

Module VI – Controlled Substance II

# Prevention and Treatment Strategies for Opioid Abuse, Misuse and Diversion

Emanuele, D., & Magladry, C. (2020). CANP CS II controlled substances modules for acute and chronic pain. Sacramento, CA: California Association for Nurse Practitioners

# Course Description

A clear understanding of safe prescribing practices is a critical component of the nurse practitioner role in the care and management of the acute and chronic pain patient. The following modules provide an overview of the pathophysiology of different types of pain, strategies for appropriate pain management including analgesics and adjuvant medications and therapies, prescribing practice guidelines in the treatment of select behavioral health conditions and concludes with legal, ethical and regulatory considerations and approaches in the prevention of use, misuse and diversion of controlled substances.

# Objectives

1. Explore prevention strategies for opioid and substance abuse, misuse and diversion.
2. Address considerations for prescriber practice in the treatment of opioid and substance abuse, misuse and addiction.
3. Identify implementation strategies for the prescriber toward prevention of diversion of scheduled class II and III medications.

# Opioid Crisis

“The ongoing opioid crisis lies at the intersection of two substantial public health challenges — reducing the burden of suffering from pain and containing the rising toll of the harms that can result from the use of opioid medications.”

Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use; National Academies of Sciences, Engineering, and Medicine, 2017

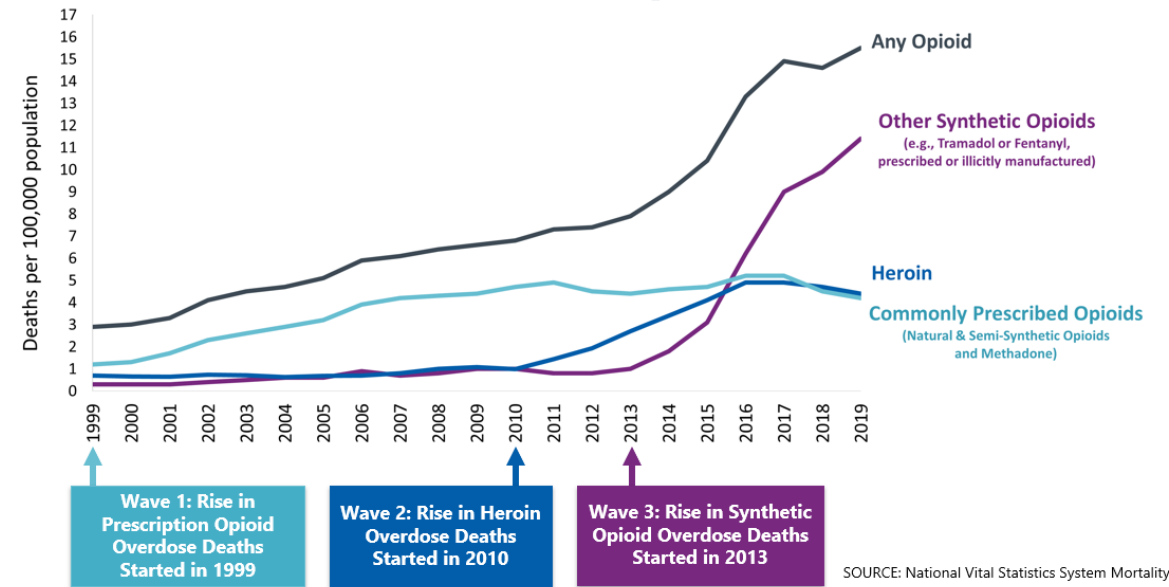
# CDC Statistics (2017)

The first wave began with increased prescribing of opioids in the 1990s, with overdose deaths involving prescription opioids (natural and semi-synthetic opioids and methadone) increasing since at least 1999.

The second wave began in 2010, with rapid increases in overdose deaths involving heroin.

The third wave began in 2013, with significant increases in overdose deaths involving synthetic opioids – particularly those involving illicitly-manufactured fentanyl (IMF). The IMF market continues to change, and IMF can be found in combination with heroin, counterfeit pills, and cocaine.

## Three Waves of the Rise in Opioid Overdose Deaths



# RISE IN OPIOID OVERDOSE DEATHS IN AMERICA

NEARLY  
**500,000**  
PEOPLE DIED FROM AN  
OPIOID OVERDOSE  
(1999-2019)

[www.cdc.gov](http://www.cdc.gov)

## A Multi-Layered Problem in Three Distinct Waves



Learn more about the evolving opioid overdose crisis: [www.cdc.gov/drugoverdose](http://www.cdc.gov/drugoverdose)

Source: <https://www.cdc.gov/opioids/data/analysis-resources.html>

# Scope of the Problem

- In 2015, 18.9 million persons were current users of psychotherapeutic drugs taken non-medically (7.1% of U.S. population)
- Commonly abused prescription drugs:
  - Pain relievers – 12.5 million
  - Tranquilizers – 6.1 million
  - Stimulants – 5.3 million
  - Sedatives – 1.5 million

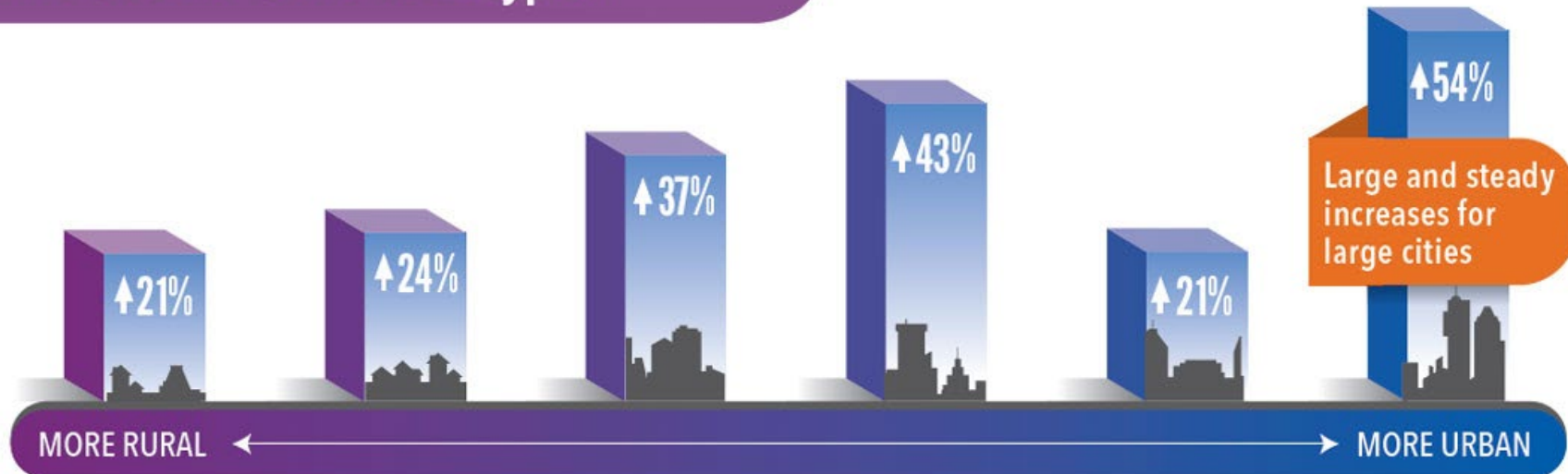
# Scope of the Problem

- In 2014, over 1700 young adults died from prescription drug (mainly opioid) overdoses.
- The number of prescription overdose deaths exceeds the number of cocaine, heroin, and methamphetamine deaths combined.
- Since 2009 overdose death rates almost quadrupled.
- From 1999 to 2017, more than 700,000 people have died from a drug overdose.
- Around 68% of the more than 70,200 drug overdose deaths in 2017 involved an opioid.
- On average, 130 Americans die every day from an opioid overdose.
- For every death there 22 treatment admissions and 119 ER visits.
- In 2017, there were 28,647 ED visits from a drug overdose involving some type of opioid, including prescription pain relievers and heroin—more than in any previous year on record.
- In 2017, the number of overdose deaths involving opioids (including prescription opioids and illegal opioids like heroin and illicitly manufactured fentanyl) was 6 times higher than in 1999.



# Opioid Statistics

Opioid overdoses continued to increase in cities and towns of all types.\*



SOURCE: CDC's Enhanced State Opioid Overdose Surveillance (ESOOS) Program, 16 states reporting percent changes from July 2016 through September 2017.

\* From left to right, the categories are:

1) non-core (non-metro), 2) micropolitan (non-metro), 3) small metro, 4) medium metro, 5) large fringe metro, 6) large central metro.

# Initiatives to Combat the Opioid Epidemic

## CDC

CDC's goal is to prevent opioid-related harms and overdose by:

- Using data to monitor emerging trends and direct prevention activities
- Strengthening state, local, and tribal capacity to respond to the epidemic
- Working with providers, health systems, and payers to reduce unsafe exposure to opioids and treat addiction
- Coordinating with public safety and community-based partners to rapidly identify overdose threats, reverse overdoses, link people to effective treatment, and reduce harms associated with illicit opioids
- Increasing public awareness about the risks of opioids

# Initiatives to Combat the Opioid Epidemic

## California State initiatives

- Mandatory Prescription Drug Monitoring Program (PDMP). CURES in the state of California
- Expansion of Medication Assisted Treatment services via funding from Substance Abuse and Mental Health Services Administration (SAMSHA)
- California Youth Opioid Response Project: The California Youth Opioid Response (YOR) Project focuses on providing prevention, treatment, and recovery services for youth aged 12 to 24.
- Expanded coverage for treatment for Medi-Cal patients
- Naloxone Distribution Program starting in 2018 with the latest results from the NDP:
  - More than 250,000 units of naloxone distributed
  - 55 of 58 counties have received naloxone
  - More than 700 applications approved
  - More than 7,500 overdoses reversed

# Federal Initiatives

## Health and Human Services unveiled a 5-point strategy in 2017

- **BETTER ADDICTION PREVENTION, TREATMENT, AND RECOVERY SERVICES:** Improve access to prevention, treatment, and recovery support services to prevent the health, social, and economic consequences associated with opioid misuse and addiction, and to enable individuals to achieve long-term recovery.
- **BETTER DATA:** Strengthen public health data reporting and collection to improve the timeliness and specificity of data, and to inform a real-time public health response as the epidemic evolves.
- **BETTER PAIN MANAGEMENT:** Advance the practice of pain management to enable access to high-quality, evidence-based pain care that reduces the burden of pain for individuals, families, and society while also reducing the inappropriate use of opioids and opioid-related harms.
- **BETTER TARGETING OF OVERDOSE REVERSING DRUGS:** Target the availability and distribution of overdose-reversing medications to ensure the broad provision of these drugs to people likely to experience or respond to an overdose, with a particular focus on targeting high-risk populations.
- **BETTER RESEARCH:** Support cutting-edge research that advances our understanding of pain, overdose and addiction, leads to the development of new treatments, and identifies effective public health interventions to reduce opioid-related health harms.

# Prescription Drug Misuse and Abuse

“Opioid painkillers are only one group of prescription drugs that have potential for misuse or abuse. The National Institute on Drug Abuse (NIDA) has grouped the most commonly used addictive drugs into 13 different categories, one of which is prescription and over-the-counter medications. Although the prescription drug abuse epidemic may be commonly discussed in terms of opioid analgesics, there are several other groups of prescription and over-the-counter medications that may be subject to misuse and abuse. For example, stimulants such as amphetamines and methylphenidates are commonly prescribed to treat attention-deficit hyperactivity disorder and have the potential for abuse. In addition, depressants may be used to treat anxiety- or sleep-related disorders and contribute to the prescription drug abuse problem in the United States. Prescription-strength cold medicines may contain ingredients such as promethazine or codeine, both of which can illicit euphoric or sedative effects. Furthermore, common over-the-counter drugs that contain ingredients such as dextromethorphan and pseudoephedrine may be subject to misuse and abuse. Thus, it is important for initiatives aimed at curbing the prescription drug abuse epidemic to address the abuse and misuse of all groups of prescription and over-the-counter medications that have the potential for abuse.” APHA (2015).

# Broad Strategies to Manage the Prescription Drug Crisis

## Strategy 1

Prevention of drug misuse and abuse:

- implementation and mandatory use of PDMP initiatives
- adoption of doctor shopping laws
- medical provider education laws
- implementation of physical exam requirements.

## Strategy 2

Increase access to and support for substance abuse services:

- adoption of Good Samaritan laws
- laws that support access to rescue drugs
- overdose harm reduction programs
- allocation of resources for development and continued support of substance abuse services
- psychosocial counseling and treatment for any co-occurring disorders

# Prescription Drug Misuse

## Definition

- Misuse of prescription drugs means taking a medication in a manner or dose other than prescribed; taking someone else's prescription, even if for a legitimate medical complaint such as pain; or taking a medication to feel euphoria (i.e., to get high). The term nonmedical use of prescription drugs also refers to these categories of misuse.

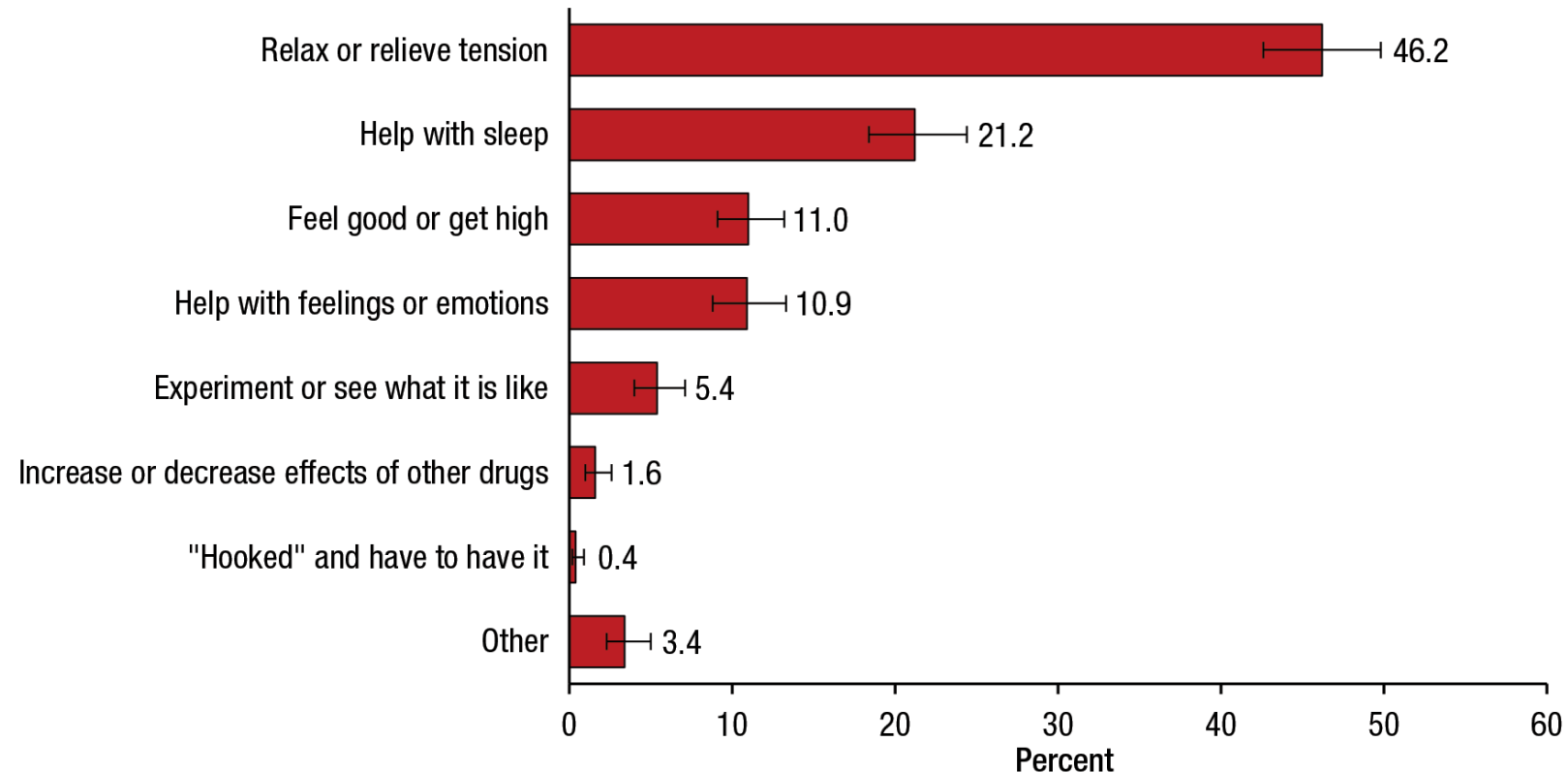
# Factors in Prescription Drug Misuse

- The reasons for the high prevalence of prescription drug misuse vary by age, gender, and other factors, but likely include ease of access.
- The number of prescriptions for some of these medications has increased dramatically since the early 1990s.
- Moreover, misinformation about the addictive properties of prescription opioids and the perception that prescription drugs are less harmful than illicit drugs are other possible contributors to the problem.
- Although misuse of prescription drugs affects many Americans, certain populations such as youth and older adults may be at particular risk.

NIDA. 2020, April 13. What is the scope of prescription drug misuse?. Retrieved from <https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/what-scope-prescription-drug-misuse>



# Reasons Given for Misusing Prescription Drugs



# How Can Prescription Drug Misuse Be Prevented?

## NIDA Recommended Clinician Actions:

- Use evidence-based screening tools for nonmedical use of prescription drugs
- Note rapid increases in the amount of medication needed or frequent, unscheduled refill requests
- Make use of PDMPs
- Promote more cautious and responsible prescribing of opioid medications by following new guidelines (Ex. CDC)

## NIDA Recommended Patient Actions:

- Following the directions as explained on the label or by the pharmacist
- Being aware of potential interactions with other drugs as well as alcohol
- Never stopping or changing a dosing regimen without first discussing it with the doctor
- Never using another person's prescription and never giving their prescription medications to others
- Storing prescription stimulants, sedatives, and opioids safely
- Properly discarding unused or expired medications

# Prescription Drug Diversion

## Definition

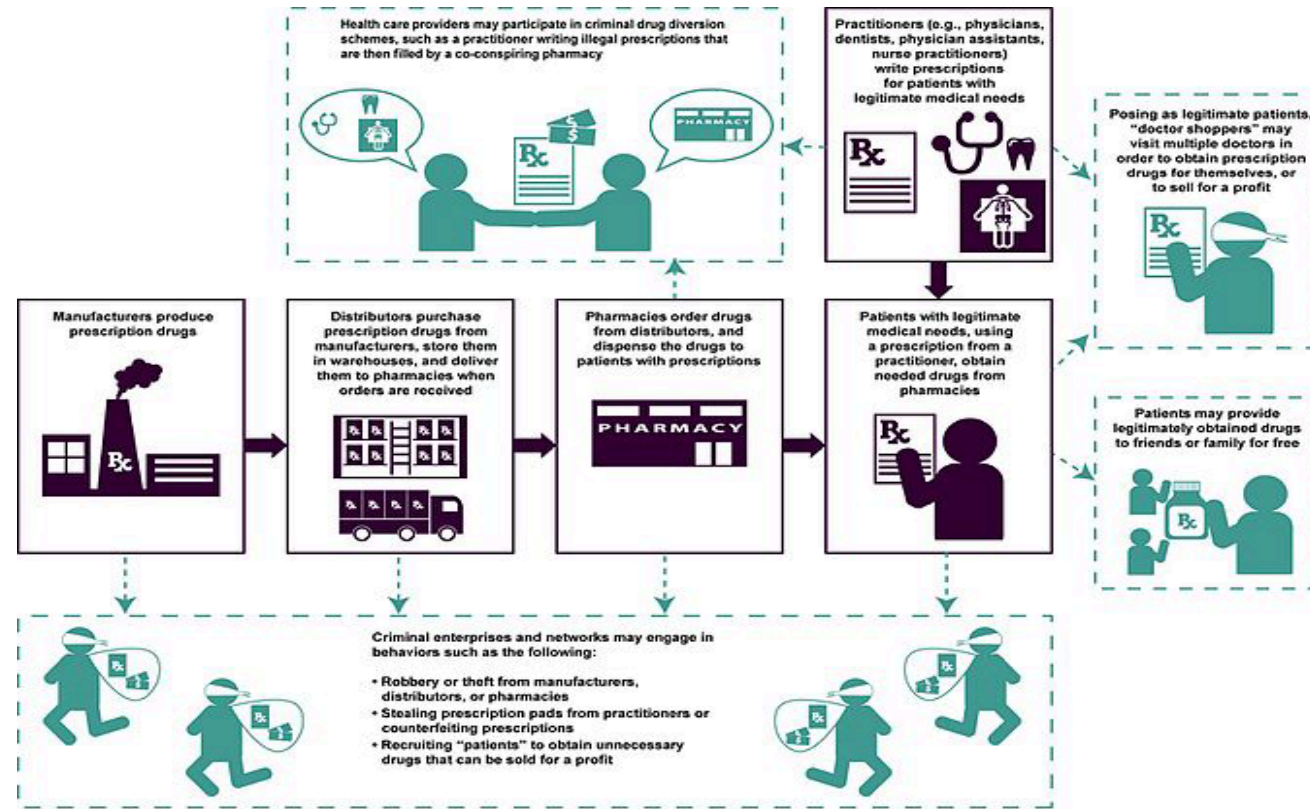
- Prescription drug diversion is the unlawful removal of an approved pharmaceutical product from the legal distribution system and subsequent distribution to an illicit marketplace.
- Diversion can occur anywhere in the legal chain of distribution from pharmaceutical manufacturer, drug packager, transporter, wholesalers, to the retail pharmacies, clinics and hospitals or the patient.
- Diverted pharmaceuticals can be distributed to legal and illegal markets.

# Common Diversion Mechanisms

## Sources of diverted prescription drugs include:

- Physicians and pharmacists
- Parents and relatives providing them
- “Doctor shopping”
- Leftover supplies following an illness or injury
- Personal visits to Mexico, South America and the Caribbean
- Prescriptions intended for the treatment of mental illness or other illness
- Direct sales on the street
- Pharmacy and hospital theft
- Friends or acquaintances
- Stealing from relatives or friends

# Prescription Drug Diversion



Examples of the legitimate flow of prescription drugs  
 Examples of where prescription drug diversion can occur

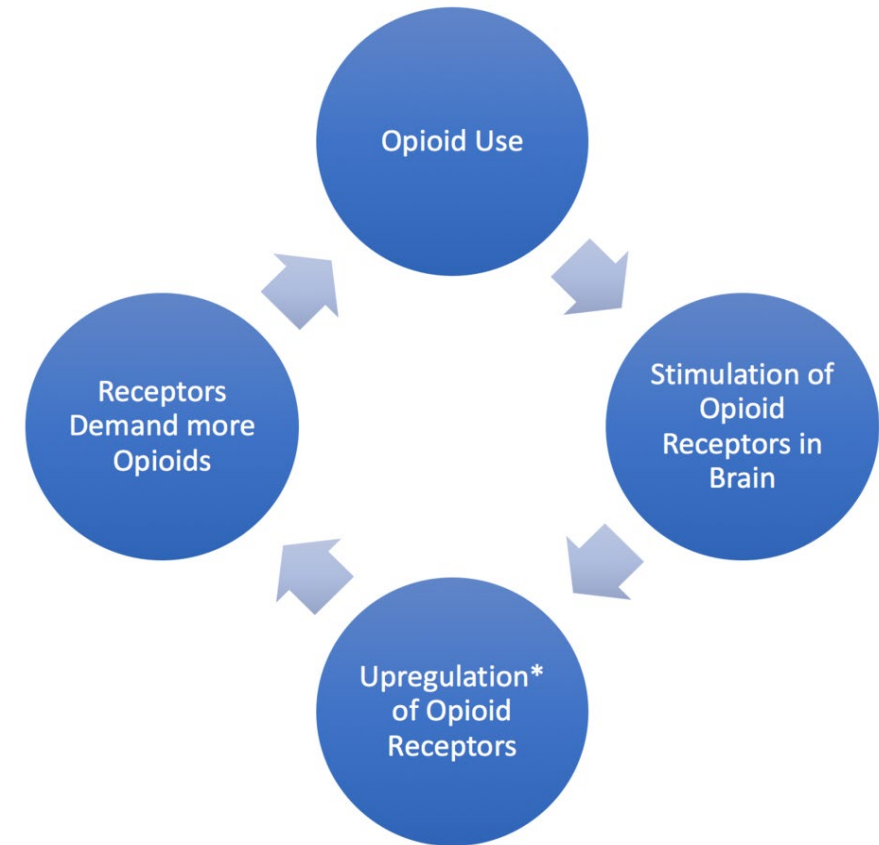
Sources: GAO (data); GAO and Art Explosion (clipart) | GAO-15-471

# Preventing Diversion

- Exercise caution when patients request a combination of drugs, such as benzodiazepines and opioids
- Ensure prescriptions are written clearly, to avoid forgery, and move toward electronic prescribing so that paper prescriptions are not required and use the appropriate guidelines regarding CSII prescriptions
- Control access to controlled substance prescription pads
- Refer patients with extensive pain management needs to a specialty clinic
- Communicate with pharmacists or other providers, and pharmacy benefit managers, and collaborate with them when suspicious behavior is observed
- Use PDMP programs when prescribing controlled substances
- Use drug monitoring such as urine drug tests to confirm patients are using prescribed medications
- Document concerning behaviors and notify the appropriate agency if diversion is suspected (law enforcement, DEA)

# Opiate Addiction

- Opiate addiction happens **when someone becomes dependent on opiates** and feels a compulsive need to continue using the drugs despite numerous attempts to quit, and despite knowing opiate use will have negative consequences.
- Addiction, in general, is a neurobiological disorder, with genetic, psychosocial and psychiatric factors.



\*Upregulation is the creation of new opioid receptors in the brain

Source: <https://www.matclinics.com/matclinics-blog/pain-pill-addiction-signs>



# Addiction as a Neurobiological Disorder

## Neurobiology of Addiction:

- Drugs of abuse illicit a feeling of euphoria or a “high” by activating the brain’s reward circuitry.
- Dopamine has been believed to be responsible for feelings of reward for the last 30 yrs, and has been called the “feel good neurotransmitter.”
- DA has long been implicated in the development of addiction.
- Most drugs of abuse have been shown (via microdialysis studies) to increase extracellular DA levels and/or DA cell firing in the nucleus accumbens.

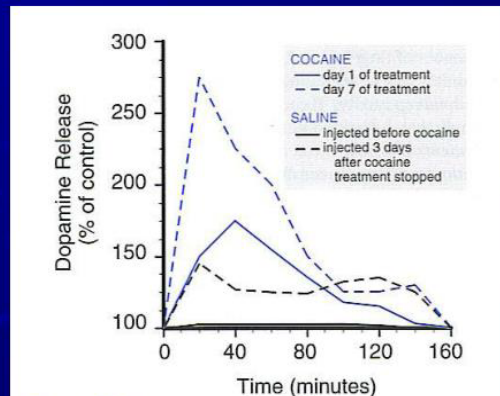
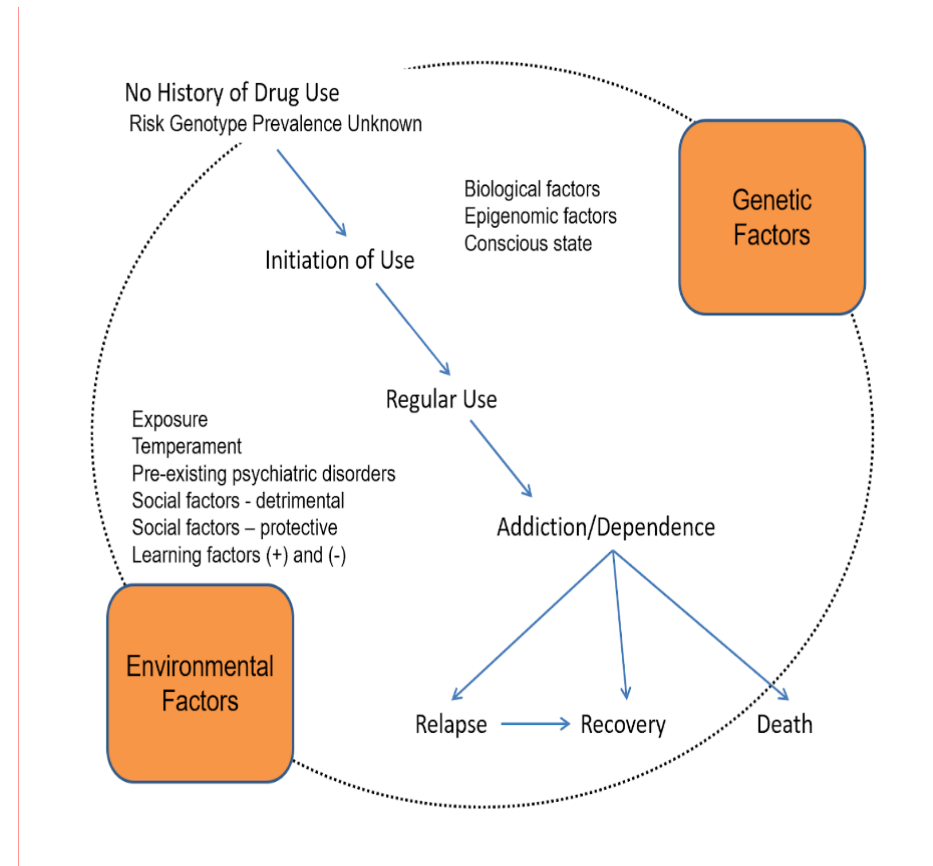


Figure 23-2. Changes in dopamine detected in the extracellular fluid of the nucleus accumbens of rats after daily injections of cocaine (10 mg/kg, i.p.). The first injection of cocaine produces a modest increase and the last, after 7 days, produces a much greater increase in dopamine release. The first saline injection produces no effect on dopamine levels, whereas the second, given 3 days after 7 days of cocaine injections, produces a significant rise in dopamine, presumably due to conditioning. (Adapted from Kalivas and Duffy, 1990, with permission.)

Goodman and Gilman's 11<sup>th</sup> edition.

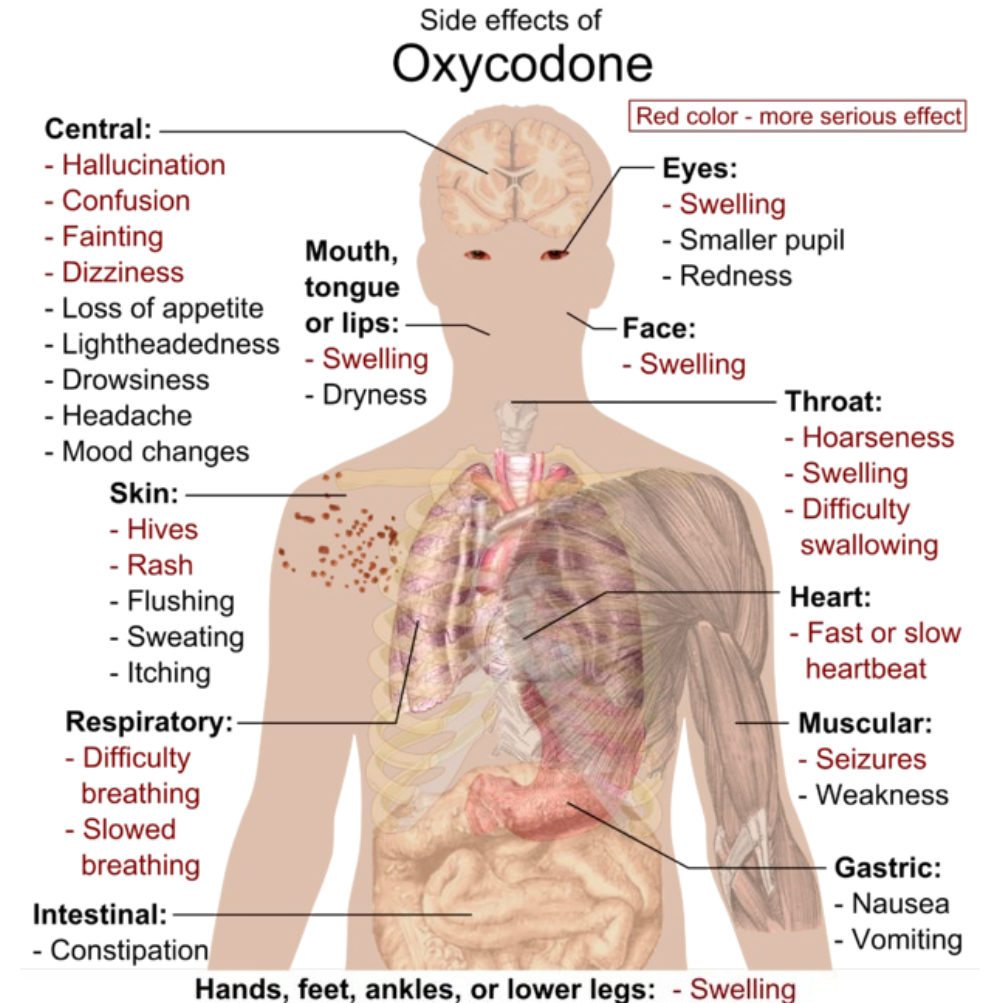




# Screening for Substance Use Disorders / Addiction

- Use existing screening tools in practice (MAST, CAGE, DAST)
- Be familiar with the signs and symptoms of addiction and document these in your history and assessment.
- Become familiar with the substance use treatment resources in your community.

Source: <https://newenglanddiary.com/home/purdue-pharma-played-down-the-addiction-risk-of-its-oxycodone-8/19/2018>



# Risk Stratification For Substance Use Disorder / Addiction

## History and Exam

- Use of screening tools and drug monitoring allows risk stratification into low, medium and high-risk patients.
- High-risk patients should be managed with a team approach and referrals.
- Exam findings suggestive of substance abuse or addiction should trigger referrals for higher level addiction services.

## Yellow Flags

- FH of current or previous substance abuse
- Requests for specific medications to treat pain (common in chronic pain).
- Lack of interest in diagnosis or findings (common in chronic pain).

## Red Flags

- Personal PMH of substance abuse.
- Frequent requests for early refills, increased doses or concerning PDMP(CURES) findings.

# Managing Substance Use Disorder/Addiction

- Know and offer resources for treatment that may include detoxification, inpatient treatment, outpatient treatment, support groups, psychiatric and psychological services.
- Use a non-judgmental approach, understanding that this is a disease process with a high rate of relapse.
- Establish clear and strict guidelines for your role in the treatment program.
- Focus on improvement as opposed to resolution. Relapse rates are high; however the goal of most treatment programs is to reduce the frequency of relapses, extend the periods of remission and to ultimately result in sobriety.
- Provide naloxone to patient and family to help prevent overdose morbidity and mortality.
- If appropriate in your setting, apply for waiver to prescribe Suboxone®.

# References/Resources

**American Academy of Pain Management:** <http://www.aapainmanage.org/>

The American Academy of Pain Management is an inclusive, interdisciplinary organization serving clinicians who treat people with pain through education, setting standards of care, and advocacy.

**American Academy of Pain Medicine:** <http://www.painmed.org/>

The practice of Pain Medicine is multidisciplinary in approach, incorporating modalities from various specialties to ensure the comprehensive evaluation and treatment of the pain patient.

**American Pain Foundation:** <http://www.painfoundation.org/>

The American Pain Foundation's mission is to improve the quality of life of people with pain by raising public awareness, providing practical information, promoting research, and advocating to remove barriers and increase access to effective pain management.

**American Public Health Association** (2015). Prevention and Intervention Strategies to Decrease Misuse of Prescription Pain Medication. <https://www.apha.org/policies-and-advocacy/public-health-policy-statements/policy-database/2015/12/08/15/11/prevention-and-intervention-strategies-to-decrease-misuse-of-prescription-pain-medication>

**American Society for Pain Management Nursing:** <http://www.aspmn.org/>

To advance and promote optimal nursing care for people affected by pain by promoting best nursing practices.

**CDC Acute Pain Guidelines.** <https://www.cdc.gov/acute-pain/about/index.html>

**National Institute on Drug Abuse** (2020) What is the scope of prescription drug misuse?. Retrieved from <https://www.drugabuse.gov/publications/research-reports/misuse-prescription-drugs/what-scope-prescription-drug-misuse>

**Pain Management and the Opioid Epidemic: Balancing Societal and Individual Benefits and Risks of Prescription Opioid Use;** National Academies of Sciences, Engineering, and Medicine, 2017

**Pain.com:** <http://www.pain.com/>

**PainKnowledge.org:** <http://www.painknowledge.org/>

PainKnowledge.org is the home of all certified enduring materials, educational resources, physician tools, and patient materials created by PPS on the treatment and management of pain. All PainKnowledge.org programs are continuously evaluated by the steering committee, an expert multidisciplinary team of specialists, researchers, and practicing physicians in pain management. The editorial board includes experts in the pain management field. The information found on PainKnowledge.org is designed to support, not to replace, the relationship between the patient and the physician.

**U.S. Department of Health and Human Services** (2019, May). Pain Management Best Practices Inter-Agency Task Force Report: Updates, Gaps, Inconsistencies, and Recommendations. Retrieved from U. S. Department of Health and Human Services website: <https://www.hhs.gov/ash/advisory-committees/pain/reports/index.html>