

After introducing key health factors, this report highlights relevant research on the health of Native American children in New Mexico. The overall purpose of the report is just not to raise awareness. It is intended to help guide discussions and support policy developments that improve future wellbeing of the Native American children of New Mexico. It concludes with a look at indigenous indicators and future opportunities.

Reviewing Health Factors

Our health is influenced not only by our individual choices, but also by the circumstances in which we are born, grow up, live, work, play and age. These circumstances are commonly referred to as the "social determinants of health."

They include factors such as:

- socioeconomic status
- education
- physical and social environments
- employment
- social support networks
- access to health care

These circumstances are shaped by a range of variables including economics, government policies, politics, history, culture and spirituality.² For example, growing up in a poor rural community with a lack of access to healthy and affordable foods can encourage unhealthy eating habits and increase the risk of dietrelated illnesses, like type 2 diabetes.

As a society, we should no longer view health as resulting only from personal choices that an individual freely makes. What research has revealed is that people's health is also shaped by the community where they live in as well as by the systems put in place to hinder or enhance individual choices. In Native American communities, these systems include a complex history of negative federal policies that have created adverse systems that tribes and communities have done their best to navigate and endure.

The more we at the NB3 Foundation reflected on these circumstances, the more key questions emerged. These include: why is it so seemingly ineffective to urge people to eat more vegetables or get more exercise? What are the root causes that are making our children and communities obese and sick? And, what are the unique health-related conditions, challenges, and opportunities for families and communities in Indian Country?

In response to these questions, the NB3 Foundation in 2015 published, The Social Determinants of Health of Type 2 Diabetes and Obesity: A Research Framework. Building on current discussions on social determinants of health, this framework uses a Native/indigenous perspective to further understand the root causes of obesity and type 2 diabetes among Native American children and communities. The framework uses unique indigenous factors (i.e., historical trauma, self-determination, cultural activities, etc.) to assess the role and impact of social determinants of health among Native people.

Three goals for using this framework are to:

- 1) Guide the NB3 Foundation's approach to addressing childhood obesity in Native communities.
- 2) Analyze the current infrastructure for collecting available public data based on the indicators identified.
- 3) Investigate the gaps and issues with data collection, access and dissemination.

To help fulfill that purpose, the NB3
Foundation developed five (NM, AZ, OK, WI and MN) state-level reports based on the framework's indicators.
These state reports can be used as easy-to-reference fact sheets.
The reports detail data on publicly available indicators such as education, eating habits, income and other factors that drive rates of childhood obesity and diabetes in Native communities.
Available data varies for each of the five states and is presented in aggregate for each state, with little data on individual tribal nations.

NB3 Foundation intentionally used public, secondary data sources to demonstrate the range of Native American data currently available. The Foundation encourages others, particularly tribes and Native American communities and organizations, in their planning, research and advocacy efforts, to use these data sources. A future publication will provide an overview of challenges and opportunities in collecting and using this data.

More information about the social determinants of the health and indicators related to obesity and type 2 diabetes among Native American children can be found at the Foundation's website.

www.nb3foundation.org



Focusing on the NB3 Foundation

The NB3 Foundation is an award-winning, national Native American nonprofit organization dedicated to reducing Native American childhood obesity and type 2 diabetes. We do this through the development of programs, strategic grantmaking, research and advocacy. NB3 Foundation has set a national standard for investing in evidence-based, community-driven, culturally relevant and sustainable programs that promote healthy weight, physical activity and healthy nutrition.

NB3 Foundation serves Native
American populations and tribal
nations, each with its own culture,
language, history and traditions.
NB3 Foundation is designed to
provide tribes and Native American
communities with the tools,
information and inspiration needed to
create sustainable change that benefit
their children's health.

Since its launch in 2005, NB3
Foundation has established its
reputation and track record nationally
in the development of research and
evidence-based, "boots-on-theground" programming. The NB3
Foundation is one of the few national
Native providers of intermediary funds
to tribal communities and Native
organizations that are engaged in
youth health, physical activity and
leadership development.

NB3 Foundation is funded by foundations, tribes, companies and individuals. Across the country, the Foundation achieves change through a network of partnering with organizations and individuals dedicated to improving the quality of life of Native American children.

The two signature programs of NB3 Foundation are:

- Native Strong: Healthy Kids, Healthy Futures
- NB3FIT

Learning Lessons In New Mexico

A people's culture, history and demographics frame how health factors operate. Keeping this in mind we will take a closer look at the available data of Native American children and families in New Mexico.

New Mexico is home to 23 tribes and one of the largest off-reservation Native American communities in the United States. The tribes include 19 Pueblos, three Apache Nations, and a portion of the Navajo Nation. New Mexico has a total of 234,690 American Indians (AI) and Alaska Natives (AN) living in the state. Thirty-two percent of this population are Native American children and youth under the age of 18. Approximately 50,000 off-reservation Native Americans are living in Albuquerque.³

The tribal nations and pueblos of New Mexico hold close their traditions and cultures. Many Native Americans still live on their ancestral lands, speak their indigenous languages and practice their cultural lifeways. Yet many Native Americans in New Mexico also live everyday with poverty, unemployment and underemployment and low educational attainment. These conditions invariably negatively impact the health of Native children in the state, and indeed, we see high occurrences of obesity and overweight among Native children and youth in New Mexico:

- Of Native American high school students in New Mexico, 37% were overweight or obese in 2013.⁵
- Of Native American kindergartners in New Mexico, 32.4% were overweight or obese in 2015.6
- Of Native American 3rd graders in New Mexico, 50.4% were overweight or obese in 2015.⁷

Unfortunately, these state statistics are in line with national trends. When children are overweight or obese, that increases their risk of developing type 2 diabetes. Nationally, Native American children and youth have the highest risk of developing type 2 diabetes when compared with other ethnic groups. A 2002 study using Indian Health Service data demonstrated that the number of new Native American youth diagnosed with diabetes increased by 71% and prevalence (existing and new cases) increased by 46% between 1990 and 1998; the general population only increased by 14%.

Overweight and Obese
Native Children and Youth
in New Mexico

37%

High school

34.2%

Kindergarteners

50.4%

3RD Graders

Focusing On Relevant Health Indicators In New Mexico And Nationally

Factors that affect or are associated with health such as the development of obesity and type 2 diabetes are sometimes called indicators. To help us grasp obesity and type 2 diabetes as significant health issues, six indicators stand out:

- 1) physical activity;
- 3) housing/neighborhoods and play areas;
- 4) income/poverty;

- 5) education:
- 6) tobacco and alcohol use.

Indicators

2) food consumption;

In United States

In New Mexico

Physical Activity

Children's participation in physical activity is directly associated with their likelihood for developing obesity and type 2 diabetes.

32.4% of Native American high school students attended a physical education class daily.¹⁰

38.6% of Native American high school students watched 3+ hours of TV per day on an average school day.¹¹

44.1% of Native American high school students reported meeting recommended guidelines (at least 60 minutes of moderate to vigorous physical activity most days).¹²

Food Consumption

Children develop healthy or unhealthy eating habits when they are young, often learned from family members. Level of income also impacts the availability and quality of food to which children have access.

32.7% of Native American high school students ate five or more servings of fruits/vegetables a day.¹³

26% of Native American households receive Supplemental Nutrition Assistance Program (SNAP) benefits (ACS 2011-2013); individually, 36% of Native Americans received SNAP benefits.¹⁴

89.7% of Native American children were ever breastfed.¹⁵

Housing/ Neighborhoods and Play Areas

Environment influences health. The places that Native American children live, learn, work and play can positively or negatively impact their health.

Safe places with community facilities and infrastructure to support playing enable children to engage in more physical activity outside of the home. Stable and adequate housing provides a safe environment for Native American children to live, learn and grow.

25% of Native American children lived in households burdened with high housing costs in 2013.¹⁶

36% of AI/AN households rent.¹⁷

54% of Native American children live in high poverty areas.¹⁸

44.5% of Native American children live in a neighborhood with a park, sidewalks, a library, and a community center.¹⁹

79.9% of Native American children live in a neighborhood that is "always safe".²⁰

Income/Poverty

A family's income can provide or limit the health-related resources and social opportunities available to children. 42.1% of Native American children (under 18) live below the federal poverty level in 2013.²¹

74% of Native American children (0-17) live below 200% of the federal poverty level in 2013.²²

90% of AI/AN 4th graders qualify for free or reduced lunch.²³

52% of Native American children lived in households where no parent had full-time, year-round employment in 2013.²⁴

The annual median Al/AN household income is \$33,323.²⁵

Education

Educational attainment, performance and persistence have long-term implications for a child's physical and mental health. Education is a reliable predictor for later employment and income which can impact overall health.

Native American students (K-12) make up 10.6% of the population enrolled in public elementary and secondary schools.²⁶

47% of Native American children attend Head Start, preschool and other early education programs ²⁷

43% of 4th grade AI/AN students tested at a "Basic" proficiency level in mathematics in the National Assessment of Educational Progress (NAEP) in 2011. An equal percentage tested "Below Basic"; 13% of 4th grade AI/AN students tested "Proficient"; 1% tested "Advanced."²⁸

35% of 8th grade AI/AN students tested at a "Basic" proficiency level in mathematics in the NAEP in 2011; 58% of AI/AN 8th graders tested "Below Basic" proficiency; 6% tested "Proficient" and 1% tested "Advanced."²⁹

Only 7% of 4th grade AI/AN students passed reading proficiency tests in 2013.³⁰

63% of AI/AN high school students (non-Hispanic) graduated on time.³¹



Tobacco and Alcohol Use

The use of alcohol and tobacco (outside of traditional activities) can lead to behaviors that negatively impact the health of Native American children over time.

Both alcohol and tobacco use and the associated behaviors can contribute to the development of chronic diseases like obesity and type 2 diabetes.

22.2% of Native American high school students reported having five or more drinks in one occasion in the last 30 days.³²

Native American youth who smoked at least 20 of the last 30 days³³:

9th grade: 3.4% 10th grade: 3.0% 11th grade: 5.2% 12th grade: 4.4%

28.4% of Native American high school students have used smokeless tobacco on one or more days in the past month.³⁴

Embracing Indigenous Indicators

Native American children and adults experience unique life and work conditions. Their experiences impact their short- and long-term health outcomes. These experiences can be measured, but incompletely using the six factors or indicators captured in the chart above. Additionally, indigenous indicators are needed to round out the adequate measurement of these experiences and can be seen as protective factors. Below are several such indicators:

- Speaking one's indigenous language;
- Participating in traditional and cultural activities, including the preparation and provision of food;
- Using traditional healing and prevention practices;
- Identifying with or participating in indigenous practices of spirituality; and
- Spending time on home or tribal land.³⁵

These indigenous indicators can reveal the positive impacts of Native Americans' traditional practices, beliefs, customs, history, language and culture.³⁶

Research into identifying and quantifying the effects of indigenous indicators is new and ongoing. Researchers, advocates, and organizations should increasingly support this research. All of us have an opportunity to build partnerships with tribes in the United States to pursue a deeper, more accurate understanding of the indigenous indicators that influence health outcomes for Native Americans.

Recent statistics that support indigenous indicators in New Mexico are:

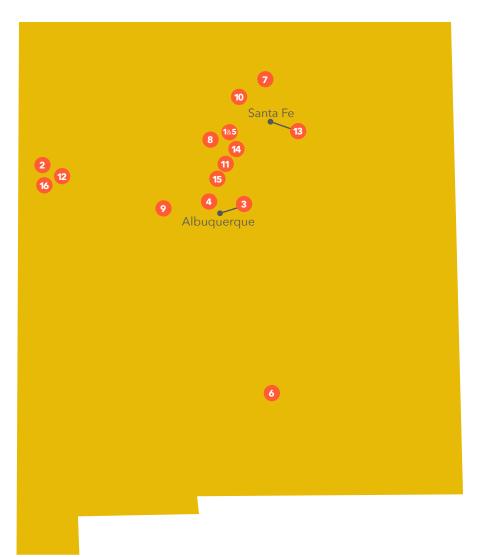
- 75% of Native American 8th grade students knew some or a lot about their own American Indian or Alaska Native traditions and culture.³⁷
- 70% of Native American 8th grade students participated several times a year or at a minimum once a year in ceremonies and gatherings for their own tribe or group.³⁸
- 80% of the families of Native American 8th grade students spoke their American Indian and Alaska Native languages every day or once or twice a week.³⁹



Looking Ahead

Many Native American communities are on the front lines of combating high rates of childhood obesity and type 2 diabetes among their younger generations. Addressing these issues will take more than changing individual health behaviors. Solutions must also engage and influence the social, economic, cultural and environmental determinants that shape children's health. These determinants in Native communities must include the six factors covered in the chart above as well as indigenous indicators. The latter provides a crucial indigenous perspective and shine needed light on the unique historical, social, cultural and political environments that have shaped, and been shaped by, tribes and Native communities.

In New Mexico, many pueblos and tribes as well as public and private organizations have developed programs to prevent childhood obesity and type 2 diabetes in Native American communities. To bring resources, awareness and advocacy to bolster these prevention efforts, the NB3 Foundation continues to create and build partnerships with advocates, foundations,



List of Grantees

- 1) Cochiti Youth Experience, Inc.
- 2) Community Outreach & Patient Empowerment
- 3) First Nations Community HealthSource
- 4) Five Sandoval Indian Pueblos, Inc.
- 5) Keres Children's Learning Center
- 6) Mescalero Apache Tribe
- 7) Picuris Pueblo
- 8) Pueblo of Jemez
- 9) Pueblo of Laguna
- 10) Pueblo of Pojoaque
- 11) Pueblo of San Felipe
- 12) Ramah Navajo School Board, Inc.
- 13) Santa Fe Indian School
- 14) Santo Domingo Tribe
- 15) Tamaya Wellness Center (Santa Ana Pueblo)
- 16) Zuni Youth Enrichment Project

\$1.24M INVESTED TO-DATE

businesses, tribes and Native organizations. However, there is much more work to be done and cultural contexts to consider.

Since 2013, the NB3 Foundation's Native Strong program has provided \$3.4 million through 96 grants to Native American tribes and Native-led non profits in 15 states across the country. These grants are funding healthy weight interventions for Native children by increasing physical activity, promoting healthy nutrition and improving community policies and systems. In New Mexico, \$1.24 million has been invested into 16 communities. The NB3 Foundation is committed to investigating and addressing the complex causes behind the extraordinary growth of obesity and type 2 diabetes among Native American children and youth in this country.

At the end of the day, there are no quick fixes when facing childhood obesity and other health challenges. It will take more than eating a few more vegetables and running extra minutes (although that is a good start and very important).

In fact, to create sustainable progress it will take community-led (driven) strategies and solutions that reflect community values and cultural practices, considerable investments that directly support mentioned indicators and time. In other words, it will require a broad people's movement dedicated to the full return of health for all children and their communities.

Join us in advocating for and investing in opportunities that support Native American children and their communities. Our common goal must be their gaining full access to healthy foods, economic resources, educational experiences, high-quality environments, physical activity opportunities and health-centered policies.

End Notes

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