



SOUTH DAKOTA  
DEPARTMENT OF HEALTH

South Dakota Preventable Death Review Committee Meeting  
February 15, 2019



## South Dakota Preventable Death Review Committee Objectives

**PURPOSE:** To standardize and influence how South Dakota performs infant, child, maternal and violent preventable death reviews

- Review current preventable death review efforts in South Dakota
- Identify common processes
- Identify challenges with implementation and standardization of preventable death review teams
- Establish standard strategies critical to infant mortality, maternal mortality, child mortality and violent death reviews
- Assist and support groups with selecting and targeting prevention efforts
- Launch National Violent Death Review System (NVDRS) in Minnehaha and Pennington



## SD Preventable Death Review Committee

- Infant mortality review- DOH
- Child mortality review- DSS
- Maternal mortality review- National and Local
- Violent mortality reporting- DOH

# Statewide Infant Death Review

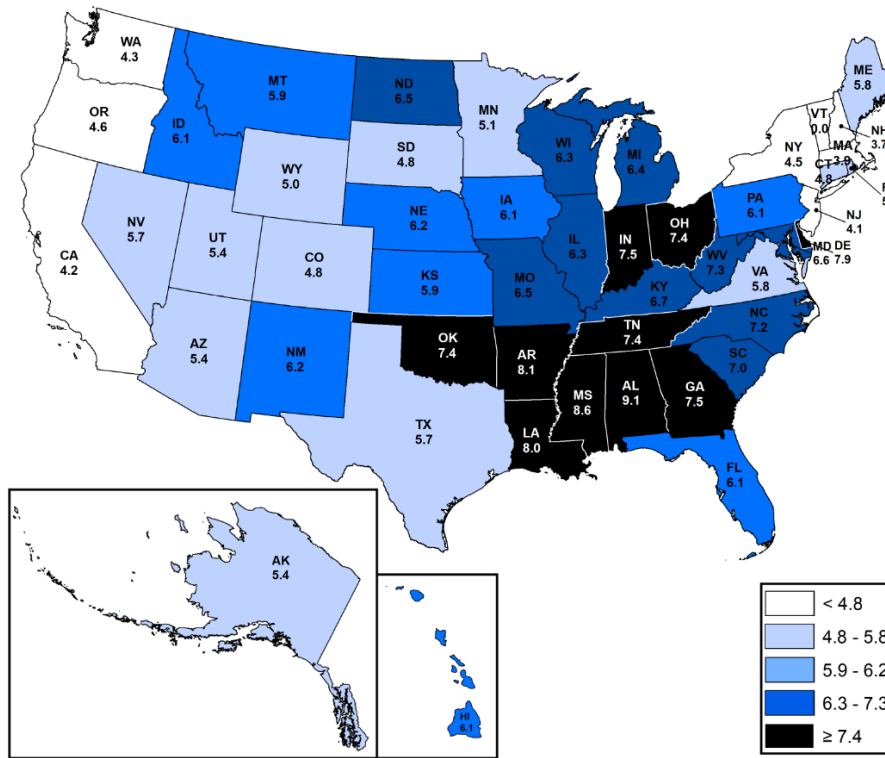


### Infant mortality rates, South Dakota 1916-2017 (infant deaths per 1,000 live births)



# Infant Mortality Rates, United States, 2016

New Hampshire 3.7  
 Massachusetts 3.9  
 New Jersey 4.1  
 California 4.2  
 Washington 4.3  
 New York 4.5  
 Oregon 4.6  
**South Dakota 4.8**  
 Colorado 4.8  
 Connecticut 4.8  
 Wyoming 5.0  
 Minnesota 5.1  
 Alaska 5.4  
 Arizona 5.4  
 Utah 5.4  
 Nevada 5.7  
 Rhode Island 5.7  
 Texas 5.7  
 Maine 5.8  
 Virginia 5.8  
 Kansas 5.9  
 Montana 5.9  
 Florida 6.1  
 Hawaii 6.1  
 Idaho 6.1



Iowa 6.1  
 Pennsylvania 6.1  
 Nebraska 6.2  
 New Mexico 6.2  
 Illinois 6.3  
 Wisconsin 6.3  
 Michigan 6.4  
 Missouri 6.5  
 North Dakota 6.5  
 Maryland 6.6  
 Kentucky 6.7  
 South Carolina 7.0  
 North Carolina 7.2  
 West Virginia 7.3  
 Ohio 7.4  
 Oklahoma 7.4  
 Tennessee 7.4  
 Georgia 7.5  
 Indiana 7.5  
 Delaware 7.9  
 Louisiana 8.0  
 Arkansas 8.1  
 Mississippi 8.6  
 Alabama 9.1

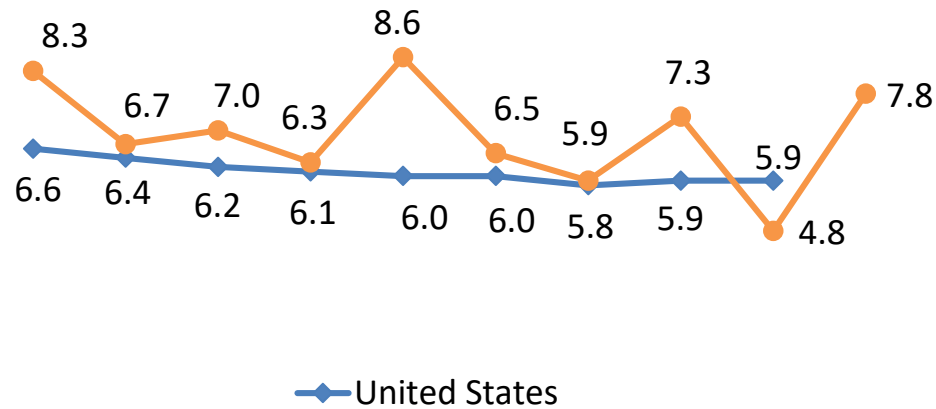
US 2016 Infant Mortality Rate: 5.9  
 SD 2017 Infant Mortality Rate: 7.8

CDC [https://www.cdc.gov/nchs/pressroom/sosmap/infant\\_mortality\\_rates/infant\\_mortality.htm](https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm)



## Infant Mortality Rates, South Dakota and United States, 2008-2017

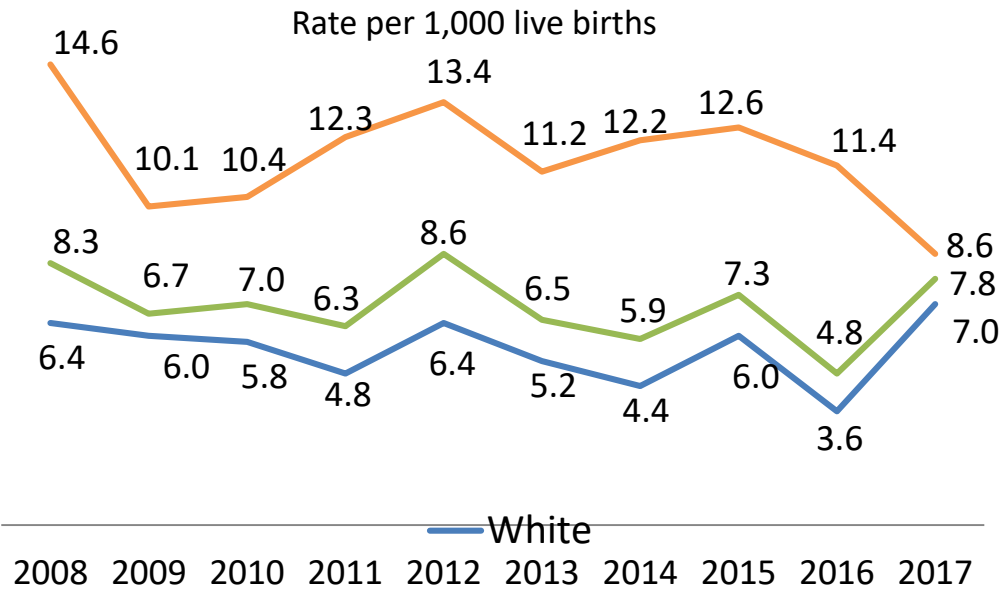
Rate per 1,000 live births



2008 2009 2010 2011 2012 2013 2014 2015 2016 2017



## Infant Mortality Disparity, South Dakota, 2008-2017







# History

- 1997 Infant and Child deaths reviewed by two local teams
  - Sioux Falls-Known as Regional Infant and Child Mortality Review Committee (RICMRC) reviewed a 10 county area
  - Rapid City-reviewed infant and child deaths in Pennington and surrounding area.
- 2011, based on recommendations from the Governor’s Task Force on Infant Mortality, the DOH used the existing teams to add the additional counties to review all infant deaths that leave the hospital.
- Data collected since 2011 has been entered into the Child Death Review Case Reporting System, from the National Center for Fatality Review and Prevention by the DOH.



## Current Review

- 2018- Sioux Falls- DOH now leads the East River Infant Death Review Committee.
  - Review only infants that have been released from the hospital.
  - No longer review children.
  - Small team focused on infants
  - Meet twice a year
- Rapid City Review Team has not changed
  - Meet twice a year



# Accomplishments

- In September of 2017 the Department of Health published its first report using data from the database: *Infant Death Review South Dakota 2013-2015* authored by the State Epidemiologist, Dr. Lon Kightlinger.
- An infographic, *South Dakota Infant Death Review*, was produced to facilitate data dissemination found in the *Infant Death Review South Dakota 2013-2017* report.
- Information from the 2017 report was shared with both death review teams to promote better data collection and to increase focus on prevention efforts.
- In May of 2018, Susanna Joy, Program Associate from the National Center for Fatality Review and Prevention provided training to the Statewide Infant Death Review Committee at their annual meeting.
- The Infant Death Review (IDR) infographic was updated in May to include 2016 data and an ad was created for the journal *SD Medicine* to share key data points with providers in the state.



# Challenges

- There is not a state mandate for infant/child death review.
- It has become more and more difficult to collect data for the review process due to *concerns related to confidentiality, HIPAA and Marsy's Law*.
- Inconsistency in how the teams conduct their reviews.
- Sustainability of the review teams (since all members are volunteers) and membership is not consistent.
- Funding not available for review teams to implement prevention recommendations.

# Child Death Review

Pamela Bennett, Assistant Director  
JoLynn Bostrom, Protective Services Program Specialist

## Division of Child Protection Services – Reporting Requirement

- Report child fatalities to NCANDS (National Child Abuse and Neglect Data System)
- NCANDS defines child fatality as “death of the child caused by injury resulting from abuse or neglect or where abuse or neglect was a contributing factor.”
- Report only cases that were reported to Child Protection Services
- In Federal Fiscal Year 2018 (October 1, 2017 to September 30, 2018), South Dakota had three substantiated cases of child abuse/neglect that resulted in a three child fatality.



# Child Death Review

## Division of Child Protection Services Internal Child Death Review

- All fatality reports are reviewed by Division Director, Deputy Director, and Protective Services Program Specialist.
- Prior reports and history, if any, with the family and child is reviewed.
- Child Protection Services staff and Law Enforcement work together to determine outcome.
- Law Enforcement's focus is regarding criminal charges, while Child Protection's focus is child safety.
- Case is followed from the time of the initial report to the date the final outcome is determined.

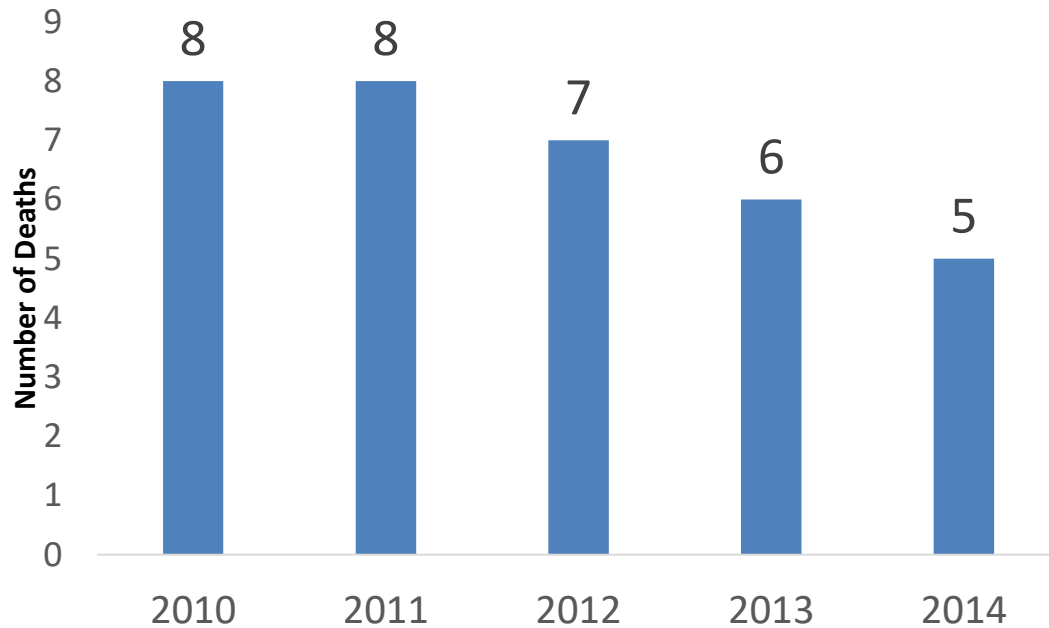


# Maternal Mortality Review

- South Dakota does not currently have a maternal mortality review committee (MMRC)
- Approximately 30 states have committees
- Definitions:
  - **Maternal death:** death of a woman while pregnant or within 42 days from any cause
  - **Pregnancy associated:** death of a woman while pregnant or within 1 year from any cause
  - **Pregnancy related:** death of a woman while pregnant or within 1 year related to or aggravated by pregnancy (not from accidental or incidental causes)
  - **CDC Pregnancy Mortality Surveillance System (PMSS):** uses pregnancy-related definition



## Pregnancy-Associated Deaths, South Dakota, 2010-2014

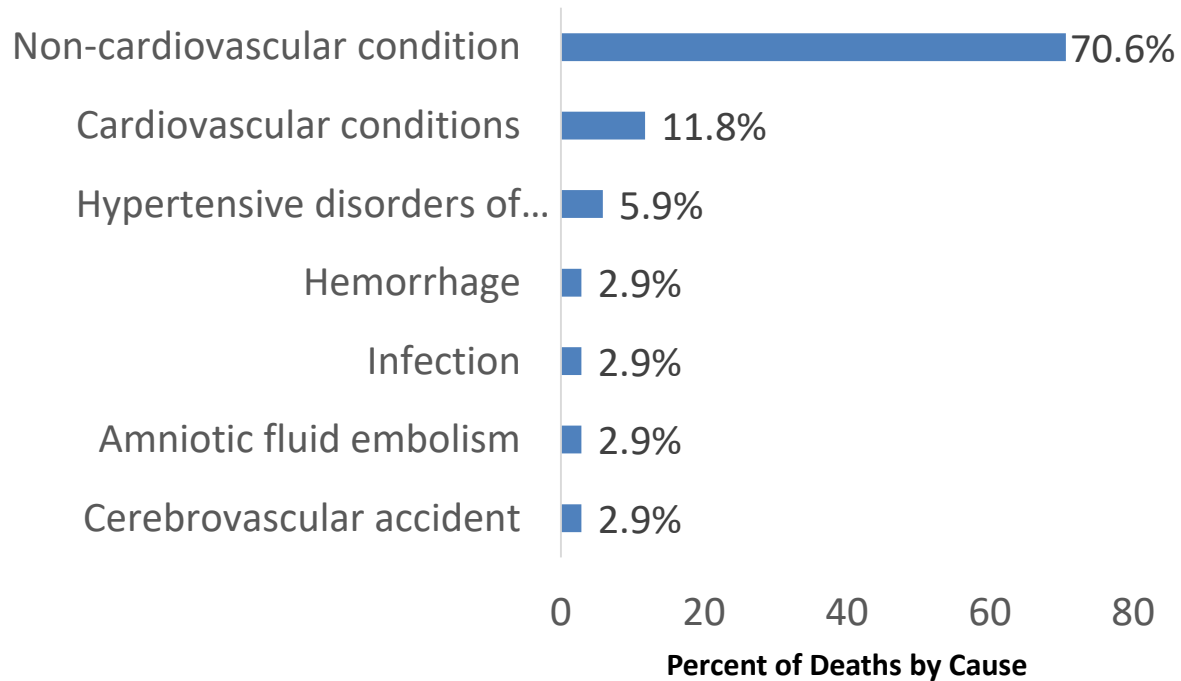


Source: CDC PMSS





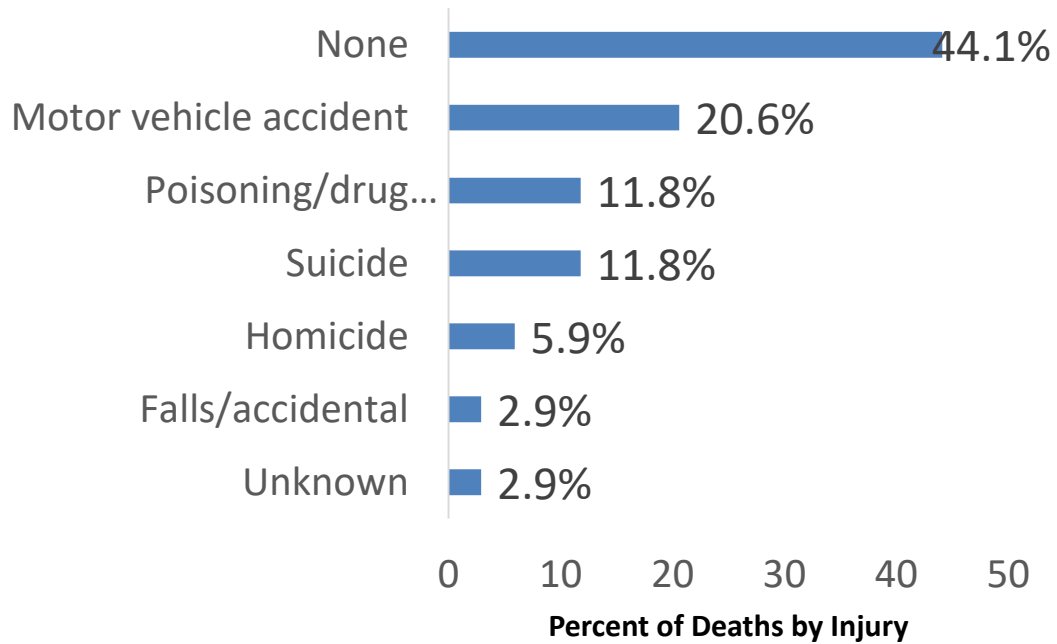
## True Cause of Death as Determined by PMSS



Source: CDC PMSS



## Percent of Pregnancy-Associated Deaths by Type of Injury, 2010-2014





## Region VIII States

- Colorado: MMRC since 1958; 1993 official CDC MMRC;
  - Leading causes: injury, mental health conditions
- Utah: committee since 1995; have legislation
- Montana: 2013 FICMR Act amended to look at maternal deaths
  - Averages 9 deaths/year; American Indian death disparity
- Wyoming: No MMRC
  - Discussion with ACOG in their state.
  - PQC since 2017; interested in establishing MMRC under this
- North Dakota: 1953-MMR through UND Medical School; led by Dennis J. Lutz, M.D.; 2-4 deaths/year

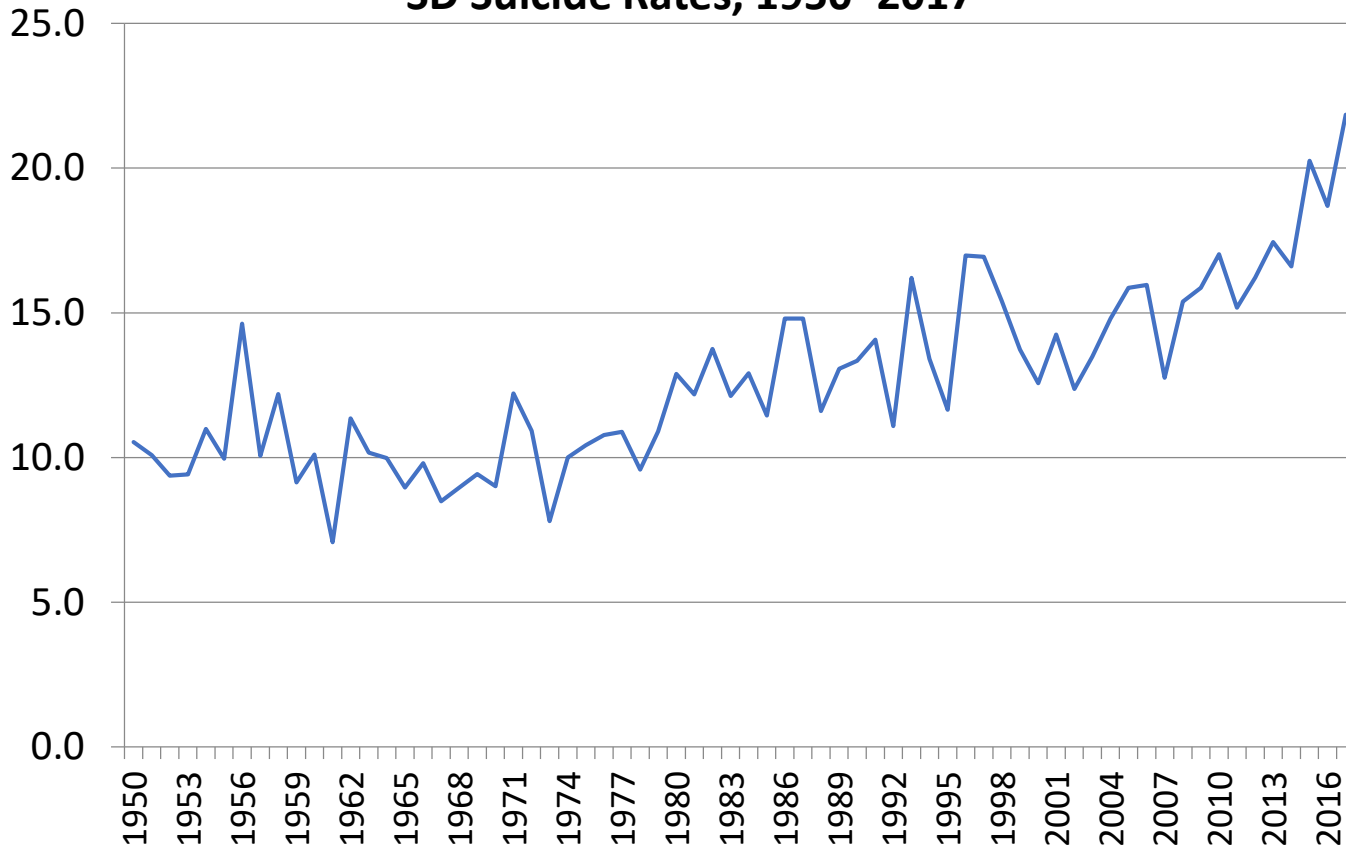


# Maternal Mortality in South Dakota

- Interest from South Dakota's American College of Obstetricians and Gynecologists (ACOG) Chapter
- Interest from OB/GYN providers at Sanford, Avera and Regional Health
- Informal meetings to discuss available data and next steps
- Focus on **prevention** of maternal deaths



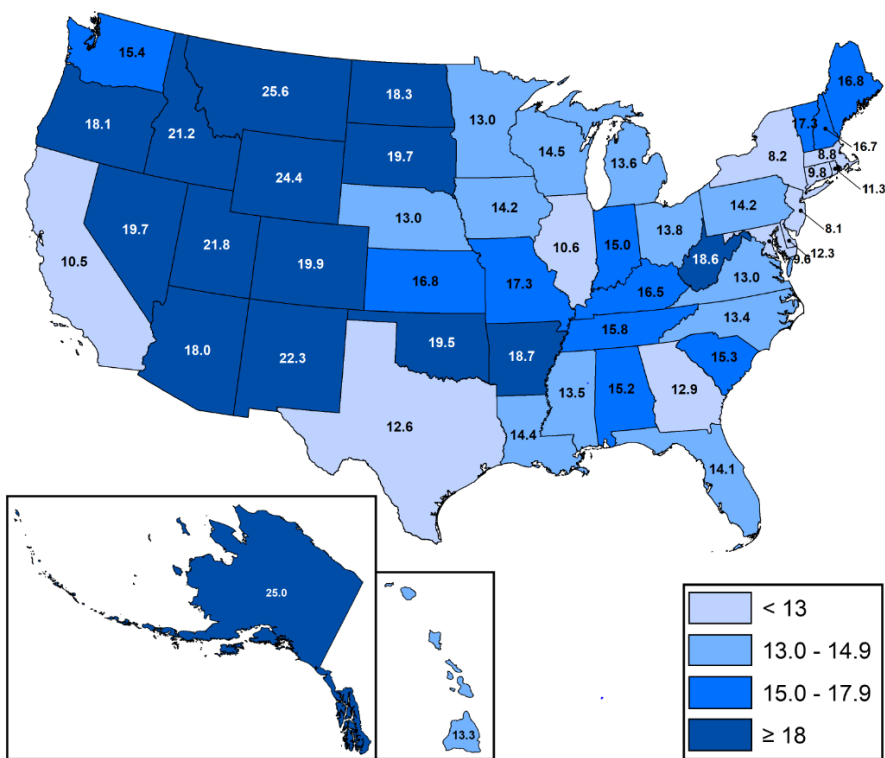
### SD Suicide Rates, 1950–2017



Source: South Dakota Vital Records

# Suicide Rates, United States, 2013-2017

New Jersey 8.1  
 New York 8.2  
 Massachusetts 8.8  
 Maryland 9.6  
 Connecticut 9.8  
 California 10.5  
 Illinois 10.6  
 Rhode Island 11.3  
 Delaware 12.3  
 Texas 12.6  
 Georgia 12.9  
 Minnesota 13.0  
 Nebraska 13.0  
 Virginia 13.0  
 Hawaii 13.3  
 North Carolina 13.4  
 Mississippi 13.5  
 Michigan 13.6  
 Ohio 13.8  
 Florida 14.1  
 Iowa 14.2  
 Pennsylvania 14.2  
 Louisiana 14.4  
 Wisconsin 14.5  
 Indiana 15.0



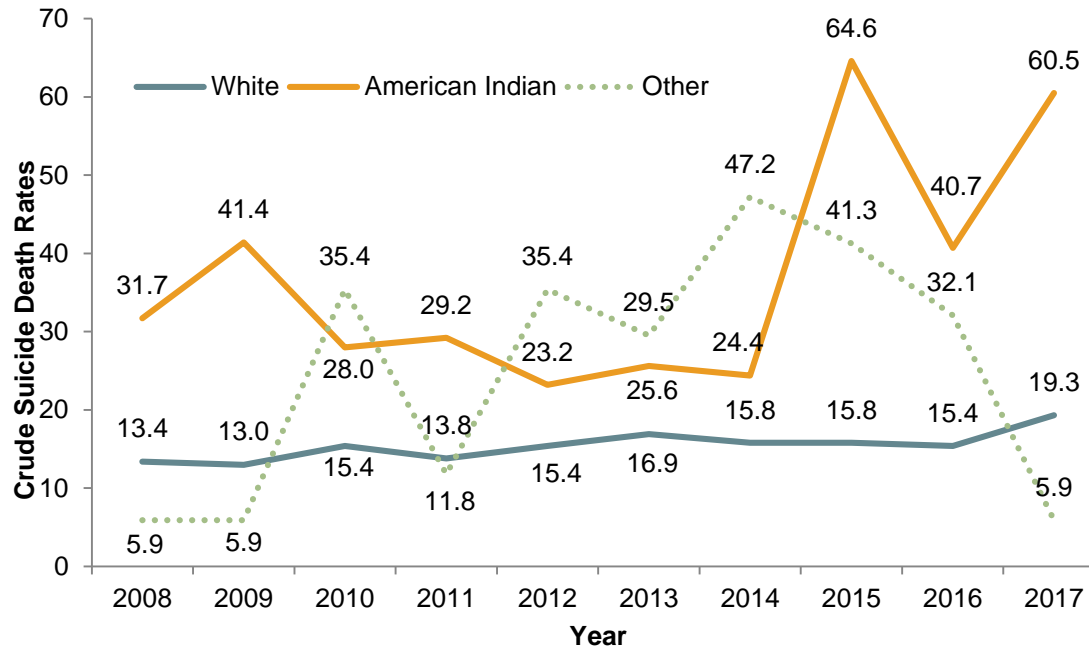
Alabama 15.2  
 South Carolina 15.3  
 Washington 15.4  
 Tennessee 15.8  
 Kentucky 16.5  
 New Hampshire 16.7  
 Kansas 16.8  
 Maine 16.8  
 Missouri 17.3  
 Vermont 17.3  
 Arizona 18.0  
 Oregon 18.1  
 North Dakota 18.3  
 West Virginia 18.6  
 Arkansas 18.7  
 Oklahoma 19.5  
 Nevada 19.7  
**South Dakota 19.7**  
 Colorado 19.9  
 Idaho 21.2  
 Utah 21.8  
 New Mexico 22.3  
 Wyoming 24.4  
 Alaska 25.0  
 Montana 25.6

U.S. 2013-2017 Suicide Rate: 13.4

CDC WONDER <https://wonder.cdc.gov/ucd-icd10.html>

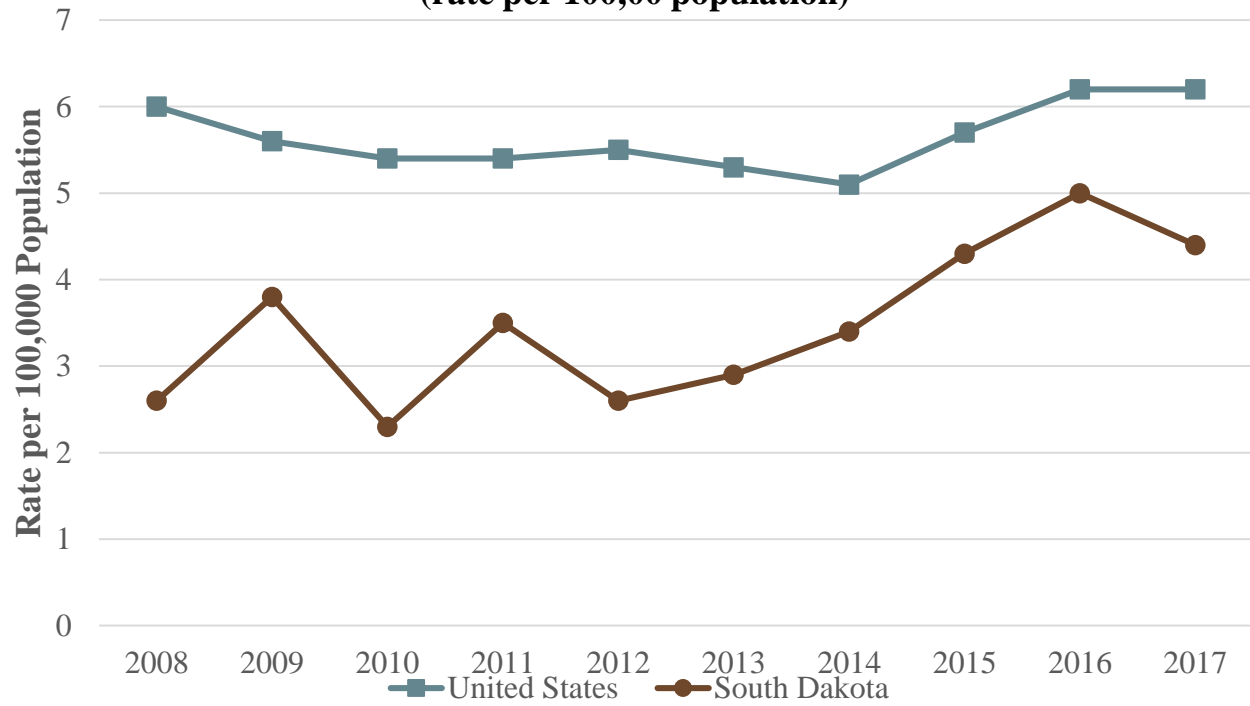


## SD Suicide Death Rates by Race, 2008-2017





### Homicide/Legal Intervention Injury Deaths (rate per 100,00 population)

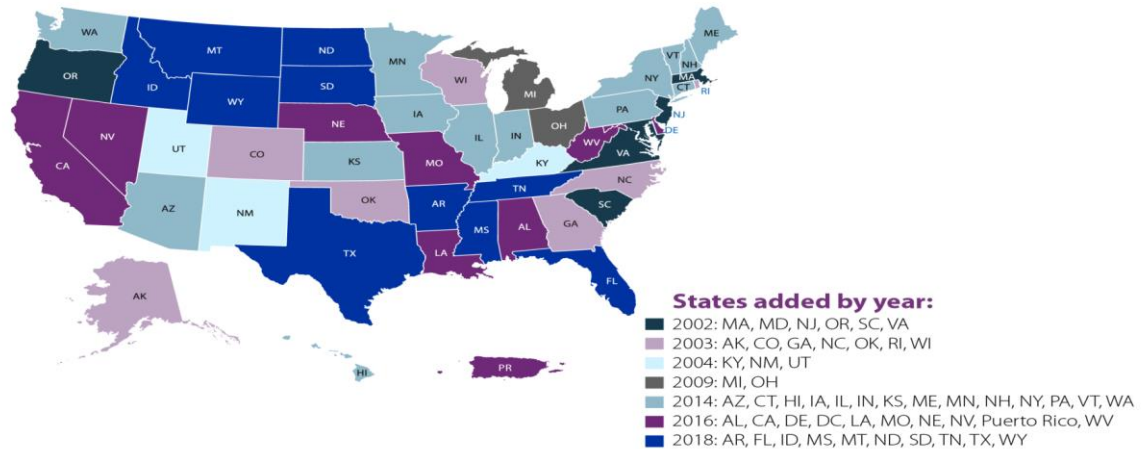






# National Violent Death Reporting System

- One of the ten remaining states to implement this reporting system
- CDC funding out of the National Center for Injury Prevention and Control
- 4 year project period (9/2018 - 8/2022)
- Year 1 funding \$184,173





# South Dakota Violent Death Reporting System (SD-VDRS)

## Roles;

- **Colleen Winter**- Division Director, Family and Community Health
  - Lead committee
- **Kiley Hump**- Administrator, Chronic Disease Prevention and Health Promotion
  - PI/Grant Manager, assist with the committee
- **Ashley Miller**- Chronic Disease Epidemiologist
  - Data collection and analysis
- **Amanda Nelson**- Injury Prevention Epidemiologist
  - Data collection and analysis
- **Mariah Pokorny**- State Registrar, Office of Vital Statistics
  - Death certificates and work with coroners
- **Dr. Josh Clayton**- State Epidemiologist
  - Support data collection and analysis



## South Dakota Violent Death Reporting System (SD-VDRS)

- Initially the Department of Health will work with Minnehaha and Pennington Counties with the goal of collecting information on violent deaths statewide beginning January 2020
- Data will be collected from death certificates, coroner/medical examiner reports, and law enforcement reports
- All of this information is combined to determine the “who, when, where, and how”
- Which will provide insights into the “why”
- SD-VDRS aims to provide our state and communities with a clearer understanding of violent deaths
- This information can be used to guide state and local prevention efforts.

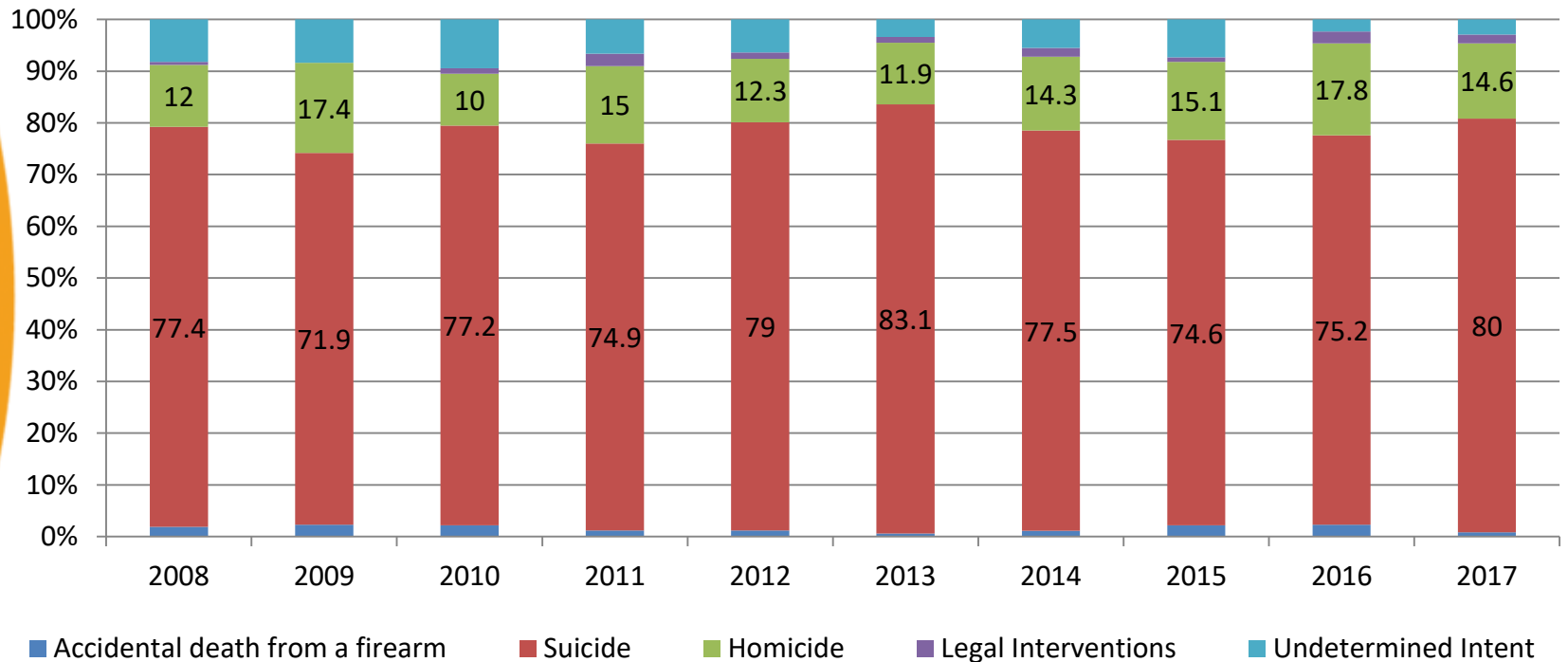


# National Violent Death Reporting System

- Collects information on all violent deaths
- A violent death includes:
  - Suicides
  - Homicides
  - Undetermined intent
  - Unintentional firearm
  - Legal intervention
  - Terrorism



## Violent Deaths in South Dakota, by Category, 2008-2017



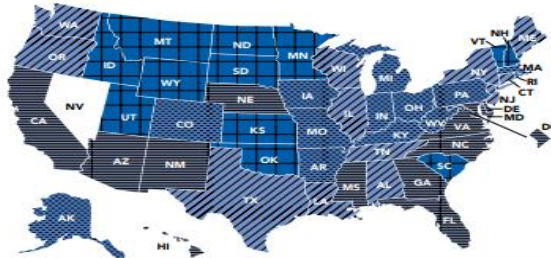


**PROBLEM:**  
Suicide rates increased in almost every state.

Suicide rates rose across the US from 1999 to 2016.

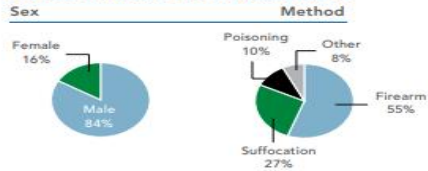


SOURCE: CDC's National Vital Statistics System; CDC Vital Signs, June 2018.

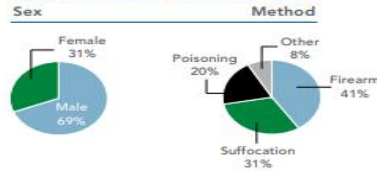


Differences exist among those with and without mental health conditions. People without known mental health conditions were more likely to be male and to die by firearm.

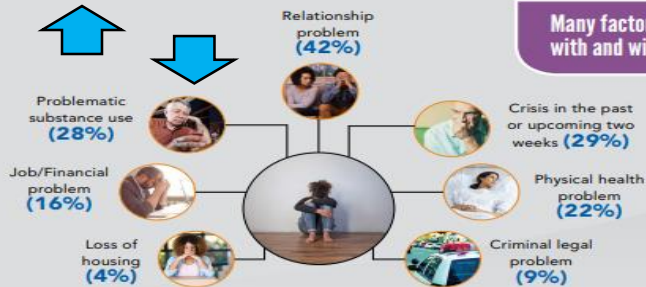
**No known mental health conditions**



**Known mental health conditions**



**Many factors contribute to suicide among those with and without known mental health conditions.**



Note: Persons who died by suicide may have had multiple circumstances. Data on mental health conditions and other factors are from coroner/medical examiner and law enforcement reports. It is possible that mental health conditions or other circumstances could have been present and not diagnosed, known, or reported.

SOURCE: CDC's National Violent Death Reporting System, data from 27 states participating in 2015.

CDC developed a Vital Signs Report using information from the NVDRS reporting system

**WHAT CAN WE DO TO PREVENT SUICIDE?**

Preventing Suicide: A Technical Package of Policy, Programs, and Practices  
<https://go.usa.gov/xQBGc>

**Preventing suicide involves everyone in the community.**

Provide financial support to individuals in need.

States can help ease unemployment and housing stress by providing temporary help.

Strengthen access to and delivery of care.

Health care systems can offer treatment options by phone or online where services are not widely available.

Create protective environments.

Employers can apply policies that create a healthy environment and reduce stigma about seeking help.

Connect people within their communities.

Communities can offer programs and events to increase a sense of belonging among residents.

Teach coping and problem-solving skills.

Schools can teach students skills to manage challenges like relationship and school problems.

Prevent future risk.

Media can describe helping resources and avoid headlines or details that increase risk.

Identify and support people at risk.

Everyone can learn the warning signs for suicide, how to respond, and where to get help.

**Know the Suicide WARNING SIGNS**

- Feeling like a burden
- Being isolated
- Increased anxiety
- Feeling trapped or in unbearable pain
- Increased substance use
- Looking for a way to access lethal means
- Increased anger or rage
- Extreme mood swings
- Expressing hopelessness
- Sleeping too little or too much
- Talking or posting about wanting to die
- Making plans for suicide

**5 STEPS TO HELP SOMEONE AT RISK**

1. Ask.
2. Keep them safe.
3. Be there.
4. Help them connect.
5. Follow up.

Find out why this can save a life by visiting:  
[www.BeThe1To.com](http://www.BeThe1To.com)

<https://www.cdc.gov/vitalsigns/pdf/vs-0618-suicide-H.pdf>

# Examples from Other States

## THE BIG PICTURE

The age-adjusted suicide rate in Oklahoma was 33% higher than the same rate for the U.S. in 2013. Oklahoma Violent Death Reporting System (OKVDRS) data illustrate the extent of this problem.

- Suicide was the third leading cause of death for Oklahomans age 10-34 in 2013, and the most prevalent type of violent death from 2004-2013, accounting for nearly 600 resident deaths each year.
- **Suicides outnumber homicides** by about three to one
- The **Veteran suicide death rate** increased by 34% from 2005-2012, with over 1,000 veteran suicides during that time; the suicide rate among veterans was **twice** that of non-veterans.

Among the 5,881 suicide deaths in Oklahoma from 2004-2013:

- 79% were male, and 21% were female
- 22% of suicide victims were veterans

- 144 (2.4%) victims killed at least one other person before taking his/her own life, **resulting in 173 homicidal deaths.**

- **Firearms (61%) were the most prevalent means of suicide**, followed by hanging/strangulation (20%), poisoning (14%), and other means (5%); immediate access to lethal means may increase the risk for suicide.

- Among suicide victims noted to have a diagnosed mental health problem (2,098), **62% were currently receiving mental health treatment.**

- A significant number of suicides were associated with a current depressed mood, intimate partner problem, mental and/or physical health problem, and/or crisis in the past weeks.

**22%**  
of the **5,881** suicide deaths from 2004-2013 were **veterans**

## TRANSLATING DATA INTO ACTION

### Informing prevention planning

- The Oklahoma Injury Prevention Service provides OKVDRS data and statistics and works closely with the Oklahoma Department of Mental Health and Substance Abuse Services (ODMHSAS), the Oklahoma Suicide Prevention Council, and other suicide prevention groups.
- OKVDRS suicide data informed the Council's 2011 **Oklahoma Strategy for Suicide Prevention.**

### Supporting veteran suicide prevention

With five military bases in Oklahoma, veterans' health issues impact more than 300,000 Oklahomans. **An OKVDRS special study and report on veteran suicides opened doors for collaboration with the Veterans Administration in Oklahoma**, and helped illustrate the:

- increased risk for suicide among veterans of all ages
- leading circumstances associated with veteran suicides across the lifespan – physical and mental health problems, depressed mood, and intimate partner problems
- most common means of suicide (firearms)

### Expanding the power of OKVDRS data

- **OKVDRS data will be linked to other state databases** to better inform suicide prevention, mental health treatment, and problematic drug prescriptions related to suicide.

- OKVDRS staff worked with law enforcement, the Child Death Review Board, and the Oklahoma Suicide Prevention Council to modify a pocket card that helps law enforcement collect more complete and accurate suicide circumstances data, which are used to understand suicide risks.

### Partnering with law enforcement

- The Oklahoma Association of Chiefs of Police hosts the OKVDRS Advisory Committee meetings and distributes data reports to its members.
- The Oklahoma State Bureau of Investigation maintains a full time program officer to collect law enforcement data for the OKVDRS through a contract with the Injury Prevention Service.

OKVDRS data showed increased risk & leading circumstances of suicide among veterans

Opened doors for collaboration with the Veterans Administration

Informs statewide suicide prevention program planning

- Oklahoma noticed their suicide rate was 33% higher than the US rate
- The suicide rate among veterans was twice that of non-veterans
- Significant number of suicides were associated with current depressed mood, intimate partner problem, mental and/or physical health, and/or crisis in the past weeks

### Data into Action:

- Inform prevention planning
- Opened doors for collaboration with the veterans administration



# Examples from Other States

## THE BIG PICTURE

In Rhode Island during 2010, there were 165 violent deaths: 135 suicides, 26 homicides and 4 deaths of undetermined manner. The number of suicides in Rhode Island peaked in 2010, declining from 102 suicides in 2011 to 89 in 2012, based on provisional 2012 data.

### RIVDRS data for 2004-2010 show that:

- During this seven year period, there were a total of 731 suicides in Rhode Island.
- Males (78%) were far more likely to commit suicide than females ( 22%).
- Male and female suicide deaths peaked in the age group 45-54 years.
- There were 18 suicides among those aged less than 18 (15 males, 3 females).
- Just over half (52%) of those who died by suicide had a current mental health problem, and 43% were currently

receiving mental health treatment.

- Nearly one in five (18%) of those who died by suicide experienced an intimate partner problem.
- 25% of those who died by suicide experienced a crisis in the two weeks prior to death.
- Only 37% of those who died by suicide left a note.



## TRANSLATING DATA INTO ACTION

Data from the Rhode Island Violent Death Reporting System (RIVDRS) provided new information on suicide and a better understanding of who is at risk.

- RIVDRS data were used by the Department of Health's Violence & Injury Prevention Program and its prevention partners for **ground-breaking priority setting and program planning**.
- Using new suicide data from the RIVDRS, the Suicide Prevention Subcommittee of the Rhode Island Injury Community Planning Group **identified the adult, working age population as being at increased risk for suicide and suicide attempts**.
- The **data were shared with key partners** through the subcommittee's members, including the State Medical Examiner, RIVDRS Program Manager and Epidemiologist, Violence & Injury Prevention Program manager, and representatives from the Samaritans, American Foundation for Suicide Prevention, community health and mental health centers, Bradley Children's Hospital, Brown University, Coastline Employee Assistance Program, and the Rhode Island Student Assistance Program.

- An "Economic Impact of Depression and Suicide in the Workplace" symposium, co-sponsored by the Violence & Injury Prevention Program and Coastline Employee Assistance Program, **increased awareness** of depression and suicide among working age adults and **provided strategies for integrating suicide prevention into worksites**.
- **Symposium participants included high-level managers and human resource representatives from the two largest employers in Rhode Island.**
- **Coastline Employee Assistance Program integrated suicide prevention into its mission statement and now provides training in early identification and referral of at risk employees to their clinical staff as well as their clients.**



- Rhode Island noticed 25% of those who died by suicide experienced a crisis in the two weeks prior to death
- 78% were males
- 52% had a current mental health problem

### Data into Action:

- Used to set priorities and program planning
- Identified the adult, working age population at increased risk
- Data shared with suicide prevention partners and 2 of the states largest employers
- Employee assistance program add suicide prevention to its mission, refers at risk employees to clinic staff



# Examples from Other States

## THE BIG PICTURE

Domestic violence is one of the fastest growing violent crimes in Utah. Findings from the 2010 publication, *Domestic Violence Fatalities in Utah, 2003-2008*, by the Utah Department of Health's Violence and Injury Prevention Program and the Domestic Violence Fatality Review Committee, include:

- 1 out of 3 adult homicides are domestic violence homicides.
- Females are 10 times more likely than males to die from domestic violence.
- The majority of domestic violence homicides are committed by males.
- While Hispanic persons comprise only 10% of Utah's population, they account for 77% of domestic violence victims.
- 52% of intimate partner homicides were premeditated.
- One-third of domestic violence perpetrators committed suicide after committing a homicide.
- 91% of the domestic violence-related suicide victims

## TRANSLATING DATA INTO ACTION

### Better data provide more complete picture of domestic violence deaths

A decade ago, it was difficult to know the extent of domestic violence in Utah because of limited data. The Utah Violent Death Reporting System (UTVDRS) has developed a more complete picture of domestic violence and its tragic impact on men, women, and children by:

- fostering a strong partnership between the Utah Department of Health's Violence and Injury Prevention Program (VIPP) and the state's multi-disciplinary Domestic Violence Fatality Review Committee (DVFRC), which includes more than 9 agencies,
- **expanding domestic violence data collection beyond the victim and suspect to include any intimate partner, family member and/or roommate involved in the incident,**
- **combining national and state-specific intimate partner violence variables** to enable the UTVDRS to collect more - and more detailed - domestic violence-related data, and
- linking data in the UTVDRS to identify and review - for the first time - when a domestic violence suspect committed suicide after the homicide.

### Linking children of victims to needed services

Intimate partner violence is particularly damaging to children who witness this violence. They are at greater risk of developing psychiatric disorders, developmental problems, school failure, violence against others, and low self-esteem, and

experienced a crisis prior to the incident or faced an impending crisis - the most common of which was facing a criminal legal problem such as a recent or impending arrest, police pursuit, or an impending criminal court date (32.7%).

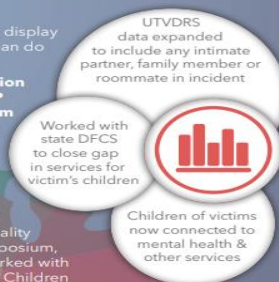
- In 44% of intimate partner violence incidents, one or more children under age 18 were living at the victim's home at the time of the incident (76 children total).
- 147 children under age 18 were directly exposed to the homicide - they saw it, heard it through the walls, were attacked or threatened during the incident, or discovered the body. Of these children, 78% were 5 years old or younger.



younger children typically display higher levels of distress than do older children.

**Through their collaboration on the UTVDRS, the VIPP and DVFRC helped inform a policy change to close a gap in services for the children of domestic violence-related homicide victims.**

- Following recommendations from a Domestic Violence Fatality Recommendations Symposium, the VIPP and DVFRC worked with the state Department of Children and Family Services (DFCS) to increase immediate referrals to DFCS at the time of a homicide - usually by law enforcement investigating the death - if the victim or perpetrator has one or more children in the home, regardless if a child was present during the incident.
- These referrals enabled these children and their families to receive an assessment and get connected to intervention and follow-up services, such as mental health services, to help cope with the homicide and other domestic violence-related issues.
- A referral to DFCS was made in 13 (46%) of the 28 intimate partner violence incidents with children in the home during 2003-2008.



- Domestic violence in Utah is one of the fastest growing violent crimes
- In 44% of intimate partner violence incidents one or more children under 18 were living in the victim's home
- 78% of children exposed to the homicide were age 5 or younger

### Data into Action:

- Expanded data collection to include intimate partner, family member or roommate incident
- Worked with the state department of children and family services to close gap in services for victim's children
- Children of victims now connected to mental health and other services

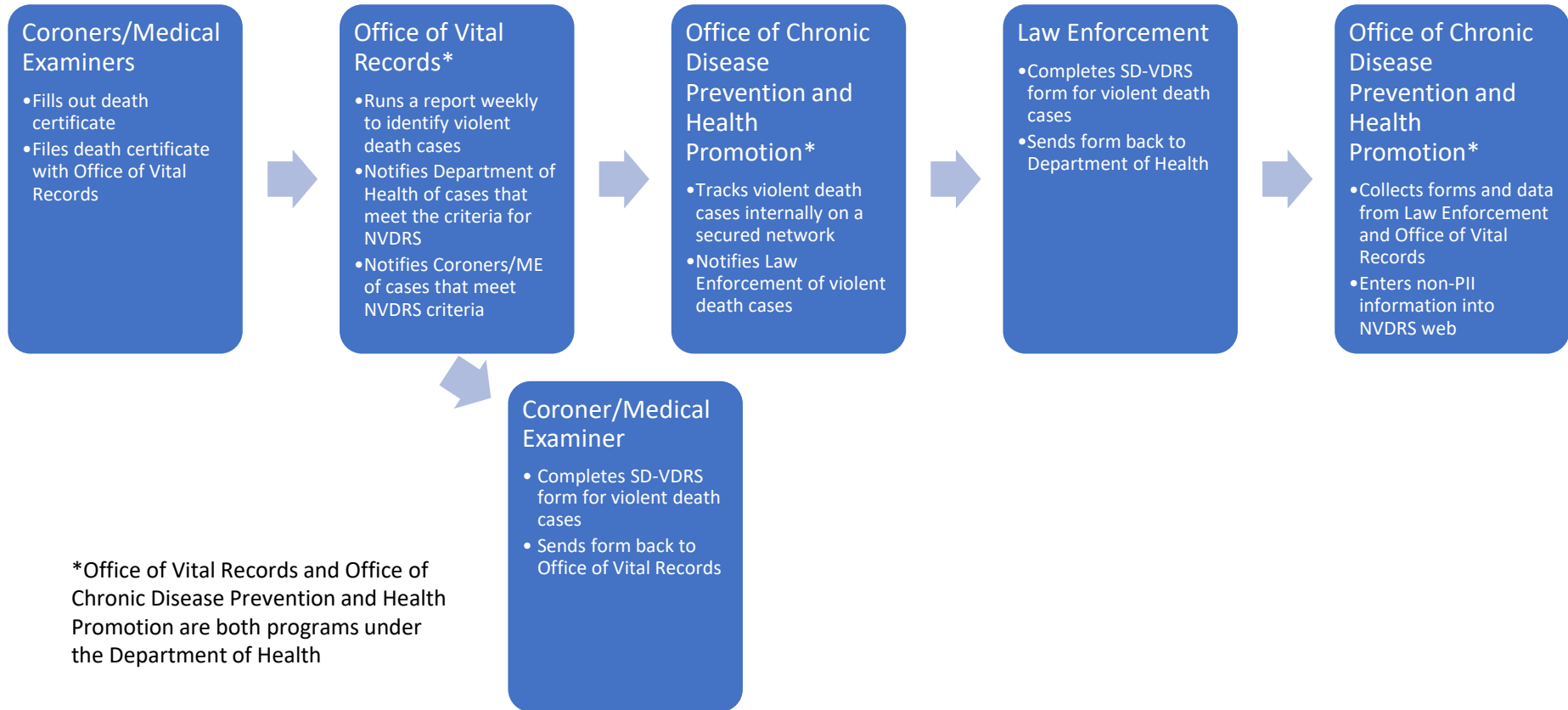
# NVDRS Data



# NVDRS Data

- Over 600 Variables
  - Demographics
    - Age, sex, race, ethnicity, place of residence, birthplace, industry, occupation, and education
  - Injury and Death
    - Manner of death, injury location and time, external cause of injury codes, underlying causes of death, location of death, and wounds
  - Circumstances
    - Mental health, substance abuse and other addictions, relationships, life stressors, crime and criminal activity, and manner specific circumstances
  - Weapons
    - Weapon type (firearm, blunt/sharp object, poisoning, fall, motor vehicle, etc.)
  - Suspects
    - Age, sex, and race of suspect; relationship to victim, and circumstances
  - Toxicology
    - Toxicology report findings
  - Optional: Intimate Partner Violence, Child Fatality Review data, and overdose-specific data

# SD-VDRS Data Collection Process





# NVDRS Web

Home Incidents Reporting Help About Log Out Amanda Nelson - State User (SD) Incident Search Search Incident ID's

Incident Overview » SD 2018 Incident: 1

MENU Victim 1: Demographics Injury and Death Circumstances Weapons Suspects Toxicology OD IPV CFR

Victims Documents Incident Summary Activity Log

### Demographics, Race, and Ethnicity

#### Basic Demographics

Person type:

Sex:   Transgender

Day of birth:  First initial of last name:

Age:  Age unit:

Last 4 of CME:  Last 4 of DC:

Height Feet:

Height Inches:  Weight (lbs):

#### Race & Ethnicity

Check all that apply

- White
- Black or African American
- Asian
- Native Hawaiian or Other Pacific Islander
- American Indian or Alaska Native
- Unspecified Race

Hispanic/Latino/Spanish:

#### Extended Demographics

Marital status:

Sexual Orientation:

Relationship Status:

Sex of Partner:

Victim was pregnant:

Current or former military personnel:



# Death Record Data Sharing

- Only specific individuals within the project have access to identifiable information for:
  - Infant/Child Death
  - Violent Death
  - Maternal Mortality
- Only de-identified information is shared with national registries as well as published presentations or papers
- All records are stored in confidential and secure electronic folders maintained by DOH



# Death Record Data Sharing

- Only deaths occurring in South Dakota are automatically eligible for review
- SD resident deaths occurring in other states are only eligible for review if allowed by state of death

# Colorado Violent Death Reporting System (CoVDRS): Program Background and Initiatives

Kirk Bol, MSPH

South Dakota Preventable Death Committee  
February 15, 2019



# Presenter Introduction

- Kirk Bol, MSPH
  - Manager, Registries and Vital Statistics Branch
    - Contains Colorado's Vital Statistics Program, CoVDRS, Central Cancer Registry, Birth Defects Monitoring Program and Medical Aid-in-Dying
  - Principal Investigator, CoVDRS
    - Since 2014



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Colorado Violent Death Reporting System (CoVDRS)

- First funded by NVDRS in 2003, first year of data was 2004
- Housed at the Colorado Department of Public Health and Environment
  - Originally housed within Prevention Services Division, Injury Epidemiology Program
  - Moved to Center for Health and Environmental Data, Vital Statistics Program in 2011
  - Continues to work close with current Violence and Injury Prevention-Mental Health Promotion Branch (PSD)



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Colorado Violent Death Reporting System (CoVDRS)

- Current Staff
  - Principal Investigator: Kirk Bol, MSPH
  - Program Coordinator/Lead Epidemiologist: Ethan Jamison, MPH
  - Coroner/Medical Examiner (CME) Record Specialist/Abstractor: Joshua Swanson
  - Law Enforcement (LE) Record Specials/Abstractor: Karl Herndon
  - Essentially 3 FTE (with 2-5% of PI's time)

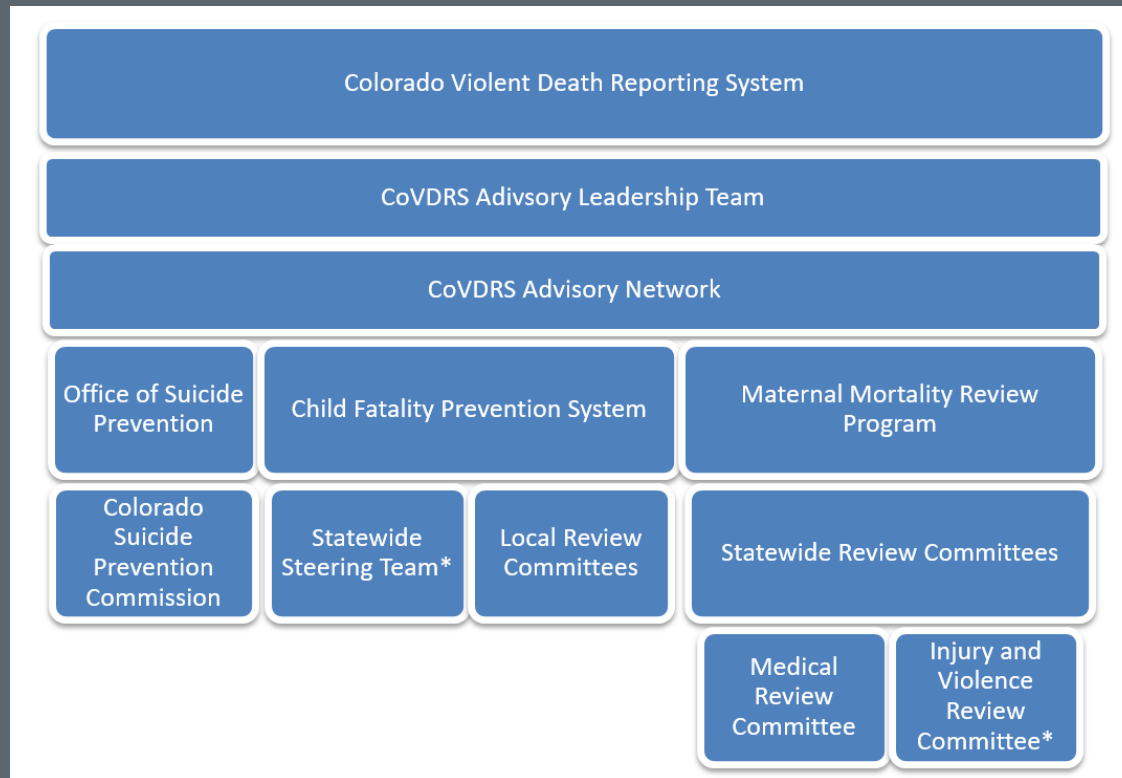


**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# CoVDRS Advisory Network



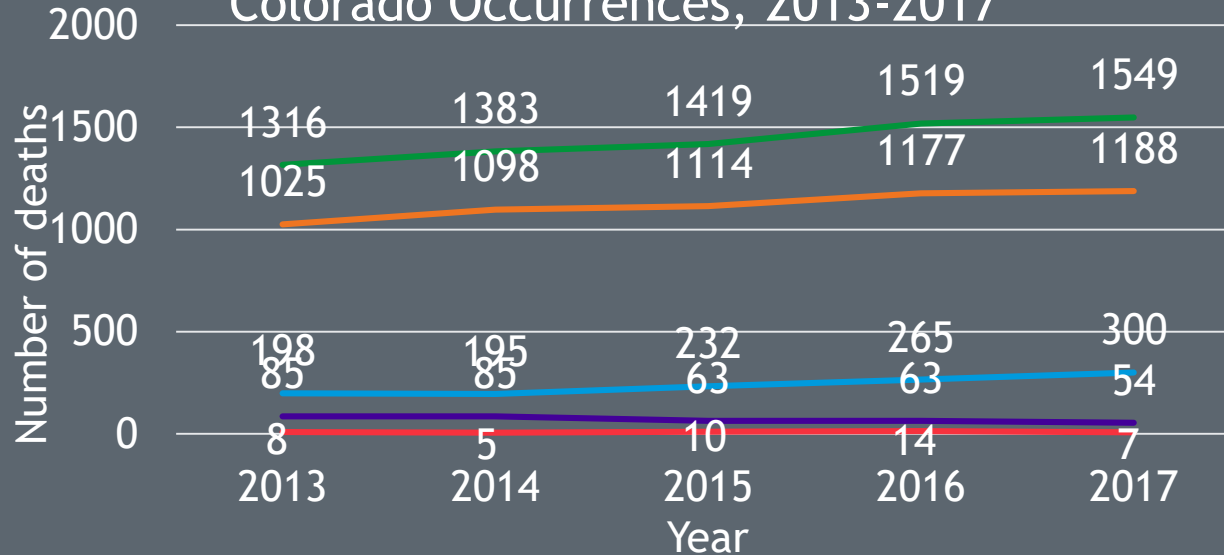
**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# CoVDRS Case load

Violent Death Cases by Manner and Year:  
Colorado Occurrences, 2013-2017



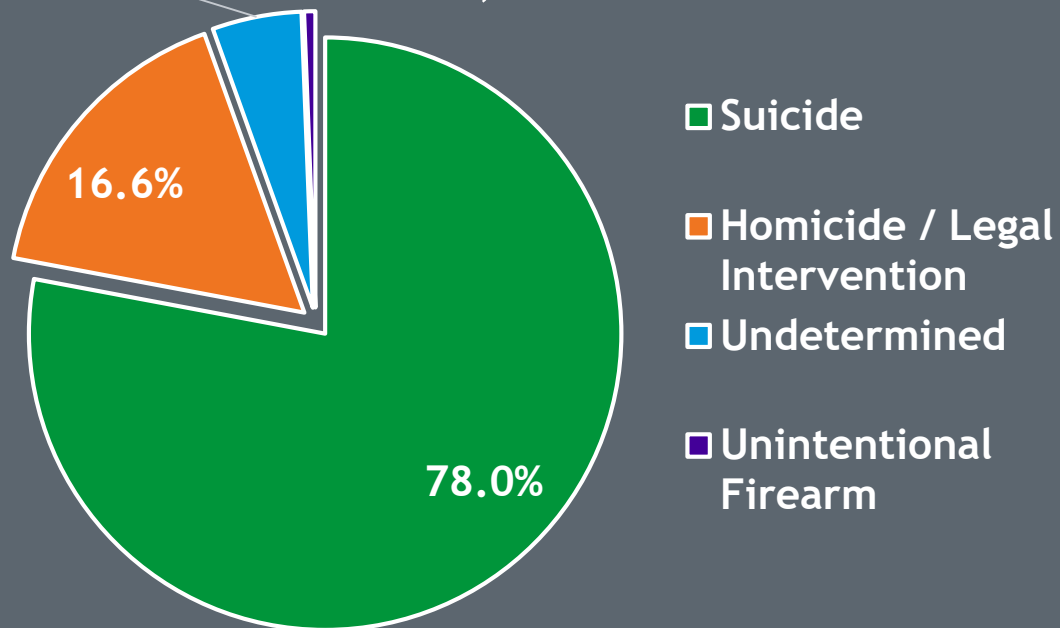
**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

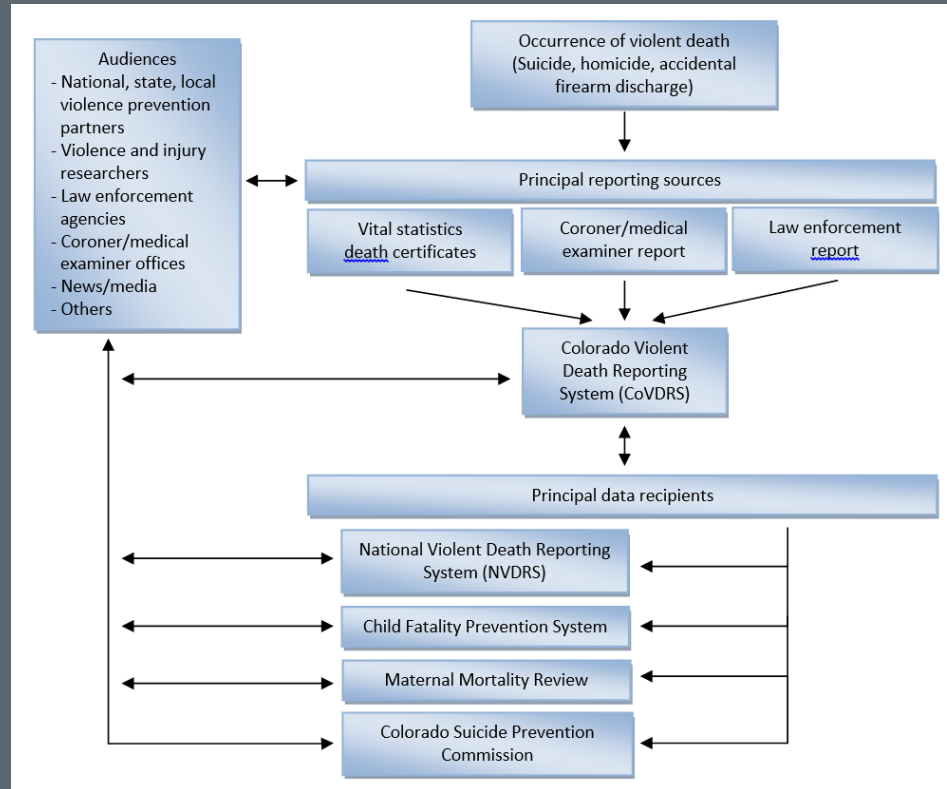
# CoVDRS Case load

Violent Death Cases by Manner: Colorado Occurrences, 2013-2017



**COLORADO**  
Center for Health  
& Environmental Data  
Department of Public Health & Environment

# CoVDRS Information Flow



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Data Sources

- Data collected from
  - Death certificates
    - Direct access to Colorado electronic death registration system (EDR)
  - Coroner/medical examiner reports
    - 62 elected coroners, 1 appointed medical examiner (City and County of Denver)
  - Law enforcement reports
    - ~240 law enforcement agencies, including elected county sheriffs and appointed police chiefs



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment



# Case Initiation and Record Abstraction

- Electronic procedures (SAS) in place to extract, manipulate and import death certificate data into NVDRS web-based system (NVDRSWeb)
  - Selected data elements are reviewed post import, and others manually entered
  - Updates cases in separate tracking spreadsheet (contains key for NVDRS ID and death cert number)
- SAS procedures in place to generate letters to CME and LE offices requesting records for specific cases
  - Form letter on front containing request language and important updates; on back is a table with decedent list



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment



**COLORADO**  
Department of Public  
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

January 30, 2019

To: James A. Wilkerson IV, MD  
495 N. Denver Avenue  
Loveland, CO 80537

From: Ethan Jamison, MPH  
Colorado Violent Death Reporting System

The Colorado Violent Death Reporting System collects data from Coroner and Law Enforcement reports in an effort to better understand and prevent violent deaths throughout the state. The program relies on agencies like your's providing detailed death records so we can gather the highest quality data for this program. We appreciate the continued support from the Colorado coroner community, but are still working to get records from all agencies.

**We are requesting copies of coroner reports for the individual(s) listed on the back of this letter. Please include a copy of the coroner investigative report, a summary of the events leading to the death, and a copy of the autopsy report (if an autopsy was performed) for each individual.** Periodically review the files and send a second request for records that have not yet been received. This mail contains both second and new requests.

Enclosed is a postage-paid return FEDEX mailer for your convenience. Contact FEDEX for packaging information. Additionally, if you would like to email copies of these reports, we have included resources on how you can send a secure encrypted email including the reports as attachments. Due to the confidentiality of these reports, it is important that if you choose to email them, that you use the secure process described here. If you have questions or concerns about this secure email option, you can contact technical support.

**All documents that you provide will remain strictly confidential.** From CRS 25-1-122 (except Reports and records resulting from the investigation of epidemic and communicable diseases, environmental and chronic diseases, reports of morbidity and mortality...held by the state department of public health and environment or local departments of health shall be strictly confidential. Such reports and records shall not be released, shared with any agency or institution, or made public upon subpoena, search warrant, discovery proceedings, or otherwise

Thank you for your assistance. If you have any questions or concerns, please contact me (303-69-ethan.jamison@state.co.us), or Kirk Bol (303-692-2170, kirk.bol@state.co.us).

You can learn more about the program on our webpage:  
<https://www.colorado.gov/pacific/cdphe/colorado-violent-death-reporting-system>

PLEASE SEE LIST ON REVERSE SIDE



**COLORADO**  
Department of Public  
Health & Environment

Dedicated to protecting and improving the health and environment of the people of Colorado

County of Death	Decedent Name	Date of Birth	Date of Death	Manner	Responding Police Agency Name (if applicable)	Police Report # (if known)
Larimer	Last, First Middle	MDY	MDY	S,H,A,C	Fort Collins Police Department	#962FG21

Key for Manner:

S= Suicide

H= Homicide

C= Could not be determined/Undetermined

A= Accident/Unintentional Firearm Death



**COLORADO**  
Center for Health  
& Environmental Data

Department of Public Health & Environment

# Case Initiation and Record Abstraction

- Letters sent via USPS, and include a FedEx envelope and mailer slip with CoVDRS account info pre-printed
- Format of records received:
  - Paper copies, returned via FedEx
  - Electronic copies, returned on CD/DVD or flash drive via USPS
  - Faxed copies, via secure fax machine in our office
- On-Site abstraction
  - 1 CME agency, many LE agencies
  - CME and LE abstractors visit agencies and are provided access to either paper records or the computerized record system
  - May be abstracted directly into NVDRSWeb (internet access dependent) or abstracted electronically or on paper for future input into NVDRSWeb



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Case Initiation and Record Abstraction

- 'Contract Abstracting'
  - Two coroners offices and Denver Medical Examiner's Office
  - Two agencies provided Microsoft Access databases mirroring content of NVDRSWeb and list of cases to be abstracted
  - One agency completes a fillable PDF
  - All three agencies receive training from CoVDRS staff and follow NVDRS coding manual
  - Costs: \$20-\$25 per abstract
  - **CDC CAUTION**



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

**All Access Objects**

Tables  
tblNVDRS\_ALL

Queries  
CLICK HERE FOR COMPLETE CASE LIST

Forms  
Enter NVDRS Data

**NVDRS - Boulder County** Click to Find a Case

NVDRS Incident ID:  Last Name:  First Name:  Middle Name:

Victim Demographics Injury/Death Information Autopsy and Toxicology Weapon Suspect Information Circumstances and Narrative Unintentional Firearm Death Circumstances Comments

DOB:  Gender:

Transgender?  Alternative Sexual Orientation?

<p>Victim's Race (select all that apply)</p> <p>White <input type="checkbox"/></p> <p>Black <input type="checkbox"/></p> <p>Asian <input type="checkbox"/></p> <p>Pacific Islander <input type="checkbox"/></p> <p>American Indian <input type="checkbox"/></p> <p>Other Race <input type="checkbox"/></p> <p>Unspecified <input type="checkbox"/></p>	<p>Victim's Residence</p> <p>City of Residence: <input type="text"/></p> <p>County of Residence: <input type="text"/></p> <p>State of Residence: <input type="text"/></p> <p>Zin Code of Residence: <input type="text"/></p>	<p>Victim's Occupational Status</p> <p>Current Occupation: <input type="text"/></p> <p>Retired? <input type="checkbox"/></p> <p>Unemployed? <input type="checkbox"/></p>
--	--	--

**NVDRS - Boulder County** Click to Find a Case

NVDRS Incident ID:  Last Name:  First Name:  Middle Name:

Victim Demographics Injury/Death Information Autopsy and Toxicology Weapon Suspect Information Circumstances and Narrative Unintentional Firearm Death Circumstances Comments

<p><b>Complete grey box for ALL MANNERS of death</b></p> <p><b>Relationship Problems</b></p> <p>Family relationship problem <input type="checkbox"/></p> <p>Other Relationship Problem <input type="checkbox"/></p> <p><b>Previous Exposure to Violence</b></p> <p>Abuse or Neglect led to death <input type="checkbox"/></p> <p>History of abuse or neglect as child <input type="checkbox"/></p> <p>Perpetrator of Interpersonal Violence in the Past Month <input type="checkbox"/></p> <p>Victim of Interpersonal Violence in the Past Month <input type="checkbox"/></p>	<p><b>Mental Health, Substance Abuse and Addictions</b></p> <p>Current depressed mood <input type="checkbox"/></p> <p>Current diagnosed mental health problem: <input type="checkbox"/></p> <p>MH Diagnosis #1 <input type="text"/></p> <p>MH Diagnosis #2 <input type="text"/></p> <p>Other MH Diagnosis: <input type="text"/></p> <p>Current mental health treatment <input type="checkbox"/></p> <p>Ever treated for mental health or substance abuse <input type="checkbox"/></p> <p>Alcohol problem <input type="checkbox"/></p> <p>Other substance abuse problem <input type="checkbox"/></p> <p>Other addiction <input type="checkbox"/></p>	<p><b>Life Events</b></p> <p>Physical fight (2 people) <input type="checkbox"/></p> <p>Argument <input type="checkbox"/></p> <p>Timing of most recent argument: <input type="text"/></p> <p>Crisis in Past Two Weeks <input type="checkbox"/></p> <p><b>Crime and Criminal Activity</b></p> <p>Precipitated by Another Crime <input type="checkbox"/></p> <p>Nature of Other Crime #1 <input type="text"/></p> <p>Nature of Other Crime #2 <input type="text"/></p> <p>Precipitating crime(s) in progress? <input type="checkbox"/></p> <p>Terrorist Attack <input type="checkbox"/></p>
---	---	--

<p><b>Complete blue box for SUICIDE and UNDETERMINED</b></p> <p><b>Relationship Problems</b></p> <p>Intimate partner problem <input type="checkbox"/></p> <p><b>Suicide Markers</b></p> <p>History of suicide attempts <input type="checkbox"/></p> <p>Disclosed suicidal thoughts or intent to commit suicide <input type="checkbox"/></p> <p>Disclosed thoughts/intent to whom? <input type="text"/></p> <p>Left a suicide note <input type="checkbox"/></p> <p>History of expressed suicidal thoughts or plans <input type="checkbox"/></p>	<p><b>Life Stressors</b></p> <p>Contributing criminal legal problem <input type="checkbox"/></p> <p>Contributing civil legal problems <input type="checkbox"/></p> <p>Contributing physical health problem <input type="checkbox"/></p> <p>Job Problem <input type="checkbox"/></p> <p>School Problem <input type="checkbox"/></p> <p>Financial Problem <input type="checkbox"/></p> <p>Eviction/loss of home <input type="checkbox"/></p> <p>Suicide of friend/family in last 5 years <input type="checkbox"/></p> <p>NON-Suicide death of friend/family <input type="checkbox"/></p> <p>Anniversary of a traumatic event <input type="checkbox"/></p> <p>Disaster exposure <input type="checkbox"/></p>	<p><b>Complete green box for HOMICIDE ONLY</b></p> <p>Walk-by assault <input type="checkbox"/> Drive-by shooting <input type="checkbox"/> Hate Crime <input type="checkbox"/> Mercy killing <input type="checkbox"/></p> <p><b>ALL MANNERS (pink box)</b></p> <p>Any other circumstance not already listed: <input type="text"/> List other circ here: <input type="text"/></p> <p><b>Narrative of the Incident (complete for ALL MANNERS). Be sure to briefly explain any checked circumstances in the narrative.</b></p> <p><input type="text"/></p>
<p><b>Complete purple box for HOMICIDE or LEGAL INTERVENTION</b></p> <p><b>Relationship Problems</b></p> <p>Intimate partner violence <input type="checkbox"/></p> <p><b>Crime and Criminal Activity</b></p> <p>Stalking <input type="checkbox"/></p>	<p><b>Misc. Circumstances</b></p> <p>Justifiable self defense <input type="checkbox"/></p> <p>Victim was a police officer on duty <input type="checkbox"/> Victim used a weapon <input type="checkbox"/></p> <p>Victim was a bystander <input type="checkbox"/></p>	



### Colorado Violent Death Reporting System – Data Abstraction Form

County: \_\_\_\_\_ Abstractor Name: \_\_\_\_\_



For questions regarding completion of this form, please contact Ethan Jamison, CoVDRS Project Coordinator, 303-692-2093, [ethan.jamison@state.co.us](mailto:ethan.jamison@state.co.us)

#### Victim Demographic Information

Last Name: \_\_\_\_\_ First Name: \_\_\_\_\_ Middle Name: \_\_\_\_\_ DOB: \_\_\_\_\_  
Sex:  Male  Transgender<sup>§</sup>  Sexual Orientation<sup>§</sup> \_\_\_\_\_ Race<sup>§</sup>: \_\_\_\_\_ Hispanic/Latino/Spanish  Age: \_\_\_\_\_  
Currently in a Relationship:  Yes  No Sex of Partner: \_\_\_\_\_  
Residence City: \_\_\_\_\_ Residence County: \_\_\_\_\_ Residence State: \_\_\_\_\_  
Residence Zip: \_\_\_\_\_ Residence COUNTRY (if other than U.S.): \_\_\_\_\_ Victim was homeless   
Current Occupation: \_\_\_\_\_ Retired  Unemployed

#### Injury and Death Information

Injury Date: \_\_\_\_\_ Injury City: \_\_\_\_\_ Injury County: \_\_\_\_\_ Injury State: \_\_\_\_\_  
Injury Zip: \_\_\_\_\_ Injury COUNTRY (if other than U.S.): \_\_\_\_\_ Recent release from an institution Unknown   
Injured at own home  Injured while in custody  EMS at scene  Alcohol use suspected   
Injured at work  Manner of Death: \_\_\_\_\_ Injury Location: \_\_\_\_\_

#### Autopsy and Toxicology Information

Height (in inches): \_\_\_\_\_ Weight (in pounds): \_\_\_\_\_ If Female, Pregnancy Status<sup>§</sup>: \_\_\_\_\_

For deaths involving **firearms and sharp instruments** only, enter the following:

Number of Wounds (bullet entry counts as 1 wound, bullet exit counts as another): \_\_\_\_\_ Note: one shotgun shell = 1 wound  
Number of bullets that hit victim: \_\_\_\_\_

Wound Locations (check if present): Head  Face  Neck  Upper Extremity   
Spine  Thorax  Abdomen  Lower Extremity

For deaths involving **any weapon type**, enter the following:

Alcohol and Drug Testing (enter regardless of weapon type; tests may be from any bodily fluid, except blood alcohol concentration, BAC):  
Toxicology Tested - \_\_\_\_\_  
Date Specimens Collected: \_\_\_\_\_ Time Collected: \_\_\_\_\_ Military time/24 hour clock \_\_\_\_\_

Substance Type (if necessary, please refer to drug manual for info on substance types)	Tested	Positive	
Alcohol	<input type="checkbox"/>	<input type="checkbox"/>	<sup>§</sup> Blood Alcohol Concentration (BAC) (mg/dl): _____ %
Carbon Monoxide (CO)	<input type="checkbox"/>	<input type="checkbox"/>	CO Source <sup>§</sup> : _____
Amphetamines	<input type="checkbox"/>	<input type="checkbox"/>	
Anticonvulsants	<input type="checkbox"/>	<input type="checkbox"/>	
Antidepressants	<input type="checkbox"/>	<input type="checkbox"/>	
Antipsychotics	<input type="checkbox"/>	<input type="checkbox"/>	
Barbiturates	<input type="checkbox"/>	<input type="checkbox"/>	
Benzodiazepines	<input type="checkbox"/>	<input type="checkbox"/>	
Cocaine	<input type="checkbox"/>	<input type="checkbox"/>	
Marijuana	<input type="checkbox"/>	<input type="checkbox"/>	
Muscle Relaxants	<input type="checkbox"/>	<input type="checkbox"/>	
Opiates	<input type="checkbox"/>	<input type="checkbox"/>	

(List any additional substances on back of this form)



## COLORADO

Center for Health & Environmental Data

Department of Public Health & Environment

#### Weapon Information

Primary Weapon<sup>§</sup>: \_\_\_\_\_ <sup>2</sup>nd Weapon Causing Injury<sup>§</sup>: \_\_\_\_\_ <sup>3</sup>rd Weapon Causing Injury<sup>§</sup>: \_\_\_\_\_

For any death involving a **firearm**, enter the following:

Firearm type<sup>§</sup>: \_\_\_\_\_ Firearm Make: \_\_\_\_\_ Firearm model: \_\_\_\_\_  
Caliber: \_\_\_\_\_ Gauge: \_\_\_\_\_ Firearm Owner<sup>§</sup>: \_\_\_\_\_ Number of non-fatally shot persons: \_\_\_\_\_  
Firearm stored loaded  Firearm stored locked  Firearm stolen   
Firearm Access Narrative: (enter a brief summary of how the victim obtained access to the gun and whether he/she had authorized access to the gun): \_\_\_\_\_

For any death where a **poison** is the primary weapon, enter the following:

Substance/Poison Name	Cause of Death <sup>§</sup>	Drug Prescribed for <sup>§</sup> :	
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

<sup>§</sup> Refer to Pages 13-17 of coding manual for more information & answer choices

(Please list any additional poisons on the back of this form)

Suspect (or "S") Information (list in order of primacy; applicable only if NOT self-inflicted) or Suspect Info Unknown

S Number	Age (years)	Gender	Race	Hispanic	History of abuse of victim by this S	S was caregiver for the victim	S attempted suicide	S mentally ill
1		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Suspect-Victim Relationships (list all relationships that apply<sup>§</sup>):

S 1 is a \_\_\_\_\_ to the Victim S 3 is a \_\_\_\_\_ to the Victim  
S 2 is a \_\_\_\_\_ to the Victim S 4 is a \_\_\_\_\_ to the Victim

<sup>§</sup> Refer to Page 12 of coding manual for answer choices

Circumstances – Complete the following for ALL MANNERS OF DEATH

NOTE: each circumstance checked should be explained in the narrative (see pg 4)

Mental Health and Substance Abuse Related:

Current depressed mood	<input type="checkbox"/>	Alcohol problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Current mental health diagnosis(es)	<input type="checkbox"/>	Other substance problem/abuse	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Please list: _____	<input type="checkbox"/>	Other addiction	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Current mental health treatment	<input type="checkbox"/>	Please list: _____	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Ever treated for mental health or substance abuse problem	<input type="checkbox"/>				

Crisis Variables: These should be endorsed when the circumstance was noted to have occurred or worsened 2 weeks prior to death

Relationship Problems:

Intimate partner violence	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Family relationship problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Intimate partner problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Other relationship problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>

Previous Exposure to Violence:

Abuse or neglect led to death	<input type="checkbox"/>	Previous perpetrator of violence in the past month	<input type="checkbox"/>
History of abuse or neglect as a child	<input type="checkbox"/>	Previous victim of violence in the past month	<input type="checkbox"/>

Life Events:

Physical fight (2 people)	<input type="checkbox"/>
Argument <small>(Thinking of Argument: -)</small>	<input type="checkbox"/>

Crime and Criminal Activity:

Precipitated by another crime <small>Crime(s) Type: -</small>	<input type="checkbox"/>	Prostitution or sex trafficking	<input type="checkbox"/>
First crime in progress	<input type="checkbox"/>	Terrorist attack	<input type="checkbox"/>
Stalking	<input type="checkbox"/>	Walk-by assault	<input type="checkbox"/>
Gang related	<input type="checkbox"/>		

Circumstances – Complete the following for **HOMICIDE & LEGAL INTERVENTION** Deaths only

Justifiable self defense	<input type="checkbox"/>	Mercy killing	<input type="checkbox"/>
Victim was a police officer on duty	<input type="checkbox"/>	Hate crime	<input type="checkbox"/>
Victim was a bystander	<input type="checkbox"/>	Jealousy (lover's triangle)	<input type="checkbox"/>
Random violence	<input type="checkbox"/>	Brawl (3 people or more in a physical fight)	<input type="checkbox"/>
Victim was an intervener	<input type="checkbox"/>	Drive-by shooting	<input type="checkbox"/>
Victim used a weapon	<input type="checkbox"/>	Drug involvement	<input type="checkbox"/>

*Crisis Variables: These should be endorsed when the circumstance was noted to have occurred/or worsened 2 weeks prior to death.*

Circumstances – Complete the following for **SUICIDE & UNDETERMINED** Deaths only

History of suicide attempts	<input type="checkbox"/>	Civil legal problems	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Contributing physical health problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Disclosed suicidal thoughts or intent to commit suicide <small>To whom: -</small>	<input type="checkbox"/>	Contributing criminal legal problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Job problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Left a suicide note	<input type="checkbox"/>	Financial problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	School problem	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
History of expressed suicidal thoughts or plans	<input type="checkbox"/>	Suicide of friend or family	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Eviction or loss of home	<input type="checkbox"/>	Crisis	<input type="checkbox"/>
Anniversary of a traumatic event	<input type="checkbox"/>	Non-suicide death of friend or family	<input type="checkbox"/>	Crisis	<input type="checkbox"/>	Disaster exposure	<input type="checkbox"/>	Crisis	<input type="checkbox"/>

Circumstances – Complete the following for **UNINTENTIONAL/ACCIDENTAL FIREARM DEATHS** only:

Context of Injury			
Hunting	<input type="checkbox"/>	Playing with gun	<input type="checkbox"/>
Target shooting	<input type="checkbox"/>	Celebratory firing	<input type="checkbox"/>
Self-defensive shooting	<input type="checkbox"/>	Other context of injury	<input type="checkbox"/>
		Showing gun to others	<input type="checkbox"/>
		Loading or unloading gun	<input type="checkbox"/>
		Cleaning Gun	<input type="checkbox"/>

*Mechanism and Context of Injury: Endorse any/all circumstances that apply to the situation and actions that led to the unintentional firearm injury.*

Mechanism of Injury			
Thought safety was engaged	<input type="checkbox"/>	Bullet ricochet	<input type="checkbox"/>
Thought gun was unloaded	<input type="checkbox"/>	Fired while operating safety/lock	<input type="checkbox"/>
Unintentionally pulled trigger	<input type="checkbox"/>	Gun defect or malfunction	<input type="checkbox"/>
Dropped gun	<input type="checkbox"/>	Gun mistaken for toy	<input type="checkbox"/>
		Fired while holstering/unholstering	<input type="checkbox"/>
		Other mechanism of injury	<input type="checkbox"/>

Brief Narrative of the Incident

OR  See Attached

Additional Comments:



**COLORADO**  
Center for Health  
& Environmental Data

Department of Public Health & Environment

# Key Challenges

- Increasing case load
  - Including increases in homicides
- Obtaining all records
  - Response rates to CoVDRS requests
  - Requirement to abstract on-site
- Substance in records
  - Limited circumstance and toxicology information
- Jurisdictional issues
  - US Military institutions
  - Tribal/Reservation considerations



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment



# Key Successes

- Obtaining all records
  - Response rates to CoVDRS requests – *more frequent requests, compiled lists, investigation ID, FedEx return*
  - Requirement to abstract on-site – *return with suicide reports, if not homicide reports*
- Substance in records
  - Limited circumstance and toxicology information – *pocket cards*

The screenshot displays the Colorado Violent Death Reporting System interface, which is organized into several key sections:

- Incident Information:** A checklist asking "Did the decedent have a..." with options for current depressed mood, current mental health problem, current/previous treatment for mental illness, alcohol problem, and other substance problem.
- Was the death related to...:** A checklist with options for an argument, physical fight, intimate partner problems, family relationship problems, other relationship problems, a victim/perpetrator of violence, a history of abuse, and a crisis (within 2 weeks) related to any of the above problems.
- Colorado Violent Death Reporting System:** A central section listing contact information for the Principal Investigator (Kirk Bol, 303-692-2170), Coroner Abstractor (Ethan Jamison, 303-692-2093), Law Enforcement Abstractor (Karl Herndon, 303-691-4962), and Coroner/ME Abstractor (Joshua Swanson, 303-691-2246). It also includes the Colorado Department of Public Health & Environment logo and website (www.colorado.gov/cdphe).
- Pocket Card Resource:** A section titled "Ideas for reports involving..." listing categories such as Suicide, Homicide, Accident, Sudden unexpected death, Infant or child death, In-custody death, and Overdose, firearm or violent death.
- Decedent demographics...:** A checklist for demographic information including age, sex, race, address of residence and injury, date & time of death, manner/cause of death, military/veteran status, pregnancy status, sexual orientation, and transgender status.
- Suicide Circumstances:** A checklist asking "Did the decedent..." with options for leaving a note, disclosing suicidal intent, history of suicide attempts, speaking of suicide, physical health problems, job/school/financial problems, criminal/civil legal problems, and crisis (within two weeks) related to above circumstances.
- Intimate partner violence:** A checklist asking "What was the history of IPV?" with options for victim's/perpetrator's convictions, physical/mental/substance abuse problems, nature of relationship, and restraining orders.
- Homicide Circumstances:** A checklist asking "Was the homicide related to..." with options for another crime, selling/using/possessing drugs, jealousy, intimate partner violence, gang involvement, hate crime, brawl (3+ people in physical fight), and mercy killing.
- Was the decedent...:** A checklist with options for bystander, police officer on duty, acting in self defense, using a weapon, and intervening to assist a crime victim.
- Firearm Information:** A checklist titled "Ideas for reports involving..." with options for firearm information, describing the firearm (type, make/model, caliber/gauge), who owns it, if it was stored loaded, and if it was stored locked.
- Poison Information:** A checklist asking "What was the poison?" with options for street/recreational drug, alcohol, pharmaceuticals, carbon monoxide/helium, and other poisons.
- If prescription drug...:** A checklist with options for name of drug, prescribed to decedent, and # prescribed/# remaining.

# Key Successes

- Jurisdictional issues
  - US Military institutions – *efforts to reach out to DOD national medical examiners office*
  - Tribal/Reservation considerations – *limited interaction with tribal leadership, but work with local coroners and BIA investigators*
- Data dissemination
  - [Web presence](#)
    - <https://www.colorado.gov/pacific/cdphe/colorado-violent-death-reporting-system>
  - [Colorado Suicide Data Dashboard](#)
    - [https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CoVDRS\\_12\\_1\\_17/Story1?:embed=y&:showAppBanner=false&:showShareOptions=true&:display\\_count=no&:showVizHome=no#4](https://cohealthviz.dphe.state.co.us/t/HSEBPublic/views/CoVDRS_12_1_17/Story1?:embed=y&:showAppBanner=false&:showShareOptions=true&:display_count=no&:showVizHome=no#4)



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

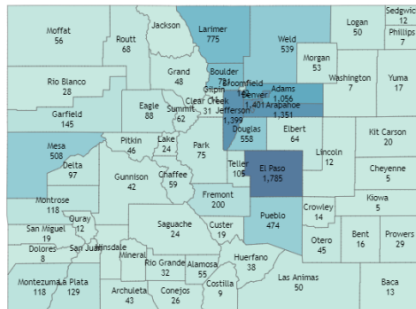
### Suicides in Colorado: An Overview

Colorado Violent Death Reporting System

Select years: 2004 2017

Number of suicides by place of residence for selected years  
 Click on a region or county to filter other charts; use "control" to select more than one at a time; click again to deselect

Choose view: County



Total suicides for selected population and years: 12,988

Number of suicides by demographics  
 Click on one or more subgroups below to filter all other charts to that group(s); click again to deselect

by age



by sex

by race/

White

Black/Af

Asian or

A

by marit

Cu

by veter

Veteran c

Veteran :

### Suicides in Colorado: Methods, Circumstances and Toxicology

Colorado Violent Death Reporting System

\*\* Select "Enable Medicaid view" to filter based on Medicaid\*\*  
 Standard view

Year: 2004 2016 Health Statistics Region: (All) County: (All) Employment status: (All) Medicaid enrollment (within 2 yrs of death): (All)

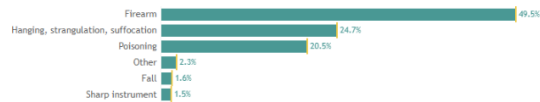
Sex: (All) Age: (All) Race/Ethnicity: (All) Marital status: (All) Veteran status: (All)

Total suicides, entire state: 11,842

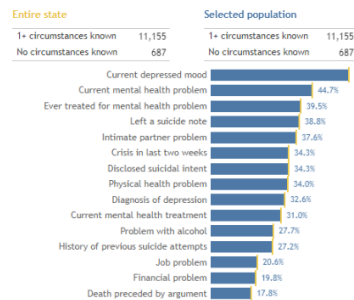
Total suicides, selected population: 11,842

For all charts below: the bars represent the values for selected population, the yellow reference bands are the values for the entire state.

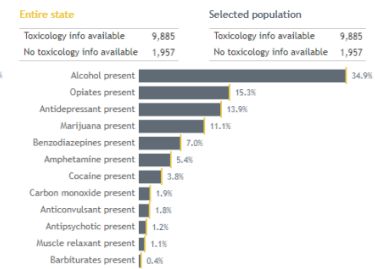
#### Method



#### Circumstances



#### Toxicology



**COLORADO**  
 Center for Health & Environmental Data

Department of Public Health & Environment

# Publications

- Peer-review (in-house)
  - Jamison EC, Bol KA, Mintz SN. Analysis of the effects on time between divorce decree and suicide. *Crisis: The Journal of Crisis Intervention and Suicide Prevention*. Doi: 10.1027/0227-5910/a000563, 2018.
  - Mintz S, Jamison E, Bol K. Suicide among healthcare practitioners and technicians in Colorado: An epidemiological study. *Suicide and Life-Threatening Behavior*. doi: 10.1111/sltb.12449, 2018.
  - Jamison EC, Bol KA. Previous suicide attempt and its association with method used in a suicide death. *American Journal of Preventive Medicine*. 51(5-3): S226-S233, 2016.
- Peer review (external)
  - Carmichael H, Jamison E, Bol KA, McIntyre R, Velopulos C. Premeditated versus “passionate”: Patterns of homicide related to intimate partner violence. *Journal of Surgical Research*. 230:87-93, 2018.
  - Searles VB, Valley MA, Hedegaard H, Betz ME. Suicides in urban and rural counties in the United States, 2006-2008. *Crisis*. 2014;35(1):18-26.



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Publications

- Reports (HealthWatch)
  - Johnson J, Jamison E, Bol K. The association between toxicology and suicide notes among firearm suicide decedents, 2004-2015: An analysis from the Colorado Violent Death Reporting System. HealthWatch No. 108, 2019.
  - Mintz S, Jamison E, Herndon K, Bol K. Violent death among people experiencing homelessness in Colorado, 2004-2015: A summary from the Colorado Violent Death Reporting System. HealthWatch No. 103, 2018.
  - Jamison E, Mintz S, Herndon K, Bol K. Suicide in Colorado, 2011-2015: A summary from the Colorado Violent Death Reporting System. HealthWatch No. 102, 2017.
  - Jamison E, Mintz S, Herndon K, Bol K. Homicide in Colorado, 2004-2014: A summary from the Colorado Violent Death Reporting System. HealthWatch No. 101, 2016.
  - Jamison E, Herndon K, Bui AG, Bol K. Suicide among first responders in Colorado, 2004-2014: A Summary from the Colorado Violent Death Reporting System. HealthWatch No. 97, 2015.
  - Bui AG, Bol K, Jamison E, Herndon K. Suicide in Colorado, 2009-2013: A summary from the Colorado Violent Death Reporting System. HealthWatch No. 96, 2015.
  - Jamison E, Bui AG, Herndon K, Bol K. Adolescent suicide in Colorado, 2008-2012. HealthWatch No. 94, 2014.



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Self-Care for NVDRS Staff

- Detail oriented positions
- Regular exposure to the topic of death and violence
  - Often disturbing or depressing material
  - Secondary and vicarious trauma
- Unique position and experience
  - May not regularly see the positive results of their efforts
  - Current upward trends in violent deaths



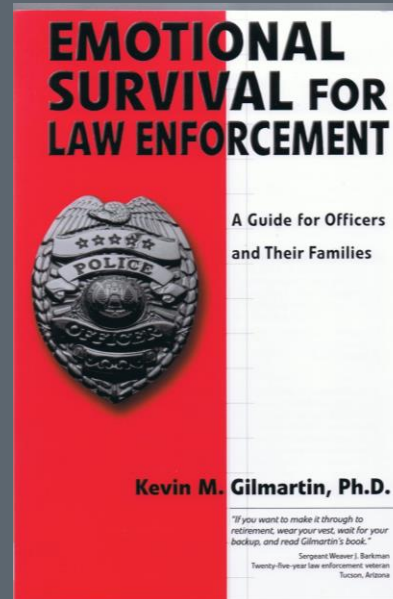
COLORADO

Center for Health  
& Environmental Data

Department of Public Health & Environment

# *Emotional Survival for Law Enforcement<sup>1</sup>*

- Kevin M. Gilmartin, Ph.D
  - Behavioral scientist specializing in law enforcement related issues
  - Book accompanies in person seminars
- Concepts targeted to increase law enforcement self care and healthy habits after work ends
- Last chapter has many useful points larger then LE specific



1. Gilmartin, KM. Emotional Survival for Law Enforcement. Tucson, AZ. E-S Press; 2002.



**COLORADO**  
Center for Health  
& Environmental Data

Department of Public Health & Environment

# Self-Care in Research



Source: <http://corewalking.com/wp-content/uploads/2012/06/self-care.jpg>

- *Self-care and the Qualitative Researcher: When Collecting Data Can Break Your Heart, Kathleen B. Ragar<sup>2</sup>*
  - Examines the emotional impact research can have on the scientist
- Breast cancer research and qualitative interviewing
- Abstractors/interviewers as an instrument and ignoring emotional aspects



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

2. Ragar, KB. Self-care and the Qualitative Researcher: When Collecting Data Can Break Your Heart. *Educational Researcher*. 2005;34(4)23-27.



# Violence Prevention Partnerships

- Office of Suicide Prevention
  - Suicide Prevention Commission of Colorado
  - Mantherapy.org
  - Colorado Gun Shop Project /Emergency Counseling on Access to Lethal Means (ED-CALM Department)
  - Sources of Strength
  - Zero Suicide Bill
  - Colorado National Collaborative



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Suicide Prevention Commission of Colorado

- May, 2014, the 26-member Suicide Prevention Commission was created via the passage of Senate Bill 088
- First Year Priorities:
  - Expanding and streamlining efforts to provide effective follow up care after emergency department discharge
  - Expanding efforts to provide effective follow up care after inpatient discharge
  - Promoting practices for reducing suicide risk among primary care patients
  - Improving and integrating training for members of specific professional groups



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment

Source: Hindman J. Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2014-2015. Colorado Department of Public Health and Environment. November 1, 2015.

# Mantherapy.org

DR. MAHOGANY

login sign up

## THERAPY from the creators of pork chops and fighter jets

Man Therapy is a tool designed to help men with their mental health. The more you tell me, Dr. Rich Mahogany, about what you're up against, the more I can cater the content you see below to your situation. Carry on!

ABOUT MAN THERAPY TAKE THE HEAD INSPECTION



COLORADO

Center for Health  
& Environmental Data

Department of Public Health & Environment

Source: Hindman J. Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2014-2015. Colorado Department of Public Health and Environment. November 1, 2015.

# Colorado Gun Shop Project

- 2014-2015 adapted from the New Hampshire Gun Shop Project
- Education and awareness project
  - firearm advocates, gun shops, firing ranges, and firearm safety course instructors
- Core message: “*restricting a suicidal individual’s access to firearms is a critical aspect of firearm safety*”



**COLORADO**  
Center for Health  
& Environmental Data

Department of Public Health & Environment

Source: Hindman J. Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2014-2015. Colorado Department of Public Health and Environment. November 1, 2015.

# Emergency Counseling on Access to Lethal Means

- Office of Suicide Prevention partnered with the Colorado School of Public Health, and the Harvard Injury Control Research Center
  - Develop and pilot a means restriction program at Children’s Hospital
  - Accompanied by formal evaluation
- Training for emergency department staff to educate parents of suicidal youth about techniques for restricting access to lethal means
  - 90 percent reported the counseling was respectful and clear
  - Respondents showed improvement in locking medications after receiving the counseling
- Children’s Hospital adopted the training and continues to implement the intervention with all families in the emergency department because of a suicide attempt



**COLORADO**  
Center for Health  
& Environmental Data

Department of Public Health & Environment

Source: Hindman J. Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2014-2015. Colorado Department of Public Health and Environment. November 1, 2015.

# Sources of Strength

- Comprehensive school based program aimed to increase connectedness within schools and train both adult and peer leaders
  - *"enhance protective factors associated with reducing suicide at the school population level"*
  - Peer leaders as agents of social change
  - Allows positive factors to spread through social network
- Office of Suicide Prevention priority through 2020
- Sources of Strength increases student's school connectedness and connectedness to caring adults, both of which are protective factors for:
  - Suicide
  - Teen dating violence
  - Youth violence



COLORADO

Center for Health  
& Environmental Data

Department of Public Health & Environment

<https://sourcesofstrength.org/wp-content/plugins/sos-home/images/wheel.png>

# Zero Suicide Bill



- SB 147: Suicide Prevention Plan to Reduce Death by Suicide in the Colorado Health Care System
  - Passed both the Senate and the House and is now on the Governor's desk waiting to be signed
- Zero Suicide Model: suicide deaths of individuals under care within health and behavioral health systems are preventable
  - Integrates and enhances care within the medical system around patient safety
- Health care systems have reported a reduction of up to 80% in the rate of suicide in their hospitals
- Colorado is the first to adopt this model at the state level



COLORADO

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Colorado National Collaborative

Original article



## Comprehensive, integrated approaches to suicide prevention: practical guidance

Eric D Caine<sup>1</sup>, Jerry Reed<sup>2</sup>, Jarrod Hindman<sup>3</sup>, Kristen Quinlan<sup>4</sup>

[Author affiliations +](#)

### Abstract

**Background** Efforts in the USA during the 21st century to stem the ever-rising tide of suicide and risk-related premature deaths, such as those caused by drug intoxications, have failed. Based primarily on identifying individuals with heightened risk nearing the precipice of death, these initiatives face fundamental obstacles that cannot be overcome readily.

**Objective** This paper describes the step-by-step development of a comprehensive public health approach that seeks to integrate at the community level an array of programmatic efforts, which address upstream (distal) risk factors to alter life trajectories while also involving health systems and clinical providers who care for vulnerable, distressed individuals, many of whom have attempted suicide.

**Conclusion** Preventing suicide and related self-injury morbidity and mortality, and their antecedents, will require a systemic approach that builds on a societal commitment to save lives and collective actions that bring together diverse communities, service organisations, healthcare providers and governmental agencies and political leaders. This will require frank, data-based appraisals of burden that drive planning, programme development and implementation, rigorous evaluation and a willingness to try-fail-and-try-again until the tide has been turned.

<http://dx.doi.org/10.1136/injuryprev-2017-042366>

**Injury Prevention**



# Take Home Points

- CoVDRS is a partnership between the program, it's data sources, and data users
- The more information we receive the better our data can inform prevention programs
- We want to give back and maximize these successful partnerships



COLORADO

Center for Health  
& Environmental Data

Department of Public Health & Environment

# Questions?

Kirk Bol, MSPH  
COVDRS Principal Investigator  
[kirk.bol@state.co.us](mailto:kirk.bol@state.co.us)  
303-692-2170

Ethan Jamison, MPH  
CoVDRS Coordinator  
[ethan.jamison@state.co.us](mailto:ethan.jamison@state.co.us)  
303-692-2093



**COLORADO**

Center for Health  
& Environmental Data

Department of Public Health & Environment