



Implementing Technology and
Medication Assisted Treatment and Team Training
in Rural Colorado

Behavioral Health Provider Training

Implementing Technology and Medication Assisted Treatment and Team Training in Rural Colorado

Behavioral Health Provider Training

Introduction

Why we're here

Interesting history here...

Primary care historically not part of substance abuse and addiction treatment.

Behavioral health historically not part of substance abuse and addiction treatment.

Addiction care/treatment was **carved out** of these settings and made into a specialized category. Prescribing policies resulted from that – such as, physicians can prescribe buprenorphine for pain but not for opioid use disorder treatment without completing special training and obtaining a prescribing waiver from the DEA.

Why we're here

- Colorado is in the midst of an epidemic of opioid addiction and death.
- We have effective, evidence-based tools for treatment.
- We can and need to translate science into practice.
- Behavioral health is an important part of medication assisted treatment for opioid use disorder.
- providers can help address the opioid epidemic.
 - You see these patients day in and day out and have a great understanding of factors that might contribute to OUD.
 - We are all working to improve our patients' physical and mental health.

Why we're here

- Behavioral health providers can help address the opioid epidemic.
 - You see these patients day in and day out and have a great understanding of factors that might contribute to OUD.
 - We are all working to improve our patients' physical and mental health.
- PTSD, depression, anxiety, suicidality...all impact the success of medication assisted treatment.

Objective

- Introduce behavioral health providers to office-based opioid treatment with buprenorphine, including:
 - Importance
 - Effectiveness
 - Approach
 - Training requirements

Behavioral Health Care Team Training Modules

Module 1: What Behavioral Health Providers need to know about treatment for opioid use disorder (OUD) with buprenorphine

Module 2: Impact of OUD

Module 3: Pharmacology of buprenorphine and opioids

Module 4: Detection and diagnosis

Module 5: Working with patients receiving treatment with buprenorphine

Module 6: Logistics of Providing Behavioral Health Services for OUD

Ms. Jones

35 year old female presenting for an annual physical. She vaguely describes using opioids “sometimes”. Upon further evaluation, she endorses symptoms of anxiety and depression. She acknowledges that for the past year she has been taking opioids prescribed to her partner when she is feeling especially anxious and depressed. On occasion, she also takes Xanax, which is prescribed to her mother. She admits that neither her partner or her mother know that she takes their medication.

Mr. Patel

28 year old male, former construction worker. He has been unemployed for the past 3 years following a back injury. He was prescribed oxycontin and oxycodone when he was placed on disability and has been using since. A few months ago his PCP discontinued his medications because he misused on multiple occasions and sought prescriptions from other providers. He began purchasing short-acting opioids from others and 3 months ago began smoking heroin. He has been using daily since and wants treatment. He heard there is a "drug to take if you are addicted to heroin".

Ms. Lopez

40 year old female with a history of generalized anxiety diagnosed with arthritis 5 years ago. She was started on opioids after failing NSAIDs. Throughout the years her daily dose has increased significantly and she is now taking hydrocodone and oxycodone. She has noticed that she feels ill whenever she does not take her medication and has even found herself stealing prescription opioids from her best friends medicine cabinet. She is concerned about her use and has been self-medicating with buprenorphine to reduce her use of hydrocodone and oxycodone.

Mr. Brown

35 year old male with extensive history of heroin and other drugs. He was diagnosed with HIV a year ago, which he likely contracted due to unsafe needle use. Since his diagnosis he has continued to use heroin, though he has not injected. His medical provider is urging him to stop using heroin because it can interfere with his HIV treatment. He has previous inpatient detoxifications, which have ultimately failed.

Implementing Technology and
Medication Assisted Treatment
and Team Training in Rural Colorado



Behavioral Health Provider Training

Module 1: What Behavioral Health Providers Need to Know about treatment for opioid use disorder with buprenorphine

Meeting a Need

Meeting a Need

11.2%

Adults in the U.S. who
experience chronic pain

6.4%

Adults in the U.S. who
experience severe pain

Increase in opioid
prescribing



Increase in opioid
use disorder

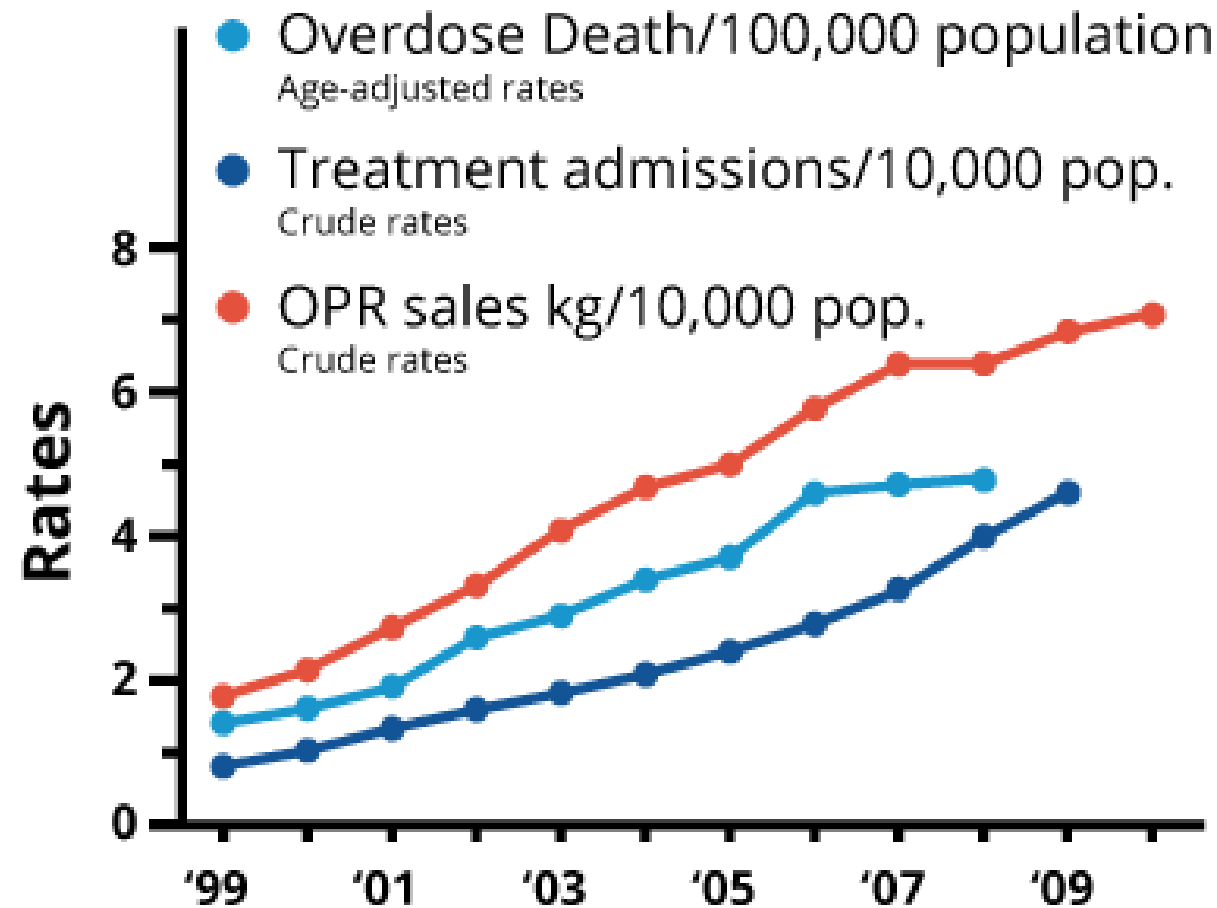
12.5 million

Americans who misused prescription pain relievers, 63% for reported pain relief

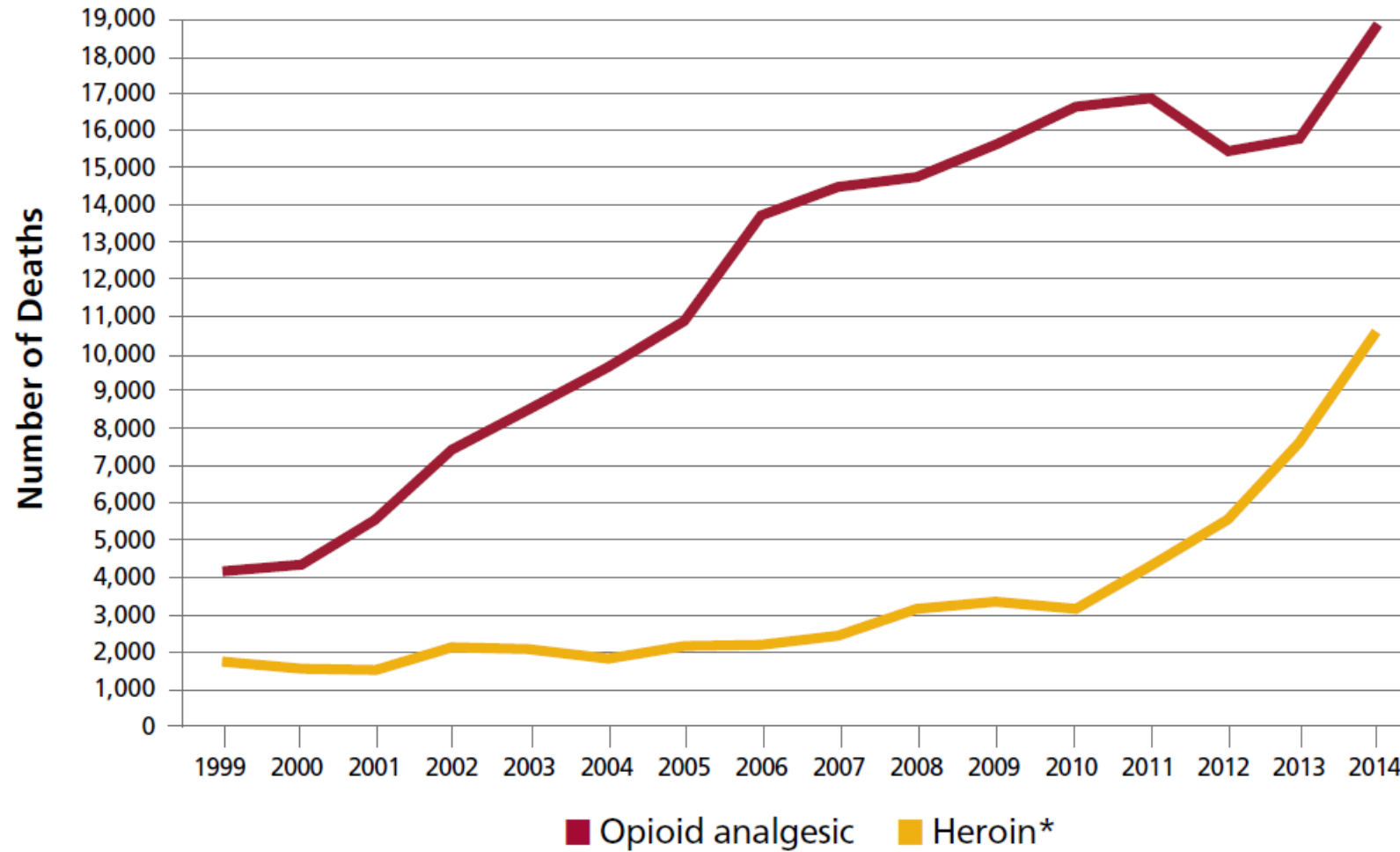
828,000

Americans who used heroin in the past year

US Rates of Opioid Pain Reliever Death, Treatment, & Sales '99-'10



U.S. Deaths from Opioids & Heroin: 1999-2014



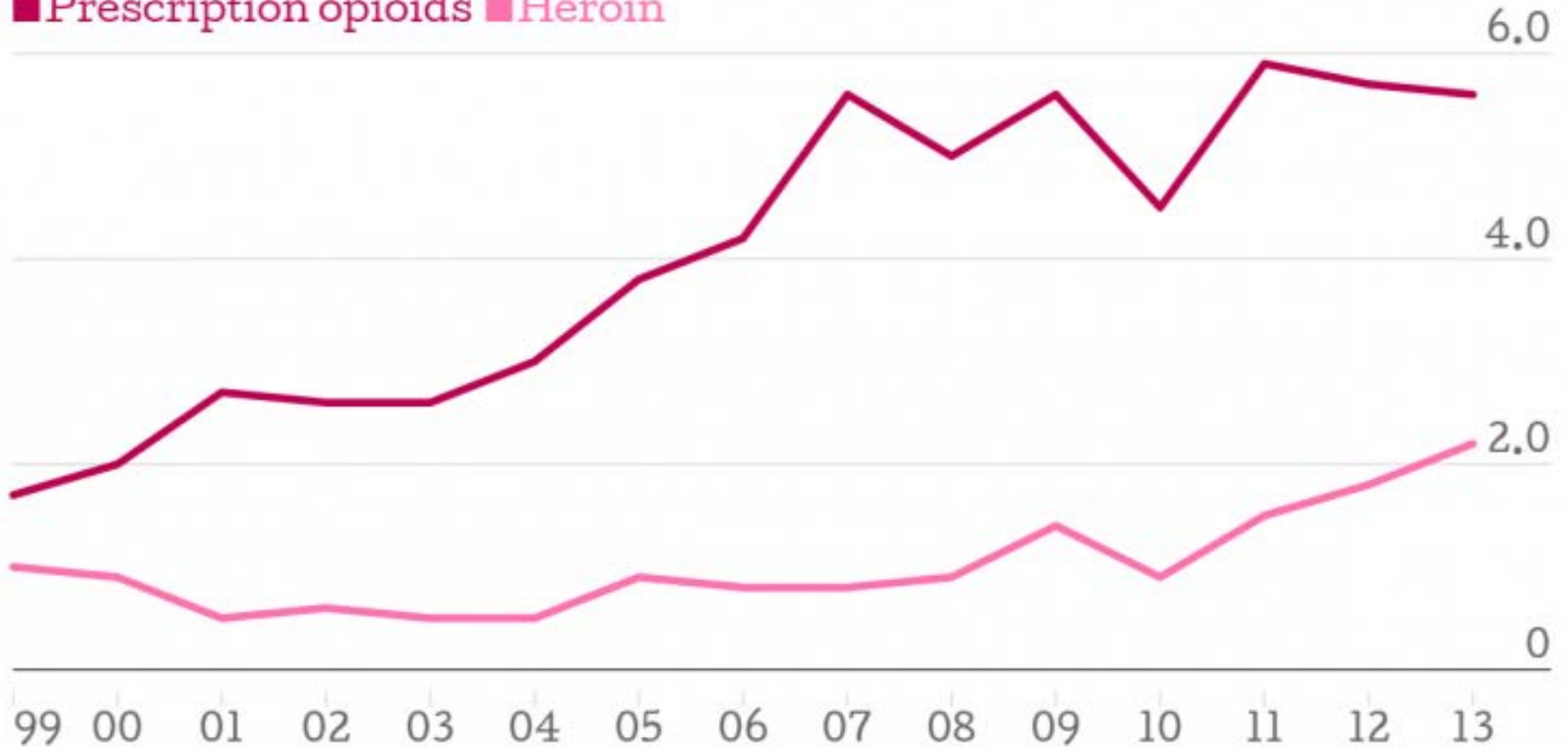
*Heroin includes opium.

1999-2013 Statistics: CDC/NCHS NVSS Multiple Cause of Death Files.

2014 Statistics: American Society of Addiction Medicine (ASAM). Opioid Addiction: 2016 Facts & Figures.

Colorado's overdose death rates

■ Prescription opioids ■ Heroin

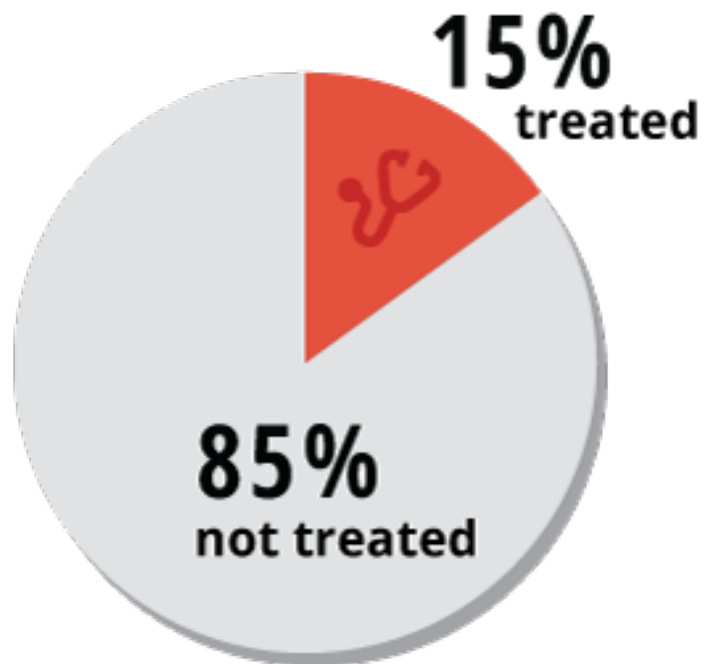


Data: Colorado Department of Public Health and Environment

Pictured are the rates of overdose death per 100,000 people in Colorado.

A Large Unmet Need for Treatment

Opioid Use Disorder Treatment in the US



In 2013, 22.7 million people needed substance abuse treatment

- 2.5 million received it
- Of those needing but not receiving treatment, 34.8% made an effort to find treatment but were unable to obtain it.

Connecting patients to prescribers (physicians, NPs, PAs)

- There is no wrong door. Patients need the option of starting at their medical office and going to the behavioral health office – or vice versa.
- Behavioral Health care is an important part of medication assisted treatment. Silo-ed treatment does not work.
- Culture of discomfort with addiction treatment

Medication Assisted Treatment

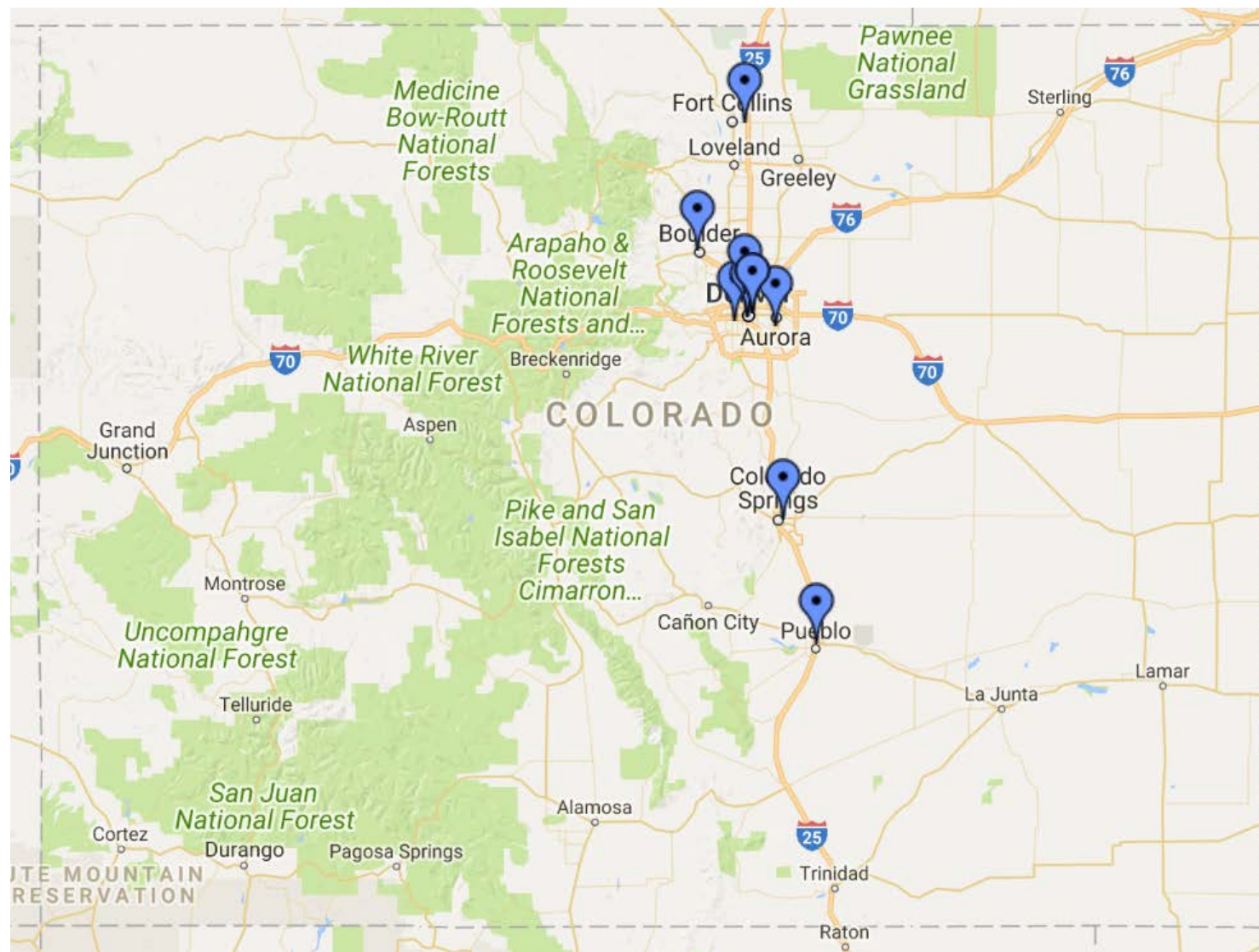
Medication-Assisted Treatment

Combines behavioral therapy and medications to treat substance use disorders, including OUD.

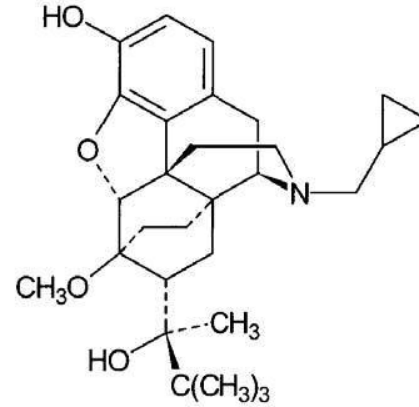
What is MAT for OUD?

	Brand Names	Pharmacology	Indicated Use
Buprenorphine	Belbuca, Buprenex, Butrans, Probuphine implant kit	Analgesic opioid, partial agonist	Opioid dependence, pain management
Naltrexone	ReVia, Vivitrol	Opioid antagonist: blocks opioid receptors	Alcohol dependence, opioid dependence (blockade of effects of exogenously administered opioids)
Methadone	Dolophine, Methadone HCL Intensol, Methadose, Methadose sugar-free	Analgesic opioid	Detox, pain management
Naloxone	Evzio, Narcan	Opioid antagonist	Initial tx of opioid associated life-threatening emergency. American Heart Association recommends, after initiation of CPR, use of intranasal or IM naloxone with a repeat dose as needed.

Methadone Treatment Centers



Buprenorphine



- Partial mu-opioid agonist
- Metabolism
 - In liver with N-dealkylation by cytochrome P450 3A4 enzyme system into an active metabolite norbuprenorphine
 - Norbuprenorphine undergoes further glucuronidation
- Elimination
 - Excreted in feces (70%) and urine (30%)
 - Mean elimination half-life = 37 hours
- Commercial screening urine drug test for parent compound and metabolite
- Does NOT show as opiate positive on standard drug screen

Buprenorphine Efficacy

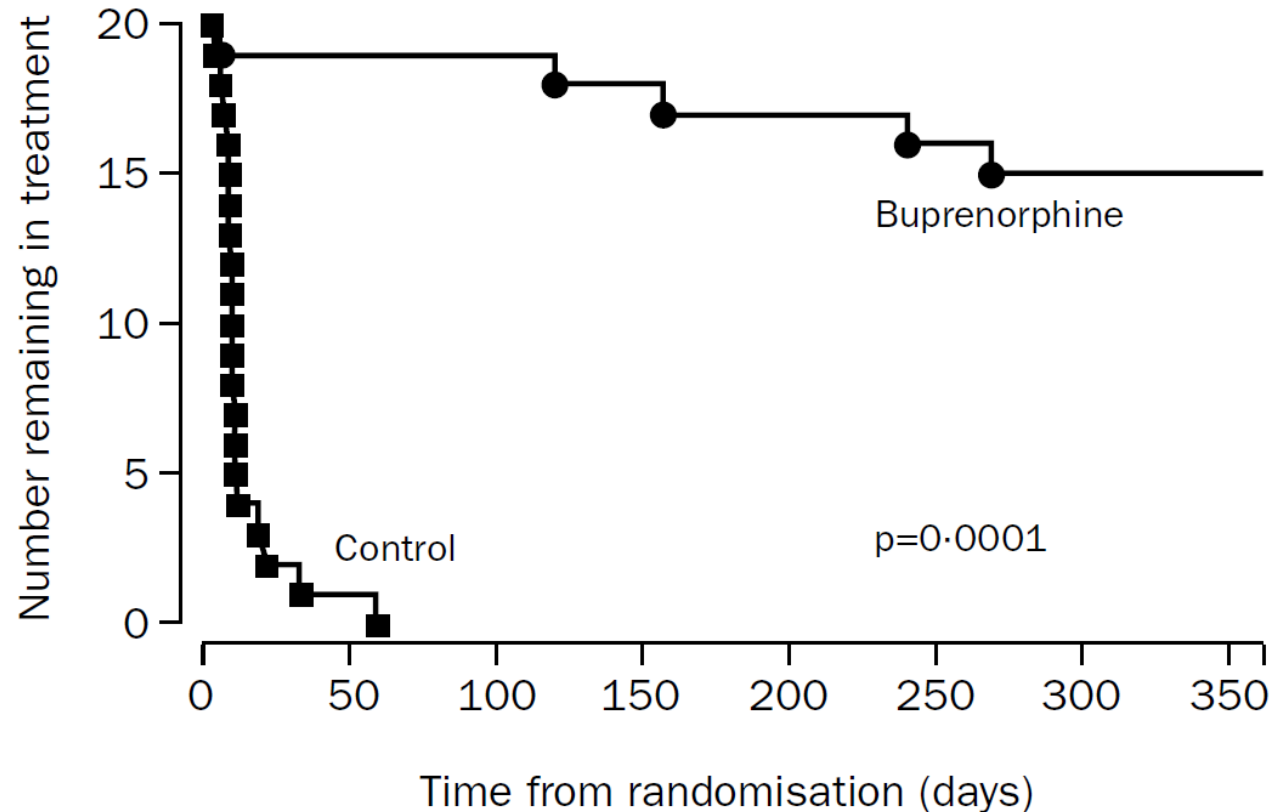
- More effective than placebo
- Equally effective to methadone on primary outcomes of:
 - Abstinence from illicit opioid use
 - Retention in treatment
 - Decreased opioid craving

Why use medications to help treat OUD?

Higher treatment efficacy than medication-free treatment!

- 80-90% relapse without medication
- Increased treatment retention
- 80% decrease in drug use, crime
- 70% decrease in death from any cause

Why use medications to help treat OUD? Compare Buprenorphine Maintenance to the Taper Method (Heroin Use Disorder)



Results

Completion of 52 week trial:

- Taper method = 0%
- Bup maintenance = 75%

Mortality:

- Taper method = 20%

Kakko J et al. *Lancet*. 2003

How is treatment chosen?

Is the patient open to taking medication to assist with treatment?

Does the patient understand efficacy, requirement/costs, side effects, and risk of each medication?

What is the patient's preference among the choices?

What is the patient's past experience with treatment?

Drug Scheduling Guide United States

Schedule I Most potential for abuse and dependence
No medicinal qualities
Heroin, LSD, Marijuana Ecstasy, Peyote

Schedule II High potential for abuse and dependence
Some medicinal qualities
Vicodin, Cocaine, Meth, OxyContin, Adderall

Schedule III Moderate potential for abuse/dependence
Acceptable medicinal qualities
Doctor's prescription required
Tylenol with Codeine, Ketamine, Steroids, Testosterone

Schedule IV Low potential for abuse and dependence
Acceptable medicinal qualities
Prescription required - fewer refill regulations
Xanax, Darvon, Valium, Ativan, Ambien, Tramadol

Schedule V Lowest potential for abuse/dependence
Acceptable medicinal qualities
Prescription required - fewest refill regulations
Robitussin AC, Lomotil, Motofen, Lyrica

Source: United States Drug Enforcement Agency

Buprenorphine: A Schedule III Drug

- Low physical dependence or high psychological dependence, if abused
- Most commonly prescribed for OUD
- Mostly used for prescription opioid and heroin abuse
- 68-81% of patients were 'very satisfied' with treatment

What are opioids?

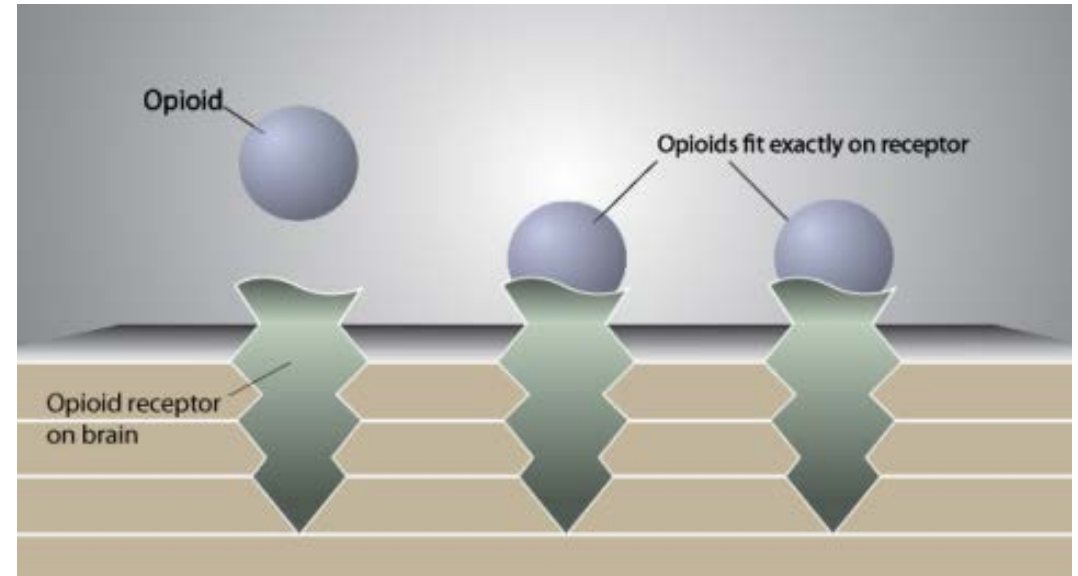


- Drugs that bind to the opioid receptors
 - Mu, kappa, and delta
- Can be naturally-occurring or derivatives of naturally-occurring compounds (“opiates”)
 - Morphine, codeine
 - Heroin: 10x more potent than morphine
- Can be synthetic (“opioids”)
 - Fentanyl: 100x more potent than morphine



Mu Receptor Mediates Opioid Effects

- Euphoria, sedation, relaxation, pain and anxiety relief, sleepiness
- Chemical opioids stimulate the receptor much more powerfully than the body's natural (endogenous) opioids



Agonist (here, the opioid) – activates the receptor

Antagonist – blocks the receptor

All chemical opioids may cause physical dependence and addiction.

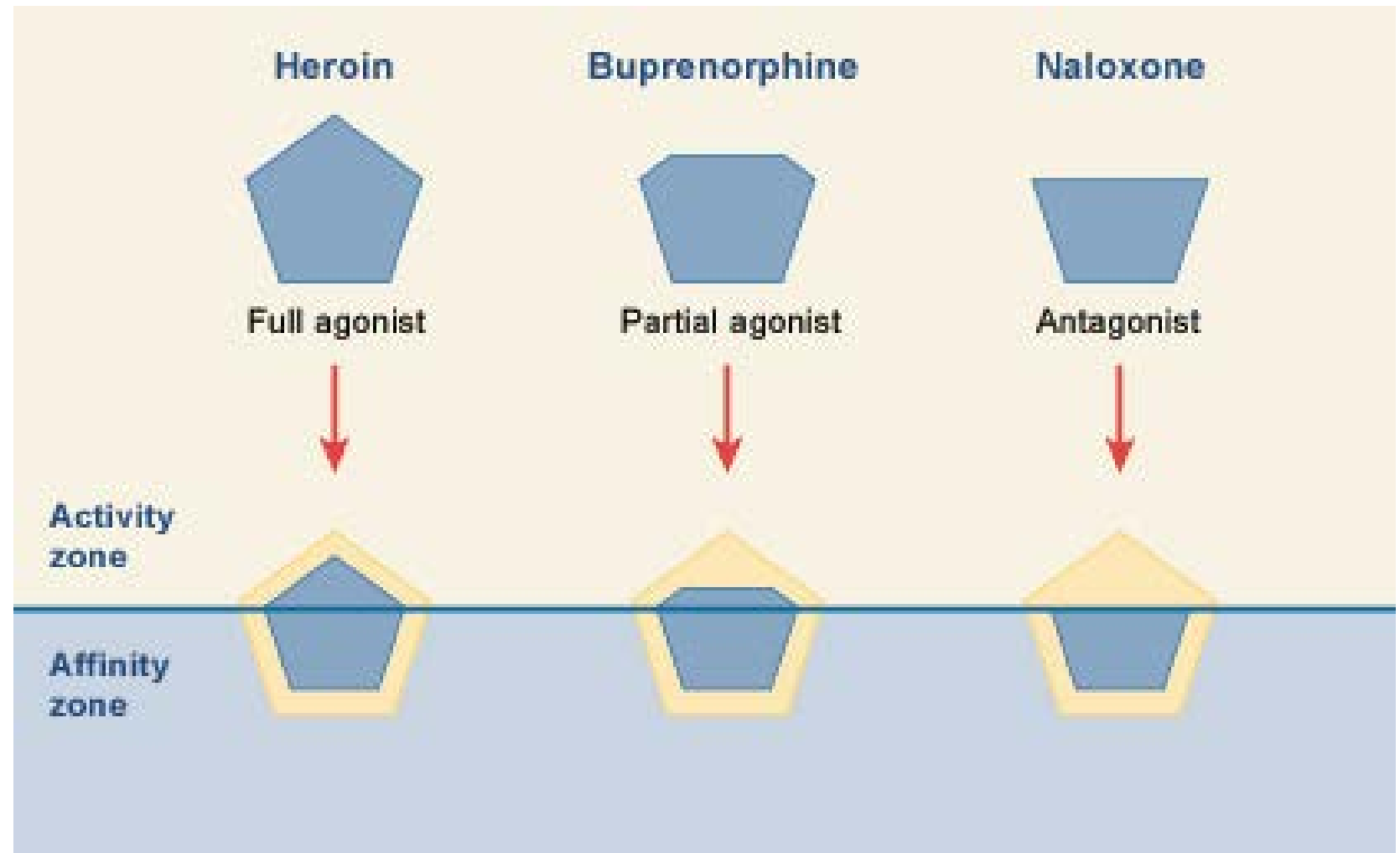
How does buprenorphine work?

Activity

What does it do?
Activate (agonist) vs.
block (antagonist)

Affinity

How tightly it binds
to the mu receptor.



Indications for Buprenorphine and Efficacy

Indicated Use

- Moderate to severe OUD (DSM-5)
- Relapse prevention for patients at risk (e.g., recently released from prison)

Efficacy

- Suppressing misuse
- Treatment programs and in a qualified practitioner's office
- Buprenorphine vs methadone
 - Equally effective
 - SIMILARLY suppresses cravings and prevents withdrawal
 - UNLIKE methadone, buprenorphine can be prescribed outside accredited programs (i.e., OTPs)
 - Can be office-based (with varying results depending on patient needs)

Important Components of Buprenorphine Treatment

- Long-term treatment: Establish rapport and collaborative relationship
- Patient engagement
- Accepting and supporting environment
- Treatment structure
- Number of DATA-Certified Physicians
 - SAMHSA tracks the number of DATA-certified physicians by state who are eligible to provide buprenorphine treatment for opioid dependency.
 - https://www.samhsa.gov/medication-assisted-treatment/physician-program-data/certified-physicians?field_bup_us_state_code_value=CO
 - Year: 2017 | State: Colorado
 - Certified Physicians with 30 Patients: 72 – and rising!
 - Certified Physicians with 100 Patients: 14 – and rising!

OUD Treatment in collaboration with Primary Care

- More accessible than specialty treatment
- Existing therapeutic relationship
- Addiction in context of patient's daily life
- Continuity can be assured
- Patients more likely to present to PCP for number of health reasons
- Receiving primary medical care is associated with decreased illicit drug use
- Improved outcomes among patients with substance use problems

Partner with primary care to build recovery pathways!

Federal Law



Two major federal laws that permit prescribing buprenorphine in the office-based setting and describe the requirements and limitations:

1. Drug Addiction Treatment Act (DATA 2000) – allows physicians to prescribe BUP w/ waiver in ambulatory setting – requires referral capacity (expand how this relates to BHPs specifically)
2. Comprehensive Addiction and Recovery Act of 2016 (CARA) – allows Nurse Practitioners and Physician Assistants to prescribe BUP with a waiver

Collaboration Opportunities For Behavioral Health Organizations

- Requirement to have the ability to refer to counseling and other support services
- Familiarity with local addiction professionals agencies, and other resources in order to refer patients to supportive services for psychosocial therapy
- Verification that counseling is potentially part of the practice plan

What opportunities do you
have to collaborate with
prescribing providers?

Module 1 Summary

- Buprenorphine is effective in the treatment of OUD.
- BH is a crucial component of MAT.
- A patient-centered approach is necessary. Keep patients fully engaged and empowered .
- Buprenorphine has low potential for abuse. It is effective and safe prescribing is important.

Mr. Patel

28 year old male, former construction worker. He has been unemployed for the past 3 years following a back injury. He was prescribed oxycontin and oxycodone when he was placed on disability and has been using since. A few months ago his PCP discontinued his medications because he misused on multiple occasions and sought prescriptions from other providers. He began purchasing short-acting opioids from others and 3 months ago began smoking heroin. He has been using daily since and wants treatment. He heard there is a "drug to take if you are addicted to heroin".



Implementing Technology and Medication Assisted Treatment
and Team Training in Rural Colorado

Behavioral Health Provider Training

Module 2: Impact of Opioid Use Disorder

Implementing Technology and
Medication Assisted Treatment
and Team Training in Rural Colorado

Behavioral Health Provider Training



Module 2: Impact of Opioid Use Disorder

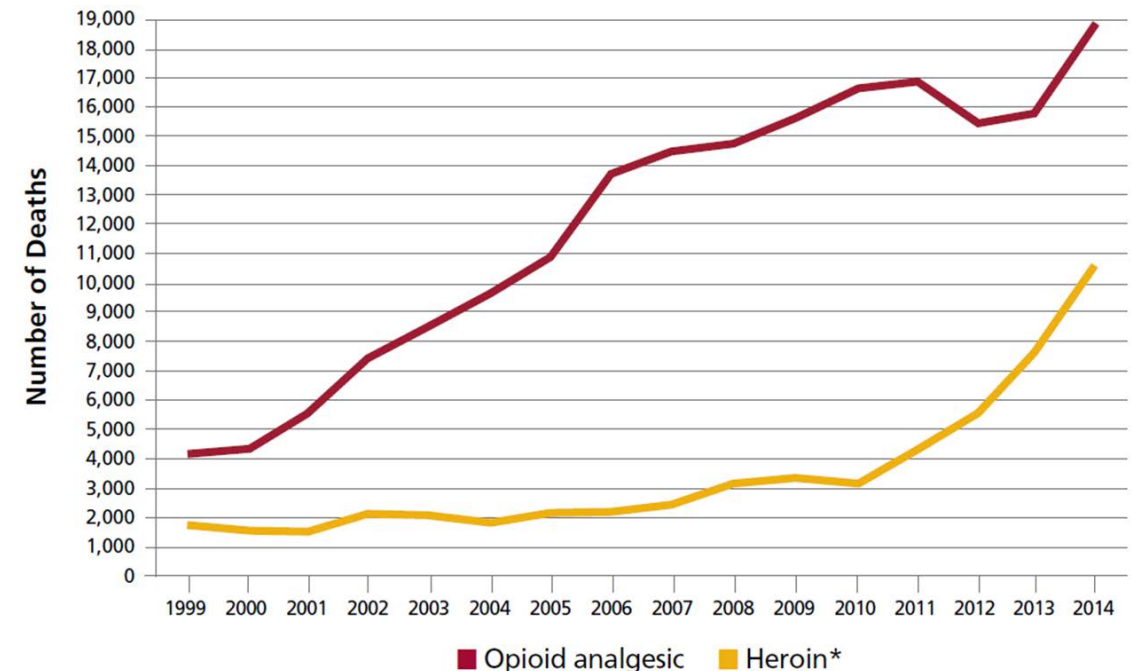
Who has OUDs?



A Major Problem in the U.S.

- Drug **overdose** deaths
- **Misuse of prescription** pain relievers, primarily opioids, is higher than that of heroin use.
- **Conversion** from prescription to illicit substances

U.S. Deaths from Opioids & Heroin: 1999-2014



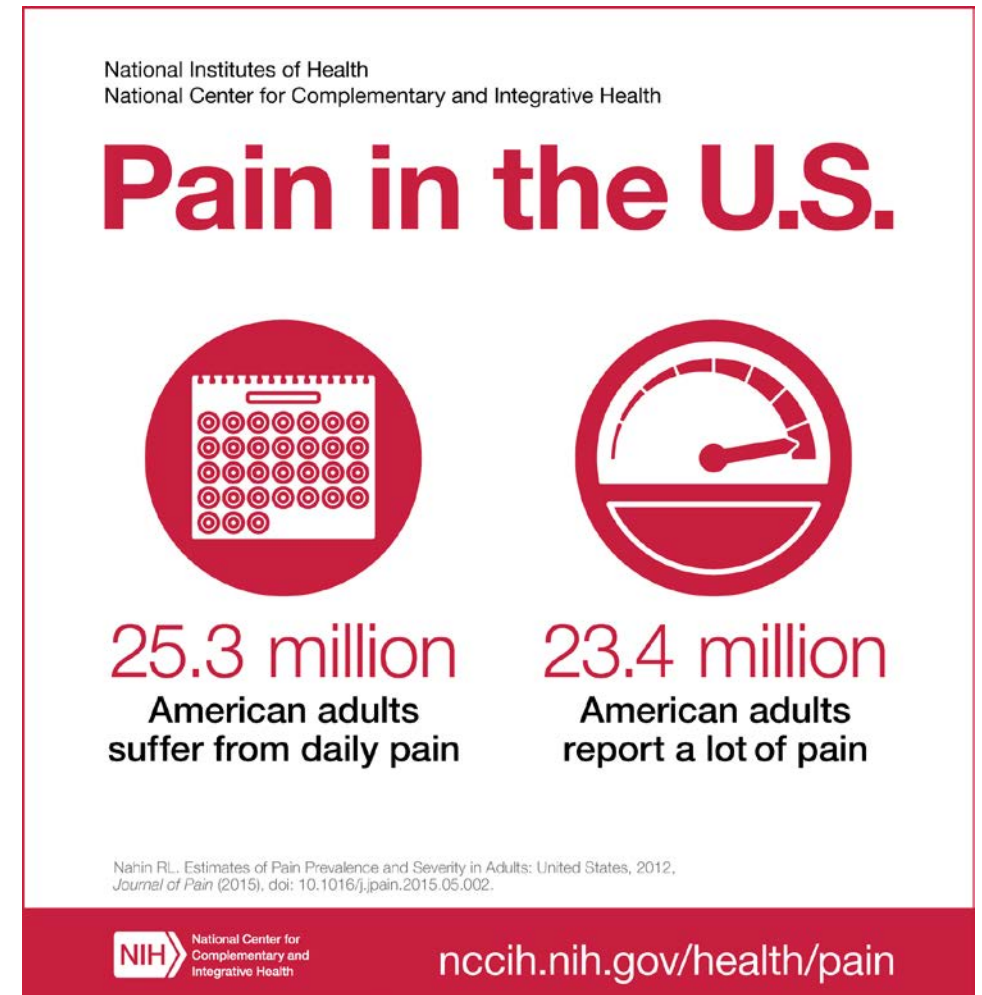
*Heroin includes opium.

1999-2013 Statistics: CDC/NCHS NVSS Multiple Cause of Death Files.

2014 Statistics: American Society of Addiction Medicine (ASAM). Opioid Addiction: 2016 Facts & Figures.

A Major Problem in the U.S.

- Over 289 million prescriptions for opioids per year.
- High rate of chronic pain for which opioids are prescribed contributes to the epidemic, including the large supply diverted for misuse.
- Pain in the U.S.
 - 11.2% with chronic pain (daily for past 3 mo)
 - 10.3% with a lot of pain
 - 6.4% with severe pain.



Misuse Defined

Using prescription opioids in any way other than as prescribed.

- Person who takes a Percocet every 2 hours instead of every 4 hours
- Person who obtains medications illegally on the street or by stealing pills.



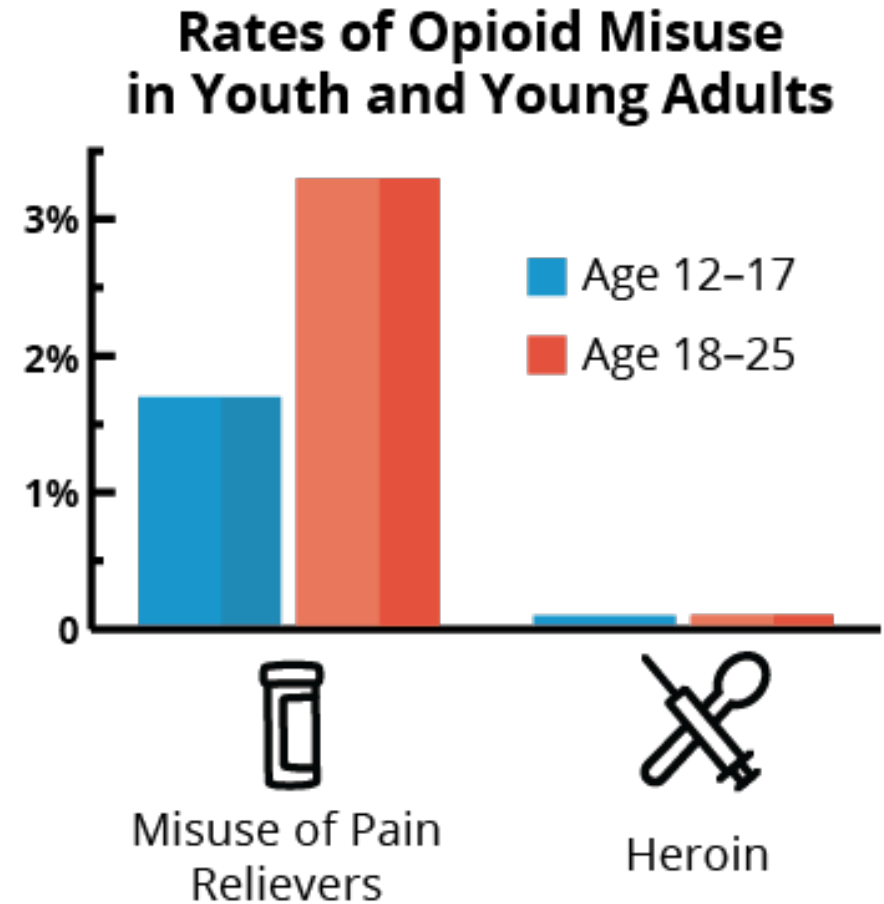
Prevalence of Opioid Pain Reliever Misuse

- 12.5 million people age 12 or older (7.1%) misused pain relievers in 2015.
- 62.6% misuse pain relievers for pain relief without medical supervision.
 - 3.4% misuse for reasons other than pain relief.
- Opioid misuse more common than OUD.
- In Colorado (2013-2014)
 - 216,000 (4%) self-reported non-medical use in past year
 - Use is highest for ages 12-25 (5.5%-6.0% of population)

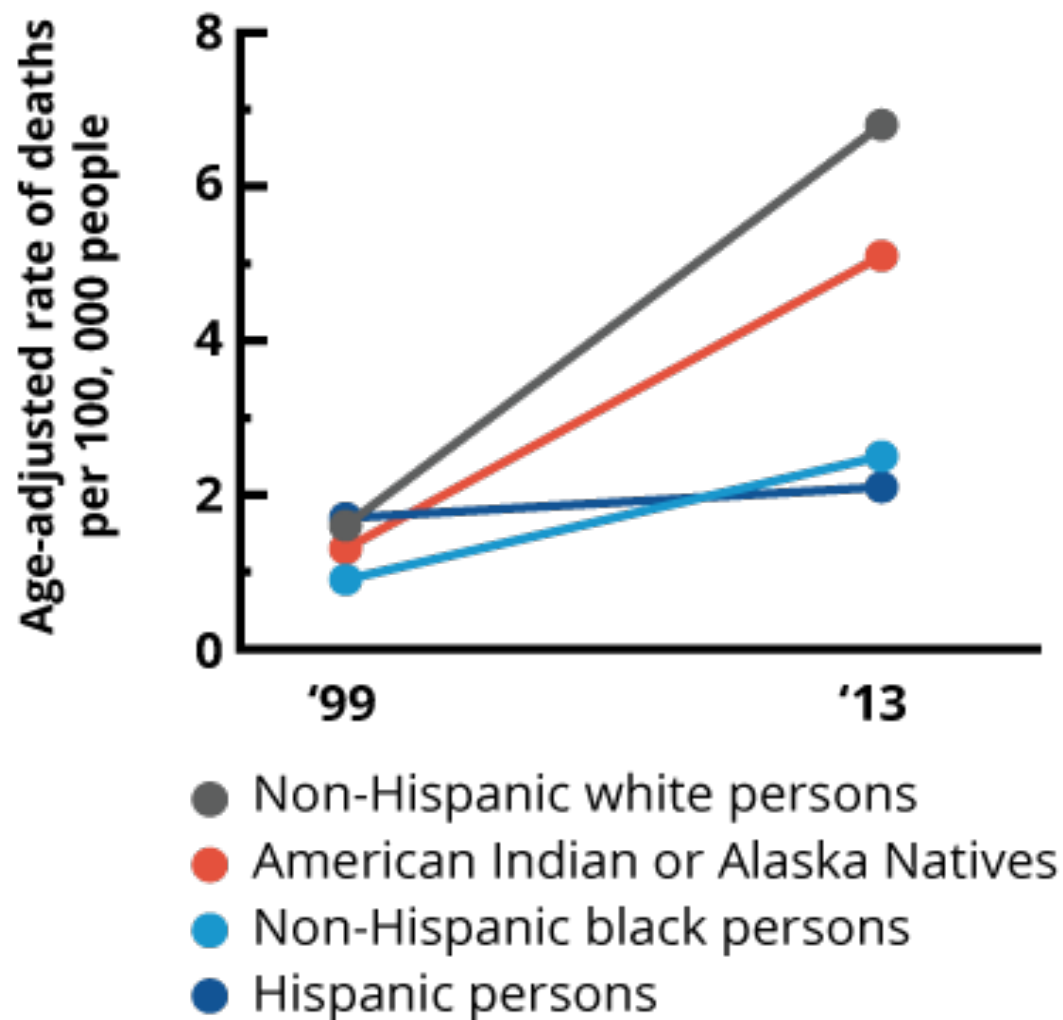


OUD – by Age

- Current use by youth age 12 to 17
 - Misuse of opioid pain medicine: 1.7%
 - Heroin: 0.1%
- Current use by young adults aged 18 to 25
 - Misuse of opioid pain medicine : 3.3%
 - Heroin: 0.1%



Deaths in the US from Prescription Opioid Overdoses



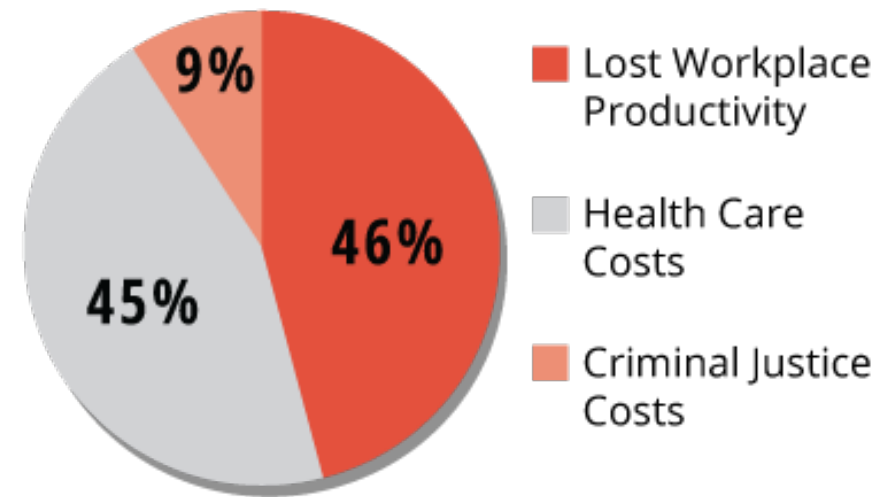
Diversion and Cost to Society

Opioids common among diverted drugs seized by DEA

- Largely oxycodone and hydrocodone
- Methadone and buprenorphine 14% of drugs seized.

Total U.S. society cost > \$55 billion

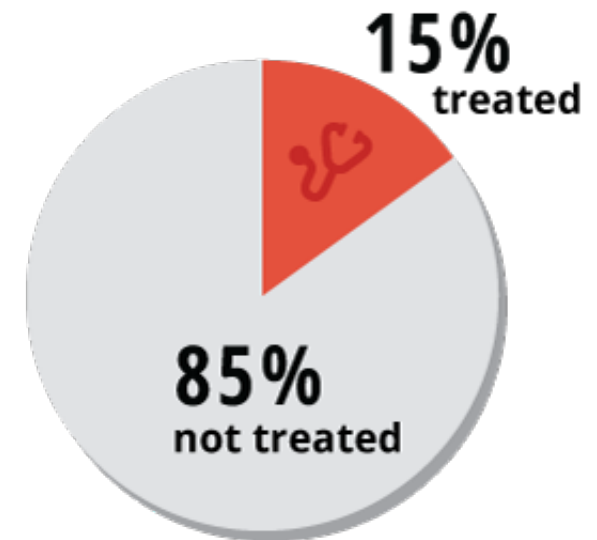
Societal Costs of Prescription Opioid Abuse in the US



Prevalence of Buprenorphine Treatment

- More than twice as many people maintained on buprenorphine as methadone
 - 9.3 million buprenorphine prescriptions filled in the U.S. in 2012
- But many are still not getting treatment.
 - Only 1380 opioid treatment programs in the U.S.

**Opioid Use Disorder
Treatment in the US**



© Clinical Tools, Inc Source: Egan et al., 2010

Prevalence of Buprenorphine Treatment

- 29,000 physicians certified to prescribed buprenorphine for treatment of OUD
 - Only about 50% have prescribed the medication!
- Physician assistants and nurse practitioners are now able to train to prescribe buprenorphine (CARA).
- SAMHSA Buprenorphine Treatment Practitioner Locator: approximately 300 IN Colorado as of Jan. 2017



Health Impact of OUD

Overdose Emergencies

- Opioid overdose rates are high: prescription opioids > heroin.
- ED visits due to prescription drug abuse increased by 132% from 2004 to 2011.
- 10,574 heroin overdoses in 2014 (fatal and non-fatal)
- Opioid overdose can cause respiratory depression, leading to cardiac arrest.



© Clinical Tools, Inc



ER visits for heroin



ER visits for Rx pain relievers

Source: SAMHSA, 2013

Infection Risk of Heroin Abuse

	Prevalence	Impact of Buprenorphine Treatment
HIV/AIDS	<ul style="list-style-type: none"> • 1/3 of 1 million cases linked with injection drug use • 2.8% of injection drug users are HIV+ • Higher incidence of HIV may explain high incidence of renal disease and failure in heroin users 	<ul style="list-style-type: none"> • Treatment lowers risk of contracting HIV • Less likely to engage in risky behaviors (e.g., sharing needles, multiple sexual partners)
Hepatitis C (HCV)	<ul style="list-style-type: none"> • Up to 90% of injection drug users have been infected at one time with HCV. • 85% will develop chronic form of disease • Ever-infected prevalence rates among non-injecting drug users are as low as 6% 	<ul style="list-style-type: none"> • Among control measures that can improve outcome for patients with HCV and those at risk for contracting it

Neonatal Abstinence Syndrome (NAS)

- Infants born to mothers dependent on opioids have NAS.
 - Withdrawal symptoms: dysfunction of autonomic nervous system, GI system, and respiratory system.
- Half of infants born to opioid-dependent mothers will have NAS.
- Precise figures on prevalence not available due to other factors (e.g., poor maternal health and malnutrition).

Module 2 Summary

- The opioid epidemic has become a major public health concern in the U.S.
- High rates of chronic pain for which opioids have been prescribed has contributed to the opioid epidemic.
- Rates of misuse of prescription opioids are high.
- OUD affects all races, genders, and socioeconomic statuses.
- Buprenorphine for OUD is prescribed widely, but many barriers to treatment continue to be in place.
- Behavioral Health providers can help by becoming proficient in treatments to aid with pain management.

Ms. Jones

35 year old female presenting for an annual physical. She vaguely describes using opioids “sometimes”. Upon further evaluation, she endorses symptoms of anxiety and depression. She acknowledges that for the past year she has been taking opioids prescribed to her partner when she is feeling especially anxious and depressed. On occasion, she also takes Xanax, which is prescribed to her mother. She admits that neither her partner or her mother know that she takes their medication.