Strengthening the Health of Future Generations

A Community Health Profile of Urban American Indian and Alaska Native Infants, Children, and Adolescents

Urban Indian Health Institute
A Division of the Seattle Indian Health Board
Acknowledgments

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Terminology

The authors use the terms “Native”, “Indian”, “Indigenous” and “American Indian and Alaska Native” interchangeably throughout this report. The demographic terminology included in source material is referenced when appropriate.

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EXECUTIVE SUMMARY

Children under the age of 18 represent approximately one-quarter of the urban American Indian and Alaska Native (AI/AN) population. Children have always been a valued part of urban AI/AN communities. Indigenous communities recognize that health during infancy, childhood, and adolescence is essential to the development of children into healthy and balanced adults, which in turn contributes to the strength and well-being of their communities and future generations.

Essential developmental periods are specific times throughout childhood in which key growth and changes occur. These developmental periods often involve different physical and psychological needs, cognitive and motor skills, and social relationships as a child matures and encounters new experiences. The well-being of children and youth throughout these developmental periods requires a balance of health across social, physical, mental, and spiritual domains. Additionally, a child’s exposure to various social determinants of health in their built and natural environments, including exposure to risk and protective factors, can have a lasting impact on their immediate and long-term health.

Historical traumas such as residential schools or separating Indigenous children from their families through the foster care system have resulted in health disparities among Indigenous communities. Yet we see more urban AI/AN youth and their families continue to be resilient in the face of adversity and work to reclaim and practice healthy ways of living. Health equity for urban AI/AN infants, children, and adolescents can only be achieved through efforts grounded in culture and traditional knowledge systems, revitalizing Indigenous values, and focusing on communal strengths.
Children under 18 years represent approximately one-quarter of the AI/AN population living in metro areas (24.3%), and children 0–5 years represent 6.0% of the population. Historical trauma, genocide, colonialism, and systemic racism continue to perpetuate health disparities for urban Indigenous youth and increase their risk for poor health outcomes.

| 41.2% of AI/AN 0–17 years living in metro areas live at or below 150% of the federal poverty level. |
| 13.1% of urban AI/AN infants are born preterm—prior to 37 weeks completed gestation. |
| 8.5% of urban AI/AN infants are born low birthweight—less than 5.5 pounds. |
| 7.7% of urban AI/AN children 0–17 years old have experienced being treated or judged unfairly because of their racial or ethnic group. |
| 14.8 per 1,000 AI/AN children 0–17 years old are the victims of maltreatment, including abuse and neglect. |
| 63.8% of domestic violence victimizations of AI/AN children 0–11 years old were done by their parents or stepparents. |
| 27.6% of urban AI/AN adolescents 10–17 years old are considered obese (95th percentile on a growth chart for age and sex). |

Among urban non-Hispanic AI/AN high school students*
- 16.2% rarely or never wear a seatbelt.
- 28.7% rode with a driver in the past month who had been drinking.
- 23.5% had ever used prescription medication without a prescription.
- 13.6% experienced electronic bullying in the past year.
- 35.2% felt so sad or hopeless almost every day for two or more consecutive weeks in the past year that they stopped doing some of their usual activities.
- 15.5% experienced sexual violence in the past year.
- 33.5% had been in a physical fight in the past year.
- 9.5% had carried a gun in the past year besides for hunting or shooting sports.

2558.3 per 100,000 non-Hispanic AI/AN adolescents 10–17 years were arrested in 2019.

287.9 per 100,000 non-Hispanic AI/AN adolescents 13–17 years were committed to or detained in residential placement in 2019.

* High school students among urban school districts participating in the survey.
Urban AI/AN youth and their families continue to be resilient in the face of adversity and work to reclaim and practice healthy ways of living.

18.6% of AI/AN households in metro areas with children under five are multigenerational.

Always or most of the time, families of urban AI/AN children 0–17 years
• stay hopeful in difficult times (96.0%).
• know they have strengths to draw on (86.4%).
• work together to solve their problems (86.2%).

99.9% of urban AI/AN children 6–11 years can share ideas or talk about things that really matter with a parent or other family member somewhat or very well.

87.2% of urban AI/AN children 6–11 years have at least one other adult that knows them well and that they can rely on.

Among AI/AN 4th grade students attending schools in principal cities
• 82.3% knew at least a little about their American Indian tribe or Alaska Native group.
• 49.2% were taught about traditions by family members.
• 51.3% could speak at least a few words of an AI/AN language.
• 53.1% attended an AI/AN ceremony or gathering at least once every few years.

Among AI/AN 8th grade students attending schools in principal cities
• 80.4% knew at least a little about their tribe or group’s history, traditions and culture, and issues important to AI/AN people.
• 64.0% were taught by family members about their AI/AN traditions, ways of life, and customs.
• 54.6% could speak at least a few words of an AI/AN language.
• 62.4% participated in ceremonies or gatherings of their tribe at least once every few years.

84.4% of urban AI/AN adolescents 12–17 years were told always or sometimes that their parents were proud of them in last year.

83.2% of urban AI/AN adolescents 12–17 years participated in two or more school, community, or religious activities.

73.4% of urban AI/AN adolescents 12–17 years said their religious beliefs were an important part of their life.

Health equity will only be achieved when efforts are grounded in culture and traditional knowledge systems, and Indigenous values are centered with a focus on communal strengths.
INTRODUCTION

Urban Indian Health Institute’s mission is to decolonize data, for Indigenous people, by Indigenous people.

Urban Indian Health Institute (UIHI) is one of 12 Tribal Epidemiology Centers (TEC) in the United States funded by the Indian Health Service (IHS) and is a division of Seattle Indian Health Board. UIHI is the only TEC that serves Urban Indian Health Programs (UIHPs) and American Indians and Alaska Natives (AI/AN) residing in urban settings across the nation. UIHI uniquely utilizes the strengths of western science and traditional Indigenous methods to conduct surveillance, research, and evaluation. Through this work, UIHI reclaims research, data, and evaluation as Indigenous values.

Purpose

This report is the first Community Health Profile (CHP) published by UIHI devoted to measuring the health status of AI/AN infants, children, and adolescents residing in urban settings and is meant to both complement existing CHPs published by UIHI and act as a stand-alone report. The term “youth” or “children” in this report refers to individuals aged 17 and younger. Additionally, “infants” refer to those under the age of 1, while “adolescents” refer to individuals between the ages of 12 and 17.

The terms “urban” and “metro” are both used to describe specific geographic areas which are densely developed and populated. As a result, both urban and metro areas may overlap and encompass nearly identical populations. However, the categorizations of urban counties and metro areas are based on two different classification standards. In this report, either urban or metro will be used based on the specific terminology of the data source used. Additionally, the use of the terms metro and urban to describe youth refer specifically to those individuals living in these urban or metro settings.

This report presents health data specific to urban AI/AN youth. It highlights the strengths and positive health outcomes and behaviors of urban AI/AN infants, children, and adolescents. It also examines the frequency, distribution, and magnitude of disease experienced by urban AI/AN youth as measured by the health conditions that most significantly contribute to AI/AN child morbidity and mortality.
Today, approximately 71% of AI/ANs live in urban settings for educational opportunities, employment, health care needs, and a variety of other reasons, resulting in an Indigenous urban population that is enormously diverse and inter-tribal. Improving the health of urban AI/AN youth through effective planning and decision-making requires accurate information about the factors that influence health.

To this end, there is a need for comprehensive estimates of the current socioeconomic, demographic, morbidity, and mortality state of urban AI/AN youth. This report aims to provide aggregated, national estimates for a range of health indicators specific to urban AI/AN youth residing within the United States for the years 2015–2019, providing valuable insight about the unique health needs and experiences of urban AI/AN youth to advocates, health programs, and providers serving these populations. Non-Hispanic Whites (NHWs) are included as the comparison group to assess disparities in these health indicators in recognition of the effects of structural racism on health.

The information provided here is intended to supplement other local health data available. Not all conditions that contribute to the health of urban AI/AN youth are represented in this report. Locally collected data may provide additional information about the health of AI/ANs living in specific service areas. Data presented in this report may be most useful when combined with individual UIHP data, stories from patients and community members, and local surveillance or survey data when available.

More information on definitions, methods, data sources, and limitations can be found in the appendices at the end of this report.

Planning Public Health Programs

Data in this report can be used by organizations working with urban AI/AN infants, children, or adolescents to identify health priorities, allocate resources, and guide the development of innovative programs.

Applying for Funding Opportunities

Data and figures help tell the story of existing resiliencies and health disparities in the AI/AN youth population compared to NHWs. This report may be useful to include as information for research proposals, grant applications, and other funding opportunities. It can also be cited as a reference.

Identifying Gaps in Data

This report may reveal the need to close current gaps in nationally collected data. For example, providers may want to consider pushing their states to link other relevant data to help correctly classify AI/ANs in death records, which helps improve data quality and address racial and ethnic misclassification of AI/AN people. In addition, national surveillance systems can further improve data collection by oversampling AI/ANs in national surveys to have enough statistical power to provide stable estimates.

Conducting Research

Data in this report can be used to generate additional hypotheses for future studies, evaluations, or assessments.
Background

Children are important and celebrated in AI/AN communities—regarded as gifts to be honored and cherished. Indigenous communities recognize that children are the future and will be the carriers of important traditions and ways of being for the next generation. As a culture that values intergenerational knowledge exchange, children are also important teachers. Traditional AI/AN ways of parenting recognize that while children have a lot to learn they also have their own wisdom to share.

Good health during infancy and adolescence is central to the development of children into healthy and balanced adults. This then contributes to the strength and well-being of their communities and future generations. Throughout childhood, there are several essential developmental periods in which key growth and changes occur, such as prenatal development, infancy and toddlerhood, early and middle childhood, and adolescence. These periods involve different physical and psychological needs, cognitive and motor skills, and social relationships as a child matures and encounters new experiences.

While each developmental period is individually important, the transitions between these periods are also critical, as stability and support during these times promote health along a child’s development and lifespan. Indigenous communities have always recognized these various rites of passage during child development. They were often marked by specific ceremonies that have long been held sacred and are being reclaimed as ways of celebrating milestones and providing a sense of belonging in the family and community. These traditions can include naming ceremonies and ceremonies of womanhood, manhood, or personhood when a child reaches adolescence.

Understanding the health of youth within and across these developmental periods requires a holistic and multi-faceted approach to health. Optimal health is only achieved through balance across all domains of well-being: social health, physical health, mental health, and spiritual health.

The health of youth is also greatly influenced by social determinants—the conditions in which people live, learn, work, and play. Evidence from decades of research on the relationship between key social determinants and health outcomes overwhelmingly suggests that greater socioeconomic disadvantage leads to poorer health and extensive inequities within and between populations. These social determinants of health (SDOH) include racism, gender inequity, lack of access to education or employment, poverty, poor-quality health care, and lack of adequate housing. As a result, health is influenced by the built and natural environments in which children reside. Additionally, the cumulative experience of risk and protective factors within these environments can have a lasting impact on a child’s health, including their long-term health into adulthood.
Indigenous knowledge systems have always known a healthy childhood is critical in leading a healthy life. The intergenerational knowledge exchange valued in AI/AN communities also promotes social connectedness across the lifespan to strengthen social health. These traditional values are just two examples of how investing in the health of AI/AN youth extends beyond achieving a western view of health and needs to include traditional ways of being and culture. Many of the health disparities we see today are a result of colonization trying to sever AI/AN communities from these traditional ways through religious indoctrination, boarding and residential schools, and abuses by the foster care system.

Despite historical traumas and ongoing systemic racism, these communities have persisted and continue to stay resilient. They have preserved culture and traditional knowledge in the face of genocide and the dispossession of land. Many have found a sense of community and pride in urban settings, where the sharing and celebration of culture and tradition through language programs, storytelling, songs, art, prayers, and ceremonies serve to pass this Indigenous knowledge to younger generations.
Demographics

In the United States between 2015–2019, the AI/AN population living in metro areas was generally younger than the NHW population in these areas. Youth under 18 years made up a quarter of all metro AI/AN individuals (24.3%) compared to approximately one-fifth of metro NHW individuals (18.4%; Figure 1). Additionally, children ages five years or younger made up 6.0% of the metro AI/AN population compared to 4.9% of the metro NHW population (Figure 2). The proportion of metro AI/AN and NHW youth between 0–5 years and 0–17 years was similar for both males and females.

Figure 1. Population 0–17 years among AI/AN and NHW Living in Metro Areas in the United States, 2015–2019

Source: American Community Survey
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Figure 2. Population 0–5 years among AI/AN and NHW Living in Metro Areas in the United States, 2015–2019

Source: American Community Survey
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
INFANT HEALTH

The health of infants, or individuals in their first year of life, is determined by factors beginning in pregnancy and carrying through birth into the postpartum period. Promotion of healthy behaviors, reduction of risk factors, access to quality medical care, and building safe and supportive family and community environments are all essential to ensuring the best outcomes for infants. There are many rapid periods of development in the first year of life, resulting in many changes and growth for an infant and their family.

Births

Infants born to AI/AN mothers residing in urban counties made up 1.3% of all urban live births in the United States between 2016–2018. NHWs in urban counties represented the largest proportion of urban live births at 48.6% (not shown).

Urban AI/AN women with a live birth in 2016–2018 were significantly younger than urban NHW women (Figure 3). Among urban AI/AN infants, 8.1% were born to teen moms (younger than 20 years) compared to 3.0% of urban NHW infants, and 55.2% of urban AI/AN mothers were between 20–29 years compared to 44.1% of urban NHW.

Conversely, urban NHW had higher proportions of live births for mothers between 30–39 years (49.7% and 34.2%) and 40 years or older (3.2% and 2.6%, respectively) than urban AI/AN. Women who deliver at younger (< 20 years) or older (≥ 40 years) maternal ages have a higher risk of adverse pregnancy and birth outcomes. These can include preterm birth, low birthweight, fetal loss, gestational diabetes, hypertensive disorders of pregnancy, cesarean section delivery, and infant mortality.11–15

* Indicates a significant relationship (p < 0.05)
Source: National Vital Statistics System
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.
Method of Delivery

Significantly more urban AI/AN infants were delivered via vaginal birth (69.9%) than urban NHW infants (69.2%; Figure 4). Significantly fewer urban AI/AN infants were delivered by cesarean section than urban NHW infants (30.1% and 30.8%, respectively). While a life-saving procedure in medical emergencies, cesarean section deliveries have been associated with adverse short and long-term outcomes for both mother and infant and can also result in subsequent risks in future pregnancies, including miscarriage and stillbirth.16–20

Recent efforts in the United States have focused on reducing non-medically indicated cesarean section deliveries, and among AI/AN communities have included reviving traditional birth practices and increasing the availability of culturally attuned services in community birth settings.21 Many of these traditional practices were suppressed by colonization, cultural erasure, reproductive coercion, and the medical industrialization of birth throughout the mid-20th century in the United States.

* Indicates a significant relationship (p < 0.05)
Source: National Vital Statistics System
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.
Pregnancy Support Services

Nearly half of all live births to urban AI/AN women (46.9%) reported receiving program benefits from the Special Supplemental Nutrition for Women, Infants, and Children (WIC) at the time of birth, significantly more than the approximately one in five urban NHW (21.5%) receiving WIC at birth (Figure 5). WIC provides supplemental foods, health care referrals, and nutrition education for low-income pregnant and postpartum women as well as infants and children up to age 5, aiming to safeguard the health of those at risk of inadequate nutrition.22

![Figure 5. Reported Receiving WIC at Birth among Urban AI/AN and NHW in the United States, 2016–2018](image)

* Indicates a significant relationship (p < 0.05)
Source: National Vital Statistics System
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.

Early and regular prenatal care is important in achieving healthy outcomes for mother and infant by allowing for the timely identification and treatment of complications.23 It also provides ongoing support to maintain a healthy pregnancy and prepare for delivery and the postpartum period.23 Typical prenatal care begins in the first trimester of pregnancy, with visits during an uncomplicated pregnancy occurring every 4 weeks for the first 28 weeks, followed by visits every 2 weeks until 36 weeks, and then weekly until delivery.23 Women considered high risk or who encounter medical problems require additional prenatal care visits, depending on their individual condition.23
Significantly fewer urban AI/AN women received prenatal care in the first trimester—the first twelve weeks of pregnancy—compared to urban NHW women (67.9% and 81.2%, respectively; Figure 6). Additionally, significantly more urban AI/AN women received care beginning in the third trimester (6.2%) or no prenatal care at all (2.8%) compared to urban NHW women (3.1% and 1.1%).

A higher proportion of urban AI/AN women also received fewer than six prenatal care visits (15.8%) compared to urban NHW women (7.0%), regardless of when prenatal care began (Figure 7). Barriers to medical care access throughout pregnancy contribute to this disparity in prenatal care. These barriers include insurance coverage, transportation, childcare, and maternal care deserts.24–26 For AI/AN women, this also includes medical distrust resulting from systemic racism and interpersonal discrimination by providers, historic abuses by medical institutions such as forced sterilizations of AI/AN women or infant separation policies, and lack of respectful care that is culturally relevant and appropriate.24–26

Additionally, chronic understaffing and underfunding of the Indian Health Service (IHS) may have exacerbated disparities in prenatal care accessibility and utilization for urban AI/AN women relying on these services.24–26 For urban AI/AN women who do not qualify for IHS, many are left uninsured or forced to find health coverage and care from other sources.24–26
Medicaid was the primary source of payment for 56.3% of urban AI/AN live births compared to 27.2% of urban NHW live births, a significant difference (Figure 8). Medicaid eligibility requirements for pregnant women vary by state, ranging from 133%–375% of the Federal Poverty Level (FPL). Conversely, 66.1% of urban NHW births were paid by private insurance, significantly more than the 33.2% of urban AI/AN births paid by private insurance.
Infant Health Outcomes

Infants who are born early or at low birth weights have increased risks of adverse health outcomes and premature death, including into childhood and beyond. Some require specialized care in neonatal intensive care units (NICU) as well as ongoing therapies to treat associated developmental delays and special health care needs. **Significantly more urban AI/AN infants were born preterm—or before 37 completed weeks of gestation—compared to urban NHW infants (13.1% and 10.0%, respectively; Figure 9). Additionally, a significantly higher proportion of urban AI/AN infants were born at low birthweight,** weighing less than 2500 grams or 5.5 pounds (5 pounds, 8 ounces), than urban NHW infants (8.5% and 6.8%, respectively; Figure 10).

![Figure 9. Preterm Births (< 37 Weeks Gestation) among Urban AI/AN and NHW in the United States, 2016–2018](image)

* Indicates a significant relationship (p < 0.05)
Source: National Vital Statistics System
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.

Both preterm birth and low birthweights have been associated with various maternal risk factors such as smoking during pregnancy, young and old maternal age, pregnancy following in vitro fertilization (IVF), being under or overweight, infection, and diabetes or hypertension, although other factors include pregnancies of multiples, a family history of preterm birth, domestic violence, environmental pollution, and low socioeconomic status. Increased prevalence of preterm birth and low birthweight among urban AI/ANs may be connected to maternal health risk factors, barriers in care, and increased socioeconomic stress and environmental risk factors experienced by AI/AN mothers.
As seen in Figure 11, a **significantly higher proportion of urban AI/AN infants required mechanical ventilation, or breathing assistance, for six hours or longer after delivery.** Among urban AI/AN infants, 1.7% required extended ventilation compared to only 1.5% of urban NHW.
Infants are admitted to the NICU when they require specialized care after delivery, including infants born preterm, low birthweight, or with medical conditions that put them at higher risk for adverse health outcomes. **Significantly more urban Al/AN infants were admitted to the NICU (10.6%) than urban NHW infants (8.7%; Figure 12).** The higher proportions of urban Al/AN infants admitted to the NICU or that need extended ventilation are influenced by the higher proportion of urban Al/AN infants born preterm or at low birth weights.

* Indicates a significant relationship (p < 0.05)
Source: National Vital Statistics System
Al/AN includes all Al/AN regardless of multiple races or Hispanic ethnicity.
Infant Mortality

The infant mortality rate is the number of deaths of infants between 0 and 364 days old, per 1,000 live births in the same year. From 2016–2018, the infant mortality rate of urban AI/AN infants was 6.6 deaths per 1,000 live births (Figure 13). This was significantly higher than the infant mortality rate among urban NHW infants, which was 4.4 per 1,000 live births. Infant mortality was significantly higher for both male and female urban AI/AN infants compared to urban NHW (Figure 14). Additionally, male infants had a significantly higher infant mortality rate than female infants for both urban AI/AN and NHW infants.

* Indicates a significant relationship (p < 0.05)
Source: CDC WONDER Online Database - Underlying Cause of Death
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
It should be noted that mortality rates of urban AI/AN infants presented here are likely under-representations due to racial misclassification. Death certificate race data is often recorded by coroners, funeral directors, or medical examiners based on limited information or appearance only, resulting in misclassification. Additionally, the limitation of AI/AN identification to a single race, excluding the many multi-racial AI/AN individuals in the population, also restricts the ability to correctly estimate the impact of infant mortality within these communities.

Figure 15 shows the infant mortality rate for the leading underlying causes of infant death. For urban AI/AN infants, the leading underlying causes of death included congenital malformations, deformations, and chromosomal abnormalities (127 deaths per 100,000 live births); disorders related to short gestation and low birthweight (94 per 100,000 live births); sudden infant death syndrome (SIDS; 74 per 100,000 live births); accidents (unintentional injuries; 62 per 100,000 live births); maternal factors and complications of pregnancy and delivery (52 per 100,000 live births); and accidental suffocation and strangulation in bed (48 per 100,000 live births).
Compared to urban NHW infants, urban AI/AN infants had significantly higher mortality rates due to disorders related to preterm birth and low birthweight, sudden infant death syndrome, accidents (unintentional injuries), and accidental suffocation and strangulation in bed (Figure 15). Many of these causes are preventable and could be addressed by programs targeted at injury prevention, safe sleep position and conditions, and prevention and management of preterm birth. Programs grounded in cultural knowledge that promote wellness such as cradleboards as a safe sleep surface as well as adoption of other traditional practices that promote healthy parenting during infancy may also decrease these preventable causes of infant mortality.
CHILD HEALTH

After infancy, childhood may be the time in life with the most rapid developmental changes. Children ages 1–11 remain vulnerable to a variety of external factors and depend on a safe and supportive family and community environment to grow and thrive. For AI/AN children in urban settings, introduction to culture and connection with community and family can help promote lifelong health and balance.

Social Health

Socioeconomic Status

Eligibility for Medicaid and Children’s Health Insurance Program (CHIP) as well as other programs and benefits are based on income as a percentage of the FPL. Medicaid eligibility levels vary by state: eligibility for children 0–1 ranges from 138%–375% FPL, while eligibility for children 1–18 ranges from 133%–319% FPL. Additionally, in applicable states, eligibility for CHIP ranges from 185%–400% FPL, and eligibility requirements for pregnant women to receive Medicaid range from 133%–375% FPL.

Among all urban AI/AN youth under the age of 18 years, 41.2% were less than or equal to 150% of the FPL, compared to 16.5% of all urban NHW under 18 years (not shown). Over a quarter of urban AI/AN youth between 0–17 years were at or below 100% of the FPL (27.6%) and 10.3% were between 101% and 138% FPL (Figure 16). Conversely, 9.9% of urban NHW between 0–17 years were at or below 100% FPL, and 4.9% were between 101% and 138% FPL.

High levels of poverty among urban AI/AN children are the direct result of colonization, forced migration, broken treaties, and ongoing systematic oppression experienced by these communities. Urban AI/AN children living at or below the FPL are more likely to experience barriers to receiving basic necessities such as nutritious food and safe housing, difficulty accessing necessary medical and mental health care, low academic achievement, and increased behavioral problems and developmental difficulties. These outcomes can contribute to poverty status in adulthood through education, employment, and disability, thus perpetuating a cycle of poverty.
Figure 16. Federal Poverty Level of Children 0–17 years among AI/AN and NHW in Metro Areas in the United States, 2015–2019

Source: American Community Survey
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
Food Security

The ability to afford enough food to eat was similar for both families of AI/AN and NHW children living in metro areas in the United States from 2017–2019: 93.1% of metro AI/AN reported always being able to afford enough to eat, similar to 96.5% of metro NHW (Figure 17). From 2015–2019, nearly a third of metro AI/AN households with children 0–5 years (32.9%) reported receiving Supplemental Nutrition Assistance Program (SNAP) benefits—also known as food stamps—compared to 11.6% of metro NHW households with children 0–5 years; no significance test was performed on this indicator (Figure 18).

Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Source: American Community Survey
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
While families may be able to afford enough food to eat, they may still be considered food insecure, or experience limited or uncertain availability of healthy foods, due to the high cost of options or a lack of availability and selection in low-income communities. \(^3\) A 2017 survey found that AI/ANs living in urban areas were more likely to experience food insecurity than AI/ANs in rural areas. \(^3\) Food insecurity among urban AI/AN people and families may be compounded by the inability to access the services and extensive food sharing provided by and within tribes as well as federally funded commodity food programs that serve federally recognized tribes in rural and reservation-based communities. \(^3\) Additionally, urban AI/ANs may have difficulty obtaining culturally appropriate or traditional foods in urban settings, either due to cost or lack of availability. \(^3\)

**Housing**

While over 70% of metro NHW households with children 0–5 years owned their home, only 42.0% of metro AI/AN households with children 0–5 years owned their home (Figure 19); this relationship was not tested for statistical significance. The stability provided by homeownership may lead to a higher-quality home environment, improved academic outcomes, and fewer behavioral problems for children \(^3\) as well as being an indicator of increased socioeconomic status and associated protective factors.

![Figure 19. Home Ownership of Households with Children 0–5 years among AI/AN and NHW in Metro Areas in the United States, 2015–2019](image)

Source: American Community Survey

AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Only includes households with respondents reporting living with their own children, 0–5 years

A national assessment of urban AI/AN household needs found that they were more likely to experience overcrowding and physical condition problems than all households in urban areas. \(^3\) The assessment also found that urban AI/AN households had a greater share of high-cost home purchase and refinance loans as well as higher loan denial rates than the average for minority and NHW borrowers across income levels. \(^3\) This results in a higher rate of housing-cost burden and inferior housing conditions, along with a lack of targeted assistance and few designated funding sources to support housing services for AI/AN people living off tribal land. \(^3\)
Internet Access

In 2019, 67.6% of 4th-grade AI/AN students attending schools within principal cities in urban areas (“city schools”) across the United States reported having internet access and either a computer or tablet at home (Figure 20). Nearly a fifth (18.9%) of 4th-grade AI/AN students in city schools reported having internet access but no computer or tablet at home, while 10.6% reported having a computer or tablet but no internet access, and 2.8% reported having neither a computer or tablet nor internet access at home. The ongoing COVID-19 pandemic has demonstrated more than ever that broadband access and internet connectivity is a social determinant of health and impacts telehealthcare access, employment and education, access to credible health information, and the ability to enroll in health insurance and other benefits. This lack of access exacerbates existing health disparities by disproportionately affecting those who are already the most vulnerable.

Figure 20. Computer/Tablet and Internet Access at Home among 4th-grade AI/AN Students attending City Schools in the United States, 2019

Source: National Indian Education Study (NIES)
Family Characteristics and Social Support

Almost one-fifth of metro AI/AN households with children 0–5 years (18.6%) were reported as multigenerational (three or more generations living in the same household), while less than one-tenth (8.9%) of metro NHW households with children 0–5 years were multigenerational (Figure 21). Children in multigenerational households may experience a more socially enriched home environment, providing early cognitive development and other social skills.37 For urban AI/AN children especially, access to grandparents and other family members also provides increased opportunity for tradition and culture sharing, which contributes to and protects child health.

When asked about how families responded all or most of the time when faced with problems, 96.0% of metro AI/AN children 0–17 years reported that their family stayed hopeful even in difficult times, 86.4% reported knowing they have strengths to draw on, 83.4% reported talking together about what to do, and 86.2% reported working together to solve their problems (Figure 22). These behaviors may help build resilience and promote healthy relationships and the well-being of children.
Positive communication between children and their parents or other adults is key to healthy relationships. It protects children from health risks and improves school performance. Significantly more AI/AN children 6–11 years living in metro areas were reported as being somewhat or very able to share ideas or talk about things that really matter with a parent than NHW children 6–11 years in metro areas (99.9% and 97.5%, respectively; Figure 23).
In addition to parents and guardians, 87.2% of metro AI/AN children 6–11 years had at least one other adult in their school, neighborhood, or community that knew the child well and on whom the child could rely for advice and guidance (Figure 24).

**Figure 24. Child Has At Least One Other Non-Family Adult That Knows Them Well and Can Rely On among AI/AN and NHW Children 6–11 years in Metro Areas in the United States, 2017–2019**

![Bar chart showing the percentage of children 6-11 years who had at least one other adult that knew them well and on whom they could rely. The chart compares American Indian / Alaska Native (AI/AN) and Non-Hispanic White (NHW) children. 87.2% of AI/AN children and 94.4% of NHW children had at least one such adult.]

Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
Adverse Childhood Experiences

Adverse childhood experiences (ACEs) are potentially traumatic events of abuse and household dysfunction that occur in childhood. Examples of ACEs include experiencing physical or psychological abuse often by a parent or adult in the household as well as living with anyone who was an alcoholic or mentally ill, witnessing domestic violence, or having a household member go to prison. Historical loss-associated symptoms, perceived discrimination, and structural racism have also been identified as contributing factors to ACEs among Indigenous children and youth.

Exposure to ACEs can result in trauma and affect the way a child perceives their environment, including their sense of stability, safety, and ability to bond with others. Additionally, ACEs have been associated with adverse long-term health outcomes such as mental illness, substance use, and other chronic health problems later in life. ACEs can also affect education, employment, and earning outcomes as adults with disproportionate impacts observed among communities of color.

Figure 25. Adverse Childhood Experiences among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019

- Parent or guardian served time in jail: 7.7% AI/AN, 5.8% NHW
- Saw or heard parents or adults slap, hit, kick, punch one another in the home: 7.6% AI/AN, 4.5% NHW
- Treated or judged unfairly because of his or her race or ethnic group: 1.3% AI/AN, 7.7% NHW

* Indicates a significant relationship (p < 0.05)  
† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.  
Source: National Survey of Children’s Health  
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
This report presents data on only three of the ten most commonly recognized ACEs. Among metro AI/AN children 0–17 years, 7.7%* experienced the incarceration of a parent or guardian and 7.6%* saw or heard parents or other adults physically hurt one another in the home (Figure 25). These proportions were similar to metro NHW children 0–17 years (5.8% and 4.5% respectively). However, a significantly higher proportion of metro AI/AN children 0–17 years experienced being treated or judged unfairly because of their race or ethnic group (7.7%*) compared to metro NHW children 0–17 years (1.3%)†.

**Physical Health**

Childhood obesity—when a child is above the normal or healthy weight for their age and height—can be influenced by behavior, genetics, maternal health conditions, and community and environmental factors.41 The ability to maintain a healthy weight requires safe spaces to play and exercise, access to healthy and affordable food options, environments free of unhealthy food marketing to kids, and peer and social support to make healthy choices.41 Unfortunately, many of these key protective factors are withheld from many communities of color, including urban AI/AN children, by policy and market decisions impacting funding, demand, and services in these neighborhoods.41 Poor city planning, food deserts, increased violence, lack of funding for school physical education or sports programs, and no safe community recreational areas all contribute to difficulties urban AI/AN children and their families face in making healthy decisions and achieving or maintaining a healthy weight.41

* Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
† While there is a statistical significance between both groups, the large relative standard error for the AI/AN estimate means that the proportion presented here may not necessarily represent the true value in the population and should thus be interpreted with caution.
When asked how often children 6–11 years old had been physically active for at least 60 minutes a day in the past week, 45.1% of metro AI/AN children reported being physically active for four or more days compared to 63.9% of metro NHW children; this difference was not significant (Figure 26).

![Figure 26. Child Was Physically Active for At Least 60 Minutes a Day for 4 or More Days in Past Week among AI/AN and NHW Children 6–11 years in Metro Areas in the United States, 2017–2019](image)

Source: National Survey of Children's Health

AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

A person’s body mass index (BMI) is a method of screening used to identify those at increased risk of weight-associated health issues, although it is not a direct correlation to percent body fat or other more specific measures of adiposity. For children and teens, BMI is based on where that individual falls on the distribution of children of their age and sex. These distributions are presented in growth charts that allow for assessing weight and height change during childhood growth and development.
Among AI/AN children 10–17 years residing in metro areas, 27.6% were considered obese—had a BMI in the 95th percentile or higher on the CDC growth chart (Figure 27). This was significantly higher than the proportion of metro NHW children 10–17 years with obesity (11.0%). There was no significant difference in the proportions of metro AI/AN and NHW children 10–17 years who had a normal weight BMI (56.9% and 68.5%, respectively). Additionally, there was no significant difference between metro AI/AN and NHW children 10–17 years with a BMI considered overweight (11.1%* and 13.6%, respectively).

![Figure 27. Body Mass Index Percentile on CDC Growth Chart among AI/AN and NHW Children 10–17 years in Metro Areas in the United States, 2017–2019](image)

* Indicates a significant relationship (p < 0.05)
† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Obesity in childhood has been associated with high blood pressure, high cholesterol, insulin resistance, type 2 diabetes, and cardiovascular and breathing problems.26,41,43,44 It is also related to low self-esteem, bullying, self-reported poor quality of life, anxiety, and depression.26,41,43,44 Obesity in childhood increases the risk of obesity in adulthood along with other disease risk factors and a higher likelihood of having their own children become overweight or obese.26,41,43,44

* Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Interactions with and Access to Medical and Dental Care

Access to preventative health care, like well-child visits or annual physicals, provides opportunities for detection and treatment of disease as well as promotion of healthy behaviors and counseling to reduce childhood injuries.\textsuperscript{45,46} In the 12 months prior, 92.1\% of metro AI/AN children 0–17 years had a preventive medical check-up such as an annual or sports physical or well-child visit. Similarly, 96.3\% of metro NHW children 0–17 years also had a preventive check-up (Figure 28).

![Figure 28. Had a Preventive Check-Up in Past Year among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019](image)

Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Preventive health visits may reduce emergency department visits and hospitalizations.\textsuperscript{45} A statistically similar proportion of metro AI/AN and NHW children 0–17 years had at least one visit to a hospital emergency room in the prior year (11.8\% and 16.7\%, respectively; Figure 29). Barriers to high-quality preventive care and other necessary medical care can include lack of time, transportation, difficulty navigating the health care system, and lack of service options available locally.\textsuperscript{26,45–47} Additionally, families of AI/AN children may experience additional barriers such as lack of clinician awareness or sensitivity, language barriers, barriers limiting parents’ agency and ability to advocate for their children, and care that is neither culturally attuned nor centered.\textsuperscript{26,45–47} Some families of urban AI/AN children may wait to travel back to their tribal lands to receive care at their tribal or IHS clinic rather than navigate new healthcare or insurance systems.
Another key factor in health care access for children, including recommended preventive care, is health insurance status. The percent of metro AI/AN children 0–17 years with no health insurance was three times the proportion of uninsured metro NHW children (10.0% and 3.3%, respectively). While only 23.5% of metro NHW children 0–17 years had public health insurance, over twice as many (52.8%) metro AI/AN children 0–17 were publicly insured (Figure 30; no significance test conducted).
There were similar proportions of metro AI/AN and NHW children 0–17 years whose families reported having problems paying any of the child’s medical or health care bills in the past year (23.9%* and 13.4%, respectively; Figure 31).

**Figure 31. Family Had Problems Paying Any of Child’s Medical or Health Care Bills in Past Year among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019**

† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Routine access to quality preventative care allows for providers and families to build relationships and trust, which in turn empowers parents to be involved in medical decisions that best meet the needs of their child while voicing questions or concerns.48 Similarly, a personal doctor or nurse is a health professional who knows the child well and is familiar with the child's health history, often helping to coordinate necessary care from specialists while also providing consistency and continuity of care.49

**Significantly more metro NHW children 0–17 years had at least one health care provider that they considered their personal doctor or nurse (78.5%) compared to metro AI/AN children 0–17 years (64.1%; Figure 32). Difficulties in identifying a personal care provider can be compounded among urban AI/AN children by lack of available services in their area, a lack of funding within the IHS system, high turnover among providers, changes or gaps in insurance coverage, and issues finding culturally attuned and sensitive care.5,50,51**
Oral health is an important part of a child’s overall wellness and physical health, and forming good habits like toothbrushing and regular dental check-ups can promote healthy teeth throughout life.\textsuperscript{52–54} Among AI/AN children 0–17 years in metro areas, 89.1\% received a dental check-up and 86.2\% received a dental cleaning in the past year (Figure 33 and Figure 34). Similarly, 94.8\% of metro NHW children 0–17 received a dental check-up and 92.3\% received a dental cleaning in the past year. Access to and utilization of oral health care can depend on health literacy and oral health beliefs as well as dental insurance coverage issues and provider shortages.\textsuperscript{55,56} Additionally, children with mental health disorders were more likely to experience oral health problems.\textsuperscript{57}
Figure 34. Dental Cleaning in Past Year among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019

Source: National Survey of Children’s Health

AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
Mental Health

Mental Health Conditions

Mental health in childhood is important to overall health. It impacts development, social skills, and coping. Mental health issues beginning in childhood can continue into adulthood, especially when children lack access to necessary mental health care and treatment. While approximately 3–4% of both metro AI/AN and NHW children 0–17 years were ever told they had depression by a doctor, other health care provider, or educator (Figure 35), significantly fewer metro AI/AN children 0–17 years were told they had anxiety (4.9%*†) compared to metro NHW children 0–17 years (9.7%; Figure 36). Several factors may have a protective role in AI/AN children’s mental health, including secure attachment, healthy traditional behaviors, reliable community support, participation in ceremonies, cultural connectedness, self-esteem, and positive self-image.5,60,61

**Figure 35. Ever Told Child has Depression among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019**

![Bar chart showing percentage of children told they have depression](chart.png)

* Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
† While there is a statistical significance between both groups, the large relative standard error for the AI/AN estimate means that the proportion presented here may not necessarily represent the true value in the population and should thus be interpreted with caution.
**Figure 36. Ever Told Child has Anxiety among AI/AN and NHW Children 0–17 years in Metro Areas in the United States, 2017–2019**

* Indicates a significant relationship (p < 0.05)
† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.

Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
Maltreatment and Violence*

AI/AN children experience higher levels of violence and are more often exposed to other traumatic events in their communities. These traumatic events are often the direct result of historical and intergenerational trauma that can perpetuate a cycle of violence.

According to the Office of Juvenile Justice and Delinquency Prevention, child maltreatment “occurs when a caretaker is responsible for, or permits, the abuse or neglect of a child.” Non-Hispanic AI/AN children 0–17 years were the victim of child maltreatment (15.2 per 1,000 children) at nearly twice the rate than NHW children 0–17 years (8.2 per 1,000 children; Figure 37); this difference was statistically significant.

* Indicates a significant relationship (p < 0.05)

Figure 37. Rate of Maltreatment Victimization among NHAI/AN and NHW Children 0–17 years in the United States, 2019

* Data on maltreatment, domestic violence, and all violent victimizations are not limited to children living in urban or metro areas of the United States and are likely under-representations due to gaps in reporting and jurisdictional authority that impact the estimates of violence in Indigenous communities.62
Domestic violence victimizations are incidents of the use or threat of force against the child by a parent, stepparent, sibling, stepsibling, grandparent, other family member, or significant other. For domestic violence victimizations of non-Hispanic AI/AN and NHW children 0–11 years, parents or stepparents were the most common offender (63.8% and 61.8%, respectively; Figure 38). A significantly higher proportion of offenders of domestic violence victimizations among NHW children 0–11 years were siblings or stepsiblings, compared to non-Hispanic AI/AN children 0–11 years (11.4% and 7.3%, respectively). Otherwise, the distribution of domestic violence by the relationship of the child with the offender was similar for both non-Hispanic AI/AN and NHW children.

![Figure 38. Relationship to Offender among Domestic Violence Victimization of NHAI/AN and NHW Children 0–11 years in the United States, 2016](image)

The overall rate of all violent victimizations was significantly lower for non-Hispanic AI/AN children 0–11 years (142.5 per 100,000) compared to NHW children (196.1 per 100,000; not shown). The rate of violent victimization among non-Hispanic AI/AN females ages 0–11 was 159.0 per 100,000, significantly higher than the rate of violent victimization among non-Hispanic AI/AN males ages 0–11 (126.1 per 100,000; Figure X).
Simple assault accounted for the largest proportion of violent victimizations for both non-Hispanic AI/AN and NHW children 0–11 years, followed by aggravated assault and fondling (Figure 40). Non-Hispanic AI/AN children 0–11 years had significantly higher proportions of simple assault (44.9%), aggravated assault (20.3%), and kidnapping (5.3%) than NHW children 0–11 years (38.2%, 13.2%, and 2.5%, respectively). Conversely, non-Hispanic AI/AN children 0–11 years had significantly lower proportions of fondling (17.6%), intimidation (3.4%), and sodomy (2.7%) than NHW children 0–11 years (21.6%, 12.0%, and 4.7%, respectively).

* Based on < 20 events; interpret with caution, proportion may be unreliable.
Violence against children directly conflicts with the traditional values of Indigenous communities. It is caused by centuries of cultural and physical trauma perpetuated on AI/AN communities through colonization and genocide along with systematic dispossession of land, culture, family, and identity.\textsuperscript{5} The introduction of AI/AN parents to the use of violence and discipline with their children has been documented to be the direct result of colonization and instruction received from western influences.\textsuperscript{63} Additionally, loss of extended family and community through migration to urban settings has removed additional protective factors of social and cultural connectedness while also resulting in higher socioeconomic risk and stress. Lack of prosecution, prejudice within the criminal justice system, and institutional racism in dealing with violence within these communities all contribute to the ongoing high rates of violence experienced by urban AI/AN children.
**Spiritual Health**

For urban AI/AN children, culture is prevention, and thus spiritual and cultural health contribute to overall health. Spiritual health includes practices such as traditional healing, connection to community, religion, cultural pride, cultural values, and traditions. Strong spiritual health can build resilience and serve as a protective factor against substance use, violence, and emotional or mental health issues and illnesses.$^{61,64,65}$ In one study of AI/AN youth, authors found that increasing protective factors was more effective at reducing the probability of suicide attempts than just decreasing risk factors.$^{64}$

**Approximately 80% of 4th-grade AI/AN students in city schools in urban settings reported knowing at least a little about their American Indian tribe or Alaska Native group** (Figure 41): 27.1% reported knowing a little, 32.9% reported knowing some, and 22.3% reported knowing a lot.

![Figure 41. Amount Known About Their American Indian Tribe or Alaska Native Group among 4th-grade AI/AN Students attending City Schools in the United States, 2019](source)

Source: National Indian Education Study (NIES)

Nearly half of 4th-grade AI/AN students at city schools (48.9%) reported that family members taught them most about what they know of AI/AN history (Figure 42), 49.2% reported family members taught them most of what they know about AI/AN traditions, ways of life, and customs (Figure 43), and 38.7% reported family members taught them most of what they know about AI/AN arts and crafts (Figure 44).
Tribal representatives or elders were said to have taught 6.0%* of students the most about AI/AN history, 3.9%* of students the most about AI/AN traditions, and 6.2%* of students the most about AI/AN arts and crafts. Between 11.4% and 18.9% of these students reported that no one taught them about AI/AN history, traditions, or arts and crafts.
Approximately one in seven 4th-grade AI/AN students in city schools reported being able to speak (15.3%) or read (13.2%) an AI/AN language well (Figure 45 and Figure 46), while approximately a third reported being able to speak or read a few words (36.0% and 31.0%, respectively). Nearly half of students reported not being able to speak (48.7%) or read (55.9%) an AI/AN language.
Approximately half of 4th-grade AI/AN students attending schools in cities attend an AI/AN ceremony or gathering at least once every few years (Figure 47): 20.5% reported attending every few years, 17.8% reported attending once a year, and 14.8% reported attending several times a year.

Source: National Indian Education Study (NIES)
Mortality

Urban AI/AN children between 1 and 17 years had a significantly lower child mortality rate in 2016–2018 compared to urban NHW children 1–17 years, 14.3 per 100,000 children and 17.8 per 100,000 children, respectively (Figure 48). Similarly, the child mortality rates for urban AI/AN children 1–4 years (16.8 per 100,000) and 10–14 years (8.8 per 100,000) were significantly lower than the mortality rates for urban NHW children 1–4 years (20.9 per 100,000) and 10–14 years (13.3 per 100,000; Figure 49). The mortality rate of children 5–9 years was similar for both urban AI/AN and NHW (9.2 and 9.7, respectively). Urban AI/AN children 1–4 years had the highest mortality rate across their age groups, significantly higher than the mortality rates of both urban AI/AN children 5–9 years and 10–14 years.

Figure 48. Child Mortality Rate (1–17 years) among Urban AI/AN and NHW in the United States, 2016–2018

* Indicates a significant relationship (p < 0.05)
Source: CDC WONDER Online Database – Underlying Cause of Death
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

It should be noted that mortality rates of urban AI/AN children presented here are likely under-representations due to racial misclassification. Death certificate race data is often recorded by coroners, funeral directors, or medical examiners based on limited information or appearance only, resulting in misclassification.²⁹ Even when next-of-kin are consulted, they may not answer as the decedent would have.²⁹ Additionally, the limitation of AI/AN identification to a single race, excluding the many multi-racial AI/AN individuals in the population, also restricts the ability to correctly estimate the impact of child mortality within these communities.
Urban AI/AN children 1–17 years had significantly lower mortality rates for both females (10.8 per 100,000 children) and males (17.7 per 100,000) compared to urban NHW females (14.2 per 100,000) and males (21.2 per 100,000) ages 1–17 years (Figure 50). The female child mortality rate was significantly lower than males among both urban AI/AN and NHW children 1–17 years.
Child mortality due to cancer was significantly lower among urban AI/AN children 1–17 years compared to urban NHW children (Figure 51). Urban AI/AN children had a cancer mortality rate of 1.1 per 100,000 children 1–17 years, while urban NHW children had a cancer mortality rate of 2.2 per 100,000.

* Indicates a significant relationship (p < 0.05)
Source: CDC WONDER Online Database – Underlying Cause of Death
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

The mortality rate of child deaths due to injuries, including unintentional injuries (accidents), intentional self-harm (suicides), and assault (homicides) was similar among urban AI/AN children 1–17 years (8.7 per 100,000 children) and urban NHW children 1–17 years (9.0 per 100,000 children; not shown). The mortality rate of unintentional injuries among urban AI/AN children 1–17 years was 4.7 per 100,000 and for urban NHW children 1–17 years was 5.2 per 100,000 (Figure 52). The suicide mortality rate among children 1–17 was 2.7 per 100,000 urban AI/AN children and 2.9 per 100,000 urban NHW children. Lastly, the mortality rate of homicides was 1.3 per 100,000 urban AI/AN children 1–17 years and 0.9 per 100,000 urban NHW children 1–17 years.
The mortality rate due to child maltreatment was similar among non-Hispanic AI/AN and NHW children 0–17 years (Figure 53). The mortality rate of deaths due to child abuse and neglect among non-Hispanic AI/AN was 2.1 per 100,000 children 0–17 years* and among NHW was 2.2 per 100,000 children 0–17 years. These mortality rates were not limited to urban or metro populations.

Source: CDC WONDER Online Database – Underlying Cause of Death
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

† Based on < 20 events; interpret with caution, rate may be unreliable.

Source: Administration on Children, Youth, and Families. Child Maltreatment 2019

* Based on < 20 events; interpret with caution, rate may be unreliable.
Among injury deaths of urban AI/AN and NHW children 1–17 years, the three leading mechanisms of injury were motor vehicle accidents, suffocation, and firearm (Figure 54). Urban AI/AN children 1–17 years had mortality rates of 2.4 per 100,000 children for motor vehicle traffic injury, 2.2 per 100,000 for suffocation, and 1.4 per 100,000 for firearm injury. Urban NHW children 1–17 years had similar rates for all three mechanisms: 2.4 per 100,000 children for motor vehicle traffic injury, 1.7 per 100,000 for suffocation, and 1.9 per 100,000 for firearm injury. Injury prevention programs may encompass a series of strategies, including but not limited to the use of seat belts and age-appropriate child passenger restraints such as car seats or booster seats, safe sleeping environments, training for child CPR, and the proper storage of firearms to prevent child access.

![Figure 54. Child Mortality Rate (1–17 years) by Mechanism of Injury among Urban AI/AN and NHW in the United States, 2016–2018](source)

Source: CDC WONDER Online Database – Underlying Cause of Death
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.
ADOLESCENT HEALTH

The phase of life between childhood and adulthood is known as adolescence. This can range from roughly 10 years to 19 years; however, this report is specifically focused on 12–17 years of age. As a critical period of development, adolescence includes rapid changes in physical, psychosocial, and cognitive growth as well as the introduction of new challenges and sensitivities in the transition to adulthood. Adoption of healthy behaviors during this period play a crucial role in developing a foundation of health that will continue throughout their lives.

Social Health

Relationships with Adults and Social Support

Positive communication and relationships between adolescents and their parents or other adults are key to healthy future relationships. They also act as protective factors against health risks and can improve school performance and other outcomes. Among urban AI/AN adolescents 12–17 years, 84.4% responded that in the past year, their parents always or sometimes told them they were proud of them for something they had done. This was significantly lower than among urban NHW adolescents 12–17 years (87.6%; Figure 55).

Figure 55. Told by Parents Always or Sometimes That They are Proud of Them in Past Year among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018

* Indicates a significant relationship (p < 0.05)
Source: National Survey on Drug Use and Health
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.
When asked if they would have anyone to turn to if they wanted to talk to someone about a serious problem, including significant others and family members, 5.1% of urban AI/AN adolescents 12–17 years reported that they had no one to talk to (Figure 56). This was significantly higher than 4.0% of urban NHW adolescents 12–17 years. One contributing factor to lower levels of social connectedness could be living away from tribal lands and reservation communities or lacking access to supportive community spaces for AI/AN adolescents in urban areas.

Figure 56. Would Have No One to Talk About a Serious Problem among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018

* Indicates a significant relationship (p < 0.05)
Source: National Survey on Drug Use and Health
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.

Participation in Youth Activities

Adolescents who participate in extracurricular activities demonstrate higher levels of academic achievement and positive educational experiences, have increased self-confidence and other character development, learn teamwork and communication skills, and experience increased social connection through community involvement such as volunteering. Among urban AI/AN adolescents 12–17 years, 83.2% reported participating in two or more youth activities, including school-based, community-based, church- or faith-based, or other activities (Figure 57). In comparison, significantly more urban NHW adolescents 12–17 years participated in two or more youth activities (87.4%).
Figure 57. Participated in Two or More Youth Activities in Past Year among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018

* Indicates a significant relationship (p < 0.05)
Source: National Survey on Drug Use and Health
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.
Physical Health

Participation in Sports

Participation in youth sports can contribute to positive immediate and long-term health outcomes of adolescents, including improved mental health, self-esteem, confidence, and cognitive performance; having a healthy weight, and having a higher quality of life. Participation also reduces the risk of substance use, cancer, and diabetes. Similar proportions of AI/AN and NHW adolescents 12–17 years living in metro areas participated on a sports team or took sports lessons in the past year (Figure 58). Just over two-thirds of metro AI/AN adolescents (67.3%) played sports compared to 61.3% of metro NHW adolescents.

**Figure 58. Participated on a Sports Team or Took Sports Lessons in Past Year among AI/AN and NHW Adolescents 12–17 years in Metro Areas in the United States, 2017–2019**

Source: National Survey of Children’s Health
AI/AN includes only single-race AI/AN, regardless of Hispanic ethnicity.

Risk Behaviors

Risk behaviors in adolescence are associated with many factors including socioeconomic status, peer influence, and social norms. These risk behaviors include aspects of motor vehicle safety, sexual risk-taking, substance use, weapon-related violence, and illegal behavior. There are a variety of environmental and individual risk factors associated with adolescent risk behaviors. Adolescents with mental and emotional problems may be more attracted to risky behaviors that contribute to additional negative mental health outcomes.
The rate of non-Hispanic AI/AN high school students in 18 urban school districts reporting rarely or never wearing a seatbelt when riding in a car driven by someone else (16.2%) was over three times the rate of urban NHW high school students (5.3%; Figure 59). This was a significant difference. Additionally, significantly more non-Hispanic AI/AN high school students in 22 urban school districts reported riding in a car driven by someone who had been drinking alcohol (28.7%) compared to urban NHW high school students (16.0%; Figure 60).
Among those who reported being currently sexually active—having had sex in the past three months—significantly more NHW high school students in 23 urban school districts reported having used no method of contraception during their last sexual encounter (10.5%), compared to only 4.4%* of urban non-Hispanic AI/AN high school students (Figure 61).

* Indicates a significant relationship (p < 0.05)
† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

Figure 61. Used No Method of Contraception During Last Sex among Currently Sexually Active NHAI/AN and NHW High School Students in 23 Urban School Districts in the United States, 2019

* Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
A quarter of non-Hispanic AI/AN high school students in 24 urban school districts had at least one alcoholic drink in the past month (24.7%), while 31.0% of urban NHW high school students drank in the past month (Figure 62); this difference was not statistically significant. The same proportion of non-Hispanic AI/AN and NHW high schools students reported smoking a cigarette in the past month at 23 urban school districts (5.2% each*; Figure 63), and approximately a fifth of both non-Hispanic AI/AN and NHW high school students in 24 urban school districts used an electronic vape in the past month (18.9% and 21.3%, respectively; Figure 64).

**Figure 62. Had at Least One Alcoholic Drink in Past Month among NHAI/AN and NHW High School Students in 24 Urban School Districts in the United States, 2019**

![Bar chart showing the percentage of high school students in 24 urban school districts in the United States who had at least one alcoholic drink in the past month, comparing NHAI/AN and NHW students.](chart-image)

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

**Figure 63. Smoked a Cigarette in Past Month among NHAI/AN and NHW High School Students in 23 Urban School Districts in the United States, 2019**

![Bar chart showing the percentage of high school students in 23 urban school districts in the United States who smoked a cigarette in the past month, comparing NHAI/AN and NHW students.](chart-image)

† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

* For AI/AN, Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Similarly, approximately one in five non-Hispanic AI/AN and NHW high school students in 24 urban school districts used marijuana in the past month (17.8% and 21.3%, respectively; Figure 65). A significantly higher proportion of non-Hispanic AI/AN high school students in 23 urban school districts reported having ever taken prescription pain medicine without a doctor’s prescription or differently than prescribed (23.5%) compared to urban NHW high school students (13.7%; Figure 66).
Substance use in adolescence is influenced by a variety of risk and protective factors. Due to legacies of colonialism and ongoing systemic racism, AI/AN youth experience high rates of trauma, loss, child abuse, and household dysfunction, all of which are associated with alcohol and drug use. Persistent substance use can contribute to physical and mental health problems, academic difficulties, violence, poor relationships, and illegal activities as well as increases in other risky behaviors. Substance use in adolescence can also contribute to addictions and continued use later in life as well as the development of other health problems in adulthood. However, traditional cultural practices and spirituality have been identified as potential ways to promote prevention and intervention of substance use among AI/AN youth.
Compared to youth in the general population, juvenile justice-involved youth have a higher prevalence of adversity and trauma, often at a greater likelihood of having experienced multiple forms of trauma.\textsuperscript{75,76} Adverse childhood experiences (ACEs) increase both the chances of justice system involvement and re-offense.\textsuperscript{75,76} Sexual assault, interpersonal victimization, and witnessing violence also increase the likelihood of violent behavior and delinquency.\textsuperscript{75,76}

The proportion of non-Hispanic AI/AN high school students in 23 urban school districts who reported being in a physical fight in the past year (33.5%) was nearly two times the proportion of urban NHW high school students (17.4) who had been in a fight, a significant difference (Figure 67).\textsuperscript{*} Additionally, significantly more non-Hispanic AI/AN high school students in 19 urban school districts had carried a gun in the past year (9.5%), not including hunting or target shooting, nearly three times the proportion of urban NHW high school students who had carried a gun (3.3%; Figure 68).\textsuperscript{*}

* Indicates a significant relationship ($p < 0.05$)

Source: Youth Risk Behavior Survey

AI/AN includes only non-Hispanic single-race AI/AN.

* Data from the Youth Risk Behavior Survey on adolescent involvement in physical fights and gun-carrying behaviors in the past year includes incidents both on and off school property, capturing adolescent experiences regardless of the environment in which they occur.
Interactions with and Access to Medical and Dental Care

The transition from pediatric to adult care is a crucial opportunity to improve independence in medical decision-making, adherence to care, health status, quality of life, and self-care skills.\textsuperscript{77,78} This is particularly important for adolescents with special health care needs, including chronic diseases that require ongoing care and management. Adolescents without support during this transition have been shown to experience additional medical complications, discontinuity of care, higher costs of care, and higher emergency department and hospital use.\textsuperscript{77,78} Components of a successful health care transition include being able to speak privately with a doctor or nurse and having support in learning the skills to manage their own healthcare.

At their last medical visit, 55.0\% of AI/AN adolescents 12–17 years living in metro areas had the chance to speak privately with a doctor or other health care providers without parents or caregivers in the room (Figure 69). This was similar among metro NHW adolescents 12–17 years (53.9\%). Additionally, similar proportions of metro AI/AN and NHW adolescents 12–17 years reported having a doctor or health care provider actively work with them to gain skills to manage their own health and health care (49.5\% and 56.7\%, respectively), including working to understand current health needs, knowing what to do in a medical emergency, or taking medications they may need (Figure 70).
Oral health is essential to overall health in adolescence and is impacted by changes in nutritional habits, oral hygiene, potential substance use, risk of pregnancy and sexually transmitted infections (STIs), eating disorders, and other needs unique to this period. Preventive dental care can reduce the risk of oral health conditions such as dental caries and contribute to positive health outcomes overall. Significantly fewer non-Hispanic AI/AN high school students in 21 urban school districts saw a dentist in the past year for a check-up, exam, teeth cleaning, or other dental work (61.0%) compared to urban NHW high school students (80.1%; Figure 71). Access to and utilization of oral health care can depend on health literacy and oral health beliefs as well as dental insurance coverage issues and provider shortages.
Sexual and Reproductive Health

During adolescence, many adolescents may begin to experience a self-awareness of sexual orientation and gender identity.81 Young people who are not heterosexual experience greater societal and social stigma, which can affect all aspects of their health.81 These youth are also at a much greater risk of experiencing disparities in health outcomes.26,81 Additional support from health care providers, family members, and extended community can be crucial in protecting adolescents from negative experiences while allowing them safe spaces to discuss and understand more about themselves and their unique needs.81

When asked about their sexual orientation, 13.2% of non-Hispanic AI/AN high school students in 23 urban school districts and 13.7% of urban NHW high school students identified as a sexual minority, including gay, lesbian, and bisexual (Figure 72). Attitudes about sex and gender vary across AI/AN cultures, and many have social and spiritual roles for gender-variant members of their communities.82 The pan-Indian term of two-spirit people is often used to describe these individuals as a distinct, alternative gender status, although not all cultures perceive or refer to these individuals in the same way.82 Many of the traditions and practices around two-spirit people and differing gender identities are being revived and reclaimed following the condemnation of these identities by missionaries, government agents, and other actors of genocide and assimilation.82

Figure 72. Sexual Orientation among NHAI/AN and NHW High School Students in 23 Urban School Districts in the United States, 2019

[Diagram showing percentages of high school students identifying as heterosexual or sexual minority, by race/ethnicity.]

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.
In addition to gender identity, sexuality and reproductive health among AI/AN communities has been impacted by historical trauma and repression by missionaries and boarding school experiences. This led to changes in sexual attitudes and behaviors from traditional pre-colonial values, in which sexuality was a healthy, natural part of life. Previously, sex was seen as multi-dimensional and emphasized respect for partners and self. This communication and sharing across generations is a key way of shaping positive, affirming attitudes around sexuality and promoting healthy behaviors along with decreased sexual risk-taking.

Nearly a quarter of non-Hispanic AI/AN and NHW high school students in 22 urban school districts reporting having ever had sex in their lifetime (23.3% and 27.7%, respectively; Figure 73). One in five urban NHW high school students (20.1%) reported having sex in the past three months, similar to 16.6% of urban non-Hispanic AI/AN high school students (23 urban school districts; Figure 74).

A fifth of non-Hispanic AI/AN high school students in 24 urban school districts had been tested for a sexually transmitted disease (STD) other than HIV in the past 12 months (20.0%), compared to 11.4% of urban NHW high schools students (difference not significant; Figure 75).
Figure 74. Currently Sexually Active (Had Sex in Past 3 Months) among NHAI/AN and NHW High School Students in 23 Urban School Districts in the United States, 2019

![Graph showing the percentage of currently sexually active high school students among NHAI/AN and NHW students.]

Missing > 20%.
Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

Figure 75. Ever Tested for STDs among NHAI/AN and NHW High School Students in 24 Urban School Districts in the United States, 2019

![Graph showing the percentage of high school students ever tested for STDs among NHAI/AN and NHW students.]

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.
Mental Health

Bullying

Bullying remains a common adolescent experience despite the significant psychosocial consequences such as loneliness, depression, and suicidal ideation. Victims of bullying have increased rates of violence-related behaviors, poorer academic outcomes, and lower self-esteem than those who had not been bullied.

† Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable. Source: Youth Risk Behavior Survey. AI/AN includes only non-Hispanic single-race AI/AN.
Nearly one in seven non-Hispanic AI/AN high school students in 24 urban school districts had been bullied on school property in the past 12 months (13.9%) as well as electronically bullied through texting or social media platforms (13.6%). This is comparable with 17.7% of urban NHW high school students bullied at school and 14.9% bullied electronically (Figure 76 and Figure 77).

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

* Relative Standard Error ≥ 25%; interpret with caution, proportion may be unreliable.
Depression

Mental health in adolescence is important to overall health, with mental health impacting an adolescent’s development, social skills, and coping.\textsuperscript{58} Mental health issues beginning in adolescence can continue into adulthood, especially when individuals lack access to necessary mental health care and treatment.\textsuperscript{59}

Over one-third of non-Hispanic AI/AN and NHW high school students in 24 urban school districts reported feeling so sad or hopeless almost every day for two or more consecutive weeks that they stopped doing some of their usual activities (35.2\% and 34.1\%, respectively; Figure 78). Additionally, 22.5\% of urban AI/AN adolescents 12–17 years have ever experienced a Major Depressive Episode (MDE) in their lifetime (Figure 79). This is significantly higher than 19.5\% of urban NHW adolescents 12–17 years having ever experienced an MDE. Protective factors for urban AI/AN adolescents’ mental health may include secure attachment, healthy traditional behaviors, reliable community support, participation in ceremonies, cultural connectedness, self-esteem, and positive self-image.\textsuperscript{5,60,61}

\textbf{Figure 78. Felt Sad or Hopeless among NHAI/AN and NHW High School Students in 24 Urban School Districts in the United States, 2019}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure78.jpg}
\caption{Felt Sad or Hopeless among NHAI/AN and NHW High School Students in 24 Urban School Districts in the United States, 2019}
\end{figure}

Source: Youth Risk Behavior Survey
AI/AN includes only non-Hispanic single-race AI/AN.

\textbf{Figure 79. Had Major Depressive Episode (MDE) Ever in Lifetime among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018}

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure79.jpg}
\caption{Had Major Depressive Episode (MDE) Ever in Lifetime among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018}
\end{figure}

* Indicates a significant relationship (p < 0.05)
Source: National Survey on Drug Use and Health
AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.
Mental Health Care Utilization

Accessing necessary behavioral and mental health care in adolescence has immediate and long-term health and social benefits. Early interventions in adolescence can help prevent more severe mental or behavioral health issues later in life. Mental health care services for adolescents occur across a variety of settings, including school health centers, primary care settings, or specialty facilities.

Similar proportions of urban AI/AN and NHW adolescents 12–17 years reported having received any specialty mental health services in the past year, including inpatient, residential, and outpatient specialty treatment: 16.5% of urban AI/AN adolescents and 16.9% of urban NHW adolescents received specialty mental health care (Figure 80).

Figure 80. Received Any Specialty Mental Health Services in Past Year among Urban AI/AN and NHW Adolescents 12–17 years in the United States, 2015–2018

However, significantly more urban AI/AN adolescents 12–17 years (18.6%) received mental health services from non-specialty sources, such as school social workers or family doctors, compared to 15.4% of urban NHW adolescents 12–17 years (Figure 81). Similar to other types of health care, type of and access to mental health care can be influenced by a variety of barriers including availability in the area, insurance coverage for services, stigma and discrimination in seeking more specialized services, and care coordination in navigating referral and managed care systems.
Violence*

AI/AN adolescents experience higher levels of violence and are exposed to other traumatic events in their communities, often the direct result of historical and intergenerational trauma that perpetuate cycles of violence. Over 15% of non-Hispanic AI/AN high school students in 21 urban school districts (15.5%) reported experiencing sexual violence in the past year (Figure 81). In this case, sexual violence is defined as being forced to do sexual things they did not want to do such as kissing, touching, or being physically forced to have sexual intercourse. One in ten urban NHW high school students (10.5%) experienced sexual violence in the past year; this difference was not significant.

* Data on domestic violence and all violent victimizations are not limited to adolescents living in urban or metro areas of the United States.
Violent victimizations are incidents involving the use or threat of force against an adolescent. Among violent victimizations, non-Hispanic AI/AN adolescent females 12–17 years had a significantly higher rate of violent victimizations (635.3 per 100,000) than non-Hispanic AI/AN adolescent males (357.5 per 100,000; Figure 82). This is consistent with the longstanding crisis of violence against Indigenous women, including missing and murdered Indigenous women and girls (MMIWG).

* Indicates a significant relationship (p < 0.05)
Source: FBI’s National Incident-Based Reporting System (NIBRS)
The most common offenses among victimizations of non-Hispanic AI/AN adolescents 12–17 years were simple assault (55.2%), fondling (11.8%), rape (10.9%), and aggravated assault (9.4%; Figure 83). Non-Hispanic AI/AN adolescents experienced a significantly higher proportion of violent victimizations due to simple assault and rape than among NHW adolescents (49.8% and 8.8%, respectively). Conversely, non-Hispanic AI/AN adolescents experienced a significantly lower proportion of victimizations due to intimidation (6.9%) and robbery (2.3%) than among NHW adolescents (13.8% and 3.7%, respectively).

**Figure 83. Most Serious Offense Experienced among Violent Victimizations of NHAI/AN and NHW Adolescents 12–17 years in the United States, 2016**

* Indicates a significant relationship (p < 0.05)
† Based on < 20 events; interpret with caution, proportion may be unreliable.
Source: FBI's National Incident-Based Reporting System (NIBRS)

Domestic violence victimizations include incidents of violence towards an adolescent by a parent, stepparent, sibling, stepsibling, grandparent, other family member, or significant other. Among domestic violence victimizations of adolescents 12–17 years, parents or stepparents were the highest proportion of offenders among both non-Hispanic AI/AN (37.7%) and NHW (42.4%) incidents followed by siblings or stepsiblings (18.4% and 19.3%) and boyfriend or girlfriend (18.2% and 17.6%; Figure 84). Other family members made up a significantly higher proportion of domestic
violence victimizations of non-Hispanic AI/AN adolescents 12–17 years (17.3%) than among NHW adolescents (11.2%).

**Figure 84. Relationship to Offender among NHAI/AN and NHW Adolescent Domestic Violence Victimizations (12–17 years) in the United States, 2016**

<table>
<thead>
<tr>
<th>Relationship to Offender</th>
<th>NHAI/AN (%)</th>
<th>NHW (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent or Step-Parent</td>
<td>37.7</td>
<td>42.4</td>
</tr>
<tr>
<td>Sibling or Step-Sibling</td>
<td>18.4</td>
<td>19.3</td>
</tr>
<tr>
<td>Boyfriend/Girlfriend</td>
<td>18.2</td>
<td>17.6</td>
</tr>
<tr>
<td>Other Family Member</td>
<td>17.3</td>
<td>11.2</td>
</tr>
<tr>
<td>Grandparent</td>
<td>3.7†</td>
<td>2.8</td>
</tr>
<tr>
<td>Parent’s Boyfriend/Girlfriend</td>
<td>2.4†</td>
<td>3.7</td>
</tr>
</tbody>
</table>

* Indicates a significant relationship (p < 0.05)
† Based on < 20 events; interpret with caution, proportion may be unreliable.
Source: FBI’s National Incident-Based Reporting System (NIBRS)

Violence against youth directly conflicts with the traditional values of Indigenous communities. It is caused by centuries of cultural and physical trauma perpetuated on these communities through colonization and genocide along with systematic dispossession of land, culture, family, and identity. Additionally, loss of extended family and community through the relocation to urban settings often results in reduced social and cultural connectedness and higher socioeconomic risk and stress. Despite these challenges, urban AI/AN communities continue to build thriving, vibrant communities rooted in culture and traditional knowledge and in resistance to oppressive systems.

AI/AN youth are at much greater risk of entering the juvenile justice system than other youth. They face higher rates of over-incarceration and systemic biases within the justice system, while also being less likely to get their needs met within that system. In many cases, these adolescents lack appropriate treatment and services to address their trauma and become incarcerated rather...
than receiving needed treatment and rehabilitation, which can further exacerbate existing trauma.\textsuperscript{87,88}

\textbf{Figure 85. Rate of Arrests for All Offenses among NHAI/AN and NHW Juveniles 10–17 years in the United States, 2019}

* Indicates a significant relationship (p < 0.05)
Source: FBI’s Uniform Crime Reporting Program Data

In 2019, non-Hispanic AI/AN juveniles 10–17 years were arrested at a significantly higher rate (2,558.3 per 100,000 juveniles 10–17 years) than NHW juveniles (1,748.3 per 100,000; Figure 85). As seen in Figure 86, the rate of arrests by offense was also significantly higher for non-Hispanic AI/AN juveniles than NHW juveniles for all property crimes (364.0 per 100,000 and 263.0 per 100,000, respectively), drug abuse violations (294.8 and 243.2), disorderly conduct (227.4 and 118.1), violent crimes (123.9 and 85.9), and curfew and loitering (61.0 and 38.5). There was no significant difference between the arrest rate for weapon offenses among non-Hispanic AI/AN and NHW juveniles (32.2 per 100,000 and 35.7 per 100,000, respectively). Data on juvenile arrests was not limited to urban or metro juveniles.
Among violent victimizations perpetrated by non-Hispanic AI/AN and NHW juveniles 12–17 years, there were no significant differences by weapon type (Figure 87). Non-Hispanic AI/AN juvenile offenders used a knife in 3.6% of victimizations, a firearm in 2.5% of victimizations, and a blunt object in 2.2% of victimizations, while NHW juvenile offenders used a knife in 3.1% of victimizations, a firearm in 2.3% of victimizations, and a blunt object in 1.5% of victimizations. Approximately a quarter of violent victimizations by juvenile offenders did not involve a weapon (27.7% of non-Hispanic AI/AN and 25.2% of NHW, not shown). Data on violence by juvenile offenders was not limited to urban or metro juveniles.
The rate of non-Hispanic AI/AN juveniles 13–17 years who were either committed or detained in residential placement for all crimes was 287.9 per 100,000 juveniles 13–17 years, which was over three times the rate of NHW juveniles 13–17 years (87.8 per 100,000; not shown). This significant difference by race also carried into juveniles committed or detained for violent crimes, property crimes, and drug offenses (Figure 88). The rate of non-Hispanic AI/AN juveniles 13–17 years committed or detained for violent crimes, including criminal homicide, sexual assault, robbery, and aggravated assault, was 57.0 per 100,000 juveniles, compared to 18.4 per 100,000 NHW juveniles. The rate of non–Hispanic AI/AN juveniles 13–17 years committed or detained for property crimes, including burglary, theft, auto theft, and arson, was also 57.0 per 100,000 juveniles, compared to 14.4 per 100,000 NHW juveniles. Lastly, the rate of non-Hispanic AI/AN juveniles 13–17 years committed or detained for drug offenses was 12.8 per 100,000 juveniles, compared to 5.4 per 100,000 NHW juveniles.

Data on the residential placement of juvenile offenders was not limited to urban or metro juveniles, and data on violence by juvenile offenders was not limited to urban or metro juveniles and does not include juveniles in adult detention centers or in drug or alcohol treatment centers.
Targeted cultural and community-based preventative and rehabilitative services has resulted in improved outcomes among AI/AN youth offenders in the justice system. Examples include Tribal Juvenile Healing to Wellness Courts (TJHWC) that are "specialized judicial interventions aimed at promoting accountability and healing for AI/AN youth in the juvenile justice system suffering from drug and alcohol abuse." They rely on unique cultural practices and a system of sanctions and incentives to support youth through behavioral change. Efforts to develop more culturally attuned programs and reform existing programs to better support AI/AN youth are essential in addressing unhealed trauma, cycles of violence, and the systemic injustice that leads to high levels of violence and justice system involvement among AI/AN youth.
Spiritual Health

For urban AI/AN adolescents, spiritual and cultural health build resilience and serve as protective factors against substance use, violence, and mental health issues.\textsuperscript{61,64,65} Spiritual health can include traditional healing, connection to community, religion, cultural pride, and connection to culture, values, and traditions.\textsuperscript{61,64,65}

Religious Beliefs

Significantly more urban AI/AN adolescents 12–17 years agreed that their religious beliefs were a very important part of their life (73.4%), compared to 66.6% of urban NHW adolescents 12–17 years (Figure 89). A significantly higher proportion of urban AI/AN adolescents 12–17 years also agreed that their religious beliefs influence how they make decisions in their life (64.3%), compared to 59.2% of urban NHW adolescents 12–17 years (Figure 90).

* Indicates a significant relationship (p < 0.05)

Source: National Survey on Drug Use and Health

AI/AN includes all AI/AN regardless of multiple races or Hispanic ethnicity.

Involvement and participation with AI/AN cultures and activities have been associated with greater resilience among urban AI/AN youth, and religious participation has been inversely associated with alcohol and substance use.\textsuperscript{90} In some studies, religious faith was shown to protect against suicidal behavior in the absence of family support.\textsuperscript{90,91}
Cultural Knowledge and Participation

For urban AI/AN adolescents, spiritual health includes connection to culture, values, and traditions. Approximately 80% of 8th-grade AI/AN students in city schools in urban settings reported knowing at least a little about their American Indian tribe or Alaska Native group history, traditions and culture, and issues important to AI/AN people (Figure 91): 21.8% reported knowing a little, 35.0% reported knowing some, and 23.6% reported knowing a lot.

Source: National Indian Education Study (NIES)
Nearly two-thirds of 8th-grade AI/AN students at city schools (64.0%) reported that family members taught them most of what they knew of AI/AN traditions, ways of life, and customs (Figure 92), and nearly half (49.9%) reported family members teaching them most of what they know about issues important to AI/AN people (Figure 93). Tribal representatives or elders were said to have taught 9.3% of students the most about AI/AN traditions and 8.4% of students the most about issues important to AI/AN people. Nearly a tenth of these students (9.3%) reported that no one taught them about AI/AN traditions, and 18.0% reported that no one taught them about issues important to AI/AN people.

**Figure 92. Who Taught Most About AI/AN Traditions among 8th-grade AI/AN Students attending City Schools in the United States, 2019**

![Graph showing the percentage of students who learned about AI/AN traditions from family members, tribal representatives or elders, or no one.]

**Source:** National Indian Education Study (NIES)

**Figure 93. Who Taught Most About Issues Important to AI/ANs among 8th-grade AI/AN Students attending City Schools in the United States, 2019**

![Graph showing the percentage of students who learned about issues important to AI/AN people from family members, tribal representatives or elders, or no one.]

**Source:** National Indian Education Study (NIES)
Among 8th-grade AI/AN students in city schools, 7.0% reported being able to speak an AI/AN language well (Figure 94), and 5.5% reported being able to read an AI/AN language well (Figure 95). Almost half of these students could speak a few words (47.6%) and almost a third could read a few words (31.4%). Nearly two-thirds of students reported not being able to read an AI/AN language (63.1%), and 45.4% reported not being able to speak an AI/AN language.

Figure 94. Ability to Speak AI/AN Language among 8th-grade AI/AN Students attending City Schools in the United States, 2019

Figure 95. Ability to Read AI/AN Language among 8th-grade AI/AN Students attending City Schools in the United States, 2019
Nearly two thirds of 8th-grade AI/AN students attending schools in cities reported participating in ceremonies and gatherings for people from their American Indian tribe or Alaska Native group at least once every few years (Figure 96): 12.1% reported attending every few years, 23.8% reported attending once a year, and 26.5% reported attending several times a year.

Additionally, 58.9% of these students reported participating in ceremonies and gatherings that bring people together from many different American Indian tribes or Alaska Native groups (Figure 97): 14.9% reported attending every few years, 20.1% reported attending once a year, and 23.9% reported attending several times a year.
Mortality

Urban AI/AN adolescents between 15 and 19 years had a significantly lower mortality rate in 2016–2018 compared to urban NHW adolescents 15–19 years (Figure 98): urban AI/AN adolescents 15–19 years had a mortality rate of 37.6 per 100,000 adolescents while urban NHW adolescents 15–19 years had a mortality rate of 44.7 per 100,000 adolescents. Urban AI/AN female adolescents had a significantly lower mortality rate (19.0 per 100,000) than urban NHW female adolescents (28.1 per 100,000; Figure 99). There was no significant difference between urban AI/AN male adolescents (55.9 per 100,000) and urban NHW male adolescents (60.4 per 100,000). The male adolescent mortality rate was significantly higher than the female adolescent mortality rate for both urban AI/AN and NHW adolescents 15–19 years.

It should be noted that mortality rates of urban AI/AN adolescents presented here are likely under-representations due to racial misclassification. Death certificate race data is often recorded by coroners, funeral directors, or medical examiners based on limited information or appearance only, resulting in misclassification.29 Even when next-of-kin are consulted, they may not answer as the decedent would have.29 Additionally, the limitation of AI/AN identification to a single race, excluding the many multi-racial AI/AN individuals in the population, also restricts the ability to correctly estimate the impact of child mortality within these communities.
The mortality rate of adolescent deaths due to injuries, including unintentional injuries (accidents), intentional self-harm (suicides), and assault (homicides) was similar among urban AI/AN adolescents 15–19 years (30.2 per 100,000 adolescents) and urban NHW adolescents 15–19 years (33.1 per 100,000 adolescents; not shown).

The mortality rate of unintentional injuries among urban AI/AN adolescents 15–19 years (12.5 per 100,000) was significantly lower than the unintentional injury mortality rate of urban NHW adolescents 15–19 years (17.7 per 100,000; Figure 100). The suicide mortality rate among adolescents 15–19 years was similar for both groups: 12.1 per 100,000 urban AI/AN adolescents and 12.9 per 100,000 urban NHW adolescents. Lastly, the mortality rate of homicides was significantly higher among urban AI/AN adolescents 15–19 years (5.6 per 100,000) than the homicide mortality rate among urban NHW adolescents 15–19 years (2.5 per 100,000).
Among injury deaths of urban AI/AN and NHW adolescents 15–19 years, the leading mechanisms of injury were by firearm, motor vehicle accidents, suffocation, and poisoning (Figure 101). Urban AI/AN adolescents 15–19 years had a firearm-related mortality rate of 10.2 per 100,000 adolescents, similar to the 8.2 per 100,000 among urban NHW adolescents. The mortality rates for motor vehicle traffic injuries and suffocation were also similar among these groups: the mortality rate for motor vehicle traffic was 8.3 per 100,000 among urban AI/AN adolescents and 10.2 per 100,000 among urban NHW adolescents; for the rate for suffocation was 6.5 per 100,000 among urban AI/AN adolescents and 5.5 per 100,000 among urban NHW adolescents.
The mortality rate due to poisoning was significantly lower among urban AI/AN adolescents (3.9 per 100,000) compared to urban NHW adolescents 15–19 years (6.0 per 100,000). Correspondingly, the rate of deaths due to drug-induced causes was also significantly lower among urban AI/AN adolescents (3.5 per 100,000) compared to urban NHW adolescents 15–19 years (5.7 per 100,000; Figure 102).

This mortality data shows that there are multiple opportunities to reduce preventable deaths among urban AI/AN adolescents. Targets for the reduction of preventable mortality among urban AI/AN adolescents exist at multiple levels, with opportunities for prevention at the individual, family, community, and policy levels. Examples include reduction of violence and prevention of youth access to firearms and other weapons, decreasing risk behaviors such as driving with someone who has been drinking or without a seatbelt, increased screening of and treatment of mental health conditions and suicide ideation, and increased availability of culturally attuned substance use treatment and rehabilitation. This list is not comprehensive of all possible measures to reduce adolescent mortality, and additional interventions may be identified through additional data and needs assessment with individual communities.
DISCUSSION

American Indians and Alaska Natives (AI/AN) were once the healthiest people in the Americas. For all AI/ANs, systemic issues such as genocide, uprooting from homelands, disruption of tribal community structure, bans on cultural practices, language erasure, racism, poverty, poor education, and limited economic opportunity have all contributed to ongoing health disparities. Over the last century, Native people have moved or were forced to relocate to urban areas because of government policy, lack of economic and educational opportunities, and limited access to healthcare and other services. Today, AI/ANs still move to urban settings for education, employment, housing opportunities, and healthcare needs. This movement results in an urban Indigenous population that is enormously diverse and inter-tribal.

Urban AI/AN children under the age of 18 years represent approximately one quarter of the urban AI/AN population and are a valued part of urban AI/AN communities. Health during infancy, childhood, and adolescence is essential to the development of children into healthy and balanced adults, which in turn contributes to the strength and well-being of their communities and future generations. This means that improving the health of urban AI/AN youth can improve the overall health of all urban AI/ANs through the promotion of protective factors and healthy behaviors along with reduction of harmful risk factors during key developmental periods.

The data in this report presents a summary of the health and experiences of urban AI/AN infants, children, and youth. Across all age groups and domains of health, significant and persistent health inequities impact these communities. However, and more importantly, it is also a testament to the strengths and resilience of urban AI/AN youth and their families despite historical trauma, disruption of family systems, and attempted erasure of traditions through genocide, colonialization, and cultural erasure.

Previous efforts to improve health and reduce disparities for urban AI/AN youth and their communities have largely failed because they were based on culturally inappropriate interventions and lacked understanding of the historical and ongoing trauma affecting AI/AN people. These inadequate interventions only further exacerbate health disparities. Health equity will only be achieved when holistic and multi-faceted efforts to promote health across all domains—physical, spiritual, emotional, and mental—are grounded in culture and traditional knowledge systems where Indigenous values are centered with a focus on communal strengths.
RECOMMENDATIONS

Recommendations to address the underlying causes of health disparities and efforts to improve the overall health of AI/AN youth have been put forth by various professional organizations, non-profits, and academic institutions in recent years.

Selected recommendations based on the topics introduced in this report have been included below. These recommendations can be adapted to fit the needs of public health programming and other urban AI/AN youth service providers as well as modified in collaboration with local tribes and community partners to build on existing cultural strengths.

“Partner with local tribes and communities to set health priorities, understand historical experiences, and combine efforts already underway, such as cultural enrichment and preservation programs.”26

“Advocate for community initiatives and develop partnerships to address health disparities” and “preventable injury-related morbidity and mortality.”26,92 “Leverage local cultural strengths in designing interventions.”93

“Identify strengths and screen youth and families for protective factors to promote positive youth development.”26

“Create efforts to promote and strengthen protective factors for youth, focusing on cultural preservation-based efforts”, self-efficacy, and family connectedness.26,93 “Offer programs and services that cultivate communication and intergenerational learning.”8

“Assess patients for ACEs and social determinants of health (e.g., poverty, food insecurity, homelessness, lack of neighborhood safety, incarceration of parents or other family members, mental health conditions of parents or other household family members, housing inequity, access to schools, academic achievement, intimate partner violence, child abuse and neglect, and involvement with the juvenile legal system) to help families identify and implement practical solutions.”26
RECOMMENDATIONS

“Provide evidence-based supports for parents and young children by promoting the use of home visiting models, high-quality child care, and early childhood programs, such as Early Head Start, Head Start, and Nurse-Family Partnership (https://www.nursefamilypartnership.org).”26

“Invest in safe schools, wellness and community centers, clinics, homes, and safe places for youth to congregate, engage in healthy physical activity and experience traditional and subsistence activities such as culture camps.”94

“Create a medical home that acknowledges and is sensitive to the discrimination, potential intergenerational trauma, and racism that AI/AN children and families can experience in clinical settings. Work with local community hospitals and pediatric emergency departments, which may serve as a referral source, to become a medical home for AI/AN children whose families use emergency departments rather than seek primary care.”26

“Advocate for improved IHS budget and funding, which is chronically underfunded. IHS expenditures are among the lowest per capita compared with other federal health care expenditures, such as Medicare and the Veterans Health Administration. This disparity contributes significantly to the ongoing health inequities experienced by AI/AN people. Advocate for policies such as advanced appropriations or mandatory funding to provide the IHS with predictable and continuous funding.”26

“Provide opportunities for adequate training of clinical and office staff in culturally sensitive care practices. Advocate for local and regional models that incorporate culturally and linguistically appropriate services tailored for local tribes.”26

“Develop and disseminate multimedia health resources (using the Internet, texting, social networking, videos, and print materials) to connect AI/AN adolescents to medically-accurate, culturally-appropriate health information.”8

“Prepare (AI/AN) adolescents and young adults to take an active role in their own health and well-being through leadership training, mentorship and internship opportunities, community services, career path and financial literacy opportunities, and other positive extracurricular activities.”94
**RECOMMENDATIONS**

<table>
<thead>
<tr>
<th>“Assess patients for mental health conditions, including signs of posttraumatic stress, anxiety, grief, depressive symptoms, and suicidality, as well as new mothers for perinatal depression using validated screening tools and a trauma-informed approach. Participate in strengths-based, community-driven, and culturally centered suicide prevention programs.”**26</th>
</tr>
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<tbody>
<tr>
<td>“Screen AI/AN youth for substance use, and if identified, conduct a brief intervention and then refer for ongoing treatment.”**26</td>
</tr>
<tr>
<td>“Support other targeted child safety efforts among rural and urban AI/AN populations that are known to be effective, including the promotion of bicycle helmet use, fire safety, the prevention of drowning and falls, and firearm safety.”**92</td>
</tr>
<tr>
<td>“Work with local tribes and communities to address the need for research and advocacy around missing and murdered Indigenous women and girls.”**26</td>
</tr>
<tr>
<td>“Develop the mechanisms and opportunities to collect and share data and information across program partners, including best practices, challenges, and lessons learned to inform decision-makers about (child and) adolescent health.”**8</td>
</tr>
</tbody>
</table>

While this list is not comprehensive of all possible measures to reduce disparities and improve the health of urban AI/AN youth, it does show that opportunities for prevention and health promotion exist at multiple levels, including at the individual, family, community, and policy levels. Additional interventions may be identified through further data analysis and needs assessment within individual communities.
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APPENDICES

Appendix A. Abbreviations and Definitions

**ACEs** | Adverse childhood experiences: potentially traumatic events that occur in childhood.39

**Adolescents** | The definition of adolescents can shift depending on data source and context; however, adolescents typically include children between the ages of 12 and 17 years.

**AI/AN** | American Indian and Alaska Native; may include individuals with single or multiple reported races, regardless of ethnicity, depending on the data source and indicator.

**BMI** | Body mass index; a person’s weight in kilograms divided by the square of height in meters. It is an inexpensive and easy-to-perform method of screening for weight categories that may lead to health problems. A high BMI can indicate high body fatness. BMI does not measure body fat directly, but BMI is correlated with more direct measures of body fat.42

**Children** | Individuals from birth through 17 years of age. In this report, children are sometimes used interchangeably to describe different age groups within this larger range, depending on the data source and indicator. In some cases, only children over the age of one are included to distinguish from infants.

**Child Maltreatment** | Child abuse and neglect.

**CSHCN** | Children and youth with special health care needs; HRSA MCHB defines children and youth with special health care needs (CSHCN) as “those who have or are at increased risk for a chronic physical, developmental, behavioral, or emotional condition and who also require health and related services of a type or amount beyond that required by children generally.”95

**FPL** | Federal poverty level; a measure of income issued every year by the Department of Health and Human Services (HHS) used to determine your eligibility for certain programs and benefits, including savings on Marketplace health insurance and Medicaid and CHIP coverage.30

**Infants** | Children between 0 and 364 days of age (within the first year of life).

**Juveniles** | In the context of the criminal justice system, victims and offenders are juveniles when they are younger than 18. In this report, juvenile victims include groups between the ages of 0 and 11 years and 12 and 17 years, while various groups for juvenile offenders range from 10–17 years and 13–17 years, depending on the data source and indicator.

**Low Birthweight** | Infants born weighing less than 2,500 grams or 5.5 pounds (5 pounds, 8 ounces) at birth.

**MDE** | Major Depressive Episode.

**Metro** | Metropolitan statistical areas, or areas containing a large population nucleus and adjacent communities that have a high degree of integration with that nucleus.96

**Non-Hispanic AI/AN (NHAI/AN)** | Non-Hispanic American Indian and Alaska Native; often only includes single-race, non-Hispanic American Indian or Alaska Natives.

**NHW** | Non-Hispanic White.

**NICU** | Neonatal intensive care unit.
Non-Specialty Mental Health Services | Non-specialty sources of mental health care including a school social worker, school psychologist, or school counselor; special school or program within a regular school for students with emotional or behavioral problems; pediatrician or other family doctor; juvenile detention center, prison, or jail; and foster care or therapeutic foster care. (NSDUH)

Personal Doctor or Nurse | A personal doctor or nurse is a health professional who knows the child well and is familiar with the child's health history. This can be a general doctor, a pediatrician, a specialist doctor, a nurse practitioner, or a physician's assistant. (NSCH)

Preterm Birth | Live birth prior to 37 weeks completed gestation.

Relative Standard Error | The standard error of an estimate expressed as a percent of the estimate, used as a way to express the reliability of the estimate; estimates with a high RSE indicate a less reliable estimate that should be interpreted with caution. In this report, estimates with an RSE ≥ 25% were flagged as likely being unreliable.

Sexual Violence | Unwanted sexual encounters such as kissing, touching, or being physically forced to have sexual intercourse. (YRBS)

SNAP | Supplemental Nutrition Assistance Program: provides nutrition benefits to supplement the food budget of needy families so they can purchase healthy food and move towards self-sufficiency.97

Specialty Mental Health Services | Inpatient/residential or outpatient specialty sources of mental health care, including hospitals, residential treatment facilities, day treatment facilities, mental health clinics, private therapists, and in-home therapists. (NSDUH)

STD | Sexually transmitted disease.

Urban | Densely developed territory encompassing residential, commercial, and other non-residential urban land uses.98 For this report, urban counties are those in metropolitan statistical areas that fall within the four metropolitan levels of the 2013 National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme, including large central metro, large fringe metro, medium metro, and small metro. In comparison, micropolitan and non-core counties are considered rural.99

WIC | The Special Supplemental Nutrition Program for Women, Infants, and Children; provides federal grants to states for supplemental foods, health care referrals, and nutrition education for low-income pregnant, breastfeeding, and non-breastfeeding postpartum women, and to infants and children up to age five who are found to be at nutritional risk.22
Appendix B. Methods

A list of potential indicators for inclusion was compiled based on a search of existing data sources and by comparing existing data to standard and age-appropriate metrics of infant, child, and adolescent health, such as Healthy People 2030 and other public health reporting benchmarks.

Data sources lacking race and ethnicity variables to compare the AI/AN and NHW populations were excluded. Also excluded were data sources that did not allow for comparison within the desired age groups of the report (less than 18 years), as well as data sources that did not allow for geographic isolation to either urban counties or metro areas; an exception was made for criminal justice and violence data despite lacking geographic granularity due to the nature of these indicators and limited alternative metrics.

Varied methods by which race data is collected and presented by individual data sources resulted in differing definitions of AI/AN across indicators. The most inclusive category is AI/AN alone or in combination, which includes all individuals identifying as AI/AN regardless of additional race(s) or Hispanic ethnicity. Some data sources only include AI/AN of a single or bridged race regardless of ethnicity, while others are limited to single-race, non-Hispanic AI/AN only. As much as possible, the definition of AI/AN for each data source is specified to allow for clarity and caution in both interpretation and generalization of conclusions. For all data sources and indicators, NHW includes only White individuals of single-race and non-Hispanic ethnicity.

The terms “urban” and “metro” are both used to describe specific geographic areas which are densely developed and populated. Metropolitan statistical areas are based on 2010 OMB (Office of Management and Budget) metropolitan area and principal city definitions, while urban counties are those in metropolitan statistical areas that fall within the four metropolitan levels of the 2013 National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme. The inclusion of data for either urban or metro populations depended on the designation used by the data source. For data sources lacking both urban or metro designation, other geographic measures were used, such as Youth Risk Behaviors Surveys (YRBS) conducted in urban school districts or the National Indian Education Study (NIES) surveys of AI/AN students attending schools in principal cities.

This report presents point estimates for both AI/AN and NHW, which may be a rate, such as a mortality rate, or a prevalence, such as the percent of children living in poverty. Point estimates were either calculated using SAS 9.4 or obtained from publicly available data tables; more information about data sources can be found in Appendix C. All rates presented in this report are unadjusted.

For most indicators, 95% confidence intervals were also presented, which provide a range of values that is likely to include the true population value with a certain degree of confidence. Differences were considered significant at a p-value <0.05 when the 95th confidence intervals did not overlap between groups.

Calculation of proportions did not include missing or non-responses in the denominator. Indicators with a large proportion of missing data among responses were not included in this report; an exception was for the sexual health indicators from the YRBS, in which case a warning on missing data was denoted. Missingness could not be assessed for all data sources.

Due to small numbers and confidentiality, cell sizes of less than 10 were suppressed. Additionally, in cases where variance was high indicating lower reliability of the estimate as assessed by a Relative Standard Error (RSE) ≥ 25%, a note to interpret the estimates with caution was included. Standard errors were not available for vital statistics and criminal justice data, and instead, a note to interpret with caution was included when the cell size was less than 20, which correlates with an RSE ~ 22%.100
Appendix C. Data Sources

**American Community Survey (ACS) | 2015–2019**

The American Community Survey (ACS) is a nationwide survey by the U.S. Census Bureau that collects and produces information on social, economic, housing, and demographic characteristics of the population in the United States every year.¹⁰¹

*Technical notes:*

- Limited to metropolitan statistical areas for this report, based on 2010 OMB (Office of Management and Budget) metropolitan area and principal city definitions.
- AI/AN group includes Hispanic and non-Hispanic single race AI/AN but not AI/AN of more than one race.

Accessed via USA IPUMS

**CDC WONDER Mortality Data by Underlying Cause | 2016–2018**

CDC Wide-ranging Online Data for Epidemiologic Research (CDC WONDER) is a public resource that manages nearly 20 collections of public-use data for U.S. births, deaths, and population estimates, among many other topics. These data collections are available as online databases, which provide public access to ad-hoc queries, summary statistics, maps, charts, and data extracts.¹⁰²

*Technical notes:*

- Used for population denominators, birth denominators for infant mortality, and deaths.
- For this report, limited to U.S. residents in urban counties based on the 2013 National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties.
- Data stratified by bridged-race categories, which bridges multiple-race groups to single-race categories. AI/AN group includes Hispanic and non-Hispanic single race AI/AN.
- Death certificate data by cause is based on a single underlying cause of death.

Accessed: https://wonder.cdc.gov/

**Census of Juveniles in Residential Placement (CJRP) | 2019**

The Census of Juveniles in Residential Placement (CJRP) asks juvenile residential custody facilities in the U.S. to provide an individual record on each juvenile held in the residential facility each year. The census is not sent to adult facilities or to facilities exclusively for drug or mental health treatment or for abused or neglected children. It is also not sent to federal correctional facilities (e.g., Immigration and Naturalization Service, Bureau of Indian Affairs, U.S. Marshals, or Bureau of Prisons).¹⁰³

*Technical notes:*

- Not limited to urban or metro juveniles.
- AI/AN group includes only non-Hispanic single race AI/AN and does not include AI/AN of more than one race nor of Hispanic ethnicity.
- Data was aggregated to include detained or committed juveniles:
  - Detained juveniles include those awaiting juvenile court adjudication, adjudicated-awaiting disposition, adjudicated-awaiting placement, awaiting transfer hearing, and awaiting a criminal court hearing.
  - Committed juveniles include those adjudicated - placed here and convicted in criminal court.

Accessed: https://www.ojjdp.gov/ojstatbb/ezacjrp/
Child Maltreatment | 2019

The report on Child Maltreatment presents national data about child abuse and neglect known to child protective services agencies in the United States during federal fiscal year 2019.\textsuperscript{104} The data are collected and analyzed through the National Child Abuse and Neglect Data System (NCANDS), which is an initiative of the Children’s Bureau. Because NCANDS contains all screened-in referrals to CPS agencies that receive a disposition and those that receive an alternative response, these data represent the universe of known CPS child maltreatment cases for FFY 2019.

Technical note:
- Not limited to urban or metro children.
- AI/AN group includes only non-Hispanic single race AI/AN and does not include AI/AN of more than one race nor of Hispanic ethnicity.


National Incident-Based Reporting System (NIBRS) | 2016

The National Incident-Based Reporting System (NIBRS) captures details on each single crime incident—as well as on separate offenses within the same incident—including information on victims, known offenders, relationships between victims and offenders, arrestees, and property involved in crimes.\textsuperscript{105} Includes information on 52 offenses, as well as arrest data for those offenses plus 10 others.\textsuperscript{106} Data are based on incidents reported in 2016 from law enforcement agencies in 38 states and the District of Columbia, although states reporting fewer than 1,000 victims were eliminated from the final data file. The final data file included more than 1.4 million victims of violence reported by more than 6,100 law enforcement agencies in 36 states and the District of Columbia, including 620,043 victims of domestic violence reported by more than 5,600 law enforcement agencies in 34 states. NIBRS data do not track individuals across incidents; a victim who was involved in more than one incident will have multiple records. Users should be aware of the fact that the NIBRS data capture an unknown portion of the violence victims known to law enforcement within a state (i.e., some agencies within a state do not report their information to the FBI).\textsuperscript{107}

Technical notes:
- Not limited to urban or metro children.
- AI/AN group includes only non-Hispanic single race AI/AN and does not include AI/AN of more than one race nor of Hispanic ethnicity.
- Used for analysis of juvenile victims and offenders.

Accessed: https://www.ojjdp.gov/ojstatbb/ezanibrsvty/
National Indian Education Survey (NIES) | 2019

The National Indian Education Study (NIES) is designed to describe the condition of education for American Indian and Alaska Native (AI/AN) students in the United States, including a survey questionnaire that gathers information about how Native traditions, languages, and cultures are integrated into their everyday lives. The study samples AI/AN students in public, private, Department of Defense, and Bureau of Indian Education (BIE) funded schools. NIES is conducted under the direction of the National Center for Education Statistics (NCES) through the National Assessment of Educational Progress (NAEP) on behalf of the U.S. Department of Education's Office of Indian Education (OIE).108

Technical notes:

- A survey conducted every two years along with NAEP reading and mathematics assessments of 4th- and 8th-grade students.
- Students were identified as AI/AN based on school records and were sampled along with other students participating in the NAEP 2019 subject-area assessments.
- Data is available by type of community where schools were located, based on census data describing proximity to an urbanized area (a densely settled core with densely settled surrounding areas) using four categories: city, suburb, town, and rural. For this report, only data of AI/AN students attending schools in cities were included as a proxy for urban communities.
- In addition to a nationally representative sample of AI/AN students, the NIES 2019 focused on 15 states with relatively large populations of AI/AN students: Alaska, Arizona, Minnesota, Montana, Nebraska, New Mexico, North Carolina, North Dakota, Oklahoma, Oregon, South Dakota, Utah, Washington, Wisconsin, and Wyoming. The combined AI/AN student enrollment in these states represents more than 60 percent of the AI/AN enrollment in the nation.

Accessed: https://www.nationsreportcard.gov/ndecore/xplore/nies

National Survey of Children’s Health (NSCH) | 2017–2019

The National Survey of Children’s Health (NSCH) is an annual household survey that produces national and state-level data on the physical and emotional health of American children 0–17 years old. The survey collects information related to the health and well-being of children, including access to and utilization of health care, receipt of care in a medical home, family interactions, parental health, school and after-school experiences, and neighborhood characteristics.109 The NSCH is funded and directed by the Health Resources and Services Administration (HRSA) Maternal and Child Health Bureau (MCHB).110

Technical notes:

- Data was included in this report based on metropolitan statistical area status based on 2010 OMB metropolitan area and principal city definitions. Metropolitan status was only available for 36 reporting states and the District of Columbia.
- AI/AN group includes Hispanic and non-Hispanic single race AI/AN, but not AI/AN of more than one race.
- Approximately 30% of all survey responses were missing either metro status or race and were not included in this report.
- Topics and questions varied slightly across the three age groups (0–5 years, 6–11 years, and 12–17 years) to allow for age-specific information to be collected.

Accessed: https://www.census.gov/programs-surveys/nsch/data/datasets.html
National Survey on Drug Use and Health (NSDUH) | 2015–2018

The National Survey on Drug Use and Health (NSDUH) provides annual national and state-level data on the use of tobacco, alcohol, illicit drugs (including non-medical use of prescription drugs), and mental health in the United States. Approximately 70,000 individuals, age 12 and older are randomly selected to participate from all over the United States.1

Technical notes:
- Used the 4-Year Restricted-use Data Analysis System (RDAS) for 2015–2018.
- For this report, limited to U.S. residents in urban counties based on the 2013 National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties.
- Also limited to adolescents 12–17 years old.
- Identification of AI/AN utilized an imputed variable (NATIVE AMERICAN MENTIONED - IMPUTATION REVISED) to include all AI/AN, regardless of ethnicity or other races.


National Vital Statistics System - Natality Data | 2016–2018

Vital statistics natality data are a fundamental source of demographic, geographic, and medical and health information on all births occurring in the United States. The data are used to present the characteristics of babies and their mothers, track trends such as birth rates for teenagers, and compare natality trends with those in other countries.112 The natality data for 2016–2018 were compiled by NCHS from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program.

Technical notes:
- Includes all births registered within the United States to mothers residing in urban counties based on the 2013 National Center for Health Statistics (NCHS) Urban-Rural Classification Scheme for Counties. The final data was limited to 50 states and the District of Columbia.
- AI/AN group includes all live births to women who identified as AI/AN, regardless of ethnicity or other races.

Data access was obtained via a two-year Data Use Agreement with the National Center for Health Statistics executed in April 2020.

Uniform Crime Reporting Program Data (UCR) | 2019

The Federal Bureau of Investigation (FBI) Uniform Crime Reporting (UCR) Program serves as the national repository for crime and law enforcement data.113 It is a nationwide, cooperative statistical effort of more than 18,000 city, university and college, county, state, tribal, and federal law enforcement agencies eligible to voluntarily report data on crimes brought to their attention.108 Includes the NIBRS as well as three other data collections.

Technical notes:
- Not limited to urban or metro children.
- AI/AN group includes only non-Hispanic single race AI/AN and does not include AI/AN of more than one race nor of Hispanic ethnicity.
- Used for juvenile arrest data.

Accessed: [https://www.ojjdp.gov/ojstatbb/ezaucr/](https://www.ojjdp.gov/ojstatbb/ezaucr/)

111 Strengthening the Health of Future Generations Urban Indian Health Institute | uihi.org
Youth Risk Behavior Survey (YRBS) | 2019

The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of health-related behaviors that contribute to the leading causes of death and disability among youth and adults, including behaviors that contribute to unintentional injuries and violence; sexual behaviors related to unintended pregnancy and sexually transmitted diseases, including HIV infection; alcohol and other drug use; tobacco use; unhealthy dietary behaviors; and inadequate physical activity. YRBSS also measures the prevalence of obesity and asthma and other health-related behaviors plus sexual identity and sex of sexual contacts. YRBSS is a system of surveys (individual YRBS) conducted every two years. It includes 1) a national school-based survey conducted by CDC and state, territorial, tribal, and 2) local surveys conducted by state, territorial, and local education and health agencies and tribal governments.114

Technical notes:

- National YRBS data are representative of all public and private school students in grades 9–12 in the 50 states and the District of Columbia, and local YRBS data that are weighted are representative of all public school students in grades 9–12 in the respective jurisdictions.
- Data from 24 large urban school districts in 15 states were included in this report using the 2019 Combined YRBS High School Districts dataset.
- Individual questions and topics included in the survey varied across districts so that indicators include the data of anywhere from 18 to 24 participating districts.
- AI/AN group includes only non-Hispanic single race AI/AN and does not include AI/AN of more than one race nor of Hispanic ethnicity.

Accessed: https://www.cdc.gov/healthyyouth/data/yrbs/data.htm
Appendix D. Limitations

Definitions and inclusion criteria for AI/AN race in datasets are inconsistent or data for AI/AN are suppressed or aggregated with other racial groups.

This report utilizes secondary data across a variety of nationally available datasets and is therefore limited by the methods by which race data is collected and presented by each individual source, including the granularity or availability of data by race and ethnicity. While it is more inclusive to present data for AI/AN individuals regardless of multiple races or ethnicities, many datasets use a single or bridged-race variable so that each race group includes only individuals of that race, while individuals with multiple races are categorized separately as a large aggregate. Additionally, race and ethnicity variables may be consolidated into a single variable so that Hispanic individuals are a separate group regardless of race and the AI/AN group includes only non-Hispanic single-race individuals. In some cases, AI/AN estimates are not available, either because data for AI/AN individuals is suppressed or AI/AN individuals are aggregated with other minority races and ethnicities. The inconsistency in defining what AI/AN individuals are being reported, or the inability to report on AI/AN individuals separate from other racial groups, impairs what analysis can be presented and comparability across data sources. Lastly, when the analysis only includes a specific subset of AI/AN individuals based on single race or ethnicity, the results may not necessarily represent the true value across the entire urban AI/AN population and conclusions cannot be generalized to all urban AI/AN communities.

Small numbers and data suppression limit the ability to assess the health status and experiences of specific groups of vulnerable urban AI/AN youth.

Identifying and understanding the health status and needs of vulnerable subpopulations—those experiencing disproportionate risk or burden of disease—is an essential part of understanding the health of the whole population. Among urban AI/AN youth this includes children and youth with special health care needs (CSHCN), youth experiencing homelessness, youth in the foster system, incarcerated youth, youth identifying as a sexual minority, and others. Unfortunately, this report was limited to indicators among all urban AI/AN youth due to the lack of available data for specific subpopulations or small numbers requiring data suppression. Gaps in data on specific subpopulations may inform targeted data collection efforts.

Racial misclassification impacts the accuracy of data estimates.

Racial misclassification is defined as incorrect coding of an individual’s race or ethnicity in public records. This can greatly underestimate the true rate of disease, risk factor, or outcome. AI/ANs are especially likely to experience problems of incorrect classification on death certificates, therefore, true mortality rates among AI/ANs are assumed to be higher than reported numbers suggest. Because mortality data are extracted from death certificates, the race/ethnicity category is not self-reported and is often completed by a funeral director based on information received from a family member or personal observation. Based on documented racial misclassification of AI/ANs in surveillance data, any of the health disparities presented in these estimates could be larger than reported.

Data by urban status is not available in some datasets.

The purpose of this report was to present an overarching community health profile of recent data for urban AI/AN infants, children, and adolescents in the United States. As a means of identifying urban counties in the United States, the 2013 NCHS Urban-Rural Classification scheme was used when available. Unfortunately, some datasets lacked any geographic information beyond states or regions of the United States, so only indicators that could be limited to AI/AN youth in urban settings were included in this report. In other cases, datasets lacking urban status did allow for analysis by metropolitan status, using the 2010 OMB metropolitan area and principal city definitions on which the 2013 NCHS continuum is designed. Only indicators available for urban populations were included with the exception of data on violence, arrests, and committed or detained juveniles in residential placement.
Survey data is affected by sampling errors, non-response, and missing data.

Many of the data sources included in this report are national or local surveys conducted to collect data on a variety of health topics, including the National Survey on Children’s Health (NSCH), the National Survey on Drug Use and Health (NSDUH), and the Youth Risk Behavior Survey (YRBS). As part of a survey’s design, sampling frames are used to randomly select individuals as potential participants. To address potential bias introduced by the sampling design and non-response of potential participants, sample weights were used in order to create a representative estimate of the population, whether nationally or among smaller jurisdictions. Additionally, confidence intervals were calculated to provide a range of values that is likely to include the true population value with a certain degree of confidence. Lastly, indicators with a large proportion of missing data among responses were not included in this report; an exception was for the sexual health indicators from the YRBS, in which case a warning on missing data was included.

Indicators and topics relevant to AI/AN communities are not always available.

The availability of indicators used in this report was limited by the content and topics of existing data sources. The questions chosen to be included in these data sources and how they are asked depend fundamentally on the methodology, social standing, and theoretical frameworks being employed by those designing the questions. Most nationally available data sources are not designed with an Indigenous framework or methodology in mind, utilizing western definitions and approaches to health and applying those concepts across all racial and ethnic groups. In some cases, the resulting topics and indicators may be appropriate for infants, children, or adolescents of multiple races and ethnicities. However, there can also be a misalignment in how data is collected, analyzed, and interpreted for Indigenous communities when the data tools are not designed for and with these communities. The result can be a perpetuation of stereotypes, a narrative focused on deficits in these communities, and harmful assumptions about what is needed to improve health among Indigenous populations. To mitigate these potentially damaging effects, this report has worked to identify these biases, contextualize data being presented, and supplement with indicators that are the most meaningful and impactful for the conversation of health among urban AI/AN youth.
Our mission is to decolonize data, for Indigenous people, by Indigenous people.
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