South Dakota Department of Health
Office of Child & Family Services

CHILD AND ADOLESCENT HEALTH

2019 Data Brief

CHILDHOOD OBESITY

> ***Healthy People 2020 Goal for Childhood Obesity: Reduce the proportion of children who are considered obese to 9.4%, ages 2-5; 15.7%, ages 6-11; and 16.1%, ages 12-19.***[1]
>
> ***South Dakota Healthy 2020 Goal: Reduce the number of children and adolescents that are obese to 14%.***[2]

In the past 30 years, the obesity prevalence for children and adolescents has nearly tripled. Obesity refers to a child's BMI-for-age being at or above the 95th percentile. 16.6 percent of South Dakota children and adolescents aged 5 to 19 years are obese. This is just slightly less than the national rate of 17 percent of children and adolescents aged 2 to 19 years that are obese. Obesity puts children and adolescents at a higher risk for psychological or psychiatric problems, cardiovascular risk factors, chronic inflammation, type 2 diabetes mellitus, and asthma. Children with a higher BMI are more likely to be obese as an adult.[2]

29.1% of South Dakota **American Indian** children and adolescents are **obese** compared to **13.9%** of **white** children and adolescents in South Dakota.[2]

Childhood overweight and obesity is a multi-faceted problem that should be addressed by promoting healthy eating, increasing physical activity and decreasing inactivity.[2] Figures 1 and 2 describe the percentage of students in grades 9-12 with certain health behaviors.[3]

Figure 1: Percent of Students with Behaviors that Contribute to Obesity, Dietary Behaviors, and Weight Control Practices[3]

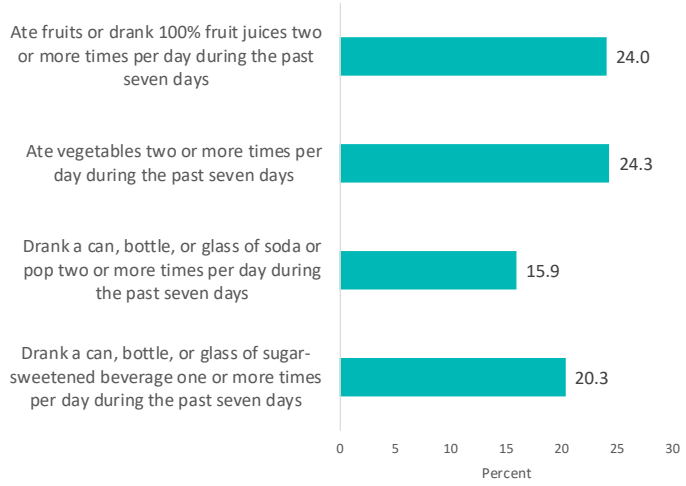
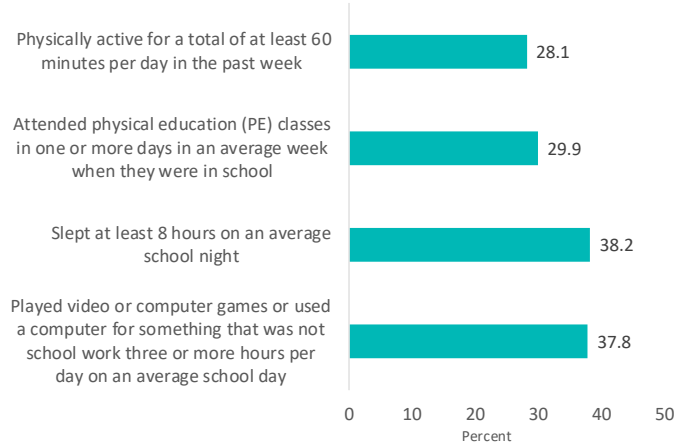


Figure 2: Percent of Students with Behaviors that Contribute to Physical Activity and Sedentary Behaviors[3]

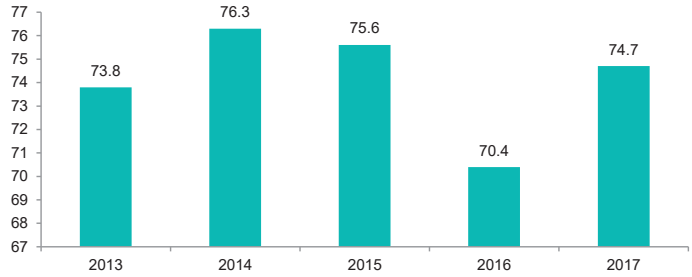


IMMUNIZATIONS

Childhood vaccination is considered among the most cost-effective preventive services available as it can prevent a potential lifetime lost to death and disability. Sustaining vaccination rates requires a constant effort to reach new children.[4] The U.S. experienced a decline in childhood immunization rates from 72.7% in 2015 to 70.4% in 2017.[5]

South Dakota has achieved high immunization coverage rates for many childhood vaccines with at least a 96% coverage rate for DTaP, MMR, Polio, and Varicella in the 2017-2018 kindergarten survey. However, for younger children 19-35 months of age, South Dakota falls short in immunizing children for the 4th dose of DTaP, 4th dose of Pneumococcal, and the full series of HIB vaccines.[4] Figure 3 shows the percent of children aged 19-35 months in South Dakota who received recommended vaccinations from 2013-2017.[4]

Figure 3: Percent of children aged 19-35 months who receive recommended vaccinations, 2013-2017[4]



DEVELOPMENTAL SCREENING

Early developmental screening is key to identifying developmental disorders that affect the overall health of children and their families.[6] Screening helps to track progress in areas of language, social or motor development. It can help raise awareness of a child's development and allows the family to celebrate milestones. Screening is crucial to identifying possible delays and challenges early and providing children and families with the tools they need to support their children's development.[7]

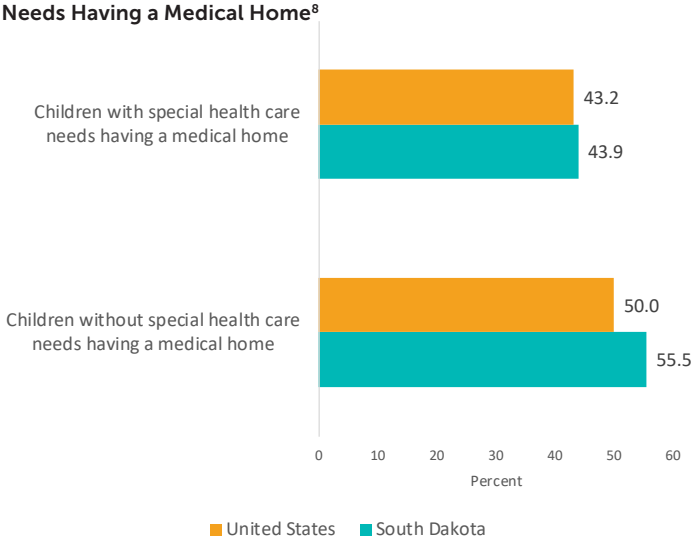
In 2016, South Dakota ranked **11th highest** in developmental screening rates for children ages 9 months through 35 months, with a rate of **40.4%** of children screened with a parent-completed screening tool.[8]

MEDICAL HOME

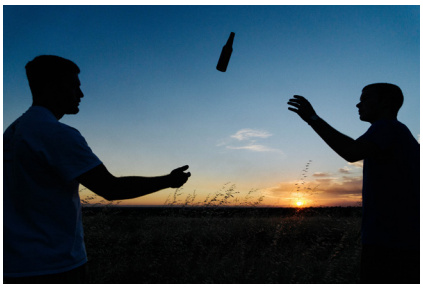
> ***Healthy People 2020 Goal: Increase the proportion of children who have access to a medical home to 63.3%[9]***
>
> ***Increase the proportion of children with special health care needs who have access to a medical home to 51.8%[9]***

A medical home is not a physical building, but rather a way of providing high quality primary care. The concept of a medical home recognizes the importance of the family as the center of the child's life, and builds the health care partnerships around the family's needs. The American Academy of Pediatrics emphasizes that a medical home should be accessible, family-centered, continuous, comprehensive, coordinated, compassionate, and culturally effective.[10] Figure 4 shows state and national rates of children with and without special health care needs that have a medical home.[8]

Figure 4: Percent of Children With and Without Special Health Care Needs Having a Medical Home[8]

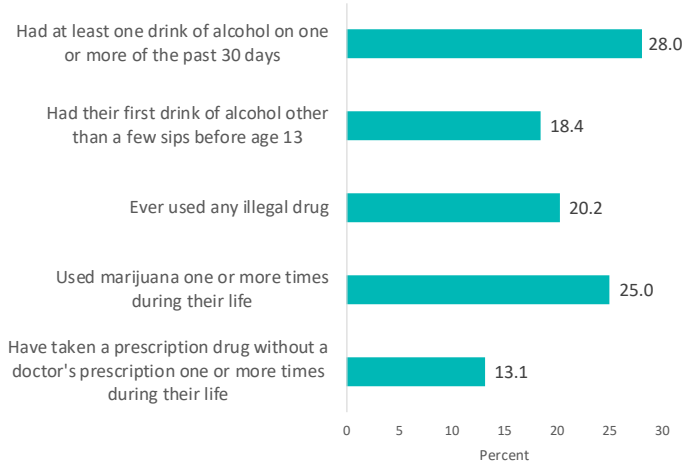


SUBSTANCE USE



Substance use by adolescents can affect their health and well-being. The effects of this behavior can impair growth and development, specifically brain development. It can also contribute to the development of adult health problems such as heart disease, high blood pressure, and sleep disorders. Substance use is seen in coordination with other risky behaviors such as dangerous driving. The earlier that adolescent substance use begins, the greater the likelihood that they will continue to use substances and develop substance use problems later in life.[11] Figure 5 shows the percentage of South Dakota students in grades 9-12 with behaviors that contribute to alcohol and drug use.[3]

Figure 5: Percent of High School Students with Behaviors that Contribute to Alcohol and Drug Use[3]



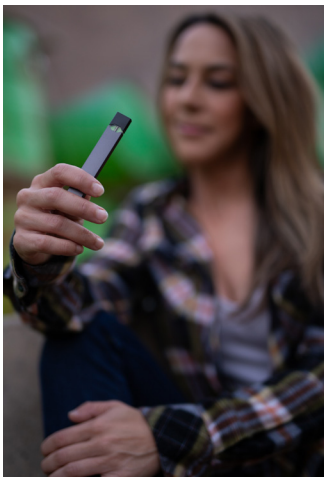
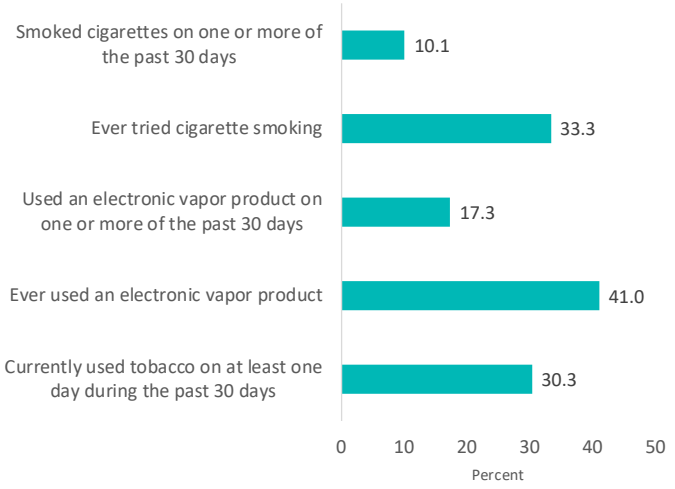


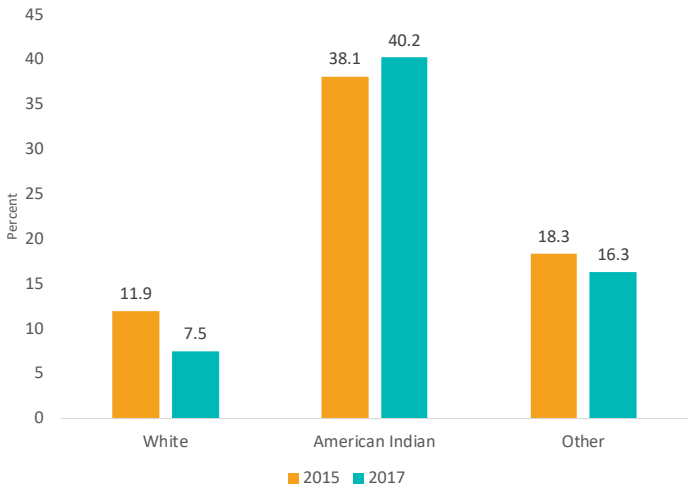
Figure 6 describes the percentage of South Dakota students in grades 9-12 with behaviors that contribute to tobacco use. Although cigarette smoking among this age group continues to decline, the use of electronic vapor products is on the rise. In 2015, 41% of students reported that they had ever used an electronic vapor product, compared to 33.3% reporting that they had ever tried cigarette smoking. No matter the method of delivery, nicotine is harmful for adolescents. In addition to affecting brain development, the nicotine in e-cigarettes usually contains other chemicals that can have harmful effects on the respiratory system.[12]

Figure 6: Percent of High School Students with Behaviors that Contribute to Tobacco Use[3]



Although national data shows an overall decrease in middle school tobacco use, striking differences of use by race still exist in South Dakota. Figure 7 shows the percent of students in grades 6-8 who have ever used tobacco products on at least one occasion by race and ethnicity. White students (7.5%) were less likely to have ever used tobacco than American Indian (40.2%) or other race students (16.3%).[13]

Figure 7: Percent of Middle School Students Who Have Ever Used Tobacco Products on at Least One Occasion By Race/Ethnicity[13]



BULLYING

Healthy People 2020 Goal: Reduce the percentage of students in grades 9 through 12 who reported they were bullied on school property in the last 12 months to 17.9%[14]

21.6% of South Dakota students in grades 9-12 reported they had been bullied on school property during the past 12 months.[3]

Bullying is defined as unwanted aggressive behavior that is repeated over time and involves an imbalance of power or strength. It is a type of youth violence that threatens young people's well-being and can result in physical injuries, along with social, emotional and academic problems. Bullying occurs in-person and through technology. This is often known as "cyberbullying."[15] According to the Centers for Disease Control and Prevention, approximately 15% of high school students in the U.S. experience cyberbullying and 20% experience bullying victimization on school property.[16] Students who are bullied are at a greater risk for sadness or loneliness, anxiety, depression, school absenteeism, health complaints, and injuries.[17]

SUICIDE

Healthy People 2020 Goal: Reduce suicide attempts by adolescents to 1.7 suicide attempts per 100 population.[18]

Suicide is a complex and growing problem. It is the 10th leading cause of death in the United States. Suicide affects all age groups and is the second leading cause of death for people 10 to 34 years of age. Nationally, the highest rates of suicide occur among non-Hispanic American Indian/Alaska Native and non-Hispanic white populations. Suicide is also more prevalent among those people who have experienced violence, including child abuse, bullying, or sexual violence. Suicide and suicide attempts can have long-term physical, emotional, and financial effects on individuals, families, and communities. Suicide prevention is multifaceted, and protective factors such as connectedness and easy access to health care have been shown effective in guarding against suicide.[19] Figure 8 shows the percent of South Dakota students in grades 9-12 with behaviors related to suicide in the past 12 months.[3] Figures 9, 10, and 11 show South Dakota specific data related to suicide.[18]

Figure 8: Percent of High School Students with Behaviors Related to Suicide in the Past 12 Months[3]

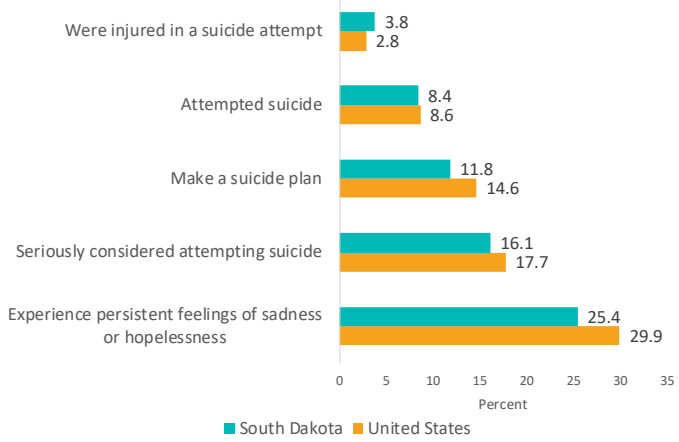
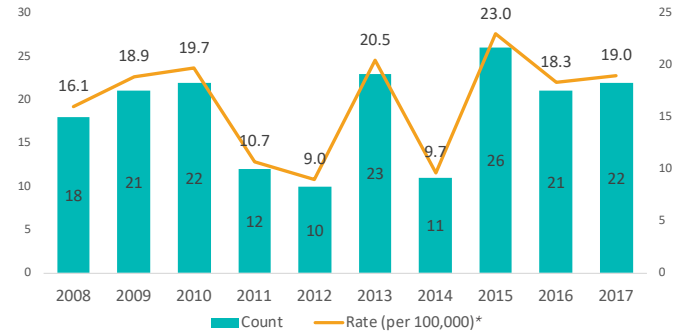


Figure 9: Suicides Among Ages 10-19, South Dakota (2008-2017)[20]



**rates with counts less than 20 are considered unstable and should be interpreted with caution*

Figure 10: Suicide by Sex, Ages 10-19, South Dakota (2008-2017)[20]

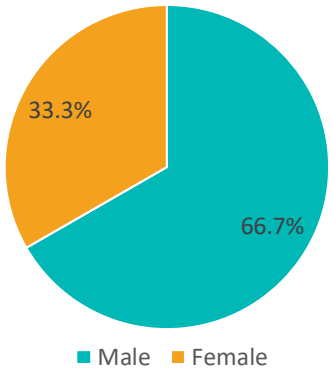
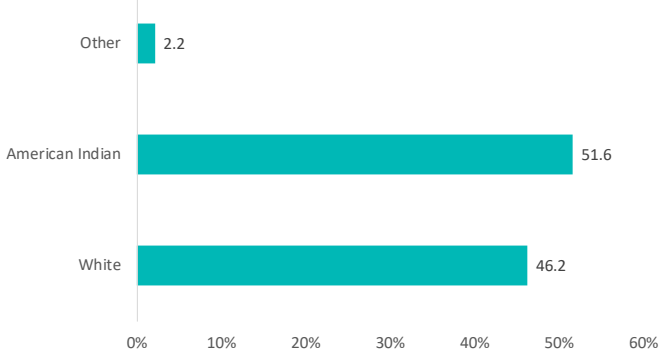


Figure 11: Suicide by Race, Ages 10-19, South Dakota (2008-2017)[20]

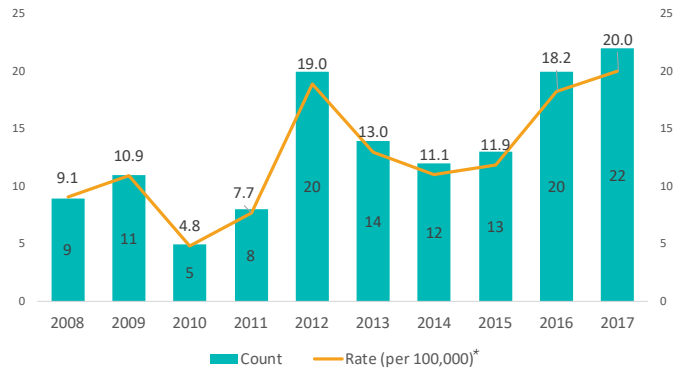


INJURY

Injuries are the leading cause of death in children and teens in the United States. The most common causes of child injury include motor vehicle traffic accidents, suffocation, drowning, poisoning, fires, and falls. Child injuries are largely preventable.[21]

Figure 12 shows the number and rate of fatal injuries among children ages 1-9 in South Dakota from 2008-2017. 80% of these deaths were unintentional. 26% were due to a motor vehicle accident.[20]

Figure 12: Fatal Injuries Among Ages 1-9, South Dakota (2008-2017)[20]



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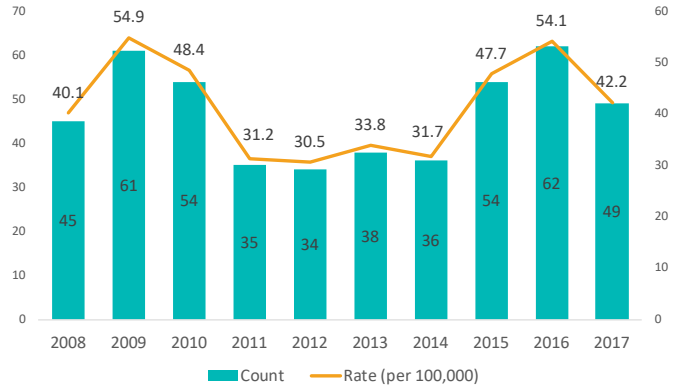
The **South Dakota adolescent mortality rate** ages 10 through 19 is **63.7** per 100,000 compared to the **national rate** of **33.1**.[20]

The **adolescent motor vehicle mortality rate** for ages 15 through 19 in **South Dakota** (2014-2016) was **23.4** per 100,000 compared to the **national rate** of **12.0**.[20]

Motor vehicle traffic accidents are the leading cause of death for teens in the United States. This is also a leading cause of injury and emergency room visits for this age group.[22] Figure 13 shows the number and rate of fatal injuries among adolescents ages 10-19 in South Dakota from 2008-2017. 54% were unintentional and 40% were due to suicide. 35.5% of these deaths were attributed to motor vehicle traffic accidents.[20]

Figure 13: Fatal Injuries Among Ages 10-19, South Dakota (2008-2017)[20]



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