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  

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

Rate per 1,000 live births

United States


Source: SDDOH Vital Statistics
Infant Mortality Disparity, South Dakota, 2008-2017

Rate per 1,000 live births

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.
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

Number of Deaths

- 2010: 8
- 2011: 8
- 2012: 7
- 2013: 6
- 2014: 5

Source: CDC PMSS
True Cause of Death as Determined by PMSS

- Non-cardiovascular condition: 70.6%
- Cardiovascular conditions: 11.8%
- Hypertensive disorders of...: 5.9%
  - Hemorrhage: 2.9%
  - Infection: 2.9%
  - Amniotic fluid embolism: 2.9%
  - Cerebrovascular accident: 2.9%

Source: CDC PMSS
Percent of Pregnancy-Associated Deaths by Type of Injury, 2010-2014

- None: 44.1%
- Motor vehicle accident: 20.6%
- Poisoning/drug...: 11.8%
- Suicide: 11.8%
- Homicide: 5.9%
- Falls/accidental: 2.9%
- Unknown: 2.9%

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
SD Suicide Rates, 1950–2017

Source: South Dakota Vital Records
Suicide Rates, United States, 2013-2017

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

Source: SDDOH Vital Statistics
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

- Accidental death from a firearm
- Suicide
- Homicide
- Legal Interventions
- Undetermined Intent

<table>
<thead>
<tr>
<th>Year</th>
<th>Accidental death</th>
<th>Suicide</th>
<th>Homicide</th>
<th>Interventions</th>
<th>Undetermined Intent</th>
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CDC developed a Vital Signs Report using information from the NVDRS reporting system

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

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 162 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 16 suicides among those aged less than 18 (15 males, 1 female)
• 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 (19%) of those who died by suicide experienced an intimate partner problem.
• 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.

25% of those who died by suicide experienced a crisis in the two weeks prior to death.

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

• 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
Examples from Other States

THE BIG PICTURE
Domestic violence is one of the fastest growing violent crimes in Utah. From 2010 publication, Domestic Violence Fatality Reports in Utah, 2001-2008, 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 74% 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

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

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

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 (UTVORS) 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 UTVORS to collect more - and more detailed - domestic violence-related data, and
• Linking data in the UTVORS 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

Through their collaboration on the UTVORS, 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 the Domestic Violence Fatality Recommendations Symposium, the VIPP and DVFRC worked with the Utah Department of Children and Family Services (DCFS) to increase immediate referrals to DCFS 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 of 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 DCFS was made in 13 (44%) of the 28 intimate partner violence incidents with children in the home during 2003-2008.
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
Coroners/Medical Examiners
• Fills out death certificate
• Files death certificate with Office of Vital Records

Office of Vital Records*
• Runs a report weekly to identify violent death cases
• Notifies Department of Health of cases that meet the criteria for NVDRS
• Notifies Coroners/ME of cases that meet NVDRS criteria

Office of Chronic Disease Prevention and Health Promotion*
• Tracks violent death cases internally on a secured network
• Notifies Law Enforcement of violent death cases

Law Enforcement
• Completes SD-VDRS form for violent death cases
• Sends form back to Department of Health

Coroner/Medical Examiner
• Completes SD-VDRS form for violent death cases
• Sends form back to Office of Vital Records

*Office of Vital Records and Office of Chronic Disease Prevention and Health Promotion are both programs under the Department of Health
NVDRS Web
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 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 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)
CoVDRS Case load

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

Year    Number of deaths
2013    8
2014    5
2015    10
2016    14
2017    7

2013    1316
2014    1383
2015    1419
2016    1519
2017    1549

Number of deaths
CoVDRS Case load

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

- Suicide: 78.0%
- Homicide / Legal Intervention: 16.6%
- Undetermined: 4.9%
- Unintentional Firearm: 0.6%
CoVDRS Information Flow

Audiences
- National, state, local violence prevention partners
- Violence and injury researchers
- Law enforcement agencies
- Coroner/medical examiner offices
- News/media
- Others

Occurrence of violent death (Suicide, homicide, accidental firearm discharge)

Principal reporting sources
- Vital statistics death certificates
- Coroner/medical examiner report
- Law enforcement report

Colorado Violent Death Reporting System (CoVDRS)

Principal data recipients
- National Violent Death Reporting System (NVDRS)
- Child Fatality Prevention System
- Maternal Mortality Review
- Colorado Suicide Prevention Commission

CDPHE
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
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
January 30, 2019

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

From: Ethan Jassimov, 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 your providing detailed death records so we can gather the highest quality data for this gap problem. We appreciate the continued support from the Colorado coroner community, but are still not able to get records from all agencies.

We are expediting copies of coroner reports for the individuals listed on the back of this form. Please include a copy of the coroner investigative report, a summary of the events leading up to and a copy of the autopsy report for each victim participating in each individual. Please review the file and send a second request for the records that have not yet been received. This mail contains both second and new requests.

Enclosed is a postage-paid return for FEDEX mailing for your convenience. Contact FEDEX for pick-up. Additionally, if you would like to receive a copy of these reports, we have included a return envelope for you to send a secure encrypted email containing the report to us. Due to the confidential nature 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 (ецe: Reports and records resulting from the investigation of sudden and unexplained deaths, environmental and chronic diseases, reports of morbidity and mortality, held by the state, county, and local departments 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 a part of a computer search, except in the course of the performance of the duties of the department or in the course of preparing and maintaining the records for law enforcement, intelligence, and surveillance.

Thank you for your assistance. If you have any questions or concerns, please contact me (203-469-2000 or Ethan.jassimov@state.co.us), or Rick Bull (303-827-2200, rick.bull@state.co.us).

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

PLEASE SEE LIST ON REVERSE SIDE
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
NVDRS - Boulder County

**Victim Demographics**
- Injury/Death Information: [Field]
- Autopsy and Toxicology: [Field]
- Weapon: [Field]
- Suspect Information: [Field]
- Circumstances and Narrative: [Field]
- Unintentional Firearms Death Circumstances: [Field]
- Comments: [Field]

**Victim's Race (select all that apply):** White, Black, Asian, Hispanic/Latino/Spanish, Other Race, Unspecified

**Victim's Hispanic Ethnicity Status:** Hispanic, Latino, Spanish

**Victim's Gender:** [Gender]

**Victim's Sexual Orientation:** Transgender, Alternative Sexual Orientation

**Victim's Age:** [Age]

**Victim's Physical Characteristics:** [Characteristics]

**NVDRS Incident ID:** [ID]

**Last Name:** [Surname]

**First Name:** [Given Name]

**Middle Name:** [Initial]

**Occurrence Date:** [Date]

**Complete grey boxes for ALL MANNERS of death:**
- Mental Health, Substance Abuse, and Addictions
- Injury/Death Information
- Autopsy and Toxicology
- Weapon
- Suspect Information
- Circumstances and Narrative
- Unintentional Firearms Death Circumstances
- Comments

**Complete blue boxes for SUICIDE and UNDETERMINED:**
- Relationship Problems
- Suicide Markers
- Suicide Method
- History of suicidal attempts
- History of antidepressant or anti-anxiety medication
- History of expressed desire to die or die
- History of expressed suicidal thoughts or intent

**Complete purple boxes for HOMICIDE or LEGAL INTERVENTION:**
- Relationship Problems
- Crime and Criminal Activity
- Circumstances

**Complete green box for HOMICIDE ONLY:**
- Life Events
- Physical/Fight/Sexual Assault
- Mental Health, Substance Abuse
- Injury/Death Information
- Autopsy and Toxicology
- Weapon
- Suspect Information
- Circumstances and Narrative
- Unintentional Firearms Death Circumstances
- Comments

**Complete red box for ALL MANNERS:**
- Any other circumstances not already listed

**Narrative of the Event (complete for ALL MANNERS):** Be sure to briefly explain any checked circumstances in the narrative.
### Previous Exposure to Violence:
- Abused or neglected in childhood
- History of abuse or neglect as an adult
- Previous perpetrator of violence in the past month
- Previous victim of violence in the past month

### Crime and Criminal Activity:
- Perpetrated by another crime (missing sex)
- Prostitution or sex trafficking
- Terrorist attack
- Robbery or theft
- Rape

### Circumstances – Complete the following for HOMICIDE & LEGAL INTERVENTION Deaths only:
- Justified self-defense
- Mercy killing
- Insanity
- Legal invalidation
- Police officer on duty
- Hit-and-run
- Alcohol/drug related
- Criminal planning

### Circumstances – Complete the following for SUICIDE & UNDETERMINED Deaths only:
- History of suicide attempts
- History of depression or other mental illness
- Left a suicide note
- History of expressed suicidal thoughts or plans
- Anniversary of a traumatic event

### Circumstances – Complete the following for UNINTENTIONAL/ACCIDENTAL/ARMSFIRE DEATHS only:
- Contact with injury
- Suicide wound
- Self-inflicted gunshot
- Other contact with injury
- Other suicide-related

### Mechanism of Injury:
- Measured on the basis of autopsy findings
- Ballistic injury
- Bullets in body
- Foreign object
- Unintentional death

### Brief Narrative of the Incident:

### Additional Comments:
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](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)
Publications

• Peer-review (in-house)

• Peer review (external)
Publications

• **Reports (HealthWatch)**
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

• 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

Self-Care in Research

- **Self-care and the Qualitative Researcher: When Collecting Data Can Break Your Heart, Kathleen B. Ragar**
  - 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

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

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”

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

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
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
Original article

Comprehensive, integrated approaches to suicide prevention: practical guidance

Eric D Caine¹, Jerry Reed², Jarrod Hindman³, Kristen Quinlan⁴

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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.

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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?

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