Understanding Addiction

COOAST Justin Culshaw Student Pharmacist Class of 2020

How do you describe...

Someone with add	iction	Someone with Lung Cancer

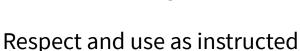
Prescription Opioids

Treatment for pain, like when recovering from sports injuries

- Vicodin (Hydrocodone/ Acetaminophen)
- Percocet (Oxycodone/ Acetaminophen)
- MS Contin (Morphine)
- Dilaudid (Hydromorphone)
- Fentanyl

Potential for danger: BREATHING EMERGENCY







Relevant

- In 2014, almost 2 million Americans abused or were dependent on prescription opioids.
- As many as 1 in 4 people who receive prescription opioids long term for noncancer pain in primary care settings struggles with addiction.
- Every day, over 1,000 people are treated in emergency departments for misusing prescription opioids.

Boscarino JA, Rukstalis M, Hoffman SN, et al. Risk factors for drug dependence among out-patients on opioid therapy in a large US health-care system. Addiction 2010;105:1776–82. http://dx.doi. org/10.1111/j.1360-0443.2010.03052.x

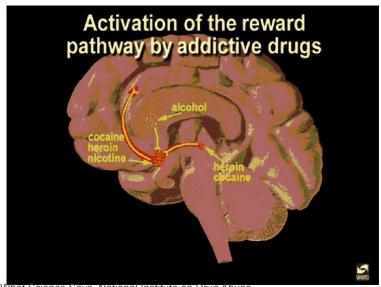
Feel the dopamine, jumping jacks!



Dopamine Reward Pathway

Your brain rewards good behavior with good feelings

Opioids hijack and **OVERLOAD** the brain with good feelings



NIDA. Understanding Drug Abuse and Addiction: What Science Says. National Institute on Drug Abuse website. https://www.drugabuse.gov/understanding-drug-abuse-addiction-what-science-says. February 11 2016 Accessed October 14 2017

Normal Dopamine



Dopamine OVERLOAD



Brainwashed to feel that opioids are necessary for life

Brain groups opioids with water, food, and survival

This is the disease of **ADDICTION**



TOLERANCE

The more you take/longer you take opioids, the more your body gets used to it

Need more drug for same effect = **opioid tolerant**

Most people are opioid naive

What happens if an *opioid naive* person take an **opioid tolerant** person's dose?

Overdose = BREATHING EMERGENCY

Give Monster Energy drink to...

coffee drinker



non-coffee drinker



Give high dose opioids to...

Opioid Tolerant

Opioid Naive



WITHDRAWAL

Not just a craving

"worse than a gunshot" or "worst stomach virus and worst flu at the same time"

No longer rational thinker, can happen to anyone



Any long term use of opioids, illegal or legal, can result in addiction and WITHDRAWAL

Not yourself



Naloxone: A Fire Extinguisher

Put Out Opiod Overdose

Everyone with an opioid or who has a loved one who takes opioids should have this

Recognizing an Overdose:

-Breathing slow, turning blue, can't wake up

Respond:

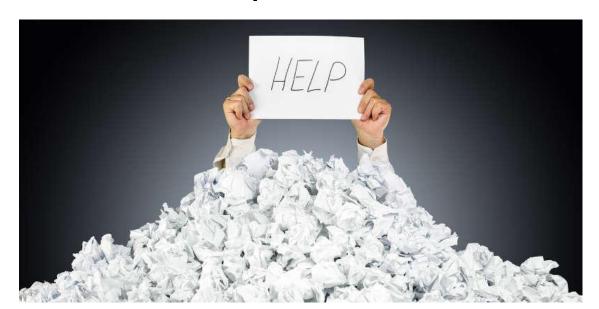
-Try to wake up, call 911, give Naloxone (more than once if not responding)



Drug overdose ranks as the leading cause of adult accidental deaths in the U.S.

Information overload?

- Important to know about addiction and Rx drugs to keep you and your community safe
- Internet isn't always right! All this information is readily available with your local pharmacist or health care provider.



Summary

- Relevant
- Dopamine Reward Pathway- "Necessary for life"
- Tolerance- different doses or different people
- Withdrawal- not yourself
- Naloxone- A Fire Extinguisher
- •Keep Informed- Don't google it, go to your local pharmacist or health care provider!

