Iowa Violent Death Reporting System

Presentation Contributors

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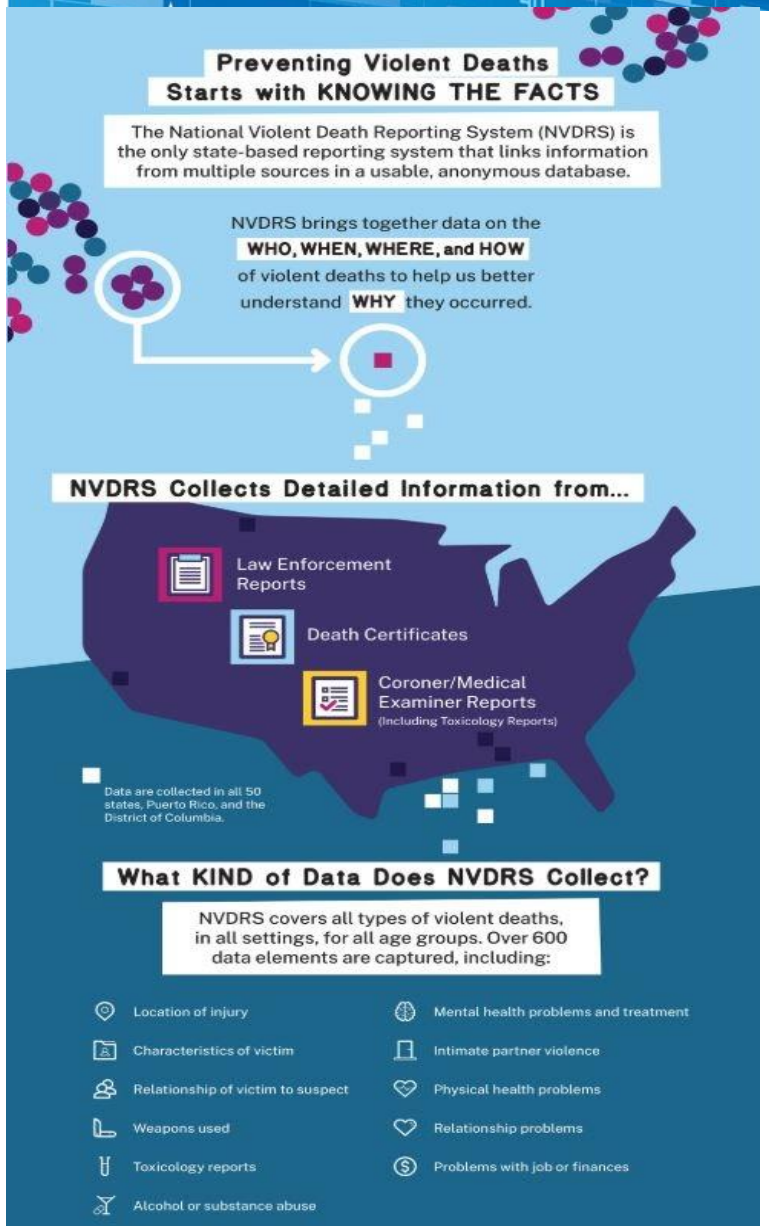
Presentation Objectives

As a result of attending this session, participants will be able to…

- Describe the history, purpose and implementation of the Iowa Violent Death Reporting System (IAVDRS)
- Identify top causes of violent death in Iowa and common contributing factors
- Apply information to prevention and response efforts in their respective agencies

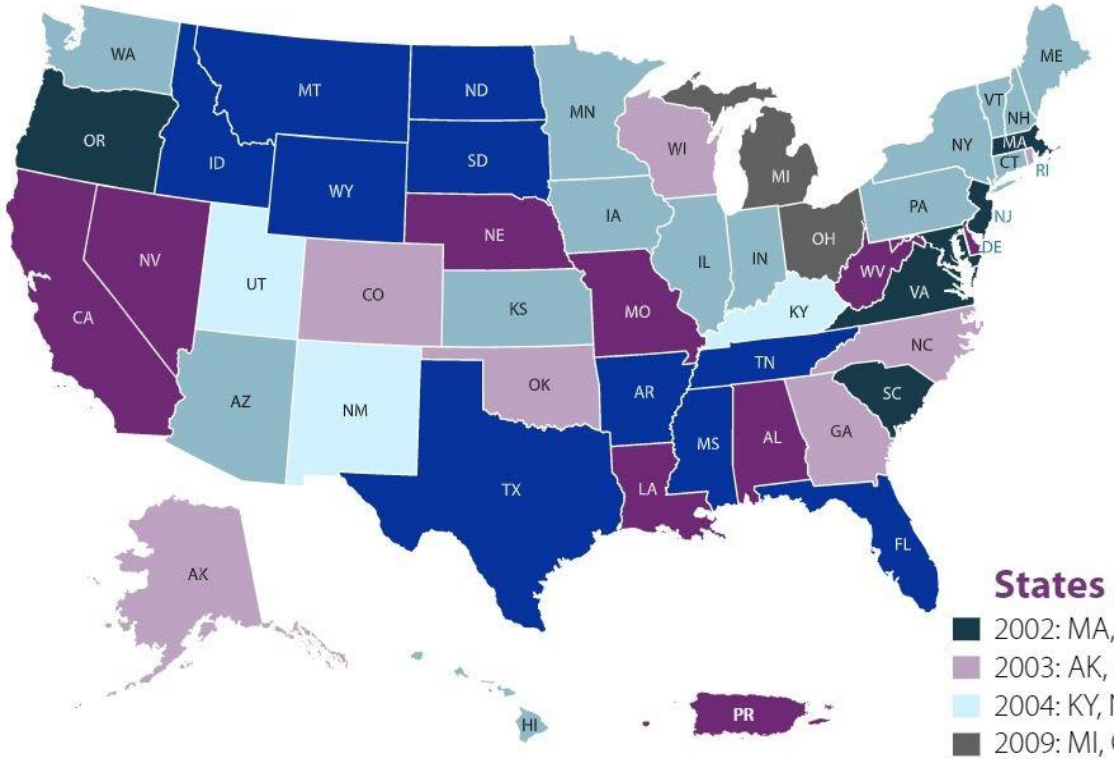
What is the IAVDRS?

The IAVDRS, as part of the *National Violent Death Reporting System* network, is the only state-based reporting system that pools *more than 600 unique data elements* from multiple sources into a *usable, anonymous database.* This system covers *all types of violent death-including homicides and suicides-in all settings for all age groups.* As such, this system is *far more comprehensive* than what is available elsewhere and data can be used *develop and tailor violence prevention efforts.*



- **Data is collected on:**
  - Homicides
  - Suicides
  - Deaths resulting from law enforcement intervention
  - Unintentional firearm injury deaths
  - Deaths of undetermined intent
  - Deaths resulting from terrorism

Image: NVDRS Infographic|Violence Prevention |Violence Prevention|Injury Center



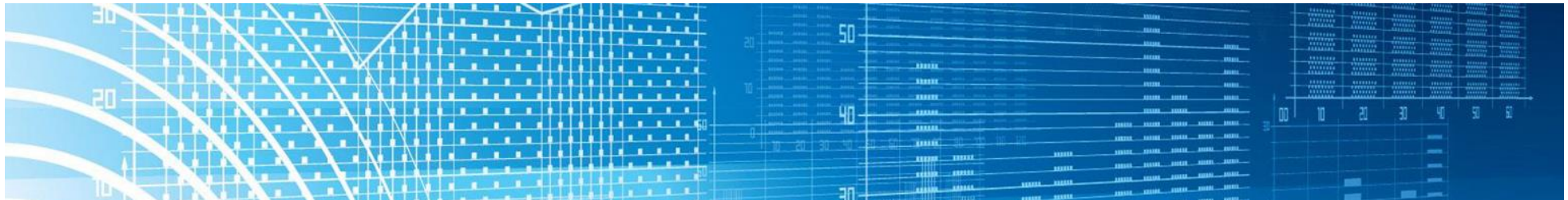
The Reach of NVDRS

NVDRS began collecting data on violent deaths from six states in 2002, followed by progressive additions to the system over several years. **In 2018, NVDRS was expanded to include data collection from all 50 states, Puerto Rico, and the District of Columbia.** This expansion brings NVDRS closer to the goal of providing a complete picture of violent deaths across the nation

States added by year:

- 2002: MA, MD, NJ, OR, SC, VA
- 2003: AK, CO, GA, NC, OK, RI, WI
- 2004: KY, NM, UT
- 2009: MI, OH
- 2014: AZ, CT, HI, IA, IL, IN, KS, ME, MN, NH, NY, PA, VT, WA
- 2016: AL, CA, DE, DC, LA, MO, NE, NV, Puerto Rico, WV
- 2018: AR, FL, ID, MS, MT, ND, SD, TN, TX, WY

Image: CDC's National Violent Death Reporting System (NVDRS)



Program Timeline

2014	2015	2016-2018	2019-2022
First Funding Received (2014-2019) Program Start-Up	**Data Collection Begins** Data collected from 7 most populous counties (Black Hawk, Johnson, Linn, Polk, Pottawattamie, Scott and Woodbury)	**Statewide Data Collection**	**Second Round of Funding** Project Period: 09/2019-08/2022

Program Implementation

IDPH
IOWA Department of PUBLIC HEALTH

Funded by CDC
Responsible for Project Direction/Oversight

+

THE UNIVERSITY OF IOWA IPRC INJURY PREVENTION RESEARCH CENTER

Contracted by IDPH for Day-to-Day Data Collection + Abstraction + Analysis

+

Data Providers

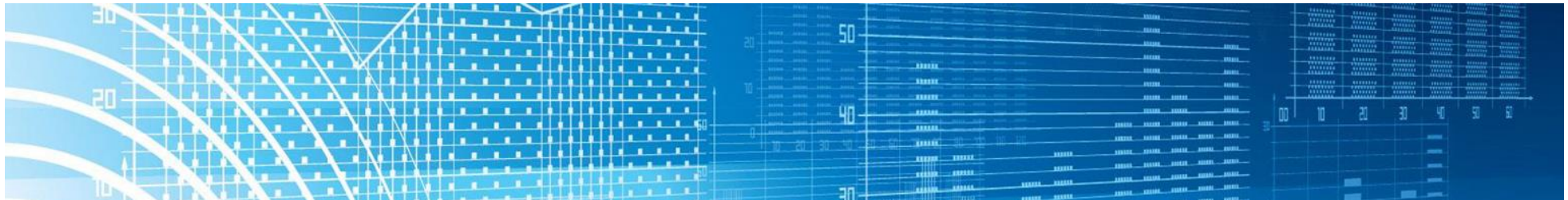
IDPH Vital Records (Death Certificates)

Coroner & Medical Examiners (IOSME & 2 County CME)

Investigating LE Agency / DCI

IAVDRS Advisory Committee

The program is guided by an advisory committee comprised of data providers and cross-sector stakeholders. Meetings are held quarterly either virtually or in-person.



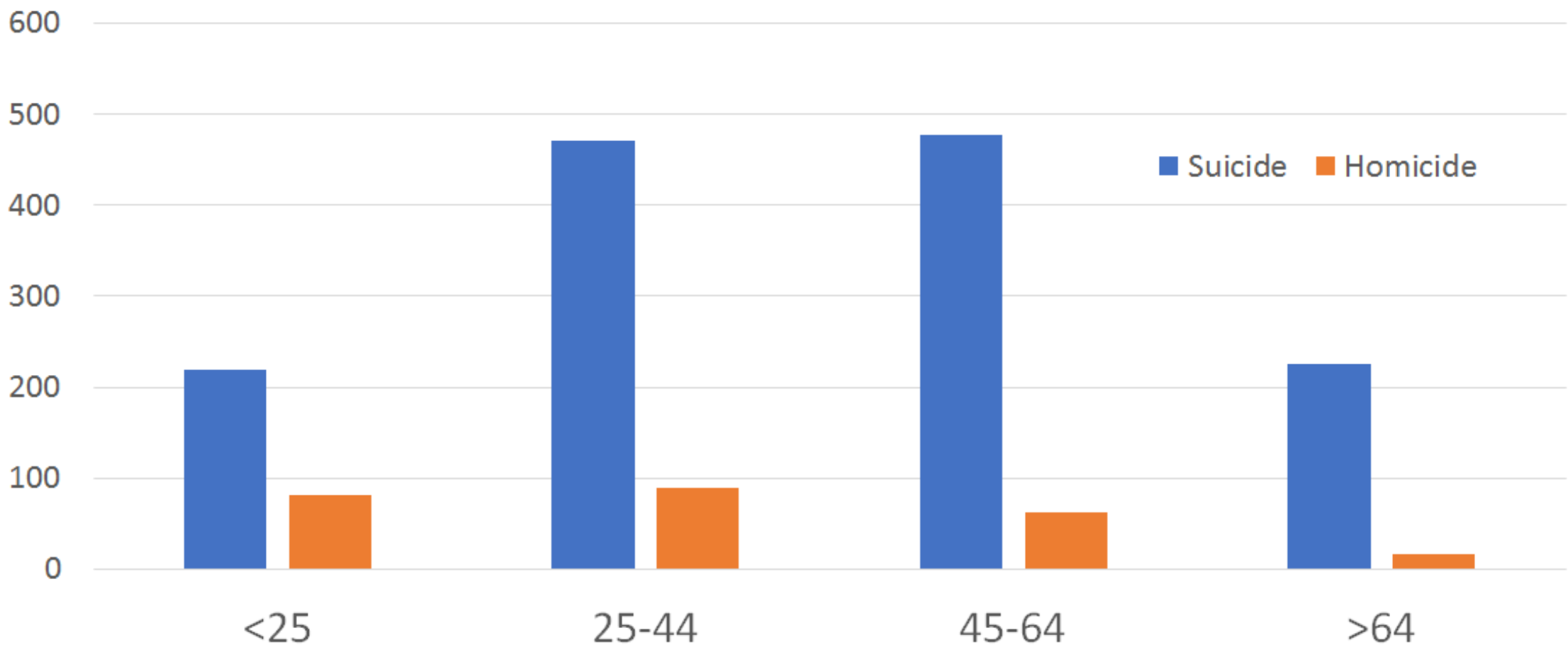
2016-2018 DATA

Types of Violent Deaths in Iowa, 2016-2018

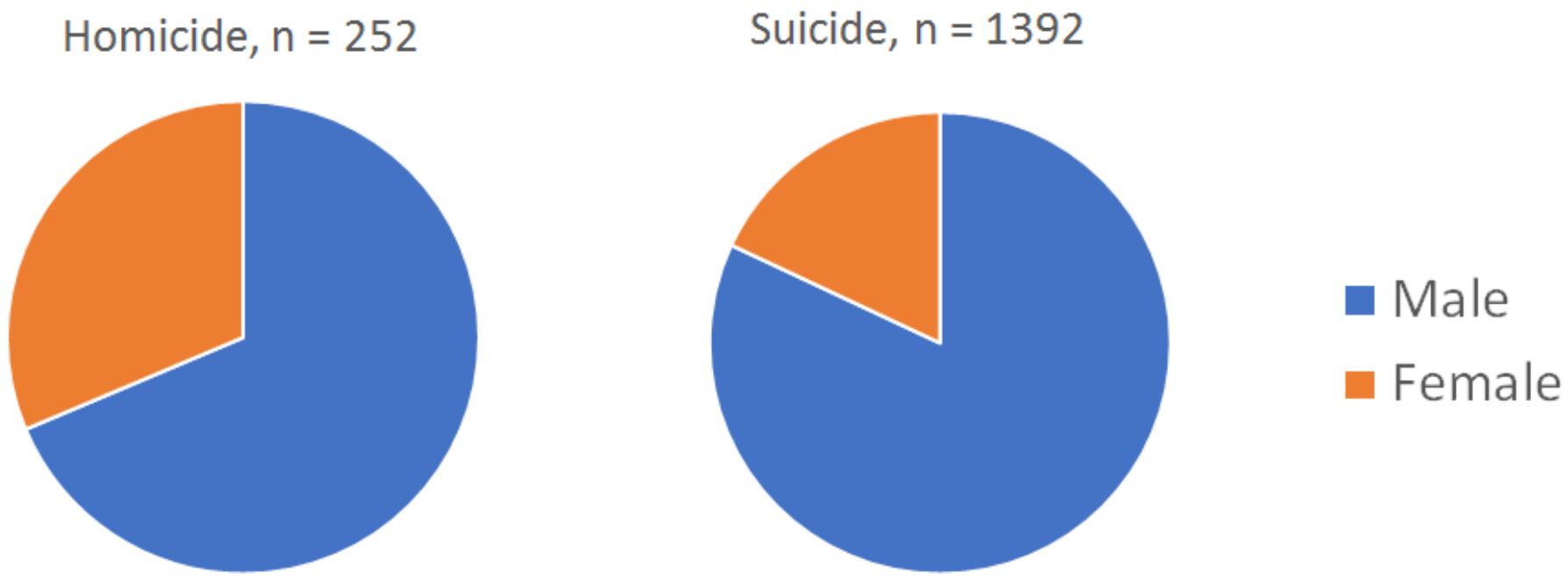
	n = 1799	(%)
Homicide	252	14.0
Suicide	1392	77.4
Undetermined intent	124	6.9
*Other**	31	1.7

*Other includes: Legal intervention, Unintentional firearm

Homicide and Suicide by Age Group, 2016-2018



Demographic Differences, 2016-2018



African American	31.3%	African American	1.9%
White	65.9%	White	95.5%

Rates by Rurality, 2016-2018

- Rurality determined at census block level

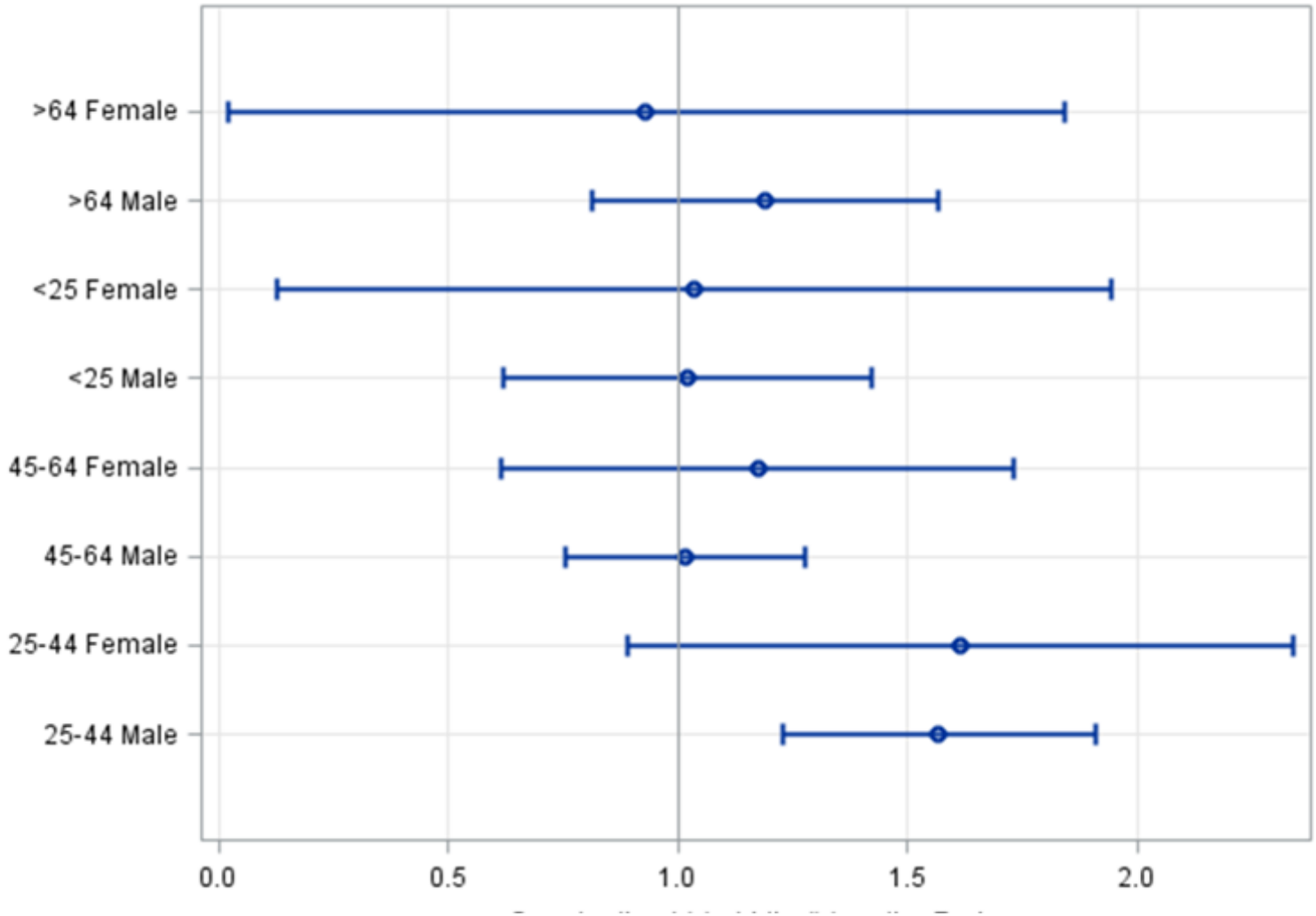
- Urban, Large Rural, Small Rural, Isolated

- Standardized by:
  - Age
  - Sex
  - Year

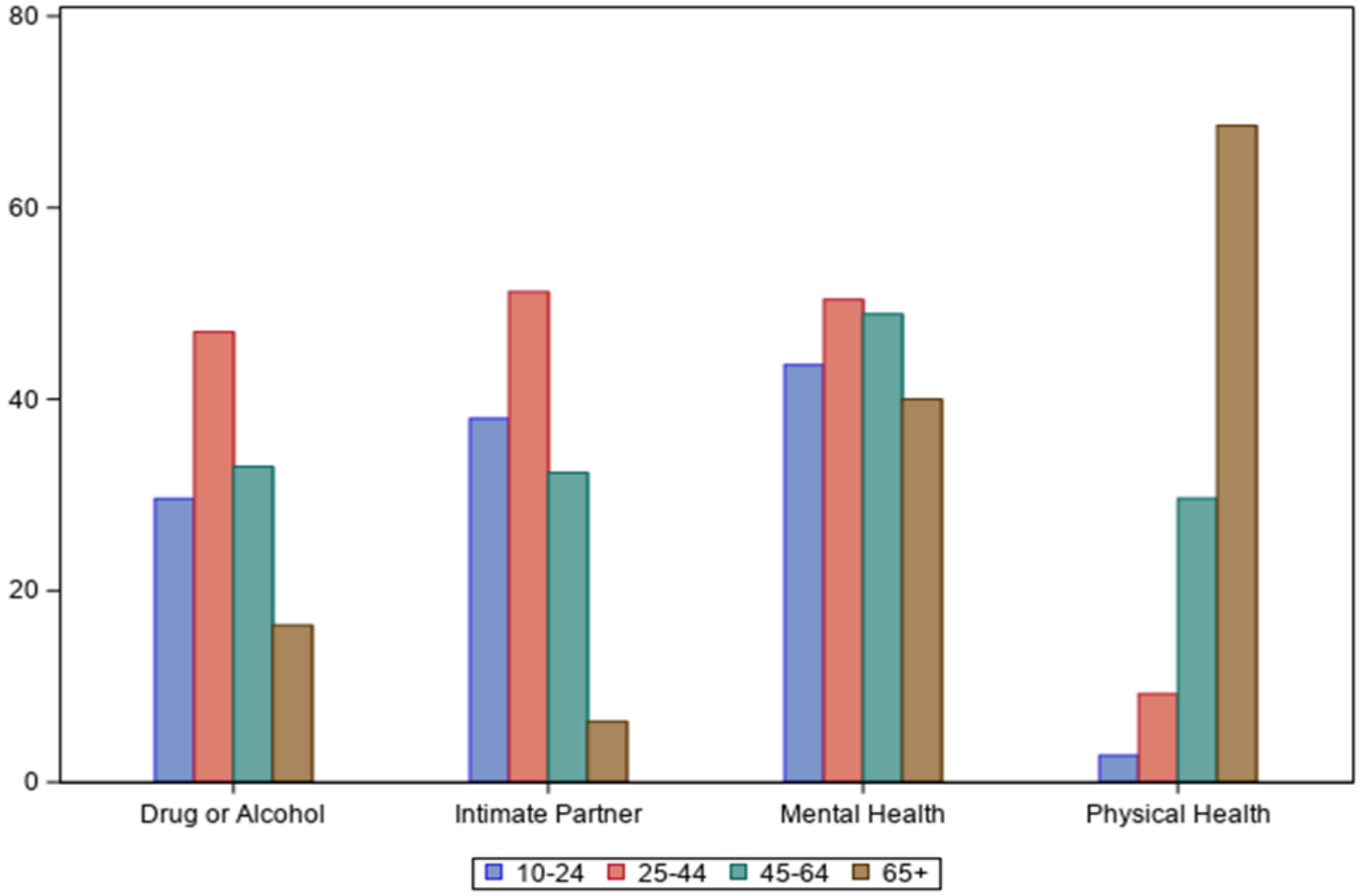
Standardized Mortality Rates by Rurality, 2016-2018

	Rate (per 100,000)	SMR	95% CI	
Urban	14.2	0.95	0.89	1.02
Large Rural	18.3	1.23	1.07	1.38
Small Rural	15.3	1.02	0.88	1.16
Isolated	13.3	0.89	0.75	1.03

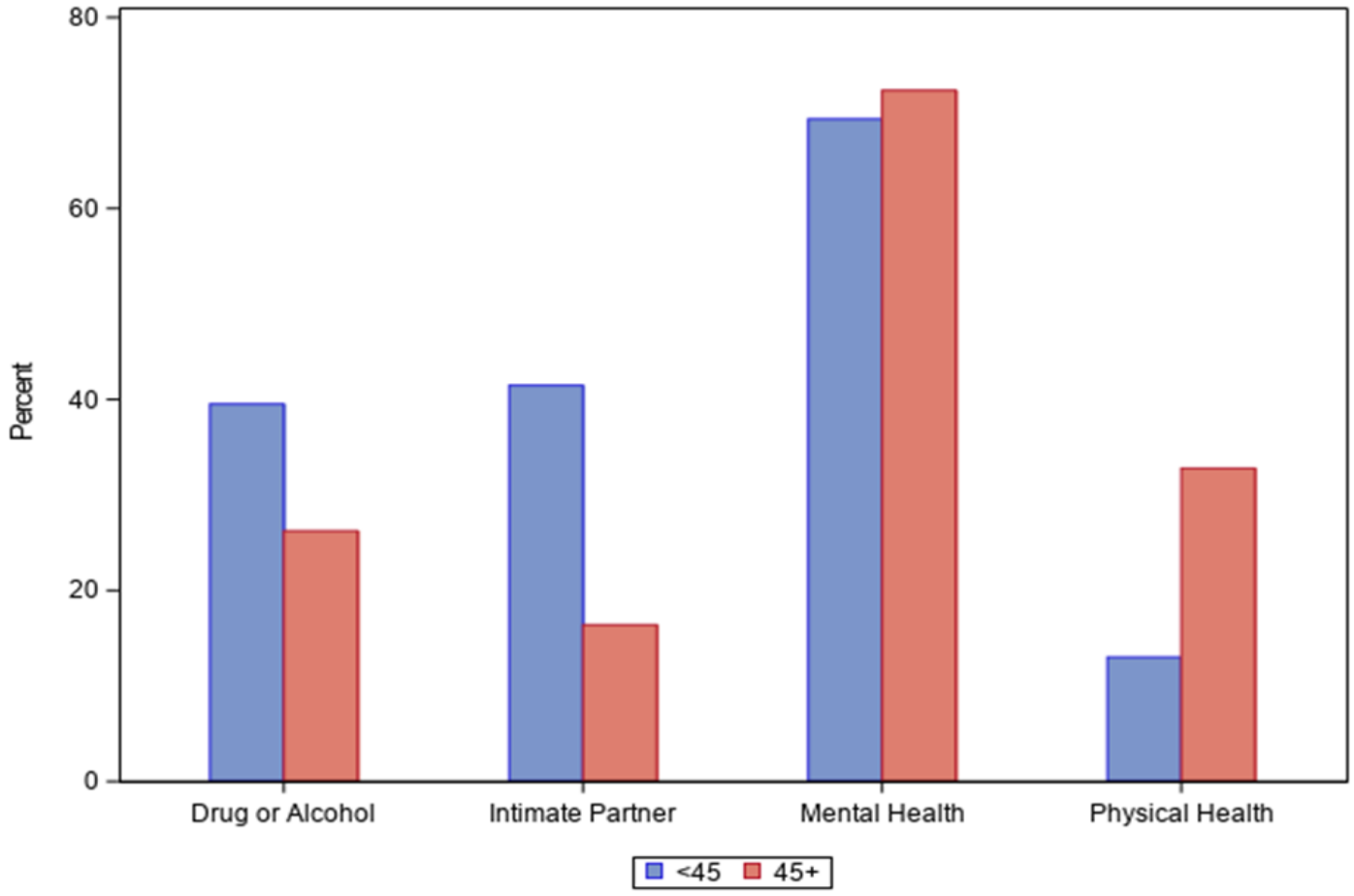
Standardized Mortality Rates, Large Rural, 2016-2018



Circumstances Data (2016-2018), Male



Circumstances Data (2016-2018), Female



Data from CME

Circumstances

https://idph.iowa.gov/Portals/1/userfiles/168/VDRS%20card.pdf

For All Victims

Had the victim been:

- ☐ Depressed? Y____ N ____
- ☐ Diagnosed with mental health disorder? Y____ N ____
- ☐ Previously or currently seeing a mental health professional? Y____ N ____
- ☐ Taking mental health medication? Y____ N ____
- ☐ A perpetrator/victim of violence in the past month? Y____ N____
- ☐ Upset over suicide/death of family/friend (when did death happen)?_____ Y____ N ____

Did the victim have problems with:

- ☐ A crisis in the past two weeks (describe)? _____ _____
- ☐ Physical health (describe)? _____
- ☐ Drugs or alcohol? Y____ N ____
- ☐ An intimate partner? Y____ N ____
- ☐ A non-intimate relationship? Y____ N ____
- ☐ Work, school, finances? Y____ N ____
- ☐ Criminal/non-criminal charges? Y____ N ____

Mental Health

- From CME: History of Mental Disorder
  -Narrative, Treatment

- Depressed Mood – 47%
- Mental Health (Diagnosis) – 48%

- History of Treatment – 37%
  - Prescribed medication

Variables about Firearms

- About 50% of suicides in Iowa involve firearms
- Owner (67%), Unknown (23%)

- Stored Loaded – Unknown (92%)
- Stored Locked – Unknown (87%)

At-risk Populations, 2016-2018

- 98.6% Sexual Orientation Unknown
  - 15 LGBTQ suicides
- 12 Identified as homeless
  - Address for shelter or motel not enough

Discussion

Opportunities to Apply Information

Iowa Violent Death Reporting System Special Report on

Suicide in Iowa, 2018

Report date: September, 30 2020

TYPES OF VIOLENT DEATHS AMONG IOWA RESIDENTS

- In 2018, the majority of violent deaths in Iowa were classified as suicide, 78.5%.
- The remaining deaths from violence in Iowa were attributed to homicide (12.5%), undetermined (6.8%), and legal intervention (1.5%).

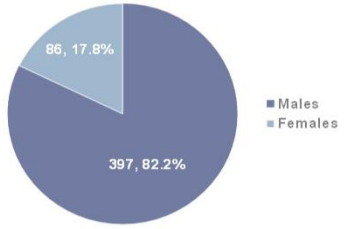
SUICIDE IN IOWA

- **State Rates.** Iowa's suicide rate in 2018 was 15.3 per 100,000 residents.
- **State/U.S. Comparison.** The suicide rate in Iowa was slightly higher than the national average of 14.8 per 100,000 residents.
- **Sex.** Males accounted for 82.2% of deaths from suicide and females accounted for 17.8% of deaths from suicide in 2018.

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. This effort aims to aid researchers, policymakers, and community interest groups in the development of public health prevention strategies to reduce violent deaths. Iowa began collecting data in 2015, with statewide coverage achieved in 2016.

In 2018, there were 615 total violent deaths involving Iowa residents. Four hundred eighty-three deaths were classified as suicide. This report is a summary of suicide deaths of Iowa residents occurring in 2018.

Sex of individuals who died by suicide, 2018



Suicide Cause of Death

Injuries from firearms were the cause of deaths in 47.9% of suicides, followed by asphyxiation (30.8%), and poisoning (14.6%).

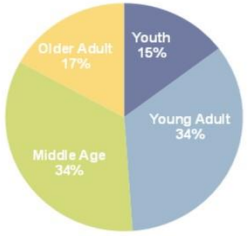
Differences in cause by sex

Female deaths from suicide:
Poisoning (33.3%), asphyxiation (31.0%), injury from firearms (27.4%)

Male deaths from suicide: Injuries from firearms (52.3%), asphyxiation (30.8%), poisoning (10.6%)

Suicide Deaths by Life Stage, 2018*

*Age groups defined as Youth: 10-24; Young Adult 25-44; Middle Age 45-64; Older Adult 65+



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).

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References

National Suicide Rates – Centers for Disease Control & Prevention, National Center for Injury Prevention and Control. https://www.cdc.gov/injury/wisqars/index.html Data updated July 1, 2020.
State Rates – Iowa VDRS (for numbers of deaths). Bureau of Census (for population estimates).

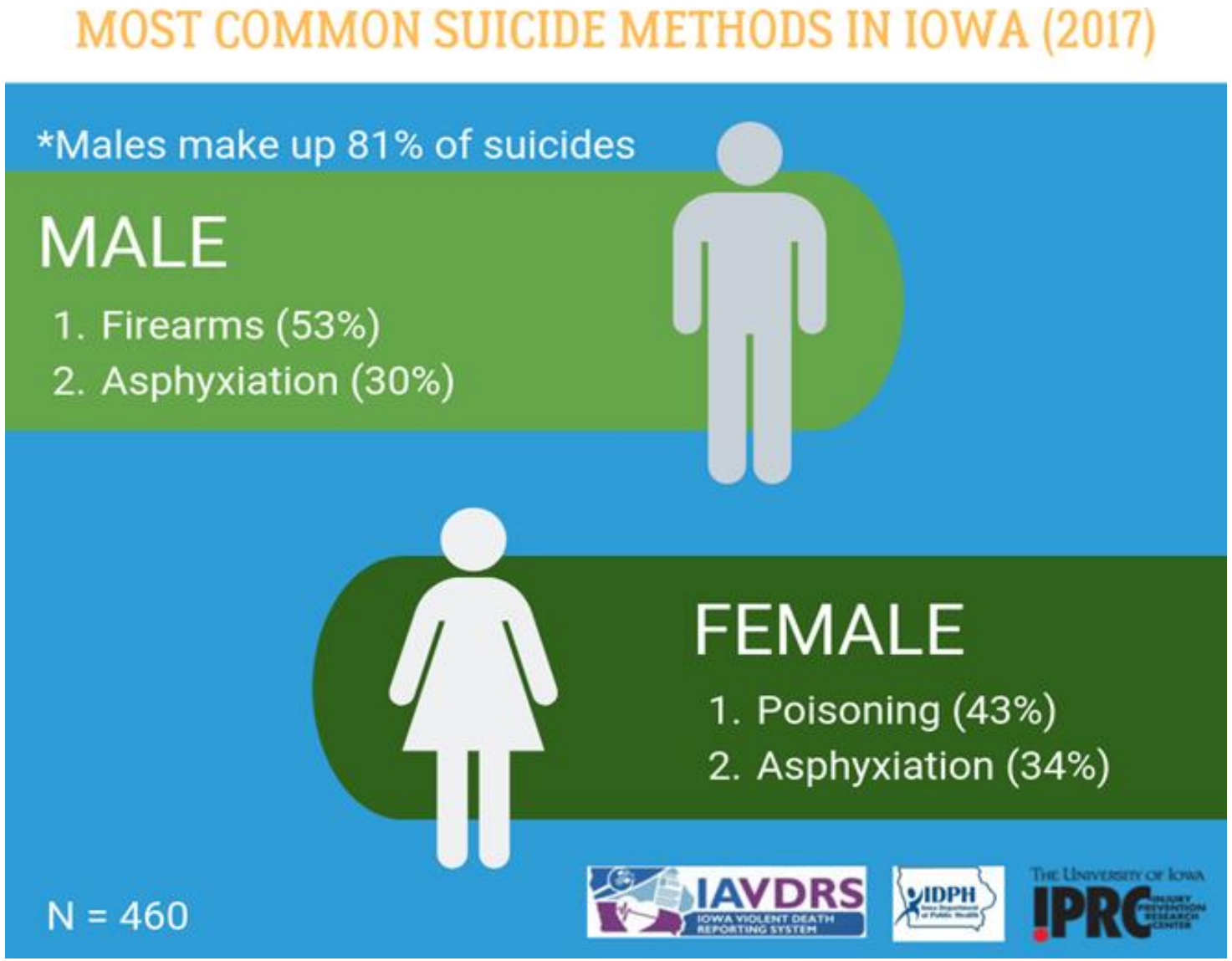
2018 Suicide Report

- **State Rate.** 15.3 per 100,000 residents.
- **State/U.S. Comparison.** The suicide rate in Iowa was slightly higher than the national average of 14.8 per 100,000 residents.

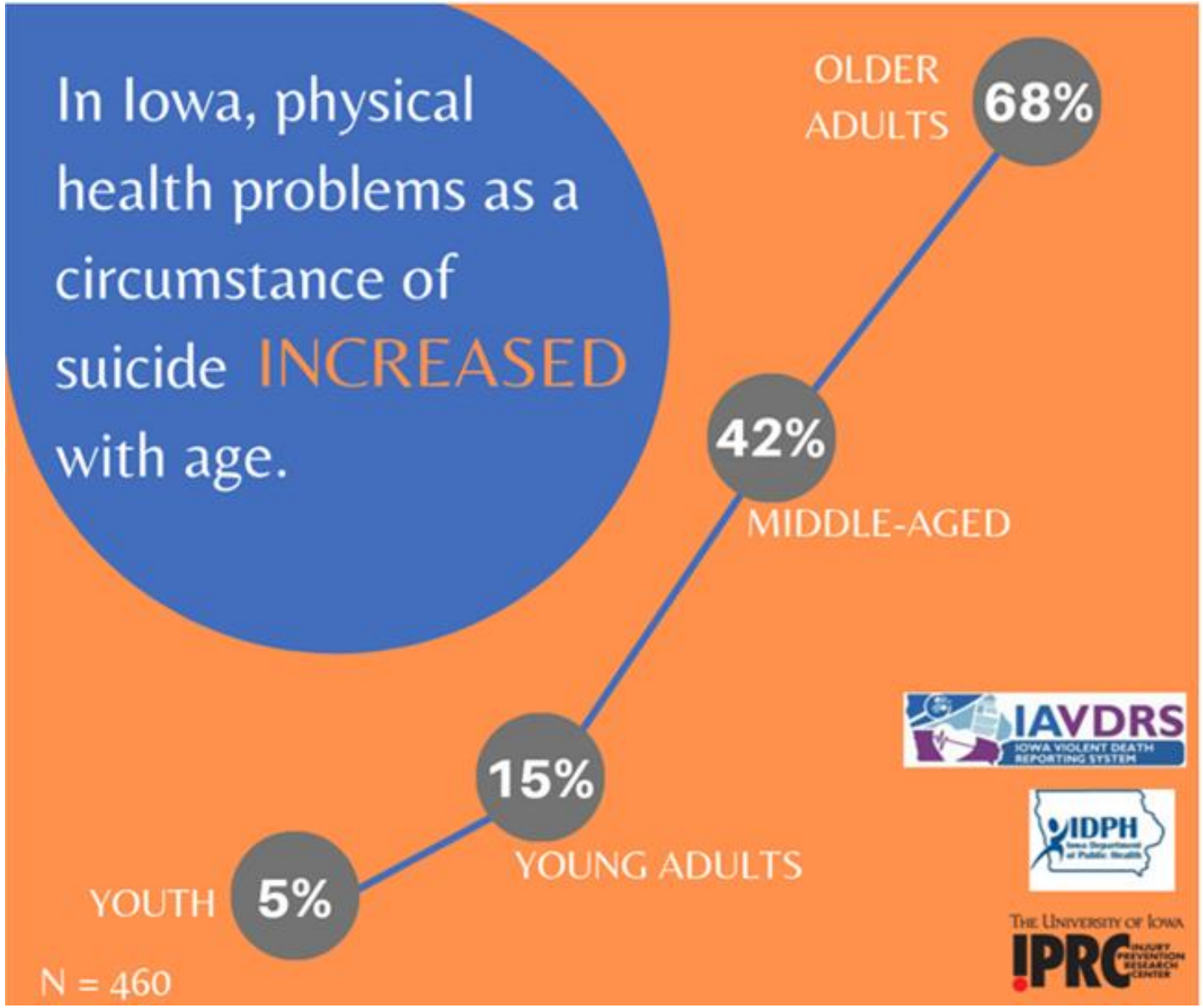
- **Sex.** Males accounted for 82.2% of deaths from suicide and females accounted for 17.8% of deaths from suicide victims in 2018.

- **Cause of Death.** Firearm 52.3% of Male // 27.4% Female
  Poisoning 10.6% Male // 33.3% Female

Suicide Methods by Sex, 2017



Physical Health, 2017



Fall 2020 Newsletter

https://idph.iowa.gov/disability-injury-violence-prevention/iavdrs

Finding ways to prevent violent deaths in Iowa by understanding contributing circumstances.

IDPH • University of Iowa Fall 2020

IAVDRS Newsletter

For calendar year (CY) 2019, there were 636 deaths entered into the database. As of October 2020, there have been 467 deaths entered for CY2020 and data continue to be collected and entered into the system.

What Have We Been Doing?

There have been big staff changes since August! Former program manager, Tiffany Conroy, returned to social work private practice. Binnie LeHew is back from retirement! She will be working on an interim, part-time basis until Tiffany's position can be permanently filled. (Binnie was the previous Program Manager before her retirement in December 2017). Marlene Callahan, our full-time abstractor, has reduced her hours beginning in October as she prepares to transition into retirement. She will still be around to help train the new program abstractor once the position is filled.

Grant Activities Update

As you can imagine, a lot of our outreach activities came to a grinding halt after March. Several of the annual conferences at which we typically present were canceled or delayed. However, there were a few virtual presentations given by program staff, including:

- ✓ 2020 Virtual Governor's Conference on Public Health (April 2020)
- ✓ Iowa Suicide Prevention Planning Group (May 2020)

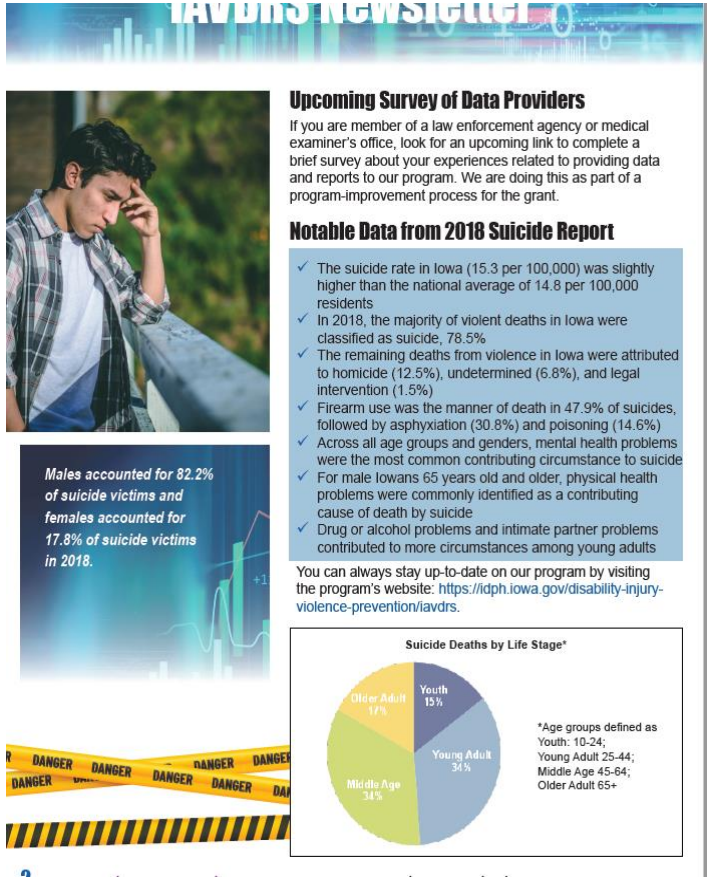
Iowa received its annual data quality report from the CDC in early October. This provides an evaluation of our performance on key data collection measures. Iowa received an overall composite rank of 10 out of 42 states. Data quality is evaluated for:

- ✓ Timeliness (percent of deaths entered into NVDRS within 120 days)
- ✓ Percent of deaths with descriptive information
- ✓ Percent of deaths with CME circumstances information
- ✓ Percent of deaths with LE circumstances information.

Of particular note, Iowa made great improvements in our case initiation rate and ranked 2nd for initiation of suicide deaths. Similarly, we had high rankings for completeness of descriptive information on cases, showing modest improvements over 2017. The areas where improvement is needed (and we declined from last year) include getting better circumstance data

UPCOMING EVENTS

UI-IPRC staff will present on suicide data at the Iowa Association of County Medical Examiners Death Investigators Webinar on November



Upcoming Survey of Data Providers

If you are member of a law enforcement agency or medical examiner's office, look for an upcoming link to complete a brief survey about your experiences related to providing data and reports to our program. We are doing this as part of a program-improvement process for the grant.

Notable Data from 2018 Suicide Report

- ✓ The suicide rate in Iowa (15.3 per 100,000) was slightly higher than the national average of 14.8 per 100,000 residents
- ✓ In 2018, the majority of violent deaths in Iowa were classified as suicide, 78.5%
- ✓ The remaining deaths from violence in Iowa were attributed to homicide (12.5%), undetermined (6.8%), and legal intervention (1.5%)
- ✓ Firearm use was the manner of death in 47.9% of suicides, followed by asphyxiation (30.8%) and poisoning (14.6%)
- ✓ Across all age groups and genders, mental health problems were the most common contributing circumstance to suicide
- ✓ For male Iowans 65 years old and older, physical health problems were commonly identified as a contributing cause of death by suicide
- ✓ Drug or alcohol problems and intimate partner problems contributed to more circumstances among young adults

You can always stay up-to-date on our program by visiting the program's website: https://idph.iowa.gov/disability-injury-violence-prevention/iavdrs.

Males accounted for 82.2% of suicide victims and females accounted for 17.8% of suicide victims in 2018.

Ideas for Using Data

- Use as data point in needs assessment
- Utilize data to guide area of focus/population of focus for programming (prevention or response)
- Include data in grant applications
- Provide suggestions/make requests for data analysis
- Incorporate data into presentations/trainings
- Identify new partners for outreach/collaboration

For More Information

https://idph.iowa.gov/disability-injury-violence-prevention/iavdrs

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IAVDRS IOWA VIOLENT DEATH REPORTING SYSTEM

THE UNIVERSITY OF IOWA IPRC INJURY PREVENTION RESEARCH CENTER

IDPH IOWA Department of PUBLIC HEALTH