Prescription Drug Abuse in Colorado:
A Coordinated, Statewide Response to an Emerging Public Health Problem

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Coordinating Center Director, Colorado Consortium for Prescription Drug Abuse Prevention

GIM Grand Rounds
August 19, 2014
Objectives

• Understand the scope of the prescription drug abuse problem in Colorado and the U.S.

• Discuss factors contributing to the growth in prescription drug abuse

• Highlight policy initiatives, programs and education at the state and federal level and in other states

• Detail the approach being taken in Colorado to address the problem
What’s the big deal?
Drug Overdose Mortality

• In 2010, **38,329** people died from a drug overdose in the U.S.
  – One every 14 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 250-550/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 Rates per 100,000 People 2010

Map showing the drug overdose mortality rates per 100,000 people across the U.S. in 2010, with different colors representing different rate ranges.

References:
Drug Overdose Mortality Trends (1979-2010)

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<thead>
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<td>2.3</td>
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<td>203%</td>
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<td>65%</td>
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<td>156%</td>
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<td>206%</td>
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<td>68%</td>
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<td>123%</td>
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<td>40</td>
<td>385%</td>
<td>40%</td>
<td>7.8</td>
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</table>

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)

- **Opioids**
- **Heroin**
- **Cocaine**
- **Benzodiazepines**


Jones et al. JAMA 2013; and CDC/NCHS 2010.
Deaths are the Tip of the Iceberg
For every opioid overdose death in 2011 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.
Physicians Authorized to Treat Addiction (Buprenorphine/Methadone)

How did we get here?
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 3 weeks

• 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)

- CDC/National Vital Statistics System
- DEA ARCOS System
- SAMHSA’s TEDS System
Majority of opioids consumed by small percentage of patients (Arkansas Medicaid, 2005)

Top 8.1% of providers prescribe 79% of CII-CIV drugs
(Oregon PDMP, 2011-12)

- Top 2,000 Providers: 60%
- 2,001-4,000 Providers: 19%
- Remaining 45,330 Providers: 21%

Oregon PDMP Report 2012:
http://www.orpdmp.com/orpdmpfiles/PDF_Files/Reports/Statewide_10.01.11_to_03.31.12.pdf
Top 20% of prescribers account for 63% of Overdose Deaths (Ontario Public Drug Program, 2006)

More patients on opioids = more doctor shoppers


Number of patients on opioid analgesics per prescriber

Odds ratio of having doctor shoppers as patients

100% of patients are doctor shoppers
Sales of Opioid Pain Relievers and Nonmedical Opioid Use (2010-11)

<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>
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<td>9.7</td>
<td>4.4</td>
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<td>3.7</td>
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<tr>
<td>Wyoming</td>
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<tr>
<td>National Rate</td>
<td>7.1</td>
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#37 in U.S.
Sales of Opioid Pain Relievers and Nonmedical Opioid Use (2010-11)

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<td>Wyoming</td>
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<tr>
<td><strong>National Rate</strong></td>
<td><strong>7.1</strong></td>
<td><strong>4.6</strong></td>
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</tbody>
</table>

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

#2 in U.S.
(Oregon = 6.4)
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%
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.
What is being done?
Prescription Drugs

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

Strategies Legend
- PDMPs
- PRRs
- Laws/Regulations/Policies
- Insurers/PBMs
- Clinical Guidelines

Pill Mills
Interventions

Problem Prescribing
Interventions

Hospitals / Emergency Departments
Interventions

General Prescribing
Interventions

Pharmacies
Interventions

Insurers / PBMs
Interventions

General Patients / Public
Interventions

People at High Risk for Overdose
Interventions

Note: What is presented here are the priority strategies that are likely to have the greatest impact. This is not an exhaustive list.
Federal Initiatives (*alphabet soup warning*)

- **FDA**: REMS programs, stricter regulation on DTC advertising, support of rescheduling certain drugs (hydrocodone) to C-II
- **CDC**: Increased surveillance, grant funding, elevate topic in national discussion
- **DEA**: Takeback events (2X/year), new rules on returning unused controlled substances (pending), rescheduling
- **ONDCP**: Federal strategic plan, elevate topic in national discussion
- **DOJ**: Promote PDMP programs, interstate data sharing
- **CMS**: Pharmacy/provider restrictions, quantity restrictions
- **NIH**: Research funding (basic science, clinical science, policy, collaborative mechanisms/center grants)
Other States and Policy Examples

- Tougher Pill Mill, Doctor Shopping Laws
- Physical Exam Requirements
- Tamper Resistant Form Requirements
- Prescription Limits
- Patient ID Requirements
- Naloxone Laws
- Immunity from Prosecution
- Prospective Reports from PDMP programs
Here in Colorado...
Misuse of Prescription Opioids

In 2010...

304 of the 838 drug poisoning deaths in Colorado involved prescription opioids

Percent of Coloradans who misused prescription opioids in the past year

Hospitalization rate for opioids compared to other drug-related hospitalizations

79,000 COLORADANS AGED 18-25
14%
255,000 COLORADANS AGED 12+
6%
144,600 COLORADANS AGED 26+
4.4%
4.6% NATIONAL AVERAGE
Colorado Plan to Reduce Prescription Drug Abuse

September 2013
Kelly Perez
Policy Advisor
Office of Governor John Hickenlooper
2016 GOAL: **PREVENT** 92,000 Coloradans from misusing opioids

255,000 COLORADANS AGED 12+

2011-2012

6%

163,000 COLORADANS AGED 12+

2016 TARGET

3.5%

92,000 COLORADANS AGED 12 + PREVENTED FROM MISUSING OPIOIDS
# Recommendations to Reduce Prescription Drug Misuse and Abuse in Colorado

<table>
<thead>
<tr>
<th>Colorado Consortium for Prescription Drug Abuse Prevention</th>
<th>• The Colorado Consortium for Prescription Drug Abuse Prevention, housed at the CU School of Pharmacy, will serve as the operational lead for the <strong>CO Plan to Reduce Rx Abuse</strong> with participation from the Governor’s Policy Office, a variety of state agencies, and community partners. The Consortium will help to facilitate and implement <em>Workgroup Recommendations</em> mentioned below.</th>
</tr>
</thead>
</table>
| **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. |
How will we do this?
Colorado Consortium for Prescription Drug Abuse Prevention
A coordinated, statewide, interuniversity/interagency network

Prescriber and Provider Education Workgroup
Agency Co-Chair: Cathy Traugott, HCPF
Univ Co-Chairs: Liliana Tenney, MPH
Lee Newman, MD

Safe Disposal Workgroup
Agency Co-Chair: Shannon Breitzman, CDPHE
Univ Co-Chair: Sunny Linnebur, PharmD

Public Awareness Workgroup
Agency Co-Chair: Stan Paprocki, OBH
Univ Co-Chair: Carol Runyan, PhD

PDMP Workgroup
Agency Co-Chair: Chris Gassen, DORA
Univ Co-Chair: Jason Hoppe, DO

Treatment Workgroup
Agency Co-Chair: Denise Vincioni, OBH
Univ Co-Chair: Paula Riggs, MD

Data/Analysis Workgroup
Agency Co-Chair: Barbara Gabella, CDPHE
Univ Co-Chair: Ingrid Binswanger, MD

Governor
Policy Lead

CO Attorney General
Substance Abuse Trend & Response Task Force

CO Legislature

Subcommittee

LEGEND
= New
= Existing

Coordinating Center
CU School of Pharmacy
+Coordinating Committee
PDMP Work Group

• Technical/System Improvements
  – User Group meetings, determined highest priority need items
    (fewer clicks and attestations, batch processing, more current data)

• Legislative Changes: HB14-1283 (PDMP Enhancement Bill)
  – Mandatory registration for PDMP account (not mandatory use)
  – Delegated access (up to three delegates per provider)
  – Unsolicited reports of potential doctor/pharmacy shoppers
  – CDPHE access to system for public health surveillance
  – Advisory Board (consortium PDMP work group) to assist DORA with
    implementation and advise on future directions

Not requiring legislation: daily reporting of dispensing data (Rx’s filled) by
pharmacies, system/interface enhancements, batch querying and reporting,
fewer clicks and fewer attestations (monthly or quarterly)
<table>
<thead>
<tr>
<th>Date</th>
<th>Number of Queries performed in November of 2013</th>
<th>Active Licenses as of 12/2/13</th>
<th>Active PDMP Accounts as of 12/2/13</th>
<th>% of License Type with Active PDMP Accounts as of 12/2/13</th>
<th>% of License Type with Active PDMP Accounts as of January 2013</th>
<th>% Increase / Decrease in accounts from January 2013 - December 2013</th>
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<td>39%</td>
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<td>5936</td>
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<td>1%</td>
<td>1%</td>
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<td>TOTALS</td>
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<td>44057</td>
<td>13738</td>
<td>31%</td>
<td>28%</td>
<td>3%</td>
</tr>
</tbody>
</table>

* Percentages shown have been rounded to whole numbers.
** The percentage of foreign teaching physicians with active accounts in January of 2013 is not available

***In November of 2013, there were 673,836 Schedule II through V controlled substance prescriptions dispensed to 445,394 Colorado patients. These prescriptions contained 40,767,389 doses.

Number of Colorado PDMP queries performed in November 2013 compared to number of Colorado patients who received a Schedule II through V controlled substance prescription in November 2013 = approx. 34%.

% of Colorado licensees eligible to access the PDMP with active PDMP accounts:
December 2013 – approx. 31%.
July 2010 – approx. 23%

***November dispensing data obtained from the Colorado PDMP on December 18, 2013.
Provider Education Work Group

• Retrain existing providers and prescribers
  – Market current education (including guidelines & PDMP)
  – Update content
  – Produce new prescriber education modules (REMS, dentists and veterinarians)
  – Align with DORA Boards rules

• Educate students & trainers
Safe Disposal Work Group

• Continue to expand DEA National Take Back sites and participation
• Strengthen DEA, EPA, CDPHE and law enforcement partnerships
• Expand number of permanent dropbox locations (now up to 19 sites in Colorado at law enforcement agencies)
• Created consensus set of Safe Disposal Guidelines, and a color, trifold brochure for widespread dissemination (major pharmacy chains, provider groups)
Public Awareness Work Group

- Develop and identify campaigns targeting the general population and youth/young adults (12-25 year olds)
  - Reviewed existing campaigns
  - Developed messaging for CO (safe use, safe storage, safe disposal)
  - Issued RFP for P.A. campaign, awardee chosen (Webb Strategic Communications)
  - Evaluate results
Data/Analysis Work Group

• Map out all data sources related to Rx drug abuse, misuse, and overdose in the state
  – Monitor trends
  – Educate public
  – Inform decision making by multiple stakeholders
What Can I Do?

Follow guidelines for responsible care and prescribing

• Implement a **multidimensional** treatment approach

• Prescribe opioids only when **other treatments** have not been effective

• Use **patient provider agreements**

• **Screen and monitor** for substance abuse

• **TALK WITH PATIENTS!**
New Training & Education for Providers

• Developed at the Colorado School of Public Health in the Center for Worker Health & Environment

• Launched in Fall 2012

• Supported by an unrestricted educational grant from Pinnacol Assurance
The Opioid Crisis: Guidelines and Tools for Improving Chronic Pain Management

Receive 2 hours of CME credits

Access to modules, online tests, toolkit, resources and case videos.

To enroll, please visit www.PainManagementCME.org

Funded through an unrestricted educational grant from Pinnacol Assurance and sponsored by the NIOSH Mountain and Plains ERC and the Hollis Family Trust.
Training Impact

Enrollment – June 2014

1,377 Enrolled
1,226 Completed

87% of providers who complete the training intend to change their practice.

Demographics

24% Family Medicine
23% Surgery
14% Other
14% Physician Assistant
12% Occupational Medicine
5% Pain Specialist
4% Nurse Practitioner
3% Internal Medicine
Online Tools for Physicians

1. Toolkit
   - Assessment forms
   - Links to PDMP, guidelines, articles
   - MED calculator app

2. 2 Hour Module

3. Patient Physician Vignettes

4. Post-assessment for CME Credits
Acknowledgements

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Questions?