



SOUTH DAKOTA  
DEPARTMENT OF HEALTH



## Alcohol-Related Deaths and Nonfatal Visits

South Dakota

# Alcohol-Related Deaths in South Dakota

Alcohol-related deaths have been an increasing concern over the last ten years in South Dakota. Alcohol-related deaths increased by 77% from 173 deaths in 2014 to 306 deaths in 2023, but deaths have decreased by 7% from 2022 to 2023 (Figure 1). South Dakota had the fourth highest age-adjusted rate for alcohol-related deaths at 29.7 per 100,000, while the United States rate was 12.1 per 100,000, 2018-2022 (Figure 2).

Figure 1: Alcohol-Related Deaths and Rates, South Dakota

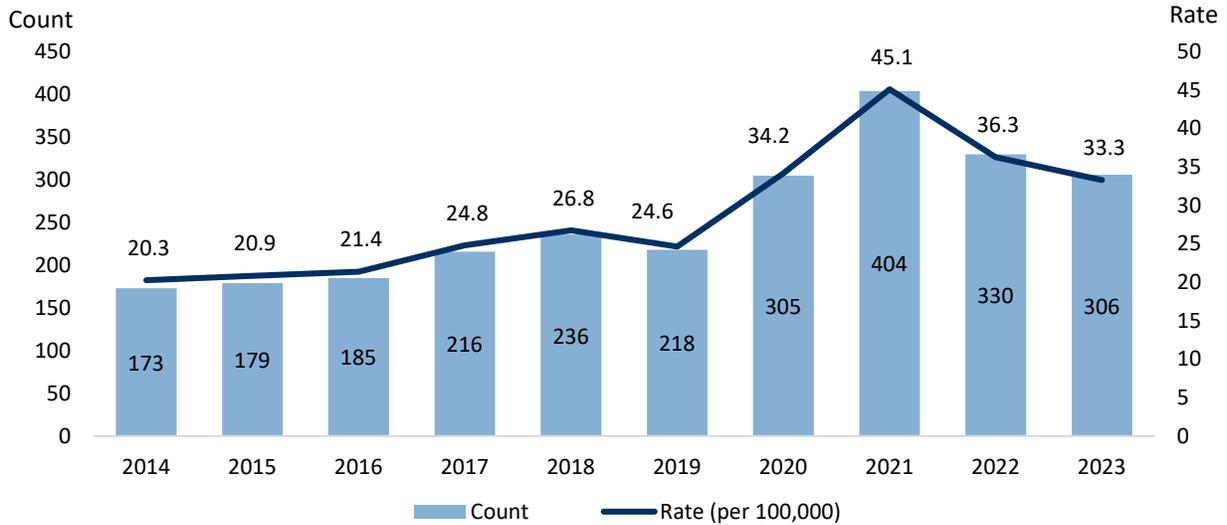
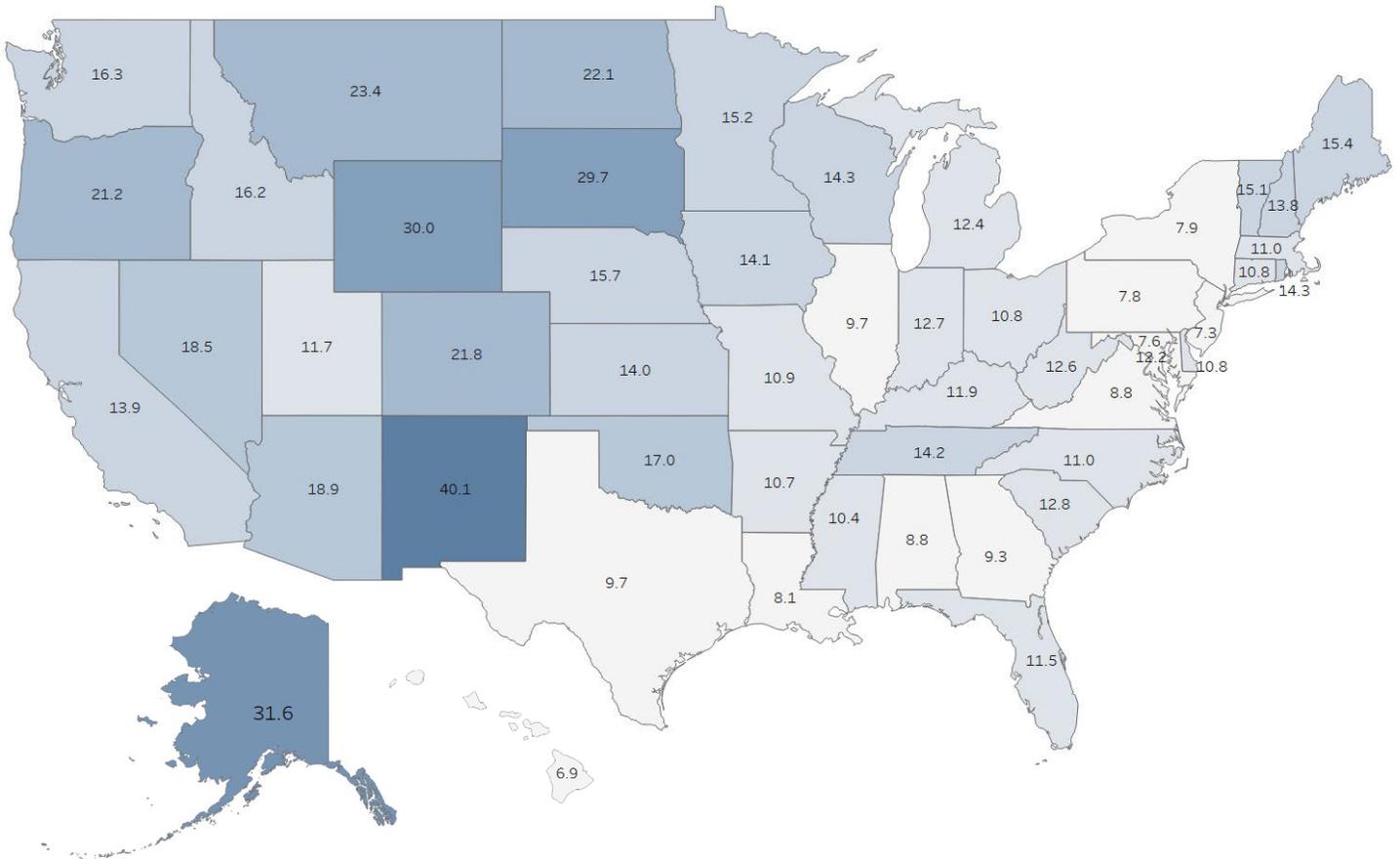


Figure 2: Alcohol-Related Death Rates by State (2018-2022)

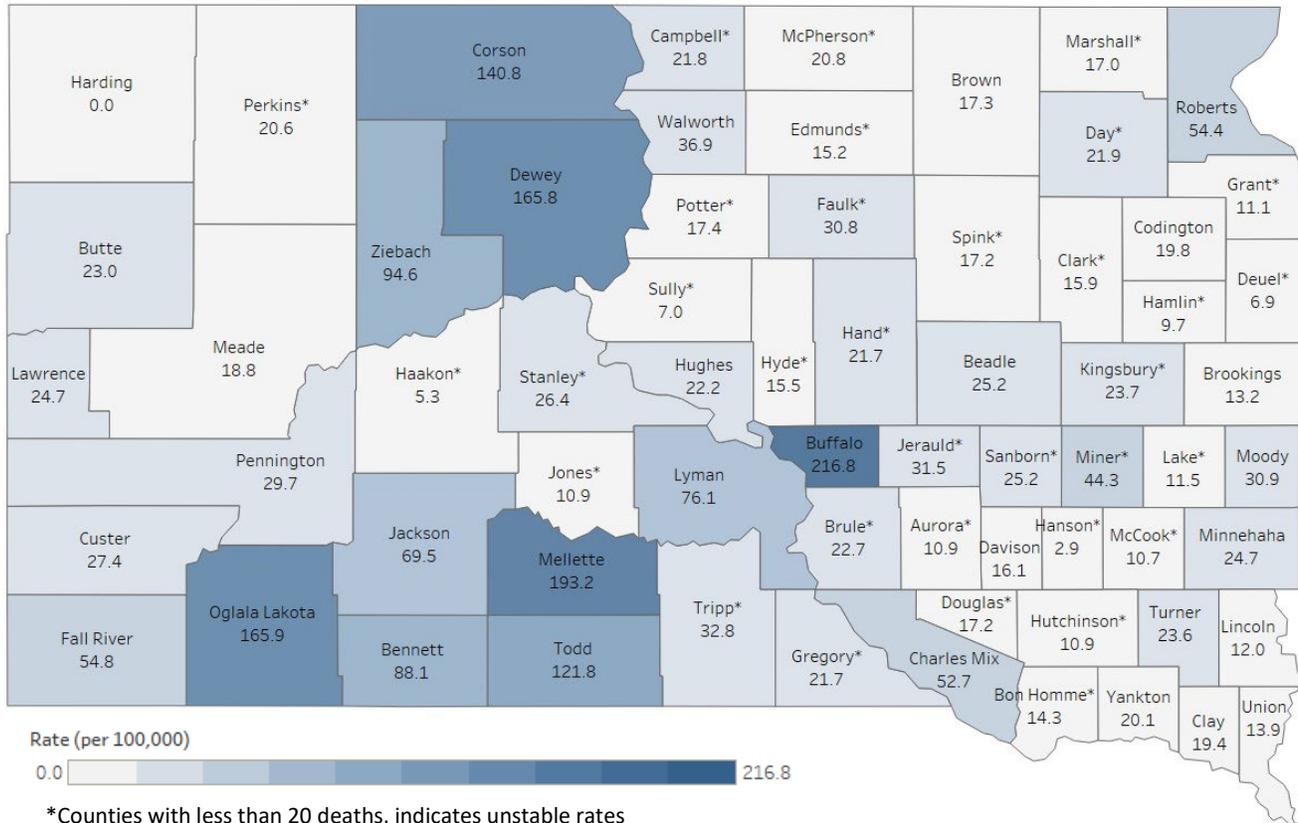
Includes codes: F10.0-10.9, G32.1, G62.1, G72.1, I42.6, K29.2, K70.0-70.4, K70.9, K86.0, O35.4, P04.3, Q86.0, R78.0, X45, X65, Y15



## Alcohol-Related Deaths by County

Among counties with stable rates for comparison ( $\geq 20$  deaths), the top five counties included Buffalo (216.8 per 100,000), Mellette (193.2 per 100,000), Oglala Lakota (165.9 per 100,000), Dewey (165.8 per 100,000), and Corson (140.8 per 100,000).

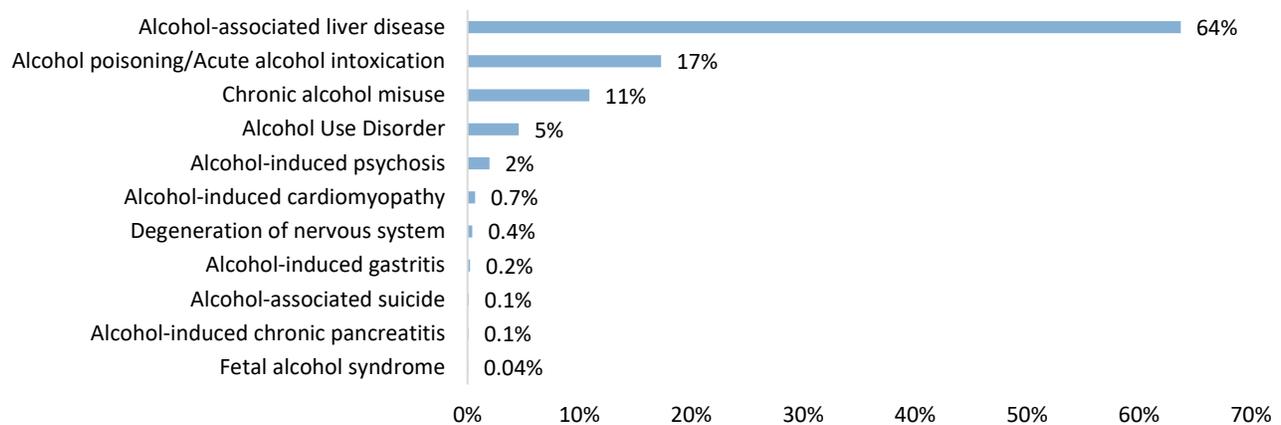
Figure 3: Alcohol-Related Death Rates by County, 2014-2023



## Common Causes of Alcohol-Related Deaths

Alcohol-related deaths include acute causes, such as alcohol poisoning and injuries where alcohol was a contributing factor, and chronic causes, such as alcohol misuse, liver disease, and other alcohol-induced chronic conditions. Alcohol-associated liver disease was the most common cause of alcohol-related deaths in South Dakota, accounting for 64% of deaths.

Figure 4: Alcohol-Related Deaths by Cause, South Dakota, 2014-2023



## High-Risk Populations

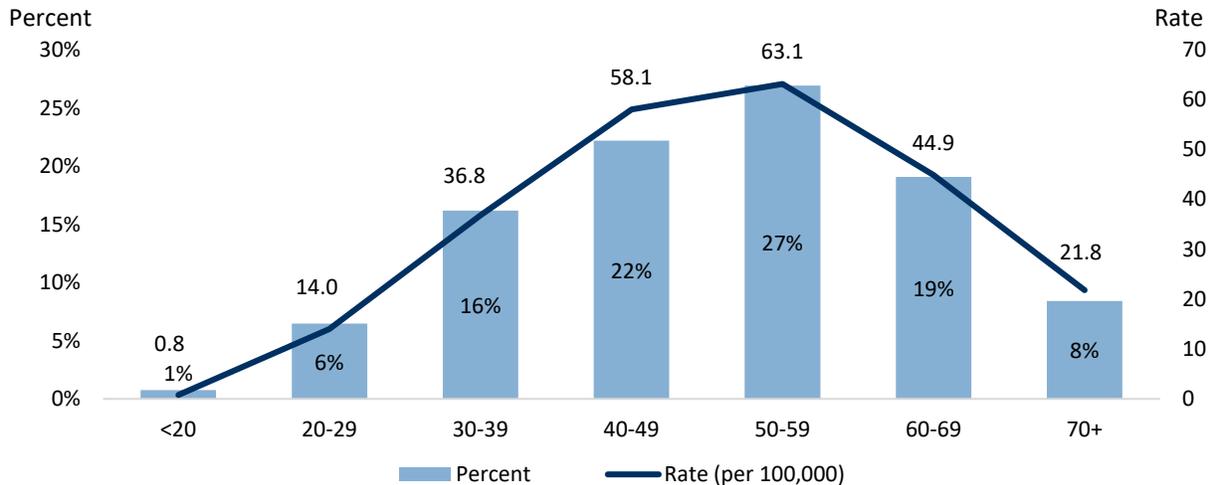
### Sex

Overall, males were more likely to die from an alcohol-related cause of death than females. Males made up 65% of all alcohol-related deaths from 2014-2023. The rate of alcohol-related deaths among males was almost two times higher than the female rate (37.2 vs 20.4 per 100,000).

### Age

In South Dakota, adults aged 30 years and older are at the highest risk for alcohol-related deaths. Adults aged 50-59 years made up the largest proportion of alcohol-related deaths (Figure 5).

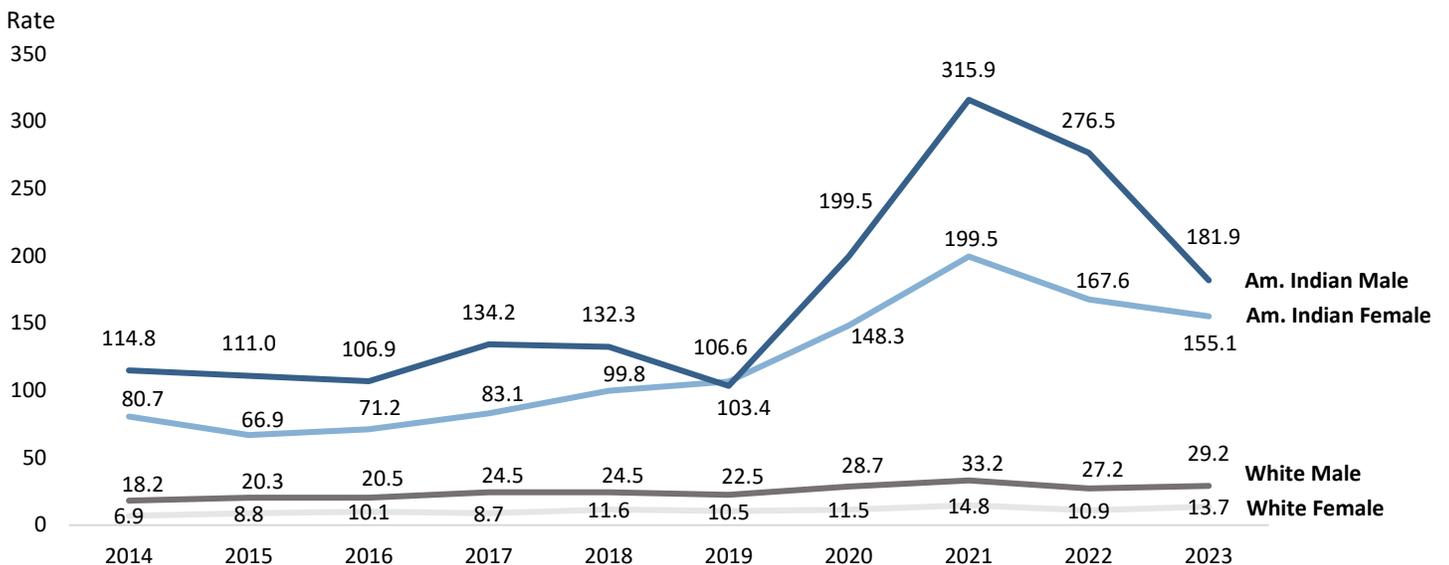
Figure 5: Alcohol-Related Deaths by Age Group, South Dakota, 2014-2023



### Race

From 2014-2023, 53% of alcohol-related deaths were White, 44% were American Indian, and 3% were another race (Black, Asian, multiracial, Hispanic, and unknown). American Indian alcohol-related death rates were eight times higher than White death rates (143.0 vs. 17.9 per 100,000). American Indian males and females experienced higher rates of alcohol-related deaths than White males and females (Figure 6).

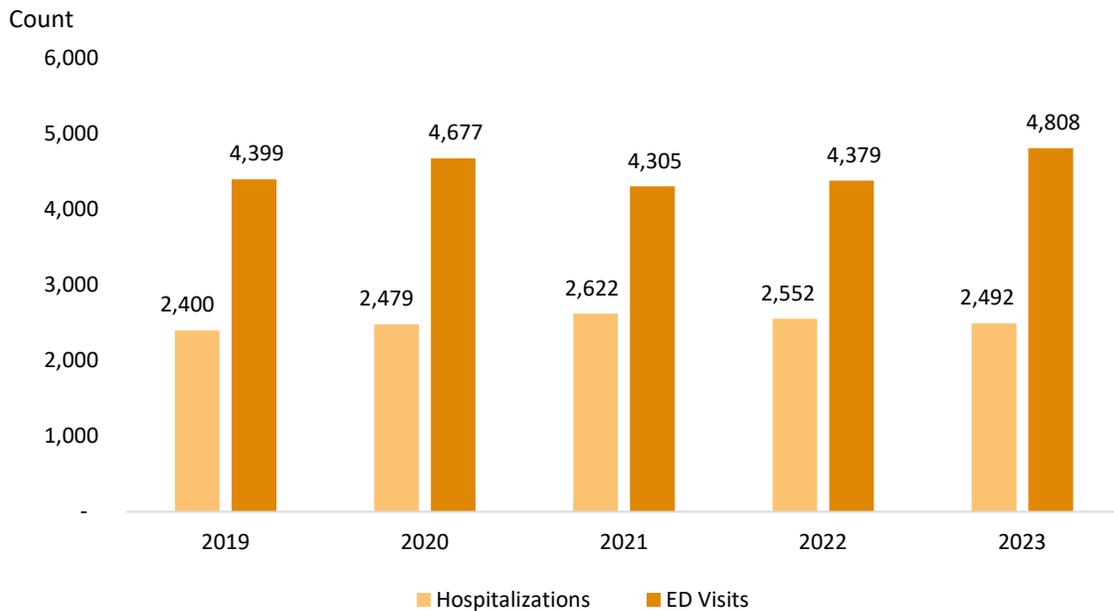
Figure 6: Alcohol-Related Death Rate (per 100,000) by Sex and Race, South Dakota



# Nonfatal Alcohol-Related Visits in South Dakota

From 2019-2022, there were 35,113 alcohol-related hospitalizations and emergency department (ED) visits. In 2023, there were 4,808 ED visits related to alcohol, which was the highest count over the last 5 years (Figure 7).

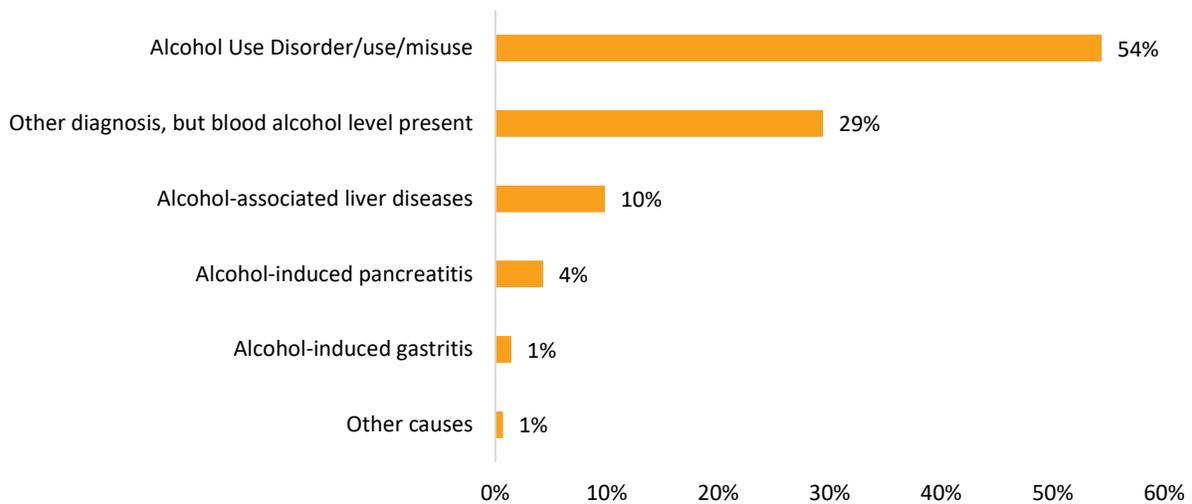
Figure 7: Alcohol-Related Hospitalizations and Emergency Department Visits



## Common Causes of Alcohol-Related Visits

Alcohol Use Disorder/use/misuse was the most common cause of alcohol-related hospitalizations and ED visits. The second most common cause was non-alcohol-related diagnoses with blood alcohol levels present (blood alcohol level of 80mg/100ml or more) (Figure 8).

Figure 8: Alcohol-Related Hospitalizations and ED Visits by Cause, 2019-2023



## High-Risk Populations

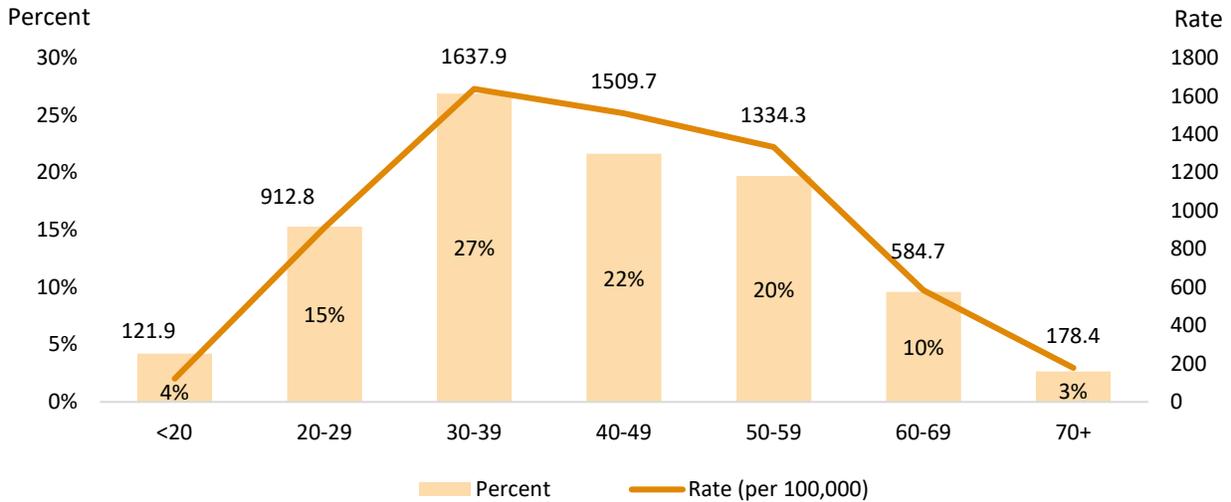
### Sex

Overall, males are more likely to have a nonfatal visit for an alcohol-related cause than females. Males made up 67% of all alcohol-related visits from 2019-2023. The rate of alcohol-related visits among males is two times higher than the female rate (1,037.0 vs. 515.5 per 100,000).

### Age

Compared to other age groups, individuals between the ages of 30-59 years are at the highest risk for alcohol-related hospitalizations and ED visits (Figure 9).

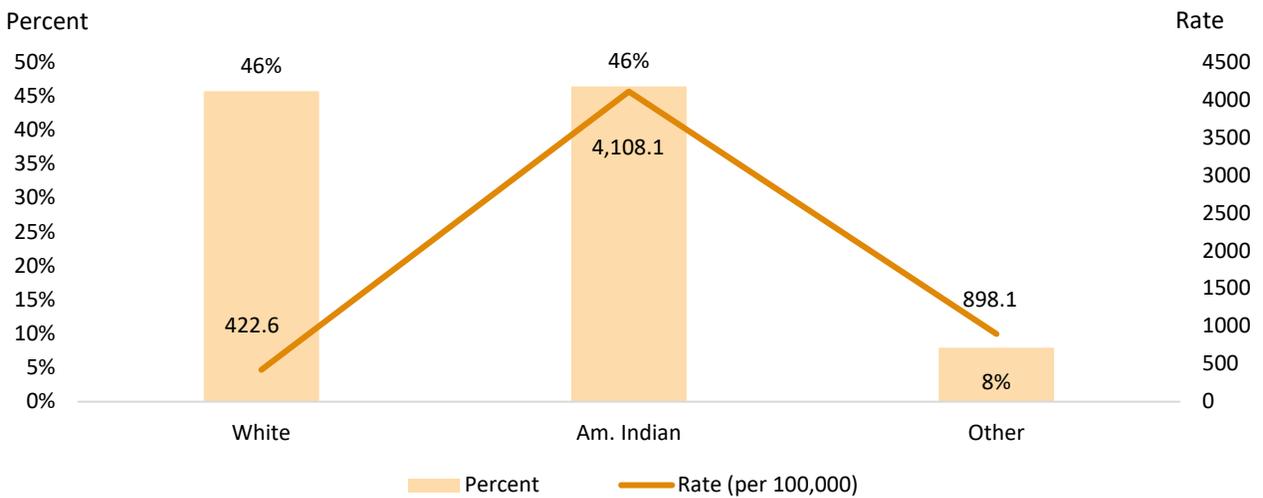
Figure 9: Alcohol-Related Visits by Age Group, 2019-2023



### Race

From 2019-2023, 46% of alcohol-related visits were White, 46% were American Indian, and 8% Other (Black, Asian, Native Hawaiian/Pacific Islander, multiracial, and unknown). American Indian alcohol-related visit rates were nine times higher than White rates (4,108.1 vs. 422.6 per 100,000) (Figure 10).

Figure 10: Alcohol-Related Visit Rates (per 100,000) by Race



## Prevention Resources

To view available state and national resources, visit <https://doh.sd.gov/health-data-reports/injury-prevention/alcohol-related-death-data/>.

## Data Sources and Methods

Data in this report may differ from other reports due to how the data was analyzed. See below for case definitions and data sources.

### **Mortality Data:**

National mortality data used in this report comes from the Centers for Disease Control and Prevention (CDC) WONDER data reporting system. South Dakota mortality data comes from the South Dakota Department of Health (DOH) Vital Statistics.

Acute causes of death: alcohol poisoning and acute alcohol intoxication (X45, Y15, T51.0-T51.1, T51.9), alcohol-associated suicide (X65), and excessive blood level of alcohol (R78.0). Chronic causes of death: alcohol-induced psychosis (F10.3-10.9), alcohol use disorder (F10.0-F10.1), alcohol dependence syndrome (F10.2), alcohol-induced polyneuropathy (G62.1), degeneration of nervous system due to alcohol (G31.2), alcohol-induced myopathy (G72.1), alcohol-induced cardiomyopathy (I42.6), alcohol-induced gastritis (K29.2), alcohol-associated 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).

### **Hospital and Emergency Department Data:**

South Dakota hospital and emergency department data comes from the South Dakota Association of Healthcare Organizations (SDAHO). Data from SDAHO does not include cases from Indian Health Services and Veterans Affairs medical centers. South Dakota alcohol-related hospitalization and emergency department visit data in this report does not include deaths. South Dakota data reflects the number of inpatient and outpatient visits for South Dakota residents by year of discharge.

Alcohol-related hospitalization causes include alcohol-induced pseudo-Cushing's syndrome (E24.4), alcohol use disorder/use/misuse (F10.1[0-2,4-5,8-9], F10.2, F10.9[2,4-9]), degeneration of nervous system due to alcohol (G31.2), alcohol-induced polyneuropathy (G62.1), alcohol-induced myopathy (G72.1), alcohol-induced cardiomyopathy (I42.6), alcohol-associated liver disease (K70.0, K70.1[0-1], K70.2, K70.3[0-1], K70.4[0-1], K70.9), alcohol induced pancreatitis (K85.2[0-2]), K86.0), maternal care for (suspected) damage to fetus from alcohol (O35.4XX[0-5,9]), alcohol use complicating pregnancy/childbirth/puerperium (O99.31[0-5]), newborn affected by maternal use of alcohol (P04.3), fetal alcohol syndrome (Q86.0), toxic effect of alcohol (T51.0X[1A-4A], T51.9[1-4,XA]), and other cause listed in diagnoses field, but blood alcohol level present (Y90.4-.8).