

OPIATES WHAT'S THE PROBLEM? WHAT CAN WE DO?

Caleb Banta-Green PhD MPH MSW

Senior Research Scientist- Alcohol and Drug Abuse Institute
Affiliate Associate Professor- School of Public Health
Affiliate Faculty- Harborview Injury Prevention & Research Center

University of Washington

May 26, 2016

UNIVERSITY of WASHINGTON

ADAI Alcohol &
Drug Abuse
Institute

I have no conflicts of interest to report. I do not take money from pharmaceutical companies.

My work is supported by federal grants and government contracts. I have received funding from private foundations such as:

Robert Wood Johnson Foundation
AAA Foundation for Traffic Safety

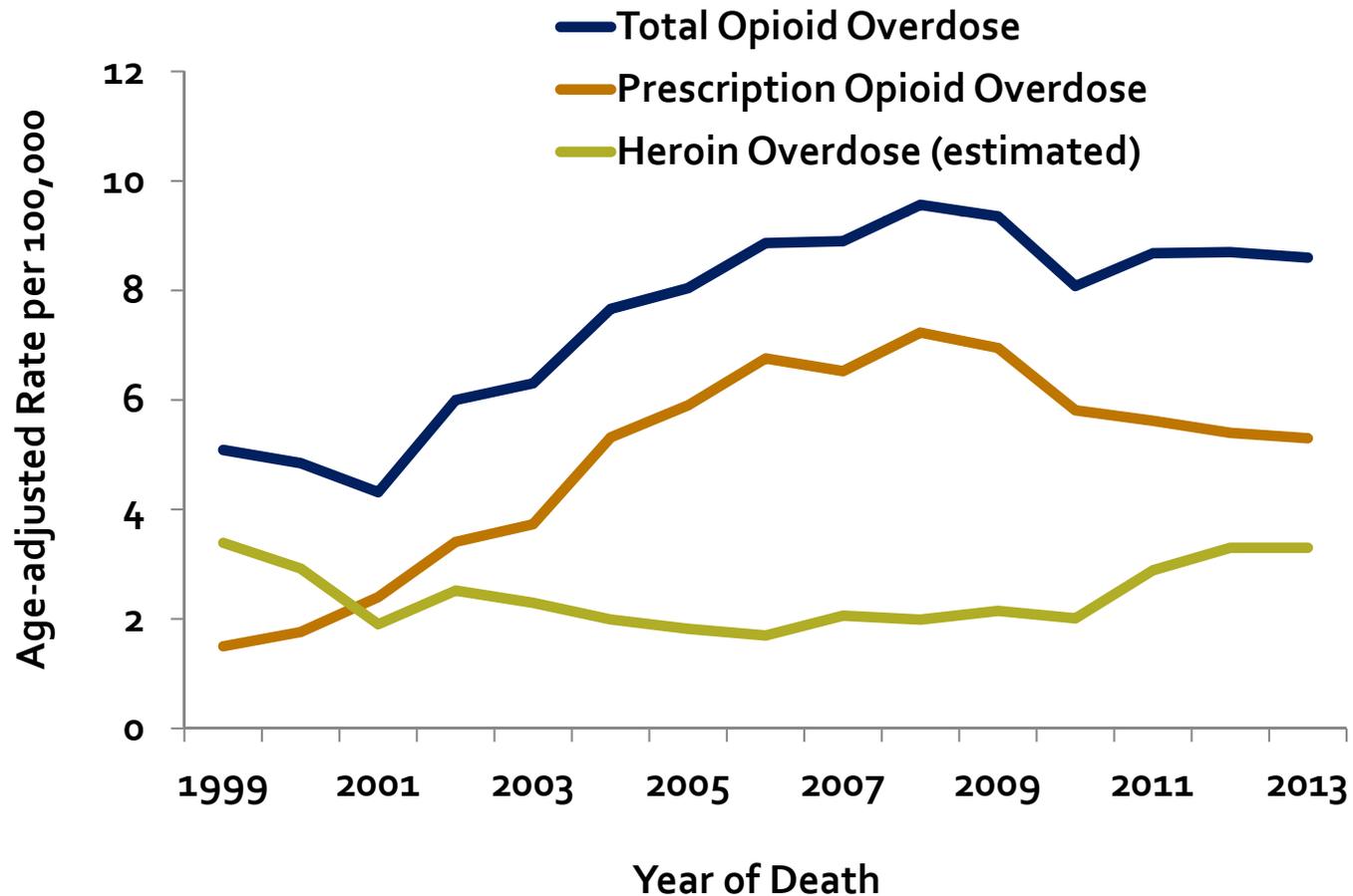
Goals- I hope you learn:

- What opioids are and what they do
- What opioid addiction is
- Untreated opioid addiction is a potentially fatal condition
- Treatments exist that cut the chance of dying in half
- An antidote to reverse overdoses is available
- It is essential that you educate and support your community

Outline

- What are opiates/opioids?
- What is opioid dependence, why is it different than addiction, and why does the distinction matter?
- How and why do people switch from opioid pills to heroin? And what does it mean for prevention?
- Treating opioid addiction.
- Preventing overdoses and preventing overdose deaths.

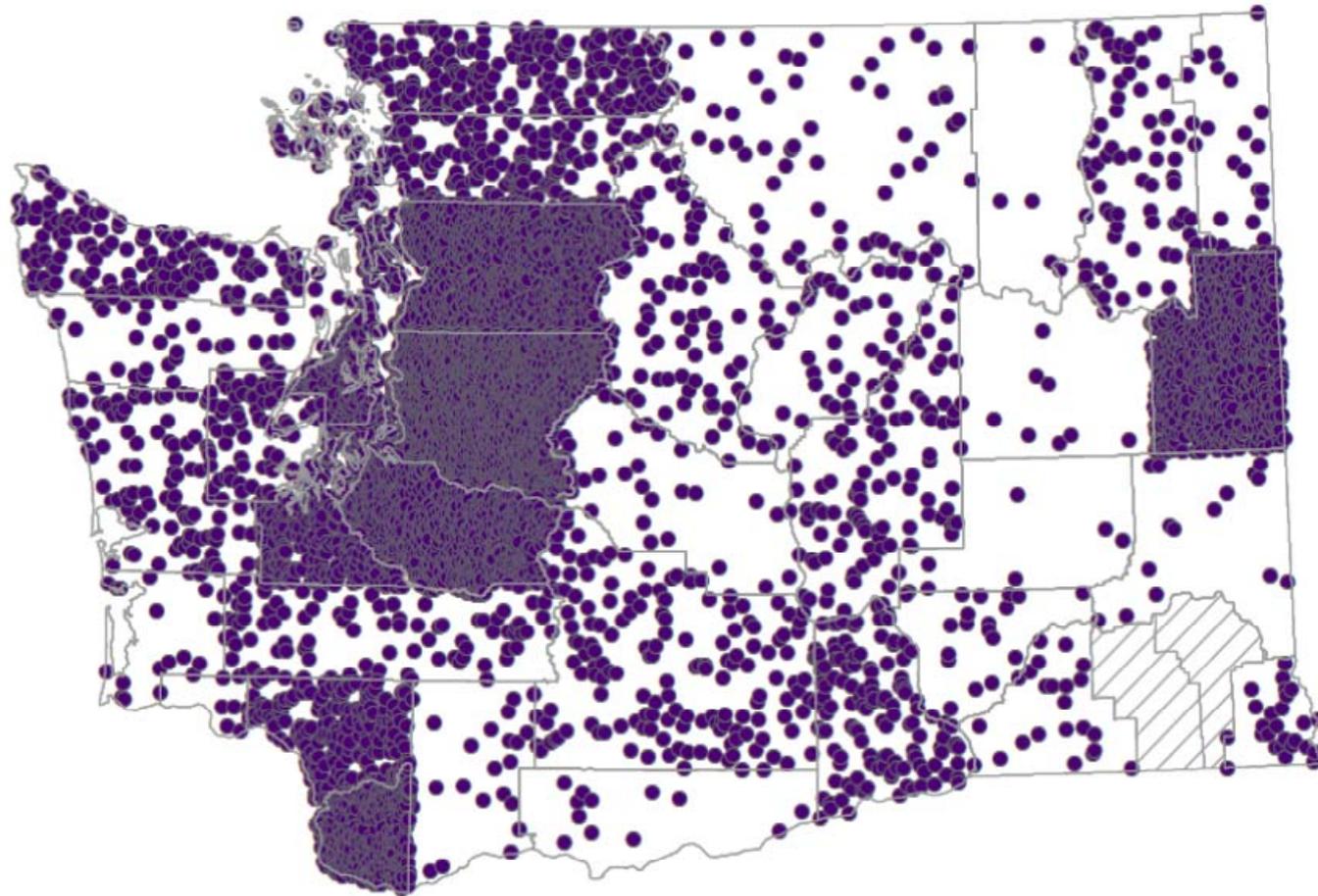
Drug Overdoses, WA, 1999-2013



Data source: WA State Dept of Health

Opioid Deaths by County 2000 - 2013

Total deaths = 7834



1 Dot = 1 death attributed to any opiate in the 14-year period Data suppressed when count is 1 to 4

Data from Center for Health Statistics, Washington State Department of Health.
Map created by Alcohol & Drug Abuse Institute, Univ. of Washington.
Residents who died outside Washington excluded.
Dots are randomly allocated within counties.

What are opioids?

- Opioids act on opioid receptors to have an effect similar to morphine.
- Opiate receptors are found primarily in the brain and the gut.
- Opioids relieve pain, depress breathing, cause euphoria/"high", suppress cough and diarrhea.
- Endorphins = endogenous morphine.
- Opiates are drugs naturally found in or made from the opium poppy such as morphine (natural) and heroin (man made).
- Opioids include (semi)-synthetic drugs that are chemically similar to and bind to opiate receptors. e.g. fentanyl, oxycodone

What is opioid dependence?

- A physical state where the body adapts over time to taking opioids.
- People develop tolerance, need more to get the same effect.
- People develop withdrawal, without opioids a temporary state of extreme discomfort.

What is opioid dependence?

- Happens to anyone who takes opioids for a while.
- Changes to the brain, natural endorphin system, may be long lasting or permanent.
- A person may make choices to use opioids initially, but structural changes to the brain mean that for many it is hard/impossible to simply make a choice to stop.

What is addiction?

Technically “Opioid use disorder”

- **Bi**ological- dependence
- **Psych**ological- compulsive use, pre-occupation (always thinking about)
- **Social**- Gets in the way of important life activities- relationships, work, school

What is addiction?

- Keep using even though you know it is hurting you
- Try to quit but can't
- Lots of time spent using or recovering from using
- Using in dangerous situations

What is addiction?

Some people become addicted and some do not.

Why is complicated and not completely understood.

Important factors:

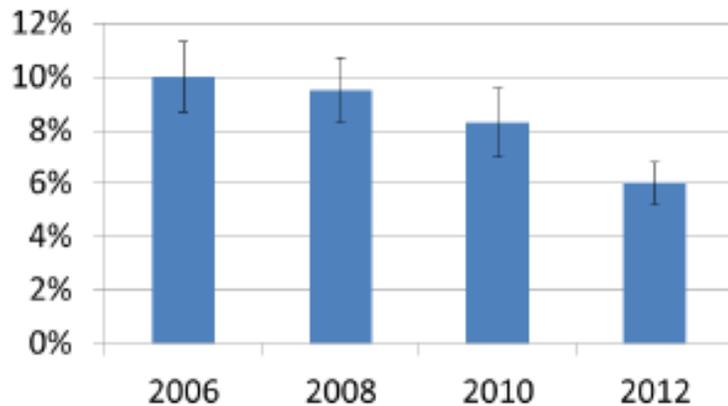
- Genetics
- Trauma
- Psychological/Mindset & Social/Setting

Pain Pills to Heroin

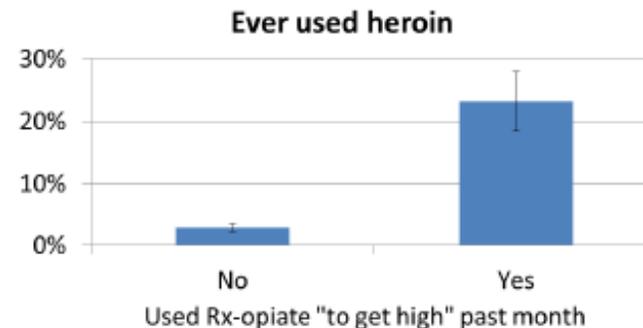


WA Healthy Youth Survey 10th graders in 2012

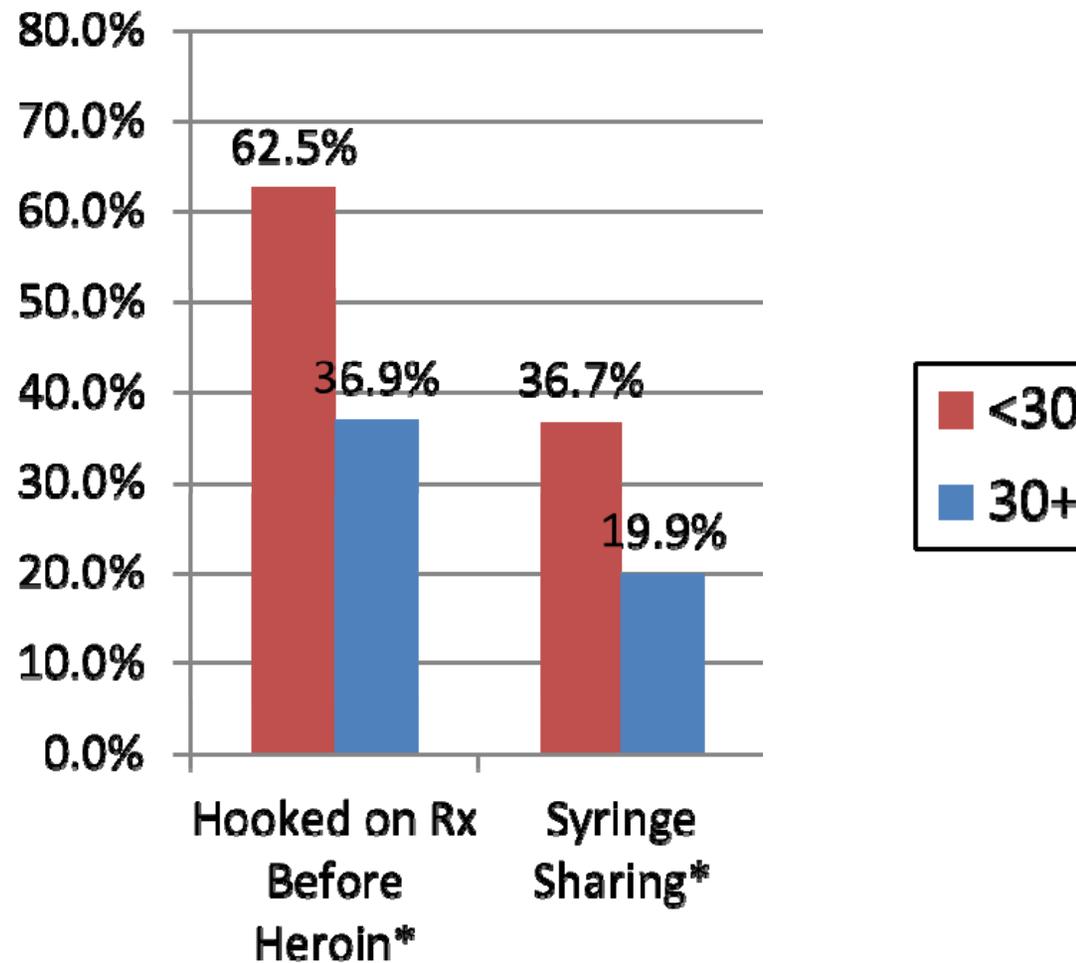
Past month use of Rx-type opiate to "get high"



Past month use of Rx-type opiate to "get high" in 2012 & ever used heroin

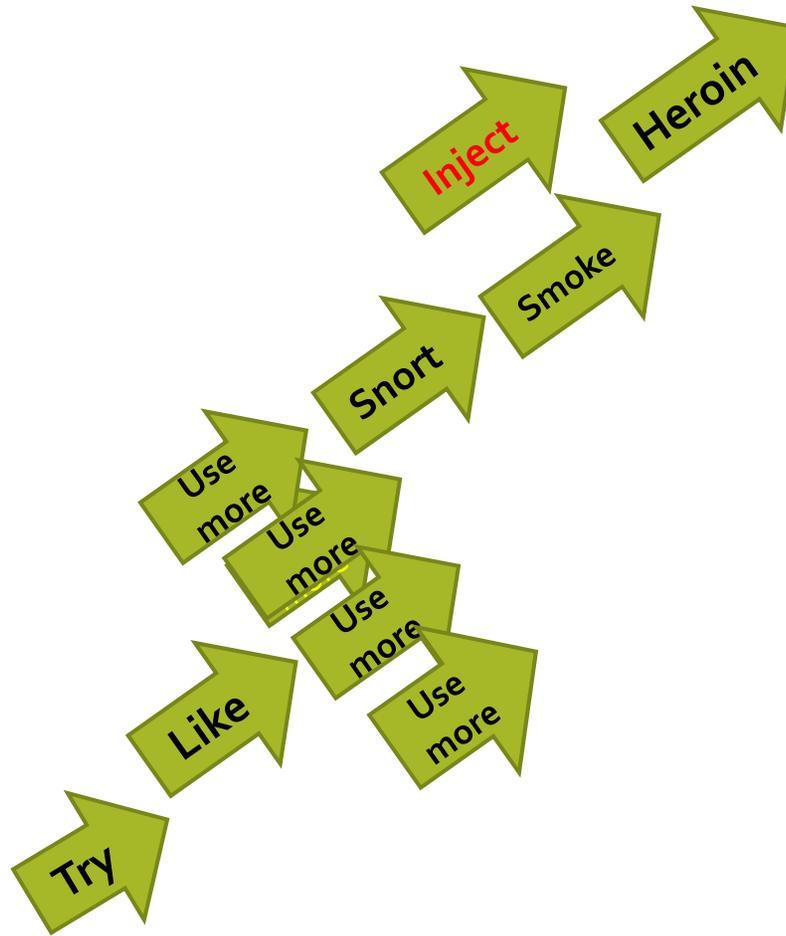


2013 Syringe Exchange Survey King County Heroin Users by Age



Source: Public Health- Seattle & King County, Emily Cederbaum analyses

**Statistically significant*



Access issues



- Most teens get Rx opiates from
 - Own Rx (33%)
 - A friend (28%)
 - Family gave (10%)
 - Took from a home (9%)
- Don't accept unneeded Rx's
- Dispose of unneeded medicines
- Lock up medications that are needed

Preventing Inappropriate initiation of Rx opioids

- **In 2013 in WA state more than 1 in 4 people had at least one prescription for a controlled substance (e.g. Vicodin, Valium, Ambien)**
- **More than half of adults take a prescription medicine of any kind.**

- Taking prescription medicines is now typical and normal
- Talking about medication usage with family members purposefully and thoughtfully and the role of medications in health is not yet normal.



Motivation & “Liking”

Motivation issues

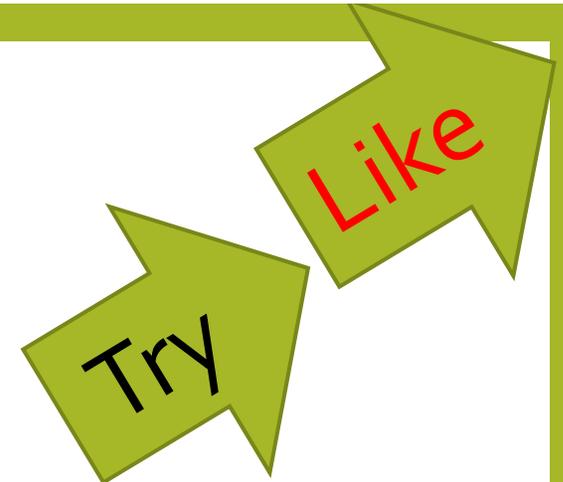
- Social-peers
- Sensation seeking- high/euphoria/fun
- Physical pain- Emotional pain- stress/trauma/escape
- Family norms- Health beliefs/stress/medication beliefs

Set & Setting

- A teen sharing their Oxy at a “kegger” is different than short term opiates for severe acute injury

Liking- aversive and reinforcing properties of the drug

- Biological- energized vs sleepy;
genetics/metabolization
- Psychological- feel “normal” vs agitated





Try

Like

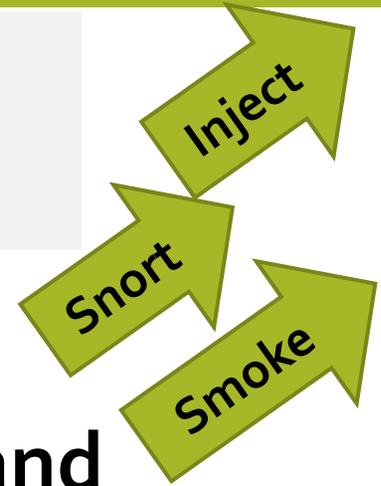
- Parents should reflect on their own use of alcohol/medication/drugs
- Consider what messages they are sending
 - e.g. emotional language- taking to “relax”
- Determine if they are the messages they want to be sending
- Consider their youths’ situation- e.g. trauma
- Be explicit about reasons for their use and expectations for youth
- This may be hard and involve the adult seeking help

Tolerance and Withdrawal

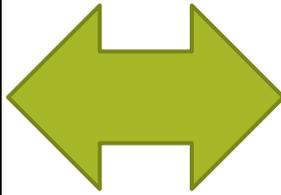


- Repeated use of opiates leads to tolerance
- Which leads to needing more to get the same effect
- Stopping use leads to withdrawal, which feels terrible
(not fatal)
- So you continue to use

Changing route of ingestion

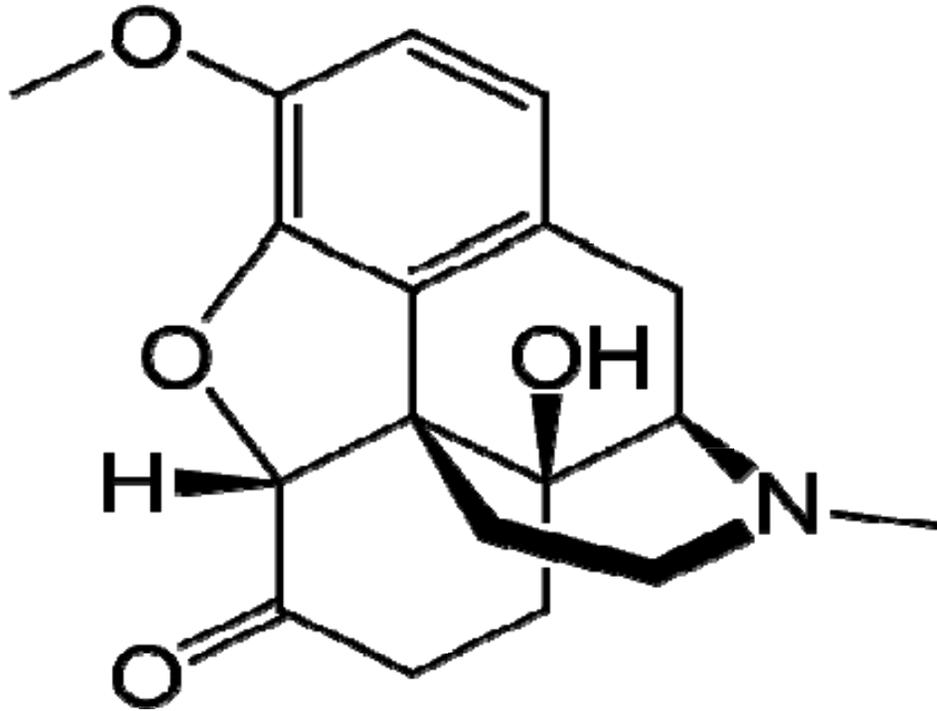


- Seeking euphoria- snorting, smoking and injecting are more intense highs
- Shorter more intense highs can also lead to quicker cycles of highs and lows and reinforce use
- Social situations, new “friends” may be using opiates in different ways and contexts
 - Initiating injecting doesn’t happen in a vacuum

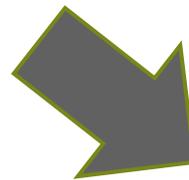
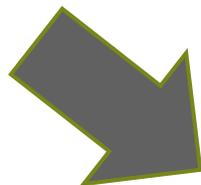
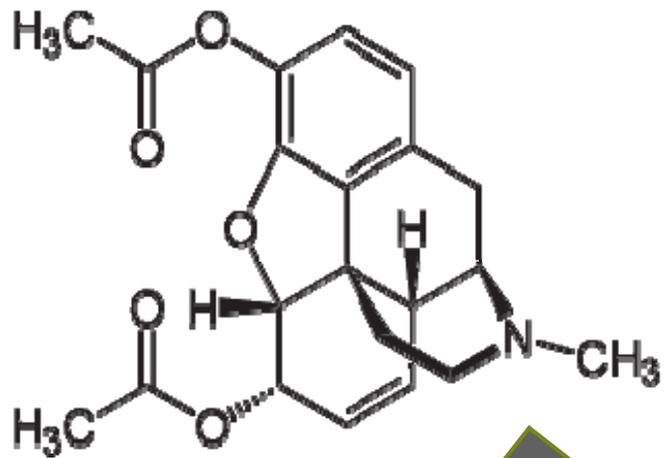


OXYCODONE

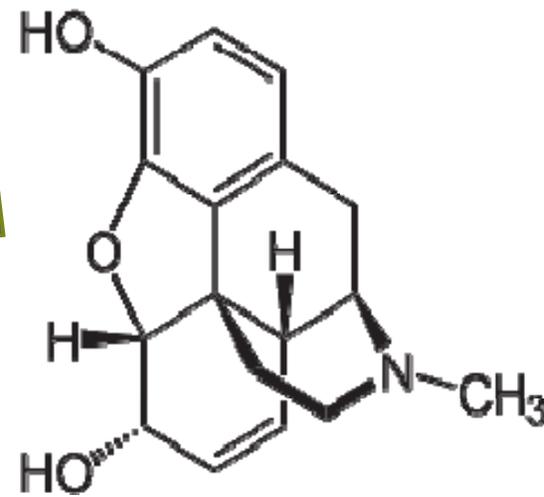
Heroin



HEROIN

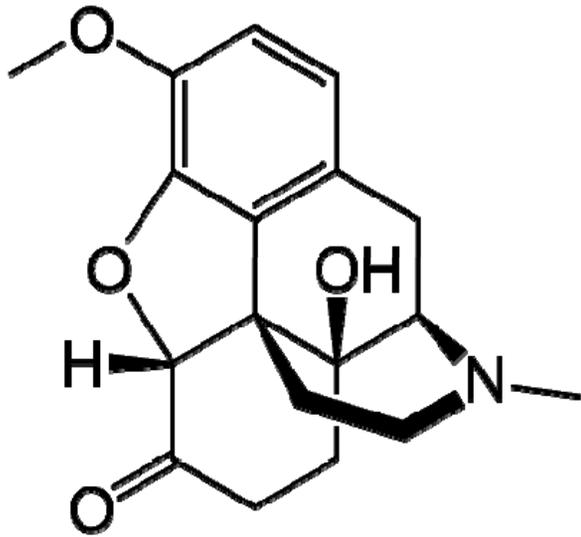


MORPHINE

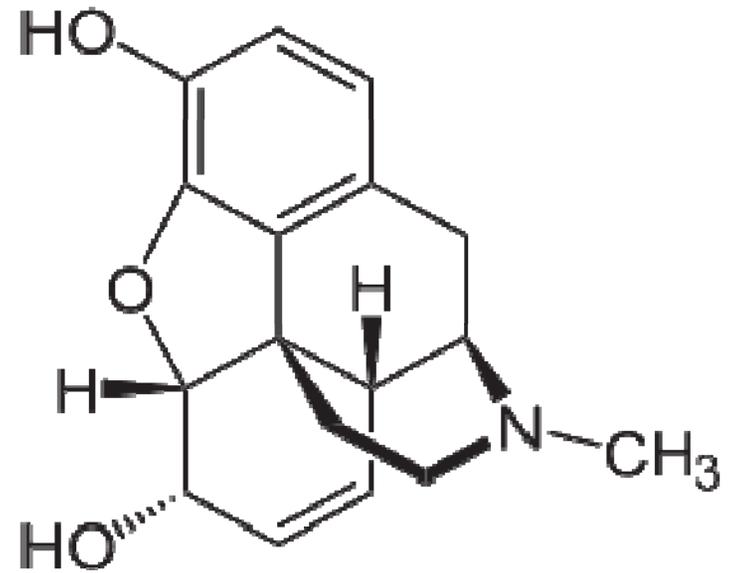




OXYCODONE

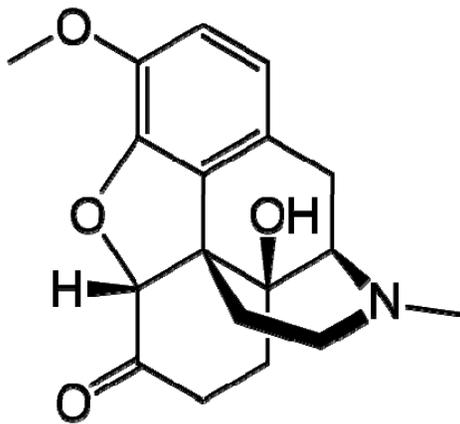


MORPHINE



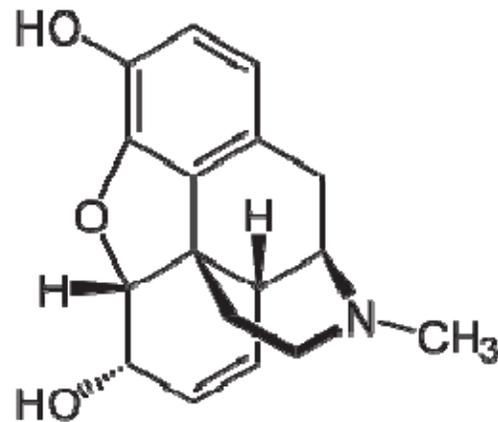
Heroin

OXYCODONE



\$80

MORPHINE (heroin metabolite)



\$10

& easier to get

**What do you
think of when**

I say

Addict?

Personal Views about Addiction

We all have some (maybe a lot) of direct experience with people who are addicted.

We may feel sympathy, anger, and other emotions.

How do my experiences:

- shade how I see addiction, how I think about it?
- impact how I treat people who are addicted?
- **Have you learned anything new today that might change how you think and act?**

Goals of Addiction Treatment

- Provide tools
(behavioral change, environmental change, medications)
to help patients manage their addiction.
- Teach patients how to use those tools.
- Facilitate a continuing care model
(addiction is chronic).
- Collaborate with patients to adapt treatment
as their needs and circumstances change.

Psychological and Social Problems



**Counseling &
social supports**



Addiction



**Opiate addiction
treatment
medicines**



Brain changes and Dependence

But aren't they still addicted?

- What is the definition of addiction?
 - Is it simply physical dependence?
- How does the change of lifestyle and psychosocial stability associated with long-term medication assisted treatment fit with that definition?
- **A person can be on treatment medications and be in recovery.**

Medications in Opioid Use Disorder Treatment

Methadone

- Delivered through approved clinics which have many regulations stipulating counseling services and drug screen urinalyses
- In larger cities in WA State

Buprenorphine (Suboxone®, Subutex®, Zubsolv®)

- Mainly delivered through physicians in office-based practice
- May also be provided through Opioid Treatment Programs

Vivitrol extended release naltrexone

- Delivered through physicians in office-based practice
- Learn more at www.drugabuse.gov

Research clearly and consistently shows that medication assisted treatment for opioid use disorders **saves lives and money**

“...mortality rates were 75 percent higher among those receiving drug-free treatment compared to those receiving buprenorphine...” or methadone

Health Aff August 2011 vol. 30 no. 8 1425-1433

NALOXONE/GOOD SAM

101

&

WHY IT'S NOT JUST ABOUT NALOXONE

Caleb Banta-Green PhD MPH MSW

Senior Research Scientist- Alcohol and Drug Abuse Institute

Affiliate Associate Professor- School of Public Health

Affiliate Faculty- Harborview Injury Prevention & Research
Center

University of Washington

Outline

- **What is WA's Good Samaritan Overdose-Naloxone Law?**
- **What is naloxone?**
- **Evidence regarding naloxone/ FAQ**
- **Current naloxone access methods**
- **Addressing overdose with more than naloxone**
- **Q & A**

WA's 2010 Good Sam Overdose/ Naloxone Law RCW 69.50.315

Medical immunity

- Prescriber may prescribe naloxone to a person at risk for having or witnessing an overdose
 - They may carry and administer naloxone

Legal immunity

- Overdose victim & bystander who seeks medical aid gets immunity from prosecution for drug possession

HB 1671 “Increasing access to opioid antagonists to prevent opioid-related overdose deaths.”

- Passed WA Legislature this session
- Awaiting Governor’s signature
- A policy/legal analysis will be created, posted and distributed soon

Two major components:

- 1. Allows prescribing to an entity such as a police department, homeless shelter**
- 2. Allows standing order so non-licensed people can distribute e.g. health educators**

What is naloxone (Narcan®)?

- It is a prescription medicine that reverses an opioid overdose. It cannot be used to get high.
- It does not have effects on a person who has not used opioids.
- Naloxone is safe and effective; emergency medical professionals have used it for decades.
- It is typically administered into a muscle or intra-nasally.
- It takes effect in 2-3 minutes & it lasts 30-90 minutes.

Evidence and Support for Overdose Education & Naloxone

- National support-
 - Medical, Pharmacy, Public Health... associations
 - ONDCP; DOJ; DHHS/SAMHSA; CDC...
- Research indicates distribution to heroin users:
 - Saves lives
 - Cost effective
- Research in process to learn
 - How OD education and naloxone impact overdose risk, occurrence, response and fatality
 - How to adapt for different populations e.g. chronic pain and primary care

Most common question:
Is naloxone just a "safety net" that allows users to use even more?

- Research studies have investigated this common concern and found that making naloxone available does NOT encourage people to use opiates more. **Withdrawal feels terrible.**
- The goal of distributing naloxone and educating people about how to prevent, recognize and intervene in overdoses is to **prevent deaths**.
- Other goals, such as decreasing drug use, can only be accomplished if the user is alive.

Naloxone access in WA- Examples

Who dispenses/ distributes	How	To Whom	Where
		Examples	
Prescriber e.g. doctor	Prescription	Patient Police officer Other	Office, mobile health van, police department
Pharmacist	Collaborative Practice Agreement with prescriber	Customer Client/Inmate College staff	Pharmacy, Clinic, Jail, Syringe exchange
Health educator	Standing order by prescriber (some counties)	Client	Syringe exchange, Mobile outreach



StopOverdose.org

Opioid overdoses can be prevented and reversed!

[Home / Opioid OD Education](#)

[Where to Get Naloxone/FAQ](#)

[Sources for Help](#)

[Law Enforcement](#)

[Evaluation of the WA Law](#)

[Pharmacy/Prescribers](#)

[Other Drugs and Overdose](#)

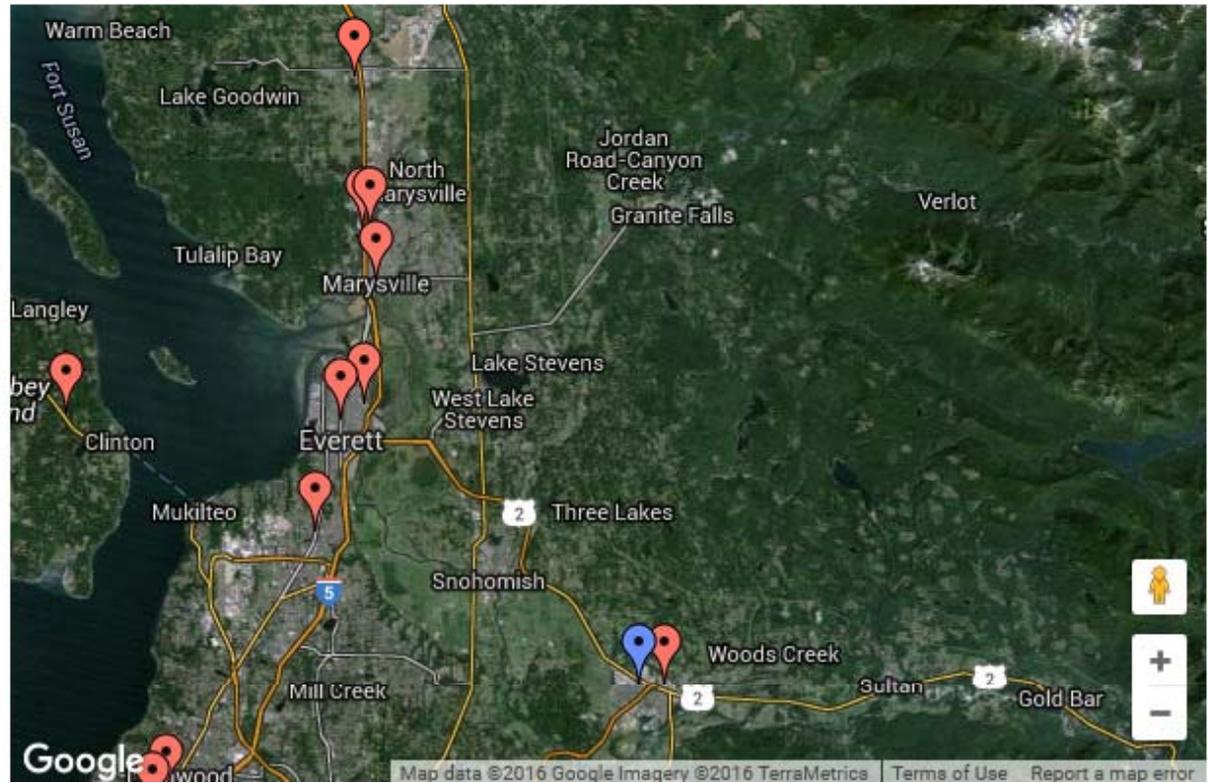
[Resources](#)

[News](#)

[Center for Opioid Safety Education \(COSE\)](#)

Naloxone in Washington state

To find naloxone near you, use the + and - buttons below to zoom in and out. Click on or hover over a pin for location information.

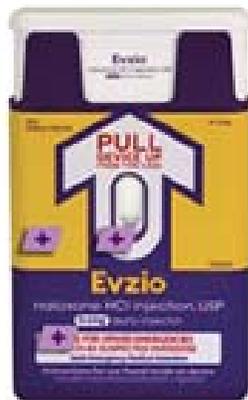


Injectable naloxone



- Inject into the arm or upper outer top of thigh muscle, 1 cc at a time.

EVZIO® Autoinjector



- Find instructions and information: <http://evzio.com>.

Intranasal naloxone



- Squirt half the vial into each nostril.

Narcan® Nasal Spray



- Find instructions and information: <http://www.narcannasalspray.com>

It's not just about naloxone

- **Overdose knowledge: recognition, call 911, rescue breathing**
- **Good Samaritan awareness**
- **Opioid addiction as a medical and public health problem- *Reducing stigma***
- **Cautious opioid prescribing important**
- **Quality drug treatment is the long term solution, easy access needed**

Stay in touch

@nomoreoverdose

The screenshot shows the Facebook profile for StopOverdose.org. The profile picture features a red pill bottle and white pills. The cover photo has the text "Opiate overdoses can be prevented and reversed". The page includes a "Community" tab, a "Timeline" section with a post from June 26 at 12:44pm about training in Seattle, and a "LIKED BY THIS PAGE" section with links to "WA Recovery Help Line" and "The DOPE Project (Drug Overdose Pre...)".

The screenshot shows the Twitter profile for @nomoreoverdose. The bio states: "Overdoses can be prevented. Educational information on laws, policy, public health, health care and treatment." The location is "WA State" and the website is "stopoverdose.org". Two tweets are visible: one from 9h about WA #Naloxone expanded access law, and another from 23h about inmates' eyes opened wide hearing about WA's Good Sam law during #naloxone training.