The Iowa Violent Death Reporting System (IAVDRS) is a CDC funded statewide surveillance system that collects information on deaths in Iowa resulting from homicide, suicide, unintentional firearm deaths, legal intervention, and deaths from undetermined intent. IAVDRS is a multi-source data system from death certificates, medical examiner, and law enforcement reports. Iowa began collecting data in 2015 with statewide coverage achieved in 2016. This report describes deaths by suicide for the years 2016 to 2018 by age and sex for residents of Iowa.

Toxicology

- The most commonly identified substance in deaths from suicide was alcohol. Alcohol was prevalent in 36% of deaths from suicide that had a test for alcohol.

About three quarters of all deaths from suicide are tested and have their toxicology report sent to IAVDRS for alcohol, amphetamines, benzodiazepines, marijuana, and opiates. Other types of drugs were tested less frequently.

- Female Iowans were more likely to have a positive test for benzodiazepines. This may be reflective of a difference in mental health treatment or seeking of mental health treatment between male and female Iowans as benzodiazepine can be use to treat anxiety disorders.

The presence of a drug does not necessarily mean the drug was involved in the violent death. The presence of a positive test alone does not indicate an increased risk for suicide from the substance.

Number of Deaths from Suicide by Age and Sex

During the 3-year period 2016-2018 there were 1,393 deaths from suicide.
- 1,142 Male (82%)
- 251 Female (18%)

There were more male deaths from suicide for each age group. Sex was identified using the death certificate. Limited data is available to identify transgender or non-binary individuals.
FACTORS CONTRIBUTING TO DEATHS FROM SUICIDE

Contributing circumstances are identified from review of the medical examiner report and law enforcement report that are made after a death from suicide. Multiple contributing circumstances can be recorded for a death from suicide. Frequency for the report of the following circumstances occurring around the time of death are presented: drug or alcohol abuse, problem with a family member, financial problems, problem with an intimate partner, job problems, mental health problems, and physical health problems.

More information on suicide prevention efforts and resources can be found at Your Life Iowa (http://www.yourlifeiowa.org), 1-855-581-8111 (telephone) and 1-855-895-8398 (TEXT).

Trends observed in contributing circumstance data:

- Mental health problem was the most commonly reported contributing circumstance for female Iowans who had a death from suicide.
- There did not appear to be a difference in mental health problems across age groups.
- For male Iowans 45 years old and older, physical health problems were commonly identified as a contributing cause of the death by suicide.
- Male and female Iowans age 10-44 were the most likely to have a report of a drug or alcohol problem or a problem with an intimate partner when compared to the older age group.

Other examples of circumstances that occurred before the death by suicide and were recorded in IAVDRS include: criminal legal problem (11.6% male, 3.3% female); recent suicide of friend or family member (3.1% male, 2.9% female); school problem (2.1% male, 2.9% female). In addition to differences in circumstances before the suicide, there was a difference in current mental health treatment between male and female Iowans who died by suicide. Male decedents of suicide were less likely to be currently receiving mental health treatment with 26.8% currently seeking treatment compared to 50.4% of female decedents of suicide currently seeking mental health treatment at the time of the death.

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