Opioid Addiction in Colorado

Jennifer Miller MSN, RN, CNML, NEA-BC, CARN

We extend the healing ministry of Christ by caring for those who are ill and by nurturing the health of the people in our communities.

centura

History of the Opioid Crisis

1990s

- 1995 Purdue Pharma-approval for Oxycotin
- 25% receiving LT opioid therapy struggle with addiction
- Overdose deaths related to Rx opioids

Next ten years – huge quantities of Rx

- Doctor and pharmacy shopping, black market
- Overprescribing (flooded market), Rx tripled from 1991-2011
- Increased recognition of pain (the 5th vital sign per JCAHO and CAHPS)
- Patient demand (zero pain goal)
- Providers lack of training in addiction, opioid pharmacology, treatment
- 2007-Purdue $634M fine for lying about addictiveness

2010 – rapid rise in overdose deaths related to heroin

- Providers discouraged from Rx, so increase in heroin
- Chronic pain/addiction to pain pills

2013 – rise in synthetic opioids (fentanyl)

- From China via Mexico
- 50x more potent than morphine

2017 – HHS – public health emergency

- 191 million opioid Rx
- 2016 - >11.5 million report misuse of opioid Rx

Click to insert footnote/source

RISE IN OPIOID OVERDOSE DEATHS IN AMERICA

MORE THAN

564,000

PEOPLE DIED FROM AN OPIOID OVERDOSE

(1999-2020)

A Multi-Layered Problem in Three Distinct Waves



1990s

mark a rise in prescription opioid overdose deaths

Rx OPIOIDS

Includes natural, semi-synthetic, and methadone and can be prescribed by doctors



2010

marks a rise in heroin overdose deaths

HEROIN

An illegal opioid



2013

marks a rise in synthetic opioid overdose deaths

SYNTHETIC OPIOIDS

Includes illicitly made fentanyl

www.cdc.gov

Learn more about the evolving opioid overdose crisis: **www.cdc.gov/drugoverdose**

Statistics – Addiction United States

- Drug overdose deaths up 30% year-over-year
- In 2020, over 92,000 people died from drug overdoses in the US
  - That is 10 overdose deaths during this presentation (187 opioid deaths/day)
  - Opioids were involved in 75% of those deaths
- From 2019 to 2020, opioid-related death rate increased by 38%
  - Fentanyl-related deaths increased by 56%
- More than 4 times as many people died from drug overdose than from homicide in January 2021
- Death rate increased 256% between 2000-2019

 Click to insert footnote/source

Statistics – Opioid Addiction United States

- 3.8% of American adults abuse opioids each year (>10 million people)
- Opioids were involved in more than 68,000 deaths in 2020, which was 8.5 times higher than 1999
- Rx –no effect on Rx overdoses, Rx abuse $79B annual cost
- Overdose deaths involving opioids increased 519% from 1999 to 2019
- 0.7% of hospital births are cases of neonatal opioid withdrawal (NOW) syndrome
- 2.4 million cases of hepatitis C are attributed to intravenous drug use (IDU)
- 1 million cases of HIV/AIDS are attributed to IDU
- Male, Native American, African American
- Some college-associates degree
- Teens (decrease in use)
- With RX, 33% more likely to misuse after HS

Click to insert footnote/source

Statistics – Addiction Colorado

Colorado in 2020, 1,512 died from drug overdoses

- Fentanyl accounts for 50% of opioid overdoses

2.8% of all deaths are from drug overdose

700/year opioid overdose death

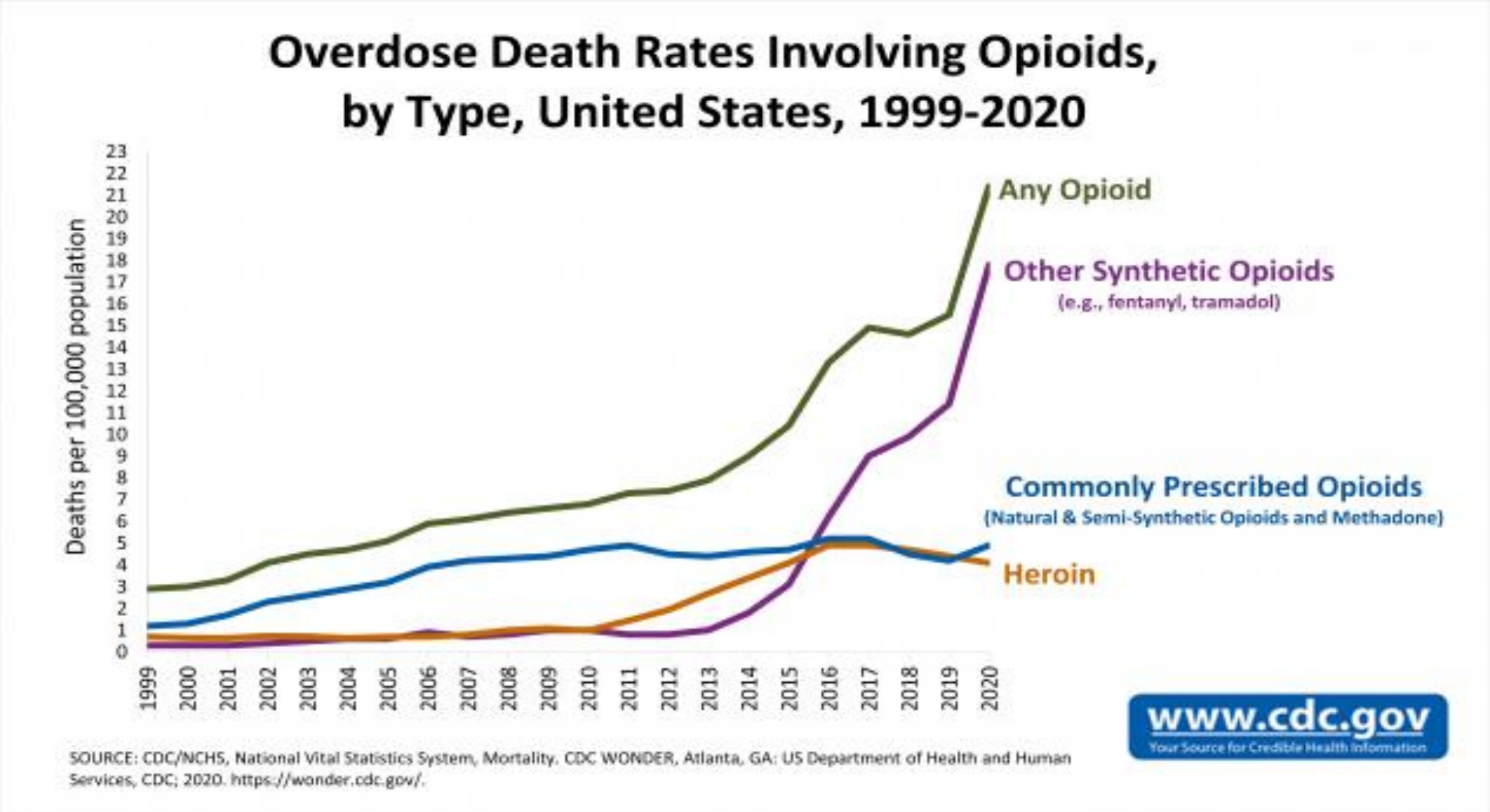
Between 2000-2016, over 5000 Coloradans died from opioid overdose

18/100,000, 9.5/100,000 opioid overdose

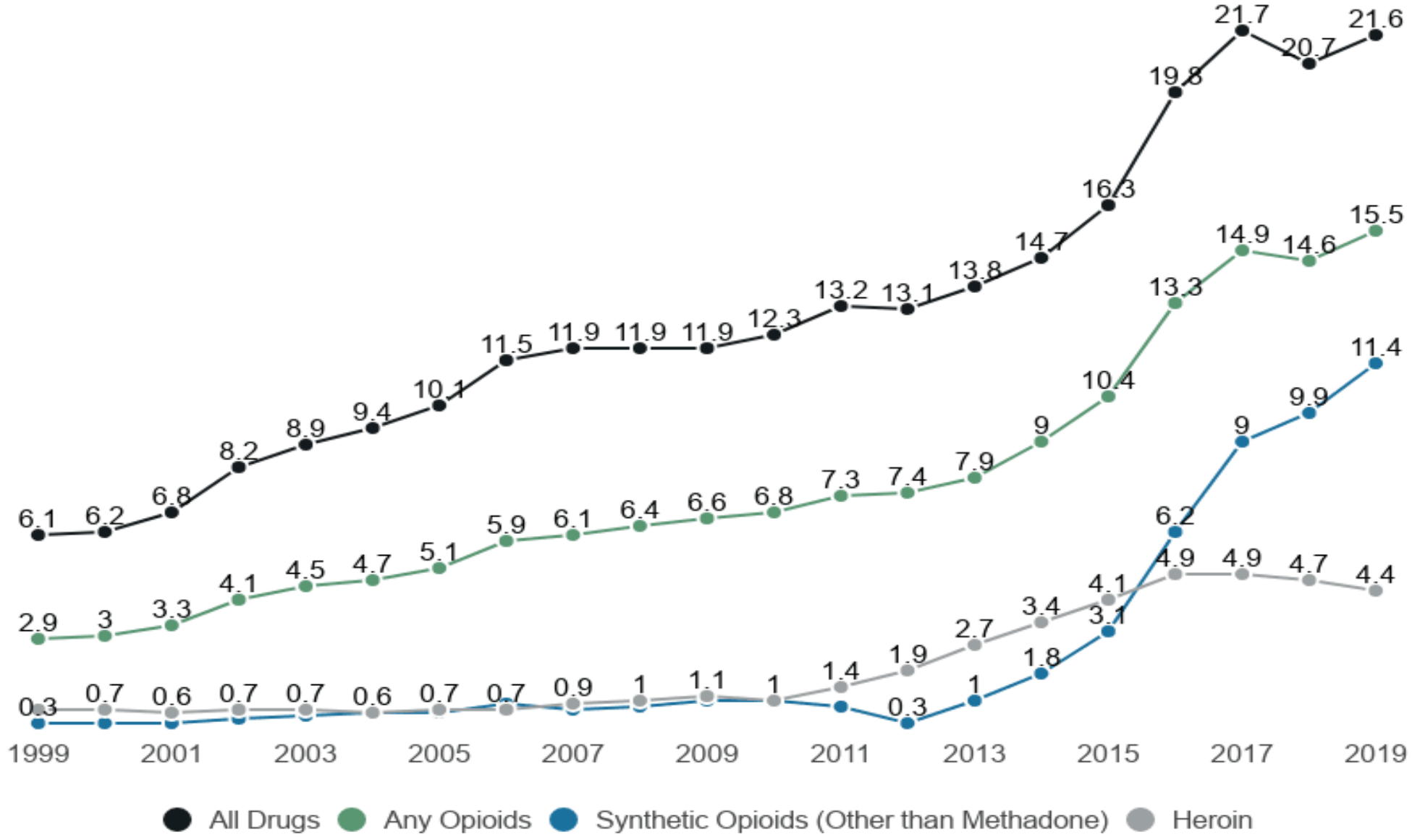
13.04% below national average (NM 46% higher)

34.9% below national average (opioid deaths) (NM 14.4% higher)

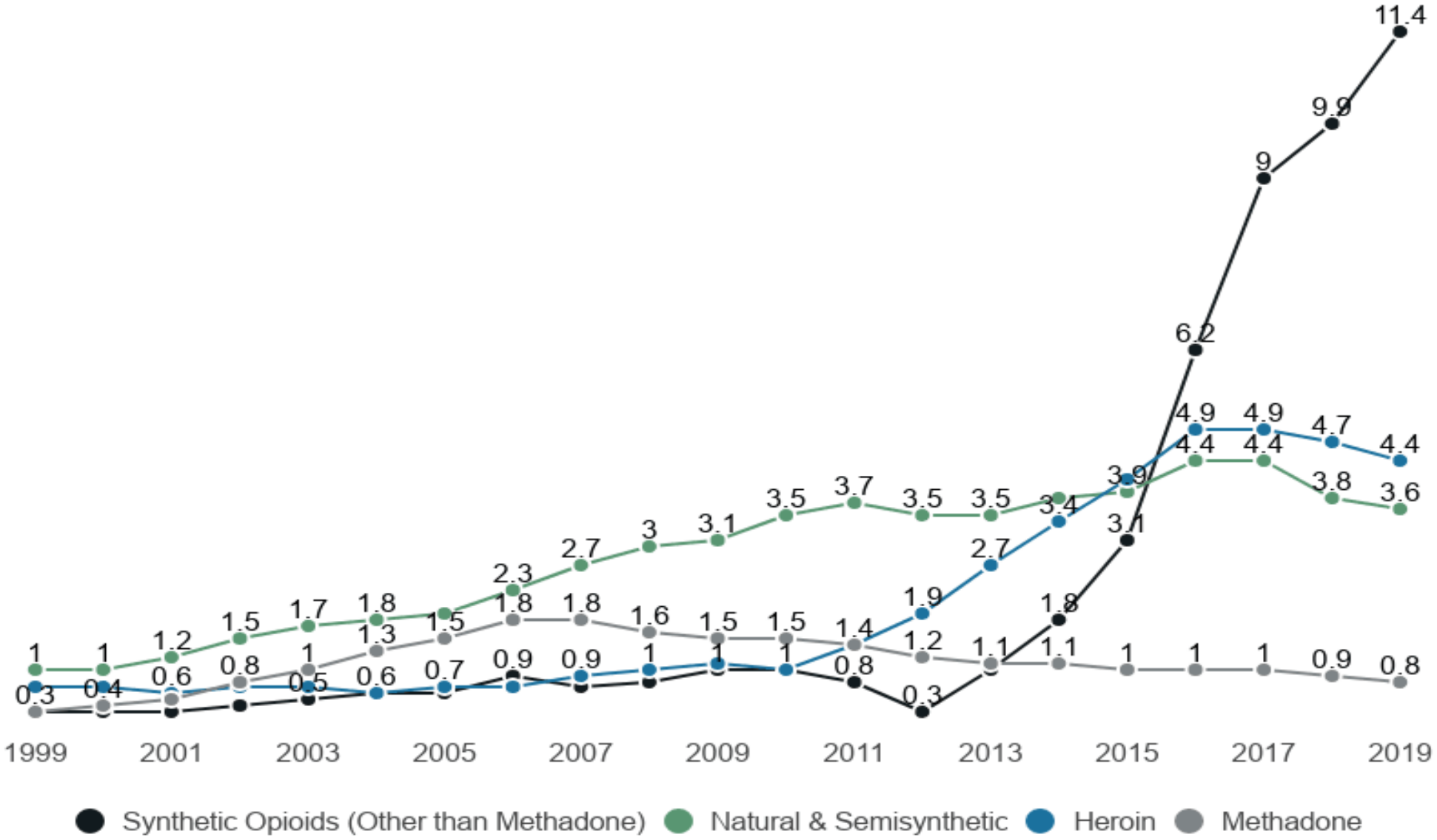
Drug overdoses have killed almost a million people since 1999.



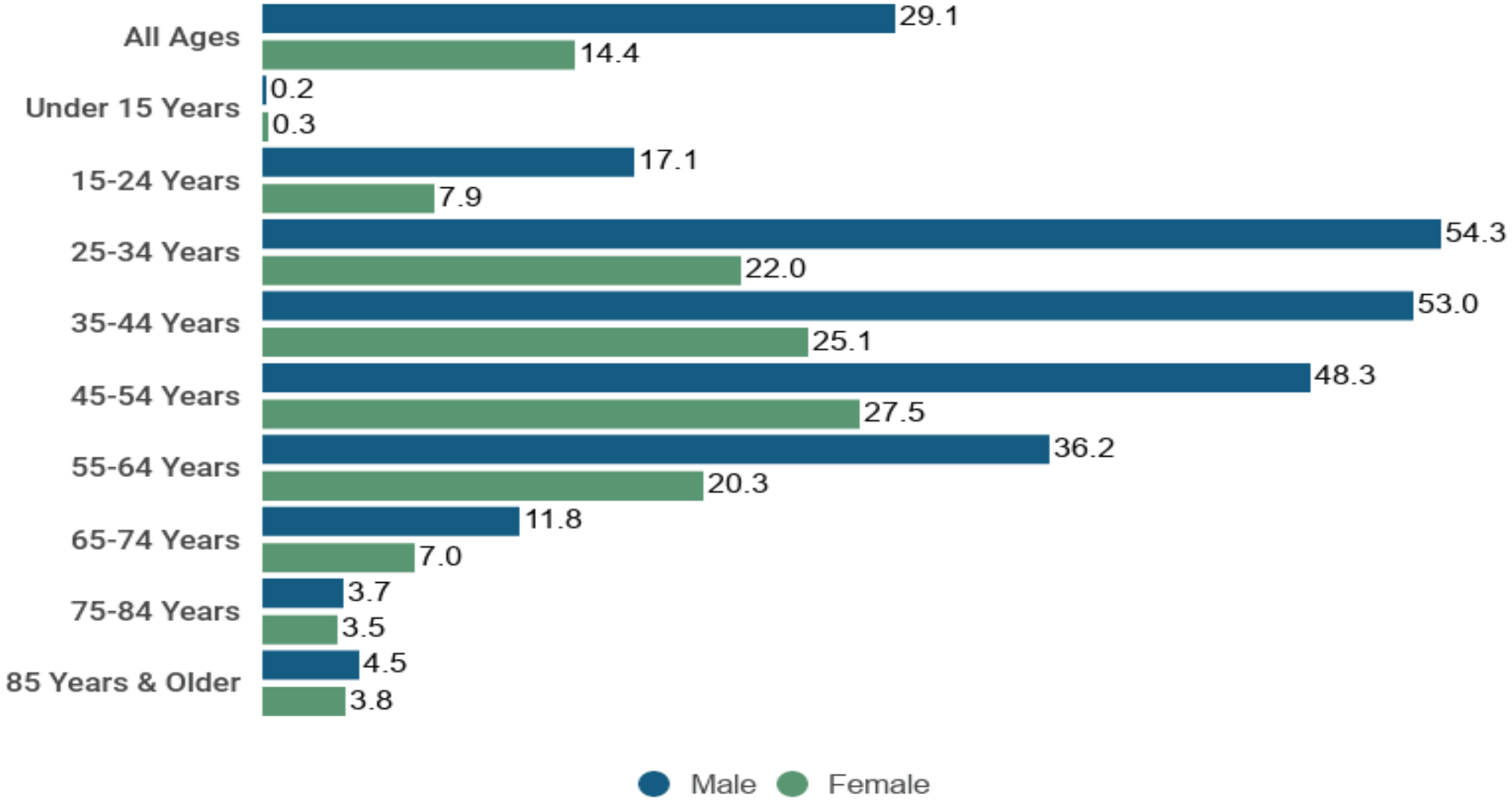
Historical Trends in Opioid Overdose Deaths per 100,000 Residents



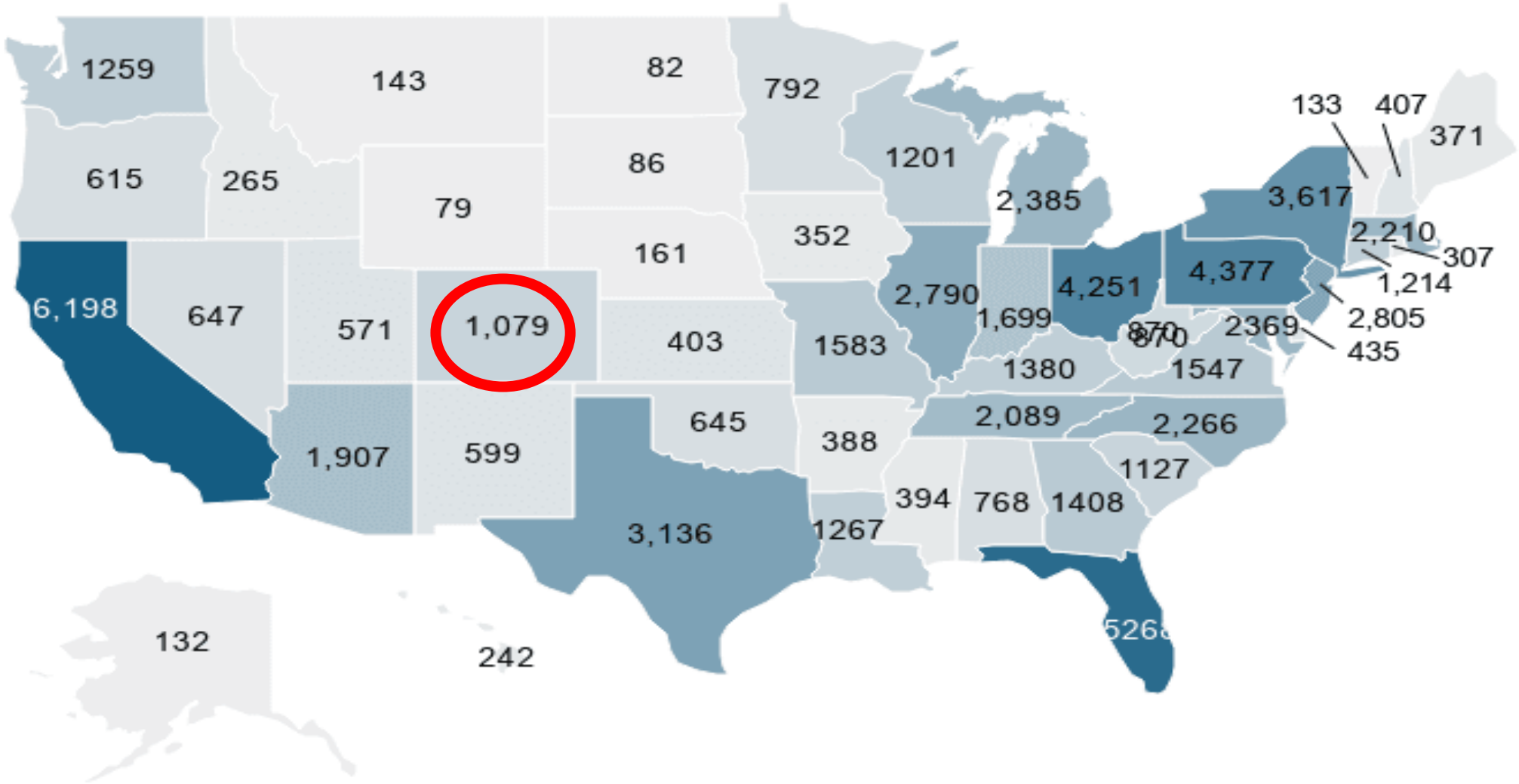
Comparative Opioid Overdose Deaths per 100,000 Residents



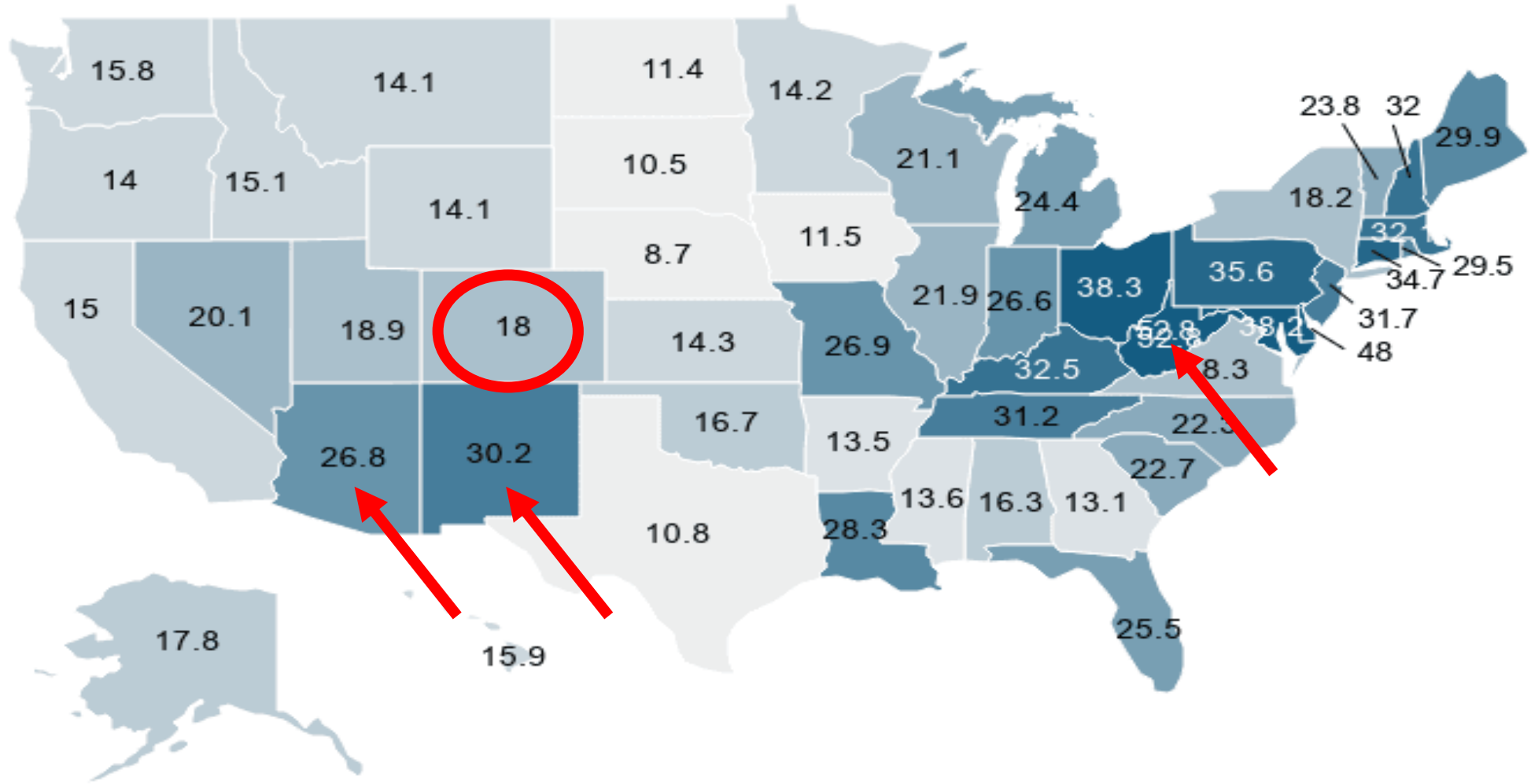
Drug Overdose Deaths Among Age Groups per 100,000 Residents



Total Annual Overdose Deaths by State



Overdose Deaths per 100,000 Residents



What is an opioid?









- Natural opioids (morphine, codeine) are substances that are derived from the opium poppy, called opiates
- Endogenous opioids (endorphins) are produced by the human body during exercise

- Semi-synthetic opioids (oxycontin, hydrocodone, oxymorphone) are produced in the laboratory from natural opioids
- Synthetic opioids (fentanyl, tramadol) are manufactured 100% in the lab

Heroin

- Illegal, cheap, highly addictive
- Use concurrently with other substances (ETOH, meth, benzos)
- IV-related risk
  - HIV
  - Hepatitis B and C
  - Infections
    - Abscesses
    - Endocarditis
    - Sepsis
- Fentanyl based market





FENTANYL

- Cheap alternative to other opioids
- Used as an adulterant due to cost
- 25-50 times more potent than heroin
- Now present in nation's COCAINE supply
- Likely due to accidental cross-contamination and not a cost/supply issue
- Fentanyl was found in 7% of all cocaine seized in New England in 2017
- Fentanyl deaths tripled in Arizona from 2015 to 2017
- Fentanyl bust-254 pounds through legal entry, enough to kill millions



Opioid Addiction

According to the American Society of Addiction Medicine, ***addiction is a primary, chronic disease of brain reward, motivation, memory, and related circuitry.***

Like other chronic diseases, addiction often involves cycles of relapse and remission.

This chronic illness has a biological basis and ***does not indicate a moral failing***

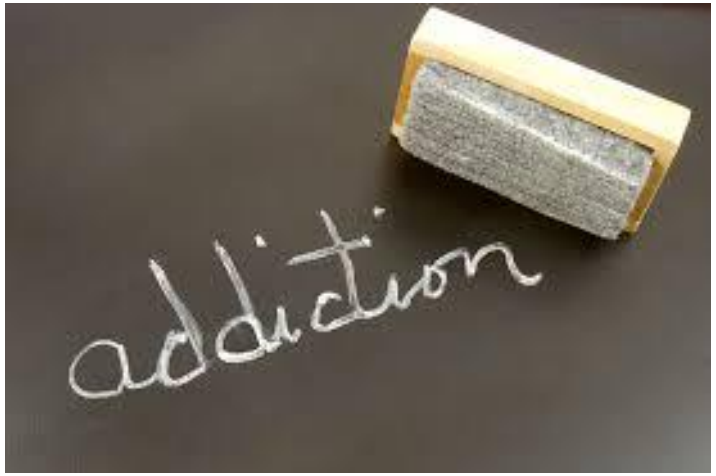
Click to insert footnote/source

OPIOID ADDICTION

Is physical dependence on and subjective need and craving for opioid drugs

Has similarities to other chronic medical disorders

In fact, is a ***chronic disease***





Who is at risk for Overdose?

- Completing mandatory opioid detoxification (rehab) or period of abstinence (and presumably with reduced opioid tolerance and high risk of relapse to opioid use)

- Recent release from incarceration and who have a history of opioid use disorder (and presumably have reduced opioid tolerance and high risk of relapse to opioid use)

- Certain medical conditions, including liver and kidney dysfunction

- Unsecured opioid medications in the household



WHO IS AT RISK?

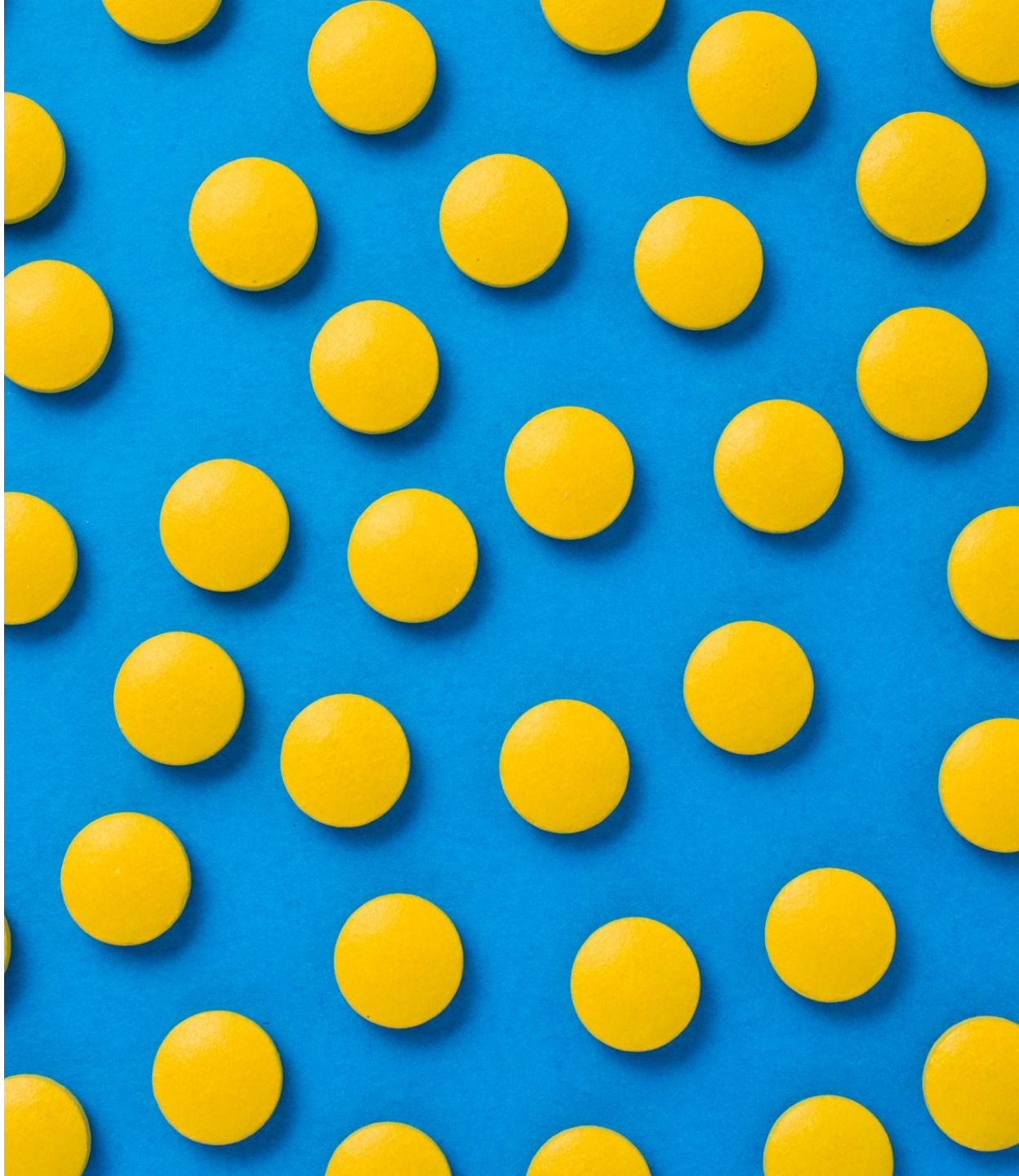
- Anyone who uses opioids for long-term management of cancer or non-cancer pain
- Elderly patients w/ changing Rxs
- Heroin/fentanyl IV users
- Receiving rotating opioid medication regimens
- Discharged from emergency medical care following opioid intoxication or poisoning
- legitimate medical need for analgesia, coupled with a suspected or confirmed substance use disorder, or non-medical use of prescription or illicit opioids

How does overdose occur?

- A variety of effects can occur after a person takes opioids, ranging from pleasure to nausea, vomiting, severe allergic reactions, and overdose, in which breathing and heartbeat slow or even stop.

- Opioid overdose can occur when a patient deliberately misuses a prescription opioid or an illicit drug such as heroin. It can also occur when a patient takes an opioid as directed, but the prescriber miscalculated the opioid dose or an error was made by the dispensing pharmacist or the patient misunderstood the directions for use.

- Also at risk are individuals who misuse opioids and combine them with sedative agents resulting in sedation and respiratory depression.



Overdose Mortality in Rural America



- Counties in the:
  - ***South Atlantic***
  - ***Mountain***
  - ***East North Central***
- more than twice the odds of high risk for opioid overdose mortality and lacking in capacity to deliver medications for opioid use disorder
- **WHY??**
  - Higher rates of unemployment
  - Lack of primary care providers/buprenorphine prescribers
  - Lack of methadone clinics
  - Older population
  - Isolation



Barriers to Treatment

- Fewer treatment facilities
- Distance to care
- Lack of providers
- Lack of community resources
- Poverty/Education Level
- Judicial System
- Stigma

Distance to Care

- Medicaid mileage reimbursement
- Childcare barriers
- Treatment facility hours
- Weather
- Income levels vs transportation costs
- Barrier to employment/school

Click to insert footnote/source

Distance to Care



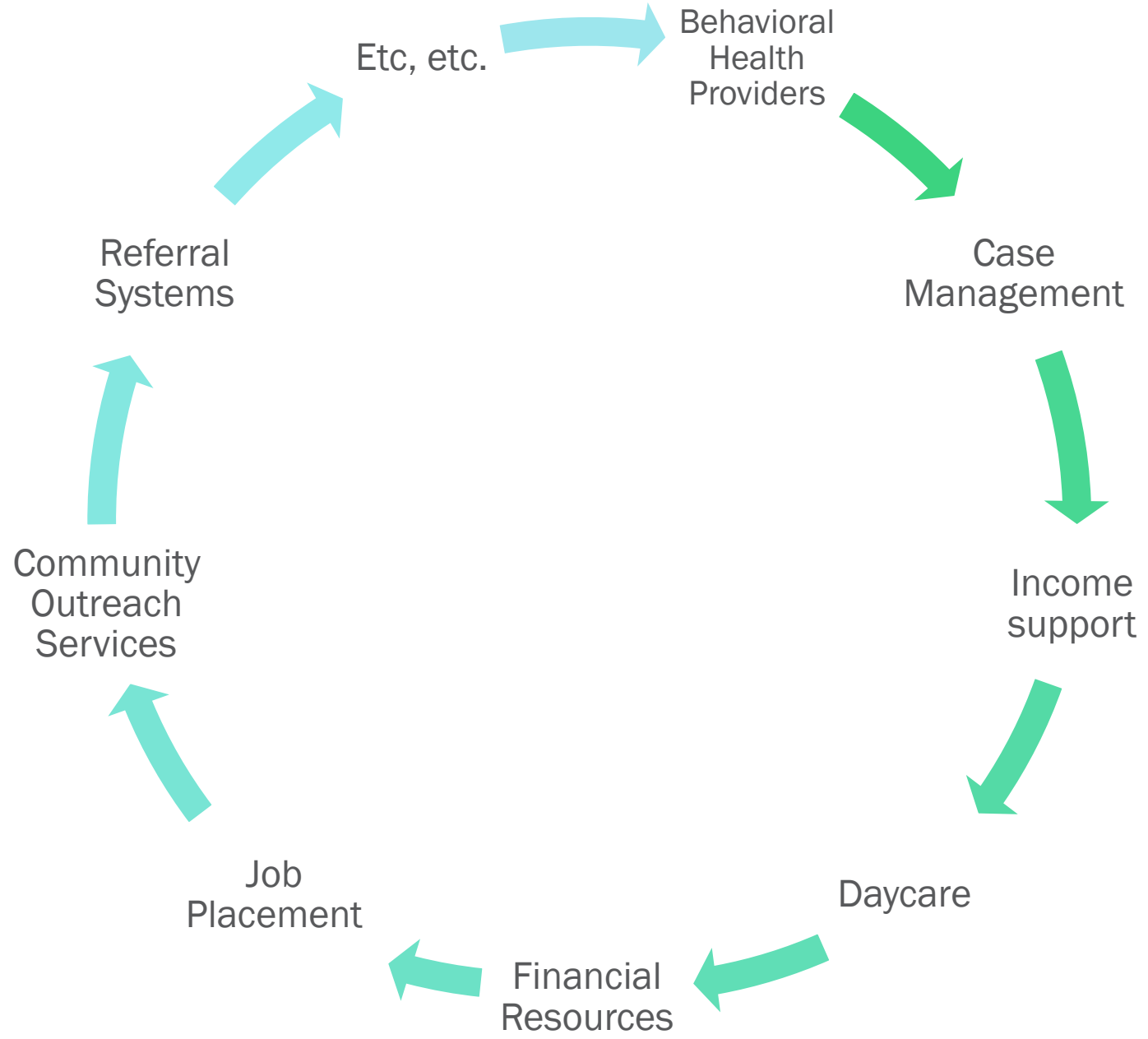
- **HEALTH OUTCOMES:**
  - Numerous studies-proximity to health care facility
    - Patient experience better health outcomes and can more easily access care.
- **STATE COST BURDEN:**
  - States spend millions/year transporting rural enrollees of the treatment programs to urban facilities



Lack of Providers

- 29.8% of rural Americans live in a county without a buprenorphine provider, compared with only 2.2% of urban Americans
- decreased availability of evidence-based care
- fewer tailored treatment options, case management, and specialized providers to address complex patients
- 13% of rural counties have no behavioral health providers
- NPs buprenorphine prescribing
  - number of all waivered providers per 100,000 residents has doubled in rural counties (challenge and benefit)

Lack of Community Resources



SYMPTOMS AND DIAGNOSIS OF OPIOID USE DISORDER

- According to the Diagnostic and Statistical Manual of Mental Disorders ***(DSM)-5***, the diagnosis of "opioid use disorder" can be applied to someone who uses opioid drugs and has :

- **at least two of the following symptoms within a 12 month period:**



SYMPTOMS OF OPIOID USE DISORDER

1. Taking more opioid drugs than intended

2. Wanting or trying to control opioid drug use without success

3. Spending a lot of time obtaining, taking, or recovering from the effects of opioid drugs

4. Cravings opioids

5. Failing to carry out important roles at home, work or school because of opioid use

SYMPTOMS OF OPIOID USE DISORDER

6. Continuing to use opioids, despite use of the drug causing relationship or social problems

7. Giving up or reducing other activities because of opioid use

8. Using opioids even when it is physically unsafe

9. Knowing that opioid use is causing a physical or psychological problem, but continuing to take the drug anyway

10. Tolerance for opioids

11. Withdrawal symptoms when opioids are not taken

Tolerance, Dependence and Addiction

Tolerance

Reduced response to opioid

Requires more for same effect

Dependence

Body adjusts normal functioning around regular opioid use

Withdrawal symptoms when stopped or reduced

Addiction

Opioid Use Disorder

After tolerance and dependence

Attempts to reduce or control fail

Social/work/relationship problems

SIGNS AND SYMPTOMS OF OPIOID USE DISORDER

Physical Symptoms

- Improved alertness
- Increased sensitivity to sensory stimuli
- Constricted blood vessels
- Increased heart rate
- High blood pressure
- Increased energy
- Decreased appetite
- Increased sexual arousal
- Physical agitation
- Difficulty sleeping
- Over arousal and hyper-vigilance

SIGNS AND SYMPTOMS OF OPIOID USE DISORDER

Mood/Psychological symptoms

- Increased general anxiety
- Anxiety attacks
- Euphoria
- Psychosis



- Improved self-esteem
- Depression
- Irritability
- Lowered motivation

SIGNS AND SYMPTOMS OF OPIOID USE DISORDER

Behavioral symptoms

- Opioids used for longer or at a greater amount than intended
- Unsuccessful attempts to decrease the amount taken
- Large amount of time spent obtaining, using, or recovering from the drug
- Abandonment of important activities

WHY IS ADDICTION SO DIFFICULT TO TREAT?



Opioid tolerance, dependence, and addiction are all manifestations of brain changes resulting from chronic opioid abuse. The opioid abuser's struggle for recovery is in great part a struggle to overcome the effects of these changes.

Why do some people become addicted to drugs while others don't?

Biology

The genes that people are born with account for about half of a person's risk for addiction. Gender, ethnicity, and the presence of other mental disorders may also influence risk for drug use and addiction.



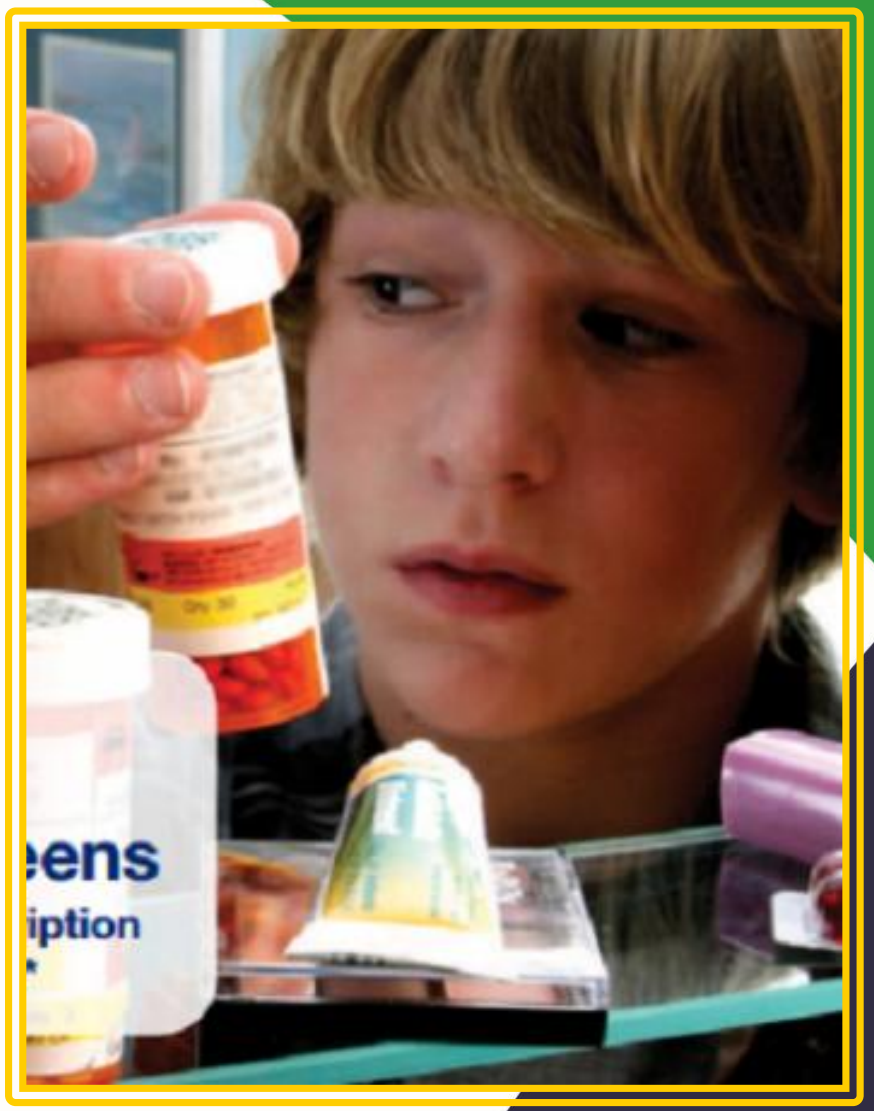
Environment

Environment includes many different influences, from family and friends to economic status and quality of life. Factors such as peer pressure, physical and sexual abuse, early exposure to drugs, stress, and parental guidance can greatly affect a person's likelihood of drug use and addiction.



Development

Genetic and environmental factors interact with critical developmental stages in a person's life to affect addiction risk. Although taking drugs at any age can lead to addiction, the earlier that drug use begins, the more likely it will progress to addiction. This is particularly problematic for teens. Because areas in their brains that control decision-making, judgment, and self-control are still developing, teens may be especially prone to risky behaviors, including trying drugs.

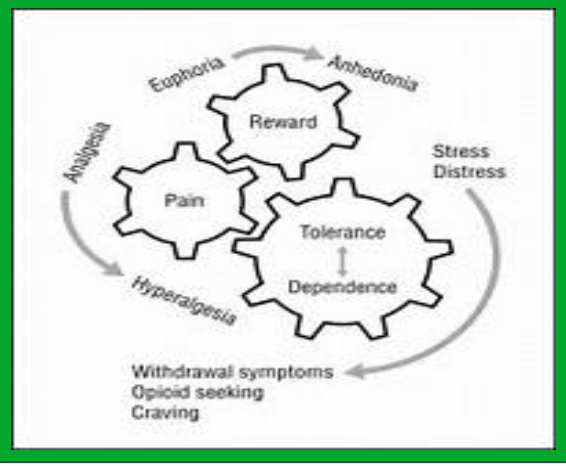


Side effects of opioid abuse





- Fatigue
- Constipation
- Breathlessness
- A sense of elation
- Bronchospasm
- Nausea
- Confusion
- Needle marks
- Depressed respiration and difficulty breathing
- Death (often due to use of more than one substance)
- Chest pain
- Physical/psychological dependence
- Abscesses and skin infections



Withdrawal effects of opioid use



- Physical and psychological cravings
- Nausea
- Stomach pain
- Cold sweat
- Chills
- Vomiting
- Diarrhea
- Agitation
- Irritability
- Muscle tension
- Tremors
- Trouble sleeping
- Enlarged pupils
- Muscles/bone pain
- Piloerection
- Lacrimation
- Rhinorrhea
- Yawning
- Anxiety



Signs of overdose

- blue lips and fingernails
- bradypnea
- cold and clammy skin
- coma
- shallow breathing
- extreme drowsiness
- fainting
- fatigue
- Pinpoint pupils
- vomiting
- weak pulse
- confusion
- apnea

Colorado Response to the Opioid Crisis

Prevention Laws

Laws to prevent initial use and misuse of prescription and other drugs

- Prescribing Limits
- State drug prescription identification laws
- Safe medication take-backs and disposals
- Prescription Drug Monitoring Programs (PDMP)

Treatment Laws

Breaking down barriers for access to and provision of effective treatment

- Provider training and workforce development
- Removing limitations on treatment benefits or expanding coverage
- Improved coordination and community partnerships

Harm Reduction Laws

Public health laws for individuals who are not in treatment of recovery

- Overdose reversal drugs
- Good Samaritan Laws
- Injection drug use and reducing negative outcomes

Colorado's response to the opioid epidemic

OpiRescue Treatment Locator



Increase Data Waiver providers

Plan to spend $5 million for 1,100 additional people receiving MAT ($4545.00/person)

Lift the Label campaign

Colorado's response to the opioid epidemic

"Good Samaritan Law" provides immunity from criminal prosecution for people who witness/report an emergency drug or alcohol overdose

May 2019-May 2020, 5,415 naloxone kits were distributed to law enforcement agencies through the Office of Behavioral Health's State Opioid Response program

Six mobile MAT units

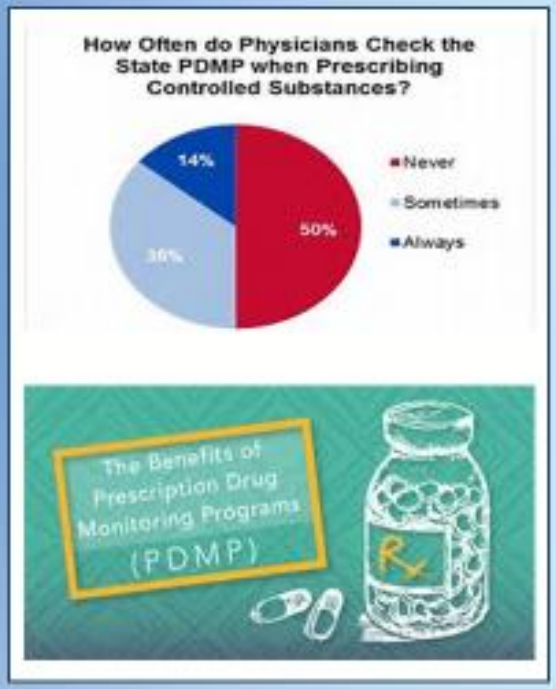
12:1 cost savings to society

Important Facts: PDMP

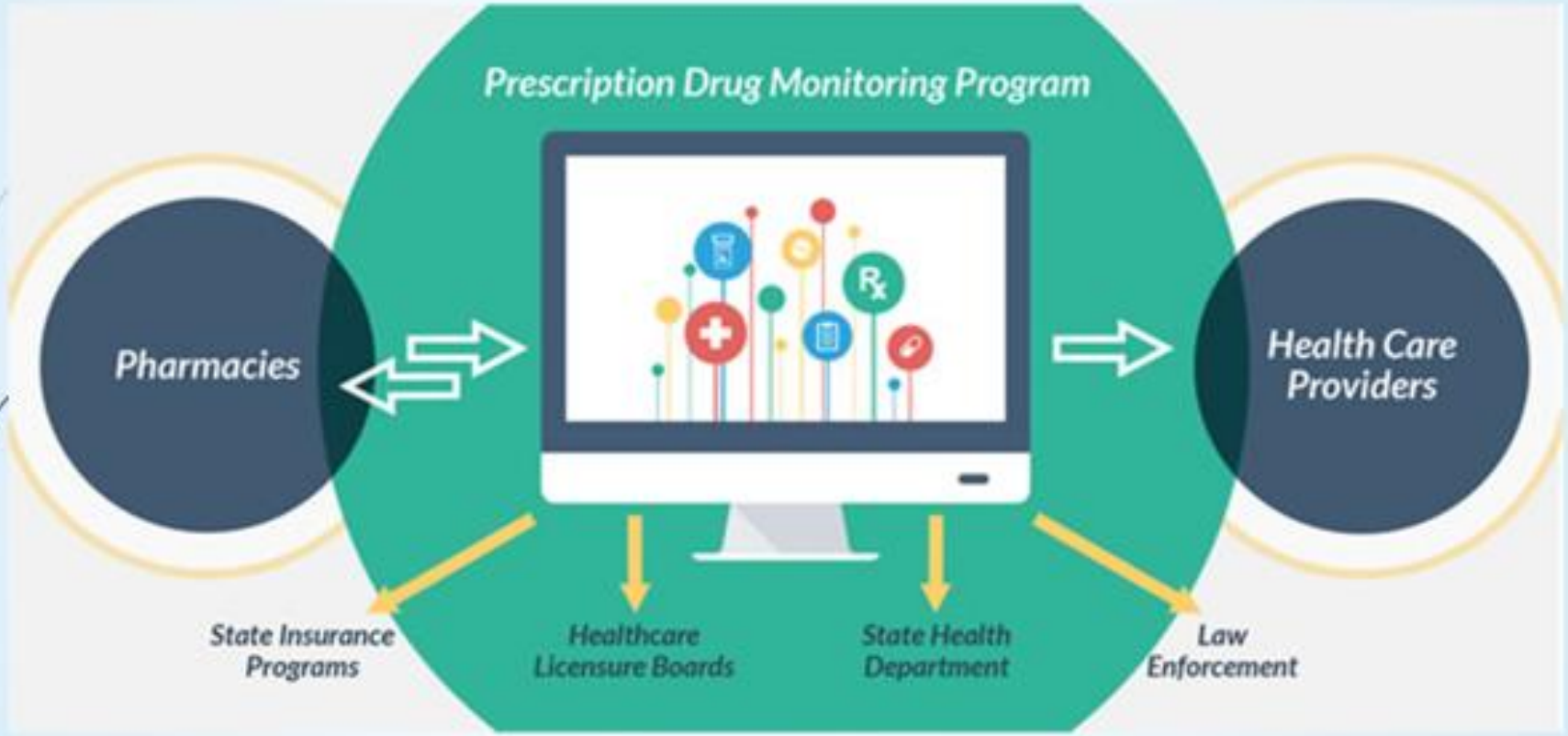
- PDMPs are promising tools for health care providers to see patients' prescribing histories to inform their prescribing decisions. However, a PDMP is only useful to health care providers if they check the system before prescribing.

- When pharmacists dispense controlled substances to patients, they have to enter the prescription into the state PDMP.

- PDMPs can also be used to send "proactive" reports to authorized users to protect patients at the highest risk and identify inappropriate prescribing trends.



Prescription Drug Monitoring Program



Collaborated effort in fighting opioid epidemic and safe prescribing of controlled substances

Colorado Senate Bill 19-227 (2018)

Colorado Department of Public Health and Environment (CDPHE)

- naloxone bulk fund
- eligible agencies
  - local public health agencies
  - school districts
  - public universities
  - law enforcement
  - harm reduction agencies
- access bulk quantities of naloxone for free



COLORADO HOUSE BILL 1326 (2022)

Fentanyl Accountability And Prevention

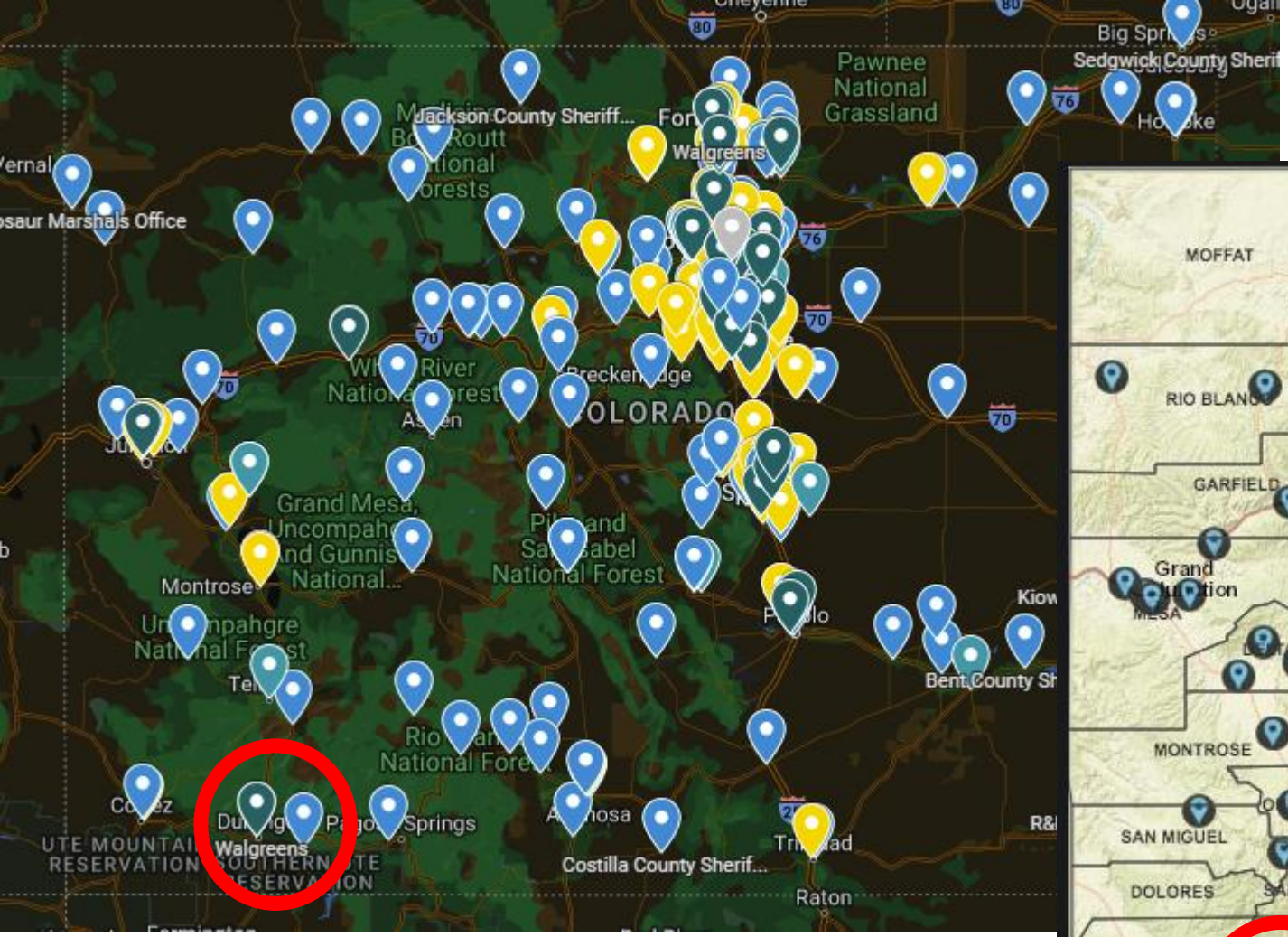


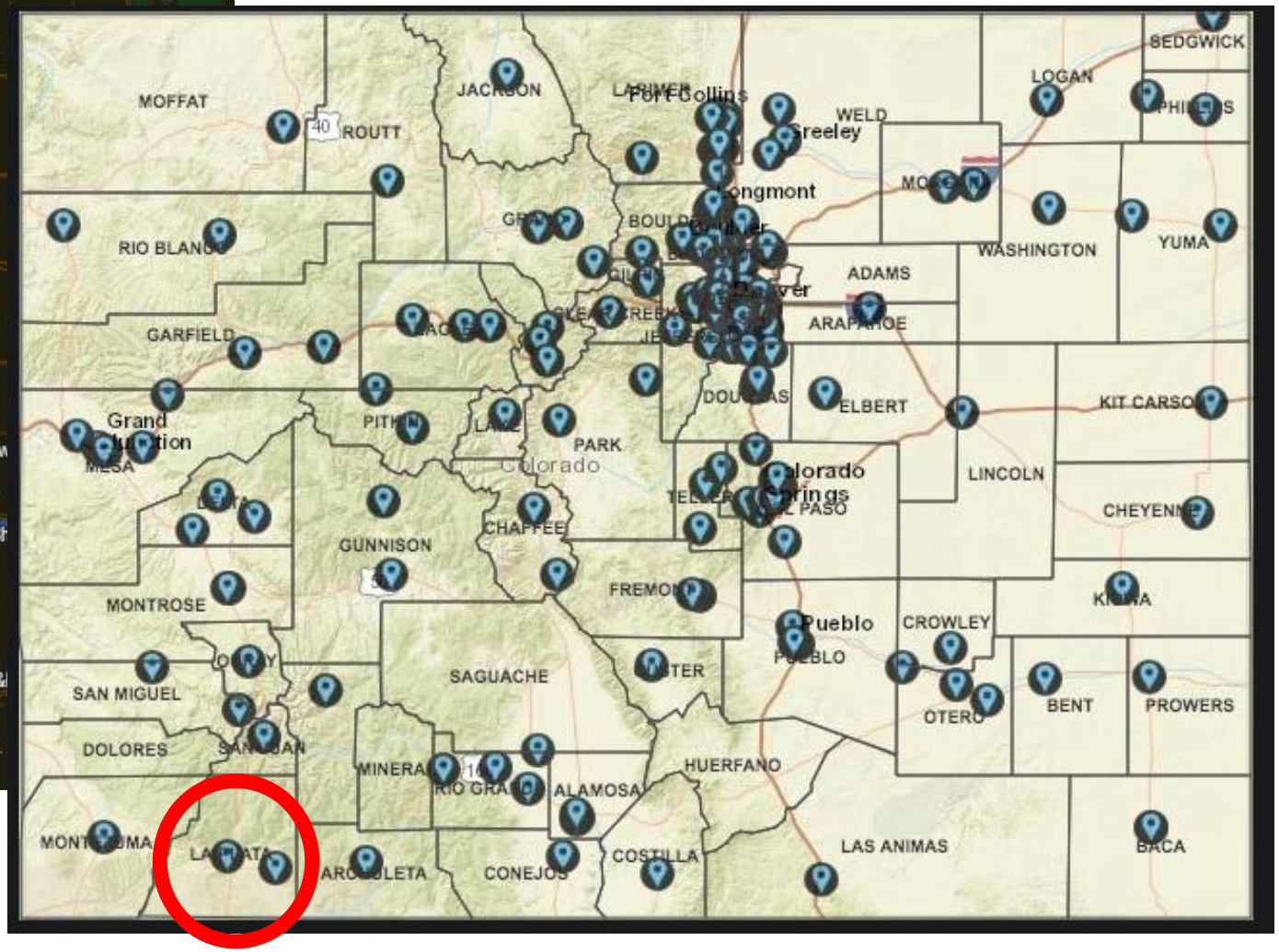
- Address synthetic opiates
  - changing the criminal penalties associated with synthetic opiates
  - using a substance abuse assessment to direct appropriate treatment at sentencing
- provide opiate antagonists in the community
- provide synthetic opiate detection tests in the community
- create immunity for furnishing synthetic opiate detection tests
- provide treatment for persons in the criminal justice system
- develop a fentanyl prevention and education campaign
- provide funding for substance use and harm reduction
- evaluate substance use and harm reduction needs across the state
- require a post-enactment review/make an appropriation

TakeMedsBack.org



- Created TakeMedsBack: statewide, permanent drug dropbox/collection program
- Received $300K annual allocation in state funds
- 2018 goal: at least one permanent drop box in every county in CO
- 62 counties / 173 boxes as of Dec 31, 2020





Bayfield Marshal's Office	1199 Bayfield Parkway	
Safeway Pharmacy	311 WEST COLLEGE DR.	Durango

Walgreens	28 Town Plaza	Durango	CO

Four Domains to Combat Opioid Crisis

Prevention

Treatment/Recovery

Harm Reduction

Criminal Justice



COLORADO CONSORTIUM
for Prescription Drug Abuse Prevention

- 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

Prevention

Prescription Drug Monitoring Program (PDMP)	Colorado's Prescription Drug Monitoring Program to improve usability and increase utilization via electronic health records or other methods
Screening, Brief Intervention, and Referral to Treatment (SBIRT)	Workforce training and funding to implement evidence-based secondary prevention approaches that identify and intervene with problematic use, abuse, and dependence on substances
Provider Education	Trainings for practitioners on non-opioid pain treatments, nonaddictive chronic pain therapies, and guidelines for opioid prescribing best practices
Community Development	Funding for community development, schools, childcare, family services, and job training to combat drug use
Primary Prevention	Evidence-based primary prevention programs and strategies, including family and youth programming, to promote protective factors and reduce risk factors, as well as adult education programs and public communications campaigns
Drug Take Back and Storage	Expand universal drug take-back programs to allow drugs to be returned to any pharmacy on any day and distribute secure containers for prescription drugs

Criminal Justice

Law Enforcement	Increased funding and training for local police, drug task forces, jail systems
Community Corrections	Developing or expanding drug or family courts and other pre-arraignment or law enforcement diversion programs (Hilltop Community Corrections) 6th District Wellness Court
Jail-Based Addiction Treatment	Expansion of addiction treatment in jails and prisons (La Plata County Detention Center has been running its MAT program since November 2022, in which inmates are medically treated for their various drug and alcohol addictions)
Post-Incarceration Social Programs	Programs for reintegrating people recovering from substance use disorders into communities following incarceration

Treatment and Recovery

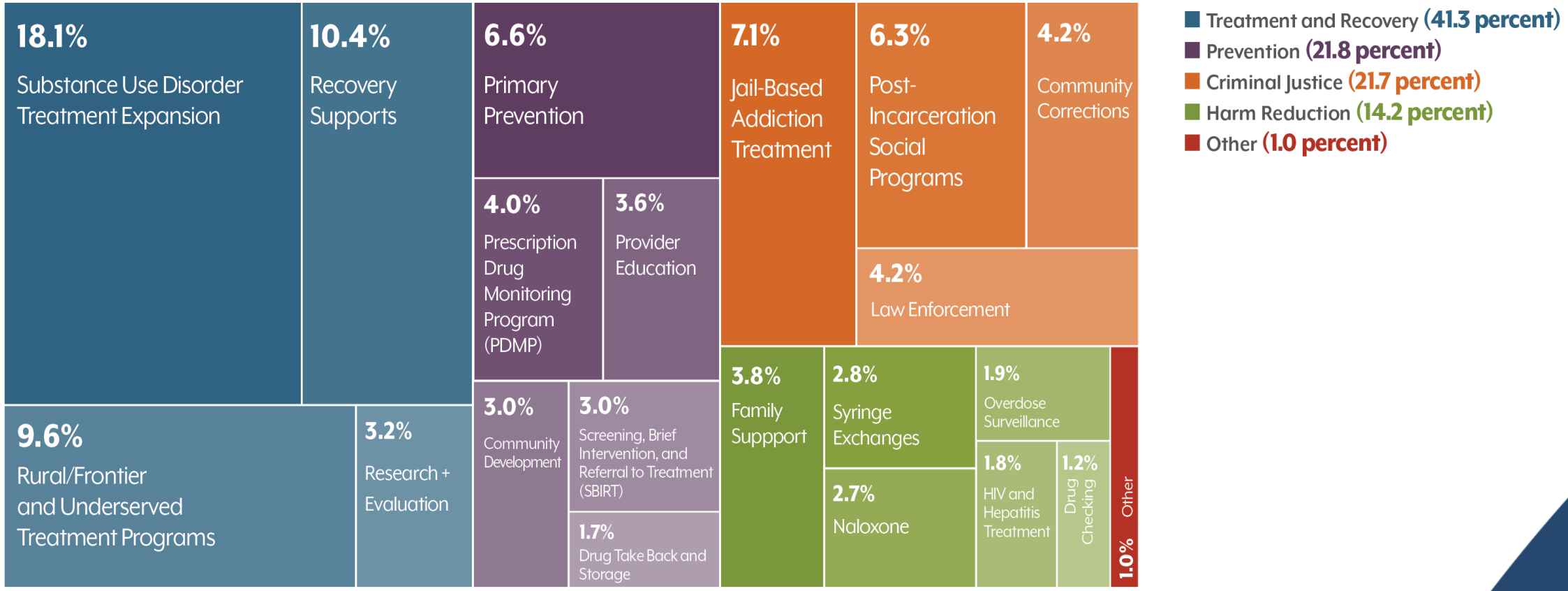
Substance Use Disorder Treatment Expansion	Expansion of the full spectrum of substance use disorder treatment: detox, inpatient/residential and outpatient treatment, and medication-assisted treatment
Recovery Supports	Developing programs to improve access to housing and health care (other than for substance use disorders); employment opportunities and job training; community-based services, including peer supports and other resources aimed at promoting recovery
Rural/Frontier and Underserved Treatment Programs	Expand treatment options in rural, frontier, and underserved areas, including mobile programs and telehealth/telemedicine programs
Research and Evaluation	Funding for research into treatment outcomes, evaluation of program effectiveness, and the impact of policy interventions in Colorado

Harm Reduction

Overdose Surveillance	Drug death and nonfatal overdose surveillance, including funding for law enforcement, medical examiners, and coroners to improve accuracy and timeliness of autopsy drug-testing
HIV And Hepatitis Treatment	Screening, early detection, vaccines, and treatment for HIV, hepatitis, and other medical issues occurring among people who inject drugs
Overdose-Reversal Drugs	Increased naloxone distribution and training (see below)
Drug Checking	Production and distribution of testing strips for fentanyl and other adulterants, and other drug-checking services
Syringe Exchanges	Establishing, running, and expanding existing syringe exchange programs, including syringe disposal
Family Support	Support services for children and families affected by substance use disorders, including training for professionals such as teachers, law enforcement, and others

How Colorado would allocate settlement funds to fight the opioid crisis

Figure 1: Aggregate Survey Results



Click to insert footnote/source

[Narcan application for High Schools in Colorado]



Ways to combat the opioid crisis

- Prescription drug monitoring programs
- State prescription drug laws
- Insurance strategies such as prior authorization, quantity limits, and drug utilization review
- Quality improvement programs in health care systems to increase implementation of recommended prescribing practices
- Youth substance abuse prevention, such as intensive family or school-based programs (This is working!! ☺)
- Patient education on the safe storage and disposal of prescription opioids
- Patient discussions with providers regarding the risks and treatment options before taking opioid medication



Thank You.

centura