Northwest (Region 10)

ROTA C Rural Opioid Technical Assistance Collaborative

Funded by Substance Abuse and Mental Health Services Administration

Fentanyl and Xylazine: what you need to know and how to keep yourself safe

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Session Objectives

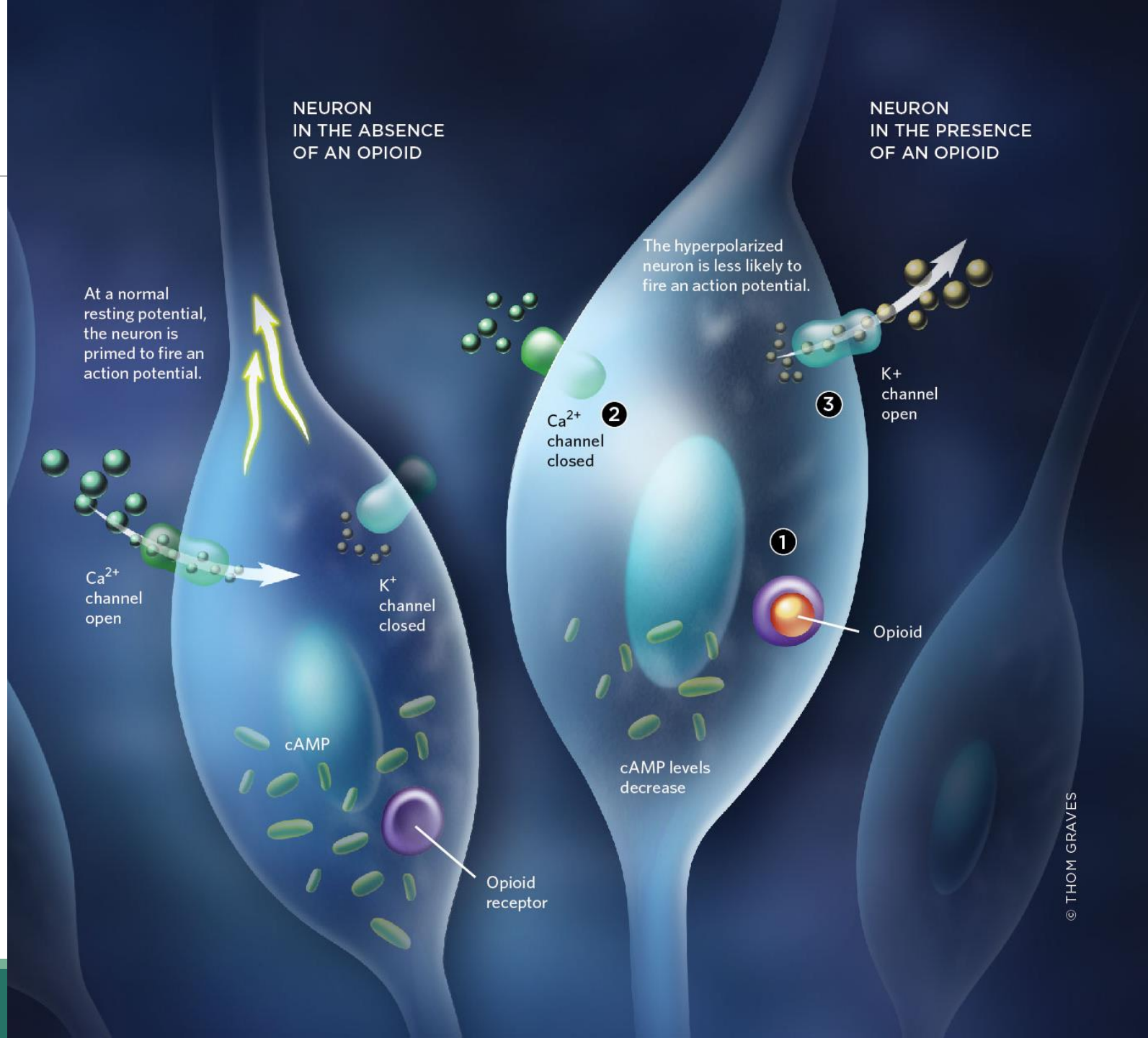
By the end of this presentation, participants should be able to:

1. Describe how addiction works in the body for adults and adolescents
2. Explain what illicitly manufactured fentanyl is and how it compares to pharmaceutical fentanyl
3. Summarize what xylazine is and how it is used in combination with other illicit substances
4. Identify and manage risks related to fentanyl and xylazine

Addiction

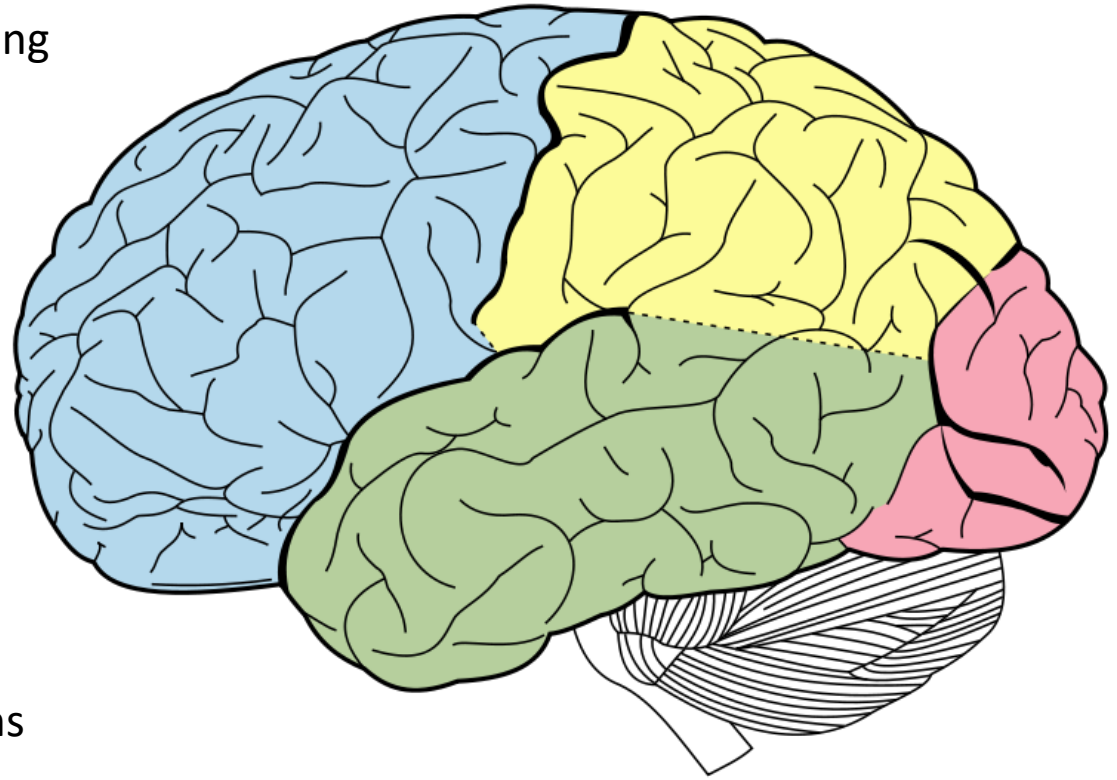
The Neurons

- Pain
- Thirst
- Mood
- Hunger
- Etc.



The brain

The **Cortex**
Decision making



The **Amygdala**
Responsible for emotions

The **Midbrain**
Our reward system

Two forms of dependance

PHYSICAL

The body's reaction to sustained exposure to a drug

Physical and observable withdrawal symptoms

This process can be painful and consuming

PSYCHOLOGICAL

Sustained mental need for the drug or substance

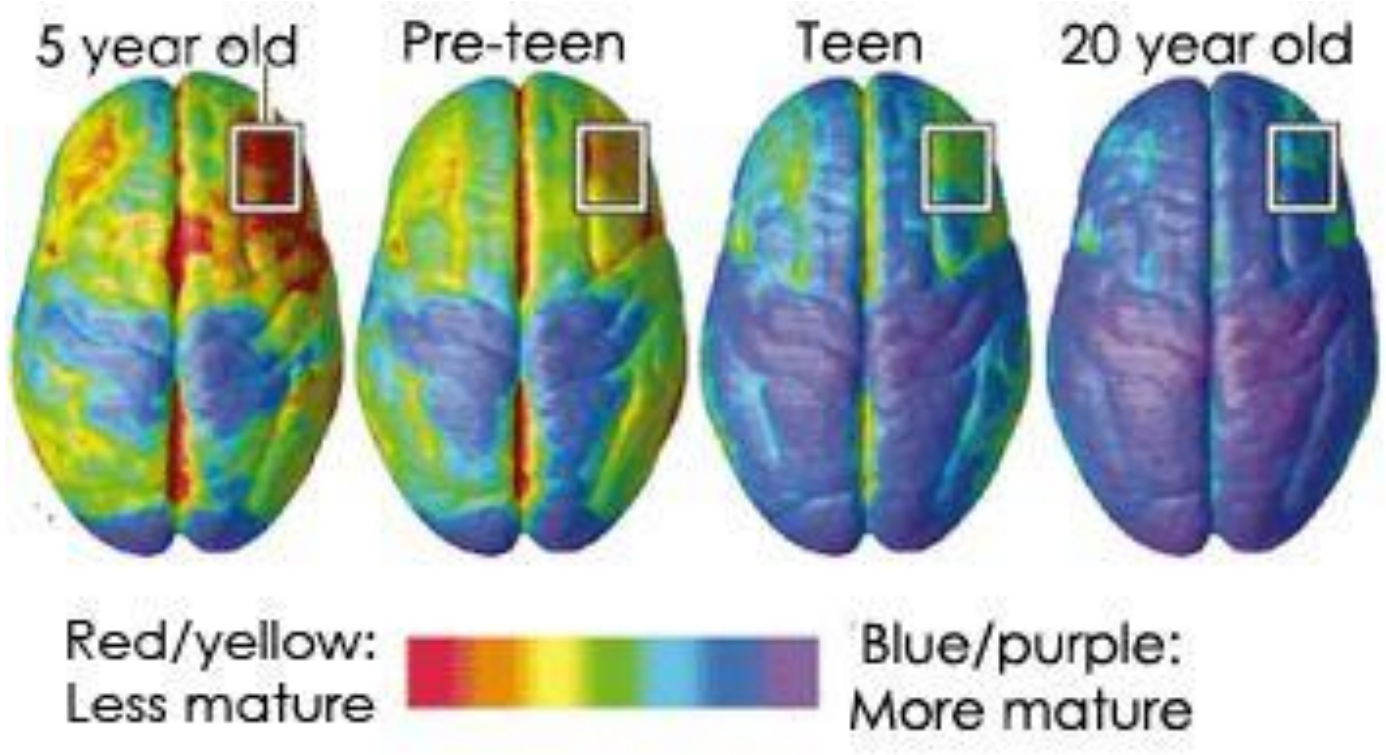
Can occur with essentially any substance

Hardwiring of the brain- we develop attachments or a need for the substance

May last longer than a physical dependance

Are adolescents different?

- The brain is still developing into our 20s & Exposure to drugs and alcohol can alter or delay development
- Decisions are guided more by the amygdala and less by the frontal cortex in SUD
- The process of addiction is the same



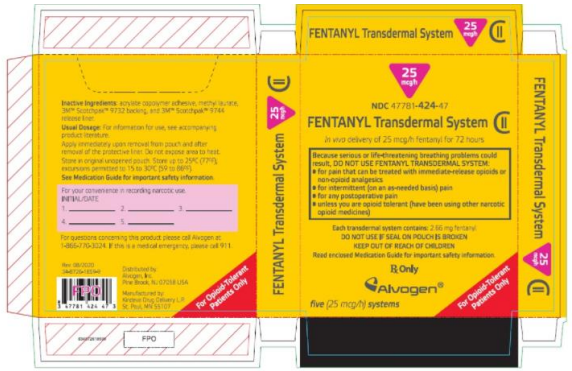
Buprenorphine/ naloxone (Suboxone)	Methadone (Doliphine)	ER Naltrexone (Vivitrol, ReVia)	Buprenorphine (Subutex, Butrans)	Buprenorphine ER (Sublocade)
Partial agonist paired with an antagonist 	Full Agonist 	Full antagonist 	Partial agoni 	Partial agon 
FDA approved ages: 16 years and older Studied in ages: 15 years and older	FDA approved ages: 18 years and older	FDA approved ages: 18 years and older Studied in ages: 15 years and older	FDA approved ages: 18 years and older	FDA approved ages: 18 years and older
Dosage forms include buccal film, sublingual tablet, and sublingual film	Dosage forms include dissolving tablets or oral solution	Dosage forms include intramuscular injection and tablet	Dosage forms include sublingual tablets	Dosage form: Extended-Release Subcutaneous Injection
FDA indication: Opioid dependence	FDA indication: detox and maintenance of opioid addiction	FDA indication: opioid dependence	FDA indication: opioid dependence	FDA indication: opioid dependance

Approved Medications for opioid use disorder

Fentanyl

AKA FAKE FENTANYL OR ILLICITLY MANUFACTURED FENTANYL (IMF)

Prescription Fentanyl



Prescription Fentanyl in the Body

Forms	Potency	Onset	Duration	Route of Administration
Lozenge Patch sublingual (SL) or buccal preparations Solution (IV, subQ, etc.)	50 times more potent than heroin 100 times more potent than morphine	IV – immediately SL/ buccal- 5 min Patch- 6 hr	IV- 0.5- 1 hour SL/buccal- varies Patch- 72-96 hr	Injected Orally through the mucus membranes in the mouth Skin

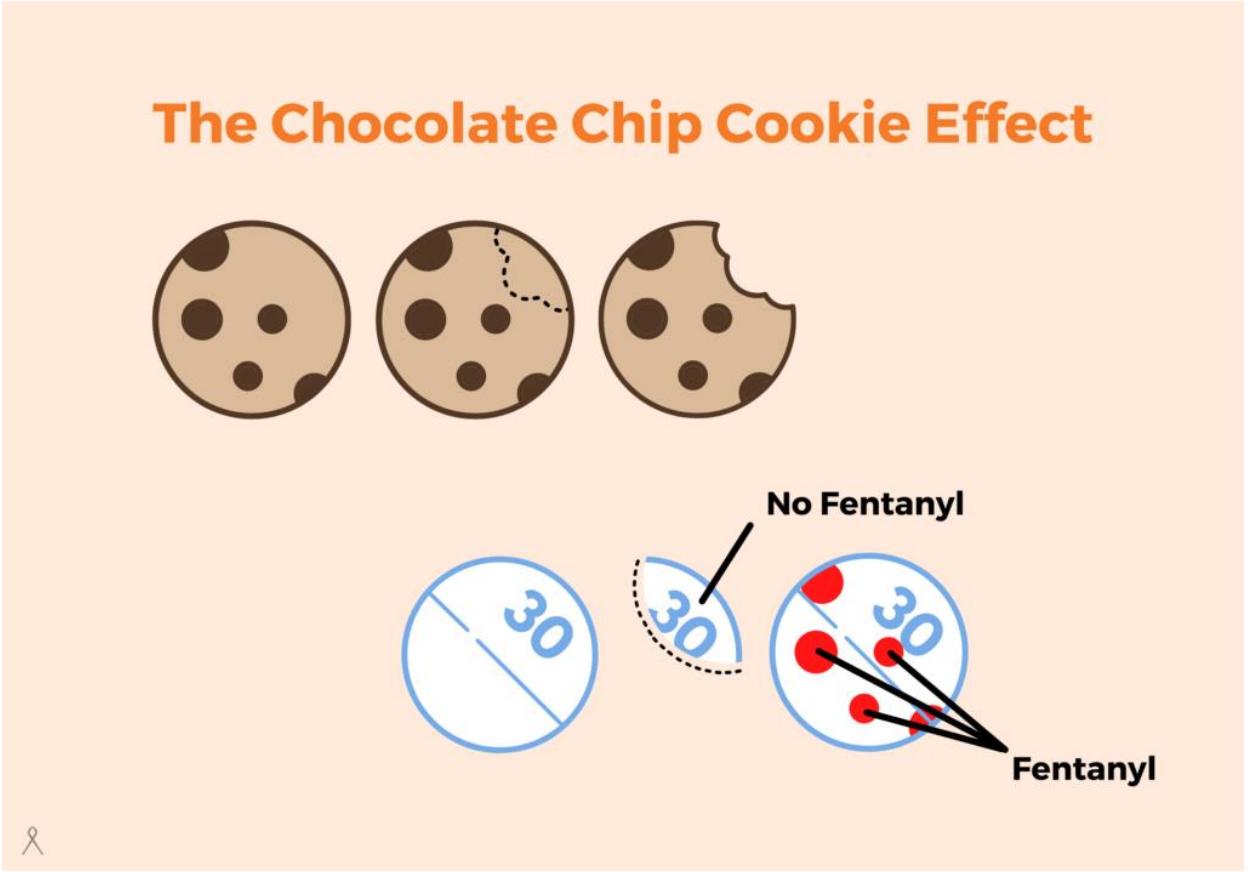
Fake Fentanyl

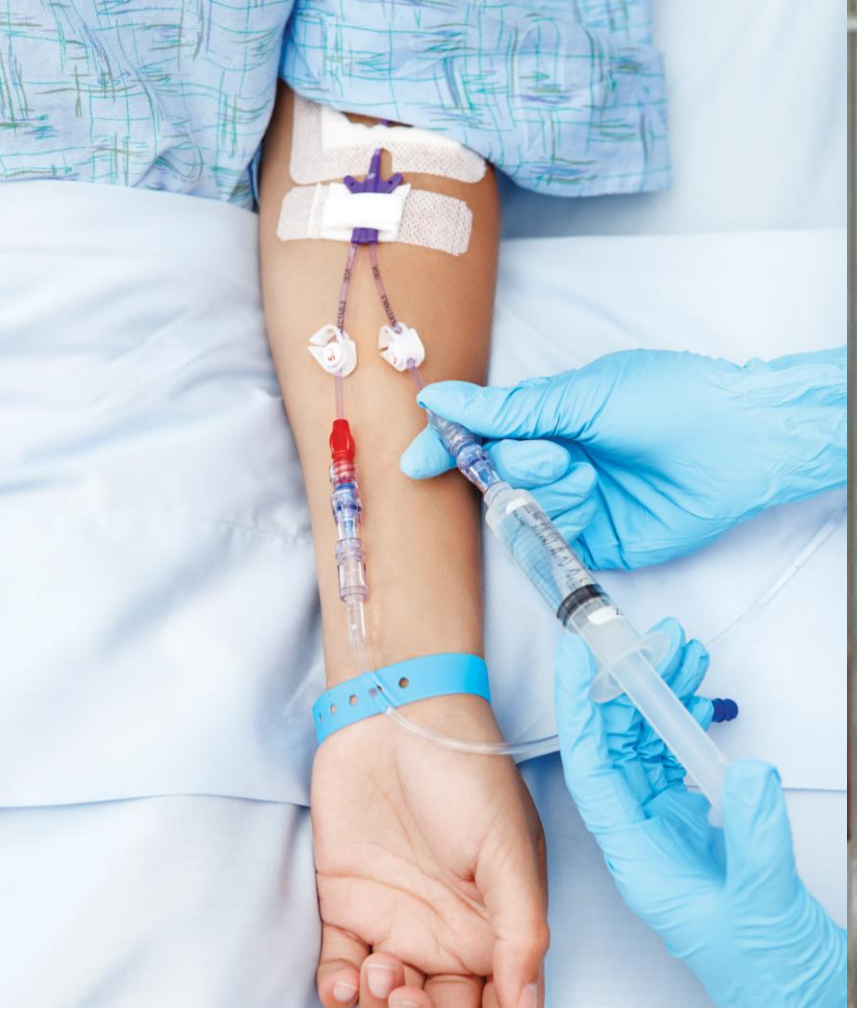
Fake fentanyl in the body

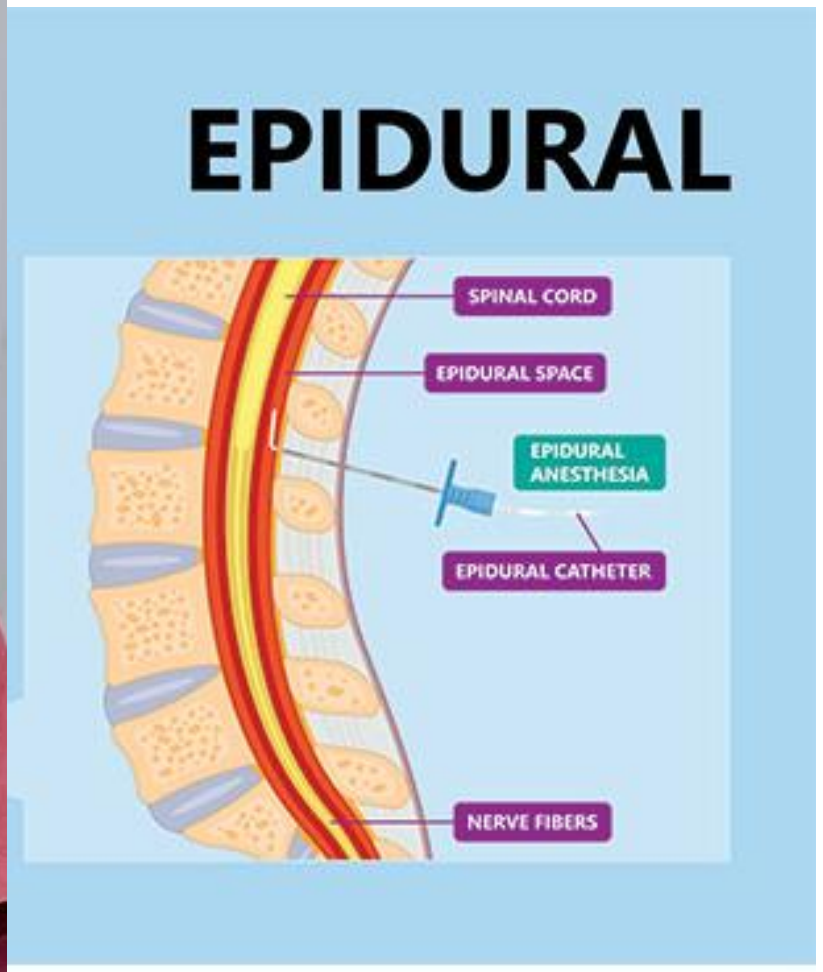
Forms	Potency	Onset	Duration	Tolerance
Fake tablets- swallowed or smoked Powder- mixed with other substances	**At Least, could be more** 50 times more potent than heroin 100 times more potent than morphine	~ 5 minutes	1-4 hours	Tolerance develops quickly Tolerance= the more you take, the more you need


A.1
A.2

Why is that important?







Rx fentanyl used medically is safe and appropriate

Xylazine

What is Xylazine?

Alpha-2 agonist

Veterinary anesthetic not approved in humans

Other names: tranq, sleep cut

Effects

- Sedation
- Pain relief
- Muscle relaxation
- Trouble breathing
- +/- euphoria

Withdrawal

- Limited information

Xylazine Overview

First overdose in 1979

Philadelphia in 2006- xylazine in the heroin supply

Hiatus 2007-2018

Reappeared in 2019

Declared an emerging threat in July 2023

Xylazine related wounds

- Chronic
- Difficult to heal on your own
- Painful
- Not designated to injection site

Xylazine as an Additive

Heroin

Fentanyl

Cocaine

Emerging Threat

High opioid overdose death rate

Both opioids (heroin, oxycodone, fake fentanyl) and xylazine slow the breathing

One study showed xylazine was in less than 1% of drug overdose deaths in 2015, in 2020, this increased to 7%

Another study showed that xylazine was found in 80% of drug samples that contained opioids in Maryland

Can look like an opioid overdose

Naloxone does not reverse xylazine overdose

Manage your risks

Raise Awareness

Test substances using test strips

Fentanyl test strips & Xylazine test strips available

- Mix substance with small amount of water
- Place strip in the mixture for the recommended amount of time (~15 seconds)
- Wait for the results (~5-10 minutes)

One line= positive

Two lines= negative

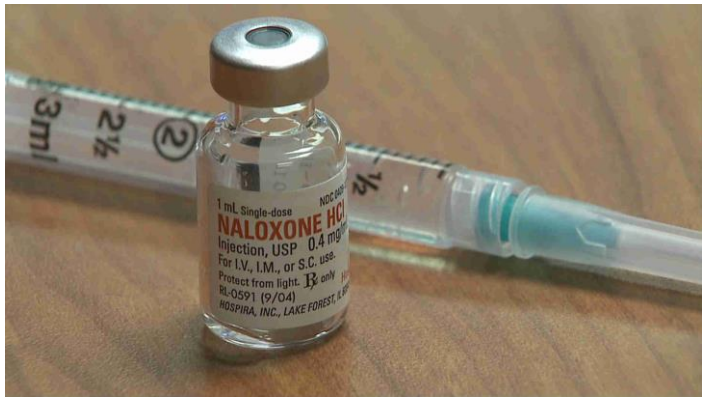
Other = invalid

If test strips are positive for fentanyl and/or xylazine

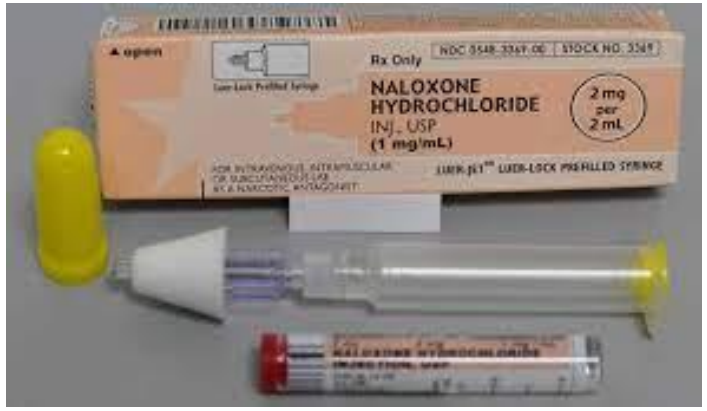
- Consider not using
- Do not use alone
- Ask someone you trust to check on you regularly
- Avoid mixing drugs
- Start low, go slow
- Carry naloxone and have it out

Understand Tolerance

Intranasal



Intramuscular or Subcutaneous



Atomized intranasal

Opioid of Reversal Agents

Naloxone and Nalmefene

- 3 types of intranasal naloxone
  - Brand name Narcan
    - Naloxone 4 mg per dose
  - Generic Naloxone nasal spray
    - Naloxone 4 mg per dose
  - Brand name Kloxxado
    - Naloxone 8 mg per dose
- 1 type of intranasal nalmefene
  - Brand name Opvee
    - Nalmefene 2.7 mg per dose

Reversal Agents

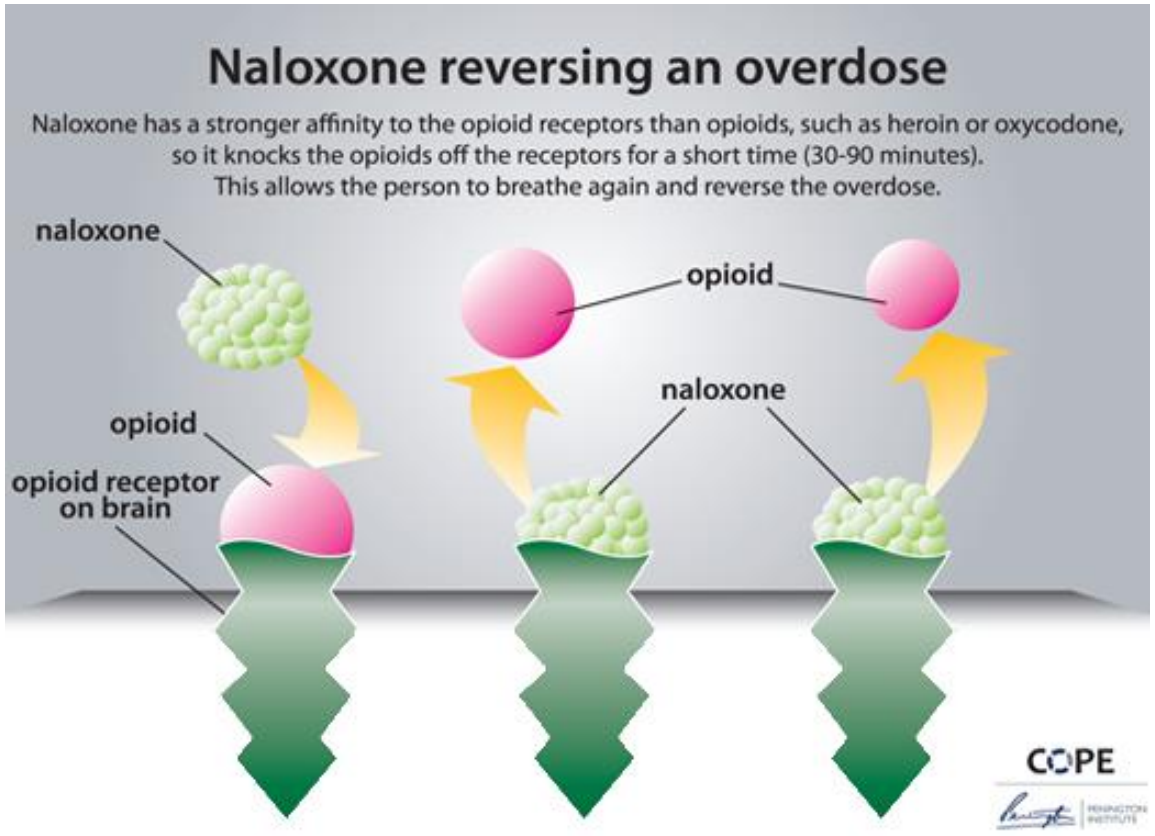
NALOXONE

- On the market, generic
- Good affinity for opioid receptors
- Lasts up to 90 minutes in the body
- Excellent safety profile

NALMEFENE

- Newly approved in June
- Stronger affinity for opioid receptors
- Lasts up to 4 hours in the body
- Longer withdrawal

Even if you are unsure if an overdose is caused by fentanyl or xylazine- always give naloxone



Reversing overdose from synthetic opioids

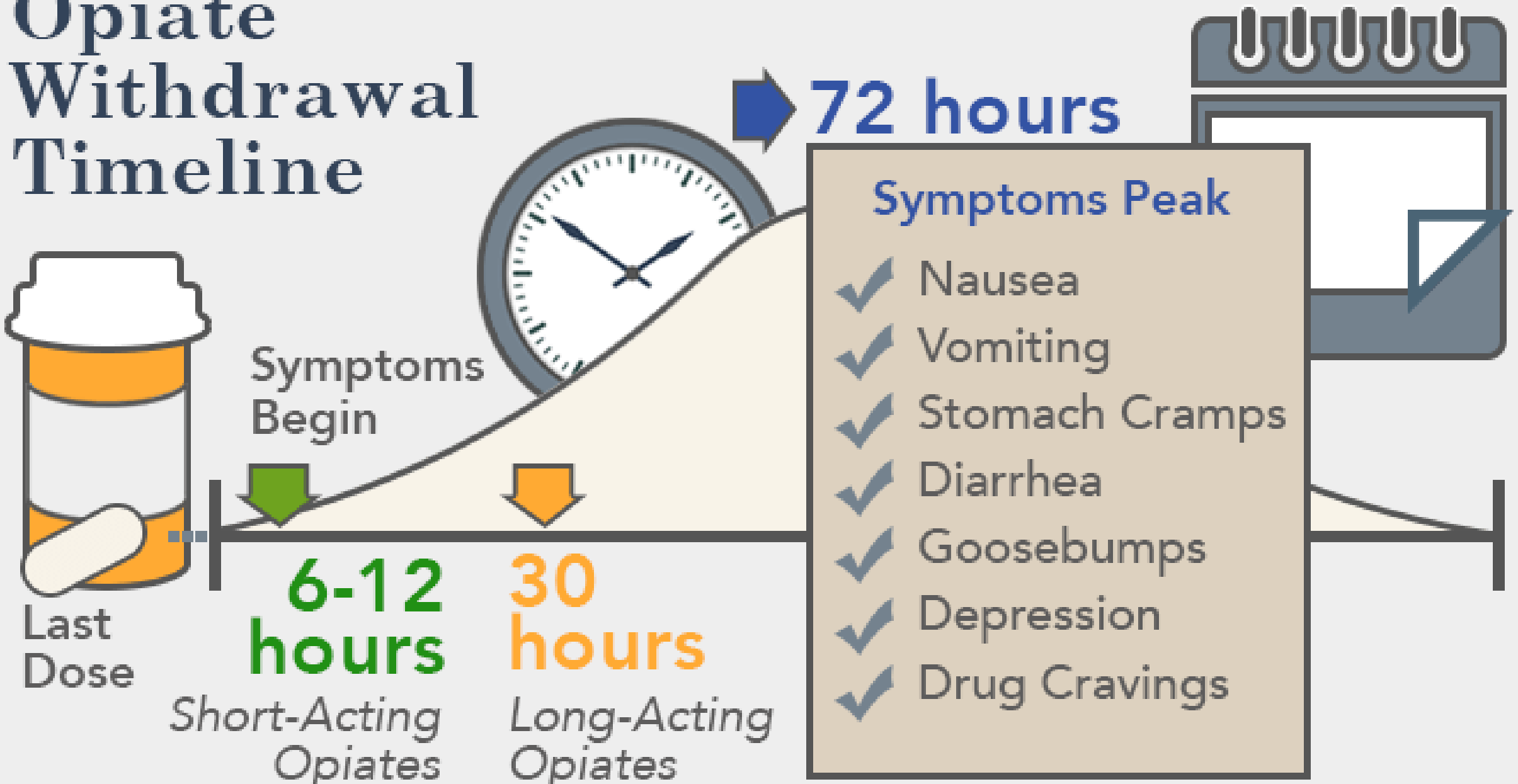
§ Synthetic opioids have a stronger affinity for the opioid receptors

§ May result in the need for higher doses or the need for more doses

§ You can administer additional doses of naloxone or nalmefene (any brand) can be given every 2-5 minutes until the patient is responding or until emergency services arrive

§No opioid = no effect

Opiate Withdrawal Timeline



Seek medical care when needed

A WOUND HAS BEEN IDENTIFIED

PROLONGED WITHDRAWAL

TREATMENT OPTIONS

OVERDOSE

Respond to an Overdose When Able

- You are physically safe
- Be aware of surroundings
  - No documented cases of passive overdose in US
- Use PPE if available

COMMON DRUG RELATED EMOJIS

LEAF:	This emoji is used as a universal symbol for drugs
PLUG:	This emoji is used to refer to a dealer or online supplier who can provide you with drugs
ROCKET SHIP:	This emoji can be used to indicate the drug has a high potency
FIRE:	This emoji is used by dealers to indicate they have good quality drugs
NO ONE UNDER 18:	This emoji is used by dealers to indicate they will not sell to anyone under 18
MONEY BAG:	This emoji is used by dealers to indicate they have drugs for sale even if they state "no sales" elsewhere
SKULL AND CROSSBONES:	This emoji is used by dealers and users to indicate the drug is potentially deadly and they should proceed with caution
MONEY:	This emoji used in combination with a drug emoji indicates a dealer has that drug for sale
EYES:	This emoji is used in combination with other emojis by drug users to indicate they're looking for a dealer or to purchase particular drugs
MONEY WITH WINGS:	This emoji used in combination with a drug emoji indicates a dealer has that drug for sale

Be Aware of Social Media

Questions?

Please **complete the survey** linked in the chat

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Register for our next webinar

Northwest (Region 10)

ROTA C

Registration link in the chat

Using CRAFT with families of people who use drugs: Alternatives to confrontation and detachment

September 26th at 12:00 PM PT

Speaker: Lara Okoloko, MSW, LICSW