

Alcohol-Related Deaths in South Dakota, 2019

In South Dakota, the number of alcohol-related deaths has been increasing in the last 10 years. The alcohol-related death rate increased 122.1% from 12.2 per 100,000 in 2009 to a rate of 27.1 per 100,000 in 2018 (Figure 1). South Dakota had the seventh highest crude rate for alcohol-related deaths from 2008-2017 (Figure 2).

Figure 1: Alcohol-Related Deaths and Rates, South Dakota (2009-2018)

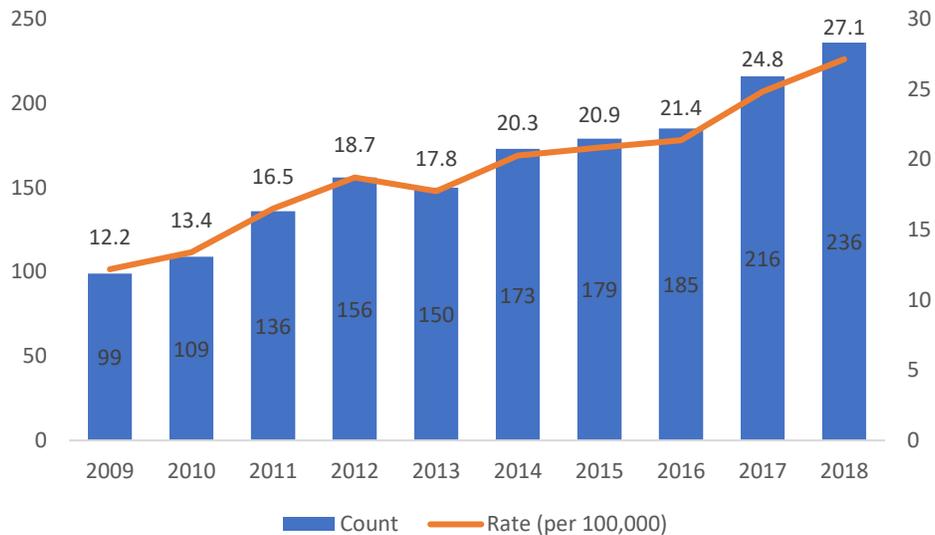
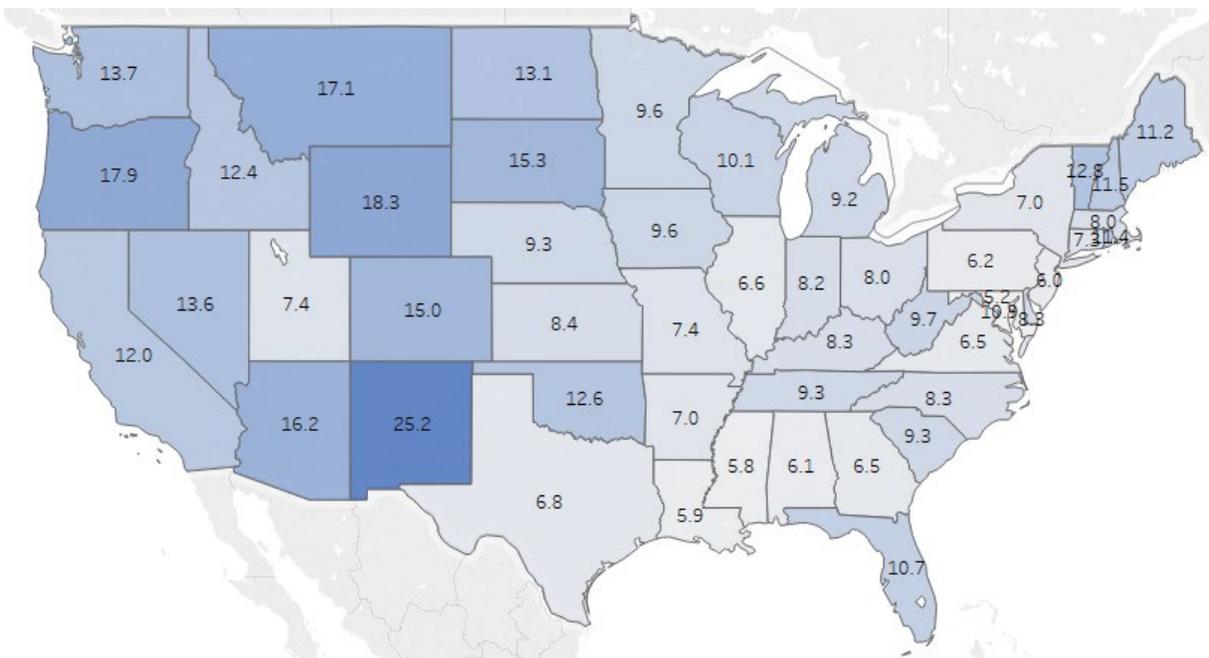
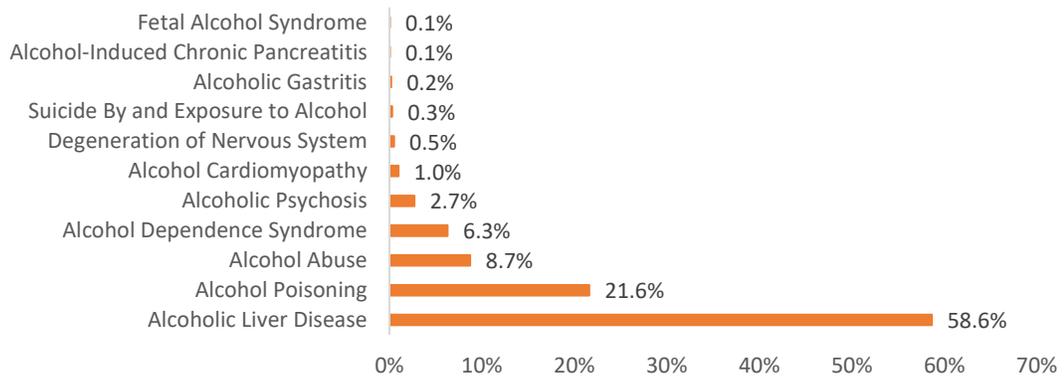


Figure 2: Alcohol-Related Death Rate by State, (2008-2017)



Alcoholic liver disease is the most common alcohol-related cause of death in South Dakota. From 2009-2018, alcohol poisoning accounted for 21.6% of all alcohol-related deaths in South Dakota (Figure 3).

Figure 3: Alcohol-Related Deaths by Cause, South Dakota (2009-2018)



High Risk Populations

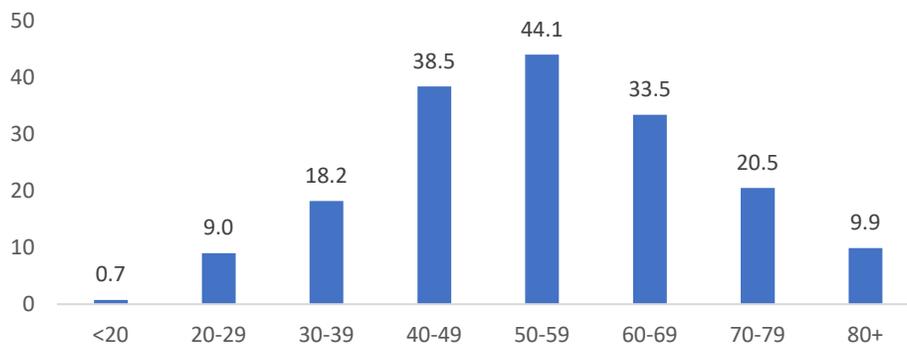
Sex

Overall, males are more likely to die from an alcohol-related cause of death compared to females. Males made up 66.7% of all alcohol-related deaths from 2009-2018.

Age

Although alcohol-related deaths affect all ages of South Dakotans, individuals between the ages of 40-69 are at the highest risk compared to all the other age groups (Figure 4).

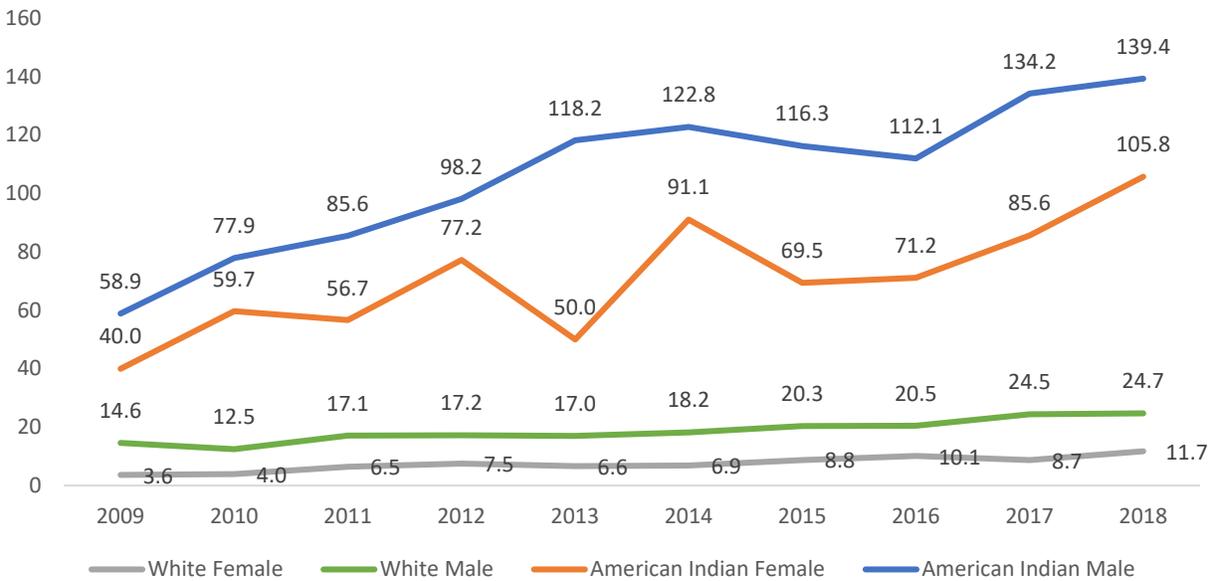
Figure 4: Alcohol-Related Death Rate (per 100,000) by Age, South Dakota (2009-2018)



Race

From 2009-2018, 58.1% of alcohol-related deaths were White, 40.8% American Indian, and 1.1% Other (Black, Asian, unknown). American Indians died of alcohol-related deaths at rates almost seven times higher than Whites (89.0 vs 13.1 per 100,000). American Indian males and females experience significantly higher rates compared to White males and females (Figure 5).

Figure 5: Alcohol-Related Death Rate (per 100,000) by Sex and Race, South Dakota (2009-2018)



Case Definitions and Data Source

Case Definitions:

Alcohol-related deaths can be broken down into two primary groups, acute and chronic causes of death. Acute causes of death include alcohol poisoning and other causes such as injury where alcohol is a contributing factor. For chronic cause of death there are 12 different causes, including alcohol abuse, liver diseases, and other alcohol induced chronic conditions.

Acute causes of death: alcohol poisoning (X45, Y15, T51.0-T51.1, T51.9), suicide by and exposure to alcohol (X65), and excessive blood level of alcohol (R78.0)

Chronic causes of death: alcoholic psychosis (F10.3-10.9), alcohol abuse (F10.0-F10.1), alcohol dependence syndrome (F10.2), alcohol polyneuropathy (G62.1), degeneration of nervous system due to alcohol (G31.2), alcoholic myopathy (G72.1), alcohol cardiomyopathy (I42.6), alcoholic gastritis (K29.2), alcoholic liver disease (K70.0-K70.4, K70.9), fetal alcohol syndrome (Q86.0), fetus and newborn affected by maternal use of alcohol (P04.3, O35.4), and alcohol-induced chronic pancreatitis (K86.0)

Data Sources:

South Dakota Department of Health (DOH) Vital Statistics

Wonder, Center for Disease Control and Prevention