



Eastern Band of Cherokee Indians Tribal Health Assessment

2023

Published August 2024

GWY
᠘᠙᠐᠑᠑᠑
᠘᠘᠎᠎᠎᠎





Notice: All information in this document is the property of the Eastern Band of Cherokee Indians (EBCI) and is subject to its laws and governance. Use or reproduction of any part of this document, including data, is prohibited without the express permission of the EBCI.

Table of Contents

Table of Contents	3
Our Secretary’s Letter to the EBCI Community	7
Our Executive Summary	8
Purpose	8
PHHS’ Mission, Vision, and Core Values	9
Leadership	10
Acknowledgments	11
Theoretical Framework	12
Process	12
Heath Priorities.....	13
Our Process	15
Methods	16
Difference Between Primary and Secondary Data.....	16
Expanding on Key Aspects	17
Primary Data Collection and Analysis	17
Secondary Data Collection and Analysis	20
The Importance of the Tribal Health Assessment.....	22
Our Community	23
Location and Geography.....	23
Communities of the EBCI.....	23
Tribal Governance and Economy.....	23
Community Demographics and Socioeconomic Overview	24
Demographic Breakdown	24
Socioeconomic Status.....	27
Maternal and Child Health: Trends and Outcomes	28
Birth Trends and Population Dynamics.....	29
Maternal Health and Pregnancy Outcomes.....	35
Youth and Community Impacts on Youth.....	41
Youth Health and Well-being.....	41

Child Maltreatment.....	42
Poverty and Use of Public Assistance.....	46
Unemployment and Underemployment.....	47
Crime and Juvenile Justice.....	49
Domestic and Intimate Partner Violence.....	54
High School Dropout and Graduation.....	56
Substance Use and Abuse.....	58
Community Health and Environmental Impacts.....	62
Chronic Disease Burden.....	62
Access to Care.....	69
Social Vulnerability Index Impacts on Health.....	71
Environmental Justice Index (EJI) Impacts on Health.....	74
Air Quality.....	77
Health Consequences of Air Pollution.....	82
Climate Change.....	86
Our Tribal Health Survey Findings.....	93
Summary of the 2023 EBCI Tribal Health Survey.....	100
Characteristics of Survey Participants.....	100
Perceived Quality of Life in the EBCI.....	100
Most Important Health Issues in Your Community.....	101
Top 10 Harmful Behaviors According to the Community.....	101
Social Determinants of Health.....	102
Vulnerable Populations.....	102
Education: Access and Quality.....	102
Neighborhood and the Built Environment.....	103
Economic Stability.....	103
Community Health and Well-being.....	103
Substance Use and Behavioral Health.....	103
Cultural Values and Community Engagement.....	104
Climate Change Perceptions.....	104

Selected Findings from the 2023 EBCI Tribal Health Survey	104
Our Health and Inequities.....	106
Introduction to Health Indicators and Inequities.....	106
Length of Life	106
Quality of Life	110
Leading Causes of Death	122
Health Factors	126
Clinical Care	143
Social & Economic Determinants	158
Community Safety Measures.....	173
Health Inequities	182
Overview of Health Inequities	183
Length of Life	183
Quality of Life	184
Leading Causes of Death	184
Health Factors	185
Clinical Care	186
Social & Economic Determinants.....	187
Community Safety Measures.....	187
County Health Data	189
Explanation and Importance.....	189
Data Presentation.....	190
Our Priorities	244
2018 THA: A Foundation and Areas for Continued Growth.....	244
2023 Data, Community Input, and the Influence of COVID-19.....	244
2023 EBCI THA Priority Health Issues	245
Reflecting on Findings from the Tribal Health Survey.....	246
Reflecting on Findings from Secondary Data Collection	247
Reflecting on Findings from Listening Sessions	249
Alignment with the Tribal Health Improvement Plan (THIP)	250

2023 Top Ten Health Priorities	252
Substance Use and Related Issues.....	253
Mental Health Support and Depression Prevention	259
Violence and Abuse Prevention.....	265
Nutrition and Exercise Improvement	269
Support for Homelessness and Housing Stability	275
Promoting Preventive Care and Improving Health Care Access	279
Safe and Healthy Built Environment.....	284
Maternal and Child Health.....	289
Tobacco Use Prevention.....	297
Healthy Aging	301
Our Path Forward	306
References.....	309
Appendix: Technical Notes	312
Appendix: Key Terms and Definitions.....	314
Appendix: 2023 Tribal Health Survey.....	319

Our Secretary's Letter to the EBCI Community

To the Members of the Eastern Band of Cherokee Indians,

For generations, the strength of the Eastern Band of Cherokee Indians has flowed from our deep connection to our people, our land, and our heritage. As we face the challenges of the modern world, it becomes ever more vital to understand the health and well-being of our community. Together, we can forge a future where every EBCI member thrives.

The Tribal Health Assessment (THA) is a cornerstone of this understanding. Through the careful examination of health data and, most importantly, the voices of our community, the THA highlights our strengths, identifies our challenges, and charts a path toward wellness. On behalf of the Eastern Band of Cherokee Indians Public Health & Human Services Division (PHHS), I am proud to present the 2023 Tribal Health Assessment. This assessment embodies the collective effort of tribal members, community organizations, healthcare providers, and the PHHS. It provides a snapshot of our community's health status and pinpoints areas where we must direct our efforts for improvement.

Our ancestors taught us the wisdom of ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ (Group Harmony). The priorities identified in this assessment call for action that transcends any single individual or organization. I encourage all community members to engage with this crucial work, bringing your wisdom and unique perspectives to foster innovative and collaborative solutions. Together, we can honor our heritage, strengthen our community, and ensure health and wellness for generations to come in alignment with the vision of ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ (Seven Generations of wellness with families strong in mind, body, and spirit).

With Respect,

Sonya Wachacha, MHS, RN ᎠᎵᎩᎠᎵ ᎠᎵᎩᎠᎵ Secretary of Public Health & Human Services Eastern Band of Cherokee Indians

Our Executive Summary

Purpose

The Eastern Band of Cherokee Indians (EBCI) Tribal Health Assessment (THA) is a critical tool to understand the evolving health status of our community. It involves collecting, analyzing, and interpreting a wide range of health-related data. This data includes indicators of:

- **Morbidity and Mortality:** Illnesses, diseases, and causes of death.
- **Risk Factors:** Behaviors, social conditions, and environmental influences on health.
- **Healthcare Access:** Availability of services, insurance, and how often they are used.
- **Maternal and Child Health:** Factors affecting mothers, infants, and children.
- **Protective Factors:** Community resources that support health and well-being.

The THA examines these factors to reveal our community's most significant health strengths and needs. In doing so, it provides a crucial foundation for health improvement efforts across the EBCI. The specific goals of the THA are to:

- **Monitor Trends:** Track health changes and progress toward goals.
- **Identify Disparities:** Uncover health differences between EBCI subgroups.
- **Set Priorities:** Determine urgent health issues and guide resources.
- **Inform Decision-Making:** Provide evidence for policy, programs, and funding.
- **Foster Collaboration:** Engage community members, providers, and stakeholders in improving health.

This assessment is a commitment to building a healthier future for our Tribe. Through understanding our health landscape, we can take targeted action to promote wellness, prevent disease, and ensure all EBCI community members thrive.

- Core Values (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵ):
 - Group Harmony (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵ)
 - Interconnectedness (ᎠᎵᎠᎵᎠᎵ)
 - Strong Individual Character (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵ - ᎠᎵᎠᎵ)
 - Compassionate Service (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵ)
 - Commitment to Stewardship (ᎠᎵᎠᎵᎠᎵ)
 - Respect for Cherokee Heritage (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵ ᎠᎵᎠᎵ)
 - Value Families (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵᎠᎵ)
 - Sense of Humor (ᎠᎵᎠᎵᎠᎵ ᎠᎵᎠᎵᎠᎵ)
 - Generosity (ᎠᎵᎠᎵᎠᎵᎠᎵ)
 - Enthusiasm (ᎠᎵᎠᎵᎠᎵᎠᎵ)

These principles guide the PHHS in its mission to improve health outcomes and well-being for the EBCI community.

Leadership

The EBCI Tribal Health Assessment is spearheaded by the Eastern Band of Cherokee Indians Public Health and Human Services Division (PHHS). The THA is guided by a collaborative steering committee that includes tribal leaders, healthcare providers, community organizations, and EBCI members.

2023 EBCI THA LEADERSHIP TEAM The THA Leadership Team is a steering committee that plays a crucial role in designing the assessment, facilitating community engagement, interpreting data, and driving action planning:

ORGANIZATION	REPRESENTATIVE	TITLE
EBCI PHHS	Sonya Wachacha, MHS, RN	Secretary of Public Health and Human Services
EBCI PHHS	Sheena K. Lambert, MPH	Public Health Director
EBCI PHHS	Mark Tuttle, MPH, MBA	Epidemiologist
EBCI PHHS	Lyndsey Henderson, MPH, CHES	Preparedness Coordinator / Tribal Health Improvement Plan Coordinator
CHEROKEE INDIAN HOSPITAL AUTHORITY	Dr. Richard Bunio, MD	Executive Clinical Director

Acknowledgments

We extend our heartfelt gratitude to the following agencies and individuals for their invaluable contributions and support in conducting this Tribal Health Assessment (THA):

- **The EBCI Tribal Community**
- **United South and Eastern Tribes (USET) Indian Health Service Nashville Area Tribal Epidemiology Center (TEC)**
- **Western North Carolina Health Network**
- **Jennifer Runkle, PhD, MSPH, Environmental Epidemiologist, North Carolina State University**
- **Charlie Reed, MPH, Research Associate, North Carolina State University**
- **Melanie Lambert, Tribal Enrollment Officer, EBCI Enrollment Office**
- **Nakeysha A. Welch, Assistant Enrollment Officer, EBCI Enrollment Office**
- **Katie Tiger, Air Quality Manager, EBCI Environmental & Natural Resources**
- **Amy J. Smoker, Air Quality Specialist, EBCI Environmental & Natural Resources**
- **Beverly Payne, EdD, Assistant Superintendent, Cherokee Central Schools**
- **Anita Lossiah, JD, Director of Human Services, EBCI Public Health and Human Services**

We are particularly grateful to the **United South and Eastern Tribes' Indian Health Service Nashville Area Tribal Epidemiology Center (USET TEC)** for their exceptional support and collaboration throughout the THA process. USET TEC has been instrumental in providing critical epidemiological expertise, data analysis, and technical assistance tailored to the unique needs of our Tribal community. Their contributions include comprehensive mortality data, along with a wide range of health indicators such as clinical care measures (including alcohol and tobacco use during pregnancy, vaccination rates, and screenings for chronic conditions like high blood pressure and diabetes). Additionally, USET TEC has provided valuable insights into substance use, domestic violence, and the prevalence and incidence of infectious diseases. By monitoring and reporting on these health trends, advocating for data sovereignty, and offering public health preparedness strategies, USET TEC ensures that our community is equipped with the knowledge and resources necessary to address current and emerging health challenges. Their efforts have significantly enhanced our ability to identify and address health disparities within the EBCI community. For more information on their work, visit <https://tribalepicenters.org/united-south-and-eastern-tribes-tribal-epidemiology-center/>.

We also extend our deep appreciation to the **Western North Carolina Health Network (WNC Health Network)**. Their collaboration has been crucial in providing access to comprehensive regional health data

and resources, facilitating data-sharing initiatives, and supporting our efforts to conduct a thorough and culturally appropriate health assessment. WNC Health Network has played a pivotal role in helping us align our health initiatives with broader regional public health goals, ensuring that the EBCI community's health priorities are addressed in a coordinated and effective manner. Their ongoing partnership has been essential in strengthening our public health infrastructure and enhancing the quality of health services available to our community. Visit them at <https://www.wnchn.org/>.

Additionally, we express our sincere thanks to the **National Indian Health Board (NIHB)**, **United South and Eastern Tribes (USET)**, and the **Centers for Disease Control and Prevention (CDC) Good Health and Wellness in Indian Country grant** for their grant support, technical assistance, and collaboration. These partnerships have been critical in providing the financial resources, technical expertise, and collaborative support necessary to conduct this comprehensive health assessment, allowing us to implement evidence-based public health strategies that address the unique health challenges faced by the EBCI community.

We are deeply appreciative of the continued support of **EBCI Public Health and Human Services (PHHS)** by the **Tribal Executive, Tribal Council, and Tribal Health Board**. Their leadership and commitment have ensured that our THA reflects the voices and needs of our community, and their ongoing support has been crucial in advancing our public health initiatives. We commend the dedicated PHHS staff for their hard work, commitment to the community survey process, and dedication to the daily mission of improving health outcomes for all EBCI members.

Finally, we offer our sincerest thanks to the **Cherokee community** for the opportunity to serve you. Your participation and input have been invaluable in guiding our efforts to create a healthier future for all.

Theoretical Framework

The 2023 EBCI THA utilizes a culturally adapted version of the Assessment Protocol for Excellence in Public Health (APEXPH). This framework respects traditional Cherokee health perspectives and emphasizes collaborative processes:

1. **Review Data:** Gathering and analyzing health data.
2. **Community Engagement:** Prioritizing community voices and perspectives.
3. **Prioritize Findings:** Identifying health concerns most important to the EBCI.
4. **Communicate Findings:** Sharing results in a clear and accessible way.
5. **Action Planning:** Developing strategies to address health priorities.

Process

The 2023 THA began in 2019 following the publishing of the 2018 THA. It included a thorough review of health data, community surveys, and focus groups. Community listening sessions were held in 2022 to gather insights and recommendations from tribal members. The final THA report will be submitted to the EBCI Tribal Council in 2024.

Health Priorities

Based on data and community input, the 2023 EBCI THA identifies these priority health areas (in no specific order):

- Substance Use and Related Issues
- Mental Health Support and Depression Prevention
- Violence and Abuse Prevention
- Nutrition and Exercise Improvement
- Support for Homelessness and Housing Stability
- Improving Health Care Access and Promoting Preventive Care
- Safe and Healthy Built Environment
- Maternal and Child Health
- Tobacco Use Prevention
- Healthy Aging

With cultural preservation as a foundation:

- Integrating Cherokee language and traditions into health initiatives to preserve cultural identity while promoting health.

NEXT STEPS The EBCI THA will guide the development of a Tribal Health Improvement Plan (THIP). The THIP will outline strategies, partnerships, and actions to address the identified health priorities. The EBCI PHHS will lead the THIP process in collaboration with the Tribal Council, healthcare providers, and the EBCI community.



Our Process

The Eastern Band of Cherokee Indians (EBCI) Tribal Health Assessment (THA) is a collaborative and ongoing process to understand and address the health needs of our community. This section outlines the key steps involved in conducting the THA:

1. Review Data

- **Gather and Analyze:** We collect and carefully analyze a wide range of health-related data, including both primary and secondary sources. Primary data includes surveys and focus groups conducted within the EBCI community. Secondary data includes existing health records, statistics from the Cherokee Indian Hospital Authority (CIHA), and relevant national and regional data sources.
- **Community Data Overview:** The initial review of available data provides insights into potential health priorities and areas of focus for the EBCI.
- **Consider Social Determinants:** We examine social determinants of health (factors like income, housing, and education) that significantly influence health outcomes within the EBCI.

2. Prioritize Findings

- **Community Engagement:** We value direct input from EBCI members through:
 - **THA Health Opinion Survey:** An EBCI-specific survey to gather perceptions of health priorities, quality of life, and access to care.
 - **THA Community Meetings:** Meetings or focus groups for EBCI members to share concerns and insights directly.
- **Prioritization:** Findings from the data review and community input are combined to identify the most significant health challenges facing the EBCI.

3. Communicate Findings

- **Share Results:** It is vital to share THA findings widely with:
 - **EBCI Tribal Council and relevant divisions**
 - **Healthcare providers, including the CIHA**
 - **Community organizations engaged in health improvement efforts**
 - **EBCI Members through accessible channels** (e.g., Tribal website, newsletters, social media)

4. Action Planning

- **Tribal Health Improvement Plan (THIP):** The THA findings directly inform the THIP. This plan outlines targeted strategies and measurable actions to address the identified health priorities.
- **Collaborative Development:** The PHHS will lead the THIP process, engaging community members, healthcare providers, and other key stakeholders across the Tribe.

Methods

The EBCI Tribal Health Assessment (THA) relies on a thorough review of relevant health data, led by the Epidemiology team within the Eastern Band of Cherokee Indians Public Health & Human Services Division (PHHS). The data used in the THA comes from both primary and secondary sources:

- **Primary Data:**
 - **CIHA Health Records:** Data from the Cherokee Indian Hospital Authority provides insights into common diagnoses, health conditions, health service utilization, and trends over time.
 - **EBCI-Specific Surveys:** Surveys conducted within the tribal community (such as the Tribal Health Survey) gather information on health behaviors, health concerns, and perceived barriers to care.
 - **Focus Groups:** Targeted focus groups or community discussions offer valuable qualitative insights into EBCI health experiences and priorities.
- **Secondary Data:**
 - **CIHA Health Record Data Collected by USET TEC:** The USET Tribal Epidemiology Center (TEC) gathers and analyzes data from the Cherokee Indian Hospital Authority (CIHA). This data provides insights into common diagnoses, health conditions, health service utilization, and trends over time.
 - **CDC Data:** National datasets such as CDC Wonder, BRFSS, etc., provide comparative health statistics and trends.
 - **NC DHHS Data:** Health data from the North Carolina Department of Health and Human Services (NC DHHS) offers state-specific insights and benchmarks.
 - **Census Data:** Data from the U.S. Census provides demographic and socioeconomic information.
 - **FBI Database:** Data from the Federal Bureau of Investigation offers insights into crime and safety statistics.
 - **Youth Risk and Resiliency Survey Data:** Data from Cherokee Central Schools contributes to understanding youth health trends and risk behaviors.

Difference Between Primary and Secondary Data

In the Tribal Health Assessment (THA), primary data is original data collected firsthand by the Public Health & Human Services (PHHS) Division specifically for this assessment. This data is obtained through methods such as surveys, interviews, focus groups, direct observations, and health records directly from institutions like hospitals. For example, the EBCI Tribal Health Survey and CIHA Health Records provide direct insights into community health priorities, diagnoses, and service utilization. The main advantages of primary data include its specificity to the THA, its up-to-date nature, and the control PHHS has over the quality and reliability of the data.

In contrast, secondary data in the THA consists of pre-existing data that was collected for other purposes but is utilized by PHHS for new analyses or to complement primary data. This type of data is sourced from

government reports, organizational databases, academic research, and public datasets. Examples include national health statistics from the CDC, state-specific health data from NC DHHS, demographic information from the U.S. Census, and crime statistics from the FBI. Additionally, the USET Tribal Epidemiology Center (TEC) provides cleaned and analyzed data from the Cherokee Indian Hospital. Secondary data is advantageous because it is often less expensive and time-consuming to obtain, provides a broader context or comparative benchmarks, and is readily available.

In summary, for the THA, primary data offers tailored and current information specific to the community's health needs, while secondary data provides cost-effective, broad, and accessible insights to support and enhance the findings from primary data.

Expanding on Key Aspects

To enhance the effectiveness and comprehensiveness of the Tribal Health Assessment (THA), several key aspects are addressed through detailed methodologies:

- **Data Review and Analysis:** The THA employs advanced statistical techniques and epidemiological methods to analyze both primary and secondary data. This approach identifies trends and correlations within the data, helping to pinpoint the root causes of health issues and assess the impact of various health determinants. The thorough analysis ensures that findings are data-driven and reflective of the community's health status.
- **Community Engagement:** Engaging the EBCI community is a crucial part of the THA process. Multiple channels are utilized to ensure diverse voices are heard, including surveys, focus groups, and community meetings. These engagement activities are meticulously documented and analyzed to capture community perceptions and priorities. This participatory approach ensures transparency and fosters a sense of ownership among community members.
- **Action Planning and Implementation:** The development of the Tribal Health Improvement Plan (THIP) is a collaborative process. Workshops and planning sessions involve community members, health professionals, and stakeholders in brainstorming and developing actionable strategies. The THIP includes specific, measurable objectives, timelines, and designated responsible parties to ensure accountability and track progress. This structured approach ensures that the plan is actionable and that improvements can be monitored over time.

By focusing on these key aspects, the THA aims to provide a thorough and accurate understanding of the health needs and priorities of the EBCI community, guiding effective public health interventions and resource allocation.

Primary Data Collection and Analysis

The Eastern Band of Cherokee Indians Public Health & Human Services Division (PHHS), in collaboration with the THA Leadership Team, undertakes comprehensive primary data collection and analysis to gain crucial insights into the community's health. This involves several key data sources:

- **EBCI Tribal Health Survey:** Developed by PHHS, this survey gathers essential information from community members regarding their health priorities, quality of life perceptions, and barriers to care. The survey's design focuses on capturing broad health challenges and lived experiences within the community, incorporating tailored questions and thematic areas to ensure comprehensive coverage.
- **CIHA Health Records:** Data from the Cherokee Indian Hospital Authority (CIHA) provides detailed information on common diagnoses, health conditions, and health service utilization trends over time. This data is critical for understanding the healthcare needs and patterns within the EBCI population.
- **EBCI-Specific Surveys:** Various surveys conducted within the tribal community, including the Tribal Health Survey, collect data on health behaviors, concerns, and perceived barriers to care. These surveys help to identify specific health issues and priorities unique to the EBCI community.
- **Focus Groups:** Targeted focus groups and community discussions offer valuable qualitative insights into the health experiences and priorities of EBCI members. These discussions allow for deeper exploration of community health issues, providing context and narrative to the quantitative data collected.

Data Collection Process

- **Response Tracking:** Using SurveyMonkey, responses are systematically tracked to ensure a representative sample of the EBCI population.
- **Data Cleaning and Coding:** All responses, including those from surveys and focus groups, are carefully reviewed, cleaned, and coded to facilitate accurate analysis. Open-ended responses are categorized into themes to identify common patterns and insights.

Data Analysis

- **Quantitative Analysis:** Statistical methods are applied to quantify the prevalence of various health concerns, quality of life factors, and barriers to care. This analysis helps to identify significant health trends and priorities within the EBCI community.
- **Qualitative Analysis:** Thematic analysis of open-ended survey responses and focus group discussions extracts key insights and narratives about community health experiences and priorities. This qualitative data adds depth and context to the quantitative findings.
- **Data Visualization:** Data is imported into Microsoft Power BI to enhance visualizations and support in-depth analysis. This facilitates better understanding and communication of the findings to stakeholders.

By integrating these diverse sources of primary data, PHHS can provide a comprehensive assessment of the health needs and priorities of the EBCI community, guiding informed decision-making and effective public health interventions.

Tribal Health Survey Design

- **Focus on Community Experience:** The survey moved beyond specific diseases and instead asked EBCI members about broad health challenges and their overall lived experiences in the community.

- **Tailored Questions:** Some questions were adapted from established health surveys (e.g., potential sources from NACCHO or the CDC) to ensure comparability with broader trends. Other questions were designed specifically to address EBCI-unique concerns.
- **Thematic Areas:** The survey included:
 - **Ranking Questions:** To identify the most significant health issues facing the EBCI.
 - **Community Strengths and Quality of Life Factors:** Questions seeking opinions on community strengths, and quality of life factors (e.g., access to care, safety, economic opportunity).
 - **Open-Ended Questions:** To gather in-depth perspectives on health challenges, social determinants of health, and barriers to care.

Tribal Health Survey Distribution

The PHHS worked closely with partners and stakeholders to ensure the survey reached a diverse cross-section of the EBCI community. Methods included:

- **Online Survey:** A user-friendly online survey with links distributed via:
 - EBCI Tribal Website and social media
 - Email lists of community organizations
 - Newsletters of relevant divisions within the Tribal Government
- **Targeted Paper Distribution:** Paper surveys were made available at:
 - Cherokee Indian Hospital Authority (CIHA) and health clinics on Tribal Lands
 - EBCI Community Club Centers
- **Community Engagement:**
 - PHHS staff and community health workers promoted the survey at events throughout the Tribal Lands.
 - Focus groups or discussion sessions where the survey could be completed with assistance.

Tribal Health Survey Data Collection and Analysis

- **Response Tracking:** Using SurveyMonkey, responses were systematically tracked to ensure a representative sample of the EBCI population.
- **Data Cleaning and Coding:** Responses were carefully reviewed, cleaned, and coded for analysis. Open-ended responses were categorized into themes.
- **Quantitative Analysis:** Statistical methods quantified the prevalence of various health concerns, quality of life factors, and barriers to care.
- **Qualitative Analysis:** Thematic analysis of open-ended responses extracted key insights and narratives about community health experiences and priorities.
- **Data Visualization:** Data was imported into Microsoft Power BI to enhance visualizations and support in-depth analysis.

Community Meetings on Tribal Health Survey

In addition to the survey, the THA process included in-person community meetings and consultations with the Health Board. These meetings served two primary purposes:

Sharing Preliminary Findings

- **Presentation of Data:** Initial data analysis of the Tribal Health Survey was presented to the community and the Health Board to facilitate discussion and gather feedback. Participants were given an overview of key health indicators, trends, and potential areas of concern identified from the survey and secondary data sources.
- **Transparency and Engagement:** By sharing preliminary findings, the PHHS ensured transparency in the assessment process and actively engaged community members and Health Board members in interpreting the data.

Gathering Input

- **Community Feedback:** Participants were encouraged to share their perspectives on health issues, community strengths, and areas needing improvement. This participatory approach helped ensure that the THA reflected the true needs and priorities of the community.
- **Open Dialogue:** The meetings provided a platform for open dialogue where community members and Health Board members could express their views, share personal experiences, and suggest areas for further investigation.

Community Partners

The success of the Tribal Health Survey and outreach efforts relied on strong partnerships with various community organizations. These partnerships were essential for maximizing reach and ensuring comprehensive community engagement.

- **EBCI Community Clubs:** These clubs played a critical role in mobilizing community members and facilitating the distribution and completion of surveys.
- **Cherokee Central Schools:** Partnering with local schools was key to understanding youth health trends and engaging younger populations in the assessment process.
- **Analenisgi Behavioral Health:** This organization provided valuable insights into mental health and substance use issues within the community, contributing to a more holistic understanding of health needs.
- **Health Board:** The Health Board provided crucial input and guidance based on the preliminary findings, ensuring that the assessment aligned with broader health strategies and priorities.
- **Additional Partners:** Other relevant community-based organizations and health-focused nonprofits were also instrumental in supporting the THA process. These might include local health departments, nonprofit health organizations, and cultural institutions that work closely with the EBCI community.

Secondary Data Collection and Analysis

The Tribal Health Assessment (THA) incorporates secondary data from various reliable sources to provide a comprehensive understanding of the health status and needs of the EBCI community. This process involves gathering, analyzing, and integrating data from national, state, and local sources to complement the primary data collected through surveys and focus groups.

Data Sources

- **Behavioral Health Data:** Data from sources such as the Substance Abuse and Mental Health Services Administration (SAMHSA) on mental health and substance abuse.
- **Census Data:** U.S. Census data supplies demographic and socioeconomic information, including population size, age distribution, income levels, and education attainment. This data is crucial for understanding the social determinants of health within the EBCI community.
- **CDC Data:** National datasets such as CDC Wonder and the Behavioral Risk Factor Surveillance System (BRFSS) offer comparative health statistics and trends. These datasets provide valuable benchmarks and insights into how the EBCI community's health status compares to national averages.
- **Environmental Health Data:** Information on environmental factors such as air and water quality that may affect the health of the EBCI community.
- **FBI Database:** Crime and safety statistics from the Federal Bureau of Investigation (FBI) provide insights into the prevalence of crime and its impact on community health and safety.
- **Health Rankings and Reports:** Comparative health insights from sources like County Health Rankings & Roadmaps, which provide state and county health rankings.
- **Hospital and Clinical Data:** Data from local health facilities like the Cherokee Indian Hospital provide detailed insights into health service utilization and specific health conditions prevalent in the community.
- **NC DHHS Data:** The North Carolina Department of Health and Human Services (NC DHHS) provides state-specific health data, including disease prevalence, health service utilization, and health outcomes. This data helps to contextualize EBCI health trends within the broader state context.
- **United South and Eastern Tribes (USET) Tribal Epidemiology Center (TEC):** The USET TEC gathers data from the Cherokee Indian Hospital, performs data cleaning and analysis, and provides comprehensive insights into common diagnoses, health conditions, health service utilization, and trends over time.
- **Youth Risk and Resiliency Survey (YRRS) Data:** Collected from Cherokee Central Schools, this data highlights youth health trends and risk behaviors, offering a focused look at the younger population's health challenges and resilience factors.

Data Analysis Process

- **Data Integration:** Secondary data is integrated with primary data to create a holistic view of the community's health. This involves aligning datasets to ensure comparability and coherence in the analysis.
- **Trend Analysis:** Longitudinal analysis of health trends over time helps identify patterns and emerging health issues. This includes examining trends in disease prevalence, health behaviors, and social determinants of health.
- **Comparative Analysis:** EBCI health data is compared with state and national benchmarks to identify areas where the community is doing well and areas needing improvement. This comparison helps highlight unique health challenges and successes within the EBCI community.

- **Thematic Analysis:** Thematic analysis of qualitative data from focus groups and community discussions complements quantitative findings, providing deeper insights into the lived experiences and health priorities of EBCI members.

Utilization of Secondary Data

- **Community Health Profiles:** Secondary data contributes to developing comprehensive community health profiles, which are used to inform public health strategies and policies.
- **Resource Allocation:** Identifying high-need areas through data analysis helps PHHS allocate resources more effectively to address specific health challenges.
- **Health Interventions:** Data-driven insights guide the design and implementation of targeted health interventions and programs aimed at improving health outcomes within the EBCI community.
- **Stakeholder Engagement:** Sharing secondary data analysis with stakeholders, including community members, health professionals, and policymakers, ensures transparency and fosters collaborative efforts to address health disparities.

By leveraging both primary and secondary data, the THA provides a robust, evidence-based assessment of the health needs and priorities of the EBCI community, supporting informed decision-making and effective public health action.

The Importance of the Tribal Health Assessment

The Tribal Health Assessment (THA) provides a comprehensive snapshot of the health status of the Eastern Band of Cherokee Indians (EBCI). It combines quantitative health data with community input through surveys, focus groups, and other engagement methods. This process serves several key purposes:

- **Identifies Strengths and Needs:** The THA reveals areas where the EBCI excels in terms of health, as well as challenges that require collaborative action. By understanding the community's health status, the EBCI can better allocate resources and prioritize health interventions.
- **Empowers the Community:** The THA equips tribal members, leaders, healthcare providers, and other stakeholders with knowledge to create focused solutions to improve well-being. Informed decision-making leads to targeted health strategies that address specific community needs.
- **Facilitates Data-Driven Decision Making:** The THA provides a solid foundation for evidence-based policy, program development, and funding allocation. Data-driven decision-making ensures that health interventions are effective, and resources are used efficiently.
- **Enhances Collaboration:** The THA process fosters collaboration among various community stakeholders, including tribal members, healthcare providers, and local organizations. This collaborative approach helps to build a unified strategy for improving health outcomes.
- **Tracks Health Trends:** By monitoring health trends, the THA allows the EBCI to track progress toward health goals and identify emerging health issues. This continuous assessment helps to adapt and refine health strategies over time.
- **Aligns with National Standards:** The THA aligns with the standards and measures set forth by the Public Health Accreditation Board (PHAB). This alignment ensures that the EBCI is meeting national benchmarks for public health practice and is committed to continuous improvement.

Our Community

The Legacy and Resilience of the Eastern Band of Cherokee Indians

The Eastern Band of Cherokee Indians (EBCI) is a resilient community with deep roots in the ancestral lands of the southeastern United States. Despite immense hardships, including the forced removal of the Trail of Tears, the EBCI people have persevered. Today, the EBCI stands as a sovereign Tribal Nation with a rich cultural heritage and over 16,000 enrolled members. This resilience is not just a testament to the strength of the community but also to their enduring commitment to preserving their culture, language, and traditions.

Location and Geography

The jurisdictional boundaries of the EBCI encompass over 56,000 acres of primarily mountainous land within six western North Carolina counties: Cherokee, Graham, Haywood, Jackson, Macon, and Swain Counties. The Qualla Boundary, spanning Jackson and Swain counties, is the largest contiguous parcel of EBCI trust land and includes the town of Cherokee. This region is characterized by its scenic landscapes, including portions of the Great Smoky Mountains, which provide both natural beauty and resources for the community.

Communities of the EBCI

The Eastern Band of Cherokee Indians is comprised of several distinct communities on Tribal trust lands: Big Cove, Big Y, Birdtown (including the 3200 Acre Tract), Cherokee County Community, Painttown, Snowbird, Wolfstown, Towstring, and Yellowhill. Each community maintains a unique identity and is represented by its own Community Club, which serves as a center for local activities and governance. These clubs also function as voting locations for both Tribal and general elections, ensuring that each community's voice is heard in the larger governance of the EBCI.

Tribal Governance and Economy

The EBCI is a sovereign Tribal Nation with an elected Principal Chief, Vice Chief, and a twelve-member Tribal Council, as well as a judiciary branch. The Tribal Government is made up of nine divisions, including the vital Public Health & Human Services Division (PHHS), which oversees health and welfare programs for the community.

- **Cherokee Indian Hospital Authority (CIHA):** A crucial healthcare provider that offers comprehensive medical services to EBCI members.
- **Cherokee Central Schools:** Provides educational opportunities for EBCI youth, from early childhood through high school.

The EBCI economy is heavily influenced by tourism, with the Great Smoky Mountains National Park and Harrah's Cherokee Casino Resort as major drivers of economic activity. These attractions not only draw millions of visitors each year but also provide significant employment opportunities for EBCI members and contribute to the financial stability of the Tribe.

Community Demographics and Socioeconomic Overview

Understanding the demographics of the Eastern Band of Cherokee Indians (EBCI) is essential for effective health planning. The Tribal Health Assessment (THA) examines key demographic factors such as age distribution, household composition, and other elements that influence the overall well-being of the Tribe. This comprehensive analysis helps identify areas of need, allocate resources effectively, and develop targeted health strategies.

Demographic Breakdown

- **Total Population:** The EBCI has a total enrolled population of **16,372** members (2023).
 - Enrolled Population that lives on the boundary (2023): **7,877**
 - Enrolled Population that lives off the boundary (2023): **8,495**
 - Enrolled Population that lives in WNC (2023): **11,299**
 - CIHA AI/AN active clinical patients (2023): **11,483**
 - Estimated population that lives on the boundary (based on 2020 Decennial Census): **9,233**

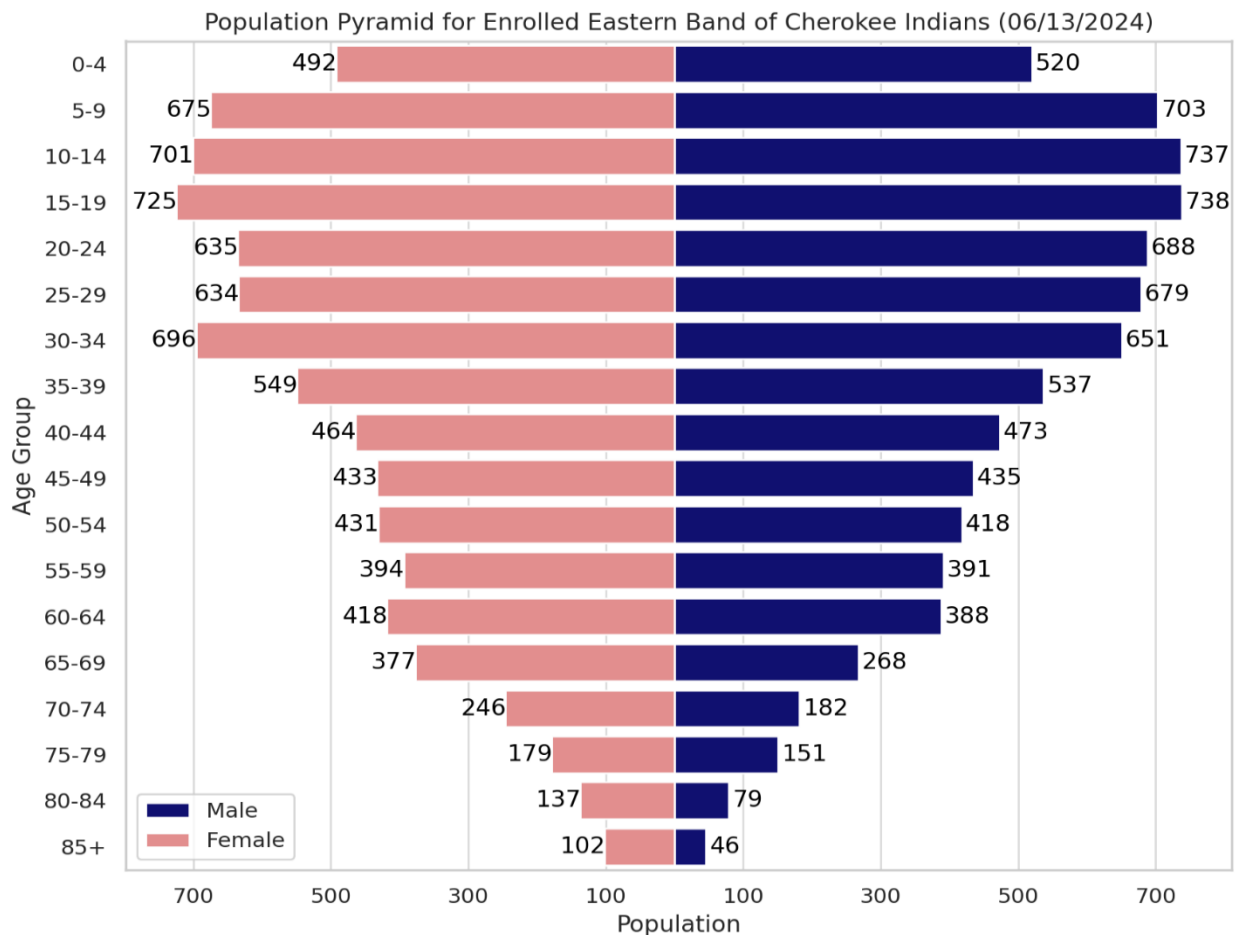


Figure 1
Population Pyramid for Enrolled Eastern Band of Cherokee Indians (06/13/2024)

Age Distribution

Based on ACS Data (2022):

- Youth (0-18 years): Represents approximately 25.1% of the population.
- Working Age (19-64 years):
 - 19-24 years: 8.7%
 - 25-34 years: 10.6%
 - 35-44 years: 9.5%
 - 45-54 years: 12.0%
 - 55-64 years: 13.5%
- Elders (65+ years): Comprise around 17.5% of the population.

Based on Enrolled Population Data (2023):

- Youth (0-17 years): Represents approximately 28.7% of the population.
- Working Age (18-64 years):
 - 18-24 years: 11.7%
 - 25-34 years: 16.2%
 - 35-44 years: 12.3%
 - 45-54 years: 10.5%
 - 55-64 years: 9.7%
- Elders (65+ years): Comprise around 11.1% of the population.

Based on "On Boundary" Enrolled Population Data (2023):

- Youth (0-17 years): Represents approximately 29.6% of the population.
- Working Age (18-64 years):
 - 18-24 years: 10.6%
 - 25-34 years: 15.8%
 - 35-44 years: 12.5%
 - 45-54 years: 10.8%
 - 55-64 years: 9.7%
- Elders (65+ years): Comprise around 11.0% of the population.

Detailed Age Distribution:

- Under 5 years: 4.9% (ACS), 6.4% (On Boundary Enrolled Population), and 6.2% (Total Enrolled Population)
- 5 to 9 years: 6.4% (ACS), 8.6% (On Boundary Enrolled Population), and 8.4% (Total Enrolled Population)
- 10 to 14 years: 7.9% (ACS), 9.4% (On Boundary Enrolled Population), and 8.8% (Total Enrolled Population)
- 15 to 19 years: 8.9% (ACS), 8.7% (On Boundary Enrolled Population), and 8.9% (Total Enrolled Population)

- 20 to 24 years: 8.7% (ACS), 7.1% (On Boundary Enrolled Population), and 8.1% (Total Enrolled Population)
- 25 to 34 years: 10.4% (ACS), 15.9% (On Boundary Enrolled Population), and 16.2% (Total Enrolled Population)
- 35 to 44 years: 9.5% (ACS), 12.5% (On Boundary Enrolled Population), and 12.3% (Total Enrolled Population)
- 45 to 54 years: 12.0% (ACS), 10.9% (On Boundary Enrolled Population), and 10.5% (Total Enrolled Population)
- 55 to 64 years: 13.5% (ACS), 9.7% (On Boundary Enrolled Population), and 9.7% (Total Enrolled Population)
- 65 to 74 years: 8.7% (ACS), 5.9% (On Boundary Enrolled Population), and 6.6% (Total Enrolled Population)
- 75 years and over: 8.6% (ACS), 3.5% (On Boundary Enrolled Population), and 4.2% (Total Enrolled Population)

Sex Distribution

Based on Enrolled Population Data (2023):

- Total Population: 16,372
- Male: 8,084 (49.4%)
- Female: 8,288 (50.6%)

Based on ACS Data (2022):

- Total Population: 7,930
- Male: 50.1%
- Female: 49.9%

Based on “On Boundary” Enrolled Population Data (2023):

- Total Population: 7,877
- Male: 3,880 (49.3%)
- Female: 3,997 (50.7%)

Median Age

- Median age (ACS 2022): 37.7
- Median age (On Boundary Enrollment): 30.4
- Median age (Total Enrollment): 31.0

Household Composition

- Average Household Size:
 - EBCI (2022): 2.36 individuals
 - US National Average (2022): 2.50 individuals
 - North Carolina Average (2022): 2.42 individuals

- Multi-Generational Households: A significant proportion of households within the EBCI are multi-generational, reflecting cultural values of family support and care.
 - Households with one or more people under 18 years (2022):
 - EBCI: 37.8%
 - US National Average: 30.2%
 - North Carolina: 29.7%
 - Households with one or more people 60 years and over (2022):
 - EBCI: 46.9%
 - US National Average: 41.0%
 - North Carolina: 40.2%
 - Households with one or more people 65 years and over (2022):
 - EBCI: 35.4%
 - US National Average: 30.8%
 - North Carolina: 30.2%

This data highlights the household composition within the EBCI, showing a tendency towards family-oriented and supportive living arrangements, with significant percentages of households including younger and older family members.

Geographic Distribution

- **Urban vs. Rural:** According to the 2020 Decennial Census P2 table, **100%** of the EBCI population resides in rural areas. Although there are small pockets of development around the town of Cherokee, the region remains classified as rural. This rural setting presents unique challenges and opportunities for healthcare delivery and infrastructure development, necessitating tailored approaches to meet the community's needs.

Socioeconomic Status

Employment:

- Employment rates have been bolstered by tourism and Tribal enterprises, with Harrah's Casino being a significant employer.
- According to the 2022 ACS:
 - **Labor Force Participation:**
 - For the EBCI population aged 16 years and over, **49.8%** were in the labor force.
 - In North Carolina, **62.4%** were in the labor force.
 - In the United States, **63.3%** were in the labor force.
 - This indicates a lower labor force participation rate in the EBCI population compared to the state and national averages.
 - **Unemployment Rate:**
 - For the EBCI population, the unemployment rate was **2.1%**.
 - In North Carolina, the unemployment rate was **3.8%**.
 - In the United States, the unemployment rate was **3.7%**.

- This suggests that, although fewer EBCI individuals are in the labor force, those who are employed experience a lower unemployment rate than both state and national levels.

Income Levels:

- According to the 2022 ACS:
 - The median household income for the EBCI population was **\$44,925**.
 - In North Carolina, the median household income was **\$66,186**.
 - In the United States, the median household income was **\$75,149**.
- This highlights a significant income disparity between the EBCI population and the broader populations of North Carolina and the United States.

Poverty Rates:

- According to the 2022 ACS:
 - **21.0%** of the EBCI population was below the poverty level.
 - In North Carolina, **15.1%** of the population was below the poverty level.
 - In the United States, **14.1%** of the population was below the poverty level.
- These figures indicate that the EBCI population experiences higher poverty rates compared to both the state and national averages.

Educational Attainment:

- According to the 2022 ACS:
 - For the EBCI population aged 25 years and over:
 - **80.7%** had at least a high school diploma.
 - **12.2%** had a bachelor's degree or higher.
 - In North Carolina:
 - **87.4%** had at least a high school diploma.
 - **30.5%** had a bachelor's degree or higher.
 - In the United States:
 - **87.7%** had at least a high school diploma.
 - **31.5%** had a bachelor's degree or higher.
- These figures show that while a majority of the EBCI population has completed high school, there is a notable gap in higher education attainment compared to the state and national averages.

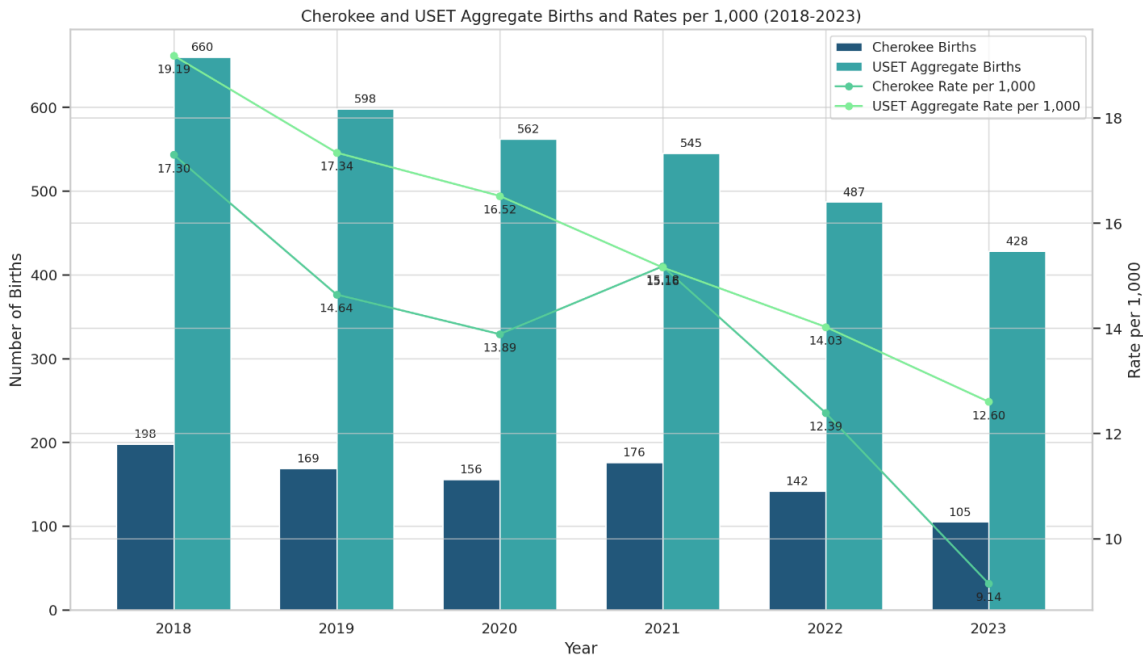
Maternal and Child Health: Trends and Outcomes

Understanding maternal and child health trends and outcomes is essential for the future well-being of the Eastern Band of Cherokee Indians (EBCI) community. This section provides a comprehensive overview of key health indicators, including birth rates, gestational diabetes, postpartum depression, fertility and pregnancy rates, and birth trends among unmarried mothers. By analyzing these trends, we can identify critical areas for intervention and support to ensure the health and well-being of EBCI mothers and children.

Birth Trends and Population Dynamics

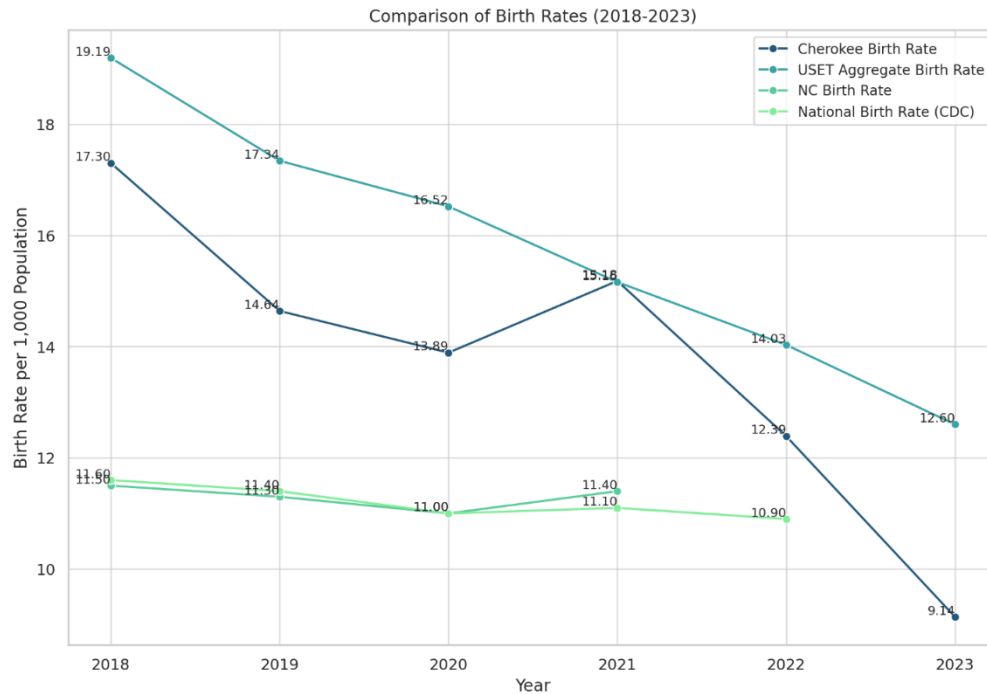
The birth rates and population trends provide valuable insights into the demographic shifts and health outcomes within the Eastern Band of Cherokee Indians (EBCI). Monitoring these trends helps identify changes in population dynamics, the impact of public health initiatives, and underlying socio-economic factors influencing the community. Understanding these patterns is essential for planning future health services, allocating resources effectively, and addressing the unique needs of the EBCI population. This section explores the birth rates over recent years, highlighting significant trends and offering a comparative analysis with broader regional and national data.

Birth Rates



Source: USET TEC Data Request Cherokee Indian Hospital RPMS

Figure 2
Cherokee and USET Aggregate Births and Rates per 1,000 (2018-2023)



Sources: USET TEC Data Request Cherokee Indian Hospital RPMS, NCDHHS, CDC

Figure 3
Comparison of Birth Rates (2018-2023)

Cherokee Birth Rates:

- **2018:** 17.30 per 1,000
- **2019:** 14.64 per 1,000
- **2020:** 13.89 per 1,000
- **2021:** 15.18 per 1,000
- **2022:** 12.39 per 1,000
- **2023:** 9.14 per 1,000

The average birth rate for Cherokee over the period from 2018 to 2023 is **13.76 per 1,000**. The trend shows a general decline in birth rates, with a notable decrease from 15.18 in 2021 to 9.14 in 2023. This significant drop may indicate demographic changes, public health interventions, or socio-economic factors affecting birth rates in the Cherokee population.

USET Aggregate Birth Rates:

- **2018:** 19.19 per 1,000
- **2019:** 17.34 per 1,000
- **2020:** 16.52 per 1,000
- **2021:** 15.16 per 1,000
- **2022:** 14.03 per 1,000

- **2023:** 12.60 per 1,000

The average birth rate for the USET Aggregate over the period from 2018 to 2023 is **15.80 per 1,000**. Similar to the Cherokee population, the USET Aggregate birth rates show a declining trend, though the rates remain consistently higher than those of the Cherokee population. The decrease from 19.19 in 2018 to 12.60 in 2023 reflects a steady decline, potentially due to similar influencing factors as those affecting the Cherokee population.

North Carolina Birth Rates:

- **2018:** 11.5 per 1,000
- **2019:** 11.3 per 1,000
- **2020:** 11.0 per 1,000
- **2021:** 11.4 per 1,000

The average birth rate for North Carolina from 2017 to 2021 is **11.4 per 1,000**. The birth rates in North Carolina have remained relatively stable with minor fluctuations, indicating a more consistent trend compared to the Cherokee and USET Aggregate populations. The absence of data for 2022 and 2023 prevents a full comparison for these years.

National (CDC) Birth Rates:

- **2018:** 11.6 per 1,000
- **2019:** 11.4 per 1,000
- **2020:** 11.0 per 1,000
- **2021:** 11.1 per 1,000
- **2022:** 10.9 per 1,000 (estimated)

The national birth rates, based on CDC data, also show a declining trend. The rates decreased from 11.6 in 2018 to an estimated 10.9 in 2022. This decline is consistent with the overall national trend of decreasing birth rates observed over the past decade.

Comparative Analysis:

1. General Trends:

- Both Cherokee and USET Aggregate populations have higher birth rates compared to North Carolina and national averages.
- All groups show a declining trend in birth rates from 2018 to 2023.

2. Magnitude of Decline:

- Cherokee birth rates show the most significant decline, from 17.30 in 2018 to 9.14 in 2023.
- USET Aggregate rates also decline substantially, though they remain higher than Cherokee rates, dropping from 19.19 in 2018 to 12.60 in 2023.
- North Carolina and national rates show a more gradual decline, indicating more stability in these larger populations.

3. Averages:

- **Cherokee (2018-2023):** 13.76 per 1,000
- **USET Aggregate (2018-2023):** 15.80 per 1,000
- **North Carolina (2017-2021):** 11.4 per 1,000

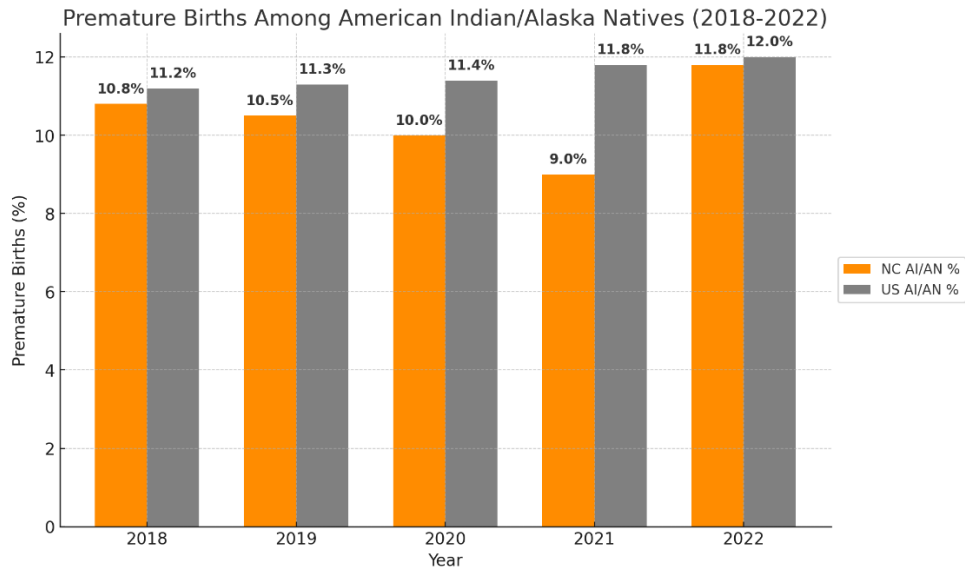
The birth rates for Cherokee and USET Aggregate populations are higher than those of North Carolina and the national average, but they exhibit a more pronounced declining trend over the years. A higher birth rate than the national average can be a sign of a younger population and potentially higher fertility rates within the EBCI. This trend underscores the importance of prenatal and postnatal healthcare services to ensure healthy outcomes for mothers and infants and highlights the need for sustainable development and infrastructure to support a younger population.

Premature Births

American Indian/Alaska Native (AI/AN) communities experience disproportionately high rates of premature births compared to other racial and ethnic groups in the United States. The data from 2018 to 2022 highlights the percentage of AI/AN infants born prematurely (before 37 weeks gestation) in North Carolina and across the United States. During this period, the premature birth rates for NC AI/AN fluctuated between 9.0% and 11.8%, while the national AI/AN premature birth rates remained slightly higher, ranging from 11.2% to 12.0%.¹

While both the North Carolina and national AI/AN premature birth rates have remained relatively stable, a slight upward trend has been observed since 2020. This trend is particularly concerning as it suggests that, despite efforts to improve maternal and infant health outcomes, AI/AN communities continue to face significant challenges in reducing the incidence of premature births. The data underscores the ongoing need for targeted public health interventions and resources to support AI/AN mothers and infants, particularly in the critical prenatal period.

¹ Centers for Disease Control and Prevention (CDC). (2018-2022). Premature birth data for American Indian/Alaska Native (AI/AN) population in North Carolina and United States. Retrieved from <https://wonder.cdc.gov/>



Data Source: Centers for Disease Control and Prevention (CDC) Wonder <https://wonder.cdc.gov/>
 Data Retrieved: Premature birth data for American Indian/Alaska Native (AI/AN) population
 Location: North Carolina (NC) and United States (US) | Timeframe: 2018-2022 | Access Method: CDC Wonder online platform <https://wonder.cdc.gov/>

Figure 4

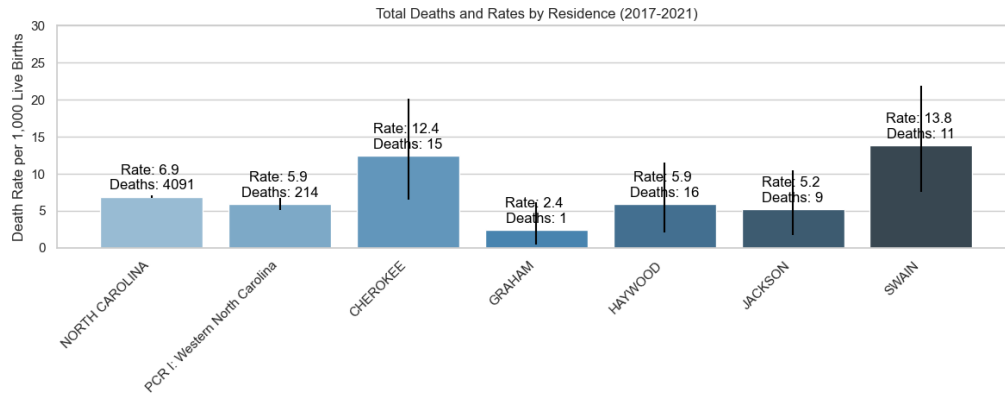
Premature Births Among American Indian/Alaska Natives (2018-2023)

Infant Mortality

Infant mortality, defined as the death of an infant before reaching one year of age, is a crucial indicator of a community's overall health and well-being. Addressing disparities in infant mortality rates is a critical public health goal. Analyzing data from the 2021 North Carolina Infant Mortality Report reveals concerning discrepancies in infant mortality rates across the Eastern Band of Cherokee Indians (EBCI) territory.

The report shows that the overall infant mortality rate in North Carolina for 2017-2021 was 6.9 deaths per 1,000 live births and a Non-Hispanic American Indian rate of 9.7.² EBCI tribal lands primarily reside in Cherokee, Graham, Haywood, Jackson, and Swain Counties, all of which are included in the "PCR 1: Western North Carolina" region. This region saw a rate of 13.8 deaths per 1,000 live births for Non-Hispanic American Indians, significantly higher than the state average. Furthermore, Jackson and Swain Counties, which have the highest EBCI populations, had elevated Non-Hispanic American Indian rates of 11.5 and 19.5 deaths per 1,000 live births respectively.

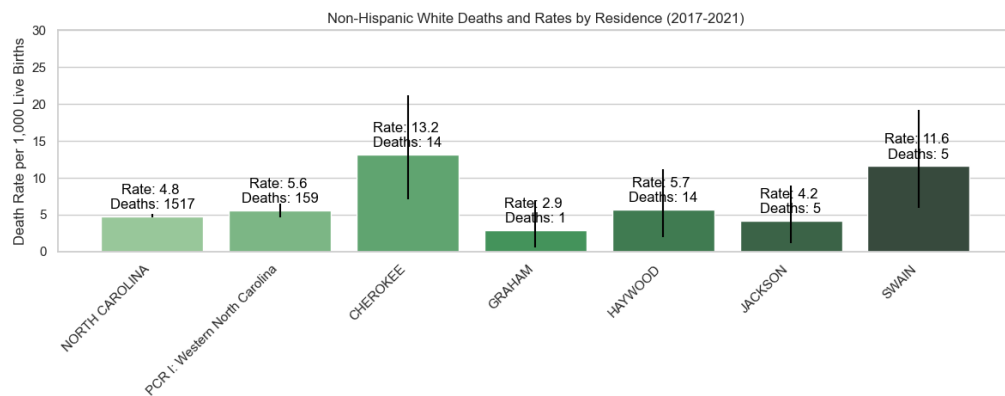
² North Carolina State Center for Health Statistics (NC SCHS). (2021). North Carolina infant mortality data: Table 1B [Data set]. Retrieved from <https://schs.dph.ncdhhs.gov/data/vital/ims/2021/2021-IMR-TABLE-1B-FINAL.html>



*Technical Note: Rates based on small numbers (fewer than 10 deaths) are unstable & should be interpreted with caution.
 Source: NC State Center for Health Statistics: North Carolina Infant Mortality Data 2021

Figure 5

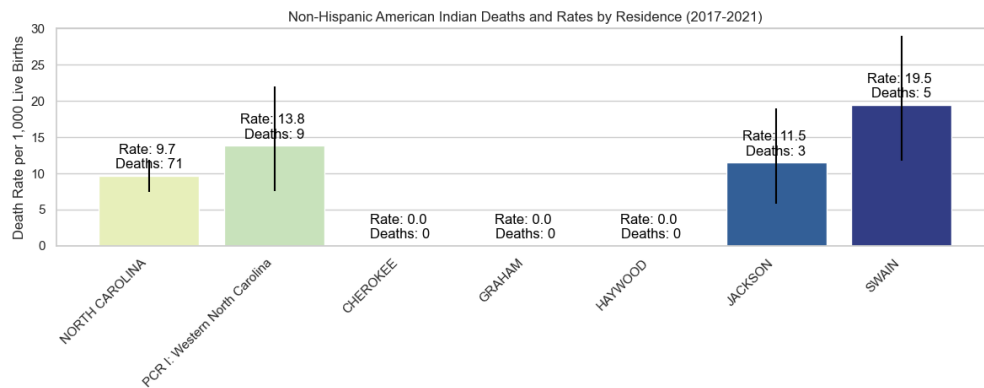
Total Deaths and Rates by Residence (2017-2021)



*Technical Note: Rates based on small numbers (fewer than 10 deaths) are unstable & should be interpreted with caution.
 Source: NC State Center for Health Statistics: North Carolina Infant Mortality Data 2021

Figure 6

Non-Hispanic White Deaths and Rates by Residence (2017-2021)

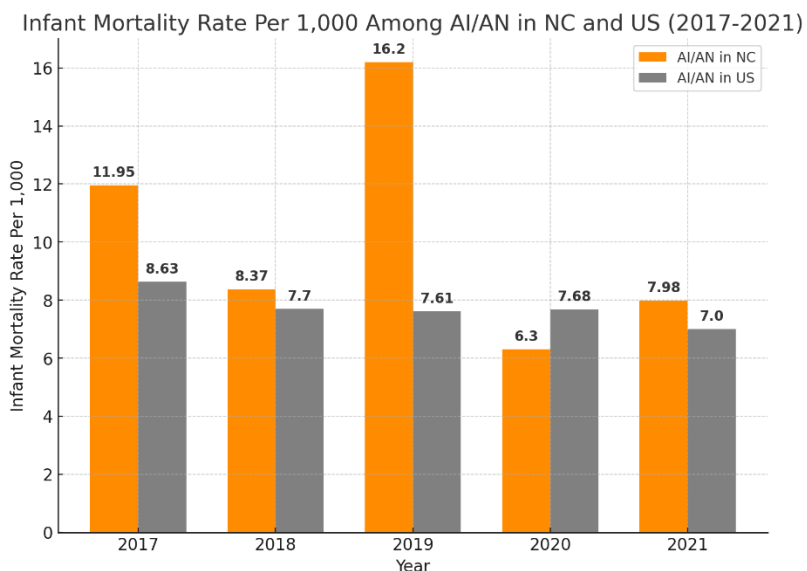


*Technical Note: Rates based on small numbers (fewer than 10 deaths) are unstable & should be interpreted with caution.
 Source: NC State Center for Health Statistics: North Carolina Infant Mortality Data 2021

Figure 7

Non-Hispanic American Indian Deaths and Rates by Residence (2017-2021)

While the infant mortality rate for North Carolina AI/AN populations fluctuated between 2017 and 2022, with an average rate of 10.16 deaths per 1,000 live births, the US AI/AN rate remained relatively stable, averaging 7.72 deaths per 1,000 live births during the same period.³ This data suggests that North Carolina AI/AN communities may face unique challenges contributing to higher infant mortality rates compared to the national average for AI/AN populations.



Source: CDC Wonder (<https://wonder.cdc.gov/>) | Data Retrieved: Infant Mortality data for American Indian/Alaska Native (AI/AN) population Location: North Carolina (NC) and United States (US) | Timeframe: 2017-2021 | Access Method: CDC Wonder online platform

Figure 8
Infant Mortality Rate per 1,000 Among AI/AN in NC and US (2017-2021)

Maternal Health and Pregnancy Outcomes

The well-being of mothers and their children is a critical aspect of public health, and understanding the trends and challenges in maternal health can help in devising effective interventions. This section delves into key areas such as gestational diabetes, postpartum depression, fertility rates, pregnancy rates, and birth trends among unmarried mothers within the Eastern Band of Cherokee Indians (EBCI) community. By examining these trends, we can better understand the unique health needs of this population and identify areas for improvement in maternal and child health services.

Gestational Diabetes

Gestational diabetes diagnoses among Eastern Band of Cherokee Indians women have steadily increased over the past seven years, with a near quadrupling from 5 cases in 2017 to 23 in 2021

³ Centers for Disease Control and Prevention (CDC). (2018-2022). Infant Mortality data for American Indian/Alaska Native (AI/AN) population in North Carolina and United States. Retrieved from <https://wonder.cdc.gov/>

before a slight decline in 2022 and 2023.⁴ Gestational diabetes, high blood sugar during pregnancy not caused by pre-existing diabetes, can pose risks for both mother and baby, highlighting the need for continued focus on prenatal care, education, and early intervention to manage this condition within the community.

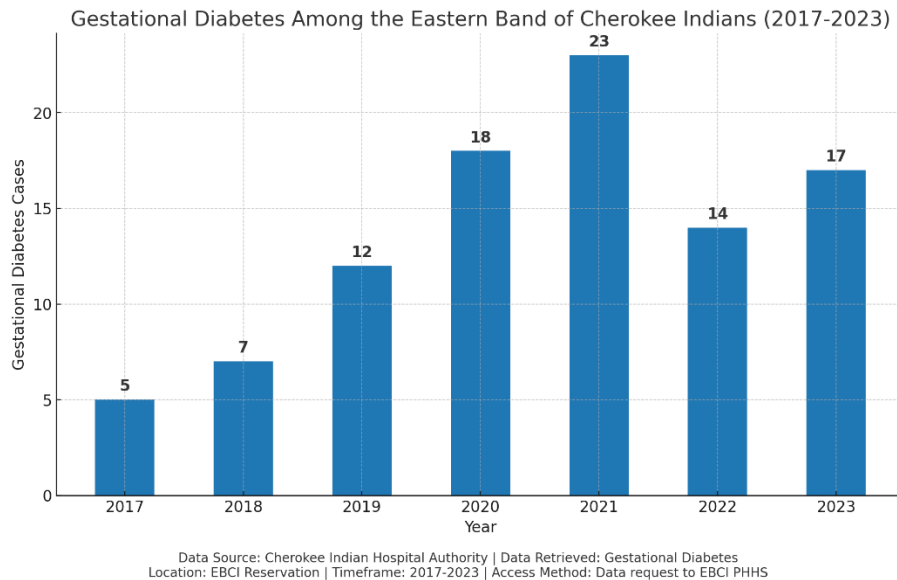


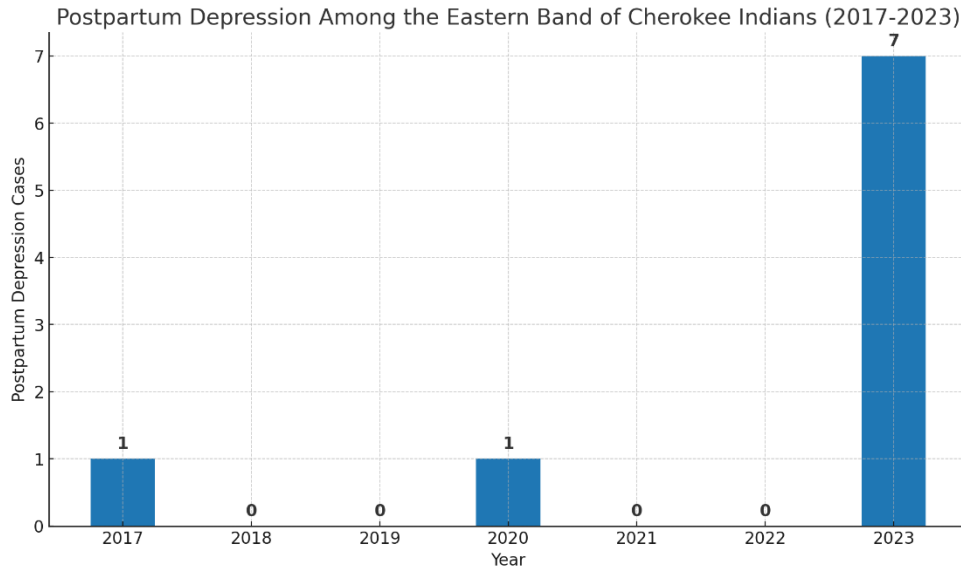
Figure 9
Gestational Diabetes Among the Eastern Band of Cherokee Indians (2017-2023)

Postpartum Depression

The data on Postpartum Depression (PPD) among the Eastern Band of Cherokee Indians reveals a significant fluctuation over the past seven years. While no cases were reported in 2018, 2019, or 2022, there was one case in 2017 and a concerning spike to seven cases in 2023.⁵ PPD is a serious mental health condition affecting mothers after childbirth, characterized by intense sadness, anxiety, and difficulty bonding with the baby.

⁴ Eastern Band of Cherokee Indians (EBCI) Public Health and Human Services (PHHS) Epidemiologist. (2017-2023). Gestational Diabetes data for the Cherokee Indian population. Data collected from Cherokee Indian Hospital Authority RPMS.

⁵ Eastern Band of Cherokee Indians (EBCI) Public Health and Human Services (PHHS) Epidemiologist. (2017-2023). Postpartum Depression data for the Cherokee Indian population. Data collected from Cherokee Indian Hospital Authority RPMS.



Data Source: Cherokee Indian Hospital Authority | Data Retrieved: Postpartum Depression
 Location: EBCI Reservation | Timeframe: 2017-2023 | Access Method: Data request to EBCI PHHS

Figure 10

Postpartum Depression Among the Eastern Band of Cherokee Indians (2017-2023)

Fertility Rates

Fertility rates, the average number of children a woman of a specific age group is expected to have, are a key metric in public health. They influence population growth, impact social programs, and can offer insights into family planning trends. In North Carolina, looking at data from 2014 to 2022, a significant disparity emerges between Non-Hispanic White and Non-Hispanic American Indian populations.⁶ Throughout this period, Non-Hispanic American Indian women consistently had higher fertility rates than Non-Hispanic White women across most age groups.

This disparity highlights potential public health concerns within the Non-Hispanic American Indian community. Higher fertility rates can strain healthcare resources, particularly for prenatal and postnatal care. Additionally, social and economic factors like access to education and employment opportunities can be intertwined with fertility rates. Understanding these factors and addressing any underlying disparities is crucial to ensure optimal health outcomes for both mothers and children in the Non-Hispanic American Indian community.

Key findings for North Carolina’s Fertility Rate Data for Non-Hispanic American Indians:

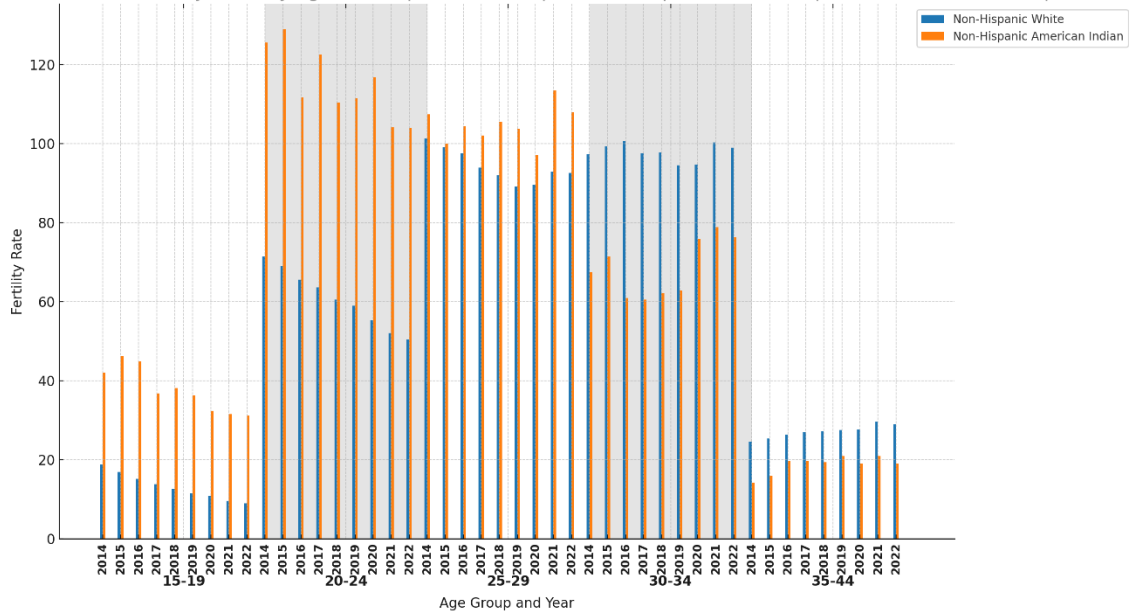
- Generally higher fertility rates: Throughout the nine years, Non-Hispanic American Indians consistently had higher rates than White, Asian/Pacific Islander, and Multiracial groups across most age groups.⁷

⁶ North Carolina State Center for Health Statistics (NC SCHS). (2022). Fertility data [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>

⁷ Ibid

- Fluctuations over time: While Non-Hispanic American Indians exhibited the highest rates in most years, their rates also fluctuated, like the peak in 2017 for ages 20-24 (122.5) followed by a decline.⁸
- Disparity in younger age groups: Compared to other groups, Non-Hispanic American Indians show a particularly significant difference in fertility rates for younger ages (15-19 and 20-24). This suggests a higher proportion of younger, potentially less prepared mothers within their communities. Public health professionals recognize that younger mothers may lack experience, financial resources, or access to prenatal care, all of which can contribute to higher risks for both mother and child during pregnancy and childbirth. This trend emphasizes the need for targeted public health initiatives within the Non-Hispanic American Indian communities to focus on family planning education, prenatal care access, and potentially broader social services to empower young women with the knowledge and resources they need to make informed choices about childbearing.⁹

2014-2022 North Carolina Fertility Rates by Age Non-Hispanic White Population Compared to Non-Hispanic American Indian Population



Data Source: NC State Center for Health Statistics
 Data Retrieved: Fertility Data
 Location: North Carolina
 Timeframe: 2014-2022
 Access Method: NC State Center for Health Statistics Databook <https://schs.dph.ncdhs.gov/data/databook/>

Figure 11
 NC Fertility Rates by Age (2014-2022)

⁸ Ibid

⁹ Ibid

Pregnancy Rates

Understanding American Indian pregnancy rates holds significant importance for public health research and intervention strategies. Analyzing these rates can reveal potential disparities and highlight areas where targeted public health initiatives may be needed.

Looking at 2018-2022 data from North Carolina, a key finding is the disproportionately higher pregnancy rate among Non-Hispanic American Indian women compared to Non-Hispanic White women across different age groups and locations.¹⁰ Here's a breakdown:

- Ages 15-44:
 - North Carolina: The American Indian rate (74.0) is significantly higher than the White rate (59.2).¹¹
 - PCR I Western: While lower than North Carolina overall, a similar disparity persists, with the American Indian rate (61.5) exceeding the White rate (52.8).¹²
- Ages 20-24:
 - North Carolina: The American Indian rate (124.5) is even more pronounced compared to the White rate (61.6).¹³
 - PCR I Western: The disparity remains evident, with the American Indian rate (120.4) being higher than the White rate (71.3).¹⁴

These disparities raise concerns about potential public health risks for both mothers and children within the American Indian community. Higher pregnancy rates among younger age groups, particularly those in the 15-19 range, can be associated with increased risks for complications during pregnancy and childbirth. Additionally, social and economic factors often linked with higher fertility rates may contribute to other health concerns. Addressing these disparities requires collaboration between public health professionals, community leaders, and the American Indian community itself to develop culturally appropriate and accessible programs that promote family planning education, ensure adequate prenatal care access, and address broader social determinants of health.

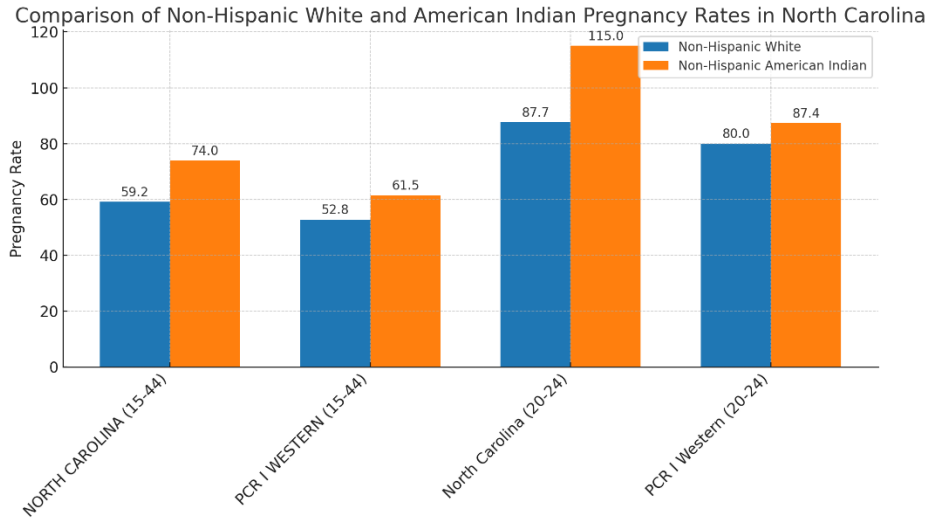
¹⁰ North Carolina State Center for Health Statistics (NC SCHS). (2022). Pregnancy data [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>

¹¹ Ibid

¹² Ibid

¹³ Ibid

¹⁴ Ibid



North Carolina State Center for Health Statistics (NC SCHS). (2022). Selected Live Birth Trends [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>

Figure 12

Comparison of Non-Hispanic White and American Indian Pregnancy Rates in North Carolina (2018-2022)

Birth Trends with Unmarried Mothers

In North Carolina, the percentage of women giving birth outside of marriage has remained steady around 41% for all races and ethnicities over the past nine years (2014-2022).¹⁵ However, a closer look reveals a significant difference for American Indian women, who consistently experience much higher rates of unmarried childbirth compared to White Non-Hispanic women.

Disparity in Rates:

- American Indian women: Rates ranged from 63.1% in 2014 to 64.0% in 2022.¹⁶
- White Non-Hispanic women: Rates ranged from 26.5% in 2014 to 24.9% in 2022.¹⁷

Unmarried motherhood can have negative consequences for mothers and children, especially regarding:

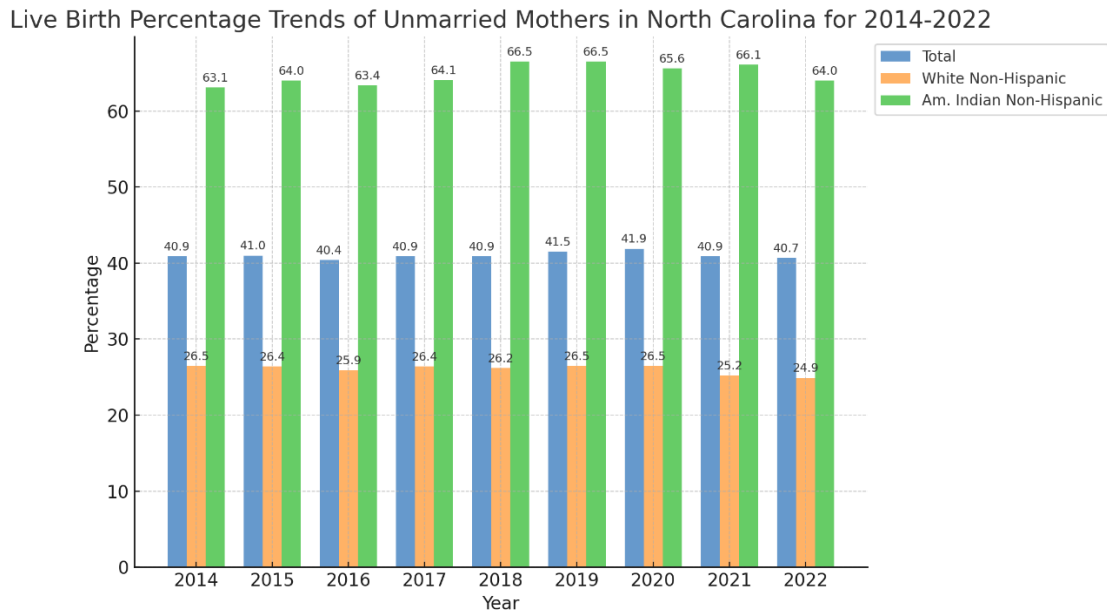
- Prenatal care access: Unmarried mothers may face challenges accessing regular prenatal care, crucial for a healthy pregnancy and birth outcome.
- Social and economic factors: Unmarried mothers are more likely to experience poverty and lack social support, impacting both maternal and child health.

¹⁵ North Carolina State Center for Health Statistics (NC SCHS). (2022). Selected Live Birth Trends [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>

¹⁶ Ibid

¹⁷ Ibid

The data reveals a disproportionate burden of unmarried childbirth among American Indian women in North Carolina.



Data Source: NC State Center for Health Statistics
 Data Retrieved: Selected Live Birth Trends Data
 Location: North Carolina
 Timeframe: 2014-2022
 Access Method: NC State Center for Health Statistics Databook <https://schs.dph.ncdhhs.gov/data/databook/>

Figure 13
 Live Birth Trends for Unmarried Mothers in North Carolina (2014-2022)

Youth and Community Impacts on Youth

The environment in which children and adolescents grow up profoundly influences their development and future outcomes. This section explores various critical factors that shape the lives of youth within the Eastern Band of Cherokee Indians (EBCI) community. It examines the prevalence of child maltreatment, poverty, and the use of public assistance, as well as issues related to unemployment and underemployment. Additionally, it addresses the impact of crime and juvenile delinquency, domestic or intimate partner violence, high school dropout and graduation rates, and substance use. Furthermore, it includes analyses from the Social Vulnerability Index (SVI) and the Environmental Justice Index (EJI) to provide a comprehensive view of the environmental and societal factors affecting EBCI youth. By understanding these societal and environmental factors, we can better address the challenges faced by EBCI youth and work towards creating a safer, healthier, and more supportive community for their growth and development.

Youth Health and Well-being

Youth health is a critical indicator of the future well-being of our community. Recent data from the Cherokee Central Schools Youth Risk and Resiliency Survey (YRRS) has shed light on significant trends and challenges faced by our young population. The 2022 survey reveals both improvements and ongoing

concerns in areas such as physical activity, diet, mental health, and substance use, providing a comprehensive overview of the health and well-being of our youth.

Physical activity levels among students have shown some promising trends. In 2022, **33.5%** of students reported being physically active for at least 60 minutes each day, meeting the US Department of Health and Human Services' recommendations for children and adolescents aged 6–17 years.¹⁸ However, the survey also revealed that **12%** of middle school students and **13%** of high school students reported no physical activity for at least 60 minutes on any day during the past week. Dietary habits among students also present challenges, with **10%** of students not consuming any vegetables and **11%** not eating any fruit in the last seven days. Comparatively, in 2018, **11%** of middle schoolers and **19%** of high schoolers reported no physical activity for at least 60 minutes on any day during the past week, highlighting some improvements but also ongoing issues in physical inactivity and diet.

Mental health remains a significant area of concern. The 2022 YRRS highlights that **38.8%** of high school students and **22.6%** of middle school students experienced prolonged feelings of sadness or hopelessness, impacting their daily activities. Additionally, **16%** of high school students seriously considered suicide, indicating a pressing need for enhanced mental health support and interventions. In comparison, the 2018 survey data showed that **31%** of high school and **23%** of middle school students felt sad or hopeless, and **14%** of high school students attempted suicide, underscoring the persistent and critical nature of mental health issues among youth.

Substance use among youth continues to pose risks to their health and safety. The 2022 survey revealed that **7.3%** of middle school students and **22.2%** of high school students reported using marijuana in the past 30 days. Additionally, **14%** of high school students admitted to using prescription drugs without a prescription. The 2018 survey data showed even higher rates of marijuana use, with **39%** of high school students and **10%** of middle school students reporting current use. Furthermore, **19%** of high school students reported being offered, sold, or given drugs on school property in 2018, emphasizing the ongoing struggle with substance abuse in our community.

Child Maltreatment

Childhood maltreatment, encompassing emotional, physical, sexual abuse, or neglect, can have lasting negative consequences for victims. Research shows it can increase the risk of developing post-traumatic stress disorder (PTSD), depression, anxiety disorders, substance abuse (including illicit drugs and alcohol), and addictive behaviors (including food and sex addictions), and even

¹⁸ Centers for Disease Control and Prevention. (n.d.). Physical Activity Guidelines. Retrieved from https://www.cdc.gov/healthyschools/physicalactivity/guidelines_backup.htm

suicide.¹⁹²⁰

In the context of Native American communities, the National Indian Child Welfare Association (NICWA) highlights the historical trauma stemming from US government forced assimilation policies, such as boarding schools, as a contributing factor to child abuse. These policies disrupted traditional family structures and community support systems, leaving lasting negative impacts that continue to affect generations.²¹

The Eastern Band of Cherokee Indians saw a concerning rise in child maltreatment reports across nearly all categories from FY18 to FY23, particularly in neglect (428 in FY23 compared to 248 in FY18) and physical abuse (80 in FY23 compared to 21 in FY18). While "Other" maltreatment categories saw significant fluctuations, substance abuse (223 cases in FY23), domestic violence (92 cases in FY23), and sexual abuse (29 cases in FY23) also remained at consistently high levels. These trends emphasize the critical need for targeted intervention strategies and increased support for families within the community to address these complex and sensitive issues.

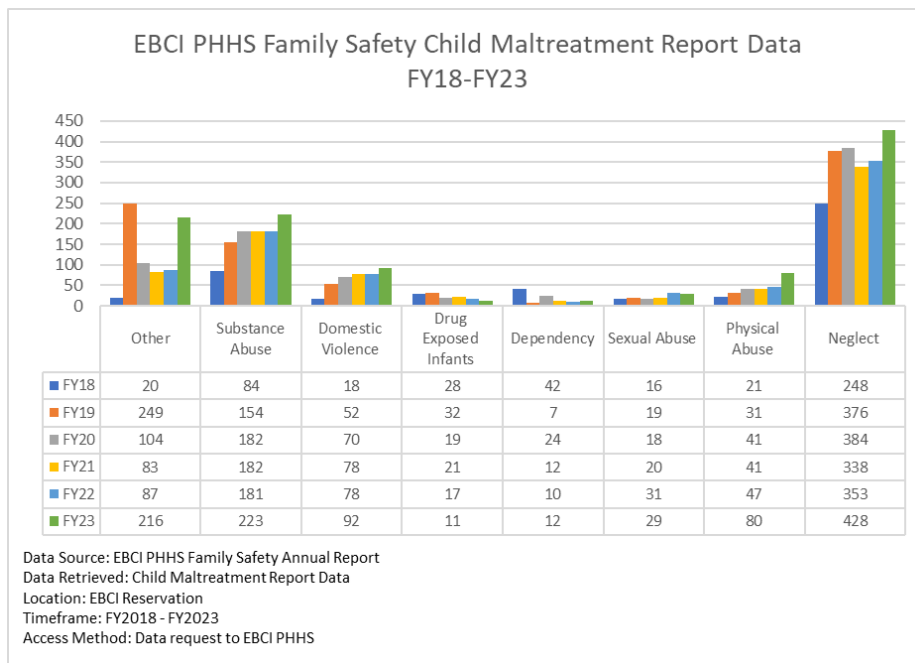


Figure 14
EBCI PHHS Family Safety Child Maltreatment Report Data (FY18-FY23)

¹⁹Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2003). The long-term health outcomes of childhood abuse: An overview and a call to action. *Journal of General Internal Medicine*, 18(10), 762–775. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1494926/>

²⁰ National Institutes of Health. (2023, September 13). Fetal Alcohol Spectrum Disorders (FASDs). [National Institutes of Health Bookshelf]. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK459146/>

²¹ National Indian Child Welfare Association (NICWA). (n.d.). Retrieved from <https://www.nicwa.org/>

The three graphs below (Figures 10-12) present longitudinal data, comparing the number of investigated reports of child abuse and neglect in Swain and Jackson Counties, and those in North Carolina as a whole. It's important to note that the Eastern Band of Cherokee Indians (EBCI) primarily resides on the Qualla Boundary, which falls largely within Swain and Jackson counties. Analyzing the data reveals a downward trend in investigated reports of child abuse and neglect since around 2014.

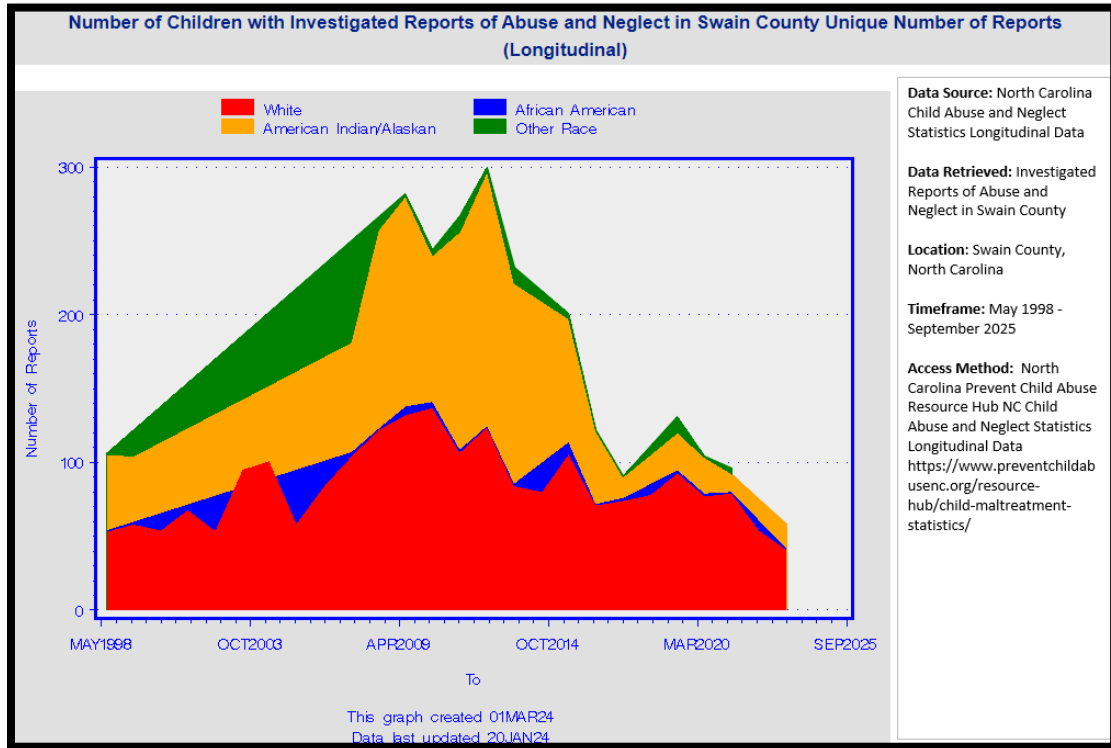


Figure 15

Number of Children with Investigated Reports of Abuse and Neglect in Swain County (1998-2023)

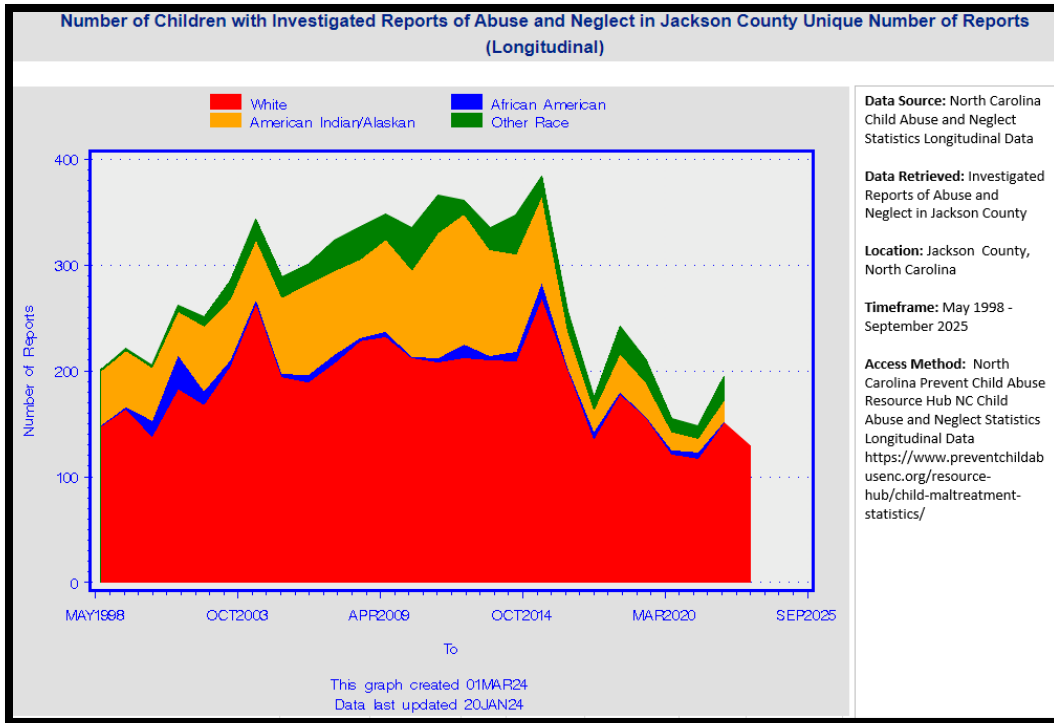


Figure 16

Number of Children with Investigated Reports of Abuse and Neglect in Jackson County (1998-2023)

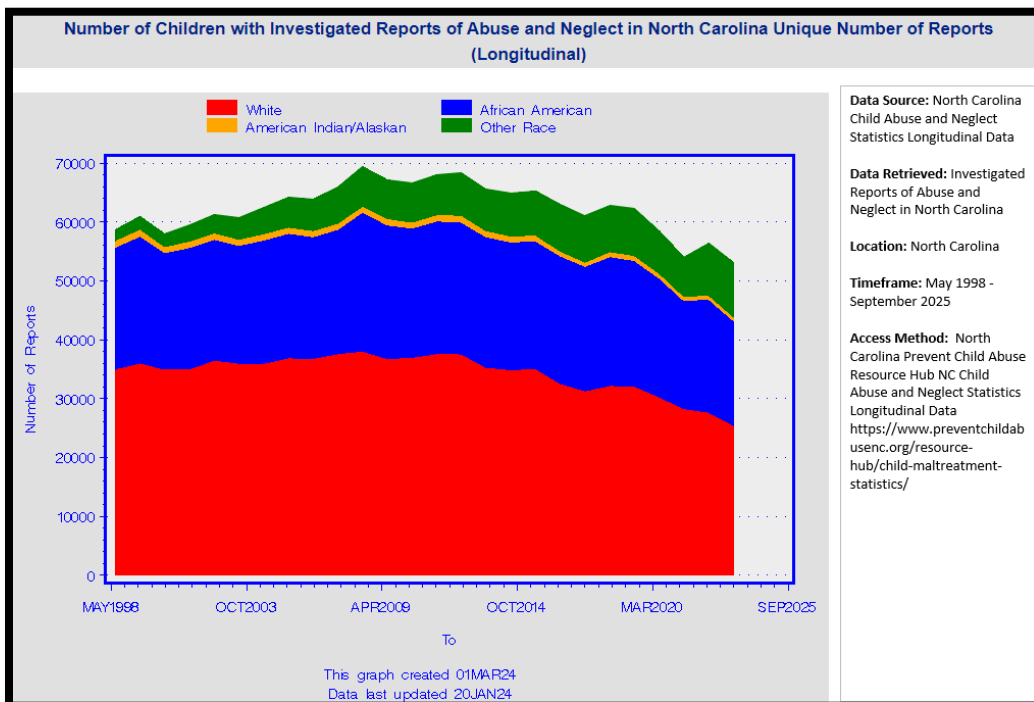


Figure 17

Number of Children with Investigated Reports of Abuse and Neglect in North Carolina (1998-2023)

Poverty and Use of Public Assistance

Understanding the impact of poverty through a public health lens is crucial. Poverty is associated with numerous negative health outcomes, including:

- Increased risk of chronic diseases such as heart disease, diabetes, and obesity.²²
- Limited access to quality healthcare, due to factors like lack of insurance or transportation.²³
- Increased exposure to environmental hazards, as low-income communities are often located in areas with higher levels of pollution.²⁴

These factors can create a cycle of poverty, where poor health outcomes lead to decreased productivity and earning potential, further perpetuating poverty.

American Indian communities experience disproportionately high poverty rates compared to the national average. This disparity is rooted in a complex history of colonial dispossession, forced assimilation policies, and systemic discrimination.²⁵ These factors have contributed to:

- Limited access to economic opportunities: Reservations are often located in remote areas with limited job opportunities and infrastructure.
- Educational disparities: Historic and ongoing challenges in accessing quality education contribute to lower educational attainment, a key factor in economic mobility.
- Intergenerational trauma: The historical experiences of forced assimilation and cultural disruption can contribute to ongoing social and emotional challenges, impacting the ability to thrive.

Addressing American Indian poverty requires comprehensive solutions that address the historical and ongoing factors contributing to this issue. This includes:

- Investing in infrastructure and economic development on tribal lands.
- Supporting tribal sovereignty and self-determination efforts.
- Providing culturally responsive educational opportunities.
- Addressing the legacy of historical trauma through trauma-informed care and support services.

²² Substance Abuse and Mental Health Services Administration (SAMHSA). (n.d.). Substance Abuse and Mental Health Services Administration. <https://www.samhsa.gov/>.

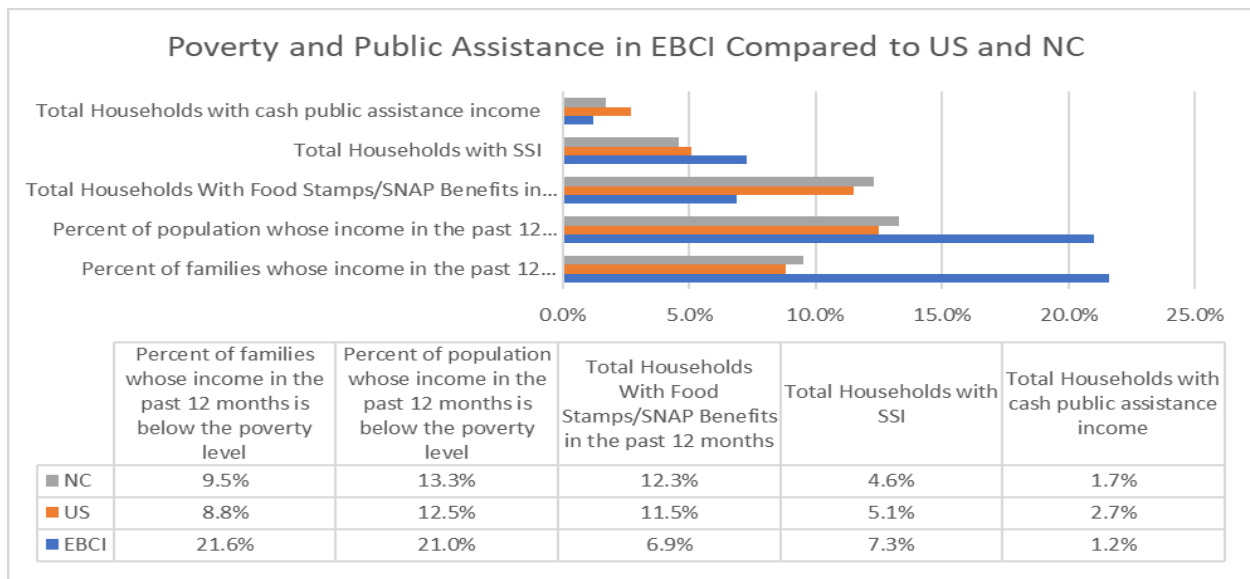
²³ Centers for Disease Control and Prevention (CDC). (2023, September 29). Advancing health equity in chronic disease prevention and management. <https://www.cdc.gov/chronicdisease/healthequity/index.htm>.

²⁴ American Progress. (n.d.). Environmental and climate justice. <https://www.americanprogress.org/topic/environmental-and-climate-justice/>.

²⁵ National Congress of American Indians (NCAI). (n.d.). Retrieved from <https://www.ncai.org/>

The Eastern Band of Cherokee Indians (EBCI) community faces ongoing challenges with poverty, as evidenced by the data. Both family and individual poverty rates in the EBCI exceed national and state averages, with around 21% of families and individuals living below the poverty line.²⁶ This means they have an income below the threshold required to meet basic needs, significantly impacting their quality of life.

While a smaller percentage of households participate in federal assistance programs like SNAP (food stamps) and Supplemental Security Income (SSI) compared to the national average, it's important to recognize that these programs play a crucial role in supplementing income and meeting basic needs for many EBCI households. Addressing the underlying factors contributing to poverty, such as limited access to employment opportunities and educational resources, remains critical for improving the overall economic well-being of the EBCI community.



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates, Table DP03

Figure 18

Poverty and Public Assistance in EBCI Compared to US and NC (2022)

Unemployment and Underemployment

Unemployment and underemployment can have a significant negative impact on public health, particularly for expecting mothers and their children. Particularly due to the following:

- Prenatal Care Access: Unemployment and low income can create barriers to accessing consistent prenatal care, which is crucial for a healthy pregnancy and birth outcome.

²⁶ U.S. Census Bureau. (2022). American Community Survey 5-year estimates, Table DP03.

<https://www.census.gov/data/developers/data-sets/acs-5year.html>

Limited access can lead to undetected health problems in mothers and babies, potentially increasing the risk of complications during pregnancy and childbirth.²⁷

- Nutritional Deficiencies: Low income may limit access to healthy and nutritious food, impacting both mothers and children. Nutritional deficiencies during pregnancy can lead to low birth weight, which is associated with increased risks of health problems like respiratory infections, developmental delays, and chronic diseases in adulthood.²⁸
- Stress and Mental Health: The financial instability associated with unemployment and low income can contribute to significant stress for mothers. This chronic stress can negatively impact both maternal and child health, increasing the risk of anxiety, depression, and even poor child development.²⁹

These factors highlight the importance of social safety net programs and economic policies that promote employment opportunities and financial security, particularly for families with expecting mothers and young children.

Native American communities often experience disproportionately high unemployment rates and lower median household incomes compared to the national average. This disparity stems from a complex history of colonial dispossession, forced assimilation policies, and ongoing systemic discrimination.³⁰

These historical and ongoing factors contribute to limited access to quality education, job training, and economic opportunities in many reservations. This lack of economic mobility creates a cycle that can perpetuate poverty and its negative health consequences across generations.

Therefore, addressing the public health concerns of expecting mothers and children in Native American communities requires a holistic approach. This includes investing in culturally responsive education and job training programs, supporting tribal sovereignty and economic development efforts, and acknowledging the historical trauma that continues to impact the well-being of these communities.

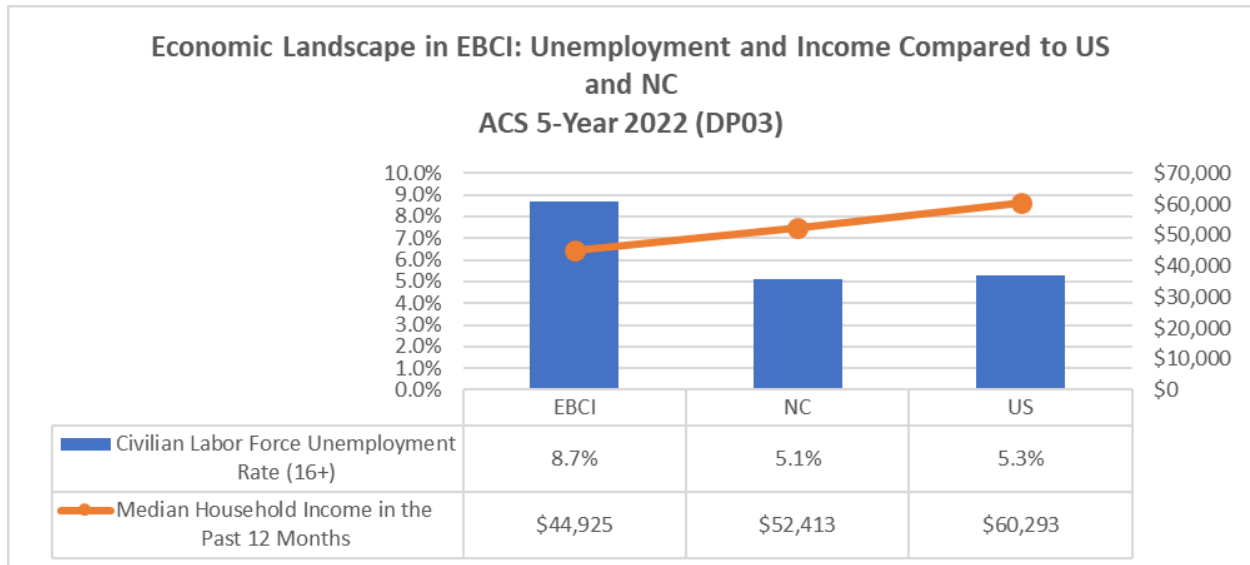
²⁷ American Congress of Obstetricians and Gynecologists (ACOG). (n.d.). Physician FAQs: Addressing the impact of COVID-19 on obstetric and gynecologic care. <https://www.acog.org/clinical-information/physician-faqs/-/media/3a22e153b67446a6b31fb051e469187c.ashx>

²⁸ Felitti, V. J., & Anda, R. F. (2023). Adverse childhood experiences and related adult health outcomes: A scoping review. *International Journal of Epidemiology*, 52(1), 22-56. <https://pubmed.ncbi.nlm.nih.gov/34609027/>

²⁹ Centers for Disease Control and Prevention (CDC). (2023, March 17). Adverse Childhood Experiences (ACEs). <https://www.cdc.gov/vitalsigns/aces/index.html>

³⁰ National Congress of American Indians (NCAI). (n.d.). Retrieved from <https://www.ncai.org/>

The Eastern Band of Cherokee Indians (EBCI) unemployment rate currently sits at 8.7%, noticeably higher than both the state of North Carolina (5.1%) and the national average (5.3%). This disparity highlights the need for targeted economic development initiatives within the EBCI community to boost employment and narrow the gap. Additionally, median household income in the EBCI falls short of both the state and national averages, at \$44,925 compared to \$52,413 and \$60,293, respectively. This income gap suggests potential challenges in accessing quality healthcare, education, and other essential resources.



Source: U.S. Census Bureau. (2022). American Community Survey 5-year estimates, Table DP03

Figure 19

Economic Landscape in EBCI: Unemployment and Income Compared to US and NC (2022)

Crime and Juvenile Justice

Crime and juvenile delinquency pose significant public health threats, particularly for expecting mothers and their children. Exposure to violence, either directly or indirectly, can have a cascading effect on a community's health.

Pregnant women living in high-crime neighborhoods experience increased stress levels, which can negatively impact fetal development. Studies have linked chronic stress during pregnancy to an

increased risk of low birth weight, premature birth, and birth defects.^{31,32} Additionally, witnessing violence can lead to depression, anxiety, and substance abuse in expecting mothers, further jeopardizing their health and the health of their babies.

Children residing in communities with high crime rates experience a range of negative health outcomes. Exposure to violence can lead to post-traumatic stress disorder (PTSD), anxiety, and depression.³³ These mental health challenges can interfere with a child's development, academic performance, and social interactions. Furthermore, children living in fear may be more likely to engage in risky behaviors, further impacting their health and safety.

From a Native American perspective, crime and juvenile delinquency are often seen as symptoms of historical trauma and ongoing social and economic injustices. Forced assimilation policies, broken treaties, and the loss of traditional cultural practices have contributed to a sense of hopelessness and despair in many Native communities.³⁴ These factors can lead to substance abuse, family dysfunction, and ultimately, crime.

Addressing crime and juvenile delinquency among Native American populations requires culturally sensitive approaches that promote healing and cultural revitalization. Community-based programs that focus on traditional knowledge systems, language preservation, and economic development can help empower Native youth and create a healthier future for their communities.³⁵

For the Eastern Band of Cherokee Indians, while reported crime fluctuated between 46 and 131 over the past decade, with a concerning spike in 2022, the clearance rate of these incidents has steadily improved. From a seemingly nonexistent clearance rate in 2012, the number of solved crimes has climbed to over 50% in recent years. This positive trend suggests increased efficiency in investigation and prosecution, potentially contributing to a safer environment for the

³¹ Black, S. C., Gemmill, H., & Robinson, W. L. (2016). Prenatal stress and the developmental origins of health and disease (DOHAD). *Frontiers in Neuroendocrinology*, 37(1), 1-17.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6933571/>

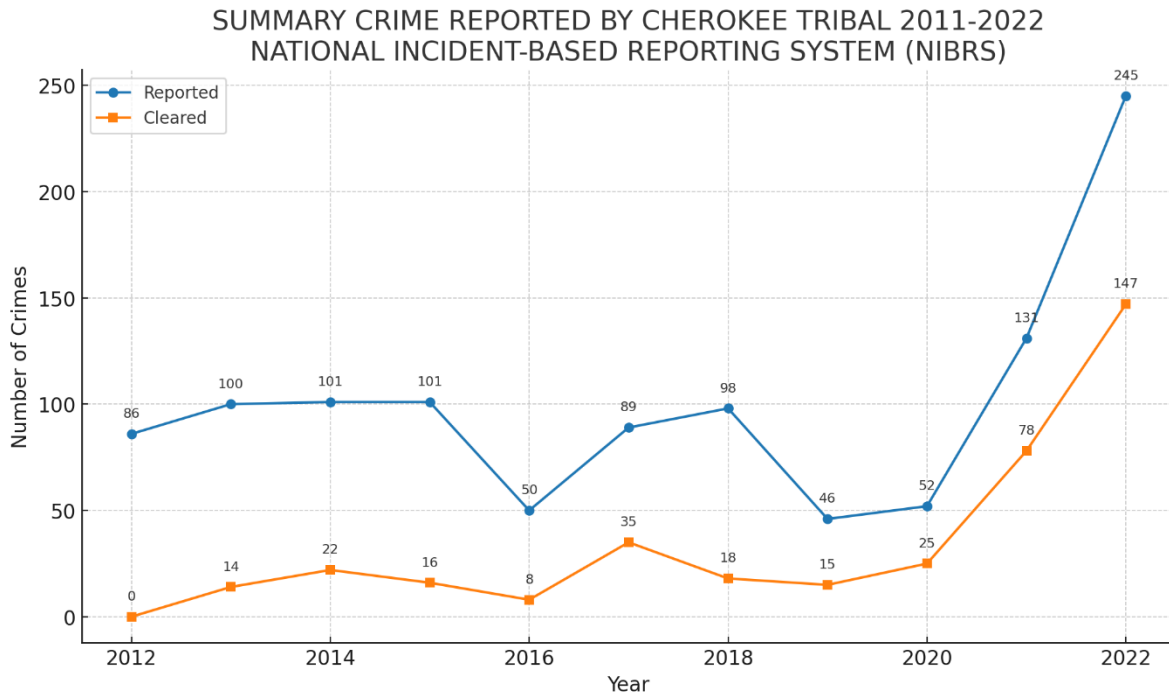
³² Costello, E. J., & Keane, T. M. (2000). Posttraumatic stress disorder in youth following exposure to family violence. *Current Psychiatry Reports*, 2(4), 350-358. <https://www.ncbi.nlm.nih.gov/books/NBK559129/>

³³ Centers for Disease Control and Prevention. (2023, January 19). Centers for Disease Control and Prevention. https://www.cdc.gov/violenceprevention/pdf/ACEs-Prevention-Resource_508.pdf

³⁴ The National Congress of American Indians (NCAI). (2023, January 25). NCAI Policy Statement on Safety <https://www.ncai.org/about-ncai>

³⁵ The National Indian Child Welfare Association (NICWA). (2023). Strengthening Tribal Communities: A Guide to Culturally Appropriate Services for Children and Families Affected by Domestic Violence. <https://www.nicwa.org/child-welfare-resources/>

community. However, the sharp rise in reported crimes in 2022 warrants further investigation to understand the underlying causes and ensure this upward trend doesn't persist.

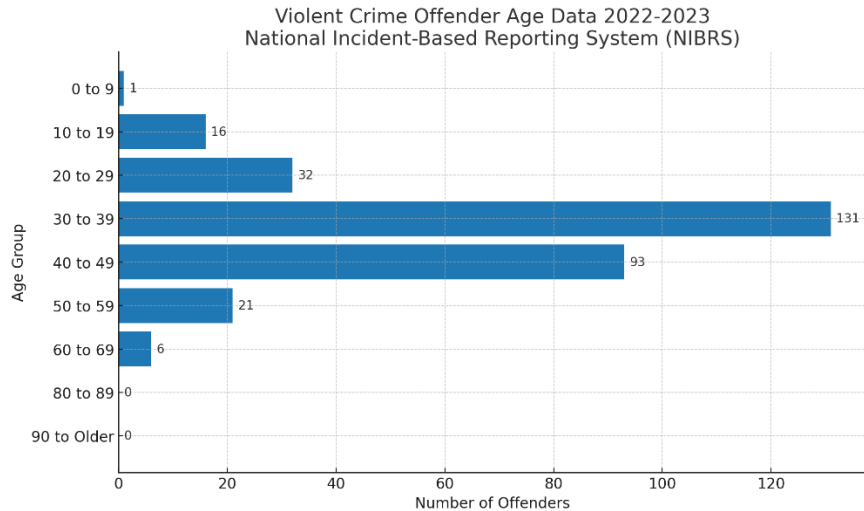


Data Source: FBI's National Incident-Based Reporting System (NIBRS)
 Data Retrieved: Reported and Cleared Data
 Agency: Cherokee Tribal
 Location: Cherokee Tribal Jurisdiction
 Timeframe: 2011-2022
 Access Method: Crime Data Explorer <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

Figure 20

Summary Crime Reported by Cherokee Tribal in the National Incident-Based Reporting System (NIBRS) (2011-2022)

The following data reveals a distinct age pattern in violent crime offenses, with a clear concentration among individuals in their 20s and 30s, accounting for over 60% of incidents. This age group typically navigates significant life transitions, including establishing careers, entering relationships, and starting families, which can bring challenges and uncertainties. Additionally, impulsivity and risk-taking behaviors are often more pronounced during this period, potentially contributing to criminal activity.

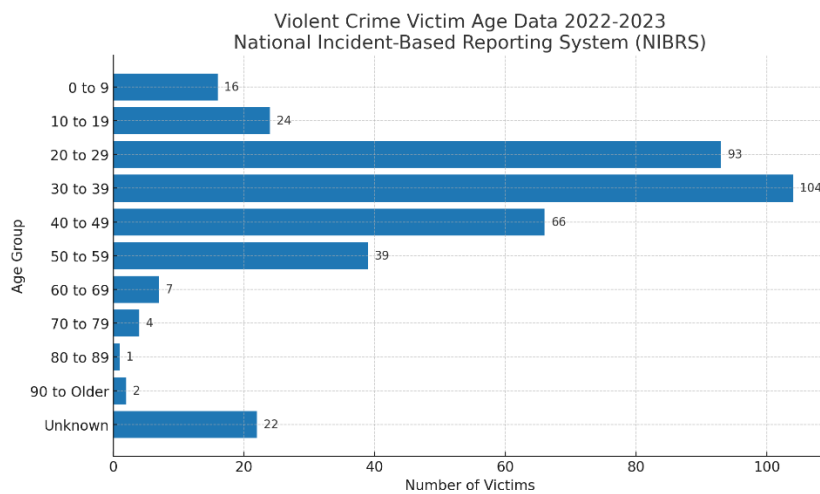


Data Source: FBI's National Incident-Based Reporting System (NIBRS)
 Data Retrieved: Offender Age Data
 Timeframe: 2022-2023
 Access Method: Crime Data Explorer <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

Figure 21

Violent Crime Offender Age Data Reported by Cherokee Tribal in NIBRS (2022-2023)

The following data reveals a concerning trend in violent crime victimization, with younger age groups bearing the brunt of the impact. Individuals between 20 and 39 years old account for nearly half (197) of all reported victims, followed by those in their 40s (66). This pattern highlights the vulnerability of young and middle-aged adults, who may be more exposed to risk factors like social settings prone to violence or involvement in certain activities.



Data Source: FBI's National Incident-Based Reporting System (NIBRS)
 Data Retrieved: Victim Age Data
 Timeframe: 2022-2023
 Access Method: Crime Data Explorer <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

Figure 22

Violent Crime Victim Age Data Reported by Cherokee Tribal in NIBRS (2022-2023)

The following table shows juvenile undisciplined and delinquency rates for the five counties in North Carolina where the Eastern Band of Cherokee Indians (EBCI) resides and the state as a whole.

Key Findings:

- Statewide Context: North Carolina has an "Undisciplined Rate" of 1.71 and a "Delinquent Rate" of 26.22 per 1,000 juveniles.³⁶
- Undisciplined Rates: All five EBCI counties show higher undisciplined rates compared to the state average. The rates range from 3.62 (Graham) to 12.54 (Swain), with Cherokee and Swain exceeding the state average by more than three times.³⁷
- Delinquent Rates: Three EBCI counties (Cherokee, Jackson, and Swain) have higher delinquent rates compared to the state average. Notably, Jackson County has a rate of 52.73, exceeding the state average by more than double.³⁸

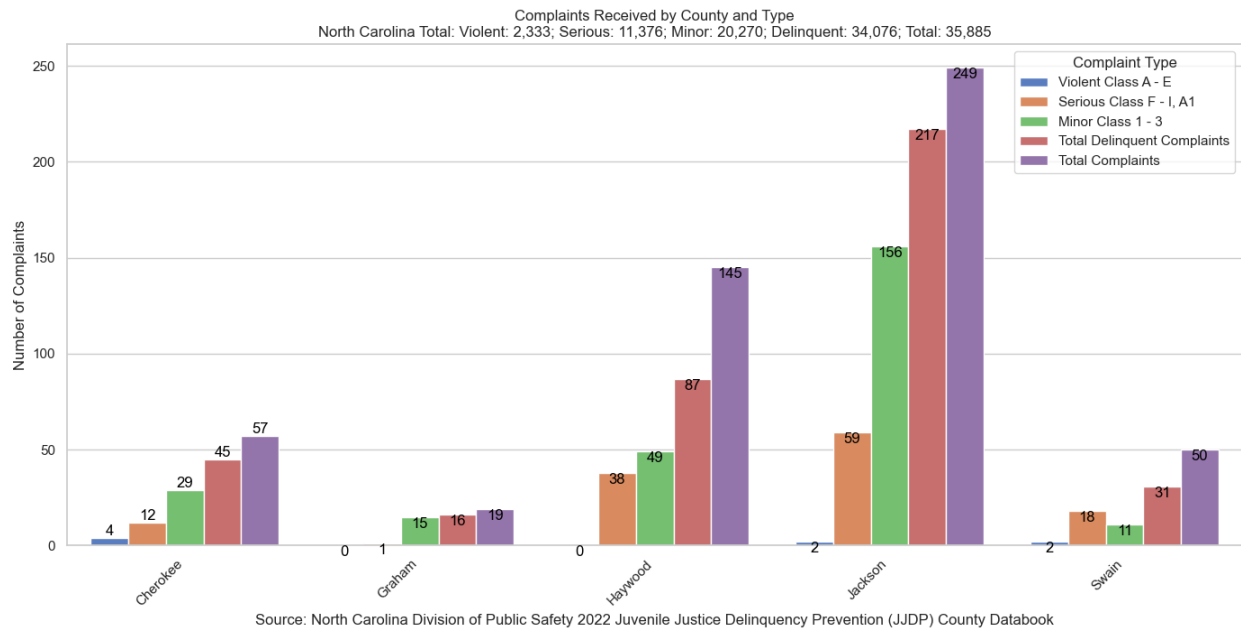


Figure 23
Complaints Received by County and Type (2022)

³⁶ North Carolina Division of Public Safety (NCDPS). (2022). 2022 Juvenile Justice Delinquency Prevention (JJDP) County Databook. Retrieved from <https://www.ncdps.gov/2022-jjdp-county-databook>

³⁷ Ibid

³⁸ Ibid

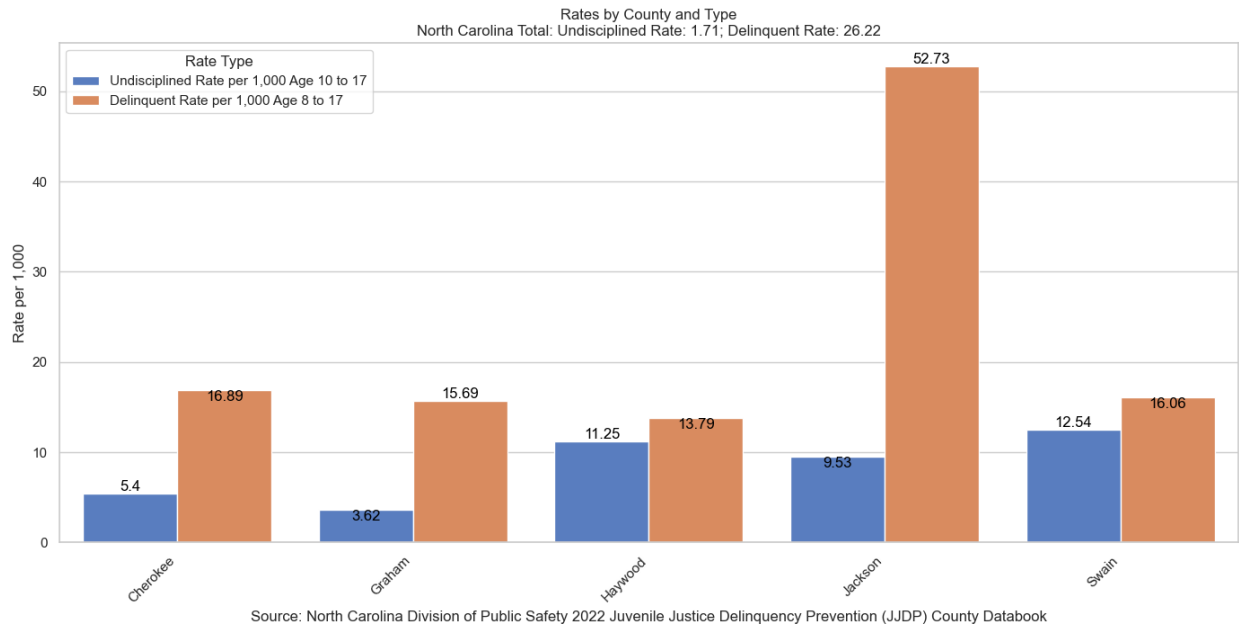


Figure 24
Undisciplined and Delinquent Rates by County (2022)

Domestic and Intimate Partner Violence

Domestic violence, encompassing physical, sexual, and emotional abuse by an intimate partner, poses a significant public health threat. The consequences extend far beyond the victim, impacting the health and well-being of expecting mothers and their children.

Pregnant women experiencing domestic violence are at increased risk for a range of negative health outcomes. The chronic stress associated with abuse can lead to preeclampsia, gestational diabetes, and premature birth.³⁹ Additionally, domestic violence can make it difficult for pregnant women to access prenatal care, further jeopardizing the health of both mother and baby.

Children exposed to domestic violence are at risk for a multitude of physical and mental health problems. Witnessing violence in the home can lead to post-traumatic stress disorder (PTSD), anxiety, depression, and behavioral problems in children.⁴⁰ These challenges can negatively impact their development, academic performance, and future relationships.

³⁹ National Institutes of Health. (n.d.). Partner Violence During Pregnancy.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2971723/>

⁴⁰ Centers for Disease Control and Prevention. (2023, January 19). Centers for Disease Control and Prevention.

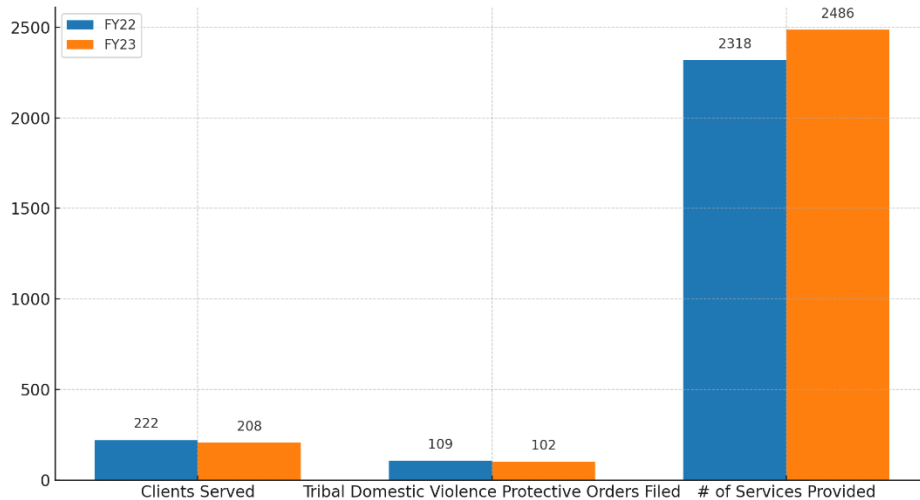
<https://www.cdc.gov/violenceprevention/aces/fastfact.html>

Native American communities face disproportionately high rates of domestic violence compared to the national average. This disparity is rooted in a complex history of colonial dispossession, forced assimilation policies, and ongoing social and economic marginalization.⁴¹ These factors can contribute to poverty, substance abuse, and feelings of hopelessness, all of which are risk factors for domestic violence.

Addressing domestic violence in Native American communities requires culturally sensitive approaches. Programs that incorporate traditional healing practices, strengthen tribal sovereignty, and promote economic opportunities can empower victims and foster healthier relationships within families and communities.⁴²

The Eastern Band of Cherokee Indians (EBCI) Domestic Violence and Sexual Assault Program continues to provide crucial support to individuals navigating challenging circumstances. While the number of clients served decreased slightly from 2022 to 2023 (222 to 208), the program saw a notable increase in the number of services provided (2,318 to 2,486). This suggests a deeper engagement with clients, offering them more comprehensive support and resources.

EBCI Public Health and Human Services' Domestic Violence and Sexual Assault Program Client Data FY22-FY23



Source: EBCI PHHS Domestic Violence and Sexual Assault Program Data

Figure 25

EBCI PHHS Domestic Violence and Sexual Assault Program Client Data (FY22-FY23)

⁴¹ The National Congress of American Indians (NCAI). (2023, January 25). NCAI Policy Statement on Domestic Violence <https://www.ncai.org/news/joint-statement-ncai-and-niwrc-call-on-the-senate-to-modernize-reauthorize-and-strengthen-the-violence-against-women-act-now>

⁴² The National Indian Justice Center. (2013). Tribal Domestic Violence and Sexual Assault Act Resource Manual. <https://www.ovcttac.gov/TVA/?nm=sfa&ns=tva&nt=resources>

The following data highlights the number of reported domestic violence and sexual assault cases within the Eastern Band of Cherokee Indians (EBCI) compared to the broader North Carolina American Indian/Alaska Native (AI/AN) population over a six-year period (FY17-FY22).⁴³

Key Findings:

- Overall Increase: Both EBCI and NC AI/AN populations show an upward trend in reported cases over the six-year period.
- Increase Rate Disparity: While both populations show an increase, the rate of increase differs: EBCI cases increased by approximately 25 times, while NC AI/AN cases increased by over 2.2 times.

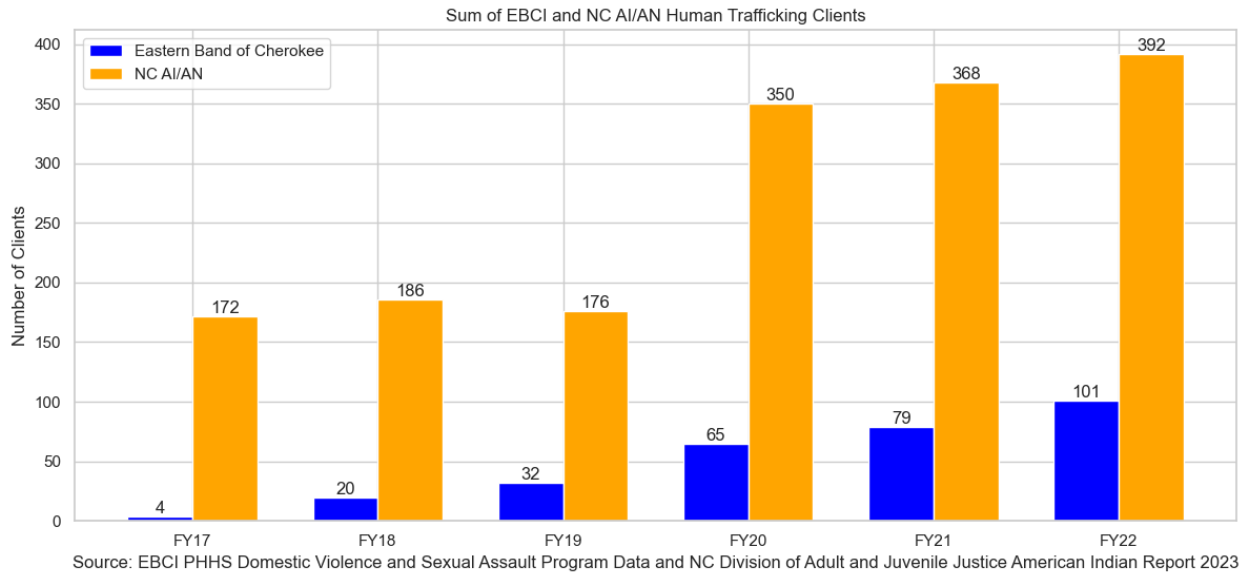


Figure 26

EBCI PHHS Domestic Violence and Sexual Assault Program Sum of Human Trafficking Clients and NC AI/AN Human Trafficking Clients (FY17-FY22)

High School Dropout and Graduation

Not completing high school education has significant public health consequences, impacting individuals and their families. For expecting mothers, a lack of education can negatively affect their own health and the health of their babies.

Pregnant women with lower educational attainment are more likely to experience poor prenatal care, inadequate nutrition, and risky behaviors such as smoking.⁴⁴ These factors can contribute to

⁴³ North Carolina Department of Administration, Division of Adult and Juvenile Justice - Council for Women and Youth. (2023, September). American Indian Report. Retrieved from <https://www.doa.nc.gov/divisions/council-women-youth/american-indian-report>

⁴⁴ Centers for Disease Control and Prevention. (2023, January 19). Centers for Disease Control and Prevention. <https://www.cdc.gov/violenceprevention/aces/fastfact.html>

preterm birth, low birth weight, and infant mortality.⁴⁵ Additionally, mothers without a high school diploma may struggle to access resources and support systems to ensure their children's health and well-being.

Children of high school dropouts face a range of health challenges. Studies show a correlation between parental educational attainment and a higher risk of childhood obesity, asthma, and mental health problems in children.⁴⁶ Furthermore, children raised by parents without a high school diploma are more likely to experience food insecurity and inadequate access to.⁴⁷

Native American communities face disproportionately high high school dropout rates compared to the national average. This disparity stems from historical factors like forced assimilation policies that disrupted traditional education systems, and ongoing challenges with poverty, limited access to educational resources, and cultural disconnect in some schools.⁴⁸

Investing in culturally relevant educational programs within Native American communities is crucial for improving public health outcomes. Programs that incorporate traditional knowledge and language while ensuring access to quality resources and support services can empower young people to succeed in school and improve their overall well-being. This can lead to healthier families, stronger communities, and a brighter future for generations to come.⁴⁹

The following data reveals interesting nuances in educational attainment among young adults across the United States, North Carolina, and the Eastern Band of Cherokee Indians (EBCI). While the percentage of young adults aged 18-24 without a high school diploma is comparable across the US and NC (around 13%), it's noticeably higher for the EBCI (16.2%). This suggests potential disparities in access to quality education or educational barriers faced by this specific community.

The trend continues in the 25-34 age group, with EBCI again exhibiting a slightly higher percentage of individuals without a high school diploma compared to the national and state averages.

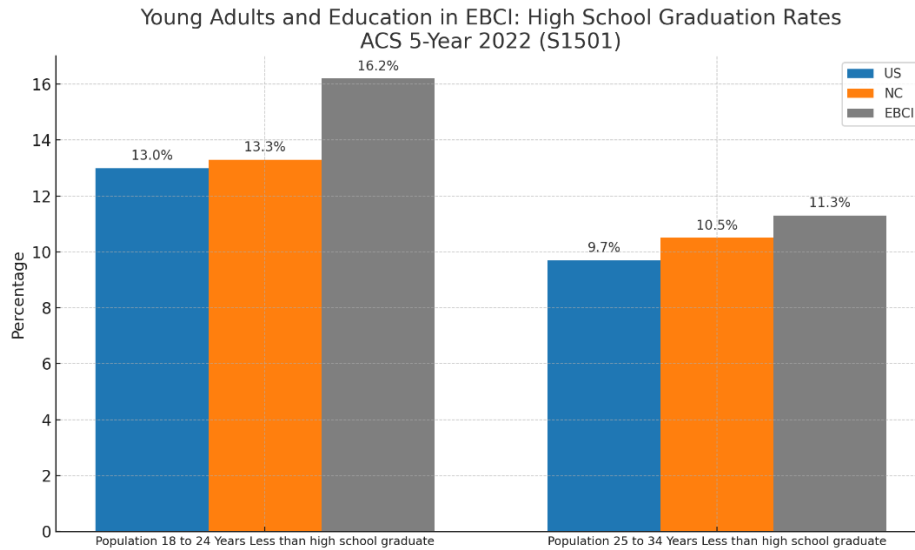
⁴⁵ March of Dimes. (n.d.). Premature Birth. <https://marchforbabies.org/>

⁴⁶ National Center for Health Statistics. (2020, December 17). Health, United States, 2019. Centers for Disease Control and Prevention. <https://www.cdc.gov/nchs/data/hus/hus19-508.pdf>

⁴⁷ Feeding America. (2023, February 14). Hunger in America. <https://www.feedingamerica.org/hunger-in-america>

⁴⁸ The National Indian Education Coalition. (n.d.). The State of Indian Education. <https://nces.ed.gov/pubsearch/pubsinfo.asp?pubid=2021018>

⁴⁹ The National Congress of American Indians (NCAI). (2023, January 25). NCAI Policy Statement on Indian Education. <https://www.ncai.org/about-ncai>



Source: U.S. Census American Community Survey 2022 Graduate Rates from S1501 (2022)

Figure 27

U.S. Census American Community Survey 2022 Graduate Rates from S1501 (2022)

Substance Use and Abuse

Substance use and abuse, encompassing alcohol, illicit drugs, and prescription medications misused, pose a significant public health threat. The consequences extend far beyond the individual user, impacting the health and well-being of expecting mothers and their children.

Pregnant women who use substances expose their developing babies to harmful toxins. This can lead to a range of birth defects, including fetal alcohol syndrome (FAS), neonatal abstinence syndrome (NAS), and premature birth.⁵⁰ Additionally, substance abuse can hinder a mother's ability to access proper prenatal care and make healthy choices for herself and her baby.

Children exposed to substance abuse in the home face numerous challenges. They may experience developmental delays, behavioral problems, and mental health issues such as anxiety and depression.⁵¹ Furthermore, children living in households with substance abuse are at a higher risk of neglect and abuse, further jeopardizing their well-being.

A Different Path: Addressing Substance Abuse in Native American Communities

⁵⁰ Centers for Disease Control and Prevention. (2023, January 19). Fetal Alcohol Spectrum Disorders (FASDs).

<https://www.cdc.gov/ncbddd/fasd/index.html>

⁵¹ National Institute on Drug Abuse. (2020, September 24). Substance Use and Mental Illness.

<https://www.samhsa.gov/>

Native American communities experience disproportionately high rates of substance abuse compared to the national average. This disparity is rooted in a complex history of colonial dispossession, the forced introduction of alcohol, and ongoing social and economic marginalization.⁵² These factors contribute to poverty, unemployment, and feelings of hopelessness, all of which can increase the risk of substance abuse.

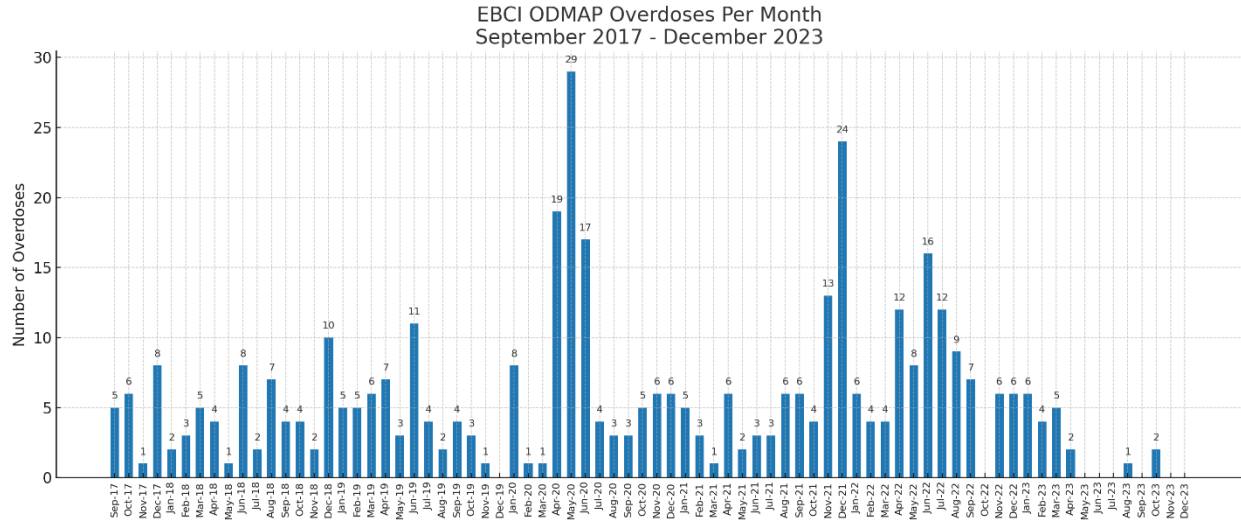
Addressing substance abuse in Native American communities necessitates culturally sensitive approaches. Programs that incorporate traditional healing practices, address historical trauma, and promote economic opportunities can empower individuals and families to overcome addiction and build stronger communities. Additionally, fostering tribal sovereignty allows for the development of culturally relevant treatment programs that address the specific needs of Native American populations.⁵³

The following data reveals trends in EBCI ODMAP overdoses, highlighting significant spikes from April to June 2020 and again from November to December 2021. While the reasons for this rise are complex and multi-faceted, it's worth considering the context of the COVID-19 pandemic and its associated mental health challenges. The isolation, economic hardship, and uncertainty brought on by the pandemic could have contributed to increased substance use as a coping mechanism, leading to the observed surge in overdoses.

However, the data also shows encouraging signs of a potential downward trend since December 2021. This could indicate the effectiveness of community support initiatives, improved access to mental health resources, or a gradual return to normalcy after the pandemic's peak.

⁵² The National Congress of American Indians (NCAI). (2023, January 25). NCAI Policy Statement on Substance Abuse. <https://www.ncai.org/resources/job-listings/associate-attorney>

⁵³ The Substance Abuse and Mental Health Services Administration (SAMHSA). (2020, September 23). Behavioral Health Treatment Services for American Indian/Alaska Native People. <https://www.samhsa.gov/>



Source: EBCI Tribal EMS Overdose Data per Month from Overdose Detection Mapping Application Program (2017-2023)

Figure 28

EBCI Tribal EMS Overdose Data per Month from Overdose Detection Mapping Application Program (2017-2023)

The following data shows trends in the usage of alcohol, marijuana, and e-cigarettes among students at EBCI Cherokee Central School. While the percentages of students reporting alcohol use fluctuate across grades, with a notable jump in 12th grade (25.0%), a consistent rise in marijuana and e-cigarette use is observed from 6th to 12th grade.

- Marijuana: The percentage of students who used marijuana at least once nearly triples from 6th grade (13.8%) to 12th grade (30.6%).
- E-cigarettes: Similar to marijuana, e-cigarette use increases steadily from 6th grade (18.4%) to 12th grade (30.6%).
- Alcohol: Compared to marijuana and e-cigarettes, alcohol use shows a slightly different pattern. It remains relatively low from 6th to 8th grade but increases significantly in 9th and 10th grades before slightly decreasing in 11th and 12th grades.

This data sheds light on concerning substance use trends among EBCI students, particularly in marijuana and e-cigarette use. While alcohol use follows a different pattern, its presence still necessitates attention.

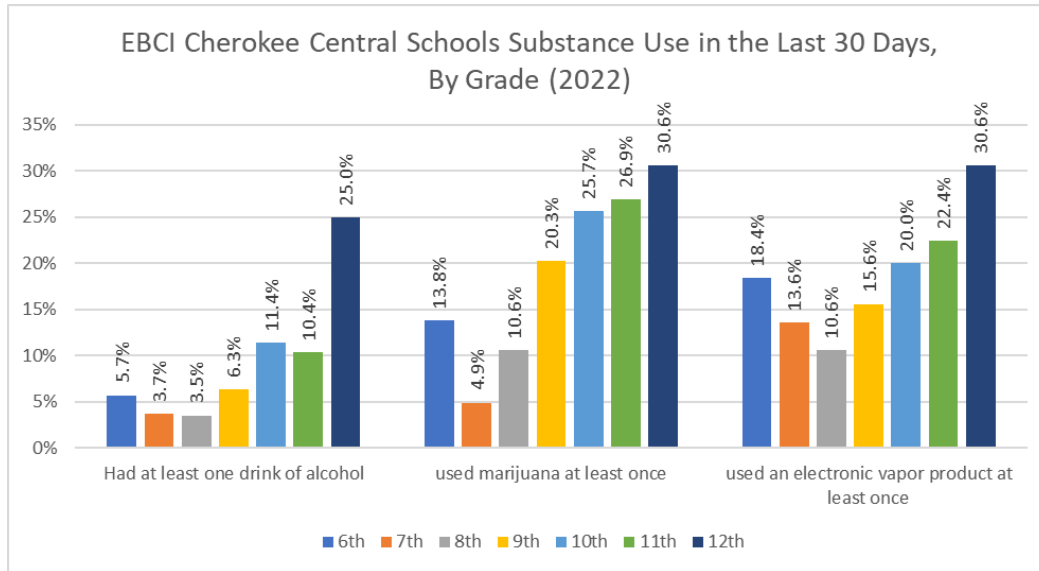


Figure 29

EBCI Cherokee Central Schools (CCS) Substance Use in Last 30 Days from Youth Risk and Resiliency Survey (2022)

The following data from EBCI Cherokee Central School (CCS) High School reveals significant shifts in youth risk behaviors between 2016 and 2022.⁵⁴ While some areas show positive trends, others remain worrisome, demanding continued attention and support for students.

- Tobacco Use: Notably, cigarette smoking experimentation and regular use have significantly decreased since 2016. In 2022, only 34.5% of students had ever tried cigarettes, compared to 51.0% in 2016.⁵⁵ This downward trend aligns with national data, pointing towards potential success in tobacco control efforts. However, e-cigarette use, while dropping from 54.0% in 2016 to 21.8% in 2022, remains concerningly high compared to the national average of 32.7%.⁵⁶ Early use (before age 13) for both cigarettes and e-cigarettes persists, requiring further preventative measures.
- Alcohol and Other Drug Use: Marijuana use exhibits a complex trend. While experimentation (ever used) jumped from 48.0% in 2016 to 60.2% in 2022, regular use (currently used) decreased from 31.0% to 25.8%.⁵⁷ These figures surpass national averages (39.4% and 21.7%), highlighting a critical issue within the EBCI community.⁵⁸ Early alcohol use (before age 13) remains consistent at 14.7%, mirroring the national average but warranting close monitoring. Current alcohol use has dipped

⁵⁴ Eastern Band of Cherokee Indians (EBCI) Public Health and Human Services (PHHS) Epidemiologist. (2022). CCS 2022 YRRS Data. Data collected from 2022 CCS YRRS Survey.

⁵⁵ Ibid

⁵⁶ Ibid

⁵⁷ Ibid

⁵⁸ Ibid

considerably since 2016, from 23.0% to 12.0%, reflecting a potentially positive development.⁵⁹ Finally, reports of being offered, sold, or given illegal drugs on school property have decreased slightly but remain elevated compared to national data, suggesting a persistent issue requiring ongoing intervention and safety measures.

Overall, the data reveals both positive and negative trends in EBCI CCS High School. While declines in cigarette smoking and alcohol use are encouraging, the prevalence of e-cigarette use and marijuana experimentation demand attention.

HIGH SCHOOL DATA							
Risk Behavior Indicators	2016 CCS High School (%)	2018 CCS High School (%)	2022 CCS High School (%)	CCS HS Data from 2016-2022 (%)	2022 CCS High School (%)	2019 NC High School YRBS Data (%)	2019 US High School YRBS Data (%)
Tobacco Use							
Ever tried cigarette smoking	51.0	48.1	34.5			34.5	24.1
Currently used electronic vapor products	54.0	37.8	21.8			34.5	32.7
First Tried Cigarette Smoking Before Age 13 Years	12.0	19.2	18.2			N/A	7.9
Currently smoked cigarettes	25.0	23.7	5.5			8.3	6.0
Alcohol and Other Drug Use							
Ever used marijuana	48.0	N/A	60.2	N/A		60.2	36.8
Currently used marijuana	31.0	39.4	25.8			25.8	21.7
Tried marijuana for the first time before age 13 years	16.0	27.7	17.1			17.1	5.6
Had their first drink of alcohol before age 13 years	14.0	14.7	14.7			14.7	15.0
Currently drank alcohol	23.0	28.2	12.0			24.2	29.2
Were offered, sold, or given an illegal drug on school property	10.0	18.7	9.4			9.4	21.8

Figure 30

CCS Tobacco Use and Alcohol and Other Drug Use Data from Youth Risk and Resiliency Survey (2016-2022)

Community Health and Environmental Impacts

This section provides a narrative and visualizations of key issues affecting the EBCI. Further data and analysis will be available in the Our Health and Inequities section.

Chronic Disease Burden

The Eastern Band of Cherokee Indians (EBCI) population faces a significant burden of chronic diseases, with high prevalence rates of conditions such as cardiovascular diseases and type 2 diabetes. According to Cherokee Indian Hospital data, **59.70%** of all deaths between 2015 and 2021 were due to chronic diseases. Among these, cardiovascular diseases were the leading cause, accounting for **19.68%** of all deaths between 2015 and 2021, which is **45.98%** of all deaths from chronic diseases. The second leading cause of death from chronic diseases was cancer, accounting for **14.46%** of all deaths between 2015 and 2021, which is **34.73%** of deaths due to chronic diseases.

⁵⁹ Ibid

Cardiovascular Diseases

Cardiovascular diseases are a major health concern for the EBCI population. From 2015 to 2021, they caused **19.68%** of all deaths. This includes **10.84%** from ischemic heart diseases and **8.84%** from other heart diseases.

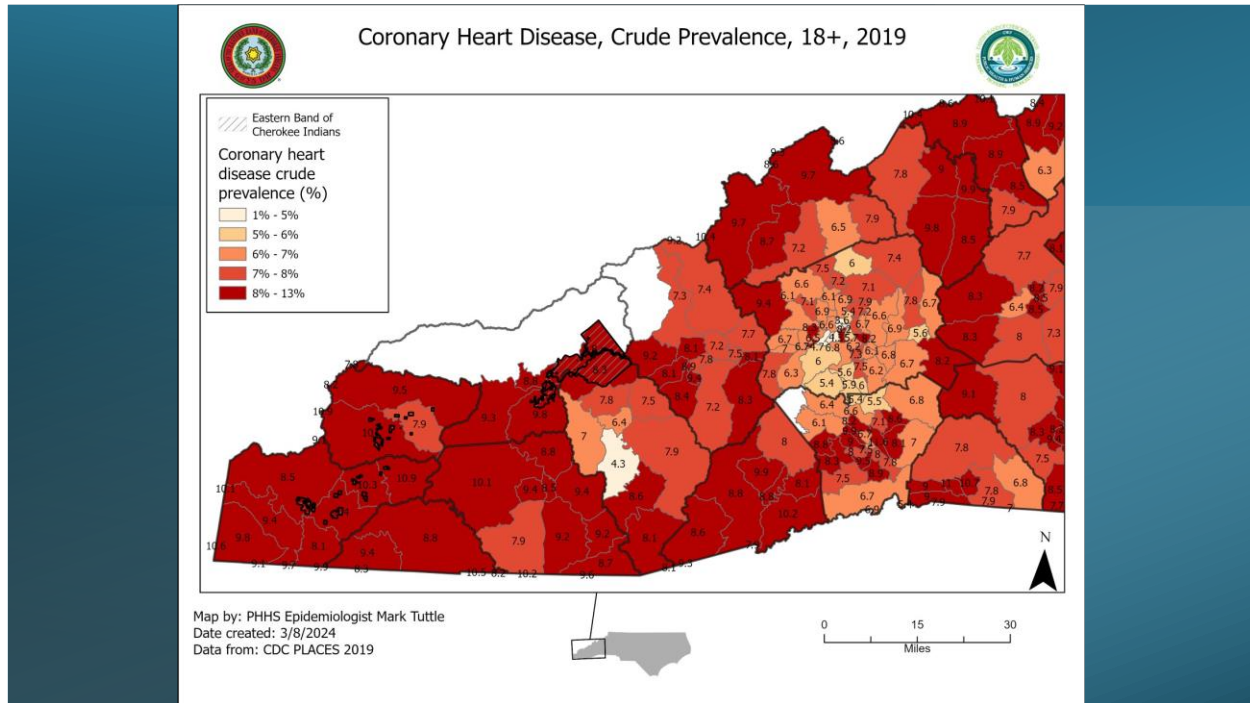


Figure 31

CDC PLACES Coronary Heart Disease, Crude Prevalence, 18+ (2019)

Type 2 Diabetes

Type 2 diabetes is prevalent within the EBCI community, significantly impacting overall health. As of 2023, **21.64%** of EBCI adults were diagnosed with type 2 diabetes, compared to **12.4%** in North Carolina, **11.6%** in the United States, and **13.6%** among National American Indian and Alaska Native adults. Between 2015 and 2021, **7.48%** of EBCI adults died due to complications from type 2 diabetes.

From 2015 to 2021, diabetes-related deaths accounted for:

- Men: **6%** of deaths.
- Women: **9.07%** of deaths.

Compared to the USET aggregate, **5.06%** of the EBCI population died from diabetes, while the percentage for North Carolina was **10.37%**. While the percentage of deaths directly attributed to diabetes may not seem high, it is important to consider that many individuals with diabetes also suffer from other health conditions related to diet and exercise. These conditions, such as cardiovascular diseases and obesity, often exacerbate the health complications associated with diabetes, leading to a higher overall mortality rate.

Managing diabetes effectively requires a comprehensive approach that includes addressing these related health issues to improve overall health outcomes within the EBCI community.

The data from 2018 to 2023 indicates a high and fluctuating incidence of type 2 diabetes in the EBCI population:

- **2018:** 199 diagnosed cases, incidence rate of **1,738.9** per 100,000.
- **2019:** 120 diagnosed cases, incidence rate of **1,039.6** per 100,000.
- **2020:** 122 diagnosed cases, incidence rate of **1,086.1** per 100,000.
- **2021:** 179 diagnosed cases, incidence rate of **1,543.6** per 100,000.
- **2022:** 144 diagnosed cases, incidence rate of **1,256.4** per 100,000.
- **2023:** 145 diagnosed cases, incidence rate of **1,262.7** per 100,000.

From 2018 to 2023, the incidence of type 2 diabetes in the Eastern Band of Cherokee Indians (EBCI) and the USET Aggregate showed similar and consistently high trends. Both groups experienced high incidence rates, with fluctuations over the years. The sharp increase in 2021 for both groups suggests shared external factors, likely influenced by the COVID-19 pandemic, which may have disrupted healthcare services and impacted diabetes management. In 2020, the incidence rates for both EBCI and USET Aggregate dropped, likely due to reduced healthcare access and fewer diagnoses during the pandemic. Despite some decreases in subsequent years, the incidence rates remained high, underscoring the persistent public health challenge. These trends highlight the need for enhanced monitoring, targeted preventive health programs, and improved healthcare access. Collaborative efforts between EBCI and USET Aggregate are essential to address common risk factors and improve diabetes management and outcomes across both populations.

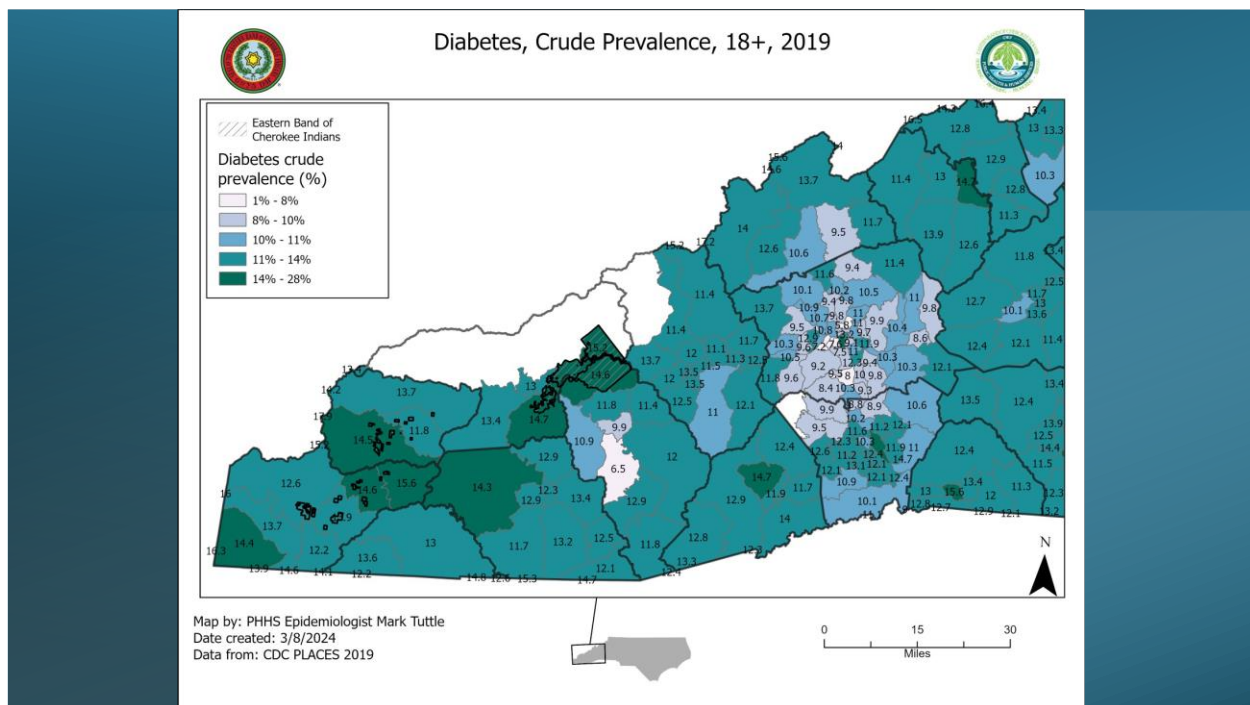
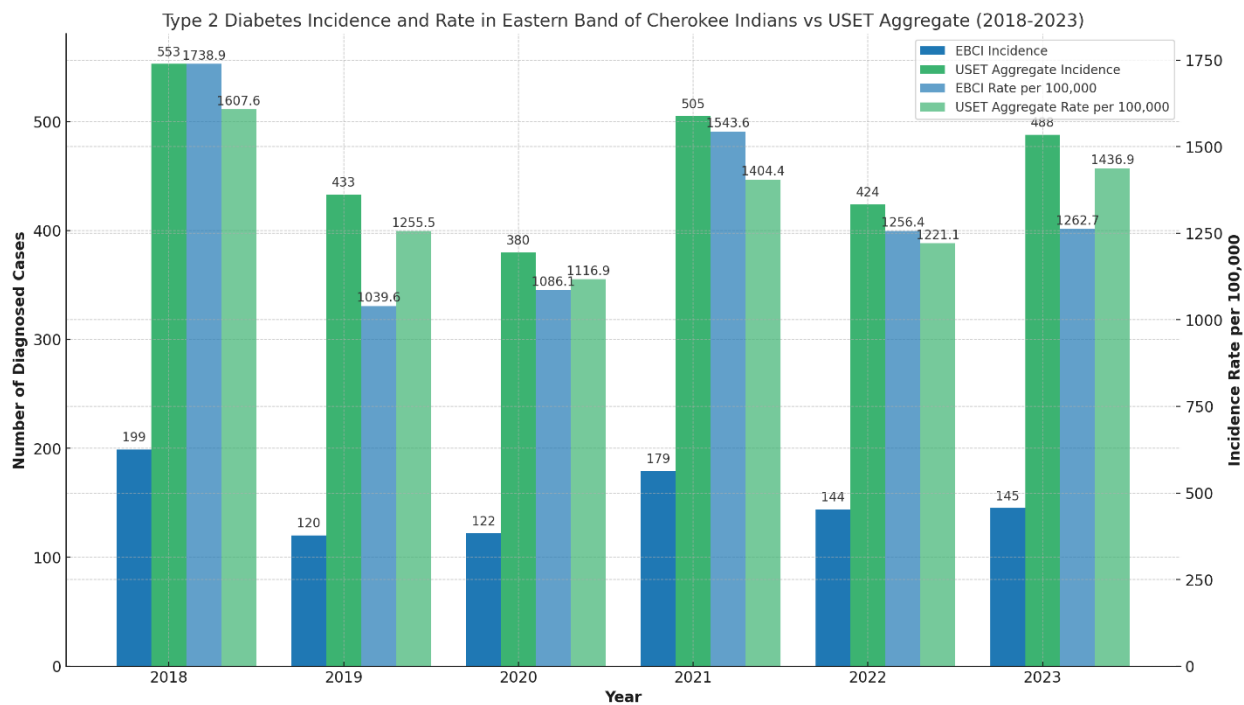


Figure 32
CDC PLACES Diabetes, Crude Prevalence, 18+ (2019)



Source: USET TEC Data Request Cherokee Indian Hospital RPMS

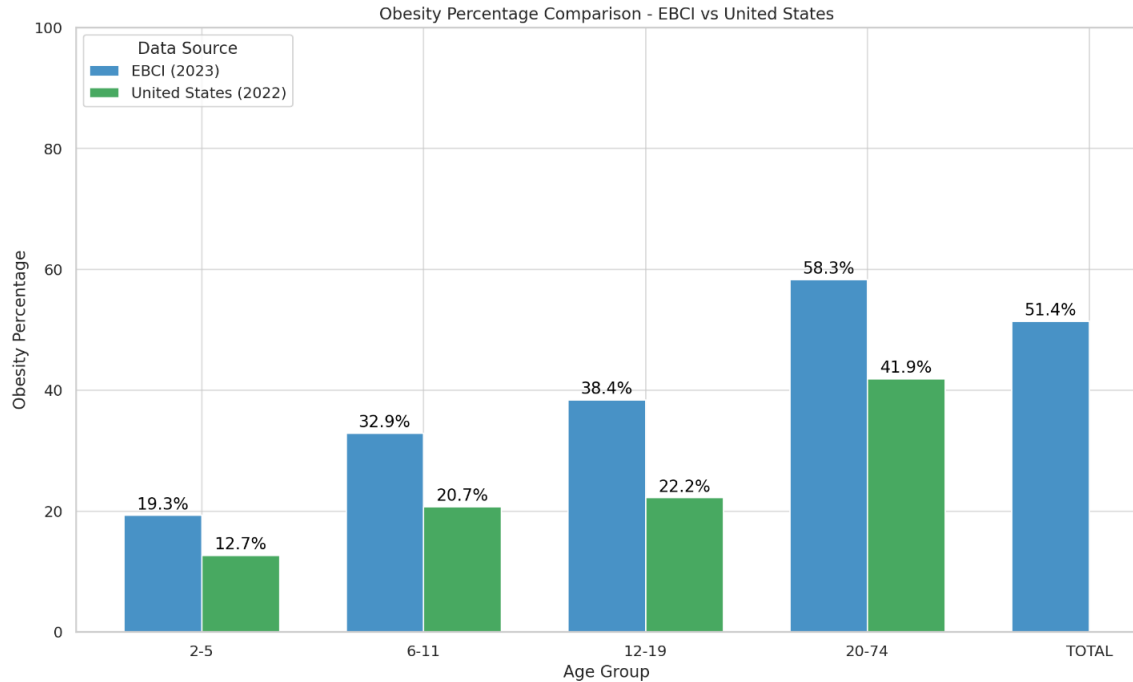
Figure 33

Type 2 Diabetes Incidence and Rate in EBCI vs USET Aggregate (2018-2023)

Obesity

Obesity is another critical health issue, affecting all age groups within the EBCI community. As of 2023:

- **19.3%** of EBCI children aged 2-5 years were affected by obesity, compared to **12.7%** in the United States.
- **32.9%** of EBCI children aged 6-11 years were affected by obesity, compared to **20.7%** in the United States.
- **38.4%** of EBCI adolescents aged 12-19 years were affected by obesity, compared to **22.2%** in the United States.
- **58.3%** of EBCI adults aged 20-74 years were affected by obesity, compared to **41.9%** in the United States.



Sources: Cherokee Indian Hospital RPMS and CDC, <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>

Figure 34
Obesity Percentage Comparison EBCI vs United States (2023 & 2022)

The data reveals a significant disparity in obesity rates between the Eastern Band of Cherokee Indians (EBCI) and the national averages in the United States. Across all age groups, EBCI individuals exhibit higher obesity rates compared to their counterparts nationwide. This disparity is particularly notable among adults, where the obesity rate in EBCI adults is substantially higher than the national average. Understanding the extent of this disparity is crucial for addressing the overall health and well-being of the EBCI population. Highlighting these differences can help prioritize resources and focus efforts on mitigating the impact of obesity within the community.

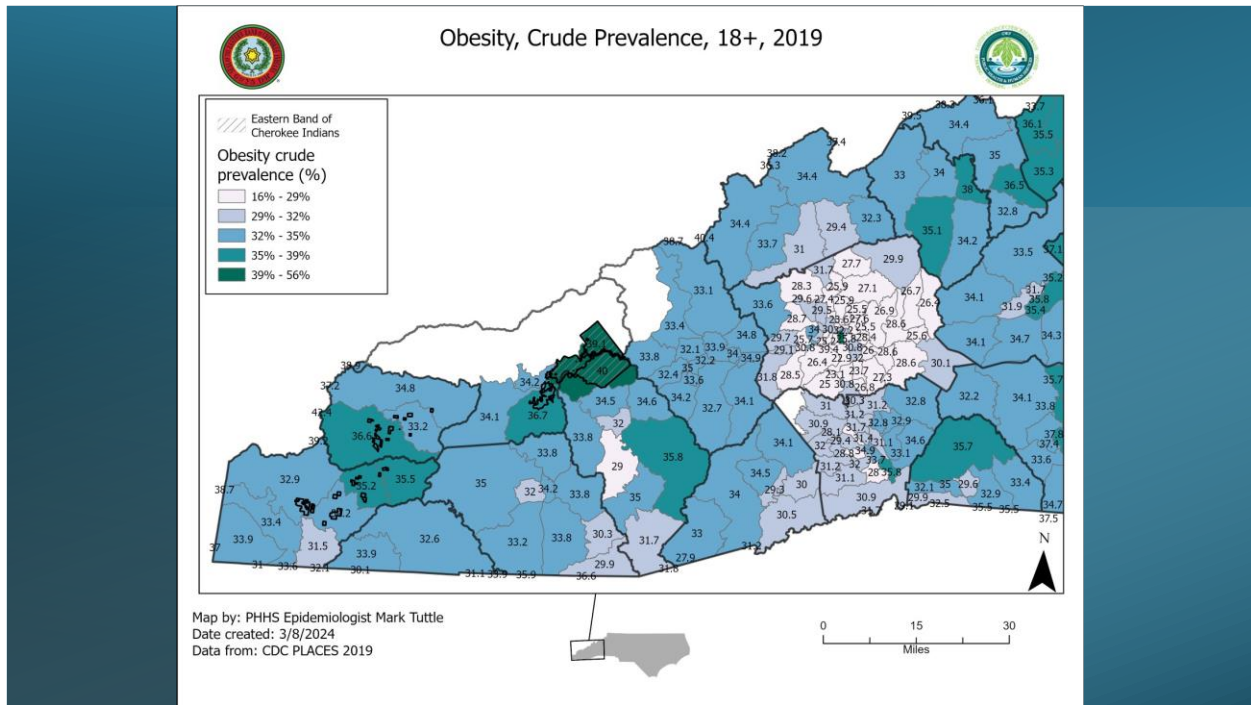


Figure 35
 CDC PLACES Obesity, Crude Prevalence, 18+ (2019)

Health Impacts and Mortality

The high rates of chronic diseases, such as diabetes and cardiovascular diseases, contribute to significant health impacts and mortality within the EBCI community. From 2015 to 2021, **40.51%** of deaths were due to chronic diseases, including cardiovascular diseases. The statistics highlight the urgent need for targeted health interventions, such as diet and exercise, to manage and reduce the burden of chronic diseases within the community.

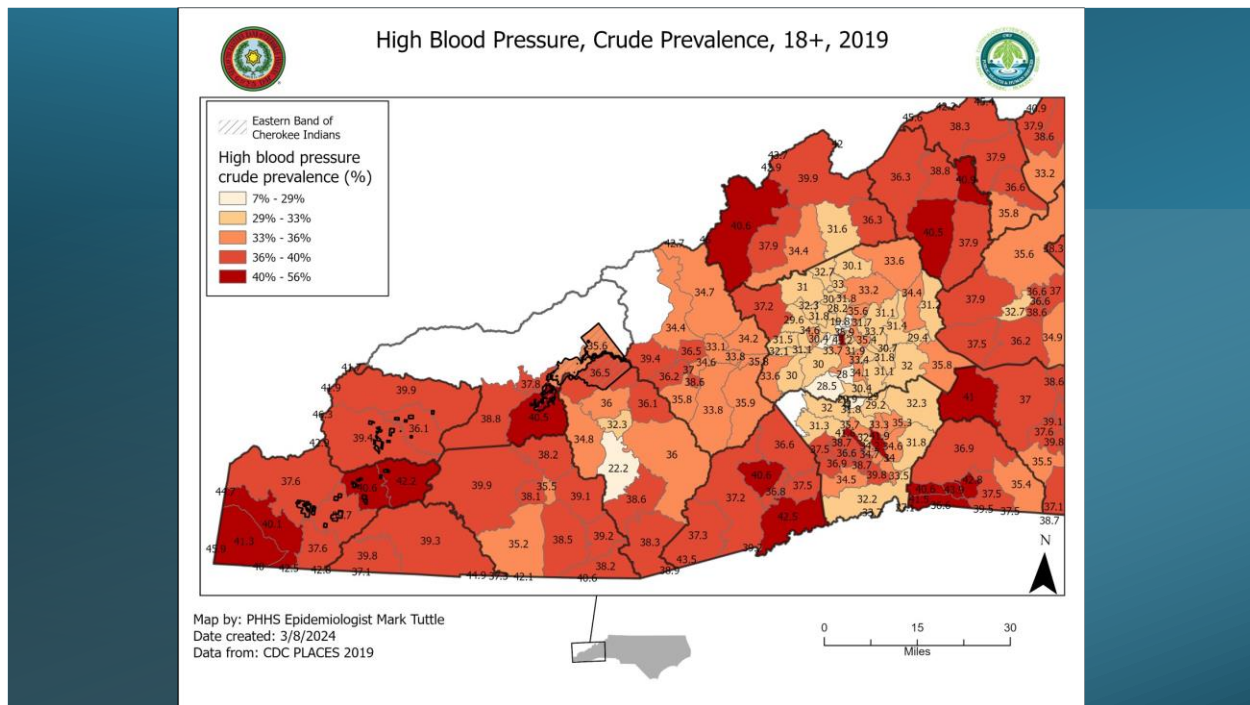


Figure 37
 CDC PLACES High Blood Pressure, Crude Prevalence, 18+ (2019)

Cardiovascular diseases, including high blood pressure-related conditions, have been the leading cause of death within the EBCI community from 2015 to 2021. The high prevalence of these conditions underscores the need for effective management and preventive strategies to mitigate their impact on the population.

Access to Care

Geographic Barriers: The rural and mountainous geography of the EBCI lands poses significant barriers to accessing healthcare services. Many community members face long travel distances to reach medical facilities, impacting their ability to receive timely care.

Healthcare Coverage: This analysis examines health insurance coverage rates across different age groups for the United States, North Carolina, and the Eastern Cherokee Reservation, NC. The data includes the percentage of insured and uninsured individuals for the total population and specific age groups: Under 6 years, 6 to 18 years, 19 to 64 years, and 65 years and older.

1. Overall Coverage:
 - United States:
 - Insured: 91.3%
 - Uninsured: 8.7%
 - North Carolina:
 - Insured: 89.5%
 - Uninsured: 10.5%
 - Eastern Cherokee Reservation:

- Insured: 62.3%
- Uninsured: 37.7%

2. Age Group Analysis:

- Under 6 Years:
 - United States: 95.6% insured, 4.4% uninsured
 - North Carolina: 95.4% insured, 4.6% uninsured
 - Eastern Cherokee Reservation: 71.0% insured, 29.0% uninsured
- 6 to 18 Years:
 - United States: 94.3% insured, 5.7% uninsured
 - North Carolina: 94.2% insured, 5.8% uninsured
 - Eastern Cherokee Reservation: 59.9% insured, 40.1% uninsured
- 19 to 64 Years:
 - United States: 87.8% insured, 12.2% uninsured
 - North Carolina: 84.7% insured, 15.3% uninsured
 - Eastern Cherokee Reservation: 52.0% insured, 48.0% uninsured
- 65 Years and Older:
 - United States: 99.2% insured, 0.8% uninsured
 - North Carolina: 99.4% insured, 0.6% uninsured
 - Eastern Cherokee Reservation: 95.9% insured, 4.1% uninsured

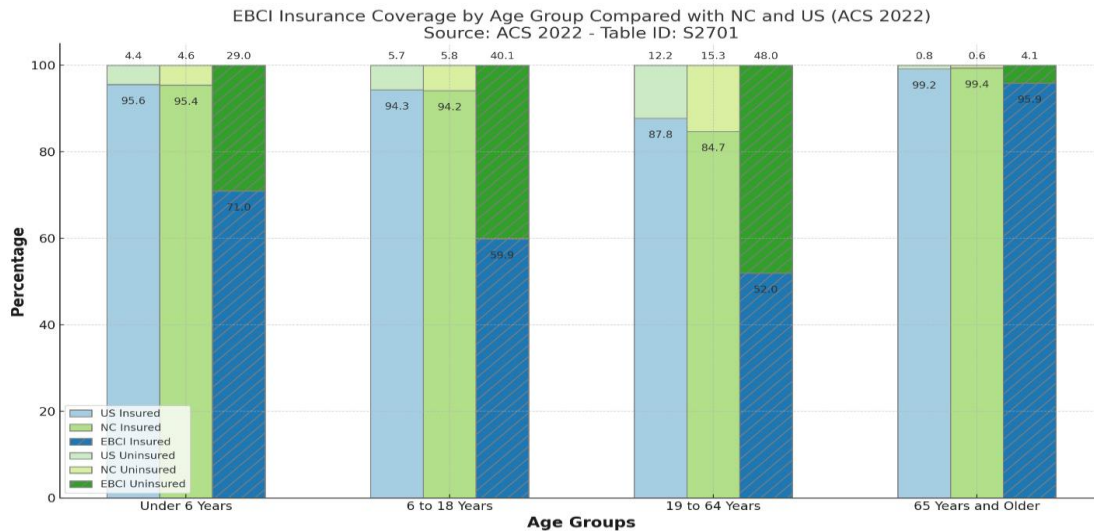


Figure 38

EBCI, NC, and US Insurance Coverage by Age Group from ACS 2022 Table S2701 (2022)

The data reveals substantial differences in health insurance coverage between the Eastern Cherokee Reservation and broader benchmarks in North Carolina and the United States. The Eastern Cherokee Reservation exhibits notably lower insurance rates across all age groups, with the most pronounced gaps observed in younger populations. While Tribal members have access to Indian Health Service (IHS) facilities, which provide essential care and cover referrals for services not available through IHS, this does not eliminate all challenges. Many referrals require travel to contracted providers outside the reservation, creating significant barriers related to transportation. The limited number of services in the region, coupled

with the logistical difficulties and potential financial strain of traveling long distances for care, can make accessing necessary services cumbersome and stressful, particularly for those with limited mobility or resources.

Social Vulnerability Index Impacts on Health

The Social Vulnerability Index (SVI) is a tool developed by the Centers for Disease Control and Prevention (CDC) to help public health officials and emergency response planners identify and map communities that are most likely to need support before, during, and after hazardous events such as natural disasters, disease outbreaks, or chemical spills. The SVI uses U.S. Census data to rank each census tract on 15 social factors, grouped into four themes: Socioeconomic Status, Household Composition and Disability, Minority Status and Language, and Housing Type and Transportation.

Key Components of SVI:

1. **Socioeconomic Status:** Includes factors like poverty, unemployment, income, and education.
2. **Household Composition and Disability:** Considers age (older adults, children) and disability.
3. **Minority Status and Language:** Accounts for race/ethnicity and English language proficiency.
4. **Housing Type and Transportation:** Encompasses housing structure, crowding, and access to a vehicle.

Purpose of SVI:

- **Preparedness:** Identifying communities that need resources and support to prepare for emergencies.
- **Response:** Prioritizing resource allocation and support during an emergency.
- **Recovery:** Guiding long-term recovery efforts by identifying areas that may need more support to recover fully.

The SVI provides a score for each census tract, which helps compare the relative vulnerability of different areas and plan targeted interventions to reduce vulnerability and enhance resilience.

Key Observations from the SVI Maps (2022):

Swain County:

- **Overall Social Vulnerability:** High social vulnerability areas are prevalent, especially within EBCI tribal lands.
- **Socioeconomic Status:** High vulnerability due to poverty, unemployment, and low educational attainment.
- **Household Characteristics:** High vulnerability reflecting households with single parents, older adults, and people with disabilities.
- **Racial and Ethnic Minority Status:** High vulnerability indicating significant minority populations.
- **Housing Type/Transportation:** High vulnerability areas with housing challenges and limited vehicle access.

Graham County:

- **Overall Social Vulnerability:** High social vulnerability, particularly within EBCI tribal lands.

- **Socioeconomic Status:** High vulnerability due to socio-economic disadvantages.
- **Household Characteristics:** High vulnerability indicating challenges related to single-parent households and disability.
- **Racial and Ethnic Minority Status:** High vulnerability areas with prevalent minority groups.
- **Housing Type/Transportation:** High vulnerability due to inadequate housing and transportation facilities.

Cherokee County:

- **Overall Social Vulnerability:** High social vulnerability is observed, with EBCI tribal lands prominently affected.
- **Socioeconomic Status:** High vulnerability due to poverty and low educational attainment.
- **Household Characteristics:** High vulnerability, highlighting challenges faced by single-parent households and the elderly.
- **Racial and Ethnic Minority Status:** High vulnerability due to significant minority populations.
- **Housing Type/Transportation:** High vulnerability areas with inadequate housing and transportation.

Analysis and Implications for the EBCI Population:

The high social vulnerability across these counties, particularly in areas encompassing EBCI tribal lands, significantly impacts the general population, including children, adults, and the elderly. The data indicates several areas of concern:

- **Health Impacts:** High social vulnerability is associated with limited access to healthcare services, leading to poorer health outcomes. For instance, in 2022, **39.5%** of the EBCI population in areas like Big Cove and Birdtown were uninsured, compared to **16.2%** in Cherokee County and **17.7%** in Graham County. This lack of insurance coverage results in reduced access to necessary medical care and preventive services, contributing to higher rates of chronic conditions and mental health issues.
- **Education and Employment:** Socioeconomic disadvantages affect educational attainment and future employment opportunities. For example, **15.9%** of the EBCI population in areas like Big Cove and Birdtown lack a high school diploma, compared to **8.8%** in Cherokee County and **10.7%** in Jackson County. Unemployment rates are also higher in EBCI areas, with **14.9%** in Wolftown, Big Y, and Painttown being unemployed, compared to **4.9%** in Cherokee County and **7.7%** in Graham County. These factors contribute to cycles of poverty and limit economic mobility.
- **Safety and Well-being:** Higher vulnerability in household characteristics and housing conditions can lead to unsafe living environments, increasing the risk of domestic violence, child maltreatment, and juvenile delinquency. For example, **24.7%** of households in EBCI areas like Big Cove and Birdtown have no vehicle, compared to **19.2%** in Cherokee County and **27.9%** in Graham County, impacting access to employment, healthcare, and other essential services.
- **Preparedness and Resilience:** High social vulnerability affects the community's ability to prepare for and recover from hazardous events. For example, **25.6%** of the population in EBCI areas like Big Cove and Birdtown are aged 17 and younger, compared to **16.1%** in Cherokee County and **20.3%**

Environmental Justice Index (EJI): The EJI assigns a score between 0 and 1 to census tracts to assess cumulative impacts from environmental burdens, social vulnerabilities, and health vulnerabilities. A higher EJI score indicates greater cumulative impacts, meaning the community faces more significant challenges compared to other tracts nationwide. Specifically, scores closer to 1 suggest higher levels of disadvantage and vulnerability, reflecting more severe environmental, social, and health-related issues.

EJI Data for Swain and Jackson Counties

The following table summarizes the EJI data for Census Tract 9401 in Swain County and Census Tract 9402 in Jackson County, North Carolina. These tracts represent the main EBCI reservation boundary in these counties.

Indicator	Swain County (Tract 9401)	Jackson County (Tract 9402)
Total Population	4,870	6,063
EJI Rank	0.73	0.73
Environmental Burden Rank	0.03	0.06
Social Vulnerability Rank	△ 0.92	△ 0.90
Air Pollution	0.10	0.11
Ozone	0.33	0.33
PM2.5	0.25	0.25
Diesel Particulate Matter	0.04	0.05
Air Toxics Cancer Risk	0.13	0.15
Potentially Hazardous & Toxic Sites	0.00	0.00
National Priority List Sites	0.00	0.00
Toxic Release Inventory Sites	0.00	0.00
Treatment, Storage, and Disposal Sites	0.00	0.00
Risk Management Plan Sites	0.00	0.00
Coal Mines	0.00	0.00
Lead Mines	0.00	0.00
Built Environment	0.58	0.66
Lack of Recreational Parks	0.55	0.71
Housing Built Pre-1980	0.24	0.27
Lack of Walkability	△ 0.86	△ 0.78
Transportation Infrastructure	0.31	0.42
High-Volume Roads	0.44	0.52
Railways	0.31	0.33
Airports	0.00	0.00
Water Pollution	0.00	0.12
Impaired Surface Water	0.00	0.12
Minority Status	△ 0.84	△ 0.77
Socioeconomic Status	△ 0.77	△ 0.84

Poverty	△ 0.78	△ 0.83
No High School Diploma	△ 0.79	0.65
Unemployment	0.72	△ 0.82
Housing Tenure	0.49	0.53
Housing Burdened, Lower-Income Households	0.07	0.46
Lack of Health Insurance	△ 0.99	△ 0.98
Lack of Internet Access	△ 0.97	△ 0.94
Household Characteristics	△ 0.78	△ 0.95
Age 65 and Older	0.42	0.64
Age 17 and Younger	0.72	0.56
Civilian with a Disability	△ 0.76	△ 0.92
Speaks English "Less than Well"	0.44	0.60
Housing Type	△ 0.98	0.60
Group Quarters	△ 0.85	0.00
Mobile Homes	△ 0.93	△ 0.94
High Pre-existing Chronic Disease Prevalence Sum	4 out of 5	4 out of 5
High Estimated Prevalence of Asthma	Yes △	Yes △
High Estimated Prevalence of Cancer	No	No
High Estimated Prevalence of High Blood Pressure	Yes △	Yes △
High Estimated Prevalence of Diabetes	Yes △	Yes △
High Estimated Prevalence of Poor Mental Health	Yes △	Yes △

Source: CDC/ATSDR 2022 Environmental Justice Index⁶⁰

Figure 43

Census Tracts 9401 and 9402 2022 Environmental Justice Index Scores

Impact on the EBCI Community

Swain County (Census Tract 9401): This tract shows significant social challenges, with a high Social Vulnerability Rank of **0.92**. Key concerns include high poverty levels, lack of health insurance, and a significant number of households with disabilities. The built environment presents issues with a lack of walkability (ranked at **0.86**), and there is a moderate presence of high-volume roads and railways, which can impact safety and air quality. The prevalence of chronic diseases such as asthma, high blood pressure, diabetes, and poor mental health is notably high.

⁶⁰ Centers for Disease Control and Prevention & Agency for Toxic Substances and Disease Registry. (2022). *Environmental Justice Index*. Retrieved from <https://www.atsdr.cdc.gov/placeandhealth/eji/index.html>

Jackson County (Census Tract 9402): Similarly, this tract has a high Social Vulnerability Rank of **0.90**. Socioeconomic challenges are prominent, with high unemployment, poverty, and lack of health insurance. The built environment also faces issues, particularly a lack of recreational parks and walkability (ranked at **0.78**). Chronic diseases are prevalent, including asthma, high blood pressure, diabetes, and poor mental health.

Key Points of Concern:

- **Socioeconomic Challenges:** High levels of poverty and unemployment, combined with a lack of health insurance, create significant barriers to accessing essential resources and services.
- **Built Environment:** Limited walkability and recreational parks reduce opportunities for physical activity, crucial for overall health and well-being.
- **Health Issues:** High prevalence of chronic diseases like asthma, diabetes, and poor mental health can affect daily life and long-term well-being.
- **Social Vulnerability:** High ranks in social vulnerability indicate a need for targeted interventions to support the most at-risk populations.

By addressing these key points of concern, we can work towards creating a healthier and more supportive environment for the entire EBCI community, enhancing the overall quality of life and health outcomes for its members.

Air Quality

Air pollution is a mix of hazardous substances from both human-made and natural sources. It can be harmful to people and the environment. Since 1999, the EBCI Air Quality Program (AQP) has monitored air quality conditions to maintain clean and healthy air quality on EBCI lands and the surrounding region. The primary pollutants of concern that are currently monitored include fine Particulate Matter (PM) and Ozone. The air quality index (AQI) indicates the level of air pollution, with higher scores reflecting worse air quality. The AQI is divided into six categories of health concern: Good, Moderate, Unhealthy for Sensitive Groups, Unhealthy, Very Unhealthy, and Hazardous (Figure 44). AQI scores above 100 signify unhealthy air quality. An AQI above 100 affects sensitive groups, elderly individuals and people with pre-existing conditions such as diabetes, heart disease, lung disease and asthma. Above 150, everyone is at risk for negative health impacts.

Daily AQI Color	Levels of Concern	Values of Index	Description of Air Quality
Green	Good	0 to 50	Air quality is satisfactory, and air pollution poses little or no risk.
Yellow	Moderate	51 to 100	Air quality is acceptable. However, there may be a risk for some people, particularly those who are unusually sensitive to air pollution.
Orange	Unhealthy for Sensitive Groups	101 to 150	Members of sensitive groups may experience health effects. The general public is less likely to be affected.
Red	Unhealthy	151 to 200	Some members of the general public may experience health effects; members of sensitive groups may experience more serious health effects.
Purple	Very Unhealthy	201 to 300	Health alert: The risk of health effects is increased for everyone.
Maroon	Hazardous	301 and higher	Health warning of emergency conditions: everyone is more likely to be affected.

Figure 44

The AQI is divided into six categories. Each category corresponds to a different level of health concern.

Particulate Matter (PM_{2.5})

A subset of PM, fine particulate matter (PM 2.5) can be inhaled deeply into lung tissue and contribute to serious health problems. PM 2.5 is responsible for most adverse health effects from air pollution in the U.S, including respiratory, cardiovascular, developmental harm, cancer and mental health disorders.

Figure 44 shows daily average PM_{2.5} concentrations surrounding the Qualla boundary measured in micrograms per cubic meter (ug/m³). In general, there has been a slight decreasing trend in average PM_{2.5} over the last 17 years with a few temporal spikes noted in the early 2000s and 2016. The 2016 spike corresponds with the wildfires that burned throughout Western North Carolina.

Daily Average PM2.5 Concentration ($\mu\text{g}/\text{m}^3$): 2001-2017

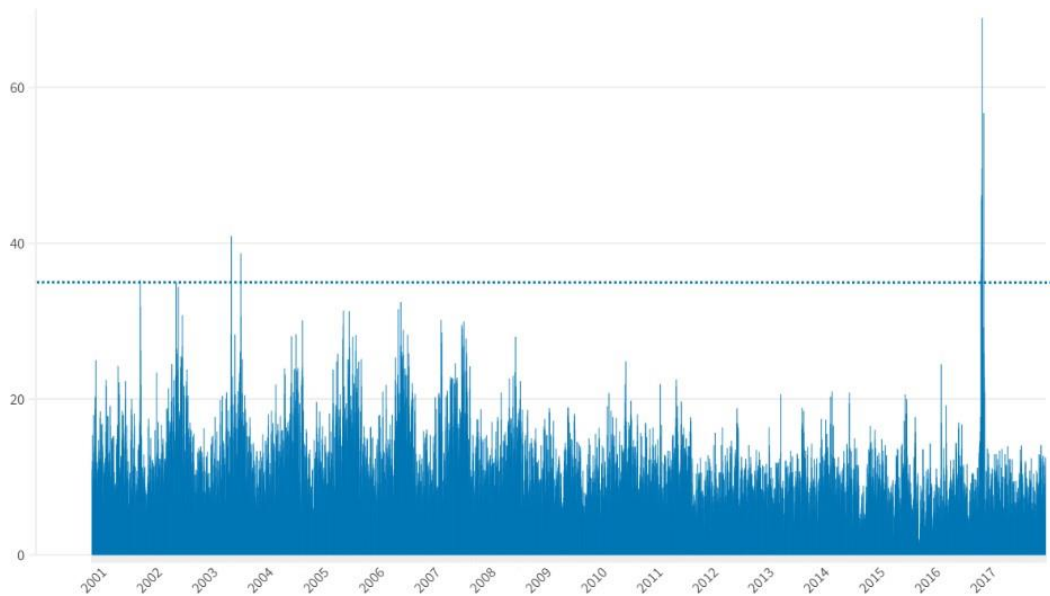


Figure 45

Daily average PM2.5 concentrations ($\mu\text{g}/\text{m}^3$) in Swain County, North Carolina (2000-2017). The dashed line represents the National Ambient Air Quality standard set by the EPA at 35 $\mu\text{g}/\text{m}^3$. EPA's Fused Air Quality Surfaces Database Using Downscaling. Data: AQS.

Below, Figure 46 shows the number of days in 3-day intervals that were classified into each AQI category based on PM2.5 levels from 1999 to 2024. Between 2000 and 2008, most days were classified as moderate, indicating acceptable air quality with slight risk for some sensitive populations. Since 2009, some of these moderate days have shifted to good air quality days, indicating significant improvements in air quality in recent years. Overall, the number of days characterized as “Unhealthy” for Sensitive Groups or “Unhealthy” for all populations have been minimal with the exception of two periods of poor-quality air days in November of 2001 and October and November of 2016.

PM2.5 Daily AQI Values, 1999 to 2024 Swain County, NC

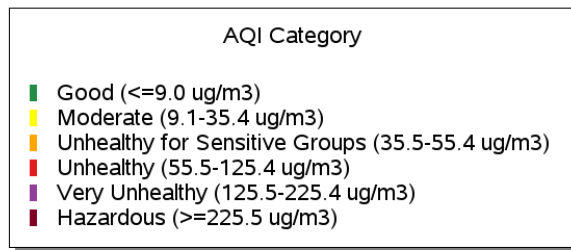
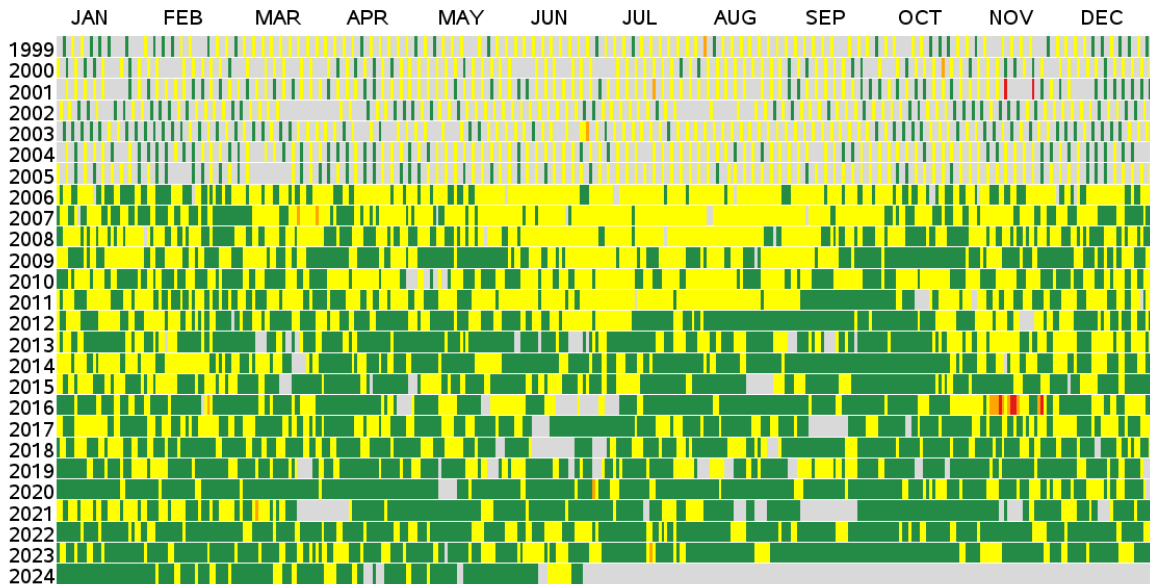


Figure 46

Annual counts of 3-day intervals of PM_{2.5} concentrations (ug/m³) flagged by Air Quality Index categories for Swain County, North Carolina (1999-2024). Source: EPA AQS Data Mart & AirNow. Data: AQS.

Ozone Levels and Impacts

Ozone can make breathing difficult and cause coughing and shortness of breath. People with respiratory conditions, like asthma, are at greatest risk. Persistent or acute exposure can lead to exacerbated conditions like damaged airways, chronic bronchitis, asthma, and emphysema. Elevated ozone levels also affect sensitive vegetation and ecosystems, including forests, wildlife refuges, and wilderness areas, particularly during the growing season.

Ozone is most likely to reach unhealthy levels on hot, sunny days. While this typically occurs in urban areas, wind can transport ozone over long distances to rural areas.

The AQP measures daily, ground-level ozone around the Qualla Boundary in parts per billion (ppb). Data from 2001 to 2017 show that average daily ozone levels have remained consistent, though the number of high-ozone days has generally decreased over time (Figure 47). Many days exceeded the EPA threshold of 70 ppb in the first ten years of monitoring, but since 2010 this number has noticeably decreased.

Daily Average Ozone Concentration (ppb): 2001-2017

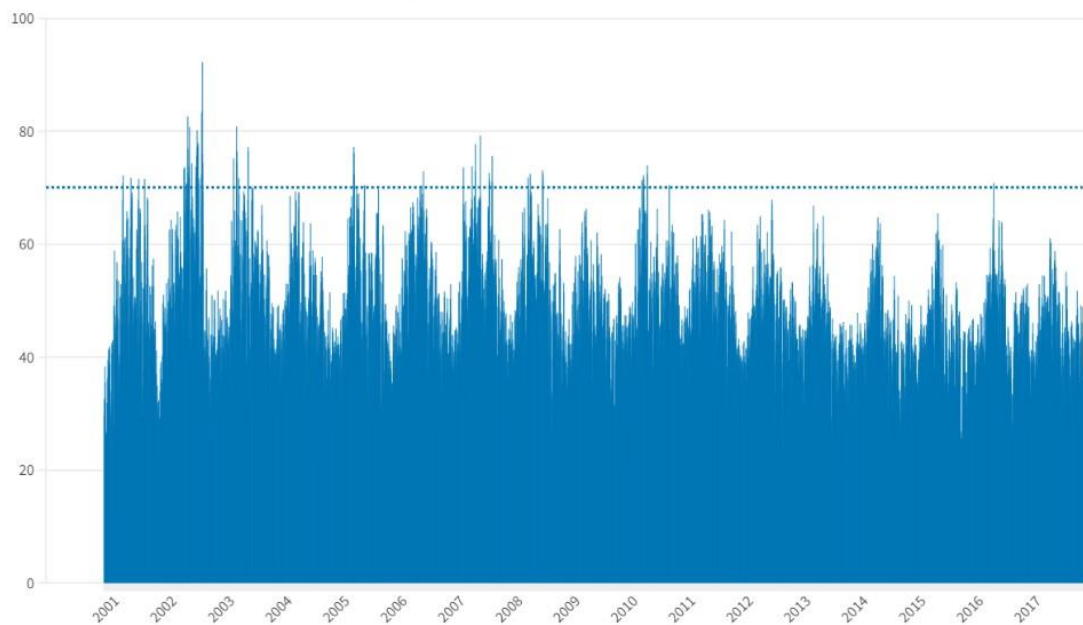


Figure 47

Daily average Ozone concentrations (ppb) in Swain County, North Carolina (2001-2017). The dashed line indicates the EPA standard for ozone (70 ppb). Source: EPA's Fused Air Quality Surfaces Database Using Downscaling. Data: AQS.

AQI definitions also apply to ground-level ozone levels. From 2001 to 2007, a quarter or more days per year experienced moderate, sensitive, and unhealthy ozone levels, similar to the number of days defined by high PM_{2.5} levels (Figure 48). In 2008 this changed abruptly; the majority of days since 2009 were good air quality days, although approximately 20% of all days each year still register as moderate.

Ozone Daily AQI Values, 1999 to 2024 Swain County, NC

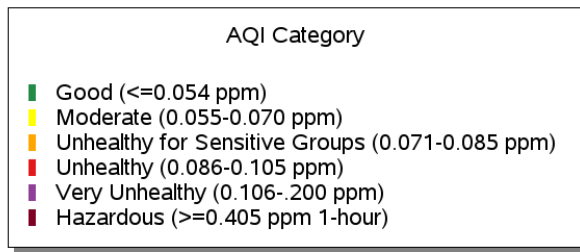
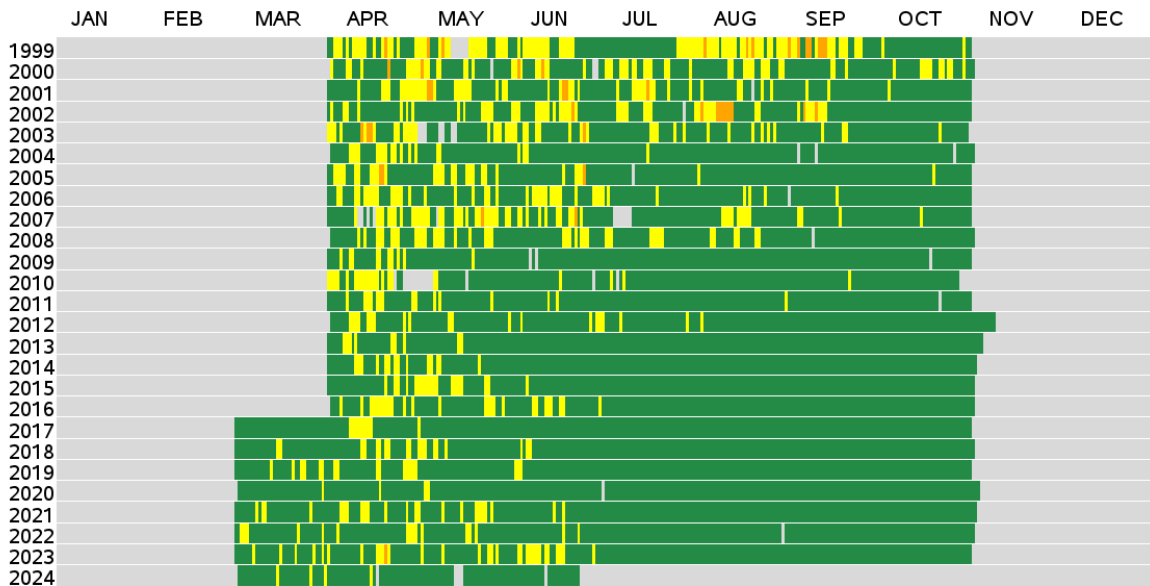


Figure 48

Annual counts of 3-day intervals of Ozone concentrations (ppb) flagged by Air Quality Index categories for Swain County, North Carolina (1999-2024). Source: EPA AQS Data Mart & AirNow. Data: AQS

Health Consequences of Air Pollution

Being exposed to air pollution poses a recognized risk for various health conditions, such as worsening asthma, cardiac events, hypertension, and poor mental health. Children and pregnant people are particularly vulnerable to these risks.

Air Pollution Effects on American Indian Children

Air pollution can harm children’s developmental, respiratory and heart health, as well as mental well-being. Research suggests that children may face higher risk from breathing in particulate matter than adults. The health impacts may persist from childhood into adulthood.

Examining data from emergency departments (ED), the AQP studied how air pollution affected American Indian children living on and around the Qualla Boundary from 2008 to 2017. The results show that children with asthma, wheeze, and bronchitis had about a 2% increased risk of being admitted to the ED for every 5 unit increase in PM_{2.5} (ug/m³) or ozone (ppb). These effects were most pronounced for children with

asthma or wheeze within one to three days after exposure to PM2.5 (Figure 49) and for children with wheeze and bronchitis six days after exposure to ozone (Figure 49).

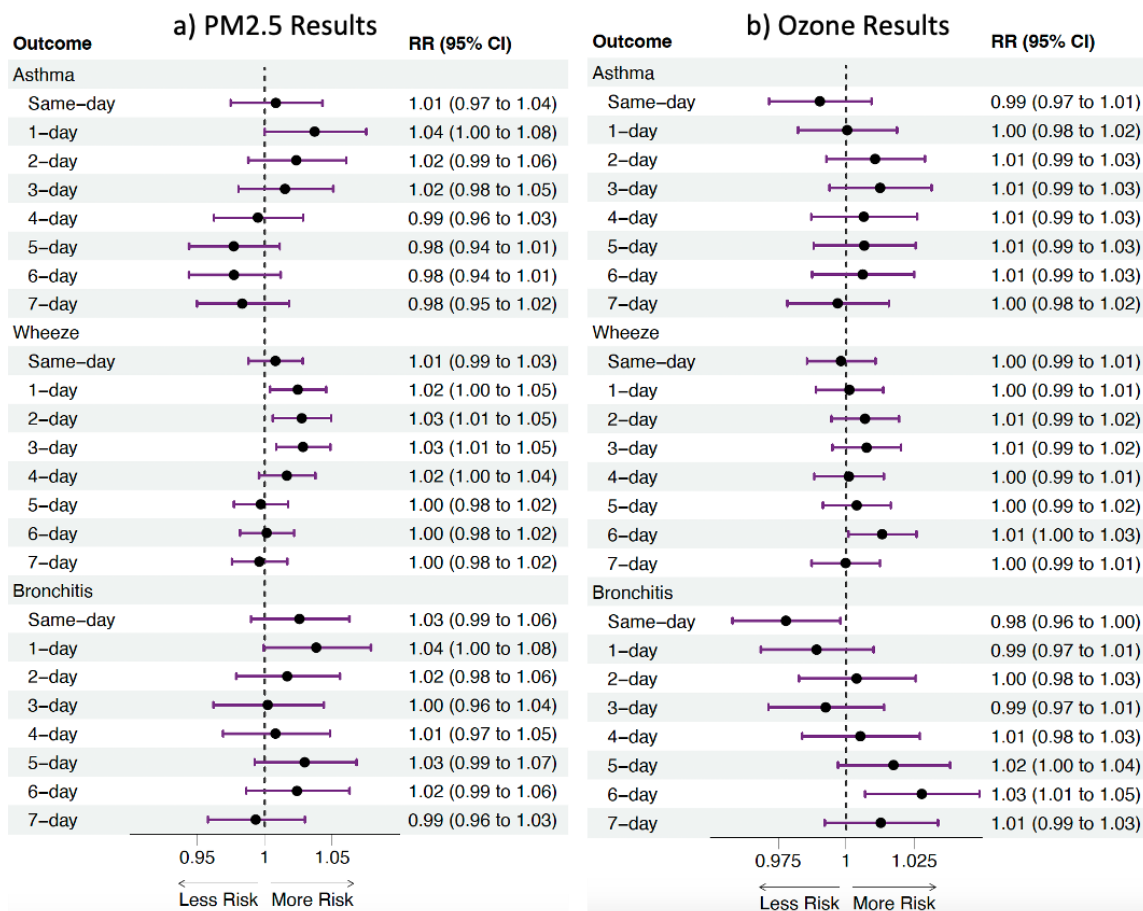


Figure 49

Forest plots of increased risk for a child emergency department visit for asthma, wheezing, and bronchitis following a 5-unit increase in a) PM2.5 (ug/m3) and b) Ozone (ppb).

Air Pollution Effects on Pregnant American Indians

Tiny particles breathed into the lungs can travel through the body, even reaching a person’s placenta. When pregnant individuals are exposed to air pollution, they face higher risks of negative pregnancy outcomes like low birth weight, premature birth, and stillbirth, as well as pregnancy complications such as preeclampsia, eclampsia, gestational hypertension, and mental health issues. The time during pregnancy is crucial for exposure because air pollution can affect both the mother and the developing fetus.

To understand the impact of air pollution on pregnant American Indian individuals living in and around the Qualla Boundary, the AQP examined inpatient hospital data from 2008 to 2017. Although most outcomes weren’t linked to air pollution, there was a notable increase in the risk (by 2-10%) of pregnancy complications, premature births, and maternal depression four days after exposure to a 5-unit rise in PM2.5

levels (Figure 50). A 5-unit increase in ozone was only significantly associated with a 4% increase in risk of preterm birth (Figure 50).

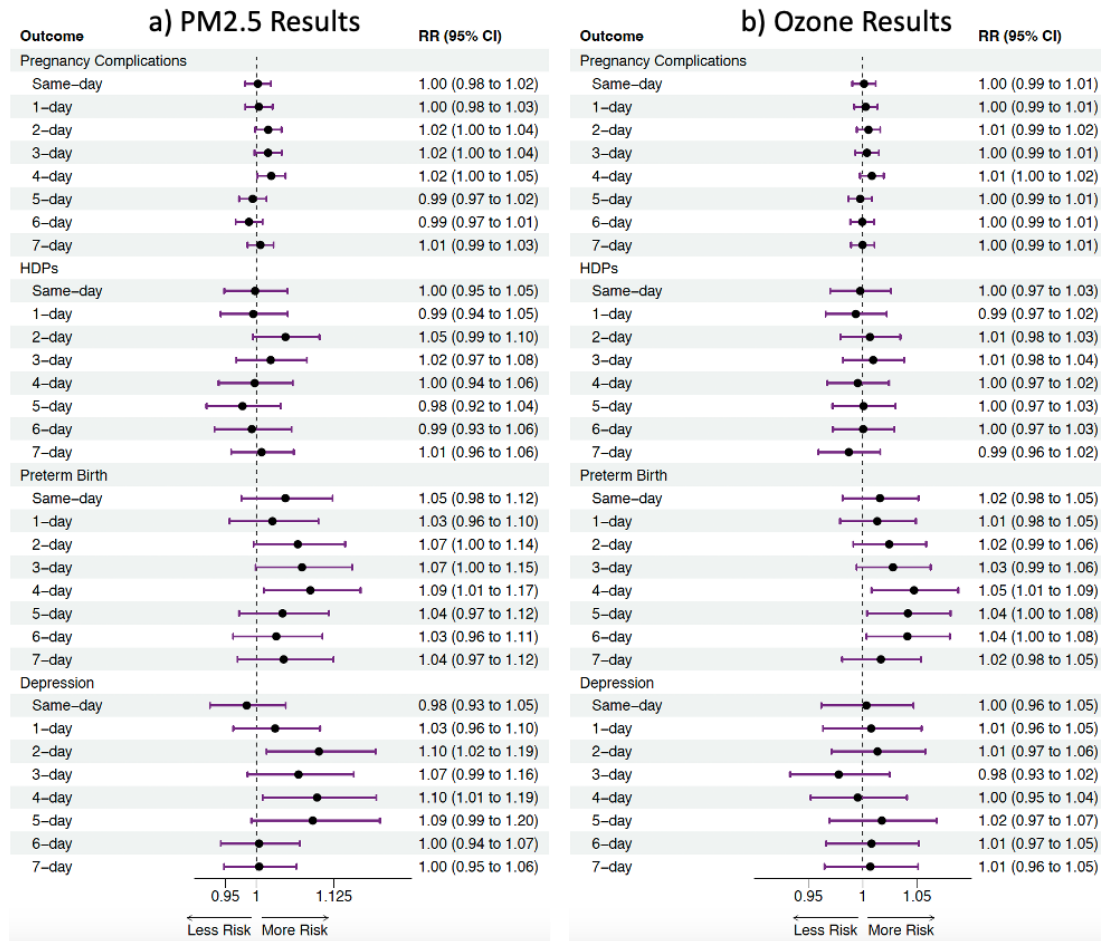


Figure 50

Forest plots of increased risk for an emergency department visit for Pregnancy Complications, Hypertensive Disorders of Pregnancy, Preterm birth, and Depression following a 5-unit increase in a) PM2.5 (ug/m3) and b) Ozone (ppb). Source: The University of North Carolina Sheps Center for Health Services Research.

Wildfire Smoke Health Effects in Western NC

Wildfire smoke contains various particles and pollutants known to cause a range of health issues from mild to very severe. Breathing in smoke, even temporarily, increases the risk of worsening existing respiratory and cardiovascular conditions, and in more severe cases, premature death. Since 1998, there have been 3 years with a large number of fires: 1998 (n=16), 2007 (n=18), and 2016 (n=27) (Figure 51). However, the 2016 wildfires burned across significantly more acres of land, nearly 60,000 acres in North Carolina.

Number of Fires and Acres Burned in WNC: 1998-2020

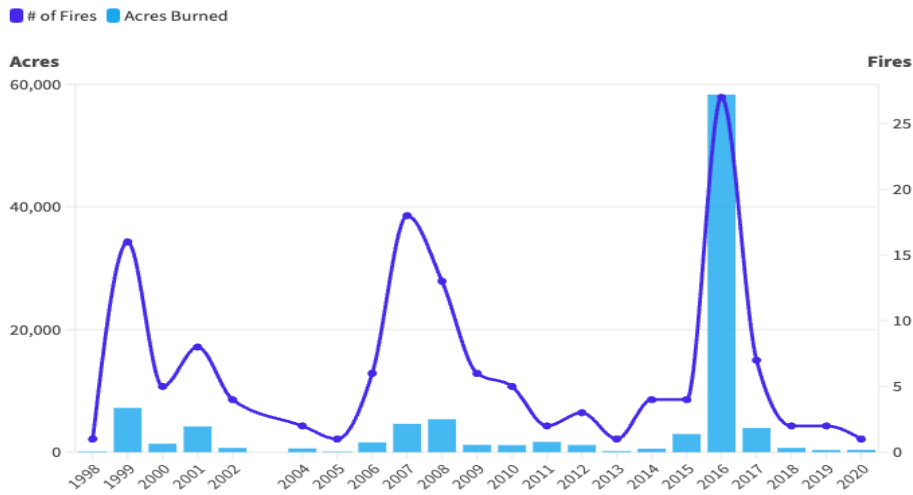


Figure 51

Number of Fires (greater than 100 acres in size) and Total Acres Burned in Western North Carolina by year: 1998-2020 Source: USDA. Data: Research Data Archive.

Smoke from the 2016 wildfires affected the entire Western North Carolina Region. An analysis in 2023 found that ED visits for respiratory and cardiovascular conditions were notably more frequent on days when wildfire smoke was present compared to smoke-free days (Figure 52). This was observed for ED admissions related to asthma, chronic obstructive pulmonary disease (COPD), hypertension, and heart disease admissions for adults in the WNC region.

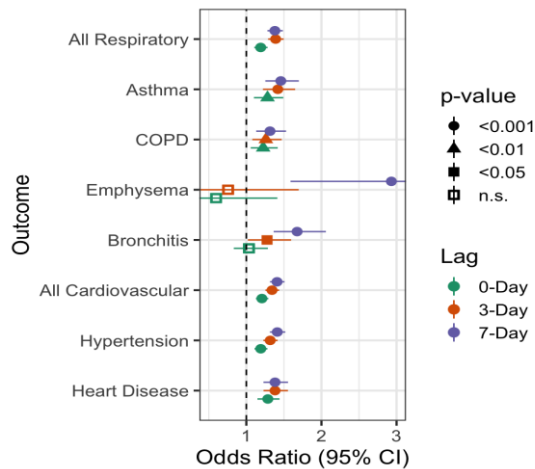


Figure 52

Forest plots of odds ratios (OR) and associated 95% confidence intervals (95%CI), which compare the probability of emergency department admissions on days affected by wildfire smoke to those on non-smoke days. Source: Duncan et al. 2023.

Climate Change

2023 Tribal Health Survey Climate Change Data

This section presents key findings from the 2023 Eastern Band of Cherokee Indians (EBCI) Tribal Health Survey, which gathered comprehensive data on the perceptions and impacts of climate change within the EBCI community. The survey received a total of 1,092 responses, but the data presented here is specifically filtered to include 713 responses from enrolled members residing within the EBCI boundary. These insights provide a crucial understanding of how climate change is perceived to affect various aspects of life, including health, income, and overall well-being for enrolled members living on the EBCI boundary. The results highlight the community's concerns and underscore the necessity for proactive measures to address these challenges.

Topic	Response	Percentage	Topic	Response	Percentage
Climate Change Belief	Strongly agree	47.4%	Local Impact of Climate Change Now	Strongly agree	33.6%
	Agree	35.6%		Agree	39.7%
	Neither agree nor disagree	14.5%		Neither agree nor disagree	23.2%
	Disagree	1.7%		Disagree	2.5%
	Strongly disagree	0.8%		Strongly disagree	1.0%
Future Local Impact of Climate Change	Strongly agree	40.3%	Increased Frequency of Extreme Weather	Strongly agree	28.6%
	Agree	38.3%		Agree	33.3%
	Neither agree nor disagree	19.1%		Neither agree nor disagree	31.2%
	Disagree	1.5%		Disagree	6.9%
	Strongly disagree	0.8%			
Increased Intensity of Extreme Weather	Strongly agree	28.3%	Climate Change Concerns for Health & Well-being	Strongly agree	31.9%
	Agree	30.3%		Agree	36.6%
	Neither agree nor disagree	32.1%		Neither agree nor disagree	26.1%
	Disagree	8.3%		Disagree	4.3%
	Strongly disagree	1.0%		Strongly disagree	1.0%
Climate Impact on Income	Greatly impacts	29.1%	Climate Impact on Health	Greatly impacts	44.6%

	Moderately impacts	33.1%		Moderately impacts	28.6%
	Impacts only a little	16.2%		Impacts only a little	12.0%
	Does not impact	9.6%		Does not impact	8.9%
	Unsure	11.9%		Unsure	5.9%
Climate Impact on Lifestyles	Greatly impacts	35.2%	Association Between Climate Change and Health Risks	Strongly agree	33.6%
	Moderately impacts	32.2%		Somewhat agree	44.0%
	Impacts only a little	14.9%		Unsure	11.9%
	Does not impact	7.4%		Do not believe	10.5%
	Unsure	10.2%			

Source: 2023 EBCI Tribal Health Survey

Figure 53

Selected climate-related data from the 2023 EBCI Tribal Health Survey, filtered to only show responses from EBCI enrolled members who live on the boundary (713 responses).

Climate Change Belief and Local Impact

The belief in climate change among respondents is notably high, with **47.4%** strongly agreeing and **35.6%** agreeing that climate change is occurring. This indicates a widespread acknowledgment of climate change within the EBCI community. The data suggests that the community members are well-aware and convinced of the ongoing climate issues. Additionally, the perceived local impact of climate change is substantial, with **33.6%** strongly agreeing and **39.7%** agreeing that climate change is currently affecting their local area. This consensus highlights an immediate recognition of the environmental changes and challenges that the community is facing. The future impact is also a significant concern, with **40.3%** strongly agreeing and **38.3%** agreeing that climate change will have a notable effect locally. The forward-looking concerns underscore the urgency and importance of addressing climate change impacts to protect the community's future.

Extreme Weather Frequency and Intensity

A considerable portion of the respondents have observed an increase in both the frequency and intensity of extreme weather events. **28.6%** strongly agree and **33.3%** agree that extreme weather has become more frequent, while **28.3%** strongly agree and **30.3%** agree that the intensity of these events has increased. This perception is critical as it points to a growing awareness of the tangible effects of climate change, which include more severe and frequent weather phenomena. The acknowledgement of these changes suggests that the community is experiencing firsthand the repercussions of a shifting climate, which can have

profound implications on infrastructure, housing, and overall community resilience. These insights call for increased preparedness and adaptive strategies to mitigate the adverse effects of extreme weather events.

Health, Income, and Lifestyle Impacts

The survey data reveals significant concerns about the impact of climate change on health, income, and lifestyles within the EBCI community. **44.6%** of respondents believe that climate change greatly impacts health, with another **28.6%** noting a moderate impact. This suggests a strong connection between environmental changes and public health concerns, potentially affecting rates of respiratory issues, mental health, and other climate-sensitive conditions. The economic repercussions are also evident, with **29.1%** of respondents stating that climate change greatly impacts their income and **33.1%** indicating a moderate impact. This economic strain could be due to factors such as increased costs for climate adaptation, damage to crops or property, and disruptions in local economies. Furthermore, **35.2%** of respondents believe that climate change greatly impacts their lifestyles, with **32.2%** noting a moderate impact. These lifestyle changes could include alterations in daily routines, increased stress levels, and a need for more robust community support systems. The strong association between climate change and health risks, with **33.6%** strongly agreeing and **44.0%** somewhat agreeing, further emphasizes the need for comprehensive strategies to address and mitigate these impacts.

Overall, the data from the 2023 EBCI Tribal Health Survey clearly illustrates that climate change is a pressing issue for the community, affecting various aspects of life, from health and income to the overall quality of life. The findings highlight the necessity for targeted interventions, increased awareness, and proactive measures to build resilience against the adverse effects of climate change. Addressing these concerns requires a collaborative effort from community leaders, public health officials, and policymakers to ensure a sustainable and healthy future for the EBCI community.

Extreme heat

While normal summer high temperatures within the Qualla Boundary are in the low to mid-80s, on our hottest days, the temperatures can climb into the 90s. The number of days at or above 90°F is expected to increase. High temperatures can be very harmful for sensitive populations, particularly for children, pregnant people, and those who work or spend extended time outdoors. Heat-related illnesses range from mild to severe, with heat stroke posing a potentially deadly threat. Additionally, extreme heat can also worsen health risks from cardiovascular, mental health, respiratory and diabetes-related chronic conditions.

Heatwaves are extended periods of abnormally high ambient temperatures, often lasting for several days or even weeks and are more dangerous than a daily spike in temperature. Figure 54 shows that the number of heatwave days per year, near the Qualla Boundary, has increased over the past 30 years. Heatwaves have been linked to higher rates of illness from chronic conditions and even death. Rural communities are particularly vulnerable to the health effects of heatwave events.

Figure 54 also shows an increasing trend in extreme heat days since 2010. During extreme heat events, people may also be exposed to increased levels of harmful air pollutants. When extreme heat coincides with poor air quality, the risk of asthma attacks and heart attacks can escalate. Research indicates that mortality rates rise during heat waves, especially on days with poor air quality.

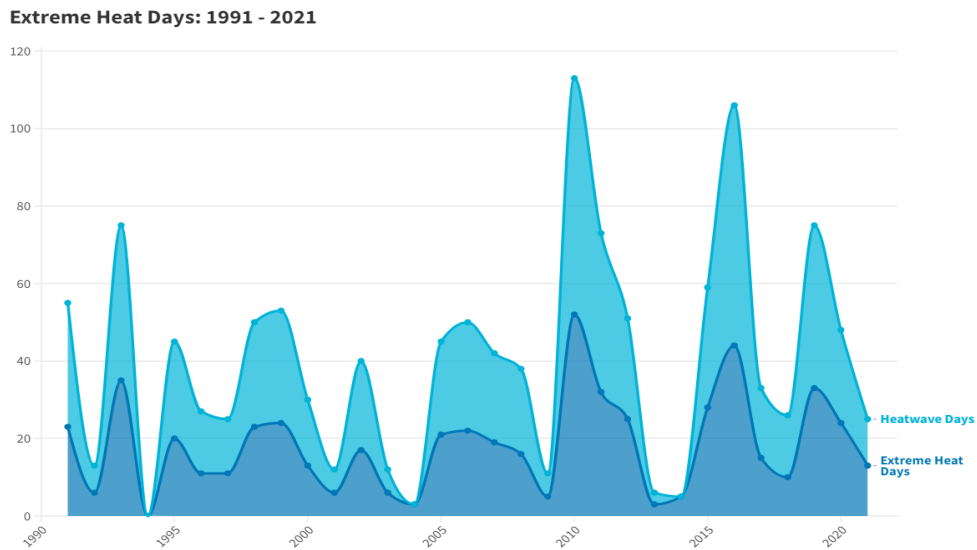


Figure 54

The observed annual number of a) heatwave days (defined as 3 or more consecutive days above the 95th percentile of average ambient temperature) and b) extreme heat days (defined as a day above the 95th percentile of average ambient temperature) for Jackson County, North Carolina (1991 to 2021). Source: PRISM Climate Group. Data: PRISM.

Rainfall

Historically, extreme precipitation has been highly variable across the historical record, particularly on an annual basis. The Qualla Boundary generally has a wet and humid climate with roughly even precipitation across all four seasons. Annual precipitation ranges from about 58 to 66 inches annually and is expected to slightly increase in the next 50 years (Figure 55).

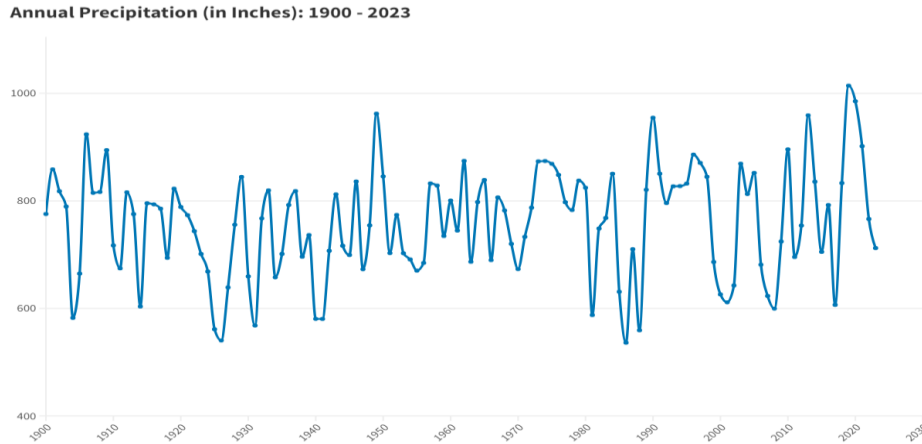


Figure 55

The observed annual total precipitation in inches for Jackson County, North Carolina (1900-2023). Source: National Centers for Environmental Information Climate at a Glance. Data: COOP, ASOS, CRN

Western North Carolina has averaged about 1 day per year with more than 3 inches of precipitation (Figure 56). However, due to climate change, total annual precipitation is projected to increase near the Qualla Boundary. It is likely that extreme precipitation events in the region will also increase. Consequently, there could be a higher frequency of flood events, like the flash flood in Big Cove in 1992, which forced 800 individuals within the EBCI community to evacuate.

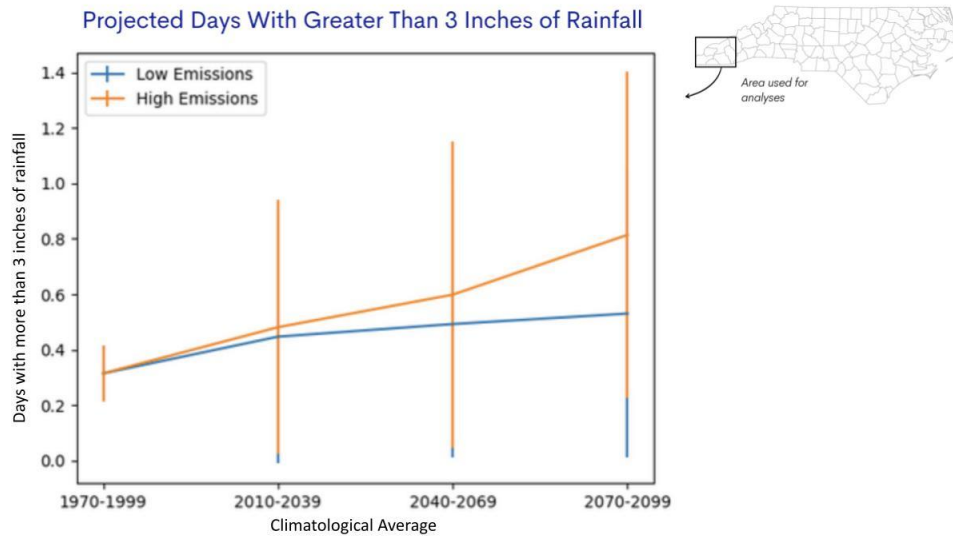


Figure 56

Projected days with greater than 3 inches of rainfall for two possible futures: one in which greenhouse gas emissions continue to increase (higher emissions in orange) and another in which greenhouse gas emissions increase at a slower rate (lower emissions in blue). Source: NC State Climate Office.

Drought

The impacts of drought in the region tend to vary with each occurrence, influenced by factors like the extent, duration, and timing of the event within the year. Short-lived droughts may result in dry topsoil, reduced streamflow, and increased wildfire activity, while longer droughts can affect hydrological systems, leading to declines in lake and reservoir levels and depletion of groundwater wells.

Figure 57 demonstrates that Western North Carolina has experienced three notable droughts in recent history. In 2007, an exceptional multi-year drought resulted in Fontana Lake dropping 30 feet below its normal level and reduced streamflow on the Oconaluftee River to a record low of 72 cubic feet per second. In the fall of 2016, a persistent hot, dry weather pattern brought on a locally extreme drought in the southern Mountains, resulting in an active and later-than-normal fall fire season, with wildfires burning 59,000 acres across Western North Carolina, including 35 fires within the Qualla Boundary. Additionally, a brief period of unseasonably warm and dry conditions in September and October 2019 triggered a rapid onset of drought, known as “flash” drought, in Western North Carolina. This drought coincided with the end of the growing season, severely impacting farmers as hay fields and pastures dried up, leading to insufficient forage demands.

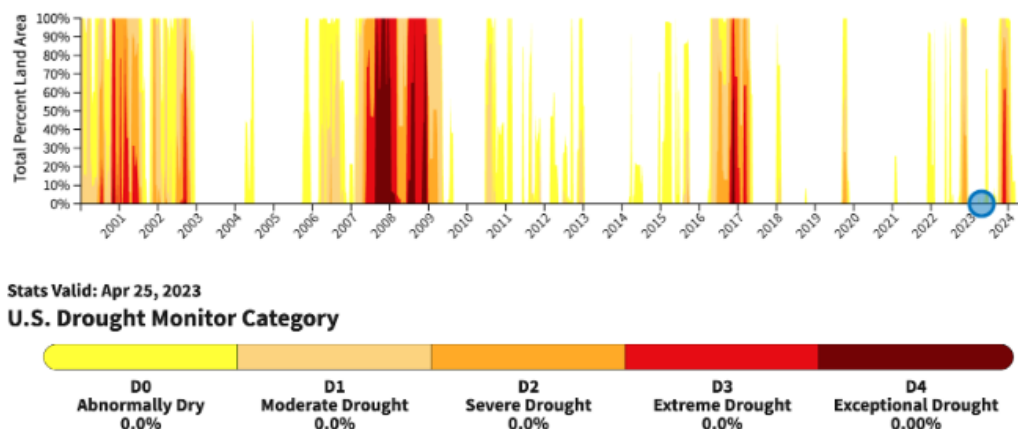


Figure 57

The observed drought conditions and size in the 6 counties surrounding the Qualla Boundary (Cherokee, Graham, Haywood, Jackson, Macon, and Swain) by USDM categories: abnormally dry, moderate drought, severe drought, extreme drought, and exceptional drought (2000-2024). Sources: NOAA, USDA, and National Drought Mitigation Center. Data: U.S. Drought Monitor.

Climate Anxiety

Climate anxiety describes the negative mental and emotional states that one may experience when thinking about climate change. As threats of climate-related changes, including intense heat waves, droughts, wildfires, and extreme precipitation continue to increase in frequency and intensity, young people are increasingly vulnerable. Higher levels of climate anxiety are linked with cognitive, emotional, and functional impairments, often leading to feelings of distress, fear of the future, hopelessness, and even anger. Addressing climate anxiety requires comprehensive education, mental health support, and policies to

mitigate the impacts of climate change in order to empower and support younger generations in facing these challenges.

Since 2021, the EBCI's Natural Resources Department has led a dedicated initiative aimed at crafting a comprehensive Climate Action Roadmap for Tribal Government, with support from other government divisions like Public Health and Human Services and academic partners, NC State's Carolinas Collaborative on Climate, Health, and Equity (C3HE). This roadmap employs a dual approach, engaging both top-down and bottom-up methodologies to actively listen and learn from tribal government, entities, and community members.

In the fall of 2023, the team piloted a survey targeting youth to understand their thoughts on climate change. A total of 45 EBCI youth responded. Findings from the survey showed that 28% of respondents experienced moderate to severe anxiety due to climate change. Results also reveal that nearly a quarter of youth were moderately anxious or distressed about climate change and 5% of youth were characterized by severe climate anxiety. Severe climate anxiety can have a profound impact on mental health, leading to impaired functioning in various areas of life and requiring professional intervention or support.

CLIMATE ANXIETY

A survey of EBCI youth show over half of respondents have concerns about climate change

How worried are you about E-lo-hi-a(d)-ste-da-li-sgv-i?



What is your level of climate anxiety?



Figure 58

2023 EBCI Youth Climate Anxiety Survey Selected Questions and Responses

Our Tribal Health Survey Findings

Below are images from the 2023 EBCI Tribal Health Survey Dashboard.

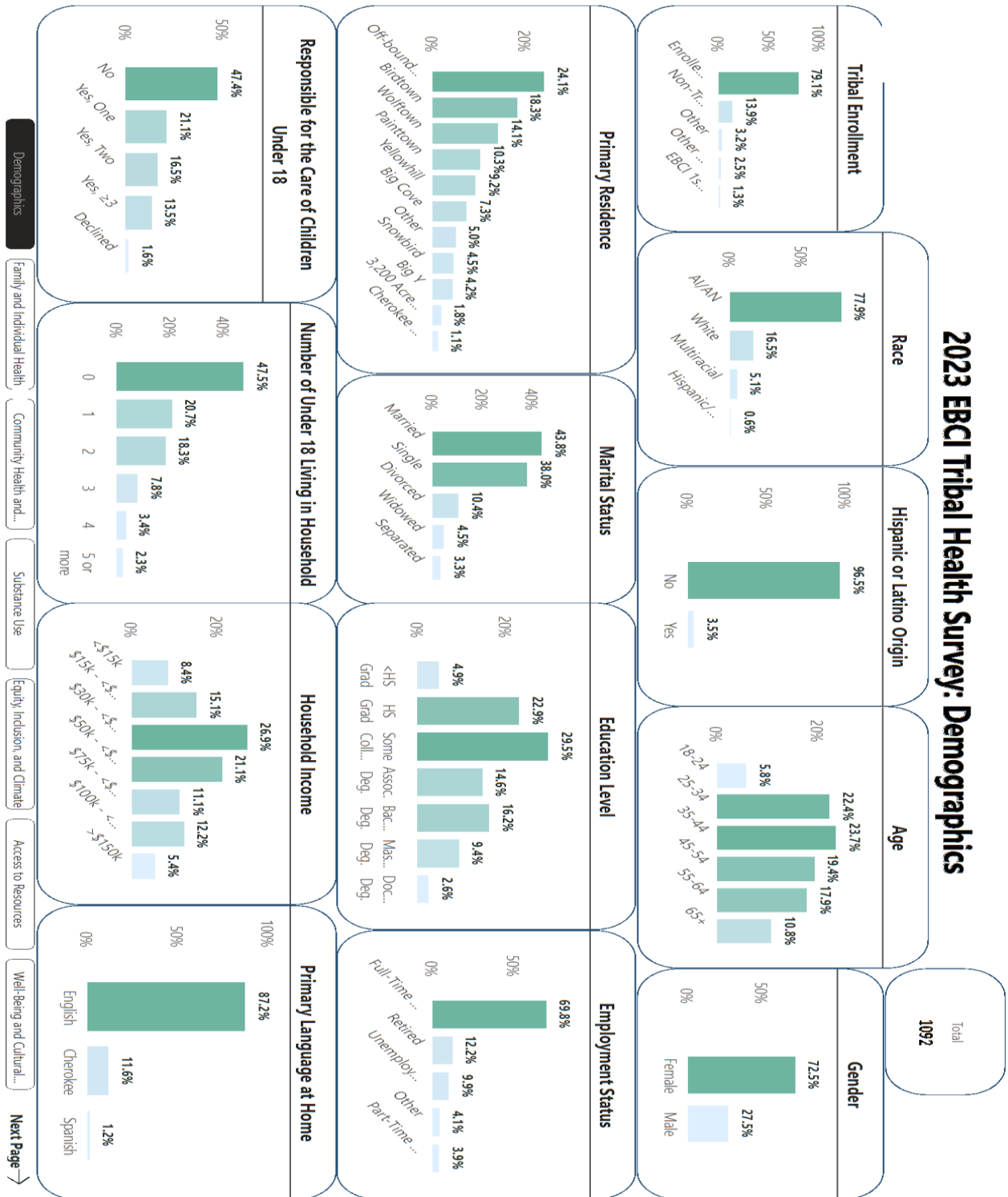


Figure 59

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various demographic data. Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Family and Individual Health

Total
1092

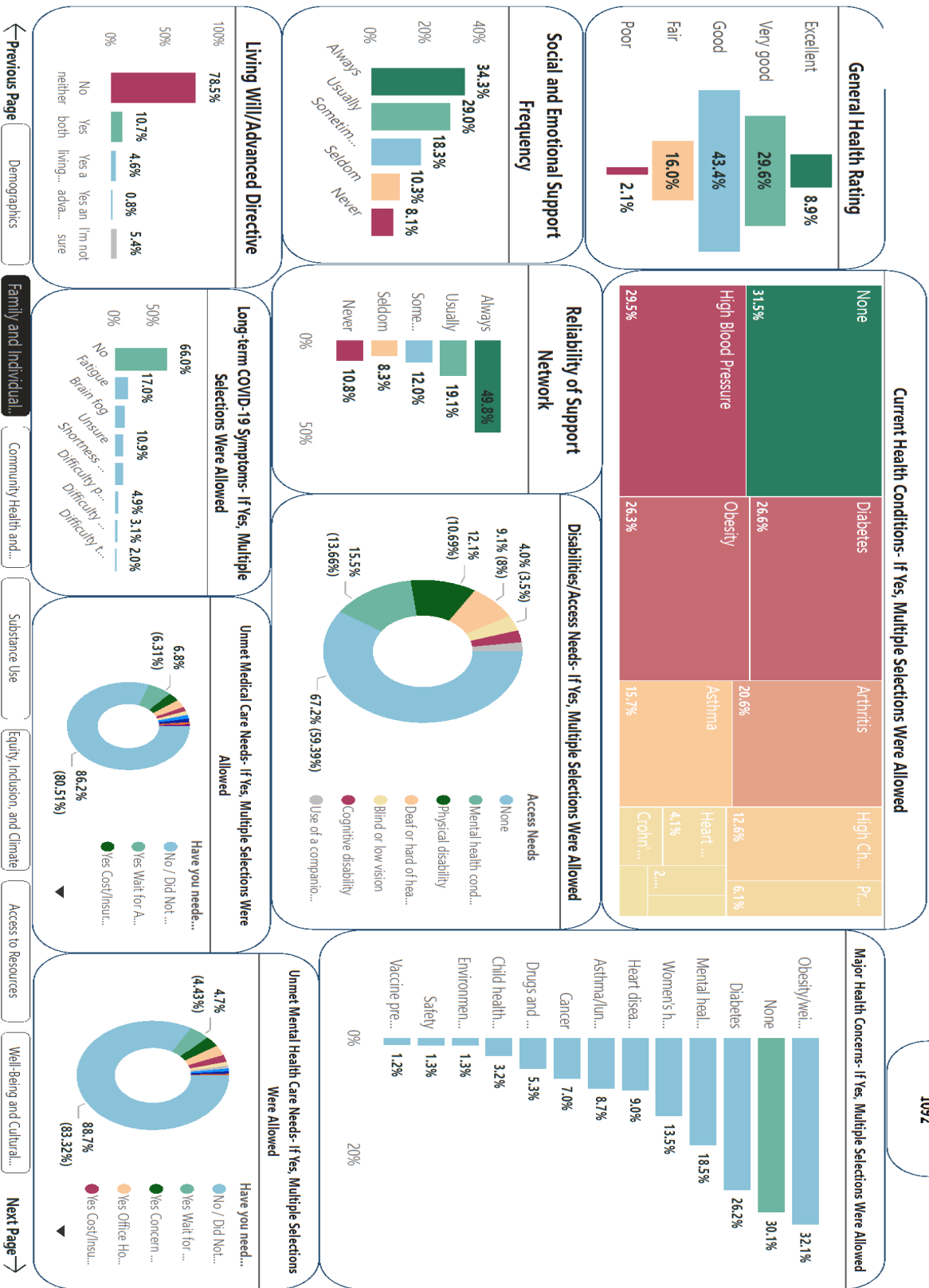


Figure 60

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various family and individual health data.

Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Community Health and Wellness

Total
1092

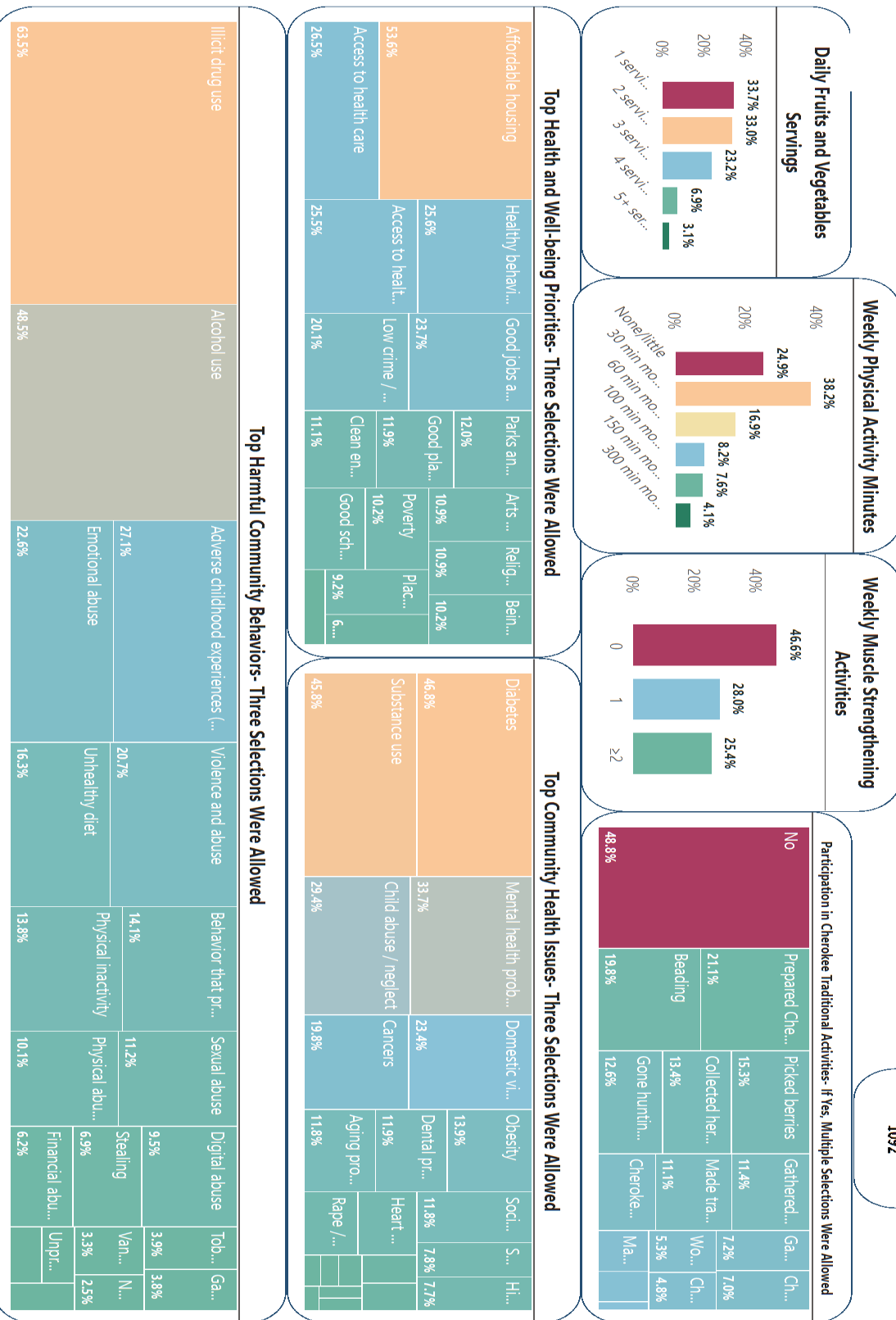


Figure 61

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various community health and wellness data.

Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Substance Use

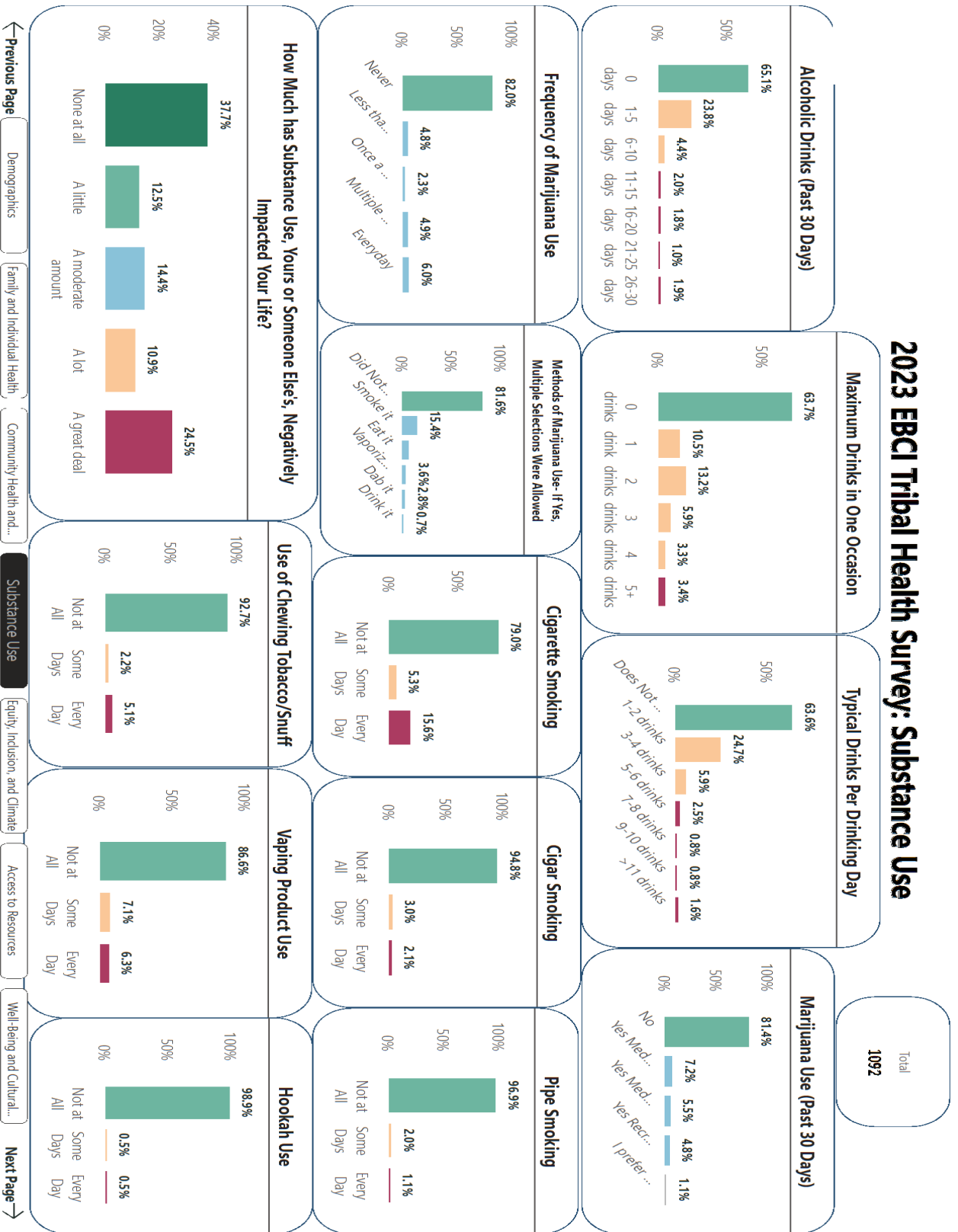


Figure 62

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various substance use data. Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Equity, Inclusion, and Climate

Total
1092

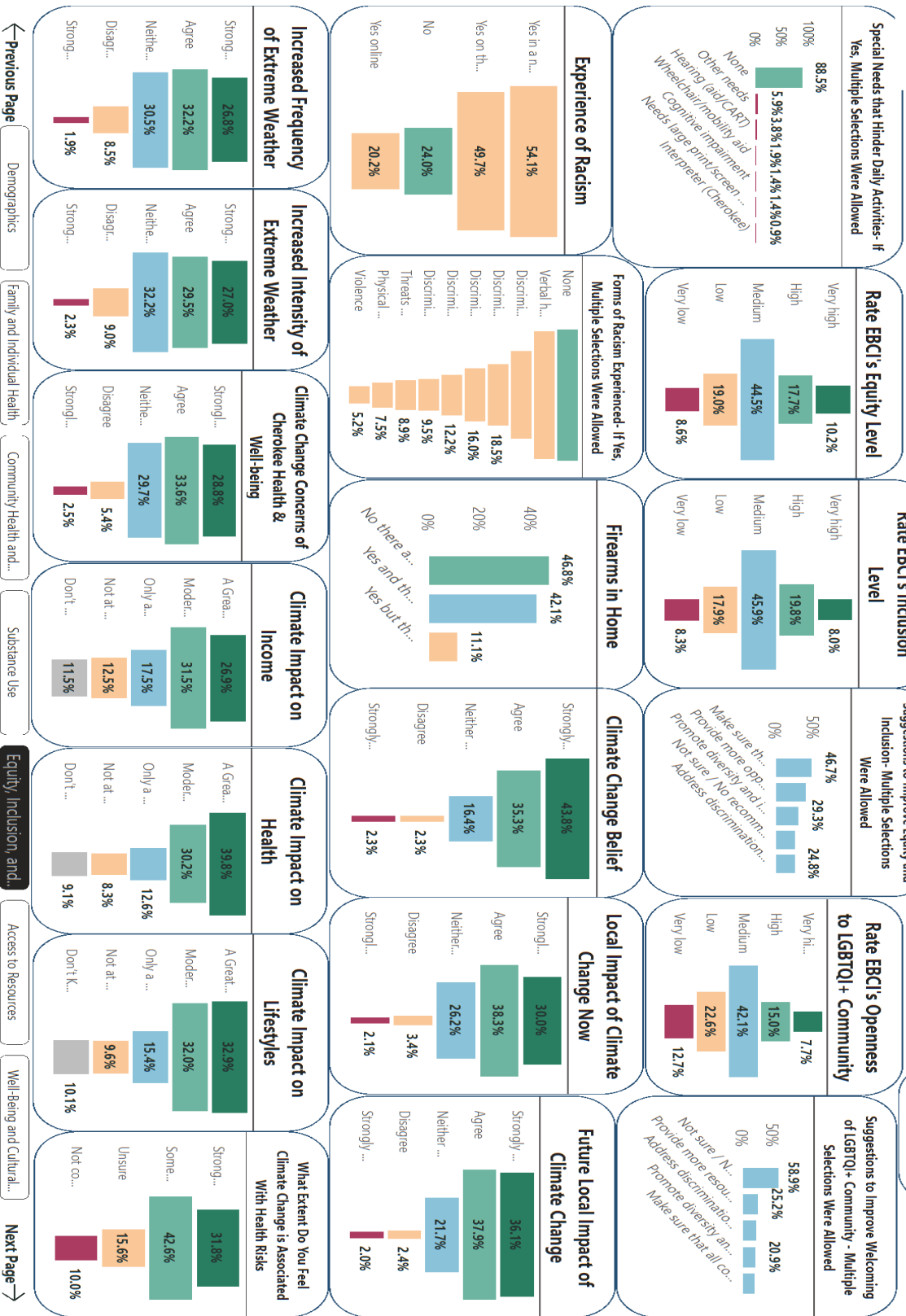


Figure 63

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various equity, inclusion, and climate data.

Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Access to Resources

Total
1092



Figure 64

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various access to resources data. Source: 2023 EBCI Tribal Health Survey

2023 EBCI Tribal Health Survey: Well-Being and Cultural Values

Total
1092



Figure 65

Image from the 2023 EBCI Tribal Health Survey Dashboard, showing various well-being and cultural values data.

Source: 2023 EBCI Tribal Health Survey

Summary of the 2023 EBCI Tribal Health Survey

Characteristics of Survey Participants

Understanding the demographics of those who participated in the EBCI THA Health Opinion Survey is essential for interpreting their responses accurately. A total of **1092 EBCI members** from across the Tribal Lands completed the survey, providing a robust dataset for analysis.

- **Community Representation:** Big Cove (14.1%), Birdtown (18.3%), Painttown (10.3%), Snowbird (4.5%), Wolfstown (9.2%), Yellowhill (7.3%), Towstring (5.0%), Cherokee County Community (4.2%), Other (27.1%).
- **Gender Distribution:** 72.5% Female, 27.5% Male.
- **Age Groups:** 18-24 (5.8%), 25-34 (22.4%), 35-44 (23.7%), 45-54 (19.4%), 55-64 (17.9%), 65+ (10.8%).
- **Educational Attainment:** Less than High School (4.9%), High School Graduate (22.9%), Some College (29.5%), Associate Degree (14.6%), Bachelor's Degree (16.2%), Master's Degree (9.4%), Doctorate Degree (2.6%).
- **Employment Status:** Full-time (69.8%), Retired (12.2%), Unemployed (9.9%), Part-time (3.9%), Other (4.1%).
- **Annual Household Income:** <\$15k (8.4%), \$15k - <\$30k (15.1%), \$30k - <\$50k (26.9%), \$50k - <\$75k (21.1%), \$75k - <\$100k (11.1%), \$100k - <\$150k (12.2%), >\$150k (5.4%).

Key Points in Interpretation: The participant profile helps identify if specific groups within the EBCI (by community, age, etc.) were particularly well-represented or less likely to participate. These demographics contextualize survey findings and inform the identification of health priorities. Survey methodology will be refined in future years to reach even more diverse segments of the community.

Perceived Quality of Life in the EBCI

Survey participants shared their perceptions of factors impacting the quality of life within their communities.

- **Community Living:** 39.8% rated their quality of life as "Very Good" or "Excellent", 32.7% rated it as "Good".
- **Support for Elders:** 40.9% said the community is "Very Good" or "Excellent" for growing old, 30.7% rated it as "Good".
- **Economic Opportunity:** 45.2% rated the community as "Good" or "Very Good".
- **Safety:** 38.8% felt the community is a "Safe Place to Live".
- **Support for Those in Need:** 45.2% felt there are good support structures for individuals and families.

Most Important Health Issues in Your Community

The EBCI 2023 Tribal Health Survey asked residents to identify the most significant health issues impacting their communities.

- **Top Health Issues Identified:**
 - Diabetes (46.8%)
 - Substance Use (45.8%)
 - Mental Health Problems (33.7%)
 - Child Abuse / Neglect (29.4%)
 - Domestic Violence (23.4%)
 - Cancers (19.8%)
 - Obesity (13.9%)
 - Dental Problems (11.9%)
 - Aging Problems (11.8%)
 - Social Determinants of Health (7.8%)

Analysis showed variations by subgroups, with different health priorities emerging based on age, community of residence, and other demographics. For example, young adults emphasized substance use issues, while elders were more concerned about chronic disease management. Despite some variation, several health concerns consistently emerged as major issues across a significant portion of the EBCI population.

Top 10 Harmful Behaviors According to the Community

Survey participants identified behaviors that they perceived as most harmful to their community.

- **Top Harmful Behaviors Identified:**
 - Illicit Drug Use (63.5%)
 - Alcohol Use (48.5%)
 - Adverse Childhood Experiences (27.1%)
 - Emotional Abuse (22.6%)
 - Violence and Abuse (20.7%)
 - Unhealthy Diet (16.3%)
 - Behavior that Promotes Racism (14.1%)
 - Physical Inactivity (13.8%)
 - Sexual Abuse (11.2%)
 - Physical Abuse (10.1%)

These behaviors highlight the areas where community members see the most significant challenges, particularly in terms of substance use, abuse, and overall community well-being. Addressing these behaviors is crucial for improving the overall health and safety of the EBCI community.

Social Determinants of Health

The survey explored various social determinants of health, which are conditions in the environments where people are born, live, learn, work, play, worship, and age that affect a wide range of health, functioning, and quality-of-life outcomes.

- **Economic Stability:** 29.9% experienced financial stress frequently, 50.0% were sometimes or often worried about having enough food.
- **Education Access and Quality:** 14.6% have an associate degree, 16.2% have a bachelor's degree.
- **Neighborhood and Built Environment:** 26.8% reported poor housing conditions, 45.0% stated a lack of safe recreational spaces.
- **Social and Community Context:** 40.9% said the community is a "Very Good" place for elders.

Vulnerable Populations

Identifying and understanding the needs of vulnerable populations within the EBCI is crucial for targeted health interventions.

Key populations included elders, youth, low-income families, and individuals with disabilities. Elders had a higher prevalence of chronic diseases and greater need for specialized healthcare services. Youth faced increased exposure to substance use, mental health issues, and educational barriers. Low-income families struggled with economic stability, access to healthcare, and quality housing. Individuals with disabilities faced challenges in accessing specialized care and inclusive community services.

Health disparities were significant among these groups, indicating the need for tailored interventions. Vulnerable populations often faced greater barriers to accessing healthcare, education, and economic opportunities.

Education: Access and Quality

Education plays a crucial role in determining health outcomes. The survey assessed access to and quality of education within the EBCI.

- **Educational Attainment:** Less than High School (4.9%), High School Graduate (22.9%), Some College (29.5%), Associate Degree (14.6%), Bachelor's Degree (16.2%), Master's Degree (9.4%), Doctorate Degree (2.6%).
- **Quality Concerns:** Concerns about the quality of education and the availability of advanced educational programs were frequently mentioned.
- **Access Barriers:** Financial constraints and distance to educational institutions were highlighted as significant barriers.

Neighborhood and the Built Environment

The built environment, including housing, transportation, and recreational facilities, plays a critical role in health outcomes.

- **Housing Quality:** 26.8% reported poor housing conditions, many noted issues with the availability of affordable housing options.
- **Transportation:** 38.2% reported having limited access to reliable transportation, limited access to reliable transportation was frequently mentioned, impacting access to education and employment.
- **Recreational Facilities:** 46.6% indicated the need for more recreational facilities to promote physical activity and overall well-being, many respondents highlighted the importance of parks, trails, and recreational facilities for community health.

Economic Stability

Economic stability is a key determinant of health, affecting access to resources and opportunities.

- **Income Levels:** <\$15k (8.4%), \$15k - <\$30k (15.1%), \$30k - <\$50k (26.9%), \$50k - <\$75k (21.1%), \$75k - <\$100k (11.1%), \$100k - <\$150k (12.2%), >\$150k (5.4%).
- **Employment Opportunities:** Full-time employment (69.8%), retired (12.2%), unemployed (9.9%), part-time employment (3.9%), other (4.1%).
- **Financial Hardship:** 29.9% of respondents reported experiencing financial stress frequently, many households indicated difficulties in affording basic needs such as food and housing.

Income disparities were significant within the community, with many households experiencing financial strain. Limited job opportunities and job security were identified as major concerns. Financial hardship was reported to impact access to education, healthcare, and other essential services.

Community Health and Well-being

The survey also gathered data on overall health and well-being, including physical activity, diet, and perceptions of health services.

- **Daily Fruits and Vegetables Servings:** 1 serving (33.7%), 2 servings (33.0%), 3 servings (23.2%), 4 servings (6.9%), 5+ servings (3.1%).
- **Weekly Muscle Strengthening Activities:** 0 times (46.6%), 1 time (28.0%), 2 or more times (25.4%).
- **Satisfaction with Health Care System:** Strongly yes (13.7%), yes (36.2%), neutral (30.1%), no (10.6%), strongly no (4.5%).

Substance Use and Behavioral Health

Substance use and behavioral health issues are critical concerns for the EBCI community.

- **Alcohol Use (Past 30 Days):** 0 days (65.1%), 1-5 days (23.8%), 6-10 days (4.4%), 11-15 days (2.0%), 16-20 days (1.8%), 21-25 days (1.0%), 26-30 days (1.9%).
- **Marijuana Use (Past 30 Days):** No (81.4%), Yes, Medical Use (7.2%), Yes, Recreational Use (5.5%).

- **Mental Health Concerns:** 33.7% reported increasing rates of depression and anxiety.
- **Social and Emotional Support:** Always (34.3%), Usually (29.0%), Sometimes (18.3%), Seldom (10.3%), Never (8.1%).

Cultural Values and Community Engagement

The survey assessed the importance of cultural values and the level of community engagement among EBCI members.

- **Value of Cherokee Culture and Traditions:** Strongly Yes (18.1%), Yes (43.6%), Neutral (26.2%), No (6.6%), Strongly No (1.1%).
- **Civic Responsibility and Pride:** Strongly Yes (5.7%), Yes (28.3%), Neutral (42.6%), No (12.6%), Strongly No (2.7%).

Climate Change Perceptions

Community perceptions of climate change and its impact on health and well-being were also assessed.

- **Belief in Climate Change:** Strongly Agree (43.8%), Agree (35.3%), Neutral (16.4%), Disagree (2.3%), Strongly Disagree (2.3%).
- **Future Local Impact:** Strongly Agree (36.1%), Agree (37.9%), Neutral (21.7%), Disagree (2.4%), Strongly Disagree (2.0%).

Selected Findings from the 2023 EBCI Tribal Health Survey

The 2023 EBCI Tribal Health Survey provides insights into health and well-being among the Eastern Band of Cherokee Indians. This survey highlights the relationships between education, substance use, social determinants, and health outcomes.

Education and Health Status:

- Higher education correlates with better health. **60%** of college graduates reported "Very good" or "Excellent" health, compared to **30%** with less than a high school education.

Substance Use and Age:

- **Alcohol Use:** **25%** of 18-24-year-olds consumed alcohol on 6+ days/month, versus **10%** of those 65+.
- **Marijuana Use:** **20%** of 18-34-year-olds used marijuana in the past month, often alongside mental health issues.

Social Determinants and Health Outcomes:

- **Diabetes and Heart Disease:** **15%** of diabetics also had heart disease, compared to **5%** without diabetes.
- **Income and Health:** **40%** with income below \$25,000 reported "Fair" or "Poor" health, versus **20%** with income above \$75,000.

- **Fruits and Vegetables Consumption:**
 - **Low (≤ 3 servings/day): 36.9%** reported "Excellent" or "Very Good" health.
 - **High (≥ 4 servings/day): 44.79%** reported "Excellent" or "Very Good" health.
 - This finding aligns with the CDC's recommendation of at least 1.5 to 2 cups of fruit and 2 to 3 cups of vegetables daily to mitigate chronic disease risk, such as heart disease, type 2 diabetes, some cancers, and obesity.⁶¹
- **Physical Activity and Obesity (Under 35 years):**
 - **No/Little Activity: 26.7%** obese.
 - **Moderate/High Activity: 8.8%** obese.
 - The CDC recommends that adults aim for at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity activity weekly, along with muscle-strengthening activities on two or more days per week. Regular physical activity is vital for weight management and reducing the risk of chronic diseases such as heart disease, type 2 diabetes, and some cancers.^{62, 63, 64}

Key Findings and Implications

The 2023 EBCI Tribal Health Survey provides an in-depth analysis of the health and social factors impacting the Eastern Band of Cherokee Indians (EBCI). The data highlights significant correlations between education, income, physical activity, and overall health outcomes. Addressing disparities in education and socioeconomic status is crucial, as these factors are closely linked to chronic diseases and poorer health. The survey also underscores the need for targeted interventions to support vulnerable populations, including elders, youth, and low-income families, who face distinct challenges that affect their health and well-being.

The findings emphasize the importance of culturally tailored public health strategies that address both immediate health concerns, such as substance use and chronic disease management, and the broader social determinants that contribute to these issues. By focusing on these areas, the EBCI can enhance health equity, improve quality of life, and ensure that all community members have the opportunity to achieve their highest level of health. The survey results will be instrumental in guiding public health initiatives and resource allocation to address the most pressing health issues within the EBCI community.

⁶¹ Lee, S. H., Moore, L. V., Park, S., Harris, D. M., & Blanck, H. M. (2022). Adults meeting fruit and vegetable intake recommendations — United States, 2019. *MMWR Morb Mortal Wkly Rep*, 71(1), 1-9. DOI:

<http://dx.doi.org/10.15585/mmwr.mm7101a1>

⁶² Centers for Disease Control and Prevention. (n.d.). Physical Activity Basics for Adults. Retrieved from

<https://www.cdc.gov/physical-activity-basics/guidelines/adults.html>

⁶³ Centers for Disease Control and Prevention. (n.d.). About Physical Activity. Retrieved from

<https://www.cdc.gov/physical-activity/php/about/index.html>

⁶⁴ Centers for Disease Control and Prevention. (n.d.). Adding Physical Activity to Your Life. Retrieved from

<https://www.cdc.gov/physical-activity-basics/adding-adults/index.html>

Our Health and Inequities

Introduction to Health Indicators and Inequities

Our Health and Inequities section provides a comprehensive look at key health trends within the Eastern Band of Cherokee Indians (EBCI). These measures influence the health and well-being of Tribal members throughout their lives, helping healthcare providers, community leaders, and EBCI members understand priority areas for improving Tribal health. The data is categorized under major themes:

- Length of Life
- Quality of Life
- Leading Causes of Death
- Health Factors
- Clinical Care
- Social & Economic Determinants
- Community Safety Measures

This section uses data from various sources, including EBCI-specific records, broader regional datasets, and national benchmarks where relevant. Wherever possible, age-adjusted metrics and rates are used to improve comparisons.

- **EBCI-Specific Data:** Primarily from CIHA records and THA surveys.
- **Regional/State Comparisons:** Sources may include datasets from the surrounding counties or the state of North Carolina.
- **National Benchmarks:** Data from sources like the CDC may be used to compare EBCI health trends to national averages.

Length of Life

Table 1: Length of Life

Measure	Value	Description	Data Origin
Number of Premature Deaths	583	Deaths among residents under age 75 (2015-2021)	EBCI
Age-Adjusted Mortality Rate for Premature Deaths	477.169	Rate per 100,000 population (2015-2021)	EBCI
Number of Child Deaths	7	Deaths among residents under age 18 (2015-2021)	EBCI
Age-Adjusted Mortality Rate for Child Deaths	6.5752	Rate per 100,000 population (2015-2021)	EBCI
Life Expectancy for AI/AN	65.2 years	Life expectancy based on national AI/AN data as of 2021 (CDC)	National

Years of Potential Life Lost (YPLL)	11,142	YPLL before age 65 per 100,000 population for AI/AN in North Carolina, 2022 (CDC WISQARS)	North Carolina
--	--------	---	----------------

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
 - Data from Centers for Disease Control and Prevention, CDC WONDER Online Database 2018-2022.⁶⁵
 - Data from Centers for Disease Control and Prevention, WISQARS Leading Causes of Death Visualization Tool 2018-2022.⁶⁶
- **Definition(s):**
 - **Number of Premature Deaths:** Total deaths among residents under age 75 from 2015 to 2021.
 - **Age-Adjusted Mortality Rate for Premature Deaths:** Rate per 100,000 population for premature deaths from 2015 to 2021.
 - **Number of Child Deaths:** Total deaths among residents under age 18 from 2015 to 2021.
 - **Age-Adjusted Mortality Rate for Child Deaths:** Rate per 100,000 population for child deaths from 2015 to 2021.
 - **Life Expectancy for AI/AN:** Estimated life expectancy for AI/AN populations based on national data as of 2021.
 - **Years of Potential Life Lost (YPLL):** YPLL before age 65 per 100,000 population for AI/AN in North Carolina, 2022.
- **Comparison with EBCI Data:**
 - The life expectancy for AI/AN populations (65.2 years) is significantly lower than the national average for the total U.S. population, which was 76.1 years in 2021. Additionally, the YPLL for AI/AN populations in North Carolina is 11,142 per 100,000 population, indicating a higher burden of premature mortality compared to other racial/ethnic groups. These statistics highlight the substantial disparities in health outcomes for the AI/AN community.
- **Analysis of the Data:**
 - The high number of premature deaths and the elevated age-adjusted mortality rates for both premature and child deaths within the EBCI community point to significant public health challenges. The lower life expectancy and higher YPLL for AI/AN populations underscore the need for targeted health interventions and policies aimed at reducing these disparities. Contributing factors may include socioeconomic determinants, limited access to healthcare, and higher prevalence of chronic diseases. Addressing these issues is crucial for improving the overall health and longevity of the AI/AN population.

⁶⁵ Centers for Disease Control and Prevention. (2018-2022). CDC Wonder. Retrieved from <https://wonder.cdc.gov>

⁶⁶ Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>

- **Additional Information:**

- Potential under-reporting and unreliable rates as indicated by CDC Wonder.
- Missing frequency counts due to unmatched ICD-10 codes and deaths occurring outside the state of North Carolina.

The table below provides a comprehensive comparison of Age-Adjusted Years of Potential Life Lost (YPLL) before age 65 for American Indian/Alaska Native (AI/AN) populations in North Carolina, all races in North Carolina, and all races in the United States. YPLL is a measure of premature mortality that accounts for the years lost when individuals die before a predetermined age. By adjusting for age differences, we can compare premature death rates between different populations more accurately. This adjustment ensures that the differences in YPLL are not simply due to one population being younger or older on average than another, making the comparisons more meaningful and accurate.

Table 2: Years of Potential Life Lost (YPLL)

Cause	NC AI/AN Age-Adjusted YPLL	NC All Races Age-Adjusted YPLL	US All Races Age-Adjusted YPLL
ALL CAUSES	6,863.4	5,485.3	4,788.7
Unintentional Injury	2,599.9	1,511.9	1,214.9
Homicide	574.8	302.2	259.3
Heart Disease	557.5	502.6	480.8
Malignant Neoplasms	482.5	545.1	526.0
Perinatal Period	256.2	354.1	271.2
Suicide	255.6	340.5	354.5
COVID-19	188.9	184.1	195.6
Liver Disease	186.1	126.9	140.0
Diabetes Mellitus	166.5	138.0	106.4
Congenital Anomalies	114.3	163.1	153.8
Cerebrovascular	118.2	96.1	94.4
Chronic Low. Respiratory Disease	102.2	64.4	65.2
Septicemia	66.0	58.7	58.5
Influenza & Pneumonia	72.5	52.5	53.7
Nephritis	48.3	48.7	47.8
Hypertension	33.0	29.4	30.5
Complicated Pregnancy	22.4	22.5	21.8
HIV	17.3	25.2	23.1
Benign Neoplasms	14.7	14.7	15.0
Pneumonitis	11.8	11.8	12.0
Adverse Effect	13.2	14.3	13.4
Aortic Aneurysm	11.9	12.6	12.7
All Others	976.0	892.0	1,087.0

Notes

- **Data Source(s):**
 - Data is from 2018 to 2022, sourced from the Centers for Disease Control and Prevention (CDC) WISQARS Leading Causes of Death Visualization Tool.⁶⁷
- **Definition(s):**
 - **Age-Adjusted YPLL:** This metric accounts for differences in age distributions between populations, allowing for more accurate comparisons of premature death rates. By standardizing the YPLL to a common age distribution, we can ensure that the differences observed are not simply due to one population being younger or older on average than another.
 - **Years of Potential Life Lost (YPLL):** YPLL highlights the significance of different causes of death in reducing the potential lifespan of individuals in a population. It emphasizes the impact of preventable and premature deaths, helping public health officials identify and prioritize areas for intervention and resource allocation.
- **Comparison with EBCI Data:**
 - The Eastern Band of Cherokee Indians (EBCI) community shows higher premature mortality rates compared to broader populations. For example, the YPLL for all causes is **6,863.4** per 100,000 for NC AI/AN, significantly higher than **5,485.3** per 100,000 for NC All Races and **4,788.7** per 100,000 for US All Races. Specifically, unintentional injuries have a YPLL of **2,599.9** for NC AI/AN, compared to **1,511.9** for NC All Races and **1,214.9** for US All Races. This indicates that preventable injuries and accidents have a more severe impact on the lifespan of individuals in the EBCI community.
- **Analysis of the Data:**
 - The higher YPLL values for causes such as unintentional injuries, heart disease, and liver disease among the NC AI/AN population highlight significant health disparities. These elevated rates suggest that the EBCI community faces greater challenges related to accidental injuries, cardiovascular health, and liver conditions. For example, the YPLL for liver disease in the NC AI/AN population is **186.1** per 100,000, higher than **126.9** per 100,000 for NC All Races and **140.0** per 100,000 for US All Races. This could be due to factors such as higher rates of alcohol use and limited access to healthcare services that effectively manage chronic conditions.
- **Additional Information:**
 - **Population Comparisons:**
 - **NC AI/AN:** Refers to the American Indian/Alaska Native population in North Carolina.
 - **NC All Races:** Represents all racial groups combined in North Carolina.
 - **US All Races:** Represents all racial groups combined across the entire United States.
 - **Interpretation of Data:**

⁶⁷ Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>

- Higher YPLL values indicate a greater burden of premature mortality for that cause in the specified population.
- Comparisons between NC AI/AN, NC All Races, and US All Races provide insights into how different populations are affected by various causes of death.
- For example, the higher YPLL for unintentional injuries among NC AI/AN (2,599.9) compared to NC All Races (1,511.9) and US All Races (1,214.9) suggests a greater impact of this cause on premature mortality in the NC AI/AN population.

Quality of Life

Table 3: Diabetes Prevalence

Condition	Population	Number (2023)	Percentage (2023)
Type 1 Diabetes	Cherokee	84	0.62%
	USET	306	0.71%
Type 2 Diabetes	Cherokee	2915	21.64%
	USET	8640	19.95%
Gestational Diabetes	Cherokee	146	19.92%
	USET	281	12.53%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Type 1 Diabetes:** An autoimmune condition where the pancreas produces little or no insulin. It typically appears in adolescence but can develop in adults.
 - **Type 2 Diabetes:** A chronic condition that affects the way the body processes blood sugar (glucose). It is often linked to obesity and inactivity.
 - **Gestational Diabetes:** A form of high blood sugar affecting pregnant women who have never had diabetes before.
- **Comparison with EBCI Data:**
 - The prevalence of Type 1 Diabetes in the Cherokee population is **0.62%**, slightly lower than the USET average of **0.71%**. However, Type 2 Diabetes shows a significant disparity: **21.64%** of Cherokee individuals are affected compared to **19.95%** within the USET population. For gestational diabetes, the prevalence in Cherokee women is **19.92%**, markedly higher than the USET average of **12.53%**. These figures highlight the higher burden of diabetes-related health issues within the EBCI community.
- **Analysis of the Data:**
 - The higher prevalence of Type 2 Diabetes and gestational diabetes among the Cherokee population indicates significant health disparities that need addressing. Type 2 Diabetes is particularly concerning due to its association with severe complications like heart disease, kidney failure, and vision problems. The elevated rate of gestational diabetes suggests a need for targeted prenatal care and diabetes management programs to support pregnant

women in the community. The relatively stable rate of Type 1 Diabetes aligns with broader population trends but still requires ongoing management and support.

- **Additional Information:**
 - **Denominator Panel:** Active clinical patients for the years of interest, including criteria based on specific ICD-10 codes.
 - **Date Range:** From 01/01/2018 to 12/31/2023 (for Gestational Diabetes), and from 01/01/1900 to 12/31/2023 (for Type 1 and Type 2 Diabetes).

Table 4: Diabetes Incidence

Condition	Population	2018	2019	2020	2021	2022	2023	Average Rate (per 1,000)
Type 1 Diabetes	EBCI	4	6	6	10	6	12	
	EBCI Rate	0.35	0.52	0.53	0.86	0.52	1.04	0.64
	USET	30	29	13	52	24	24	
	USET Rate	0.87	0.84	0.38	1.45	0.69	0.71	0.82
Type 2 Diabetes	EBCI	199	120	122	179	144	145	
	EBCI Rate	17.39	10.39	10.86	15.43	12.56	12.63	13.21
	USET	553	433	380	505	424	488	
	USET Rate	16.08	12.56	11.17	14.04	12.21	14.37	13.41
Gestational Diabetes	EBCI	17	24	29	36	18	17	
	EBCI Rate	1.49	2.08	2.58	3.10	1.57	1.48	2.05
	USET	-	-	-	-	-	-	
	USET Rate	-	-	-	-	-	-	-

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Type 1 Diabetes:** An autoimmune condition where the pancreas produces little or no insulin. It typically appears in adolescence but can develop in adults.
 - **Type 2 Diabetes:** A chronic condition that affects the way the body processes blood sugar (glucose). It is often linked to obesity and inactivity.
 - **Gestational Diabetes:** A form of high blood sugar affecting pregnant women who have never had diabetes before.
- **Comparison with EBCI Data:**
 - The incidence of Type 1 Diabetes in the EBCI population fluctuated over the years, with the highest rate of **1.04 per 1,000** in 2023. The average rate from 2018 to 2023 was **0.64 per 1,000**, compared to the USET average rate of **0.82 per 1,000**. For Type 2 Diabetes, the EBCI average rate was **13.21 per 1,000**, slightly lower than the USET average rate of **13.41 per 1,000**. Gestational diabetes rates among the EBCI population peaked in 2021 at **3.10 per 1,000**.

1,000, with an average rate of **2.05 per 1,000** from 2018 to 2023. There is no comparative data available for gestational diabetes rates within the USET population.

- **Analysis of the Data:**
 - The incidence rates for Type 1 Diabetes within the EBCI population show variability, with a notable increase in 2023. This trend may indicate emerging risk factors or better detection methods. Despite these fluctuations, the average rate remains lower than the USET average. For Type 2 Diabetes, the rates suggest a consistent burden of the disease within the EBCI community, though slightly lower than the USET average. This indicates ongoing challenges related to lifestyle and metabolic health. The high rates of gestational diabetes highlight the need for focused prenatal care and interventions to manage blood sugar levels during pregnancy, although direct comparisons with USET are not possible due to missing data.
- **Additional Information:**
 - **Denominator Panel:** Active clinical patients for the years of interest, including criteria based on specific ICD-10 codes.
 - **Date Range:** From 01/01/2018 to 12/31/2023.

Table 5: Osteoporosis 65+ Prevalence

Condition	Population	2018	2019	2020	2021	2022	2023	Total	Average Rate per 1,000
Osteoporosis 65+	EBCI	700	673	641	613	571	552	3,750	
	EBCI Rate per 1,000	38.59	38.79	38.77	38.02	37.65	37.96		38.30
	USET	1,719	1,660	1,580	1,516	1,419	1,347	9,241	
	USET Rate per 1,000	35.77	35.59	34.94	33.68	33.94	33.55		34.91

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Osteoporosis:** A medical condition where bones become brittle and fragile from loss of tissue, typically as a result of hormonal changes, or deficiency of calcium or vitamin D. It is particularly common in older adults.
 - **Prevalence Rate:** The total number of cases of a specific condition in a population at a given time, expressed per 1,000 individuals.
- **Comparison with EBCI Data:**
 - The prevalence of osteoporosis among individuals aged 65 and older in the EBCI population showed slight fluctuations from 2018 to 2023, with an average rate of **38.30 per 1,000**.

This rate is consistently higher than the USET average rate of **34.91 per 1,000** for the same period. The highest rate for EBCI was **38.79 per 1,000** in 2019, while the USET's highest rate was **35.77 per 1,000** in 2018. These comparisons indicate a greater prevalence of osteoporosis in the EBCI community compared to the USET population.

- **Analysis of the Data:**

- The higher average prevalence rate of osteoporosis among the EBCI elderly population compared to the USET average suggests significant health disparities. This elevated rate can be attributed to factors such as genetic predispositions, lifestyle choices, and access to healthcare services. The consistency of high rates over the years implies a need for targeted interventions to manage and prevent osteoporosis. Strategies could include community-based programs to promote bone health, increase calcium and vitamin D intake, encourage weight-bearing exercises, and improve overall healthcare access for the elderly.

Table 6: History of Falls and Fall Injuries

Year	Population	# w/ History of Fall	History of Fall Incidence Rate per 1,000	# w/ Fall Injury	Fall Injury Incidence Rate per 1,000
2018	EBCI	22	21.3	104	100.7
2018	USET	64	22.4	178	62.2
2019	EBCI	16	15.4	104	99.8
2019	USET	59	22.2	199	69.4
2020	EBCI	15	14.1	94	88.6
2020	USET	39	14.5	174	64.5
2021	EBCI	22	20.5	105	97.9
2021	USET	45	18.8	162	67.7
2022	EBCI	33	30.9	101	94.5
2022	USET	73	29.8	161	65.8
2023	EBCI	34	30.1	120	106.4
2023	USET	79	25.9	215	70.5
2018-2023	EBCI	142	22.2	628	98.0
2018-2023	USET	359	22.3	1,089	67.6

Notes

- **Data Source(s):**

- Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.

- **Definition(s):**

- **History of Fall:** Refers to individuals who have experienced at least one fall within the specified year.

- **Fall Injury:** Refers to injuries sustained as a result of a fall, which can include fractures, bruises, or other trauma.
- **Incidence Rate per 1,000:** The number of new cases (falls or fall injuries) per 1,000 individuals in the population during the specified time period.
- **Comparison with EBCI Data:**
 - From 2018 to 2023, the average incidence rate of history of falls among the EBCI elderly population was **22.2 per 1,000**, which is almost equal to the USET average of **22.3 per 1,000**. However, the incidence rate of fall injuries in the EBCI population was significantly higher, averaging **98.0 per 1,000** compared to **67.6 per 1,000** for the USET population. This suggests that while the occurrence of falls is similar between the two populations, the EBCI elderly are more likely to sustain injuries from falls.
- **Analysis of the Data:**
 - The data indicates a notable disparity in fall injury rates between the EBCI and USET populations. The consistently higher rates of fall injuries among the EBCI elderly suggest several underlying issues, such as differences in physical health, living conditions, or access to fall prevention resources. For example, in 2023, the fall injury rate for EBCI was **106.4 per 1,000**, compared to **70.5 per 1,000** for USET. This disparity underscores the need for targeted fall prevention programs and interventions within the EBCI community, such as home safety assessments, balance training exercises, and increased availability of mobility aids.

Table 7: Asthma Incidence and Prevalence

Year	Population	Asthma Incidence	Asthma Incidence (%)	Asthma Prevalence	Asthma Prevalence (%)
2018	EBCI	286	2.5%	699	7.32%
2018	USET	621	1.8%	1287	4.07%
2019	EBCI	205	1.8%	675	7.10%
2019	USET	526	1.5%	1041	3.53%
2020	EBCI	138	1.2%	566	6.11%
2020	USET	337	1.0%	929	3.3%
2021	EBCI	168	1.4%	505	5.61%
2021	USET	373	1.0%	374	1.94%
2022	EBCI	177	1.5%	560	6.43%
2022	USET	408	1.2%	397	2.13%
2023	EBCI	138	1.2%	589	6.73%
2023	USET	377	1.1%	1035	3.8%
Total	EBCI	-	-	3594	6.56%
Total	USET	-	-	5063	3.28%

Notes

- **Data Source(s):**

- Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Asthma Incidence:** The number of new cases of asthma diagnosed within a specific time period.
 - **Asthma Prevalence:** The total number of existing cases of asthma at a given time.
 - **Incidence Percentage:** The percentage of new asthma cases out of the total population within the specified year.
 - **Prevalence Percentage:** The percentage of total asthma cases out of the total population within the specified year.
- **Comparison with EBCI Data:**
 - The average asthma prevalence among the EBCI population from 2018 to 2023 is **6.56%**, which is significantly higher than the USET average of **3.28%**. Similarly, the asthma incidence rate in the EBCI population consistently exceeds that of the USET population. For example, in 2018, the asthma incidence was **2.5%** for EBCI compared to **1.8%** for USET. These figures indicate a higher burden of asthma within the EBCI community.
- **Analysis of the Data:**
 - The data reveals a notable disparity in both asthma incidence and prevalence between the EBCI and USET populations. The higher rates in the EBCI community suggest environmental, genetic, or lifestyle factors that increase susceptibility to asthma. For instance, the asthma prevalence in 2023 for EBCI was **6.73%**, significantly higher than the USET prevalence of **3.8%**. This persistent trend highlights the need for targeted asthma management and prevention programs within the EBCI population, including improved air quality, smoking cessation programs, and increased access to healthcare services that provide asthma education and treatment.

Table 8: Asthma Prevalence by Age Group

Year	Population	<15 (Patients)	15-34 (Patients)	35-64 (Patients)	65+ (Patients)
2018	EBCI	216	187	234	62
2019	EBCI	183	206	224	62
2020	EBCI	136	172	199	59
2021	EBCI	96	166	180	63
2022	EBCI	126	167	192	75
2023	EBCI	112	187	215	75

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Asthma Prevalence:** The total number of existing cases of asthma at a given time.

- **Patients (Numerator):** Represents the number of patients with asthma within each age group.
- **Comparison with EBCI Data:**
 - The data from 2018 to 2023 shows varying asthma prevalence across different age groups within the EBCI population. For the age group under 15, the number of patients decreased from **216** in 2018 to **112** in 2023. For the 15-34 age group, the numbers fluctuated, starting at **187** in 2018, dropping slightly in the following years, and then rising back to **187** in 2023. For those aged 35-64, the prevalence also showed fluctuations but ended with an increase from **234** in 2018 to **215** in 2023. The 65+ age group saw a rise in asthma prevalence from **62** in 2018 to **75** in 2023.
- **Analysis of the Data:**
 - The data indicates age-specific trends in asthma prevalence within the EBCI community. Notably, the under-15 age group saw a significant decrease in asthma cases, which might reflect effective pediatric asthma management programs or changes in environmental exposures. In contrast, the 35-64 and 65+ age groups exhibited an overall increase in asthma prevalence. This trend suggests that adults and the elderly in the EBCI population are increasingly affected by asthma, potentially due to factors such as aging, prolonged exposure to asthma triggers, or higher rates of smoking and occupational hazards. The fluctuating numbers in the 15-34 age group highlight the need for consistent asthma monitoring and intervention strategies for young adults.

Table 9: Tobacco Use

Year	Population	% w/ Tobacco Screening	% Tobacco Users	% Smokers	% Smokeless Users	% E-cig Users
2018	EBCI	87.47	27.98	24.02	5.17	-
2018	USET	76.95	23.90	21.61	2.79	-
2019	EBCI	89.59	27.39	22.87	6.05	-
2019	USET	76.24	22.59	19.91	3.12	-
2020	EBCI	83.38	24.94	21.24	4.18	0.51
2020	USET	68.66	20.25	17.97	2.35	0.24
2021	EBCI	85.47	24.95	20.89	3.65	1.90
2021	USET	57.01	17.64	16.09	1.42	0.29
2022	EBCI	87.53	23.62	19.06	3.87	3.20
2022	USET	65.69	19.18	17.53	1.83	0.38
2023	EBCI	91.25	24.31	18.46	4.09	4.65
2023	USET	82.86	26.53	19.25	3.76	5.87

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**

- **Tobacco Screening:** The percentage of individuals who have been screened for tobacco use during a healthcare visit.
- **Tobacco Users:** The percentage of individuals who use any form of tobacco.
- **Smokers:** The percentage of individuals who smoke tobacco.
- **Smokeless Users:** The percentage of individuals who use smokeless tobacco products, such as chewing tobacco or snuff.
- **E-cig Users:** The percentage of individuals who use electronic cigarettes.
- **Comparison with EBCI Data:**
 - The data from 2018 to 2023 shows that the percentage of tobacco users within the EBCI population remained relatively high, with slight fluctuations. In 2023, **24.31%** of the EBCI population were tobacco users, compared to **26.53%** in the USET population. The percentage of smokers in the EBCI population decreased from **24.02%** in 2018 to **18.46%** in 2023, whereas the USET smoker percentage also showed a decrease from **21.61%** in 2018 to **19.25%** in 2023. The use of smokeless tobacco and e-cigarettes varied, with EBCI showing higher percentages in some years compared to USET.
- **Analysis of the Data:**
 - The consistently high percentage of tobacco users in the EBCI population highlights ongoing public health challenges. Despite efforts to reduce smoking rates, the data indicates that a significant portion of the community continues to use tobacco. For example, the percentage of smokers among EBCI individuals was **18.46%** in 2023, compared to **19.25%** for USET. This suggests that while progress has been made in reducing smoking rates, there is still a substantial need for effective tobacco cessation programs. Additionally, the rise in e-cigarette use from 0.51% in 2020 to 4.65% in 2023 among the EBCI population indicates a shifting trend in tobacco use behaviors that needs to be addressed through targeted interventions and education on the risks of e-cigarettes.

Table 10: Tobacco Use by Age Group

Age Group	Year	% Tobacco Users	% Smokers	% Smokeless Users	% E-cig Users
5-13	2018	0.40%	0.33%	0.07%	0.00%
	2019	0.60%	0.07%	0.20%	0.00%
	2020	0.07%	0.07%	0.00%	0.00%
	2021	0.55%	0.21%	0.00%	0.21%
	2022	0.29%	0.22%	0.00%	0.14%
	2023	0.22%	0.15%	0.15%	0.00%
14-17	2018	9.28%	7.82%	2.44%	0.00%
	2019	6.63%	4.48%	2.82%	0.00%
	2020	4.20%	2.86%	1.01%	0.34%
	2021	5.71%	3.19%	0.84%	2.69%
	2022	5.83%	2.92%	0.81%	3.99%
	2023	6.77%	1.94%	0.65%	5.16%

18-24	2018	25.08%	21.76%	4.44%	0.00%
	2019	27.63%	23.17%	5.38%	0.00%
	2020	23.62%	20.84%	3.23%	1.38%
	2021	24.40%	19.37%	3.27%	5.66%
	2022	25.62%	19.61%	3.30%	11.83%
	2023	25.79%	14.29%	3.04%	16.27%
25-44	2018	42.49%	37.95%	6.35%	0.21%
	2019	41.31%	36.28%	8.04%	0.04%
	2020	37.82%	33.50%	4.98%	0.95%
	2021	36.32%	31.60%	4.11%	3.58%
	2022	33.67%	28.92%	4.44%	5.69%
	2023	33.36%	26.15%	4.52%	8.03%
45-64	2018	39.01%	33.30%	7.74%	0.09%
	2019	37.95%	31.58%	8.19%	0.04%
	2020	35.43%	30.08%	6.56%	0.31%
	2021	36.03%	30.88%	6.02%	1.20%
	2022	33.57%	28.40%	6.35%	1.92%
	2023	36.62%	29.65%	7.30%	2.17%
65+	2018	25.07%	18.59%	6.68%	0.19%
	2019	24.66%	18.14%	6.43%	0.00%
	2020	24.22%	17.90%	6.03%	0.19%
	2021	22.37%	18.27%	4.75%	0.19%
	2022	21.63%	17.14%	5.15%	0.47%
	2023	21.73%	17.11%	4.61%	0.53%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Tobacco Users:** The percentage of individuals who use any form of tobacco within a specific age group.
 - **Smokers:** The percentage of individuals who smoke tobacco within a specific age group.
 - **Smokeless Users:** The percentage of individuals who use smokeless tobacco products, such as chewing tobacco or snuff, within a specific age group.
 - **E-cig Users:** The percentage of individuals who use electronic cigarettes within a specific age group.
- **Comparison with EBCI Data:**
 - The data from 2018 to 2023 indicates varying rates of tobacco use across different age groups within the EBCI population. For example, in 2023, the highest percentage of tobacco users was among the 18-24 age group at **25.79%**, followed closely by the 25-44 age group at **33.36%**. Smokers in the 18-24 age group decreased to **14.29%** in 2023 from

21.76% in 2018, while e-cigarette use in this group dramatically increased to 16.27% in 2023. Smokeless tobacco use showed less fluctuation across the years but remained a significant portion of tobacco use, especially among the 45-64 age group.

- **Analysis of the Data:**

- The analysis reveals age-specific trends in tobacco use within the EBCI population. The highest rates of tobacco use are consistently observed in the 25-44 and 45-64 age groups, indicating a strong presence of both smoking and smokeless tobacco use. The sharp rise in e-cigarette use among the younger age groups, particularly those aged 18-24, highlights a shifting trend in tobacco consumption. This increase in e-cigarette use could be driven by perceptions of e-cigarettes as a safer alternative to smoking, despite growing evidence of their health risks. The data suggests that targeted interventions are needed to address the high prevalence of tobacco use, particularly focusing on young adults and middle-aged individuals to reduce long-term health impacts.

Table 11: Disability by Type Prevalence

Population	Mobility (2023)	Cognition (2023)	Independent Living (2023)	Hearing (2023)	Vision (2023)	Self-Care (2023)	Speech (2023)	Intellectual (2023)	ASD (2023)	Mental Health (2023)
EBCI	997	561	565	733	56	572	138	2	126	3654
EBCI (%)	7.40	4.17	4.20	5.44	0.42	4.25	1.02	0.01	0.94	27.13

Notes

- **Data Source(s):**

- Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.

- **Definition(s):**

- **Mobility:** Includes patients who have difficulty walking or climbing stairs.
- **Cognition:** Includes patients with difficulty concentrating, remembering, or making decisions.
- **Independent Living:** Includes patients who have difficulty doing errands alone, such as visiting a doctor’s office or shopping.
- **Hearing:** Includes patients who are deaf or have serious difficulty hearing.
- **Vision:** Includes patients who are blind or have serious difficulty seeing, even when wearing glasses.
- **Self-Care:** Includes patients who have difficulty bathing or dressing.
- **Speech:** Includes patients who have difficulty with speech or language.
- **Intellectual:** Includes patients with intellectual disabilities, which involve limitations in intellectual functioning and adaptive behavior.
- **ASD (Autism Spectrum Disorder):** Characterized by challenges with social skills, repetitive behaviors, and communication.
- **Mental Health:** Includes patients diagnosed with mental health conditions such as depression, anxiety, or bipolar disorder.

- **Analysis of the Data:**

- The data indicates that certain disabilities are particularly prevalent within the EBCI community. The high prevalence of mental health conditions (**27.13%**) suggests significant mental health needs, which could be due to various factors, including socio-economic stressors, historical trauma, and limited access to mental health services. Mobility issues (**7.40%**) and difficulties with independent living (**4.20%**) are also notable, pointing to the need for enhanced support services for individuals with physical disabilities. The relatively low percentages for vision (**0.42%**) and ASD (**0.94%**) may reflect either lower incidence or potential underdiagnosis within the community. Overall, this data highlights critical areas for public health intervention, including the need for comprehensive mental health services, support for independent living, and accessible healthcare for individuals with mobility issues.

Table 12: Disability Percentages Comparisons

Disability Type	EBCI (%)	NC (%)	US (%)
Total with a disability	17.5%	13.3%	12.9%
Hearing difficulty	5.4%	3.7%	3.6%
Vision difficulty	4.9%	2.5%	2.4%
Cognitive difficulty	7.4%	5.4%	5.3%
Ambulatory difficulty	9.9%	7.2%	6.7%
Self-care difficulty	4.1%	2.6%	2.6%
Independent living difficulty	6.4%	5.8%	5.8%

Notes

- **Data Source(s):**
 - Data obtained from the 2022 American Community Survey (ACS) 5-year estimates, Table S1810.⁶⁸
- **Definition(s):**
 - **Total with a disability:** The percentage of the population with any type of disability.
 - **Hearing difficulty:** The percentage of the population with serious difficulty hearing.
 - **Vision difficulty:** The percentage of the population with serious difficulty seeing, even when wearing glasses.
 - **Cognitive difficulty:** The percentage of the population with difficulty concentrating, remembering, or making decisions.
 - **Ambulatory difficulty:** The percentage of the population with serious difficulty walking or climbing stairs.
 - **Self-care difficulty:** The percentage of the population with difficulty bathing or dressing.
 - **Independent living difficulty:** The percentage of the population with difficulty doing errands alone, such as visiting a doctor's office or shopping.
- **Comparison with EBCI Data:**

⁶⁸ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S1810: Disability Characteristics. Retrieved from <https://data.census.gov/table?q=S1810>

- The table indicates that **17.5%** of the EBCI population has a disability, which is higher than both the North Carolina average of **13.3%** and the US average of **12.9%**. In particular, hearing difficulty affects **5.4%** of the EBCI population, compared to **3.7%** in NC and **3.6%** in the US. Vision difficulty is reported by **4.9%** of the EBCI population, significantly higher than the **2.5%** in NC and **2.4%** in the US. Cognitive difficulty is also more prevalent in the EBCI population (**7.4%**) compared to NC (**5.4%**) and the US (**5.3%**). These comparisons highlight that the EBCI community experiences higher rates of various disabilities compared to state and national averages.
- **Analysis of the Data:**
 - The data reveals significant disparities in disability prevalence between the EBCI population and broader state and national averages. The higher rates of hearing, vision, and cognitive difficulties suggest that the EBCI community faces unique health challenges that may be linked to genetic, environmental, or socio-economic factors. For instance, the high prevalence of ambulatory difficulty (**9.9%**) compared to NC (**7.2%**) and the US (**6.7%**) indicates a greater need for mobility assistance and support within the EBCI community. The higher overall disability rate (**17.5%**) in the EBCI population underscores the necessity for comprehensive healthcare services, including specialized care for individuals with disabilities and improved access to supportive resources. Addressing these disparities requires targeted public health interventions, such as enhanced screening programs, accessibility improvements, and community-based support services tailored to the needs of individuals with disabilities.

Table 13: Autism Spectrum Disorders (ASD)

Year	Population	# w/ ASD	% w/ ASD
2018	EBCI	58	0.51%
2019	EBCI	65	0.56%
2020	EBCI	74	0.66%
2021	EBCI	84	0.72%
2022	EBCI	101	0.88%
2023	EBCI	146	1.27%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **ASD (Autism Spectrum Disorders):** Developmental disabilities causing social, communication, and behavioral challenges. People with ASD may communicate, interact, and learn differently. Abilities vary significantly; some need substantial support, while others may live independently. Symptoms typically appear in early childhood and can affect daily functioning.

- **Active Clinical Patients (Denominator):** Used to calculate the percentages of ASD within each year.
- **Comparison with EBCI Data:**
 - The prevalence of ASD within the EBCI population has shown a consistent increase from 2018 to 2023. In 2018, **0.51%** of the EBCI population was diagnosed with ASD, rising to **1.27%** in 2023. This trend indicates an increasing recognition and diagnosis of ASD within the community. Compared to national prevalence rates, which are around **1.85%** as per recent CDC estimates, the EBCI rates are slightly lower but show a significant upward trend, indicating a need for focused intervention and support.
- **Analysis of the Data:**
 - The data highlights a growing trend in the diagnosis of Autism Spectrum Disorders within the EBCI community. The rise from **0.51%** in 2018 to **1.27%** in 2023 may reflect increased awareness, better diagnostic practices, or a genuine rise in ASD cases. The increasing percentages suggest a pressing need for enhanced services and support systems for individuals with ASD and their families. This could include specialized educational programs, early intervention services, and community awareness initiatives to promote understanding and inclusion. The trend also underscores the importance of training healthcare providers in the early detection and management of ASD to ensure timely and effective support for affected individuals.

Leading Causes of Death

Table 14: Leading Causes of Death (2015-2021) - EBCI

Cause	Number	Percentage	Mortality Rate per 100,000
All Other Diseases	132	17.67%	124.576
Ischemic Heart Disease	81	10.84%	76.1757
Accidental Poisoning	66	8.84%	56.78
Other Heart Diseases	62	8.30%	57.378
Diabetes Mellitus	58	7.76%	50.5607
Liver Disease	40	5.35%	33.677
Lung Cancer	37	4.95%	33.679
Chronic Lower Respiratory Diseases	31	4.15%	30.2387
Other Cancers	31	4.15%	27.9903
Cerebrovascular Diseases	27	3.61%	26.8546
COVID-19	27	3.61%	23.7179
Influenza and Pneumonia	21	2.81%	19.5218
Colon, Rectum, and Anus Cancer	20	2.68%	16.9241
Alzheimer's Disease	16	2.14%	17.3875
Other Accidents and Adverse Effects	17	2.28%	15.464
Motor Vehicle Accidents	16	2.14%	14.154
Kidney Diseases	16	2.14%	13.9074

Symptoms, Signs, and Abnormal Clinical Findings	14	1.87%	12.5377
Intentional Self-Harm	8	1.07%	6.492
Urinary Tract Cancer	7	0.94%	7.139
Hypertension and Hypertensive Renal Disease	7	0.94%	6.77798
Breast Cancer	7	0.94%	4.93203
Prostate Cancer	6	0.80%	5.29334

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **All Other Diseases:** Includes a wide range of residual causes of death not specified elsewhere.
 - **Ischemic Heart Disease:** Includes coronary artery disease and other related conditions.
 - **Other Heart Diseases:** Includes various non-ischemic heart conditions.
 - **Accidental Poisoning:** Includes drug overdoses and other unintentional poisonings.
 - **Diabetes Mellitus:** Includes deaths due to complications from diabetes.
 - **Lung Cancer:** Includes malignant neoplasms of the trachea, bronchus, and lung.
 - **Liver Disease:** Includes chronic liver disease and cirrhosis.
 - **Chronic Lower Respiratory Diseases:** Includes chronic bronchitis, emphysema, and other chronic respiratory diseases.
 - **Other Cancers:** Includes various other malignant neoplasms.
 - **Cerebrovascular Diseases:** Includes strokes and other cerebrovascular diseases.
 - **COVID-19:** Includes deaths directly attributed to the COVID-19 virus.
 - **Influenza and Pneumonia:** Includes deaths due to influenza and pneumonia.
 - **Alzheimer's Disease:** Includes deaths due to Alzheimer's disease.
 - **Colon, Rectum, and Anus Cancer:** Includes malignant neoplasms of the colon, rectum, and anus.
 - **Other Accidents and Adverse Effects:** Includes various other accidental deaths and adverse effects.
 - **Motor Vehicle Accidents:** Includes deaths due to motor vehicle accidents.
 - **Kidney Diseases:** Includes nephritis, nephrotic syndrome, and nephrosis.
 - **Symptoms, Signs, and Abnormal Clinical Findings:** Includes various non-specific causes of death.
 - **Urinary Tract Cancer:** Includes malignant neoplasms of the urinary tract.
 - **Hypertension and Hypertensive Renal Disease:** Includes high blood pressure-related conditions and hypertensive kidney disease.
 - **Intentional Self-Harm:** Includes suicides and other self-inflicted injuries.
 - **Prostate Cancer:** Includes malignant neoplasms of the prostate.
 - **Breast Cancer:** Includes malignant neoplasms of the breast.
- **Analysis of the Data:**

- The data reveals significant health challenges within the EBCI community. The high percentage of deaths due to **ischemic heart disease (10.45%)** and **diabetes mellitus (7.48%)** underscores the need for enhanced cardiovascular and diabetes care and prevention programs. The substantial impact of **accidental poisoning (8.52%** of deaths) suggests a critical need for interventions addressing substance use and overdose prevention. **Lung cancer** and **chronic lower respiratory diseases** also feature prominently, reflecting the long-term health consequences of smoking and other respiratory hazards. The **COVID-19** mortality data indicates that the pandemic has had a significant impact on the community, necessitating continued public health measures to manage and mitigate its effects. Overall, the leading causes of death in the EBCI population highlight areas for targeted healthcare interventions, improved disease management, and preventive health strategies to address these pressing health issues.
- **Additional Information:**
 - **Time Period:** Data from 2015 to 2021.

The EBCI data is listed separately from the NC and US data in the table below to acknowledge potential differences in data collection, cleaning, and analysis methods that may affect the comparability of mortality rates. The EBCI data is derived specifically from the Cherokee Indian Hospital Authority (CIHA) RPMS, which may use slightly different data classifications. For instance, the EBCI data categorizes heart diseases more specifically, such as "Ischemic Heart Disease" and "Other Heart Diseases," while state and national data may list these collectively as "Heart Disease."

Table 15: Leading Causes of Death Comparisons

Cause	US Crude Rate	NC Crude Rate	NC AI/AN Crude Rate	US Percentage	NC Percentage	NC AI/AN Percentage
Heart Disease	206.4	194.4	130.4	26.2%	23.7%	20.8%
Malignant Neoplasms	182.5	190.6	118.0	23.1%	23.3%	18.8%
Unintentional Injury	60.1	70.3	93.5	7.6%	8.6%	14.9%
COVID-19	57.8	52.8	51.2	7.3%	6.4%	8.2%
Cerebrovascular	47.6	52.9	29.6	6.0%	6.5%	4.7%
Chronic Low. Respiratory Disease	45.9	49.4	36.1	5.8%	6.0%	5.7%
Alzheimer's Disease	37.4	42.3	33.4	4.7%	5.2%	5.3%
Diabetes Mellitus	29.0	33.2	30.5	3.7%	4.1%	4.9%
Nephritis	16.2	20.0	15.1	2.1%	2.4%	2.4%
Influenza & Pneumonia	15.2	16.5	12.9	1.9%	2.0%	2.1%
Liver Disease	15.1	15.3	15.7	1.9%	1.9%	2.5%
Suicide	14.5	14.0	8.2	1.8%	1.7%	1.3%

Septicemia	12.3	14.9	9.0	1.6%	1.8%	1.4%
Hypertension	12.1	11.1	8.0	1.5%	1.4%	1.3%
Parkinson's Disease	11.4	11.2	5.1	1.4%	1.4%	0.8%
Homicide	6.9	8.0	16.0	0.9%	1.0%	2.5%
Pneumonitis	5.9	6.9	4.6	0.7%	0.8%	0.7%
Benign Neoplasms	4.8	4.9	2.7	0.6%	0.6%	0.4%
Nutritional Deficiencies	4.5	6.3	3.8	0.6%	0.8%	0.6%
Perinatal Period	3.1	3.9	4.3	0.4%	0.5%	0.7%

Notes

- **Data Source(s):**
 - Data is from 2018 to 2022, sourced from the Centers for Disease Control and Prevention (CDC) WISQARS Leading Causes of Death Visualization Tool.⁶⁹
- **Definition(s):**
 - **Crude Rate:** The number of deaths per 100,000 population.
 - **Percentage:** The proportion of total deaths attributed to a specific cause.
- **Comparison with EBCI Data:**
 - The leading causes of death for the NC AI/AN population show some distinct differences compared to the broader NC and US populations. For example, **unintentional injury** has a crude rate of **93.5 per 100,000** and accounts for **14.9%** of deaths in the NC AI/AN population, significantly higher than the NC crude rate of **70.3 per 100,000** and the US crude rate of **60.1 per 100,000**. This suggests a higher impact of accidents and overdoses within the NC AI/AN community. Similarly, the percentage of deaths due to **heart disease** is lower in the NC AI/AN population (**20.8%**) compared to NC (**23.7%**) and the US (**26.2%**), yet it remains a leading cause of death. The **COVID-19** death percentage is also slightly higher in the NC AI/AN population (**8.2%**) compared to the NC average (**6.4%**) and US average (**7.3%**), highlighting the disproportionate impact of the pandemic on this group.
- **Analysis of the Data:**
 - The data highlights significant health disparities within the NC AI/AN population compared to broader populations. The high rates of **unintentional injury** deaths suggest a need for targeted interventions to prevent accidents and overdoses, such as enhanced safety measures, education programs, and access to substance use treatment. The lower percentage of deaths from **heart disease** in the NC AI/AN population compared to national and state averages could be due to underdiagnosis or different risk factor profiles, indicating a need for improved cardiovascular health initiatives. The elevated impact of **COVID-19** underscores the importance of continued public health efforts, including vaccination campaigns and healthcare access, to mitigate the effects of the pandemic. Additionally, the higher rates of **homicide** (**16.0 per 100,000** and **2.5%** of deaths) and **liver**

⁶⁹ Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>

disease (15.7 per 100,000 and 2.5% of deaths) in the NC AI/AN population highlight areas for focused community health interventions and support services.

- **Additional Information:**

- **Cause of Death Categories:**

- **Heart Disease:** Includes ischemic heart disease and other heart-related conditions.
 - **Malignant Neoplasms:** Includes various types of cancer.
 - **Unintentional Injury:** Includes accidents such as motor vehicle accidents, falls, and unintentional poisonings, including overdoses.
 - **COVID-19:** Includes deaths directly attributed to the COVID-19 virus.
 - **Cerebrovascular:** Includes strokes and other cerebrovascular diseases.
 - **Chronic Lower Respiratory Disease:** Includes chronic bronchitis, emphysema, and other chronic lower respiratory diseases.
 - **Alzheimer's Disease:** Includes deaths due to Alzheimer's disease.
 - **Diabetes Mellitus:** Includes deaths due to complications from diabetes.
 - **Nephritis:** Includes kidney disease.
 - **Influenza & Pneumonia:** Includes deaths due to influenza and pneumonia.
 - **Liver Disease:** Includes liver disease and cirrhosis.
 - **Suicide:** Includes intentional self-harm.
 - **Septicemia:** Includes blood infections.
 - **Hypertension:** Includes high blood pressure-related conditions.
 - **Parkinson's Disease:** Includes deaths due to Parkinson's disease.
 - **Homicide:** Includes deaths due to intentional harm by another person.
 - **Pneumonitis:** Includes lung inflammation.
 - **Benign Neoplasms:** Includes non-cancerous tumors.
 - **Nutritional Deficiencies:** Includes deaths due to lack of essential nutrients.
 - **Perinatal Period:** Includes deaths related to conditions originating in the perinatal period.

Health Factors

Table 15: Overweight and Obesity

Age	Average BMI (2023)	Overweight # (2023)	Overweight % (2023)	Obese # (2023)	Obese % (2023)	Overweight or Obese # (2023)	Overweight or Obese % (2023)
2 to 4	16.8	72	16.2	85	19.1	157	35.3
5 to 10	19.3	187	18.6	295	29.3	482	47.8
11 to 17	26.3	214	18.0	470	39.6	684	57.7
18-29	32.2	456	22.8	1085	54.2	1541	77.0
30-39	33.3	381	22.3	1043	61.0	1424	83.3
40-49	33.6	365	24.3	968	64.3	1333	88.6
50-59	32.4	389	27.1	866	60.3	1255	87.3
60-69	30.9	404	30.8	679	51.8	1083	82.7

70-74	29.7	144	34.6	178	42.8	322	77.4
20-74	32.5	2082	25.7	4725	58.3	6807	83.9
18-74	31.3	2139	25.6	4819	57.5	6958	83.0
TOTAL	29.9	2612	23.7	5669	51.4	8281	75.2
Obesity National Comparison							
Age		EBCI		United States			
2-5		19.3%		12.7%			
6-11		32.9%		20.7%			
12-19		38.4%		22.2%			
20-74		58.3%		41.9%			
Total		51.4%		-			

Notes

- **Data Source(s):**
 - EBCI data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
 - National data is from the 2017- March 2020 CDC National Health and Nutrition Examination Survey.⁷⁰
- **Definition(s):**
 - **Population:** The report is based on active user CIHA American Indian/Alaska Native (AI/AN) data and utilizes the most recent weight measurement.
 - **Age Groups:** The data covers various age groups from 2 to 74 years old, with specific breakdowns for each age category.
 - **Average BMI:** The average Body Mass Index (BMI) is calculated for each age group.
 - **Overweight:** Individuals with a BMI above the normal weight range for their height but below the obesity range.
 - **Obese:** Individuals with a BMI significantly above the normal weight range, indicating a higher level of excess body fat.
 - **Overweight and Obesity Percentages:** The percentages represent the proportion of individuals within each age group who are classified as overweight or obese.
 - **Combined Overweight or Obese:** This category includes all individuals who are either overweight or obese.
- **Comparison with EBCI Data:**
 - The data indicates significantly higher rates of overweight and obesity within the EBCI population compared to national averages. For adults aged 20-74 years, **58.3%** are classified as obese and **83.9%** are either overweight or obese. In contrast, CDC National Health and Nutrition Examination Survey (NHANES) data from 2017-March 2020 shows **41.9%** of US adults aged 20 and older are obese, and **73.6%** are either overweight or obese. Among children and adolescents, the differences are also pronounced. For EBCI, **19.3%** of

⁷⁰ Centers for Disease Control and Prevention (CDC). (n.d.). National Health and Nutrition Examination Survey (NHANES). Retrieved from <https://www.cdc.gov/nchs/nhanes/index.htm>

young children (2-5 years), **32.9%** of children (6-11 years), and **38.4%** of adolescents (12-19 years) are obese. Comparatively, the NHANES data reports **12.7%** of young children, **20.7%** of children, and **22.2%** of adolescents in the same age groups are obese.

- **Analysis of the Data:**

- The data highlights a critical public health concern within the EBCI community, with significantly higher percentages of overweight and obesity across all age groups compared to national averages. The high rates of obesity among EBCI adults (**58.3%**) and the combined overweight or obesity rate (**83.9%**) indicate a substantial burden of weight-related health issues. These issues likely contribute to the prevalence of chronic diseases such as diabetes, cardiovascular diseases, and joint problems. The alarming rates of obesity among EBCI children and adolescents suggest that early intervention is necessary to address and prevent obesity-related health problems from developing into adulthood. Public health initiatives should focus on promoting healthy eating habits, increasing physical activity, and providing education and resources to support weight management within the community. Additionally, culturally tailored interventions that respect and incorporate the traditions and lifestyles of the EBCI population will be crucial for the success of these programs.

- **Additional Information:**

- **Adults (20-74 years):**

- For EBCI, the total obesity percentage is **58.3%** and the combined percentage of overweight or obese individuals is **83.9%**.
- In comparison, according to CDC National Health and Nutrition Examination Survey (NHANES) data from 2017-March 2020:
 - Percent of adults age 20 and older with obesity: **41.9%**
 - Percent of adults age 20 and older with overweight, including obesity: **73.6%**⁷¹

- **Children and Adolescents:**

- For EBCI, the obesity percentages are:
 - Adolescents (12-19 years): **38.4%**
 - Children (6-11 years): **32.9%**
 - Young Children (2-5 years): **19.3%**
- In comparison, CDC NHANES data shows:
 - Percent of adolescents ages 12–19 years with obesity: **22.2%**
 - Percent of children ages 6–11 years with obesity: **20.7%**
 - Percent of children ages 2–5 years with obesity: **12.7%**⁷²

Table 16: High Blood Pressure (Hypertension)

Year	2018 (%)	2019 (%)	2020 (%)	2021 (%)	2022 (%)	2023 (%)
EBCI Data						

⁷¹ Ibid

⁷² Ibid

User Pop Pts 18-85 w/ HTN Dx (GPRA)	66.6	62.3	59.3	62.2	58.1	63.9
User Pop Pts 18-59 w/ HTN Dx	66.7	60.7	57.6	60.5	57.2	60.0
User Pop Pts 60-85 w/ HTN Dx	80.4	76.3	72.8	76.3	70.8	78.2
USET Aggregate Data						
User Pop Pts 18-85 w/ HTN Dx (GPRA)	57.0	51.4	46.2	51.2	27.1	51.1
User Pop Pts 18-59 w/ HTN Dx	56.4	49.8	44.7	49.7	24.6	75.4
User Pop Pts 60-85 w/ HTN Dx	72.3	66.1	61.6	65.8	42.9	79.6

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Population:** The report covers active users diagnosed with hypertension (HTN) within the age range of 18-85 years.
 - **BP Control:** The data represents the percentage of patients with controlled blood pressure, defined as BP <140/90 for ages 18-59 and BP <150/90 for ages 60-85.
- **Comparison with National Data:**
 - According to the National Health and Nutrition Examination Survey (NHANES) 2017-2018, the prevalence of hypertension among adults aged 18 and over in the United States was **45.4%** and **74.5%** for ages 60 and over. In comparison, EBCI's 2023 data shows **63.9%** of adults aged 18-85 with hypertension and **78.2%** for those aged 60-85. This indicates a higher prevalence of hypertension within the EBCI population compared to the national averages.⁷³
- **Analysis of the Data:**
 - The data from 2018 to 2023 reveals a concerning trend of high blood pressure among the EBCI population. For adults aged 18-85, the percentage of individuals with hypertension fluctuated, peaking at **66.6%** in 2018 and **63.9%** in 2023. This is significantly higher than the national average of **45.4%**. The data for those aged 60-85 also shows higher hypertension prevalence in the EBCI population (**78.2%** in 2023) compared to the national average of **74.5%**. These elevated rates suggest a critical need for enhanced hypertension management and prevention programs within the EBCI community. Factors contributing to these high rates may include genetic predisposition, lifestyle choices, and access to healthcare services. Public health initiatives should focus on promoting healthy diets, increasing physical activity, reducing stress, and ensuring regular monitoring and treatment of blood pressure. Culturally tailored interventions and education programs can help address these high rates effectively and improve overall cardiovascular health within the community.
- **Additional Information:**

⁷³ Ostchega, Y., Fryar, C. D., Nwankwo, T., & Nguyen, D. T. (2020). Hypertension prevalence among adults aged 18 and over: United States, 2017–2018. NCHS Data Brief, 364. Hyattsville, MD: National Center for Health Statistics.

- **Population:** The report covers active users diagnosed with hypertension (HTN) within the age range of 18-85 years.
- **BP Control:** The data represents the percentage of patients with controlled blood pressure, defined as BP <140/90 for ages 18-59 and BP <150/90 for ages 60-85.

Table 17: High Cholesterol

Age Group	Percentage with High Cholesterol (2023)
18-24	0%
25-34	7.8%
35-44	6.7%
45-54	17.8%
55-64	37.8%
65+	30.0%
Total	11.8%

Notes

- **Data Source(s):**
 - The data is derived from the 2023 EBCI Tribal Health Survey. It was filtered to only look at EBCI enrolled responses, which were from 857 individuals, of which there were a total of 91 that reported high cholesterol.
- **Definition(s):**
 - **Population:** This was an EBCI community survey with 1,092 total responses. The data specifically reflects EBCI enrolled responses.
 - **High Cholesterol:** Typically defined as having a total cholesterol level of 240 mg/dL or higher, which increases the risk of cardiovascular diseases.
- **Comparison with EBCI Data:**
 - According to the CDC National Health and Nutrition Examination Survey (NHANES) 2015-2018, the prevalence of high total cholesterol among adults aged 20 years and older was **11.4%**. The overall prevalence of high cholesterol in the EBCI population, according to the 2023 survey, is slightly higher at **11.8%**. Among specific age groups within the EBCI community, the prevalence varies significantly. For instance, **37.8%** of individuals aged 55-64 and **30.0%** of those aged 65 and older reported high cholesterol, which is notably higher than the overall national average.⁷⁴
- **Analysis of the Data:**
 - The data reveals age-specific trends in high cholesterol prevalence within the EBCI community. Younger adults (18-24 years) reported no cases of high cholesterol, while the prevalence significantly increases with age. The highest percentages are observed in the 55-64 age group (**37.8%**) and the 65+ age group (**30.0%**). This trend suggests that age is a

⁷⁴ QuickStats: Prevalence of High Total Cholesterol Among Adults Aged ≥20 Years, by Age Group and Sex — National Health and Nutrition Examination Survey, 2015–2018. (2020). MMWR Morb Mortal Wkly Rep, 69, 690. DOI: <http://dx.doi.org/10.15585/mmwr.mm6922a5>

major factor influencing cholesterol levels within the EBCI population. The overall prevalence of **11.8%** is comparable to the national average of **11.4%**; however, the higher rates in older age groups indicate a critical need for targeted interventions. These could include promoting regular cholesterol screenings, encouraging heart-healthy diets, increasing physical activity, and providing education on managing cholesterol levels. Addressing these risk factors can help reduce the incidence of high cholesterol and associated cardiovascular diseases within the EBCI community.

- **Additional Information:**
 - **Population:** The survey was conducted within the EBCI community and included 1,092 total responses, with specific analysis on 857 EBCI enrolled individuals.

Table 18: Physical Inactivity

Weekly Aerobic Physical Activity Minutes		Percentage (2023)
None/little (< 30 min)		25.4%
30 min		7.4%
60 min		39.5%
100 min		16.2%
150 min		7.9%
300 min		4.0%
Weekly Muscle-Strengthening Sessions		Percentage (2023)
0		48%
1		27.9%
2+		24.1%
Age Group	Percentage of None/Little (< 30 min) Physical Activity per week (2023)	Percent of No Muscle-strengthening Exercises per week (2023)
18-24	3.9%	4.2%
25-34	23.2%	23.6%
35-44	14.8%	18.8%
45-54	22.7%	18.6%
55-64	24.1%	21.5%
65+	11.3%	13.4%

Notes

- **Data Source(s):**
 - The data is derived from the 2023 EBCI Tribal Health Survey, filtered to include only responses from enrolled EBCI members, totaling 857 individuals.
- **Definition(s):**
 - **Physical Activity Minutes:** The amount of time respondents engage in physical activity weekly.
 - **None/little (< 30 min):** Indicates respondents with minimal or no physical activity.

- **Age Distribution:** Breakdown of the percentage of individuals reporting no physical activity by age group.
- **Comparison with EBCI Data:**
 - According to the CDC's National Health Interview Survey 2020, **54.1%** of adults in the United States did not meet the recommended aerobic physical activity guidelines, and **69.0%** did not meet the muscle-strengthening guidelines. Additionally, **75.8%** did not meet either the aerobic or muscle-strengthening guidelines. In contrast, the 2023 EBCI data reveals that **88.1%** of respondents did not meet the recommended aerobic physical activity guidelines, **75.9%** did not meet the muscle-strengthening guidelines, and **93.5%** did not meet either set of guidelines. This comparison indicates a higher prevalence of physical inactivity within the EBCI community compared to national averages.
- **Analysis of the Data:**
 - The data highlights significant physical inactivity within the EBCI population. **25.4%** of respondents engage in little to no aerobic physical activity, and **48%** do not participate in any muscle-strengthening activities. The age distribution of physical inactivity shows that the highest percentages of minimal physical activity are in the 55-64 age group (**24.1%**) and the 45-54 age group (**22.7%**). The lack of physical activity is a major public health concern as it is associated with increased risks of chronic diseases such as heart disease, diabetes, and obesity. The elevated rates of physical inactivity in the EBCI community compared to national averages suggest a need for targeted interventions. Promoting physical activity through community programs, creating accessible recreational facilities, and educating individuals on the importance of regular exercise can help improve physical activity levels. Additionally, culturally relevant initiatives that resonate with the EBCI population's values and lifestyle can enhance participation and sustainability of these health-promoting activities.
- **Additional Information:**
 - **National Guidelines:** According to CDC guidelines, adults should engage in at least 150 minutes of moderate-intensity aerobic physical activity per week and perform muscle-strengthening activities on 2 or more days per week.
 - **EBCI Data vs. National Data:**
 - **Aerobic Physical Activity:**
 - **National: 54.1%** did not meet the recommended guidelines.
 - **EBCI: 88.1%** did not meet the recommended guidelines.
 - **Muscle-Strengthening Activity:**
 - **National: 69.0%** did not meet the recommended guidelines.
 - **EBCI: 75.9%** did not meet the recommended guidelines.
 - **Both Aerobic and Muscle-Strengthening Activity:**
 - **National: 75.8%** did not meet the recommended guidelines.
 - **EBCI: 93.5%** did not meet the recommended guidelines.

Table 19: Human Immunodeficiency Virus (HIV)

Community	Year	# of Population w/ HIV	% of Population w/ HIV	# of New Incidence of HIV by Year
EBCI				
	2020	13	0.2%	0
	2021	12	0.2%	1
	2022	15	0.2%	3
	2023	15	0.2%	0
USET				
	2020	53	0.2%	1
	2021	33	0.2%	1
	2022	35	0.2%	4
	2023	46	0.2%	1

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **New Incidence of HIV:** The number of new HIV cases diagnosed in a given year.
 - **HIV (Human Immunodeficiency Virus):** A virus that attacks the body’s immune system. If not treated, it can lead to Acquired Immunodeficiency Syndrome (AIDS). Unlike some other viruses, the human body cannot get rid of HIV completely. Once someone has HIV, they have it for life. HIV is spread through contact with certain body fluids such as blood, semen, vaginal fluids, rectal fluids, and breast milk from a person who has HIV.
- **Comparison with EBCI Data:**
 - The prevalence of HIV within the EBCI community has remained relatively stable from 2020 to 2023, with an average of **0.2%** of the population living with HIV each year. This is comparable to the USET data, which also shows a **0.2%** prevalence rate over the same period. When compared to national and state data, the EBCI and USET HIV prevalence rates are lower. According to HIV.gov, an estimated **1.2 million Americans** had HIV in 2021, accounting for approximately **0.36%** of the population. In North Carolina, **36,581 individuals** were living with HIV in 2022, representing about **0.34%** of the state's population. These comparisons indicate that the EBCI community has a lower prevalence of HIV than the broader US and North Carolina populations.⁷⁵⁷⁶
- **Analysis of the Data:**

⁷⁵ HIV.gov. (n.d.). HIV Statistics Overview. Retrieved from <https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics>

⁷⁶ North Carolina Department of Health and Human Services. (2022). 2022 HIV Surveillance Report Summary. Retrieved from <https://epi.dph.ncdhhs.gov/cd/stds/figures/2022-HIVSurveillanceReportSummary.pdf>

- The data indicates a stable but low prevalence of HIV within the EBCI community, with no new cases reported in 2020 and 2023, and a slight increase in new incidences in 2021 and 2022. This stability suggests effective management and prevention efforts within the community. The lower prevalence rates compared to national and state averages highlight the success of public health initiatives aimed at preventing HIV transmission. However, the presence of new cases in some years indicates the need for continued vigilance and education. Ongoing efforts to promote safe practices, regular testing, and access to medical care are essential to maintain these low prevalence rates and address any new incidences promptly. Culturally sensitive programs that address the specific needs and concerns of the EBCI community can further enhance these efforts.
- **Additional Information:**
 - **National Data:** According to HIV.gov, an estimated **1.2 million Americans** had HIV in 2021, accounting for approximately **0.36%** of the population.⁷⁷
 - **North Carolina Data:** In 2022, an estimated **36,581 individuals** were living with HIV in North Carolina, representing about **0.34%** of the state's population.⁷⁸

Table 20: Chlamydia

Year	EBCI (%)	USET (%)	EBCI Cases
2018	0.2%	0.3%	17
2019	0.1%	0.3%	14
2020	0.0%	0.2%	5
2021	0.1%	0.2%	9
2022	0.1%	0.2%	6
2023	0.0%	0.2%	5

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Chlamydia:** A common sexually transmitted infection (STI) caused by the bacterium *Chlamydia trachomatis*. It often presents no symptoms but can lead to serious reproductive and other health problems if left untreated.
- **Comparison with EBCI Data:**
 - The prevalence of chlamydia within the EBCI community from 2018 to 2023 is consistently lower than the USET averages. For example, in 2023, the chlamydia prevalence in the EBCI population was **0.0%** compared to **0.2%** in the USET population. The highest prevalence in

⁷⁷ HIV.gov. (n.d.). HIV Statistics Overview. Retrieved from <https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics>

⁷⁸ North Carolina Department of Health and Human Services. (2022). 2022 HIV Surveillance Report Summary. Retrieved from <https://epi.dph.ncdhhs.gov/cd/stds/figures/2022-HIVSurveillanceReportSummary.pdf>

the EBCI community was **0.2%** in 2018, which still remained lower than the USET average of **0.3%** for the same year. These comparisons indicate that the EBCI community has a lower prevalence of chlamydia compared to the broader USET population.

- **Analysis of the Data:**
 - The data reveals a consistently low prevalence of chlamydia within the EBCI community, with notable decreases over the years. In 2020 and 2023, the prevalence was **0.0%**, indicating no new reported cases of chlamydia. This trend suggests effective public health measures and awareness programs within the EBCI community. However, despite these positive trends, it remains essential to continue monitoring and prevention efforts to maintain these low levels.

Table 21: Gonorrhea

Year	EBCI Percent	USET Percent	EBCI Cases
2018	0.2%	0.2%	24
2019	0.1%	0.2%	15
2020	0.1%	0.2%	14
2021	0.1%	0.1%	12
2022	0.1%	0.1%	11
2023	0.1%	0.1%	12

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Gonorrhea:** A common sexually transmitted infection (STI) caused by the bacterium *Neisseria gonorrhoeae*. It can infect both men and women and often presents no symptoms, particularly in women. If untreated, it can lead to serious health problems, including infertility and increased risk of HIV.
- **Comparison with EBCI Data:**
 - The prevalence of gonorrhea within the EBCI community from 2018 to 2023 has remained consistently low and similar to the USET averages. For instance, the EBCI prevalence rate in 2023 was **0.1%**, identical to the USET rate. This consistency in low rates across years suggests effective STI prevention and management within the EBCI community. The highest number of cases in the EBCI community was **24** in 2018, with a declining trend in subsequent years, reaching **12** cases in 2023.
- **Analysis of the Data:**
 - The data indicates a stable and low prevalence of gonorrhea within the EBCI community, mirroring the trends seen in the USET population. The slight decline in the number of cases from **24** in 2018 to **12** in 2023 reflects ongoing successful public health initiatives and awareness campaigns. These efforts likely include regular screening, education on safe sexual practices, and accessible treatment options. Maintaining this low prevalence

requires continued vigilance and proactive measures. Public health strategies should focus on regular testing, especially for high-risk groups, and ensuring that individuals receive timely treatment to prevent complications and further transmission. Culturally appropriate health education that resonates with the community’s values and practices can enhance these prevention efforts.

Table 22: Syphilis

Year	EBCI Percent	USET Percent	EBCI Cases
2018	0.0%	0.0%	0
2019	0.0%	0.0%	1
2020	0.0%	0.0%	2
2021	0.0%	0.0%	2
2022	0.0%	0.0%	1
2023	0.0%	0.1%	0

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Syphilis:** A sexually transmitted infection (STI) caused by the bacterium *Treponema pallidum*. Syphilis develops in stages (primary, secondary, latent, and tertiary), with different signs and symptoms associated with each stage. It can cause serious health problems if not treated, including damage to the heart, brain, and other organs.
- **Comparison with EBCI Data:**
 - The prevalence of syphilis within the EBCI community from 2018 to 2023 is consistently very low, with a **0.0%** prevalence rate each year except for a slight increase in USET prevalence to **0.1%** in 2023. The number of syphilis cases in the EBCI community ranged from 0 to 2 cases per year, indicating minimal incidence. This low prevalence is comparable to the broader USET data, which also shows near-zero prevalence for most years, except in 2023.
- **Analysis of the Data:**
 - The data demonstrates an exceptionally low prevalence of syphilis within the EBCI community, reflecting effective public health measures and awareness programs. From 2018 to 2023, the EBCI community reported between 0 and 2 cases of syphilis per year, suggesting that syphilis is not a widespread issue within the community. The consistent zero or near-zero prevalence highlights successful strategies in place for STI prevention, including education on safe sexual practices, regular screening, and prompt treatment of detected cases. Maintaining this low prevalence requires ongoing public health efforts. Ensuring continued access to STI testing and treatment, promoting sexual health education, and addressing potential risk factors are essential components of these efforts.

The slight increase in USET prevalence in 2023 to **0.1%** serves as a reminder of the need for vigilance and sustained preventive measures.

Table 23: Total STI Data

Year	EBCI Percent	USET Percent	EBCI Cases
2018	1.3%	1.0%	143
2019	1.2%	1.1%	137
2020	0.8%	0.7%	88
2021	0.9%	0.7%	110
2022	0.7%	0.7%	88
2023	0.7%	0.7%	86

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **STI (Sexually Transmitted Infections):** Infections commonly spread through sexual contact, including chlamydia, gonorrhea, syphilis, and others. STIs can cause a range of health problems if left untreated and can be asymptomatic, making regular screening important.
 - **Active Clinical Patients (Denominator):** Used to calculate the percentages of the population with STIs.
- **Comparison with EBCI Data:**
 - The prevalence of STIs within the EBCI community has seen a general decline from 2018 to 2023. In 2018, the EBCI STI prevalence was **1.3%**, higher than the USET average of **1.0%**. By 2023, the EBCI prevalence had decreased to **0.7%**, aligning with the USET rate of **0.7%**. This trend suggests a successful reduction in STI cases within the EBCI community over the years, leading to comparable rates with the USET population by 2023.
- **Analysis of the Data:**
 - The data reflects a positive trend in the reduction of STI prevalence within the EBCI community, with a notable decrease from **1.3%** in 2018 to **0.7%** in 2023. The number of STI cases dropped from **143** in 2018 to **86** in 2023. This decline indicates effective public health interventions, including increased awareness, better access to healthcare, and regular screening and treatment programs. Maintaining this progress requires continued efforts in education, prevention, and timely treatment. Public health initiatives should focus on promoting safe sexual practices, ensuring confidential and accessible STI testing, and providing comprehensive sexual health education tailored to the community’s cultural context. By sustaining these efforts, the EBCI community can continue to manage and reduce the prevalence of STIs, improving overall public health outcomes.

Table 24: Hepatitis B

Year	EBCI Percent	USET Percent	EBCI Cases
------	--------------	--------------	------------

2018	0.06%	0.03%	7
2019	0.02%	0.01%	2
2020	0.04%	0.01%	4
2021	0.03%	0.01%	3
2022	0.03%	0.01%	4
2023	0.03%	0.01%	3

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Hepatitis B:** A viral infection that attacks the liver and can cause both acute and chronic disease. It is commonly transmitted through contact with infectious body fluids, such as blood, semen, and other body fluids. It can lead to severe health issues, including liver cirrhosis and liver cancer if not treated.
 - **Active Clinical Patients (Denominator):** Used to calculate the percentages of the population with Hepatitis B.
- **Comparison with EBCI Data:**
 - The prevalence of Hepatitis B within the EBCI community from 2018 to 2023 shows slightly higher rates compared to the USET averages. For instance, in 2018, the EBCI prevalence was **0.06%**, compared to **0.03%** for USET. This trend of higher prevalence in EBCI continues in subsequent years, although the numbers remain low. By 2023, the prevalence in EBCI was **0.03%**, still higher than the USET rate of **0.01%**. These comparisons indicate that while the rates are low, the EBCI community has a slightly higher burden of Hepatitis B compared to the broader USET population.
- **Analysis of the Data:**
 - The data shows that Hepatitis B prevalence in the EBCI community has remained relatively stable but slightly higher than the USET population from 2018 to 2023. The number of cases fluctuated from 2 to 7 cases annually, reflecting ongoing but low-level transmission within the community. This consistent prevalence highlights the importance of continuous monitoring, vaccination programs, and public health interventions to prevent transmission.

Table 25: Hepatitis C

Year	EBCI Hep C Incidence (#)	EBCI Hep C Incidence (%)	USET Hep C Incidence (%)
2018	66	0.8%	0.3%
2019	66	0.8%	0.3%
2020	51	0.6%	0.2%
2021	41	0.5%	0.3%
2022	37	0.5%	0.2%
2023	31	0.4%	0.2%

EBCI HCV Prevalence Data	
Category	Value
Living AI/AN Diagnosed with HCV	754 (6.8%)
Current High Viral Load	287 (2.5%)

Notes

- **Data Source(s):**
 - Incidence data was obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
 - Prevalence data was obtained through the Cherokee Indian Hospital RPMS ICare Panel, with data current as of December 31, 2023.
- **Definition(s):**
 - **Hep C Incidence:** The number of new cases diagnosed with Hepatitis C each year.
 - **Hepatitis C (HCV):** A viral infection that causes liver inflammation, sometimes leading to serious liver damage. It is spread through contact with blood from an infected person.
 - **Current High Viral Load:** Percentage of EBCI population with HCV currently having high viral loads, indicating active infection.
- **Comparison with EBCI Data:**
 - The incidence of Hepatitis C within the EBCI community has shown a decline from **0.8%** in 2018 and 2019 to **0.4%** in 2023. In comparison, the USET incidence rates have been consistently lower, decreasing from **0.3%** in 2018 to **0.16%** in 2023. This indicates that while the EBCI community has a higher incidence of Hepatitis C compared to the broader USET population, efforts to reduce new infections are showing progress.
- **Analysis of the Data:**
 - The data indicates a declining trend in the incidence of Hepatitis C within the EBCI community, from **0.8%** in 2018 and 2019 to **0.4%** in 2023. Despite this positive trend, the incidence rate remains higher than the USET population, which saw a decrease from **0.3%** to **0.16%** over the same period. Additionally, **6.8%** of the living AI/AN diagnosed with HCV indicates a significant burden of the disease within the community, with **2.5%** having a high viral load, pointing to ongoing transmission risks and the need for effective management. This highlights the importance of continued public health interventions focusing on prevention, early detection, and treatment.

Table 26: Low Birth Weight

Year	EBCI %	USET %	EBCI Low Birth Weight (Num)	EBCI Newborns
2018	7.07	5.30	14	198
2019	7.69	5.18	13	169
2020	2.56	2.67	4	156
2021	4.55	3.49	8	176
2022	4.93	3.29	7	142
2023	9.52	6.78	10	105

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definition(s):**
 - **Low Birth Weight:** Newborns weighing less than 2,500 grams (5.5 pounds) at birth.
 - **Active Clinical Patients (Denominator):** Represents the total number of newborns in the given year.
- **Comparison with EBCI Data:**
 - The percentage of low birth weight newborns within the EBCI community has varied over the years, with a notable increase to **9.52%** in 2023 compared to **7.07%** in 2018. In comparison, the USET percentages have generally been lower, with **6.78%** in 2023 and **5.30%** in 2018. The data shows that the EBCI community has experienced higher rates of low birth weight newborns compared to the USET average, highlighting a potential area of concern.
- **Analysis of the Data:**
 - The data reveals fluctuations in the percentage of low birth weight newborns within the EBCI community from 2018 to 2023. In 2020, the percentage dropped to **2.56%**, the lowest in the six-year period, but increased again to **9.52%** in 2023. These variations suggest the presence of underlying factors that may influence birth outcomes, such as maternal health, access to prenatal care, and socio-economic conditions. Compared to the USET averages, the EBCI percentages are consistently higher, indicating a greater prevalence of low birth weight within the EBCI community.

Table 27: Breastfeeding

Year	EBCI Screened @ 2 mos (#)	EBCI Exclusively/Mostly Breastfed @ 2 mos (%)	USET Exclusively/Mostly Breastfed @ 2 mos (%)	EBCI Screened @ 6 mos (#)	EBCI Exclusively/Mostly Breastfed @ 6 mos (%)	USET Exclusively/Mostly Breastfed @ 6 mos (%)
2018	99	37.4	35.9	62	24.2	24.4
2019	98	38.8	37.4	41	14.6	18.6
2020	76	43.4	33.3	12	25.0	13.0
2021	79	45.6	34.8	6	66.7	26.3
2022	86	39.5	36.0	4	75.0	23.5
2023	67	38.8	29.1	9	55.6	26.7

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Population:** Active Clinical Patients aged 30-394 days.
 - **Exclusively/Mostly Breastfed:** Proportion of infants exclusively or mostly breastfed at respective time points (2 months and 6 months).

- **Comparison with EBCI Data:**
 - The data shows that the EBCI community has generally higher rates of exclusive/mostly breastfeeding at 2 months compared to the USET averages. For instance, in 2023, **38.8%** of EBCI infants were exclusively/mostly breastfed at 2 months compared to **29.1%** for USET. Similarly, at 6 months, EBCI's rates have varied significantly, peaking at **75.0%** in 2022, which is substantially higher than the USET rate of **23.5%** for the same year. This indicates that, in certain years, the EBCI community has achieved higher breastfeeding rates than the broader USET population, particularly at the 6-month mark.
- **Analysis of the Data:**
 - The data indicates a generally positive trend in breastfeeding practices within the EBCI community, especially noticeable in the significant rates of exclusive/mostly breastfeeding at 6 months in recent years. For example, the rate of **75.0%** in 2022 is notably higher than the USET average of **23.5%**. This suggests effective breastfeeding support and promotion within the EBCI community. However, there is variability over the years, with some years showing lower rates, such as **14.6%** in 2019 at 6 months. The data highlights the need for consistent support for breastfeeding mothers to maintain and improve these rates.

Table 28: Teen Pregnancy

Year	EBCI Teen Pregnancy %	USET Teen Pregnancy %	EBCI Teen Pregnancy Rate (per 1,000)	USET Teen Pregnancy Rate (per 1,000)	EBCI Teen Pregnancies (Num)	EBCI All Pregnancies (Denom)
2018	3.14	3.17	-	31.66	22	241
2019	4.10	3.54	40.96	35.41	29	232
2020	2.59	3.51	25.94	35.10	18	214
2021	2.88	2.85	28.85	28.54	21	239
2022	3.34	3.01	33.42	30.09	25	203
2023	1.38	2.45	13.77	24.48	11	190

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Active Clinical Patients (Denominator):** Used to calculate the percentages.
 - **Teen Pregnancy %:** Percentage of teen pregnancies within the teen girl population.
 - **Teen Pregnancy Rate (per 1,000):** Number of teen pregnancies per 1,000 female population.
 - **Teen Pregnancies (Num):** The actual number of teen pregnancies.
 - **All Pregnancies (Denom):** The denominator for calculating teen pregnancies, representing all pregnancies within the population.
- **Comparison with EBCI Data:**

- The EBCI community has shown variability in teen pregnancy rates over the years compared to USET. For instance, in 2019, the EBCI teen pregnancy percentage was **4.10%** with a rate of **40.96 per 1,000**, which was higher than the USET percentage of **3.54%** and rate of **35.41 per 1,000**. However, by 2023, the EBCI teen pregnancy percentage decreased to **1.38%** and the rate to **13.77 per 1,000**, both significantly lower than the USET percentages of **2.45%** and rate of **24.48 per 1,000**. This indicates a successful reduction in teen pregnancies within the EBCI community in recent years.
- **Analysis of the Data:**
 - The data shows a positive trend in reducing teen pregnancy rates within the EBCI community from 2018 to 2023. The EBCI teen pregnancy percentage dropped from **3.14%** in 2018 to **1.38%** in 2023. Similarly, the teen pregnancy rate per 1,000 decreased from **31.66** in 2018 to **13.77** in 2023. These improvements suggest effective public health interventions and education programs targeting teen pregnancy prevention within the EBCI community.

Table 29: Dental

Time Frame	Max Denture	Mand Denture	Totals
07/01/2022 – 06/30/2023	104	77	181
07/01/2023 – 07/01/2024	79	58	137
Totals	183	135	318

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of July 1st, 2024.
- **Definitions:**
 - **Max Denture:** Refers to the number of maxillary (upper jaw) dentures provided.
 - **Mand Denture:** Refers to the number of mandibular (lower jaw) dentures provided.
 - **Time Frames:** Data is broken down into two time periods, from July 1, 2022, to June 30, 2023, and from July 1, 2023, to July 1, 2024.
 - **Total Count:** The total number of dentures provided over the two time periods.
- **Analysis of the Data:**
 - The data highlights a noticeable decline in the provision of both maxillary and mandibular dentures from the first time frame (July 1, 2022, to June 30, 2023) to the second time frame (July 1, 2023, to July 1, 2024). In the first period, a total of **181 dentures** were provided, while **137 dentures** were provided in the second period, showing a reduction of **44 dentures**. This reduction could be attributed to several factors, such as improved dental health leading to fewer extractions and denture needs, changes in healthcare access or utilization, or variations in population health and demographics.

Clinical Care

Table 30: Pregnant People with Alcohol Screening

Year	EBCI %	USET %	EBCI Alcohol Screening (Num)	EBCI Pregnant Patients (Denom)
2018	95.85	86.64	231	241
2019	94.83	86.64	220	232
2020	95.79	81.66	205	214
2021	92.05	80.88	220	239
2022	78.33	82.27	159	203
2023	83.68	86.57	159	190

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Active Clinical Patients (Denominator):** Represents the total number of pregnant patients in the given year.
 - **Screening Definition:** Screening for alcohol use among pregnant patients.
- **Comparison with EBCI Data:**
 - The percentage of pregnant patients screened for alcohol use within the EBCI community has shown variability over the years, with generally higher rates compared to USET averages. In 2018, the EBCI screening rate was **95.85%**, significantly higher than the USET average of **86.64%**. However, by 2022, the EBCI screening rate decreased to **78.33%**, which was lower than the USET average of **82.27%**. In 2023, the EBCI screening rate improved to **83.68%**, close to the USET average of **86.57%**.
- **Analysis of the Data:**
 - The data indicates that the EBCI community has generally maintained higher alcohol screening rates among pregnant patients compared to USET averages, although there was a noticeable decline in 2022. The highest screening rate for EBCI was **95.85%** in 2018, which then decreased to **78.33%** in 2022 before improving to **83.68%** in 2023. These fluctuations suggest that while the EBCI community has been successful in maintaining high screening rates, there may have been challenges or changes in healthcare practices, resource availability, or patient engagement that influenced the rates in certain years.

Table 31: Tobacco Use in Pregnancy

Year	EBCI Pregnant Patients	EBCI % Pregnant Tobacco Users	USET % Pregnant Tobacco Users	EBCI % Pregnant Smokers	EBCI % Pregnant E-cig Users	EBCI % Pregnant Exposed to Smoke in Home
2018	191	30.3%	22.6%	29.8%	1.1%	18.6%
2019	205	28.9%	22.1%	27.9%	2.5%	12.4%

2020	196	24.5%	19.0%	23.4%	1.0%	13.0%
2021	184	24.5%	19.1%	19.6%	4.9%	12.5%
2022	182	28.7%	21.5%	24.9%	8.8%	8.3%
2023	149	32.4%	21.6%	24.3%	18.9%	6.8%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Tobacco Use:** Includes cigarettes, smokeless tobacco, and e-cigarettes.
 - **Smokers:** Percentage of total tobacco users identified as smokers.
 - **E-cig Users:** Percentage of total tobacco users identified as e-cigarette users.
 - **Exposed to Smoke in Home:** Percentage of pregnant female patients who were exposed to environmental tobacco smoke (ETS) or had a smoker in their home among those who were screened. This includes pregnant women who reported being around others who smoke or living in a household with smokers, regardless of whether the mother herself smokes.
- **Comparison with EBCI Data:**
 - The percentage of pregnant tobacco users within the EBCI community has varied over the years, with a peak of **32.4%** in 2023 compared to **30.3%** in 2018. The USET percentages have generally been lower, with **21.6%** in 2023 compared to **22.6%** in 2018. This indicates that the EBCI community has a higher prevalence of tobacco use among pregnant patients compared to the broader USET population. Similarly, the percentage of pregnant smokers and e-cigarette users in the EBCI community fluctuates, with notable increases in e-cigarette use from **1.1%** in 2018 to **18.9%** in 2023.
- **Analysis of the Data:**
 - The data shows a concerning trend in tobacco use among pregnant patients within the EBCI community, with an increase in the overall percentage from **30.3%** in 2018 to **32.4%** in 2023. This rise is particularly evident in the use of e-cigarettes, which increased from **1.1%** in 2018 to **18.9%** in 2023. Although there was a slight decline in the percentage of pregnant smokers from **29.8%** in 2018 to **24.3%** in 2023, the overall high rate of tobacco use remains an issue. Additionally, the percentage of pregnant women exposed to smoke in the home decreased from **18.6%** in 2018 to **6.8%** in 2023, indicating some progress in reducing secondhand smoke exposure. However, the persistently high rates of tobacco use during pregnancy highlight the need for intensified public health interventions.

Table 32: Neonatal Abstinence Syndrome (NAS)

Year	EBCI %	USET %	EBCI NAS Diagnosis (Num)	EBCI Newborns	EBCI NAS per 1,000
2018	7.07	2.27	14	198	70.71
2019	4.14	1.84	7	169	41.42
2020	1.28	0.36	2	156	12.82
2021	2.84	0.92	5	176	28.41

2022	3.52	1.03	5	142	35.21
2023	2.86	0.93	3	105	28.57

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Active Clinical Patients (Denominator):** Represents the total number of newborns in the given year.
 - **NAS (Neonatal Abstinence Syndrome):** A group of conditions caused when a baby withdraws from certain drugs they were exposed to in the womb before birth.
- **Comparison with EBCI Data:**
 - The prevalence of NAS within the EBCI community has shown a decline over the years, from **7.07%** in 2018 to **2.86%** in 2023. This is higher compared to the USET averages, which ranged from **2.27%** in 2018 to **0.93%** in 2023. The NAS diagnosis rate per 1,000 live births in EBCI has also decreased from **70.71** in 2018 to **28.57** in 2023. For context, the NAS rate in North Carolina is **20.34 per 1,000 live births**, indicating that the EBCI rates, although improved, are still higher than the state average.⁷⁹
- **Analysis of the Data:**
 - The data indicates a significant reduction in NAS diagnoses within the EBCI community from 2018 to 2023. The percentage of newborns diagnosed with NAS decreased from **7.07%** in 2018 to **2.86%** in 2023, with the rate per 1,000 live births dropping from **70.71** to **28.57** over the same period. These improvements suggest successful intervention efforts, such as increased prenatal care and substance abuse treatment programs for pregnant women. However, despite this progress, the NAS rates within the EBCI community remain higher than both the USET averages and the North Carolina state average. This disparity highlights the need for continued and enhanced public health efforts.

Table 33: Uninsured Population

Age Group	United States Insured %	United States Uninsured %	North Carolina Insured %	North Carolina Uninsured %	EBCI Insured %	EBCI Uninsured %
Total	91.3	8.7	89.5	10.5	62.3	37.7
Under 6 years	95.6	4.4	95.4	4.6	71	29
6 to 18 years	94.3	5.7	94.2	5.8	59.9	40.1

⁷⁹ Prenatal Substance Exposure and Neonatal Abstinence Syndrome: State Estimates from the 2016–2020 Transformed Medicaid Statistical Information System. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10204012/>

19 to 64 years	87.8	12.2	84.7	15.3	52	48
65 years and older	99.2	0.8	99.4	0.6	95.9	4.1

Notes

- **Data Source(s):**
 - Data obtained from the 2022 U.S. Census Bureau's ACS 5-Year Estimates, Table S2701: Health Insurance Coverage Status.⁸⁰
- **Definitions:**
 - **Insured %:** The percentage of the population that has health insurance coverage.
 - **Uninsured %:** The percentage of the population that does not have health insurance coverage.
 - **Date Range:** Data reflects estimates for the years 2017-2021.
- **Comparison with EBCI Data:**
 - The EBCI community shows significantly lower insurance coverage rates compared to both state (North Carolina) and national averages. Overall, **37.7%** of the EBCI population is uninsured, compared to **10.5%** in North Carolina and **8.7%** in the United States. The disparity is particularly pronounced among those aged 19 to 64, where **48%** of the EBCI population is uninsured, compared to **15.3%** in North Carolina and **12.2%** in the United States. In contrast, the insurance coverage rate for those aged 65 and older in the EBCI community is much closer to the state and national averages, with **95.9%** insured.
- **Analysis of the Data:**
 - The data highlights a significant gap in health insurance coverage within the EBCI community, particularly among younger and middle-aged adults. While Tribal members have access to Indian Health Service (IHS) facilities, which provide essential care and cover referrals for services not available through IHS, this does not eliminate all challenges. Many referrals require travel to contracted providers outside the reservation, creating significant barriers related to transportation. The limited number of services in the region, coupled with the logistical difficulties and potential financial strain of traveling long distances for care, can make accessing necessary services cumbersome and stressful, particularly for those with limited mobility or resources. The high uninsured rate among those aged 19 to 64 (**48%**) suggests barriers to employment-based insurance, affordability issues, or lack of awareness about available insurance programs. For children under 18, the uninsured rate is also high at **40.1%**, indicating potential gaps in coverage for low-income families or issues with enrollment in public insurance programs like Medicaid or CHIP. While the insurance rate for those aged 65 and older is relatively high (**95.9%**), consistent with Medicare coverage, the overall low rates in other age groups point to a need for comprehensive strategies to improve health insurance access and reduce disparities.

⁸⁰ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S2701: Health Insurance Coverage Status. Retrieved from <https://data.census.gov/table?q=Health+Insurance>.

Table 34: Primary Care Provider Ratio

Region	Active M.D.s	Population	Rate per 100,000
North Carolina	30,043	10,551,162	284.74
EBCI PRCD A (5 Counties)	227	157,232	144.43
United States	1,005,150	335,326,130	299.75

Notes

- **Data Source(s):**
 - Data obtained from the Health Resources and Services Administration's Area Health Resources Files (AHRF), 2024, covering the period 2022-2023.⁸¹
- **Definitions:**
 - **EBCI PRCD A (5 Counties):** Includes all active M.D.s in the five counties comprising the Eastern Band of Cherokee Indians Purchased/Referred Care Delivery Area (PRCD A), not limited to those working within the EBCI boundary.
 - **Rate Calculation:** The rate per 100,000 population reflects the density of active medical doctors in each region, providing a comparative perspective on healthcare provider availability.
- **Comparison with EBCI Data:**
 - The rate of active M.D.s per 100,000 population in the EBCI PRCD A (5 Counties) is **144.43**, which is significantly lower than the rates in North Carolina (**284.74**) and the United States (**299.75**). This suggests that the EBCI PRCD A has fewer primary care providers relative to its population compared to the broader state and national averages. The lower provider-to-population ratio indicates potential challenges in accessing primary care services within the EBCI PRCD A.
- **Analysis of the Data:**
 - The data reveals a substantial disparity in the availability of primary care providers within the EBCI PRCD A compared to North Carolina and the United States. With a rate of **144.43** active M.D.s per 100,000 population, the EBCI PRCD A's provider density is almost half that of North Carolina (**284.74**) and less than half that of the national average (**299.75**). This significant gap highlights a critical issue in healthcare access, where residents within the EBCI PRCD A may experience longer wait times for appointments, reduced access to medical advice and treatment, and potentially worse health outcomes due to delays in receiving care.

Table 35: Dentist Ratio

Region	Active Dentists	Population	Rate per 100,000
North Carolina	5,831	10,551,162	55.26
EBCI PRCD A (5 Counties)	64	157,232	40.72
United States	203,803	335,326,130	60.78

⁸¹ Health Resources and Services Administration. (2024). Area Health Resources Files (AHRF) 2024. Retrieved from <https://data.hrsa.gov/data/data-download>.

Notes

- **Data Source(s):**
 - Data obtained from the Health Resources and Services Administration's Area Health Resources Files (AHRF), 2024, covering the period 2022-2023.⁸²
- **Definitions:**
 - **EBCI PRCD (5 Counties):** Includes all active dentists in the five counties comprising the Eastern Band of Cherokee Indians Purchased/Referred Care Delivery Area (PRCDA), not limited to those working within the EBCI boundary.
 - **Rate Calculation:** The rate per 100,000 population reflects the density of active dentists in each region, providing a comparative perspective on dental care provider availability.
- **Comparison with EBCI Data:**
 - The rate of active dentists per 100,000 population in the EBCI PRCD (5 Counties) is **40.72**, which is significantly lower than the rates in North Carolina (**55.26**) and the United States (**60.78**). This suggests that the EBCI PRCD has fewer dental care providers relative to its population compared to the broader state and national averages. The lower provider-to-population ratio indicates potential challenges in accessing dental care services within the EBCI PRCD.
- **Analysis of the Data:**
 - The data highlights a significant disparity in the availability of dental care providers within the EBCI PRCD compared to North Carolina and the United States. With a rate of **40.72** active dentists per 100,000 population, the EBCI PRCD's provider density is substantially lower than the state rate of **55.26** and the national rate of **60.78**. This gap suggests that residents within the EBCI PRCD may experience limited access to dental care services, longer wait times for appointments, and potentially worse oral health outcomes due to delays in receiving care.

Table 36: Mammogram Screening

Year	EBCI No Mammograms %	USET No Mammograms %	EBCI No Mammograms (Num)	EBCI Denominator
2018	20.3%	29.5%	404	1,994
2019	19.0%	27.8%	385	2,021
2020	19.6%	27.6%	408	2,077
2021	19.8%	29.4%	424	2,137
2022	19.5%	28.1%	415	2,129
2023	20.1%	26.7%	434	2,160

Notes

- **Data Source(s):**

⁸² Health Resources and Services Administration. (2024). Area Health Resources Files (AHRF) 2024. Retrieved from <https://data.hrsa.gov/data/data-download>

- Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator Panel:** Active Clinical Female patients aged 45+.
 - **EBCI No Mammograms %:** Percentage of EBCI female patients aged 45+ who did not receive a mammogram.
 - **USET No Mammograms %:** Percentage of USET female patients aged 45+ who did not receive a mammogram.
 - **EBCI No Mammograms (Num):** The number of EBCI female patients aged 45+ who did not receive a mammogram.
 - **EBCI Denominator:** The total number of EBCI female patients aged 45+.
- **Comparison with EBCI Data:**
 - Over the period from 2018 to 2023, the percentage of EBCI female patients aged 45+ who did not receive a mammogram ranged from **19.0%** to **20.3%**, with an overall average of **19.73%**. In comparison, the USET percentages ranged from **26.7%** to **29.5%**, with an overall average of **28.18%**. This indicates that EBCI has a lower percentage of women missing mammogram screenings compared to the broader USET population.
- **Analysis of the Data:**
 - The data shows that the EBCI community has consistently lower percentages of women aged 45+ who did not receive mammogram screenings compared to the USET average. The percentages for EBCI remain relatively stable around **19.73%**, indicating that approximately one-fifth of eligible women did not receive a mammogram each year. In contrast, the USET percentages are consistently higher, averaging **28.18%**. This difference suggests that the EBCI community may have more effective screening programs or better access to mammography services compared to the USET average. However, the data also indicates that there is room for improvement within the EBCI community, as around 20% of eligible women are still not receiving recommended mammogram screenings.

Table 37: Colonoscopy Screening

Year	EBCI No Colo %	USET No Colo %	EBCI No Colos (Num)	EBCI Denominator
2018	57.0%	58.4%	2116	3712
2019	55.7%	56.9%	2084	3742
2020	54.3%	48.1%	2027	3730
2021	53.8%	56.7%	2077	3861
2022	51.7%	55.4%	1956	3780
2023	50.8%	53.8%	1956	3851

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**

- **Denominator Panel:** Includes active clinical patients aged 45+ who are eligible for colonoscopy screenings.
- **EBCI No Colo %:** Percentage of EBCI patients aged 45+ who did not receive a colonoscopy.
- **USET No Colo %:** Percentage of USET patients aged 45+ who did not receive a colonoscopy.
- **EBCI No Colos (Num):** The number of EBCI patients aged 45+ who did not receive a colonoscopy.
- **EBCI Denominator:** The total number of EBCI patients aged 45+ eligible for colonoscopy.
- **Comparison with EBCI Data:**
 - Over the period from 2018 to 2023, the percentage of EBCI patients aged 45+ who did not receive a colonoscopy showed a gradual decline from **57.0%** in 2018 to **50.8%** in 2023. In comparison, the USET percentages fluctuated slightly but were generally higher than those of the EBCI, with a range from **48.1%** to **58.4%**. The overall average for EBCI patients not receiving a colonoscopy over this period was **53.87%**, compared to **54.69%** for USET patients.
- **Analysis of the Data:**
 - The data highlights a positive trend in the EBCI community, with a steady decline in the percentage of patients aged 45+ who did not receive a colonoscopy from **57.0%** in 2018 to **50.8%** in 2023. This suggests improvements in colonoscopy screening rates over the years. However, the fact that over half of the eligible EBCI population still did not receive a colonoscopy by 2023 indicates ongoing barriers to screening. Comparatively, the USET population's non-screening percentages were generally higher, with an average of **54.69%** not receiving a colonoscopy. This points to slightly better screening rates within the EBCI community but also highlights the need for further improvements. Increasing colonoscopy screening rates is crucial for early detection and prevention of colorectal cancer, which can significantly improve health outcomes.
- **Additional Information:**
 - **Overall Comparison (2018-2023):** 53.87% of EBCI active clinical patients aged 45+ did not receive a colonoscopy compared to 54.69% of USET active clinical patients aged 45+.

Table 38: Flu Vaccination

Year	EBCI Refusals (Count)	EBCI Refusals (%)	EBCI Contra/NMI Refusals (%)	USET Refusals (%)	USET Contra/NMI Refusals (%)
2018	3,474	36.37%	0.61%	32.24%	0.29%
2019	4,653	48.93%	0.48%	35.30%	0.30%
2020	4,105	44.34%	0.53%	44.30%	0.53%
2021	3,403	37.79%	0.53%	21.28%	0.01%
2022	3,385	38.86%	0.49%	22.67%	0.35%
2023	3,847	43.95%	0.62%	32.02%	0.50%

Notes

- **Data Source(s):**

- Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients, including all patients aged 6 months and older.
 - **Numerator(s):**
 - **Refusals:** Patients who refused the influenza vaccine for any reason.
 - **Contra/NMI Refusals:** Patients who refused the influenza vaccine due to medical contraindications or non-medically indicated reasons.
- **Comparison with EBCI Data:**
 - Over the period from 2018 to 2023, the percentage of EBCI patients refusing the influenza vaccine ranged from **36.37%** to **48.93%**, with an overall average of **41.74%**. In comparison, the USET percentages were generally lower, ranging from **21.28%** to **44.30%**, with an overall average of **30.68%**. This indicates that the EBCI community has higher rates of vaccine refusal compared to the USET average. The percentages of refusals due to contraindications or non-medically indicated reasons were relatively low for both groups, with EBCI ranging from **0.48%** to **0.62%** and USET from **0.01%** to **0.53%**.
- **Analysis of the Data:**
 - The data indicates a concerning trend in vaccine refusal within the EBCI community, with refusal rates consistently higher than the USET average. In 2019, nearly half of the EBCI patients (**48.93%**) refused the influenza vaccine, the highest percentage recorded during the period. Despite a slight improvement in subsequent years, the refusal rate remained significantly high at **43.95%** in 2023. This high refusal rate suggests potential barriers to vaccine acceptance within the EBCI community, such as vaccine hesitancy or cultural beliefs against vaccination. In contrast, the USET community showed lower refusal rates, although there was a notable increase in 2020. The data also reveals that refusals due to contraindications or non-medically indicated reasons are minimal in both groups, indicating that most refusals are likely due to personal choice rather than medical necessity.
- **Additional Information:**
 - **Overall Comparison (2018-2023):** 41.74% of EBCI active clinical patients refused the influenza vaccine compared to 30.68% of USET active clinical patients. The percentages of refusals due to contraindications or non-medically indicated reasons are also provided for comparison.

Table 39: COVID Vaccination

Year	EBCI Vaccinated (Count)	EBCI Vaccinated (%)	USET Vaccinated (%)
2020	433	3.85%	2.29%
2021	6,492	55.98%	54.56%
2022	3,814	33.28%	30.80%
2023	1,444	12.58%	13.51%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients, including all patients aged 6 months and older.
 - **Numerator(s):** Patients who received the COVID-19 vaccine.
- **Comparison with EBCI Data:**
 - The percentage of EBCI patients who received the COVID-19 vaccine showed a significant increase from **3.85%** in 2020 to **55.98%** in 2021, followed by a decline to **33.28%** in 2022 and **12.58%** in 2023. In comparison, the USET vaccination percentages were slightly lower in 2021 (**54.56%**) but followed a similar trend with **30.80%** in 2022 and **13.51%** in 2023. Overall, **26.62%** of EBCI patients received the vaccine compared to **25.73%** of USET patients during the combined period.
- **Analysis of the Data:**
 - The data highlights a strong initial response to the COVID-19 vaccination campaign within the EBCI community, with over half of the active clinical patients vaccinated in 2021 (**55.98%**). This reflects the community's proactive measures to combat the pandemic. However, the decline in vaccination rates in subsequent years, dropping to **33.28%** in 2022 and **12.58%** in 2023, indicates potential challenges in maintaining vaccination momentum. This trend is mirrored in the USET data, suggesting broader regional or national trends in vaccine uptake. Factors contributing to the decline may include vaccine hesitancy or perceived reduction in threat.
- **Additional Information:**
 - **Overall Comparison (2020-2023):** 26.62% of EBCI active clinical patients received the COVID-19 vaccine compared to 25.73% of USET active clinical patients.
 - **Vaccine Introduction:** The COVID-19 vaccine was introduced in December 2020 in limited quantities, resulting in a lower vaccination rate for that year.

Table 40: Vaccination Data for Elders

Group	Year	Active Clinical Pts 66+	Tdap/Td (%)	Tdap (%)	Influenza (%)	Shingrix (%)	Pneumo (%)	1:1:1:2:1 Combo (%)	1:1:2:1 Combo (%)
EBCI	2018	1,033	85.7%	91.2%	58.5%	82.6%	74.0%	-	-
USET	2018	2,861	84.9%	86.5%	57.7%	68.2%	62.5%	-	-
EBCI	2019	1,042	83.7%	91.8%	71.5%	81.2%	74.3%	-	-
USET	2019	2,655	82.8%	87.9%	61.9%	66.9%	63.5%	-	-
EBCI	2020	1,061	83.4%	92.2%	63.8%	13.8%	78.5%	5.7%	8.7%
USET	2020	2,697	81.4%	88.7%	59.0%	23.0%	71.7%	13.4%	17.1%
EBCI	2021	966	82.3%	92.7%	56.5%	8.5%	74.5%	4.8%	7.2%
USET	2021	2,177	81.0%	89.7%	52.8%	16.4%	65.5%	N/A	N/A
EBCI	2022	987	70.8%	94.5%	57.5%	28.6%	72.8%	15.1%	20.8%

USET	2022	2,255	73.3%	91.0%	55.1%	31.0%	64.3%	24.4%	N/A
EBCI	2023	1,039	75.0%	95.1%	65.0%	39.4%	73.3%	24.8%	29.9%
USET	2023	2,752	73.6%	91.5%	59.8%	41.5%	65.3%	30.1%	30.1%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients aged 66 and older.
 - **Numerator(s):** This includes patients who received the respective vaccines.
 - **Tdap/Td:** Patients who received Tetanus, Diphtheria, and Pertussis (Tdap) or Tetanus and Diphtheria (Td) vaccines in the past 10 years.
 - **Tdap:** Patients who received the Tdap vaccine.
 - **Influenza:** Patients who received the influenza vaccine during the report period.
 - **Shingrix:** Patients who received 2 doses of the Shingrix vaccine.
 - **Pneumo:** Patients who are up-to-date with the Pneumococcal vaccine.
 - **1:1:1:2:1 Combo:** Patients who received 1 Tdap/Td in the past 10 years, 1 Tdap ever, 1 influenza during the report period, 2 doses of Shingrix ever, and are up-to-date with the Pneumococcal vaccine.
 - **1:1:2:1 Combo:** Patients who received 1 Tdap/Td in the past 10 years, 1 Tdap ever, 2 doses of Shingrix ever, and are up-to-date with the Pneumococcal vaccine.
 - **Clarification:** The data reflects patients who received the vaccine or had a medical contraindication.
- **Comparison with EBCI Data:**
 - The table shows vaccination rates for the EBCI and USET populations aged 66 and older over six years (2018-2023). For instance, in 2023, 75.0% of EBCI patients received the Tdap/Td vaccine compared to 73.6% of USET patients. Similarly, 95.1% of EBCI patients received the Tdap vaccine compared to 91.5% of USET patients. These figures demonstrate that EBCI consistently has higher vaccination rates compared to USET in most categories, reflecting effective vaccination programs within the EBCI community.
- **Analysis of the Data:**
 - The data reveals that EBCI has maintained relatively high vaccination rates among its elderly population, particularly in the administration of Tdap and Td vaccines, with rates consistently above 83% and peaking at 95.1% for Tdap in 2023. In comparison, USET's rates, although slightly lower, also show a strong vaccination uptake. The influenza vaccination rates for EBCI have varied, with a notable increase in 2019 (**71.5%**) and a subsequent decline, reaching **65.0%** in 2023, while USET's rates have generally been lower. Shingrix vaccination rates for EBCI saw a dramatic rise from **13.8%** in 2020 to **39.4%** in 2023, surpassing USET's **41.5%** in 2023. Pneumococcal vaccine rates for EBCI have been stable and higher than USET's, indicating strong adherence to vaccination schedules. The introduction of combo vaccination metrics in 2020 shows EBCI making significant progress

by 2023, with **24.8%** for the 1:1:1:2:1 combo and **29.9%** for the 1:1:2:1 combo, indicating comprehensive vaccination coverage efforts.

- **Additional Information:**
 - **Overall Comparison (2018-2023):** EBCI's vaccination rates for Tdap/Td, Tdap, and pneumococcal vaccines consistently surpass those of USET, demonstrating robust vaccination programs and efforts within the community.

Table 41: Infant Vaccinations

Year	Group	4313*3 14 Combo	4 dose s DTa P	3 dose s Polio	1 dose MM R	3-4 dose s HiB	3 dose s Hep B	1 dose Varicel la	4 doses Pneumococ cal	1 dose Hep A	2-3 doses Rotavir us	2 doses Influen za
2018	EBCI	73.9%	83.6%	92.9%	90.3%	79.4%	92.9%	90.3%	79.0%	89.1%	76.5%	55.9%
2018	USET	66.8%	75.1%	86.7%	83.4%	76.4%	88.4%	82.8%	72.2%	75.1%	68.9%	40.8%
2019	EBCI	79.9%	83.3%	92.2%	90.2%	86.3%	90.7%	90.7%	85.3%	87.7%	82.8%	61.8%
2019	USET	68.8%	74.5%	87.0%	85.2%	79.2%	88.7%	85.0%	73.3%	74.6%	71.8%	41.8%
2020	EBCI	80.1%	84.0%	92.2%	90.8%	85.4%	91.3%	90.3%	85.4%	90.3%	86.9%	69.4%
2020	USET	68.0%	73.6%	86.4%	85.2%	77.1%	88.7%	84.5%	73.6%	75.6%	73.3%	40.0%
2021	EBCI	85.1%	91.4%	96.0%	95.4%	91.4%	96.0%	94.9%	88.0%	93.1%	88.0%	68.0%
2021	USET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2022	EBCI	86.3%	91.3%	96.3%	95.7%	90.7%	96.9%	95.7%	88.8%	95.7%	91.9%	65.2%
2022	USET	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
2023	EBCI	86.3%	90.7%	95.1%	95.6%	90.7%	96.2%	96.2%	90.2%	95.1%	88.0%	63.9%
2023	USET	63.6%	76.0%	87.9%	88.4%	76.5%	90.8%	88.3%	69.6%	76.7%	71.8%	27.5%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients aged 19-35 months.
 - **Numerator(s):** Includes patients who received the respective vaccines.

- **4313*314 Combo:** Patients who received the combination of 4 DTaP, 3 Polio, 1 MMR, 3 or 4 HiB, 3 Hepatitis B, 1 Varicella, and 4 Pneumococcal vaccines.
 - **4 doses DTaP:** Patients who received 4 doses of DTaP/DTP/Tdap vaccines.
 - **3 doses Polio:** Patients who received 3 doses of Polio (OPV or IPV) vaccines.
 - **1 dose MMR:** Patients who received 1 dose of MMR vaccine.
 - **3-4 doses HiB:** Patients who received 3 or 4 doses of HiB vaccine.
 - **3 doses Hep B:** Patients who received 3 doses of Hepatitis B vaccine.
 - **1 dose Varicella:** Patients who received 1 dose of Varicella vaccine.
 - **4 doses Pneumococcal:** Patients who received 4 doses of Pneumococcal vaccine.
 - **1 dose Hep A:** Patients who received 1 dose of Hepatitis A vaccine.
 - **2-3 doses Rotavirus:** Patients who received 2 or 3 doses of Rotavirus vaccine.
 - **2 doses Influenza:** Patients who received 2 doses of Influenza vaccine.
 - **Clarification:** The data reflects patients who received the vaccine or had a medical contraindication.
- **Comparison with EBCI Data:**
 - From 2018 to 2023, EBCI consistently demonstrated higher vaccination coverage rates across all categories compared to USET. For the 4313*314 combo, EBCI's coverage ranged from **73.9%** to **86.3%**, while USET's coverage fluctuated between **63.6%** and **68.8%**. For 4 doses of DTaP, EBCI's coverage was between **83.3%** and **91.4%**, surpassing USET's **73.6%** to **76.0%**. Similarly, EBCI showed higher rates for 3 doses of Polio (**92.2%** to **96.3%** versus USET's **86.4%** to **87.9%**), 1 dose of MMR (**90.2%** to **95.7%** versus USET's **83.4%** to **88.4%**), and 3-4 doses of HiB (**79.4%** to **91.4%** versus USET's **76.4%** to **79.2%**). EBCI also maintained superior coverage for 3 doses of Hep B (**90.7%** to **96.9%** compared to USET's **88.4%** to **90.8%**), 1 dose of Varicella (**90.3%** to **96.2%** versus USET's **82.8%** to **88.3%**), and 4 doses of Pneumococcal (**79.0%** to **90.2%** compared to USET's **69.6%** to **73.6%**). For 1 dose of Hep A, EBCI's coverage ranged from **87.7%** to **95.7%**, while USET's was **75.1%** to **76.7%**. Coverage for 2-3 doses of Rotavirus was higher in EBCI (**76.5%** to **91.9%** versus USET's **68.9%** to **73.3%**), as well as for 2 doses of Influenza (**55.9%** to **69.4%** versus USET's **27.5%** to **41.8%**).
- **Analysis of the Data:**
 - The data shows that EBCI consistently outperforms USET in vaccination rates across all categories. The high vaccination rates in EBCI suggest effective vaccination programs and outreach efforts within the community. For instance, the coverage for the 4313*314 combo increased from **73.9%** in 2018 to **86.3%** in 2023. Similarly, significant improvements are seen in the coverage for 4 doses of DTaP, 3 doses of Polio, and other vaccines. The higher rates in EBCI compared to USET indicate a successful implementation of vaccination strategies and possibly better healthcare access and education within the EBCI community.
- **Additional Information:**
 - **Overall Comparison (2018-2023):** EBCI consistently showed higher vaccination coverage rates across all categories compared to USET. This indicates strong vaccination efforts and healthcare infrastructure within the EBCI community.
 - **Data Gaps:** USET data for 2021 and 2022 was unavailable due to reporting errors likely influenced by the COVID-19 pandemic.

Table 42: Adolescent Vaccinations

Year	Group	1:1:2* Combo	1:1 Combo	Tdap	Meningococcal	2-3 doses HPV
2018	EBCI	57.1%	92.9%	93.6%	92.9%	57.1%
2018	USET	54.7%	90.2%	94.2%	90.5%	55.2%
2019	EBCI	58.8%	82.4%	82.9%	82.9%	59.3%
2019	USET	46.4%	79.9%	82.1%	81.0%	46.8%
2020	EBCI	67.9%	88.2%	89.3%	89.3%	68.4%
2020	USET	42.7%	78.6%	82.0%	79.6%	43.1%
2021	EBCI	67.8%	91.0%	91.5%	91.9%	69.7%
2021	USET	N/A	N/A	N/A	N/A	N/A
2022	EBCI	71.7%	91.3%	93.6%	91.9%	72.8%
2022	USET	N/A	N/A	N/A	N/A	N/A
2023	EBCI	69.6%	89.1%	89.1%	89.1%	70.1%
2023	USET	45.5%	80.7%	82.9%	81.5%	45.8%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients aged 19-35 months.
 - **Numerator(s):** This includes patients who received the respective vaccines.
 - **1:1:2 Combo:** Patients who received the combination of 1 Tdap/Td, 1 Meningococcal, and 2 or 3 HPV vaccines.
 - **1:1 Combo:** Patients who received the combination of 1 Tdap/Td and 1 Meningococcal vaccines.
 - **Tdap:** Patients who received 1 dose of Tdap/Td vaccine.
 - **Meningococcal:** Patients who received 1 dose of Meningococcal vaccine.
 - **2-3 doses HPV:** Patients who received 2 or 3 doses of HPV vaccine.
 - **Clarification:** The data reflects patients who received the vaccine or had a medical contraindication.
- **Comparison with EBCI Data:**
 - From 2018 to 2023, EBCI consistently demonstrated higher vaccination coverage rates across all categories compared to USET. For the 1:1:2 combo, EBCI's coverage ranged from **57.1%** to **71.7%**, while USET's coverage fluctuated between **42.7%** and **54.7%**. For the 1:1 combo, EBCI's coverage was between **82.4%** and **92.9%**, surpassing USET's **79.9%** to **90.2%**. Similarly, EBCI showed higher rates for 1 dose of Tdap (**82.9%** to **93.6%** versus USET's **82.0%** to **94.2%**), 1 dose of Meningococcal (**82.9%** to **92.9%** versus USET's **81.0%** to **90.5%**), and 2-3 doses of HPV (**57.1%** to **72.8%** versus USET's **46.8%** to **55.2%**).
- **Analysis of the Data:**
 - The data shows that EBCI consistently outperforms USET in vaccination rates across all categories. The high vaccination rates in EBCI suggest effective vaccination programs and

outreach efforts within the community. For instance, the coverage for the 1:1:2 combo increased from **57.1%** in 2018 to **71.7%** in 2022. Similarly, significant improvements are seen in the coverage for the 1:1 combo, 1 dose of Tdap, and other vaccines. The higher rates in EBCI compared to USET indicate a successful implementation of vaccination strategies and possibly better healthcare access and education within the EBCI community. However, the lower coverage rates for HPV vaccination highlight an area that needs further improvement. Efforts should be directed towards increasing HPV vaccination rates through targeted campaigns and improved access.

- **Additional Information:**
 - **Overall Comparison (2018-2023):** EBCI consistently showed higher vaccination coverage rates across all categories compared to USET. This indicates strong vaccination efforts and healthcare infrastructure within the EBCI community.
 - **Data Gaps:** USET data for 2021 and 2022 was unavailable due to reporting errors likely influenced by the COVID-19 pandemic.

Table 43: Substance Use Diagnoses

Year	EBCI	USET
2018	8.4%	5.0%
2019	8.7%	4.9%
2020	8.5%	4.4%
2021	8.9%	4.6%
2022	9.5%	5.0%
2023	8.8%	4.8%

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Denominator(s):** Active Clinical Patients for the year of interest.
 - **Numerator(s):** This includes the percentage of the population during the given year that was diagnosed with a Substance Use Disorder (SUD).
- **Clarification:** The data reflects the percentage of active clinical patients diagnosed with a Substance Use Disorder (SUD) within each year. This is not necessarily indicative of new patients but represents the proportion of the population diagnosed with SUD during the given year.
- **Comparison with EBCI Data:**
 - Over the period from 2018 to 2023, the Eastern Band of Cherokee Indians (EBCI) consistently exhibited higher percentages of active clinical patients diagnosed with Substance Use Disorders (SUD) compared to the United South and Eastern Tribes (USET). The percentage of EBCI patients diagnosed with SUD ranged from **8.4%** to **9.5%**, with the highest rate observed in 2022. In contrast, USET's percentages were consistently lower,

ranging from **4.4%** to **5.0%** during the same period. This data highlights a significant difference in the prevalence of SUD diagnoses between EBCI and USET populations.

- **Analysis of the Data:**
 - The higher prevalence of Substance Use Disorders (SUD) in the EBCI population compared to USET suggests a greater burden of substance use-related issues within the EBCI community. For instance, in 2022, **9.5%** of EBCI patients were diagnosed with SUD, significantly higher than the **5.0%** in the USET population. This indicates a need for on-going targeted intervention and support within the EBCI community to address substance use issues.

Social & Economic Determinants

Table 44: Poverty

Category	EBCI Poverty Rate	NC Poverty Rate	US Poverty Rate
Age Group			
Under 18 years	26.4%	18.5%	16.7%
18 to 64 years	17.9%	12.4%	11.7%
65 years and over	23.9%	9.8%	10.0%
Total Population	21.0%	13.3%	12.5%
Sex			
Male	21.8%	12.0%	11.3%
Female	20.2%	14.6%	13.7%
Educational Attainment			
Less than high school graduate	30.8%	26.3%	24.0%
High school graduate (includes equivalency)	15.3%	14.9%	13.7%
Some college, associate's degree	19.3%	9.7%	9.5%
Bachelor's degree or higher	17.4%	4.1%	4.4%

Notes

- **Data Source(s):**
 - Data obtained from the 2022 U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates, Table S1701.⁸³
- **Definitions:**
 - **Poverty Rate:** The percentage of people whose income falls below the poverty threshold, which varies by family size and composition as defined by the U.S. Census Bureau.
- **Comparison with EBCI Data:**
 - **Age Group Analysis:**
 - **Under 18 years:** Approximately **26.4%** of individuals in this age group in EBCI are below the poverty level, compared to **18.5%** in NC and **16.7%** in the US. This

⁸³ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S1701: Poverty Status in the Past 12 Months. Retrieved from <https://data.census.gov/table?q=S1701>

highlights the need for targeted social and economic support for children and their families within the EBCI.

- **18 to 64 years: 17.9%** of the working-age population in EBCI is below the poverty level, compared to **12.4%** in NC and **11.7%** in the US. This indicates greater economic challenges among adults in EBCI, which could impact their ability to support families and contribute to the community.
- **65 years and over: 23.9%** of elderly individuals in EBCI are below the poverty level, compared to **9.8%** in NC and **10.0%** in the US. This emphasizes the importance of financial support and services for the aging population in EBCI.
- **Sex Analysis:**
 - **Male:** Approximately **21.8%** of males in EBCI are below the poverty level, compared to **12.0%** in NC and **11.3%** in the US. This indicates a higher proportion of economic challenges among males in EBCI.
 - **Female:** **20.2%** of females in EBCI are below the poverty level, compared to **14.6%** in NC and **13.7%** in the US. This suggests that females in EBCI experience higher levels of poverty compared to their national and state counterparts.
- **Educational Attainment Analysis:**
 - **Less than high school graduate: 30.8%** of individuals in EBCI without a high school diploma live below the poverty level, compared to **26.3%** in NC and **24.0%** in the US. This indicates a strong correlation between lower educational attainment and higher poverty rates, with EBCI showing higher rates than both national and state levels.
 - **High school graduate: 15.3%** of high school graduates in EBCI live below the poverty level, compared to **14.9%** in NC and **13.7%** in the US. This suggests that a high school diploma reduces the risk of poverty in EBCI, but the rates are still slightly higher than national and state levels.
 - **Some college, associate's degree: 19.3%** of individuals in EBCI with some college education or an associate's degree are below the poverty level, compared to **9.7%** in NC and **9.5%** in the US. This shows a significant decrease in poverty compared to high school graduates in the US and NC, but EBCI rates are notably higher.
 - **Bachelor's degree or higher: 17.4%** of individuals in EBCI with a bachelor's degree or higher are below the poverty level, compared to **4.1%** in NC and **4.4%** in the US. This indicates the lowest poverty rates among the educational attainment groups, but EBCI still shows higher rates than national and state levels.
- **Analysis of the Data:**
 - The data reveals significant disparities in poverty rates between the EBCI community and both North Carolina and the United States across various demographics. The poverty rate among children under 18 in EBCI is notably higher than the state and national averages, underscoring the need for enhanced support programs targeting young families. The working-age population (18-64 years) in EBCI also faces higher poverty rates, suggesting economic challenges that could impact overall community well-being and economic growth. Elderly individuals (65+) in EBCI have more than double the poverty rate compared

to their counterparts in NC and the US, indicating a critical need for improved support and services for the aging population.

- o Gender disparities are evident, with both male and female poverty rates in EBCI significantly exceeding those in NC and the US, though males show a slightly higher rate than females within the EBCI community. Educational attainment plays a crucial role in poverty rates, with those having less than a high school education experiencing the highest poverty levels. While higher education reduces the likelihood of poverty, the rates for EBCI individuals with a bachelor's degree or higher are still substantially higher than state and national averages, highlighting systemic issues that persist regardless of educational achievements.

Table 45: Severe Housing Costs

Income Bracket	EBCI Owner-Occupied Severely Cost-Burdened Households (#)	EBCI Owner-Occupied Severely Cost-Burdened Households (%)	EBCI Renter-Occupied Severely Cost-Burdened Households (#)	EBCI Renter-Occupied Severely Cost-Burdened Households (%)	NC Owner-Occupied Severely Cost-Burdened Households (%)	NC Renter-Occupied Severely Cost-Burdened Households (%)	US Owner-Occupied Severely Cost-Burdened Households (%)	US Renter-Occupied Severely Cost-Burdened Households (%)
Less than \$20,000	159	6.6%	49	5.5%	5.8%	16.5%	5.2%	15.5%
\$20,000 to \$34,999	55	2.3%	22	2.4%	4.4%	13.7%	4.3%	12.8%
\$35,000 to \$49,999	31	1.3%	11	1.2%	3.4%	8.0%	3.5%	8.4%
\$50,000 to \$74,999	12	0.5%	0	0.0%	3.2%	4.3%	4.0%	6.5%
\$75,000 or more	8	0.3%	0	0.0%	2.1%	0.9%	4.9%	3.2%
Zero or negative income	30	1.2%	20	2.2%	0.8%	2.0%	0.8%	2.1%

Total > 30% of Income	295	11.9%	102	11.3%	19.7%	45.4%	22.7%	48.5%
-----------------------	-----	-------	-----	-------	-------	-------	-------	-------

Notes

- **Data Source(s):**
 - Data obtained from the 2022 U.S. Census Bureau, American Community Survey 5-Year Estimates, Table S2503.⁸⁴
- **Definitions:**
 - **Severely Cost-Burdened Households:** Households that spend more than 30% of their income on housing costs, which include rent or mortgage payments, property taxes, insurance, and utilities.
- **Comparison with EBCI Data:**
 - The Eastern Cherokee Reservation, NC, has lower percentages of severely cost-burdened households compared to the state of North Carolina and the United States overall. For example, 11.9% of EBCI owner-occupied households are severely cost-burdened, compared to 19.7% in NC and 22.7% in the US. Similarly, 11.3% of EBCI renter-occupied households are severely cost-burdened, compared to 45.4% in NC and 48.5% in the US. This indicates that the EBCI community experiences less severe housing cost burdens relative to broader regional and national contexts.
- **Analysis of the Data:**
 - The data reveals that while a significant portion of households across all regions spend more than 30% of their income on housing, renter-occupied households generally face a higher burden than owner-occupied ones. The lower percentages of severely cost-burdened households within the EBCI community suggest a relatively more affordable housing situation compared to state and national averages. However, this analysis does not account for those who are housing insecure or homeless, and the EBCI data may be influenced by the margin of error inherent in survey estimates. Therefore, while the overall burden appears lower, it is crucial to consider the potential underreporting or variability in these figures.

Table 46: Social Vulnerability Index (SVI) Part 1 of 2

Year	Location	SVI Score	% Without High School Diploma	% Uninsured	% Unemployed	% Aged 65 and Older	% Aged 17 and Younger	% with Disabilities	% Single-Parent Households
2022	EBCI (Big Cove, Birdtown, Yellowhill,	Only counties are scored	15.9%	39.5%	5.9%	13.1%	25.6%	16.0%	13.5%

⁸⁴ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S2503: Financial Characteristics. Retrieved from <https://data.census.gov/table?q=S2503>

	3,200 Acre, Snowbird, Cherokee County) (0990T00100)								
2022	EBCI (Wolfstown, Big Y, Painttown) (0990T00200)	Only counties are scored	16.8%	34.5%	14.9%	25.5%	24.0%	20.2%	12.9%
2022	Cherokee County, NC (37039)	0.3729	8.8%	16.2%	4.9%	30.7%	16.1%	18.1%	3.3%
2022	Graham County, NC (37075)	0.6933	15.9%	17.7%	7.7%	23.6%	20.3%	19.6%	5.0%
2022	Haywood County, NC (37087)	0.3646	9.6%	11.2%	3.5%	25.1%	17.9%	17.2%	5.3%
2022	Jackson County, NC (37099)	0.7862	10.7%	15.1%	5.9%	20.4%	16.6%	13.2%	5.2%
2022	Swain County, NC (37173)	0.901	14.9%	24.0%	7.5%	19.2%	22.6%	17.9%	8.2%

Table 47: Social Vulnerability Index (SVI) Part 2 of 2

Year	Location	% Limited English Proficiency	% Minority Population	% Multi-Unit Housing	% Mobile Homes	% Crowded Housing Units	% Households with No Vehicle	% Living in Group Quarters
2022	EBCI (Big Cove, Birdtown, Yellowhill, 3,200 Acre, Snowbird, Cherokee County) (0990T00100)	0.2%	88.0%	5.2%	1.5%	1.1%	24.7%	5.9%
2022	EBCI (Wolfstown, Big Y, Painttown) (0990T00200)	0.8%	86.7%	8.2%	2.5%	1.1%	25.2%	8.0%

2022	Cherokee County, NC (37039)	0.3%	9.9%	5.2%	0.3%	0.4%	19.2%	0.9%
2022	Graham County, NC (37075)	1.0%	14.6%	0.2%	1.3%	1.3%	27.9%	1.0%
2022	Haywood County, NC (37087)	0.6%	8.6%	0.1%	2.0%	2.0%	16.6%	1.3%
2022	Jackson County, NC (37099)	2.0%	20.3%	0.4%	5.1%	5.1%	16.3%	3.0%
2022	Swain County, NC (37173)	0.5%	40.5%	0.2%	23.9%	23.9%	27.9%	4.7%

Notes

- **Data Source(s):**
 - Data obtained from the CDC/ATSDR Social Vulnerability Index 2022 Database.⁸⁵
- **Definitions:**
 - **SVI Score:** Social Vulnerability Index score, indicating the community's resilience to external stresses on human health.
 - **% Without High School Diploma:** Percentage of people aged 25 and older without a high school diploma.
 - **% Uninsured:** Percentage of people without health insurance.
 - **% Unemployed:** Percentage of people who are unemployed.
 - **% Aged 65 and Older:** Percentage of the population aged 65 and older.
 - **% Aged 17 and Younger:** Percentage of the population aged 17 and younger.
 - **% with Disabilities:** Percentage of the population with disabilities.
 - **% Single-Parent Households:** Percentage of households with single parents.
 - **% Limited English Proficiency:** Percentage of people with limited ability to read, speak, write, or understand English.
 - **% Minority Population:** Percentage of the population that is a racial or ethnic minority.
 - **% Multi-Unit Housing:** Percentage of housing units that are part of multi-unit structures.
 - **% Mobile Homes:** Percentage of housing units that are mobile homes.
 - **% Crowded Housing Units:** Percentage of housing units with more than one person per room.
 - **% Households with No Vehicle:** Percentage of households without access to a vehicle.
 - **% Living in Group Quarters:** Percentage of people living in group quarters such as dormitories, prisons, or nursing homes.

⁸⁵ Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/Geospatial Research, Analysis, and Services Program. (2022). CDC/ATSDR Social Vulnerability Index 2022 Database U.S. Retrieved from https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html

- **Comparison with EBCI Data:**
 - Compared to the surrounding counties, the Eastern Cherokee Reservation shows higher percentages of individuals without a high school diploma (15.9% and 16.8%), uninsured individuals (34.5% and 39.5%), and those unemployed (5.9% and 14.9%). For the age demographics, a larger percentage of the population in EBCI is aged 17 and younger (24.0% and 25.6%), with 65 and older populations at 13.1% and 25.5%. Disabilities are higher at 16.0% and 20.2%, and single-parent households are also more prevalent (12.9% and 13.5%). The EBCI areas have a significantly higher minority population (86.7% and 88.0%) and higher percentages of households without a vehicle (24.7% and 25.2%).
- **Analysis:**
 - The data indicates that the Eastern Cherokee Reservation faces significant social vulnerabilities compared to the surrounding counties. The high percentage of uninsured individuals suggests potential barriers to healthcare access. The high unemployment rates and lower educational attainment highlight economic challenges within the community. The large percentages of young and disabled populations point to the need for comprehensive social support services. Additionally, the high percentage of minority populations and single-parent households underscores the importance of targeted interventions to address these vulnerabilities. The high percentage of households without a vehicle indicates potential transportation challenges, which can impact access to employment, healthcare, and other essential services.

Table 48: Unemployment

Year	EBCI Estimate (Unemployed)	EBCI % Unemployed	EBCI Unemployment Rate	NC % Unemployed	NC Unemployment Rate	US % Unemployed	US Unemployment Rate
2018	144	2.1%	4.2%	3.8%	6.3%	3.7%	5.9%
2019	119	1.8%	3.6%	3.4%	5.6%	3.4%	5.3%
2020	191	2.8%	5.6%	3.3%	5.4%	3.4%	5.4%
2021	261	3.9%	8.5%	3.3%	5.3%	3.5%	5.5%
2022	251	4.0%	8.7%	3.1%	5.1%	3.4%	5.3%

Notes

- **Data Source(s):**

- U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, DP03: Selected Economic Characteristics.⁸⁶
- **Definitions:**
 - **Estimate (Unemployed):** This includes only those individuals who are part of the labor force and are actively seeking employment but are not currently employed.
 - **Percent (Unemployed):** The proportion of the total population that is unemployed. It includes everyone in the community, not just those who are looking for work. For example, if there are 1,000 people living in a community and 20 of them are unemployed, the percent unemployed would be 2% ($20/1,000 * 100$).
 - **Unemployment Rate:** This focuses only on people who are part of the labor force, which means those who are either working or actively looking for work. It does not include people who are not looking for work, like students, homemakers, or retirees. For example, if the labor force consists of 500 people out of the total 1,000 population, and 20 of these 500 are unemployed, the unemployment rate would be 4% ($20/500 * 100$).
- **Comparison with Surrounding Areas:**
 - The unemployment data for the Eastern Cherokee Reservation shows higher variability due to its smaller population size, making the estimates more susceptible to fluctuations and larger margins of error. From 2018 to 2022, the EBCI community experienced an increase in both the percent unemployed and the unemployment rate, reaching 4.00% and 8.70%, respectively, in 2022. In contrast, North Carolina and the United States showed relatively stable or decreasing trends in unemployment rates during the same period. For instance, the NC unemployment rate decreased from 6.30% in 2018 to 5.10% in 2022, and the US unemployment rate decreased from 5.90% to 5.30%.
- **Analysis:**
 - The Eastern Cherokee Reservation's increasing unemployment rates indicate significant economic challenges within the community. The data suggests that despite general improvements in unemployment rates at the state and national levels, the EBCI community faces unique economic hardships that require targeted interventions. This might include enhanced job training programs, economic development initiatives, and support for small businesses to create more employment opportunities. Additionally, the higher variability in the data due to the smaller population size highlights the need for robust local economic policies to stabilize and support the community's workforce.

Table 49: Graduation and Dropout Rates

School Year	CCS Graduation Rate (%)	NC Graduation Rate (%)	US Graduation Rate (%)	CCS Dropout Rate (%)
2022-2023	83.0	86.5	N/A	4.4

⁸⁶ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, DP03: Selected Economic Characteristics. Retrieved from <https://data.census.gov/table?q=DP03>.

2021-2022	73.0	86.4	87.0	6.7
2020-2021	88.0	87.0	86.0	1.5
2019-2020	83.5	86.5	87.0	4.7
2018-2019	81.6	86.3	86.0	6.7

Notes

- **Data Source(s):**
 - Cherokee Central Schools Annual Reports⁸⁷
 - NC Department of Public Instruction⁸⁸
 - NCES Condition of Education Report⁸⁹
- **Definitions:**
 - **Graduation Rate:** The percentage of students who successfully complete their high school education within a set period, typically four years.
 - **Dropout Rate:** The percentage of students who leave school before completing their high school education within a set period, typically without transferring to another school.
- **Comparison:**
 - **Graduation Rates:**
 - Cherokee Central Schools (CCS) have shown resilience and potential, with graduation rates peaking at **87.95%** in the 2020-2021 school year, surpassing both North Carolina (NC) and United States (US) averages for that year. Despite a dip to **73.03%** in 2021-2022, the overall trend indicates that CCS can achieve high graduation rates with consistent support and resources. North Carolina's stable graduation rates around **86-87%** reflect successful educational policies, serving as a benchmark for maintaining steady high graduation rates. The US graduation rates have been stable around **86-87%**, with the AI/AN graduation rate specifically at **74%** in 2021-2022, highlighting that CCS's highest graduation rate of **87.95%** in 2020-2021 is a remarkable achievement above the national average for AI/AN students.
 - **Dropout Rates:**
 - The dropout rates for CCS have shown significant improvements, especially with a low of **1.50%** in 2020-2021. Although the dropout rate increased to **6.65%** in 2021-

⁸⁷ Cherokee Central Schools. (2018-2023). Annual Reports. Retrieved from https://www.ccs-nc.org/apps/pages/index.jsp?uREC_ID=368975&type=d&pREC_ID=1606813

⁸⁸ North Carolina Department of Public Instruction. (2018-2023). Cohort Graduation Rates. Retrieved from <https://www.dpi.nc.gov/districts-schools/testing-and-school-accountability/school-accountability-and-reporting/cohort-graduation-rates>.

⁸⁹ National Center for Education Statistics. (2018-2023). Condition of Education Report: Cohort Graduation Rates. Retrieved from <https://nces.ed.gov/programs/coe/indicator/coj>.

2022, it remains below the national dropout rate for AI/AN students, which was **9.9%** in 2022. The national dropout rate was **5.3%** in 2022, with the AI/AN dropout rate at **9.9%**. This data highlights ongoing challenges in educational equity and the need for culturally relevant and supportive educational practices to reduce dropout rates among Native American students.

- **Analysis:**
 - Compared to North Carolina and the United States, EBCI schools show higher variability in both graduation and dropout rates. The peak graduation rate of **87.95%** in 2020-2021 demonstrated a significant achievement above both state and national averages. However, the variability also underscores the challenges faced by CCS in maintaining consistent graduation rates, as evidenced by the drop to **73.03%** in 2021-2022. The relatively higher dropout rates, particularly in the 2021-2022 school year at **6.65%**, highlight the need for targeted interventions to support students and prevent them from leaving school prematurely. This analysis suggests that while CCS has the potential to achieve high academic outcomes, sustained efforts and resources are essential to address the fluctuations and ensure continuous improvement in educational attainment.

Table 50: Languages Spoken

Year	Location	Speak only English (%)	Speak a language other than English (%)	Spanish (%)	Other Indo-European languages (%)	Asian and Pacific Island languages (%)	Other languages (%)
2018	EBCI	92.2	7.8	1.8	0.5	0.7	4.8
2019	EBCI	88.7	11.3	2.3	0.7	0.7	7.6
2020	EBCI	88.1	11.9	0.6	0.0	1.7	9.6
2021	EBCI	85.2	14.8	0.9	0.3	1.1	12.5
2022	EBCI	79.8	20.2	2.4	0.6	0.8	16.4
2022	North Carolina	87.7	12.3	7.8	2.0	1.8	1.2
2022	United States	78.3	21.7	13.3	3.7	3.5	1.2

Notes

- **Data Source(s):**
 - U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table S1601: Language Spoken at Home.⁹⁰
- **Definitions:**
 - **Speak only English (%):** Percentage of the population that speaks only English at home.

⁹⁰ U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table S1601: Language Spoken at Home. Retrieved from <https://data.census.gov/cedsci/table?q=S1601>

- **Speak a language other than English (%):** Percentage of the population that speaks a language other than English at home.
- **Spanish (%):** Percentage of the population that speaks Spanish at home.
- **Other Indo-European languages (%):** Percentage of the population that speaks other Indo-European languages at home.
- **Asian and Pacific Island languages (%):** Percentage of the population that speaks Asian and Pacific Island languages at home.
- **Other languages (%):** Percentage of the population that speaks languages other than the categories specified above, which includes Native American languages such as Cherokee.
- **Comparison:**
 - The data shows a notable increase in linguistic diversity within the EBCI community from 2018 to 2022. While the percentage of English-only speakers in EBCI decreased from 92.2% in 2018 to 79.8% in 2022, North Carolina's percentage of English-only speakers remained relatively stable at 87.7% in 2022, and the United States had a similar percentage to EBCI at 78.3%. The increase in non-English speakers in EBCI from 7.8% to 20.2% is significantly higher compared to North Carolina's 12.3% and is close to the United States' 21.7%.
- **Analysis:**
 - The rising linguistic diversity in EBCI highlights the community's growing multiculturalism and the revitalization of the Cherokee language, as evidenced by the increase in the "Other languages" category from 4.8% to 16.4% between 2018 and 2022. This trend suggests a positive movement towards preserving cultural heritage. The percentage of Spanish speakers in EBCI fluctuated slightly, indicating some variability but remaining relatively low compared to North Carolina and the United States. The presence of other Indo-European and Asian/Pacific Island languages in EBCI is minimal but shows slight growth. This data underscores the importance of linguistic and cultural initiatives within the community to support and enhance language diversity.
- **Additional Information:**
 - The data reflects the efforts of the EBCI community to maintain and promote the Cherokee language and cultural identity. The significant increase in "Other languages" speakers likely includes a large number of Cherokee speakers, showcasing the impact of local language preservation programs.

Table 51: Households Without Internet

Year	Category	EBCI %	NC %	US %
2018	Without an Internet subscription	53.6%	21.3%	19.1%
	Without an Internet subscription (Less than \$20,000)	71.3%	48.3%	45.3%
	Without an Internet subscription (\$20,000 to \$74,999)	52.6%	22.3%	21.9%
	Without an Internet subscription (\$75,000 or more)	34.6%	5.9%	6.0%
2019	Without an Internet subscription	42.3%	18.9%	17.0%
	Without an Internet subscription (Less than \$20,000)	54.0%	44.8%	41.9%
	Without an Internet subscription (\$20,000 to \$74,999)	44.6%	20.1%	19.8%

	Without an Internet subscription (\$75,000 or more)	26.2%	5.4%	5.4%
2020	Without an Internet subscription	35.4%	16.3%	14.5%
	Without an Internet subscription (Less than \$20,000)	50.8%	40.2%	37.4%
	Without an Internet subscription (\$20,000 to \$74,999)	38.2%	17.4%	17.0%
	Without an Internet subscription (\$75,000 or more)	14.6%	4.9%	4.7%
2021	Without an Internet subscription	30.7%	14.4%	12.8%
	Without an Internet subscription (Less than \$20,000)	43.5%	36.7%	33.9%
	Without an Internet subscription (\$20,000 to \$74,999)	31.2%	16.0%	15.6%
	Without an Internet subscription (\$75,000 or more)	13.3%	4.5%	4.3%
2022	Without an Internet subscription	33.1%	12.9%	11.5%
	Without an Internet subscription (Less than \$20,000)	47.9%	33.9%	31.0%
	Without an Internet subscription (\$20,000 to \$74,999)	32.8%	15.1%	15.0%
	Without an Internet subscription (\$75,000 or more)	18.9%	4.5%	4.1%

Notes

- **Data Source(s):**

- U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table B28002: Types of Internet Subscriptions by Selected Characteristics.⁹¹

- **Definitions:**

- **Without an Internet subscription:** The percentage of households that do not have a subscription to any type of internet service, including broadband or dial-up.
- **Income Categories:**
 - **Less than \$20,000:** Households with an annual income below \$20,000.
 - **\$20,000 to \$74,999:** Households with an annual income between \$20,000 and \$74,999.
 - **\$75,000 or more:** Households with an annual income of \$75,000 or more.

- **Comparison:**

- The Eastern Band of Cherokee Indians (EBCI) consistently shows a higher percentage of households without internet access compared to the national and state averages. For example, in 2022, 33.1% of EBCI households lacked internet subscriptions, whereas this was only 12.9% in North Carolina and 11.5% in the United States. The disparity is even more pronounced among lower-income households, with 47.9% of EBCI households earning less than \$20,000 without internet, compared to 33.9% in North Carolina and 31.0% nationwide. This trend highlights a significant digital divide within the EBCI community, affecting its lower-income households the most.

- **Analysis:**

- The digital divide within the EBCI community can exacerbate existing health and social inequities. Internet access is essential for accessing healthcare information, telehealth services, educational resources, and economic opportunities. The higher percentage of

⁹¹ U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table B28002: Internet Subscription Data. Retrieved from <https://data.census.gov/cedsci/table?q=B28002>

EBCI households without internet, especially among lower-income groups, underscores the need for targeted interventions to improve internet access. Addressing this divide is crucial for enhancing health equity, educational outcomes, and overall quality of life within the community.

Table 52: Households with No Vehicles

Year	Geography	No Vehicle Available (%)	1 Vehicle Available (%)	2 Vehicles Available (%)	3+ Vehicles Available (%)
2018	EBCI	11.6	30.5	38.7	19.2
2019	EBCI	11.3	29.5	39.7	19.5
2020	EBCI	10.0	27.1	38.5	24.4
2021	EBCI	11.7	30.6	34.8	22.8
2022	EBCI	14.3	29.5	33.5	22.7
2022	North Carolina	3.1	25.5	42.4	29.0
2022	United States	8.3	32.6	37.0	22.1

Notes

- **Data Source(s):**
 - U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table S2504: Vehicles Available.⁹²
- **Definitions:**
 - **No Vehicle Available:** Households without any vehicles.
 - **1 Vehicle Available:** Households with one vehicle.
 - **2 Vehicles Available:** Households with two vehicles.
 - **3+ Vehicles Available:** Households with three or more vehicles.
- **Comparison:**
 - **Higher Percentage of Households Without a Vehicle:** The EBCI shows a significantly higher percentage of households without a vehicle compared to North Carolina and the United States. In 2022, 14.3% of EBCI households had no vehicle available, compared to 3.1% in North Carolina and 8.3% in the United States. This indicates that transportation access is a growing concern for the EBCI community, which can impact access to healthcare, employment, and essential services. Additionally, the percentage of EBCI households without a vehicle has increased from 10.0% in 2020 to 14.3% in 2022, highlighting a concerning trend.
- **Analysis:**
 - **Fewer Households with Two Vehicles:** The percentage of EBCI households with two vehicles has decreased from 38.7% in 2018 to 33.5% in 2022. This decline contrasts with

⁹² U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S2504: Vehicles Available. Retrieved from <https://data.census.gov/table?q=S250>

the relatively stable trends observed in North Carolina and the United States, where a significant portion of households continues to have two vehicles. This reduction in vehicle availability may indicate economic challenges or changing transportation needs within the EBCI community. Additionally, while there was an initial increase in households with three or more vehicles from 2018 to 2020, this trend has reversed slightly by 2022. This variability in vehicle availability highlights the need for targeted interventions to improve transportation access and affordability for EBCI households.

Table 53: Food Environment Index

Metric	Jackson	Swain	Haywood	Graham	Cherokee	North Carolina	United States
Food Environment Index	7.7	7.5	7.8	7.6	7.4	6.8	7.7
% Rural	66.7%	100%	46.9%	100%	100%	33.3%	20%

Notes

- **Data Source(s):**
 - County Health Rankings (2024). Food Environment Index.⁹³
- **Definitions:**
 - **Food Environment Index:** Ranging from 0 (worst) to 10 (best), this index measures the quality of the food environment in a community. It accounts for factors such as the proximity of residents to grocery stores and supermarkets and income-related barriers to accessing healthy food. Higher scores indicate better food environments, which correlate with lower rates of obesity, better overall health, and reduced healthcare costs.
 - **% Rural:** The percentage of the population living in rural areas within a county.
- **Comparison:**
 - **Food Environment Index:** Haywood County has the best food environment among the compared counties with a score of 7.8, indicating superior access to healthy food options and lower food insecurity. Cherokee County, with the lowest score of 7.4, faces more challenges in food access and quality. The state average for North Carolina is 6.8, which is lower than all the compared counties, suggesting that these counties have better food environments relative to the state overall. The national average of 7.7 aligns closely with Jackson County, indicating similar food access and quality at the national level.
- **Analysis:**
 - Counties with lower Food Environment Index scores, such as Cherokee County, are likely to experience higher food insecurity, which can lead to poor health outcomes. This highlights the need for targeted interventions to improve access to nutritious foods and reduce health disparities. For rural areas like Graham, Cherokee, and Swain counties,

⁹³ County Health Rankings (2024). Food Environment Index. Retrieved from <https://www.countyhealthrankings.org/health-data/health-factors/health-behaviors/diet-and-exercise/food-environment-index?year=2024>.

transportation barriers and the distance to supermarkets further exacerbate challenges in accessing healthy food options.

Table 54: Food Insecurity

Year	Category	EBCI (%)	NC (%)	US (%)
2018	Households on SNAP	9.7	13.2	12.2
	Households on SNAP with Children Under 18	31.0	51.3	31.4
	Households on SNAP Below Poverty Level	21.0	48.4	13.4
	Households on SNAP At or Above Poverty Level	79.0	51.6	86.6
	Households on SNAP with No Workers in Past 12 Months	22.4	21.4	14.7
2019	Households on SNAP	7.5	12.6	11.7
	Households on SNAP with Children Under 18	28.9	50.1	31.0
	Households on SNAP Below Poverty Level	18.9	47.3	12.9
	Households on SNAP At or Above Poverty Level	81.1	52.7	87.1
	Households on SNAP with No Workers in Past 12 Months	22.8	21.1	14.7
2020	Households on SNAP	6.2	12.0	11.4
	Households on SNAP with Children Under 18	33.9	49.2	30.7
	Households on SNAP Below Poverty Level	20.3	45.9	12.5
	Households on SNAP At or Above Poverty Level	79.7	54.1	87.5
	Households on SNAP with No Workers in Past 12 Months	26.5	20.4	14.6
2021	Households on SNAP	6.3	12.1	11.4
	Households on SNAP with Children Under 18	32.1	48.6	30.6
	Households on SNAP Below Poverty Level	24.5	44.7	12.4
	Households on SNAP At or Above Poverty Level	75.5	55.3	87.6
	Households on SNAP with No Workers in Past 12 Months	32.3	20.4	14.6
2022	Households on SNAP	6.9	12.3	11.5
	Households on SNAP with Children Under 18	36.4	47.9	30.2
	Households on SNAP Below Poverty Level	23.6	43.7	12.4
	Households on SNAP At or Above Poverty Level	76.4	56.3	87.6
	Households on SNAP with No Workers in Past 12 Months	28.0	20.1	14.7

Notes

- **Data Source(s):**
 - U.S. Census Bureau (2018-2022). American Community Survey 5-Year Estimates, Table S2201: Food Stamps/Supplemental Nutrition Assistance Program (SNAP).⁹⁴
- **Definitions:**
 - **Households on SNAP:** The percentage of households receiving food assistance through the Supplemental Nutrition Assistance Program (SNAP).

⁹⁴ U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, S2201: Food Stamps/Supplemental Nutrition Assistance Program (SNAP). Retrieved from <https://data.census.gov/table?q=S2201>

- **Households on SNAP with Children Under 18:** The percentage of SNAP households that include children under the age of 18.
- **Households on SNAP Below Poverty Level:** The percentage of SNAP households living below the poverty line.
- **Households on SNAP At or Above Poverty Level:** The percentage of SNAP households living at or above the poverty line.
- **Households on SNAP with No Workers in Past 12 Months:** The percentage of SNAP households with no employed members in the past year.
- **Comparison:**
 - The Eastern Band of Cherokee Indians (EBCI) consistently shows a lower percentage of households on SNAP compared to North Carolina and the national average. In 2022, 6.9% of EBCI households were on SNAP, compared to 12.3% in North Carolina and 11.5% nationally. The percentage of EBCI households on SNAP with children under 18 has shown an increasing trend, rising from 31.0% in 2018 to 36.4% in 2022. However, EBCI households on SNAP with no workers in the past 12 months have a higher participation rate, indicating economic vulnerabilities specific to this population.
- **Analysis:**
 - The fluctuations in SNAP participation rates among EBCI households reflect unique socio-economic challenges within the reservation. While overall SNAP participation is lower in EBCI compared to state and national levels, the increasing percentage of households with children on SNAP suggests growing economic pressures on families. Additionally, the high SNAP participation rate among households with no workers in the past 12 months highlights significant economic vulnerabilities. Addressing these issues requires targeted interventions to improve employment opportunities and economic stability within the EBCI community. The data underscores the need for comprehensive support systems to enhance food security and reduce economic disparities.

Community Safety Measures

Table 55: Homicide Rates

Year	EBCI Homicides	EBCI Homicide Rate	NC Homicide Rate	US Homicide Rate
2013	2	21.36	4.8	4.6
2014	0	0	5.11	4.51
2015	1	10.21	5.25	5.02
2016	0	0	6.82	5.47
2017	0	0	6.19	5.39
2018	2	21.76	5.65	5.07
2019	0	0	6.36	5.13
2020	2	23.00	8.2	6.61
2021	0	0	9.6	6.83
2022	2	25.22	8.23	6.39
10 Year Average	0.9	10.95	6.35	5.58

Notes

- **Data Sources:**
 - Data from Federal Bureau of Investigation’s Crime Data Explorer 2013-2022.⁹⁵
 - U.S. Census Bureau (2013-2022). American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates.⁹⁶
- **Definitions:**
 - **Homicide Rate:** The homicide rate is expressed per 100,000 people. This rate is calculated by dividing the number of homicides by the population and then multiplying by 100,000.
 - **Homicide:** Homicide refers to the unlawful killing of one person by another, including murder and non-negligent manslaughter.
- **Comparisons:**
 - **EBCI Homicide Rate:** The EBCI exhibits highly fluctuating homicide rates due to its small population size. Rates vary drastically from 0 in several years to peaks of 25.22 in 2022 and 23.00 in 2020. These fluctuations highlight the impact of even a small number of incidents on the overall rate, given the smaller population base.
 - **NC and US Homicide Rates:** Both North Carolina and the U.S. show a general upward trend in homicide rates over the ten-year period. North Carolina's rates increase from 4.8 in 2013 to 8.23 in 2022, while the U.S. rates rise from 4.6 in 2013 to 6.39 in 2022.
- **Analysis:**
 - The significant variations in EBCI's homicide rate are expected due to its small population. This factor makes the rates highly sensitive to changes, where a few incidents can substantially alter the rate, contrasting with the more stable trends seen in larger populations like those of the U.S. and NC. Notably, the data reveals that the homicide rate for EBCI is nearly double that of the U.S. average over a ten-year period. This stark difference highlights a significant and troubling disparity. High rates of violence within the EBCI community could be attributed to systemic issues such as socioeconomic conditions, and historical trauma.

Table 56: Suicide

Region	Deaths (2018-2022)	Crude Rate per 100,000 (2018-2022)
Swain County, NC	21	29.7
Jackson County, NC	38	17.5
Haywood County, NC	65	20.8
Graham County, NC	N/A	N/A
Cherokee County, NC	43	29.7
5-County Area (EBCI PRCD)	167	22.4
North Carolina (State)	7,351	13.9

⁹⁵ Federal Bureau of Investigation. (2013-2022). Crime Data Explorer. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/query>

⁹⁶ U.S. Census Bureau. American Community Survey 5-Year Estimates, Table DP05. Retrieved from <https://data.census.gov>

United States	239,296	14.5
---------------	---------	------

Notes

- **Data Sources:**
 - Data from Centers for Disease Control and Prevention, CDC WONDER Online Database 2018-2022.⁹⁷
- **Definition and Rate Explanation:**
 - **Crude Rate per 100,000:** This rate is calculated by dividing the number of deaths by the population and multiplying by 100,000. It provides a standardized way to compare the prevalence of deaths across different populations.
 - **EBCI PRCDA:** The Purchased/Referred Care Delivery Area (PRCDA) is defined by the Indian Health Service (IHS) and refers to specific geographic areas in which tribal members are eligible for purchased/referred care services. For the Eastern Band of Cherokee Indians (EBCI), this includes Swain, Jackson, Haywood, Graham, and Cherokee Counties in North Carolina.
- **Comparisons:**
 - **EBCI PRCDA Crude Rate:** The EBCI PRCDA shows a high crude rate of 22.4 per 100,000, which is significantly higher than the state and national averages.
 - **NC and US Crude Rates:** North Carolina's state-level rate is 13.9 per 100,000, while the national rate is 14.5 per 100,000. Both are lower than most of the individual counties listed and the EBCI PRCDA.
- **Analysis:**
 - The significant variations in the crude rate for deaths by intentional self-harm in the EBCI PRCDA are notable. The small population of these counties makes the rates highly sensitive to changes, where a few incidents can substantially alter the rate, in contrast to the more stable trends seen in larger populations like those of the U.S. and NC. The data reveals that the crude rate for the EBCI PRCDA is higher than the U.S. average over the specified period, highlighting a critical area for targeted mental health interventions and support within the EBCI community.

Table 57: Firearm Deaths

Category	5-County Area (EBCI PRCDA) (2018-2022)	NC AI/AN (2018-2022)	NC (2018-2022)	AI/AN US (2018-2022)	US (2018-2022)
Deaths	130	153	8,182	2,384	221,703
Crude Rate per 100,000	17.4	18.4	15.5	11.2	13.4

Notes

- **Data Sources:**

⁹⁷ Centers for Disease Control and Prevention. (2018-2022). CDC Wonder. Retrieved from <https://wonder.cdc.gov>

- Data from Centers for Disease Control and Prevention, CDC WONDER Online Database 2018-2022.⁹⁸
- **Definitions:**
 - **Firearm Deaths:** Includes all deaths caused by firearms, encompassing terrorism, intentional self-harm, assault, legal intervention, and undetermined intent.
 - **Crude Rate:** The number of deaths per 100,000 people, calculated by dividing the number of deaths by the population and then multiplying by 100,000.
 - **EBCI PRCDA:** The Purchased/Referred Care Delivery Area (PRCDA) is defined by the Indian Health Service (IHS) and refers to specific geographic areas in which tribal members are eligible for purchased/referred care services. For the Eastern Band of Cherokee Indians (EBCI), this includes Swain, Jackson, Haywood, Graham, and Cherokee Counties in North Carolina.
- **Comparisons:**
 - The crude rate of firearm deaths in the EBCI PRCDA (17.4 per 100,000) is higher than the national average (13.4 per 100,000) but lower than the rate for NC AI/AN (18.4 per 100,000). The rate for North Carolina overall is 15.5 per 100,000, which is lower than both the EBCI Counties and the NC AI/AN population. These comparisons indicate that while the EBCI PRCDA is experiencing a higher rate of firearm deaths compared to the national average, it is somewhat lower than the rate observed in the broader NC AI/AN population.
- **Analysis:**
 - The higher crude rates of firearm deaths in the EBCI PRCDA and among NC AI/AN populations highlight significant health disparities. These disparities can be attributed to systemic issues such as limited access to healthcare, socioeconomic challenges, and historical trauma. Addressing these root causes is crucial for reducing firearm-related deaths and improving overall health outcomes within these communities. This data emphasizes the need for targeted interventions, community support, and policies aimed at reducing firearm violence and its impacts on vulnerable populations.

Table 58: Transportation Deaths

Category	AI/AN EBCI PRCDA (2018-2022)	EBCI PRCDA All Races (2018-2022)	NC AI/AN (2018-2022)	NC (2018-2022)	AI/AN US (2018-2022)	US (2018-2022)
Deaths	11	135	248	9,038	4,124	223,863
Crude Rate per 100,000	22.24	18.11	29.8	17.1	19.3	13.6

Notes

- **Data Source:**
 - Data from Centers for Disease Control and Prevention, CDC WONDER Online Database 2018-2022.⁹⁹

⁹⁸ Ibid

⁹⁹ Ibid

- **Definitions:**
 - **Transportation Deaths:** This includes all deaths resulting from transport accidents, as classified under ICD-10 codes V01-V99.
 - **Crude Rate:** The number of deaths per 100,000 people, calculated by dividing the number of deaths by the population and then multiplying by 100,000.
 - **EBCI PRCDA:** The Purchased/Referred Care Delivery Area (PRCDA) is defined by the Indian Health Service (IHS) and refers to specific geographic areas in which tribal members are eligible for purchased/referred care services. For the Eastern Band of Cherokee Indians (EBCI), this includes Swain, Jackson, Haywood, Graham, and Cherokee Counties in North Carolina.
- **Comparisons:**
 - The crude rate of transportation deaths in the AI/AN EBCI PRCDA is 22.24 per 100,000, higher than the overall rate for the EBCI PRCDA All Races (18.11 per 100,000) but lower than the NC AI/AN rate (29.8 per 100,000). The rate for North Carolina overall is 17.1 per 100,000, while the AI/AN US rate is 19.3 per 100,000 and the national rate is 13.6 per 100,000. These figures indicate that transportation-related deaths are a significant concern within the EBCI PRCDA, particularly among AI/AN populations.
- **Analysis:**
 - The higher crude rates of traffic fatalities in the AI/AN EBCI PRCDA and among NC AI/AN populations highlight significant health disparities. These disparities may be influenced by factors such as older vehicle age, inadequate road infrastructure, and challenging mountainous terrain and weather conditions. Addressing these factors is crucial for reducing traffic-related deaths and improving overall safety and health outcomes within these communities. The data underscores the need for targeted interventions and policies to enhance transportation safety, particularly for vulnerable populations in rural and mountainous areas.

Table 59: Juvenile Arrest Data

Category	Cherokee Tribal 2022	North Carolina 2022	United States 2022	Cherokee Tribal 2021	North Carolina 2021	United States 2021
Total Arrests (All Ages)	973	233,950	6,500,154	526	268,474	5,418,669
Total Under 20	18	19,156	675,704	15	17,791	538,644
Percent Under 20	1.80%	8.19%	10.39%	2.90%	6.63%	9.94%
Total 20 and Older	955	214,794	5,824,450	511	250,683	4,880,025
Percent 20 and Older	98.20%	91.81%	89.61%	97.10%	93.37%	90.06%
Juvenile Violent Crime Offender						

Ages 10-19 Count	10	4,544	134,576	11	4,391	120,664
Percent of Offenses	4.0%	14.5%	15.3%	7.5%	13.2%	14.3%
Juvenile Property Crime						
Ages 10-19 Count	9	12,435	262,165	1	11,488	222,011
Percent of Offenses	3.8%	10.4%	9.5%	0.3%	9.2%	8.5%
Other Larceny						
Ages 10-19 Count	0	2,817	58,756	6	2,794	52,307
Percent of Offenses	0.0%	8.0%	8.4%	3.7%	7.6%	7.8%

Notes

- **Data Sources:**
 - Data from Federal Bureau of Investigation’s Crime Data Explorer 2021-2022.¹⁰⁰
- **Definitions:**
 - **Juvenile Violent Crime Offender:** Individuals aged 10-19 involved in violent crimes.
 - **Juvenile Property Crime:** Individuals aged 10-19 involved in property crimes.
 - **Other Larceny:** Theft crimes committed by individuals aged 10-19.
 - **Total Arrests:** The total number of arrests made.
 - **Percent Under 20:** The percentage of total arrests involving individuals under 20 years old.
 - **Percent 20 and Older:** The percentage of total arrests involving individuals aged 20 and older.
- **Comparisons:**
 - **Cherokee Tribal vs. North Carolina and United States:** The data indicates a lower percentage of juvenile arrests in the Cherokee Tribal area compared to North Carolina and the United States. In 2022, only 1.80% of total arrests in the Cherokee Tribal area involved individuals under 20, whereas this percentage was 8.19% in North Carolina and 10.39% in the United States. In 2021, the percentage of juvenile arrests was 2.90% in the Cherokee Tribal area, 6.63% in North Carolina, and 9.94% in the United States. This comparison suggests that the Cherokee Tribal area experiences a significantly lower rate of juvenile delinquency compared to state and national levels.
- **Analysis:**
 - **Juvenile Crime Rates:** Despite the influence of socioeconomic factors and challenges, such as poverty and limited access to education and resources, the Eastern Band of Cherokee Indians (EBCI) juvenile crime rate is notably lower compared to state and national levels.

¹⁰⁰ Federal Bureau of Investigation. (2024, May 13). Crime Data Explorer. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/arrest>

For example, in 2022, the Cherokee Tribal area had only 1.80% of arrests involving juveniles under 20, while North Carolina had 8.19% and the United States had 10.39%. This positive outcome suggests that effective community measures and support systems are in place within the EBCI, which help mitigate juvenile delinquency. The data highlights the importance of continued investment in youth programs and support services to sustain and further improve these outcomes.

Table 60: Youth Victim Rates

Year	Age Group	Cherokee Tribal Rate (per 100,000)	NC Rate (per 100,000)	US Rate (per 100,000)
2021	Total (19 and under)	590.46	370.95	632.76
2022	Total (19 and under)	1161.88	364.91	648.59
2021	0-9	492.13	215.82	263.16
2021	10-19	664.95	509.04	902.82
2022	0-9	1220.87	189.69	268.16
2022	10-19	1121.62	520.57	764.82

Notes

- **Data Sources:**
 - Data from U.S. Census Bureau. (2021-2022). American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates.¹⁰¹
 - Data from Federal Bureau of Investigation’s Crime Data Explorer 2021-2022.¹⁰²
- **Definition and Rate Calculation:**
 - **Rate per 100,000:** The rate per 100,000 is calculated using the formula: (Number of Victims / Population) × 100,000.
 - **Adjusted Population:** The adjusted population columns account for the coverage of the National Incident-Based Reporting System (NIBRS). For North Carolina, NIBRS covers 97% of the population. For the United States, NIBRS covered 70% of the population in 2021 and 76% in 2022. Adjusting the population figures ensures that the victimization rates accurately reflect the population covered by NIBRS data.
 - **Youth Victim:** A youth victim is defined as an individual who is 19 years old or younger and has experienced a crime or harmful incident.
- **Comparisons:**
 - **Cherokee Tribal vs. NC and US:** In both 2021 and 2022, the victimization rates for the Cherokee Tribal area for individuals 19 and under are notably higher than those for North Carolina but comparable to or lower than the national rates. Specifically, in 2022, the

¹⁰¹ U.S. Census Bureau. American Community Survey 5-Year Estimates, Table DP05. Retrieved from <https://data.census.gov>

¹⁰² Federal Bureau of Investigation. (2024, June 12). Crime Data Explorer All Violent Crime Data. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

overall rate for the Cherokee Tribal area was 1161.88 per 100,000, significantly higher than North Carolina's 364.91 per 100,000 and somewhat close to the US rate of 648.59 per 100,000. This suggests that while the Cherokee Tribal rates are higher than the state rates, they align more closely with the national context.

- **Age Group:** The rates for the 0-9 and 10-19 age groups in the Cherokee Tribal area show significant increases from 2021 to 2022. For example, the rate for the 0-9 age group rose from 492.13 per 100,000 in 2021 to 1220.87 per 100,000 in 2022. Similarly, for the 10-19 age group, the rate increased from 664.95 per 100,000 in 2021 to 1121.62 per 100,000 in 2022. These increases suggest a worsening trend in youth victimization within the Cherokee Tribal area, contrasting with the more stable rates observed in North Carolina and the United States.
- **Analysis:**
 - **Rising Youth Victimization Rates:** The data reveals a concerning increase in victimization rates among youth in the Cherokee Tribal area. This increase highlights the need for enhanced protective measures, community safety programs, and support services for young people. Addressing these issues is crucial for improving safety and well-being within the community. The rising rates may be indicative of underlying social, economic, and systemic challenges that need to be addressed through targeted interventions and policies aimed at reducing youth victimization and supporting at-risk youth. Enhanced community engagement, increased resources for youth programs, and improved reporting and response mechanisms are essential steps toward mitigating this upward trend and ensuring a safer environment for the youth in the Cherokee Tribal area.

Table 61: Crime Rates

Year	Reported Crimes (EBCI)	Rate per 100,000 (EBCI)	Rate per 100,000 (NC)	Rate per 100,000 (US)
2016	50	520.04	371.8	397.5
2017	89	933.55	370.4	394.9
2018	98	1066.35	356.2	383.4
2019	46	518.11	378.7	380.8
2020	52	590.02	419.3	398.5
2021	131	1545.74	419.5	387.0
2022	245	3088.4	405.1	380.7

Notes

- **Data Sources:**
 - U.S. Census Bureau. (2016-2022). American Community Survey 5-Year Estimates, Table DP05: Demographic and Housing Estimates.¹⁰³

¹⁰³ U.S. Census Bureau. American Community Survey 5-Year Estimates, Table DP05. Retrieved from <https://data.census.gov>

- Data from Federal Bureau of Investigation’s Crime Data Explorer 2016-2022.¹⁰⁴
- **Definition and Rate Calculation:**
 - **Rate per 100,000:** The rate per 100,000 is calculated using the formula: (Reported Crimes / Population) × 100,000.
- **Comparisons:**
 - **EBCI vs. NC and US:** The crime rates for the EBCI community have shown significant fluctuations over the years, with a notable peak in 2022. These rates are often higher compared to the state (NC) and national (US) rates, indicating unique challenges within the EBCI community. In 2022, the EBCI's crime rate was 3088.4 per 100,000, compared to North Carolina's 405.1 per 100,000 and the US's 380.7 per 100,000. This suggests that the EBCI community experiences a significantly higher incidence of reported crimes compared to state and national averages.
- **Analysis:**
 - **High Crime Rates:** The significant increase in reported crimes for the EBCI starting in 2021 could be attributed to several factors, including improved reporting mechanisms, increased law enforcement activity, changes in local policies, enhanced community awareness, demographic shifts, targeted crime prevention efforts, or even the effects of the COVID-19 pandemic. Additionally, it is worth noting that the EBCI area attracts many tourists, whose crimes are included in the statistics, but they are not counted in the population figures. However, when examining data from as far back as 2016, EBCI's crime rates have consistently been higher than those of North Carolina and the United States. This indicates persistent issues with crime within the EBCI.
- **Additional Information:**
 - **Tourism Impact:** The inclusion of tourist-related crimes may inflate the crime rates for the EBCI, as tourists are not counted in the resident population but their crimes are included in the reported data. This factor should be considered when interpreting the crime rates for the EBCI community.

Table 62: Domestic Violence

Year	EBCI: # of Patients Diagnosed with Intimate Partner Violence / Domestic Violence	EBCI: % of Patients Diagnosed with Intimate Partner Violence / Domestic Violence	USET: % of Patients Diagnosed with Intimate Partner Violence / Domestic Violence
2018	18	0.8%	0.9%
2019	24	1.1%	0.9%
2020	21	1.0%	0.8%
2021	23	1.0%	0.8%
2022	30	1.4%	1.0%
2023	35	1.5%	0.7%

¹⁰⁴ Federal Bureau of Investigation. (2024, June 12). Crime Data Explorer All Violent Crime Data. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

Notes

- **Data Source:**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Definitions:**
 - **Intimate Partner Violence / Domestic Violence (IPV/DV):** Refers to physical, sexual, or psychological harm by a current or former partner or spouse.
 - **Patients Diagnosed with Intimate Partner Violence / Domestic Violence (IPV/DV):** The number of patients who received a diagnosis related to intimate partner violence / domestic violence.
 - **Percentage of Patients Diagnosed with Intimate Partner Violence / Domestic Violence (IPV/DV):** The proportion of screened patients who received a diagnosis related to intimate partner violence / domestic violence.
- **Comparisons:**
 - The number of patients diagnosed with IPV/DV within the EBCI has increased from 18 in 2018 to 35 in 2023, reflecting a rise in the percentage of patients diagnosed with IPV/DV-related issues from 0.8% to 1.5%. In comparison, the percentage of patients diagnosed with IPV/DV in the broader USET region shows slight fluctuations but generally remains around 0.8% to 1.0%, with a noticeable drop to 0.7% in 2023. This higher percentage of patients diagnosed with IPV/DV within the EBCI compared to the USET aggregate data suggests a more significant challenge in addressing IPV/DV-related issues within the EBCI community.
- **Analysis:**
 - The persistent and rising rates of IPV/DV diagnoses in the EBCI community indicate ongoing health inequities. Contributing factors may include socioeconomic challenges, cultural barriers to reporting, and limited access to support services. This disparity underscores the need for continued focus on IPV/DV and intervention efforts tailored to the unique needs of the EBCI population. Addressing these disparities through targeted programs and resources is essential for improving the health and well-being of individuals affected by IPV/DV within the EBCI.

Health Inequities

Health inequities refer to systematic disparities in health outcomes and access to healthcare services across different population groups, influenced by social, economic, and environmental factors. This section provides an in-depth examination of health inequities within the Eastern Band of Cherokee Indians (EBCI) by analyzing a wide range of health indicators and comparing them with North Carolina (NC) and United States (US) averages.

Overview of Health Inequities

This section provides a detailed analysis of health inequities within the Eastern Band of Cherokee Indians (EBCI) community. The analysis focuses on various health indicators including length of life, quality of life, chronic diseases, behavioral health, and access to healthcare. The goal is to identify specific areas where the EBCI community faces disparities and propose strategies to address these inequities.

Length of Life

Table 63: Length of Life

Measure	Value	Description	Data Origin
Number of Premature Deaths	583	Deaths among residents under age 75 (2015-2021)	EBCI
Age-Adjusted Mortality Rate for Premature Deaths	477.169	Rate per 100,000 population (2015-2021)	EBCI
Number of Child Deaths	7	Deaths among residents under age 18 (2015-2021)	EBCI
Age-Adjusted Mortality Rate for Child Deaths	6.5752	Rate per 100,000 population (2015-2021)	EBCI
Life Expectancy for AI/AN	65.2 years	Life expectancy based on national AI/AN data as of 2021	National
Years of Potential Life Lost (YPLL)	11,142	YPLL before age 65 per 100,000 population for AI/AN in NC (2022)	CDC WISQARS

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
 - Data from Centers for Disease Control and Prevention, CDC WONDER Online Database 2018-2022.¹⁰⁵
 - Data from Centers for Disease Control and Prevention, WISQARS Leading Causes of Death Visualization Tool 2018-2022.¹⁰⁶

Health Inequities Identified:

- **Premature Deaths:** The high number of premature deaths (583) and the age-adjusted mortality rate for premature deaths (477.169 per 100,000) indicate significant health disparities in the EBCI community, likely due to a combination of chronic diseases, socioeconomic factors, and limited access to healthcare.
- **Child Deaths:** The number of child deaths (7) and the age-adjusted mortality rate for child deaths (6.5752 per 100,000) highlight health inequities affecting the youngest members of the community, possibly linked to inadequate maternal and child health services.

¹⁰⁵ Centers for Disease Control and Prevention. (2018-2022). CDC Wonder. Retrieved from <https://wonder.cdc.gov>

¹⁰⁶ Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>

- **Life Expectancy:** The life expectancy for AI/AN populations (65.2 years) is significantly lower than the national average, reflecting broader health inequities faced by Indigenous populations.
- **Years of Potential Life Lost (YPLL):** The high YPLL (11,142 per 100,000) underscores the burden of premature mortality in the EBCI community, indicating the need for targeted interventions to address preventable causes of death.

Quality of Life

Table 64: Type 2 Diabetes Prevalence

Condition	Population	Number (2023)	Percentage (2023)	Description	Data Origin
Type 2 Diabetes	Cherokee	2,915	21.64%	Significantly higher prevalence compared to USET average	EBCI, USET

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Health Inequities Identified:**
 - **Type 2 Diabetes Prevalence:** The prevalence of Type 2 Diabetes among the Cherokee population is **21.64%**, compared to the USET average of **19.95%**. This disparity highlights substantial inequities in metabolic health within the EBCI community.

Table 65: Gestational Diabetes Prevalence

Condition	Population	Number (2023)	Percentage (2023)	Description	Data Origin
Gestational Diabetes	Cherokee	146	19.92%	Markedly higher prevalence compared to USET average	EBCI, USET

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Health Inequities Identified:**
 - **Gestational Diabetes Prevalence:** The prevalence of gestational diabetes in the Cherokee population is **19.92%**, compared to the USET average of **12.53%**. This disparity highlights inequities in maternal health within the EBCI community.

Leading Causes of Death

Table 65: Leading Causes of Death (2015-2021)

Cause	Number	Mortality Rate per 100,000	Comparison (NC/US)
Accidental Poisoning	66	56.78	NC: 45.1

Diabetes Mellitus	58	50.56	US: 30.5
-------------------	----	-------	----------

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.

Health Inequities Identified:

- **Accidental Poisoning:** The mortality rate for accidental poisoning (56.78 per 100,000) is higher than the North Carolina average, indicating a significant issue with substance use and accidental overdoses within the EBCI community.
- **Diabetes Mellitus:** The high mortality rate for diabetes mellitus (50.56 per 100,000) compared to the US average reflects the high prevalence and poor management of diabetes within the EBCI population.

Health Factors

Table 66: Overweight and Obesity Percentages (2023)

Age Group	Average BMI	Overweight %	Obese %	Comparison (US)
18-29	32.2	22.8%	54.2%	US: 36.5% (Obese)
30-39	33.3	22.3%	61.0%	US: 42.4% (Obese)

Notes

- **Data Source(s):**
 - EBCI data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
 - National data is from the 2017- March 2020 CDC National Health and Nutrition Examination Survey.¹⁰⁷

Health Inequities Identified:

- **Overweight and Obesity:** The significantly higher rates of obesity among the 18-29 and 30-39 age groups compared to the US averages contribute to increased risks for cardiovascular diseases, diabetes, and other chronic conditions within the EBCI community.

Table 67: Physical Inactivity (2023)

Weekly Aerobic Physical Activity Minutes	Percentage	Comparison (US)
None/Little (< 30 min)	25.4%	US: 23.4%

Notes

- **Data Source(s):**
 - The data is derived from the 2023 EBCI Tribal Health Survey, filtered to include only responses from enrolled EBCI members, totaling 857 individuals.

Health Inequities Identified:

¹⁰⁷ Centers for Disease Control and Prevention (CDC). (n.d.). National Health and Nutrition Examination Survey (NHANES). Retrieved from <https://www.cdc.gov/nchs/nhanes/index.htm>

- **Physical Inactivity:** The higher percentage of the EBCI population (25.4%) engaging in less than 30 minutes of physical activity per week compared to the national average indicates a significant risk factor for chronic diseases such as obesity, cardiovascular disease, and diabetes.

Clinical Care

Table 68: Tobacco Use in Pregnancy

Condition	Population	Number (2023)	Percentage (2023)	Description	Data Origin
Tobacco Use in Pregnancy	Cherokee	48	32.4%	Significantly higher prevalence of tobacco use during pregnancy	EBCI, USET

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Health Inequities Identified:**
 - **Tobacco Use in Pregnancy: 32.4%** of pregnant patients in the Cherokee population used tobacco in 2023, compared to **21.6%** in the USET average. This disparity reflects significant inequities in maternal and child health within the EBCI community.

Table 69: Neonatal Abstinence Syndrome (NAS)

Condition	Population	Number (2023)	Percentage (2023)	Description	Data Origin
Neonatal Abstinence Syndrome (NAS)	Cherokee	3	2.86%	Higher prevalence of NAS compared to USET and state averages	EBCI, USET, NC State

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Health Inequities Identified:**
 - **Neonatal Abstinence Syndrome (NAS):** The prevalence of NAS among newborns in the Cherokee population is **2.86%** in 2023, higher than the USET average of **0.93%** and the North Carolina state average of **1.03%**. This disparity indicates ongoing inequities in prenatal substance use within the EBCI community.

Social & Economic Determinants

Table 70: Poverty

Condition	Population	Percentage (2023)	Description	Data Origin
Poverty	EBCI Total Population	21.0%	Higher poverty rates across all age groups compared to NC and US averages	U.S. Census Bureau, ACS 5-Year Estimates, 2022

Notes

- **Data Source(s):**
 - Data obtained from the 2022 U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates, Table S1701.
- **Health Inequities Identified:**
 - **Poverty Rates:** The poverty rate within the EBCI is **21.0%**, higher than **13.3% in NC** and **12.5% in the U.S.** Among children under 18, the rate is **26.4%**, and among the elderly (65+), it is **23.9%**. These disparities highlight systemic economic challenges affecting the EBCI community.

Table 71: Households Without Internet Access

Condition	Population	Percentage (2022)	Description	Data Origin
Households Without Internet	EBCI Total Population	33.1%	Significantly higher percentage of households without internet access compared to NC and US averages	U.S. Census Bureau, ACS 5-Year Estimates, 2022

Notes

- **Data Source(s):**
 - Data obtained from the 2022 U.S. Census Bureau's American Community Survey (ACS) 5-Year Estimates, Table B28002.
- **Health Inequities Identified:**
 - **Households Without Internet Access:** **33.1%** of EBCI households lack internet access, compared to **12.9% in North Carolina** and **11.5% in the U.S.** Among lower-income households, **47.9%** lack internet access. This significant digital divide exacerbates social and health inequities within the EBCI community.

Community Safety Measures

Table 72: Intimate Partner Violence / Domestic Violence (IPV/DV)

Condition	Population	2023 Percentage	Description	Data Origin
-----------	------------	-----------------	-------------	-------------

Intimate Partner Violence / Domestic Violence (IPV/DV)	EBCI Community	1.5%	Higher prevalence of IPV/DV compared to USET average	EBCI, USET
---	----------------	------	--	------------

Notes

- **Data Source(s):**
 - Data obtained through a USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS as of December 31st, 2023.
- **Health Inequities Identified:**
 - **Intimate Partner Violence / Domestic Violence (IPV/DV):** The percentage of patients diagnosed with IPV/DV within the EBCI community increased from **0.8% in 2018** to **1.5% in 2023**, which is higher than the USET average of **0.7% to 1.0%**. The rising rates of IPV/DV indicate ongoing health inequities within the EBCI community.

Table 73: Youth Victimization Rates

Condition	Population	2022 Rate per 100,000	Description	Data Origin
Youth Victimization	EBCI Community (Ages 19 and Under)	1161.88	Higher victimization rates compared to NC and US averages	FBI Crime Data Explorer, U.S. Census Bureau ACS 5-Year Estimates (2021-2022)

Notes

- **Data Source(s):**
 - Data from the U.S. Census Bureau, American Community Survey (ACS) 5-Year Estimates, Table DP05: Demographic and Housing Estimates.
 - Data from Federal Bureau of Investigation’s Crime Data Explorer (2021-2022).
- **Health Inequities Identified:**
 - **Youth Victimization:** The youth victimization rate within the EBCI community increased from **590.46 per 100,000 in 2021** to **1161.88 per 100,000 in 2022**. This rate is significantly higher than the North Carolina average of **364.91 per 100,000** and the U.S. rate of **648.59 per 100,000**. The marked increase highlights a concerning trend of rising victimization among youth aged 19 and under within the EBCI community.

Addressing Health Inequities in the EBCI Community

To address these significant health inequities, a multi-faceted approach is required, focusing on both immediate health interventions and long-term policy changes.

Enhanced Access to Healthcare Services

- **Increase Healthcare Providers:** Enhance the availability of healthcare providers, including primary care physicians, specialists, and mental health professionals within the EBCI community. This can

be achieved through incentives for healthcare providers to work in underserved areas, loan repayment programs, and partnerships with medical schools.

- **Mobile Health Clinics and Telehealth Services:** Implement mobile health clinics and telehealth services to reach remote areas. These services can provide primary care, chronic disease management, and preventive care, reducing the barriers to accessing healthcare.

Community Health Programs

- **Chronic Disease Management:** Develop community-based health programs focused on managing chronic diseases such as diabetes and hypertension. These programs should include patient education, regular monitoring, and support groups.
- **Healthy Lifestyle Initiatives:** Promote and support healthy lifestyle initiatives, including smoking cessation programs, fitness activities, and nutritional counseling. These programs can be tailored to the cultural preferences and practices of the EBCI community.

Health Education and Promotion

- **Culturally Appropriate Health Education:** Conduct culturally appropriate health education campaigns to raise awareness about the importance of regular health screenings, preventive care, and healthy behaviors. Materials should be available in multiple formats (print, digital, verbal) to ensure accessibility.
- **Risks of Tobacco Use:** Provide education on the risks associated with tobacco use, including its contribution to respiratory diseases, cancers, and cardiovascular diseases. Support for quitting smoking should include access to counseling and cessation aids.

Policy and Environmental Changes

- **Address Social Determinants of Health:** Advocate for policies that address social determinants of health, such as improving access to quality housing, education, and employment opportunities. These policies can help reduce the socio-economic disparities that contribute to health inequities.
- **Enhance Built Environment:** Improve the built environment to promote physical activity, including the development of safe walking trails, parks, and recreational facilities. Creating spaces that encourage physical activity can help reduce obesity rates and improve overall health.

County Health Data

Explanation and Importance

Health issues do not respect boundaries, and the well-being of our tribal members is intricately connected to the health of the surrounding counties. While a little over half of our enrolled members reside on tribal lands, a significant portion lives in neighboring counties. This intertwined relationship means that public health outcomes in the counties that encompass our tribal lands directly impact our community.

Understanding county health data is crucial for several reasons:

1. **Integrated Community Health:** Many of our tribal members live, work, and access services in the surrounding counties. Health trends in these areas can influence the health status of our members, regardless of whether they live on tribal lands.

2. **Resource Allocation and Planning:** By examining health metrics from these counties, we can identify shared health challenges and opportunities for collaborative interventions. This approach enables more effective allocation of resources and targeted public health initiatives that benefit both tribal and non-tribal populations.
3. **Policy and Advocacy:** Comprehensive health data from these counties provides a solid foundation for advocating for policy changes at the local, state, and federal levels. It helps in highlighting the unique health needs of our community and securing necessary support and funding.
4. **Comparative Analysis:** Including data from North Carolina and the United States provides a broader context, allowing us to compare local health outcomes with state and national averages. This comparison helps in identifying areas where our community excels and where improvements are needed.

Data Presentation

The following table presents key health metrics for the counties that contain tribal lands—Swain, Jackson, Haywood, Graham, and Cherokee—as well as data from North Carolina and the United States. Each data point represents a specific health metric for each location, providing a detailed overview of health outcomes and changes over time.

- **Index:** Unique identifier for each data point, representing specific metrics for each location.
- **Location:** The geographic area the data pertains to (e.g., Haywood County).
- **Data Point:** The specific metric being evaluated (e.g., Life Expectancy).
- **Data Description:** A brief explanation of what the data point measures (e.g., Average number of years people are expected to live).
- **Reported Year Data (2024-2018):** The data values are reported at the beginning of the year, reflecting data collected over the prior year or a specific period. For more information, visit www.countyhealthrankings.org.
- **Change Since Baseline:** The difference between the most recent year's data and the baseline year.
- **Type of Change:** An evaluation of the change. Beneficial changes indicate improvements in health outcomes, while adverse changes indicate deterioration. No significant change means there has been little to no variation over time.

It is important to note, that the data reported for each year may reflect a single year or a period of years. However, for each metric, the same methodology is used consistently across county, state, and national levels to ensure direct comparability.

- **Citation:** University of Wisconsin Population Health Institute. County Health Rankings & Roadmaps 2024. www.countyhealthrankings.org.

Example of Data Interpretation

Life Expectancy:

- **Cherokee County:** The average life expectancy has decreased from 76.6 years in 2018 to 74.5 years in 2024, showing an adverse change of -2.1 years.
- **Swain County:** Life expectancy has significantly dropped from 74.4 years in 2018 to 69.3 years in 2024, indicating a concerning adverse change of -5.1 years.

- **North Carolina and United States:** Both show a decrease in life expectancy, highlighting a broader trend of declining life expectancy which aligns with national data.

Premature Age-Adjusted Mortality:

- **Graham County:** The number of deaths among residents under age 75 has increased from 400 per 100,000 in 2018 to 550 in 2024, reflecting an adverse change of 130.
- **Swain County:** There has been a significant increase from 510 per 100,000 in 2018 to 780 in 2024, indicating an adverse change of 270.
- **North Carolina and United States:** Both have seen an increase, though the changes are less pronounced than in some of the counties with tribal lands.

This table, which includes 85 different metrics, offers a comprehensive view of health trends in the five counties with tribal lands and provides context with state and national data. It underscores the importance of monitoring and addressing health issues that affect both tribal and non-tribal populations to improve overall community health.

Table 74: County Health Data

Index	Location	Data Point	Data Description	2024 Reported	2023 Rpt.	2022 Rpt.	2021 Rpt.	2020 Rpt.	2019 Rpt.	2018 Rpt.	Change Since Baseline	Type of Change
1	Cherokee County	Life Expectancy	Average number of years people are expected to live	74.5	76.3	76.3	76	76.7	76.6	N/A	-2.1	Adverse Change
1	Graham County	Life Expectancy	Average number of years people are expected to live	74.8	76.2	76.5	77.1	77.8	78.6	N/A	-3.8	Adverse Change
1	Haywood County	Life Expectancy	Average number of years people are expected to live	75.5	76.5	76.2	77.1	77.2	77.5	N/A	-2	Adverse Change
1	Jackson County	Life Expectancy	Average number of years people are expected to live	76.8	78	78	78.5	77.7	77.5	N/A	-0.7	Adverse Change
1	Swain County	Life Expectancy	Average number of years people are expected to live	69.3	70.6	70.6	71.4	73.3	74.4	N/A	-5.1	Adverse Change
1	North Carolina	Life Expectancy	Average number of years people are expected to live	76.6	77.7	77.7	78.1	78	78	N/A	-1.4	Adverse Change
1	United States	Life Expectancy	Average number of years people are expected to live	77.6	78.5	78.5	79.2	79.1	79.1	N/A	-1.5	Adverse Change

2	Cherokee County	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	520	450	450	470	450	450	430	90	Adverse Change
2	Graham County	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	550	510	430	480	440	400	420	130	Adverse Change
2	Haywood County	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	450	430	510	420	420	400	380	70	Adverse Change
2	Jackson County	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	450	420	420	390	390	390	380	70	Adverse Change
2	Swain County	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	780	710	710	670	610	560	510	270	Adverse Change
2	North Carolina	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	420	380	380	370	370	370	370	50	Adverse Change
2	United States	Premature Age-Adjusted Mortality	Number of deaths among residents under age 75 per 100,000 (age-adjusted)	390	360	360	340	340	340	340	50	Adverse Change
3	Cherokee County	Child Mortality	Number of deaths among residents under age 18 per 100,000	100	100	100	90	90	80	70	30	Adverse Change
3	Graham County	Child Mortality	Number of deaths among residents under age 18 per 100,000	N/A	N/A	40	N/A	N/A	N/A	N/A	0	No Significant Change
3	Haywood County	Child Mortality	Number of deaths among residents under age 18 per 100,000	60	40	N/A	50	50	50	60	0	No Significant Change
3	Jackson County	Child Mortality	Number of deaths among residents under age 18 per 100,000	N/A	N/A	N/A	50	60	60	60	-10	Beneficial Change

3	Swain County	Child Mortality	Number of deaths among residents under age 18 per 100,000	70	80	80	N/A	N/A	N/A	N/A	-10	Beneficial Change
3	North Carolina	Child Mortality	Number of deaths among residents under age 18 per 100,000	60	60	60	60	60	60	60	0	No Significant Change
3	United States	Child Mortality	Number of deaths among residents under age 18 per 100,000	50	50	50	50	50	50	50	0	No Significant Change
4	Cherokee County	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	8	N/A	N/A	N/A	N/A	N/A	N/A	0	No Significant Change
4	Graham County	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	N/A	N/A	7	N/A	N/A	N/A	N/A	0	No Significant Change
4	Haywood County	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	8	7	N/A	7	7	6	7	1	Adverse Change
4	Jackson County	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	N/A	N/A	N/A	N/A	N/A	8	8	0	No Significant Change
4	Swain County	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	No Significant Change
4	North Carolina	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	7	7	7	7	7	7	7	0	No Significant Change
4	United States	Infant Mortality	Number of infant deaths (within 1 year) per 1,000 live births	6	6	6	6	6	6	6	0	No Significant Change
5	Cherokee County	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	12%	11%	14%	14%	13%	12%	12%	0%	No Significant Change
5	Graham County	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	12%	11%	12%	15%	14%	13%	13%	-1%	Beneficial Change
5	Haywood County	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	11%	10%	15%	12%	13%	12%	12%	-1%	Beneficial Change

5	Jackson County	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	12%	13%	13%	13%	13%	13%	13%	-1%	Beneficial Change
5	Swain County	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	14%	16%	16%	17%	15%	15%	15%	-1%	Beneficial Change
5	North Carolina	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	11%	12%	12%	11%	13%	11%	11%	0%	No Significant Change
5	United States	Frequent Physical Distress	% adults reporting 14 or more days of poor physical health per month (age-adjusted)	10%	12%	12%	11%	12%	N/A	N/A	-2%	Beneficial Change
6	Cherokee County	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	17%	16%	17%	16%	13%	13%	13%	4%	Adverse Change
6	Graham County	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	18%	16%	15%	17%	14%	14%	14%	4%	Adverse Change
6	Haywood County	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	17%	15%	18%	15%	13%	13%	13%	4%	Adverse Change
6	Jackson County	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	17%	16%	16%	N/A	14%	14%	14%	3%	Adverse Change
6	Swain County	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	19%	18%	18%	N/A	15%	16%	16%	3%	Adverse Change
6	North Carolina	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	14%	14%	14%	N/A	13%	12%	12%	2%	Adverse Change

6	United States	Frequent Mental Distress	% adults reporting 14 or more days of poor mental health per month (age-adjusted)	15%	14%	14%	N/A	12%	N/A	N/A	3%	Adverse Change
7	Cherokee County	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	11%	10%	10%	13%	13%	13%	12%	-1%	Beneficial Change
7	Graham County	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	10%	10%	10%	7%	7%	11%	12%	-2%	Beneficial Change
7	Haywood County	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	9%	9%	11%	12%	11%	11%	12%	-3%	Beneficial Change
7	Jackson County	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	11%	10%	10%	10%	8%	10%	11%	0%	No Significant Change
7	Swain County	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	12%	12%	12%	13%	13%	12%	13%	-1%	Beneficial Change
7	North Carolina	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	11%	11%	11%	12%	11%	11%	11%	0%	No Significant Change
7	United States	Diabetes Prevalence	% adults aged 20 and above with diagnosed diabetes (age-adjusted)	10%	9%	9%	11%	10%	10%	10%	0%	No Significant Change
8	Cherokee County	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	131	159	142	124	N/A	93	93	38	Adverse Change
8	Graham County	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	N/A	N/A	144	68	N/A	N/A	N/A	76	Adverse Change

8	Haywood County	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	134	144	N/A	130	N/A	102	102	32	Adverse Change
8	Jackson County	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	104	93	93	92	N/A	77	77	27	Adverse Change
8	Swain County	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	93	100	100	67	N/A	74	74	19	Adverse Change
8	North Carolina	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	384	373	373	364	356	355	355	29	Adverse Change
8	United States	HIV Prevalence	Number of people aged 13 years and older living with a diagnosis of HIV per 100,000 population	382	378	378	373	366	362	362	20	Adverse Change
9	Cherokee County	Food Insecurity	% population who lack adequate access to food	15%	16%	17%	15%	13%	14%	14%	1%	Adverse Change
9	Graham County	Food Insecurity	% population who lack adequate access to food	15%	17%	15%	17%	14%	15%	18%	-3%	Beneficial Change
9	Haywood County	Food Insecurity	% population who lack adequate access to food	13%	14%	18%	14%	13%	13%	14%	-1%	Beneficial Change
9	Jackson County	Food Insecurity	% population who lack adequate access to food	14%	16%	16%	14%	15%	15%	16%	-2%	Beneficial Change
9	Swain County	Food Insecurity	% population who lack adequate access to food	15%	17%	17%	16%	14%	15%	17%	-2%	Beneficial Change

9	North Carolina	Food Insecurity	% population who lack adequate access to food	12%	14%	14%	14%	15%	15%	17%	-5%	Beneficial Change
9	United States	Food Insecurity	% population who lack adequate access to food	10%	11%	11%	12%	13%	13%	13%	-3%	Beneficial Change
10	Cherokee County	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	3%	3%	3%	3%	3%	3%	3%	0%	No Significant Change
10	Graham County	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	1%	1%	3%	1%	1%	1%	1%	0%	No Significant Change
10	Haywood County	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	3%	3%	1%	8%	8%	8%	8%	-5%	Beneficial Change
10	Jackson County	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	2%	2%	2%	11%	11%	11%	11%	-9%	Beneficial Change
10	Swain County	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	2%	2%	2%	1%	1%	1%	1%	1%	Beneficial Change
10	North Carolina	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	8%	8%	8%	7%	7%	7%	7%	1%	Adverse Change
10	United States	Limited Access to Healthy Foods	% population who are low-income and do not live close to a grocery store	6%	6%	6%	6%	6%	6%	6%	0%	No Significant Change
11	Cherokee County	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	36	30	30	31	26	23	19	17	Adverse Change
11	Graham County	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	N/A	N/A	33	N/A	N/A	N/A	N/A	0	No Significant Change

11	Haywood County	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	46	33	N/A	36	29	25	19	27	Adverse Change
11	Jackson County	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	40	36	36	29	35	27	21	19	Adverse Change
11	Swain County	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	49	45	45	44	28	N/A	N/A	21	Adverse Change
11	North Carolina	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	30	24	24	22	22	19	16	14	Adverse Change
11	United States	Drug Overdose Deaths	Number of drug overdose deaths per 100,000 population	27	23	23	21	21	19	17	10	Adverse Change
12	Cherokee County	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	33%	33%	38%	38%	32%	32%	32%	1%	Adverse Change
12	Graham County	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	33%	33%	37%	37%	33%	33%	33%	0%	No Significant Change
12	Haywood County	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	32%	32%	37%	37%	32%	32%	32%	0%	No Significant Change
12	Jackson County	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	32%	36%	36%	36%	32%	32%	32%	0%	No Significant Change
12	Swain County	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	34%	39%	39%	39%	34%	34%	34%	0%	No Significant Change
12	North Carolina	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	32%	36%	36%	36%	34%	34%	34%	-2%	Beneficial Change

12	United States	Insufficient Sleep	% adults who report fewer than 7 hours of sleep on average (age-adjusted)	33%	35%	35%	35%	34%	N/A	N/A	-1%	Beneficial Change
13	Cherokee County	Uninsured Adults	% adults under age 65 without health insurance	18%	18%	20%	18%	17%	18%	18%	0%	No Significant Change
13	Graham County	Uninsured Adults	% adults under age 65 without health insurance	24%	22%	15%	22%	23%	21%	21%	3%	Adverse Change
13	Haywood County	Uninsured Adults	% adults under age 65 without health insurance	16%	15%	23%	15%	15%	14%	14%	2%	Adverse Change
13	Jackson County	Uninsured Adults	% adults under age 65 without health insurance	21%	22%	22%	21%	21%	21%	22%	-1%	No Significant Change
13	Swain County	Uninsured Adults	% adults under age 65 without health insurance	24%	27%	27%	24%	22%	22%	22%	2%	Adverse Change
13	North Carolina	Uninsured Adults	% adults under age 65 without health insurance	15%	16%	16%	16%	16%	15%	16%	-1%	No Significant Change
13	United States	Uninsured Adults	% adults under age 65 without health insurance	12%	13%	13%	12%	12%	12%	13%	-1%	Beneficial Change
14	Cherokee County	Uninsured Children	% children under age 19 without health insurance	6%	6%	7%	7%	5%	6%	6%	0%	No Significant Change
14	Graham County	Uninsured Children	% children under age 19 without health insurance	8%	9%	6%	8%	7%	6%	7%	1%	Adverse Change
14	Haywood County	Uninsured Children	% children under age 19 without health insurance	6%	6%	8%	5%	4%	4%	4%	2%	Adverse Change
14	Jackson County	Uninsured Children	% children under age 19 without health insurance	8%	9%	9%	7%	8%	7%	7%	1%	Adverse Change
14	Swain County	Uninsured Children	% children under age 19 without health insurance	10%	11%	11%	8%	8%	8%	7%	3%	Adverse Change

14	North Carolina	Uninsured Children	% children under age 19 without health insurance	5%	6%	6%	5%	5%	5%	5%	0%	No Significant Change
14	United States	Uninsured Children	% children under age 19 without health insurance	5%	6%	6%	5%	5%	5%	5%	0%	No Significant Change
15	Cherokee County	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	840:1	970:1	1,160:1	1,060:1	1,092:1	1,170:1	1,163:1	-323	Beneficial Change
15	Graham County	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	1,000:1	1,340:1	1,430:1	1,410:1	1,414:1	1,220:1	1,070:1	-70	Beneficial Change
15	Haywood County	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	1,140:1	1,300:1	1,410:1	1,680:1	1,823:1	1,909:1	1,896:1	-756	Beneficial Change
15	Jackson County	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	590:1	710:1	710:1	830:1	884:1	877:1	862:1	-272	Beneficial Change
15	Swain County	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	390:1	380:1	380:1	400:1	460:1	550:1	652:1	-262	Beneficial Change
15	North Carolina	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	620:1	690:1	690:1	750:1	801:1	912:1	975:1	-355	Beneficial Change
15	United States	Other Primary Care Providers	Ratio of population to primary care providers other than physicians	760:1	870:1	870:1	940:1	1,013:1	1,133:1	1,231:1	-471	Beneficial Change
16	Cherokee County	High School Graduation	% ninth-grade cohort that graduates in four years	87%	76%	93%	92%	92%	92%	93%	-6%	Adverse Change
16	Graham County	High School Graduation	% ninth-grade cohort that graduates in four years	93%	88%	85%	88%	85%	85%	88%	5%	Beneficial Change
16	Haywood County	High School Graduation	% ninth-grade cohort that graduates in four years	90%	89%	83%	85%	85%	85%	83%	7%	Beneficial Change
16	Jackson County	High School Graduation	% ninth-grade cohort that graduates in four years	93%	89%	89%	92%	92%	92%	84%	9%	Beneficial Change
16	Swain County	High School Graduation	% ninth-grade cohort that graduates in four years	78%	78%	78%	81%	79%	79%	83%	-5%	Adverse Change

16	North Carolina	High School Graduation	% ninth-grade cohort that graduates in four years	87%	87%	87%	86%	86%	86%	86%	1%	No Significant Change
16	United States	High School Graduation	% ninth-grade cohort that graduates in four years	86%	86%	86%	85%	85%	85%	N/A	1%	No Significant Change
17	Cherokee County	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
17	Graham County	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	N/A	N/A	9%	N/A	N/A	N/A	N/A	N/A	No Significant Change
17	Haywood County	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	9%	12%	N/A	10%	8%	9%	15%	-6%	Beneficial Change
17	Jackson County	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
17	Swain County	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
17	North Carolina	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	7%	7%	7%	7%	7%	7%	15%	-8%	Beneficial Change
17	United States	Disconnected Youth	% teens and young adults ages 16-19 who are neither working nor in school	7%	7%	7%	7%	7%	7%	N/A	0%	No Significant Change
18	Cherokee County	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.1	3.1	3.1	3.1	3.1	3.1	N/A	0	No Significant Change

18	Graham County	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.2	3.2	3.2	3.2	3.3	3.3	N/A	-0.1	Adverse Change
18	Haywood County	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.2	3.2	3.2	3.2	3.4	3.4	N/A	-0.2	Adverse Change
18	Jackson County	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3	3	3	3	3.1	N/A	N/A	-0.1	Adverse Change
18	Swain County	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3	3	3	3	3.1	N/A	N/A	-0.1	Adverse Change
18	North Carolina	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.1	3.1	3.1	3.1	3.2	N/A	N/A	-0.1	Adverse Change
18	United States	Reading Scores	Average grade level performance for 3rd graders on English Language Arts standardized tests	3.1	3.1	3.1	3.1	3.1	N/A	N/A	0	No Significant Change
19	Cherokee County	Math Scores	Average grade level performance for 3rd graders on math standardized tests	3.1	3.1	3.1	3.1	3.2	3.2	N/A	-0.1	Adverse Change
19	Graham County	Math Scores	Average grade level performance for 3rd graders on math standardized tests	3.1	3.1	3.3	3.1	3.3	3.3	N/A	-0.2	Adverse Change
19	Haywood County	Math Scores	Average grade level performance for 3rd graders on math standardized tests	3.3	3.3	3.1	3.3	3.5	3.5	N/A	-0.2	Adverse Change

19	Jackson County	Math Scores	Average grade level performance for 3rd graders on math standardized tests	2.8	2.8	2.8	2.8	2.8	N/A	N/A	0	No Significant Change
19	Swain County	Math Scores	Average grade level performance for 3rd graders on math standardized tests	2.9	2.9	2.9	2.9	2.9	N/A	N/A	0	No Significant Change
19	North Carolina	Math Scores	Average grade level performance for 3rd graders on math standardized tests	3.1	3.1	3.1	3.1	3.1	N/A	N/A	0	No Significant Change
19	United States	Math Scores	Average grade level performance for 3rd graders on math standardized tests	3	3	3	3	3	N/A	N/A	0	No Significant Change
20	Cherokee County	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.04	0.04	0.04	0.04	N/A	12	N/A	-12	Beneficial Change
20	Graham County	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0	0.01	0.02	0.01	N/A	49	N/A	-49	Beneficial Change
20	Haywood County	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.03	0.02	0.01	0.02	N/A	56	N/A	-56	Beneficial Change
20	Jackson County	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.06	0.07	0.07	N/A	N/A	N/A	N/A	0	No Significant Change

20	Swain County	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.04	0.05	0.05	N/A	N/A	N/A	N/A	0	No Significant Change
20	North Carolina	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.2	0.2	0.2	N/A	N/A	N/A	N/A	0	No Significant Change
20	United States	School Segregation	Extent to which students within different race and ethnicity groups are unevenly distributed across schools	0.24	0.25	0.25	N/A	N/A	N/A	N/A	0	No Significant Change
21	Cherokee County	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$792)	(\$187)	\$667	N/A	N/A	N/A	N/A	N/A	No Significant Change
21	Graham County	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$2,148)	(\$320)	(\$140)	N/A	N/A	N/A	N/A	N/A	No Significant Change
21	Haywood County	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$1,326)	(\$962)	\$2,653	N/A	N/A	N/A	N/A	N/A	No Significant Change
21	Jackson County	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$1,337)	\$1,353	\$1,353	N/A	N/A	N/A	N/A	N/A	No Significant Change

21	Swain County	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$2,726)	\$1,778	\$1,778	N/A	N/A	N/A	N/A	N/A	No Significant Change
21	North Carolina	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	(\$4,742)	(\$3,326)	(\$3,326)	N/A	N/A	N/A	N/A	N/A	No Significant Change
21	United States	School Funding Adequacy	Average gap in dollars between actual and required spending per pupil among public school districts	\$634	\$741	\$741	N/A	N/A	N/A	N/A	N/A	No Significant Change
22	Cherokee County	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.91	0.9	0.99	N/A	N/A	N/A	N/A	-0.1	Adverse Change
22	Graham County	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.75	0.76	0.76	N/A	N/A	N/A	N/A	0	No Significant Change
22	Haywood County	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.82	0.83	0.8	N/A	N/A	N/A	N/A	0	No Significant Change
22	Jackson County	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.9	0.92	0.92	N/A	N/A	N/A	N/A	0	No Significant Change
22	Swain County	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.9	0.97	0.97	N/A	N/A	N/A	N/A	-0.1	Adverse Change

22	North Carolina	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.83	0.84	0.84	N/A	N/A	N/A	N/A	0	No Significant Change
22	United States	Gender Pay Gap	Ratio of women's median earnings to men's median earnings for all full-time, year-round workers	0.81	0.81	0.81	N/A	N/A	N/A	N/A	0	No Significant Change
23	Cherokee County	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$51,600	\$44,200	\$44,400	\$42,800	\$41,300	\$38,300	\$37,200	14400	Beneficial Change
23	Graham County	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$50,300	\$43,600	\$50,500	\$45,800	\$39,500	\$37,700	\$35,800	14500	Beneficial Change
23	Haywood County	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$62,400	\$51,800	\$42,100	\$51,600	\$47,200	\$47,900	\$45,300	17100	Beneficial Change
23	Jackson County	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$58,500	\$49,500	\$49,500	\$47,800	\$44,500	\$46,100	\$44,000	14500	Beneficial Change
23	Swain County	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$55,500	\$47,600	\$47,600	\$46,100	\$43,100	\$41,400	\$39,000	16500	Beneficial Change
23	North Carolina	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$67,500	\$59,600	\$59,600	\$57,400	\$53,900	\$52,800	\$50,600	16900	Beneficial Change
23	United States	Median Household Income	Income where half of households in a county earn more and half of households earn less	\$74,800	\$67,300	\$67,300	\$65,700	\$61,900	\$60,300	\$57,600	17200	Beneficial Change

24	Cherokee County	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$37.22	\$40.43	\$33.97	N/A	N/A	N/A	N/A	3.2	Beneficial Change
24	Graham County	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$36.80	\$41.13	\$35.54	N/A	N/A	N/A	N/A	1.3	Beneficial Change
24	Haywood County	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$42.00	\$42.69	\$34.67	N/A	N/A	N/A	N/A	7.3	Beneficial Change
24	Jackson County	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$38.83	\$35.13	\$35.13	N/A	N/A	N/A	N/A	3.7	Beneficial Change
24	Swain County	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$37.74	\$33.58	\$33.58	N/A	N/A	N/A	N/A	4.2	Beneficial Change
24	North Carolina	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	\$45.31	\$38.86	\$38.86	N/A	N/A	N/A	N/A	6.5	Beneficial Change
24	United States	Living Wage	Hourly wage needed to cover basic household expenses plus all relevant taxes for a household of one adult and two children	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change

25	Cherokee County	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	67%	66%	74%	77%	82%	84%	80%	-13%	Beneficial Change
25	Graham County	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	57%	53%	57%	62%	62%	64%	61%	-4%	Beneficial Change
25	Haywood County	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	53%	52%	60%	56%	54%	56%	48%	5%	Beneficial Change
25	Jackson County	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	42%	56%	56%	58%	57%	61%	63%	-21%	Beneficial Change
25	Swain County	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	45%	59%	59%	59%	58%	63%	59%	-14%	Beneficial Change
25	North Carolina	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible for free or reduced price lunch	51%	58%	58%	56%	56%	57%	57%	-6%	Beneficial Change
25	United States	Children Eligible for Free or Reduced Price Lunch	% children enrolled in public schools that are eligible	51%	52%	52%	52%	52%	52%	52%	-1%	Beneficial Change
26	Cherokee County	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	46	61	65	43	41	50	47	-1	Beneficial Change

26	Graham County	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	71	N/A	58	N/A	N/A	N/A	N/A	13	Beneficial Change
26	Haywood County	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	46	65	N/A	55	58	56	56	-10	Beneficial Change
26	Jackson County	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	38	52	52	52	52	36	30	8	Beneficial Change
26	Swain County	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	N/A	N/A	N/A	N/A	N/A	N/A	67	0	No Significant Change
26	North Carolina	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	52	52	52	50	50	50	50	2	Adverse Change
26	United States	Residential Segregation - Black/White	Index of dissimilarity where higher values indicate greater residential segregation between Black and white residents	63	63	63	61	62	N/A	N/A	1	Adverse Change
27	Cherokee County	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	26%	31%	28%	N/A	N/A	N/A	N/A	-2%	Beneficial Change

27	Graham County	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	23%	35%	27%	N/A	N/A	N/A	N/A	-4%	Beneficial Change
27	Haywood County	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	25%	30%	33%	N/A	N/A	N/A	N/A	-8%	Beneficial Change
27	Jackson County	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	25%	29%	29%	N/A	N/A	N/A	N/A	-4%	Beneficial Change
27	Swain County	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	24%	25%	25%	N/A	N/A	N/A	N/A	-1%	Beneficial Change
27	North Carolina	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	27%	29%	29%	N/A	N/A	N/A	N/A	-2%	Beneficial Change
27	United States	Child Care Cost Burden	Child care costs for a household with two children as a percent of median household income	27%	25%	25%	N/A	N/A	N/A	N/A	2%	Adverse Change
28	Cherokee County	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	13	13	16	N/A	N/A	N/A	N/A	-3	Adverse Change
28	Graham County	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	19	19	11	N/A	N/A	N/A	N/A	8	Beneficial Change
28	Haywood County	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	12	12	21	N/A	N/A	N/A	N/A	-9	Adverse Change

28	Jackson County	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	12	11	11	N/A	N/A	N/A	N/A	1	No Significant Change
28	Swain County	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	13	12	12	N/A	N/A	N/A	N/A	1	No Significant Change
28	North Carolina	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	9	9	9	N/A	N/A	N/A	N/A	0	No Significant Change
28	United States	Child Care Centers	Number of child care centers per 1,000 population under 5 years old	7	6	6	N/A	N/A	N/A	N/A	1	Beneficial Change
29	Cherokee County	Homicides	Number of deaths due to homicide per 100,000 population	4	N/A	N/A	N/A	6	N/A	N/A	-2	Beneficial Change
29	Graham County	Homicides	Number of deaths due to homicide per 100,000 population	N/A	N/A	4	N/A	N/A	N/A	N/A	0	No Significant Change
29	Haywood County	Homicides	Number of deaths due to homicide per 100,000 population	4	4	N/A	3	4	4	4	0	No Significant Change
29	Jackson County	Homicides	Number of deaths due to homicide per 100,000 population	4	4	4	3	N/A	N/A	N/A	1	Beneficial Change
29	Swain County	Homicides	Number of deaths due to homicide per 100,000 population	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
29	North Carolina	Homicides	Number of deaths due to homicide per 100,000 population	7	7	7	6	6	6	6	1	Adverse Change
29	United States	Homicides	Number of deaths due to homicide per 100,000 population	6	6	6	6	5	5	5	1	Adverse Change
30	Cherokee County	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	22	22	22	18	20	N/A	N/A	2	Adverse Change

30	Graham County	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	N/A	N/A	23	25	30	N/A	N/A	-7	Beneficial Change
30	Haywood County	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	22	23	N/A	20	19	N/A	N/A	3	Adverse Change
30	Jackson County	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	17	17	17	17	17	N/A	N/A	0	No Significant Change
30	Swain County	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	25	24	24	18	15	N/A	N/A	10	Adverse Change
30	North Carolina	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	13	13	13	13	13	N/A	N/A	0	No Significant Change
30	United States	Suicides	Number of deaths due to suicide per 100,000 population (age-adjusted)	14	14	14	14	14	N/A	N/A	0	No Significant Change
31	Cherokee County	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	20	21	21	21	22	22	24	-4	Beneficial Change
31	Graham County	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	N/A	N/A	17	N/A	23	N/A	N/A	-6	Beneficial Change
31	Haywood County	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	18	17	N/A	17	16	16	15	3	Adverse Change
31	Jackson County	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	12	14	14	13	13	14	15	-3	Beneficial Change
31	Swain County	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	22	22	22	17	17	14	14	8	Adverse Change
31	North Carolina	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	15	14	14	14	13	13	13	2	Adverse Change

31	United States	Firearm Fatalities	Number of deaths due to firearms per 100,000 population	13	12	12	12	12	11	11	2	Adverse Change
32	Cherokee County	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	22	23	23	24	22	23	21	1	Beneficial Change
32	Graham County	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	19	17	16	N/A	N/A	N/A	N/A	3	Beneficial Change
32	Haywood County	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	17	16	17	16	15	14	14	3	Adverse Change
32	Jackson County	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	14	12	12	11	11	8	9	5	Beneficial Change
32	Swain County	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	18	18	18	19	16	15	16	2	Beneficial Change
32	North Carolina	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	15	15	15	14	14	14	14	1	Beneficial Change
32	United States	Motor Vehicle Crash Deaths	Number of motor vehicle crash deaths per 100,000 population	12	12	12	11	11	11	11	1	Beneficial Change
33	Cherokee County	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	15	N/A	N/A	13	14	N/A	N/A	1	Adverse Change
33	Graham County	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	No Significant Change
33	Haywood County	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	6	N/A	N/A	16	14	N/A	N/A	-8	Beneficial Change
33	Jackson County	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	22	N/A	N/A	29	26	N/A	N/A	-4	Beneficial Change
33	Swain County	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	19	N/A	N/A	N/A	N/A	N/A	N/A	0	No Significant Change
33	North Carolina	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	16	N/A	N/A	19	16	N/A	N/A	0	No Significant Change

33	United States	Juvenile Arrests	Rate of delinquency cases per 1,000 juveniles	N/A	N/A	N/A	16	N/A	N/A	N/A	0	No Significant Change
34	Cherokee County	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	70.20%	70.20%	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	Graham County	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	70.60%	70.60%	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	Haywood County	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	73.20%	73.20%	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	Jackson County	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	61.10%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	Swain County	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	65.40%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	North Carolina	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	72.30%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
34	United States	Voter Turnout	% citizen population aged 18 or older who voted in the 2020 U.S. Presidential election	67.90%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
35	Cherokee County	Census Participation	% households that self-responded to the 2020 census	47.90%	47.90%	47.90%	N/A	N/A	N/A	N/A	0.00%	No Significant Change
35	Graham County	Census Participation	% households that self-responded to the 2020 census	35.10%	35.10%	56.80%	N/A	N/A	N/A	N/A	-21.70%	Adverse Change
35	Haywood County	Census Participation	% households that self-responded to the 2020 census	56.80%	56.80%	35.10%	N/A	N/A	N/A	N/A	21.70%	Beneficial Change

35	Jackson County	Census Participation	% households that self-responded to the 2020 census	37.40%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
35	Swain County	Census Participation	% households that self-responded to the 2020 census	37.00%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
35	North Carolina	Census Participation	% households that self-responded to the 2020 census	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
35	United States	Census Participation	% households that self-responded to the 2020 census	65.20%	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
36	Cherokee County	Traffic Volume	Average traffic volume per meter of major roadways	11	34	31	31	25	N/A	N/A	-14	Beneficial Change
36	Graham County	Traffic Volume	Average traffic volume per meter of major roadways	9	1	180	0	33	N/A	N/A	-24	Beneficial Change
36	Haywood County	Traffic Volume	Average traffic volume per meter of major roadways	42	224	0	180	136	N/A	N/A	-94	Beneficial Change
36	Jackson County	Traffic Volume	Average traffic volume per meter of major roadways	27	113	113	113	95	N/A	N/A	-68	Beneficial Change
36	Swain County	Traffic Volume	Average traffic volume per meter of major roadways	7	22	22	22	23	N/A	N/A	-16	Beneficial Change
36	North Carolina	Traffic Volume	Average traffic volume per meter of major roadways	74	228	228	228	168	N/A	N/A	-94	Beneficial Change
36	United States	Traffic Volume	Average traffic volume per meter of major roadways	108	395	395	N/A	N/A	N/A	N/A	-287	Beneficial Change
37	Cherokee County	Homeownership	% owner-occupied housing units	81%	82%	82%	79%	80%	80%	80%	1%	No Significant Change
37	Graham County	Homeownership	% owner-occupied housing units	80%	81%	73%	83%	84%	82%	82%	-2%	Adverse Change
37	Haywood County	Homeownership	% owner-occupied housing units	75%	74%	83%	73%	72%	72%	72%	3%	Beneficial Change
37	Jackson County	Homeownership	% owner-occupied housing units	62%	64%	64%	64%	65%	65%	N/A	-3%	Adverse Change

37	Swain County	Homeownership	% owner-occupied housing units	73%	75%	75%	72%	71%	72%	N/A	1%	Beneficial Change
37	North Carolina	Homeownership	% owner-occupied housing units	66%	66%	66%	65%	65%	65%	N/A	1%	Beneficial Change
37	United States	Homeownership	% owner-occupied housing units	65%	64%	64%	64%	64%	64%	N/A	1%	Beneficial Change
38	Cherokee County	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	9%	9%	10%	11%	11%	11%	11%	-2%	Beneficial Change
38	Graham County	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	6%	7%	13%	7%	6%	8%	8%	-2%	Beneficial Change
38	Haywood County	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	12%	13%	8%	12%	13%	14%	14%	-2%	Beneficial Change
38	Jackson County	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	15%	14%	14%	15%	15%	15%	19%	-4%	Beneficial Change
38	Swain County	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	12%	11%	11%	12%	10%	11%	13%	-1%	Beneficial Change
38	North Carolina	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	13%	12%	12%	13%	13%	14%	17%	-4%	Beneficial Change
38	United States	Severe Housing Cost Burden	% households spending 50% or more of their income on housing	14%	14%	14%	14%	15%	15%	19%	-5%	Beneficial Change
39	Cherokee County	Broadband Access	% households with broadband internet connection	79%	78%	76%	74%	N/A	N/A	N/A	5%	Beneficial Change
39	Graham County	Broadband Access	% households with broadband internet connection	73%	72%	73%	57%	N/A	N/A	N/A	16%	Beneficial Change

39	Haywood County	Broadband Access	% households with broadband internet connection	80%	77%	69%	72%	N/A	N/A	N/A	8%	Beneficial Change
39	Jackson County	Broadband Access	% households with broadband internet connection	76%	73%	73%	71%	N/A	N/A	N/A	5%	Beneficial Change
39	Swain County	Broadband Access	% households with broadband internet connection	74%	67%	67%	60%	N/A	N/A	N/A	14%	Beneficial Change
39	North Carolina	Broadband Access	% households with broadband internet connection	87%	83%	83%	81%	N/A	N/A	N/A	6%	Beneficial Change
39	United States	Broadband Access	% households with broadband internet connection	88%	85%	85%	83%	N/A	N/A	N/A	5%	Beneficial Change
40	Cherokee County	Population	Total population in the county	29,512	29,167	29,073	28,612	28,383	28,087	27,905	1607	Beneficial Change
40	Graham County	Population	Total population in the county	7,980	8,043	62,972	8,441	8,484	8,541	8,558	-578	Adverse Change
40	Haywood County	Population	Total population in the county	62,609	62,476	8,474	62,317	61,971	61,084	60,682	1927	Beneficial Change
40	Jackson County	Population	Total population in the county	42,955	44,033	44,033	43,938	43,327	42,973	42,241	714	Beneficial Change
40	Swain County	Population	Total population in the county	13,967	14,179	14,179	14,271	14,245	14,294	14,346	-379	Adverse Change
40	North Carolina	Population	Total population in the state	10,698,973	10,600,823	10,600,823	10,488,84	10,383,620	10,273,419	10,146,788	552185	Beneficial Change
40	United States	Population	Total population in the country	##### ##	329,484,123	329,484,123	328,239,523	327,167,434	325,719,178	323,127,513	10160044	Beneficial Change
41	Cherokee County	% Below 18 Years of Age	Percentage of the population below 18 years of age	15.60%	15.90%	16.10%	16.50%	16.80%	17.40%	17.60%	-2.00%	Beneficial Change
41	Graham County	% Below 18 Years of Age	Percentage of the population below 18 years of age	19.70%	20.10%	17.90%	19.80%	20.00%	20.70%	21.20%	-1.50%	Beneficial Change
41	Haywood County	% Below 18 Years of Age	Percentage of the population below 18 years of age	17.40%	17.90%	19.90%	18.20%	18.20%	18.30%	18.30%	-0.90%	Beneficial Change
41	Jackson County	% Below 18 Years of Age	Percentage of the population below 18 years of age	16.00%	16.30%	16.30%	16.40%	16.60%	17.10%	17.20%	-1.20%	Beneficial Change

41	Swain County	% Below 18 Years of Age	Percentage of the population below 18 years of age	22.20%	22.10%	22.10%	22.00%	22.10%	22.30%	22.50%	-0.30%	Beneficial Change
41	North Carolina	% Below 18 Years of Age	Percentage of the population below 18 years of age	21.40%	21.80%	21.80%	21.90%	22.20%	22.40%	22.70%	-1.30%	Beneficial Change
41	United States	% Below 18 Years of Age	Percentage of the population below 18 years of age	21.70%	22.10%	22.10%	22.30%	22.40%	22.60%	22.80%	-1.10%	Beneficial Change
42	Cherokee County	% 65 and Older	Percentage of the population 65 years and older	31.60%	31.50%	31.30%	30.50%	29.60%	28.80%	27.70%	3.90%	Beneficial Change
42	Graham County	% 65 and Older	Percentage of the population 65 years and older	24.30%	24.80%	25.50%	24.50%	23.80%	23.30%	23.00%	1.30%	Beneficial Change
42	Haywood County	% 65 and Older	Percentage of the population 65 years and older	25.60%	25.10%	25.30%	25.00%	24.60%	24.40%	24.40%	1.20%	Beneficial Change
42	Jackson County	% 65 and Older	Percentage of the population 65 years and older	21.00%	20.60%	20.60%	19.90%	19.70%	19.10%	18.30%	2.70%	Beneficial Change
42	Swain County	% 65 and Older	Percentage of the population 65 years and older	19.60%	19.80%	19.80%	19.60%	19.20%	18.90%	19.50%	0.10%	Beneficial Change
42	North Carolina	% 65 and Older	Percentage of the population 65 years and older	17.40%	17.10%	17.10%	16.70%	16.30%	15.90%	15.50%	1.90%	Beneficial Change
42	United States	% 65 and Older	Percentage of the population 65 years and older	17.30%	16.90%	16.90%	16.50%	16.00%	15.60%	15.20%	2.10%	Beneficial Change
43	Cherokee County	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	1.60%	1.50%	1.40%	1.40%	1.50%	1.40%	1.40%	0.20%	Beneficial Change
43	Graham County	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	0.60%	0.60%	1.20%	0.40%	0.40%	0.50%	0.40%	0.20%	Beneficial Change
43	Haywood County	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	1.30%	1.30%	0.50%	1.30%	1.20%	1.20%	1.10%	0.20%	Beneficial Change
43	Jackson County	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	2.10%	2.10%	2.10%	2.10%	2.10%	2.10%	2.20%	-0.10%	Beneficial Change

43	Swain County	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	1.40%	1.10%	1.10%	1.10%	1.10%	1.00%	1.10%	0.30%	Beneficial Change
43	North Carolina	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	21.20%	21.30%	21.30%	21.40%	21.40%	21.40%	21.40%	-0.20%	Beneficial Change
43	United States	% Non-Hispanic Black	Percentage of the population that is non-Hispanic Black	12.60%	12.60%	12.60%	12.50%	12.50%	12.50%	12.40%	0.20%	Beneficial Change
44	Cherokee County	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	1.70%	1.80%	1.60%	1.60%	1.50%	1.50%	1.50%	0.20%	Beneficial Change
44	Graham County	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	8.10%	8.90%	0.70%	7.90%	8.00%	7.70%	7.40%	0.70%	Beneficial Change
44	Haywood County	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	0.80%	0.80%	8.40%	0.70%	0.70%	0.60%	0.70%	0.10%	Beneficial Change
44	Jackson County	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	8.80%	9.00%	9.00%	9.10%	9.00%	9.20%	9.40%	-0.60%	Beneficial Change
44	Swain County	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	30.60%	30.50%	30.50%	30.10%	29.80%	29.70%	29.20%	1.40%	Beneficial Change
44	North Carolina	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	1.60%	0.00%	No Significant Change
44	United States	% American Indian or Alaska Native	Percentage of the population that is American Indian or Alaska Native	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	1.30%	0.00%	No Significant Change
45	Cherokee County	% Asian	Percentage of the population that is Asian	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.70%	0.00%	No Significant Change

45	Graham County	% Asian	Percentage of the population that is Asian	0.70%	0.70%	0.70%	0.50%	0.60%	0.50%	0.50%	0.20%	Beneficial Change
45	Haywood County	% Asian	Percentage of the population that is Asian	0.80%	0.70%	0.60%	0.60%	0.60%	0.50%	0.50%	0.30%	Beneficial Change
45	Jackson County	% Asian	Percentage of the population that is Asian	1.20%	1.20%	1.20%	1.10%	1.00%	1.00%	1.00%	0.20%	Beneficial Change
45	Swain County	% Asian	Percentage of the population that is Asian	0.80%	0.70%	0.70%	0.70%	0.70%	0.60%	0.60%	0.20%	Beneficial Change
45	North Carolina	% Asian	Percentage of the population that is Asian	3.60%	3.30%	3.30%	3.20%	3.20%	3.10%	2.90%	0.70%	Beneficial Change
45	United States	% Asian	Percentage of the population that is Asian	6.30%	6.10%	6.10%	5.90%	5.90%	5.80%	5.70%	0.60%	Beneficial Change
46	Cherokee County	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.00%	No Significant Change
46	Graham County	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.00%	No Significant Change
46	Haywood County	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.10%	0.10%	0.00%	0.10%	0.00%	0.00%	0.10%	Beneficial Change
46	Jackson County	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.10%	Beneficial Change
46	Swain County	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.10%	0.10%	0.00%	0.00%	0.00%	0.00%	0.10%	Beneficial Change
46	North Carolina	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.00%	No Significant Change

46	United States	% Native Hawaiian or Other Pacific Islander	Percentage of the population that is Native Hawaiian or Other Pacific Islander	0.30%	0.30%	0.30%	0.20%	0.20%	0.20%	0.20%	0.10%	Beneficial Change
47	Cherokee County	% Hispanic	Percentage of the population that is Hispanic	4.00%	3.80%	3.60%	3.30%	3.30%	3.20%	3.20%	0.80%	Beneficial Change
47	Graham County	% Hispanic	Percentage of the population that is Hispanic	4.20%	4.10%	4.50%	3.70%	3.80%	3.50%	3.20%	1.00%	Beneficial Change
47	Haywood County	% Hispanic	Percentage of the population that is Hispanic	4.90%	4.60%	3.70%	4.30%	4.10%	3.90%	3.80%	1.10%	Beneficial Change
47	Jackson County	% Hispanic	Percentage of the population that is Hispanic	6.80%	6.30%	6.30%	6.20%	5.90%	5.80%	5.50%	1.30%	Beneficial Change
47	Swain County	% Hispanic	Percentage of the population that is Hispanic	7.30%	6.50%	6.50%	5.80%	5.50%	5.10%	4.90%	2.40%	Beneficial Change
47	North Carolina	% Hispanic	Percentage of the population that is Hispanic	10.50%	9.90%	9.90%	9.80%	9.60%	9.50%	9.20%	1.30%	Beneficial Change
47	United States	% Hispanic	Percentage of the population that is Hispanic	19.10%	18.60%	18.60%	18.50%	18.30%	18.10%	17.80%	1.30%	Beneficial Change
48	Cherokee County	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	90.00%	90.30%	90.60%	91.10%	91.00%	91.20%	91.20%	-1.20%	Beneficial Change
48	Graham County	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	85.00%	84.70%	91.80%	86.10%	86.00%	86.60%	87.20%	-2.20%	Beneficial Change
48	Haywood County	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	91.00%	91.40%	85.70%	92.20%	92.50%	92.70%	92.90%	-1.90%	Beneficial Change
48	Jackson County	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	80.30%	80.70%	80.70%	80.60%	81.10%	81.00%	81.00%	-0.70%	Beneficial Change
48	Swain County	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	58.50%	60.20%	60.20%	60.70%	61.30%	61.80%	62.30%	-3.80%	Beneficial Change

48	North Carolina	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	61.50%	62.30%	62.30%	62.60%	62.80%	63.10%	63.50%	-2.00%	Beneficial Change
48	United States	% Non-Hispanic White	Percentage of the population that is non-Hispanic White	58.90%	59.70%	59.70%	60.10%	60.40%	60.70%	61.30%	-2.40%	Beneficial Change
49	Cherokee County	% Not Proficient in English	Percentage of the population not proficient in English	0%	1%	1%	1%	1%	1%	0%	0.00%	No Significant Change
49	Graham County	% Not Proficient in English	Percentage of the population not proficient in English	1%	1%	0%	1%	1%	0%	1%	0.00%	No Significant Change
49	Haywood County	% Not Proficient in English	Percentage of the population not proficient in English	1%	1%	1%	1%	1%	1%	1%	0.00%	No Significant Change
49	Jackson County	% Not Proficient in English	Percentage of the population not proficient in English	2%	2%	2%	2%	1%	2%	2%	0.00%	No Significant Change
49	Swain County	% Not Proficient in English	Percentage of the population not proficient in English	0%	0%	0%	0%	0%	0%	0%	0.00%	No Significant Change
49	North Carolina	% Not Proficient in English	Percentage of the population not proficient in English	2%	2%	2%	2%	2%	3%	3%	-1.00%	Beneficial Change
49	United States	% Not Proficient in English	Percentage of the population not proficient in English	4%	4%	4%	4%	4%	4%	4%	0.00%	No Significant Change
50	Cherokee County	% Female	Percentage of the population that is female	50.40%	50.70%	51.10%	51.30%	51.30%	51.30%	51.40%	-1.00%	Beneficial Change
50	Graham County	% Female	Percentage of the population that is female	48.70%	49.60%	51.70%	50.00%	50.00%	50.00%	50.30%	-1.60%	Beneficial Change
50	Haywood County	% Female	Percentage of the population that is female	51.10%	51.30%	50.00%	51.70%	51.70%	51.80%	51.90%	-0.80%	Beneficial Change
50	Jackson County	% Female	Percentage of the population that is female	50.90%	51.00%	51.00%	50.80%	50.90%	50.80%	50.90%	0.00%	No Significant Change
50	Swain County	% Female	Percentage of the population that is female	51.60%	52.20%	52.20%	52.10%	51.80%	51.80%	51.70%	-0.10%	Beneficial Change

50	North Carolina	% Female	Percentage of the population that is female	51.00%	51.40%	51.40%	51.40%	51.40%	51.30%	51.40%	-0.40%	Beneficial Change
50	United States	% Female	Percentage of the population that is female	50.40%	50.80%	50.80%	50.80%	50.80%	50.80%	50.80%	-0.40%	Beneficial Change
51	Cherokee County	% Rural	Percentage of the population living in rural areas	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	No Significant Change
51	Graham County	% Rural	Percentage of the population living in rural areas	100.00%	100.00%	55.40%	100.00%	100.00%	100.00%	100.00%	0.00%	No Significant Change
51	Haywood County	% Rural	Percentage of the population living in rural areas	46.90%	55.40%	100.00%	55.40%	55.40%	55.40%	55.40%	-8.50%	Beneficial Change
51	Jackson County	% Rural	Percentage of the population living in rural areas	66.70%	73.10%	73.10%	73.10%	73.10%	73.10%	73.10%	-6.40%	Beneficial Change
51	Swain County	% Rural	Percentage of the population living in rural areas	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	100.00%	0.00%	No Significant Change
51	North Carolina	% Rural	Percentage of the population living in rural areas	33.30%	33.90%	33.90%	33.90%	33.90%	33.90%	33.90%	-0.60%	Beneficial Change
51	United States	% Rural	Percentage of the population living in rural areas	20.00%	19.30%	19.30%	19.30%	19.30%	N/A	N/A	0.70%	Adverse Change
52	Cherokee County	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	12,700	10,900	10,900	11,200	10,700	10,900	11,000	1700	Adverse Change
52	Graham County	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	11,600	10,200	9,400	9,800	8,700	7,600	8,200	3400	Adverse Change
52	Haywood County	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	10,100	9,400	10,200	8,900	9,000	8,500	7,900	2200	Adverse Change
52	Jackson County	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	10,200	9,100	9,100	8,300	8,800	8,800	7,400	2800	Adverse Change
52	Swain County	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	16,500	14,900	14,900	14,600	12,400	10,900	11,600	4900	Adverse Change

52	North Carolina	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	8,900	8,000	8,000	7,600	7,700	7,600	7,300	1600	Adverse Change
52	United States	Premature Death	Years of Potential Life Lost Before age 75 per 100,000 (age-adjusted)	8,000	7,300	7,300	6,900	6,900	6,900	6,700	1300	Adverse Change
53	Cherokee County	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	16%	15%	20%	20%	17%	18%	18%	-2%	Beneficial Change
53	Graham County	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	16%	15%	18%	23%	18%	18%	18%	-2%	Beneficial Change
53	Haywood County	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	14%	13%	23%	17%	15%	17%	17%	-3%	Beneficial Change
53	Jackson County	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	19%	19%	19%	19%	17%	19%	19%	0%	No Significant Change
53	Swain County	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	25%	25%	25%	25%	21%	22%	22%	3%	Adverse Change
53	North Carolina	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	18%	18%	18%	18%	18%	18%	18%	0%	No Significant Change
53	United States	Poor or Fair Health	% adults reporting fair or poor health (age-adjusted)	17%	17%	17%	17%	17%	N/A	N/A	0%	No Significant Change
54	Cherokee County	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	3.6	3.4	4.3	4.5	4.3	3.9	3.9	-0.3	Beneficial Change
54	Graham County	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	3.8	3.4	3.9	4.8	4.4	4	4	-0.2	Beneficial Change
54	Haywood County	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	3.5	3.2	4.7	3.9	4.3	3.9	3.9	-0.4	Beneficial Change

54	Jackson County	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	4.2	4.2	4.2	4.2	4.3	4.2	4.2	0	No Significant Change
54	Swain County	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	5	5	5	5.1	4.8	4.6	4.6	0.4	Adverse Change
54	North Carolina	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	3.7	3.7	3.7	3.6	3.9	3.6	3.6	0.1	No Significant Change
54	United States	Poor Physical Health Days	Avg. number of physically unhealthy days in past 30 days (age-adjusted)	3.9	3.9	3.9	3.7	3.8	N/A	N/A	0.1	No Significant Change
55	Cherokee County	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	5	4.7	5	4.9	4.3	4.5	4.5	0.5	Adverse Change
55	Graham County	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	5.1	4.8	4.7	5.3	4.4	4.4	4.4	0.7	Adverse Change
55	Haywood County	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	4.9	4.7	5.2	4.7	4.4	4.2	4.2	0.7	Adverse Change
55	Jackson County	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	4.8	4.8	4.8	4.9	4.4	4.4	4.4	0.4	Adverse Change
55	Swain County	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	5.5	5.5	5.5	5.5	4.8	4.9	4.9	0.6	Adverse Change
55	North Carolina	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	4.4	4.4	4.4	4.1	4.1	3.9	3.9	0.5	Adverse Change

55	United States	Poor Mental Health Days	Avg. number of mentally unhealthy days in past 30 days (age-adjusted)	4.5	4.5	4.5	4.1	4	N/A	N/A	0.5	Adverse Change
56	Cherokee County	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	8%	9%	9%	9%	9%	10%	10%	-2%	Beneficial Change
56	Graham County	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	7%	9%	9%	8%	9%	10%	9%	-2%	Beneficial Change
56	Haywood County	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	9%	9%	9%	9%	9%	9%	9%	0%	No Significant Change
56	Jackson County	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	9%	9%	9%	8%	8%	8%	8%	1%	Adverse Change
56	Swain County	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	8%	8%	8%	8%	8%	8%	8%	0%	No Significant Change
56	North Carolina	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	9%	9%	9%	9%	9%	9%	9%	0%	No Significant Change
56	United States	Low Birthweight	% of live births with low birthweight (< 2,500 grams)	8%	8%	8%	22%	8%	8%	8%	0%	No Significant Change
57	Cherokee County	Adult Smoking	% adults who are current smokers (age-adjusted)	19%	22%	23%	23%	17%	18%	18%	1%	Beneficial Change
57	Graham County	Adult Smoking	% adults who are current smokers (age-adjusted)	20%	23%	20%	26%	18%	19%	19%	1%	Beneficial Change
57	Haywood County	Adult Smoking	% adults who are current smokers (age-adjusted)	17%	19%	25%	21%	18%	17%	17%	0%	No Significant Change
57	Jackson County	Adult Smoking	% adults who are current smokers (age-adjusted)	19%	21%	21%	27%	18%	20%	20%	-1%	Adverse Change
57	Swain County	Adult Smoking	% adults who are current smokers (age-adjusted)	23%	26%	26%	18%	22%	23%	23%	0%	No Significant Change

57	North Carolina	Adult Smoking	% adults who are current smokers (age-adjusted)	15%	19%	19%	17%	17%	18%	18%	-3%	Beneficial Change
57	United States	Adult Smoking	% adults who are current smokers (age-adjusted)	15%	16%	16%	28%	17%	N/A	N/A	-2%	Beneficial Change
58	Cherokee County	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	38%	33%	33%	31%	27%	29%	28%	10%	Adverse Change
58	Graham County	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	36%	33%	33%	41%	43%	32%	30%	6%	Adverse Change
58	Haywood County	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	37%	34%	35%	33%	32%	29%	32%	5%	Adverse Change
58	Jackson County	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	37%	35%	35%	28%	28%	29%	29%	8%	Adverse Change
58	Swain County	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	39%	36%	36%	28%	31%	29%	29%	10%	Adverse Change
58	North Carolina	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	36%	34%	34%	32%	31%	30%	30%	6%	Adverse Change
58	United States	Adult Obesity	% adults with BMI >= 30 (age-adjusted)	34%	32%	32%	30%	29%	29%	28%	6%	Adverse Change
59	Cherokee County	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.4	7.2	7.3	7.5	8	8	7.8	-0.4	Beneficial Change
59	Graham County	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.6	7.3	7.6	7.5	7.9	8	7.5	0.1	Beneficial Change
59	Haywood County	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.8	7.6	7.3	7.4	7.6	7.7	7.5	0.3	Beneficial Change
59	Jackson County	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.7	7.6	7.6	7.0	6.9	6.9	6.9	0.8	Beneficial Change

59	Swain County	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.5	7.4	7.4	7.7	8	7.9	7.6	-0.1	Beneficial Change
59	North Carolina	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	6.8	6.6	6.6	6.8	6.7	6.6	6.4	0.4	Beneficial Change
59	United States	Food Environment Index	Index of factors contributing to a healthy food environment (0 worst, 10 best)	7.7	7.8	7.8	7.8	7.6	7.7	7.7	0	No Significant Change
60	Cherokee County	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	24%	24%	28%	30%	29%	29%	31%	-7%	Beneficial Change
60	Graham County	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	24%	24%	24%	24%	25%	26%	27%	-3%	Beneficial Change
60	Haywood County	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	22%	21%	30%	25%	26%	24%	26%	-4%	Beneficial Change
60	Jackson County	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	23%	26%	26%	29%	29%	27%	24%	-1%	Beneficial Change
60	Swain County	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	25%	31%	31%	23%	25%	25%	27%	-2%	Beneficial Change
60	North Carolina	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	22%	26%	26%	23%	24%	23%	24%	-2%	Beneficial Change
60	United States	Physical Inactivity	% adults with no leisure-time physical activity (age-adjusted)	23%	26%	26%	23%	23%	22%	23%	0%	No Significant Change
61	Cherokee County	Access to Exercise Opportunities	% population with adequate access to physical activity locations	98%	99%	99%	99%	99%	99%	99%	-1%	Beneficial Change

61	Graham County	Access to Exercise Opportunities	% population with adequate access to physical activity locations	100%	100%	81%	100%	100%	100%	100%	0%	No Significant Change
61	Haywood County	Access to Exercise Opportunities	% population with adequate access to physical activity locations	86%	83%	100%	86%	86%	76%	81%	5%	Adverse Change
61	Jackson County	Access to Exercise Opportunities	% population with adequate access to physical activity locations	99%	99%	99%	100%	100%	100%	100%	-1%	Beneficial Change
61	Swain County	Access to Exercise Opportunities	% population with adequate access to physical activity locations	97%	96%	96%	97%	97%	97%	97%	0%	No Significant Change
61	North Carolina	Access to Exercise Opportunities	% population with adequate access to physical activity locations	73%	68%	68%	74%	74%	73%	76%	-3%	Beneficial Change
61	United States	Access to Exercise Opportunities	% population with adequate access to physical activity locations	84%	80%	80%	84%	84%	84%	83%	1%	Beneficial Change
62	Cherokee County	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	15%	19%	18%	19%	14%	15%	15%	0%	No Significant Change
62	Graham County	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	17%	19%	19%	18%	15%	16%	16%	1%	Adverse Change
62	Haywood County	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	17%	19%	18%	19%	16%	16%	16%	1%	Adverse Change
62	Jackson County	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	18%	19%	19%	18%	18%	18%	18%	0%	No Significant Change
62	Swain County	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	17%	17%	17%	17%	16%	16%	16%	1%	Adverse Change
62	North Carolina	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	18%	17%	17%	18%	17%	17%	17%	1%	Adverse Change

62	United States	Excessive Drinking	% adults reporting binge or heavy drinking (age-adjusted)	18%	20%	20%	19%	19%	N/A	N/A	-1%	Beneficial Change
63	Cherokee County	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	28%	29%	29%	26%	30%	30%	29%	-1%	Beneficial Change
63	Graham County	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	6%	0%	11%	5%	6%	6%	6%	0%	No Significant Change
63	Haywood County	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	10%	11%	0%	9%	16%	16%	14%	-4%	Beneficial Change
63	Jackson County	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	20%	17%	17%	20%	23%	31%	27%	-7%	Beneficial Change
63	Swain County	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	0%	0%	0%	0%	13%	9%	17%	-17%	Beneficial Change
63	North Carolina	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	25%	26%	26%	28%	29%	30%	31%	-6%	Beneficial Change
63	United States	Alcohol-Impaired Driving Deaths	% driving deaths with alcohol involvement	26%	27%	27%	27%	28%	29%	29%	-3%	Beneficial Change
64	Cherokee County	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	178.3	129.3	160.8	185.1	149.5	139.8	132.6	45.7	Adverse Change
64	Graham County	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	111.9	308	277.6	199	245.9	197.3	231.4	-119.5	Beneficial Change

64	Haywood County	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	208.1	235.9	201.4	273.4	227.6	222.2	252.2	-44.1	Beneficial Change
64	Jackson County	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	497.6	630.4	630.4	474.70	479.4	368.4	388	109.6	Adverse Change
64	Swain County	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	530.6	721.7	721.7	825.50	615.6	755.2	917.8	-387.2	Beneficial Change
64	North Carolina	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	603.3	669.9	669.9	647.80	612	577.6	647.4	-44.1	Beneficial Change
64	United States	Sexually Transmitted Infections	Number of newly diagnosed chlamydia cases per 100,000 population	495.5	551	551	539.90	524.6	497.3	478.8	16.7	Adverse Change
65	Cherokee County	Teen Births	Number of births per 1,000 female population ages 15-19	24	29	29	30	33	35	36	-12	Beneficial Change
65	Graham County	Teen Births	Number of births per 1,000 female population ages 15-19	39	41	22	38	40	46	49	-10	Beneficial Change
65	Haywood County	Teen Births	Number of births per 1,000 female population ages 15-19	19	22	41	26	29	33	35	-16	Beneficial Change
65	Jackson County	Teen Births	Number of births per 1,000 female population ages 15-19	13	15	15	16.00	18	19	20	-7	Beneficial Change
65	Swain County	Teen Births	Number of births per 1,000 female population ages 15-19	42	47	47	54.00	58	62	61	-19	Beneficial Change
65	North Carolina	Teen Births	Number of births per 1,000 female population ages 15-19	18	21	21	22.00	24	27	29	-11	Beneficial Change
65	United States	Teen Births	Number of births per 1,000 female population ages 15-19	17	19	19	21.00	23	25	27	-10	Beneficial Change

66	Cherokee County	Uninsured	% population under age 65 without health insurance	16%	15%	17%	15%	14%	15%	15%	1%	Adverse Change
66	Graham County	Uninsured	% population under age 65 without health insurance	20%	18%	12%	18%	19%	17%	17%	3%	Adverse Change
66	Haywood County	Uninsured	% population under age 65 without health insurance	13%	13%	19%	12%	12%	11%	12%	1%	Adverse Change
66	Jackson County	Uninsured	% population under age 65 without health insurance	18%	19%	19%	17%	18%	18%	18%	0%	No Significant Change
66	Swain County	Uninsured	% population under age 65 without health insurance	20%	22%	22%	19%	18%	18%	18%	2%	Adverse Change
66	North Carolina	Uninsured	% population under age 65 without health insurance	12%	13%	13%	13%	13%	12%	13%	-1%	Beneficial Change
66	United States	Uninsured	% population under age 65 without health insurance	10%	11%	11%	10%	10%	10%	11%	-1%	Beneficial Change
67	Cherokee County	Primary Care Physicians	Ratio of population to primary care physicians	2,430:1	2,080:1	2,380:1	2,580:1	2,810:1	2,540:1	2,090:1	340.00	Adverse Change
67	Graham County	Primary Care Physicians	Ratio of population to primary care physicians	2,680:1	4,240:1	1,350:1	4,240:1	4,270:1	4,280:1	4,310:1	-1630.00	Beneficial Change
67	Haywood County	Primary Care Physicians	Ratio of population to primary care physicians	1,450:1	1,340:1	4,220:1	1,350:1	1,330:1	1,380:1	1,360:1	90	Adverse Change
67	Jackson County	Primary Care Physicians	Ratio of population to primary care physicians	1,400:1	1,190:1	1,190:1	1,080:1	1,070:1	1,060:1	1,090:1	310.00	Beneficial Change
67	Swain County	Primary Care Physicians	Ratio of population to primary care physicians	1,570:1	1,300:1	1,300:1	1,190:1	1,190:1	1,200:1	1,110:1	460.00	Beneficial Change
67	North Carolina	Primary Care Physicians	Ratio of population to primary care physicians	1,410:1	1,400:1	1,400:1	1,400:1	1,410:1	1,420:1	1,420:1	-10.00	No Significant Change
67	United States	Primary Care Physicians	Ratio of population to primary care physicians	1,330:1	1,310:1	1,310:1	1,320:1	1,330:1	1,330:1	1,320:1	10.00	No Significant Change
68	Cherokee County	Dentists	Ratio of population to dentists	2,460:1	2,650:1	3,230:1	3,180:1	3,150:1	3,120:1	3,100:1	-640.00	Adverse Change
68	Graham County	Dentists	Ratio of population to dentists	3,990:1	4,020:1	2,250:1	4,220:1	2,830:1	2,850:1	4,280:1	-290.00	Beneficial Change

68	Haywood County	Dentists	Ratio of population to dentists	2,240:1	2,230:1	4,240:1	2,150:1	2,300:1	2,180:1	2,090:1	150.00	Beneficial Change
68	Jackson County	Dentists	Ratio of population to dentists	2,260:1	2,100:1	2,100:1	2,090:1	1,970:1	1,870:1	2,010:1	250.00	Beneficial Change
68	Swain County	Dentists	Ratio of population to dentists	1,160:1	1,180:1	1,180:1	1,190:1	1,190:1	1,190:1	1,300:1	-140.00	Beneficial Change
68	North Carolina	Dentists	Ratio of population to dentists	1,630:1	1,710:1	1,710:1	1,720:1	1,780:1	1,800:1	1,830:1	-200.00	Beneficial Change
68	United States	Dentists	Ratio of population to dentists	1,360:1	1,400:1	1,400:1	1,400:1	1,450:1	1,460:1	1,480:1	-120.00	Beneficial Change
69	Cherokee County	Mental Health Providers	Ratio of population to mental health providers	660:1	710:1	710:1	730:1	690:1	740:1	750:1	-90.00	Adverse Change
69	Graham County	Mental Health Providers	Ratio of population to mental health providers	890:1	1010:1	260:1	1060:1	1060:1	1220:1	1430:1	-540.00	Beneficial Change
69	Haywood County	Mental Health Providers	Ratio of population to mental health providers	250:1	260:1	1060:1	250:1	260:1	260:1	270:1	-20.00	Beneficial Change
69	Jackson County	Mental Health Providers	Ratio of population to mental health providers	210:1	220:1	220:1	230:1	220:1	220:1	210:1	0.00	No Significant Change
69	Swain County	Mental Health Providers	Ratio of population to mental health providers	280:1	300:1	300:1	320:1	360:1	380:1	410:1	-130.00	Beneficial Change
69	North Carolina	Mental Health Providers	Ratio of population to mental health providers	320:1	360:1	360:1	390:1	410:1	440:1	460:1	-140.00	Beneficial Change
69	United States	Mental Health Providers	Ratio of population to mental health providers	320:1	350:1	350:1	380:1	400:1	440:1	470:1	-150.00	Beneficial Change
70	Cherokee County	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	2,143	1,683	3,132	3,383	4,262	5,002	50	2093	Adverse Change
70	Graham County	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	1,216	1,683	4,463	2,506	3,191	3,452	61	1155	Adverse Change

70	Haywood County	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	2,247	2,843	2,485	4,966	5,063	4,909	50	2197	Adverse Change
70	Jackson County	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	1,809	3,445	3,445	2,963	3,117	3,622	51	1758	Adverse Change
70	Swain County	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	2,875	3,969	3,969	4,582	4,671	4,171	72	2803	Adverse Change
70	North Carolina	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	2,838	4,096	4,096	4,539	4,758	4,702	49	2789	Adverse Change
70	United States	Preventable Hospital Stays	Rate of hospital stays for ambulatory-care sensitive conditions per 100,000 Medicare enrollees	2,681	3,767	3,767	4,236	4,535	N/A	49	2632	Adverse Change
71	Cherokee County	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	40%	36%	40%	41%	38%	36%	68%	-28%	Beneficial Change
71	Graham County	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	33%	25%	46%	34%	33%	32%	59%	-26%	Beneficial Change
71	Haywood County	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	47%	40%	29%	46%	44%	44%	68%	-21%	Beneficial Change

71	Jackson County	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	41%	39%	39%	36%	39%	40%	59%	-18%	Beneficial Change
71	Swain County	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	33%	24%	24%	23%	21%	21%	53%	-20%	Beneficial Change
71	North Carolina	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	47%	48%	48%	46%	46%	45%	68%	-21%	Beneficial Change
71	United States	Mammography Screening	% female Medicare enrollees ages 65-74 receiving annual mammography screening	43%	43%	43%	42%	42%	N/A	63%	-20%	Beneficial Change
72	Cherokee County	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	37%	47%	46%	45%	43%	38%	38%	-1%	Adverse Change
72	Graham County	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	33%	36%	50%	40%	37%	36%	36%	-3%	Adverse Change
72	Haywood County	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	48%	54%	39%	50%	49%	49%	49%	-1%	Adverse Change
72	Jackson County	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	48%	48%	48%	47%	48%	46%	N/A	2%	Beneficial Change
72	Swain County	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	42%	43%	43%	42%	42%	41%	N/A	1%	Beneficial Change

72	North Carolina	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	50%	53%	53%	52%	51%	50%	N/A	0%	No Significant Change
72	United States	Flu Vaccinations	% fee-for-service Medicare enrollees receiving annual flu vaccination	46%	48%	48%	48%	46%	N/A	N/A	0%	No Significant Change
73	Cherokee County	High School Completion	% adults ages 25 and over with high school diploma or equivalent	91%	90%	89%	87%	92%	92%	N/A	-1%	Adverse Change
73	Graham County	High School Completion	% adults ages 25 and over with high school diploma or equivalent	84%	83%	89%	82%	85%	85%	N/A	-1%	Adverse Change
73	Haywood County	High School Completion	% adults ages 25 and over with high school diploma or equivalent	90%	90%	82%	88%	85%	85%	N/A	5%	Beneficial Change
73	Jackson County	High School Completion	% adults ages 25 and over with high school diploma or equivalent	89%	88%	88%	89%	N/A	N/A	N/A	0%	No Significant Change
73	Swain County	High School Completion	% adults ages 25 and over with high school diploma or equivalent	85%	83%	83%	80%	N/A	N/A	N/A	5%	Beneficial Change
73	North Carolina	High School Completion	% adults ages 25 and over with high school diploma or equivalent	89%	89%	89%	88%	N/A	N/A	N/A	1%	Beneficial Change
73	United States	High School Completion	% adults ages 25 and over with high school diploma or equivalent	89%	89%	89%	88%	N/A	N/A	N/A	1%	Beneficial Change
74	Cherokee County	Some College	% adults ages 25-44 with some post-secondary education	58%	58%	62%	59%	61%	61%	59%	-1%	Adverse Change
74	Graham County	Some College	% adults ages 25-44 with some post-secondary education	51%	53%	65%	57%	57%	56%	49%	2%	Beneficial Change
74	Haywood County	Some College	% adults ages 25-44 with some post-secondary education	67%	66%	60%	66%	66%	63%	60%	7%	Beneficial Change
74	Jackson County	Some College	% adults ages 25-44 with some post-secondary education	57%	59%	59%	67%	67%	67%	63%	-6%	Adverse Change

74	Swain County	Some College	% adults ages 25-44 with some post-secondary education	55%	57%	57%	54%	52%	59%	59%	-4%	Adverse Change
74	North Carolina	Some College	% adults ages 25-44 with some post-secondary education	69%	68%	68%	67%	67%	67%	66%	3%	Beneficial Change
74	United States	Some College	% adults ages 25-44 with some post-secondary education	68%	67%	67%	66%	66%	65%	65%	3%	Beneficial Change
75	Cherokee County	Unemployment	% population ages 16 and older unemployed but seeking work	4.00%	5.00%	7.90%	4.50%	4.40%	5.10%	5.60%	-2%	Beneficial Change
75	Graham County	Unemployment	% population ages 16 and older unemployed but seeking work	5.40%	6.90%	7.50%	5.40%	5.90%	6.80%	8.80%	-3%	Beneficial Change
75	Haywood County	Unemployment	% population ages 16 and older unemployed but seeking work	3.20%	4.20%	9.90%	3.40%	3.40%	4.10%	4.60%	-1%	Beneficial Change
75	Jackson County	Unemployment	% population ages 16 and older unemployed but seeking work	3.80%	7.60%	7.60%	4.1%	4.10%	4.80%	5.40%	-2%	Beneficial Change
75	Swain County	Unemployment	% population ages 16 and older unemployed but seeking work	3.20%	8.50%	8.50%	4.0%	4.30%	5.10%	6.10%	-3%	Beneficial Change
75	North Carolina	Unemployment	% population ages 16 and older unemployed but seeking work	3.70%	7.30%	7.30%	3.9%	3.90%	4.60%	5.10%	-1%	Beneficial Change
75	United States	Unemployment	% population ages 16 and older unemployed but seeking work	3.70%	8.10%	8.10%	3.7%	3.90%	4.40%	4.90%	-1%	Beneficial Change
76	Cherokee County	Children in Poverty	% people under age 18 in poverty	25%	27%	25%	29%	28%	29%	31%	-6%	Beneficial Change
76	Graham County	Children in Poverty	% people under age 18 in poverty	23%	28%	21%	23%	26%	28%	31%	-8%	Beneficial Change
76	Haywood County	Children in Poverty	% people under age 18 in poverty	19%	20%	24%	17%	22%	23%	28%	-9%	Beneficial Change
76	Jackson County	Children in Poverty	% people under age 18 in poverty	19%	20%	20%	25.0%	21%	23%	24%	-5%	Beneficial Change
76	Swain County	Children in Poverty	% people under age 18 in poverty	21%	21%	21%	27.0%	23%	24%	25%	-4%	Beneficial Change
76	North Carolina	Children in Poverty	% people under age 18 in poverty	17%	18%	18%	19.0%	20%	21%	22%	-5%	Beneficial Change

76	United States	Children in Poverty	% people under age 18 in poverty	16%	16%	16%	17.0%	18%	18%	20%	-4%	Beneficial Change
77	Cherokee County	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.2	4.3	4.2	4.3	4.3	4.2	4.4	-0.2	Beneficial Change
77	Graham County	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.2	4.3	4.6	4.8	4.5	4.3	4.3	-0.1	Beneficial Change
77	Haywood County	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.7	4.6	5	4.6	4.6	4.9	4.8	-0.1	Beneficial Change
77	Jackson County	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	5.2	4.6	4.6	4.60	4.9	5.2	5.2	0	No Significant Change
77	Swain County	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	5.4	5.2	5.2	4.90	4.4	4.5	4.8	0.6	Beneficial Change
77	North Carolina	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.7	4.7	4.7	4.70	4.8	4.8	4.8	-0.1	Beneficial Change
77	United States	Income Inequality	Ratio of household income at the 80th percentile to income at the 20th percentile	4.9	4.9	4.9	4.90	4.9	4.9	5	-0.1	Beneficial Change
78	Cherokee County	Children in Single-Parent Households	% children living in a household headed by a single parent	27%	27%	25%	29%	31%	30%	37%	-10%	Beneficial Change
78	Graham County	Children in Single-Parent Households	% children living in a household headed by a single parent	15%	24%	23%	26%	26%	33%	27%	-12%	Beneficial Change
78	Haywood County	Children in Single-Parent Households	% children living in a household headed by a single parent	25%	25%	23%	20%	31%	33%	36%	-11%	Beneficial Change

78	Jackson County	Children in Single-Parent Households	% children living in a household headed by a single parent	31%	26%	26%	32%	39%	40%	42%	-11%	Beneficial Change
78	Swain County	Children in Single-Parent Households	% children living in a household headed by a single parent	31%	40%	40%	32%	37%	43%	48%	-17%	Beneficial Change
78	North Carolina	Children in Single-Parent Households	% children living in a household headed by a single parent	27%	27%	27%	28%	35%	35%	36%	-9%	Beneficial Change
78	United States	Children in Single-Parent Households	% children living in a household headed by a single parent	25%	25%	25%	26%	33%	33%	34%	-9%	Beneficial Change
79	Cherokee County	Social Associations	Number of membership associations per 10,000 population	9.3	10.3	10.1	10.2	12.1	13.6	13.6	-4.3	Adverse Change
79	Graham County	Social Associations	Number of membership associations per 10,000 population	14.9	11.8	15.4	14.1	12.9	12.9	13.9	1	Beneficial Change
79	Haywood County	Social Associations	Number of membership associations per 10,000 population	15	14.6	14.2	15.3	15.9	15.7	16.4	-1.4	Adverse Change
79	Jackson County	Social Associations	Number of membership associations per 10,000 population	14.7	12.1	12.1	13.60	13.5	13.3	13.1	1.6	Beneficial Change
79	Swain County	Social Associations	Number of membership associations per 10,000 population	8.5	9.1	9.1	9.80	9.8	12.5	11.8	-3.3	Adverse Change
79	North Carolina	Social Associations	Number of membership associations per 10,000 population	11.3	11.3	11.3	11.50	11.5	11.5	11.5	-0.2	Adverse Change

79	United States	Social Associations	Number of membership associations per 10,000 population	9.1	9.2	9.2	9.30	9.3	9.3	9.3	-0.2	Adverse Change
80	Cherokee County	Injury Deaths	Number of deaths due to injury per 100,000 population	120	110	110	105	105	103	100	20	Adverse Change
80	Graham County	Injury Deaths	Number of deaths due to injury per 100,000 population	105	99	126	94	98	102	127	-22	Beneficial Change
80	Haywood County	Injury Deaths	Number of deaths due to injury per 100,000 population	129	126	99	122	114	104	94	35	Adverse Change
80	Jackson County	Injury Deaths	Number of deaths due to injury per 100,000 population	100	96	96	89.00	89	82	76	24	Adverse Change
80	Swain County	Injury Deaths	Number of deaths due to injury per 100,000 population	134	123	123	103.00	92	87	86	48	Adverse Change
80	North Carolina	Injury Deaths	Number of deaths due to injury per 100,000 population	88	82	82	77.00	75	71	68	20	Adverse Change
80	United States	Injury Deaths	Number of deaths due to injury per 100,000 population	80	76	76	72.00	70	67	65	15	Adverse Change
81	Cherokee County	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	7.4	7.4	7.3	9.6	9	9	8.7	-1.3	Beneficial Change
81	Graham County	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	6.6	6.6	6.9	9.2	8.4	8.4	8.2	-1.6	Beneficial Change
81	Haywood County	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	6.7	6.7	6.8	8.6	8.7	8.7	8.6	-1.9	Beneficial Change
81	Jackson County	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	6.6	6.6	6.6	9.70	8.4	8.4	8.3	-1.7	Beneficial Change

81	Swain County	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	7.2	7.7	7.7	9.20	8.4	8.4	8.3	-1.1	Beneficial Change
81	North Carolina	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	7.8	7.5	7.5	8.50	9.8	9.8	9.1	-1.3	Beneficial Change
81	United States	Air Pollution - Particulate Matter	Avg. daily density of fine particulate matter in micrograms per cubic meter (PM2.5)	7.4	7.5	7.5	7.20	8.6	N/A	N/A	-1.2	Beneficial Change
82	Cherokee County	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	No	No	No	No	No	No	No	N/A	No Significant Change
82	Graham County	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	No	No	No	No	No	No	No	N/A	No Significant Change
82	Haywood County	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	No	No	No	No	No	No	No	N/A	No Significant Change
82	Jackson County	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	No	Yes	Yes	Yes	No	No	No	N/A	Beneficial Change
82	Swain County	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	No	No	No	No	No	Yes	Yes	N/A	No Significant Change
82	North Carolina	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
82	United States	Drinking Water Violations	Presence of health-related drinking water violations (Yes/No)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	No Significant Change
83	Cherokee County	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	11%	12%	12%	13%	13%	13%	12%	-1%	Beneficial Change

83	Graham County	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	10%	9%	14%	8%	9%	10%	12%	-2%	Beneficial Change
83	Haywood County	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	14%	13%	8%	15%	15%	16%	15%	-1%	Beneficial Change
83	Jackson County	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	15%	16%	16%	16%	17%	18%	19%	-4%	Beneficial Change
83	Swain County	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	14%	12%	12%	13%	12%	13%	13%	1%	Adverse Change
83	North Carolina	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	14%	15%	15%	15%	16%	16%	17%	-3%	Beneficial Change
83	United States	Severe Housing Problems	% households with overcrowding, high housing costs, or lack of kitchen/plumbing facilities	17%	17%	17%	18%	18%	18%	19%	-2%	Beneficial Change
84	Cherokee County	Driving Alone to Work	% workforce that drives alone to work	79%	78%	78%	79%	81%	82%	83%	-4%	Beneficial Change
84	Graham County	Driving Alone to Work	% workforce that drives alone to work	83%	83%	82%	82%	77%	83%	80%	3%	Adverse Change
84	Haywood County	Driving Alone to Work	% workforce that drives alone to work	80%	81%	84%	82%	83%	84%	83%	-3%	Beneficial Change
84	Jackson County	Driving Alone to Work	% workforce that drives alone to work	82%	80%	80%	80%	79%	78%	79%	3%	Adverse Change

84	Swain County	Driving Alone to Work	% workforce that drives alone to work	81%	85%	85%	83%	84%	87%	86%	-5%	Beneficial Change
84	North Carolina	Driving Alone to Work	% workforce that drives alone to work	75%	79%	79%	81%	81%	81%	81%	-6%	Beneficial Change
84	United States	Driving Alone to Work	% workforce that drives alone to work	72%	75%	75%	76%	76%	76%	76%	-4%	Beneficial Change
85	Cherokee County	Long Commute - Driving Alone	% workers with long commute (driving alone)	28%	29%	29%	30%	28%	29%	26%	2%	Adverse Change
85	Graham County	Long Commute - Driving Alone	% workers with long commute (driving alone)	30%	26%	32%	35%	37%	30%	23%	7%	Adverse Change
85	Haywood County	Long Commute - Driving Alone	% workers with long commute (driving alone)	34%	34%	27%	32%	33%	32%	32%	2%	Adverse Change
85	Jackson County	Long Commute - Driving Alone	% workers with long commute (driving alone)	24%	20%	20%	23%	21%	21%	21%	3%	Adverse Change
85	Swain County	Long Commute - Driving Alone	% workers with long commute (driving alone)	21%	17%	17%	18%	19%	19%	20%	1%	Adverse Change
85	North Carolina	Long Commute - Driving Alone	% workers with long commute (driving alone)	34%	34%	34%	34%	33%	32%	31%	3%	Adverse Change
85	United States	Long Commute - Driving Alone	% workers with long commute (driving alone)	36%	37%	37%	37%	36%	35%	35%	1%	Adverse Change

Our Priorities

The development of the 2023 EBCI Tribal Health Assessment (THA) priorities involved a careful review of the successes and ongoing challenges identified in the 2018 THA, alongside insights from updated data, community voices, and the unique circumstances brought about by the COVID-19 pandemic.

2018 THA: A Foundation and Areas for Continued Growth

The 2018 THA established the following ten health priorities:

1. Substance Abuse and Related Issues
2. Violence and Abuse
3. Diabetes
4. Hepatitis C
5. Heart Disease
6. Stress
7. Tobacco Use
8. Depression
9. Food Insecurity
10. Sexually Transmitted Infections and Teen Pregnancy

Extensive efforts have been directed toward these priorities, resulting in both progress and persistent challenges within the EBCI. This provides a valuable starting point as we refine priorities for the new THA cycle.

2023 Data, Community Input, and the Influence of COVID-19

The 2023 THA process included in-depth data analysis and community engagement through the Tribal Health Survey, focus groups, listening sessions, and close partnership with the THA Advisory Group. The following key findings informed our priority selection:

- **Chronic Disease Burden:** Diabetes, heart disease, and obesity continue to disproportionately affect the EBCI, often worsened by social determinants of health (SDOH).
- **Unmet Mental Health Needs:** Mental health challenges, including depression, stress, and trauma, demand expanded services and a comprehensive focus on emotional well-being in our community.
- **Persistent Substance Abuse:** While progress has been made, substance abuse remains a critical issue, with an urgent need for prevention, harm reduction, and treatment responsive to opioid misuse and other emerging drug trends.
- **Violence and its Impact:** Domestic violence, child abuse, and other forms of violence contribute to physical and emotional harm, requiring holistic interventions focused on both prevention and healing.
- **Evolving Community Concerns:** The 2023 Tribal Health Survey highlighted cancer, dental issues, and challenges facing elders as growing concerns requiring attention.
- **COVID-19 Disruptions:** The pandemic exacerbated existing health disparities, limited access to some services, and further highlighted interconnectedness between health and social factors.

2023 EBCI THA Priority Health Issues

The determination of the top ten health priorities for the 2023 Tribal Health Assessment (THA) of the Eastern Band of Cherokee Indians (EBCI) was an extensive and collaborative process. It involved multiple stages of data collection, community engagement, and rigorous analysis to ensure that the priorities identified are reflective of the community's needs.

Data Collection and Community Input

The process began with the 2023 Tribal Health Survey, where community members highlighted critical health issues. The top health concerns identified by the community included diabetes, substance use, mental health problems, child abuse/neglect, and domestic violence. These concerns were further validated through an analysis of harmful behaviors reported by the community, such as illicit drug use, alcohol use, adverse childhood experiences, emotional abuse, and violence. This survey provided a grassroots perspective on the pressing health issues affecting the EBCI.

In addition to the survey, secondary data collection played a crucial role in shaping the priorities. This involved analyzing health and behavior issues from various reliable sources, including the USET Tribal Epidemiology Center recommendations and data from health institutions. The secondary data highlighted substance use and related issues, mental health improvement, and diet and exercise-related conditions as significant areas requiring attention. It also pointed to issues such as domestic violence, healthy aging, and maternal and child health, further broadening the scope of identified health challenges.

Listening sessions added another layer of depth to the data collection process. These sessions provided a platform for community members to voice their concerns and discuss health-related issues in detail. Topics such as chronic disease prevention, mental health, healthy food access, housing stability, trauma healing, and environmental health were prominently discussed. The insights from these sessions were invaluable in understanding the nuanced health needs and preferences of the EBCI community.

Integration and Analysis

Integrating the data from these diverse sources ensured a comprehensive understanding of the health landscape. The Tribal Health Assessment's Leadership Team meticulously reviewed the findings from the Tribal Health Survey, secondary data collection, and listening sessions. They identified common themes and cross-referenced them with historical health data and trends observed in the EBCI community.

The team employed a holistic approach, recognizing that health is influenced by a multitude of factors, including social determinants of health (SDOH). Issues such as access to nutritious food, safe spaces for exercise, housing stability, and transportation were considered alongside direct health concerns. This integrated approach allowed for the identification of priorities that not only address immediate health issues but also the underlying social and economic conditions that contribute to these problems.

Finalizing the Priorities

The final top ten health priorities for the 2023 THA were determined through a collaborative decision-making process. The Leadership Team synthesized the data, ensuring that the selected priorities were comprehensive and actionable. Each priority was chosen based on its prevalence, impact on the community, and potential for improvement through targeted interventions.

Reflecting on Findings from the Tribal Health Survey

The 2023 Tribal Health Survey provided invaluable insights into the specific health concerns and needs of the EBCI community. The selected THA priorities directly respond to these community-identified issues, ensuring a comprehensive and detailed approach:

Chronic Conditions: Diabetes, Obesity, and Cancer

- **Diabetes:** Flagged as a significant concern, diabetes prevalence within the EBCI community is notably high. The survey data indicate that poor dietary habits and limited access to preventive care contribute to this issue. The THA includes all relevant data from the Tribal Health Survey, including blood sugar levels, incidence rates, and healthcare access metrics, providing a detailed analysis.
- **Obesity:** Closely linked to diabetes, obesity was repeatedly highlighted as a major health concern. Factors such as physical inactivity and unhealthy diets are prevalent. The THA incorporates Body Mass Index (BMI) statistics, exercise frequency, and dietary patterns to offer a comprehensive analysis.
- **Cancer:** Various forms of cancer were flagged as significant concerns, particularly those linked to lifestyle factors such as smoking and diet. The THA details cancer incidence rates, screening uptake, and survival rates, providing thorough analysis within the health priority section.

Mental Health, Substance Use, and Abuse

- **Mental Health Problems:** Issues such as depression, anxiety, and trauma were highlighted as having a widespread impact. The survey data indicate a need for expanded mental health services and reduced stigma around mental health care. The THA includes prevalence data, access to mental health services, and community attitudes towards mental health to address these challenges effectively and culturally appropriately.
- **Substance Use:** Substance abuse, including opioid misuse and alcohol dependency, remains a critical issue. The survey findings suggest that substance use disorders are exacerbated by underlying mental health issues and socioeconomic factors. The THA incorporates data on substance use prevalence, treatment access, and harm reduction strategies.
- **Abuse (Emotional, Physical, Sexual):** The survey brought attention to various forms of abuse that significantly impact community members' health and well-being. Detailed analysis includes

prevalence rates, the impact of abuse on mental and physical health, and available support services.

Aging Problems and Dental Issues

- **Aging Problems:** The health concerns specific to the elderly, such as mobility issues, chronic disease management, and social isolation, were highlighted. The THA includes data on aging demographics, healthcare utilization by older adults, and specific health challenges faced by the elderly.
- **Dental Problems:** Oral health issues were identified as often-overlooked concerns. The survey data suggest that limited access to dental care and preventive services contributes to these problems. The THA provides a comprehensive analysis of dental health status, access to dental care, and the impact of poor oral health on overall well-being.

The THA presents a holistic view of community health by incorporating all Tribal Health Survey data. For the top ten health priorities listed in the THA, the survey data offers critical insights that enable detailed analysis of these findings, helping to inform the public about current health issues. This comprehensive approach allows for a nuanced understanding of the community's health needs. By providing thorough data and analysis on these issues, the THA serves as a vital resource for planning and implementing effective, culturally appropriate interventions aimed at enhancing the well-being of the EBCI community.

Reflecting on Findings from Secondary Data Collection

The secondary data collection for the 2023 THA involved rigorous analysis of health and behavior issues using various reliable sources, including recommendations from the USET Tribal Epidemiology Center and data from health institutions. These findings are crucial for understanding the broader health landscape affecting the EBCI community and aligning the THA priorities accordingly.

Chronic Conditions: Substance Use, Asthma, and Diet-Related Issues

- **Substance Use and Related Issues:** Secondary data indicates that substance use, particularly opioid misuse and alcohol dependency, continues to be a significant health burden. High rates of substance use disorders were identified, exacerbated by factors such as mental health challenges and socioeconomic disparities. The THA includes detailed data on substance use prevalence, overdose rates, and access to treatment and prevention services.
- **Asthma:** Asthma prevalence within the EBCI community is notably high. Environmental factors, including exposure to pollutants and allergens, contribute significantly to this issue. The THA incorporates asthma incidence rates, hospitalization data, and environmental quality metrics to provide a comprehensive analysis.
- **Diet and Exercise-Related Conditions (Diabetes & High Blood Pressure):** Secondary data highlights the critical impact of poor diet and physical inactivity on health outcomes. The THA includes detailed statistics on dietary patterns, physical activity levels, and the prevalence of diet-related conditions such as diabetes and hypertension.

Mental Health and Abuse

- **Mental Health Improvement:** Data suggests a significant need for improved mental health services and support within the community. High rates of depression, anxiety, and trauma were identified, emphasizing the need for expanded access to mental health care and reduction of stigma. The THA provides a detailed analysis of mental health prevalence, service utilization, and barriers to care.
- **Violence and Abuse Prevention:** Secondary data underscores the high incidence of domestic violence, child abuse, and other forms of abuse. These issues contribute to long-term physical and mental health problems. The THA includes prevalence data, impact assessments, and information on available support services and preventive measures.

Aging, Housing, and Environmental Health

- **Healthy Aging:** The data reveals significant challenges related to aging within the EBCI community, including chronic disease management and social isolation. The THA incorporates demographic data, healthcare utilization statistics, and specific health issues faced by older adults, providing a thorough analysis.
- **Homeless and Housing Insecure Assistance:** Housing instability and homelessness are pressing issues identified through secondary data. The THA includes data on homelessness rates, housing quality, and access to housing support services, highlighting the critical need for stable housing to improve overall well-being.
- **Men's Health Improvement:** Specific health issues affecting men, including higher rates of substance use and chronic diseases, were identified. The THA provides data on health outcomes for men, access to healthcare, and targeted intervention strategies to improve men's health.

Social, Preventive, and Built Environment

- **Educational Achievement and Social Isolation Reduction:** Educational disparities and social isolation significantly impact health outcomes. The THA includes data on educational attainment, social support networks, and initiatives to reduce isolation and improve community cohesion.
- **Vaccination and Preventable Hospital Stays:** Data indicates gaps in vaccination rates and preventable hospital stays due to chronic conditions. The THA includes detailed statistics on vaccination coverage, hospital admission rates, and strategies to improve preventive care and reduce unnecessary hospitalizations.
- **Safe and Healthy Built Environment:** The built environment, including infrastructure quality and access to safe recreational spaces, was identified as a crucial determinant of health. The THA includes data on road safety, public transportation access, and environmental quality, providing insights into how the built environment impacts health.

By reflecting on these secondary data findings, the THA presents a detailed and comprehensive view of community health issues. This approach ensures that the health priorities are not only community-driven

but also supported by robust data, providing a strong foundation for effective, culturally appropriate interventions to enhance the well-being of the EBCI community.

Reflecting on Findings from Listening Sessions

The listening sessions conducted as part of the 2023 THA process provided invaluable qualitative insights into the health concerns and needs of the EBCI community. These sessions involved in-depth discussions with community members, allowing for a more nuanced understanding of the issues that matter most to them. The themes that emerged from these conversations were instrumental in shaping the THA priorities, ensuring they are aligned with the community's lived experiences and perspectives.

Chronic Disease Prevention and Management

- **Chronic Disease Prevention:** Community members emphasized the importance of focusing on healthy habits to prevent diabetes, heart disease, and other chronic conditions. They highlighted the need for education on nutrition and exercise, as well as greater access to preventive care services. The THA includes detailed insights from these discussions, incorporating recommendations for community-based programs that promote healthy lifestyles.

Mental Health and Trauma

- **Mental Health:** Tackling the stigma surrounding mental health and improving access to culturally appropriate services were recurrent themes. Participants shared experiences of depression, anxiety, and trauma, underscoring the need for more comprehensive mental health support. The THA reflects these concerns by providing data on mental health prevalence, community attitudes, and access to services, along with strategies to enhance mental health care.
- **Healing from Trauma:** The impact of historical and personal trauma was a significant topic of discussion. Community members called for support systems that acknowledge and address trauma in culturally sensitive ways. The THA includes qualitative data from these sessions, detailing the types of trauma experienced and the need for healing initiatives.

Nutrition, Exercise, and Environmental Health

- **Healthy Food:** Addressing the lack of nutritious options and promoting healthy choices were identified as critical needs. Participants pointed to food deserts and the prevalence of unhealthy dietary habits. The THA incorporates data on food accessibility, dietary patterns, and recommendations for improving nutrition education and access to healthy foods.
- **Clean Environment:** Concerns about environmental health, including air and water quality, and safe housing, were highlighted. Community members advocated for stronger environmental protections and sustainable practices. The THA includes data on environmental health indicators and community suggestions for enhancing environmental quality.

Housing Stability and Safe Homes

- **Housing Stability:** Affordability and instability in housing were major concerns. Participants discussed the impacts of housing insecurity on overall well-being and called for initiatives to

improve housing stability. The THA includes data on housing conditions, rates of homelessness, and access to housing support services.

- **Safe Homes and Families:** Combating domestic violence and ensuring safety within communities were emphasized. Participants shared experiences of violence and abuse, highlighting the need for preventive measures and support systems. The THA provides data on domestic violence rates, community resources, and strategies for creating safer home environments.

Access to Care and Social Support

- **Transportation Access:** Helping marginalized groups, such as elders, disabled individuals, and rural populations, reach healthcare services was a significant issue. Participants identified transportation barriers as a key factor limiting access to care. The THA includes data on transportation availability and community recommendations for improving access.
- **Children's Health:** Focusing on early childhood nutrition, mental health, and overall well-being was a priority. Community members stressed the importance of early intervention and support for children's health. The THA includes data on child health indicators and community suggestions for enhancing child health services.

Cultural Preservation and Community Engagement

- **Cultural Preservation:** Integrating Cherokee language and traditions into health initiatives was seen as vital for ensuring cultural relevance and effectiveness. Participants advocated for health programs that honor and incorporate cultural practices. The THA reflects these discussions by highlighting the importance of cultural preservation in health interventions.

By incorporating these insights from the listening sessions, the THA presents a comprehensive view of the community's health needs and priorities. This qualitative data complements the quantitative findings from the Tribal Health Survey and secondary data collection, providing a rich and nuanced understanding of the EBCI community's health landscape. The THA serves as a critical resource for planning and implementing culturally appropriate interventions that address both immediate health concerns and underlying social determinants of health.

Alignment with the Tribal Health Improvement Plan (THIP)

The selected priorities for the 2023 THA will guide the broader goals established in the EBCI THIP. Although the THIP has the autonomy to determine its own priorities, it is recommended that the THIP align its efforts with the top ten health priorities identified in the THA to ensure focused and effective health improvement initiatives for a healthy and thriving community.

Recommendations to the THIP:

- **Substance Use and Related Issues:** The THA emphasizes addressing substance use to create a community free from the detrimental impacts of alcohol and drug misuse. The THIP can enhance prevention, treatment, and harm reduction efforts by aligning with these recommendations.

- **Violence and Abuse Prevention:** Addressing domestic violence and child abuse is crucial for community safety. The THIP can develop culturally specific prevention programs and support systems by leveraging the findings from the THA.
- **Mental Health Support and Depression Prevention:** Ensuring equitable access to mental health resources is vital. The THIP can focus on specific areas for service improvement and innovation as highlighted in the THA.
- **Nutrition and Exercise Improvement:** Addressing chronic diseases such as diabetes and heart disease is key. The THIP can support healthy eating and physical activity initiatives outlined in the THA to promote healthier lifestyles.
- **Support for Homelessness and Housing Stability:** Ensuring stable housing improves overall well-being. The THIP can enhance housing assistance and stability programs recommended by the THA to address housing insecurity.
- **Improving Health Care Access and Promoting Preventive Care:** Increasing access to vaccinations and routine health checkups is essential. The THIP can ensure comprehensive preventive care and health promotion by following the THA's emphasis on preventive healthcare.
- **Safe and Healthy Built Environment:** Enhancing infrastructure and improving road safety are important. The THIP can incorporate improvements in the built environment as recommended in the THA to create a safe and accessible community.
- **Maternal and Child Health:** Ensuring healthy prenatal and postnatal care and addressing Adverse Childhood Experiences (ACEs) are critical. The THIP can support maternal and child health initiatives as outlined in the THA.
- **Tobacco Use Prevention:** Reducing smoking rates through education and cessation programs is vital. The THIP can support efforts to limit tobacco use as recommended by the THA.
- **Healthy Aging:** Promoting healthy aging practices and supporting elderly community members are important. The THIP can ensure the well-being of elderly community members through targeted programs and resources as highlighted in the THA.

Importance of Alignment

By demonstrating clear alignment between the THA priorities, the THIP goals, and the community's voice as expressed in the Tribal Health Survey, we ensure the following:

- **Focused Efforts:** Resources and energy are directed at the highest-impact health areas.
- **Community-Driven Solutions:** Interventions reflect the lived experiences and priorities of EBCI members.
- **Accountability:** The integrated nature of the THA and THIP allows for clear evaluation of progress towards shared health improvement goals.

2023 Top Ten Health Priorities

The 2023 Tribal Health Assessment (THA) has identified ten critical health priorities for the Eastern Band of Cherokee Indians (EBCI) based on extensive data collection and community input. These priorities represent the most pressing health concerns and areas for action to improve the overall well-being of the EBCI community. Each priority is selected not only for its prevalence but also for its significant impact on the community's health and its potential for improvement through targeted interventions.

The top ten health priorities (in no particular order) for 2023 are:

- **Substance Use and Related Issues**
- **Mental Health Support and Depression Prevention**
- **Violence and Abuse Prevention**
- **Nutrition and Exercise Improvement**
- **Support for Homelessness and Housing Stability**
- **Promoting Preventive Care and Improving Health Care Access**
- **Safe and Healthy Built Environment**
- **Maternal and Child Health**
- **Tobacco Use Prevention**
- **Healthy Aging**

These priorities were determined through a rigorous and collaborative process, integrating findings from the Tribal Health Survey, secondary data collection, and listening sessions with the community. The comprehensive analysis ensures that the identified health priorities address both immediate health concerns and the underlying social determinants of health, providing a pathway for sustainable health improvements in the EBCI community. Each priority will be explored in detail, incorporating relevant data and insights to guide effective and culturally appropriate health interventions.

Substance Use and Related Issues

Substance use, encompassing drug overdoses, excessive drinking, illicit drug use, and prescription medication misuse, significantly impacts the overall health and well-being of the Eastern Band of Cherokee Indians (EBCI). The misuse of these substances can lead to serious health, social, and economic consequences, including addiction, mental health disorders, chronic diseases, and increased mortality rates.

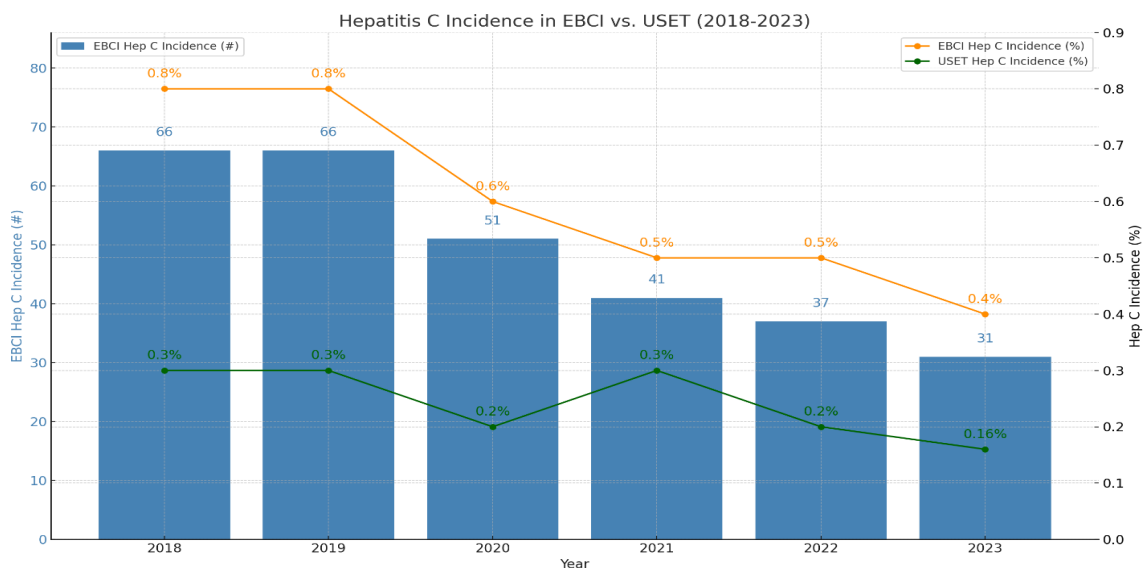
The Burden of Substance Use in the EBCI

The EBCI community has experienced significant challenges related to substance use, with notable fluctuations in rates over recent years. The COVID-19 pandemic exacerbated these issues, leading to increased isolation, economic hardship, and mental health struggles that have, in turn, contributed to higher substance use rates.

Consequences of Substance Use

Substance use can have far-reaching consequences beyond the immediate health impacts on individuals. Chronic use of substances such as opioids, alcohol, and illicit drugs can lead to a multitude of health issues:

- **Infectious Diseases:** Substance use, particularly through injection, can increase the risk of infectious diseases such as Hepatitis C and HIV. Sharing needles and other paraphernalia facilitates the transmission of these blood-borne infections. According to the CDC, injection drug users are at high risk of contracting Hepatitis C, which can lead to severe liver damage and liver cancer if left untreated.



Source: USET TEC Data Request

Figure 66

Hepatitis C incidence in EBCI vs USET (2018-2023)

- **Mental Health Disorders:** Substance use is often co-morbid with mental health conditions like depression, anxiety, and bipolar disorder. The bidirectional relationship means that individuals with

mental health disorders may use substances as a form of self-medication, while substance use can exacerbate or trigger mental health issues.

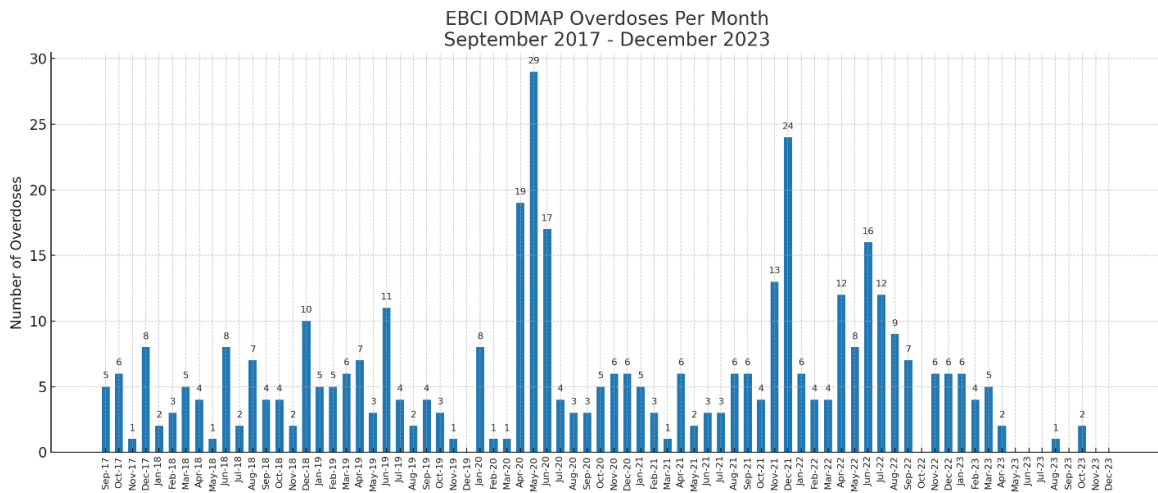
- **Chronic Diseases:** Prolonged substance use can lead to chronic conditions such as cardiovascular disease, respiratory issues, liver disease (including cirrhosis due to alcohol use), and neurological damage. For example, excessive alcohol consumption is a leading cause of liver cirrhosis, and long-term use of stimulants can result in cardiovascular complications.
- **Overdose and Mortality:** The risk of overdose is a critical concern with substances like opioids and synthetic drugs such as fentanyl. Overdose can lead to respiratory depression and death, and the presence of fentanyl in illicit drugs has significantly increased the rate of fatal overdoses.
- **Social and Economic Consequences:** Substance use disorders can result in significant social and economic burdens. These include loss of productivity, unemployment, financial instability, and strained relationships. Additionally, substance use can lead to legal issues and incarceration, further perpetuating the cycle of poverty and social marginalization.

Substance Use in the EBCI Community

Recent data highlights the various challenges and successes related to substance use prevention within the EBCI community. Several key areas require attention:

Key Substance Use-Related Health Measures:

- **Overdose Detection Mapping Application Program (ODMAP):** The EBCI ODMAP data from September 2017 to December 2023 reveals significant fluctuations in overdose incidents. The data shows a marked increase starting in April 2020, peaking in December 2021. This rise can be attributed to the pandemic's mental health impact. However, there are encouraging signs of a downward trend since December 2021, indicating the potential effectiveness of community support initiatives and improved access to mental health resources.



Source: EBCI Tribal EMS Overdose Data per Month from Overdose Detection Mapping Application Program (2017-2023)

Figure 67

EBCI Tribal EMS Overdose Data per Month from Overdose Detection Mapping Application Program (2017-2023)

Substance Use Among EBCI Cherokee Central Schools Students:

- Alcohol, Marijuana, and E-cigarette Use:** Data from 2022 shows troubling trends in the use of alcohol, marijuana, and e-cigarettes among students at EBCI Cherokee Central Schools. Alcohol use increases significantly in higher grades, peaking at 25% among 12th graders. Marijuana use shows a consistent rise from 13.8% in 6th grade to 30.6% in 12th grade. Similarly, e-cigarette use starts at 18.4% in 6th grade and peaks at 30.6% by 12th grade.

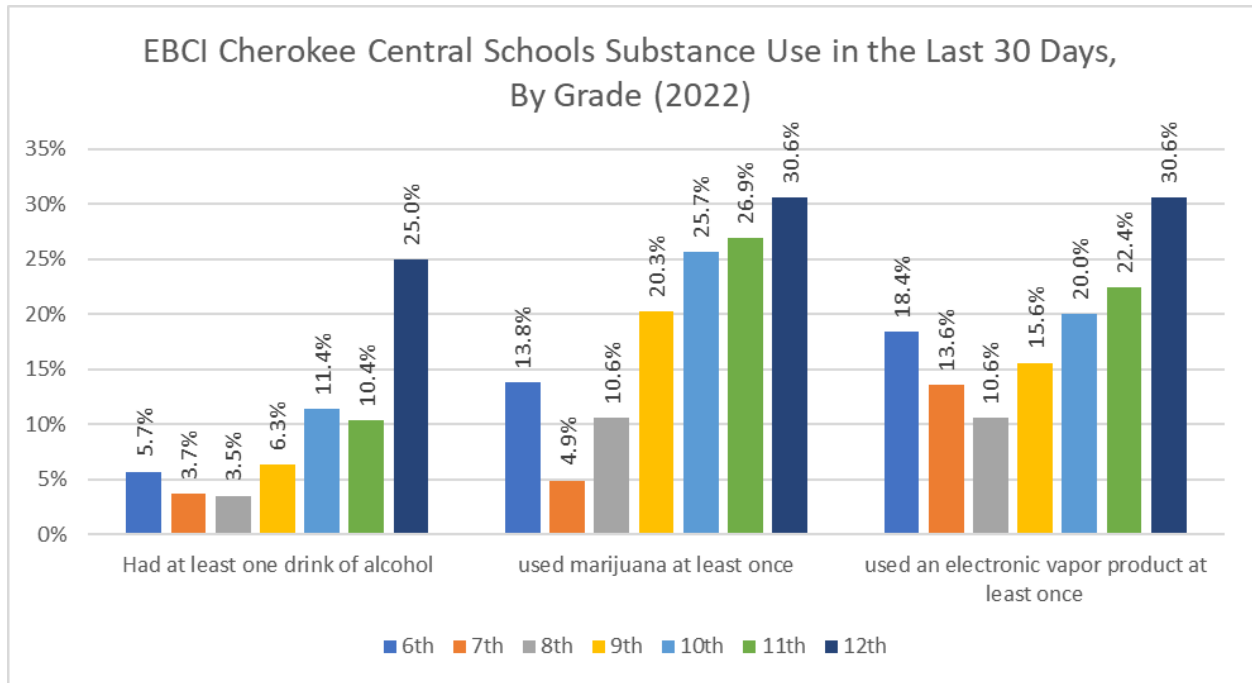


Figure 68

EBCI Cherokee Central Schools (CCS) Substance Use in Last 30 Days from Youth Risk and Resiliency Survey (2022)

High School Risk Behavior Indicators (2016-2022):

- Marijuana and Alcohol Use:** During this period, experimentation with marijuana increased from 48.0% to 60.2%, although regular use saw a slight decrease from 31.0% to 25.8%. Alcohol use trends reveal a decrease in current use from 23.0% to 12.0%, while early alcohol use (before age 13) remained consistent at around 14.7%. Reports of being offered or sold illegal drugs on school property decreased slightly but still remained higher than the national average, indicating a persistent issue within the school environment.

HIGH SCHOOL DATA

Risk Behavior Indicators	2016	2018	2022	CCS HS Data from 2016-2022 (%)		2022	2019	2019
	CCS High School (%)	CCS High School (%)	CCS High School (%)			CCS High School (%)	NC High School YRBS Data (%)	US High School YRBS Data (%)
Tobacco Use								
Ever tried cigarette smoking	51.0	48.1	34.5			34.5	N/A	24.1
Currently used electronic vapor products	54.0	37.8	21.8			34.5	35.5	32.7
First Tried Cigarette Smoking Before Age 13 Years	12.0	19.2	18.2			18.2	N/A	7.9
Currently smoked cigarettes	25.0	23.7	5.5			5.5	8.3	6.0
Alcohol and Other Drug Use								
Ever used marijuana	48.0	N/A	60.2	N/A		60.2	39.4	36.8
Currently used marijuana	31.0	39.4	25.8			25.8	22.1	21.7
Tried marijuana for the first time before age 13 years	16.0	27.7	17.1			17.1	7.5	5.6
Had their first drink of alcohol before age 13 years	14.0	14.7	14.7			14.7	15.0	15.0
Currently drank alcohol	23.0	28.2	12.0			12.0	24.2	29.2
Were offered, sold, or given an illegal drug on school property	10.0	18.7	9.4			9.4	22.2	21.8

Figure 69

CCS Tobacco Use and Alcohol and Other Drug Use Data from Youth Risk and Resiliency Survey (2016-2022)

Syringe Services Program and Public Health Vending Machines Initiative

In 2018, the Public Health and Human Services (PHHS) launched the Syringe Services Program, a community-based public health initiative aimed at reducing the harms associated with injection drug use. The program provides participants with sterile syringes and clean injection equipment, as well as comprehensive harm reduction services, including HIV and HCV testing and referrals, naloxone (Narcan©) distribution, safer injection education, and referrals for drug treatment and medical care. The goals of the program are to provide a safe, non-judgmental environment and develop meaningful relationships with participants to encourage recovery.

In 2019, PHHS expanded its harm reduction efforts by introducing Syringe Kiosks (sharps disposal units) throughout the community. Currently, 19 kiosks are strategically located to ensure safe disposal of used syringes, thereby reducing the risk of needle-stick injuries and preventing the spread of infectious diseases in public spaces.

In 2023, PHHS further enhanced its harm reduction strategy by launching the Public Health Vending Machine (PHVM) initiative. These vending machines are located in 10 different locations within the community and dispense naloxone, fentanyl test strips, and other health and wellness supplies. From September 11, 2023, to December 31, 2023, the PHVMs dispensed a total of 10,650 items, including 185 units of naloxone and 115 fentanyl test strips. This initiative represents a vital step towards reducing the harm associated with substance use and improving overall community health.

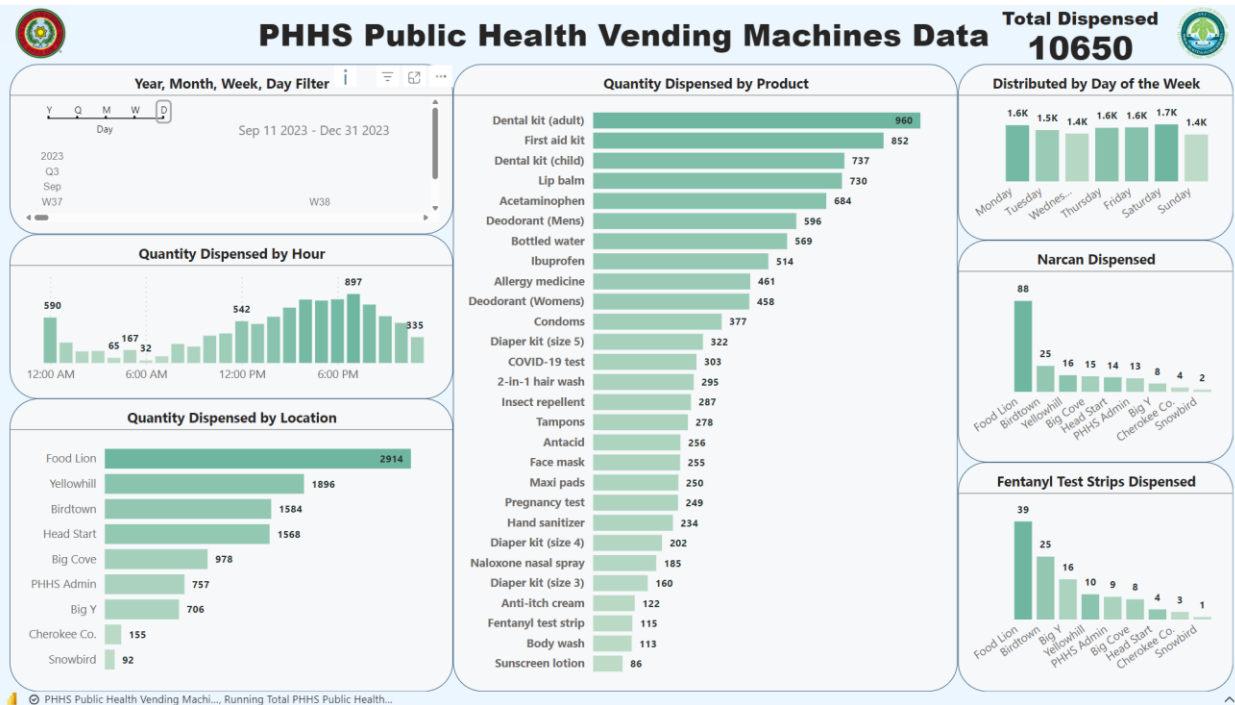


Figure 70
PHHS Public Health Vending Machines Data from September 11th, 2023, to December 31st, 2023 (2023)

Understanding the Causes of Substance Use and Related Issues

Substance use and related issues are influenced by various factors:

- **Genetic Predisposition:** Genetic factors can increase the susceptibility to substance use disorders.
- **Environmental Exposure:** Exposure to substance use within the family and community can normalize such behaviors, making them more socially acceptable.
- **Mental Health Conditions:** Mental health disorders such as depression and anxiety often co-occur with substance misuse, creating a complex interplay that exacerbates the problem.
- **Availability of Substances:** Easy access to drugs and alcohol increases the likelihood of misuse.
- **Socioeconomic Factors:** Income disparities, housing instability, and limited access to education and employment opportunities contribute to the risk of substance use disorders.

The Impact of Substance Use on the EBCI Community

The impact of substance use extends beyond individual health, affecting the well-being of the entire community. High rates of substance use lead to increased healthcare costs, social instability, and economic burdens. Furthermore, substance use within families can perpetuate a cycle of addiction and poor health

outcomes across generations, highlighting the need for interventions that not only address current substance use but also prevent future occurrences.

Health Resources Available

To support substance use prevention and treatment, several resources and initiatives are available in the Cherokee, NC area:

1. Analenisgi Recovery Center

- **Description:** Offers a variety of evidence-based practices, including Cognitive Behavioral Therapy, Matrix Model, Seeking Safety, Motivational Interviewing, Narrative Therapy, Dialectical Behavioral Therapy, Trauma-Informed Cognitive Behavioral Therapy, Parent-Child Interactive Therapy, Child-Parent Psychotherapy, and Anger Replacement Therapy. The center also incorporates traditional Native interventions, such as White Bison and The Red Road to Wellbriety.
- **Contact:** 828-497-9163 ext. 7550
- **Location:** 59 Echota Rd., Cherokee, NC 28719
- **Website:** <https://cherokeehospital.org/locations/analenisgi/>

2. Kanvwotiyi Residential Treatment Center

- **Description:** An inpatient substance use treatment center located in the Snowbird community, offering a 20-bed facility for comprehensive substance use treatment.
- **Contact:** 828-497-6892
- **Website:** <https://cherokeehospital.org/locations/the-kanvwotiyi-residential-treatment-center/>

3. Unity Healing Center

- **Description:** Provides a long-term intensive residential treatment program for youth ages 13-18 diagnosed with substance use disorder or dependence. Services include counseling, education, cultural and spiritual programs, medical and dental care, follow-ups, and continuing care.
- **Contact:** 828-497-3958
- **Website:** <https://www.ihs.gov/nashville/healthcarefacilities/unity/>

4. Syringe Services Program

- **Description:** Offers comprehensive harm reduction services, including providing participants with sterile syringes and clean injection equipment, HIV and HCV testing, naloxone, and safer injection education.
- **Contact:** 828-359-6879
- **Location:** 174 John Crowe Hill Dr., Cherokee, NC 28719
- **Website:** <https://phhs.ebci-nsn.gov/tsalagi-public-health/>

Mental Health Support and Depression Prevention

Mental health, including the prevention and management of depression, significantly impacts the overall well-being of the Eastern Band of Cherokee Indians (EBCI). Addressing mental health issues is crucial to improving quality of life, reducing the risk of chronic diseases, and enhancing the overall health of the community.

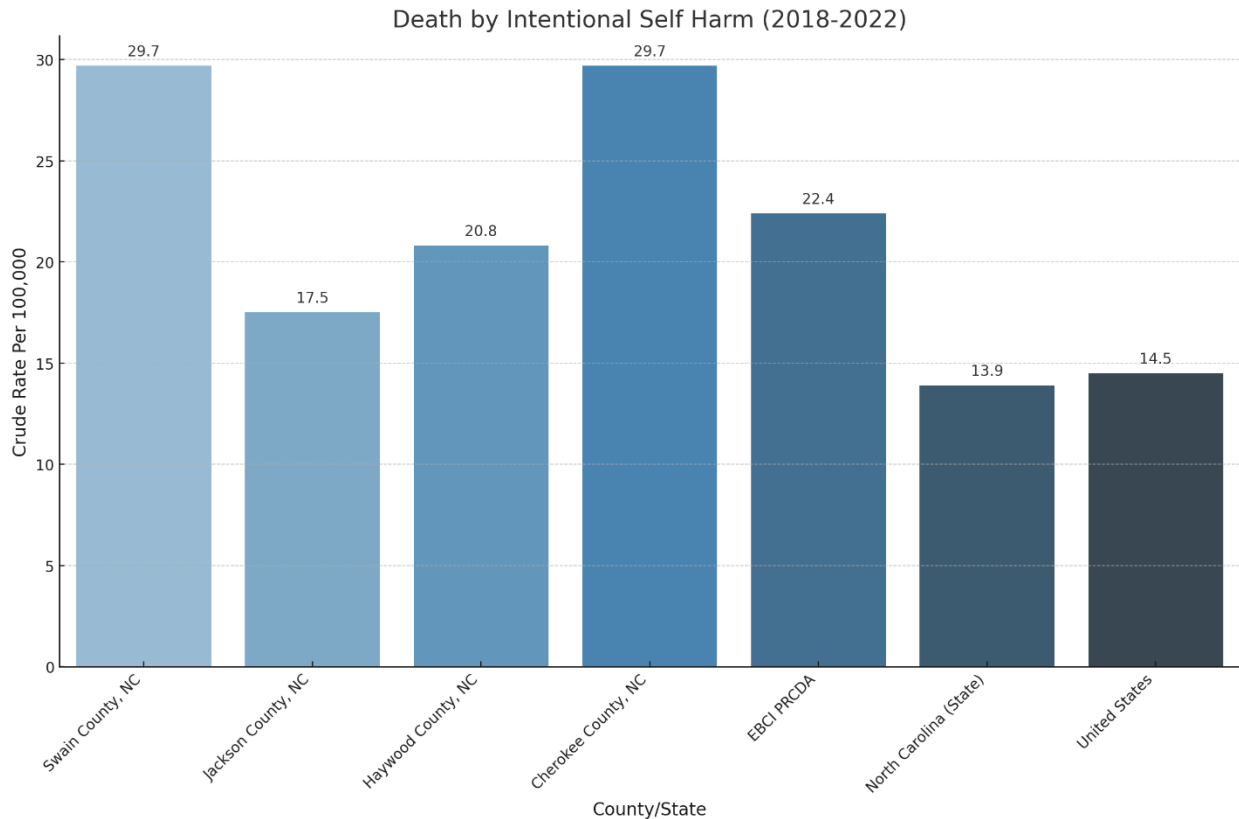
The Burden of Mental Health Issues in the EBCI

The EBCI community faces significant challenges related to mental health, with varying rates of depression and other mental health disorders over recent years. The COVID-19 pandemic has exacerbated these issues, leading to increased isolation, economic hardship, and mental health struggles.

Consequences of Mental Health Issues

Mental health disorders, including depression, anxiety, and bipolar disorder, can have far-reaching consequences beyond the immediate emotional impacts on individuals. These disorders can lead to a multitude of health and social issues:

- **Chronic Diseases:** Mental health disorders are often co-morbid with chronic conditions such as diabetes, heart disease, and obesity. The stress associated with mental health issues can exacerbate these conditions, leading to poorer health outcomes.
- **Substance Use Disorders:** Individuals with mental health disorders may use substances as a form of self-medication, leading to substance use disorders. This bidirectional relationship complicates both the diagnosis and treatment of these conditions.
- **Suicide and Self-Harm:** Depression and other mental health disorders significantly increase the risk of suicide and self-harm. Suicide prevention efforts are critical in addressing these risks within the community.
- **Social and Economic Consequences:** Mental health disorders can result in significant social and economic burdens. These include loss of productivity, unemployment, financial instability, and strained relationships. Additionally, mental health issues can lead to legal problems and incarceration, further perpetuating the cycle of poverty and social marginalization.



Source: Centers for Disease Control and Prevention. (2018-2022). CDC Wonder. Retrieved from <https://wonder.cdc.gov>.

Figure 71

Crude death rates per 100,000 due to intentional self-harm for EBCI counties, North Carolina, and the United States (2018-2022)

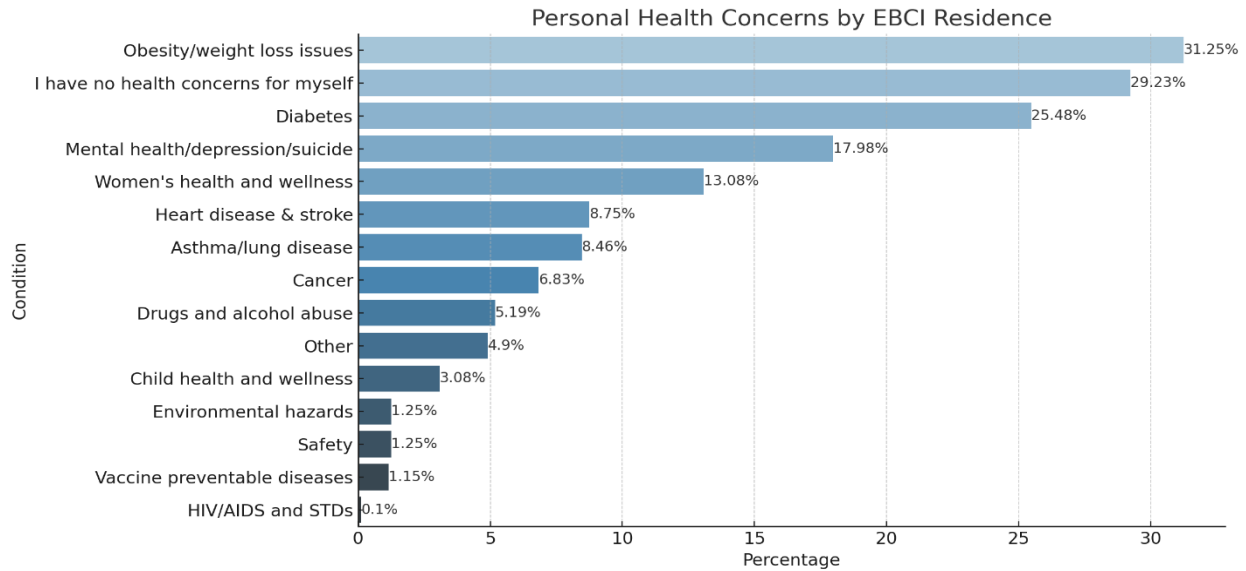
Mental Health in the EBCI Community

Recent data highlights the various challenges and successes related to mental health within the EBCI community. Several key areas require attention:

Key Mental Health-Related Health Measures:

- Mental Health Prevalence:** According to the 2023 Tribal Health Survey, 17.98% of the EBCI community suffers from mental health issues, including depression and thoughts of suicide, making this the third-highest recorded health concern in the community. The survey also revealed significant correlations between mental health issues and other health concerns. Specifically, 39.6% of respondents with mental health conditions reported obesity, compared to 25.6% of the general population. Additionally, 18.4% of individuals with mental health issues reported concerns about drug and alcohol use, compared to 6.7% of the general EBCI population. These findings underscore the intricate link between mental health and other health and social issues, highlighting

the need for comprehensive health interventions that address both mental and physical health needs within the community.



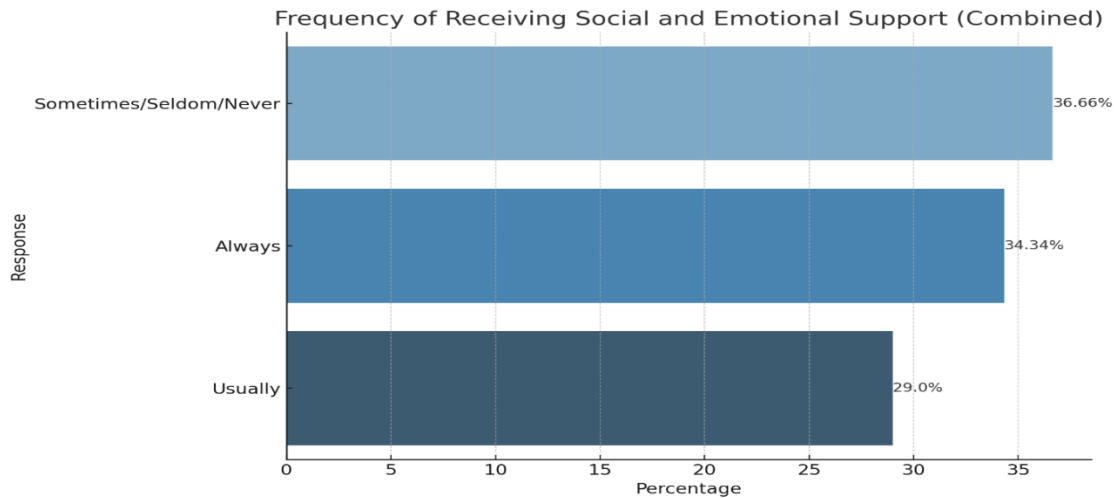
Source: 2023 Tribal Health Survey

Figure 71

Personal Health Concerns by EBCI Residence based on the 2023 Tribal Health Survey (2023)

Social and Emotional Support in the EBCI Community:

- Support Frequency:** The 2023 Tribal Health Survey sheds light on the frequency with which members of the Eastern Band of Cherokee Indians (EBCI) community receive social and emotional support. The survey reveals that a significant portion of the community experiences inconsistent support, with 36.66% of respondents indicating they receive support only "sometimes," "seldom," or "never." Conversely, 34.34% of respondents report "always" receiving social and emotional support, while 29.00% usually receive support. These findings highlight the need for strengthening social networks and support systems within the EBCI community to ensure that more individuals consistently receive the necessary emotional backing. Enhanced community programs and initiatives that foster stronger social connections and provide mental health resources can play a vital role in addressing these gaps and promoting overall mental well-being.



Source: 2023 Tribal Health Survey

Figure 72

Frequency of Receiving Social and Emotional Support based on the 2023 Tribal Health Survey (2023)

Improving Mental Health Support and Depression Prevention

To address these challenges and promote mental health, several strategies can be implemented:

Encouraging Mental Well-Being:

- **Community Programs:** Develop community-based programs that focus on mental health education, stigma reduction, and promoting mental well-being. These programs can include workshops, support groups, and community events that foster social connections.
- **School-Based Initiatives:** Implement school-based mental health programs that provide education on mental health, coping skills, and resilience. These programs can help identify and support students experiencing mental health issues early on.

Support Services:

- **Accessible Mental Health Care:** Increase access to mental health care services, including counseling, therapy, and psychiatric care. Ensure that these services are culturally sensitive and accessible to all community members.
- **Crisis Intervention Services:** Enhance crisis intervention services to provide immediate support for individuals experiencing mental health crises. This includes 24/7 helplines, crisis hotlines, and mobile crisis teams.

Policy and Regulation:

- **Mental Health Policies:** Advocate for policies that support mental health initiatives, such as funding for mental health programs, integrating mental health services into primary care, and promoting workplace mental health.

- **Training for Healthcare Providers:** Provide training for healthcare providers on recognizing and addressing mental health issues. This includes training in culturally appropriate care and trauma-informed practices.

Understanding the Causes of Mental Health Issues

Mental health issues are influenced by various factors:

- **Genetic Factors:** Genetic predispositions can increase the risk of developing mental health disorders.
- **Environmental Stressors:** Exposure to stressors such as family conflict, community violence, and economic hardship can contribute to mental health issues.
- **Social Determinants of Health:** Income disparities, housing instability, and limited access to education and employment opportunities significantly impact mental health.
- **Stigma and Lack of Awareness:** Stigma surrounding mental health and a lack of awareness can prevent individuals from seeking help.

The Impact of Mental Health on the EBCI Community

The impact of mental health issues extends beyond individual well-being, affecting the overall health and stability of the community. High rates of mental health disorders lead to increased healthcare costs, social instability, and economic burdens. Addressing mental health is essential for improving community resilience and well-being. Untreated mental health issues can result in higher rates of substance abuse and homelessness, further exacerbating social problems. Additionally, mental health disorders often lead to lower educational attainment and reduced workforce productivity. Community-wide efforts to promote mental health awareness and provide accessible mental health services are crucial in mitigating these negative impacts.

Health Resources Available

To support mental health and depression prevention, several resources and initiatives are available in the Cherokee, NC area:

1. **Analenisgi Recovery Center**
 - **Description:** Provides a variety of evidence-based outpatient therapy, including treatments focused on anxiety and depression, psychiatric evaluation, medication management, and intensive outpatient substance abuse treatment.
 - **Contact:** 828-497-9163 ext. 7550
 - **Location:** 59 Echota Rd., Cherokee, NC 28719
 - **Website:** <http://cherokeehospital.org/page?title=Analenisgi>
2. **American Academy of Child and Adolescent Psychiatry (AACAP)**
 - **Description:** Offers resources for children and adolescents on mental health and depression.

- **Website:**
https://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Depression_Resource_Center/Home.aspx
- 3. **Anxiety and Depression Association of America (ADAA)**
 - **Description:** Provides resources and articles on anxiety and depression.
 - **Website:** <https://www.adaa.org/>
- 4. **Substance Abuse and Mental Health Services Administration (SAMHSA)**
 - **Description:** Offers 24-hour helplines to support individuals facing mental health and substance use disorders.
 - **Website:** <https://www.samhsa.gov/>
 - **Helplines:**
 - 988 Suicide & Crisis Lifeline: Call or Text 988
 - Veterans Crisis Line: Dial 988 then Press 1 or Text 838255
 - SAMHSA's National Helpline: 1-800-662-HELP (4357)

Violence and Abuse Prevention

Violence and abuse prevention is a critical component of public health for the Eastern Band of Cherokee Indians (EBCI). Addressing these issues is essential for improving quality of life, reducing health disparities, and creating a safer community environment.

The Burden of Violence and Abuse in the EBCI

The EBCI community faces significant challenges related to violence and abuse, with data showing notable trends over recent years. The COVID-19 pandemic has exacerbated these issues, leading to increased stress, economic hardship, and heightened instances of domestic violence and abuse.

Consequences of Violence and Abuse

Violence and abuse have far-reaching consequences beyond the immediate physical and emotional impacts on victims. These issues can lead to a multitude of health and social problems:

- **Physical Health Problems:** Victims of violence and abuse often suffer from physical injuries, chronic pain, and other health issues resulting from trauma. Pregnant women experiencing domestic violence are at increased risk for preeclampsia, gestational diabetes, and premature birth.
- **Mental Health Disorders:** Exposure to violence and abuse is a significant risk factor for mental health disorders, including depression, anxiety, and post-traumatic stress disorder (PTSD). Children exposed to domestic violence are particularly vulnerable to developing mental health issues.
- **Substance Use Disorders:** Victims of violence and abuse may turn to substances as a coping mechanism, leading to substance use disorders. This bidirectional relationship complicates both the diagnosis and treatment of these conditions.
- **Social and Economic Consequences:** Violence and abuse result in significant social and economic burdens, including loss of productivity, unemployment, financial instability, and strained relationships. Additionally, these issues can lead to legal problems and incarceration, further perpetuating the cycle of poverty and social marginalization.

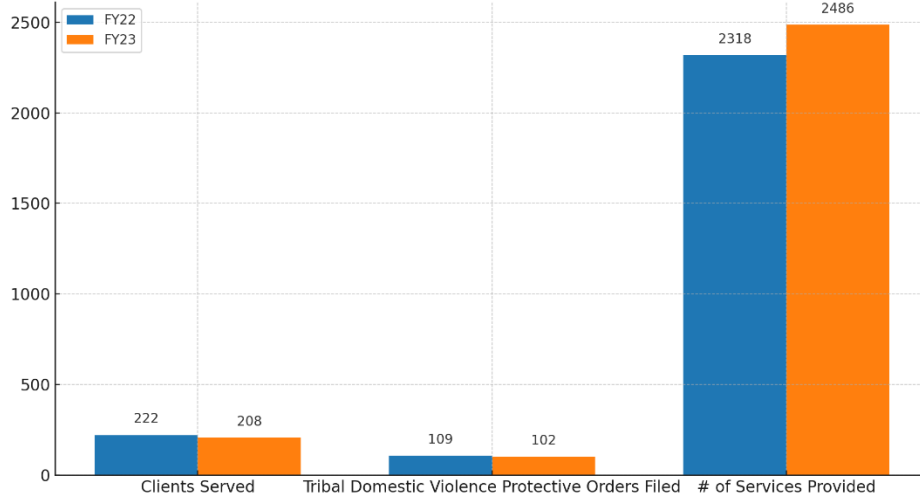
Violence and Abuse in the EBCI Community

Recent data highlights the various challenges and successes related to violence and abuse prevention within the EBCI community. Several key areas require attention:

Key Findings from Data Analysis:

- **Domestic Violence and Sexual Assault:** According to the 2023 Tribal Health Survey, 23.5% of EBCI enrolled members identified domestic violence as one of the most significant health issues impacting their communities. Additionally, 22.1% of EBCI enrolled members identified violence and abuse as a top harmful behavior affecting the community. Furthermore, the PHHS Domestic Violence and Sexual Assault Program continues to provide substantial services to victims, highlighting the ongoing need for these support systems.

EBCI Public Health and Human Services' Domestic Violence and Sexual Assault Program Client Data
FY22-FY23



Source: EBCI PHHS Domestic Violence and Sexual Assault Program Data

Figure 73

EBCI PHHS Domestic Violence and Sexual Assault Program Client Data (FY22-FY23)

- Family Safety Child Maltreatment Report:** Data indicates an upward trend in substance use, domestic violence, sexual abuse, physical abuse, and neglect. This trend underscores the urgent need for continued support for individuals experiencing these issues and reinforces the importance of prioritizing these areas as critical health concerns.

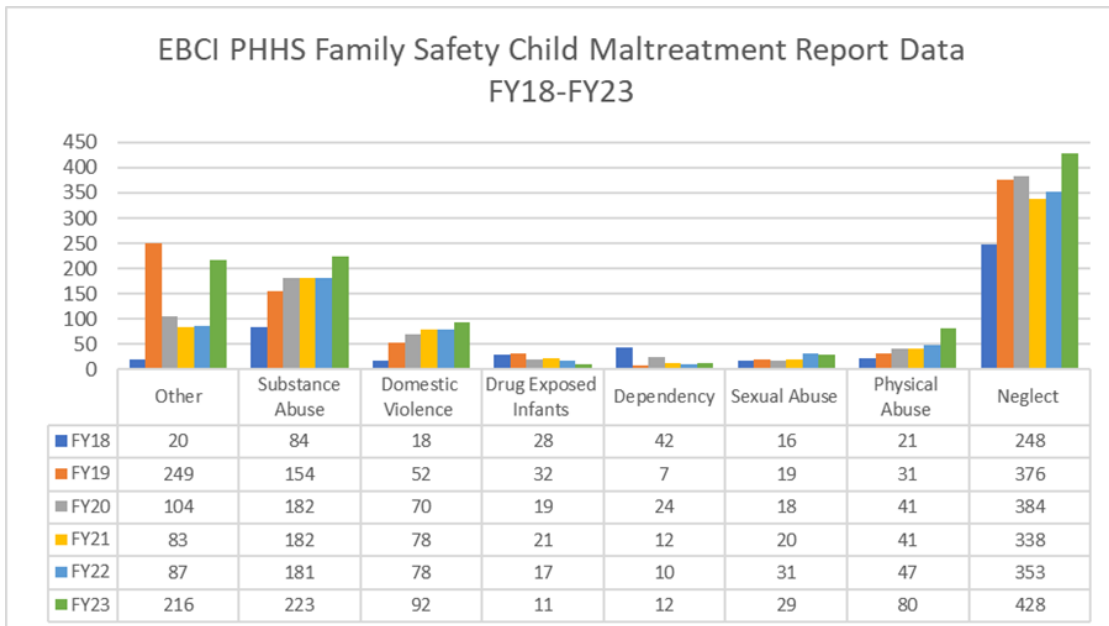


Figure 74

EBCI PHHS Family Safety Child Maltreatment Report Data (FY22-FY23)

- **Human Trafficking:** The data reveals an upward trend in reported cases of human trafficking, with a notable increase in clients from the EBCI community over the years.

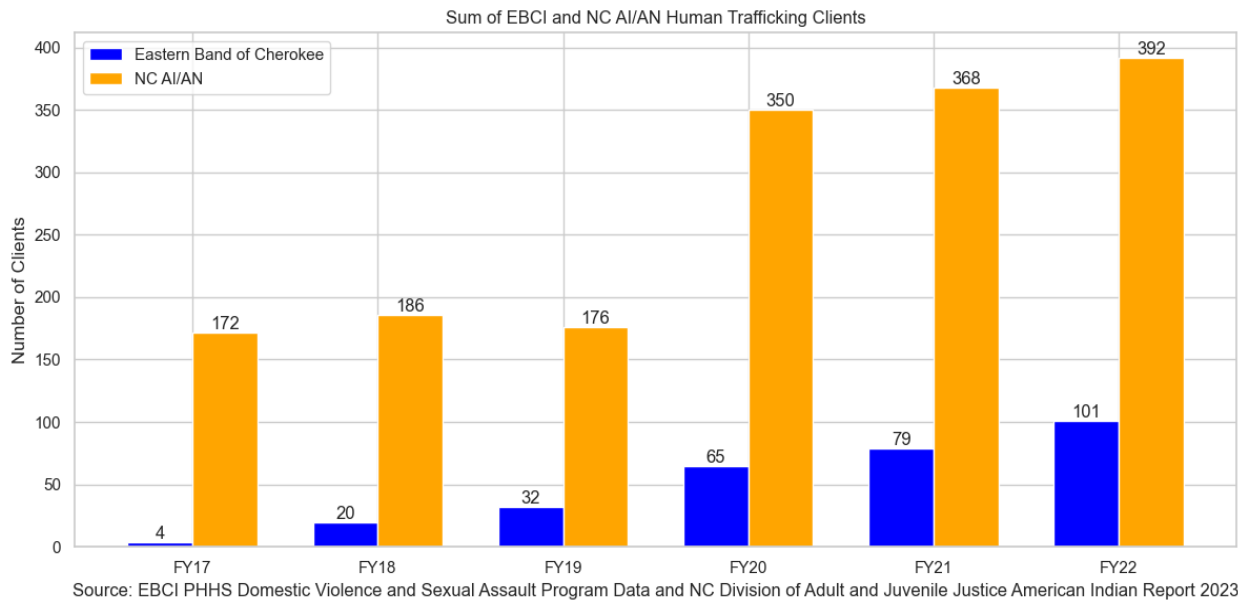


Figure 75

EBCI PHHS Domestic Violence and Sexual Assault Program Sum of Human Trafficking Clients and NC AI/AN Human Trafficking Clients (FY17-FY22)

Understanding the Causes of Violence and Abuse

Violence and abuse are influenced by various factors:

- **Historical Trauma:** The legacy of trauma and marginalization can contribute to high rates of violence and abuse.
- **Social Determinants of Health:** Income disparities, housing instability, and limited access to education and employment opportunities increase the vulnerability to violence and abuse.
- **Substance Use:** Substance use can exacerbate the risk of violence and abuse within families and communities.
- **Lack of Support Systems:** Inadequate social and community support can hinder efforts to prevent and address violence and abuse.

The Impact of Violence and Abuse on the EBCI Community

The impact of violence and abuse extends beyond individual well-being, affecting the overall health and stability of the community. High rates of violence and abuse lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community resilience and well-being. Violence and abuse can lead to chronic health conditions such as heart disease and diabetes, further straining healthcare resources. Communities with high rates of violence often experience decreased property values and reduced economic investment. Additionally, the psychological trauma from

violence and abuse can hinder educational attainment and workforce participation, perpetuating cycles of poverty and instability.

Health Resources Available

To support violence and abuse prevention, several resources and initiatives are available in the Cherokee, NC area:

1. **Walkingstick Domestic Violence Shelter**
 - **Description:** Provides safe housing and comprehensive support services for individuals experiencing domestic violence.
 - **Contact:** 828-497-6871
2. **American Academy of Child and Adolescent Psychiatry (AACAP)**
 - **Description:** Offers resources for children and adolescents on mental health and depression.
 - **Website:** [https://www.aacap.org/aacap/Families and Youth/Resource Centers/Depression Resource Center/Home.aspx](https://www.aacap.org/aacap/Families_and_Youth/Resource_Centers/Depression_Resource_Center/Home.aspx)
3. **Anxiety and Depression Association of America (ADAA)**
 - **Description:** Provides resources and articles on anxiety and depression.
 - **Website:** <https://www.adaa.org/>
4. **Substance Abuse and Mental Health Services Administration (SAMHSA)**
 - **Description:** Offers 24-hour helplines to support individuals facing mental health and substance use disorders.
 - **Website:** <https://www.samhsa.gov/>
 - **Helplines:**
 - 988 Suicide & Crisis Lifeline: Call or Text 988
 - Veterans Crisis Line: Dial 988 then Press 1 or Text 838255
 - SAMHSA's National Helpline: 1-800-662-HELP (4357)

Nutrition and Exercise Improvement

Nutrition and exercise improvement is a critical component of public health for the Eastern Band of Cherokee Indians (EBCI). Addressing these issues is essential for improving quality of life, reducing health disparities, and promoting overall well-being within the community.

The Burden of Poor Nutrition and Physical Inactivity in the EBCI

The EBCI community faces significant challenges related to nutrition and physical activity. Data from recent surveys and health reports highlight concerning trends in dietary habits and exercise levels, contributing to high rates of chronic diseases and obesity. These challenges have been exacerbated by the COVID-19 pandemic, which led to increased sedentary behavior and disruptions in access to healthy foods and physical activity opportunities.

Consequences of Poor Nutrition and Physical Inactivity

Poor nutrition and physical inactivity have far-reaching consequences beyond the immediate health impacts on individuals. These issues can lead to a multitude of health and social problems:

- **Chronic Diseases:** Poor nutrition and lack of exercise are major risk factors for chronic diseases such as cardiovascular diseases, type 2 diabetes, and certain cancers. The EBCI population shows a high prevalence of these conditions, significantly impacting overall health outcomes.
- **Obesity:** High rates of obesity are prevalent within the EBCI community across all age groups. Obesity is linked to numerous health complications, including hypertension, hyperlipidemia, and metabolic syndrome.
- **Mental Health Disorders:** There is a strong correlation between poor nutrition, lack of physical activity, and mental health disorders such as depression and anxiety. Improved diet and regular exercise can enhance mental well-being and reduce the risk of mental health issues.
- **Social and Economic Consequences:** Poor health due to inadequate nutrition and physical inactivity can result in significant social and economic burdens, including increased healthcare costs, loss of productivity, and reduced quality of life.

Nutrition and Exercise in the EBCI Community

Data from the EBCI community reveal critical insights into the current state of nutrition and physical activity:

- **Fruits and Vegetables Consumption:**
 - According to the 2023 Tribal Health Survey, only **3.1%** of respondents reported consuming five or more servings of fruits and vegetables per day, which falls significantly short of the CDC's recommendations. The Centers for Disease Control and Prevention (CDC) recommends that adults consume at least 1.5 to 2 cups of fruits and 2 to 3 cups of vegetables daily as part of a healthy diet. This intake is associated with a lower risk of chronic diseases such as heart disease, type 2 diabetes, and certain cancers.
 - The low consumption rates among the EBCI community highlight a critical public health concern. Adequate intake of fruits and vegetables is essential for providing essential nutrients, including vitamins, minerals, and dietary fiber, which contribute to overall health

and disease prevention. The CDC emphasizes that a diet rich in fruits and vegetables can help individuals maintain a healthy weight, reduce the risk of chronic diseases, and promote overall well-being.

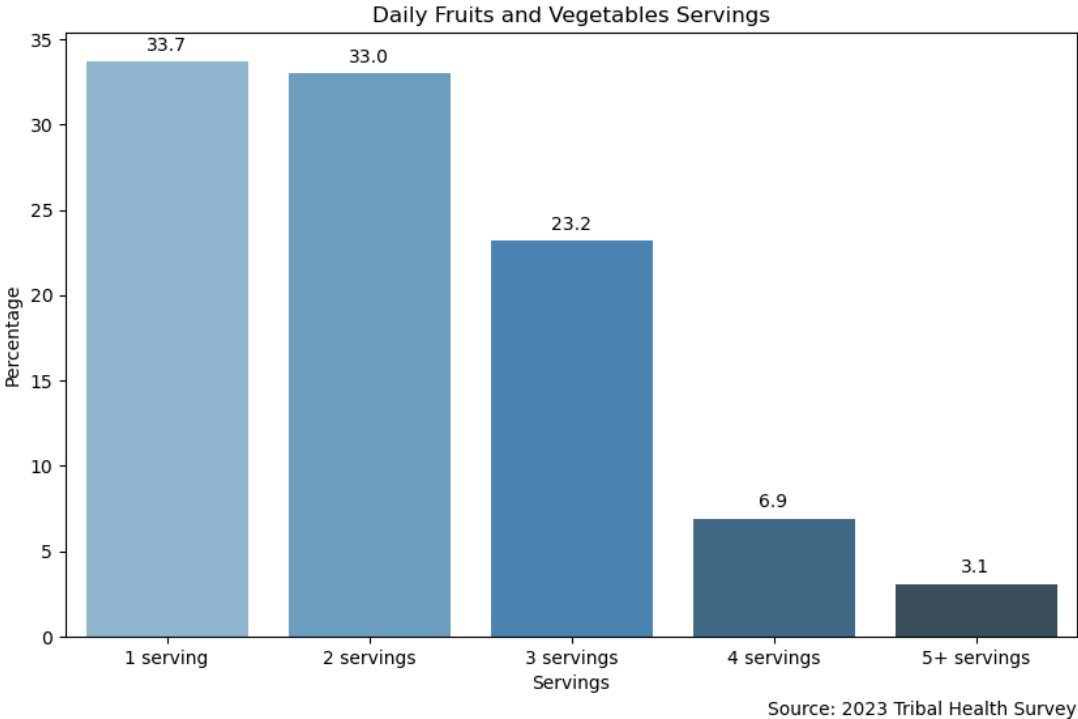


Figure 76

Daily fruit and vegetable servings consumption based on the 2023 Tribal Health Survey (2023)

- **Physical Activity and Muscle Strengthening Activities:**
 - Among those under 35 years, 26.7% of individuals with no or little physical activity are obese, compared to only 8.8% of those with moderate or high activity levels. This highlights the importance of regular exercise in weight management and chronic disease prevention.
 - Furthermore, only **11%** of enrolled EBCI members met the CDC's recommendations for physical activity. Specifically, **7.0%** of respondents reported engaging in at least 150 minutes of moderate-intensity or 75 minutes of vigorous-intensity aerobic activity per week, while **4.0%** met the higher threshold of 300 minutes of moderate-intensity or 150 minutes of vigorous-intensity activity weekly.
 - The 2023 Tribal Health Survey reveals that only **24.1%** of respondents engaged in muscle-strengthening activities two or more times per week, which is the recommended amount by the CDC. Muscle-strengthening activities are vital for maintaining muscle mass, strength, and overall physical health.
 - These findings are concerning, as the CDC recommends that adults aim for at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity activity per week, along with muscle-strengthening activities on two or more days per week.

Regular physical activity is crucial for weight management, reducing the risk of chronic diseases such as heart disease, type 2 diabetes, and certain cancers, and promoting overall well-being.

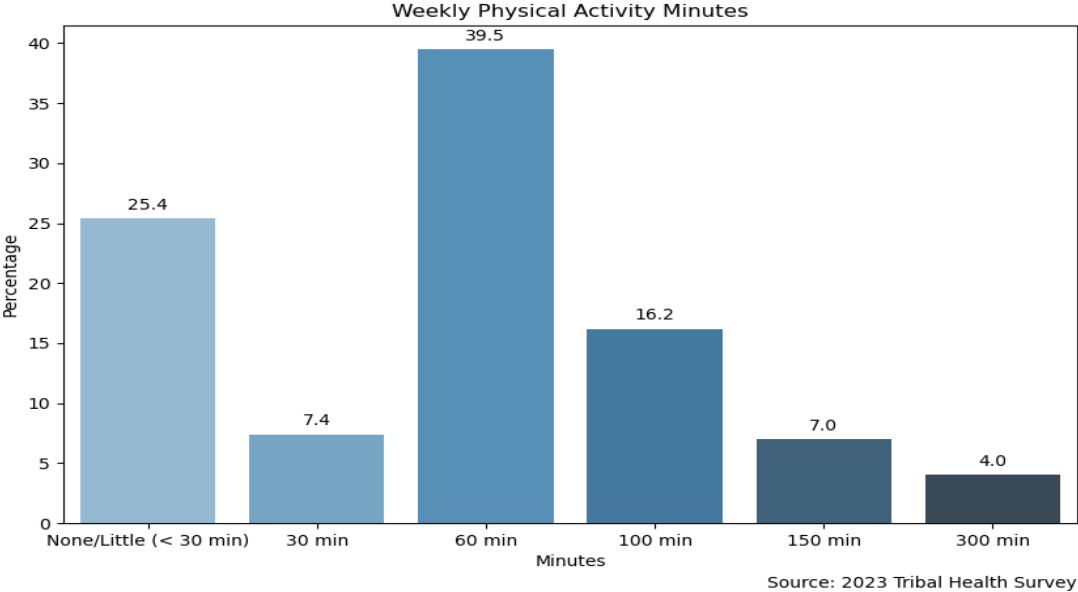


Figure 77
Weekly physical activity in minutes based on the 2023 Tribal Health Survey (2023)

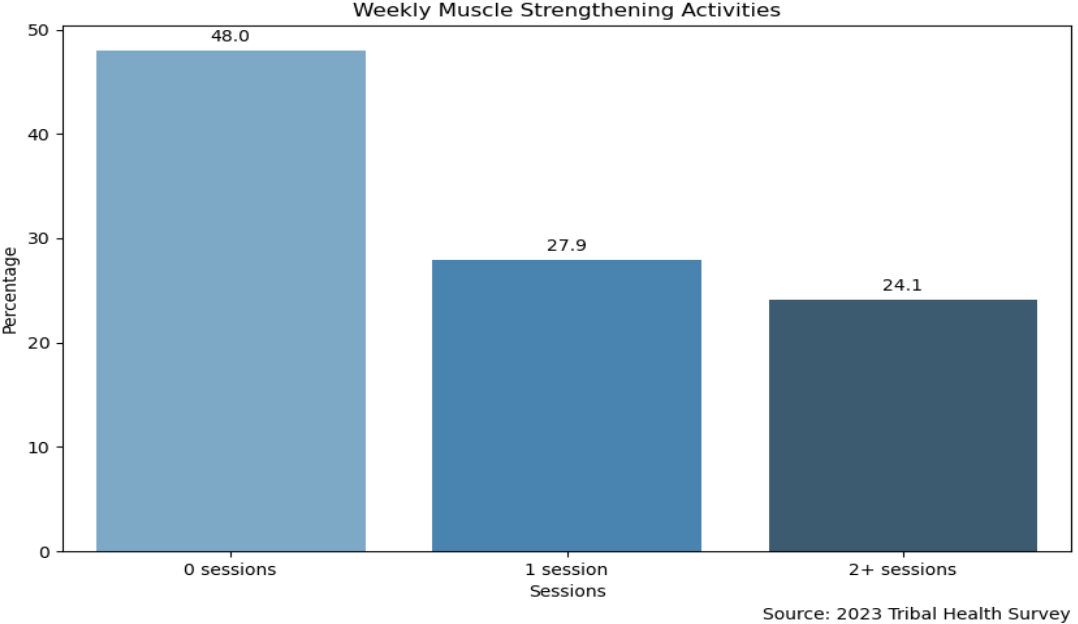
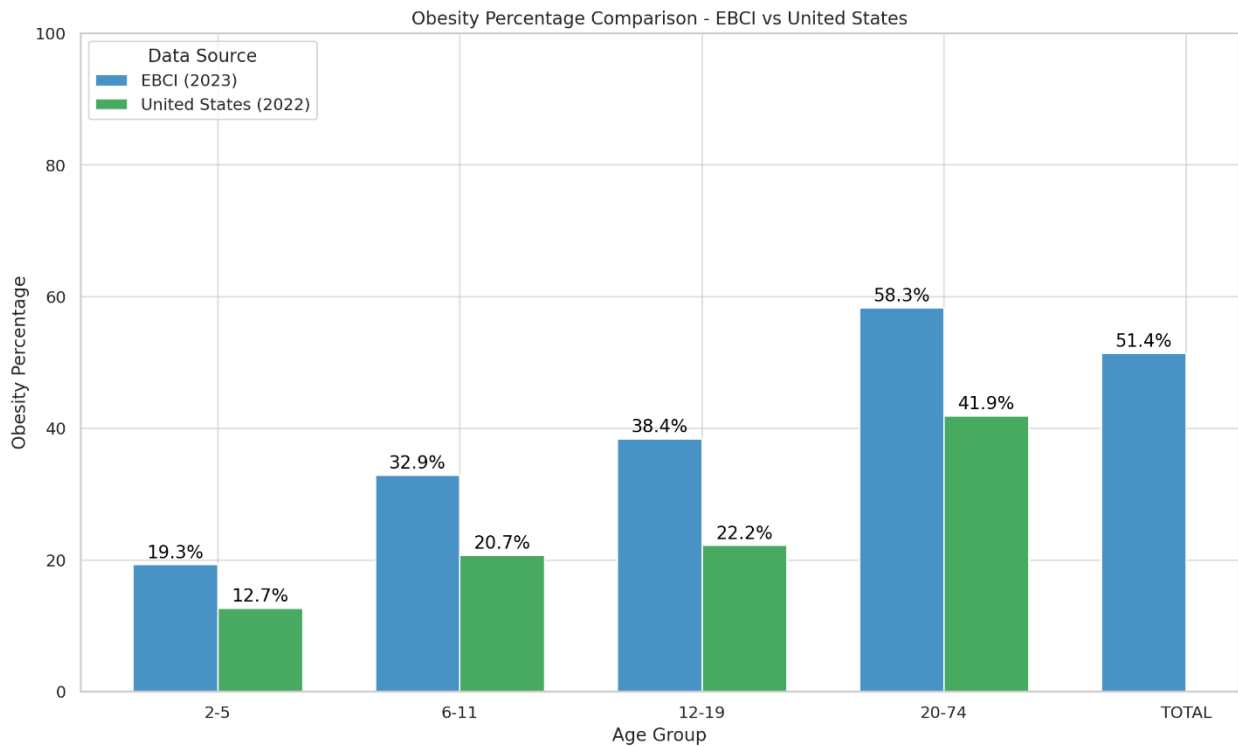


Figure 78
Weekly muscle-strengthening activities in minutes based on the 2023 Tribal Health Survey (2023)

- Obesity and Chronic Diseases:
 - The EBCI population shows alarming rates of obesity and chronic diseases, significantly higher than national averages. For instance, 58.3% of EBCI adults aged 20-74 are obese, compared to 41.9% nationally. Among children and adolescents, obesity rates are also notably higher, with 38.4% of EBCI adolescents aged 12-19 affected by obesity compared to 22.2% nationally. These disparities highlight the urgent need for targeted health interventions to enhance nutrition and increase physical activity within the community.



Sources: Cherokee Indian Hospital RPMS and CDC, <https://www.cdc.gov/nchs/fastats/obesity-overweight.htm>

Figure 79

Obesity Percentage Comparison EBCI vs United States (2023 & 2022)

Improving Nutrition and Exercise

To enhance nutrition and exercise within the Eastern Band of Cherokee Indians (EBCI) community, several strategies can be implemented. These strategies focus on creating an environment that naturally encourages healthier lifestyles and reduces the prevalence of obesity and related chronic diseases.

Encouraging Natural Movement

- **Design Walkable Communities:** Create and maintain safe, walkable spaces such as sidewalks, parks, and trails that encourage walking, biking, and other forms of natural movement throughout daily life.

- **Promote Active Transportation:** Encourage walking or biking as a primary mode of transportation for short trips, supported by infrastructure improvements that make these options safe and convenient.

Enhancing Dietary Habits

- **Increase Access to Fresh, Whole Foods:** Expand farmers' markets, community gardens, and local food co-ops to provide greater access to fresh fruits, vegetables, and other whole foods.
- **Promote Plant-Based Diets:** Encourage a dietary shift towards more plant-based meals that include a variety of vegetables, fruits, legumes, and whole grains. Offer community cooking classes and workshops to educate members on preparing healthy, plant-based meals.
- **Reduce Processed Foods and Sugars:** Implement community-wide initiatives to decrease the availability and consumption of processed foods and sugary beverages. This can include policy changes, educational campaigns, and healthier food options in schools and workplaces.

Building Strong Social Networks

- **Foster Community Connections:** Create opportunities for social engagement through community events, clubs, and group activities that promote physical activity and healthy eating.
- **Support Group-Based Exercise Programs:** Encourage group fitness activities, such as walking clubs, group fitness classes, and sports leagues, to provide both physical and social benefits.

Integrating Healthy Lifestyle Education

- **Implement Comprehensive Health Education:** Provide ongoing education on nutrition and physical activity through community programs, schools, and healthcare providers. Focus on practical tips for incorporating healthy habits into daily routines.
- **Highlight Success Stories:** Share success stories of individuals and families who have made positive changes to their diet and exercise habits to inspire others in the community.

Encouraging Purposeful Living

- **Promote Volunteerism and Engagement:** Encourage community members to participate in volunteer activities and community service, which can provide a sense of purpose and increase physical activity.
- **Support Lifelong Learning:** Offer educational opportunities and programs that promote personal growth, skills development, and active engagement in community life.

Creating Supportive Environments

- **Enforce Health-Oriented Policies:** Implement policies that support healthy living, such as smoke-free areas, nutritional standards in schools, and incentives for businesses to promote wellness.
- **Enhance Access to Preventive Healthcare:** Ensure that community members have access to preventive healthcare services, including regular health screenings, nutrition counseling, and physical activity programs.

Understanding the Causes of Poor Nutrition and Physical Inactivity

Poor nutrition and physical inactivity are influenced by various factors:

- **Socioeconomic Factors:** Income disparities and limited access to healthy foods and affordable recreational facilities are significant barriers.
- **Cultural Factors:** Dietary habits and cultural practices can influence food choices and activity levels.
- **Environmental Factors:** The availability of unhealthy food options and lack of safe spaces for physical activity can hinder healthy lifestyle choices.
- **Lack of Education:** Limited awareness and education about healthy nutrition and the benefits of physical activity.

The Impact of Poor Nutrition and Physical Inactivity on the EBCI Community

The impact of poor nutrition and physical inactivity extends beyond individual health, affecting the overall well-being of the community. High rates of obesity and chronic diseases lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community resilience and health outcomes.

Health Resources Available

To support nutrition and exercise improvement, several resources are available in the Cherokee, NC area:

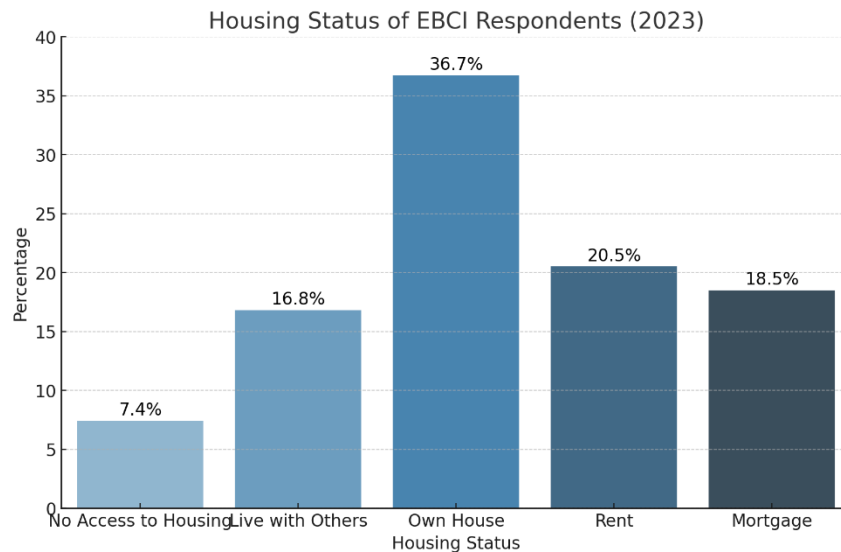
1. **EBCI Public Health and Human Services**
 - **Description:** Cherokee Choices offers a variety of fitness programs and activities to promote physical health.
 - **Contact:** 828-359-6785
 - **Location:** 37 Cherokee Boys Club Loop, Cherokee, NC 28719
 - **Website:** <https://phhs.ebci-nsn.gov/cherokee-choices/>
2. **Eastern Band of Cherokee Indians Cooperative Extension**
 - **Description:** Provides educational programs on nutrition, gardening, and healthy living.
 - **Contact:** 828-359-6939
 - **Location:** 876 Acquoni Rd, Cherokee, NC 28719
 - **Website:** <https://ebci.com/services/cooperative-extension/>
3. **Cherokee Recreation**
 - **Description:** Offers various physical activity programs and facilities for community members of all ages.
 - **Contact:** 828-497-1820
 - **Location:** 60 Council House Loop, Cherokee, NC 28719
 - **Website:** <https://ebci.com/services/recreation/>

Support for Homelessness and Housing Stability

Support for homelessness and housing stability is a crucial component of public health for the Eastern Band of Cherokee Indians (EBCI). Addressing these issues is essential for improving quality of life, reducing health disparities, and creating a stable community environment.

The Burden of Homelessness and Housing Instability in the EBCI

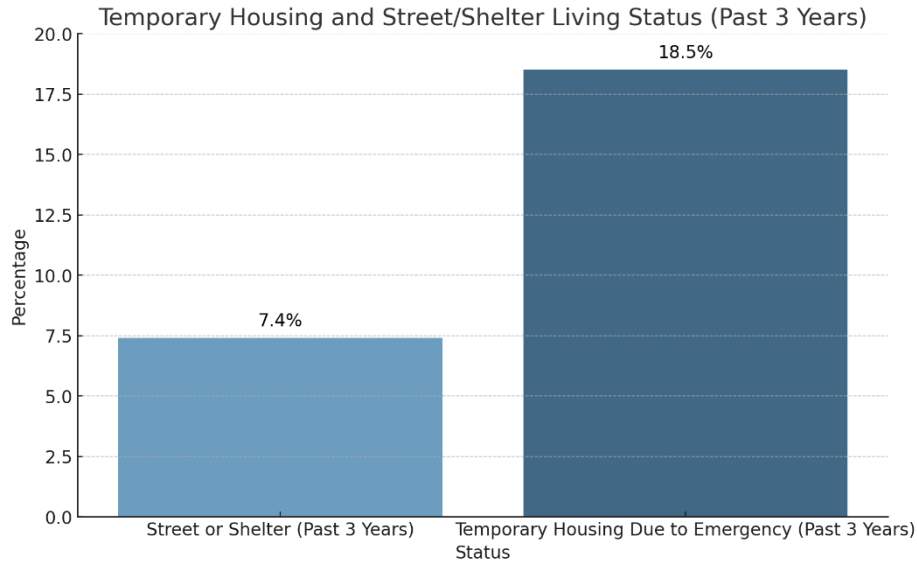
The EBCI community faces significant challenges related to homelessness and housing instability. Data from recent surveys highlight concerning trends in housing conditions and stability within the community. According to the 2023 EBCI Tribal Census, 7.4% of respondents reported not having access to housing, and 16.8% live with others, 36.7% own a house, 20.5% rent, and 18.5% have a mortgage. Furthermore, 7.4% of respondents reported living on the street or in a temporary shelter within the past three years, and 18.5% had to seek temporary housing due to an emergency during the same period. These challenges have been exacerbated by economic hardships and the impacts of the COVID-19 pandemic, which have led to increased housing instability and homelessness.



Source: 2023 EBCI Tribal Census

Figure 80

Housing status of EBCI Respondents from the 2023 EBCI Tribal Census (2023)



Source: 2023 Tribal Health Survey

Figure 80

Temporary Housing and Street/Shelter Living Status from the 2023 Tribal Health Survey (2023)

Consequences of Homelessness and Housing Instability

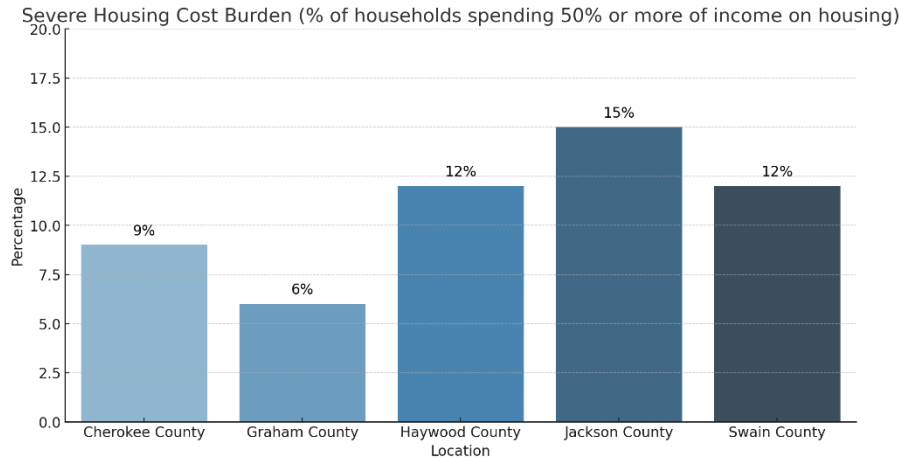
Homelessness and housing instability have far-reaching consequences beyond the immediate lack of shelter. These issues can lead to a multitude of health and social problems:

- **Health Problems:** Lack of stable housing is associated with increased risks of physical and mental health issues, including chronic diseases, injuries, and stress-related conditions. The instability can also hinder access to healthcare services.
- **Mental Health Disorders:** Housing instability significantly contributes to mental health disorders such as depression, anxiety, and post-traumatic stress disorder (PTSD). The stress of not having a stable home exacerbates these conditions.
- **Economic Consequences:** Housing instability leads to significant economic burdens, including loss of productivity, increased healthcare costs, and financial instability. It can also result in job loss and reduced educational attainment, perpetuating the cycle of poverty and homelessness.

Homelessness and Housing Stability in the EBCI Community

Data from the EBCI community reveal critical insights into homelessness and housing stability in the EBCI Community. Several key areas require attention:

- **Severe Housing Cost Burden:** The percentage of households spending 50% or more of their income on housing has shown beneficial changes in the region, with declines observed in Cherokee County (9%), Graham County (6%), Haywood County (12%), Jackson County (15%), and Swain County (12%). These percentages, while slightly better than previous years, still indicate significant financial strain on many households.



Source: County Health Rankings

Figure 81

Severe housing cost burden for EBCI counties based on County Health Rankings data (2023)

- **Community Priorities:** The 2023 Tribal Health Survey highlighted that 56.2% of respondents identified affordable housing as a top health and well-being priority. This underscores the critical need for continued focus on improving housing affordability and stability.

Understanding the Causes of Homelessness and Housing Instability

Homelessness and housing instability are influenced by various factors:

- **Economic Hardship:** Income disparities, unemployment, and financial instability are significant contributors.
- **Lack of Affordable Housing:** Limited availability of affordable housing options exacerbates housing instability.
- **Mental Health and Substance Use:** Mental health disorders and substance use can lead to housing instability.
- **Social Determinants of Health:** Factors such as education and employment opportunities play a crucial role in housing stability.

The Impact of Homelessness and Housing Instability on the EBCI Community

The impact of homelessness and housing instability extends beyond individual well-being, affecting the overall health and stability of the community. High rates of housing instability lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community resilience and well-being.

- **Health Impacts:** The stress and uncertainty of housing instability can lead to various health problems, including high blood pressure, anxiety, depression, and exacerbation of chronic conditions. Children experiencing housing instability are at higher risk for developmental delays and academic challenges.

- **Educational and Employment Challenges:** Housing instability disrupts children's education, leading to higher absenteeism and lower academic performance. Adults facing housing instability may struggle to maintain steady employment, further exacerbating their economic challenges.
- **Social Impacts:** Homelessness and housing instability can lead to social isolation, stigma, and strained relationships. This isolation can make it more difficult for individuals to access the support and resources they need to improve their situation.

Health Resources Available

To support housing stability and homelessness prevention, several resources are available in the Cherokee, NC area:

1. Cherokee Indian Housing Division

- Provides housing assistance programs, including rental assistance, home repair, and new home construction for eligible EBCI members.
- **Contact:** 828-359-6320
- **Location:** 687 Aquoni Rd, Cherokee, NC 28719
- **Website:** <https://ebci.com/services/departments/department-of-housing/>

2. Helpmate

- Offers emergency shelter, counseling, and support services for victims of domestic violence and their children.
- **Contact:** 828-254-0516
- **Location:** 35 Woodfin Street, Asheville, NC 28801
- **Website:** <https://www.helpmateonline.org/>

3. U.S. Department of Housing and Urban Development (HUD)

- Provides various programs and services to assist with rental assistance, public housing, and housing choice vouchers. HUD also offers counseling services and resources for finding affordable housing.
- **Contact:** Toll-free (800) 569-4287
- **Website:** <https://www.hud.gov/>

Promoting Preventive Care and Improving Health Care Access

Promoting preventive care and improving healthcare access are pivotal elements in enhancing the overall health and well-being of the Eastern Band of Cherokee Indians (EBCI) community. Ensuring that community members receive timely preventive services can significantly reduce the prevalence of chronic diseases, enhance quality of life, and foster a healthier population.

The Importance of Preventive Care

Preventive care involves regular health check-ups, screenings, immunizations, and counseling to prevent illnesses, detect health conditions early, and manage existing conditions effectively. For the EBCI community, promoting preventive care is crucial due to the high burden of chronic diseases and health disparities.

Consequences of Not Getting Preventive Care or Access to Health Care

The lack of preventive care and limited access to healthcare services have profound consequences on both individual and community health. These consequences are multifaceted and can lead to long-term health, social, and economic challenges:

Health Problems:

- **Increased Morbidity and Mortality:** Without preventive care, individuals are at higher risk of developing severe health conditions such as heart disease, diabetes, and cancer. Early detection through screenings can significantly improve treatment outcomes and survival rates.
- **Chronic Disease Management:** Preventive care helps manage existing chronic conditions, reducing complications and improving quality of life. Lack of regular check-ups and management can lead to deteriorating health and increased hospitalizations.

Mental Health Disorders:

- **Undiagnosed Conditions:** Preventive care includes mental health screenings that can identify conditions such as depression, anxiety, and PTSD early. Without access to these services, many mental health disorders remain undiagnosed and untreated, exacerbating symptoms and affecting daily functioning.
- **Increased Stress and Anxiety:** The inability to access healthcare can lead to heightened stress and anxiety, further contributing to mental health problems and reducing overall well-being.

Economic Consequences:

- **Higher Healthcare Costs:** Preventive care is cost-effective by reducing the need for emergency care and hospitalizations. Lack of preventive services leads to higher healthcare costs for individuals and the healthcare system due to advanced disease stages and complications.
- **Lost Productivity:** Poor health resulting from lack of preventive care can lead to increased absenteeism from work and reduced productivity, impacting economic stability for individuals and the community.

Educational and Social Impacts:

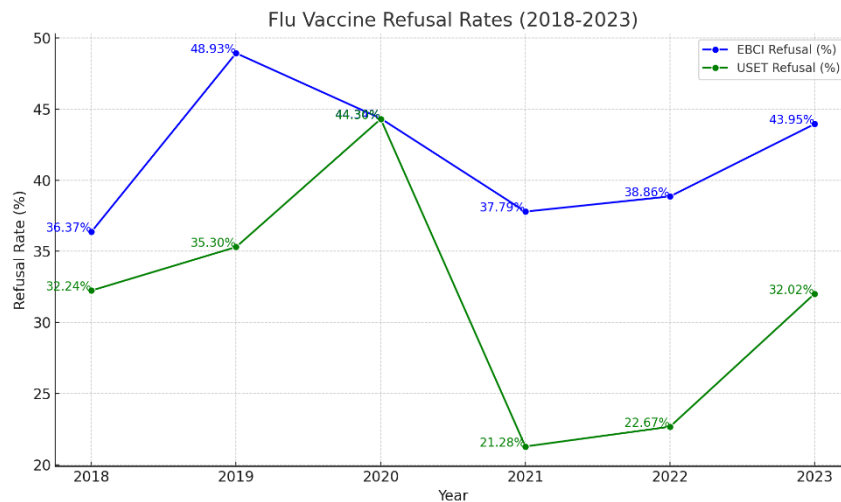
- **Disrupted Education:** Health issues can lead to missed school days and decreased academic performance among children. Preventive care helps ensure children are healthy and able to attend school regularly.
- **Social Isolation:** Health problems and lack of access to care can result in social isolation, as individuals may withdraw from community activities and relationships due to poor health or stigma associated with untreated conditions.

Preventive Care Utilization in the EBCI Community

Recent data highlights the utilization of various preventive services within the EBCI community. Several key areas require attention:

Flu Vaccination Rates:

- Over the period from 2018 to 2023, the percentage of EBCI patients refusing the influenza vaccine ranged from **36.37% to 48.93%**, with an overall average of **41.74%**. In comparison, the USET percentages were generally lower, ranging from **21.28% to 44.30%**, with an overall average of **30.68%**. This indicates that the EBCI community has higher rates of vaccine refusal compared to the USET average.
- Notably, in 2019, nearly half of the EBCI patients (**48.93%**) refused the influenza vaccine, the highest percentage recorded during the period. Despite a slight improvement in subsequent years, the refusal rate remained significantly high at **43.95%** in 2023.



Source: USET TEC Data Request

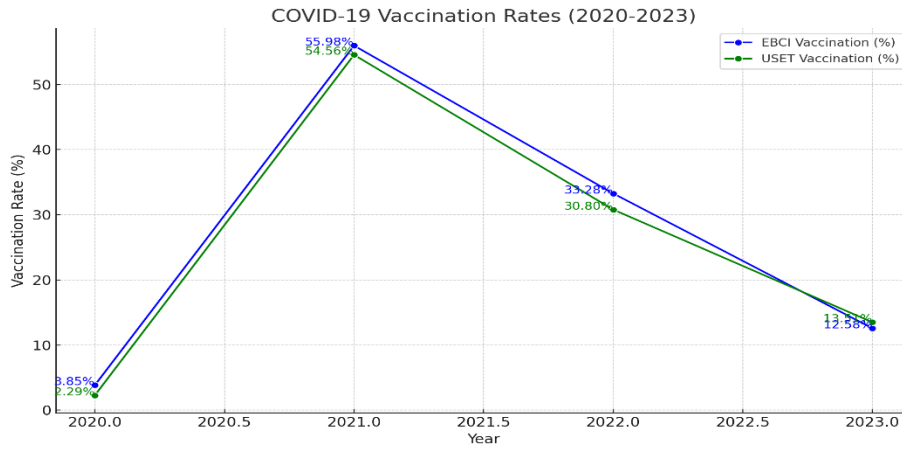
Figure 82

Flu vaccine refusal rates for EBCI and USET Aggregate from USET Data Request (2018-2023)

COVID-19 Vaccination Rates:

- The percentage of EBCI patients who received the COVID-19 vaccine showed a significant increase from **3.85%** in 2020 to **55.98%** in 2021, followed by a decline to **33.28%** in 2022 and **12.58%** in

2023. In comparison, the USET vaccination percentages were slightly lower in 2021 (**54.56%**) but followed a similar trend with **30.80%** in 2022 and **13.51%** in 2023.



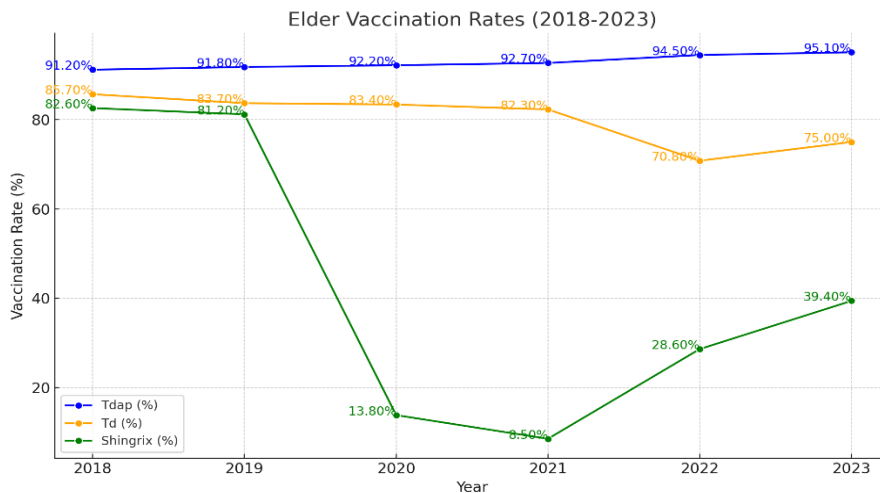
Source: USET TEC Data Request

Figure 83

COVID-19 vaccination rates for EBCI and USET Aggregate from USET Data Request (2018-2023)

Vaccination Rates for Elders:

- EBCI has maintained relatively high vaccination rates among its elderly population, particularly in the administration of Tdap and Td vaccines, with rates consistently above **83%** and peaking at **95.1%** for Tdap in 2023. The influenza vaccination rates for EBCI have varied, with a notable increase in 2019 (**71.5%**) and a subsequent decline, reaching **65.0%** in 2023.
- Shingrix vaccination rates for EBCI saw a dramatic rise from **13.8%** in 2020 to **39.4%** in 2023, surpassing USET's **41.5%** in 2023.



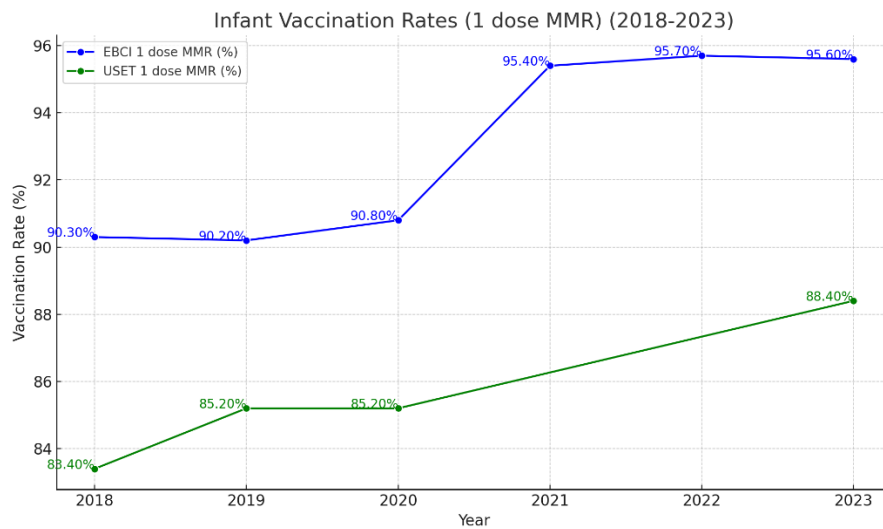
Source: USET TEC Data Request

Figure 84

Elder (66+) vaccination rates for EBCI from USET Data Request (2018-2023)

Infant and Adolescent Vaccinations:

- From 2018 to 2023, EBCI consistently demonstrated higher vaccination coverage rates for the MMR vaccine compared to USET. In 2023, EBCI achieved a coverage rate of **95.6%** for the 1 dose MMR vaccine, significantly higher than USET's **88.4%**.
- Throughout this period, EBCI's MMR coverage remained robust, showing improvement from **90.3%** in 2018 to **95.6%** in 2023. However, there is still room for improvement, especially when considering the goal of achieving near-universal coverage.
- These high coverage rates reflect EBCI's effective vaccination programs and community engagement efforts, but continued focus on increasing coverage further is necessary to ensure optimal protection against measles, mumps, and rubella.



Source: USET TEC Data Request

Figure 85

Infant (19-35m) vaccination rates for EBCI from USET Data Request (2018-2023)

Challenges in Preventive Care

Despite the improvements in vaccination rates, there are still significant barriers to preventive care within the EBCI community:

- **Vaccine Hesitancy:** The high refusal rates for the influenza vaccine suggest potential barriers such as vaccine hesitancy or cultural beliefs against vaccination.
- **Access to Services:** While the data indicates robust vaccination programs, there remain challenges in ensuring consistent access to preventive services, particularly in remote areas.

Understanding the Causes of Limited Preventive Care and Health Care Access

Limited preventive care and health care access are influenced by various factors:

- **Economic Barriers:** Financial constraints and lack of insurance coverage hinder access to preventive care and healthcare services.

- **Geographical Barriers:** Rural and remote locations limit access to healthcare facilities and providers.
- **Cultural and Language Barriers:** Cultural differences and language barriers impede access to healthcare services.
- **Lack of Awareness:** Limited knowledge about the importance of preventive care.

The Impact of Limited Preventive Care and Health Care Access on the EBCI Community

The impact of limited preventive care and healthcare access extends beyond individual health, affecting the overall well-being of the community. High rates of preventable diseases and delayed treatment lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community health outcomes and resilience.

Health Resources Available

To promote preventive care and improve health care access, several resources and initiatives are available in the Cherokee, NC area:

1. Cherokee Indian Hospital

- **Description:** Provides comprehensive healthcare services, including chronic disease management, vaccinations, and mental health support.
- **Contact:** 828-497-9163
- **Location:** 1 Hospital Road, Cherokee, NC 28719
- **Website:** www.cherokeehospital.org

2. EBCI PHHS Tsalagi Public Health

- **Description:** Offers community health programs aimed at promoting healthy aging among youth and adults, providing education, resources, and support.
- **Contact:** 828-359-6785
- **Location:** 73 Kaiser Wilnoty Road, Cherokee, NC 28719
- **Website:** <https://phhs.ebci-nsn.gov/Tsalagi-public-health>

Safe and Healthy Built Environment

Creating a safe and healthy built environment is essential for the overall well-being of the Eastern Band of Cherokee Indians (EBCI) community. A well-designed and maintained environment can significantly enhance the quality of life, promote physical activity, reduce injury risks, and support the community's health and resilience.

The Importance of a Safe and Healthy Built Environment

A safe and healthy built environment encompasses the physical surroundings in which individuals live, work, and play. This includes housing, transportation systems, parks, and public spaces. For the EBCI community, ensuring a safe and healthy built environment is crucial due to the unique geographical and socio-economic challenges faced by the community.

Consequences of an Unsafe or Unhealthy Built Environment

An unsafe or unhealthy built environment can lead to numerous adverse health, social, and economic outcomes. These consequences can be broad and long-lasting:

Health Problems:

- **Increased Injuries and Fatalities:** Poorly designed or maintained infrastructure can lead to higher rates of injuries and fatalities. For instance, inadequate road safety measures can result in transportation-related deaths.
- **Chronic Diseases:** Limited access to safe recreational areas and poor air quality can contribute to chronic conditions such as asthma, cardiovascular diseases, and obesity.

Mental Health Disorders:

- **Stress and Anxiety:** Living in unsafe or unhealthy environments can increase stress and anxiety levels among residents. The lack of green spaces and exposure to pollution can negatively impact mental health.
- **Social Isolation:** Unsafe neighborhoods can lead to social isolation as individuals may avoid outdoor activities due to safety concerns.

Economic Consequences:

- **Higher Healthcare Costs:** Health issues arising from an unsafe environment can lead to increased healthcare costs for individuals and the community.
- **Lost Productivity:** Poor health and injury can result in lost productivity and increased absenteeism from work, affecting economic stability.

Educational and Social Impacts:

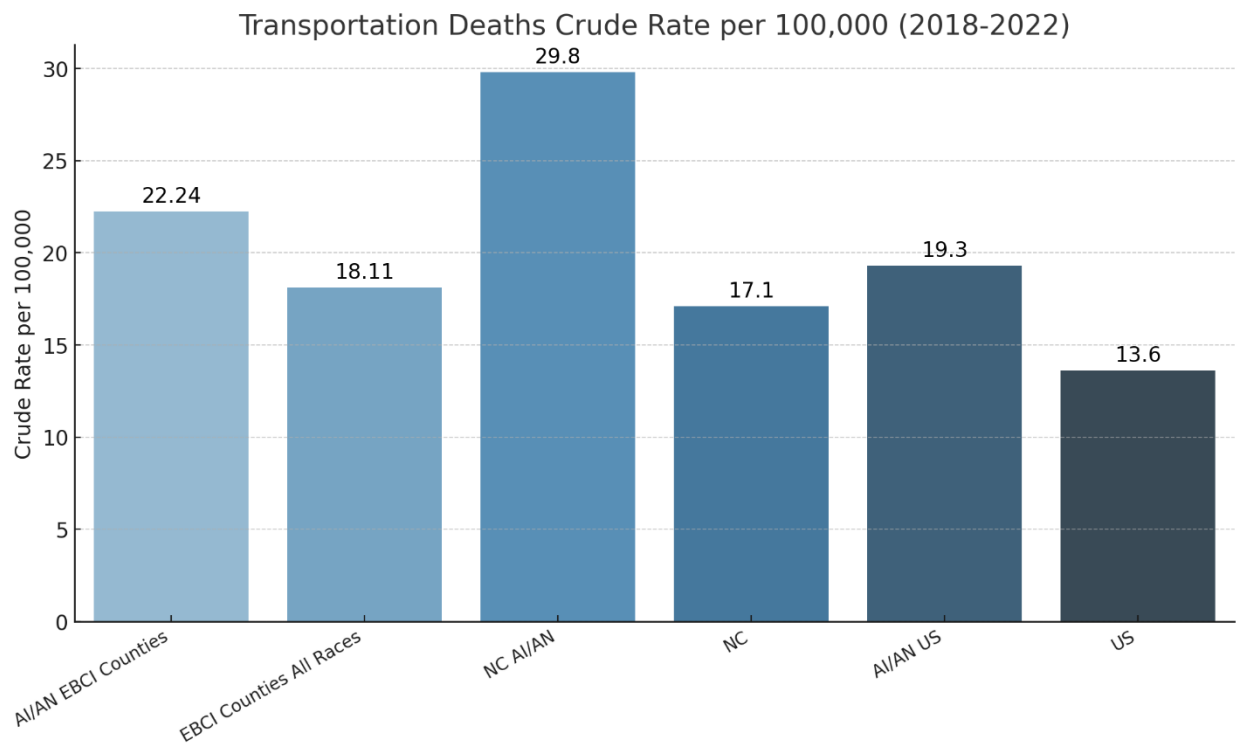
- **Disrupted Education:** Health problems related to an unsafe environment can lead to missed school days and decreased academic performance among children.
- **Social Inequities:** Disparities in the built environment can exacerbate social inequities, limiting access to essential services and opportunities.

Built Environment in the EBCI Community

Recent data highlights the various challenges related to the built environment within the EBCI community. Several key areas require attention:

Transportation Deaths:

- The crude rate of transportation deaths in the AI/AN EBCI PRCDA is **22.24 per 100,000**, higher than the overall rate for the EBCI PRCDA All Races (**18.11 per 100,000**) but lower than the NC AI/AN rate (**29.8 per 100,000**). This indicates significant transportation-related safety concerns within the EBCI community.



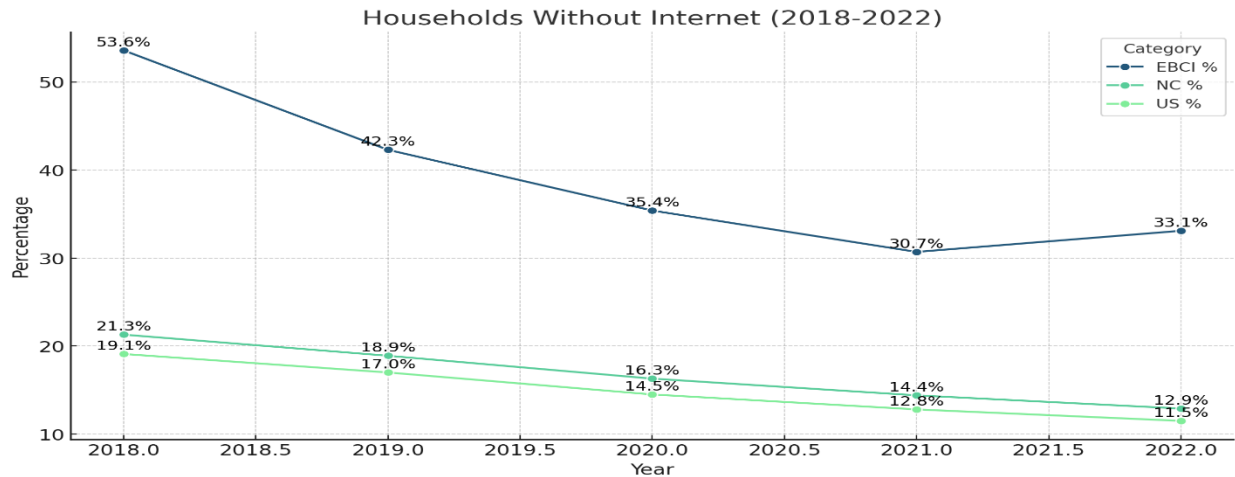
Source: CDC WONDER Online Database

Figure 86

Transportation deaths crude rate per 100,000 from CDC Wonder (2018-2022)

Households Without Internet:

- The percentage of EBCI households without internet subscriptions has consistently been higher than the national and state averages. In 2022, **33.1%** of EBCI households lacked internet subscriptions, compared to **12.9%** in North Carolina and **11.5%** in the United States. This digital divide is more pronounced among lower-income households, with **47.9%** of EBCI households earning less than \$20,000 without internet.



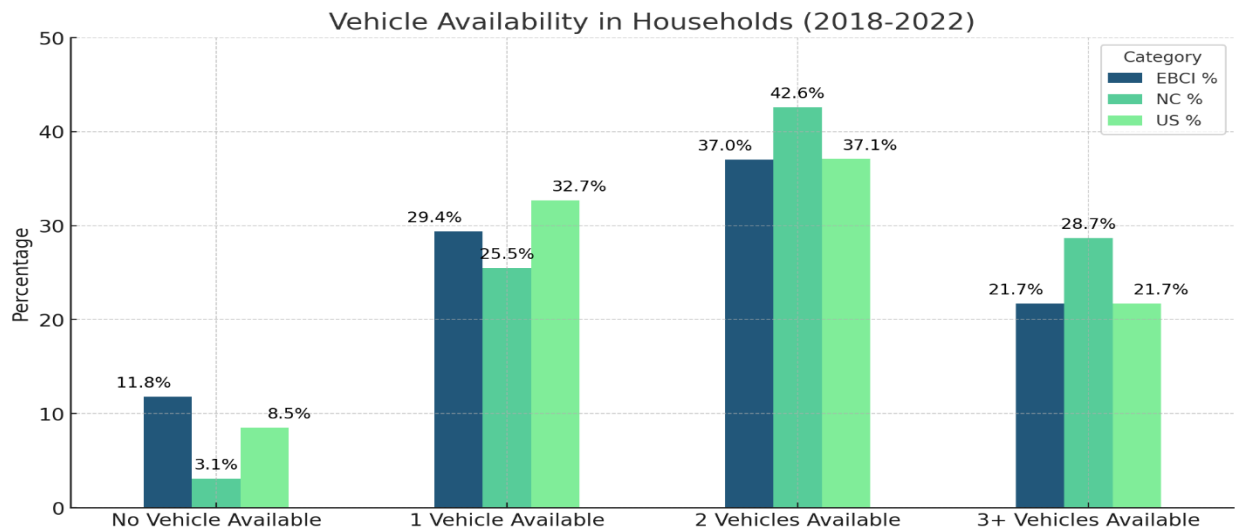
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Figure 87

Households without Internet based on US Census American Community Survey 5-Year Estimates for EBCI, NC, and US (2018-2022)

Vehicle Availability:

- The average vehicle availability data (2018-2022) indicates that 11.8% of households in the Eastern Cherokee Reservation had no vehicle available, higher than the 8.5% in the United States and 3.1% in North Carolina. The lack of vehicle availability can hinder access to essential services and employment opportunities.



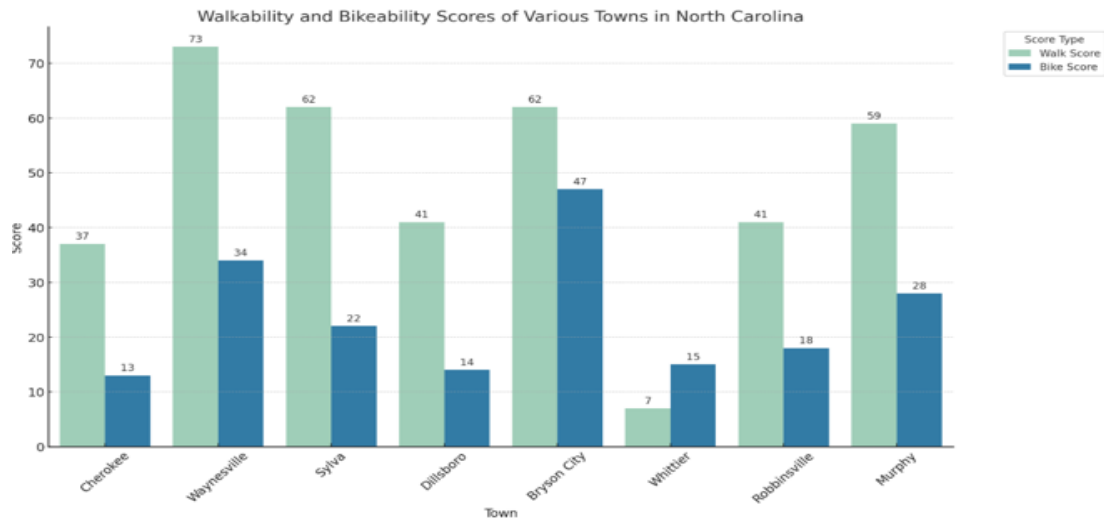
Source: U.S. Census Bureau, American Community Survey 5-Year Estimates

Figure 88

Vehicle availability in households based on US Census American Community Survey 5-Year Estimates for EBCI, NC, and US (2018-2022)

Walkability and Bikeability:

- The walkability and bikeability scores for various towns in North Carolina highlight disparities. For example, Cherokee has a walk score of 37 and a bike score of 13, which are lower compared to other towns like Bryson City, which has a walk score of 62 and a bike score of 47. Improving these scores is essential for promoting physical activity and reducing reliance on vehicles.



Source: walkscore.com

Figure 89

Walkability and bikeability scores of various towns in North Carolina

Enhancing the Built Environment

To address these challenges and improve the built environment, several strategies can be implemented:

Transportation Safety:

- **Infrastructure Improvements:** Enhance road safety measures, including better lighting, signage, and pedestrian pathways to reduce transportation-related deaths and injuries.
- **Public Transportation:** Improve public transportation options to reduce reliance on personal vehicles and enhance safety and accessibility.

Internet Access:

- **Digital Inclusion Programs:** Implement programs to provide affordable internet access to low-income households and improve digital literacy.
- **Infrastructure Investments:** Invest in broadband infrastructure to expand internet access in remote and underserved areas of the EBCI community.

Community Design:

- **Green Spaces:** Develop and maintain parks and recreational areas to promote physical activity and mental well-being.
- **Housing Quality:** Ensure housing is safe, healthy, and affordable, addressing issues such as ventilation, mold, and structural integrity.

Understanding the Causes of an Unsafe and Unhealthy Built Environment

An unsafe and unhealthy built environment is influenced by various factors:

- **Infrastructure Deficiencies:** Inadequate infrastructure, such as poor housing and insufficient sanitation facilities.
- **Environmental Hazards:** Exposure to pollution, hazardous waste, and poor air quality.
- **Lack of Recreational Facilities:** Limited availability of safe recreational facilities hinders physical activity and social engagement.
- **Urban Planning Issues:** Poor urban planning can lead to unsafe and unhealthy living conditions.

The Impact of an Unsafe and Unhealthy Built Environment on the EBCI Community

The impact of an unsafe and unhealthy built environment extends beyond individual health, affecting the overall well-being of the community. Poor infrastructure and environmental hazards lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community health outcomes and resilience.

Health Resources Available

To support the development of a safe and healthy built environment, several resources and initiatives are available in the Cherokee, NC area:

1. EBCI Planning and Development Department

- **Description:** Focuses on urban planning, infrastructure development, and community design to create a safer and healthier environment.
- **Contact:** 828-359-6120
- **Location:** 810 Acquoni Road, Cherokee, NC 28719
- **Website:** www.ebci.com/services/departments/division-of-commerce/administration-and-planning/

2. Cherokee Broadband Initiative

- **Description:** Aims to expand internet access and reduce the digital divide within the community, ensuring that all members have access to reliable and high-speed internet.
- **Website:** <https://ebci.com/services/departments/office-of-information-technology/broadband/>

3. Tribal Construction & Road Maintenance

- **Description:** Provides safe domestic water and waste disposal facilities, including wells, septic tanks, and main lines for enrolled members. Also responsible for tree removal, special projects, and roadway maintenance on the Qualla Boundary.
- **Contact:** 828-359-6841
- **Location:** 810 Acquoni Road, Cherokee, NC 28719
- **Website:** www.ebci.com/services/departments/department-of-operations/tribal-construction-road-maintenance/

Maternal and Child Health

Maternal and child health is a critical component of public health for the Eastern Band of Cherokee Indians (EBCI) community. Ensuring the health and well-being of mothers and children lays the foundation for a healthier future generation.

The Importance of Maternal and Child Health

Maternal and child health encompasses a range of healthcare services aimed at improving the health outcomes of mothers and their children. This includes prenatal care, childbirth, postnatal care, and early childhood health services. For the EBCI community, focusing on maternal and child health is crucial due to the high prevalence of certain health issues and the unique cultural and socio-economic challenges faced by the community.

Consequences of Poor Maternal and Child Health

Poor maternal and child health can lead to numerous adverse health, social, and economic outcomes. These consequences can be broad and long-lasting:

Health Problems:

- **Increased Morbidity and Mortality:** Lack of proper maternal and child healthcare can lead to higher rates of maternal and infant morbidity and mortality. This includes complications during pregnancy and childbirth, as well as preventable childhood illnesses.
- **Developmental Issues:** Poor maternal health and inadequate early childhood care can result in developmental delays and long-term health problems in children.

Mental Health Disorders:

- **Maternal Depression and Anxiety:** Lack of support and care during and after pregnancy can increase the risk of maternal mental health disorders such as depression and anxiety, impacting the mother's ability to care for her child.
- **Impact on Child Mental Health:** Children of mothers with untreated mental health issues are at a higher risk of developing mental health disorders themselves.

Economic Consequences:

- **Higher Healthcare Costs:** Health issues arising from inadequate maternal and child healthcare can lead to increased healthcare costs for families and the community.
- **Lost Productivity:** Poor maternal and child health can result in lost productivity and increased absenteeism from work, affecting economic stability.

Educational and Social Impacts:

- **Disrupted Education:** Health problems in children can lead to missed school days and decreased academic performance.

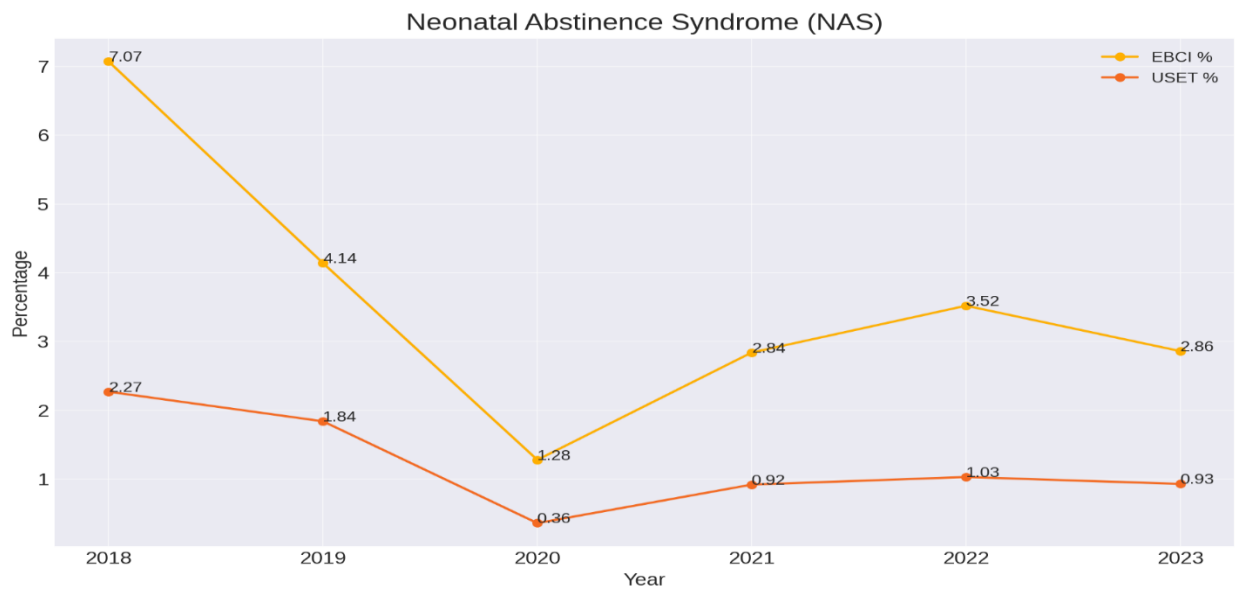
- **Social Inequities:** Disparities in maternal and child health can exacerbate social inequities, limiting access to essential services and opportunities.

Maternal and Child Health in the EBCI Community

Recent data highlights the various challenges and successes related to maternal and child health within the EBCI community. Several key areas require attention:

Neonatal Abstinence Syndrome (NAS):

- The prevalence of NAS within the EBCI community has shown a decline over the years, from 7.07% in 2018 to 2.86% in 2023. This is higher compared to the USET averages, which ranged from 2.27% in 2018 to 0.93% in 2023.



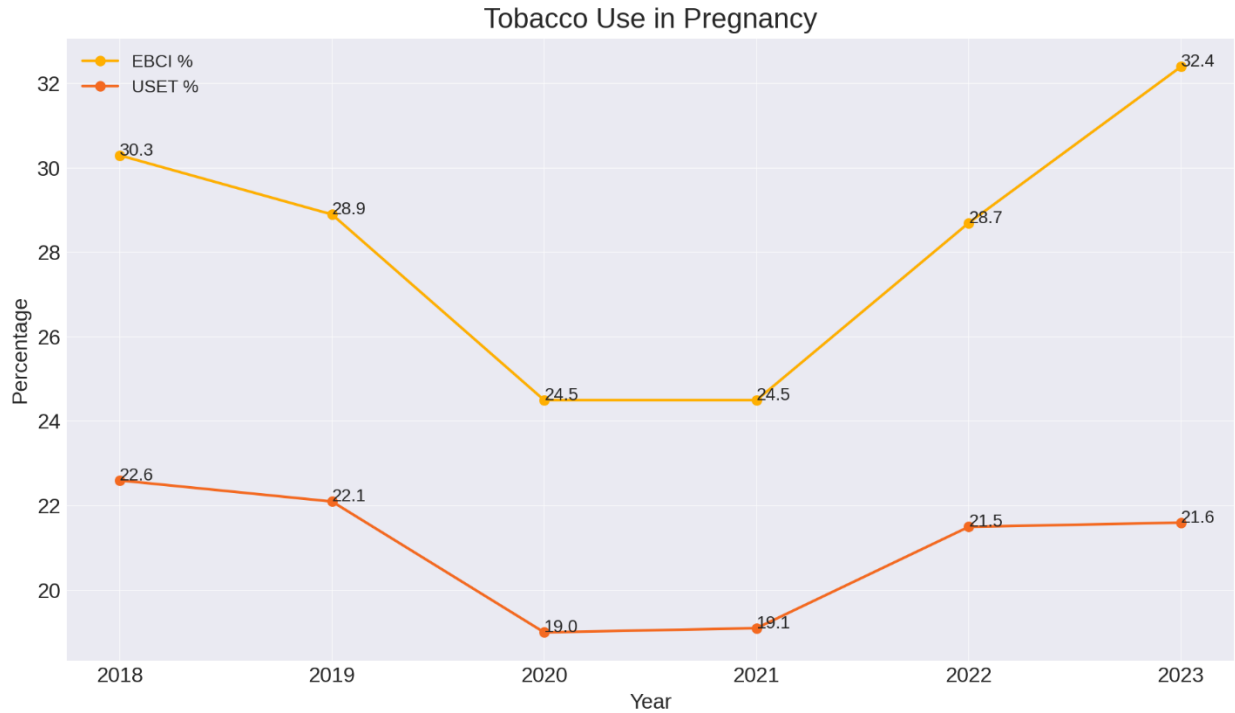
Source: USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS Data.

Figure 90

Percentage of births with Neonatal Abstinence Syndrome (NAS) for EBCI and USET Aggregate data from USET TEC Data Request (2018-2023)

Tobacco Use in Pregnancy:

- The percentage of pregnant tobacco users within the EBCI community has varied over the years, with a peak of 32.4% in 2023 compared to 30.3% in 2018. The USET percentages have generally been lower, with 21.6% in 2023 compared to 22.6% in 2018.



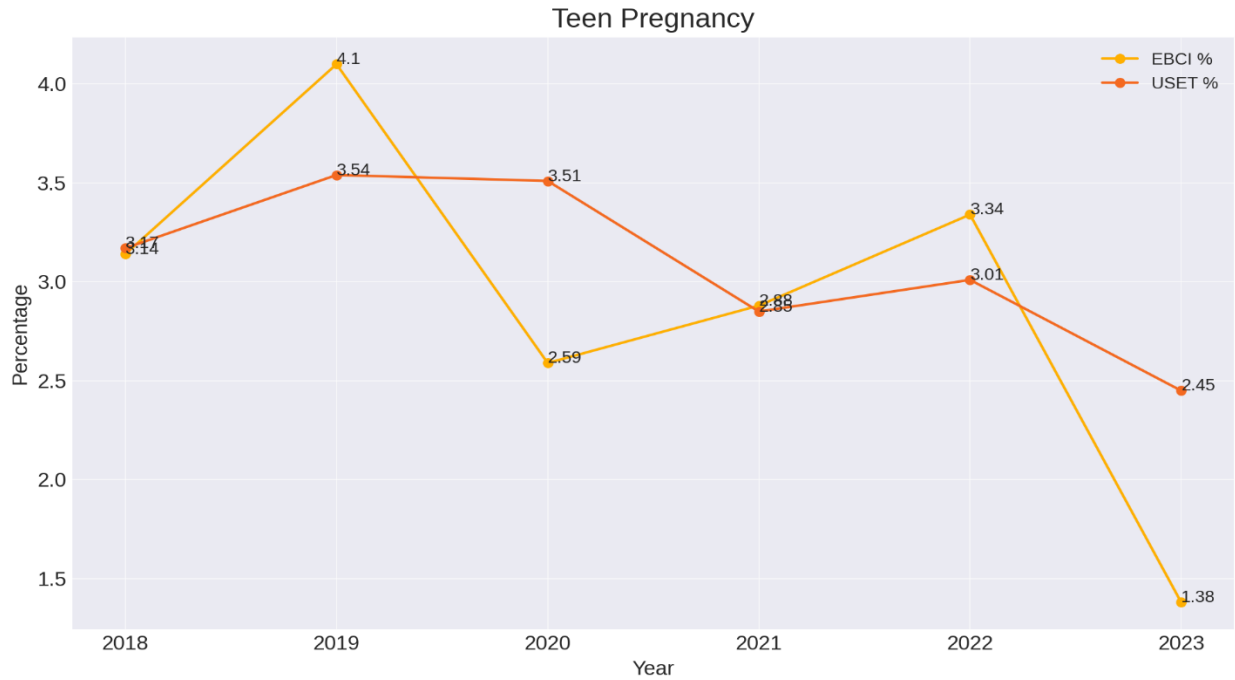
Source: USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital CRS reports.

Figure 91

Percent of mothers who used tobacco during pregnancy for EBCI and USET from USET TEC Data Request (2018-2023)

Teen Pregnancy:

- The EBCI community has shown variability in teen pregnancy rates over the years compared to USET. For instance, in 2019, the EBCI teen pregnancy percentage was 4.10% with a rate of 40.96 per 1,000, which was higher than the USET percentage of 3.54% and rate of 35.41 per 1,000. However, by 2023, the EBCI teen pregnancy percentage decreased to 1.38% and the rate to 13.77 per 1,000, both significantly lower than the USET percentages of 2.45% and rate of 24.48 per 1,000. While these improvements are promising, there is still substantial work to be done to further reduce teen pregnancy rates and address the underlying factors contributing to these rates.



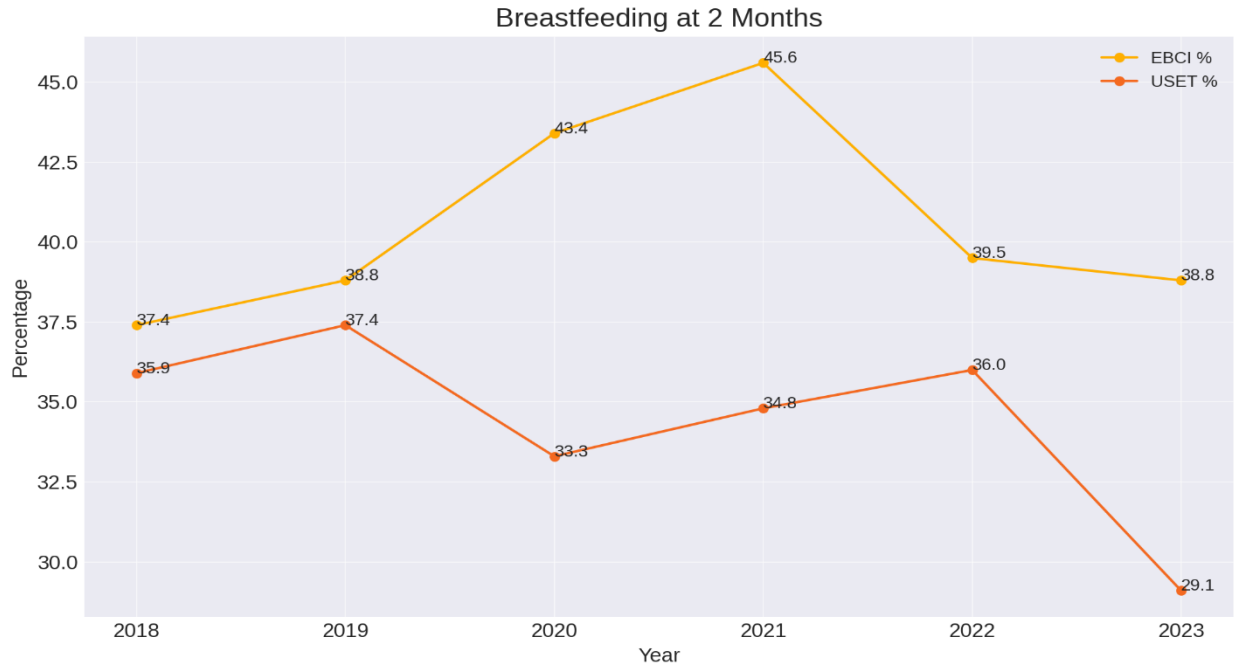
Source: USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS Data.

Figure 92

Percentage of teen pregnancies (ages 12-19) for EBCI and USET from USET TEC Data Request (2018-2023)

Breastfeeding:

- The data shows that the EBCI community has generally higher rates of exclusive/mostly breastfeeding at 2 months compared to the USET averages. For instance, in 2023, 38.8% of EBCI infants were exclusively/mostly breastfed at 2 months compared to 29.1% for USET. Despite these higher rates, there remains significant room for improvement in promoting and supporting breastfeeding practices to ensure even more infants receive the benefits of breastfeeding.



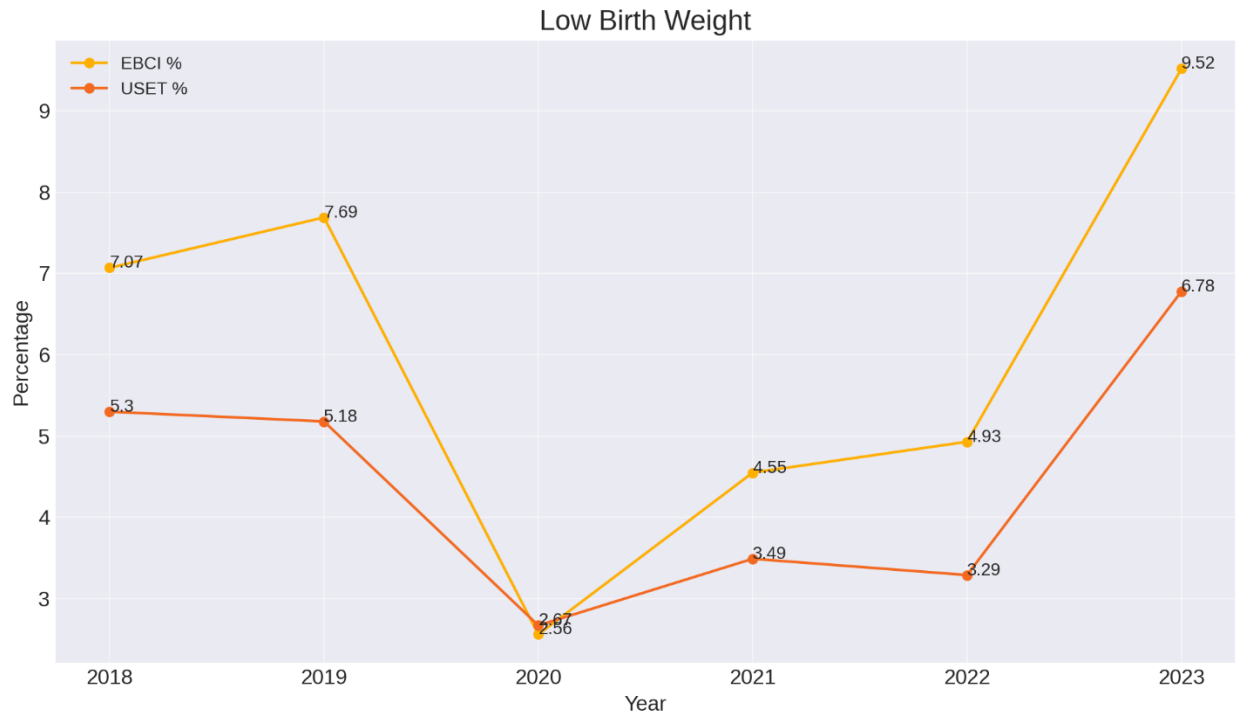
Source: USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS Data.

Figure 93

Percent of mothers who breastfed for at least 2 months for EBCI and USET from USET TEC Data Request (2018-2023)

Low Birth Weight:

- The percentage of low birth weight newborns within the EBCI community has varied over the years, with a notable increase to 9.52% in 2023 compared to 7.07% in 2018. In comparison, the USET percentages have generally been lower, with 6.78% in 2023 and 5.30% in 2018.



Source: USET Tribal Epidemiology Center (TEC) data request, using Cherokee Indian Hospital RPMS Data.

Figure 94

Percent of babies with a low birth weight (less than 2,500 grams) for EBCI and USET from USET TEC Data Request (2018-2023)

Improving Maternal and Child Health

To address these challenges and improve maternal and child health, several strategies can be implemented:

Prenatal Care:

- **Enhanced Prenatal Services:** Increase access to comprehensive prenatal care to monitor and manage health during pregnancy.
- **Education and Support:** Provide education and support programs for expectant mothers on nutrition, substance use, and mental health.

Postnatal Care:

- **Newborn Care:** Ensure access to postnatal care services for newborn health checks, vaccinations, and breastfeeding support.
- **Maternal Mental Health:** Provide resources and support for maternal mental health to address postpartum depression and anxiety.

Health Education:

- **Community Programs:** Implement community programs to educate about the importance of maternal and child health and promote healthy practices.

- **School-Based Programs:** Introduce school-based programs to educate adolescents about reproductive health and prevent teen pregnancies.

Understanding the Causes of Maternal and Child Health Issues

Maternal and child health issues are influenced by various factors:

- **Access to Care:** Limited access to quality prenatal and postnatal care impacts maternal and child health outcomes.
- **Nutritional Deficiencies:** Poor nutrition during pregnancy and early childhood can lead to adverse health outcomes.
- **Socioeconomic Factors:** Income disparities, education levels, and housing instability affect maternal and child health.
- **Cultural Practices:** Cultural beliefs and practices can influence health behaviors and outcomes.

The Impact of Maternal and Child Health Issues on the EBCI Community

The impact of maternal and child health issues extends beyond individual well-being, affecting the overall health and stability of the community. Poor maternal and child health outcomes lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community health outcomes and resilience.

Health Resources Available

To support maternal and child health, several resources and initiatives are available in the Cherokee, NC area:

1. **Cherokee Indian Hospital**
 - **Description:** Provides comprehensive maternal and child healthcare services, including prenatal and postnatal care, vaccinations, and health education.
 - **Contact:** 828-497-9163
 - **Location:** 1 Hospital Road, Cherokee, NC 28719
 - **Website:** www.cherokeehospital.org
2. **EBCI PHHS Nurse-Family Partnership**
 - **Description:** Offers a community health program for first-time mothers, providing home visits from registered nurses to support maternal and child health, improve pregnancy outcomes, and enhance child development.
 - **Contact:** 828-359-6785
 - **Location:** 73 Kaiser Wilnoty Road, Cherokee, NC 28719
 - **Website:** <https://phhs.ebcinsn.gov/nurse-family-partnership/>
3. **EBCI PHHS WIC Program**
 - **Description:** The Women, Infants, and Children (WIC) program provides nutrition education, healthy food, breastfeeding support, and healthcare referrals to pregnant women, new mothers, and young children.

- **Contact:** 828-359-7297
 - **Location:** 73 Kaiser Wilnoty Road, Cherokee, NC 28719
 - **Website:** <https://phhs.ebci-nsn.gov/wic-program/>
4. **EBCI Head Start and Early Head Start**
- **Description:** Offers early childhood education, health, nutrition, and parent involvement services to low-income children and their families. The program aims to enhance the cognitive, social, and emotional development of children from birth to age five.
 - **Contact:** 828-359-6582
 - **Location:** 810 Acquoni Road, Cherokee, NC 28719
 - **Website:** phhs.ebci-nsn.gov/head-start-early-head-start/

Tobacco Use Prevention

Tobacco use prevention is a critical public health focus for the Eastern Band of Cherokee Indians (EBCI) community. Addressing tobacco use among various age groups can significantly reduce the burden of tobacco-related diseases and improve overall health outcomes.

The Importance of Tobacco Use Prevention

Preventing tobacco use is essential due to its well-documented adverse health effects, including cancer, cardiovascular diseases, respiratory illnesses, and other chronic conditions. For the EBCI community, tobacco use prevention is crucial given the high prevalence of tobacco use and its impact on the community's health and well-being.

Consequences of Tobacco Use

Tobacco use has numerous adverse health, social, and economic outcomes. These consequences can be broad and long-lasting:

Health Problems:

- **Increased Morbidity and Mortality:** Tobacco use is a leading cause of preventable morbidity and mortality, contributing to various cancers, cardiovascular diseases, and respiratory conditions.
- **Chronic Conditions:** Smokers, smokeless tobacco users, and e-cigarette users are at increased risk of developing chronic diseases, including COPD, asthma, and diabetes.

Mental Health Disorders:

- **Increased Stress and Anxiety:** Tobacco use can exacerbate mental health issues, leading to increased stress, anxiety, and depression.
- **Impact on Youth Mental Health:** Adolescents who use tobacco products are more likely to experience mental health disorders.

Economic Consequences:

- **Higher Healthcare Costs:** Tobacco-related illnesses lead to increased healthcare costs for individuals and the community.
- **Lost Productivity:** Tobacco use can result in lost productivity due to illness and increased absenteeism from work.

Educational and Social Impacts:

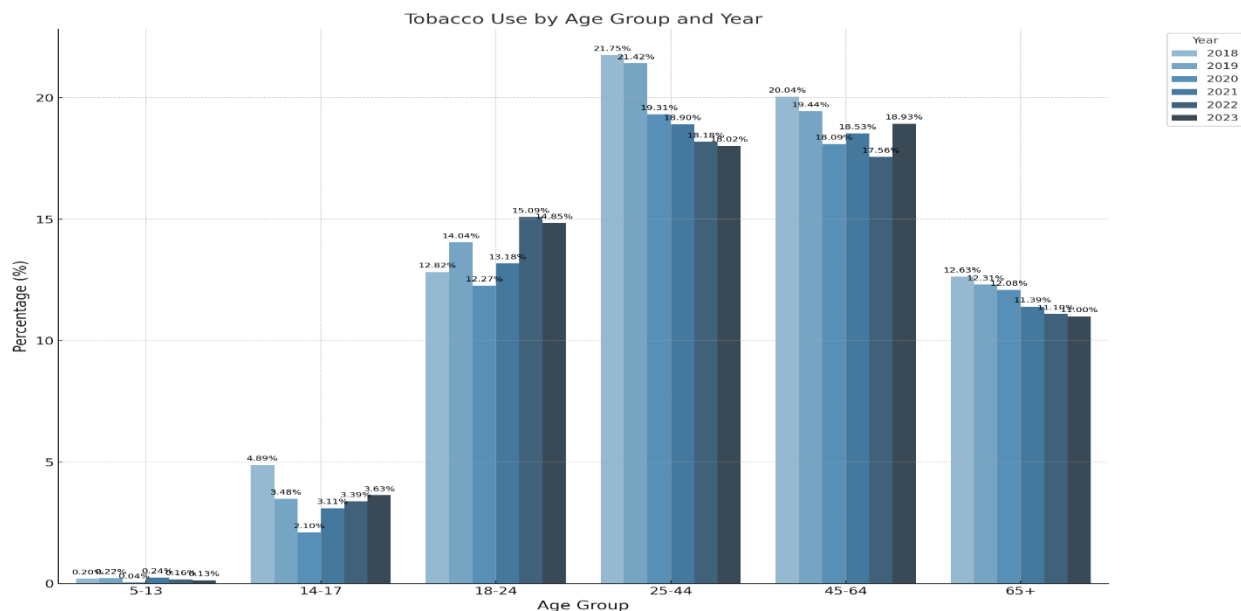
- **Disrupted Education:** Youth tobacco use can lead to missed school days and decreased academic performance.
- **Social Inequities:** Higher rates of tobacco use can exacerbate social inequities, limiting access to essential services and opportunities.

Tobacco Use in the EBCI Community

Recent data highlights the various challenges and successes related to tobacco use prevention within the EBCI community. Several key areas require attention:

Tobacco Use by Age Group:

- The data from 2018 to 2023 indicates varying rates of tobacco use across different age groups within the EBCI population. For example, in 2023, the highest percentage of tobacco users was among the 18-24 age group at 25.79%, followed closely by the 25-44 age group at 33.36%. Smokers in the 18-24 age group decreased to 14.29% in 2023 from 21.76% in 2018, while e-cigarette use in this group dramatically increased to 16.27% in 2023. Smokeless tobacco use showed less fluctuation across the years but remained a significant portion of tobacco use, especially among the 45-64 age group. Concerning, tobacco use among younger populations (14-24) has increased since a low in 2020, primarily due to the emergence of e-cigarettes and vaping.



Data Source: USET Tribal Epidemiology Center (TEC) Data Request, using Cherokee Indian Hospital RPMS Data

Figure 95

Tobacco use by age group and year for EBCI from USET TEC Data Request (2018-2023)

Overall Tobacco Use:

- The data from 2018 to 2023 shows that the percentage of tobacco users within the EBCI population remained relatively high, with slight fluctuations. In 2023, 24.31% of the EBCI population were tobacco users, compared to 26.53% in the USET population. The percentage of smokers in the EBCI population decreased from 24.02% in 2018 to 18.46% in 2023, whereas the USET smoker percentage also showed a decrease from 21.61% in 2018 to 19.25% in 2023. The use of smokeless tobacco and e-cigarettes varied, with EBCI showing higher percentages in some years compared to USET.

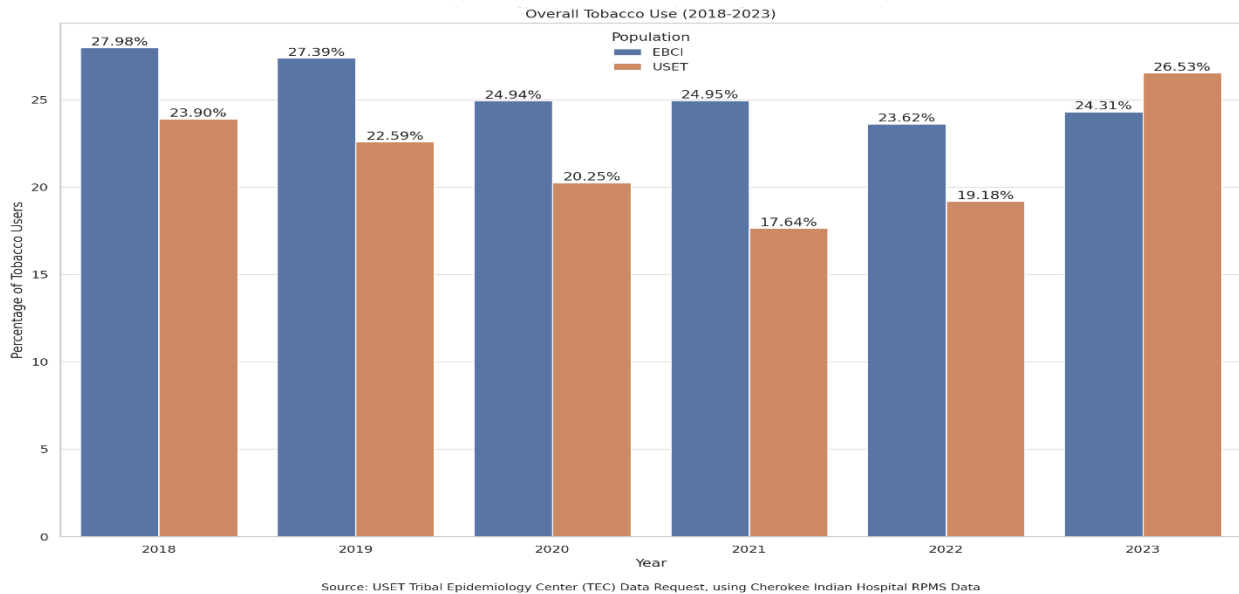


Figure 96

Overall tobacco use for EBCI and USET from USET TEC Data Request (2018-2023)

While there are some areas where the EBCI community has shown improvements compared to USET, there remains significant room for progress in reducing tobacco use among all age groups.

Improving Tobacco Use Prevention

To address these challenges and improve tobacco use prevention, several strategies can be implemented:

Education and Awareness:

- **Community Programs:** Implement community-based programs to educate about the dangers of tobacco use and promote tobacco cessation.
- **School-Based Programs:** Introduce school-based programs to educate adolescents about the risks of tobacco use and prevent initiation.

Support Services:

- **Cessation Programs:** Provide access to tobacco cessation programs, including counseling, support groups, and nicotine replacement therapies.
- **Healthcare Provider Training:** Train healthcare providers to screen for tobacco use and provide cessation support.

Policy and Regulation:

- **Smoke-Free Policies:** Enforce smoke-free policies in public spaces to reduce exposure to secondhand smoke.
- **Regulation of Tobacco Products:** Implement regulations on the sale and marketing of tobacco products, including e-cigarettes.

Understanding the Causes of Tobacco Use

Tobacco use is influenced by various factors:

- **Socioeconomic Factors:** Income disparities and limited access to cessation programs contribute to higher tobacco use rates.
- **Advertising and Availability:** Exposure to tobacco advertising and easy availability of tobacco products.
- **Peer Influence:** Social and peer pressure can play a significant role in tobacco use initiation.

The Impact of Tobacco Use on the EBCI Community

The impact of tobacco use extends beyond individual health, affecting the overall well-being of the community. High rates of tobacco use lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community health outcomes and resilience.

Health Resources Available

To support tobacco use prevention, several resources and initiatives are available in the Cherokee, NC area:

1. Cherokee Indian Hospital

- **Description:** Provides comprehensive healthcare services, including tobacco cessation programs, counseling, and support for individuals looking to quit tobacco.
- **Contact:** 828-497-9163
- **Location:** 1 Hospital Road, Cherokee, NC 28719
- **Website:** www.cherokeehospital.org

2. EBCI PHHS Tsalagi Public Health

- **Description:** Offers community health programs aimed at preventing tobacco use among youth and adults, providing education, resources, and support for tobacco cessation.
- **Contact:** 828-359-6785
- **Location:** 73 Kaiser Wilnoty Road, Cherokee, NC 28719
- **Website:** <https://phhs.ebci-nsn.gov/Tsalagi-public-health>

Healthy Aging

Healthy aging is a vital public health focus for the Eastern Band of Cherokee Indians (EBCI) community. Ensuring that older adults remain healthy, active, and engaged can significantly enhance their quality of life and reduce the burden of age-related diseases.

The Importance of Healthy Aging

Promoting healthy aging is essential due to the well-documented benefits of maintaining physical, mental, and social well-being in older adults. For the EBCI community, fostering healthy aging is crucial given the increasing elderly population and its impact on community health and well-being.

Consequences of Unhealthy Aging

Unhealthy aging can lead to numerous adverse health, social, and economic outcomes. These consequences can be broad and long-lasting:

Health Problems:

- **Increased Morbidity and Mortality:** Unhealthy aging is associated with higher rates of chronic diseases, such as heart disease, diabetes, and osteoporosis, leading to increased morbidity and mortality.
- **Chronic Conditions:** Older adults are more prone to developing chronic conditions, including arthritis, hypertension, and respiratory illnesses.

Mental Health Disorders:

- **Increased Stress and Anxiety:** Aging can exacerbate mental health issues, leading to increased stress, anxiety, and depression.
- **Impact on Cognitive Function:** Cognitive decline, including conditions like dementia and Alzheimer's disease, can severely impact the quality of life.

Economic Consequences:

- **Higher Healthcare Costs:** Age-related illnesses lead to increased healthcare costs for individuals and the community.
- **Lost Productivity:** Unhealthy aging can result in lost productivity due to illness and increased absenteeism from work.

Educational and Social Impacts:

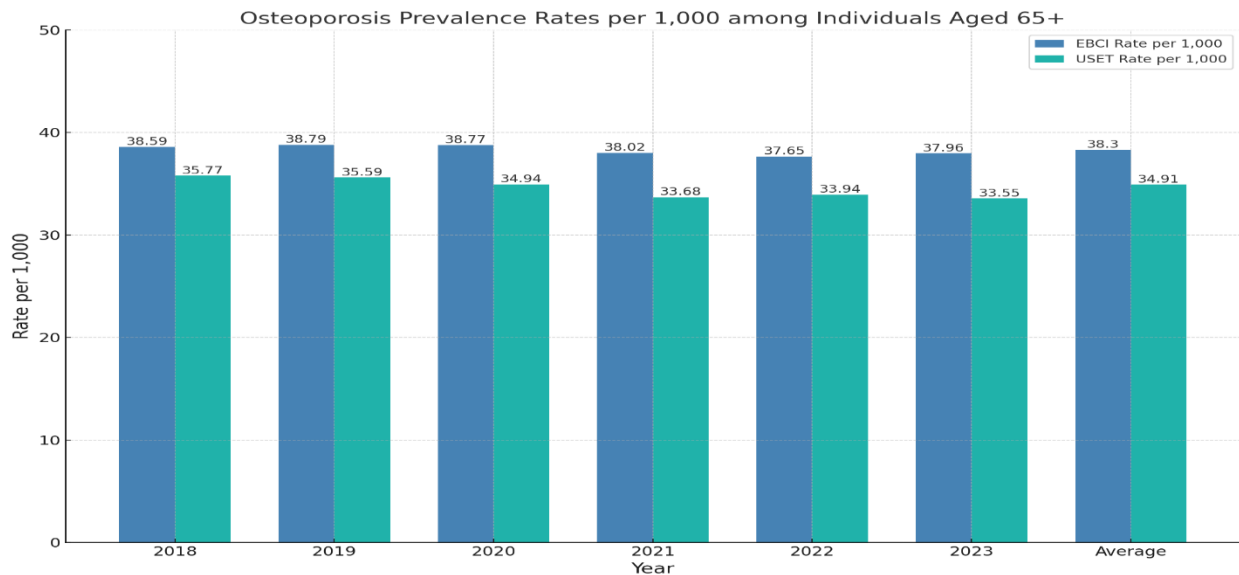
- **Social Isolation:** Older adults may experience social isolation, leading to negative impacts on mental and physical health.
- **Reduced Access to Services:** Barriers to accessing essential services can exacerbate health inequities among the elderly.

Aging in the EBCI Community

Recent data highlights the various challenges and successes related to healthy aging within the EBCI community. Several key areas require attention:

Osteoporosis in Individuals Aged 65+:

- **Prevalence of Osteoporosis:** Osteoporosis is a significant concern among the elderly, leading to weakened bones and an increased risk of fractures. From 2018 to 2023, the prevalence rate of osteoporosis in EBCI individuals aged 65 and older was consistently higher than the broader USET population. The average rate for EBCI was 38.30 per 1,000, compared to 34.91 per 1,000 for USET. This higher prevalence underscores the need for targeted interventions to manage and prevent osteoporosis in the EBCI community.



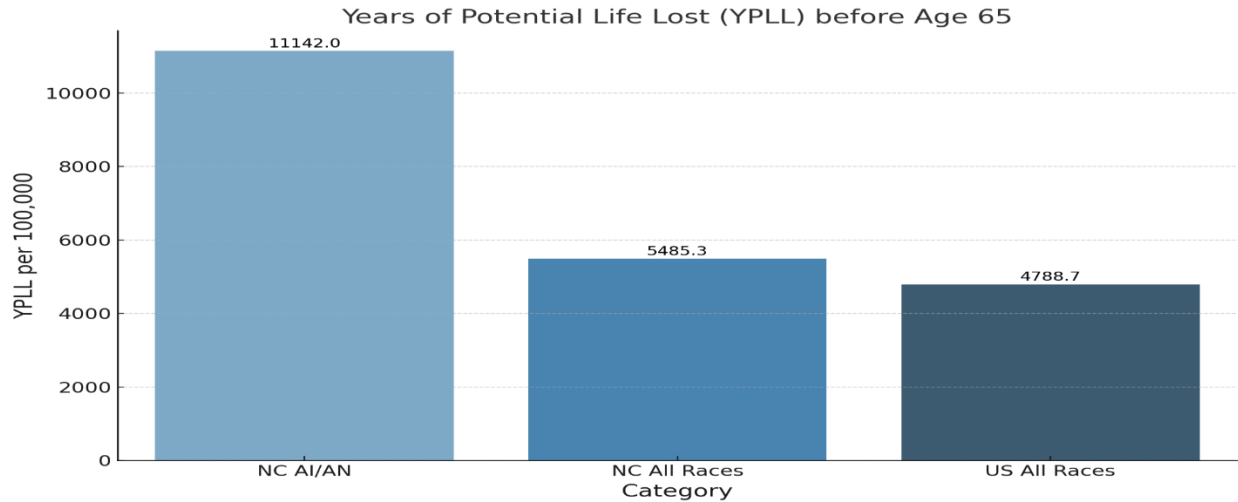
Data Source: USET Tribal Epidemiology Center (TEC) Data Request, using Cherokee Indian Hospital RPMS Data.

Figure 97

Osteoporosis prevalence rates per 1,000 among individuals aged 65+ for EBCI and USET Aggregate from USET TEC Data Request (2018-2023)

Life Expectancy and Years of Potential Life Lost (YPLL):

- **Life Expectancy for AI/AN:** As of 2021, the life expectancy for American Indian/Alaska Native (AI/AN) populations was 65.2 years, significantly lower than the national average.
- **Years of Potential Life Lost (YPLL):** The YPLL before age 65 was 11,142 per 100,000 population for AI/AN in North Carolina, highlighting the higher burden of premature mortality.



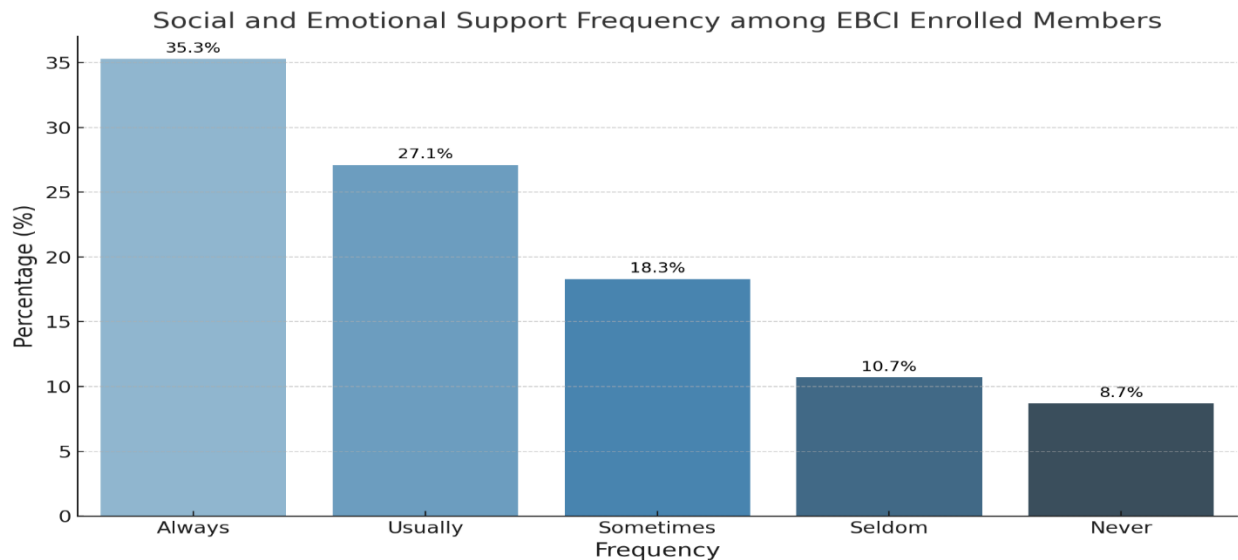
Data Source: CDC WISQARS Leading Causes of Death Visualization Tool

Figure 98

Years of Potential Life Lost (YPLL) before age 65 for NC AI/AN, NC all races, and US all races from CDC WISQARS (2018-2022)

Social and Emotional Support:

- Social and Emotional Support Frequency:** According to the 2023 Tribal Health Survey, 35.3% of EBCI enrolled members reported always receiving social and emotional support, while 27.1% usually received support, 18.3% sometimes received support, 10.7% seldom received support, and 8.7% never received support.

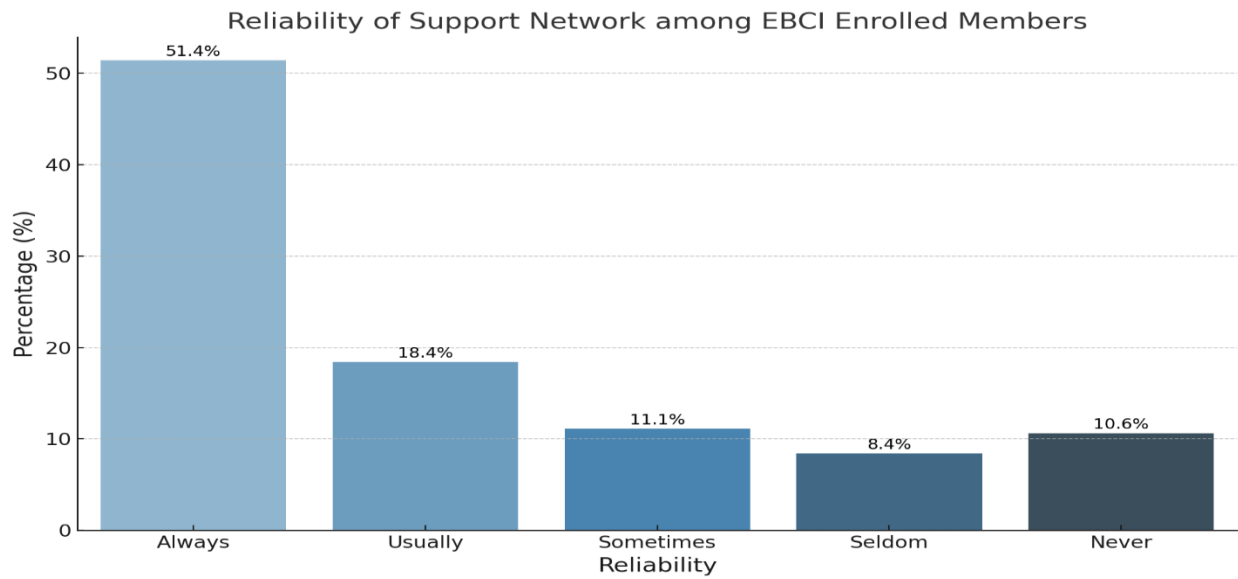


Data Source: 2023 EBCI Tribal Health Survey

Figure 99

Social and emotional support frequency among EBCI enrolled members based on the 2023 EBCI Tribal Health Survey (2023)

- **Reliability of Support Network:** Among EBCI enrolled members, 51.4% reported their support network as always reliable, 18.4% usually reliable, 11.1% sometimes reliable, 8.4% seldom reliable, and 10.6% never reliable.



Data Source: 2023 EBCI Tribal Health Survey

Figure 100

Reliability of support network among EBCI enrolled members based on the 2023 EBCI Tribal Health Survey (2023)

Improving Healthy Aging

To address these challenges and promote healthy aging, several strategies can be implemented:

Encouraging Physical Activity:

- **Move Naturally:** Promote regular physical activity as part of daily routines, such as walking, gardening, and household chores. Simple lifestyle changes, like taking stairs instead of elevators, can significantly impact overall health.

Fostering Mental and Social Well-Being:

- **Purpose and Social Engagement:** Encourage activities that provide a sense of purpose and foster social connections. Community programs that involve volunteering, hobbies, and social gatherings can enhance mental well-being and longevity.
- **Stress Management:** Implement stress-relieving practices, such as meditation, yoga, and socializing with friends and family, to improve mental health and reduce the risk of chronic diseases.

Healthy Eating Habits:

- **Mindful Eating:** Encourage mindful eating habits, such as eating smaller portions and focusing on plant-based diets rich in vegetables, fruits, legumes, and whole grains. Reducing the intake of processed foods and sugars is crucial for maintaining a healthy weight and preventing chronic diseases.

Strong Community and Family Connections:

- **Belonging and Support Networks:** Foster strong community ties and participation in faith-based activities. Emphasizing close family connections and support systems can improve overall well-being and provide a safety net for older adults.

Understanding the Causes of Unhealthy Aging

Unhealthy aging is influenced by various factors:

- **Chronic Disease Management:** Limited access to healthcare and chronic disease management programs.
- **Physical Inactivity and Poor Nutrition:** Lack of regular physical activity and poor nutrition.
- **Social Isolation:** Social isolation and lack of engagement in community activities.
- **Mental Health Issues:** Unaddressed mental health problems can impact overall well-being in older adults.

The Impact of Unhealthy Aging on the EBCI Community

The impact of unhealthy aging extends beyond individual well-being, affecting the overall health and stability of the community. High rates of chronic diseases and social isolation lead to increased healthcare costs, social instability, and economic burdens. Addressing these issues is essential for improving community resilience and well-being.

Health Resources Available

To support healthy aging, several resources and initiatives are available in the Cherokee, NC area:

1. Cherokee Indian Hospital
 - **Description:** Provides comprehensive healthcare services, including chronic disease management, vaccinations, and mental health support.
 - **Contact:** 828-497-9163
 - **Location:** 1 Hospital Road, Cherokee, NC 28719
 - **Website:** www.cherokeehospital.org
2. EBCI PHHS Tsalagi Public Health
 - **Description:** Offers community health programs aimed at promoting healthy aging among youth and adults, providing education, resources, and support.
 - **Contact:** 828-359-6785
 - **Location:** 73 Kaiser Wilnoty Road, Cherokee, NC 28719
 - **Website:** <https://phhs.ebci-nsn.gov/Tsalagi-public-health>

Our Path Forward

The 2023 Tribal Health Assessment (THA) for the Eastern Band of Cherokee Indians (EBCI) has provided an in-depth understanding of the community's health status and identified key health priorities. This comprehensive assessment is the foundation for our journey towards improved community health. The road ahead is paved with opportunities to make significant strides in addressing these health priorities and ensuring the well-being of the EBCI community.

Embracing Community Engagement

Our path forward is rooted in the active engagement and participation of community members. Health interventions that are developed and implemented with direct input from the community are more likely to be effective and sustainable. By fostering a sense of ownership and accountability, we can drive meaningful improvements in community health. Involving community members in every step of the process—from planning to execution—ensures that health initiatives are relevant and responsive to their needs and experiences.

Strengthening Collaborative Efforts

Collaboration among various stakeholders, including healthcare providers, tribal leaders, community organizations, and public health officials, is essential for achieving our health goals. By working together, we can leverage our collective strengths and resources to address complex health challenges. Collaborative efforts enhance the coordination of services, reduce duplication of efforts, and ensure a more comprehensive approach to health improvement.

Addressing Social Determinants of Health

The health issues identified in the THA are closely linked to social determinants of health, such as income, education, housing, and access to healthcare. Addressing these underlying factors is crucial for achieving long-term health improvements. Initiatives that enhance economic opportunities, improve educational outcomes, ensure stable housing, and expand access to healthcare are fundamental to our strategy. By tackling these social determinants, we can create an environment that supports healthier lifestyles and reduces health disparities.

Enhancing Preventive Care

Preventive care is a cornerstone of our health strategy. By focusing on prevention, we can reduce the incidence of chronic diseases and improve overall health outcomes. Initiatives that promote regular health screenings, vaccinations, and healthy behaviors are essential. Preventive care not only improves individual health but also reduces the burden on healthcare systems by preventing diseases before they become severe.

Improving Access to Healthcare

Ensuring that all community members have access to high-quality healthcare is a top priority. Efforts to increase the availability of healthcare services, including primary care, dental care, and mental health services, are critical. Reducing barriers to healthcare access, such as transportation and cost, will help

ensure that everyone in the community can receive the care they need. Telehealth services and mobile clinics are innovative solutions that can extend healthcare access to remote areas.

Promoting Mental Health and Well-Being

Mental health is an integral component of overall health. The THA has highlighted the need to address mental health issues within the community. Efforts to provide comprehensive mental health services, reduce stigma, and promote mental well-being are vital. By supporting mental health initiatives, we can improve the quality of life for community members and create a supportive environment where individuals can thrive.

Tackling Substance Use

Substance use remains a significant challenge within the community. Efforts to prevent substance use, provide treatment and recovery services, and support individuals and families affected by substance use are essential. A multi-faceted approach that includes education, prevention, treatment, and support services will help reduce the impact of substance use on the community.

Supporting Maternal and Child Health

The health of mothers and children is a priority for the EBCI community. Initiatives that support maternal and child health, including prenatal care, breastfeeding support, and early childhood development programs, are crucial. By ensuring that mothers and children receive the care and support they need, we can lay a strong foundation for a healthy future.

Encouraging Healthy Lifestyles

Promoting healthy lifestyles through nutrition, physical activity, and wellness programs is essential for improving community health. Initiatives that encourage healthy eating, regular exercise, and wellness activities can help prevent chronic diseases and improve overall well-being. Community-based programs and activities that promote healthy lifestyles can engage individuals and families in making positive health choices.

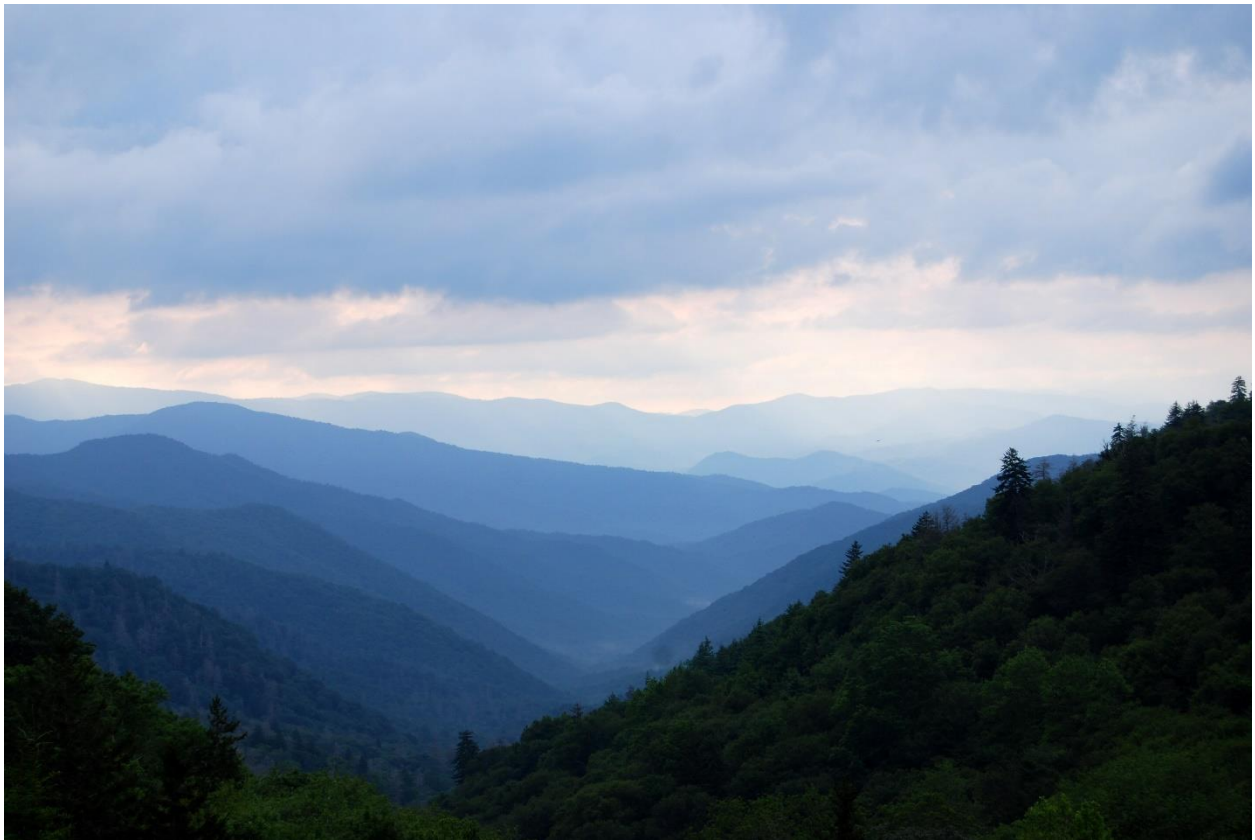
Ensuring Safe and Healthy Environments

The built environment plays a significant role in health. Efforts to ensure safe and healthy environments, including access to clean air and water, safe housing, and recreational spaces, are critical. Environmental health initiatives that address pollution, climate change, and other environmental factors are essential for protecting the health of the community.

Moving Forward with a Unified Vision

The path forward for the EBCI involves a unified vision that integrates insights from the 2023 Tribal Health Assessment (THA) with strategic goals for health improvement. By addressing the identified health priorities through targeted interventions and fostering collaboration among community members and stakeholders, we can achieve significant improvements in the health and well-being of the community. This journey requires dedication, collaboration, and a commitment to continuous improvement. The 2023 THA has highlighted the health challenges and opportunities within the EBCI community. By embracing community engagement, strengthening collaborative efforts, addressing social determinants of health,

enhancing preventive care, improving access to healthcare, promoting mental health, tackling substance use, supporting maternal and child health, encouraging healthy lifestyles, and ensuring safe environments, we can make substantial progress in community health. Our path forward is clear, and with a unified vision and collective effort, we can achieve a healthier future for all members of the Eastern Band of Cherokee Indians.



References

1. American Congress of Obstetricians and Gynecologists (ACOG). (n.d.). Physician FAQs: Addressing the impact of COVID-19 on obstetric and gynecologic care. Retrieved from <https://www.acog.org/clinical-information/physician-faqs/-/media/3a22e153b67446a6b31fb051e469187c.ashx>
2. American Progress. (n.d.). Environmental and climate justice. Retrieved from <https://www.americanprogress.org/topic/environmental-and-climate-justice/>
3. Centers for Disease Control and Prevention. (n.d.). Behavioral Risk Factor Surveillance System (BRFSS). Retrieved from <https://www.cdc.gov/brfss/index.html>
4. Centers for Disease Control and Prevention. (n.d.). CDC Wonder. Retrieved from <https://wonder.cdc.gov/>
5. Centers for Disease Control and Prevention. (n.d.). Physical Activity Guidelines. Retrieved from https://www.cdc.gov/healthyschools/physicalactivity/guidelines_backup.htm
6. Centers for Disease Control and Prevention. (n.d.). Physical Activity Basics for Adults. Retrieved from <https://www.cdc.gov/physical-activity-basics/guidelines/adults.html>
7. Centers for Disease Control and Prevention. (n.d.). About Physical Activity. Retrieved from <https://www.cdc.gov/physical-activity/php/about/index.html>
8. Centers for Disease Control and Prevention. (n.d.). Adding Physical Activity to Your Life. Retrieved from <https://www.cdc.gov/physical-activity-basics/adding-adults/index.html>
9. Centers for Disease Control and Prevention. (2018-2022). CDC Wonder. Retrieved from <https://wonder.cdc.gov>
10. Centers for Disease Control and Prevention. (2023, March 17). Adverse Childhood Experiences (ACEs). Retrieved from <https://www.cdc.gov/vitalsigns/aces/index.html>
11. Centers for Disease Control and Prevention. (2023, September 29). Advancing health equity in chronic disease prevention and management. Retrieved from <https://www.cdc.gov/chronicdisease/healthequity/index.htm>
12. Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>
13. Centers for Disease Control and Prevention/Agency for Toxic Substances and Disease Registry/Geospatial Research, Analysis, and Services Program. (2022). CDC/ATSDR Social Vulnerability Index 2022 Database U.S. Retrieved from https://www.atsdr.cdc.gov/placeandhealth/svi/data_documentation_download.html
14. Cherokee Central Schools. (2018-2023). Annual Reports. Retrieved from https://www.ccs-nc.org/apps/pages/index.jsp?uREC_ID=368975&type=d&pREC_ID=1606813
15. Costello, E. J., & Keane, T. M. (2000). Posttraumatic stress disorder in youth following exposure to family violence. *Current Psychiatry Reports*, 2(4), 350-358. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK559129/>
16. Federal Bureau of Investigation. (2022). Crime Data Explorer. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/query>
17. Federal Bureau of Investigation. (n.d.). Crime Data Explorer All Violent Crime Data. Retrieved from <https://cde.ucr.cjis.gov/LATEST/webapp/#/pages/explorer/crime/crime-trend>

18. Felitti, V. J., & Anda, R. F. (2023). Adverse childhood experiences and related adult health outcomes: A scoping review. *International Journal of Epidemiology*, 52(1), 22-56. Retrieved from <https://pubmed.ncbi.nlm.nih.gov/34609027/>
19. Feeding America. (2023, February 14). Hunger in America. Retrieved from <https://www.feedingamerica.org/hunger-in-america>
20. HIV Statistics Overview. (n.d.). Retrieved from <https://www.hiv.gov/hiv-basics/overview/data-and-trends/statistics>
21. Lee, S. H., Moore, L. V., Park, S., Harris, D. M., & Blanck, H. M. (2022). Adults Meeting Fruit and Vegetable Intake Recommendations — United States, 2019. *MMWR Morb Mortal Wkly Rep*, 71(1), 1-9. DOI: <http://dx.doi.org/10.15585/mmwr.mm7101a1>
22. March of Dimes. (n.d.). Premature Birth. Retrieved from <https://marchforbabies.org/>
23. National Center for Education Statistics. (2018-2023). Condition of Education Report: Cohort Graduation Rates. Retrieved from <https://nces.ed.gov/programs/coe/indicator/coj>
24. National Center for Health Statistics. (2020, December 17). Health, United States, 2019. Centers for Disease Control and Prevention. Retrieved from <https://www.cdc.gov/nchs/data/hus/hus19-508.pdf>
25. National Congress of American Indians (NCAI). (n.d.). Retrieved from <https://www.ncai.org/>
26. National Indian Child Welfare Association (NICWA). (n.d.). Retrieved from <https://www.nicwa.org/>
27. National Institutes of Health. (2020, September 24). Substance Use and Mental Illness. Retrieved from <https://www.samhsa.gov/>
28. National Institutes of Health. (2023, September 13). Fetal Alcohol Spectrum Disorders (FASDs). *National Institutes of Health Bookshelf*. Retrieved from <https://www.ncbi.nlm.nih.gov/books/NBK459146/>
29. National Institutes of Health. (n.d.). Partner Violence During Pregnancy. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC2971723/>
30. National Institutes of Health. (n.d.). Prenatal Substance Exposure and Neonatal Abstinence Syndrome: State Estimates from the 2016–2020 Transformed Medicaid Statistical Information System. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10204012/>
31. North Carolina Division of Public Safety (NCDPS). (2022). 2022 Juvenile Justice Delinquency Prevention (JJDP) County Databook. Retrieved from <https://www.ncdps.gov/2022-jjdp-county-databook>
32. North Carolina State Center for Health Statistics (NC SCHS). (2021). North Carolina infant mortality data: Table 1B [Data set]. Retrieved from <https://schs.dph.ncdhhs.gov/data/vital/ims/2021/2021-IMR-TABLE-1B-FINAL.html>
33. North Carolina State Center for Health Statistics (NC SCHS). (2022). Fertility data [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>
34. North Carolina State Center for Health Statistics (NC SCHS). (2022). Pregnancy data [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>
35. North Carolina State Center for Health Statistics (NC SCHS). (2022). Selected Live Birth Trends [2022]. Retrieved from <https://schs.dph.ncdhhs.gov/data/databook/>

36. Ostchega, Y., Fryar, C. D., Nwankwo, T., & Nguyen, D. T. (2020). Hypertension prevalence among adults aged 18 and over: United States, 2017–2018. *NCHS Data Brief*, 364. Hyattsville, MD: National Center for Health Statistics.
37. QuickStats: Prevalence of High Total Cholesterol Among Adults Aged ≥20 Years, by Age Group and Sex — National Health and Nutrition Examination Survey, 2015–2018. (2020). *MMWR Morb Mortal Wkly Rep*, 69, 690. DOI: <http://dx.doi.org/10.15585/mmwr.mm6922a5>
38. Springer, K. W., Sheridan, J., Kuo, D., & Carnes, M. (2003). The long-term health outcomes of childhood abuse: An overview and a call to action. *Journal of General Internal Medicine*, 18(10), 762–775. Retrieved from <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1494926/>
39. Substance Abuse and Mental Health Services Administration (SAMHSA). (n.d.). Substance Abuse and Mental Health Services Administration. Retrieved from <https://www.samhsa.gov/>
40. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, DP03: Selected Economic Characteristics. Retrieved from <https://data.census.gov/table?q=DP03>
41. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, S2201: Food Stamps/Supplemental Nutrition Assistance Program (SNAP). Retrieved from <https://data.census.gov/table?q=S2201>
42. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table B28002: Internet Subscription Data. Retrieved from <https://data.census.gov/cedsci/table?q=B28002>
43. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table DP05. Retrieved from <https://data.census.gov>
44. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S1601: Language Spoken at Home. Retrieved from <https://data.census.gov/cedsci/table?q=S1601>
45. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S1701: Poverty Status in the Past 12 Months. Retrieved from <https://data.census.gov/table?q=S1701>
46. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S2503: Financial Characteristics. Retrieved from <https://data.census.gov/table?q=S2503>
47. U.S. Census Bureau. (2018-2022). American Community Survey 5-Year Estimates, Table S2504: Vehicles Available. Retrieved from <https://data.census.gov/table?q=S2504>
48. National Institutes of Health. (2020, September 24). Substance Use and Mental Illness. Retrieved from <https://www.samhsa.gov/>
49. Centers for Disease Control and Prevention. (2024). CDC WISQARS Leading Causes of Death Visualization Tool. Retrieved from <https://wisqars.cdc.gov>

Appendix: Technical Notes

- **CIHA Data:** While CIHA serves the primary healthcare needs of many EBCI members, data may not represent all Tribal members, as some may access healthcare outside the CIHA system. Differences in data collection methods, healthcare access, and reporting can affect the completeness and accuracy of health indicators derived from CIHA data.
- **Tribal Health Survey:** Self-reported data from the Tribal Health Survey is subject to recall bias and may not perfectly reflect population-level health indicators. However, the survey offers valuable insights into community-perceived health needs and barriers to care. The survey methodology, sample size, and question wording can influence the results and should be considered when interpreting the data.
- **Small Area Estimates:** Municipality-level data or data specific to certain EBCI communities may have limitations due to small population sizes. Rates should be interpreted with caution and in the context of overall population composition. Small sample sizes can result in large variability and may not be generalizable to the entire population.
- **BRFSS and CDC PLACES:** While both utilize BRFSS methodology, data from these sources should not be directly compared due to differences in statistical techniques, particularly for smaller geographic areas. Differences in survey design, question wording, and data collection periods can impact the comparability of the results.
- **Social Determinants of Health (SDOH):** SDOH data may come from multiple sources with varying methodologies and time periods. This underscores the complex, interconnected nature of SDOH. Data integration challenges, varying definitions, and reporting periods can affect the accuracy and reliability of SDOH indicators.
- **Data Suppression:** To protect confidentiality, some data cells may be suppressed, especially when dealing with small numbers or rare events. Suppressed data can lead to incomplete datasets and may affect trend analysis and comparisons.
- **Data Updates:** Certain data sources are updated periodically. Please refer to the specific source for the most recent data release information. The timing of data releases can affect the currency of the data presented in this assessment.
- **Health Disparities:** Data on health disparities among different subpopulations within the EBCI, such as age, gender, and socioeconomic status, are crucial for understanding and addressing inequities. However, the availability and granularity of such data can vary, affecting the ability to conduct detailed analyses.
- **Data Quality:** The accuracy, completeness, and timeliness of the data used in this assessment depend on the data sources. Inconsistencies or gaps in data collection and reporting can impact the findings and recommendations. Efforts should be made to continuously improve data quality through robust data management practices.
- **Comparative Data:** When comparing health indicators between EBCI and other populations (e.g., NC AI/AN, USET), differences in demographic characteristics, healthcare access, and social

determinants should be considered. Comparative analyses should account for these factors to avoid misinterpretation of the data.

- **Public Health Surveillance:** Data from public health surveillance systems such as NC DETECT and NVSS are integral for monitoring health trends and outcomes. However, variations in case definitions, reporting practices, and data completeness can influence the interpretation of surveillance data.
- **Environmental and Climate Data:** Environmental factors and climate change data relevant to the EBCI region are critical for understanding health impacts. The integration of local, state, and national data sources can provide a comprehensive view but may also present challenges in data harmonization.
- **Community Engagement:** The engagement of community members in data collection and interpretation processes enhances the relevance and acceptance of the findings. Community perspectives can provide valuable context but also highlight the need for culturally appropriate data collection methods.
- **Epidemiological Methods:** The use of standard epidemiological methods, such as age-standardization and multivariable analysis, is essential for accurate interpretation of health data. The limitations of these methods, particularly in small population studies, should be acknowledged.

Appendix: Key Terms and Definitions

- **Adult Current E-Cigarettes/Vaping:** Adults who use electronic cigarettes or vaping products regularly.
- **Adult Current Smokers:** Adults who smoke tobacco products regularly.
- **Adult Obesity:** Adults with a Body Mass Index (BMI) of 30 or higher. BMI is calculated as weight in kilograms divided by height in meters squared.
- **Adult Overweight:** Adults with a Body Mass Index (BMI) between 25 and 29.9. BMI is calculated as weight in kilograms divided by height in meters squared.
- **Adult Physical Inactivity:** Adults who do not meet the recommended levels of physical activity, which is at least 150 minutes of moderate-intensity aerobic activity or 75 minutes of vigorous-intensity activity per week.
- **Adults 19-64 without Health Insurance:** Adults aged 19-64 who do not have health insurance coverage through any private, employer, or government-sponsored plan.
- **Air Quality Index Summary:** A scale used to report daily air quality, indicating how clean or polluted the air is and what associated health effects might be a concern for the public. Categories include Good, Moderate, Unhealthy for Sensitive Groups, Unhealthy, Very Unhealthy, and Hazardous.
- **All Cause Death:** The total number of deaths from all causes in a given population.
- **Alcohol Screening in Pregnancy:** The practice of screening pregnant women for alcohol use during prenatal care visits to identify and mitigate the risks of alcohol consumption during pregnancy.
- **Breastfeeding:** The act of feeding an infant with milk directly from the mother's breast. Key milestones often measured are breastfeeding rates at 2 months and 9 months of age.
- **Cancer Deaths:** Deaths resulting from any type of cancer. Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells.
- **Characteristics of Survey Participants:** Information about the demographics and socioeconomic status of individuals who participated in a survey, including age, gender, income, education, and employment status.
- **Child Maltreatment:** Includes physical, sexual, and emotional abuse, as well as neglect of children under the age of 18. Confirmed or suspected cases are recorded by child protective services or other agencies.
- **Child Mortality:** The number of deaths of children under the age of 18 in a given population.
- **Child Neglect Rate:** The rate of confirmed or suspected cases where a caregiver fails to provide for a child's basic needs, including adequate food, shelter, medical care, and supervision.
- **Child Sexual Abuse Rate:** The rate of confirmed or suspected cases where a child is involved in sexual activity with an adult or older adolescent.
- **Climate Change Area Data (World, US, NC):** Information and metrics related to changes in climate patterns on a global scale (World), national scale (US), and state scale (North Carolina), including temperature changes, extreme weather events, and greenhouse gas emissions.
- **Climate Change Local Data (WNC, Cherokee):** Data specific to the impacts of climate change in Western North Carolina and the Cherokee areas, such as changes in temperature, weather patterns, and local emissions.

- **Climate Change Survey Data (EBCI Climate Survey and Tribal Health Survey):** Survey results from the EBCI community capturing perceptions and impacts of climate change, including concerns about health, economic effects, and environmental changes.
- **Cohort Graduation Rate:** The percentage of students who graduate from high school within four years of entering ninth grade.
- **Community Engagement:** The process of involving community members in planning and decision-making activities to address community issues and improve overall well-being.
- **Community Safety Measures:** Indicators related to crime prevention, violence reduction, and injury prevention within a community, such as crime rates, traffic safety, and emergency preparedness.
- **COVID-19 Deaths:** Deaths attributed to COVID-19, a respiratory illness caused by the coronavirus SARS-CoV-2, confirmed through testing or clinical diagnosis.
- **Crime Rates (Overall):** The number of reported crimes in a given area, usually expressed per 1,000 or 100,000 population, including violent crimes (e.g., assault, robbery) and property crimes (e.g., burglary, theft).
- **Dental Data:** Information on dental health, including the prevalence of tooth decay, gum disease, and tooth loss among different age groups, such as the percentage of adults aged 65 and older who have lost all their natural teeth due to dental issues.
- **Dentists (Ratio):** The ratio of dentists to the population in a given area, typically expressed as the number of dentists per 10,000 residents.
- **Diabetes Incidence:** The number of new cases of diabetes diagnosed during a specific time period. Diabetes is a chronic condition that affects how the body processes blood sugar (glucose).
- **Diabetes Prevalence:** The total number of existing cases of diabetes within a population at a given time. This includes both Type 1 diabetes (where the body does not produce insulin) and Type 2 diabetes (where the body does not use insulin properly).
- **Difference Between Primary and Secondary Data:** Primary data is information collected directly by researchers for a specific purpose, while secondary data is information that was collected by someone else for a different purpose but is being used by researchers for new analysis.
- **Diseases of the Heart:** Deaths specifically attributed to heart disease, including conditions such as coronary artery disease, heart attack, and congestive heart failure.
- **Domestic Violence:** Instances of physical, emotional, or sexual abuse occurring between intimate partners or family members, leading to injuries or other health consequences.
- **Executive Summary:** A brief overview of the main points of the report, including key findings, conclusions, and recommendations, designed to give readers a quick understanding of the content.
- **Firearm Fatalities:** Deaths resulting from the use of firearms, including homicides, suicides, and accidental shootings.
- **Flu Vaccinations:** The administration of vaccines to protect individuals from the influenza virus, which is recommended annually for most populations.
- **Food Environment Index (0-10):** A score that reflects the availability and accessibility of healthy food options in a community, where a higher score indicates better access.
- **Food Insecurity:** The state of being without reliable access to a sufficient quantity of affordable, nutritious food. Households experiencing food insecurity may have uncertain or limited access to food at some point during the year.

- **High Blood Pressure:** Also known as hypertension, this is a condition where the force of the blood against the artery walls is too high, often requiring medication to control. It is defined as having a systolic blood pressure of 130 mmHg or higher, or a diastolic blood pressure of 80 mmHg or higher.
- **High Cholesterol:** A condition where there are high levels of cholesterol in the blood, which can lead to an increased risk of heart disease and stroke. Cholesterol is a fatty substance found in the blood.
- **HIV Incidence:** The number of new diagnoses of Human Immunodeficiency Virus (HIV) in a given time period. HIV is a virus that attacks the body's immune system.
- **HIV Prevalence:** The total number of people living with Human Immunodeficiency Virus (HIV) at a given time. HIV is a virus that attacks the body's immune system.
- **Homicides:** Deaths caused by intentional harm inflicted by another person.
- **Households without Internet:** Households that do not have access to reliable internet service.
- **Households with No Vehicles:** Households that do not have access to a personal vehicle for transportation.
- **Infant Mortality:** The number of deaths of infants under one year of age.
- **Infant Mortality Causes:** The primary causes of infant death, including congenital malformations, disorders related to short gestation and low birth weight, and sudden infant death syndrome (SIDS).
- **Juvenile Arrests:** The number of arrests made among individuals under the age of 18 for delinquency or criminal activities.
- **Length of Life:** Measures related to the lifespan of individuals, such as life expectancy and years of potential life lost.
- **Life Expectancy:** The average number of years a person can expect to live based on current mortality rates.
- **Local Air Quality Data:** Data on the concentrations of specific pollutants, such as PM2.5 and ozone, monitored locally to indicate the quality of air in the immediate environment and any associated health risks.
- **Low Birthweight:** Infants born with a weight of less than 2,500 grams (5 pounds, 8 ounces).
- **Maternal and Child Health:** Health services and outcomes related to mothers and children, including prenatal care, childbirth, and early childhood health.
- **Motor Vehicle Crash Deaths:** Deaths resulting from motor vehicle accidents.
- **Most Important Health Issues:** Health problems identified by the community as the most significant or concerning.
- **Neonatal Abstinence Syndrome (NAS):** A condition in newborns caused by withdrawal from exposure to drugs while in the mother's womb.
- **Never Had Colonoscopy (Adults 45+):** Adults aged 45 and older who have never undergone a colonoscopy, a screening test for colon cancer.
- **Never Had Mammogram (Females 45+):** Women aged 45 and older who have never undergone a mammogram, a screening test for breast cancer.
- **Osteoporosis Prevalence in 65+:** The occurrence of osteoporosis, a condition characterized by weak and brittle bones, among residents aged 65 and older.

- **Ozone:** A gas composed of three oxygen atoms, found both at ground level and in the Earth's upper atmosphere. Ground-level ozone, or "bad" ozone, is a harmful air pollutant and a key component of smog, affecting respiratory health.
- **Per 100,000:** A standard unit of measurement used in public health to normalize data, allowing for comparisons between populations of different sizes. For example, "10 cases per 100,000 population" means there are 10 cases for every 100,000 people in the population.
- **Per 1,000:** Another standard unit of measurement used in public health, often for smaller populations or more frequent events. For example, "5 cases per 1,000 population" means there are 5 cases for every 1,000 people in the population.
- **Percent of 65+ with Seasonal Flu, Shingles, COVID-19, and Pneumococcal Vaccinations:** EBCL residents aged 65 and older who are up-to-date on vaccinations for seasonal flu, shingles, COVID-19, and pneumococcal disease.
- **Percent of COVID-19 Vaccinations per year:** The proportion of the population who received a COVID-19 vaccination in the previous year.
- **Perceived Quality of Life:** The community's perception of their overall well-being and satisfaction with life, often measured through surveys.
- **PM2.5:** Fine particulate matter with a diameter of 2.5 micrometers or smaller, which can penetrate deep into the lungs and are linked to various health issues, including respiratory and cardiovascular diseases.
- **Population in Poverty:** Individuals living below the poverty line as defined by federal income guidelines.
- **Premature Age-Adjusted Mortality:** Deaths among residents under age 75, adjusted for age differences within the population.
- **Premature Death:** The years of potential life lost before age 75, adjusted for age differences within the population.
- **Primary Care Physicians (Ratio):** The ratio of primary care physicians to the population, typically expressed as the number of physicians per 10,000 residents.
- **Primary Data Collection:** The process of gathering original data directly from sources through methods like surveys, interviews, or direct measurements.
- **Quality of Life:** Indicators related to physical and mental health status, and functional status, reflecting overall well-being.
- **Secondary Data Collection:** The use of existing data collected by other organizations or for other purposes, such as reports, studies, and databases.
- **Severe Housing Cost:** Households spending more than 30% of their income on housing costs.
- **Sexually Transmitted Infections (STIs) Incidence rates for:**
 - **Chlamydia:** New cases of chlamydia infection.
 - **Gonorrhea:** New cases of gonorrhea infection.
 - **Syphilis:** New cases of syphilis infection.
- **Social Determinants of Health (SDOH):** Conditions in the environments where people are born, live, learn, work, play, worship, and age that affect health and quality of life.
- **Social Vulnerability Index (0-1):** A composite score reflecting a community's susceptibility to social and environmental hazards, with a higher score indicating greater vulnerability.

- **Speaks English Less Than “Very Well”:** Individuals aged 5 and older who speak English less than "very well".
- **Substance Use Cases:** The incidence of diagnoses related to substance use, including specific substances such as:
 - **Alcohol:** Use of alcoholic beverages.
 - **Opioids:** Use of opioid drugs.
 - **Hallucinogens:** Use of hallucinogenic drugs.
 - **Cocaine:** Use of cocaine.
 - **Cannabis:** Use of marijuana.
 - **Barbiturates:** Use of barbiturate drugs.
 - **Stimulants:** Use of stimulant drugs.
- **Suicides:** Deaths resulting from self-inflicted harm with intent to die.
- **Teen Births:** Births among females aged 15-19.
- **Tobacco Use in Pregnancy:** Pregnant women who currently use tobacco products.
- **Unemployment:** Individuals in the labor force who are actively seeking work but are currently unemployed.
- **Vulnerable Populations:** Groups at higher risk for poor health outcomes due to socioeconomic, environmental, or medical factors.
- **Youth Victimization:** Youth aged 12-19 experiencing victimization from crime, such as robbery, assault, or theft, in the past year.

Appendix: 2023 Tribal Health Survey

EBCI Tribal Health Survey 2023 Final Version

2023 Tribal Health Survey

This survey is part of the upcoming Eastern Band of Cherokee Indians (EBCI) Tribal Health Assessment. It is being conducted by the Tribe for the Tribe, through the Public Health and Human Services Division (PHHS). Your responses will help improve the health of our community.

The survey is voluntary and anonymous. It will take 15-25 minutes to complete. Please only take the survey one time.

You must be at least 18 years old to take this survey. *Sgi*

Demographics

1. Please select your tribal enrollment

- Enrolled member of the Eastern Band of Cherokee Indians
- Not an enrolled member of the Eastern Band of Cherokee Indians, but an enrolled member of another Tribe
- EBCI first descendant
- Not enrolled in a Tribe
- Other (please specify)

2. What is your race? Would you say:

- American Indian or Alaska Native
- Asian or Asian American
- Black or African American
- Hispanic or Latino
- Native Hawaiian or other Pacific Islander
- White
- Two or more races

3. Are you of Hispanic or Latino origin, or is your family originally from a Spanish-speaking country?

- Yes
- No

4. What is your age?

- 18-24
- 25-34
- 35-44
- 45-54
- 55-64
- 65+

5. What is your gender?

- Male
- Female
- Non-binary
- Transgender
- Two-Spirited
- Other (please specify)

6. Where do you live as your primary residence (at least 6 months of the year)? (select only one)

- 3,200 Acre Tract
- Big Cove
- Big Y
- Birdtown
- Cherokee County
- Painttown
- Other (please specify)
- Snowbird
- Towstring
- Wolftown
- Yellowhill
- Live off boundary in either Jackson, Swain, Haywood, Graham, or Cherokee Counties

7. What is your marital status?

- Single
- Married
- Widowed
- Divorced
- Separated

8. What is your education level?

- Less than high school diploma
- High school diploma or equivalent
- Some college but no degree
- Associate's degree
- Bachelor's degree
- Master's degree
- Doctorate degree

9. What is your employment status?

- Employed full-time
- Employed part-time
- Unemployed
- Retired
- Other (please specify)

10. Do you have any children under the age of 18 who you are responsible for caring for, even part-time?

- No, I do not have any children under the age of 18
- Yes, I have one child under the age of 18
- Yes, I have two children under the age of 18
- Yes, I have three or more children under the age of 18
- Prefer not to answer

11. How many children under the age of 18 are currently **LIVING** in your household?

- 0
- 1
- 2
- 3
- 4
- 5 or more

12. What is your total family household income before taxes for the past 12 months?

- Under \$15,000
- Between \$15,000 and \$29,999
- Between \$30,000 and \$49,999
- Between \$50,000 and \$74,999
- Between \$75,000 and \$99,999
- Between \$100,000 and \$150,000
- Over \$150,000

13. Do you primarily speak a language other than English at home?

- No
- Yes, Spanish
- Yes, Cherokee
- Yes, Other (use comment box to specify)

Family and Individual Health

14. Would you say that, in general, your health is:

- Excellent
- Very good
- Good
- Fair
- Poor

15. Do you or does anyone in your household have any of the following disabilities or access needs? (Please select all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> I do not have any disabilities or access needs | <input type="checkbox"/> Physical disability |
| <input type="checkbox"/> Deaf or hard of hearing | <input type="checkbox"/> Mental health condition |
| <input type="checkbox"/> Blind or low vision | <input type="checkbox"/> Use of a companion animal |
| <input type="checkbox"/> Cognitive disability | |
| <input type="checkbox"/> Other (please specify) | |

16. Do you have a living will or advanced directive?

- | | |
|--|------------------------------------|
| <input type="radio"/> Yes, both | <input type="radio"/> No, neither |
| <input type="radio"/> Yes, a living will | <input type="radio"/> I'm not sure |
| <input type="radio"/> Yes, an advanced directive | |

17. Which of the following health conditions do you currently have? (Please select all that apply.)

- | | | |
|---|--|--|
| <input type="checkbox"/> ALS | <input type="checkbox"/> Cystic Fibrosis | <input type="checkbox"/> Obesity |
| <input type="checkbox"/> Alzheimer's Disease and other Dementias | <input type="checkbox"/> Diabetes | <input type="checkbox"/> Osteoporosis |
| <input type="checkbox"/> Arthritis | <input type="checkbox"/> Ever Had a Stroke | <input type="checkbox"/> Pre-Diabetes |
| <input type="checkbox"/> Asthma | <input type="checkbox"/> Heart Disease | <input type="checkbox"/> I do not have any chronic health conditions |
| <input type="checkbox"/> Chronic Obstructive Pulmonary Disease (COPD) | <input type="checkbox"/> High Blood Pressure | |
| <input type="checkbox"/> Crohn's Disease, Ulcerative Colitis, Other Inflammatory Bowel Diseases, Irritable Bowel Syndrome | <input type="checkbox"/> High Cholesterol | |
| <input type="checkbox"/> Other (please specify) | | |

* 18. What are the biggest ongoing health concerns for **YOURSELF**? (Please select up to three.)

- | | |
|---|--|
| <input type="checkbox"/> I have no health concerns for myself | <input type="checkbox"/> Heart disease & stroke |
| <input type="checkbox"/> Asthma/lung disease | <input type="checkbox"/> HIV/AIDS and Sexually Transmitted Diseases (STDs) |
| <input type="checkbox"/> Cancer | <input type="checkbox"/> Mental health/depression/suicide |
| <input type="checkbox"/> Child health and wellness | <input type="checkbox"/> Obesity/weight loss issues |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Safety |
| <input type="checkbox"/> Drugs and alcohol abuse | <input type="checkbox"/> Vaccine preventable diseases |
| <input type="checkbox"/> Environmental hazards | <input type="checkbox"/> Women's health and wellness |
| <input type="checkbox"/> Other (please specify) | |

19. Have you experienced any of the following long-term symptoms of COVID-19? (Please select all that apply.)

- | | |
|--|--|
| <input type="checkbox"/> I have not experienced any long-term symptoms from COVID-19 | <input type="checkbox"/> Difficulty working or going to school |
| <input type="checkbox"/> Fatigue | <input type="checkbox"/> Difficulty participating in social activities |
| <input type="checkbox"/> Shortness of breath | <input type="checkbox"/> Difficulty taking care of yourself |
| <input type="checkbox"/> Brain fog | <input type="checkbox"/> Unsure |
| <input type="checkbox"/> Other (please specify) | |

20. Have you needed **MEDICAL CARE** in the past 12 months that you couldn't get? If not, select the first option. (Please select all that apply.)

- No, I did not need **Medical Care** in the past 12 months, **OR** I did not have any issues getting **Medical Care** when I needed it.
- Yes, due to: Concerns about what others may think
- Yes, due to: Cost/no insurance
- Yes, due to: Distance too far
- Yes, due to: Inconvenient office hours/office closed
- Yes, due to: Lack of childcare
- Yes, due to: Lack of transportation
- Yes, due to: Language barrier
- Yes, due to: Lack of access for people with disabilities
- Yes, due to: Too long of wait for appointment
- Yes, due to: Too long of wait in waiting room
- Yes, due to: Fear of discrimination based on race, sexual orientation, or other factors
- Yes, due to: Difficulty navigating the healthcare system
- Yes, due to: Other (please specify)

21. Have you needed **MENTAL HEALTH CARE OR COUNSELING** in the past 12 months that you couldn't get? If not, select the first option. (Please select all that apply.)

- No, I did not need **Mental Health Care or Counseling** in the past 12 months, **OR** I did not have any issues getting **Mental Health Care or Counseling** when I needed it.
- Yes, due to: Concerns about what others may think
- Yes, due to: Cost/no insurance
- Yes, due to: Distance too far
- Yes, due to: Inconvenient office hours/office closed
- Yes, due to: Lack of childcare
- Yes, due to: Lack of transportation
- Yes, due to: Language barrier
- Yes, due to: Lack of access for people with disabilities
- Yes, due to: Too long of wait for appointment
- Yes, due to: Too long of wait in waiting room
- Yes, due to: Fear of discrimination based on race, sexual orientation, or other factors
- Yes, due to: Difficulty navigating the healthcare system
- Yes, due to: Other (please specify)

22. How often do you get the social and emotional support you need? Would you say:

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Seldom |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

23. How often do you have someone you can rely on to help with things like food, transportation, childcare, or other support if needed? Would you say:

- | | |
|---------------------------------|------------------------------|
| <input type="radio"/> Always | <input type="radio"/> Seldom |
| <input type="radio"/> Usually | <input type="radio"/> Never |
| <input type="radio"/> Sometimes | |

Nutrition and Physical Activity

24. How many servings of fruits and vegetables do you typically eat in a day? (One serving of fruit or vegetables is equal to 1 cup. You can count fresh, frozen, and canned fruits and vegetables, but not include juice, french fries, fried potatoes, or potato chips.)

- 1 serving or less
- 2 servings
- 3 servings
- 4 servings
- 5+ servings

25. On an average week, how many minutes of physical activity do you complete? Please include activities such as brisk walking, biking, running, swimming, and other forms of moderate or vigorous activity.

- I complete no or very little physical activity.
- I complete about 30 minutes of moderate-intensity activity or 15 minutes of vigorous-intensity activity, or an equivalent combination.
- I complete about 60 minutes of moderate-intensity activity or 30 minutes of vigorous-intensity activity, or an equivalent combination.
- I complete about 100 minutes of moderate-intensity activity or 50 minutes of vigorous-intensity activity, or an equivalent combination.
- I complete at least 150 minutes of moderate-intensity activity or 75 minutes of vigorous-intensity activity, or an equivalent combination.
- I complete more than 300 minutes of moderate-intensity activity or 150 minutes of vigorous-intensity activity, or an equivalent combination.

26. On an average week, how often do you do physical activities or exercises to STRENGTHEN your muscles? Do NOT count aerobic activities like walking, running, or bicycling. Please include activities such as lifting weights, working with resistance bands, body weight resistance exercises (e.g., sit ups, pushups, some forms of yoga), and heavy gardening (e.g., digging, shoveling).

- 0
- 1
- 2+

27. Have you participated in any of the following Cherokee traditional activities in the past 12 months? (Please select all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> I did not participate in any Cherokee traditional activities in the past 12 months | <input type="checkbox"/> Gathered Wishi, Morels, or other mushrooms |
| <input type="checkbox"/> Beading | <input type="checkbox"/> Cured or tanned hides |
| <input type="checkbox"/> Cherokee Games (Stickball, Chunkey, Marbles) | <input type="checkbox"/> Gathered wild onions |
| <input type="checkbox"/> Woodworking | <input type="checkbox"/> Cherokee Storytelling |
| <input type="checkbox"/> Made traditional clothing/regalia | <input type="checkbox"/> Hunt, trapped, snared, or gone fishing |
| <input type="checkbox"/> Picked berries | <input type="checkbox"/> Collected herbs or medicine |
| <input type="checkbox"/> Made baskets | <input type="checkbox"/> Prepared Cherokee Dishes (Bean bread, Chestnut bread, Hominy, etc.) |
| <input type="checkbox"/> Cherokee music (flute, rattle, song) | <input type="checkbox"/> Made pottery |
| <input type="checkbox"/> Other Cherokee Traditional Activities (please specify) | |

Community Health

* 28. What do you think are the top three things the **EBCI community should focus on to improve our health and well-being?** (Please select up to three.)

- | | | |
|--|---|---|
| <input type="checkbox"/> Access to health care (e.g., family doctor) | <input type="checkbox"/> Good jobs and healthy economy | <input type="checkbox"/> Parks and recreation |
| <input type="checkbox"/> Access to healthy food | <input type="checkbox"/> Good place to raise children | <input type="checkbox"/> Place where anyone can thrive |
| <input type="checkbox"/> Affordable housing | <input type="checkbox"/> Good schools | <input type="checkbox"/> Pollution and environmental degradation |
| <input type="checkbox"/> Arts and cultural events | <input type="checkbox"/> Healthy behaviors and lifestyles | <input type="checkbox"/> Poverty |
| <input type="checkbox"/> Being prepared for an emergency | <input type="checkbox"/> Healthy infants and toddlers | <input type="checkbox"/> Religious, spiritual, and/or cultural values |
| <input type="checkbox"/> Clean environment | <input type="checkbox"/> Low crime / safe neighborhoods | |
| <input type="checkbox"/> Other (please specify) | | |

* 29. What do you think are the top three **health issues facing the EBCI community today?** (Please select up to three.)

- | | | |
|--|--|--|
| <input type="checkbox"/> Aging problems (e.g., arthritis, hearing/vision loss, etc.) | <input type="checkbox"/> High blood pressure | <input type="checkbox"/> HIV/AIDS and Sexually Transmitted Diseases (STDs) |
| <input type="checkbox"/> Cancers | <input type="checkbox"/> Homicide | <input type="checkbox"/> Suicide |
| <input type="checkbox"/> Child abuse / neglect | <input type="checkbox"/> Childhood diseases and deaths | <input type="checkbox"/> Teenage pregnancy |
| <input type="checkbox"/> Dental problems | <input type="checkbox"/> Infectious diseases (e.g., hepatitis, TB, etc.) | <input type="checkbox"/> Climate change |
| <input type="checkbox"/> Diabetes | <input type="checkbox"/> Mental health problems | <input type="checkbox"/> Substance Use |
| <input type="checkbox"/> Domestic violence | <input type="checkbox"/> Motor vehicle crash injuries | <input type="checkbox"/> Obesity |
| <input type="checkbox"/> Firearm-related injuries | <input type="checkbox"/> Rape / sexual assault / abuse | <input type="checkbox"/> Social Determinates of Health (poverty, education, housing) |
| <input type="checkbox"/> Heart disease and stroke | <input type="checkbox"/> Respiratory / lung disease | |
| <input type="checkbox"/> Other (please specify) | | |

* 30. What are the **top three harmful behaviors** in the EBCI community? (Please select up to three.)

- | | | |
|--|---|---|
| <input type="checkbox"/> Adverse childhood experiences (ACEs) | <input type="checkbox"/> Illicit drug use | <input type="checkbox"/> Tobacco use |
| <input type="checkbox"/> Alcohol use | <input type="checkbox"/> Not getting "shots" for preventable diseases | <input type="checkbox"/> Vandalism |
| <input type="checkbox"/> Behavior that promotes racism, discrimination, and/or exclusion | <input type="checkbox"/> Not using seat belts / child safety seats | <input type="checkbox"/> Violence and abuse |
| <input type="checkbox"/> Digital abuse (i.e., online stalking, harassment, etc.) | <input type="checkbox"/> Physical inactivity | <input type="checkbox"/> Unhealthy diet |
| <input type="checkbox"/> Emotional abuse (i.e., name calling, threats, etc.) | <input type="checkbox"/> Physical abuse (i.e., hitting, punching, etc.) | <input type="checkbox"/> Unprotected sex |
| <input type="checkbox"/> Financial abuse (i.e., stealing money, withholding money, etc.) | <input type="checkbox"/> Sexual abuse (i.e., forced sexual activity, coerced sexual activity, etc.) | <input type="checkbox"/> Unsecured firearms |
| <input type="checkbox"/> Gambling | <input type="checkbox"/> Stealing | |
| <input type="checkbox"/> Other (please specify) | | |

Substance Use

31. In the past 30 days, how many days did you have at least one drink of any alcoholic beverage such as beer, wine, a malt beverage, or liquor?

- 0 days
- 1-5 days
- 6-10 days
- 11-15 days
- 16-20 days
- 21-25 days
- 26-30 days

32. In the past 30 days, what is the highest number of drinks you have had on an occasion (that is, within about 2 hours)?

- 0 drinks
- 1 drink
- 2 drinks
- 3 drinks
- 4 drinks
- 5+ drinks

33. In the past 30 days, on days when you drank alcohol, how many drinks did you typically have?

- Does not apply, did not drink alcohol in past 30 days
- 1-2
- 3-4
- 5-6
- 7-8
- 9-10
- 11+

34. In the past 30 days, have you used marijuana for any reason?

- No, I did not use marijuana in the past 30 days
- Yes, I have used marijuana for recreational purposes
- Yes, I have used marijuana for medicinal purposes
- Yes, I have used marijuana for medical and recreational purposes
- I prefer not to answer

35. In the past 30 days, how often did you use marijuana?

- Never
- Less than once a week
- Once a week
- Multiple times a week
- Everyday

36. In the past 30 days, which one of the following ways have you used marijuana? (Please select all that apply.)

- Does not apply, did not use marijuana in past 30 days
 Drink it
 Smoke it
 Vaporize it
 Eat it
 Dab it
 Used some other way?

37. Please indicate your current tobacco and smoking habits.

	Every Day	Some Days	Not at All
Currently smoke cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently smoke cigars	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently smoke a pipe (Do not include ceremonial, traditional, or sacred smoking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently use chewing tobacco, snuff (dip), or snus	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently use electronic vaping products or electronic cigarettes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Currently use commercial hookah (Do not include ceremonial, traditional, or sacred smoking)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

38. To what degree has your life been negatively affected by YOUR OWN or SOMEONE ELSE's substance use issues, including alcohol, prescription, and other drugs?

- None at all
 A moderate amount
 A great deal
 A little
 A lot

Equity and Community Safety

39. Do you have any of the following special needs that make it difficult for you to do your daily activities or live your life? (Please select all that apply.)

- I do not have any special needs.
- I need a wheelchair or other mobility device.
- I need an interpreter in ASL (American Sign Language).
- I need an interpreter for Cherokee language.
- I need an interpreter for Spanish language.
- I need an interpreter for another language (use comment box for language needed).
- I have a visual impairment and need large print materials or a screen reader.
- I have a hearing impairment and need a hearing aid or CART (Communication Access Realtime Translation) services.
- I have a cognitive impairment and need more time to complete tasks or simplified language.
- I have another disability that makes it difficult for me to do my daily activities or live my life (use comment box to list disability).

Comments

40. How would you rate the level of equity in our community?

EQUITY is about making sure that everyone has what they need to succeed, even if they start from different places.

- Very high
- High
- Medium
- Low
- Very low

Additional comments

41. How would you rate the level of inclusion in our community?

Inclusion means that everyone feels welcome and accepted, regardless of their differences.

- Very high
- High
- Medium
- Low
- Very low

Additional comments

42. What are some things that our community could do to improve equity and inclusion?
(Please select all that apply.)

- Not sure / No recommendations
- Provide more opportunities for people from all backgrounds to participate in community activities
- Promote diversity and inclusion in schools and workplaces
- Address discrimination and bias
- Make sure that all community resources are accessible to everyone

Additional thoughts and/or ideas

43. How would you rate the level of openness to Lesbian, Gay, Bisexual, Transgender, Queer, Intersex,+ (LGBTQI+) people in our community?

- Very high
- High
- Medium
- Low
- Very low

44. What are some specific things you would like the EBCI community to do to be more welcoming to LGBTQI+ people? (Please select all that apply.)

- Not sure / No recommendations
- Provide more resources for LGBTQI+ people, such as support groups, counseling, and legal aid.
- Promote diversity and inclusion in schools and workplaces, such as by adding LGBTQI+-inclusive curriculum and training.
- Address discrimination and bias, such as by enacting anti-discrimination laws and policies.
- Make sure that all community resources are accessible to everyone, such as by providing gender-neutral restrooms and changing facilities.

Additional thoughts and/or ideas

45. Have you ever seen or experienced racism? (Please select all that apply.)

- I have not seen or experienced racism
- Yes, on the reservation (casino, restaurant, shopping area, government office, health care facility, or other)
- Yes, in a neighboring city (store, restaurant, bar, park, street, or other)
- Yes, online

46. Have you ever seen or experienced any of the following forms of racism? (Please select all that apply.)

- | | |
|---|--|
| <input type="checkbox"/> No, I have not experienced racism. | <input type="checkbox"/> Discrimination in the criminal justice system (e.g., being more likely to be arrested, charged, or sentenced more harshly than white people for the same crime) |
| <input type="checkbox"/> Discrimination in employment (e.g., being passed over for a promotion because of your race, being denied a job interview because of your name) | <input type="checkbox"/> Verbal harassment (e.g., being called racial slurs, being told that you don't belong in a certain place because of your race) |
| <input type="checkbox"/> Discrimination in housing (e.g., being denied a rental application because of your race, being told that a neighborhood is not "suitable" for people of your race) | <input type="checkbox"/> Physical harassment (e.g., being pushed or shoved, being threatened with violence because of your race) |
| <input type="checkbox"/> Discrimination in education (e.g., being disciplined more harshly than white students for the same behavior, being placed in lower-level classes because of your race) | <input type="checkbox"/> Threats of violence (e.g., being told that you will be harmed because of your race) |
| <input type="checkbox"/> Discrimination in healthcare (e.g., being misdiagnosed or given lower-quality care because of your race) | <input type="checkbox"/> Violence (e.g., being physically attacked because of your race) |
| <input type="checkbox"/> Other (please specify) | |

47. Are any firearms kept in or around your home?

- No, there are no firearms in or around my home.
- Yes, and they are locked in a cabinet, box, or other firearm container.
- Yes, but they are not locked in a cabinet, box, or other firearm container.

48. To what extent do you agree with the following statements?

	Strongly Agree	Agree	Neither Agree or Disagree	Disagree	Strongly Disagree
Climate Change is occurring.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The EBCI community is experiencing the effects of climate change now.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The EBCI community will experience the effects of climate change in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extreme weather events happen more frequently than they used to.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Extreme weather events are stronger than they used to be.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am worried about the impact of climate change on the health and well-being of the Cherokee people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

49. How concerned are you about the impact of climate change on...

	A Great Deal	Moderate Amount	Only a Little	Not at All	Don't Know
People's income	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People's health	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
People's lifestyles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

50. To what extent do you feel that climate change is associated with health risks?

- Strongly connected
- Somewhat
- Not connected
- Unsure

51. How often in the past 12 months would you say you were worried or stressed about having enough money to pay your rent or mortgage? Would you say:

- Never
- Rarely
- Sometimes
- Usually
- Always

52. Has there been a time in the past three years when you've had to live with a friend or relative because of a housing emergency, even if this was only temporary?

- No
- Yes

53. Has there been any time in the past three years when you were living on the street, in a car, or in a temporary shelter?

- No
- Yes

Access to Resources and Well-being

54. Do you have access to the internet at home?

- Yes, through a wired connection
- Yes, through a satellite connection
- Yes, but only through a cellular phone or mobile hot spot connection
- Other (please specify)
- No
- I don't know

55. How would you rate your internet connection, taking into account any **issues you may have** (drops in service, slow speed, data caps, and other issues)?

- Excellent: No issues
- Very good: A few minor issues
- Good: Some issues
- Fair: Several issues
- Poor: Many issues
- None: no internet access at all

Comments

56. How would you rate your internet connection, taking into account the affordability?

- Excellent: affordability is not a concern.
- Very good: affordability is a slight concern.
- Good: affordability is not a somewhat of a concern.
- Fair: affordability is a minor concern.
- Poor: affordability is a major concern.
- None: no internet access at all

Comments

57. If an emergency happens, do you have enough food, water, medications, and supplies in your home to last for 3 days without outside help?

- Yes
- No

58. During the past 12 months, did you or your household experience any of the following food-related challenges? (Please select all that apply.)

- No one in my household experienced any food-related issues.
- Worrying whether you would have enough food to eat.
- Having to cut the size of your meals or skip meals because there wasn't enough money for food.
- Not being able to afford to eat balanced meals.
- Not having enough food to last until the next grocery shopping day.
- Having to rely on food banks or other sources of food assistance.

Comments

59. Quality of Life questions. Click the ONE choice in each row that best represents your opinion.

	Strongly yes	Yes	Neutral	No	Strongly no	Does not apply OR unsure
Are you satisfied with the quality of life in the EBCI community? (Consider your sense of safety, well being, participation in community life and associations, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you satisfied with the health care system in the EBCI community? (Consider access, cost, availability, quality, and options in health care)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is the EBCI community a good place to raise children? (Consider school quality, day care, after school programs, recreation, etc.)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is the EBCI community a good place to grow old? (Consider elder-friendly housing, transportation to medical services, churches, shopping; elder day care, social support for the elderly living alone, meals on	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

wheels, etc.)

Is there economic opportunity in the EBCI community? (Consider locally owned and operated businesses, jobs with career growth, job training/higher education opportunities, affordable housing, reasonable commute, etc.)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Is the EBCI community a safe place to live? (Consider residents' perceptions of safety in the home, the workplace, schools, playgrounds, parks, and the mall. Do neighbors know and trust one another? Do they look out for one another?)

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Are there networks of support for individuals and families (neighbors, support groups, faith community outreach, agencies, organizations) during times of stress and need?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Do all individuals and groups have the opportunity to contribute to and participate in the EBCI community's quality of life?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Do all residents perceive that they — individually and collectively — can make the EBCI community a better place to live?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Are there a broad variety of health services in the EBCI community?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Is there a sufficient number of health and social services in the EBCI community?

<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------	-----------------------

Are levels of mutual trust and respect increasing among community partners as they participate in collaborative activities to achieve shared community goals?

Is there an active sense of civic responsibility and engagement, and of civic pride in shared accomplishments?

Are Cherokee culture and traditions valued and respected in the EBCI community?

60. Please share comments or suggestions that you have to improve the health of the community:

**When you are finished, please click "DONE" below. Sgi!
Thank you for taking this survey!**



NOTICE: All information in this document is property of the Eastern Band of Cherokee Indians (EBCI) and is subject to its laws and governance. Use or reproduction of any part of this document, including data, is prohibited without the express permission of the EBCI.

