ECHO IDAHO

Opioids, Pain and Substance Use Disorders

# Detoxification of Fentanyl vs. Opioids

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# Financial Disclosures

None

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# Learning Objectives

- Describe fentanyl and why it can be difficult to treat
- Understand general trends of opioid deaths
- Describe basic treatments for OUD
- Describe different methods for buprenorphine induction

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# What is Fentanyl?

- Synthetic opioid
- 100 times more potent than morphine
- Very lipophilic

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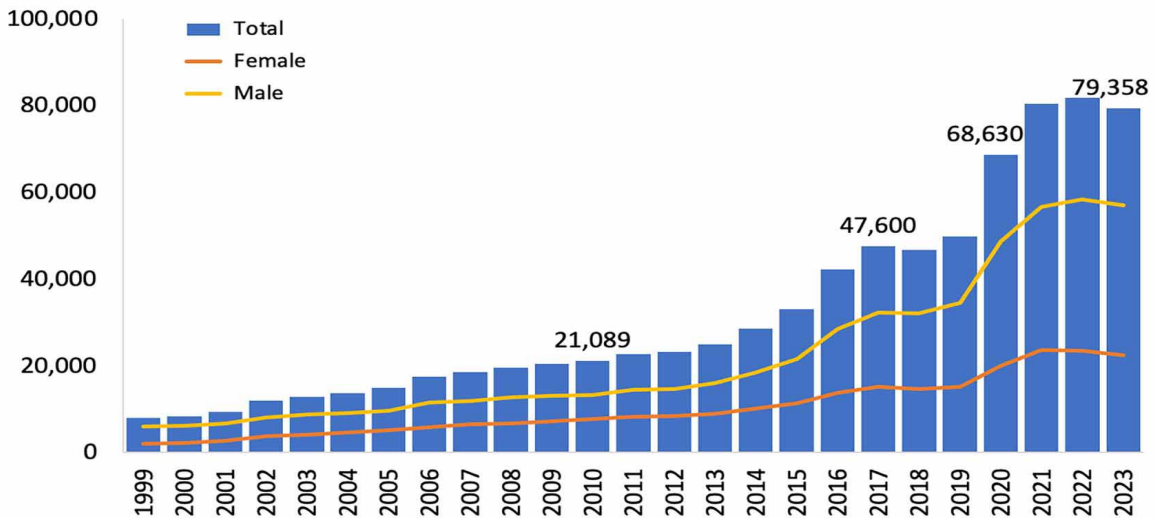
# Why do we care?

**Figure 3. U.S. Overdose Deaths Involving Any Opioid* by Sex, 1999-2023**




*Among deaths with drug overdose as the underlying cause, the "any opioid" subcategory was determined by the following ICD-10 multiple cause-of-death codes: natural and semi-synthetic opioids (T40.2), methadone (T40.3), other synthetic opioids other than methadone (primarily illicitly manufactured fentanyl or IMF) (T40.4), or heroin (T40.1). Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2023 on CDC WONDER Online Database, released 1/2025.

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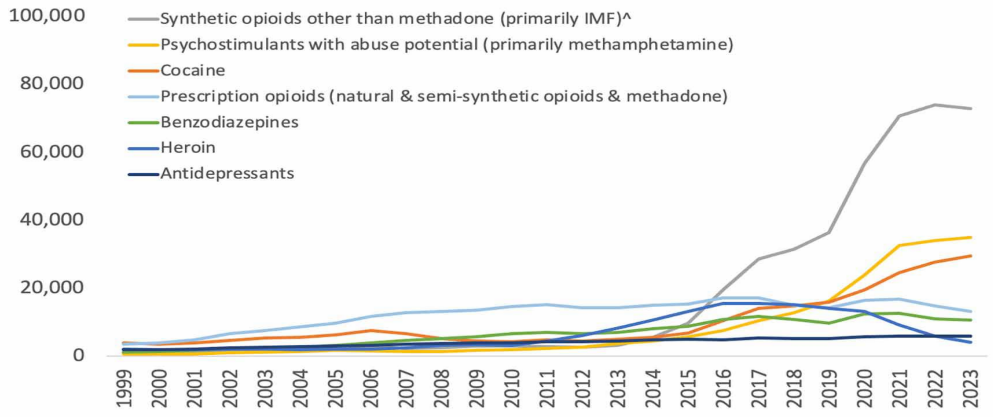
# Why do we care?

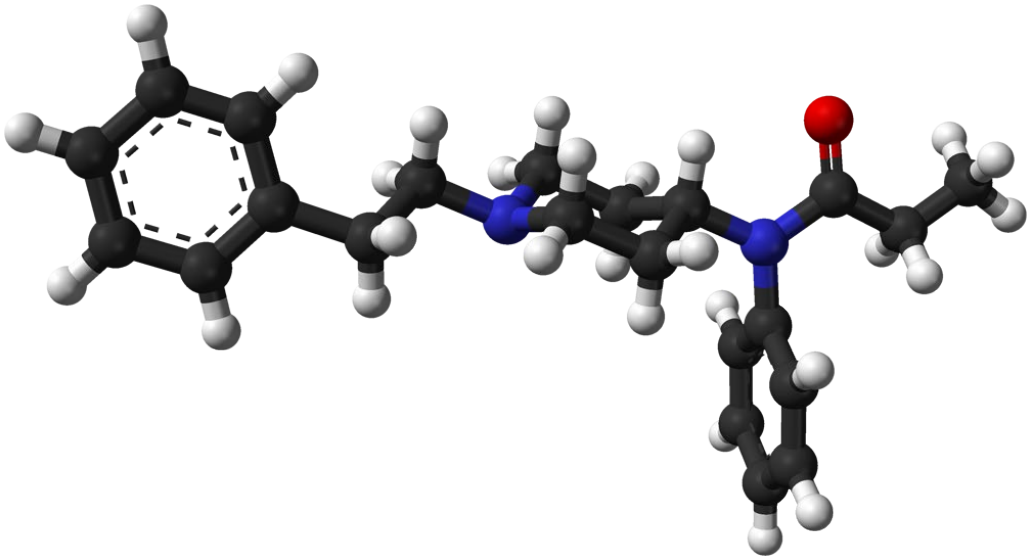
# Let's Talk Fentanyl Some More

**Figure 2. U.S. Overdose Deaths*, Select Drugs or Drug Categories, 1999-2023**

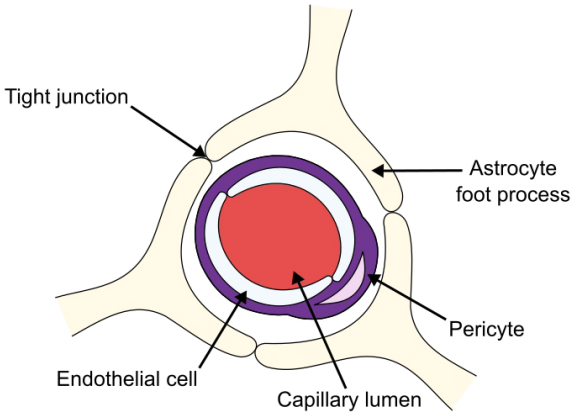



*Includes deaths with underlying causes of unintentional drug poisoning (X40–X44), suicide drug poisoning (X60–X64), homicide drug poisoning (X85), or drug poisoning of undetermined intent (Y10–Y14), as coded in the International Classification of Diseases, 10th Revision. ^Illicitly manufactured fentanyl. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Multiple Cause of Death 1999-2023 on CDC WONDER Online Database, released 1/2025.

# Fentanyl is Highly Lipophilic



## Blood-Brain Barrier



# Treatment?


Vivitrol
380 mg/via


NDC 12496-1208-1
1 sublingual film
8 mg/2 mg
Suboxone
(buprenorphine and naloxone) sublingual film
8 mg/2 mg
Rx only
Do not cut, chew or swallow sublingual film.
suboxone.com


CONTROLLED DRUG
ASPEN METHADONE SYRUP
methadone hydrochloride 25 mg/5 mL
1 litre oral liquid

# What About Precipitated Withdrawal???

- Originally became a concern at the rise of fentanyl and a couple of studies around 2009.
- It seems that these fears are mostly overblown.
- There is still a real possibility of precipitate withdrawal, but if induction is performed correctly the risk appears to be very minimal.
- ED study D'Onofrio et al.

# Buprenorphine strategies

Two fundamental ideas for induction in those with **OUD**.

- "Traditional method" the patient will abstain from opioids until they are in moderate withdrawal.
  - Difficult to do in a fast paced clinic environment sometimes, but can be done at home
- Low dose: this method involves slowly titrating the patient up from an extremely low dose of buprenorphine.
  - Often starting at 0.5mg and building a patient up to a working dose of 8-16mg daily over the course of a week.

Patient's Name:_____ Date and Time ____/____/____:_____

**Reason for this assessment**:_____

**Resting Pulse Rate**: _____beats/minute
*Measured after patient is sitting or lying for one minute*
0 pulse rate 80 or below
1 pulse rate 81-100
2 pulse rate 101-120
4 pulse rate greater than 120

**GI Upset**: *over last 1/2 hour*
0 no GI symptoms
1 stomach cramps
2 nausea or loose stool
3 vomiting or diarrhea
5 multiple episodes of diarrhea or vomiting

**Sweating:** *over past 1/2 hour not accounted for by room temperature or patient activity.*
0 no report of chills or flushing
1 subjective report of chills or flushing
2 flushed or observable moistness on face
3 beads of sweat on brow or face
4 sweat streaming off face

**Tremor** *observation of outstretched hands*
0 no tremor
1 tremor can be felt, but not observed
2 slight tremor observable
4 gross tremor or muscle twitching

**Restlessness** *Observation during assessment*
0 able to sit still
1 reports difficulty sitting still, but is able to do so
3 frequent shifting or extraneous movements of legs/arms
5 unable to sit still for more than a few seconds

**Yawning** *Observation during assessment*
0 no yawning
1 yawning once or twice during assessment
2 yawning three or more times during assessment
4 yawning several times/minute

**Pupil size**
0 pupils pinned or normal size for room light
1 pupils possibly larger than normal for room light
2 pupils moderately dilated
5 pupils so dilated that only the rim of the iris is visible

**Anxiety or Irritability**
0 none
1 patient reports increasing irritability or anxiousness
2 patient obviously irritable or anxious
4 patient so irritable or anxious that participation in the assessment is difficult

**Bone or Joint aches** *If patient was having pain previously, only the additional component attributed to opiates withdrawal is scored*
0 not present
1 mild diffuse discomfort
2 patient reports severe diffuse aching of joints/muscles
4 patient is rubbing joints or muscles and is unable to sit still because of discomfort

**Gooseflesh skin**
0 skin is smooth
3 piloerrection of skin can be felt or hairs standing up on arms
5 prominent piloerrection

**Runny nose or tearing** *Not accounted for by cold symptoms or allergies*
0 not present
1 nasal stuffiness or unusually moist eyes
2 nose running or tearing
4 nose constantly running or tears streaming down cheeks

Total Score _____

The total score is the sum of all 11 items

Initials of person completing assessment: _____

Score: 5-12 = mild; 13-24 = moderate; 25-36 = moderately severe; more than 36 = severe withdrawal

Scale: 0 = not at all 1 = a little 2 = moderately 3 = quite a bit 4 = extremely

| | | | | | | |
|---|---|---|---|---|---|---|
| **DATE** | | | | | | |
| **TIME** | | | | | | |
| | | | | | | |
| **SYMPTOM** | | **SCORE** | **SCORE** | **SCORE** | **SCORE** | **SCORE** |
| **1** | I feel anxious | | | | | |
| **2** | I feel like yawning | | | | | |
| **3** | I am perspiring | | | | | |
| **4** | My eyes are tearing | | | | | |
| **5** | My nose is running | | | | | |
| **6** | I have goosebumps | | | | | |
| **7** | I am shaking | | | | | |
| **8** | I have hot flushes | | | | | |
| **9** | I have cold flushes | | | | | |
| **10** | My bones and muscles ache | | | | | |
| **11** | I feel restless | | | | | |
| **12** | I feel nauseous | | | | | |
| **13** | I feel like vomiting | | | | | |
| **14** | My muscles twitch | | | | | |
| **15** | I have stomach cramps | | | | | |
| **16** | I feel like using now | | | | | |
| **TOTAL** | | | | | | |

# Buprenorphine strategies

Three fundamental ideas for induction in those with recent **fentanyl** use.

- High dose: various articles describe giving the patient between 16-24mg in a single dose if they are in withdrawal.
  - Appears to be safe, these studies typically take place in the ED.
- Traditional
- Low dose: this method involves slowly titrating the patient up from an extremely low dose of buprenorphine.
  - Often starting at 0.5mg and building a patient up to a working dose of 8-16mg daily over the course of a week.

# What About Methadone?

- Still has an important role to play in the fentanyl era
  - Does not have the same risk of precipitated withdrawal
- More difficult for patients due to daily dosing and requirement to go to a methadone clinic
- Often extremely effective for patients using most opioids.
- Current federal guidelines cap the starting dose of methadone at a level that is often not high enough to relieve symptoms of withdrawal from fentanyl

# Sources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