



# Our Response to the Opioid Epidemic:

## Medication Assisted Treatment

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Community for New Direction

# How it started...

## History of the Rise of Opioids

- 1997- The American Pain Society terms pain the “fifth vital sign” to be routinely measured.
- 1998- Purdue Pharma spent \$207 million on Oxycontin marketing
- 1997-2002- Morphine prescriptions increased by 73%, hydromorphone increase by 96%, Fentanyl prescriptions increased by 226%, and oxycodone increase by 402%
- 2001- Medical Centers are required to examine their patients’ pain levels.
- 2010- From pills to heroin
- 2013- 27,000 opioid dependent babies being born with Neonatal Abstinence Syndrome
- 2015- National Record of Overdose Deaths Grows
- 2016- Surgeon General declares “Addiction is a Chronic Disease of the Brain.”

# Opiates vs. Opioids

Opiate - a medication or an illegal drug that is **derived from the poppy plant** and produces a sedative effect by depressing activity of the central nervous system, reducing pain and inducing sleep.

Examples: Heroin; Opium

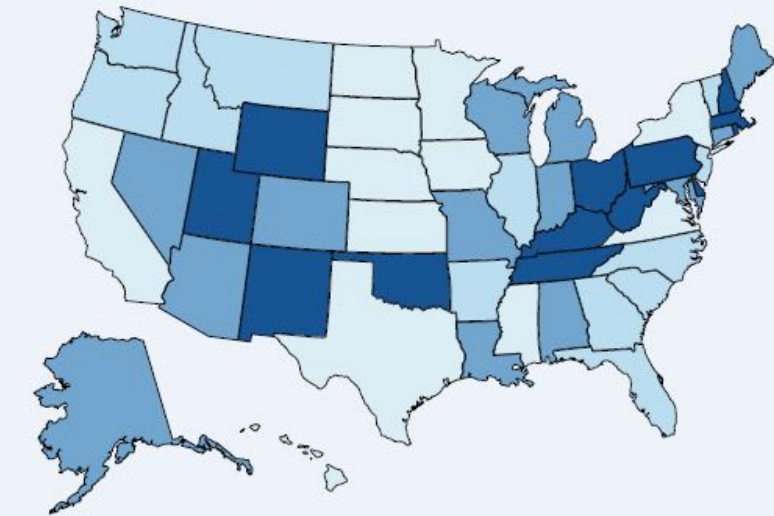


Opioid - medication or illegal drug that is a **synthetic form** of the opiate that is derived to **mimic the effective of an opiate**. Opioids include methadone, morphine, codeine and oxycodone.

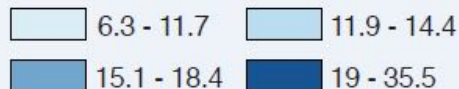


# National Overdose Statistics

Drug overdose death rates, United States, 2014\*



Drug overdose deaths per 100,000 population



\*Age-adjusted death rate per 100,000 population

Source: CDC National Vital Statistics System

## Economic Impact of the Opioid Epidemic:

**\$ 55 billion** in health and social costs related to prescription opioid abuse each year<sup>1</sup>

**\$ 20 billion** in emergency department and inpatient care for opioid poisonings<sup>2</sup>

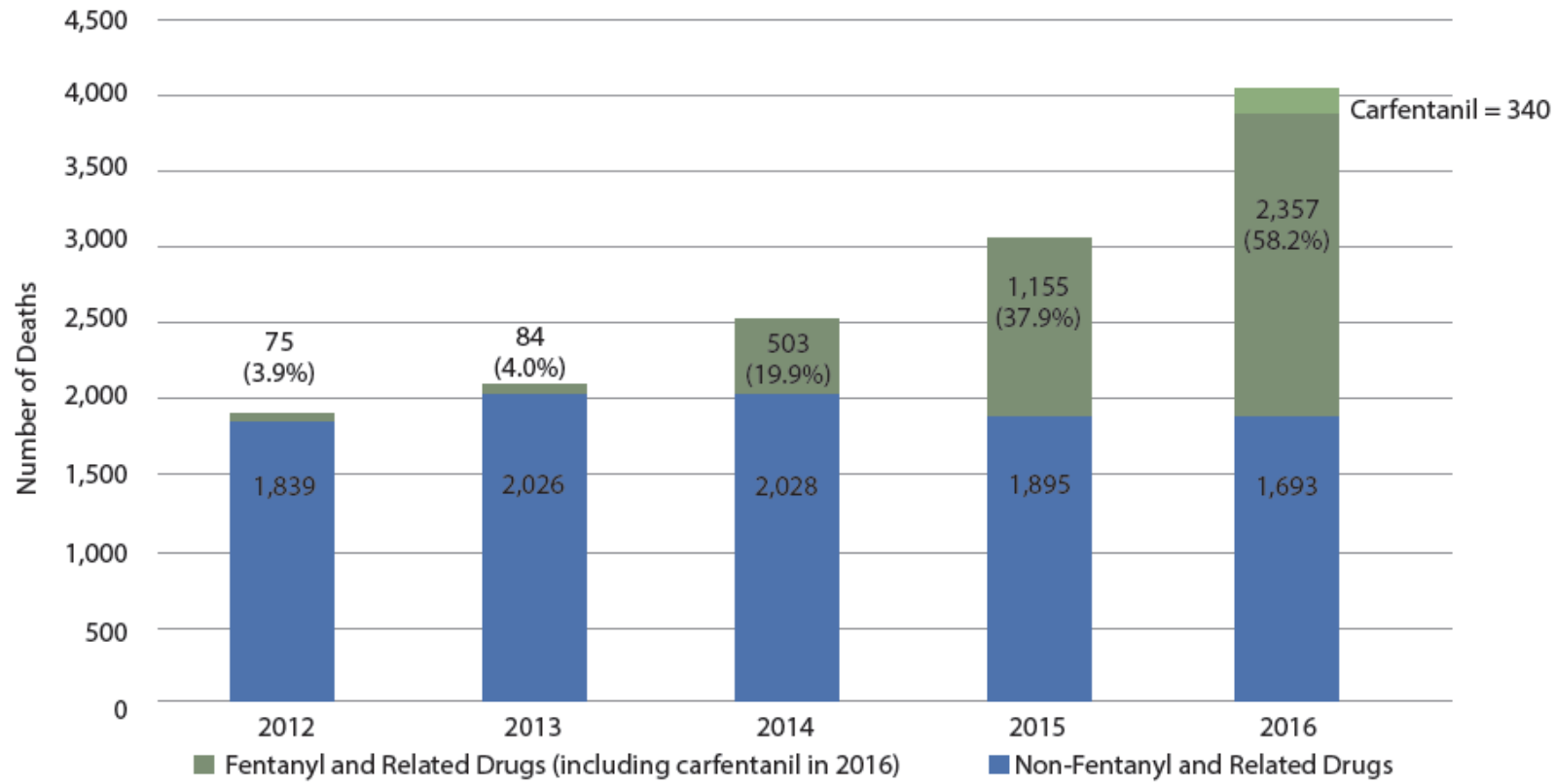
Source: Pain Med. 2011;12(4):657-67.<sup>1</sup>  
2013;14(10):1534-47.<sup>2</sup>

***115 People lose their lives every day to accidental Drug Overdose in the United States***



# Ohio: Introduction of Illicit Fentanyl

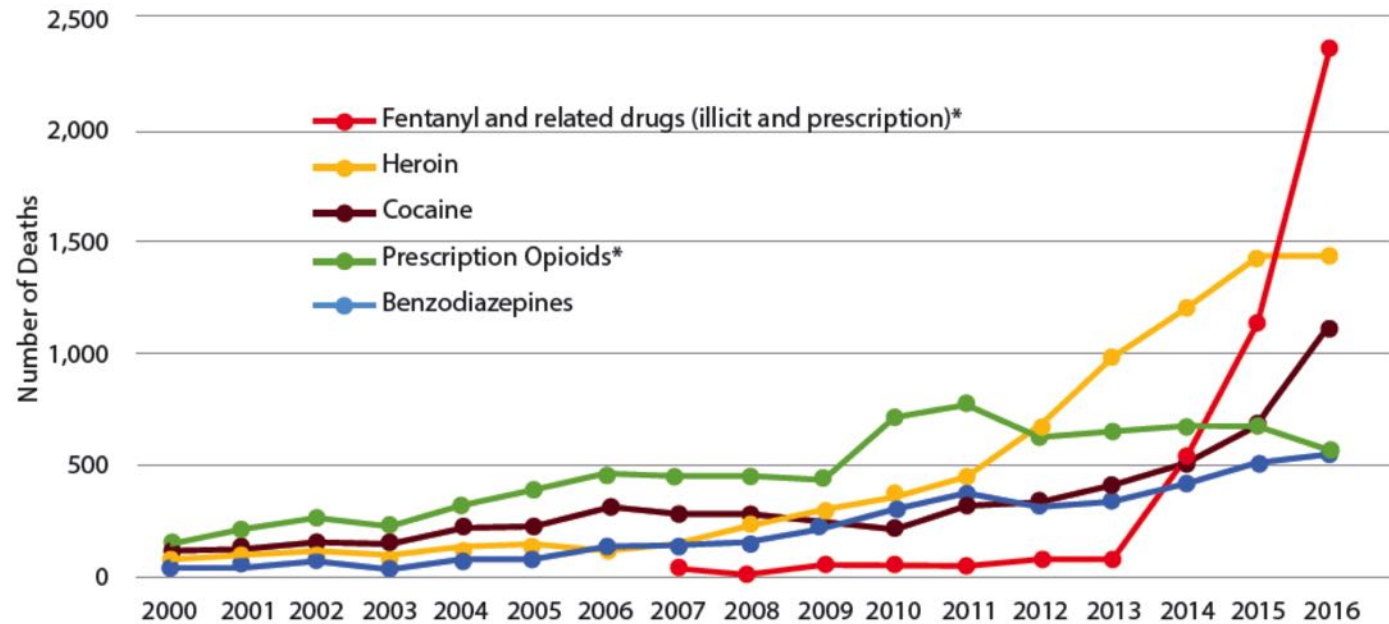
Figure 1. Number of Fentanyl and Related Drug Deaths and Percentage of Unintentional Overdose Deaths, by Year, Ohio, 2012-2016



Source: Ohio Department of Health, Bureau of Vital Statistics; analysis conducted by ODH Violence and Injury Prevention Program. Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44).

# Ohio: OD Fatalities by Specific Drugs

Figure 7. Number of Unintentional Drug Overdose Deaths Involving Selected Drugs, by Year, Ohio, 2000-2016



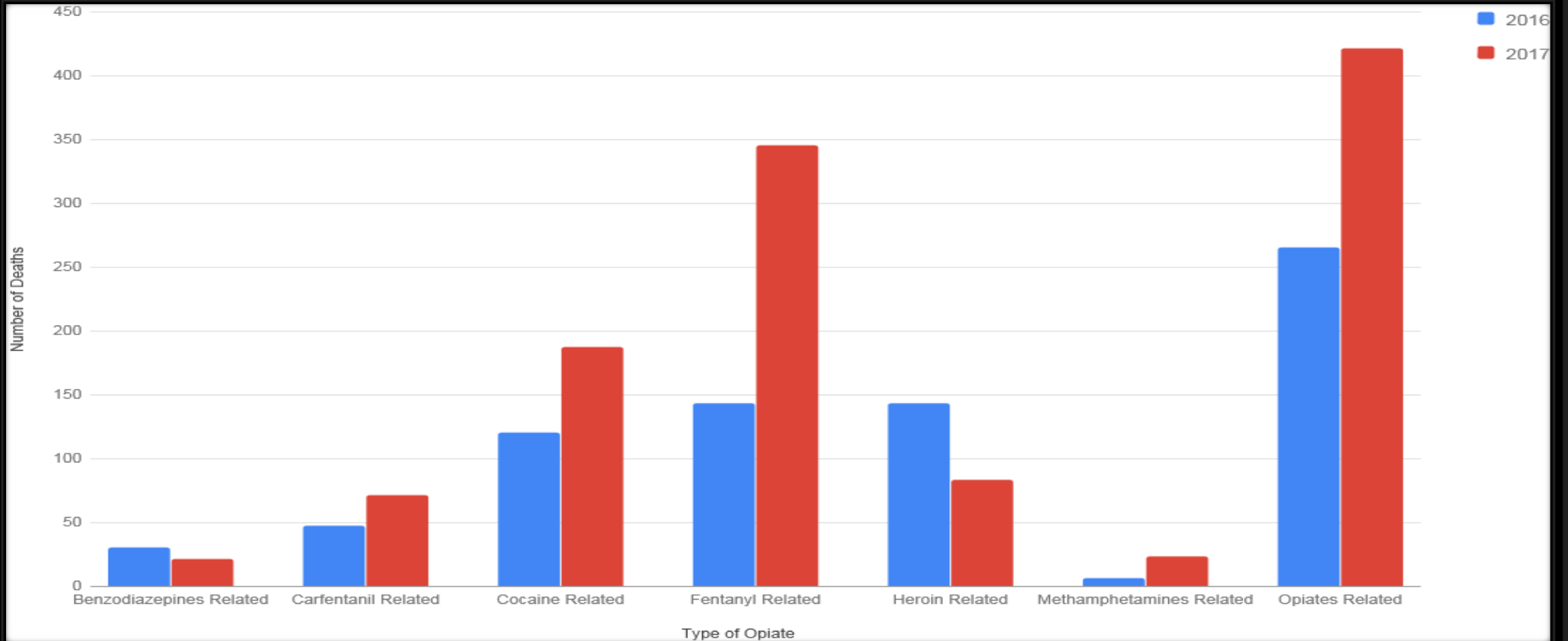
Source: Ohio Department of Health, Bureau of Vital Statistics; analysis conducted by ODH Violence and Injury Prevention Program.

Multiple drugs are usually involved in overdose deaths. Individual deaths may be reported in more than one category.

Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44).

\* Excludes deaths involving fentanyl and related drugs.

# 2016/2017 Full Year Comparison





# Fentanyl

- **Synthetic Opiate – Schedule II**
- **Synthesized in 1959 – Prescribed for severe acute pain and as a sedative.**
- **Much more powerful than Morphine (80 to 100x) and 30 to 50x more powerful than Heroin.**
- **Used to “cut” or replace Heroin or to mimic Percocet, Norco, and Benzo’s.**
- **Very cheap to make**

# Fentanyl Distribution Trends



Which one is medical grade Oxycodone 30mg?

Which ones are pure Fentanyl?



# Fentanyl Distribution Trends



Which is Medical Grade  
15mg Oxycodone?

Which is pure Heroin?





# Recognizing an Opioid Overdose

- **What are the symptoms of opioid overdose?**
- An overdose of opioids requires immediate emergency medical treatment. If you suspect someone has overdosed on opioids, get a medic on-scene; administer department issued naloxone (Narcan).
- Unresponsive
- Slow, erratic breathing, or no breathing at all
- Slow, erratic pulse, or no pulse
- Vomiting
- Loss of consciousness
- Constricted (small) pupils

-Source: Franklin County Coroner's Office

# What to do in case of an Overdose

- Retrieve First Aid Kit that contains AED/Naloxone
- **Call 911** – Even if the victim of the OD awakens and/or leaves the property. (Danger of Re-Overdose)
- Administer Naloxone and Begin CPR if Necessary
- Protect the airway
- If CPR isn't necessary at the time, place victim in the recovery position.
- Call for additional staff to be present while you wait on EMS / Police
- WEAR GLOVES – AND NEVER TOUCH ANY PARAPHERNALIA/SYRINGES/WRAPPERS/POWDERS OR ANY UNKNOWN SUBSTANCE IN THE AREA OF THE OD
- Safely Decontaminate the area after the EMS/Police remove the victim of the overdose. Implement a policy in your building which closes the immediate area of the OD event until thoroughly cleaned.
- If the victim is a staff member, ensure the staff member goes to the Emergency Room for follow up care, even if they feel OK after being administered Naloxone.

# Naloxone (Narcan)

## ○ Pros

- **Naloxone Saves lives.** Serious brain injury and/or death will likely occur if Naloxone is not readily administered after an Overdose.
- Naloxone is safe even when given to someone who is not overdosing. **Naloxone is an opiate blocker**, not an opiate.
- Ohio Revised Code protects civilians who administer Naloxone from any liability if administered in good faith.
- Staff members could overdose if they accidentally come into contact with strong opiates. Naloxone could save the lives of your staff.



# The Research: Prevention



## A Systematic Review of Community Opioid Overdose Prevention and Naloxone Distribution Programs

- 49.6% of OOPP participants reported experiencing overdose during their lifetime.
- Nearly 1/3 of participants witnessed at least one fatal overdose.
- Twelve explicit factors were reviewed that increase risk of overdose such as mixing drugs, using alone, periods of abstinence, and drug purity.
- Eleven studies reported 100% survival rate post-naloxone and the remaining articles reported between 83% and 96%.
- Opioid Overdose Prevention and Naloxone programs are associated with overdose reversal, increased knowledge regarding opioid overdose, and improved ability to respond appropriately.

(Clark et al., 2014)

# Opioid Use Disorder



**Addiction** is “a primary, chronic and relapsing brain disease characterized by an individual pathologically pursuing reward and/or relief by substance use and other behaviors” (ASAM, 2016)

- 21.2 million people in the United States (8.4%) have Substance Use Disorder (SAMHSA, 2017).
- 43.6 million adults (18.1%) experience some form of mental illness (SAMHSA, 2017).
- Only 12% of individuals with SUD receive specialized treatment for their addiction (SAMHSA, 2014)

# The Story of Mary

- Mary was born into a family with substance use disorder. Her mother used substances while pregnant with her.
- When Mary was little, she experienced regular domestic violence between her parents and often went without meals.
- At the age of 6, her uncle started to sexually molest her until the age of 10 when she was taken by Children Services.
- At the age of 12, she started smoking marijuana and drinking alcohol to become numb from her feelings.
- At the age of 15, she started experimenting with pills and started to take opioids daily.
- When she could no longer afford the pills, she was offered heroin from a friend.
- Her tolerance increased and she soon found herself spending most of her time seeking the drug.
- She started a relationship with a dealer and he soon convinced her to “turn tricks” and rewarded her with heroin or money.
- She became homeless and only used to not feel sick...she reached out for help after losing her life to overdose and being left in an alley to die...





# Common Realities of Patients with OUD

- History of Trauma/Exposure to Repeated Trauma- Adverse Childhood Events
- Traumatic Brain Injury
- Co-occurring Mental Illness- Major Depression, Post-Traumatic Stress Disorder, Bipolar Disorder, and Anxiety Disorders being the most prevalent.
- Homelessness
- Lack Healthy Social Supports
- Caught in the Lifestyle
- Neglected Health Needs and Mental Health
- Involvement in Criminal Justice System and/or Children Services
- Relapse

# Opiate Withdrawal Symptoms



- Yawning and other sleep problems
- Sweating more than normal
- Anxiety and nervousness
- Muscle aches and pains
- Stomach pain, nausea or vomiting
- Diarrhea
- Weakness

\*\*Withdrawal syndrome begins 6-8 hours after the last dose, usually after 1-2 week period of continuous use.

\*\*Withdrawal peaks during the second and third day and subsides during the next 7 to 10 days.

# Post Acute Withdrawal Syndrome (PAWS)



- Fewer physical symptoms, but more emotional and psychological withdrawal symptoms.
- Brain chemistry is gradually returning to normal.
- Levels of brain chemicals fluctuate as they approach new equilibrium.
  - Mood Swings
  - Anxiety
  - Irritability
  - Tiredness
  - Variable energy
  - Low enthusiasm
  - Variable concentration
  - Disturbed sleep



# Levels of Care for Substance Use Disorders

- Inpatient Treatment  
(detox or stabilization)
- Residential Treatment
- Partial Hospitalization
- Ambulatory Detox
- Outpatient Treatment
- Intensive Outpatient Treatment
- Clinics  
(minimal treatment/programming)
- Recovery Housing
- Sober Housing
- Community Supports: AA/NA, faith-based



# Medication Assisted Treatment (MAT)

- MAT is First-Line Treatment for Opioid Use Disorder
- MAT is associated with reduced morbidity and mortality
- Reduces the risk of relapse, improve social functioning, reduce transmission of infectious diseases and reduce criminal activity

## Types of MAT

- Methadone
- Buprenorphine-Naloxone
- Naltrexone (Vivitrol)





# Medication Assisted Treatment

- **Methadone- full agonist**
  - Daily dose of 20-80 mg
  - Duration of action exceeds 24 hours- daily dosing adequate
  - Patient is dependent on the medication and need tapered off
  - Reduced mortality related to overdose



# Medication Assisted Treatment

- **Buprenorphine- partial agonist**
  - Daily dose 12-16 mg (sometimes lower or higher)
  - Once to twice daily dosing
  - Naloxone- prevents IV use
  - Patient is dependent on medication and need tapered off
  - Reduced mortality due to overdose



# Medication Assisted Treatment

- **Naltrexone (Vivitrol)-  
antagonist**
  - Daily oral dosing 50 mg OR  
monthly injection
  - Required to be 5-14 days  
opioid free
  - Patient is not dependent



# What can we do to support individuals with Opioid Use Disorder?

- We can be patient. Understand that individuals with SUD are caught up in the cycle of addiction. Separate the person from the substance-induced behaviors.
- Remain non-judgmental- remember this is a chronic disease and they have been judged a lot.
- Understand that the medication is not used to “get high.”
- Understand that MAT is not replacing a drug with another drug.
- Ensure security of property and medications are locked up.
- Create protocols to keep individuals accountable.
- Educate on the mixing of all substance with fentanyl. Need for Naloxone regardless of the drug of choice.
- Request Release of Information (ROI) for treatment providers to individuals in recovery.
- Familiarize yourself with your local treatment providers to make appropriate referrals.
- You're in a great position to be a critical support to individuals struggling with this disease.



# Questions/Comments

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