Prescription Drug Abuse in Colorado:
How Preceptors Can Make a Difference

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Task Force Member, Colorado Consortium for Prescription Drug Abuse Prevention

October 15, 2016
Objectives

• Describe the scope and reasons for growth of prescription drug abuse in Colorado and the US

• Discuss factors contributing to the growth in prescription drug abuse

• Detail the collective action approach being taken in Colorado to address the problem and what you as a provider (and preceptor) can do to help
What’s the big deal?
Drug Overdose Mortality

• In 2014, over 40,000 people died from drug overdoses in the United States
  – One every 13 minutes
  – Nearly 60% of those deaths involved prescription drugs
  – Painkillers (opioids) were involved in 75% of those deaths
• In Colorado, drug overdose deaths range from 300-500/year
• Since 2003, more overdose deaths have involved opioids than heroin and cocaine combined
• Rates of misuse and overdose death are highest among men, persons aged 20-64, non-Hispanic whites, and poor and rural
Drug Overdose Mortality in Colorado

Colorado Drug Overdose Death Rate, 2002

Legend
- 1: 0 - 2.0
- 2: 2.1 - 4.0
- 3: 4.1 - 6.0
- 4: 6.1 - 8.0
- 5: 8.1 - 10.0
- 6: 10.1 - 12.0
- 7: 12.1 - 14.0
- 8: 14.1 - 16.0
- 9: 16.1 - 18.0
- 10: 18.1 - 20.0
- 11: > 20.0

No Data Available

# Drug Overdose Mortality Trends (1979-2010)

## Drug Overdose Mortality Over the Years

<table>
<thead>
<tr>
<th>State</th>
<th>1979&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1990&lt;sup&gt;a&lt;/sup&gt;</th>
<th>1999&lt;sup&gt;b&lt;/sup&gt;</th>
<th>2005&lt;sup&gt;b&lt;/sup&gt;</th>
<th>2010&lt;sup&gt;b&lt;/sup&gt;</th>
<th>2010 Rank</th>
<th>1979 to 2010</th>
<th>1999 to 2010</th>
<th>Motor Vehicle Deaths vs. Drug Overdose Deaths</th>
<th>MV Death Rate 2010&lt;sup&gt;c&lt;/sup&gt;</th>
<th>DO &gt; MV in 2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama***</td>
<td>1.6</td>
<td>2.3</td>
<td>3.9</td>
<td>6.3</td>
<td>11.8</td>
<td>26</td>
<td>638%</td>
<td>203%</td>
<td>19.4</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Alaska</td>
<td>N/A</td>
<td>3.7</td>
<td>7.5</td>
<td>11.4</td>
<td>11.6</td>
<td>29</td>
<td>N/A</td>
<td>55%</td>
<td>10.4</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Arizona</td>
<td>4.1</td>
<td>4.8</td>
<td>10.6</td>
<td>14.1</td>
<td>17.5</td>
<td>6</td>
<td>327%</td>
<td>65%</td>
<td>12.3</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Arkansas**</td>
<td>1.7</td>
<td>1.1</td>
<td>4.4</td>
<td>10.1</td>
<td>12.5</td>
<td>25</td>
<td>635%</td>
<td>184%</td>
<td>20.7</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>6.7</td>
<td>5.9</td>
<td>8.1</td>
<td>9.0</td>
<td>10.6</td>
<td>37</td>
<td>58%</td>
<td>31%</td>
<td>7.7</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Colorado**</td>
<td>4.1</td>
<td>4.0</td>
<td>8.0</td>
<td>12.7</td>
<td>12.7</td>
<td>24</td>
<td>210%</td>
<td>59%</td>
<td>9.5</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Connecticut</td>
<td>1.1</td>
<td>1.7</td>
<td>9.0</td>
<td>8.5</td>
<td>10.1</td>
<td>39</td>
<td>818%</td>
<td>12%</td>
<td>9.1</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Delaware**</td>
<td>N/A</td>
<td>3.6</td>
<td>6.4</td>
<td>7.5</td>
<td>16.6</td>
<td>10</td>
<td>N/A</td>
<td>159%</td>
<td>12.5</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>D.C.</td>
<td>5.0</td>
<td>N/A</td>
<td>8.3</td>
<td>13.7</td>
<td>12.9</td>
<td>21</td>
<td>158%</td>
<td>55%</td>
<td>6.0</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Florida**</td>
<td>3.7</td>
<td>3.4</td>
<td>6.4</td>
<td>13.5</td>
<td>16.4</td>
<td>11</td>
<td>343%</td>
<td>156%</td>
<td>13</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Georgia***</td>
<td>2.6</td>
<td>2.3</td>
<td>3.5</td>
<td>8.2</td>
<td>10.7</td>
<td>36</td>
<td>312%</td>
<td>206%</td>
<td>13.9</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Hawaii</td>
<td>3.8</td>
<td>2.0</td>
<td>6.5</td>
<td>9.4</td>
<td>10.9</td>
<td>34</td>
<td>187%</td>
<td>68%</td>
<td>9.1</td>
<td>Yes</td>
<td></td>
</tr>
<tr>
<td>Idaho**</td>
<td>2.1</td>
<td>2.6</td>
<td>5.3</td>
<td>8.1</td>
<td>11.8</td>
<td>26</td>
<td>462%</td>
<td>123%</td>
<td>13.8</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>Illinois</td>
<td>2.6</td>
<td>4.4</td>
<td>6.7</td>
<td>8.4</td>
<td>10.0</td>
<td>40</td>
<td>285%</td>
<td>40%</td>
<td>7.8</td>
<td>Yes</td>
<td></td>
</tr>
</tbody>
</table>

<sup>a</sup> Data not available before 1980.<br><sup>b</sup> Data not available before 1999.<br><sup>c</sup> MV Death Rate 2010 includes both licensed drivers and non-licensed drivers.
Drug Overdose Death Rates in the US

NCHS Data Brief, December, 2011, Updated with 2009 and 2010 mortality data
Opioid and Benzodiazepine Trends Different than Heroin and Cocaine in the US (1999-2010)

Prescription Drugs: primary driver of Overdose Deaths in United States

Jones et al. JAMA 2013; and CDC/NCHS 2010.
Deaths are the Tip of the Iceberg
For every opioid overdose death in 2013 there were...

For every 1 death there are:

- 10 treatment admissions for abuse
- 32 emergency dept visits for misuse or abuse
- 130 people who abuse or are dependent
- 825 nonmedical users

SAMHSA NSDUH, DAWN, TEDS data sets
Coalition Against Insurance Fraud. Prescription for Peril.
Cost of Prescription Drug Abuse on the U.S. Economy

Cost of Prescription Drug Abuse on the U.S. Economy

$6,120 per second
Cost of Prescription Drug Abuse on the U.S. Economy

$6,120 per second

$200 Billion per year
Substance Abuse Treatment Gap (2011)

Number of People Needing Treatment for Substance Abuse Problems

21.6 million

Number of People Who Received Treatment at a Substance Abuse Facility

2.3 million

SAMHSA/NSDUH 2011 survey
Physicians Authorized to Treat Addiction (Buprenorphine/Methadone)

Rate of Providers (per 100,000 people)

How did we get here?
Risk Factors for Prescription Drug Abuse

![Diagram showing risk factors for prescription drug abuse]

**Source:** NIDA

Prescription Drug (Opioid) Availability

• Drug distribution through the pharmaceutical supply chain
  – 1997: 96mg “morphine equivalents” per person (in the US)
  – 2007: 700mg per person (in the US) = an increase of >600%
  – That 700mg per person is enough for every person in the US to take a typical 5mg dose of Vicodin every 4 hours for a month!

• Causes of the increase?
  – Increased recognition of pain, under-treatment of pain
  – Pain as the “fifth vital sign”, JCAHO quality measure, etc.
  – Drug company advertising and promotion
  – Practitioners are not well trained in opioid pharmacology, addiction
  – Drugs are very powerful, highly addictive if not used properly
  – Scamming, doctor/pharmacy shopping, black market for opioids

SAMHSA/NSDUH 2009 survey
States with higher opioid sales/use rates tend to have higher overdose death rates.

Kg of opioid pain relievers used per 10,000

Age-adjusted rate per 100,000

SAMHSA/NSDUH 2009 survey
Rates of opioid overdose deaths, sales and treatment admissions increased in parallel (US, 1999-2010)

![Graph showing rates of opioid overdose deaths, sales, and treatment admissions from 1999 to 2010.](image-url)
How does this problem start?
Most commonly, like this:

https://www.youtube.com/watch?v=bjgkcFK3iyA
Sources of Opioids among Nonmedical Users

- Obtained free from friend or relative: 55%
- Prescribed by one doctor: 17.3%
- Bought from a friend or relative: 11.4%
- Took from a friend or relative without asking: 4.8%
- Got from drug dealer or stranger: 4.4%
- Other Source: 7.1%
### Rates of Non-Medical Use of Prescription Opioids, and Sales

<table>
<thead>
<tr>
<th>State</th>
<th>Sales of Opioid Pain Relievers, 2010</th>
<th>Nonmedical % Use of Prescription Pain Relievers in the Past Year by Persons Aged 12 or Older, 2010-2011.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alabama</td>
<td>9.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Alaska</td>
<td>8.2</td>
<td>5.3</td>
</tr>
<tr>
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<td>8.4</td>
<td>5.7</td>
</tr>
<tr>
<td>Arkansas</td>
<td>8.7</td>
<td>5.6</td>
</tr>
<tr>
<td>California</td>
<td>6.2</td>
<td>4.7</td>
</tr>
<tr>
<td>Colorado</td>
<td>6.3</td>
<td>6.0</td>
</tr>
<tr>
<td>Connecticut</td>
<td>6.7</td>
<td>4.4</td>
</tr>
<tr>
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<td>10.2</td>
<td>4.4</td>
</tr>
<tr>
<td>D.C.</td>
<td>3.9</td>
<td>4.7</td>
</tr>
<tr>
<td>Florida</td>
<td>12.6</td>
<td>5.6</td>
</tr>
<tr>
<td>Georgia</td>
<td>6.5</td>
<td>4.1</td>
</tr>
<tr>
<td>Hawaii</td>
<td>5.9</td>
<td>3.8</td>
</tr>
<tr>
<td>Idaho</td>
<td>7.5</td>
<td>5.7</td>
</tr>
<tr>
<td>Illinois</td>
<td>3.7</td>
<td>4.4</td>
</tr>
<tr>
<td>Wyoming</td>
<td>6.0</td>
<td>4.7</td>
</tr>
<tr>
<td><strong>National Rate</strong></td>
<td><strong>7.1</strong></td>
<td><strong>4.6</strong></td>
</tr>
</tbody>
</table>

* Kilograms of opioid pain relievers sold per 10,000 population, measured in morphine equivalents.

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**Sales of Opioid Pain Relievers and Nonmedical Opioid Use (2010-11)**

#2 in U.S.

(Oregon = 6.4)
Majority of Heroin users in past year reported Nonmedical use of Opioids before heroin initiation (US, 2002-2004 and 2008-2010)

Jones, C.M. Drug Alcohol Depend 2013.
How does this problem end?
Oftentimes, like this:

http://www.riseaboveco.org/rx/rx4.html
What is being done?
PREScription DRUGS

Strategies and points of intervention for preventing misuse, abuse, and overdose, while safeguarding access to treatment.

MANUFACTURERS/WHOLESalers/DISTRIBUTORS
Intervention

Pill Mills
Interventions

Problem Prescribing
Interventions

Hospitals/Emergency Departments
Interventions

Pharmacies
Interventions

Insurers/PBMs
Interventions

NOTE: What is presented here are the priority strategies that are likely to have the greatest impact. This is not an exhaustive list.
New Federal Initiatives

- **CDC:** calls Prescription Drug Abuse as one of the top four epidemics facing the U.S.; new guidelines for doctors

- **FDA:** requiring pharmaceutical companies to create Abuse Deterrent Formulations (ADFs); new Black Box Warnings

- **DEA:** tougher scheduling (more restrictions on how Vicodin like drugs can be prescribed and dispensed); drug “Take Back days”; reducing the amount of CII drugs that may be manufactured in 2017 by 25% (↓hydrocodone by 66%)
Comprehensive Addiction and Recovery Act (CARA)

- Signed into law July, 2016
- Amends partials fills of CII prescriptions. Allows partial fills if:
  - It is requested by patient or practitioner who wrote the Rx
  - Total quantity dispensed does not exceed total quantity prescribed
  - Remaining portions must not be filled 30 days after Rx issue date
New Black Box Warnings: Opioids and Benzodiazepines

Opioid Pain or Cough Medicines Combined With Benzodiazepines: Drug Safety Communication - FDA Requiring Boxed Warning About Serious Risks and Death

[Posted 08/31/2016]

AUDIENCE: Pharmacy, Internal Medicine, Psychiatry, Neurology, Family Practice

ISSUE: FDA review has found that the growing combined use of opioid medicines with benzodiazepines or other drugs that depress the central nervous system (CNS) has resulted in serious side effects, including slowed or difficult breathing and deaths. Opioids are used to treat pain and cough; benzodiazepines are used to treat anxiety, insomnia, and seizures. In an effort to decrease the use of opioids and benzodiazepines, or opioids and other CNS depressants, together, FDA is adding Boxed Warnings, our strongest warnings, to the drug labeling of prescription opioid pain and prescription opioid cough medicines, and benzodiazepines. See the Drug Safety Communication for a listing of all approved prescription opioid pain and cough medicines, and benzodiazepines and other CNS depressants.

FDA conducted and reviewed several studies showing that serious risks are associated with the combined use of opioids and benzodiazepines, other drugs that depress the CNS, or alcohol (see the FDA Drug Safety Communication for a Data Summary). Based on these data, FDA is requiring several changes to reflect these risks in the opioid and benzodiazepine labeling, and new or revised patient Medication Guides. These changes include the new Boxed Warnings and revisions to the Warnings and Precautions, Drug Interactions, and Patient Counseling Information sections of the labeling.
Colorado Plan to Reduce Prescription Drug Abuse

September 2013
Kelly Perez
Policy Advisor
Office of Governor John Hickenlooper
# Recommendations to Reduce Prescription Drug Misuse and Abuse in Colorado

## Colorado Consortium for Prescription Drug Abuse Prevention
- The Colorado Consortium for Prescription Drug Abuse Prevention, housed at the CU School of Pharmacy, will serve as the operational lead for the **CO Plan to Reduce Rx Abuse** with participation from the Governor’s Policy Office, a variety of state agencies, and community partners. The Consortium will help to facilitate and implement *Workgroup Recommendations* mentioned below.

## Provider & Prescriber Education
- Change state board policies (or rules) for all DORA-licensed prescribers to include pain management guidelines.
- Enlist and support DORA to provide education about the existence and utilization of PDMP as part of the licensing processes for prescribers and pharmacists.

## PDMP
- Form taskforce with representation from various agencies to examine the use of PDMP as a public health tool
- Improve usability and appropriate accessibility of the PDMP system through the use of information technology and increased stakeholder access

## Disposal
- Expand take-back program in law enforcement agencies – develop permanent drop-off sites with Law Enforcement
- Expand take-back program to pharmacies (pending DEA approval)
- Establish Colorado guidelines on flushing

## Public Awareness
- Develop (or utilize existing) social marketing campaign that targets the General Public and overcomes existing obstacles and misperceptions
- Develop (or utilize existing) social marketing campaign that targets Youth and Young Adults (12-25 year olds) and overcomes existing obstacles and misperceptions

## Data & Analysis
- Map out all sources of data related to prescription drug use, misuse and overdose in the state in order to monitor trends, educate the public and inform decision making by multiple stakeholders
- Identify other efforts that successfully use crosswalks between diverse data sources and successfully standardize their data collection tools across agencies
Colorado Consortium for Prescription Drug Abuse Prevention
A coordinated, statewide, interuniversity/interagency network

Provider Education Work Group
Co-Chairs:
Lili Tenney, CSPH
Lesley Brooks, NCHA

Safe Disposal Work Group
Co-Chairs:
Greg Fabisiak, CDPHE
Sunny Linnebur, CU

PDMP Work Group
Co-Chairs:
Mark O’Neill, DORA
Jason Hoppe, UCH / CU

Treatment Work Group
Co-Chairs:
Denise Vincioni, OBH
Paula Riggs, CU

Affected Families Work Group
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Karen Hill, JPAF
Suzi Stolte

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Coordination Center
CU School of Pharmacy
Robert Valuck, PhD, RPh, Director
Rosemarie MacDowell, Coordinator
Whit Oyler, Program Manager

+ Coordinating Committee
(Work Group Co-Chairs)

Governor

Health Policy Lead

CO Attorney General
Substance Abuse Trend & Response Task Force

CO Legislature

Subcommittee

LEGEND
= New
= Existing

Data/Research Work Group
Co-Chairs:
Barbara Gabella, CDPHE
Ingrid Binswanger, KPCO

Naloxone Work Group
Co-Chairs:
Joshua Blum, DHHS
Lisa Raville, HRAC

Ad Hoc
ADO / ADF Work Group
Co-Chairs:
Steve Wright, MD
Scott Hompland, DO

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Co-Chairs:
Steve Wright, MD
Scott Hompland, DO
How can you get involved?
Things you can do...NOW

• Learn more: go to www.TakeMedsSeriously.org
  – Safe Use, Safe Storage, Safe Disposal of medications

• Share/talk with your friends and family

• Use the PDMP – show your students how you use the PDMP

• Recognize red flags

• Implement naloxone standing orders
UNUSED MEDICINE BY THE NUMBERS:
4 billion prescriptions are filled in the U.S. every year. 1/3 of that medicine goes unused. Thats 200 million pounds of unused medication.¹

Drug Enforcement Administration’s National Drug Take-Back Event:
Saturday, October 22, 2016, from 10:00 a.m. to 2:00 p.m.
October 22, 2016
10:00 AM - 2:00 PM

The National Prescription Drug Take-Back Day aims to provide a safe, convenient, and responsible means of disposing of prescription drugs, while also educating the general public about the potential for abuse of medications.

**Locate A Collection Site Near You**

**Law Enforcement Agencies Only**

For law enforcement agencies that wish to host a collection site please call the POC in your area.

**Partnership Toolbox**

Download posters, handouts and other materials to promote National Prescription Drug Take-Back Day.

**Drug Disposal Information**

**News Releases**

www.deadiversion.usdoj.gov/drug_disposal/takeback/index.html
Questions?