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

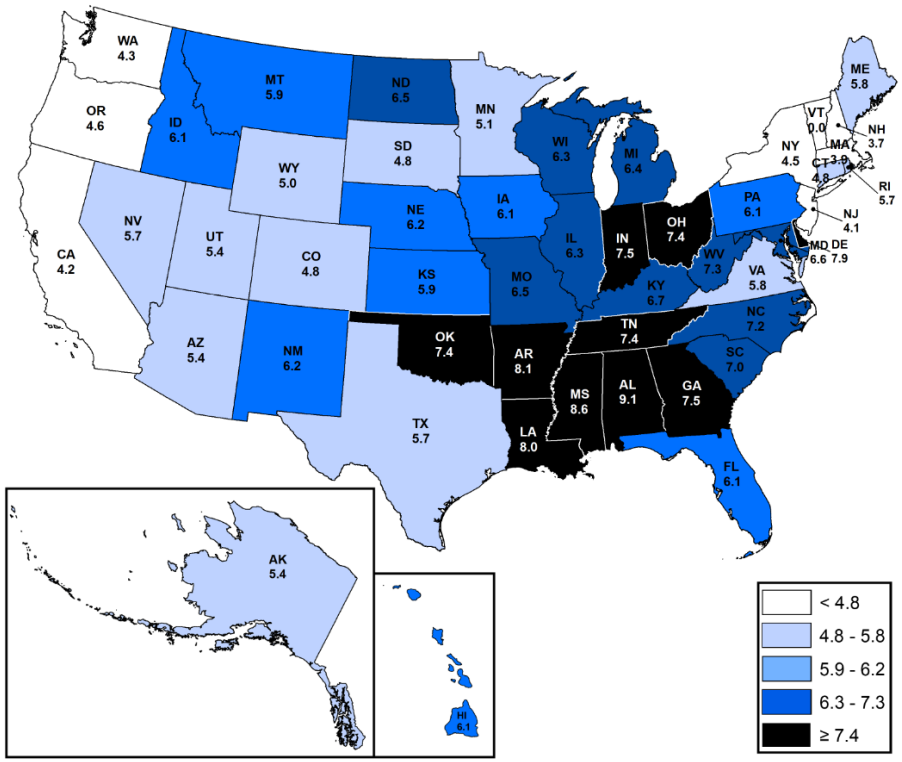
- Infant mortality review- DOH
- Child mortality review- DSS
- Maternal mortality review- National and Local
- Violent mortality reporting- DOH

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

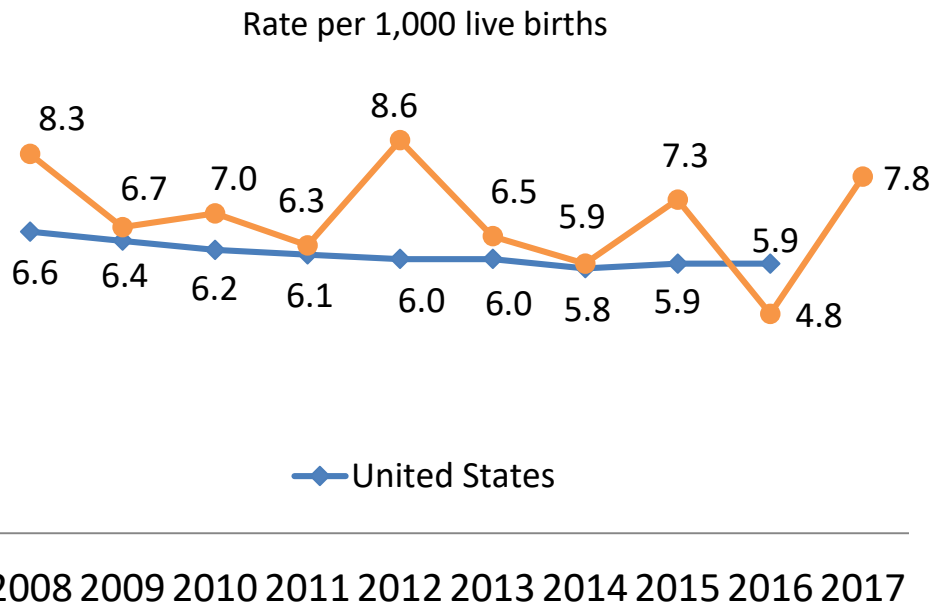


Iowa 6.1
Pennsylvania 6.1
Nebraska 6.2
New Mexico 6.2
Illinois 6.3
Wisconsin 6.3
Michigan 6.4
Missouri 6.5
North Dakota 6.5
Maryland 6.6
Kentucky 6.7
South Carolina 7.0
North Carolina 7.2
West Virginia 7.3
Ohio 7.4
Oklahoma 7.4
Tennessee 7.4
Georgia 7.5
Indiana 7.5
Delaware 7.9
Louisiana 8.0
Arkansas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

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

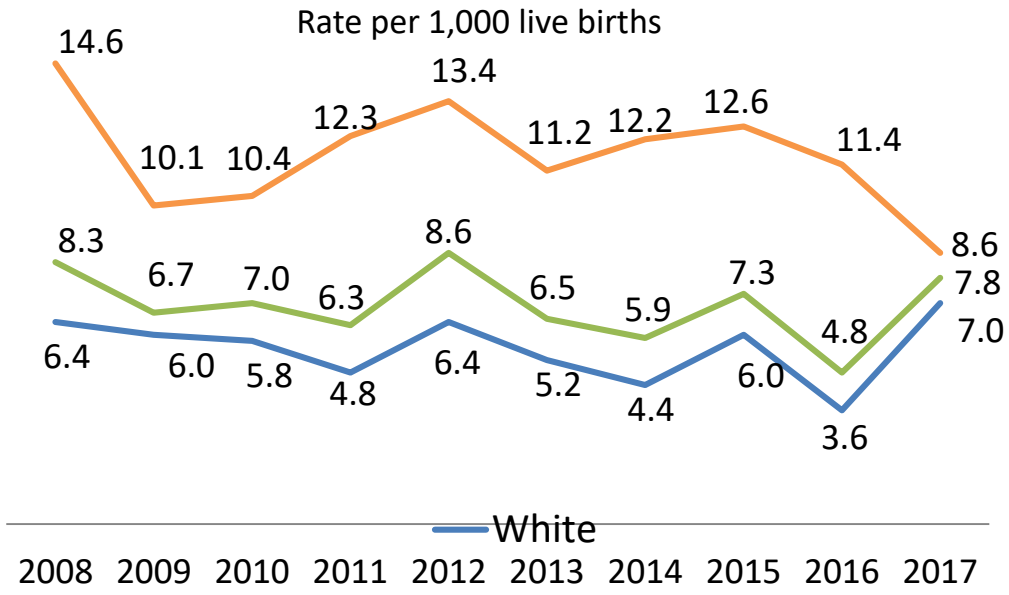
CDC https://www.cdc.gov/nchs/pressroom/sosmap/infant_mortality_rates/infant_mortality.htm

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



Source: SDDOH Vital Statistics

Infant Mortality Disparity, South Dakota, 2008-2017



Source: SDDOH Vital Statistics

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.

DSS
Strong Families - South Dakota's Foundation and Our Future

Child Death Review

Division of Child Protection Services Internal Child Death Review

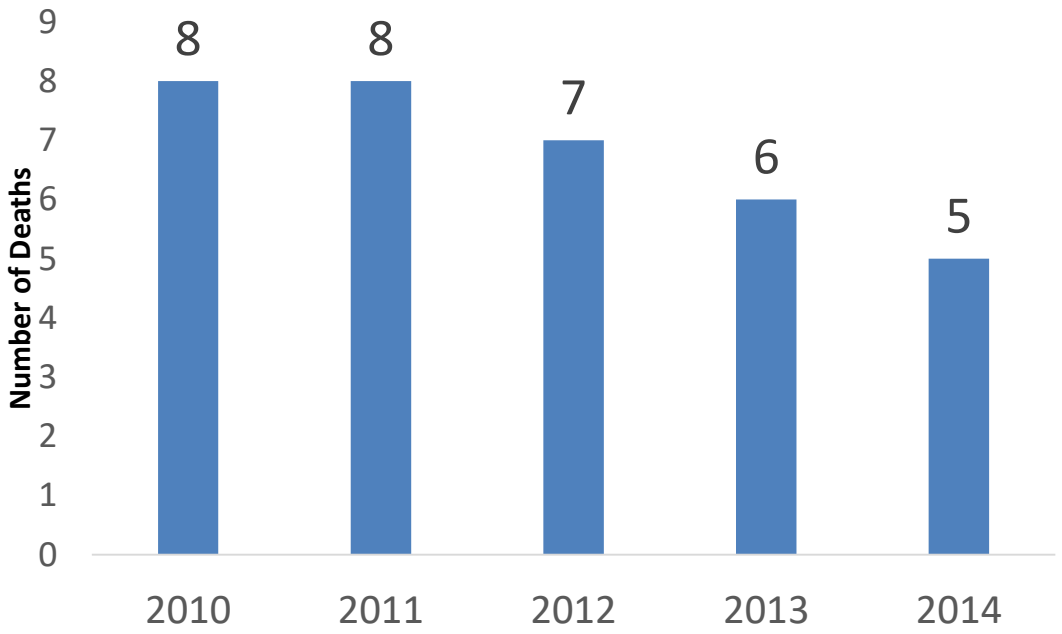
- All fatality reports are reviewed by Division Director, Deputy Director, and Protective Services Program Specialist.
- Prior reports and history, if any, with the family and child is reviewed.
- Child Protection Services staff and Law Enforcement work together to determine outcome.
- Law Enforcement's 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.

DSS
Strong Families - South Dakota's Foundation and Our Future

Maternal Mortality Review

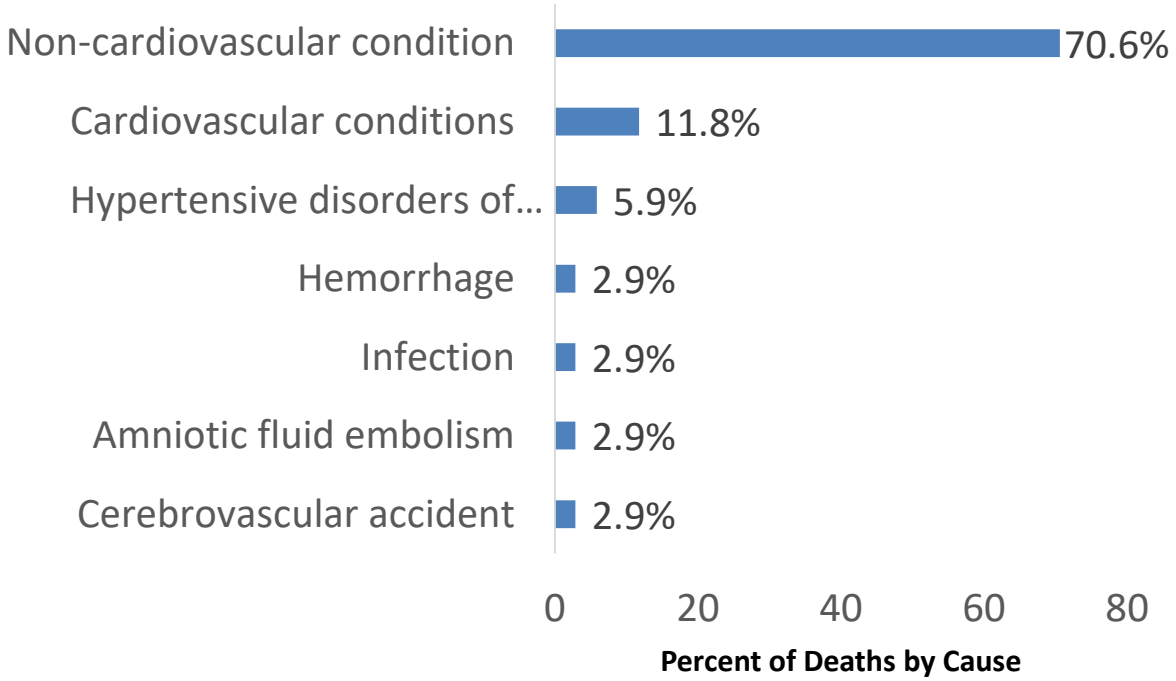
- South Dakota does not currently have a maternal mortality review committee (MMRC)
- Approximately 30 states have committees
- Definitions:
  - Maternal death: death of a woman while pregnant or within 42 days from any cause
  - Pregnancy associated: death of a woman while pregnant or within 1 year 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

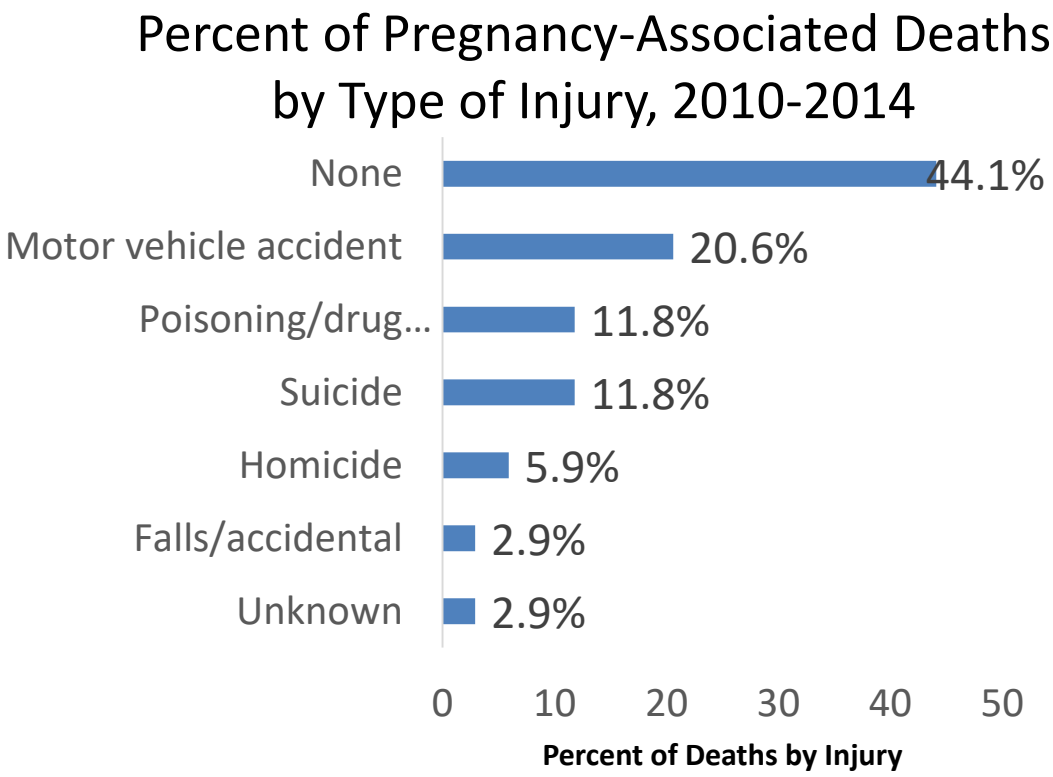


Source: CDC PMSS

True Cause of Death as Determined by PMSS



Source: CDC PMSS



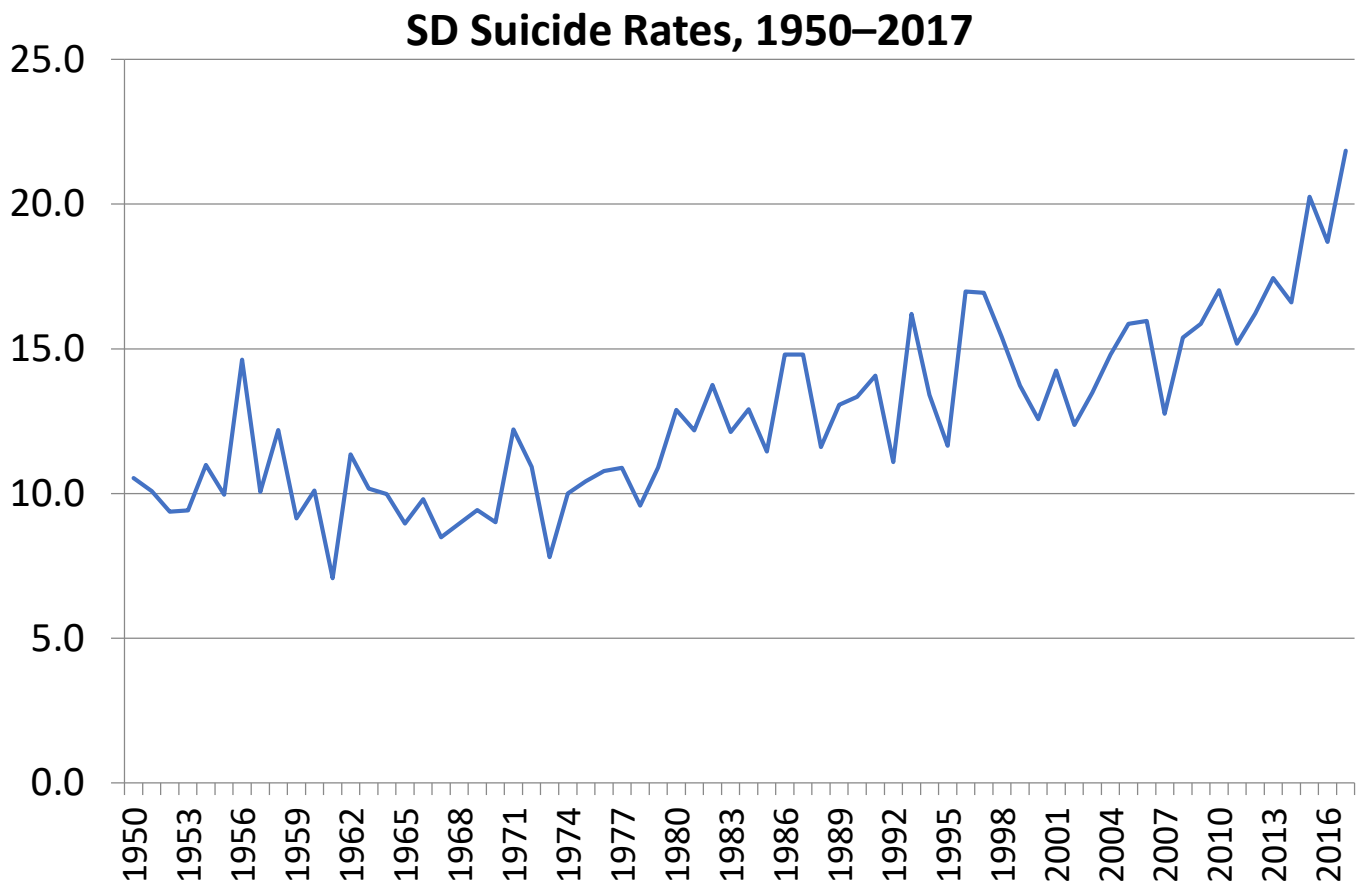
Source: CDC PMSS

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

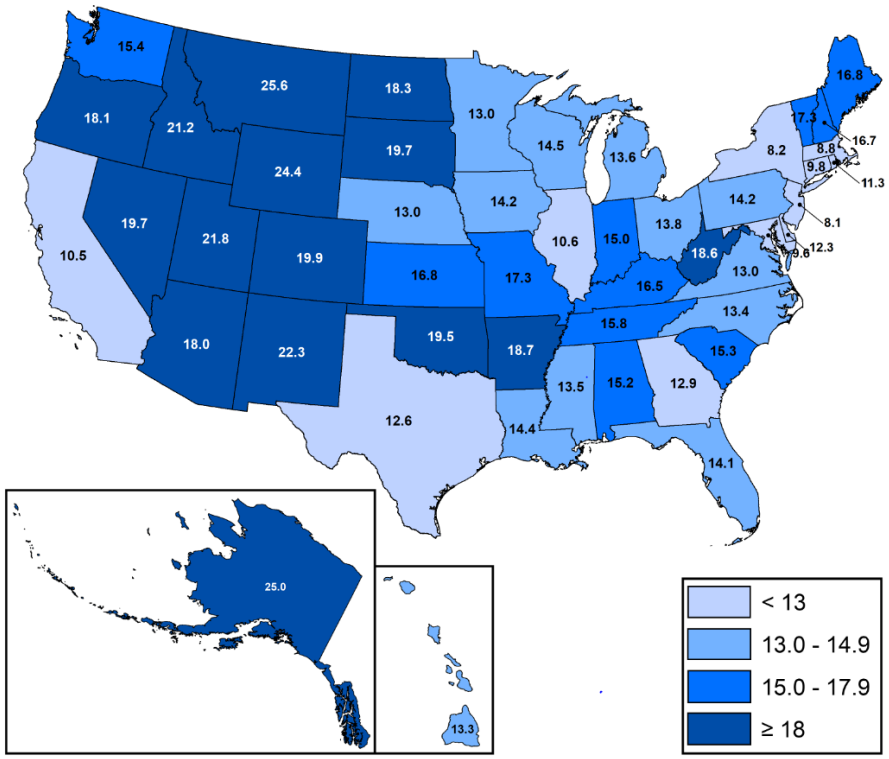
- Interest from South Dakota's American College of Obstetricians and Gynecologists (ACOG) Chapter
- Interest from OB/GYN providers at Sanford, Avera and Regional Health
- Informal meetings to discuss available data and next steps
- Focus on **prevention** of maternal deaths



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

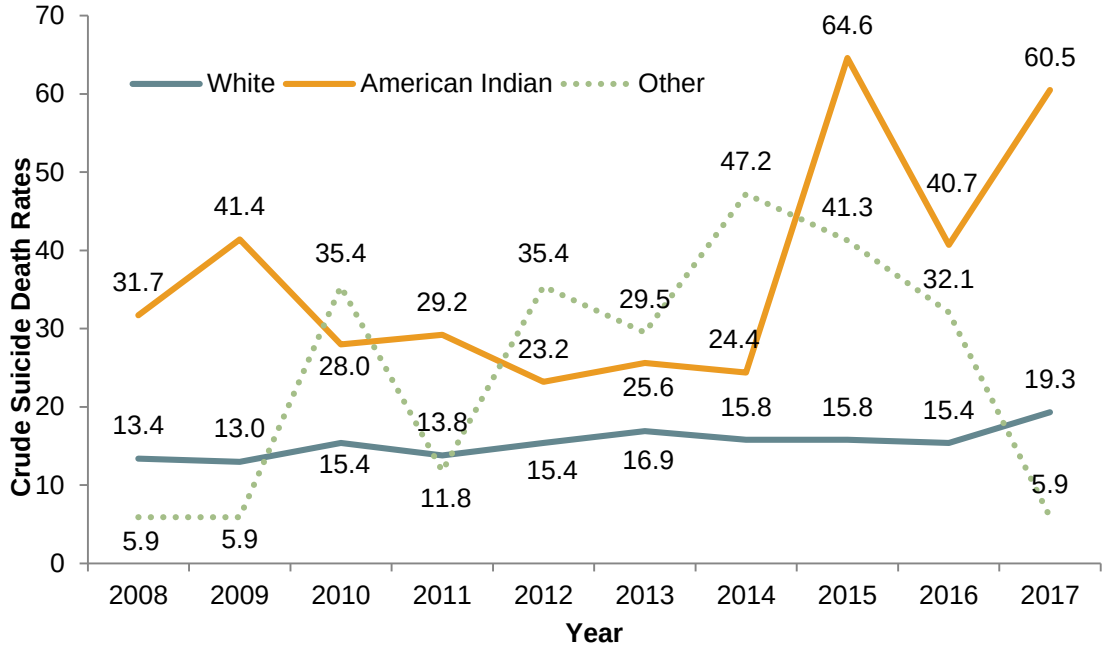


U.S. 2013-2017 Suicide Rate: 13.4

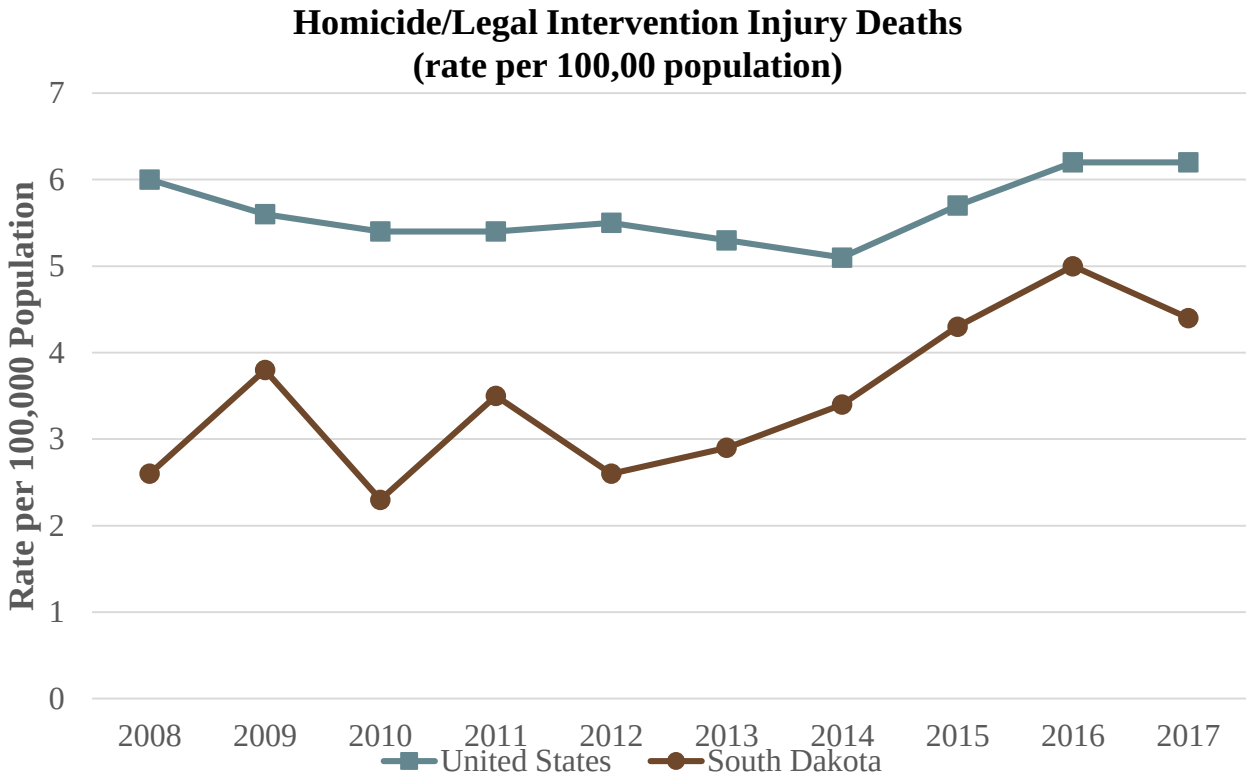
CDC WONDER https://wonder.cdc.gov/ucd-icd10.html

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

SD Suicide Death Rates by Race, 2008-2017

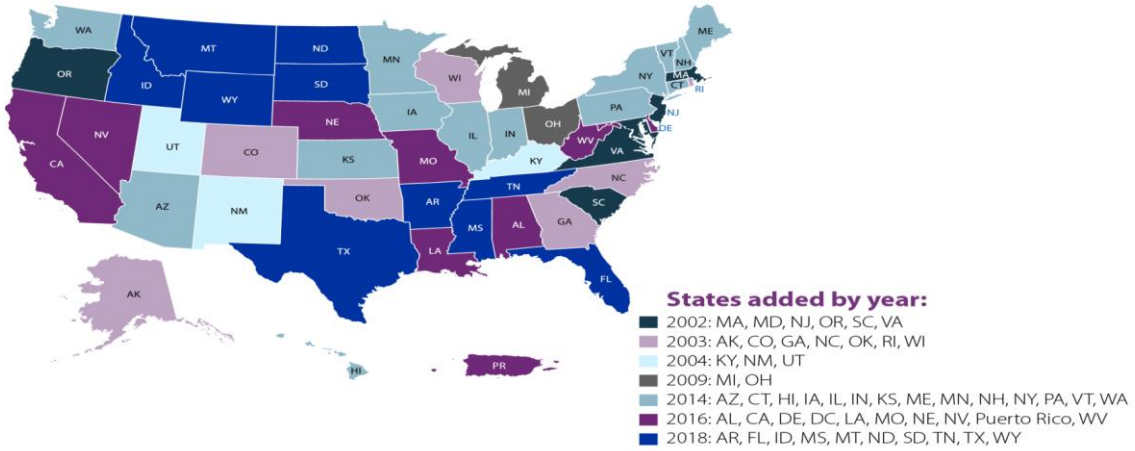


Source: SDDOH Vital Statistics


Homicide/Legal Intervention Injury Deaths
(rate per 100,00 population)
Rate per 100,000 Population
7
6
5
4
3
2
1
0
2008
2009
2010
2011
2012
2013
2014
2015
2016
2017
United States
South Dakota

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

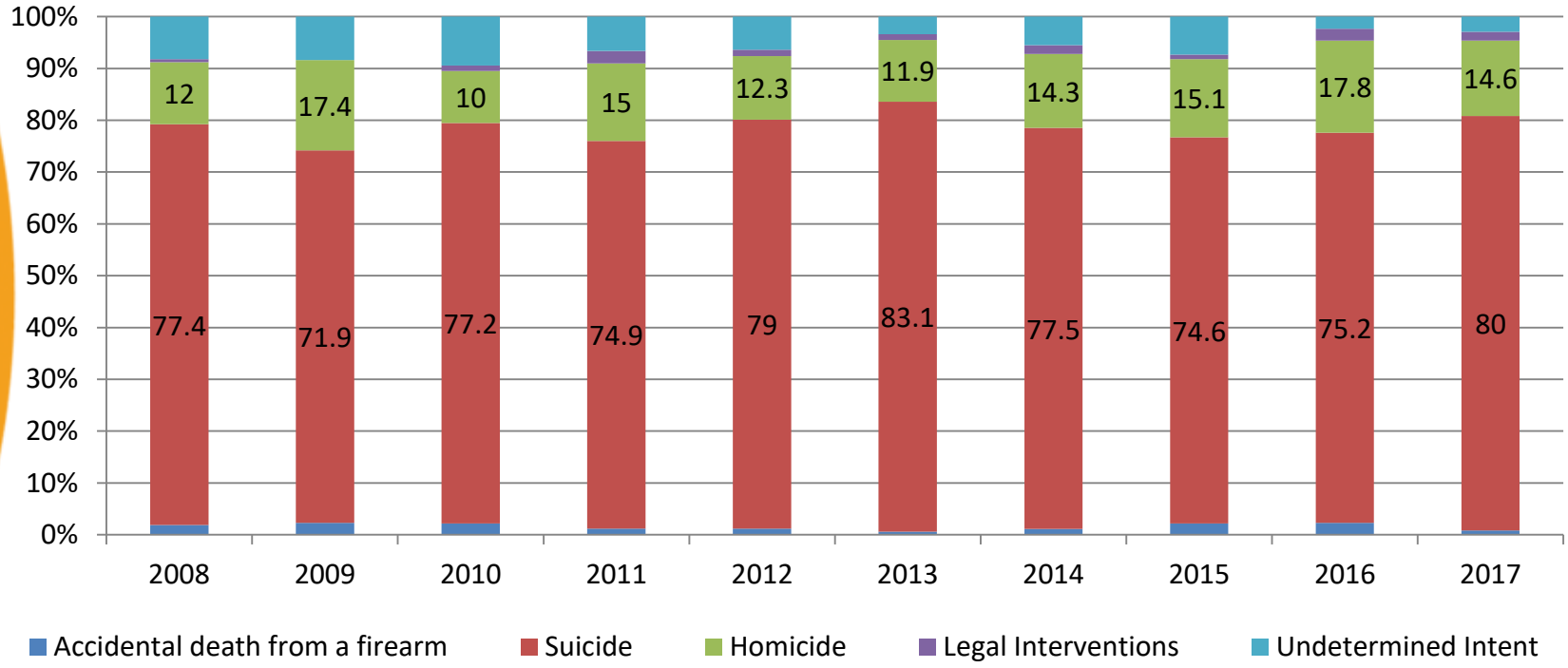
South Dakota Violent Death Reporting System (SD-VDRS)

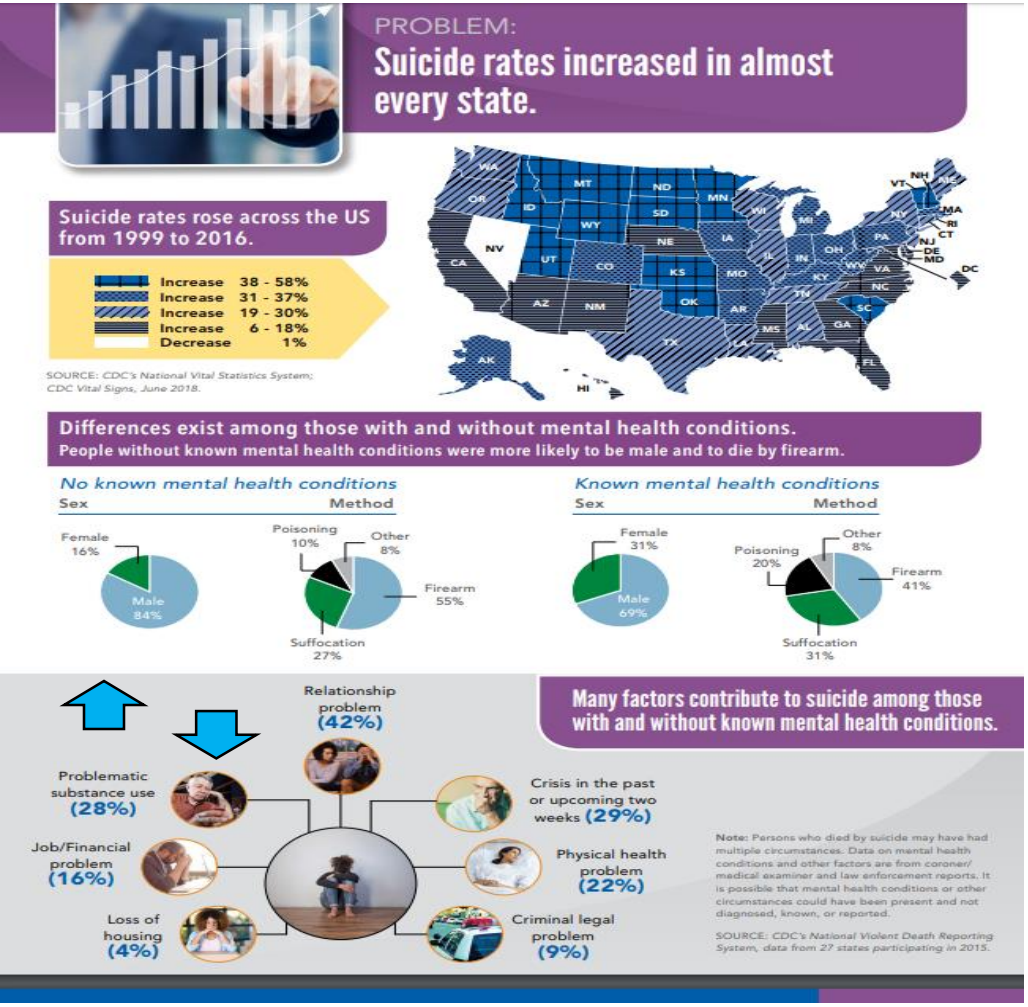
- Initially the Department of Health will work with Minnehaha and Pennington Counties with the goal of collecting information on violent deaths statewide beginning January 2020
- Data will be collected from death certificates, coroner/medical examiner reports, and law enforcement reports
- All of this 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

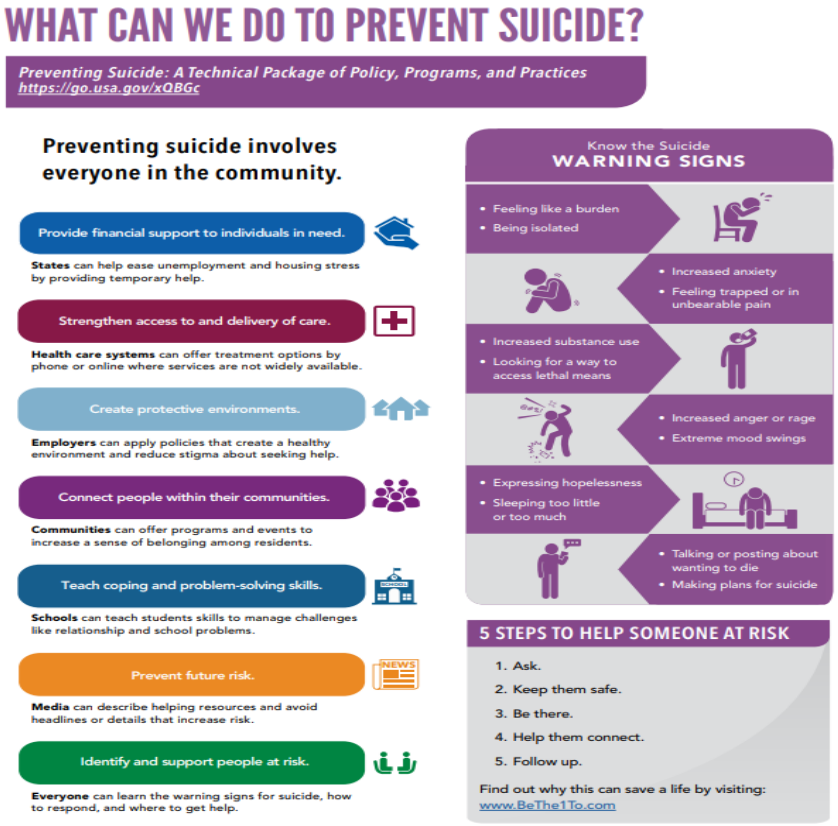
- Collects information on all violent deaths
- A violent death includes:
  - Suicides
  - Homicides
  - Undetermined intent
  - Unintentional firearm
  - Legal intervention
  - Terrorism

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





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



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

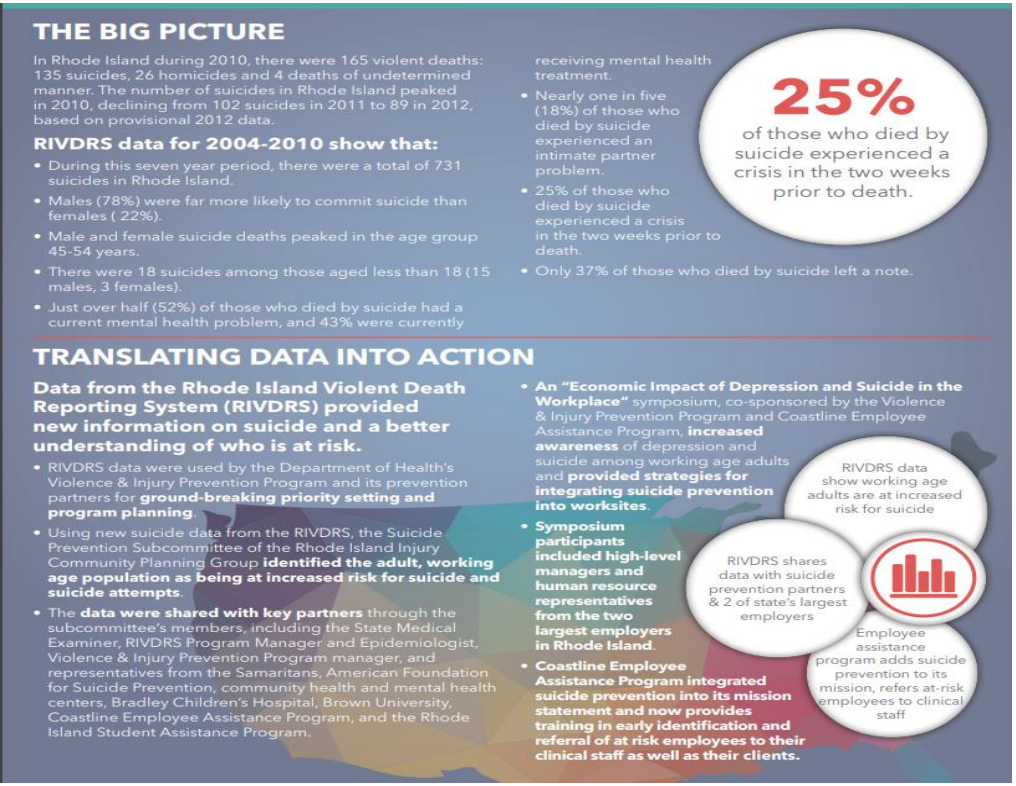
Examples from Other States

- 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

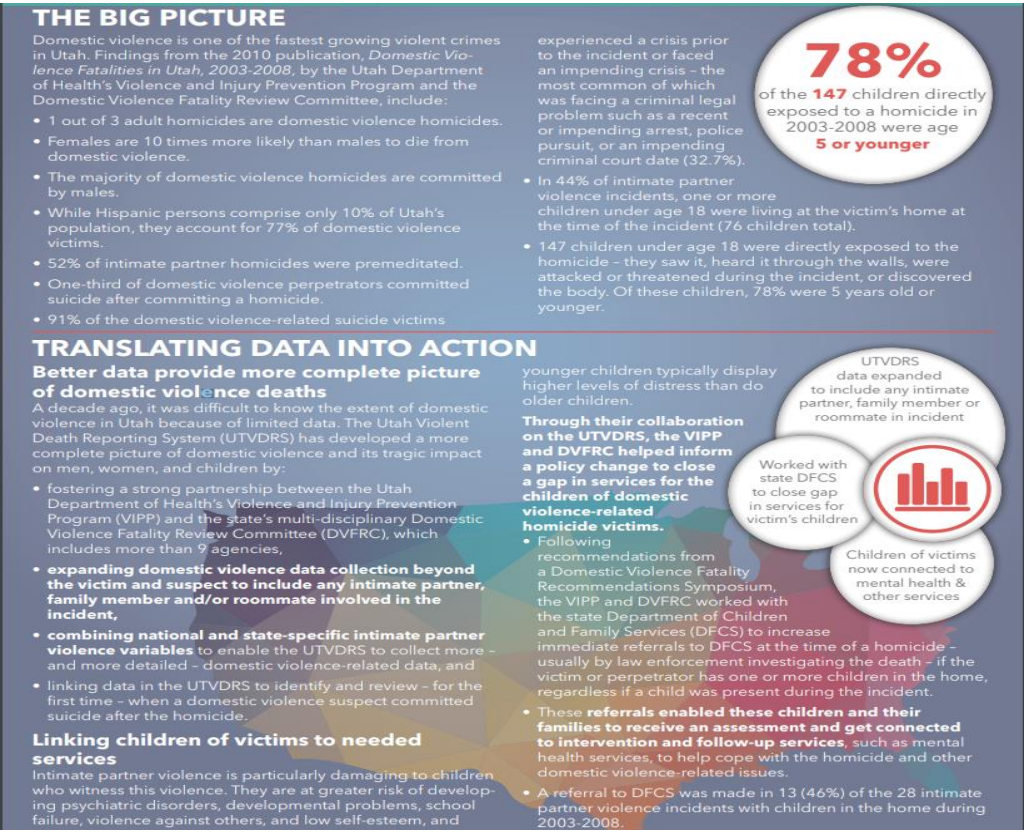


- Rhode Island noticed 25% of those who died by suicide experienced a crisis in the two weeks prior to death
- 78% were males
- 52% had a current mental health problem

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 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.

78% of the **147** children directly exposed to a homicide in 2003-2008 were age **5 or younger**

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 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.

UTVDRS data expanded to include any intimate partner, family member or roommate in incident

Worked with state DFCS to close gap in services for victim's children

Children of victims now connected to mental health & other services

- Domestic violence in Utah is on 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:

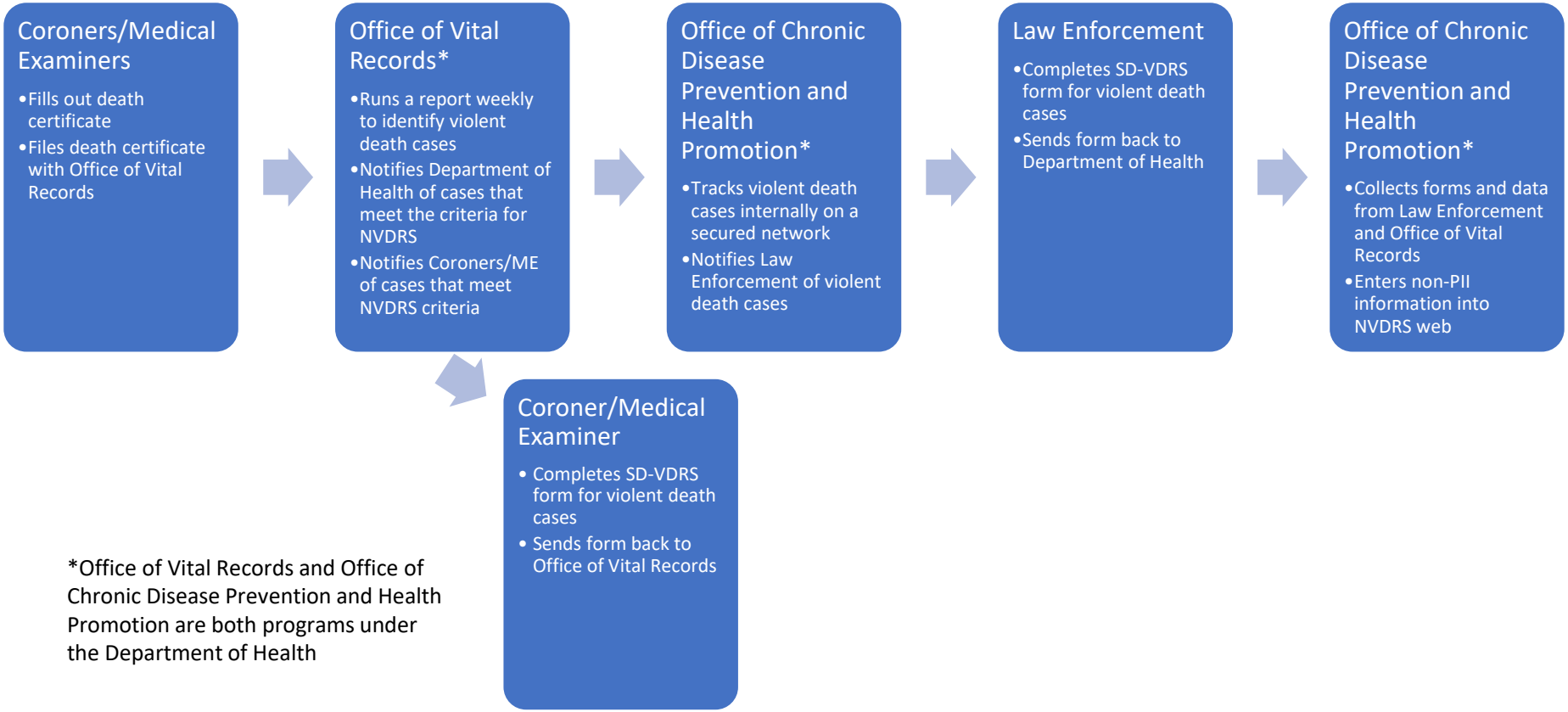
- Expanded data collection to include intimate partner, family member or roommate incident
- Worked with the state department of children and family services to close gap in services for victim's children
- Children of victims now connected to mental health and other services

NVDRS Data

NVDRS Data

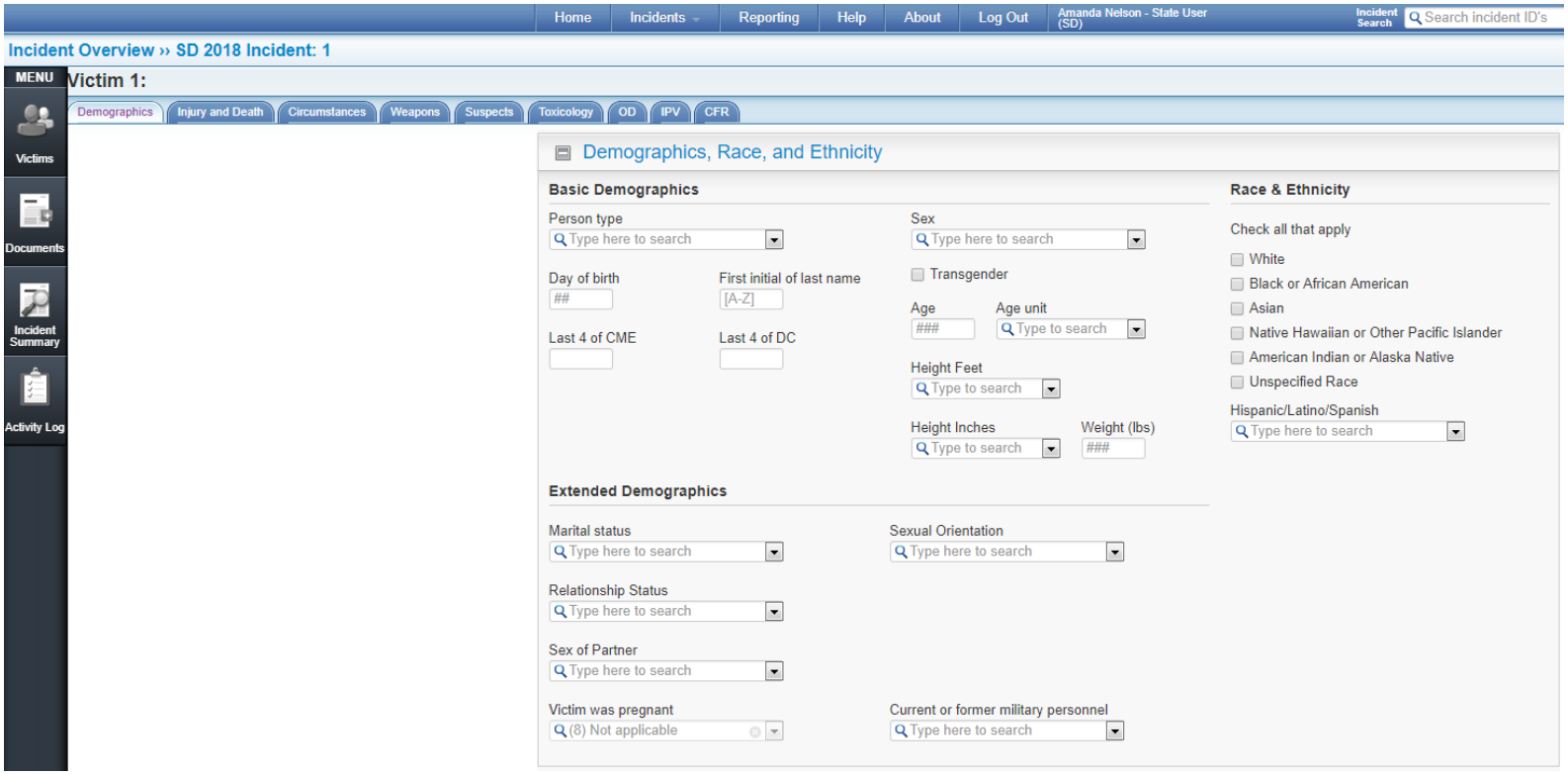
- Over 600 Variables
  - Demographics
    - Age, sex, race, ethnicity, place of residence, birthplace, industry, occupation, and education
  - Injury and Death
    - Manner of death, injury location and time, external cause of injury codes, underlying causes of death, location of death, and wounds
  - 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



*Office of Vital Records and Office of Chronic Disease Prevention and Health Promotion are both programs under the Department of Health

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
Type here to search
Sex
Type here to search
Day of birth
##
First initial of last name
[A-Z]
Transgender
Age
###
Age unit
Type to search
Last 4 of CME
Last 4 of DC
Height Feet
Type to search
Height Inches
Type to search
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
Type here to search
Extended Demographics
Marital status
Type here to search
Sexual Orientation
Type here to search
Relationship Status
Type here to search
Sex of Partner
Type here to search
Victim was pregnant
(8) Not applicable
Current or former military personnel
Type here to search

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

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

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

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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)

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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)

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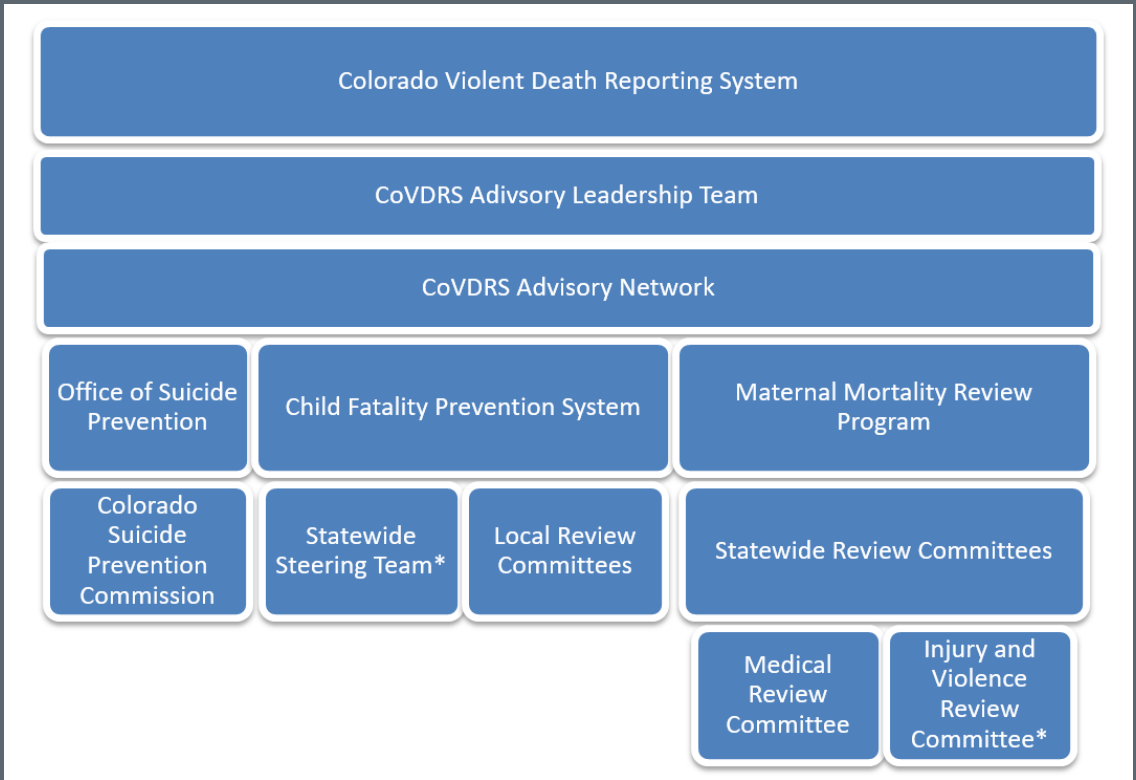
CoVDRS Advisory Network



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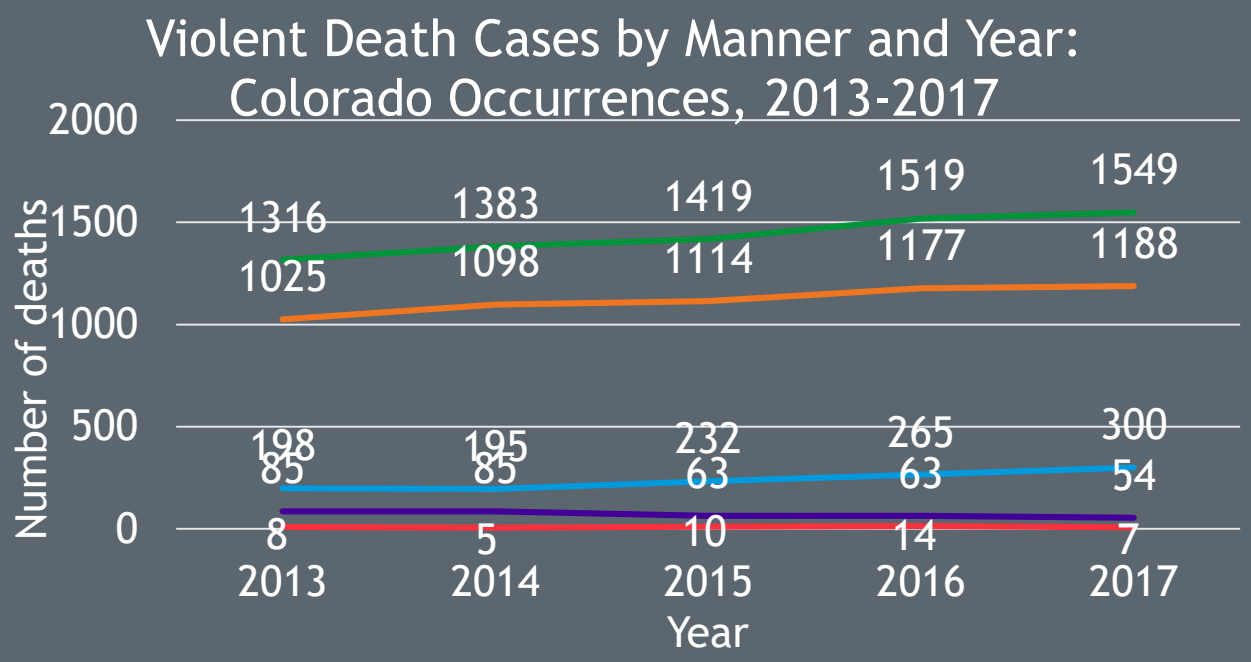
CoVDRS Case load



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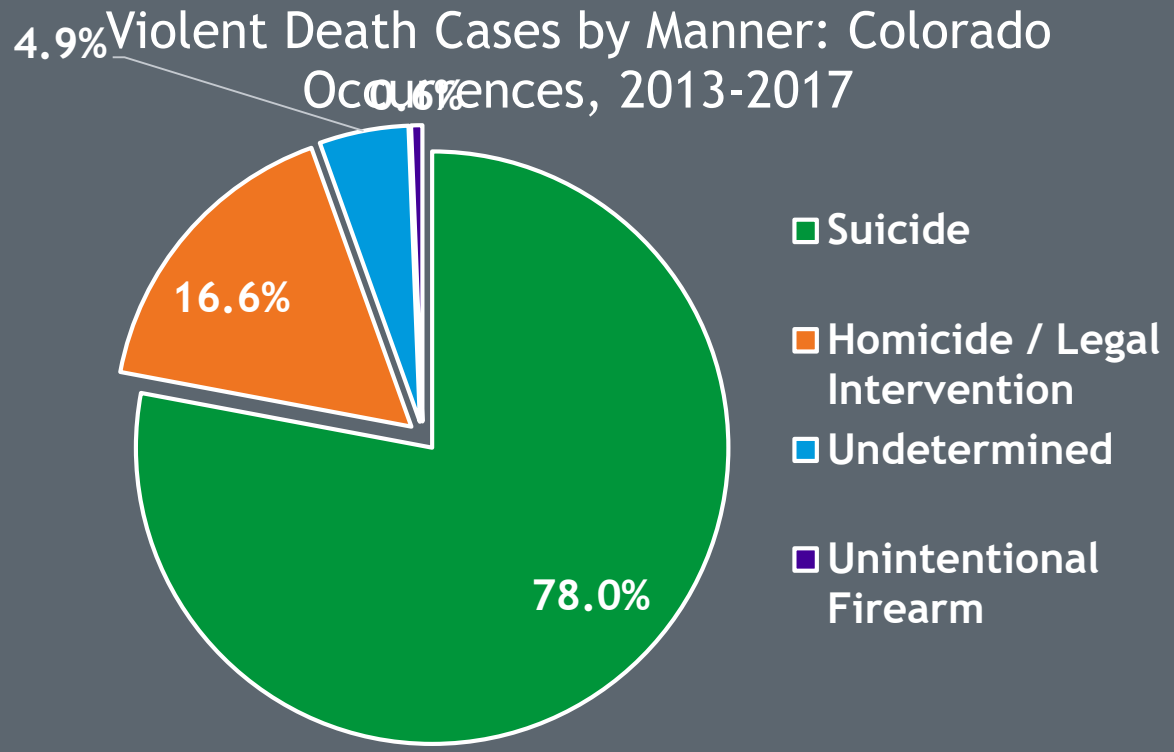
CoVDRS Case load



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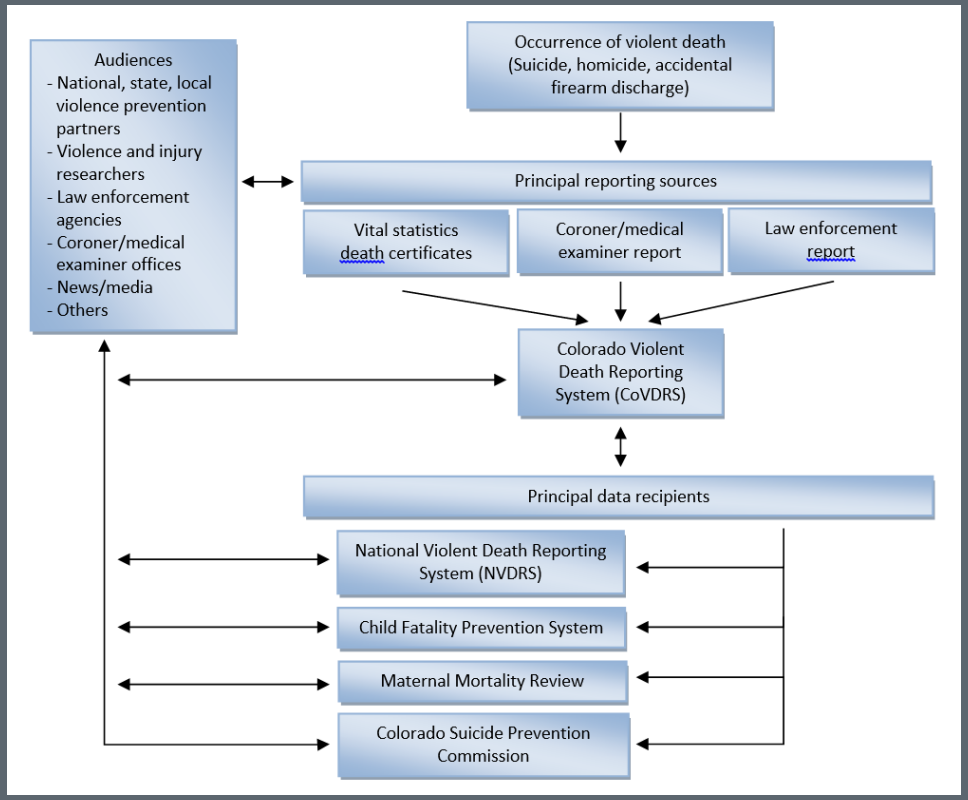
CoVDRS Information Flow



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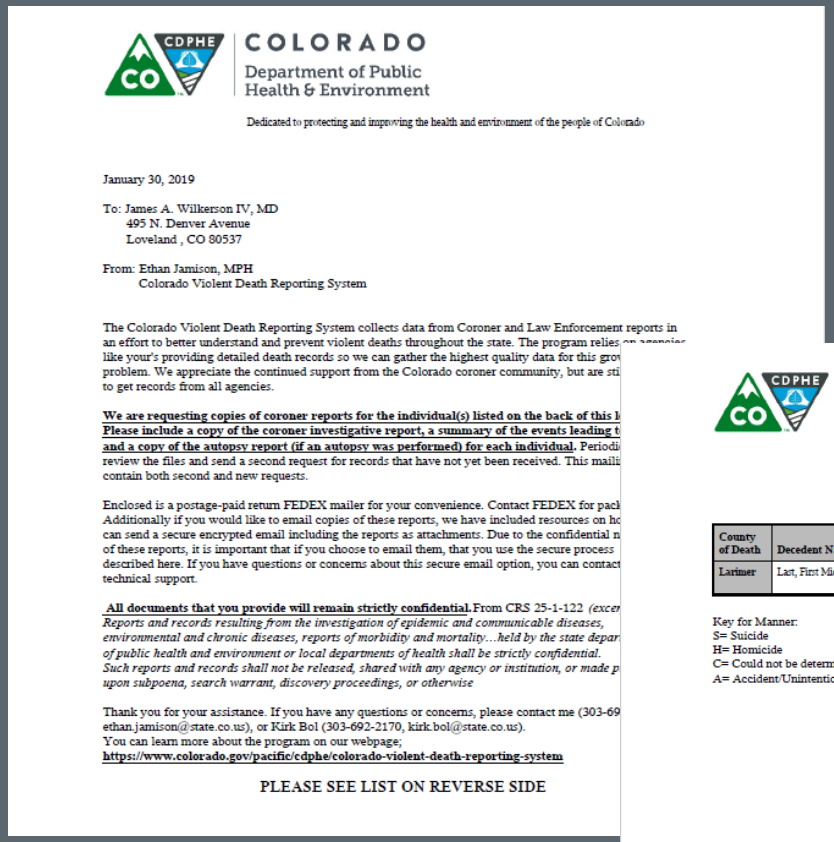
Data Sources

- 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

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



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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 gro problem. We appreciate the continued support from the Colorado coroner community, but are sti to get records from all agencies.

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

Enclosed is a postage-paid return FEDEX mailer for your convenience. Contact FEDEX for pack Additionally if you would like to email copies of these reports, we have included resources on ho can send a secure encrypted email including the reports as attachments. Due to the confidential n 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 *(excep 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 depar 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 p 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

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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

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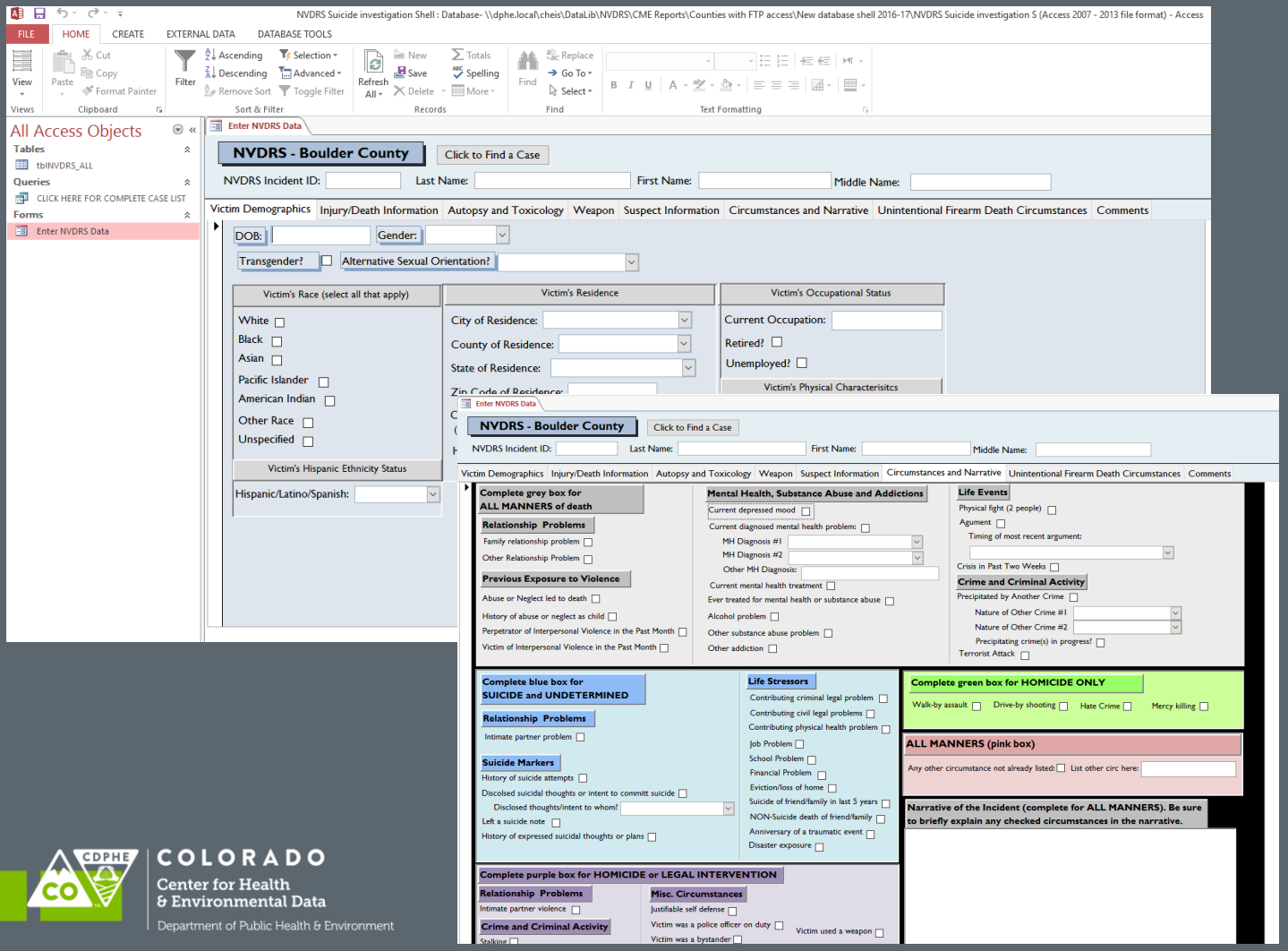
Case Initiation and Record Abstraction

- 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

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



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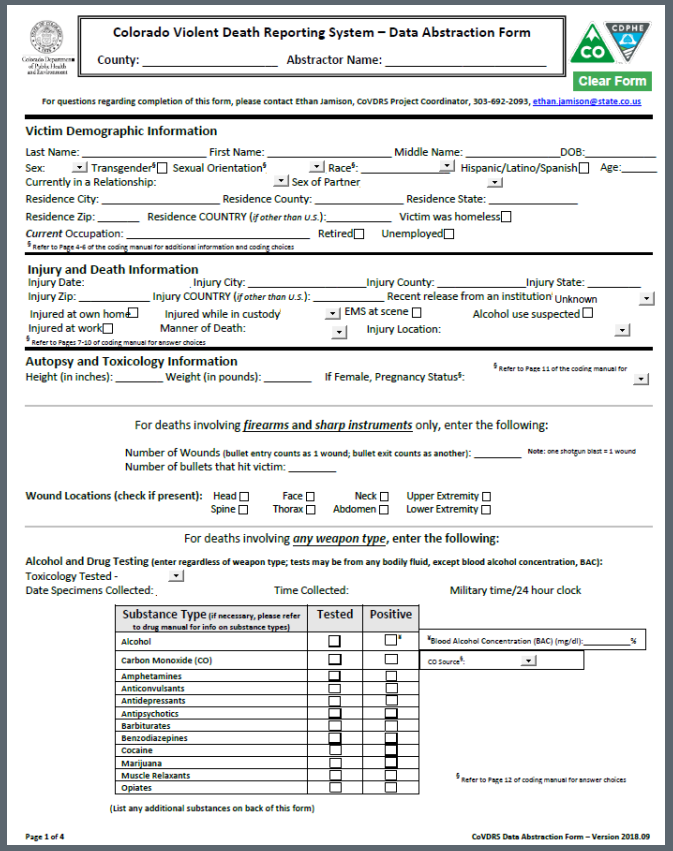

Colorado Violent Death Reporting System – Data Abstraction Form

County: _____ Abstractor Name: _____

Clear Form

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

Victim Demographic Information

Last Name: _____ First Name: _____ Middle Name: _____ DOB: _____

Sex: Transgender[§] Sexual Orientation[§] Race[§]: Hispanic/Latino/Spanish Age: _____

Currently in a Relationship: 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

§ Refer to Page 4-6 of the coding manual for additional information and coding choices

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:

§ Refer to Pages 7-10 of coding manual for answer choices

Autopsy and Toxicology Information

Height (in inches): _____ Weight (in pounds): _____ If Female, Pregnancy Status[§]: § Refer to Page 11 of the coding manual for

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 blast = 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	☐	☐
Carbon Monoxide (CO)	☐	☐
Amphetamines	☐	☐
Anticonvulsants	☐	☐
Antidepressants	☐	☐
Antipsychotics	☐	☐
Barbiturates	☐	☐
Benzodiazepines	☐	☐
Cocaine	☐	☐
Marijuana	☐	☐
Muscle Relaxants	☐	☐
Opiates	☐	☐

[a] Blood Alcohol Concentration (BAC) (mg/dl): _____ %

CO Source[§]:

§ Refer to Page 12 of coding manual for answer choices

(List any additional substances on back of this form)

Page 1 of 4 CoVDRS Data Abstraction Form – Version 2018.09

Weapon Information

Primary Weapon[§]: 2nd Weapon Causing Injury[§]: 3rd Weapon Causing Injury[§]:

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

Firearm type[§]: _____ Firearm Make: _____ Firearm model: _____

Caliber: _____ Gauge: _____ Firearm Owner[§]: 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[§]	Drug Prescribed for[§]:
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	
	☐	

§ 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				☐	☐	☐	☐	☐
2				☐	☐	☐	☐	☐
3				☐	☐	☐	☐	☐
4				☐	☐	☐	☐	☐

Suspect-Victim Relationships (list all relationships that apply[§]):

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

*Please list any additional suspects and suspect information on the back of this form

§ Refer to Pages 18-19 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	☐	Alcohol problem	☐	Crisis	☐
Current mental health diagnosis(es) *Please List:*	☐	Other substance problem/abuse	☐	Crisis	☐
Current mental health treatment	☐	Other addiction *Please List:*	☐	Crisis	☐
Ever treated for mental health or substance abuse problem	☐				

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	☐	Crisis	☐	Family relationship problem	☐	Crisis	☐
Intimate partner problem	☐	Crisis	☐	Other relationship problem	☐	Crisis	☐

Page 2 of 4 CoVDRS Data Abstraction Form – Version 2018.09

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Previous Exposure to Violence:

Abuse or neglect led to death	☐	Previous perpetrator of violence in the past month	☐
History of abuse or neglect as a child	☐	Previous victim of violence in the past month	☐

Life Events:

Physical fight (2 people)	☐
Argument *Timing of Argument:* -	☐

Crime and Criminal Activity:

Precipitated by another crime *Crime(s) Type:*	☐	Prostitution or sex trafficking	☐
First crime in progress	☐	Terrorist attack	☐
Stalking	☐	Walk-by assault	☐
Gang related	☐		

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

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

***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	☐	Civil legal problems	☐	Crisis	☐	Contributing physical health problem	☐	Crisis	☐
Disclosed suicidal thoughts or intent to commit suicide *To whom:*	☐	Contributing criminal legal problem	☐	Crisis	☐	Job problem	☐	Crisis	☐
Left a suicide note	☐	Financial problem	☐	Crisis	☐	School problem	☐	Crisis	☐
History of expressed suicidal thoughts or plans	☐	Suicide of friend or family	☐	Crisis	☐	Eviction or loss of home	☐	Crisis	☐
Anniversary of a traumatic event	☐	Non-suicide death of friend or family	☐	Crisis	☐	Disaster exposure	☐	Crisis	☐

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

Context of injury					
Hunting	☐	Playing with gun	☐	Celebratory firing	☐
Target shooting	☐	Other context of injury	☐	Showing gun to others	☐
Self-defensive shooting	☐	Loading or unloading gun	☐	Cleaning Gun	☐

***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	☐	Bullet ricochet	☐	Fired while operating safety/lock	☐
Thought gun was unloaded	☐	Gun defect or malfunction	☐	Gun mistaken for toy	☐
Unintentionally pulled trigger	☐	Fired while holstering/ unholstering	☐	Other mechanism of injury	☐
Dropped gun	☐				

***Brief* Narrative of the Incident** or ☐ See Attached

Additional Comments:

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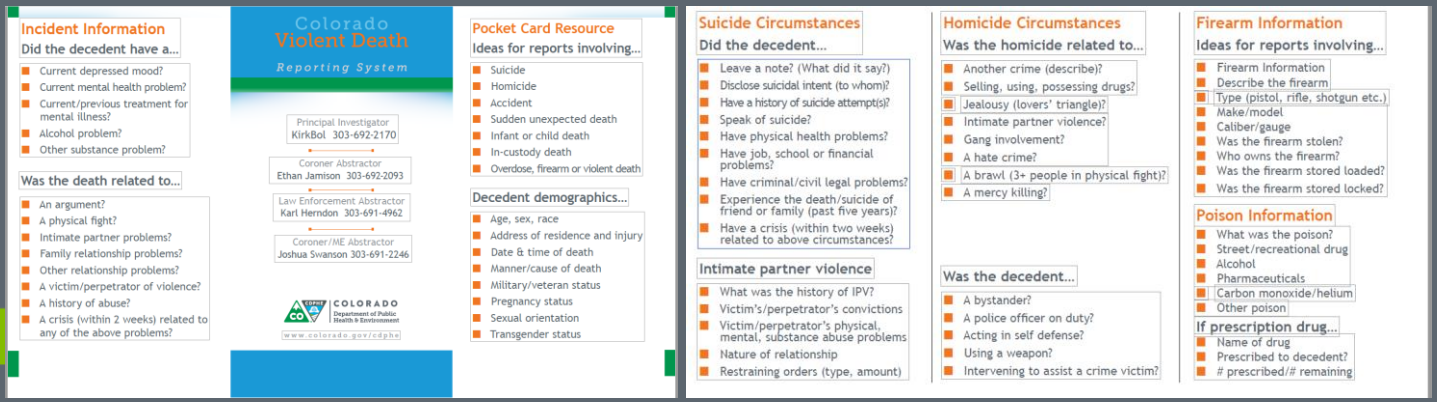
Key Challenges

- 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

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*



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*

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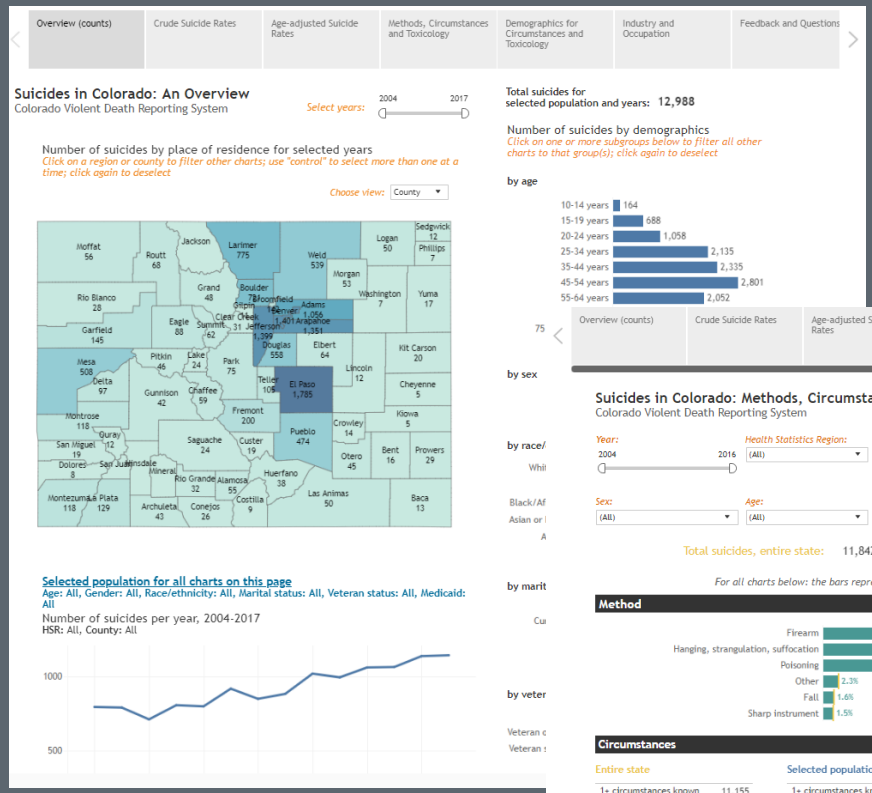

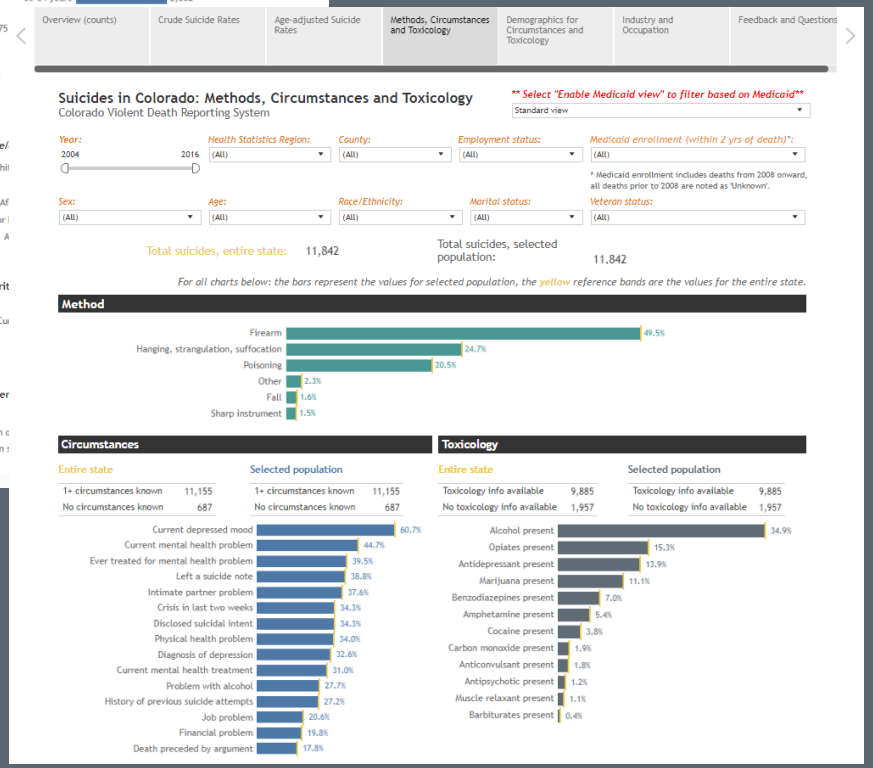

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Publications

- 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.

Publications

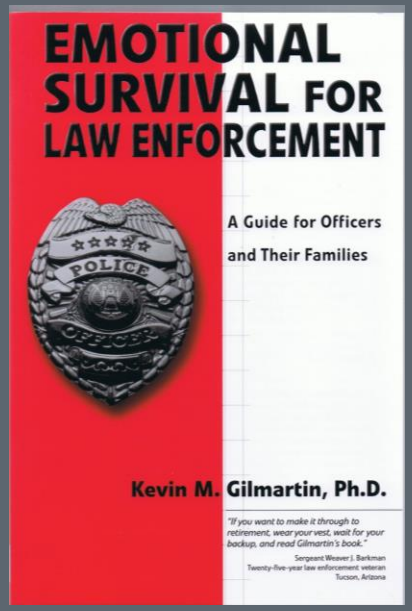
- Reports (HealthWatch)
  - Johnson J, Jamison E, Bol K. The association between toxicology and suicide notes among firearm suicide decedents, 2004-2015: An analysis form the Colorado Violent Death Reporting System. HealthWatch No. 108, 2019.
  - Mintz S, Jamison E, Herndon K, Bol K. Violent death among 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.

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

Emotional Survival for Law Enforcement[1]

- 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



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

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*[2]
  - 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

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

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

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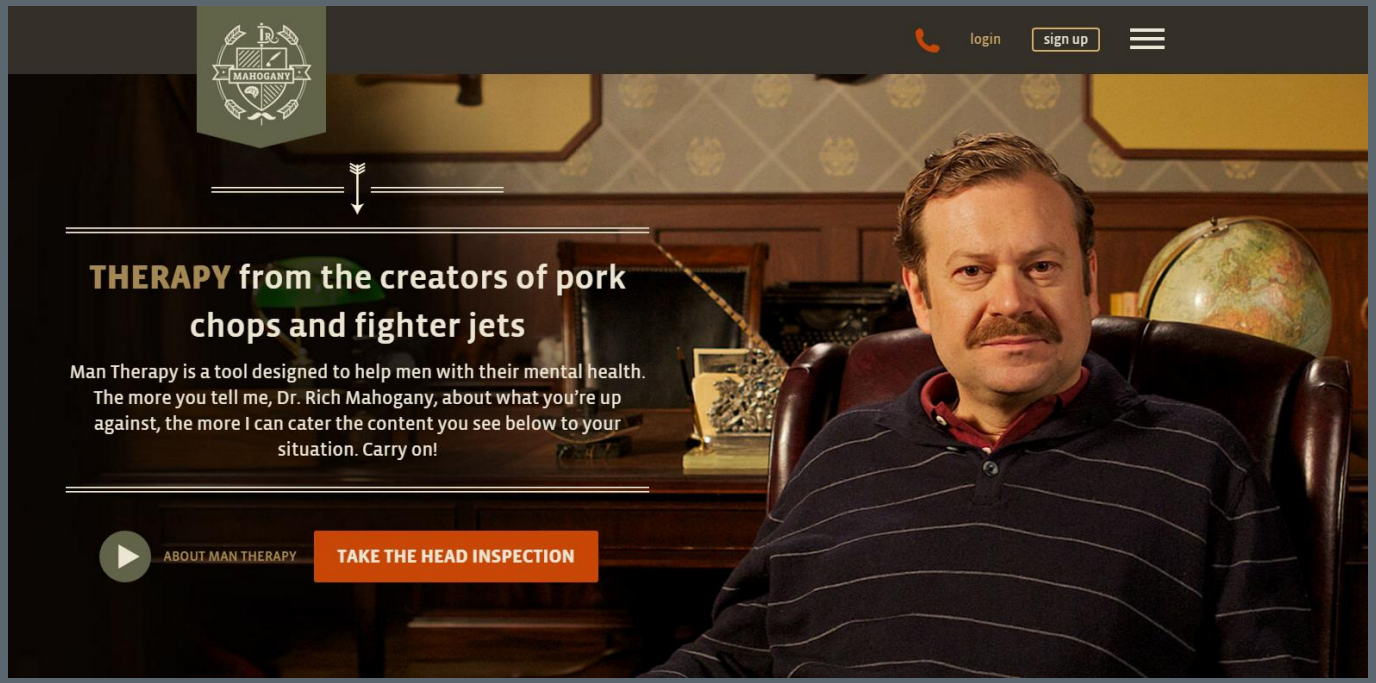
Source: Hindman J. Office of Suicide Prevention Suicide Prevention in Colorado Annual Report 2014-2015. Colorado Department of Public Health and Environment. November 1, 2015.

Mantherapy.org



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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*"

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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

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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

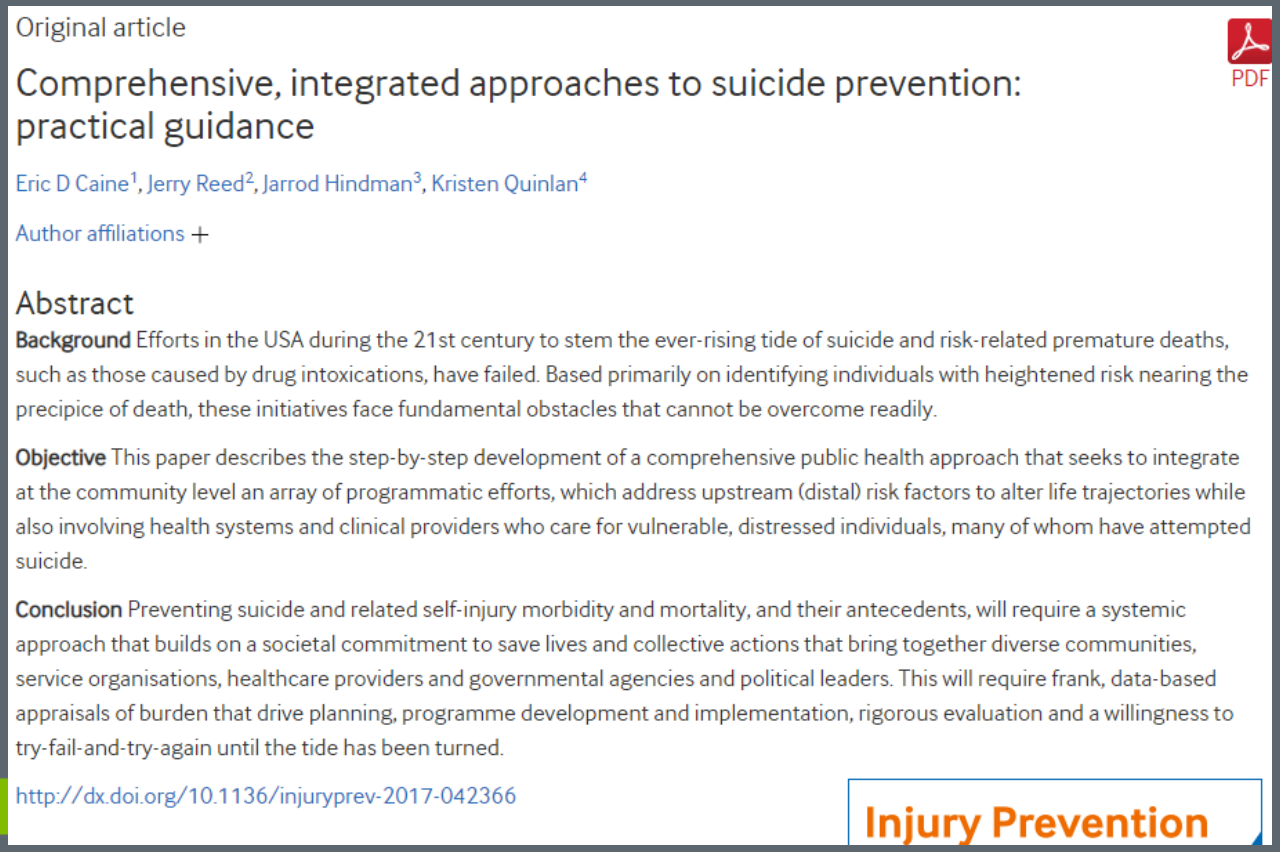
- Comprehensive school based program aimed to increase connectedness within schools and train both adult and peer leaders
  - *"enhance protective factors associated with reducing suicide at the school population level"*
  - Peer leaders as agents of social change
  - Allows positive factors to spread 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

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 National Collaborative



Original article

PDF

Comprehensive, integrated approaches to suicide prevention: practical guidance

Eric D Caine[1], Jerry Reed[2], Jarrod Hindman[3], Kristen Quinlan[4]

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


Questions?
Kirk Bol, MSPH
COVDRS Principal Investigator
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303-692-2170
Ethan Jamison, MPH
CoVDRS Coordinator
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Department of Public Health & Environment