



++ 2024 ++

Community Health Needs Assessment

FORT DEFIANCE INDIAN HOSPITAL BOARD, INC.



FORT DEFIANCE INDIAN HOSPITAL BOARD, INC.

TSÉHOOTSOOÍ MEDICAL CENTER | NAHATA'DZIIL HEALTH CENTER | NIHI DINE'É BÁ WELLNESS CENTER

Fort Defiance Indian Hospital Board, Inc. (FDIHB) is a tribally chartered 501(c)(3) nonprofit multi-facility healthcare & public health organization located on the Navajo Nation in northeastern Arizona. FDIHB facilities are comprised of Tséhoostooí Medical Center (TMC), a 56-inpatient and outpatient facility with a 24-hour emergency department located in Fort Defiance, AZ, as well as Nihi Dine'é Bá Wellness Center (NDBWC), also located in Fort Defiance, AZ and Nahata'Dziil Health Center (NDHC) located in Sanders, AZ, providing basic outpatient services.

FDIHB is certified by the Centers for Medicare & Medicaid Services (CMS) to offer a wide range of acute and ambulatory care services to patients. FDIHB serves approximately 45,000 people, a majority of whom are Navajo Nation tribal members, across 16 Navajo Nation communities in the Indian Health Service Navajo Area, specifically the Fort Defiance delivery service area.

Corner of N12 & N7
P.O. Box 649
Fort Defiance, AZ 86504

www.fdihb.org

928-729-8000 | contact@fdihb.org

@fdihb



Table of Contents

4	Message from the Board
5	Executive Summary
6	Introduction
8	Demographics: Fort Defiance Delivery Service Area
22	Health Services
26	Results
27	Recommendations
28	Strategies to Address Community Health Needs
30	Action Plan

Message from the Board

On behalf of the Board of Directors of Fort Defiance Indian Hospital Board, Inc., it is our privilege to present the Community Health Needs Assessment (CHNA) Report for our community. This report represents an in-depth analysis of the health needs, challenges, and opportunities unique to our population.

The CHNA is a vital tool in understanding the health status of the communities we serve. Through the assessment process, which involved community input, health data analysis, and consultations with stakeholders, we have identified key areas for improvement and development. These areas include behavioral health, obesity and related diseases, pneumonia and respiratory diseases, and healthcare system navigation.

We are committed to using the findings from this report to inform our strategic planning and guide the development of programs and services that will meet the specific needs of our people. Collaboration with our community and health partners will be essential as we work to implement solutions and improve the overall health outcomes for our region.

We invite you to review the CHNA Report in full. Together, we can ensure that our healthcare system meets and exceeds the needs of the Fort Defiance Service Delivery Area.

Thank you for your continued trust and partnership in advancing the health and well-being of our community.

Sincerely,

Benjamin Dodge
Chairperson, Board of Directors
Fort Defiance Indian Hospital Board, Inc.

Executive Summary

The Community Health Needs Assessment (CHNA) aimed to identify and prioritize the health needs of our community, the Fort Defiance Indian Health Board, Inc. (FDIHB, Inc.) Service Delivery Area (SDA). The process leveraged a comprehensive methodology that integrated both primary and secondary data sources. Primary data was gathered from the hospital’s registration and patient management systems (RPMS), which provided health trends and patient demographics. Additional primary data included results from surveys, hospital operations reports, and insights from community focus groups utilizing the nominal group technique to ensure a broad range of perspectives.

Secondary data were collected from authoritative sources including federal, state, and tribal health reports, the latest census data, and detailed statistics from the Centers for Disease Control and Prevention. This data collection was instrumental in providing an understanding of the community’s health landscape.

The assessment revealed four primary health needs:

- 1

Behavioral Health Services
There is a need for enhanced behavioral health services, including mental health counseling and substance abuse treatment. The data indicates a rising trend in mental health issues and substance dependency in the community, signaling the need for expanded services and resources.
- 2

Obesity and Related Diseases
Obesity has emerged as a prevalent issue, closely linked with secondary conditions such as diabetes, heart disease, and hypertension. The findings highlight the necessity for community-wide health initiatives focused on nutrition, physical activity, and education to combat obesity and its associated health risks.
- 3

Pneumonia and Related Respiratory Diseases
Respiratory conditions, particularly pneumonia, have been identified as significant health concerns. This underscores the need for improved clinical services and preventive measures, including vaccination and public health campaigns, to address and mitigate these diseases.
- 4

Healthcare System Navigation
The data reveals complexities in navigating the healthcare system within our community, particularly among vulnerable populations. There is a critical need for better support systems, educational programs, and accessible services to assist individuals in understanding and utilizing available healthcare resources effectively.

Moving forward, it is recommended that stakeholders across various sectors collaborate to address these identified needs through strategic planning, resource allocation, and the implementation of targeted health programs. Addressing these priorities will not only improve individual health outcomes but also enhance overall community well-being.

Introduction

Purpose and Objectives of the Community Health Needs Assessment

In this Community Health Needs Assessment (CHNA) report, we systematically gathered and analyzed data to identify the health needs of our contracted service delivery area. The purpose of this assessment is to inform, support, and enhance health improvement initiatives tailored to our community’s specific needs. Through a combination of quantitative data from health databases and qualitative insights from community surveys and stakeholder interviews, we developed a comprehensive understanding of the prevailing health challenges in our area.

This report is structured to provide a clear overview of our methodology, key findings, and strategic recommendations that will guide local health agencies, policymakers, and community-based organizations in deploying effective health interventions. By aligning our efforts with the community’s most pressing health needs, we seek to foster a healthier, more resilient population. This assessment not only highlights current health issues, but also sets the stage for ongoing monitoring and evaluation of health improvement strategies. It is our hope that this report will serve as a catalyst for meaningful change and a cornerstone for future community health planning and initiatives.

About Fort Defiance Indian Hospital Board, Inc.

The Fort Defiance Indian Hospital Board, Inc. (FDIHB) is a non-profit corporation that operates healthcare services in the Central and Southeast parts the Navajo Nation. It was established to deliver comprehensive healthcare services to the Navajo people in the region. The organization oversees the operation of the Tséhootsooí Medical Center (TMC), Nihi Dine’ Bah Wellness Center (NDBWC), and Nahata’Dziil Health Center (NDHC) located in Fort Defiance, AZ and Sanders, AZ, respectively.

FDIHB is committed to providing culturally sensitive healthcare, incorporating traditional Navajo beliefs and practices alongside modern medical treatments. Services span a wide range of medical specialties, from primary care to advanced surgical procedures, ensuring that the community has access to comprehensive care. In addition to medical services, the organization also focuses on public health initiatives, health education, and community wellness programs designed to improve the overall health outcomes of the community.

By integrating traditional values with contemporary healthcare, the Fort Defiance Indian Hospital Board aims to respect and enhance the cultural identity of its patients while providing high-quality medical care.

Methodology

The CHNA used both primary data and secondary data to identify and prioritize community health needs in the FDSDA. Using a combination of both primary and secondary data sources gave a good perspective of the overall health status and needs

of each chapter community. Primary data sources included the hospital system’s Resource and Patient Management System (RPMS), Hospital Operations Summary, Community Surveys, and Community Focus Groups.

Primary Data

Primary data comes directly from the hospital system’s data sources and are considered to be collected, managed, analyzed, and interpreted by internal processes controlled by FDIHB, Inc. Primary data takes precedence as the assumptions and processes are controlled internally. The data is the most accurate reflection of the services, activities, and needs of the patient population. There were four primary data collection methods used for the CHNA: FDIHB, Inc.’s Resource and Patient Management System (Electronic Health Record Software), Hospital Operations Report, Community Surveys, and Community Focus Groups.

Resources And Patient Management System (Rpms)

The Resource and Patient Management System (RPMS) is a decentralized integrated solution for managing clinical and administrative information in healthcare facilities. RPMS is used in the CHNA to aggregate data on patient demographics, health status, and service utilization.

Hospital Operations Report

A product of RPMS is the annual hospital operations summary. The operations summary includes information that supports the identification of priority areas for intervention and resource allocation. The hospital operations summary provides a data-driven foundation for engaging stakeholders, community member, healthcare providers, and policy makers. Information includes top ten admitting diagnosis, number of ambulatory visits, and other valuable information for the CHNA.

Community Surveys

Community surveys are a crucial tool in conducting a CHNA. The survey provided direct insights from community members about their health status, perceptions of health services, and perception of greatest health needs in the community. The community survey helped to identify health behaviors, gauge community perceptions, and determined health priorities.

Community Focus Groups

A focus group is an approach that involves bringing together a small group of participants to discuss a particular topic. The group is typically led by a trained facilitator who uses open-ended questions to guide the discussion and elicit a range of perspectives on the topic. Focus groups are useful for collecting qualitative data, which can provide rich, detailed insights into participants’ experiences and perspectives. This methodology is useful for exploring complex issues or understanding the social and cultural context of healthcare. Focus groups were conducted using the Nominal Group Technique.

Nominal Group Technique (NGT)

The focus groups were conducted using the nominal group technique (NGT). The NGT is a structured group process that is used to generate and prioritize ideas or solutions. Participants work together to brainstorm ideas, which are then shared with the group and recorded. Each participant then ranks the ideas or solutions, and the group discusses the rankings to come to a consensus on the most important or viable ideas. NGT can be used to generate ideas for interventions, prioritize strategies, or identify barriers to implementation. The structured nature of NGT can help ensure that all participants have an equal opportunity to contribute and that the group reaches a consensus on the most important ideas or solutions.

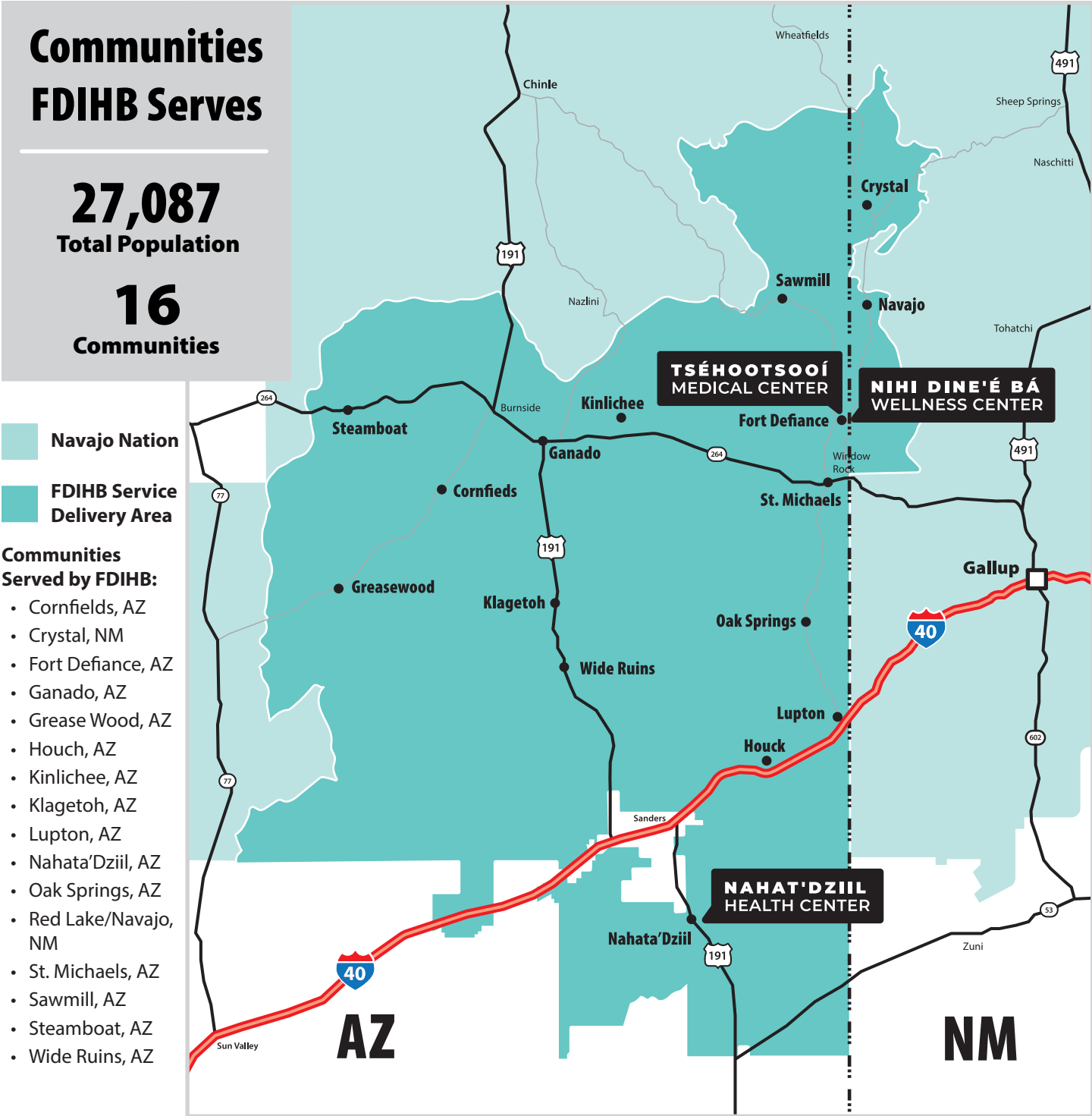
Secondary Data

Secondary data sources are important for the CHNA because they offer a wealth of pre-existing information that can enhance the understanding of broader health trends and context. These sources, which include government reports, government databases, publicly available health databases, and some academic sources, provide valuable baseline data and historical perspectives, allowing for comparisons and benchmarking against other communities or regions. Using secondary data saved time and resources, complemented primary data findings, and helped identify gaps in knowledge that need to be addressed. By integrating secondary data, the CHNA is more comprehensive and robust, supporting more informed decision-making and planning. The CHNA used a variety of secondary sources including sources from the Federal Government, State Government, and Tribal Government. Some examples include the U.S. Census Bureau, U.S. Department of Health and Human Services, the Centers for Disease Control and Prevention, Arizona Department of Health Services, New Mexico Department of Health, Navajo Nation Department of Health, and the Navajo Epidemiology Center.

Fort Defiance Service Delivery Area

Fort Defiance, the headquarters of FDIHB, Inc., is a census-designated place located within Apache County in northeastern Arizona, USA. Situated at an elevation of over 6,800 feet, it lies at the mouth of Canyon Bonito at the junction of streams originating on the Defiance Plateau in the Navajo Nation. The area is marked by a cooler climate compared to much of Arizona, featuring a mix of desert and mountainous landscapes that influence the community's lifestyle and activities. There

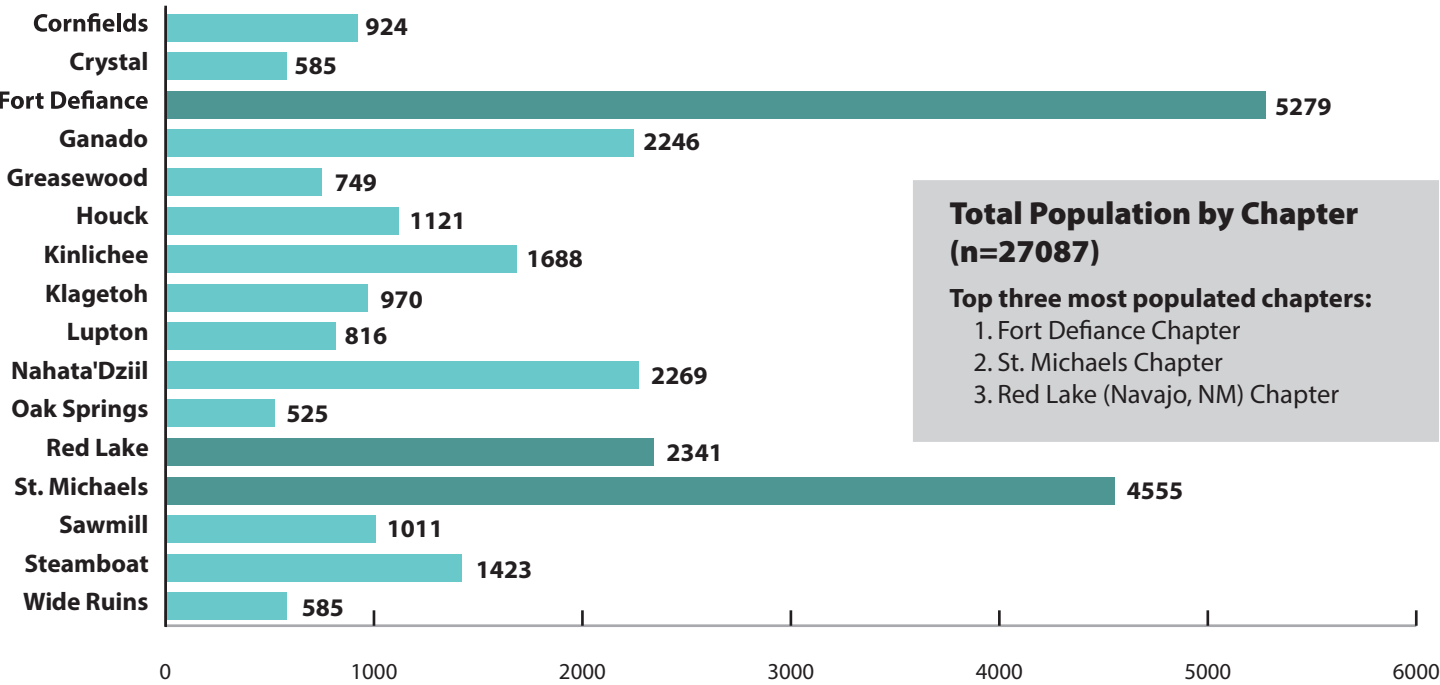
are informal and formal outdoor recreational opportunities throughout the area. Within 30 miles of Fort Defiance, there are three lakes and several hiking trails. However, in the more rural communities of the FDSDA, there are primitive trails and lack of safe physical activity opportunities.



Population and Demographics

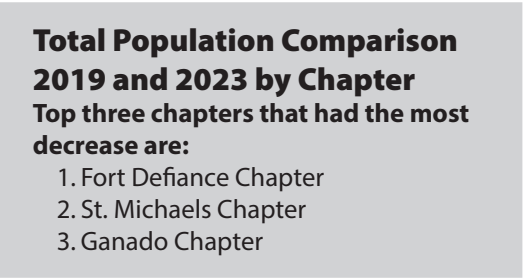
As a part of the Navajo Nation, the Fort Defiance Service Delivery Area is predominantly populated by Navajo tribal members. The communities are often small, with the largest having a total population of 5,279 (Fort Defiance Chapter Area). The FDSDA emphasizes family and tribal connections as its strengths. It is characterized by a young demographic profile, with a significant proportion of residents under the age of 18, which impacts the community's focus on family-oriented services and education.

The total population for the FDSDA is 27,087 according to the U.S. Census (2022), with a majority of individuals living in the most economically developed areas such as Fort Defiance, St. Michaels (Window Rock, AZ), Ganado, and NahataDziil areas. It is important to note that Window Rock, AZ, the capital of the Navajo Nation, is located within the boundaries of the St. Michaels chapter. Window Rock can be considered the Washington DC of the Navajo Nation, without formal representation, but housing the capital and it's tribal governmental operations. The total population of each of the chapters can be found below in the graph.



Community Health Needs Assessment Demographic Comparison from 2019 to 2023

In addition to population counts, it is important to know how the demographic make-up of the FDSDA changed from the previous CHNA. The table below shows the comparison between 2019 and 2023 CHNA total population by chapter. For each of the 16 chapters in the FDSDA, the total population decreased, except for Red Lake Chapter, where it remained the same.



These chapters are among the highest populated chapters, yet have lost the most individuals from the time period for a total loss of population in the FDSDA of 3,639.

Total Population Comparison 2019 and 2023 by Chapter

Chapter	2019 CHNA Population	2022 CHNA Population	Difference
Cornfields Chapter	1014	989	-25
Crystal Chapter	637	550	-87
Fort Defiance Chapter	6402	4970	-1432
Ganado Chapter	2577	2132	-445
Greasewood Chapter	1209	1183	-26
Houck Chapter	1380	1338	-42
Kinlichee Chapter	1814	1636	-178
Klagetoh Chapter	843	832	-11
Lupton Chapter	933	1009	76
Nahatadziil Chapter	2130	2122	-8
Oak Springs Chapter	540	478	-62
Red Lake Chapter	2079	2079	0
St. Michaels Chapter	6077	5061	-1016
Sawmill Chapter	993	927	-66
Steamboat Chapter	1276	1088	-188
Wide Ruins Chapter	814	685	-129
Total	30718	27079	-3639

Median Age

The median age is a better measure of centrality as it has resistance to outliers, prevents skewed distributions, and provides demographic insights.

Resistance to Outliers: The median is not affected by extremely high or low values. For example, a few very elderly individuals or a high number of very young children can skew the mean age, but the median remains stable. This makes the median a more accurate reflection of the typical age in a community.

Skewed Distributions: In populations where age distribution is not symmetrical (i.e., it is skewed), the median provides a better indication of the central tendency. This is particularly important in communities with high birth rates or significant elderly populations.

Demographic Insights: The median age can offer insights into the demographic structure of a community. A lower median age might indicate a younger population with potentially higher birth rates and different healthcare needs, such as pediatric care. Conversely, a higher median age might suggest an aging population, highlighting the need for services related to chronic illnesses and elderly care.

The median age can help policymakers and healthcare providers through:

- **Resource Allocation:** Understanding the median age helps providers allocate resources more effectively. For example, a younger median age might necessitate more schools and child health services, while an older median age could require more elderly care facilities and geriatric services.

- **Public Health Planning:** Median age helps in planning for future healthcare needs. Trends in median age can signal shifts in population dynamics, allowing for proactive adjustments in public health strategies.

Median Age (Years) by Chapter

The chapter community with the youngest median age is Red Lake Chapter (Navajo, NM) at 24.6 years old. The chapter community with the oldest median age is Wide Ruin, AZ at 51.7 years old.

Chapter	Median Age (Years)
Cornfields Chapter	40.3
Crystal Chapter	45.2
Fort Defiance Chapter	33.3
Ganado Chapter	30.4
Greasewood Chapter	42.2
Houck Chapter	38.8
Kinlichee Chapter	28.4
Klagetoh Chapter	34.1
Lupton Chapter	37.6
Nahatadziil Chapter	30
Oak Springs Chapter	44
Red Lake Chapter	24.6
St. Michaels Chapter	35.6
Sawmill Chapter	34
Steamboat Chapter	35.2
Wide Ruins Chapter	51.7

Youth Population

The youth population significantly impacts community health through various channels. As the future leaders and workforce, their physical, mental, and emotional well-being directly influence the overall health dynamics of the community. Healthy youth are more likely to engage in positive behaviors, contribute to economic productivity, and participate in civic activities, fostering a vibrant, resilient community. Conversely, high rates of substance abuse, mental health issues, or chronic diseases among young people can strain community resources, increase healthcare costs, and hinder socioeconomic development. Therefore, investing in youth health initiatives is crucial for ensuring long-term community prosperity and stability.

The total number of youth ages 0-18 years old is 7,225. The chapters with the highest number of youth are typically the highest populated chapters in the FDSDA. Here are the top three chapters with the highest number of youth:

1. Fort Defiance
2. St. Michaels
3. Red Lake (Navajo, NM)

Compared to the total number of youth, a proportion highlights communities with the highest percentage of youth in the community. The top three communities with the highest percentage of youth are:

1. Red Lake (Navajo, NM)
2. Kinlinchee
3. Ganado

Health promotion efforts geared to the youth should be a priority for these communities.

Chapter	Number of Youth (0-18 years) (n=7225)	Percent of Population (under 18 years)
Cornfields Chapter	235	25%
Crystal Chapter	58	10%
Fort Defiance Chapter	1330	25%
Ganado Chapter	713	32%
Greasewood Chapter	161	21%
Houck Chapter	234	21%
Kinlichee Chapter	569	34%
Klagetoh Chapter	229	24%
Lupton Chapter	189	23%
Nahatadziil Chapter	670	30%
Oak Springs Chapter	76	14%
Red Lake Chapter	937	40%
St. Michaels Chapter	1145	25%
Sawmill Chapter	220	22%
Steamboat Chapter	360	25%
Wide Ruins Chapter	99	17%

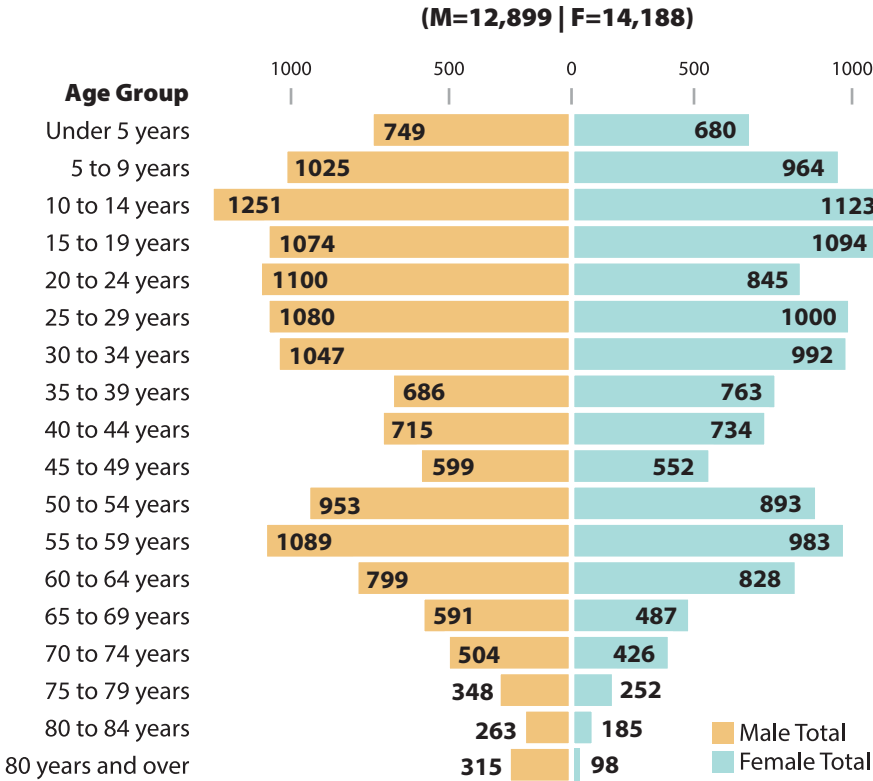
Total Number of Youth Ages 0-18 Years Old

7,225

FDSDA Population Pyramid

A population pyramid is a graphical representation that shows the distribution of various age groups in a population, typically displayed as a bar graph with males on one side and females on the other. The horizontal axis represents the population size, and the vertical axis represents age groups, usually in 5-year intervals.

The FDSDA population pyramid can be described as expansive, as it has a larger number of young people. This shape suggests high birth rates and potentially high death rates. Further, as seen in the population pyramid, females outnumber males in most age categories. Women are living longer than men, especially in the older age categories. The age category with the highest number of females is the age group 10-14 years old with 1,251 individuals. The age category with the highest number of males is the same, 10 to 14 years old, with 1,123 individuals. The total number of females in the FDSDA is 14,188 and the total number of males is 12,899.



Elderly Population

“God Often Speaks Through Elders. Honor The Sacred. Honor The Earth, Our Mother. Honor The Elders.”

The elder population plays a crucial role in shaping community health, serving as custodians of cultural traditions, wisdom, and social stability. Their well-being influences intergenerational relationships and the overall social fabric. Healthy elders can actively participate in community life, offering mentorship, volunteering, and supporting familial structures, which in turn fosters social cohesion and resilience. However, an aging population with high rates of chronic illness or limited mobility can place significant demands on healthcare systems and social services. Prioritizing elder health not only enhances their quality of life but also strengthens community bonds and reduces the burden on medical and social infrastructure.

There are 3,465 individuals that are aged 65 years or older living within the designated boundaries of the FDSDA or 12.8% of the total population. Communities that have the highest number of elders, typically are the furthest from the hospital and are in the most need for healthcare, therefore highlighting the need for reliable transportation.

Chapter	Number of Individuals 65 Years & Over (n=3465)	Proportion of Elderly (65 years & Older))
Cornfields Chapter	191	21%
Crystal Chapter	104	18%
Fort Defiance Chapter	765	14%
Ganado Chapter	257	11%
Greasewood Chapter	149	20%
Houck Chapter	150	13%
Kinlichee Chapter	168	10%
Klagetoh Chapter	123	13%
Lupton Chapter	119	15%
Nahatadziil Chapter	183	8%
Oak Springs Chapter	84	16%
Red Lake Chapter	167	7%
St. Michaels Chapter	602	13%
Sawmill Chapter	127	13%
Steamboat Chapter	145	10%
Wide Ruins Chapter	135	23%

As stated above, the most populated chapters within the FDS-DA have the highest number of youth and elderly due to their population size and centrality to economic development. The highest number of 65 and older individuals live in the following chapters:

- 1. Fort Defiance Chapter
- 2. St. Michaels Chapter
- 3. Ganado Chapter

Taking into account the total population size, the proportion graph above gives a better insight into the make-up of the chapter communities in relation to the elderly population. The top three communities that have the highest proportion of elderly:

- 1. Wide Ruins, AZ
- 2. Cornfields, AZ
- 3. Greasewood, AZ

Highest Proportion of Elderly by Travel Time to FDIHB Health Care Facilities

All of the above chapter communities are located on the southwest area of the FDSDA, furthest from the primary healthcare center, Tsehootsooi Medical Center (TMC). In addition, two of the three chapter communities are over an hour away from TMC and NahataDziil Health Center (NDHC) in Sanders, AZ.

After cross-referencing the chapter communities with the highest elderly proportion in relation to the FDIHB, Inc. locations, a trend was identified that they are usually the furthest from a FDIHB, Inc. healthcare facility.

Proportion of Elderly	Chapter Community	Miles from TMC	Travel Time to TMC	Miles from NDHC	Travel Time to NDHC
23%	Wide Ruins, AZ	57	1 hour	18.1	21 min.
21%	Cornfields	50	1 hour	60	1 hour 13 min.
20%	Greasewood	63	1 hour 9 min.	75	1 hour 17 min.
18%	Crystal	22	31 min.	73	1 hour 30 min.
16%	Oak Springs	23	30 min.	30	35 min.

Age Dependency Ratio

The age dependency ratio is a crucial metric in understanding the demographic makeup of a community. It compares the number of dependents (individuals aged 0-14 and 65 and older) to the working-age population (those aged 15-64). This ratio is pivotal for planning and sustaining community health and social services.

Why It Matters

- 1. **Resource Allocation:** A higher age dependency ratio means there are more dependents relative to the working-age population. This requires careful planning to ensure adequate resources such as healthcare, education, and social services are available for children and the elderly.
- 2. **Economic Impact:** A larger dependent population can strain the economic productivity of a community. Conversely, a lower dependency ratio can mean a more economically vibrant community with a greater capacity for investment in health and well-being.
- 3. **Healthcare Services:** Children and the elderly often have specific health needs. Understanding the age dependency ratio helps health services plan for pediatric and geriatric care, ensuring that facilities and services are adequately equipped to handle the unique health issues these groups face.

Impacts on Children and Elderly

- 1. **Children:** Communities with a high proportion of children need robust educational and recreational facilities, vaccina-

- tion programs, and preventive healthcare services. Adequate support in these areas fosters healthier and more productive future generations.
- 2. **Elderly:** An increasing elderly population necessitates a focus on long-term care services, chronic disease management, and age-friendly community initiatives. Ensuring that older adults have access to necessary healthcare and social support enhances their quality of life and reduces the burden on caregivers and health systems.

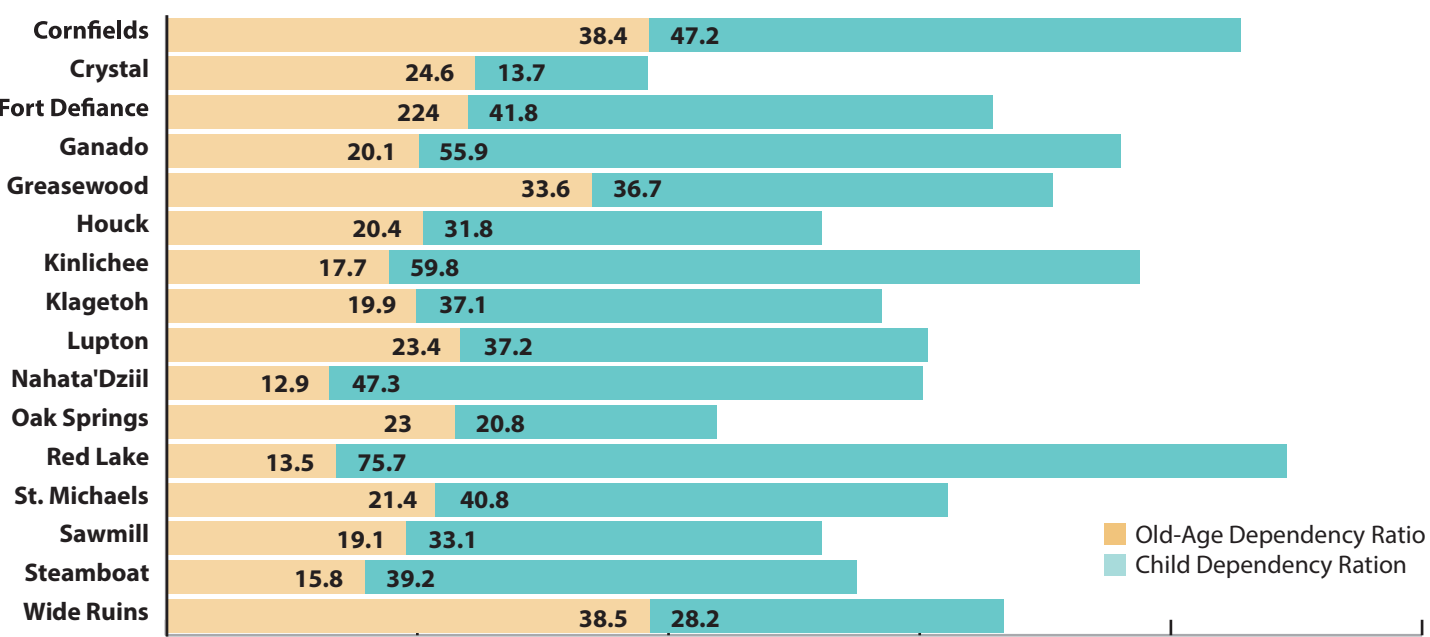
Community Action

Understanding and monitoring the age dependency ratio can guide community leaders in policy-making and resource distribution. Encouraging local government and health organizations to prioritize data collection and analysis ensures informed decisions that can improve health outcomes for all age groups.

The age dependency ratio is more than just a number, it is a reflection of the community’s demographic health and its ability to support its most vulnerable members. By paying close attention to this ratio, communities can better prepare for the future, ensuring that both children and the elderly receive the care and support they need to thrive.

The results of the age dependency ratio align with the youth and elderly proportion section. The chapter community with the highest child dependency ratio is Red Lake (Navajo, NM) at 75.7, indicating that there are a lot of children that depend on an age working adult. Programs that are geared toward parenting should be implemented in areas with a higher child

Age Dependency Ratio by Chapter



dependency ratio. The chapter community with the highest old-age dependency ratio is Cornfields, AZ. Programs that are geared toward elderly care should have implemented in areas with a high old-age dependency ratio.

- Top Three Old-Age Dependency Ratio Chapter Communities:
- 1. Wide Ruins, AZ
 - 2. Cornfields, AZ
 - 3. Greasewood, AZ

- Top Three Child Dependency Ratio Chapter Communities:
- 1. Red Lake (Navajo, NM)
 - 2. Kinlichee, AZ
 - 3. Ganado, AZ

Economic Landscape

The economy in the FSDSA is primarily driven by the public sector, with healthcare, education, and tribal government being the major employers. Small businesses and crafts also contribute to the local economy, though economic opportunities are generally constrained leading to higher unemployment rates compared to wider state and national figures.

Economic Measures

Economic and social insecurity often are associated with poor health. Poverty, unemployment, and lack of educational achievement affect access to care and a community’s ability to engage in healthy behaviors. Without a network of support and a safe community, families cannot thrive. Ensuring access to social and economic resources provides a foundation for a healthy community (Community Commons, 2020).

Mean Household Income

The mean household income measures the average amount in U.S. dollars of each household in the FSDSA area. In addition, the U.S. and Arizona mean household incomes are included in the chart below. Communities with the most economic development and housing areas are at the top of the list.

Median Household Income

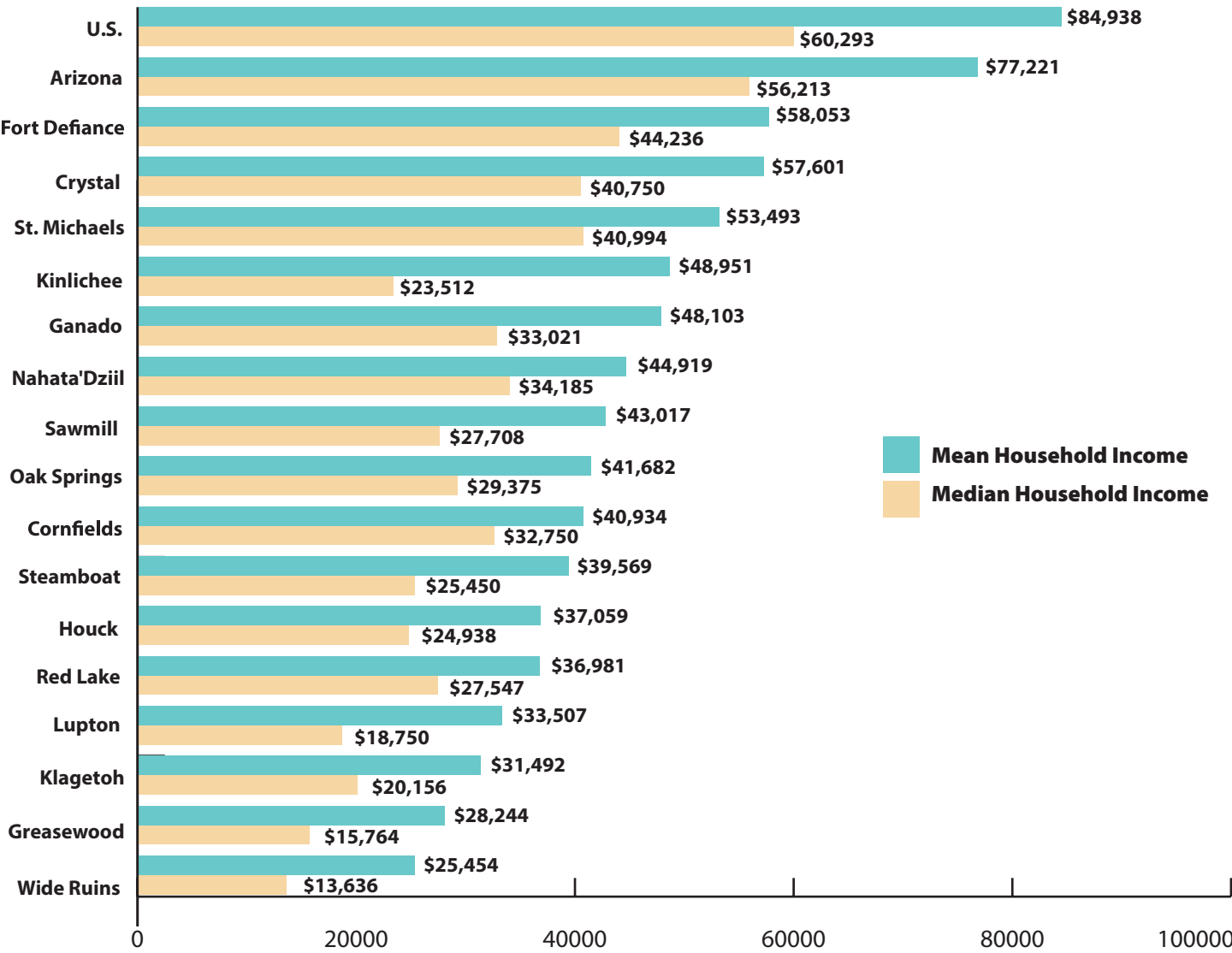
As stated above under the median demographic graphs, utilizing median gives a better picture and is a better measure of centrality. The median household income graph is below. The top three chapters remain the same, except St. Michaels comes in second spot to Crystal.

Crystal is a unique community, as it has one of the highest mean and median household incomes with low economic opportunity. There are no stores, no employment areas other than the tribal government, so there exist an opportunity to further explore this phenomena. Further, Crystal also has one of the highest proportions of elderly, likely unable to work or have already retired, so there is further evidence to explore the situation.

The top three chapters with the highest mean household income is:

- 1. Fort Defiance
- 2. Crystal
- 3. St. Michaels

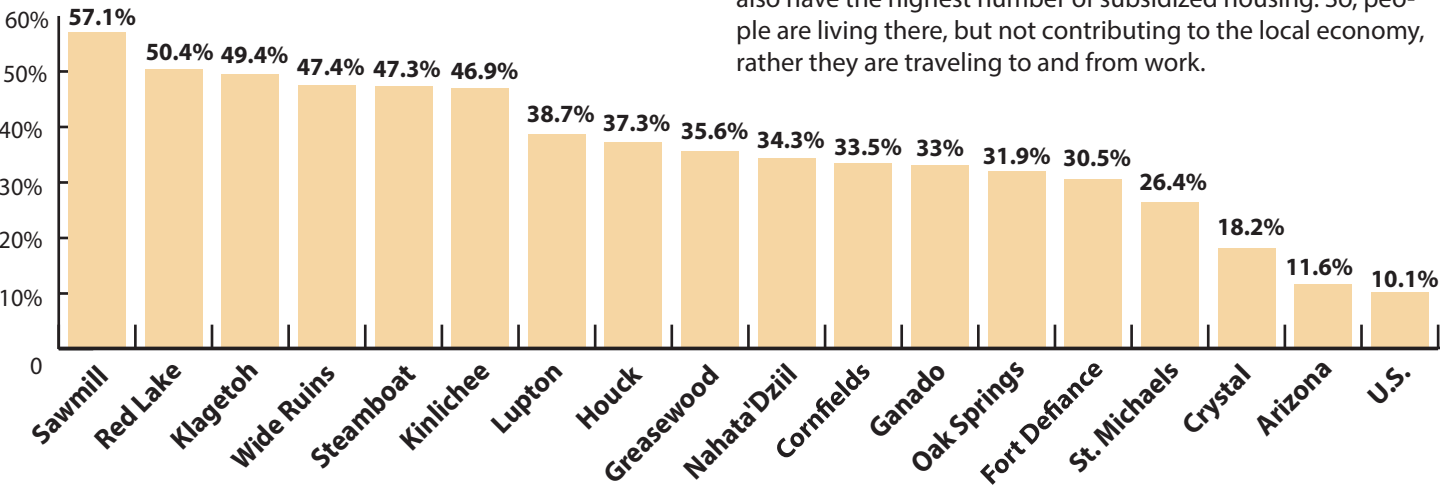
Median & Median Household Income



All Families whose income fell below poverty in the last 12-months (Percent)

The top three areas where poverty was the highest among families are:

- 1. Sawmill
- 2. Red Lake
- 3. Klagetoh

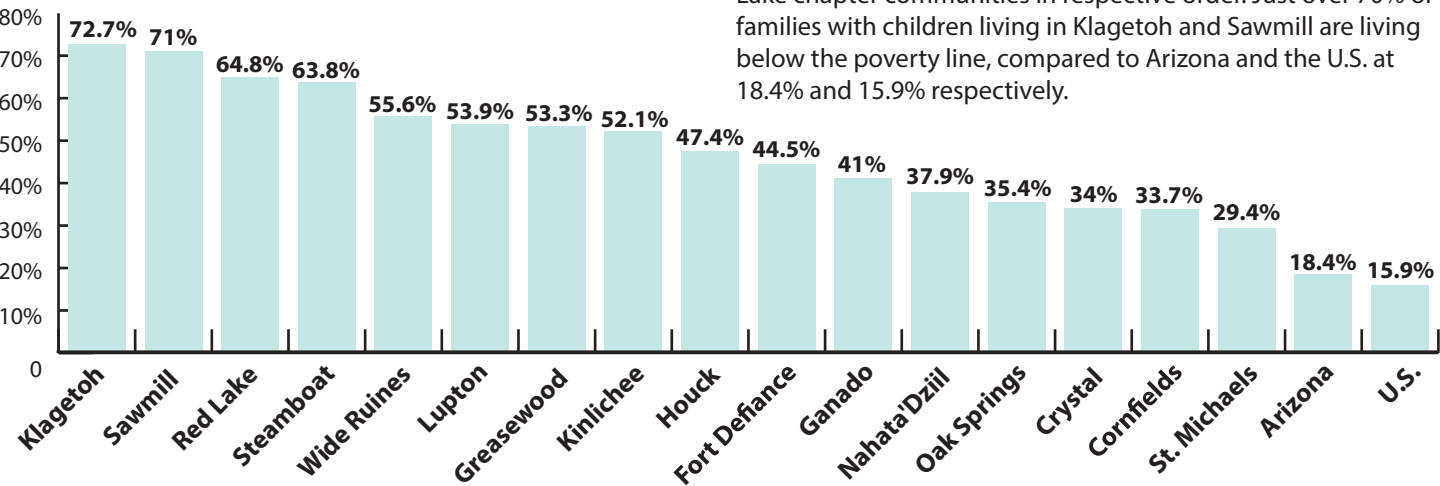


Poverty Among Families

Poverty among families is a good measure of household or family income. The previous section focused on individuals rather than the family as a whole. The graph below highlights areas where families may not have economic resources to meet their needs.

These communities often have very little to no economic opportunities, which includes jobs. However, these communities also have the highest number of subsidized housing. So, people are living there, but not contributing to the local economy, rather they are traveling to and from work.

Families with Children Living Below Poverty (Percent)



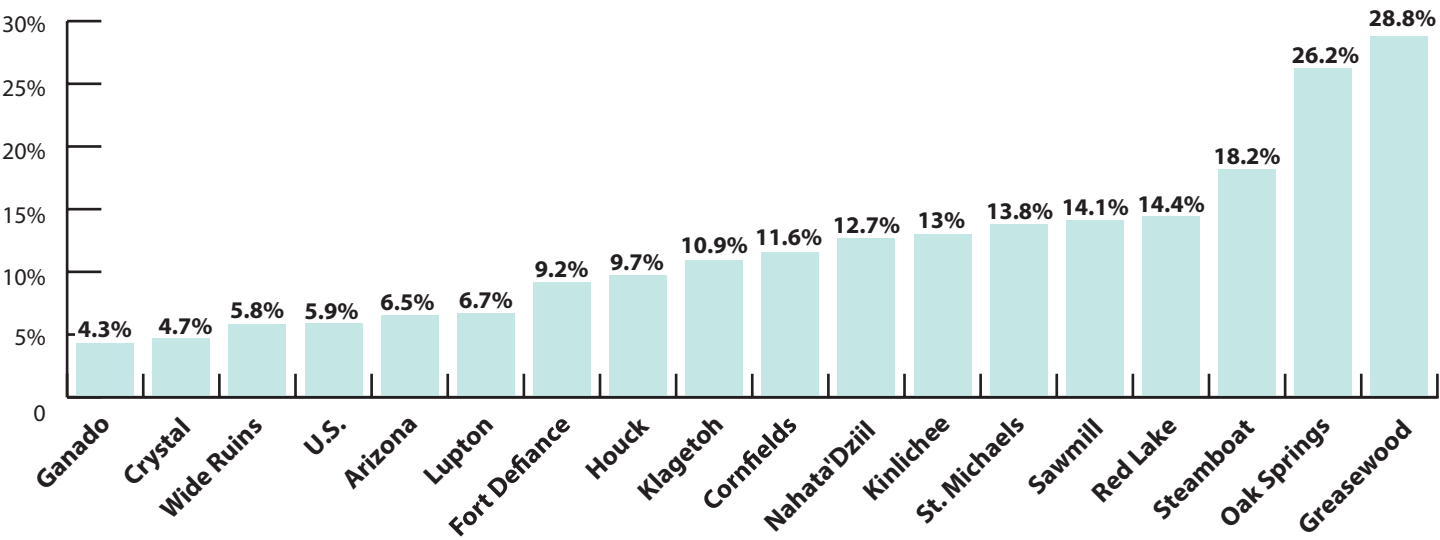
Poverty Among Children

Similar to the graph above, the percent of families with children living in poverty remain the same chapter communities in different order. The order has Klagetoh, Sawmill, and Red Lake chapter communities in respective order. Just over 70% of families with children living in Klagetoh and Sawmill are living below the poverty line, compared to Arizona and the U.S. at 18.4% and 15.9% respectively.

Unemployment Rate

The unemployment rate is the percentage of the labor force that is unemployed and actively seeking employment. The rate is an important economic indicator, reflecting the health of the economy and the labor market. The unemployment rate is not only an economic measure but also a crucial indicator of community health and well-being.

Unemployment can lead to high financial stress resulting in reduced access to necessities like food, housing, and healthcare. It is also linked to higher rates of mental health issues, including depression, stress, and anxiety, due to the financial strain and possible loss of purpose or identity. Further, prolonged unemployment can lead to poor physical health outcomes, such as increased risk of chronic diseases, partly due to stress and reduced access to healthcare access.



There are three communities that have an unemployment rate lower than the U.S. and State, Ganado, Crystal, and Wide Ruins. However, it is important to consider that the unemployment rate is based on the labor force, so a low labor force would likely lead to a lower unemployment rate. Crystal and Wide Ruins have some of the highest proportion of elders that may have left the workforce.

The communities with the highest unemployment are:

1. Greasewood
2. Oak Springs
3. Steamboat

Mean Travel Time to Work

Travel time to work, often referred to as commute time, can significantly affect community health via physical health, mental health, social and community health, economic impact, and environmental impact.

Long commute times often mean extended periods of sitting, which is linked to various health issues, such as obesity, cardiovascular disease, and musculoskeletal problems. Further, long commute times could lead to stress and anxiety through mental fatigue and reduced social interaction. As you'll see in the graph below, a majority of individuals that commute to work, drive alone. Extending travel times can also reduce the amount of time available for family, leisure, and self-care, negatively impacting overall well-being. Lastly, long commutes can lead to financial strain through transportation costs, including fuel, vehicle maintenance, or other expenses.

Steamboat and Klagetoh are two of the most rural communities and are furthest from FDIHB, Inc. facilities. However, these communities do have opportunities for subsidized housing, which may lead individuals to choose to live there, while working elsewhere.

Mean Travel Time to Work (Minutes)
Of individuals that are currently employed, the communities with the highest commute times are:

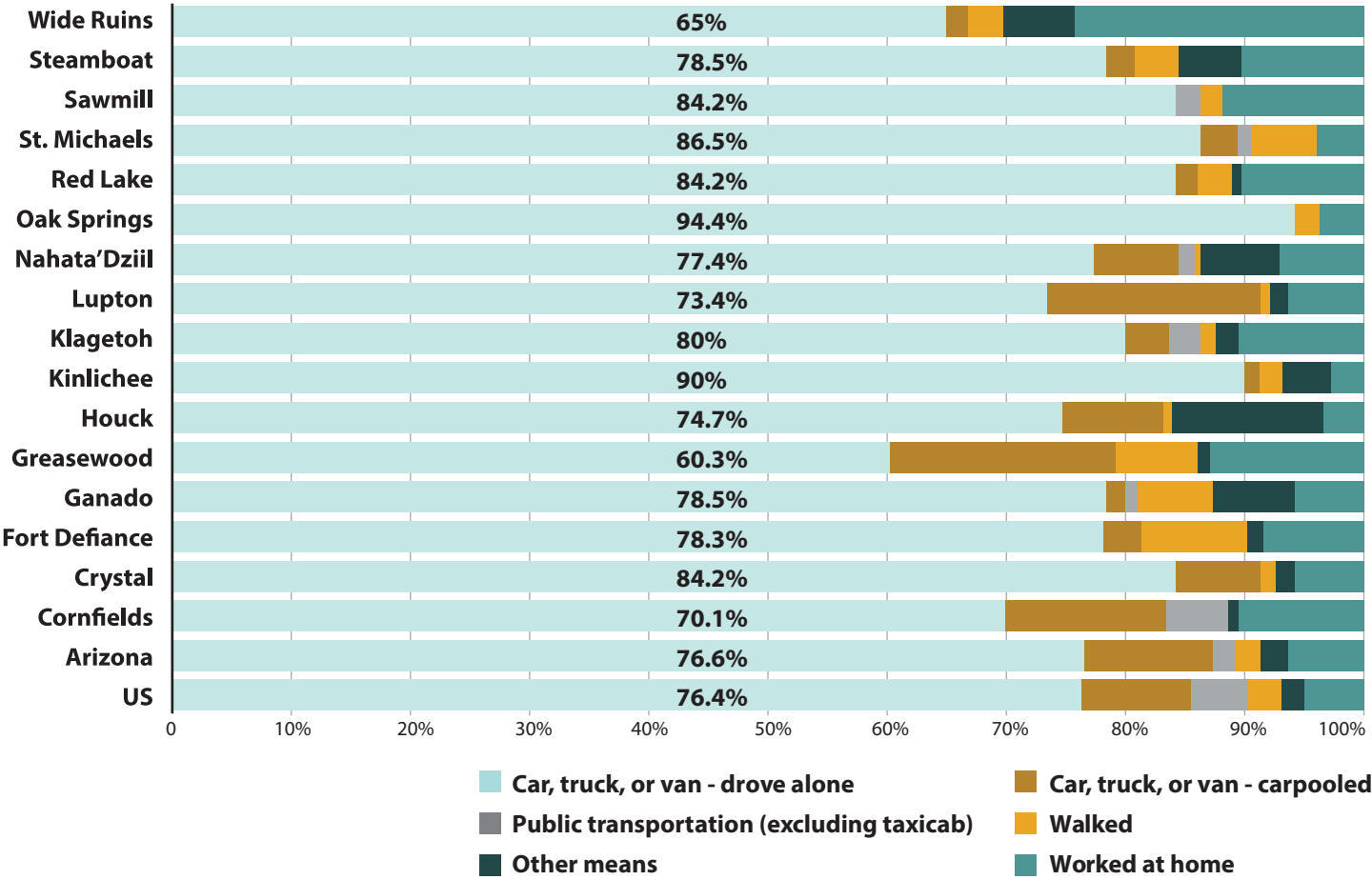
Minutes	
Steamboat	47.3
Crystal	46.8
Klagetoh	44.8
Greasewood	43.9
Cornfields	42.9
Wide Ruins	39.2
Houck	36.4
Kinlichee	36.1
Sawmill	36.1

Minutes	
Nahata'Dziil	35.2
Lupton	29.3
Oak Springs	29.3
Red Lake	29.2
U.S.	26.6
Ganado	25.4
Arizona	25.3
Fort Defiance	22.1
St. Michaels	21.9

Commuting to Work by Type

Commuting to work by type can give a good insight on how people are traveling to work. Most employed individuals commute to work by vehicle and drive alone with the highest being located in Oak Springs. Another good insight is the number of those that worked from home, labeled by the green bar graph below.

The chapter community with the highest number of individuals that worked from home is Wide Ruins. Wide Ruins used to be home to one of the world famous trading posts with weaving being a big economic driver in the community.



Education and Community

Within FDSDA, the local schools serve as community hubs, not only offering education, but also jobs, events, and are usually the only buildings in the community. These institutions are critical in efforts to enhance community health through education and preventive programs.

Educational Attainment

Educational attainment refers to the highest level of education an individual has completed. It is a key indicator used to assess the educational composition of the community and has profound effects on community health through health literacy, economic stability, lifestyle opportunities, and can have generational effects.

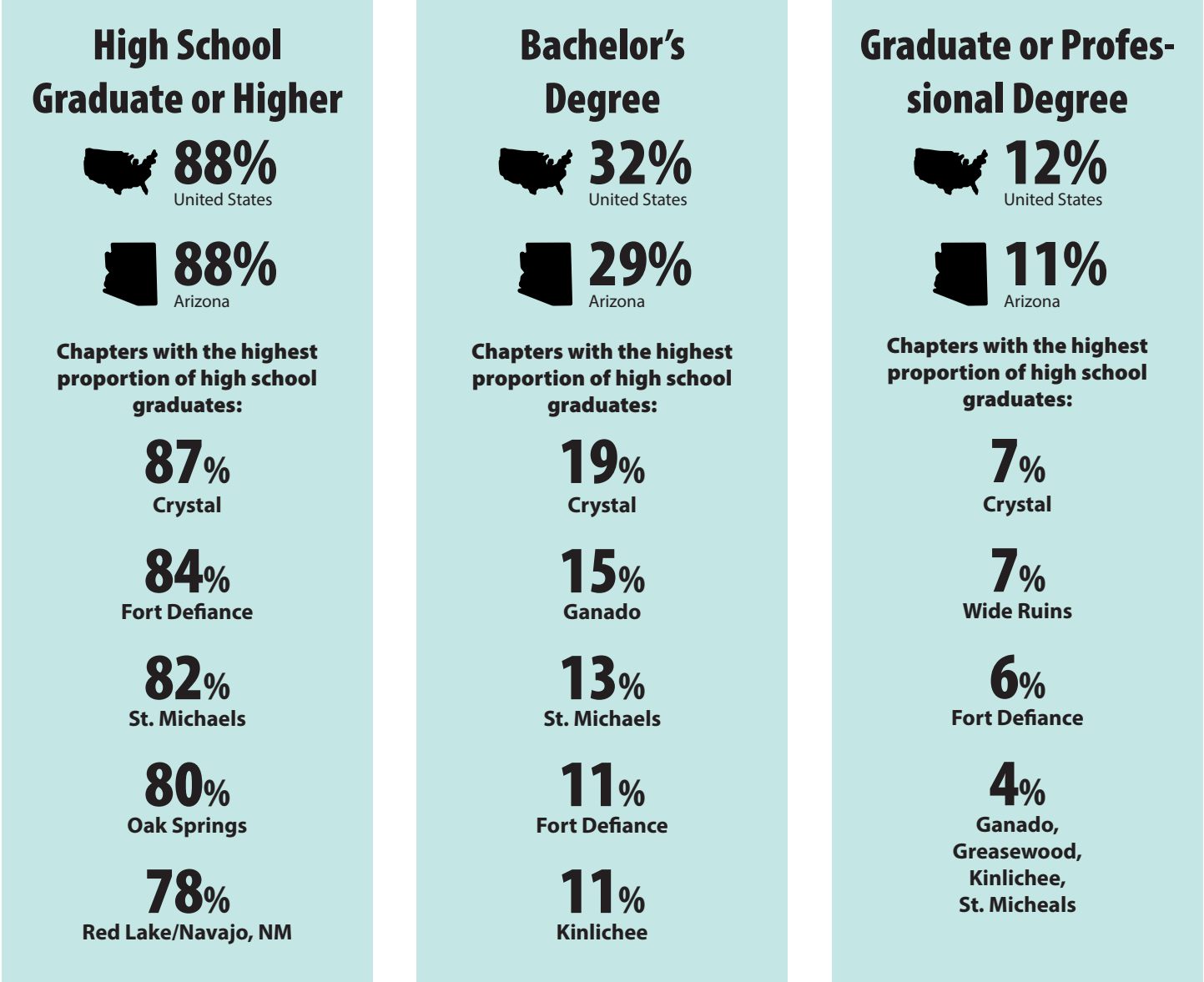
Higher educational attainment typically leads to better health literacy, enabling individuals to make informed decisions about their health, understand medical instructions, and navigate the healthcare system effectively. It could also lead to individuals

more likely to engage in preventive care, such as vaccinations, and regular health check-ups, reducing the prevalence of diseases and health complications.

Higher education is associated with better job prospects and higher incomes, leading to economic stability. Educated individuals are more likely to have jobs that provide insurance benefits, ensuring better access to care.

Communities with higher educational attainment levels tend to have better public health outcomes, as education fosters a culture of health awareness and proactive health management. Further, education promotes social cohesion and community engagement, leading to a stronger social networks that provide support and resources, enhancing overall community health. Lastly, parents with higher educational attainment tend to emphasize the importance of education for their children, creating a cycle of educational and health benefits that extend to future generations.

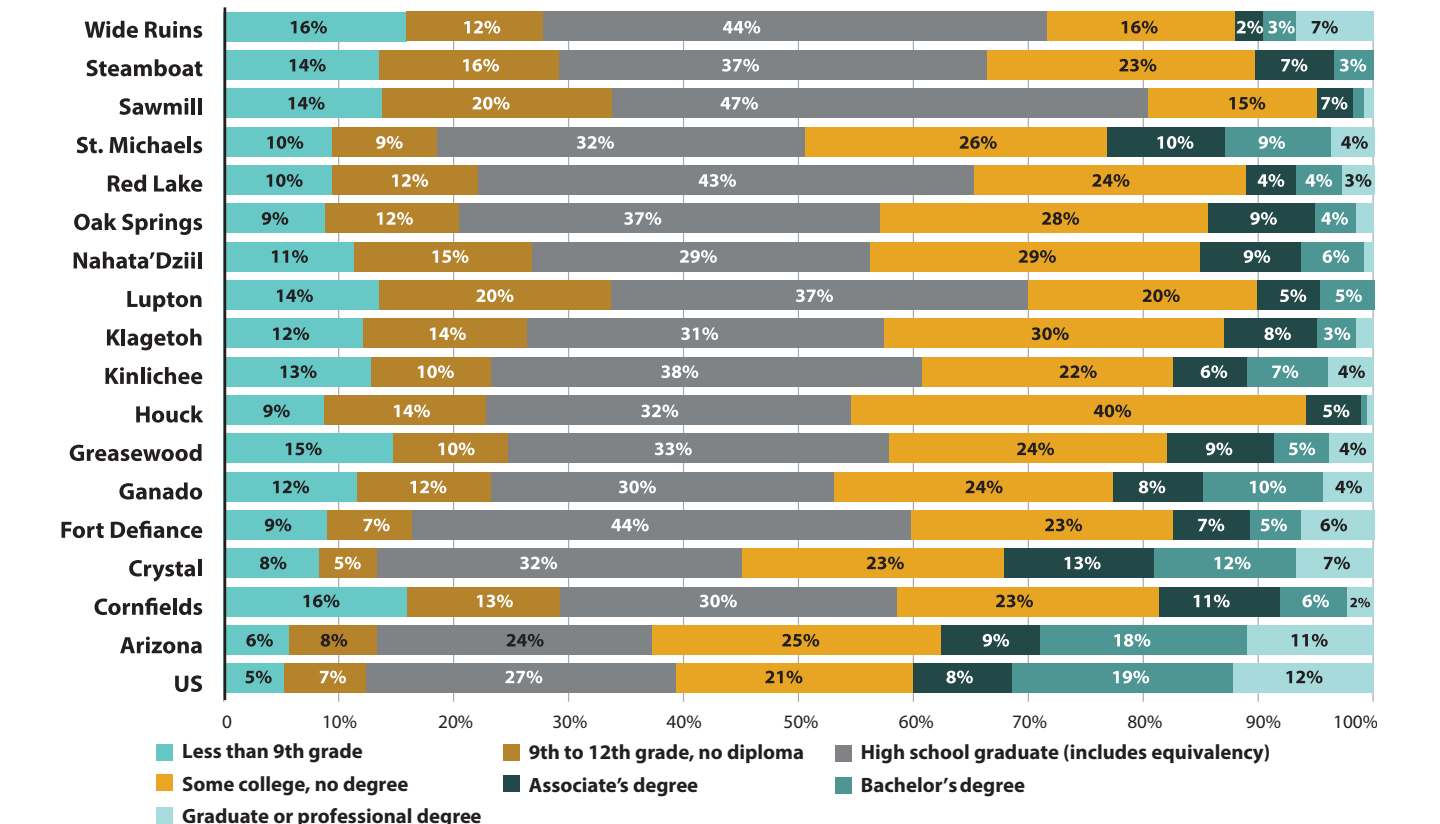
The communities with the greatest proportion of individuals with each of the following



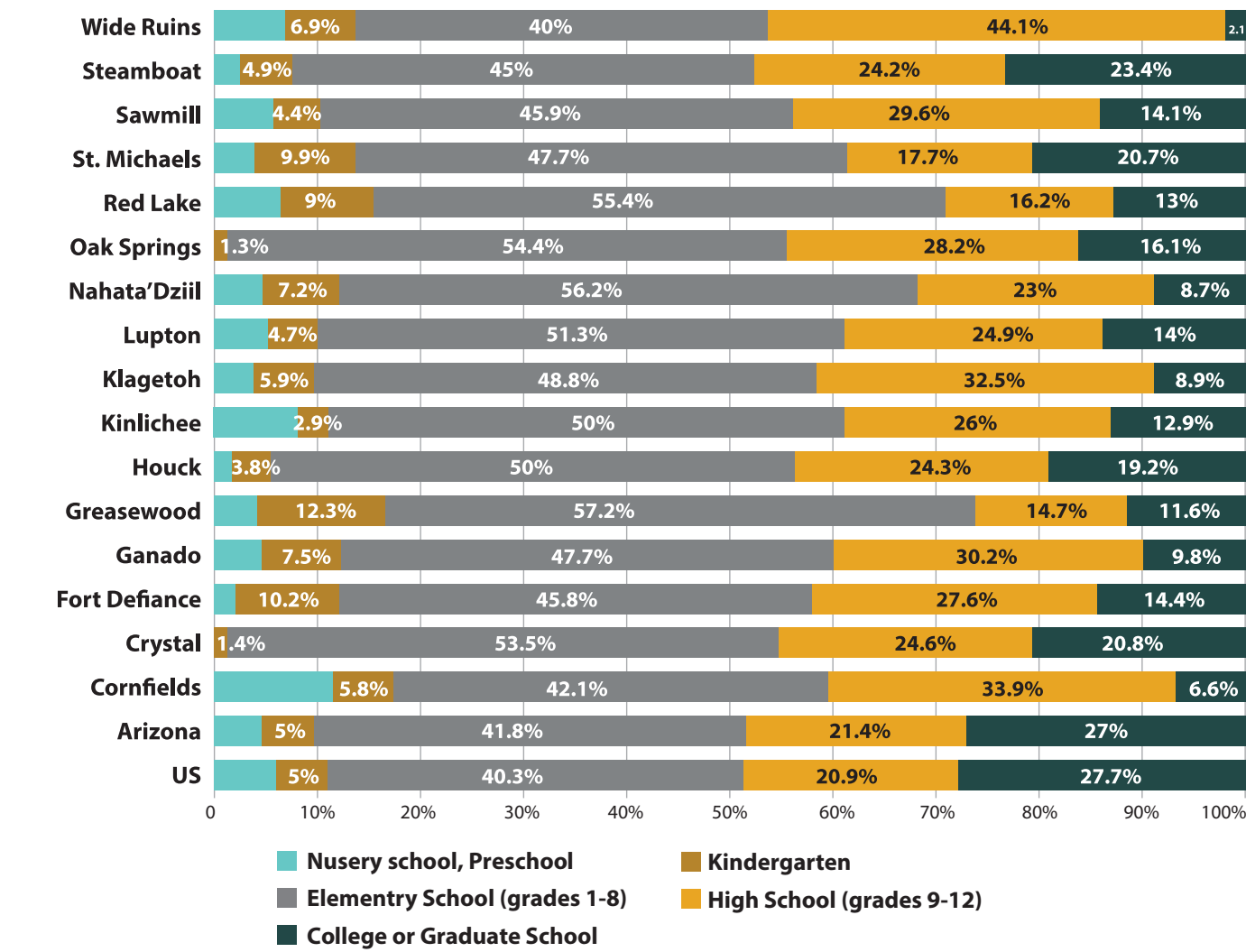
Educational Attainment by Chapter

	Population 25 years and over	Less than 9th grade	9th to 12th grade, no diploma	High school graduate (includes equivalency)	Some college, no degree	Associate's degree	Bachelor's degree	Graduate or professional degree	High school graduate or higher	Bachelor's degree or higher
Cornfields	621	99	82	184	141	65	36	14	440	50
Crystal	412	34	21	131	94	53	51	28	357	79
Fort Defiance	3939	356	288	1719	897	261	179	239	3295	418
Ganado	1470	172	440	244	178	67	153	63	1128	216
Greasewood	734	107	74	244	178	67	35	29	553	64
Houck	809	70	114	257	320	38	4	6	625	10
Kinlichee	977	126	101	366	214	63	70	37	750	107
Klagetoh	568	68	82	176	169	46	19	8	418	27
Lupton	613	83	123	224	122	33	28	0	407	28
NahataDziil	1374	157	211	404	397	119	76	10	1006	86
Oak Springs	409	36	48	150	116	38	15	6	325	21
Red Lake	923	89	114	400	219	39	39	23	720	62
St. Michaels	3954	380	351	1267	1043	408	359	146	3223	505
Sawmill	574	79	115	268	85	17	5	5	380	10
Steamboat	909	124	143	338	211	64	29	0	642	29
Wide Ruins	536	85	64	235	88	13	16	35	387	51

Educational Attainment Proportions by Chapter



School Enrollment



Communities with the highest proportion of children in elementary school:

1. Greasewood (57.2%)
2. NahataDziil/Sanders, AZ (56.2%)
3. Red Lake/Navajo, NM (55.4%)
4. Oak Springs (54.4%)
5. Crystal (53.5%)

Communities with the highest proportion of college or graduate students:

1. Steamboat (23.4%)
2. Crystal (20.8%)
3. St. Michaels (20.7%)
4. Houck (19.2%)
5. Oak Springs (16.1%)

Communities with the highest proportion of adolescents in high school:

1. Wide Ruins (44.1%)
2. Cornfields (33.9%)
3. Ganado (30.2%)



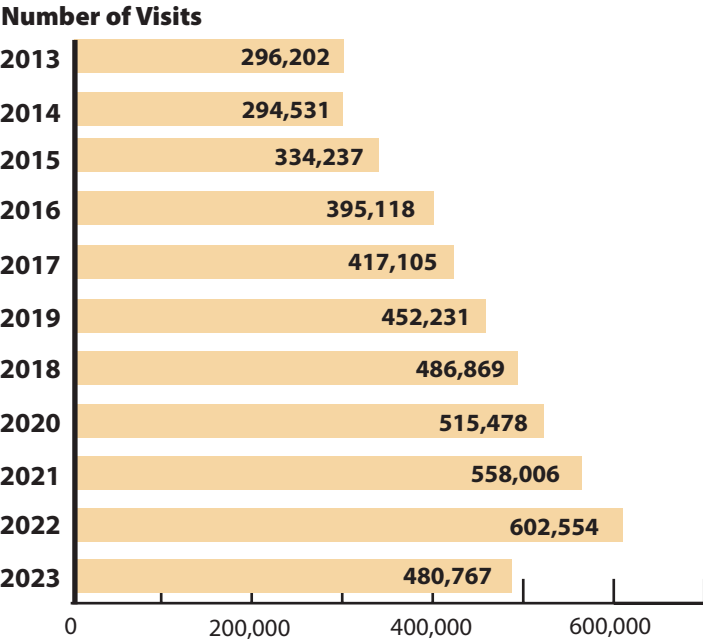
Healthcare Services

Healthcare is a central aspect of the community, anchored by the Tséhootsooí Medical Center, which provides a range of health services from basic care to some specialized medical treatments. Residents often need to travel to larger cities for advanced care. Public health challenges include high rates of diabetes, cardiovascular issues, and obesity, influenced by lifestyle and limited access to recreational and fresh food resources.

Number of Visits

The number of visits is a critical indicator of community health and access to healthcare services. It reflects how often individuals seek medical attention and can impact community health by indicating timely treatment, health monitoring, health education, medication adherence, public health surveillance, and health equity.

Regular visits to the hospital can indicate preventive care, such as vaccinations, screenings, and health check-ups. This can help in early detection and management of health condition, reducing the burden of disease in the community.



Direct Inpatient

There were 1,977 discharges (-16.1) during this period, accounting for 5,859 patient days (-10.6). The average length of stay was 3 days compared to an ALOS of 2.8 during this period last year. In addition, there were 219 newborn discharges accounting for 429 days.



Number of Births

Year	Number of Births
2019	296
2020	277
2021	215
2022	259
2023	234
1/1/24 to today	99

Five Leading Primary Diagnosis for Hospitalizations

Diagnosis			Increase/Decrease % from previous year
1	Alcohol dependence with withdrawal	75	-23.5
2	COVID-19	63	-54
3	Pneumonia, unspecified organism	54	3.8
4	Sepsis, unspecified organism	53	165
5	Unspecified asthma (acute)	50	13.6

Top Ten Admitting Diagnosis for Hospitalization

Table - Top Ten Admitting Diagnosis for Hospitalization

No	Admitting Diagnosis		Increase/Decrease % from previous year
1	Alcohol dependence with withdrawal	80	-18.4
2	COVID-19	63	-5303
3	Sepsis, unspecified organism	51	168.4
4	Pneumonia, unspecified organism	51	-1.9
5	Unspecified asthma (acute)	50	16.3
6	Urinary tract infection	44	-12
7	Encounter for full-term uncomplication	37	-30.2
8	Hypoxemia	37	19.4
9	Alcohol abuse with withdrawal	35	16.7
10	Acute cholecystitis	34	78.9

Insurance

Third Party Eligibility

There were 27,430 patients enrolled in Medicare Part A and 24,990 patients enrolled in Part B at the end of this time period.

There were 12,726 patients enrolled in Medicare Part D. There were also 115,296 patients enrolled in Medicaid and 44,118 patients with an active private insurance policy as of that date.

Ambulatory Care Visits

There were a total of 275,227 ambulatory visits (-26.4) during the calendar year 2023. The following tables break down the Ambulatory Care Visits by type, location, service category, clinic type, and provider type.

By Type		
Tribe-638 Program	275,223	(-26.4)
Other	2	(-33.3)
Tribe-Non 638/Non-Compact	2	(-60.0)
By Location		
Fort Defiance Indian Hospital	250,688	(-27.8)
Nahata'Dziil Health Center	24,221	(-9.7)
Wide Ruins School	88	(+39.7)
Hunter's Point Boarding School	75	(+38.9)
Pine Springs School	69	(+81.6)
Hilltop Christian School	45	(+80)
Crystal Boarding School	32	(+14.3)
Tshehootsooi Mobile Health Clinic	9	(-81.6)
By Service Category		
Ambulatory	264,268	(-19.4)
Telecommunications	6,680	(-84.3)
Telemedicine	3,143	(+66.2)
Day Surgery	989	(-37.6)
Observation	138	(-21.1)
Not Found	6	(+50)
Nursing Home	3	(+200)
By Clinic Type		
Pharmacy	84,948	(+7.6)
Emergency Medicine	36,844	(-1.9)
Family Practice	31,538	(-1.7)
Radiology	16,759	(-18.7)
Dental	13,709	(+4.1)
Pediatric	11,430	(+4.3)
Laboratory Services	8,054	(-77.4)
Mental Health (Psychiatry)	6,768	(-3.9)
Public Health Emergency	6,087	(-84.3)
Podiatry	6,069	(-13.2)
Physical Therapy	5,786	(-18)
Optometry	4,867	(-50.7)
Gynecology	4,721	(+14.6)
Obsetrics	3,636	(+5.8)
Immunizations	3,477	(-6.9)
Public Health Nursing Clinic Visit	3,201	(-81.5)
Chart Rev/Rec Mod	3,002	(-40.7)
Wellness	2,634	(+120.8)
Audiology	2,107	(-7.6)
Surgical	2,076	(-42.4)

Orthopedic	1,977	(-41.8)
Diabetes Education - Individual	1,896	(-10.3)
Ear, Nose, Throat	1,784	(-35.4)
Occupational Therapy	1,225	(+23.4)
Day Surgery	1,071	(-35.4)
Diabetic	942	(-1.6)
Internal Medicine	830	(-25.8)
Anticoagulation Therapy	779	(-11.6)
Speech Pathology	642	(+3.6)
Labor & Delivery	569	(+1.2)
Dietary	516	(-23.4)
Family Planning	424	(+430)
Respritory Care	386	(-31.3)
Postpartum	359	(+63.9)
Traditional Medicine	354	(+51.9)
School	316	(+35.6)
Home Care	303	(+8.2)
Telephone Call	234	(-98.5)
Observation	137	(-16.5)
Well Child	97	(-66.2)
Cardiology	63	(-13.7)
Employee Health Unit	41	(+78.3)
Medical Social Services	38	(-60.4)
Case Management Services	17	(+41.7)
Chest & TB	16	(+23.1)
STD	11	(**)
General	10	(+0)
Ultrasound	7	(+600)
No Clinic	4	(-60)
Telemedicine	4	(+0)
By Provider Type (Primary & Secondary Providers)		
Clinic Registered Nurse (RN)	116,161	(-27.4)
Pharmacist	111,433	(-0.5)
Nurse Practitioner	56,118	(+0.8)
Medical Assistant	33,742	(+4.4)
Family Practice	25,544	(+1.6)
Emergency Room Physician	23,843	(-28.6)
Internal Medicine	21,166	(-63.8)
Physician Assistant	19,570	(-0.8)
Radiologist	18,992	(-22.2)
XRay Technician	14,890	(-0.2)
Dentist	14,368	(+3.2)
Medical Doctor (MD)	13,748	(+7.6)
Nurse Assistant	12,011	(-26.6)
Laboratory Technician	11,352	(-60.9)
OB/GYN	7,837	(+51.1)

Abulatory Care Visits: By Provider Type (Cont.)

Pediatrician	7,679	(-44.1)
Podiatrist	7,590	(-12.2)
Physical Therapist	6,004	(-1.2)
Nuse Midwife	5,443	(-2.6)
Optometrist	5,391	(-50.8)
Health Aide	4,451	(-12.3)
Osteopathic Medicine	4,233	(+0.4)
Licensed Medical Social Worker	2,961	(-37.9)
Surgeon	2,802	(-53.3)
Fitness Specialist	2,638	(-36.4)
Public Health Nurse	2,084	(-75.7)
Otolaryngol	2,054	(-3.1)
Orthopedist	1,984	(-44.3)
Ultrasound Technician	1,935	(+213.1)
Medical Technologist	1,705	(-15.9)
Physical Therapist Technician	1,521	(-10.5)
Licensed Professional Counslr	1,233	(-10.9)
Occupational Therapist	1,126	(+37.7)
Audiologist	1,090	(-12.9)
Pharmacy Technician	1,038	(+47.9)
Audiology Health Technician	1,017	(-1.5)
Respritory Therapist	896	(+1.9)
Medical Social Worker	853	(-2.6)
CRNA	803	(-44.5)
Licensed Clinical Social Worker	775	(+20.7)
Mental Health (Master Only)	647	(-37.5)
Speech/Language PATH	647	(+3.4)
Health Educator	596	(+43.3)
Medical Student	594	(+74.2)
Surgical Technician	536	(-25.9)
Nutritionist	450	(+33.9)
Mental Health Technician	416	(-78.8)
Behavioral Health Technician	397	(+7,840)
Case Managers	370	(-70.2)
Traditional Medicine Practitioner	352	(+51.1)
Dental Assistant	347	(-28.3)
Ophthalmologist	222	(-48)
Physical Therapy Student	157	(-36.9)

Ten Leading Ambulatory Care Visits

The ten leading purposes of ambulatory visits by individual ICD Code are listed below. Both primary and secondary diagnoses are included in the counts.

By ICD Diagnosis			
1	Encounter for issues of rePEAT pres	85,790	(+10.7)
2	Type 2 diabetes without co	26,735	(-4.6)
3	Essential (primary) hypertension	16,264	(+5.9)
4	Encounter for immunization	14,241	(-38.1)
5	Other specified counseling	9,907	(-55.8)
6	Contact with and (suspected) expo	9,199	(-77.5)
7	Enounter for other administrative	8,839	(-77)
8	Uncoded diagnosis	7,991	(+79,810)
9	Hyperlipidemia, unspecified	6,870	(+23.1)
10	Encounter for dental exam & clean	6,087	(-20.5)

Chart Reviews

There were 85,457 (-7.4) chart reviews performed during this time period.

Injuries

There were 11,452 visits for injuries (-24.7) reported during this period. Of these, 5,759 were new inuries (-25.4).

Five Leading Causes:

1	Unspecified fall, initial encounter	329	(-9.4)
2	Striking against or struck by other	187	(-10.1)
3	Fall same lev from slip/trip w/o st	177	(-7.8)
4	Bitten by dog, initial encounter	163	(-12.8)
5	Fall on same level due to ice and s	125	(+197.6)

Emergency Room

There were 36,844 visits (-1.9) to the ER (Clinic Code=30). Of these 4,194 had an injury diagnosis (-13.8) and 1,332 had an alcohol-related diagnosis (-17.9).

Dental Care

There were 5,432 patients (-1.4) seen for Dental Care. They accounted for 13,709 visits (+4.1).

Seven Leading Service Categories:

1	Intraoral - Periapical each addition	9,923	(+26.7)
2	Patient Revisit	8,318	(+9.8)
3	Hypertension Screening	7,588	(+4.4)
4	Intraoral - Periapical First Radiog	6,288	(-8.1)
5	First Visit of Fiscal Year	4,916	(-7)
6	Limited Oral Evaluation-Problem F	4,725	(-17.8)
7	Emergency Encounter, Any Reason	4,363	(-17.8)

In-Hospital Visits

There were a total of 824 In-Hospital visits (-31.3) during the period for all visit types, including CHS.

They are broken down below by Type, Location, Service Category, Clinic, Provider Discipline and Leading Diagnoses.

By Type		
Tribe-638 Program	824	(-31.3)
By Location		
Fort Defiance	823	(-31.4)
Nahata’Dziil	1	(+0)
By Outside Location		
---not entered---	824	(-31.3)
By Provider Type (Primary & Secondary Providers)		
Licensed Medical Social Worker	306	(-46.3)
Pharmacist	163	(-55)
Mental Health Technician	162	(+200)
Clincal Registered Nurse (RN)	85	(+30.8)
Medical Assistant	32	(+220)
Medical Doctor (MD)	21	(+600)
Nurse Practitioner	19	(-65.5)
Podiatrist	17	(+13.3)
Nurse Midwife	14	(+55.6)
OB/GYN	14	(-26.3)
Medical Social Worker	9	(-67.9)
Traditional Medicine Practitioner	9	(+50)
Emergency Room Physician	8	(-27.3)
Nurse Assistant	6	(-25)
Physical Therapist	6	(+20)
Audiology Health Technician	5	(+66.7)
Dentist	5	(-16.7)
Optometrist	4	(-55.6)
Pediatrician	4	(-20)
Health Aide	3	(**)
Internal Medicine	3	(-80)
Occupational Therapist	3	(**)
Radiologist	3	(**)
Respritory Therapist	3	(+200)

The Ten Leading Purposes of In-Hospital Visits

The ten leading purposes of In-Hospital visits by individual ICD code are listed below. Both primary and secondary diagnoses are included in the counts.

By ICD Diagnosis			
1	Other specified counseling	327	(-38.9)
2	Encounter for issue of repeat presc	150	(-56.3)
3	Uncoded diagnosis	111	(+73.4)
4	Alcohol abuse, uncomplicated	55	(+1.9)
5	Encntr for f/u exam aft trtmt for cond	45	(**)
6	Encntr for administration examination	14	(-26.3)
7	Alcohol dependence, uncomplicated	13	(+160)
8	Adjustment disorder with mixed anxiety	6	(-45.5)
9	Encntr for change or removal of nonsu	6	(+500)
10	Depression, unspecified	6	(-50)

Results

The community health needs assessment, conducted through comprehensive surveys, focus groups, and an analysis of health data from local health departments, identified four critical health needs that require priority attention: behavioral health, obesity and related diseases, pneumonia, and respiratory diseases, and healthcare system navigation. The findings for each of these priority health needs are detailed below.

Behavioral Health

Behavioral health emerged as a significant concern within the community, reflecting high rates of mental health issues and substance abuse. The assessment revealed the following key points:

Mental Health Disorders: Approximately 12% of respondents reported experiencing symptoms of depression or anxiety within the past year. The prevalence of these mental health issues suggests a substantial portion of the community is affected by psychological distress. Contributing factors include economic stress, social isolation, and limited access to mental health services. The stigma associated with seeking mental health care was also noted as a barrier, preventing individuals from obtaining the necessary support.

Substance Abuse: Substance abuse, particularly involving alcohol, was identified as a critical issue. Over 15% of survey participants indicated struggles with substance abuse, highlighting a growing concern. The availability of substances, coupled with socioeconomic challenges, exacerbates this issue. The community lacks sufficient substance abuse treatment programs and support services, which are crucial for addressing this problem effectively.

Efforts to enhance behavioral health services are imperative. Recommendations include increasing the availability of mental health and substance abuse treatment programs, reducing stigma through public awareness campaigns, and providing community-based support groups to foster a supportive environment for individuals seeking help.

Obesity and Related Diseases

Obesity and its associated diseases, including diabetes, hypertension, and cardiovascular disease, were identified as prevalent health issues within the community. The assessment revealed the following findings:

Obesity Rates: Nearly 35% of adults in the community are classified as obese, with a body mass index (BMI) of 30 or higher. This statistic is alarming and indicates a significant public health challenge. Obesity rates among children and adolescents are also rising, suggesting that early intervention is necessary to prevent long-term health complications.

Chronic Disease Incidence: The community experiences high rates of chronic diseases closely linked to obesity. Diabetes affects 21% of the population, hypertension affects 28%, and cardiovascular diseases are also prevalent. These conditions result in substantial healthcare costs and reduce the quality of life for affected individuals. Contributing factors include poor dietary habits, lack of physical activity, and limited access to healthy food options.

To address obesity and related diseases, the community needs comprehensive lifestyle and dietary interventions. These include community-wide initiatives to promote healthy eating, increase physical activity, and provide early screening and management of obesity-related diseases.

Pneumonia and Respiratory Diseases

Pneumonia and other respiratory diseases, such as chronic obstructive pulmonary disease (COPD) and asthma, were identified as significant health concerns. Key data points include:

Incidence Rates: The community has higher-than-average rates of pneumonia, with 6% of respondents reporting a pneumonia diagnosis in the past year. COPD and asthma were also prevalent, affecting 10% and 12% of the population, respectively. These high incidence rates indicate a need for improved respiratory health management and preventive

measures. **Environmental Factors:** Additionally, environmental pollutants, such as smoke from wood burning fires, exacerbate respiratory issues, particularly for vulnerable populations such as children and the elderly.

Developing targeted interventions to reduce smoking rates, improve air quality, and increase access to preventive care for respiratory conditions is essential for improving respiratory health within the community.

Healthcare System Navigation

Navigating the healthcare system was identified as a significant challenge for community members. The assessment revealed the following key points:

Access to Care: Many residents reported difficulties in accessing healthcare services due to a lack of transportation and limited healthcare specialty services. These barriers can delay seeking care, which can lead to the progression of diseases and worsened health outcomes.

Health Literacy: Low educational attainment rates can lead to low health literacy rates, which were reported, with many individuals struggling to understand medical information and navigate insurance processes. Patients with low health literacy are less likely to engage in preventive care and are at higher risk for hospitalizations and chronic disease complications.

To improve healthcare system navigation, the community needs to enhance transportation services, expand healthcare facilities, and develop health literacy programs. These initiatives will help residents better navigate the healthcare system, access necessary services, and achieve better health outcomes.

Recommendations

Based on these findings, the following recommendations are proposed to address the identified health needs:

1 Enhance Behavioral Health Services: Increase availability of mental health and substance abuse treatment programs, reduce stigma through public awareness campaigns, and provide community-based support groups.

3 Improve Respiratory Health: Develop targeted interventions to reduce smoking rates and increase access to preventive care for respiratory conditions.

2 Promote Healthy Lifestyles: Implement community-wide initiatives to promote healthy eating, physical activity, and early screening for obesity-related diseases.

4 Facilitate Healthcare Navigation: Improve transportation services, expand healthcare facilities, and enhance health literacy programs to help residents better navigate the healthcare system.

Strategies to Address Community Health Needs

Behavioral Health

1. Increase Access to Mental Health Services:

- Expand telehealth services to provide remote access to mental health professionals, especially in rural areas
 - [oa1_citation:1, Navigating Health Disparities in Navajo Nation | Think Global Health] (<https://www.thinkglobalhealth.org/article/navigating-health-disparities-navajo-nation>).
- Collaborate with schools and community organizations to integrate mental health programs and provide on-site counseling services.
- Establish crisis intervention teams and 24/7 hotlines for immediate support.

2. Community-Based Programs:

- Develop culturally sensitive programs that incorporate traditional healing practices with modern therapies
 - [oa1_citation:2, Cardiovascular Disease in American Indian and Alaska Native Populations Reflects Grave Health Disparities - Penn LDI] (<https://ldi.upenn.edu/our-work/research-updates/cardiovascular-disease-in-american-indian-and-alaska-native-populations-reflects-grave-health-disparities/>).
- Organize support groups and peer counseling to reduce stigma and provide a sense of community.

3. Training and Education:

- Provide training for healthcare providers on culturally competent care and trauma-informed approaches.
- Educate the community on mental health awareness, recognizing signs of mental illness, and available resources.

Obesity and Related Diseases

1. Promote Healthy Eating and Active Living:

- Launch community gardens and farmers' markets to improve access to fresh produce.
- Implement nutrition education programs in schools and community centers.
- Create safe and accessible spaces for physical activity, such as parks and recreational facilities
 - [oa1_citation:3, Health-Related Behavioral Risk Factors and Obesity Among American Indians and Alaska Natives of the United States: Assessing Variations by Indian Health Service Region] (https://www.cdc.gov/pcd/issues/2022/21_0298.htm).

2. Preventive Health Screenings:

- Conduct regular health fairs and screenings for obesity-related diseases such as diabetes and hypertension.
- Offer free or low-cost weight management and exercise programs.

3. Policy Advocacy:

- Advocate for policies that limit the availability of unhealthy foods and beverages in schools and public places.
- Support local businesses in providing healthier food options.

Pneumonia and Respiratory Disease

1. Vaccination Campaigns:

- Promote influenza and pneumococcal vaccination campaigns, especially for high-risk populations like the elderly and those with chronic illnesses.
- Partner with local healthcare providers to offer vaccination clinics.

2. Public Awareness Campaigns:

- Educate the community about the importance of vaccinations, good respiratory hygiene, and early detection of respiratory diseases
 - [oa1_citation:4, Native Americans & Health Equity] (<https://nihcm.org/publications/native-americans-health-equity>).
- Provide information on avoiding environmental triggers such as smoke and pollutants.

3. Access to Care:

- Increase access to respiratory care specialists and provide training for primary care providers on managing respiratory diseases.
- Implement smoking cessation programs to reduce the incidence of respiratory conditions.
-

Pneumonia and Respiratory Disease

1. Patient Navigation Services:

- Establish patient navigation programs to help individuals understand and access healthcare services, schedule appointments, and follow up on care
 - [oa1_citation:5, Cardiovascular Disease in American Indian and Alaska Native Populations Reflects Grave Health Disparities - Penn LDI] (<https://ldi.upenn.edu/our-work/research-updates/cardiovascular-disease-in-american-indian-and-alaska-native-populations-reflects-grave-health-disparities/>).
- Provide multilingual and culturally competent navigators to assist diverse populations.

2. Health Literacy Programs:

- Develop educational materials and workshops to improve health literacy, ensuring patients understand their health conditions and treatment options.
- Use clear and simple language in all communications and provide resources in multiple languages.

3. Technology Integration:

- Implement electronic health records (EHR) systems to streamline patient information and improve care coordination.
- Utilize mobile health apps to remind patients of appointments, medications, and health tips.

4. Community Partnerships:

- Collaborate with local organizations, schools, and religious institutions to reach broader populations and provide health education and resources.
- Engage community leaders in health promotion activities to build trust and increase program participation.

Action Plan

Goals and Objectives for Improving Behavioral Health, Obesity and Related Diseases, Pneumonia and Respiratory Diseases, and Healthcare System Navigation

Behavioral Health

Goal 1: Improve access to mental health services and reduce stigma surrounding mental health.

Objective 1.1: Expand telehealth services to ensure remote access to mental health professionals.

Action Steps:

- Partner with telehealth providers.
- Secure funding for telehealth infrastructure improvements.
- Promote telehealth services through community outreach programs.

Objective 1.2: Integrate mental health programs within schools and community organizations.

Action Steps:

- Develop partnerships with local schools and community centers.
- Train school counselors and community workers on mental health support.
- Implement mental health awareness campaigns targeting youth and adults.

Objective 1.3: Establish crisis intervention teams and hotlines.

Action Steps:

- Train and deploy crisis intervention teams.
- Create and distribute materials promoting the availability of crisis hotlines.

Obesity and Related Diseases

Goal 2: Promote healthy lifestyles and reduce the prevalence of obesity and related diseases.

Objective 2.1: Increase access to healthy foods and promote nutrition education.

Action Steps:

- Develop community gardens and farmers' markets.
- Implement nutrition education programs in schools and community centers.
- Partner with local businesses to promote healthy food options.

Objective 2.2: Create opportunities for physical activity.

Action Steps:

- Develop and maintain parks and recreational facilities.
- Organize community fitness programs and events.
- Promote physical activity through public awareness campaigns.

Objective 2.3: Conduct preventive health screenings and interventions.

Action Steps:

- Organize regular health fairs and screening events.
- Provide free or low-cost weight management programs.
- Promote the benefits of regular health check-ups.

Pneumonia and Respiratory Diseases

Goal 3: Reduce the incidence and impact of pneumonia and respiratory diseases.

Objective 3.1: Increase vaccination rates among high-risk populations.

Action Steps:

- Launch vaccination campaigns for influenza and pneumococcal vaccines.
- Partner with healthcare providers to offer vaccination clinics.

Objective 3.2: Improve public awareness about respiratory health.

Action Steps:

- Educate the community about respiratory hygiene and early detection of respiratory diseases.
- Provide resources and information on avoiding environmental triggers.

Objective 3.3: Enhance access to respiratory care.

Action Steps:

- Increase availability of respiratory specialists.
- Implement smoking cessation programs to reduce respiratory diseases.

Healthcare System Navigation

Goal 4: Enhance the ability of individuals to navigate the healthcare system effectively.

Objective 4.1: Establish patient navigation services.

Action Steps:

- Develop a patient navigation program to assist with healthcare system navigation.
- Train multilingual and culturally competent navigators.

Objective 4.2: Improve health literacy within the community.

Action Steps:

- Create educational materials and workshops focused on health literacy.
- Ensure communication is clear and available in multiple languages.

Objective 4.3: Integrate technology to improve care coordination.

Action Steps:

- Implement electronic health record (EHR) systems.
- Utilize mobile health apps for patient reminders and health tips.

Objective 4.4: Foster community partnerships.

Action Steps:

- Collaborate with local organizations for health education and resource distribution.
- Engage community leaders in health promotion activities.



References:

1. Centers for Disease Control and Prevention. COVID-19 and Your Health. CDC, 15 July 2023, www.cdc.gov/coronavirus/2019-ncov/your-health/index.html. Accessed 9 Aug. 2024.
2. World Health Organization. Global Health Observatory (GHO) Data. WHO, 2023, www.who.int/data/gho. Accessed 9 Aug. 2024.
3. National Institutes of Health. Health Information. NIH, 2024, www.nih.gov/health-information. Accessed 9 Aug. 2024.
4. U.S. Department of Health and Human Services. Healthy People 2030. HHS, 2024, health.gov/healthypeople. Accessed 9 Aug. 2024.
5. American Public Health Association. Public Health Topics. APHA, 2024, www.apha.org/topics-and-issues. Accessed 9 Aug. 2024. U.S. Census Bureau. (2022). Age and Sex. American Community Survey, ACS 5-Year Estimates Subject Tables, Table S0101. Retrieved June 6, 2024, from
6. Mayo Clinic. Public Health Programs and Initiatives. Mayo Clinic, 2024, www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/public-health-programs/art-20255647. Accessed 9 Aug. 2024.
7. Harvard T.H. Chan School of Public Health. Public Health Research. Harvard University, 2024, www.hsph.harvard.edu/public-health-research. Accessed 9 Aug. 2024.
8. Johns Hopkins Bloomberg School of Public Health. COVID-19 Resources. Johns Hopkins University, 2024, www.jhsph.edu/covid-19. Accessed 9 Aug. 2024.
9. Public Health England. Health Matters: Public Health Issues. PHE, 2024, www.gov.uk/government/collections/health-matters-public-health-issues. Accessed 9 Aug. 2024.
10. World Bank. Public Health at a Glance. World Bank, 2024, www.worldbank.org/en/topic/publichealth. Accessed 9 Aug. 2024.
11. National Center for Biotechnology Information. Public Health Genomics. NCBI, 2024, www.ncbi.nlm.nih.gov/pmc/articles/PMC5769553. Accessed 9 Aug. 2024.
12. The Lancet. Public Health: Open Access Articles. The Lancet, 2024, www.thelancet.com/journals/lancet/public-health. Accessed 9 Aug. 2024.
13. Public Health Institute. Public Health Programs. PHI, 2024, www.phi.org/work-with-us/programs. Accessed 9 Aug. 2024.
14. National Academies of Sciences, Engineering, and Medicine. The Future of Public Health. NAP, 2023, www.nap.edu/catalog/5298/the-future-of-public-health. Accessed 9 Aug. 2024.
15. American Heart Association. Public Health Programs to Address Hypertension. AHA, 2024, www.heart.org/en/healthy-living/healthy-blood-pressure/public-health-programs. Accessed 9 Aug. 2024.

FORT DEFIANCE INDIAN HOSPITAL BOARD

TSÉHOOTSOOÍ MEDICAL CENTER | NAHATA'DZIIL HEALTH CENTER | NIHI DINE'É BĀ WELLNESS CENTER

928.728.8000 | CORNER OF ROUTES N12 & N7 | P.O. BOX 649, FORT DEFIANCE AZ, 86504



@fdihbinc | www.fdihb.org