


**SAME NAME NEW FACE
FENTANYL 2023**

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1

DISCLOSURES

All relevant financial relationships(s) with any commercial interest to the provider name of commercial interest(s) nature of the relationship with each

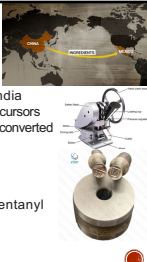
NONE



2

MAKIN' FENTANYL

- Precursors are purchased from China and India
 - Governments are attempting to stop export of precursors
 - Other precursors are available that can be easily converted
- Fentanyl precursors
 - 4-anilino-N-phenethyl-4-piperidine (ANPP)
 - N-phenethyl-4-piperidone (NPP)
- Mexican labs are processing precursors to fentanyl
- Pill presses



3

FORMS

- Fentanyl pills are most common
 - Estimated 1,000 to 2,000 mcg/pill
 - Can be up to 8,000 mcg/pill
- Fentanyl powder






www.fda.gov/oc/ohrt/ohrt-ohrt-history/ www.fda.gov/oc/ohrt/ohrt-history/

4

USIN' FENTANYL – THE 3S'S

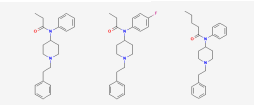
- **Snort**
 - Not as fast or satisfying
- **Shoot**
 - Injection is good
 - IV – access is finite, vein sclerosing
 - IM – Risk of infection, necrosis
 - Technique is not usually sterile
- **Smoke**
 - Fast and furious

5

ALL FENTANYL?



- Most pills contain fentanyl although fentanyl analogs have been found
 - Para-fluorofentanyl
 - Valeryl fentanyl
- And then the adulterants



6

ADULTERANTS

- Increases profits, may enhance effects
- Dipyryone or metamizole
 - NSAID sold in countries outside of North America
 - May cause agranulocytosis, aplastic anemia
- Acetaminophen


7

XYLAZINE

- "Tranq", "tranq dope", "zombie drug"
- Clonidine analog (α_2 adrenergic agonist)
- Non-opioid sedative, analgesic and muscle relaxant
- Veterinary use in the US used with ketamine for sedation
- Generally short acting in animals 30-40 minutes
- Mixed opinion about its effects
 - May cause a longer high than fentanyl
 - May decrease the euphoria

EU Figure 1. DEA Forensic Laboratory Identifications of Xylazine by Region


Region	2016	2017	Percent Increase
West	34	25	-21%
South	19	58	195%
Midwest	115	143	25%
North	77	163	112%



8

XYLAZINE

- Clinical effects
 - Initially: Dry mouth, sedation, hypertension, tachycardia
 - Then: **Hypotension, bradycardia**, hyperglycemia, hypothermia, respiratory depression, dysrhythmia
 - Does not respond to naloxone like clonidine
 - May experience withdrawal symptoms
 - Chest pain, seizures
 - Soft tissue necrosis and infection



9



10

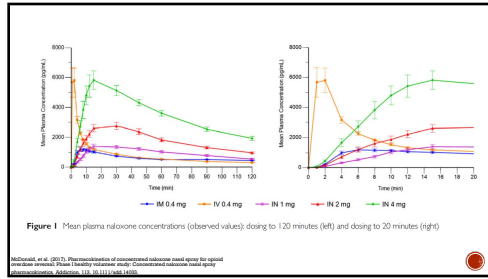


11

REVERSAL AGENTS

- Naloxone
 - Metabolized to naloxone-3-glucuronide in the liver
 - Intranasal 4 mg/actuation (3.6 mg naloxone) or Kloxxado 8 mg/actuation (7.2 mg naloxone)
 - Onset 1-2 minutes, Duration 1-4 hours, Half-life 0.5 - 2 hours
 - Breaking news...it is now OTC (March 29, 2023)

12



13

NALMEFENE AND NALTREXONE

- Nalmefene (2 mg/2 mL) – Purdue Pharma
 - Approved in 1995 as an opioid reversal agent
 - Similar to naloxone
 - Used in the past for alcohol consumption reduction
 - Onset 2-5 minutes, Duration 1-4 hours, Half-life 8-11 hours
 - Dose: 0.5 mg initial dose, 1 mg repeat in 2-5 minutes
 - IV/IM/SC NOT intranasal
 - May not adequately reverse buprenorphine due to slow displacement from receptors
- Naltrexone
 - Not indicated for acute opioid reversal
 - Oral or long-acting IM injectable called Vivitrol

14

DISCUSSION CASE 1

- 22 year old was found down at a bus stop
- Bystanders administered naloxone nasal spray
- EMS arrives and administers another bolus dose of naloxone
- He is alert and awake, no respiratory depression.
- What is your plan?

15
