ASAM American Society *of* Addiction Medicine

ASAM

TREATMENT OF OPIOID USE DISORDER COURSE

Course in Addiction Medicine

Faculty

Daniel Nauts, MD, FASAM

Dr. Nauts, MD, FASAM completed his undergraduate and medical education at the University of Michigan and joined an internal medicine group practice in Bellingham, Washington. He left general internal medicine to develop his Addiction Medicine practice; since that time, he has been instrumental in the creation of three inpatient programs for those suffering with substance use and co-occurring disorders, outpatient SUD programs, and medication assisted treatment services

Faculty

Kirk Moberg, MD, PhD, DFASAM

Kirk Moberg, MD, PhD, DFASAM is a graduate of and Clinical Professor of Internal Medicine and Psychiatry at the University of Illinois College of Medicine. Trained in Internal Medicine he practiced in the field of Addiction Medicine for over 25 years and served as medical director of three addiction treatment centers, most recently at the Illinois Institute for Addiction Recovery in the Unity Point Health System. He is certified by both the American Board of Internal Medicine and the American Board of Preventive Medicine-Addiction Medicine and is certified as a Medical Review Officer. In addition to the Fundamentals of Addiction Medicine course, Dr. Moberg teaches the Pain Management and Opioids: Balancing Risks and Benefits and the Treatment of Opioid Use Disorder courses for ASAM.

Disclosure Information

Daniel Nauts, MD, FASAM

No Disclosures

Kirk Moberg, MD, PhD, DFASAM

No Disclosures

About ASAM

ASAM, founded in 1954, is a professional medical society representing over 6,000 physicians, clinicians and associated professionals in the field of addiction medicine. ASAM is dedicated to increasing access and improving the quality of addiction treatment, educating physicians and the public, supporting research and prevention, and promoting the appropriate role of physicians in the care of patients with addiction.

More information available at
https://www.asam.org/about-us/about-asam

Course Learning Objectives

1. Identify, assess, and diagnose patients with opioid use disorder while considering severity, chronicity, individual characteristics, and psychiatric and medical comorbidities.
2. Develop an individualized, patient-centered treatment plan including negotiating treatment goals by evaluating appropriate medication- and psychosocial-based treatment options.
3. Monitor progress and modify treatment plan based on patient needs and progress toward treatment goals.
4. Implement best practices for office systems including team-based care to support treatment with medications for opioid use disorder.
5. Examine misconceptions, stigma, and complexities (bioethical, social, clinical, public health) associated with opioid use disorder and the use of medications to treat opioid use disorder.

Course Announcements: Claiming CME

- Evaluation:
  - Complete the CME evaluation in the ASAM e-Learning Center.
- CME Certificate:
  - Claim your credits after completing the evaluation.
  - Click the blue “Claim Medical Credits” button toview/save your certificate.
  - Return to this page at any time to view/save your certificate.

Course Announcements: Acknowledgment

The ASAM Treatment of Opioid Use Disorder Course has been made available in part by an unrestricted educational grant from Indivior, Inc.

Funding for this initiative was made possible (in part) by grant no. 1H79TI026793-01 from SAMHSA. The views expressed in written conference materials or publications and by speakers and moderators do not necessarily reflect the official policies of the Department of Health and Human Services; nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.

Introduction and Context Setting

Case-Based Learning

What is it?

We will follow a case-based learning approach where we will explore scenarios that resemble or typically are real-world examples. This approach is learner-centered and links theoretical knowledge to practice by giving opportunities for the application of knowledge.

Session 1

Identifying, Assessing and Diagnosing Patients with Opioid Use Disorder

Session Learning Objectives

1. Describe the current epidemiologic trends in prescription opioid misuse and illicit opioid use including overdose and use disorders.
2. Describe opioid use neurobiology with initial use and with prolonged use as it applies to the development of an opioid use disorder and relapse risk.
3. Screen and assess patients for the full spectrum of harmful opioid use, including misuse and diagnosing opioid use disorder.
4. Discuss the assessment and management of patients with psychiatric and medical co-morbidities associated with opioid use disorder.
5. Identify patients with a moderate to severe OUD who are appropriate for treatment with medications in an office-based setting.

MARY'S CASE

Mary's Case

A colleague contacts you seeking help for their daughter. Mary is a 22-year-old who is currently using intranasal (IN) and intravenous (IV) heroin. Her opioid use started in high school with oxycodone pills which her friends were crushing and snorting to get "high." Mary would also binge drink at parties on the weekend and smoke cannabis daily during this time.

At first, Mary did not like the feeling she experienced from oxycodone—she got nauseous and vomited. But after a few more times, she found that the oxycodone was relaxing, and eased her anxiety. She felt like this was what her brain was "missing."

Mary's Case

Your colleague tells you that Mary was sexually abused by an older male cousin when she was 9 years old. She kept this a secret until very recently. Mary has been evaluated by a psychiatrist who diagnosed her with PTSD. She was prescribed an SSRI, and started seeing a therapist, but her heroin use interferes with her ability to adhere to both.

Mary continued to use oxycodone tablets, but in her senior year, her supplier was arrested, and a new boyfriend introduced her to heroin, which was more available and considerably cheaper. At first, she only snorted the heroin. She managed to graduate high school and enrolled in her local community college. She had no idea what she wanted to study or eventually "do with her life." She dropped out after one semester.

Mary's Case

Mary has been injecting heroin. She obtains her needles and syringes from a needle exchange. She has had two overdoses, which required naloxone reversal by her boyfriend and once by your colleague. Fentanyl contamination was suspected in both cases. Mary has been in three short term "detox" centers and one 28-day rehab. She has attended a few NA meetings with her boyfriend. She thinks medications, such as methadone and buprenorphine, would just be trading one addiction for another.

Your colleague was reluctant to reach out to you earlier, due to a feeling of shame and guilt. There is concern about the stigma of addiction, both for Mary and your colleague. An appointment has been made for Mary and for your colleague for the next day.

Activity 1: Learner Introductions

Meet your Colleagues

At your table, take some time to introduce yourself to your colleagues. Use the following questions to guide your discussion.

Discuss the following questions:

- Where are you from?
- What do you do?
- What is your specialty?
- What are your goals for today? Complete the following sentence: “This training will meet my goals if…”

Time Allocated: 5 minutes

Activity 2: Case Discussion – Mary

Task:

- Review the case with your group in break-out sessions and answer the prompting questions at the end of the case introduction. Take notes to report back as a group.

Prompting Questions:

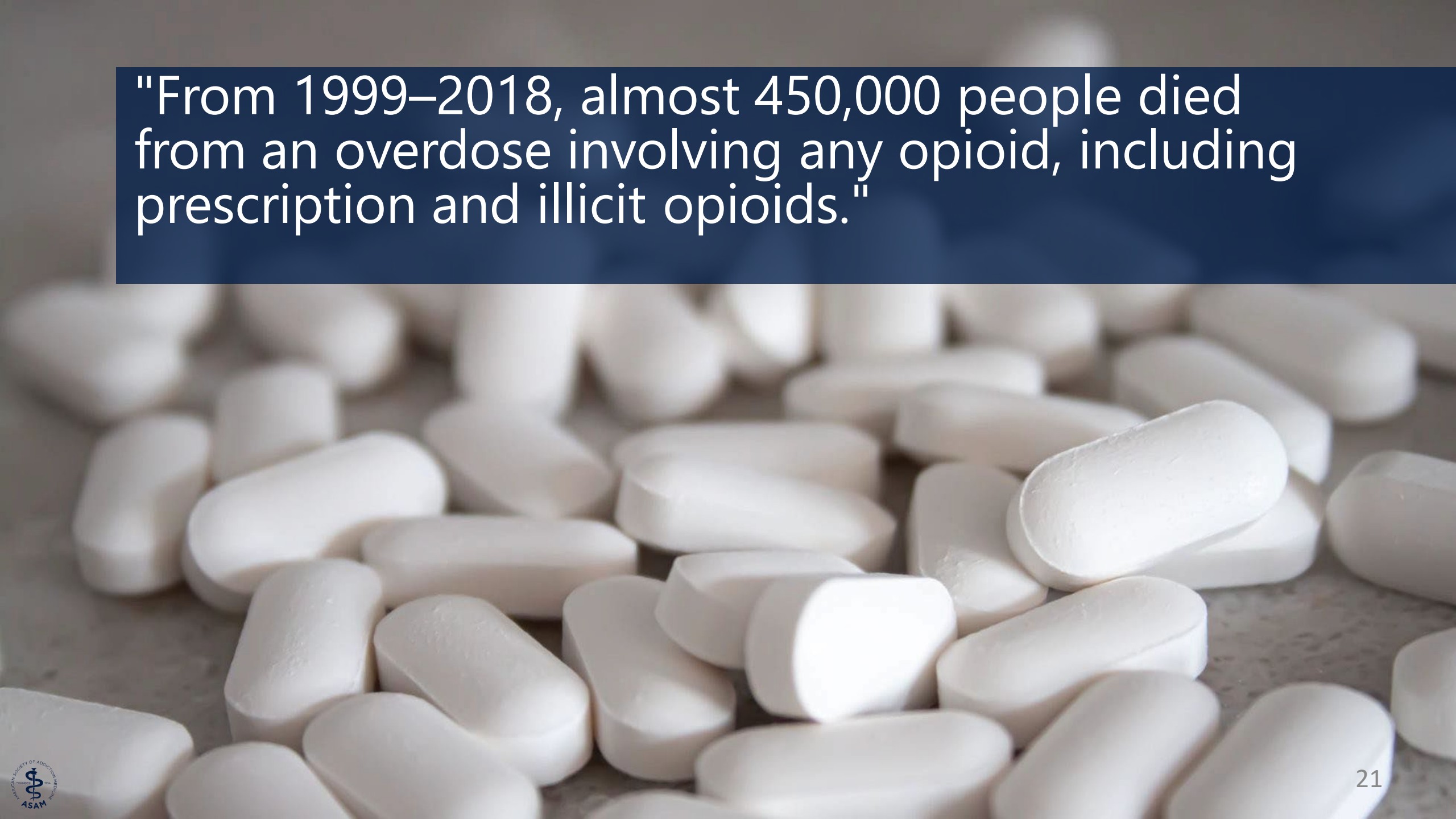
- What are your procedures for documenting Mary's use of other substances?
- How do you identify if Mary needs medically supervised withdrawal management?
- What are your procedures for screening and assessing for comorbid medical conditions?
  - *How, when, and where will they be addressed?*
- What are your procedures for screening for psychiatric disorders?
  - *How, when, and where will they be addressed?*
- What are your procedures for:
  - *Screening for communicable diseases?*
  - *Assessing Mary's access to social supports?*
  - *Determining her readiness to participate in treatment and her goals for treatment?*
- What else do you want to know about Mary?

Time Allocated: 10 Minutes

HISTORY, EPIDEMIOLOGY, AND TRENDS

The Scope of the Opioid Epidemic

"From 1999–2018, almost 450,000 people died from an overdose involving any opioid, including prescription and illicit opioids."



Opioid Addiction

- Opioid addiction afflicts individuals from all socioeconomic and educational backgrounds.
- Four million people admit to the nonmedical use of prescription opioids. Perhaps more concerning, 400,000 people had used heroin in the past month based on data from 2015 through 2016.
- Roughly 80% of new heroin users in the United States report pills as their initiation to opioid use and subsequent OUD.
- From 2002 through 2011, approximately 25 million people in the United States began nonmedical use of pain relievers. More than 11 million misused the medications.
- Emergency department visits due to complications and overdose have increased annually since 2010. Rates of ED visits involving opioids more than tripled from 1999 through 2013.
- In 2017, opioid overdose was declared a national emergency in the United States.

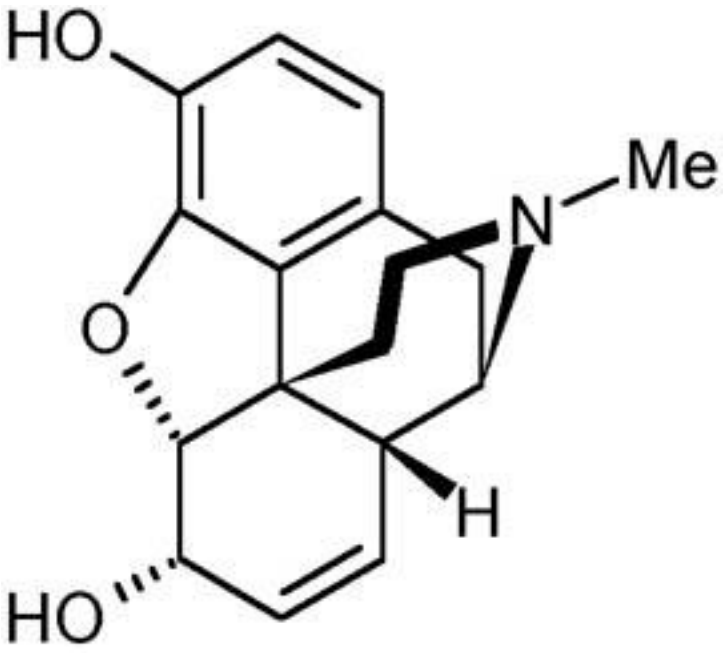
Azadfard M. Opioid Addiction. StatPearls. https://www.ncbi.nlm.nih.gov/books/NBK448203/#article-26212.s3. Published June 29, 2020. Accessed August 6, 2020.

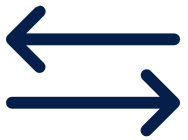
Papaver Somniferum — The Origins of Opium Alkaloids

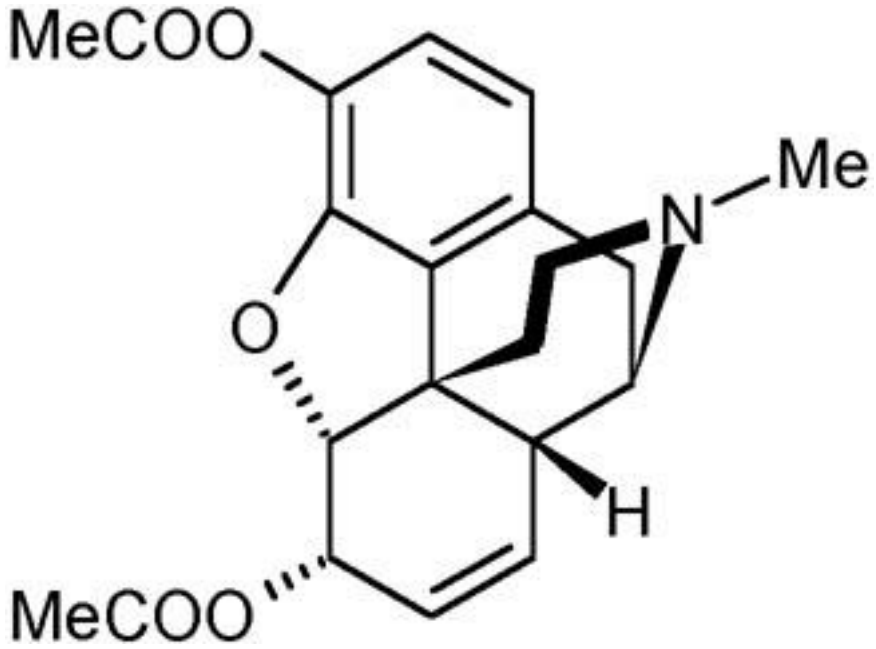
- Morphine
- Codeine
- Thebaine
- Papaverine

Morphine

Heroin

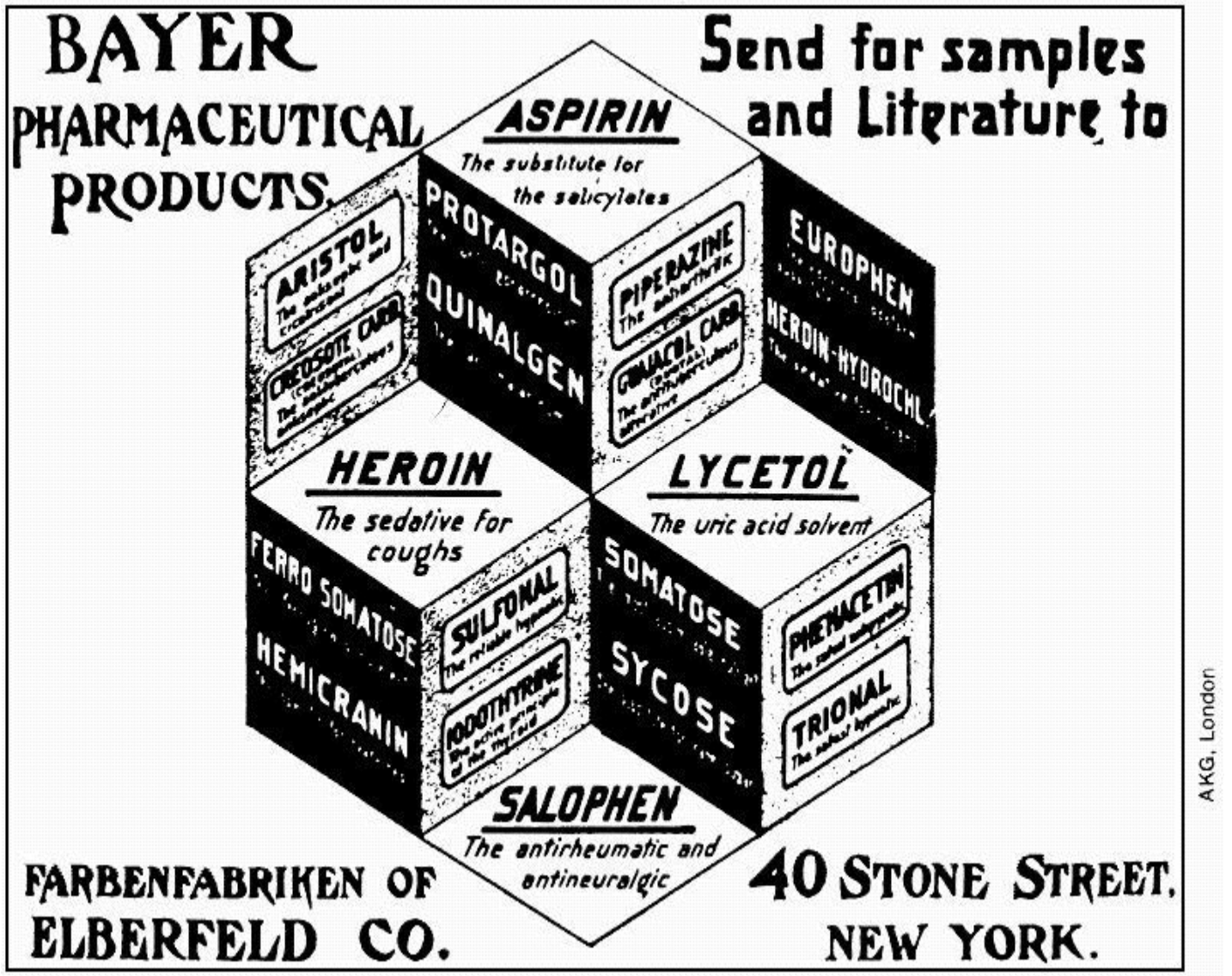




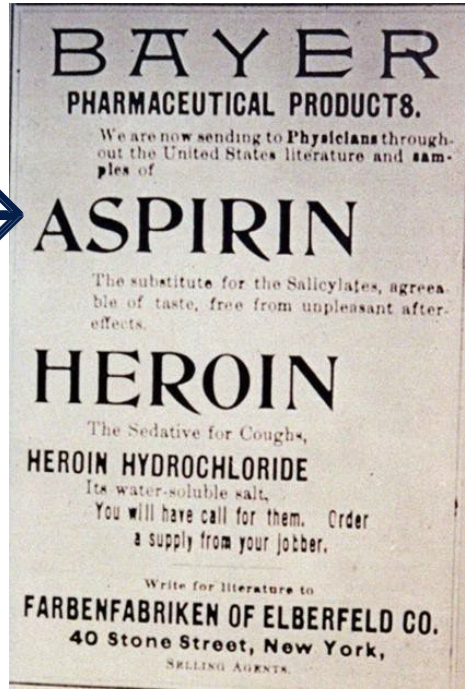


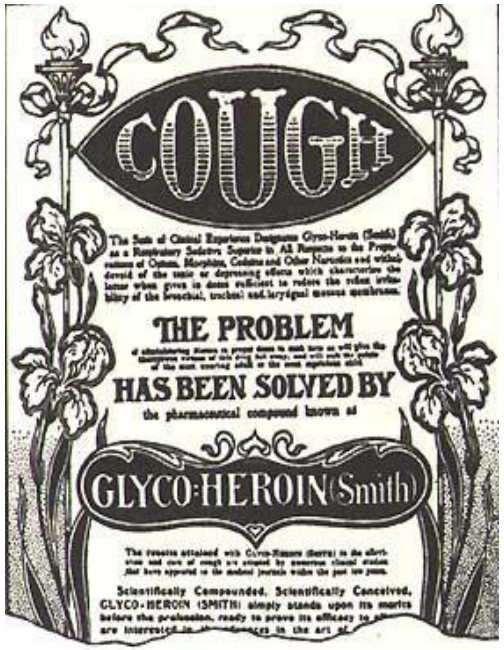
Diacetylmorphine

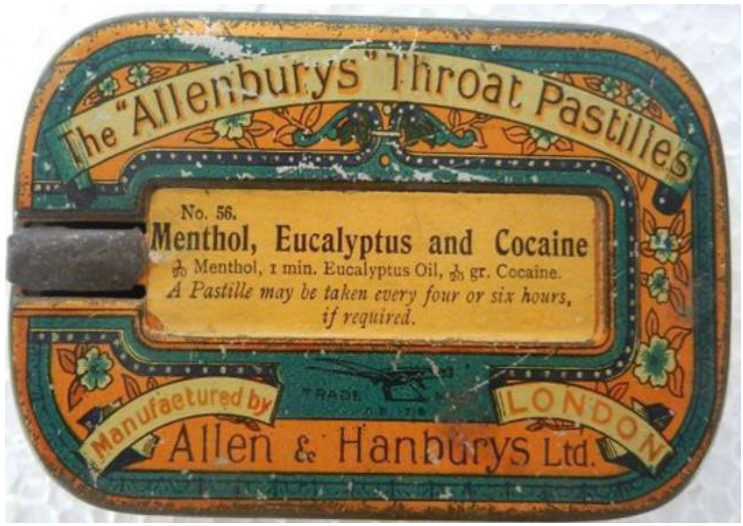
Pharmaceutical Products



History of Opioids

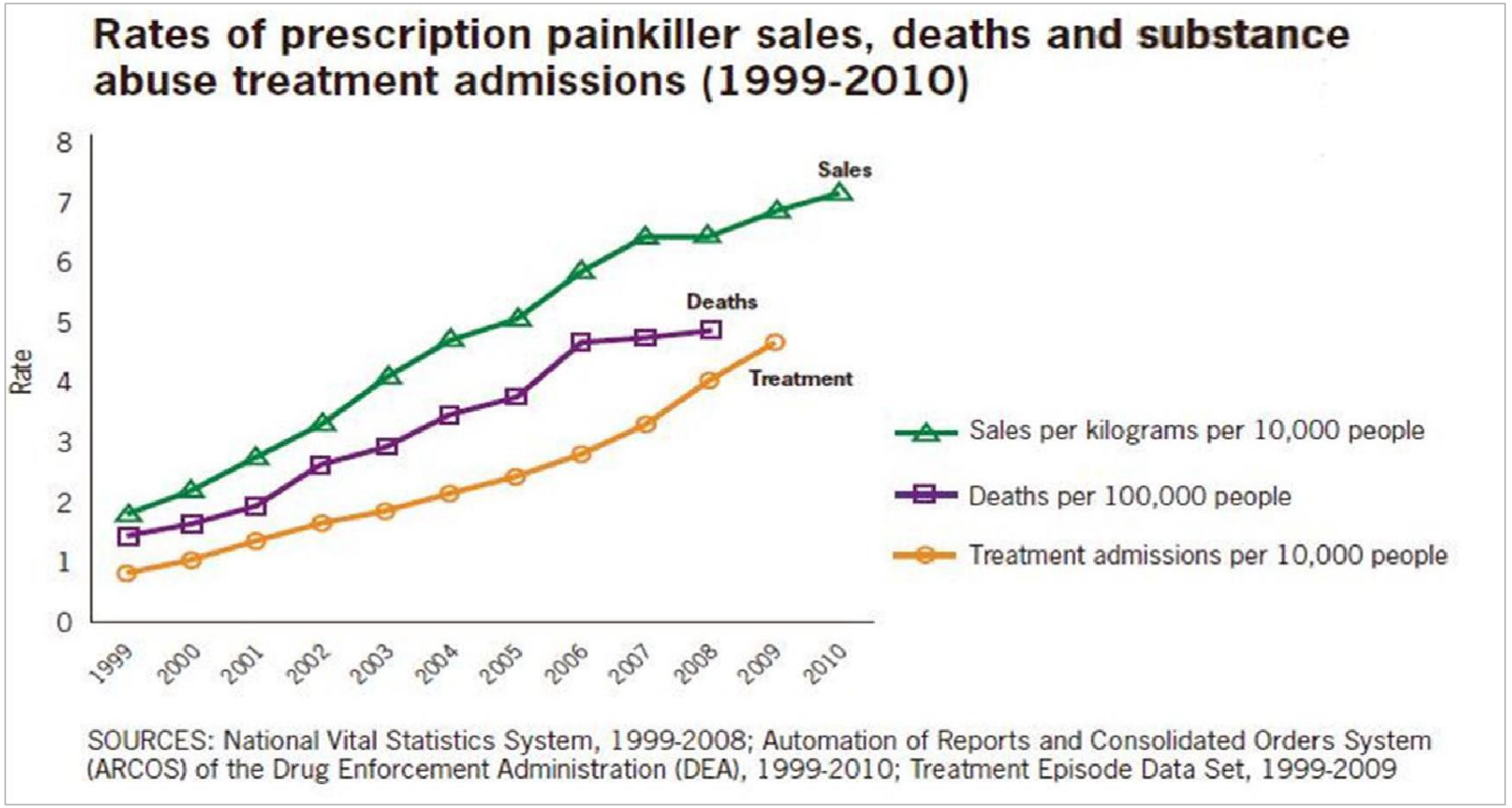






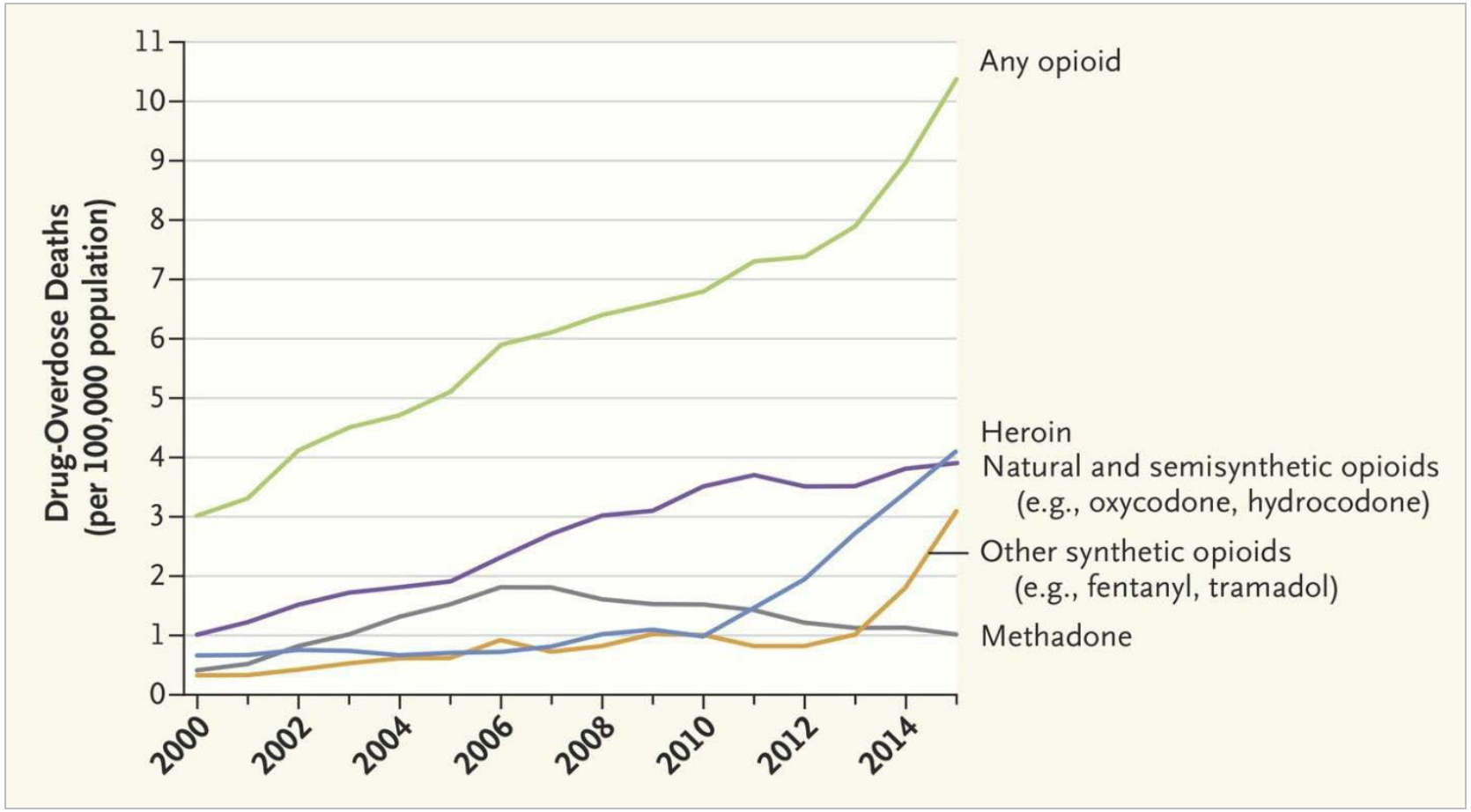
Morphine Syrup –
10 mg/teaspoon

Rates of Opioid Overdose Deaths, Sales, and Treatment Admissions, United States, 1999 - 2010



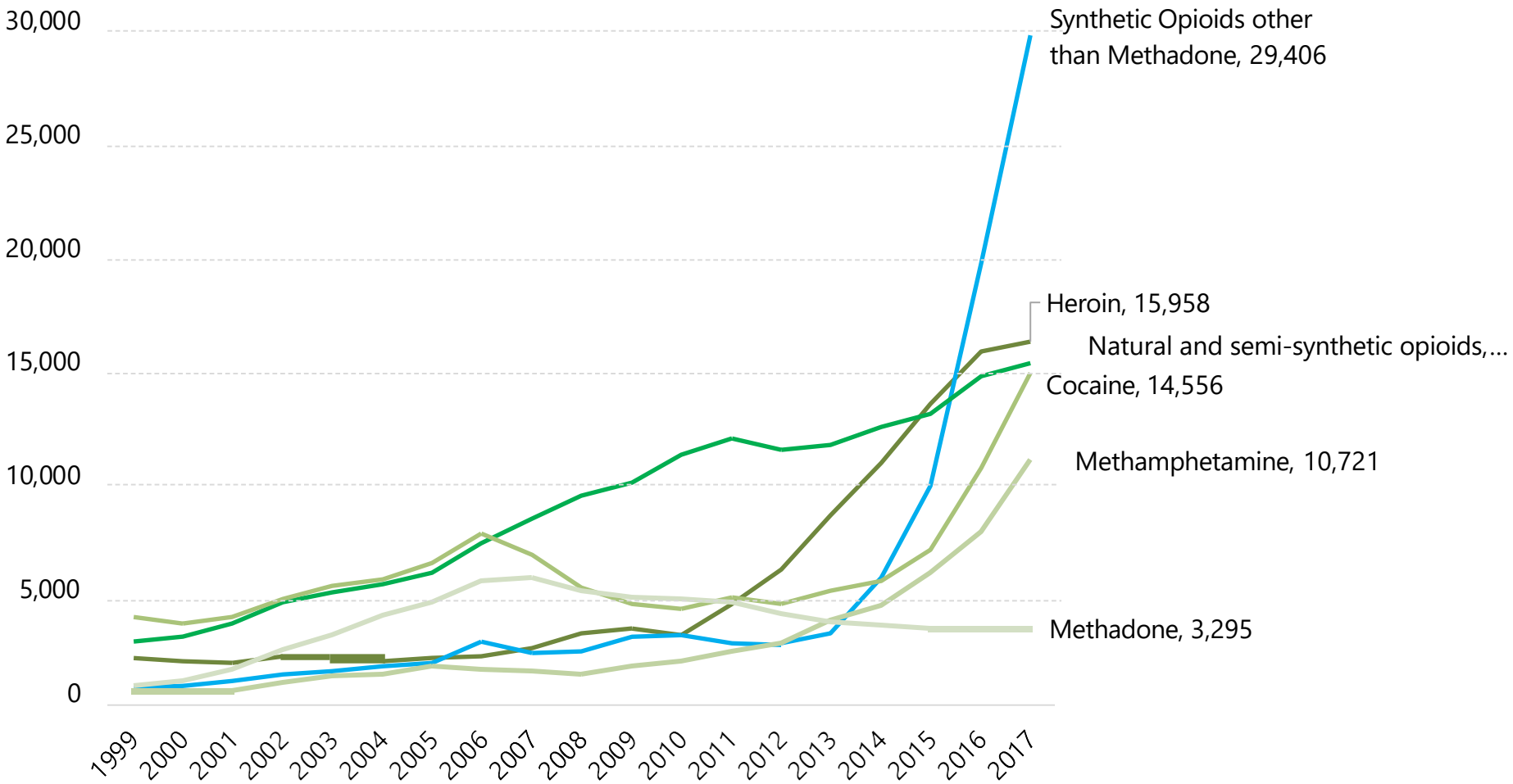
Drug-Overdose Deaths Involving Opioids, by Type of Opioid, United States, 2000–2014

The NEW ENGLAND JOURNAL of MEDICINE



Frank RG, Pollack HA. N Engl J Med 2017;376:605-607.

Drugs Involved in US Overdose Deaths, 1999 - 2017



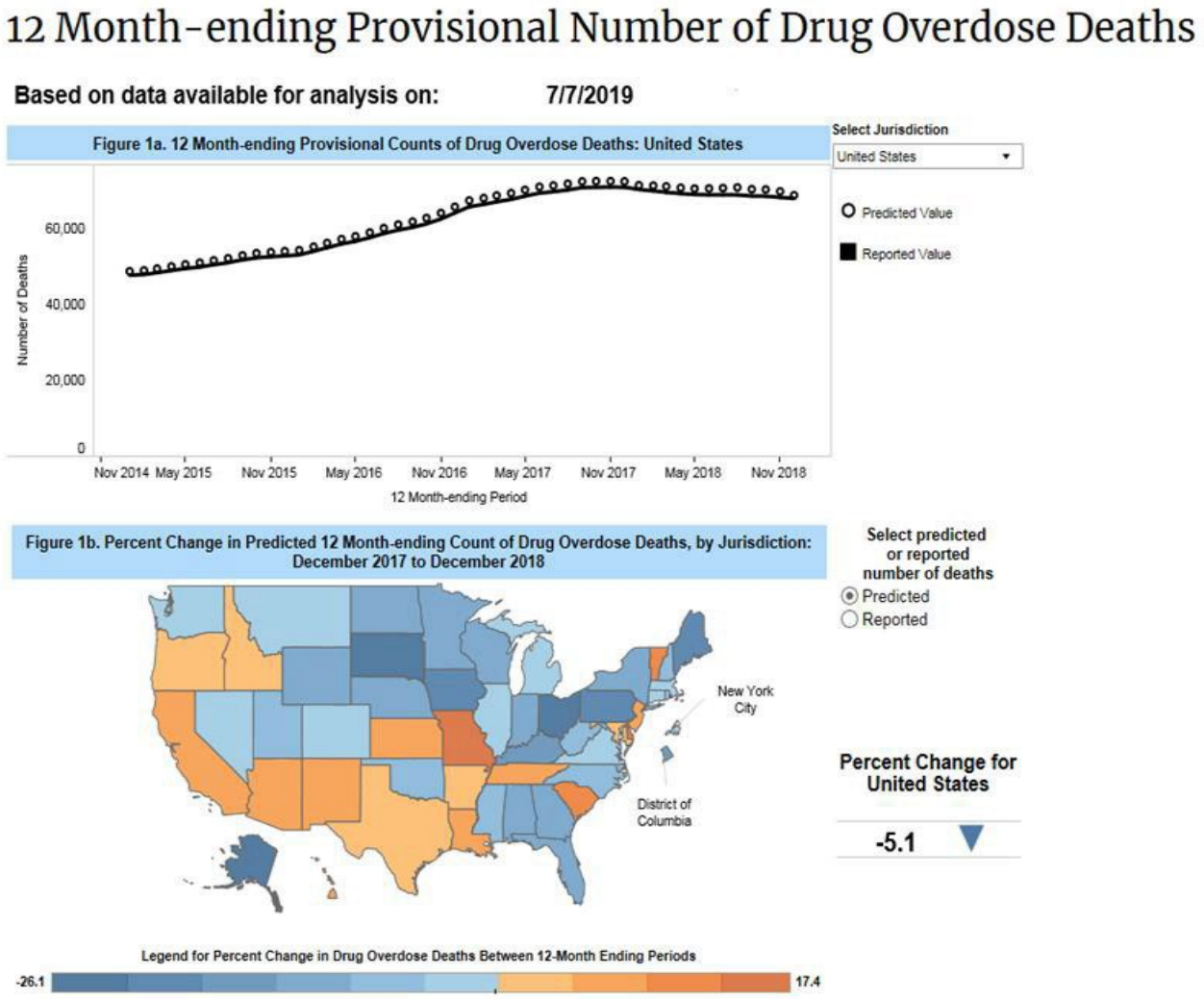
Source: CDC WONDER

A Hint of Good News

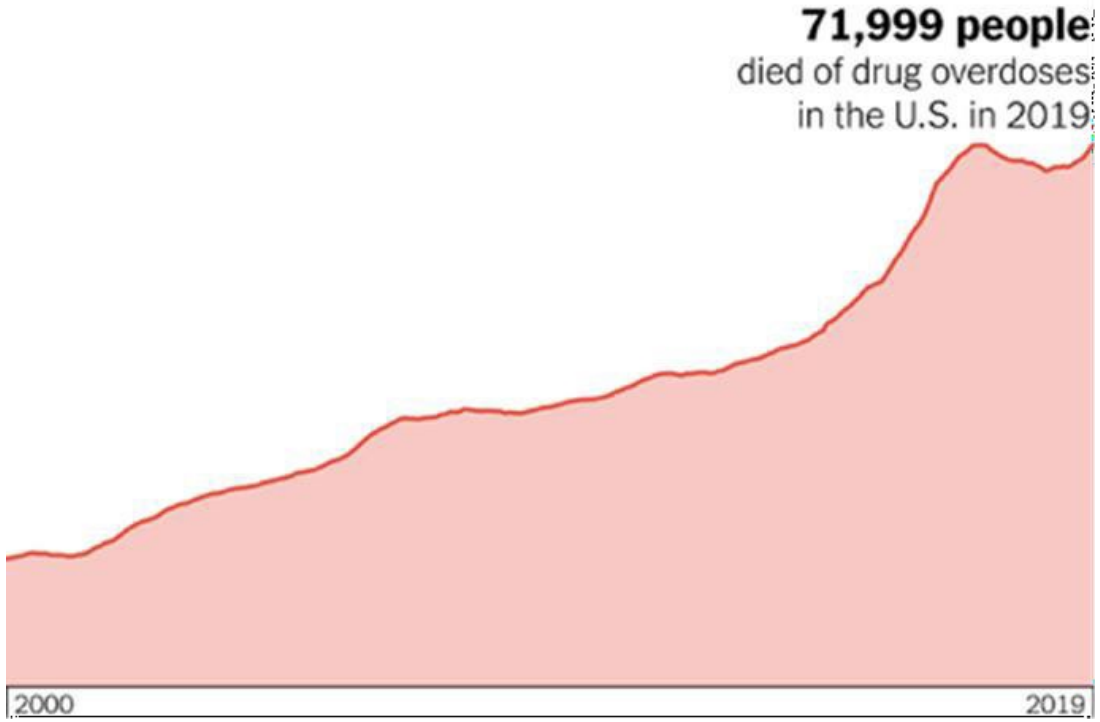
Total = 68,500 First ↓ since 1990

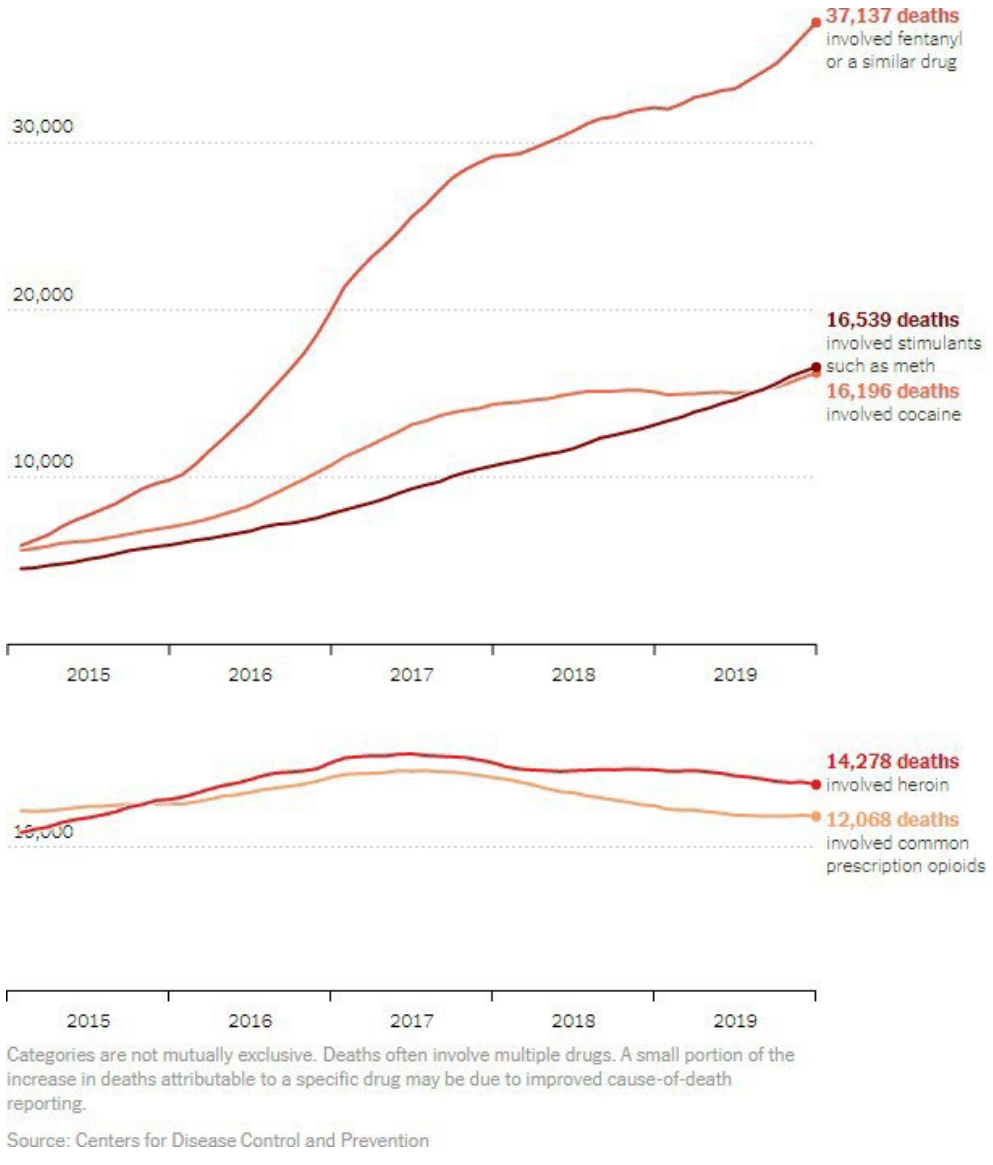
SD ↓25%, OH ↓22%, WV ↓8%
MO ↑16% DE ↑16%

Health and Human Services Secretary Alex Azar noted that more patients were receiving medication treatment,naloxone was being more widely distributed, and opioid prescriptions were down.

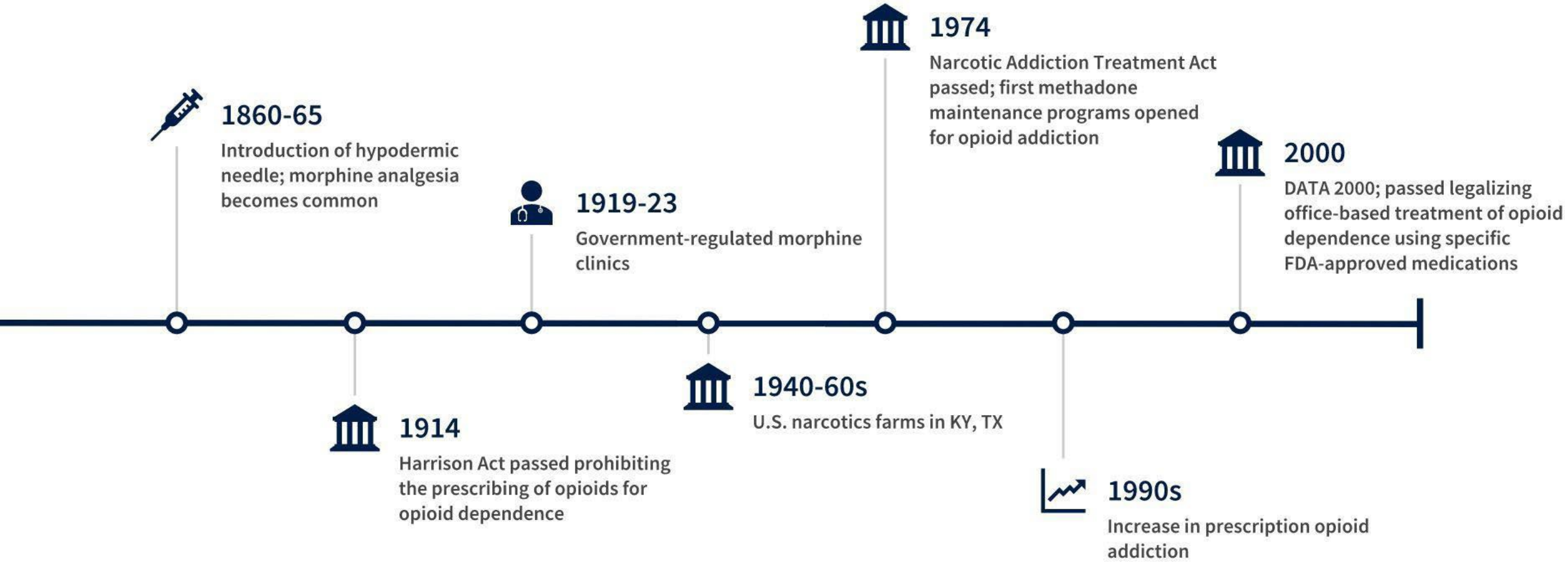


Drug Overdose Deaths 2019 - CDC



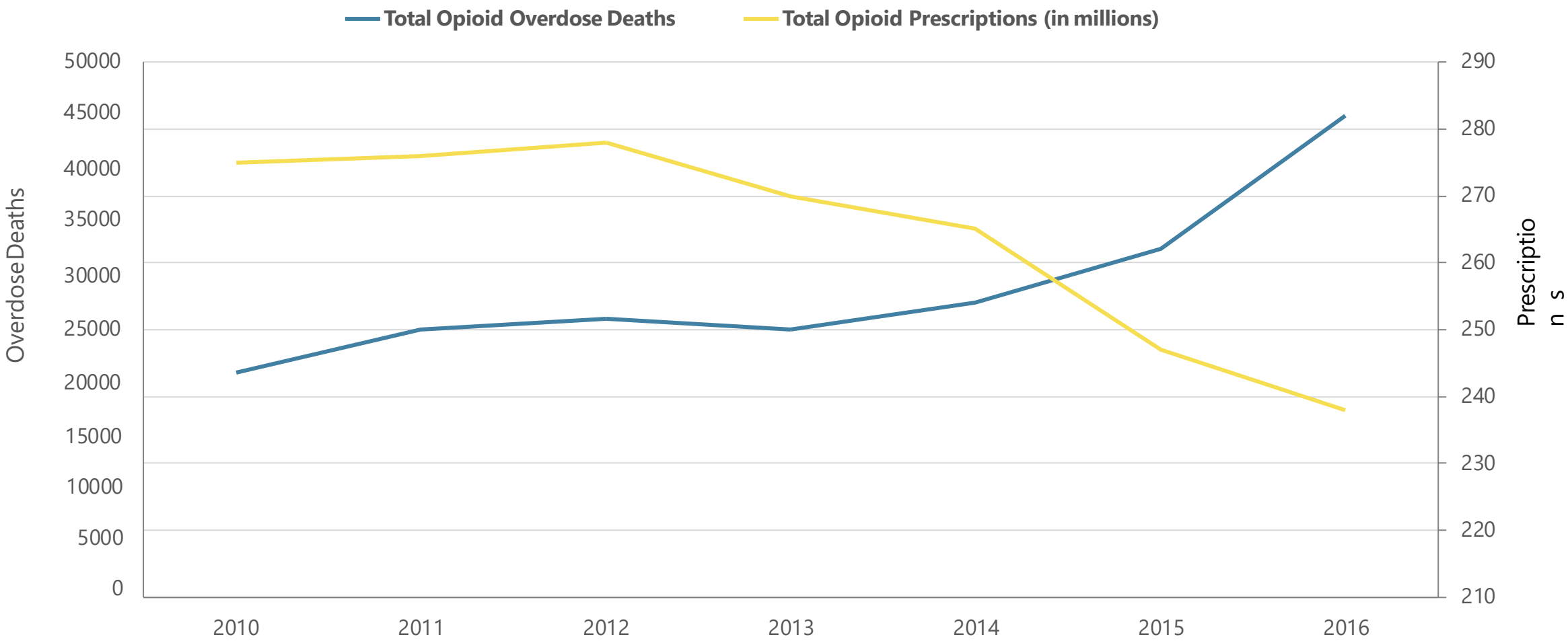


Brief History of Opioids in the US



CDC, 2018; Pezalla et al., 2017

Opioid Overdose and Prescribing Trends



CDC, 2018; Pezalla et al., 2017

Lethal Dose

- *Morphine* = 1x
- *Fentanyl* = 100x
- *Carfentanil* = 10,000x

Lethal doses of heroin compared to "synthetic" opioids.

DEA Schedule I II II Legal Implications

"Death pill": fentanyl disguised as other drugs linked to spike in US overdoses.

Audience Response

Opioids have been used medicinally for thousands of years, at which point did they become concerning for development of a substance use disorder?

A. In the late 1900s, with the development of pain as the fifth vital sign.

B. In the early 1900s, with government regulations limiting opioid importation.

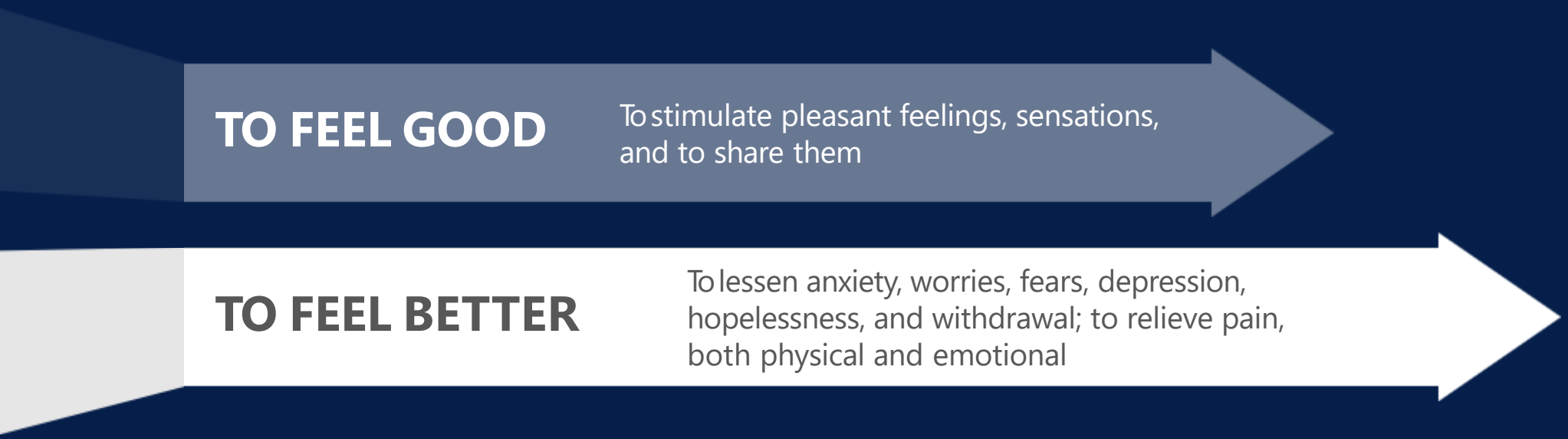
C. In the mid 1800s, with the development of the hypodermic needle.

D. Since they were discovered as an analgesic thousands of years ago.

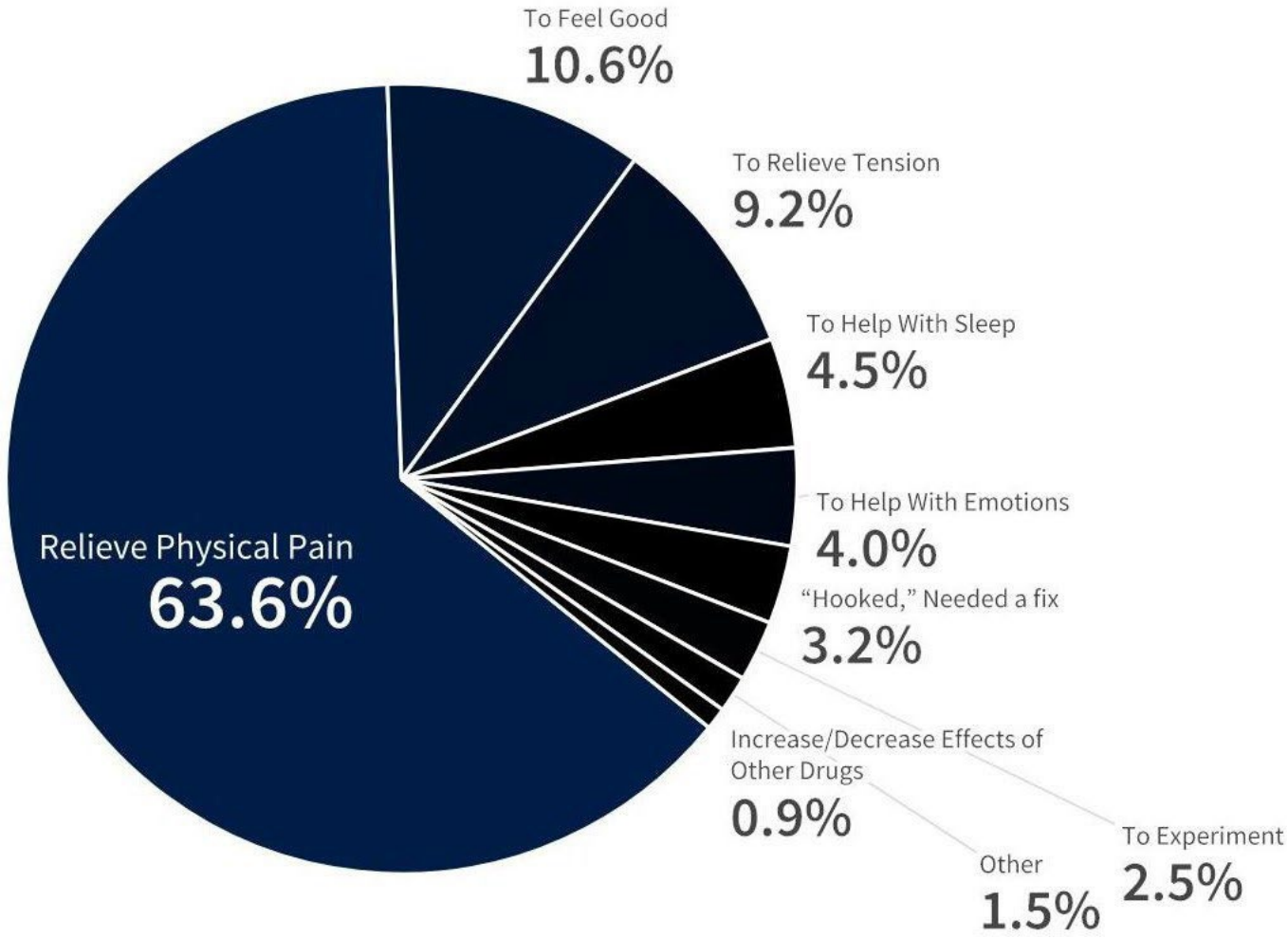
UNDERSTANDING ADDICTION AS A DISEASE

Neurobiology of Addiction

Why Do People Take Drugs?



Prescription Opioid Misuse and Heroin Use

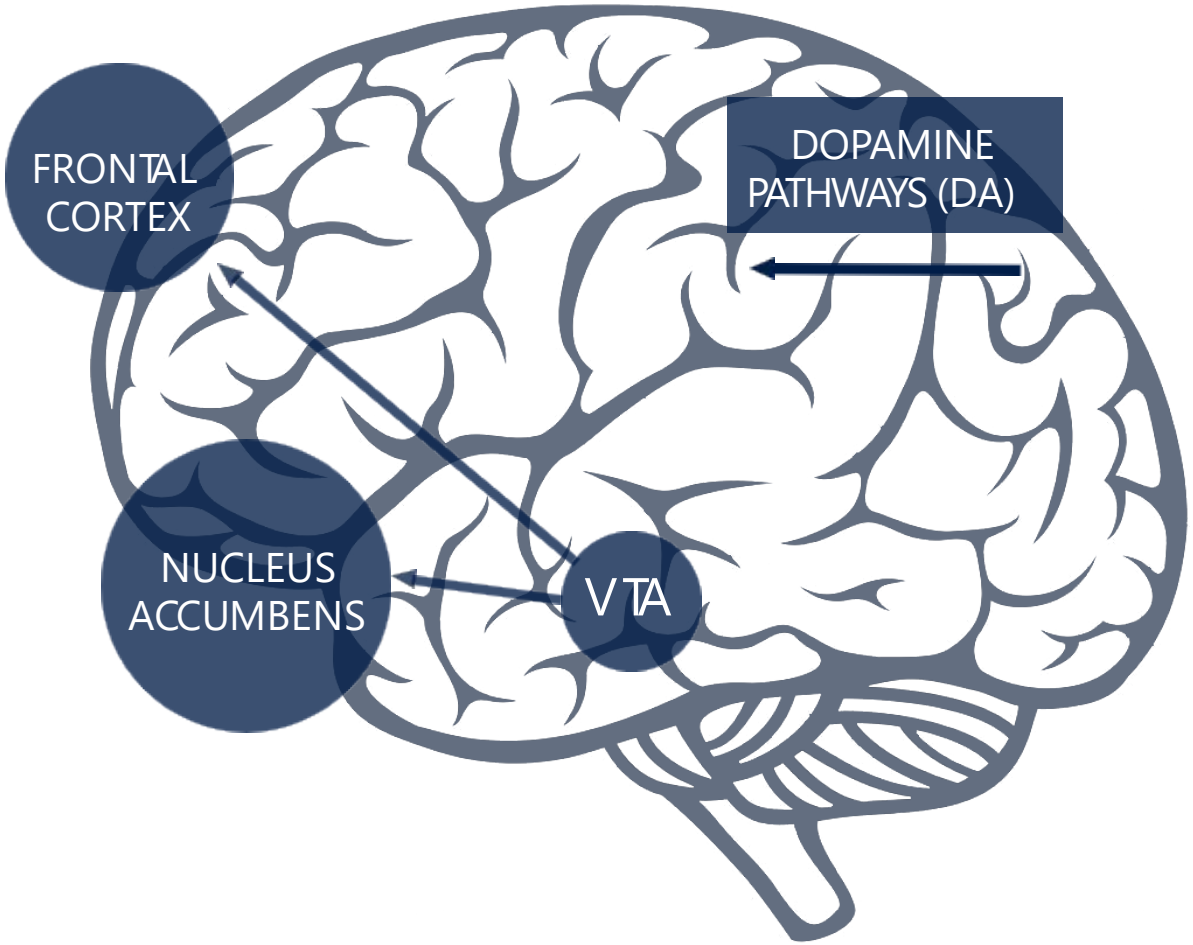


SAMHSA (2019). Results from the 2018 National Survey on Drug Use and Health

Reward Pathways

Mesolimbic Dopaminergic Circuitry

(Limbic System)



Reward Pathways

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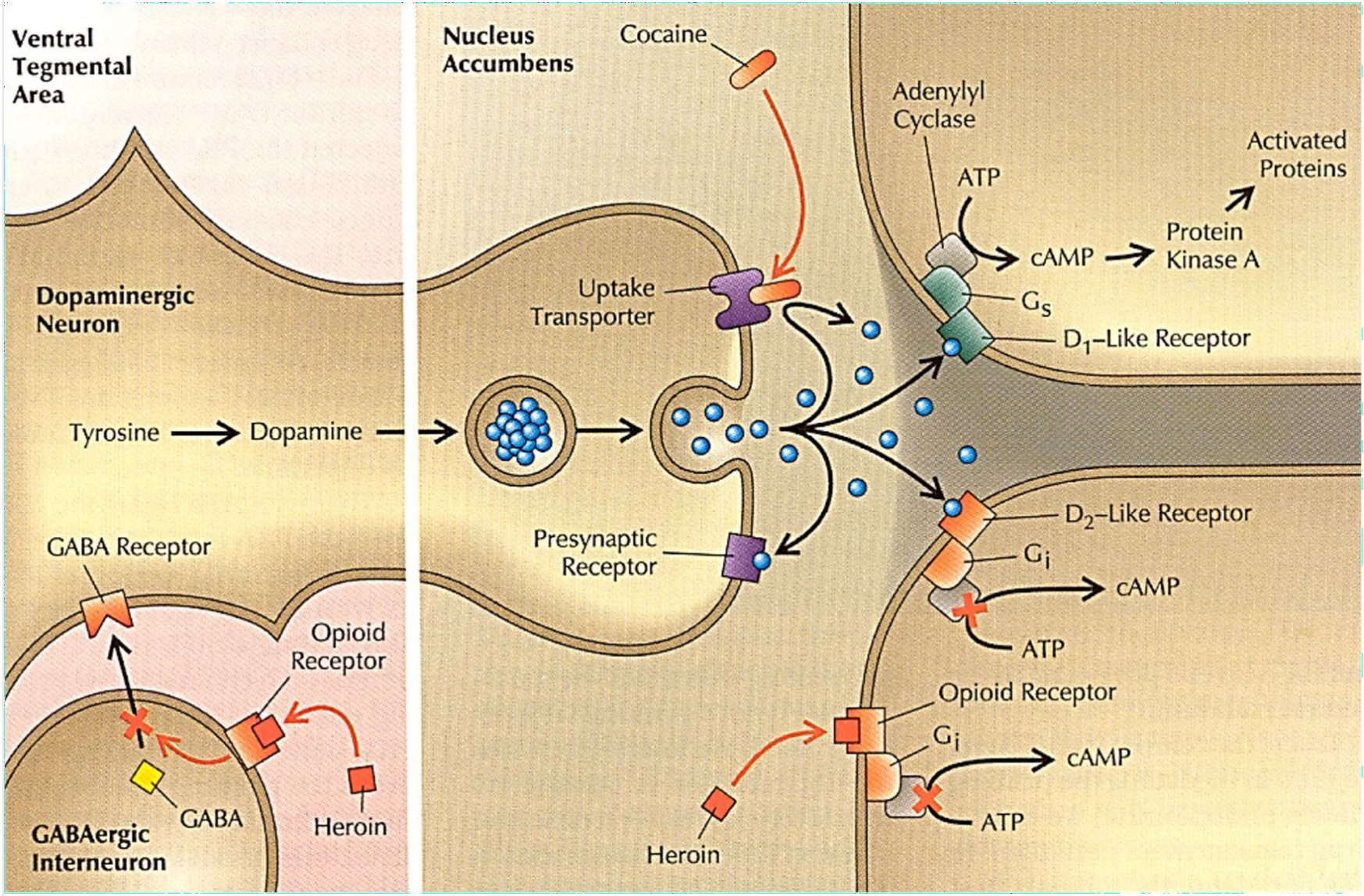
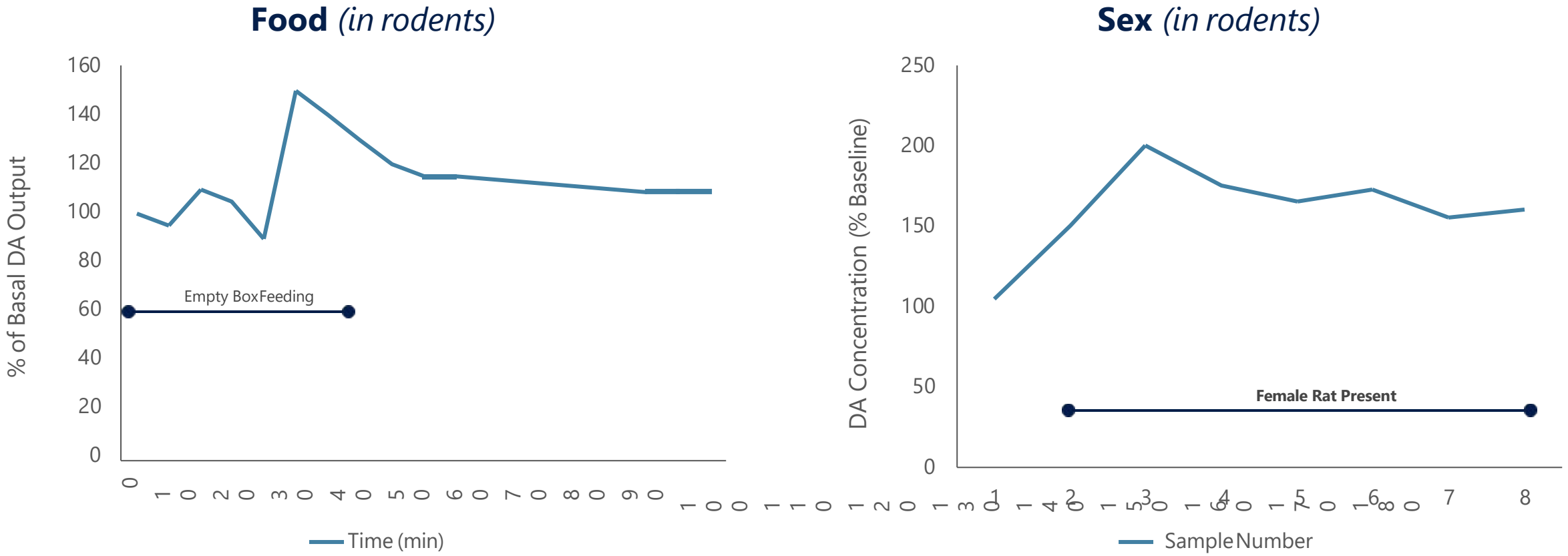


Leshner AI. Hosp Pract. 1996

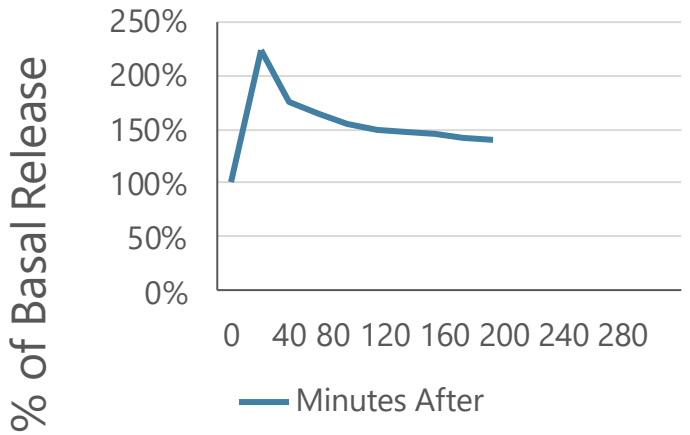
Natural Rewards Elevate Dopamine Levels



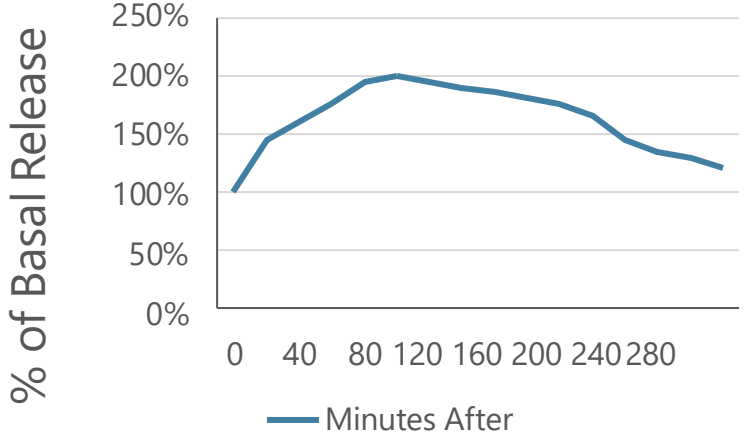
Di Chiara et al., Neurosci, 1999.Fiorino and Phillips, J. Neurosci, 1997

Drugs Elevate Dopamine More/Longer

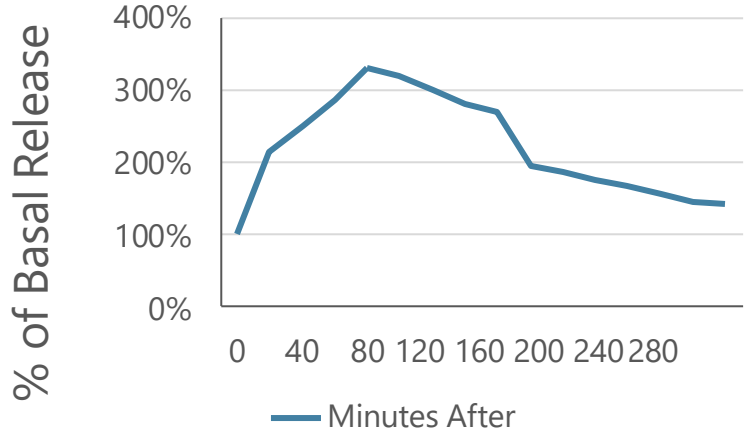
Nicotine *(in rodents)*



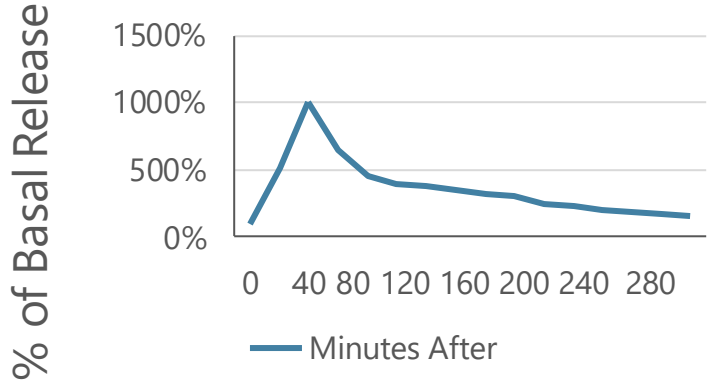
Morphine *(in rodents)*



Cocaine *(in rodents)*

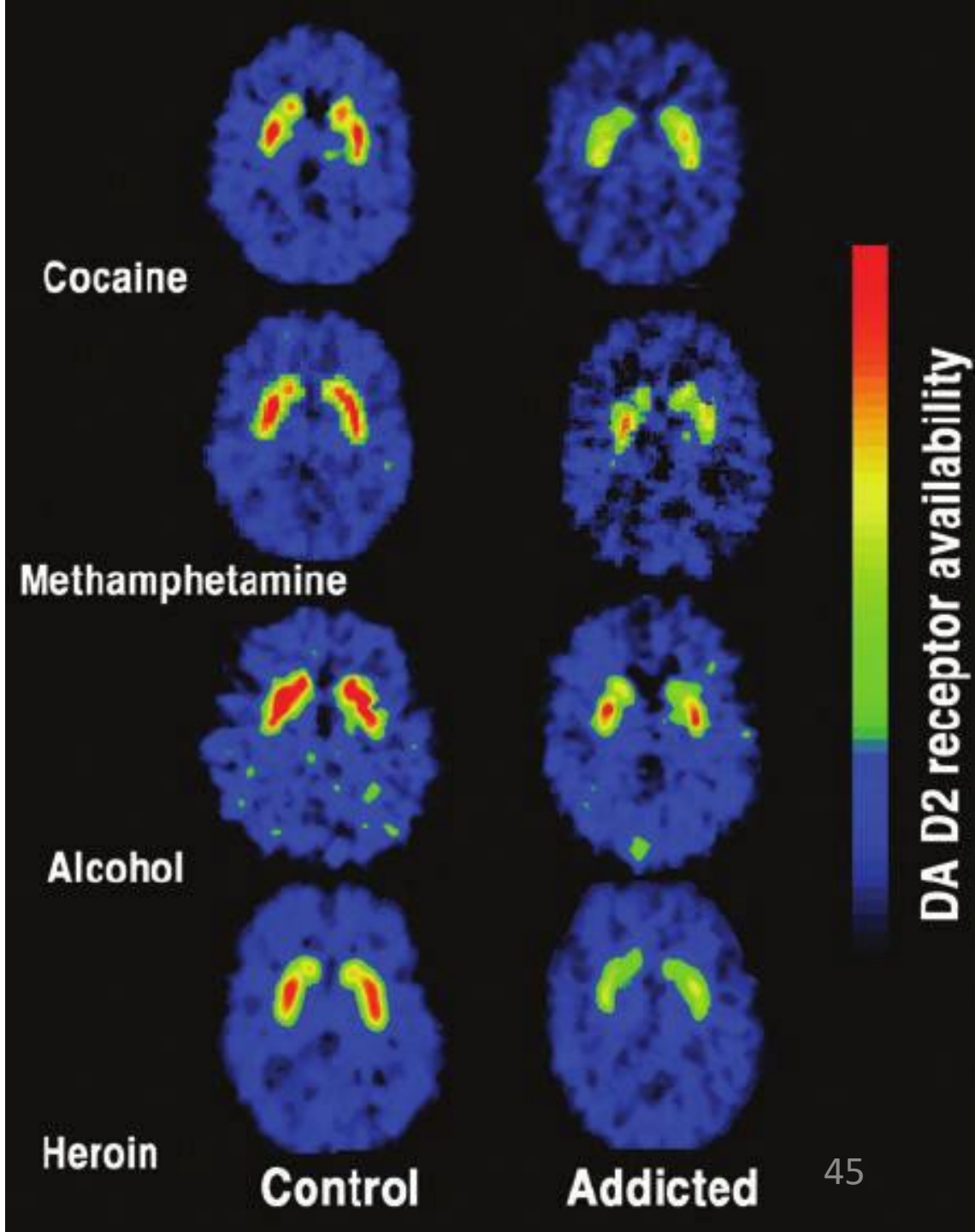


Amphetamine *(in rodents)*



Di Chiara G, Imperato A. Proc Natl Sci. 1988

Dopamine D2 Receptors are Decreased in the Addicted Brain



Non-Addicted Brain V. Addicted Brain

Non-Addicted Brain

Control

Saliency

Drive

Memory

STOP

GO

Addicted Brain

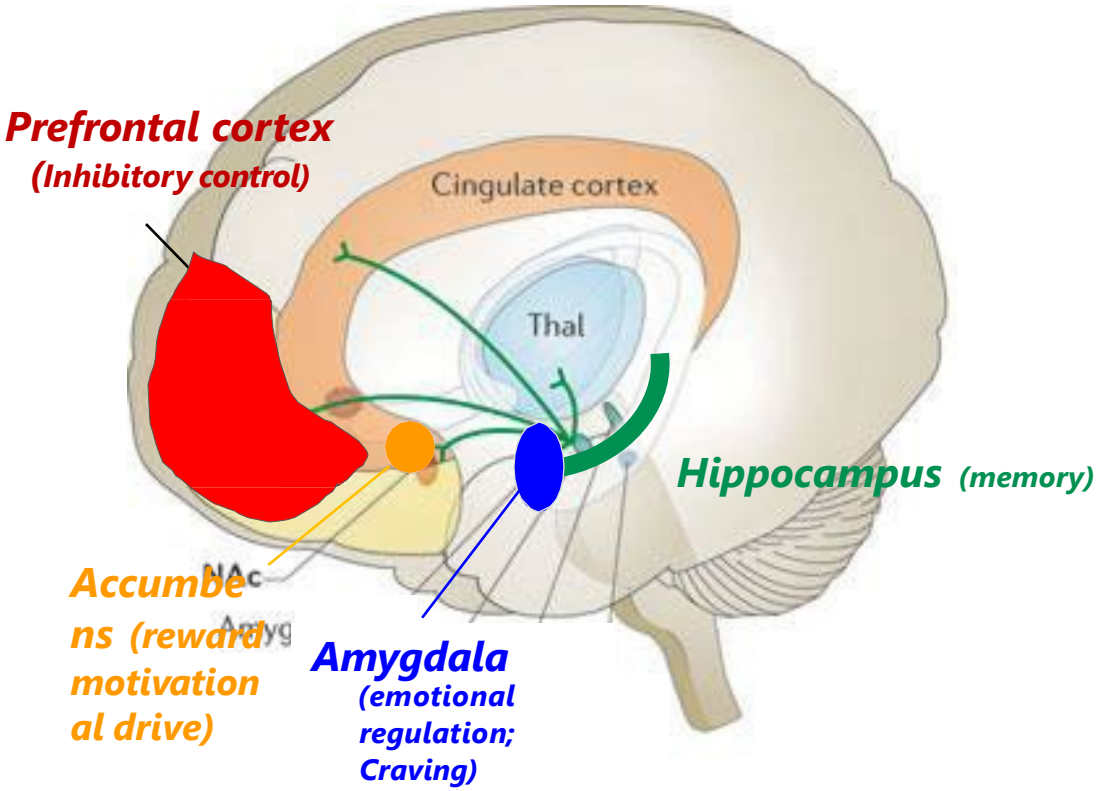
Control

Drive

Saliency

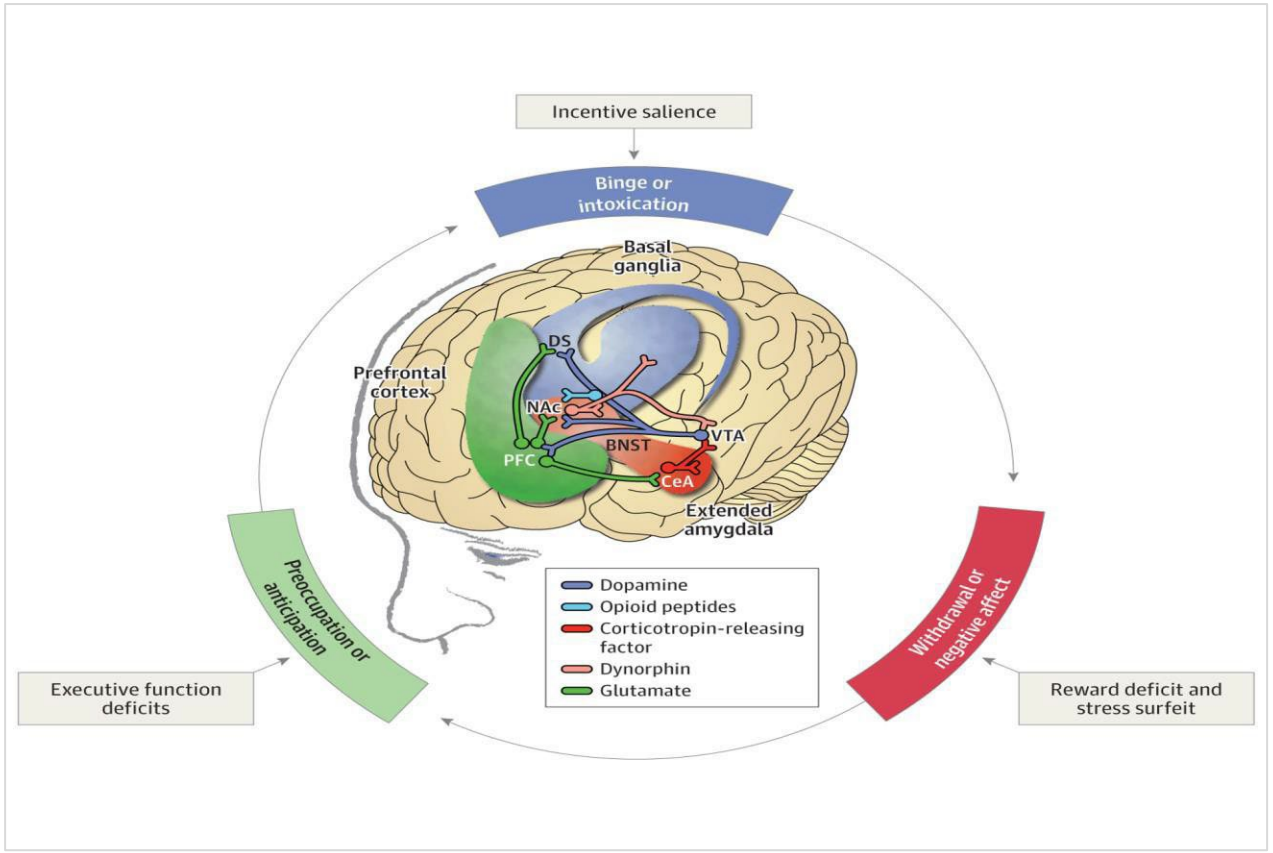
Memory

The Neurobiological Challenge of Addiction



↓ *Inhibitory control*
↑ *Increase rewarddrive*
↑ *Craving*
↑ *Drug memories*

Three Stages of the Addiction Cycle and Associated Neural Circuits



- **Stage 1:** Binge or Intoxication
- **Stage 2:** Negative Affect or Withdrawal
- **Stage 3:** Preoccupation or Anticipation (Craving)

Volkow, N. D., Jones, E. B., Einstein, E. B., & Wargo, E. M. (2019). Prevention and treatment of opioid misuse and addiction: A review

Opioid Tolerance and Physical Dependence

TOLERANCE

Both tolerance and physical dependence are physiological adaptations to chronic opioid exposure and DO NOT equal addiction or opioid use disorder

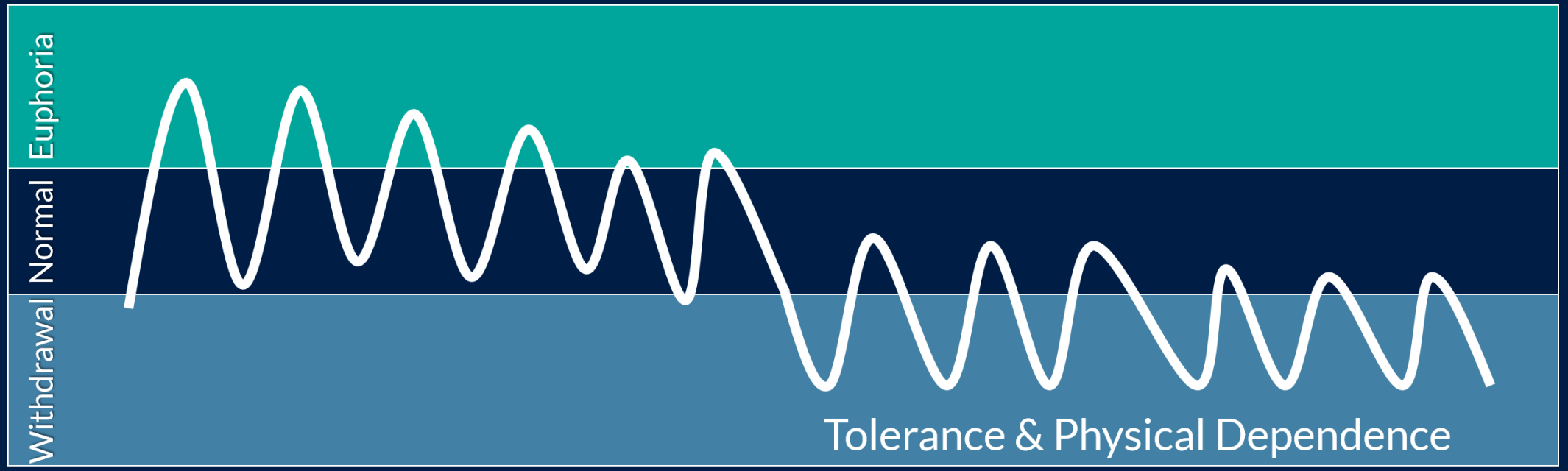
PHYSICAL DEPENDENCE

Increased dosage needed to produce specific effect. Develops readily for CNS and respiratory depression.

Signs and symptoms of withdrawal by abrupt opioid cessation, rapid dose reduction

Natural History Of Opioid Use Disorder

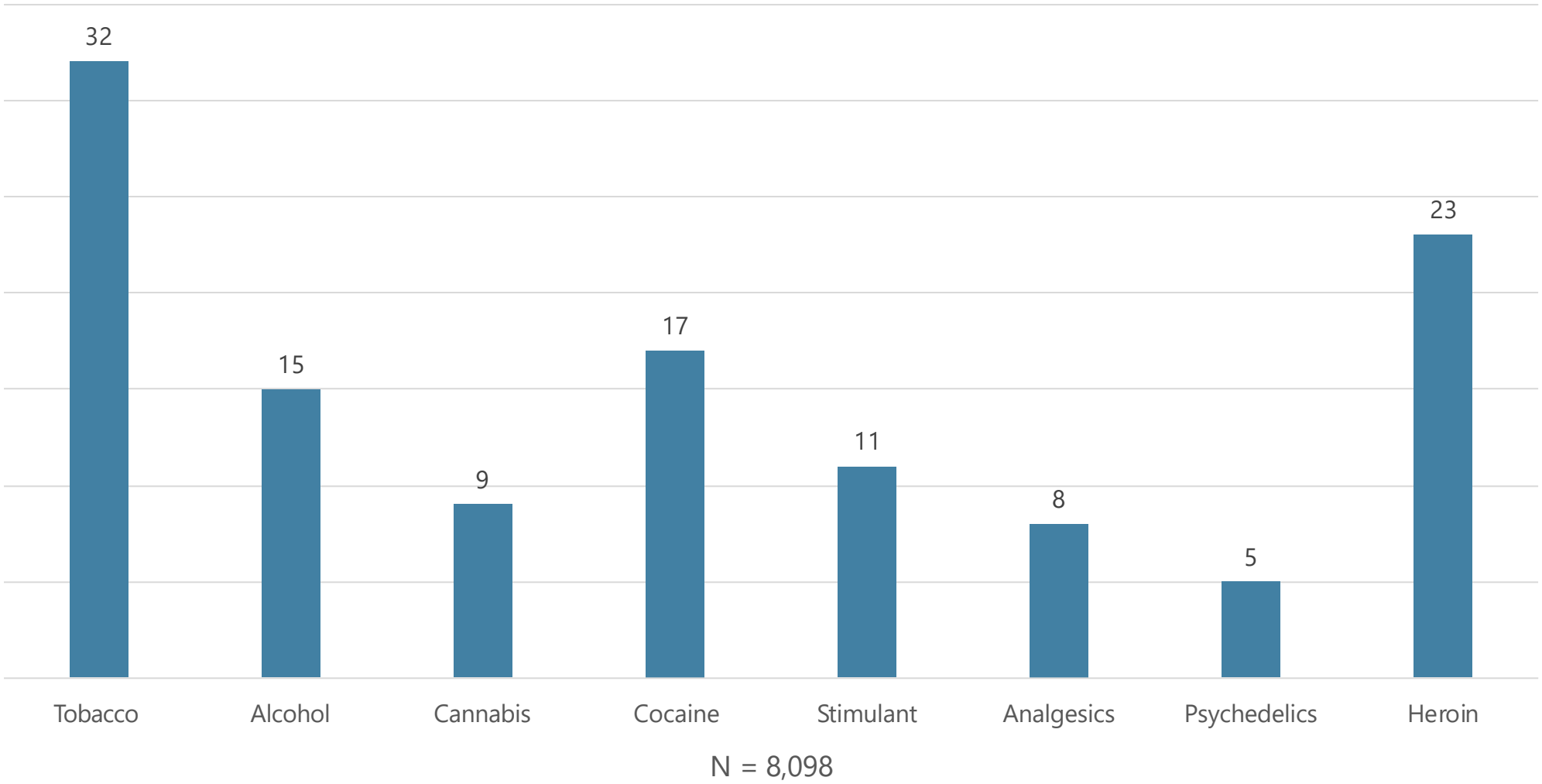
Alford DP. http://www.bumc.bu.edu/care/



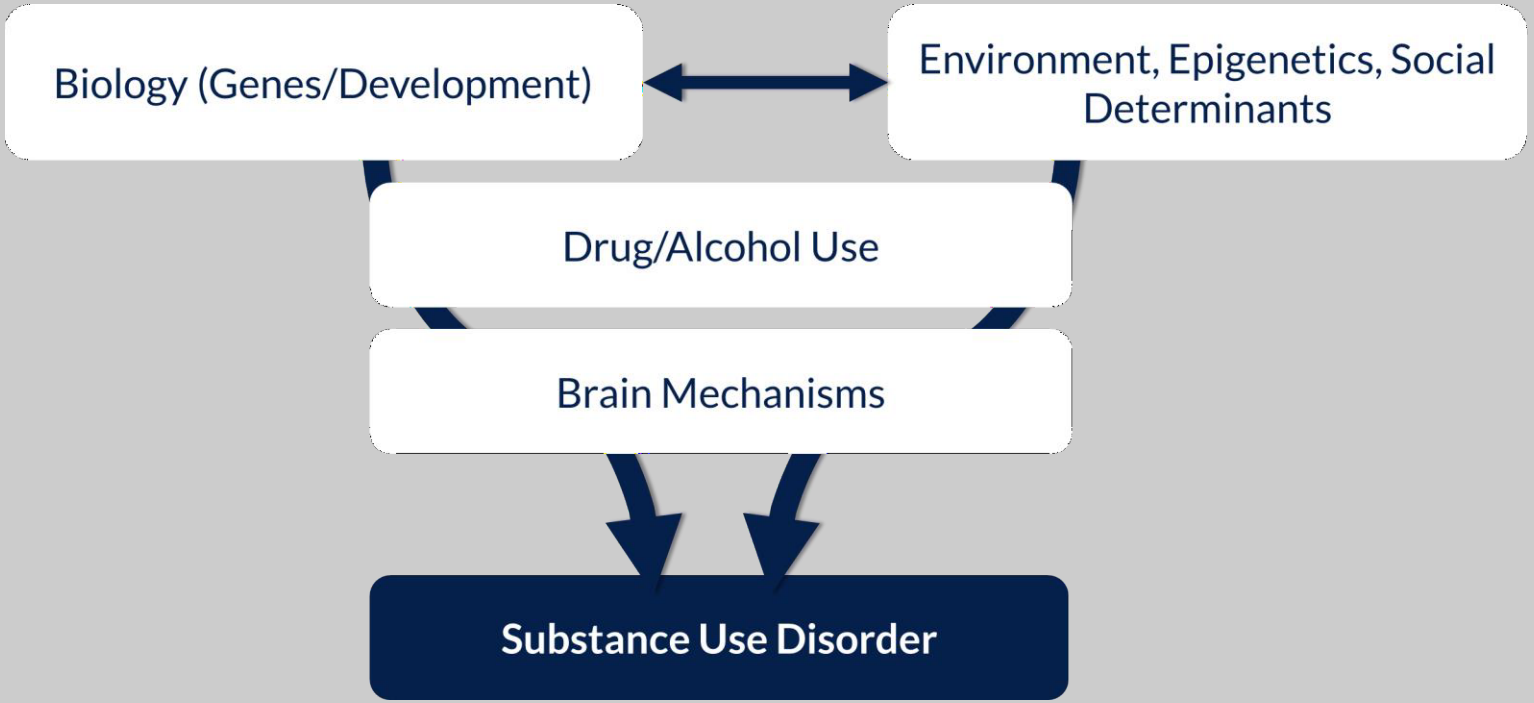
Initial use

Chronic use

Addiction Vulnerability/Prevalence Varies By Substance



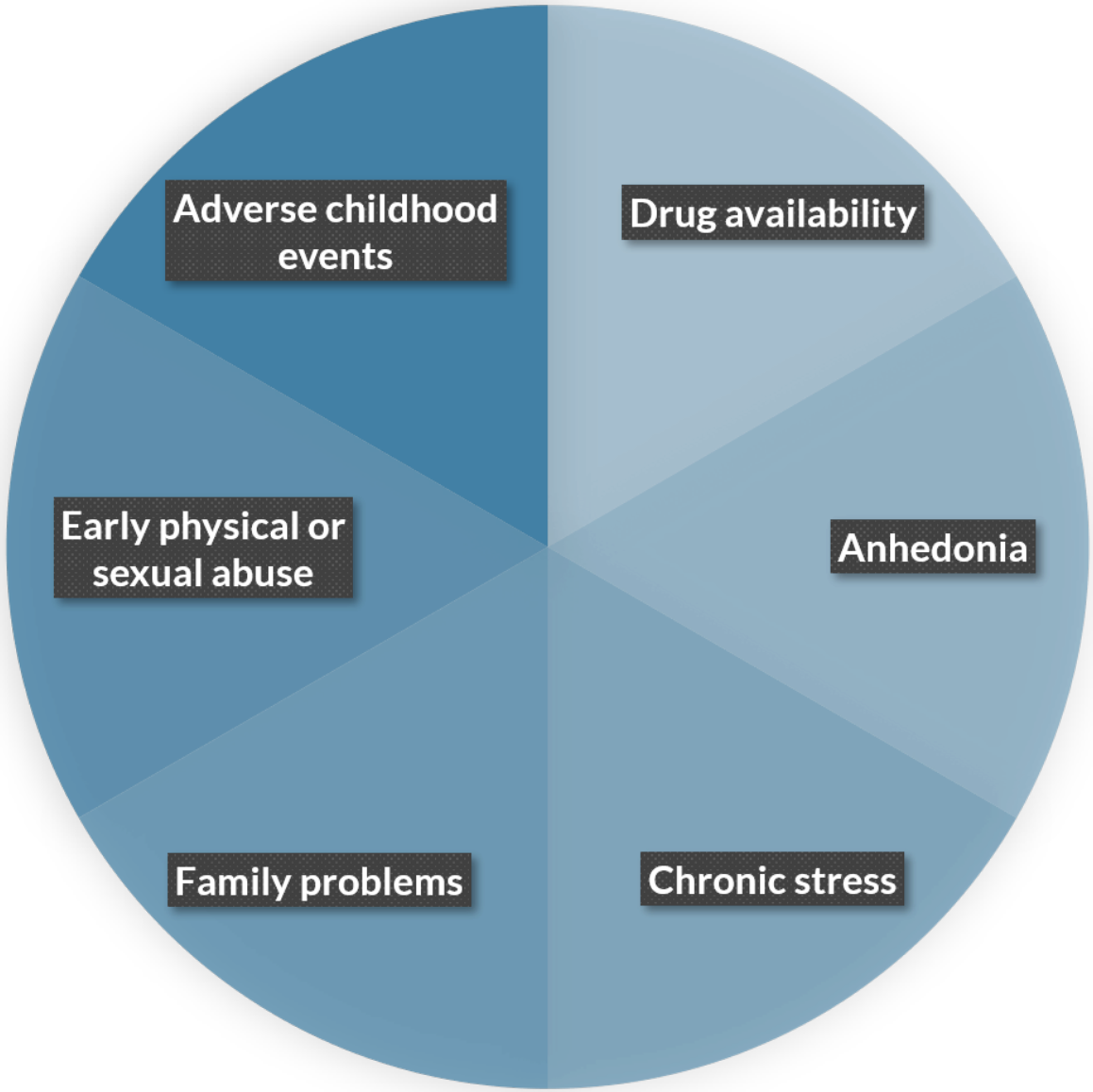
https://doi.org/10.1037/1064-1297.2.3.244



Development Of Substance Use Disorders Involves Multiple Factors

Environmental Factors That Contribute To Addiction

Many environmental factors can contribute to a person's propensity to use substances.



Audience Response

At what point in the natural history of development of an opioid use disorder does someone start taking opioids to “feel normal”?

A. After their first use.

B. After a period of use that results in tolerance.

C. When they first try to cut back on their use.

D. When they change from pills to injection druguse.

ASSESSING FOR EMOTIONAL/BEHAVIORAL AND MEDICAL CO-MORBIDITIES

Patient Assessment

The Healthcare Team

Qualities of the Healthcare Team Reviewer

- Welcoming, non-judgmental, empathetic, respectful
- Asks open-ended questions
- Explores patients' ambivalence to engage in treatment
- Attentive to responses; persistent

To Facilitate Effective Treatment

- Acknowledge some information is difficult to talk about
- Ask questions out of concern for patients' health
- Avoid using labels (e.g., "clean," "dirty," "addict")
- Assure confidentiality

Assessment Overview

1. Assess for use of alcohol, other drugs (illicit use, prescription drug misuse), and tobacco use.
2. Review the Prescription Drug Monitoring Program (PDMP).
3. Establish diagnosis of moderate and current opioid use disorder and current opioid use history.
4. Identify comorbid emotional/behavioral and medical conditions; how, when, where they will be addressed.
5. Evaluate level of physical, psychological, and social functioning or impairment.
6. Determine patient's readiness to participate in treatment.

Concurrent Sedative-Hypnotics

Relative Contraindications

- Alcohol and other sedative-hypnotics are relative, not absolute, contraindications to buprenorphine
- *Deaths have resulted from injecting high potency benzodiazepines*

Identification and Referral

- Identify and refer patients who are willing and able to undergo medically supervised withdrawal management from alcohol, benzodiazepines, or other sedatives

Substance Use Disorder: DSM-5 Criteria

1. Tolerance*
2. Withdrawal*

**Not valid if opioid taken as prescribed*

Loss of Control

3. Larger amounts and/or longer periods
4. Inability to cut down on or control use
5. Increased time spent obtaining, using, or recovering
6. Craving/Compulsion

Mild (2-3),
Moderate (4-5),
Severe (≥6)

APA. (2013). DSM (5th ed.)

Substance Use Disorder: DSM V Criteria

Use Despite Negative Consequences

7. Role failure: work, home, school
8. Social, interpersonal problems
9. Reducing social, work, recreational activity
10. Physical hazards
11. Physical or psychological harm

Mild (2-3),
Moderate (4-5),
Severe (≥6)

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DSM-5 OUD Checklist (Part 1 of 2)

Diagnostic Criteria*	Meet Criteria?(Yes/No)	Notes/Supporting Information
Opioids are often taken in larger amounts or over a longer period than was intended		
There is a persistent desire or unsuccessful efforts to cut down or control opioid use		
A great deal of time is spent in activities necessaryto obtain the opioid, use the opioid, or recover from its effects		
Craving, or a strong desire to use opioids		
Recurrent opioid useresulting in failure to fulfill major role obligations at work, school or home		
Continued opioid use despite having persistent or reurrent social or interpersonal problems caused or exacerbated by the effects of opioids		

*Opioid Use Disorder requires at least 2 criteria be met wit hin a 12-month

DSM-5 OUD Checklist (Part 2 of 2)

Diagnostic Criteria*	Meet Criteria? (Yes/No)	Notes/ Supporting Information
Import ant social, occupati onal, or recreational activities are given up or reduced becauseof opioid use		
Recurrent opioid use in situations in which it is physicallyhazardous		
Continued opioid use despite knowledge of having a persistent or recurrent physical or psychological problem that is likely to have been caused or exacerbated by the substance		
Tolerance, as defined by eit her of the following: (a) A need for markedly increased amounts of opioids to achieve intoxicationor desired *effect* (bl Markedly diminishedeffect with continued use of the same amount of an opioid		
Withdrawal, as manifested by either of the following: (a)The characteristic opioid withdrawal syndrome (bl Opioids (or a closely related) substance is taken to relieve or avoid withdrawal symptoms		

*Opioid Use Disorderrequiresat least 2 criteriabe met within a 12-mont

Current Opioid Use History

- Type: prescription opioids, heroin, fentanyl
- Routes
  - Injection: IV, IM, SC, or skin popping (history of sharing needles)
  - Oral, intranasal, inhaled
- Quantity used
- Frequency used
- Last use: Date? Time?
- Withdrawal Symptoms:Present? Absent?

Current Opioid Use History

- Previous treatment/counseling/ groups
  - Nonpharmacologic (AA,NA, and other recovery groups e.g. Smart Recovery with or without a sponsor, counseling, etc.)
  - Pharmacologic with agonist (methadone, buprenorphine) and antagonist (naltrexone) therapies
- Use of syringe and needle exchange program
- Longest period of abstinence
- Relapse experience, triggers
- Overdose history including use of naloxone (current naloxone access)

Psychiatric Co-morbidity

- Any history of:
  - psychiatric illness? did it predate substance use?
  - inpatient and/or outpatient treatment
  - suicidal ideation or attempts
- Treatment adherence to psychiatric care including medications
- Is the patient psychiatrically stable?
- Are the psychosocialcircumstances of the patient stable and supportive?

Laboratory Evaluation

- Liver function tests
- Hepatitis and HIV serologies
- Pregnancy test for women
- Urine drug testing
- Do not let lab evaluation delay initiation of treatment

First Patient Appointment

- May involve phone screening by staff or provider to assure that provider can meet patient's needs
- If the patient is not in withdrawal, all therapeutic options discussed; if buprenorphine, then arrangements are made for induction
- If the patient is in withdrawal or withdrawal is imminent an abbreviated evaluation and emergent induction is made
- Harm reduction education and naloxone training and access; significant others involved if possible

Are You Ready To Start Treating Your Patient?

Are You Ready?

- Are there resources available in the office to provide appropriate treatment? Medical or psychiatric care?
- What about on-call coverage?
- Are there treatment programs available that will accept referral to a setting with more intensive levels of service if needed? (e.g., buprenorphine→ methadone [daily observeddosing])

Words of Wisdom

1. Do not start with the most complex patient (e.g., methadone transfer).
2. Start with 1, not 30, patients.
3. Know your limits.
4. Do not be afraid to consult with and/or refer to more experienced provider.
5. Obtain a mentor from your ASAM State or regional chapter or from the Provider's Clinical Support System (https://pcssnow.org).

Audience Response

Do you feel ready to diagnose a substance use disorder?

A. Absolutely!
B. I need more information and practice.
C. This type of patient scares me.
D. I'm nervous about how my staff will react to treating this population.
E. A bit of everything except A.

Activity 3: Revisiting Mary's Case

- ***Task:*** With your group, identify assessment procedures for Mary.
- ***Discuss:*** Let's revisit Mary's case from an assessment perspective. What steps and procedures you would follow to assess Mary?
- ***Time Allocated:*** 10 Minutes

Mary's Case

What are your procedures for:

1. Documenting Mary's use of other substances?
2. Identifying if Mary needs medically supervised withdrawal management?
3. Screening and assessing for comorbid medical conditions (how, when, and where will they be addressed)?
4. Screening for emotional/behavioral and psychiatric disorders (how, when, and where will they be addressed)?
5. Screening for communicable diseases?
6. Assessing Mary's access to social supports?
7. Determining her readiness to participate in treatment and her goals for treatment?

Is there anything you would assess for that we have NOT discussed?

What else do you want to know about Mary?

Activity 3: Revisiting Mary's Case

- ***Task:*** Large Group Report Out
- ***Discuss:*** Let's revisit Mary's case from an assessment perspective. What steps and procedures you would follow to assess Mary?
- ***Time Allocated:*** 10 Minutes

End of Session 1