



DEA

U.S. DRUG ENFORCEMENT ADMINISTRATION

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Threat of Fentanyl to Law Enforcement and First Responders

DEA Mid-Atlantic Laboratory

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Presentation Overview

- Dosage and Appearance
- What to Watch for on the Scene
- Signs of Exposure
- Safety Precautions &
Clandestine Laboratories
- Countermeasures

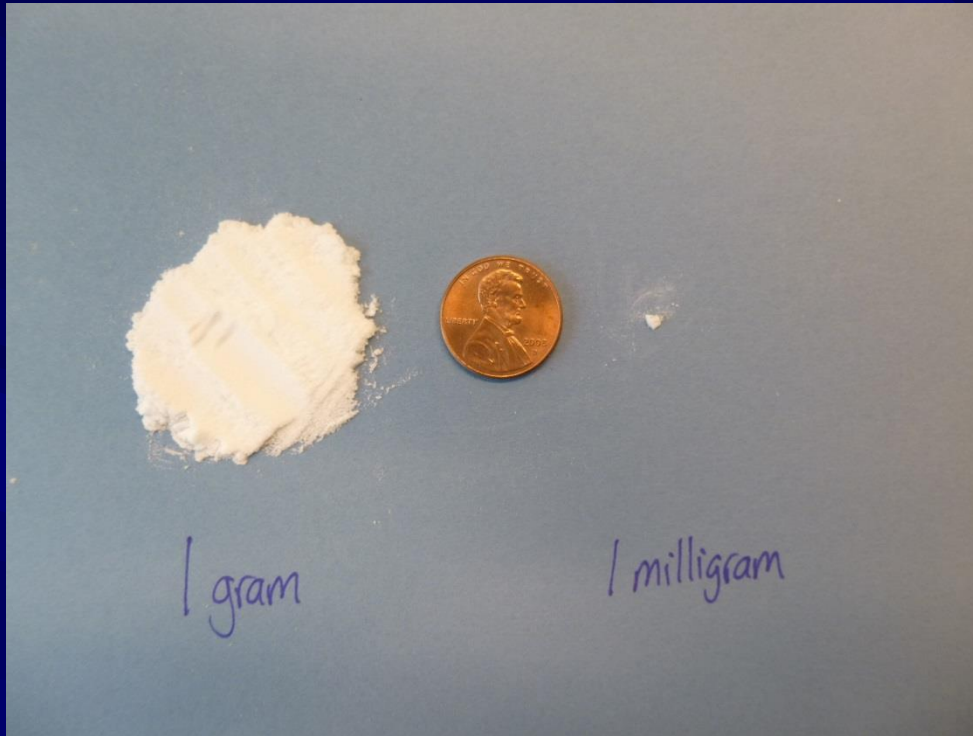
Non-Pharmaceutical Fentanyl



China White
Synthetic Heroin
Drop Dead
Flatline
Lethal Injection
Apache
China Girl
Chinatown
Dance Fever
Great Bear
Poison
Tango & Cash
TNT
Perc-o-Pops
Lollipops



Dosage



- Readily absorbed through the skin and inhaled
- Doses as small as 0.25 mg can be fatal
- Long surgery: max dosage for anesthesia would be 0.009 - 0.022 mg/lb body weight (4.5 mg max for a 200 lb person)
- Patches: max dose is 0.1 mg per hour (patches contain 72 hours worth)

Typical Appearance of Powder Heroin



Typical Appearance of Fentanyl





Atypical Appearances of Fentanyl

Reported as black tar

Los Angeles HIDTA (Aug 2015)
Turned out to be no heroin at all
Anomaly or new trend?



Fentanyl as Oxy tablets

Trace of fentanyl, dipyrrone, acetaminophen, and lactose in a MA case of green/blue pills



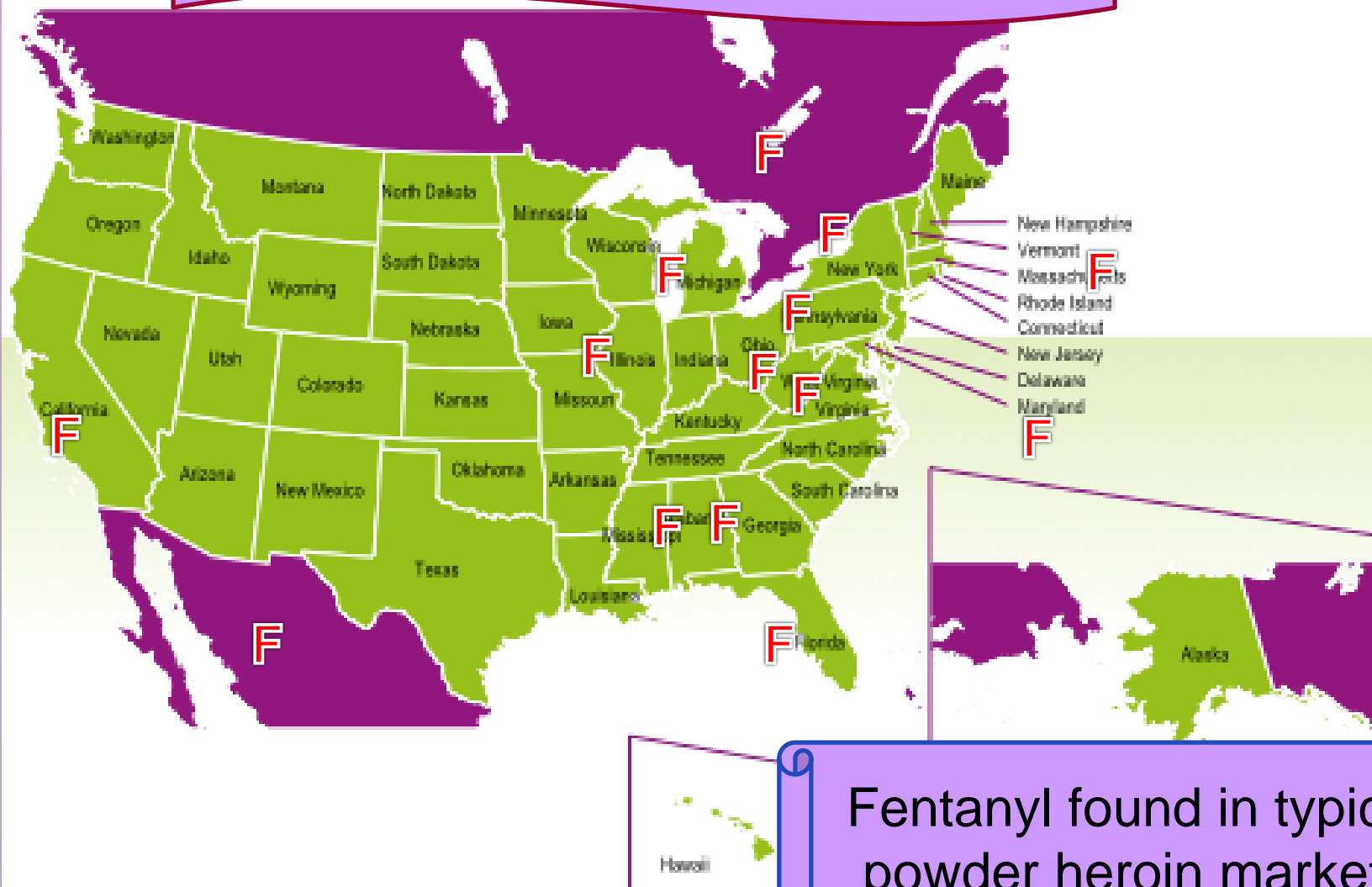
Synthetic Cannabinoids

Arizona PD (June 2016)
Seizure at synthetic cannabinoid processing facility
and smoke shop
AB-PINACA & acetyl fentanyl dosed on plant material



HSP/DMP samples with Fentanyl

From these states



Fentanyl found in typical powder heroin markets

How is Fentanyl typically found?

Domestic:

- Purity range is 0 to 6%
- Street level fentanyl can be found with or without heroin
- Sporadically, fentanyl is found with cocaine or methamphetamine

Foreign:

- The majority showed less than 10% pure fentanyl
- Canada/China connected fentanyl and acetyl fentanyl exhibits were of high purity
- Minimal manufacturing impurities



DEA
BULLETIN



(U) Maryland: “Super Speedball”— U-47700/Cocaine Mixture Seized in Montgomery County

(U) This DEA Bulletin is based on preliminary reporting and may be subject to updating as additional information becomes available.

DEA-WAS-BUL-156-16
JUNE 2016

(U) Event

(U//FOUO) On March 16, 2016, the Montgomery County Police Department (MCPD) conducted a traffic stop in which officers seized a small baggie of suspected cocaine from the trunk of a vehicle.

(U) Significance

(U//FOUO) The Montgomery County Police Laboratory tested the suspected cocaine and determined that it was a mixture of cocaine and the synthetic opioid, U-47700. This was the first known incident involving U-47700 within the Washington Division’s area of responsibility, as well as the first known mixture of U-47700 with cocaine. The mixture of cocaine and heroin (as opposed to a synthetic opioid), often referred to a “speedball,” is not new. However, mixing U-47700 and cocaine creates a “super speedball” as U-47700 reportedly has three to seven times the potency of heroin.

(U//FOUO) Figure 1. Suspected cocaine seized from the trunk of the vehicle.



Source: Montgomery County, Maryland Police

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Situational Awareness

Fentanyl



Overview: There has been recent reporting by the New England Narcotic Enforcement Officers Association (NEOA) of a batch of fentanyl that has caused burns to individuals who have handled it. In one of the cases, an officer was injured when the fentanyl burnt through his glove and caused burns to his skin. This burning effect is attributed to an error made during the clandestine manufacturing process. It should be assumed that Fentanyl from this batch is still out on the street, and that this type of manufacturing error may occur again in the future. Officers are reminded that Fentanyl can be inadvertently absorbed through the skin, or inhaled, and are advised always to use caution when dealing with any type of crystal or powder substance and always assume it is Fentanyl.

What to Watch For on Scene

Common Precursors and Reagents

- NPP
- ANPP
- Phenethyl Bromide
- 4-Piperidone
- Aniline
- Propionyl Chloride
- Sodium Borohydride
- Sodium triacetoxymborohydride



Safety First:

Wear PPE, Eliminate ignition source, DO NOT immediately Ventilate, Contact lab for backup

Field Test Kits



Signs of Exposure

- Early symptoms:

- Skin rash
- Disorientation
- Coughing
- Sedation
- Cardiac or respiratory problems



- Symptoms occur and worsen within minutes
- Slowed or stopped breathing is the primary concern
- **Death can occur within 5 minutes to hours**

Protection for Personnel

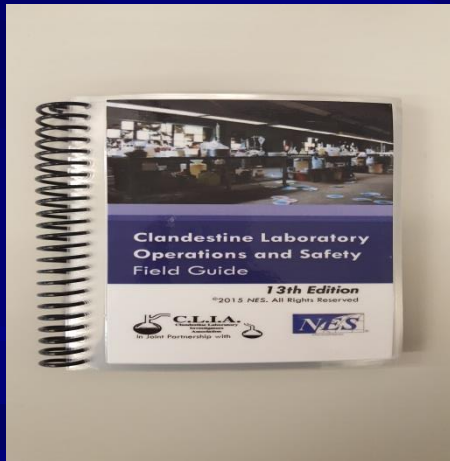
Minimum:

Glasses

Mask

Skin Coverage

Gloves



Use dust masks or APRs when handling unknown powders



Prevent exposure

Always wear gloves and secure long sleeves inside



Protection for Processing Labs

Level "A"

Scene Protection:

- One-Piece Suit
- Self-Contained Breathing Apparatus
- Incorporated Gloves
- Skin Coverage – fully encapsulated
- Incorporated “socks” with steel-toe boots



Milling & Tableting Operation Azusa, CA



Various colored powders and cutting/ tableting agents



Starches, binders, and other fillers are used

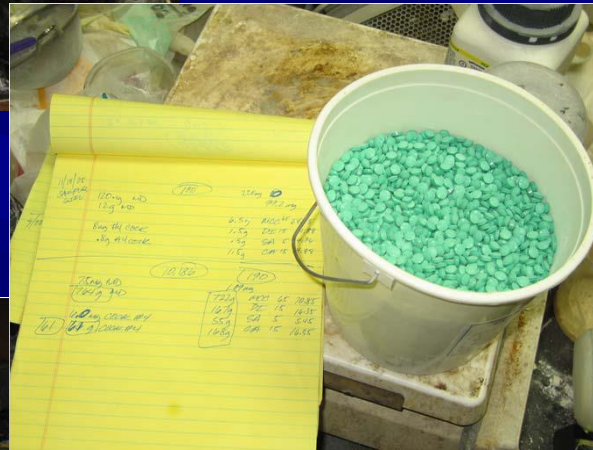


Balances are used to weigh out drugs and diluents

Strainers ,sifters, & mixing equipment are used to ensure powder “consistency”



Made into dosage units by tableting machines

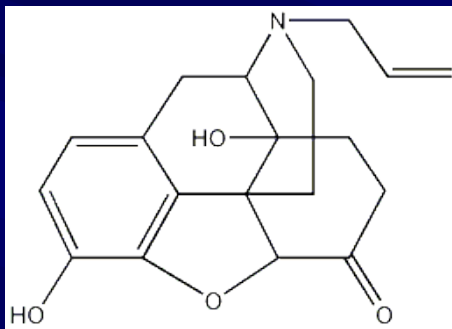


Gross contamination

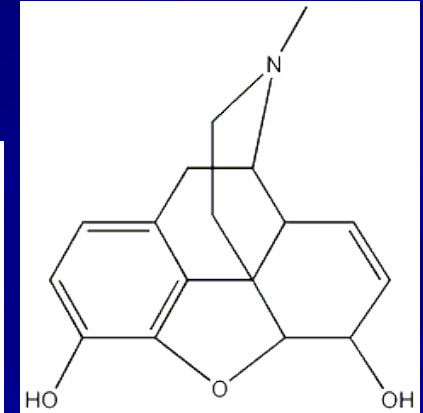
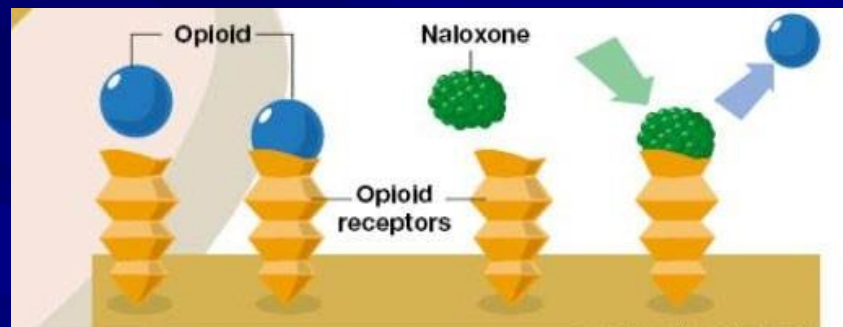


How Naloxone Works

- Narcan: “**Narcotic Antagonist**”
- Naloxone has a similar structure to opioids, like morphine, but not the same pharmacological effects



Naloxone



Morphine

- Binds strongly to the same receptors, replacing the drug, therefore reversing the effects
- Administered:
 - Nasal spray
 - Intravenously (fastest)
 - Intermuscular/subcutaneous injection



How to identify an opioid overdose:

Look for these common signs:

- The person won't wake up even if you shake them or say their name
- Breathing slows or even stops
- Lips and fingernails turn blue or gray
- Skin gets pale, clammy

In case of overdose:

1 Call 911 and give naloxone

If no reaction in 3 minutes, give second naloxone dose

2 Do rescue breathing or chest compressions

Follow 911 dispatcher instructions

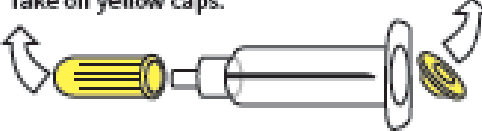
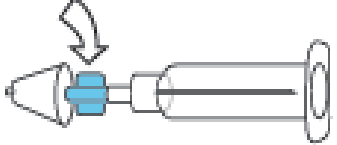


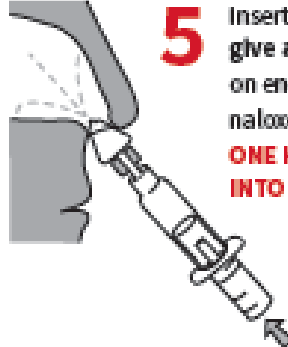
3 After naloxone

Stay with person for at least 3 hours or until help arrives



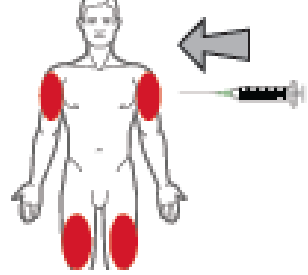
How to give naloxone:

There are 3 ways to give naloxone. Follow the instructions for the type you have.

Nasal spray naloxone

- 1** Take off yellow caps. 
- 2** Screw on white cone. 
- 3** Take purple cap off capsule of naloxone. 
- 4** Gently screw capsule of naloxone into barrel of syringe. 
- 5** Insert white cone into nostril; give a short, strong push on end of capsule to spray naloxone into nose: **ONE HALF OF THE CAPSULE INTO EACH NOSTRIL.**  Push to spray.
- 6** If no reaction in 3 minutes, give second dose.

Injectable naloxone

- 1** Remove cap from naloxone vial and uncover the needle. 
- 2** Insert needle through rubber plug with vial upside down. Pull back on plunger and take up 1 ml.  fill to 1 ml
- 3** Inject 1 ml of naloxone into an upper arm or thigh muscle. 
- 4** If no reaction in 3 minutes, give second dose.

Auto-injector

The naloxone auto-injector is FDA approved for use by anyone in the community. It contains a speaker that provides instructions to inject naloxone into the outer thigh, through clothing if needed.

Evzio Auto-Injector

- Electronic injection of naloxone (intermuscular)



Summary

- Fentanyl and analogues of fentanyl are the most potent opioids available for use
- Seized in many forms
- Doses as small as 0.25 mg can be fatal
- Readily absorbed through the skin or inhaled
- Always wear gloves and other protective equipment when handling unknown and “routine” powders
- Have naloxone readily available to reverse opioid effects

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Questions ???