

# The Opioid Epidemic: What Mental Health Professionals Need to Know

Person-Centered Addiction  
Medicine Treatment

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# Agenda

- 1 The Opioid Epidemic: history, course, and statistics
- 2 Policy developments: federal and state initiatives
- 3 Treatment considerations: current trends in SUD care
- 4 Anti-relapse medications
- 5 Questions and Discussion

# Contact Information

I am happy to discuss any of this information further



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# The Opioid Epidemic: History, Course, Statistics

## Definition of Opioids



“Opioids are a class of drugs that include the illicit drug heroin as well as the licit prescription pain relievers oxycodone, hydrocodone, codeine, morphine, fentanyl and others.”

“Opioids are chemically related and interact with opioid receptors on nerve cells in the brain and nervous system to produce pleasurable effects and relieve pain.”

- ASAM, 2016 Opioids Facts and Figures

# Major Events in the History of Opioids

Brownstein, M. J. (1993). A brief history of opiates, opioid peptides, and opioid receptors. Proceedings of the National Academy of Sciences, 90(12), 5391-5393.

## 3000 BC Opium Cultivation

There is agreement among scholars that at least as far back as 3000 BC opium was cultivated by the Sumerians - inhabitants of modern day Iraq

## 300 BC Homer's Odyssey

Helen, Zeus' daughter, gives an opiate-based preparation to her guests to "help them forget their grief over Odysseus' absence"

## 700-1300 AD Opium trade expands

Arab traders first bring opium to India and China 700-1000 AD. Then it makes its way from Asia Minor to Europe. By 1600, reports of misuse and dependence found in manuscripts

## 1806 Morphine isolated

Serturmer isolates the active ingredient in opium and names it after Morpheus, the god of dreams

## 1850s Hypodermic needle invented

Morphine becomes widely used in surgical settings and pain treatment in general

# Major Events in the History of Opioids

Brownstein, M. J. (1993). A brief history of opiates, opioid peptides, and opioid receptors. Proceedings of the National Academy of Sciences, 90(12), 5391-5393.

## 1898 Heroin synthesized

Discovered in the search for a safer, more effective, less addictive alternative to morphine

## 1914 Passage of Harrison Act

Opiates and cocaine were taxed heavily and then ultimately made illegal, leading to the creation and surge of black market availability

## 1939, 1946 First synthetic opioids

Demerol and Methadone, respectively, were developed as the first two structurally unrelated compounds that produced opiate-like effects

## 1942 First antagonist developed

Weijlard and Erikson develop nalorphine, finding it can reverse respiratory depression and precipitate withdrawal syndrome

## 1960s-90s Other developments

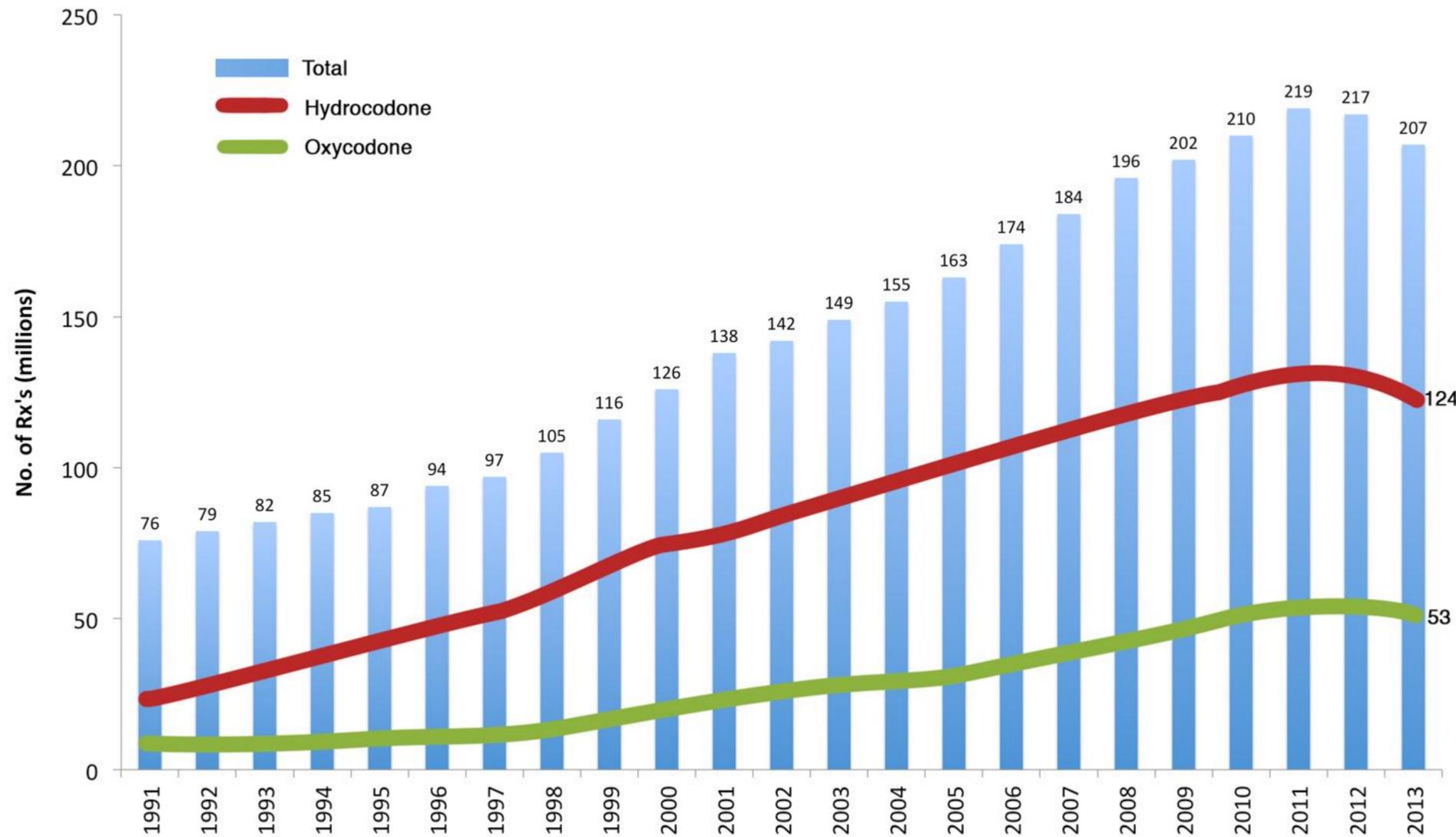
By the 1960s, actions of agonists, partial agonists and antagonists were being investigated, as was MMT. In the 1970s, Vicodin and Percocet were introduced, though most Drs were conservative in pain treatment

## Then, in 1996, OxyContin is Born



- Purdue Pharma aggressively marketed the painkiller as safe, non-addictive, and “abuse deterrent” due to its time-release protective coating.
- By 2000, it accounted for \$1.1 billion in sales, a 2000% increase from its first year. In 2010, that number reached \$3.1 billion.
- Its introduction coincided with a major push by industry groups to treat chronic non-cancer pain more aggressively than ever, identifying pain as the “5th vital sign.”
- Ultimately, the rate of opioid prescribing in general increased substantially, with over 1/3 of opioid prescriptions coming from primary care providers.

# Prescriptions for Opioids Surge...



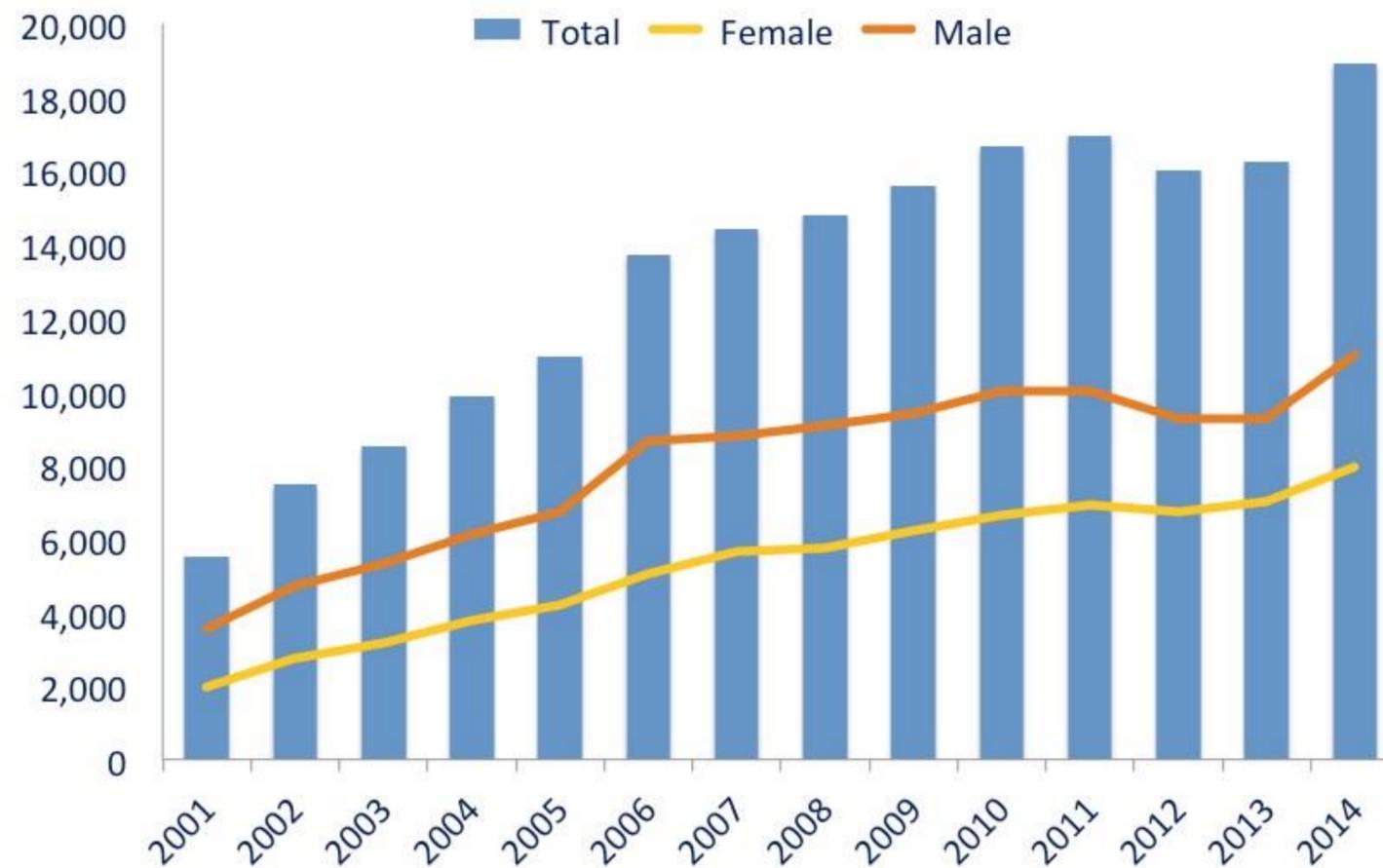
- Between 1991-2011, opioid prescriptions nearly tripled, climbing from 76 million to 219 million, respectively.
- The US accounts for nearly 100% of worldwide hydrocodone Rx's and 81% of worldwide oxycodone Rx's

# ...And Overdose Deaths Surge Too



## National Overdose Deaths

Number of Deaths from Prescription Opioid Pain Relievers



Source: National Center for Health Statistics, CDC Wonder

- Nationwide, deaths attributed to Rx opioids nearly quadrupled between 2001-2014
- In Minnesota, overdose death rates climbed steadily between 2000-2013, only recently showing modest improvements

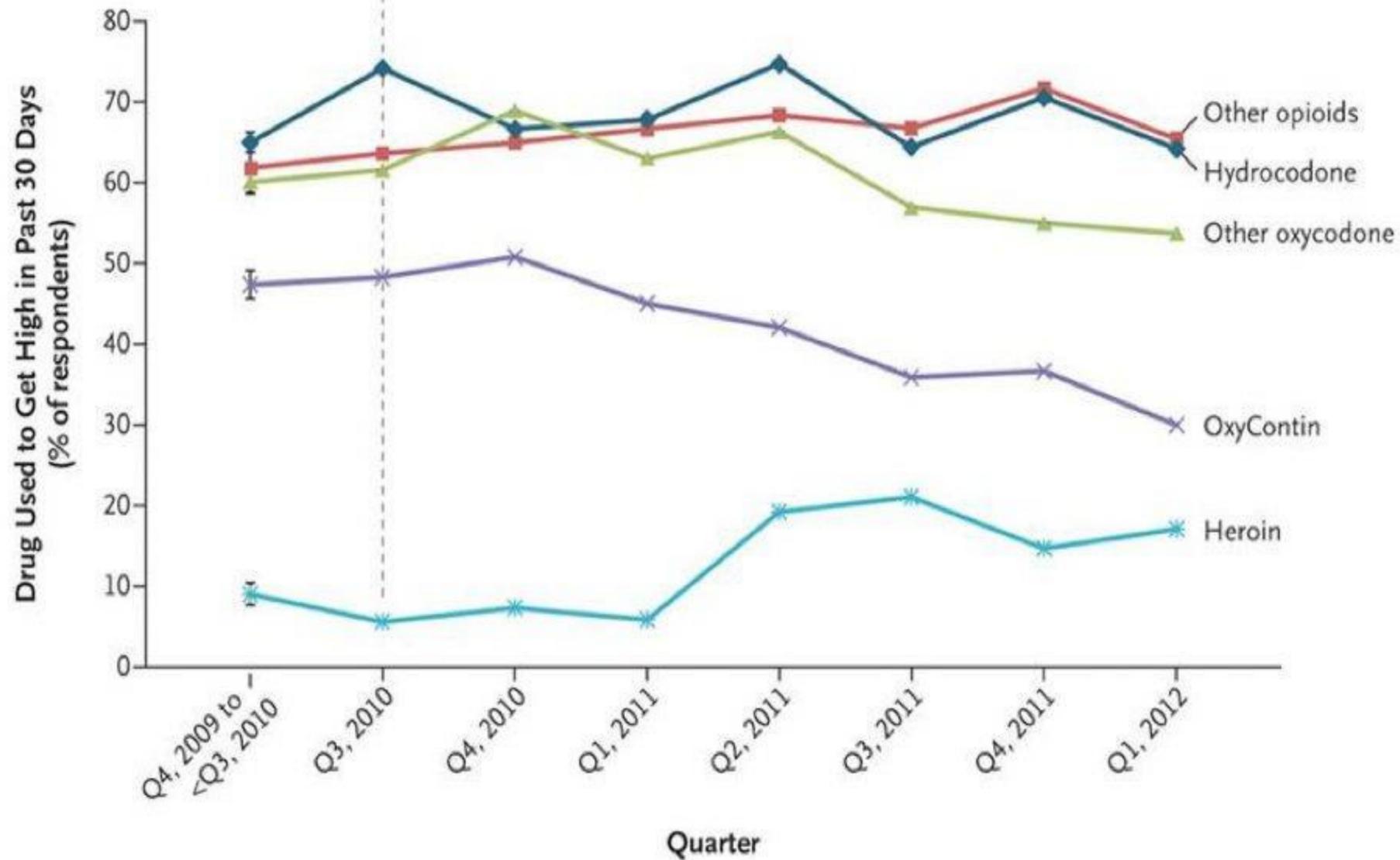
## Opioid Epidemic

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Drug overdose is the leading cause of accidental death in the US, with 47,055 lethal drug overdoses in 2014 (double the rate from decade prior). Opioid addiction is driving this epidemic, with 18,893 overdose deaths related to prescription pain relievers, and 10,574 overdose deaths related to heroin in 2014.”

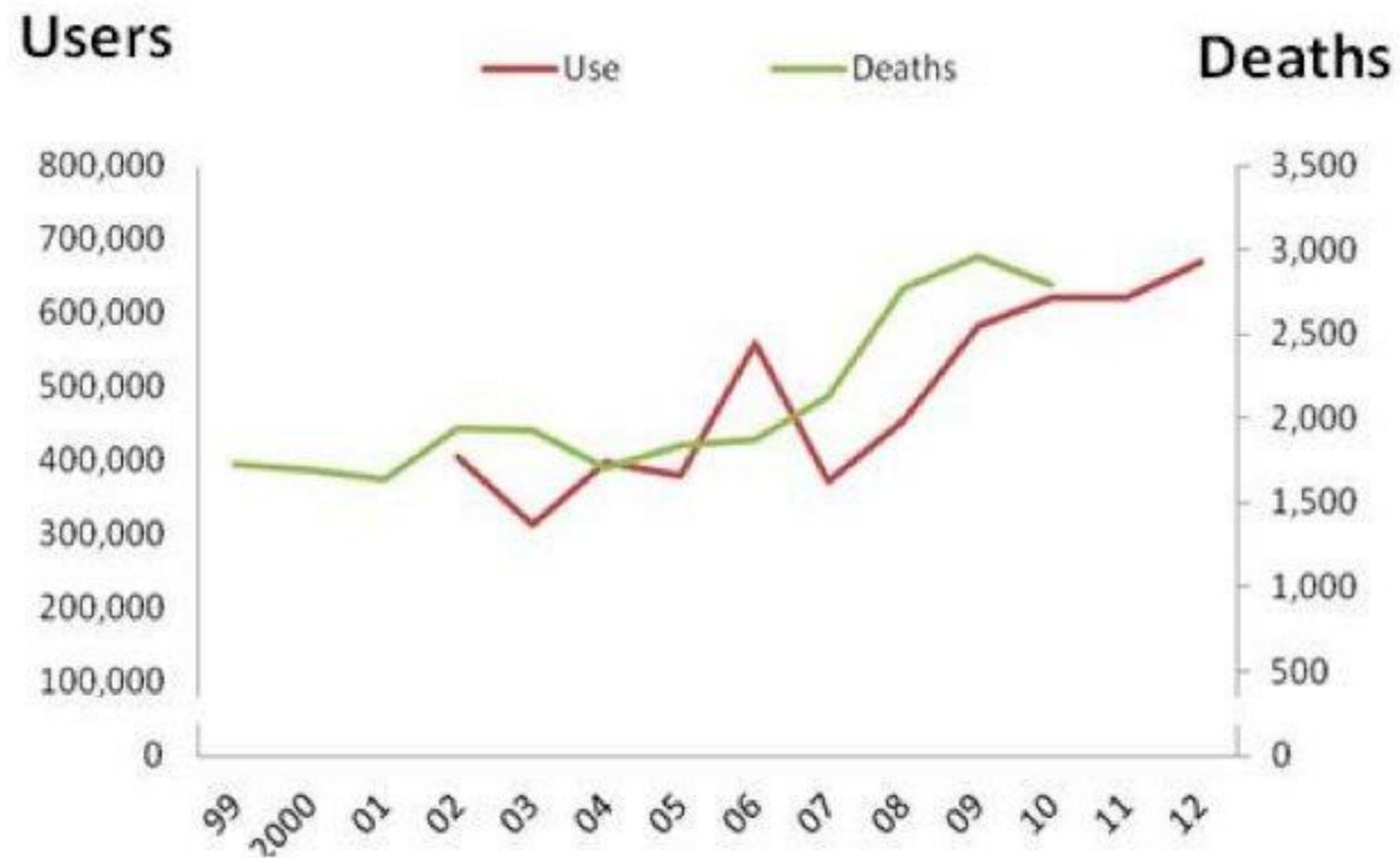
- Centers for Disease Control and Prevention

# Relationship Between Rx Opioids and Heroin use



- More recently, as awareness of opioid risk has grown and greater controls over rx-ing and dispensing do too, more and more people are switching to heroin

# Relationship Between Heroin use and Heroin OD



- As heroin use rates have started climbing, so have overdose death rates
- The number of past-year heroin users in the United States nearly doubled between 2005 and 2012, from 380,000 to 670,000



What are we doing about it?

- Policy changes
- Public health initiatives
- Treatment interventions



# Policy developments: federal and state initiatives

# Policy Initiatives



CARA - Comprehensive Addiction and Recovery Act

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Steve's Law - Narcan and Good Samaritan Legislation

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CDC Opioid Guidelines

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## Comprehensive Addiction and Recovery Act

- Recently signed by President Obama.
- Expands access to ARMs in the criminal justice system.
- Provides investment in diversion programs and drug courts.
- May expand the use of PDMPs.
- Expands buprenorphine prescribing authority to nurse practitioners and physician assistants.
- Failed to ensure much-needed funding, so future impact of the law is hard to predict.

## Steve's Law: 911 Good Samaritan and Naloxone Bill

- Passed in 2014 after lobbying and pressure by SRHF and others.
- Legalized the prescribing and use of Narcan/Naloxone - the opioid overdose antidote - to anyone who needs it.
- Also guarantees users can call 911 to report an overdose without fear of prosecution for possession of paraphernalia, personal drugs.
- First responders are getting trained and equipped with OD antidote - and it's working!

## CDC Opioid Prescribing Guidelines

- If opioids are used for acute pain, 3 days or fewer will often suffice; more than 7 days will rarely be needed.
- Consider the full range of therapeutic options for chronic pain, including combinations of non-opioid and nonpharmacologic therapy.
- When starting opioids for chronic pain, prescribe immediate-release formulations instead of extended-release/long-acting opioids.
- Use the lowest effective dose. Reassess benefits and risks if the dose reaches 50 morphine milligram equivalents (MME) per day; avoid or carefully justify a dosage of 90 MME/day.
- When starting opioids, and periodically, order urine testing and review state prescription drug monitoring program (PDMP) pharmacy tracking data.

Avoid prescribing opioids and benzodiazepines concurrently



# Treatment Considerations: current trends in SUD care

# Current Trends



Integrated Mental Health and SUD Care

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Integration of Neuroscience

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Recovery-oriented Systems of Care (ROSC)

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DHS - ADAD Initiatives

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Obamacare!

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# Integrated MH and SUD Care



All symptoms are treated in the same place, at the same time, preferably by the same

**Clinicians.** Consistently outperforms “parallel” or “consecutive” approaches



Encourages advanced training, requires MH **Professionals**

Clinicians are held to a high standard of competency



Usually requires **team-based approach**

Lots of coordination, consultation, and supervision



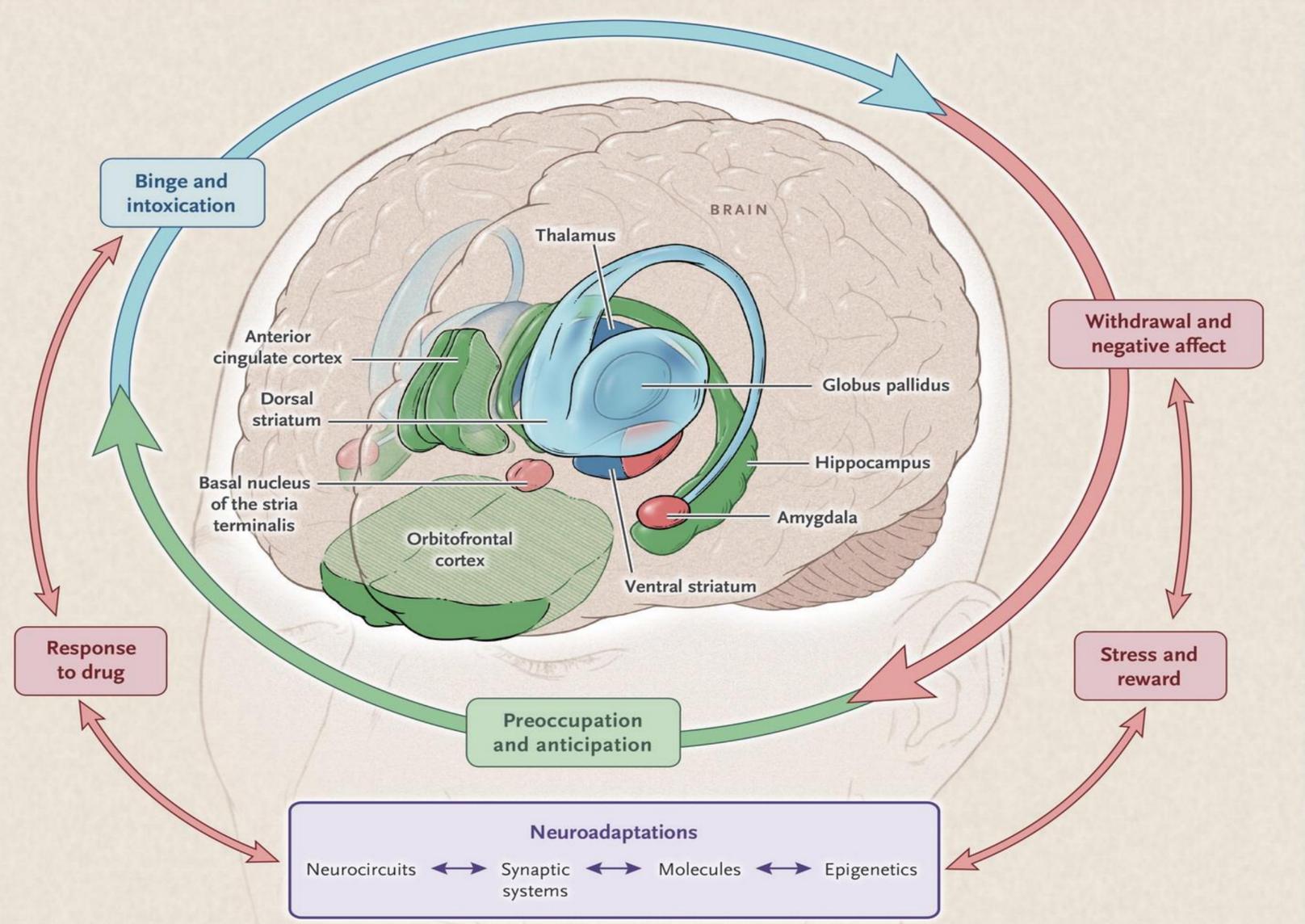
Chronic-care model, **longitudinal treatment**

Setbacks are expected, multiple tools are used, focus on engagement as priority

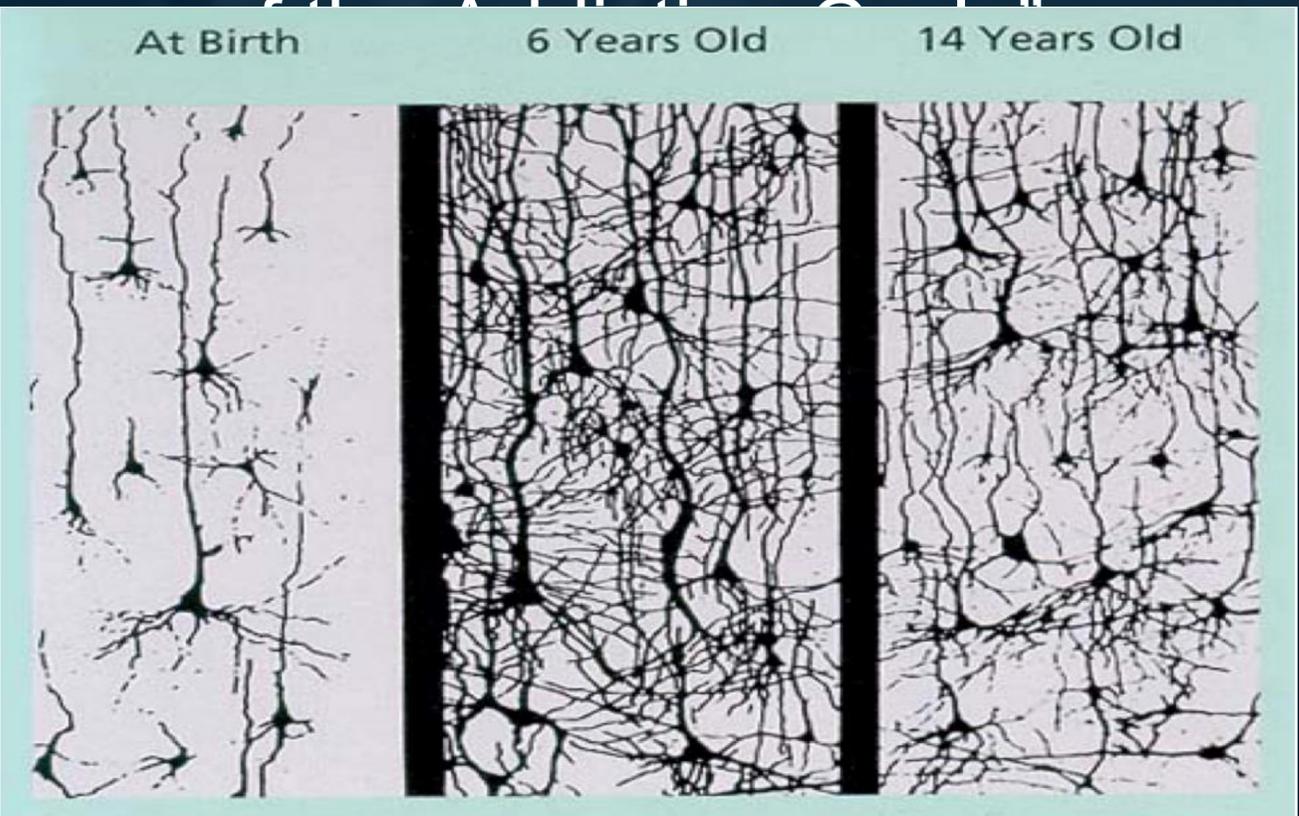
# Integration of Neuroscience

The field of neuroscience has yielded incredible new findings which are working their way into clinical practice

- Brain anatomy - 100 billion neurons - & genes
- Pharmacological effects of drugs, alcohol and medications
- The importance of the different brain regions in the development and maintenance of addiction



“Stages of Brain Development”



Stage of Addiction	Shifting Drivers Resulting from Neuroadaptations		
Binge and intoxication	Feeling euphoric	Feeling good	Escaping dysphoria
Withdrawal and negative affect	Feeling reduced energy	Feeling reduced excitement	Feeling depressed, anxious, restless
Preoccupation and anticipation	Looking forward	Desiring drug	Obsessing and planning to get drug

Behavioral Changes		
<b>Voluntary action</b> Abstinence Constrained drug taking	Sometimes taking when not intending Sometimes having trouble stopping Sometimes taking more than intended	<b>Impulsive action</b> Relapse Compulsive consumption

# Integration of Neuroscience

Stage of Addiction	Shifting Drivers Resulting from Neuroadaptations		
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# Recovery-Oriented Systems of Care:



Providing a continuum of services, rather than crisis-oriented care



Care that is age- and gender-appropriate and culturally competent



Accessible services that engage and retain people seeking recovery;



Where possible, care in the person's community and home using natural supports

## What is recovery?



2009: “Recovery from alcohol and drug problems is a process of change through which an individual achieves abstinence and improved health, wellness, and quality of life.”

2011: “Recovery from Mental Disorders and Substance Use Disorders: A process of change through which individuals improve their health and wellness, live a self-directed life, and strive to reach their full potential.”

— SAMHSA

# Minnesota DHS-ADAD Model of Care of SUDs Legislative Report - 2013



Identified the need to change the entire system of care from acute, episodic to chronic, longitudinal



Recommended changing rule that requires discharge and service termination



Endorsed ROSC model of an enhanced continuum of care, peer support and flexible services



Recommended increased diversity and emphasis on growing multicultural workforce

## The Affordable Care Act



**OBAMACARE**

## Substance Use Disorder Treatment Hugely Impacted:

- ★ Over 30 million newly-insured Americans.
- ★ SUDs added to list of “Essential Health Benefits” - previously, 80% of Tx publicly funded.
- ★ Preventive care covered 100%
- ★ Guaranteed coverage for pre-existing conditions.
- ★ Increase in the number of people who meet criteria for treatment.



# Anti-Relapse Medications



## Why Use ARMs?

- Improve outcomes
  - Improve retention
- Reduce risk of recurrences
  - Reduce ODs

# Anti-relapse Medications



Suboxone/  
Buprenorphine



Methadone



Naltrexone



Vivitrol



Opioid Use  
Disorder



# But, first: Myth vs Fact



**Myth:**  
Use of ARMs is just  
replacing one addiction  
with another

## Fact:

- Prescribed/monitored by a medical provider
- FDA-approved
- regulated potency
- curbs cravings and withdrawal symptoms

# Addiction *vs.* Dependence

compulsive use

cont'd use despite  
consequences

using a substance to get  
“high”

physiologically reliant on  
a substance

dependence on  
medications is common

(e.g. insulin, beta blockers,  
antidepressants, antipsychotic  
medications)

utilize the medication to

Fact:



Myth:  
Medications don't work

In just about every  
measurable way, they  
do!

Fact:



Myth:  
If someone is already  
abstinent, they don't  
need medications

Drug overdose is a  
leading cause of death  
for individuals being  
released from jail or  
prison.

## Fact:



Myth:  
12-Step Programs like  
AA/NA do not support  
MAT/medications

“No A.A. member should  
‘play doctor;’ all medical  
advice and treatment  
should come from a  
qualified physician.” --A.A.  
General Service Office (Member  
Medications & Other Drugs brochure)

## Wise Words

“

“...just as it is wrong to enable or support any alcoholic to become readdicted to any drug, it's equally wrong to deprive any alcoholic of medication, which can alleviate or control other disabling physical and/or emotional problems.”

- AA General Service

## More Wise Words

“

“NA as a whole has no opinion on outside issues, including prescribed medications. Use of psychiatric medication and other medically indicated drugs prescribed by a physician and taken under medical supervision is not seen as compromising a person’s recovery in NA.”

- NA “How it works”

# Medications for Opioid use Disorder



Methadone

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Naltrexone/Vivitrol

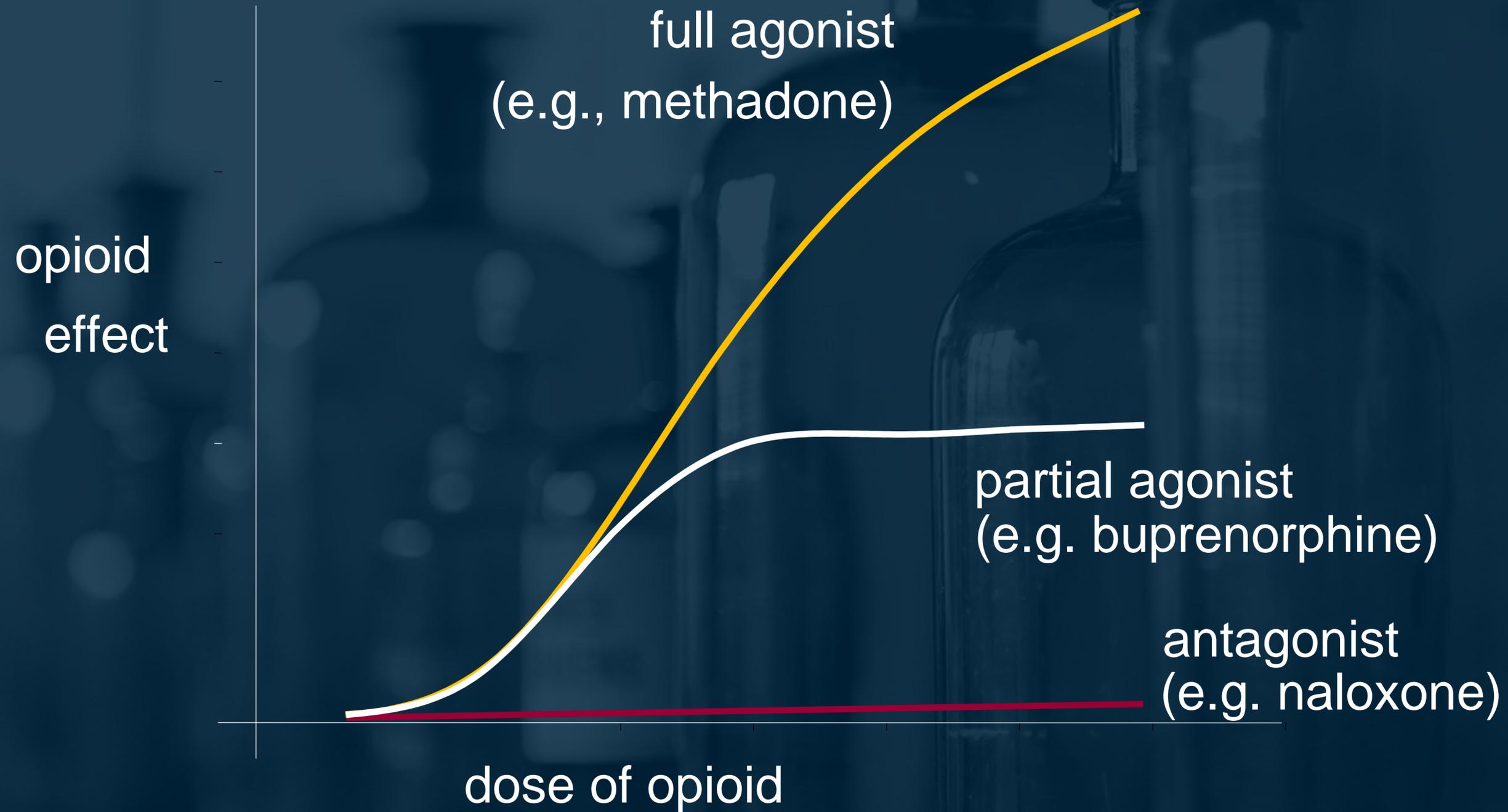
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Buprenorphine

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# How do Opioids Work?



# Methadone



The “gold standard” in opioid addiction treatment. Introduced in

US in 1960s  
Full agonist, once-daily dosing, also used to treat moderate-severe pain



Pros: Affordable, highly effective, safe in pregnancy, convenient once-daily dosing

Research consistently shows methadone is cost-effective, increases employment and reduces criminal activity



Dosing:  
Average effective dose 80-120

mg/day  
Dose begins @ 30mg, then titrates up 3mg or more/day



Cons: Must be dispensed in OTP, strict regulations, burdensome attendance requirements

Common side effects:  
constipation, excessive sweating, risk of overdose esp w/alcohol

# Naltrexone, Vivitrol



Opioid antagonist: binds to opioid receptors, maintains state, blocks

other opioids  
Prevents user from getting high in event of recurrence



Pros: Blocks the high of opioids, non-addictive, no risk of misuse, monthly injection very

convenient  
Probably most effective when agonist medications are unavailable



Dosing

Tablets: 50mg once/day  
Vivitrol: 380mg monthly intramuscular injection

Dose begins @ 30mg, then titrates up 3mg or more/day



Cons: No effect on craving or withdrawal, very hard to maintain adherence, high risk of OD, not much evidence

Anecdotal reports that by day 21 or so after injection, the full effect wears off

# Buprenorphine



Opioid partial-agonist:  
binds to opioid  
receptors, partially

**activates them**  
Provides craving relief AND  
blocks additional opioids



Pros: Blocks the high of  
opioids, provides full  
craving relief, presence  
of naltrexone prevents

**Diversion**  
Office based prescribing helps  
reduce stigma, does not require  
daily attendance



Dosing:  
16mg or higher 1x/day  
Available in film, tablet,  
buccal film, and implant

Dose begins @ 8mg, then titrates  
up to effective dose



Cons:  
Can be expensive, few  
doctors accept  
insurance, fewer sober

**housing options**  
Primary side effects: constipation,  
excessive sweating (though not  
as bad as methadone)



## What does the research say?

- There has never been a single RCT that showed an abstinence-based treatment could outperform agonist medications.
- At least 80% of patients treated without meds return to opioid use (in some studies, as many as 93-100%). Whereas treatment retention rates are 60-80% with medications while only 15% continue to use opioids.
- Dosing must be adequate.
- Open-ended treatment is key, forced tapers **DO NOT WORK**
- Patient choice is key. As long as they are well-informed, let them decide!

## Who is Appropriate for Maintenance Treatment?

- Adults with long-term opioid addiction (arbitrary length of time: >12 months)
- Willingness to use medications
- Especially if previously attempted treatment/recovery
- Is currently abstinent but struggling with cravings, low mood, agitation, etc., all of which are symptoms of opioid deficiency syndrome

## So - What Do We Need to Know?

-  With opioid addiction and overdose rates reaching epidemic proportions, MH Professionals must be armed with the knowledge and skills to offer the best available treatment to our clients.
-  Currently, there are several FDA-approved anti-relapse medications available, but their use is still controversial in many circles.
-  Multiple local and national initiatives are aimed at affecting change.
-  Be aware of promising future directions and potential changes.



# Questions and Discussion



THANK YOU!

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