Substance Misuse and the Maternal and Child Health Population

Violence & Injury Prevention - Mental Health Promotion Branch

MCH Webinar with JFK Partners
February 2019

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Opioid Overdose Prevention Program Coordinator
MCH Substance Misuse Lead
Funding

Assistance  States
Child  Control  Centers
Justice
Supplemental  Maternal  Disease  Health  Bureau  Prevention
Marijuana Campaign Efforts
Marijuana use before pregnancy, during pregnancy, and postpartum while breastfeeding, 2014-2016.

Data Source: Colorado Pregnancy Risk Assessment Monitoring System

<table>
<thead>
<tr>
<th></th>
<th>Before pregnancy</th>
<th>During pregnancy</th>
<th>Postpartum and currently breastfeeding</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td>11.2%</td>
<td>5.7%</td>
<td>2.9%</td>
</tr>
<tr>
<td>2015</td>
<td>13.2%</td>
<td>5.7%</td>
<td>3.6%</td>
</tr>
<tr>
<td>2016</td>
<td>15.2%</td>
<td>7.8%</td>
<td>4.4%</td>
</tr>
</tbody>
</table>

DATA DASHBOARDS AVAILABLE ONLINE  https://www.colorado.gov/marijuanahealthinfo
### Daily/near daily marijuana use by sex, 2014-2017

**Data Source:** Colorado BRFSS

<table>
<thead>
<tr>
<th>Year</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>2014</td>
<td><img src="image" alt="Male 2014" /></td>
<td><img src="image" alt="Female 2014" /></td>
</tr>
<tr>
<td>2015</td>
<td><img src="image" alt="Male 2015" /></td>
<td><img src="image" alt="Female 2015" /></td>
</tr>
<tr>
<td>2016</td>
<td><img src="image" alt="Male 2016" /></td>
<td><img src="image" alt="Female 2016" /></td>
</tr>
<tr>
<td>2017</td>
<td><img src="image" alt="Male 2017" /></td>
<td><img src="image" alt="Female 2017" /></td>
</tr>
</tbody>
</table>

**Prevalence (%)**

- Male 2014: 6.0%
- Male 2015: 6.0%
- Male 2016: 6.0%
- Male 2017: 10.0%
- Female 2014: 4.0%
- Female 2015: 4.0%
- Female 2016: 4.0%
- Female 2017: 6.0%

**DATA DASHBOARDS AVAILABLE ONLINE** [https://www.colorado.gov/marijuanahealthinfo](https://www.colorado.gov/marijuanahealthinfo)
OBJECTIVE: Drive women to a website that connects them to the information and resources they need to make the most responsible decision for themselves and their baby.

AUDIENCE: Pregnant and breastfeeding women in Colorado:
- Primary: Ages 15 - 24, low SES
- Secondary: Ages 25 - 35, low SES
WHAT WILL YOU PASS ON?

Mothers and moms-to-be spend a lot of time thinking about things they want to pass on to their babies.

This campaign will use powerful imagery to spark emotion and get mothers thinking about what they would want to pass on and what they would not.
Responsibility Grows Here

What will you pass on?

YOUR EYES?
YOUR LOVE OF MOVIES?
THC FROM MARIJUANA?

Learn How THC Could Be Passed to Your Baby

RESPONSIBILITYGROWHERE.COM

1.6k Likes  48 Comments  485 Shares

Like  Comment  Share
| The ads motivated women not to use marijuana while pregnant or breastfeeding. | The photos make an emotional appeal. | Calling out “THC” illustrated that marijuana could be harmful while pregnant or breastfeeding. |
Marijuana & Your Baby’s Health

Learn how THC (Tetrahydrocannabinol) from marijuana can be passed to your baby during pregnancy and breastfeeding.

There is No Known Safe Amount:
There is no known safe amount of marijuana to use while pregnant. No matter how marijuana is used, THC always gets passed to your baby.

Pumping and Dumping Isn’t the Solution:
If you use marijuana while breastfeeding, your baby will be exposed to THC. THC is stored in the fat cells, and stays in your breast milk much longer than alcohol does, so “pumping and dumping” doesn’t work with THC. It’s better to quit smoking or using marijuana altogether.

What do you want to pass on?
Your smile?
Your sense of humor?
THC from marijuana?

There is no known safe amount of marijuana to use while pregnant or breastfeeding. Learn how THC from retail marijuana could be passed to your baby.

Responsibility
Grow Here
Visit ResponsibilityGrowsHere.com to learn more.

Available Resources

Marijuana Pregnancy & Breastfeeding Guidance
For Colorado Health Care Providers Prenatal Visits

Tips for using this guidance: all information in italics is scripted tailoring points to share with parents.

Screening Questions

Q: Have you used marijuana in the last year?
   If no:
   Go to question 2.
   If yes:
   • When was the last time you used marijuana?
   • How do you use marijuana? What form of marijuana do you use? How often do you use and how much?
   • If pregnant: How has your use of marijuana changed since finding out you are pregnant?
   • If concerned about substance abuse: Use the Cannabis Use Disorder Identification Test (CUDIT) and referral recommendations found in the resources section.

Q: Does anyone use marijuana in your home?
   If yes or no,
   It is important to ensure that your home is safe for your child. Make sure that any potentially harmful substances are out of reach of your child, including marijuana, alcohol, prescription drugs or household substances.
   If yes:
   Provide additional education on avoidance of secondhand smoke and safe storage, more information below.

Well-Woman/Teen Visits

Colorado Department of Public Health & Environment
Opioid Overdose Prevention Unit
<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead Injury Epidemiologist</td>
<td>Barbara Gabella</td>
</tr>
<tr>
<td>VIP-MHP Branch Chief</td>
<td>Lindsey Myers</td>
</tr>
<tr>
<td>Opioid Overdose Prevention Unit Supervisor</td>
<td>Andres Guerrero</td>
</tr>
<tr>
<td>Evaluation Supervisor</td>
<td>Colleen Kapsimalis</td>
</tr>
<tr>
<td>Coordinator and MCH Lead</td>
<td>Shayna Micucci</td>
</tr>
<tr>
<td>Epidemiologist</td>
<td>Maria Butler</td>
</tr>
<tr>
<td>Evaluator</td>
<td>Allison Rosenthal</td>
</tr>
<tr>
<td>Evaluator</td>
<td>Katie Olson</td>
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Opioid Misuse Prevention Activities
Opioid Misuse Prevention Activities

<table>
<thead>
<tr>
<th>Data/ Surveillance</th>
<th>PDMP Enhancements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provider Education</td>
<td>Coalition Building/ Community Strategies</td>
</tr>
</tbody>
</table>
Colorado’s Opioid Data for Women of Reproductive Age (15-44)
Fatal Overdoses

Poisoning Death Rates per 100,000 residents involving Prescription Opioids and Heroin, 2011-2017

Source: Vital Statistics, Colorado Department of Public Health and Environment
FIGURE 1. National prevalence of opioid use disorder per 1,000 delivery hospitalizations* — National Inpatient Sample (NIS),† Healthcare Cost and Utilization Project (HCUP), United States, 1999–2014

* Prevalence numerator consisted of cases of opioid type dependence and nondependent opioid abuse based on International Classification of Diseases, Ninth Revision (ICD-9) codes (304.00–304.03, 304.70–304.73, 305.50–305.53), and denominator consisted of delivery hospitalization discharges.
† Includes data from all states participating in HCUP each year (https://www.hcup-us.ahrq.gov/partners.jsp?NIS), weighted to produce national estimates. Rates before 2012 are weighted with trend weights, and rates after 2012 are weighted using original NIS discharge weights to account for the change in NIS design in 2012.

MMWR: August 10, 2018
Prescription Opioid Morbidity

Poisoning Related Visit Rates per 100,000 Residents Associated with Prescription Opioids, 2011-2017

Source: Emergency Department Discharge & Hospital Discharge Datasets, Colorado Hospital Association; Analyzed by the Colorado Department of Public Health and Environment
Heroin Morbidity

Poisoning Related Visit Rates per 100,000 Residents Associated with Heroin, 2011-2017

Source: Emergency Department Discharge & Hospital Discharge Datasets, Colorado Hospital Association; Analyzed by the Colorado Department of Public Health and Environment
Opioid Dispensing

18% of all controlled substance prescriptions dispensed in Colorado were dispensed to women of reproductive age.

50% of all controlled substance prescriptions dispensed to women of reproductive age were opioids.
High-Dose Prescribing

CDC prescribing guidelines recommend opioid dosages should not be increased to greater than 90 mg morphine equivalents (MME) per day.

Percentage of high-dose (> 90MME per day) opioid prescriptions received, Colorado, 2017.
**County Surveillance**

**Age-Adjusted Rate of Poisoning Deaths by Any Opioid Analgesic** Among Colorado Residents, by County, Colorado, 2014-2016

**Prescription Drug Use Among Pregnant, Postpartum and Women of Reproductive Age**

- **Rx Drugs Dispensed to Women of Reproductive Age in Adams County**
  - In 2016, 20% (n=124,629) of all prescriptions dispensed by Adams County residents were dispensed to women between the ages of 15-44. The average age of women receiving prescriptions was 33 years old.
  - A majority of the prescriptions were for opioids (62%) followed by benzodiazepines (20%) and stimulants (12%).
  - About 6% of women of reproductive age received high dose opioid prescriptions (>90 MME).
  - The rate of multiple provider episodes was 12 per 100,000 Colorado women aged 15-44.

**Rx Drug Use and Maternal Mortality in Colorado**

- Drug overdose was one of the leading causes of maternal deaths from 2004-2012.
- Among all overdose decedents with toxicology results, a single medication or illicit drug was identified in 24% of women, two medications or illicit drugs were identified in 20% of women, and three or more medications or illicit drugs were identified in 44% of women.
- Opioids were the most commonly detected class of drugs, identified in 42% of women.
- In a majority of the pharmaceutical opioid overdoses, there was documentation of a recent prescription for opioids, a known opioid use disorder, or empty pill bottles at the scene.

**Neonatal Abstinence Syndrome (NAS) in Colorado**

- In 2010, an estimated 6% of babies born in Colorado, or 3,958 out of 65,962 births, were exposed to non-medical use of prescription medications.
- In 2013, it was estimated that only 25% of women using substances during pregnancy sought treatment.
- Cases of NAS births have increased 83% from 2010 to 2015.

**Recommendations**

- Educate the public about the addictive potential of prescription opioids and enhance access to reproductive health services.
- Conduct routine universal substance use and mental health screening of all pregnant women through validated screening tools before and throughout pregnancy.
- Improve access to comprehensive services for pregnant women with substance use disorders, including medication-assisted treatment (MAT) and gender-specific substance use treatment programs.
- Improve the identification of infants at risk and identify strategies to mitigate the effects of NAS.

PDMP Enhancements
PDMP

• Controlled substances database (dispensed by Colorado pharmacies)
• Department of Regulatory Agencies
• State mandates/regulations
• Clinical tool
• Public health surveillance
• Utilization
## PDMP Projects

<table>
<thead>
<tr>
<th>Enhancements</th>
<th>Connectivity</th>
<th>Surveillance</th>
</tr>
</thead>
<tbody>
<tr>
<td>• New vendor/system</td>
<td>• Health information exchanges (HIEs)</td>
<td>• State &amp; county prescription dispensing profile</td>
</tr>
<tr>
<td>• New agreements with DORA</td>
<td>• Electronic health records (EHRs)</td>
<td>• Mapping</td>
</tr>
<tr>
<td>• Specific enhancements</td>
<td>• System interface connection</td>
<td>• Data linkages</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• MCH support</td>
</tr>
</tbody>
</table>
Prescription Drug Monitoring Program Data

- Housed at Dept. of Regulatory Agencies (DORA)
- DEA Schedules II-V
- Data from 2014-2018
- Each record represents a prescription and includes information on the drug dispensed, patient, pharmacy, and prescriber

Pharmacies upload prescription data each business day

Users access and review the prescription data uploaded by pharmacies

Users make informed decisions on prescribing or dispensing controlled substances.

https://www.colorado.gov/pacific/cdphe/prescription-drug-data-profiles
https://www.colorado.gov/dora-pdmp
PDMP and MMRIIA
Data Linkage Project
Using the PDMP to support MMRC

- **Purpose**
  - Improve the comprehensiveness of the records presented to the review committee.

- **Process:**
  - MMRC provides list of patient first and last name
  - PDMP reports are pulled for all patients who have filled a rx
  - Reports are partially de-identified and sent back to MMRC abstractor.
  - MMRC abstractor summarizes the data and de-identifies the patient information prior to sharing it with MMRC members
### Sample Patient Report

**Patient 1**

<table>
<thead>
<tr>
<th>Name</th>
<th>DOB</th>
<th>ID</th>
<th>Gender</th>
<th>Address</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient 1</td>
<td>8/10/1980</td>
<td>1</td>
<td>female</td>
<td>123 Street</td>
</tr>
</tbody>
</table>

**Report Criteria**

First Name: Patient Last Name: 1 DOB: 6/10/1900

### Summary

<table>
<thead>
<tr>
<th>Summary</th>
<th>Opioids* (excluding buprenorphine)</th>
<th>Buprenorphine*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Prescriptions</td>
<td>3</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Private Pay</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Prescribers</td>
<td>2</td>
<td>0.0</td>
</tr>
<tr>
<td>Total Pharmacies</td>
<td>1</td>
<td>0.0</td>
</tr>
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</table>

### Prescriptions

<table>
<thead>
<tr>
<th>Filled Date</th>
<th>ID</th>
<th>Written Date</th>
<th>Drug</th>
<th>QTY</th>
<th>Days</th>
<th>Prescriber</th>
<th>Rx #</th>
<th>Pharmacy*</th>
<th>Refills</th>
<th>Daily Dose</th>
<th>Pymt Type</th>
<th>PMP</th>
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<tbody>
<tr>
<td>04/25/2014</td>
<td>1</td>
<td>04/25/2014</td>
<td>HYDROCODON-ACETAMINOPHEN 5-325</td>
<td>15</td>
<td>3</td>
<td></td>
<td>4237119</td>
<td></td>
<td>0</td>
<td>25.0 MME</td>
<td>Comm Ins</td>
<td>CO</td>
</tr>
<tr>
<td>03/18/2014</td>
<td>1</td>
<td>03/18/2014</td>
<td>Diazepam 5mg</td>
<td>15</td>
<td>3</td>
<td></td>
<td>4230314</td>
<td></td>
<td>0</td>
<td>0.0</td>
<td>Comm Ins</td>
<td>CO</td>
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<tr>
<td>02/14/2014</td>
<td>1</td>
<td>02/14/2014</td>
<td>HYDROCODON-ACETAMINOPHEN 5-600</td>
<td>30</td>
<td>3</td>
<td></td>
<td>4235680</td>
<td></td>
<td>0</td>
<td>25.0 MME</td>
<td>Comm Ins</td>
<td>CO</td>
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</table>
Drug overdose was one of the leading causes of maternal deaths from 2004-2012.

Opioids were the most commonly detected class of drugs, identified in 42% of women.

In a majority of the pharmaceutical opioid overdoses, there was documentation of a recent prescription for opioids, a known opioid use disorder, or empty pill bottles at the scene.
Community Strategies: Provider Education and Coalition Building
CDC Guidelines

1. Opioids are not first-line therapy
2. Establish goals for pain and function
3. Discuss risk and benefits
4. Use immediate-relates opioids when starting
5. Use lowest effective dose
6. Prescribe short durations for acute pain
7. Evaluate benefits and harms frequently
8. Use strategies to mitigate risk
9. Review PDMP data
10. Use urine drug testing
11. Avoid current opioid and benzodiazepine prescribing
12. Offer treatment for opioid use disorders
Provider Education

- Pueblo City-County Health Department
- Summit County Health Department
- Tri-County Health Department
- Denver Public Health (DHHA)
- Northwest Colorado Community Health Partnership
- Las Animas-Huerfano Counties District Health Department
- El Paso County Public Health
- Southwest Colorado AHEC
- San Luis Valley AHEC
- Fremont County Public Health
- Mesa County Public Health
- North Colorado Health Alliance
- Jefferson County Public Health
- Boulder County Public Health
Tri County Health Department Highlight

Maternal and Child Health: Issue Brief - January 2018 Women of Reproductive Age: Substance Abuse
Partnerships and Resources
Substance Exposed Newborns (SEN) Committee
SEN Committee

Focus 2018-2020

Convening, supporting, and guiding the following workgroups:

- The Colorado Hospital SEN (CHoSEN) Collaborative
- SEN Data and Research Work Group
- SEN FASD Identification Work Group
- SEN Plans of Safe Care Work Group
- SEN Policy Work Group
- SEN Provider Education Work Group
SEN Hospital Collaborative

- Address best practice approaches in identifying and responding to pregnant women using drugs and newborns exposed to drugs

- Funding from the Children’s Justice Act through the Colorado Department of Human Services

- Partnership between the SEN Committee, Illuminate Colorado, Kempe Children’s Center and ECHO Colorado
SEN Toolkit Project - Inventory

- The preliminary inventory of existing resources is complete and contains over 200 unique resources.
- Categories of resources include: substance use disorders, statutes, safe prescribing across the lifespan, screening and testing, hospital practice and discharge, referrals for community resources, documentation and billing, harm reduction, and lactation.
- These categories are each further divided into sections such as: clinical guidance and recommendations, data and epidemiology, maternal health resources, neonatal health resources, etc.

https://docs.google.com/document/d/1v0fynmnFcAC6t7YR7NV8FMiPy6a9_TcGNInjNUWjtI0/edit#heading=h.gjdgx
Neonatal Abstinence Syndrome (NAS)

The number of NAS cases increased 81% from 2010 to 2017.

NAS Limitations: Data is based on hospital discharge coding using the ICD9. It is not possible to determine from these codes what caused the NAS, therefore the cases reported here were likely caused by a variety of different drugs.
• Created by Governor John Hickenlooper in the fall of 2013 to establish a coordinated, statewide response to this major public health problem

• The Consortium serves as a backbone, which links the many state agencies, organizations, health professions, associations, task forces, and programs that are currently addressing the prescription drug abuse problem

• Seeded with $1M in funding from former AG John Suthers
Consortium Organization

Governor
- Health Policy Lead

Provider Education Work Group
- Co-Chairs: Lesley Brooks, N. Colorado Health Alliance
- Joshua Blum, Denver Health

Public Awareness Work Group
- Co-Chairs: Jose Esquivel, Attorney General's Office
- Kent MacLeannan, Rise Above Colorado

Attorney General
- Substance Abuse Trend & Response Task Force

Treatment Work Group
- Co-Chairs: Paula Riggs, CU
- Mandy Malone, OBH

Legislature

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

PDMP Work Group
- Co-Chairs: Jason Hopper, UCH/ CU TBD — DORA

Data & Research Work Group
- Co-Chairs: Barbara Gabriella, CDPHE
- Alla Al-Tayyib, Denver Health

Naloxone Work Group
- Co-Chairs: Lisa Raville, HRAC
- Chris Stock, PharmD

Heroin Response Work Group
- Co-Chairs: Tom Gorman, RM HIDTA
- Lindsey Myers, CDPHE

Affected Families & Friends Work Group
- Co-Chairs: Karen Hill & Suzi Sloane
- JP Rx Drug Awareness Foundation

Recovery Work Group
- Co-Chairs: Dana Smith, The Phoenix
- Rourke Weaver, Red Rock Recovery

Coordinating Center
CU School of Pharmacy
Robert Valuck, PhD, RPh
Coordinating Committee
(Work Group Co-Chairs)
Provider Education Work Group

- Created live CE program for physicians, other providers
- Focusing initially on Safe Opioid Prescribing/Monitoring
- Delivered 13 times (3 more scheduled), to >575 providers
- Next topics: MAT in Primary Care; Alternatives to Opioids; Telehealth/Telemedicine for Pain Management, Addiction Treatment
Colorado Department of Public Health & Environment

- Safe Disposal - Permanent Drop Box Locations
- Naloxone Standing Orders
- PDO Prevention for Communities Grants
- Prescription Drug Monitoring Program
- Disease control and syringe access
- Upstream prevention - Communities that Care
- MCH Overlaps
State

Colorado Department of Human Services
Office of Behavioral Health

- Medication Assisted Treatment Expansion
- Naloxone Expansion
- Law Enforcement Assisted Diversion Funding
- Crisis Services Expansion

Rise Above Colorado

- Prevention targeted towards youth
Thank you!
Communication

Shayna Micucci
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Maternal and Child Health Substance Misuse Priority Lead
shayna.micucci@state.co.us
(303) 692-6448