OPIOID MISUSE & OVERDOSE: IDAHO’S RESPONSE

Nicole Fitzgerald, MPA, CPS
Governor’s Office of Drug Policy
Idaho ranks 5th in the nation for pain reliever misuse

- Idahoans aged 18 to 25 were significantly more likely to report misusing prescription drugs.
- Idahoans were more likely to misuse prescription drugs in every age group compared to the percentage for the United States.
OVER 1 IN 7 IDAHO HIGH SCHOOL STUDENTS HAVE EVER MISUSED PRESCRIPTION DRUGS.
1 IN 50 HAVE TRIED HEROIN

SAMHSA, Center for Behavioral Health Statistics and Quality, National Survey on Drug Use and Health, 2015 and 2016
Drug-induced Death

**FIGURE 1.** Age-adjusted mortality rate trend for drug-induced deaths: Idaho residents and the United States\(^1\), 2000-2016.

*2016 data for the United States has not been released.*

\(^1\)Source: CDC Wonder
Drug Poisoning (Overdose) Deaths, Idaho 2004-2016

Source: Idaho Bureau of Vital Records and Health Statistics
Number of drug-induced deaths by opioid drug category reported on the death certificate for each year: Idaho residents, 2011-2016

Source: Idaho Bureau of Vital Records and Health Statistics
Rate of Drug Overdose Deaths reporting Opioid involvement by Public Health District of Residence 2011-2015*

*among Idaho residents
Idaho ranks 17th in the nation in the total number of opioid prescriptions dispensed/100 persons.

National average: 66.5/100 persons
Idaho rate: 77.6/100 persons
Variation by county in the total number of opioid prescriptions dispensed/100 persons

Source: Centers for Disease Control & Prevention, 2016
Quarterly rate of people with ≥1 opioid prescription per 1,000 Idaho residents, 2016–2017
Resources

Opioid Misuse & Overdose Workgroup & Strategic Plan
www.odp.idaho.gov

Idaho’s Response to the Opioid Crisis (IROC)
https://healthandwelfare.idaho.gov/ search IROC
To refer anyone to IROC call 1-800-922-3406

Live Better Idaho
https://www.livebetteridaho.org/

2-1-1 Helpline
Call 211

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Treatment of Opioid Use Disorder

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Disclosures

• No financial disclosures.
• Will use generic names when possible.
  – Buprenorphine/naloxone instead of Suboxone.
  – “Bupe” for short.
• Will use PollEverywhere
Why did you choose to attend this talk?
How knowledgeable are you about medication assisted treatment?

- This is brand new to me!
- I've heard a little bit about it
- Pretty knowledgeable
- Expert
Goals of Talk

• Understand the scope of the opioid overdose epidemic
• Define opioids, opioid use disorder (OUD), addiction & recovery
• Identify evidence-based treatments for OUD
• Understand why buprenorphine/naloxone is an effective treatment for OUD
How the Epidemic of Drug Overdose Deaths Ripples Across America

By HAEYOUN PARK and MATTHEW BLOCH  JAN. 19, 2016

Overdose deaths per 100,000

4  8  12  16  20

The New York Times
Deaths from overdoses are reaching levels similar to the H.I.V. epidemic at its peak.

115 AMERICANS
3 Waves of the Rise in Opioid Overdose Deaths

**Wave 1:** Rise in Prescription Opioid Overdose Deaths

**Wave 2:** Rise in Heroin Overdose Deaths

**Wave 3:** Rise in Synthetic Opioids Overdose Deaths

Synthetic opioids like fentanyl

Heroin

Natural and semi-synthetic opioids like oxycodone or hydrocodone

SOURCE: National Vital Statistics System Mortality File
CDC’s Unique Work In Action: "Overdose Deaths are the Tip of the Iceberg"

For every 1 prescription or illicit opioid overdose death in 2015 there were...

18 people who had a substance use disorder involving heroin

62 people who had a substance use disorder involving prescription opioids

377 people who misused prescription opioids in the past year

2,946 people who used prescription opioids in the past year

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What are Opioids?

- Prescription pain medicines such as hydrocodone (Norco), oxycodone, morphine, fentanyl
- Illegal drugs such as heroin
- Stimulate the opioid receptor in the brain to decrease pain, as side effects make people feel good (euphoria) and slow breathing (overdose risk)
Perfect Fit - Maximum Opioid Effect

Empty Receptor

No Withdrawal Pain

Euphoric Opioid Effect

Courtesy of NAABT, Inc. (naabt.org)
What is Addiction?

• “a primary, chronic disease of brain reward, motivation, memory, and related circuitry..."

• ...pathologically pursuing reward and/or relief of withdrawal symptoms by substance use...

• ...Without treatment or engagement in recovery, addiction is progressive and can result in disability and death.”
Biology / Genetics
- Genetics ~ 50% of risk

Environment
- Poverty
- Trauma
- Education
- Parents/Peers

Drugs
- Early Use
- Effect of Drug
- Route of Use
- Availability
- Cost

Brain Chemistry
- Brain Development
- Reward Pathway
- Tolerance/Withdrawal

Addiction

Adapted from NIDA 2018
Natural History of Opioid Dependence

“When you can stop you don't want to, and when you want to stop, you can't.”

In addition to fact that heroin possession/use is illegal, increased tolerance and physical dependence often lead to criminal activity in order to sustain drug use.
Opioid Use Disorder
Clinical term for the chronic disease of addiction

- Diagnostic criteria include:
  - escalating use & loss of control
  - continued use despite negative consequences
  - diminished ability to fulfill societal obligations
  - tolerance to the effects of the drug
  - withdrawal symptoms when the drug is stopped
Who is affected?
Who is affected?

1. 70 year-old grandfather, relapsed after 40 years
2. 28 year-old homeless insulin-dependent diabetic
3. 32 year-old pregnant stay-at-home mom on opioids since last c-section
4. 50 year-old using painkillers after work injury
5. 44 year-old small business owner
How can we help these individuals? What treatments can we offer?
Treatment

Harm Reduction

Psychosocial Interventions

Medication Assisted Treatment

Recovery Support

Housing, Employment, Mental Healthcare
Harm Reduction

- Practical strategies & ideas aimed at reducing negative consequences of drug use
  - Meeting users where they are at
  - Substance use a continuum – from severe use to abstinence
  - Complete abstinence not always the goal
  - Empower & give voice to people who use drugs
Harm Reduction

• Safe injection technique
• Clean needles
• HIV, Hepatitis C testing
• Hepatitis A & B vaccination
• Naloxone (Narcan) for reversal of opioid overdose
What is Recovery?

• “a process of sustained action that addresses the biological, psychological, social and spiritual disturbances...
• aims to improve the quality of life...
• is the consistent pursuit of abstinence”
Treatment

Harm Reduction

Psychosocial Interventions

Medication Assisted Treatment

Recovery Support

Housing, Employment, Mental Healthcare
Medication Assisted Treatment
Medication Assisted Treatment

Opioid Agonist Therapy
- Methadone
- Buprenorphine

Opioid Antagonist
- Extended-release Naltrexone
Medication Assisted Treatment
Opioid Antagonist Therapy

- Once monthly intramuscular injection
- Blocks intoxicating/reinforcing effects of opioids
- Some interest pre-release
- High relapse rates, limited evidence
- *Increased risk of overdose after antagonist wears off*
# Opioid Agonist Therapy

<table>
<thead>
<tr>
<th>Method</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Methadone</td>
<td>Reduce withdrawal symptoms &amp; cravings → prevent relapse → allow brain to heal</td>
</tr>
<tr>
<td></td>
<td>↓ mortality ↓ HIV/HCV ↓ substance use ↓ criminal activity ↑ retention in treatment</td>
</tr>
<tr>
<td>Buprenorphine</td>
<td></td>
</tr>
</tbody>
</table>
Opioid Agonist Therapy

- Methadone
- Buprenorphine

Reduce withdrawal symptoms & cravings → prevent relapse → allow brain to heal.
Medication Assisted Treatment
# Methadone vs Buprenorphine

<table>
<thead>
<tr>
<th>Methadone</th>
<th>Buprenorphine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full agonist</td>
<td>Partial agonist</td>
</tr>
<tr>
<td>Typical dose 80-120mg/d</td>
<td>Typical dose 16mg/d</td>
</tr>
<tr>
<td>Treatment Program (daily dosing)</td>
<td>Office based (prescription)</td>
</tr>
<tr>
<td>Stigma</td>
<td>Managed like any other chronic illness</td>
</tr>
<tr>
<td>More risky, especially during induction phase</td>
<td>Protected from overdose (ceiling effect, tight bond to receptors)</td>
</tr>
<tr>
<td>Better for patients who need more structure, heavier opioid use</td>
<td>Bound to naloxone to prevent diversion and misuse</td>
</tr>
</tbody>
</table>
Addiction

- Escalating use over time
- Loss of control; inability to stop
- Use despite negative consequences
- Unable to fulfill societal obligations

Dependence

- Presence of withdrawal symptoms if substance stopped abruptly

Methadone and buprenorphine result in physical dependence but **not** addiction.
Retain in Treatment, Prevent Relapse

Buprenorphine Maintenance
75% retained in treatment
75% abstinent by toxicology

Detoxification
0% retained in treatment
20% died

\[ p = 0.0001 \]

Time from randomisation (days)

Retain in Treatment, Prevent Relapse

Figure 2. Treatment Retention and Mean Buprenorphine Dosage for Patients With Prescription Opioid Dependence

- Maintenance condition
- Taper condition

Mean buprenorphine dosage, mg/d
- Maintenance condition: 14.9, 15.1, 15.2, 15.3, 15.3, 16.0, 15.9, 16.2, 16.2, 16.6, 16.8, 16.2, 16.1, 15.8, 14.6
- Taper condition: 15.6, 15.6, 15.4, 15.3, 14.2, 9.7, 5.7, 3.1, 0.6, 0.2, 0, 0, 0, 0, 0

Reduce HIV, HCV

70% lower risk of acquiring hepatitis C on methadone or buprenorphine

Reduce Mortality


Schwartz et al. AJPH 2013; 103: 917-22.
Reduce Mortality

- Recent meta-analysis showed reduction in all-cause mortality and overdose-related mortality
  - **Three** times higher mortality rate out of methadone treatment
  - **Five** times higher overdose mortality rate out of methadone treatment

Buprenorphine Treatment

Day 1: Intake (counselor & MD visit, agreement, urine drug screen, PMP, labs)

Home Induction

Day 4: MD visit

Week 1: MD & counselor visit

Week 2/3/4: MD & counselor visit

Week 6/8: MD & counselor visit

Urine drug screens each visit.
Monthly visits once patient doing well.
Recommend LONG TERM treatment, typically a year or longer; some need lifelong treatment.
What are the biggest barriers to care?

- Cost
- Health Insurance
- Stigma
- Licensed prescribers
- Other
What can employers do?

- Naloxone for reversal of opioid overdose on site and easily accessible
- Information about how to access care
- Support staff struggling with opioid use disorder, as would support employees with other chronic medical conditions
- Ensure coverage of substance use disorders and mental health care
In the unfortunate circumstance where an employee finds that he or she is dependent upon or addicted to opioid painkillers, help needs to be clear and accessible. Employee-sponsored treatment is more effective than treatment encouraged by family or friends. Retaining an employee following successful treatment is good for morale and the company’s bottom line.

Employers committed to safe and healthy workplaces have a responsibility to address the opioid epidemic. These employers can do so with strong employee policies, alliances with health benefits and workers’ compensation plan providers, education, expanded drug-free workplace testing and access to treatment programs.
Want to learn more?

- https://www.samhsa.gov/medication-assisted-treatment
- https://odp.idaho.gov/opiods-and-overdoses/
- https://www.nsc.org/
Questions?

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