

BREAKING NEWS

Since 1883

YOUR NUMBER ONE SOURCE FOR HEADLINES

\$1.00

OPIOID

OPIOID TRAINING MODULE 2

UNDERSTANDING HEROIN USE

COMMUNITIES
DID THIS HAPPEN?

35,000 DEATHS
REPORTED IN THE LAST
2 YEARS

of deaths due to
overdoses

- This training is offered by the Florida Alcohol and Drug Abuse Association and JBS International and supported by funding from the Department of Children and Families, Office of Substance Abuse and Mental Health (Contract #LD987) as part of its Substance Abuse and Mental Health Services Administration (SAMHSA) State Targeted Response to the Opioid Crisis (O-STR) grant efforts.



THE PURPOSE OF THE OPIOID STR GRANT

Through prevention, treatment, and recovery activities for opioid use disorder (OUD) including prescription opioids and illicit drugs (e.g., heroin), the grant aims to address the opioid crisis by:

- ✓ Increasing access to treatment;
- ✓ Reducing unmet treatment needs; and
- ✓ Reducing opioid overdose-related deaths.

MODULE LEARNING OBJECTIVES

Participants will:

- Name at least two ways that heroin use may affect parents.
- Describe at least two methods of heroin use (e.g., methods of administration).
- In a photo simulation exercise, identify at least three signs of possible heroin use in the home.



HEROIN, AND FACTORS THAT CONTRIBUTE TO ITS WIDESPREAD USE



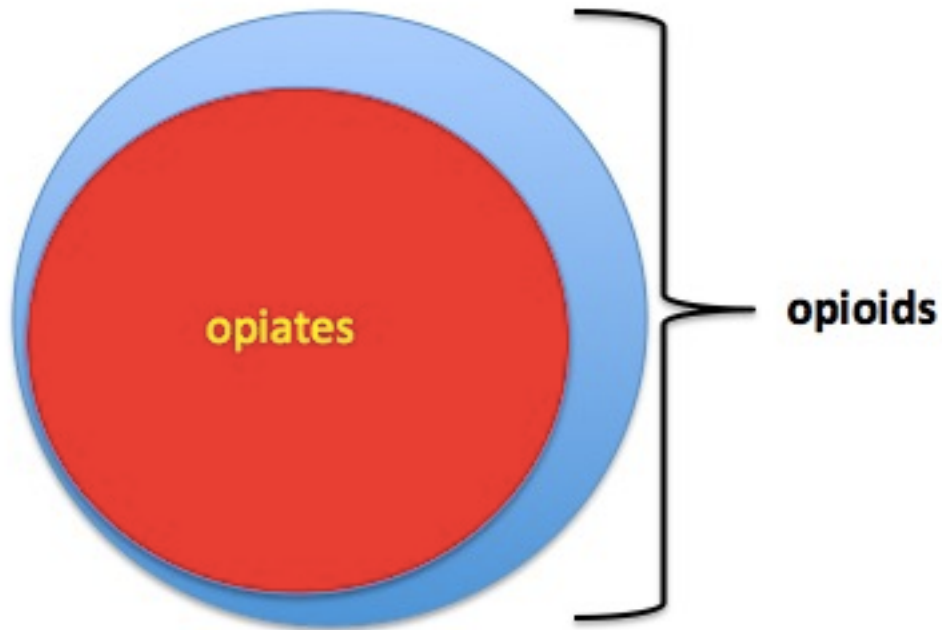


OPIATES? OPIOIDS?

- **Opiates** are drugs (e.g., codeine, morphine, and heroin) derived from the opium poppy plant.
- At one time, "**opioids**" referred to synthetic **opiates** that include certain prescription painkillers such as hydrocodone (e.g., Vicodin[®]), oxycodone (e.g., OxyContin[®] and Percocet[®]), oxymorphone (e.g., Opana[®]), morphine (e.g., Kadian[®] and Avinza[®]), hydromorphone (e.g., Dilaudid[®]), fentanyl, and others.



OPIATES/OPIOIDS...WHAT'S THE DIFFERENCE?



- Now the term **Opioid** is used for the entire family of **opiates**, including natural, synthetic, and semi-synthetic.

THE ILLICIT OPIOID...HEROIN

- Heroin, a highly addictive opioid drug made from morphine, is a natural substance derived from the seed pod of opium poppy plants from Southeast and Southwest Asia, Mexico, and Colombia.
- Heroin can be a white or brown powder, or a black sticky substance known as black tar heroin.



HEROIN IS WIDELY AVAILABLE AND CHEAP

- Increased availability, relatively low price (compared to prescription opioids), and high purity of heroin in the U.S. also have been identified as possible factors in the rising rate of heroin use.



HEROIN PURITY

- Users strive to acquire heroin with high purity; most of the time it is usually cut with additives (e.g., powdered milk, sugar, strychnine, and more recently fentanyl).
- The strength of the drug is unknown for each use (each end of the spectrum can occur -- and can contribute to withdrawal or overdose).



FENTANYL



- A powerful synthetic opioid analgesic similar to morphine, typically administered by physicians via injection, transdermal patch, or in lozenges.
- 40-50 times more potent than heroin, and 50-100 times more potent than morphine.

FENTANYL

More than 80% of fentanyl seizures in the US in 2014 were reported in 10 states: OH, MA, PA, MD, NJ, KY, VA, **FL**, NH, and IN (CDC 2015).



CARFENTANIL



- A synthetic opioid 100 times more potent than fentanyl, and 10,000 times more potent than morphine
- A tranquilizing agent for elephants and other large mammals -- not approved for use in humans
- Linked to a significant number of overdose deaths in various parts of the country
- Improper handling of carfentanil, fentanyl, and other fentanyl-related compounds can have deadly consequences.

HEROIN CONSUMPTION AND OVERDOSES ARE ON THE RISE

- Since the mid-2000s, heroin and fentanyl (mainly illicit formulations) consumption has sharply increased.
- Since 2010, heroin overdose deaths have more than quadrupled.
- People who turn to illicit drugs after misusing opioid medications have driven greater use of heroin and fentanyl, which are cheaper and easier to obtain.



HEROIN PATHWAYS

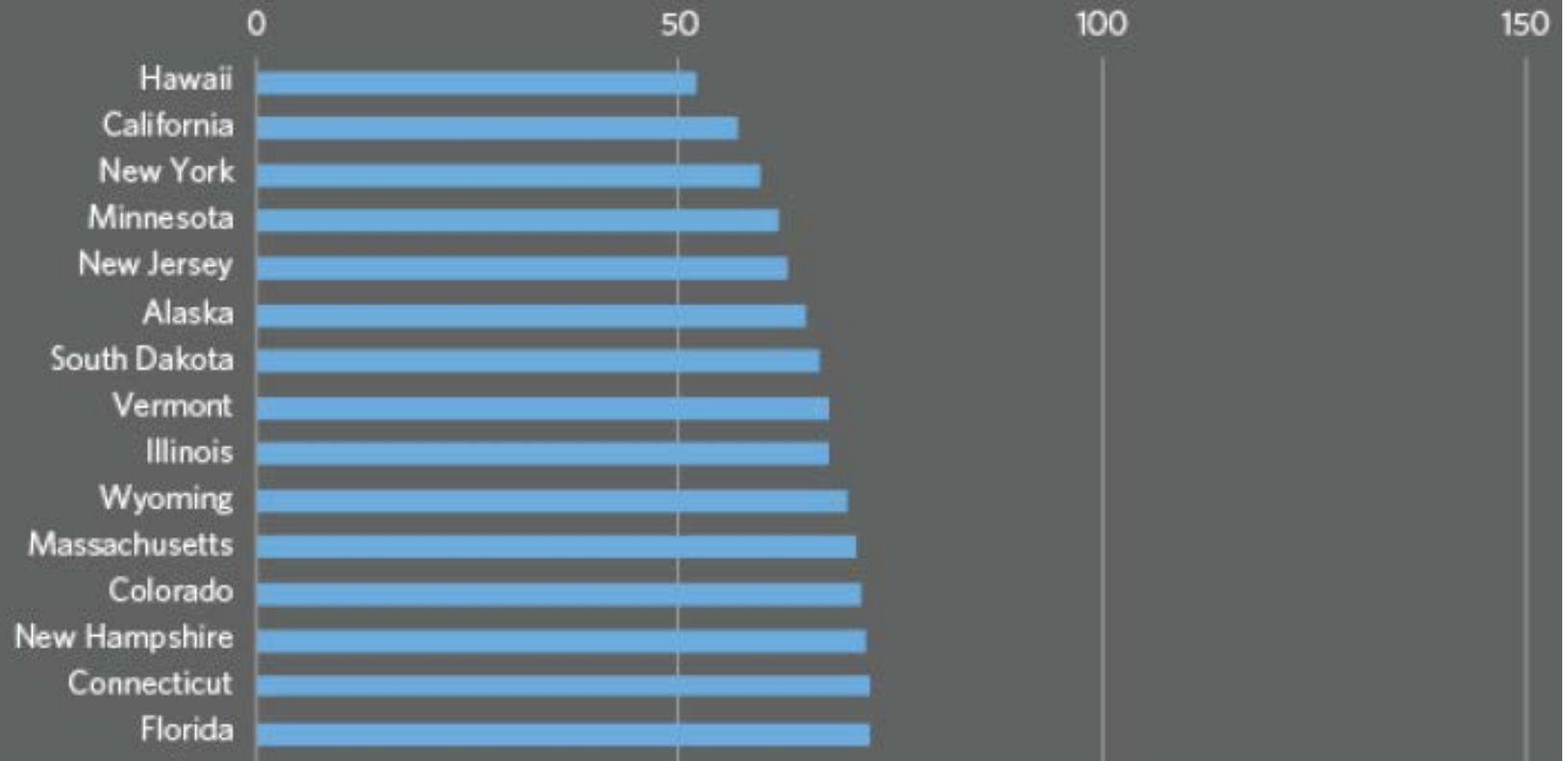
Research shows that four out of five heroin users first began with recreational use of prescription pain relievers.

This chart (partial display due to space limitations) from the Pew Charitable Trust reflects 2016 Centers for Disease Control and Prevention (CDC) data illustrating that enough painkiller prescriptions were written to provide roughly 75 out of 100 Floridians with opioid

Painkiller Prescriptions

The number of painkiller prescriptions varies widely by state, from 52 per 100 people in Hawaii to 142.9 per 100 people in Alabama. New federal guidelines aim to reduce excessive painkiller prescribing, which has contributed to an epidemic of opioid addiction and overdose deaths.

■ Painkiller prescriptions per 100 people

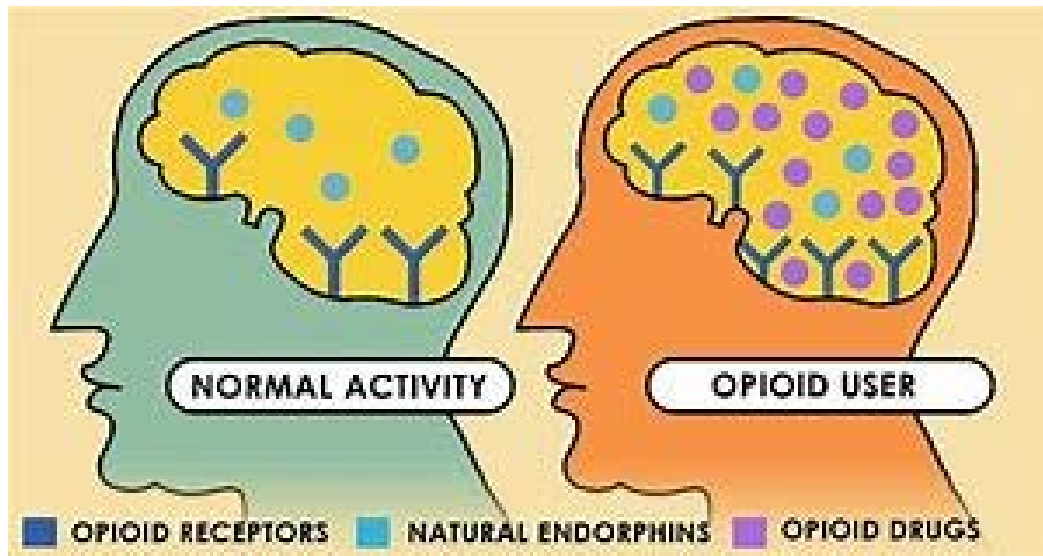




EFFECTS OF HEROIN USE



OPIOIDS AND THE BRAIN



- Natural endorphins: A group of chemicals (e.g., dopamine) released within the brain and nervous system that have a number of physiological functions: provide the body's natural opioids; promote feelings of wellbeing; make a person happy (such as when we eat, have sex, etc.); and reduce/eliminate pain.

OPIOID WITHDRAWAL:

- Excessive perspiration.
- Shaking and muscle spasms.
- Severe muscle and bone pain.
- Vomiting, nausea, and diarrhea.
- Irritability.
- Insomnia.
- Restlessness.
- Dilated pupils.
- Rapid heart rate/Anxiety.
- Death is not likely from opioid withdrawal, but the person may feel they are dying.



WITHDRAWAL REALITY

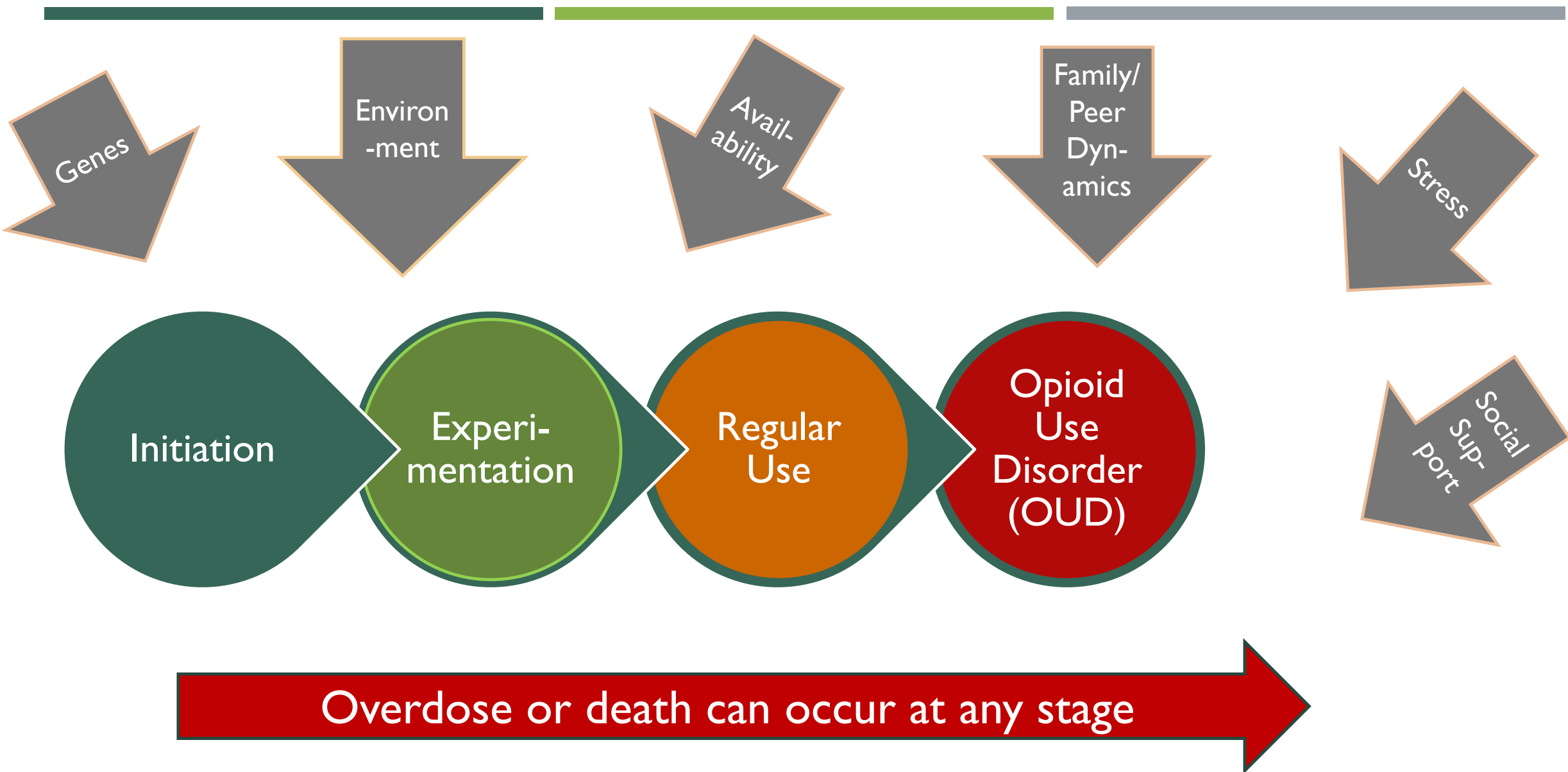
“I don’t need an alarm, my cold sweats and muscle aches wake me up before the sun rises, it’s the same as most mornings. The first thing on my mind is the same as it always is: heroin. How am I going to get it, where am I going to steal from, who will I buy it from? I drag my legs from under the covers; my cold damp feet meet the floor and drag me towards my shower. I check my empty bags for any dust left behind from yesterday’s use, they’re pretty bare but there’s enough to shoot up to help relieve some of the pain for an hour or so. A hot shower helps alleviate the heroin addiction withdrawals while the steaming water hits my back.”

OPIOID EFFECTS

- Short-term a few days, properly managed - rarely leads to an OUD.
- Regular use (several times a day) for several weeks or longer can lead to:
 - Dependence – physical discomfort when not taking.
 - Tolerance – diminished effect, increasing amount taken.
 - Addiction/OUD – compulsive drug seeking and use.

CONSEQUENCES OF OPIOID USE

- Poor ability to regulate one's own behaviors.
- Impaired emotional processing.
- Impaired memory.
- Decreased capacity for making decisions.
- Decreased ability to imagine future events and interactions.
- Poor executive functioning:
 - ✓ Diminished ability in being flexible with tasks.
 - ✓ Impaired reasoning skills.
 - ✓ Poor ability to problem-solve.
 - ✓ Poor planning skills.



HEROIN HIGH



HEROIN USE STAGE: INITIATION

"I just feel love and peace. It is better than everything else. It makes me who I wish I was. But I can't do it again as I know I'll never stop."

Initiation

"Instead of being sad or grumpy or depressed with family and life stress... I am just... happy. Mellow. Content. Everything is fine and the world is beautiful!"

HEROIN USE STAGE: EXPERIMENTATION

“Heroin is unbearably wonderful for suppressing pain and generating a false sense of well-being. I love heroin.”

Experimentation

“Dark secrets guarded for a lifetime can be divulged with carefree folly after a sip of the black smoke.” — Roman Payne, *The Wanderess*

HEROIN USE STAGE: REGULAR USE

"I had been a very anxious person up until I started using regularly. I had a lot of problems; a crappy childhood and I just felt like I was home—that I'd found people who I could relate to and this drug was amazing."

Regular Use

"I am starting to get to the point where I can't choose whether to use."

HEROIN USE STAGE: OPIOID USE DISORDER (OUD)

"I'm not sad, not happy, I have no emotion, I am just numb and don't care. The disease changes you."

OUD

"I need heroin to feel normal. I don't love anymore. Now I'm sick. I can't afford the heroin that I need. How did \$10 used to get me high? Now I need \$100."



The journey to (and through) heroin use and disorder stages/ associated timeframes vary by person, and are based on a number of variables.



METHODS OF HEROIN USE AND WHAT TO LOOK FOR



HEROIN

- People inject, snort, or smoke heroin.





INJECTION:

This method involves the most complicated preparation steps, and the most paraphernalia.

INJECTION:

- *Bottle cap/prescription drug caps:* vessels to “cook” the drug, or turn tar, solidified, or powdered heroin into a liquid for injection
- *Lighter or candle:* the heat source used to melt heroin into a liquid.





INJECTION:

- *Hypodermic needle*: used to inject the liquefied drug into a vein or sometimes a muscle
- Tiny orange or clear syringe tip caps
- *Spoons*: blacked on the bottom from heating heroin, and sometimes with a bent handle (lighter/torch often nearby)
- *Cotton balls, Q-tips or pieces of a cigarette filter*: used prior to *injection* to filter/strain the liquid drug, and pull out chunks of impurities that did not melt
- *Small cellophane baggie/glassine envelopes*: (especially if powder residue) or torn corners of small plastic bags.

INJECTION:

- *Tie-off*: often a bootlace/shoelace, piece of rubber hose, belt, or string that ties off a limb – usually an arm – and changes blood flow to make veins pop out





USE METHODS: INJECTION

- *Pieces of balled tin foil: (including burned foil gum wrappers) in cars or in waste baskets in room with traces of a white or brown powder*
- *Black smudges or fingerprints: on furniture, door knobs, or light switches. May have come from fingers used to heat and prepare the drug.*



USE METHODS: INJECTION

- In its purest form, heroin is odorless. However, when diluted or manipulated it can have an acidic vinegar-like smell.



“TRACK” MARKS

Also, some people who inject will have tattoos to make their track marks less noticeable.

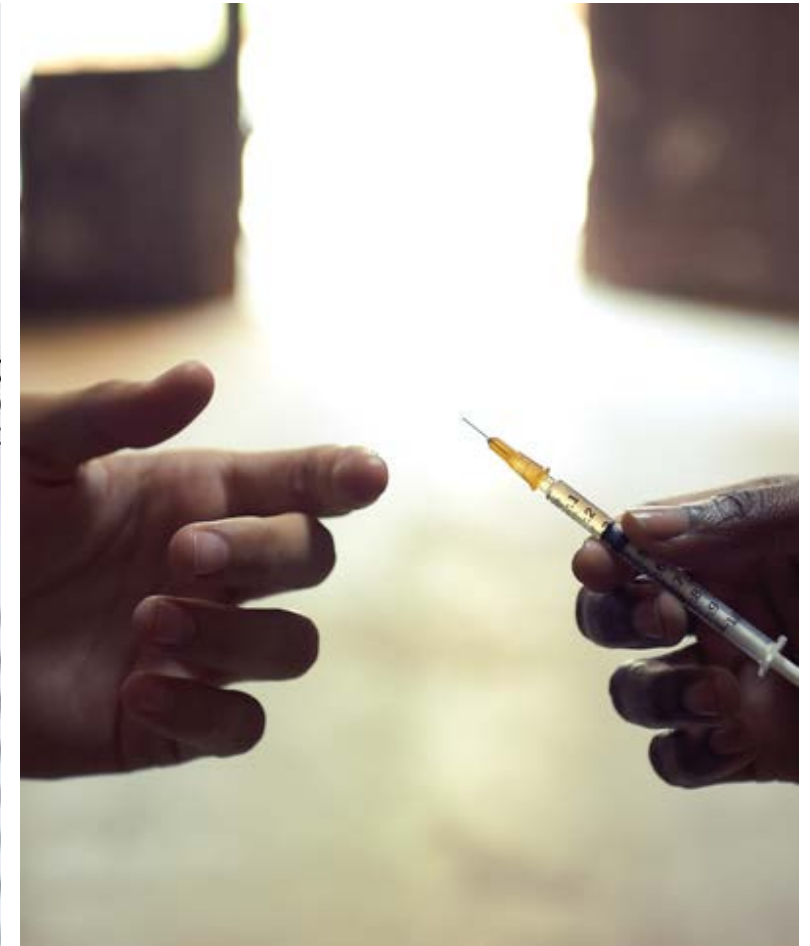




INJECTION ABSCESES

INJECTION RISKS: SHARING NEEDLES AND DRUG PREP EQUIPMENT

- Frequently associated with disease transmission, especially HIV/AIDS, and viral hepatitis
- Tuberculosis, and sexually transmitted infections (STIs) are also caused by, or transmitted through, dirty or shared needles
- Any blood-borne pathogen can be transmitted through shared needles.





HEROIN METHODS OF USE: SMOKING

- **Smoking:** When powdered heroin is smoked, the associated paraphernalia includes:
 - *Aluminum foil:* Contains the drug while it is smoked
 - *Lighter or candle:* a heat source placed under the aluminum foil, which causes the drug to liquefy and emit steam or smoke
 - *Straw:* used to inhale the smoke and steam as it wafts off the heroin on the aluminum foil
 - *Cigarette, rolling papers, or pipe:* when heroin is rolled into a cigarette or placed in a pipe to be smoked.

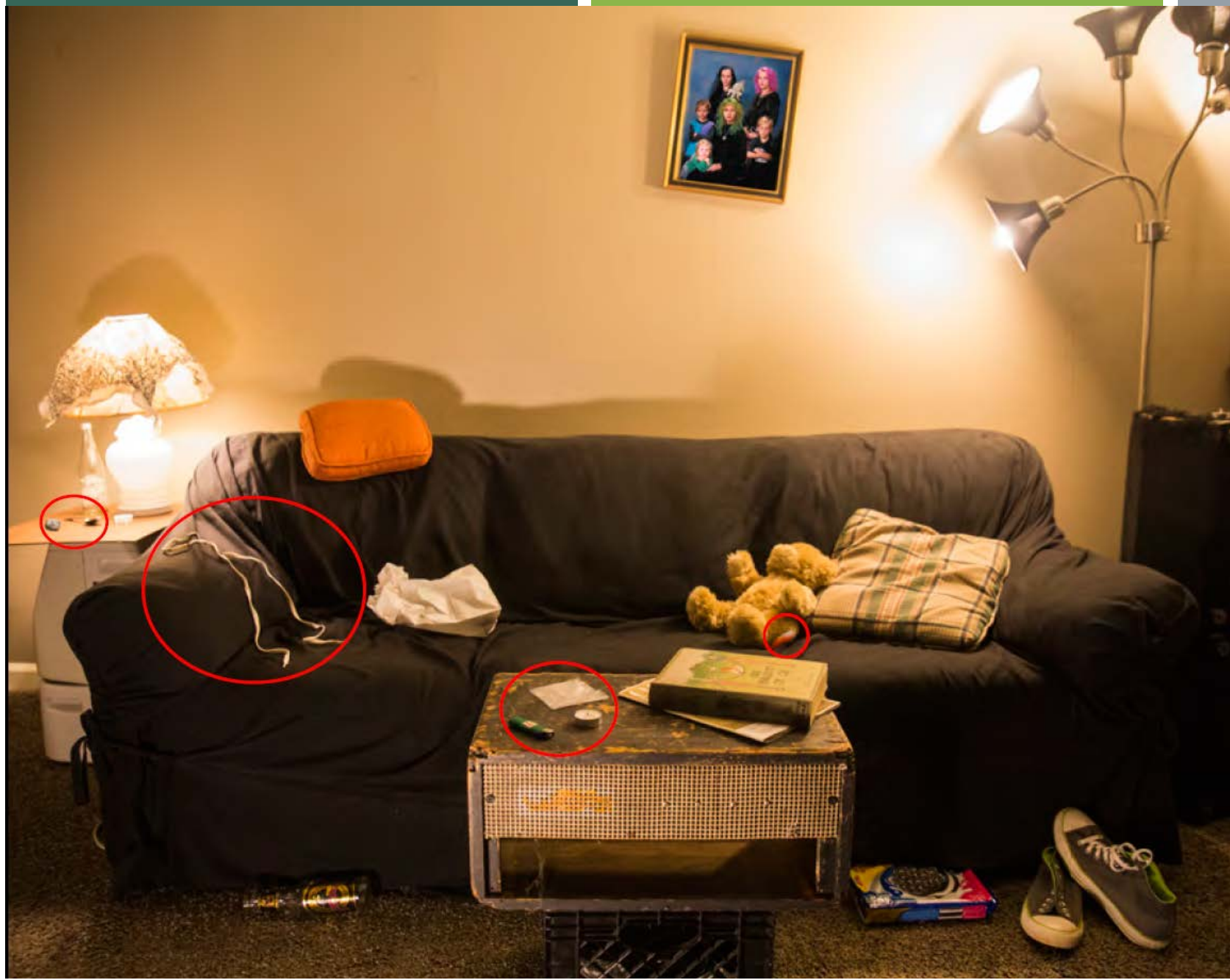
HEROIN USE METHODS: SNORTING

- **Snorting:** Snorted powdered heroin, especially if it's close to pure, can produce a strong euphoric effect.
- Straw, rolled bill or paper, or another small tube (e.g., empty pen tubes, cardboard tampon inserts) to guide powdered heroin into the nostrils.



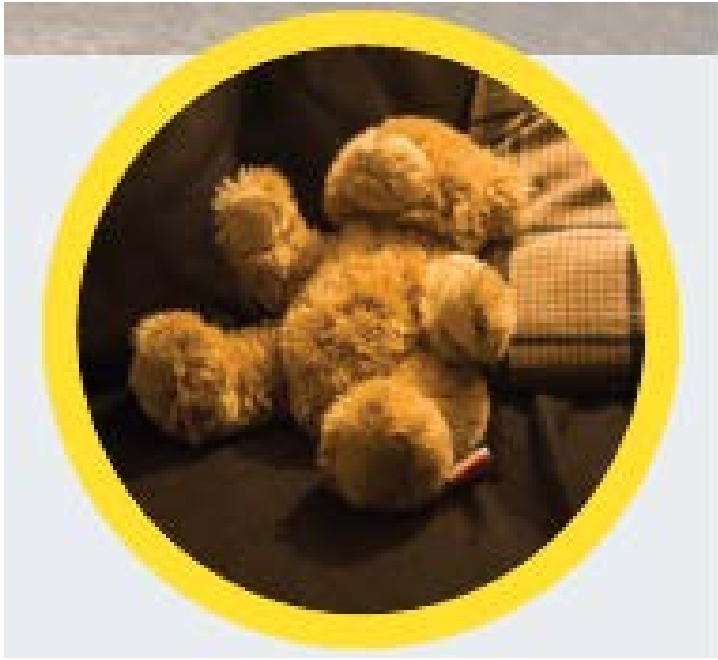


SAMPLE CHILD
PROTECTION
INVESTIGATOR
(CPI)
SIMULATION
EXERCISE:
HEROIN



Sample
Simulation
Exercise:
Heroin/
Paraphernalia

SIGNS OF POSSIBLE HEROIN USE



DIFFERING PHYSICAL SIGNS



Constricted pupils are a common sign of someone under the influence of an opioid or other depressant substance.



Dilated pupils are a common sign of someone under the influence of meth or other amphetamines.

HEROIN ANONYMOUS RESOURCES

- **Heroin Anonymous** (<http://heroinanonymous.org>): A nonprofit fellowship of individuals in recovery from heroin addiction committed to helping each other stay sober. This organization holds local support meetings, a directory of which can be found on their website.
- Heroin Anonymous (www.facebook.com/HeroinAnonymous/)
- **Heroin Addiction & Recovery Forum** (<http://killtheheroinepidemicnationwide.org/forum/>): An online discussion forum for both people who are addicted to heroin, and their friends and families.

Heroin use is part of a larger substance abuse problem.

Nearly all people who used heroin also used at least 1 other drug.

Most used at least **3** other drugs.

Heroin is a highly addictive opioid drug with a high risk of overdose and **death** for users.

People who are addicted to...



ALCOHOL

are

2x



MARIJUANA

are

3x



COCAINE

are

15x



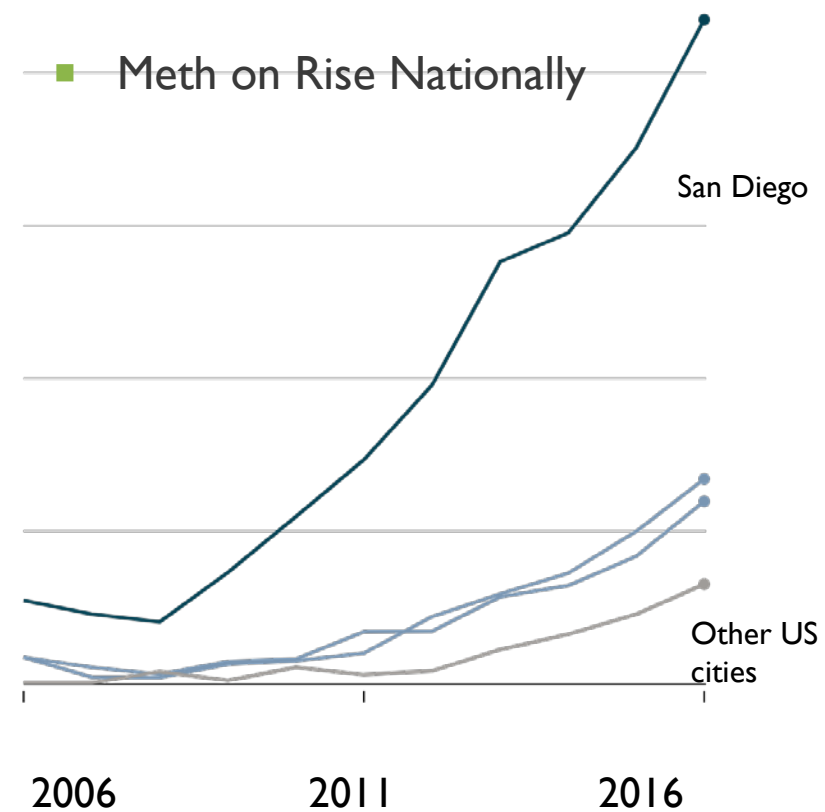
Rx OPIOID PAINKILLERS

are

40x

...more likely to be addicted to heroin.

CRYSTAL METHAMPHETAMINE RISING TOO



“SPEEDBALLING”

- Some people mix heroin with crack cocaine, a practice called *speedballing*. *Speedballing* can amplify the actions of both drugs, producing a significant high and a strong attraction to repeat.



FOR QUESTIONS, OR FOR ADDITIONAL INFORMATION

For additional opioid training modules:

- [FADAA.org](https://www.fadaa.org)

For additional information about Florida's opioid treatment options or other DCF opioid information, contact:

Walter Castle LCSW, MCAP

Opioid STR Project Director

Office of Substance Abuse and Mental Health

Florida Department of Children and Families

1317 Winewood Blvd., Bldg. 6, Room 250

Tallahassee, FL 32399

Office: (850) 717-4277

Email: walter.castle@myflfamilies.com

REFERENCES/RESOURCES

Slide 6: <https://teens.drugabuse.gov/drug-facts/prescription-pain-medications-opioids>

Slide 8: <https://www.drugabuse.gov/publications/drugfacts/heroin>

Slide 9: <https://www.cdc.gov/drugoverdose/data/heroin.html>

Slide 11: https://www.dea.gov/divisions/hq/2016/hq092216_attach.pdf

Slide 12: <https://emergency.cdc.gov/han/han00384.asp>

Slide 13: <https://www.dea.gov/pr/multimedia-library/image-gallery/fentanyl/Heroin%20Carfentanil%20Fentanyl%20Lethal%20Dose%20Close%20Up.jpg>

Slide 14: www.cdc.gov/drugoverdose/data/heroin.html

Slide 15: <https://www.dea.gov/pr/multimedia-library/image-gallery/fentanyl/Heroin%20Carfentanil%20Fentanyl%20Lethal%20Dose%20Close%20Up.jpg>

REFERENCES/RESOURCES

Slide 16: <http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2016/03/03/states-cdc-seek-limits-on-painkiller-prescribing>

Slide 19: Source: <https://www.drugabuse.gov/publications/drugfacts/heroin>

Slide 20: Excerpted for purposes of illustration from: <https://yourfirststep.org/drug-diaries-opiate-addict/>

Slide 22: <https://heroin.net/heroin-effects/heroin-effects-sub-page-1/heroin-effects-on-the-brain/>

Slide 24: Artwork Source/Illustration by Michael Dockery https://www.vice.com/en_us/article/kwxkbv/ex-users-describe-the-first-time-they-tried-heroin with permission

Slides 25-28: Quotes on slides 25-28 were excerpted from various anonymous blogs and used as composite examples

Slide 31: <https://www.drugabuse.gov/publications/drugfacts/heroin>

Slide 40: http://www.hepatitiscentral.com/news/smoking_pipes_m/

REFERENCES/RESOURCES

Slide 41: <https://americanaddictioncenters.org/heroin-treatment/identifying-paraphernalia/>

Slide 42: Ibid

Slide 48: <https://www.cdc.gov/vitalsigns/heroin/index.html>

Slide 49: U.S. Customs and Border Protection

Slide 50: <https://americanaddictioncenters.org/heroin-treatment/combination/>