

Prescription Drug Laws and Emerging Drugs in Our Communities

Ed Cartwright

August 10, 2019

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Disclosures

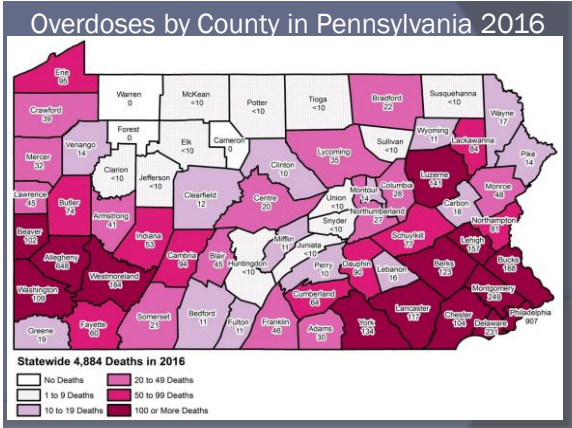
I have no relevant financial relationships or conflicts of interest to disclose.

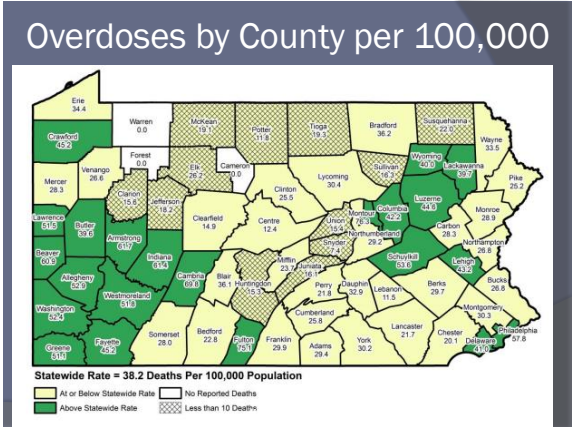
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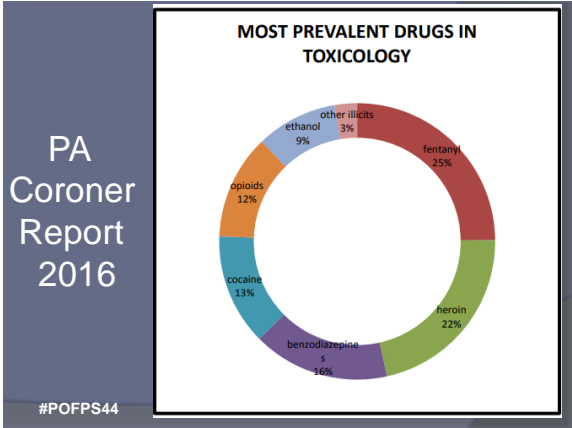
Goals and Objectives

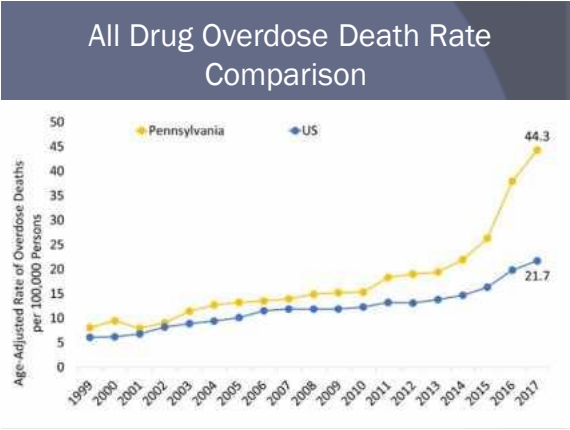
- Better understand the Pennsylvania Drug Act and illegal activities.
- Learn that various fentanyl analogs are being placed into counterfeit pills.
- Learn what some of the current trends in prescription drug abuse are.
- Understand how synthetic opioids are being made to look like legitimate prescription drugs.

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The Tenets of Lawful Prescribing CFR 1306.04

A lawful prescription for a controlled substance must meet the following:

“A prescription for a controlled substance to be effective must be issued for a legitimate medical purpose”*

“by an individual practitioner acting in the usual course of his professional practice.”*

http://www.deadiversion.usdoj.gov/21cfr/cfr/1306/1306_04.htm

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Pennsylvania Controlled Substance, Drug, Device and Cosmetic Act.

Title 780-113-a

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Illegal Acts

Section 780-113-a-12

(12) The acquisition or obtaining of possession of a controlled substance by misrepresentation, fraud, forgery, deception or subterfuge

<http://www.health.state.pa.us/pdf/ddc/ddcAct.pdf>

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Illegal Acts

PA Controlled Substance, Drug, Device and Cosmetic Act.

Section 780-113-a-14

The administration, dispensing, delivery, gift or prescription of any controlled substance by any practitioner or professional assistant under the practitioner's direction and supervision unless done

- (i) in good faith in the course of their professional practice;
- (ii) (ii) within the scope of the patient relationship;
- (iii) (iii) in accordance with treatment principles accepted by a responsible segment of the medical profession.

<http://www.health.state.pa.us/pdf/ddc/ddcAct.pdf>

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Key Points

In establishing probable cause in a criminal investigation, Law Enforcement Officers cannot determine legitimate medical purpose, medical experts should

Medical expert testimony is essential for administrative and criminal actions relating to medical practice and prescribing

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Known Drug Addicted Patients

Section 780-113-a-13:

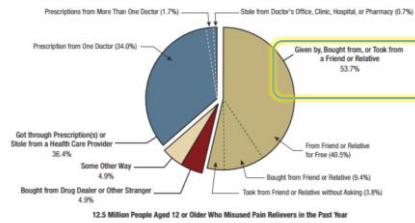
The sale, dispensing, distribution, prescription or gift by any practitioner otherwise authorized by law so to do of any controlled substance **to any person known to such practitioner to be or whom such practitioner has reason to know is a drug dependent person**, unless said drug is prescribed, administered, dispensed or given, **for the cure or treatment of some malady other than drug dependency.....** for a period of time not to exceed fourteen days pending confirmed admission of the patient to a hospital or rehabilitation center.

<http://www.health.state.pa.us/pdf/ddc/ddcAct.pdf>

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Sources for Misuse

Figure 24. Source Where Pain Relievers Were Obtained for Most Recent Misuse among People Aged 12 or Older Who Misused Prescription Pain Relievers in the Past Year: Percentages, 2015



12.5 Million People Aged 12 or Older Who Misused Pain Relievers in the Past Year
Note: The percentages do not add to 100 percent due to rounding.
Note: Respondents with unknown data for the Source for Most Recent Misuse or who reported Some Other Way but did not specify a valid way were excluded.

Prepared by the Pennsylvania State Center for Drug Use and Abuse, Pennsylvania State University, Harrisburg, PA. © 2016 Pennsylvania State University. All rights reserved. <http://www.psu.edu>. Accessed 6/21/2017

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Potential Drug-Seeking Behavior

Wants appointment toward end-of-office hours or telephones / arrives after regular business hours

Insists on being seen immediately or demands immediate action. Says they are in a hurry to catch a plane or late for a business meeting

Wants early refills

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Potential Drug-Seeking Behavior

- Not interested in having physical examination or undergoing diagnostic tests
- Unwilling to give permission to obtain past medical records
- Unable to recall hospital or clinic where past records are kept, or states it is out of business or burned down
- Unwilling or unable to give names of past healthcare professionals

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Potential Drug-Seeking Behavior

- Has no interest in referral -- wants prescription now
- Shows unusual knowledge of controlled substances
- Requests a specific drug, unwilling to try any other treatment, with no medical justification
- Claims allergies to non-opioid analgesics with no medical justification

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Preventing Diversion: The Practitioner

Educate the patients about:

- Where to store their medications.
- Not to share their medications.
- Any unique side effects such as absorption rates based on body temperatures or mixed with alcohol
- Not to break, cut, etc.. time release tablets.

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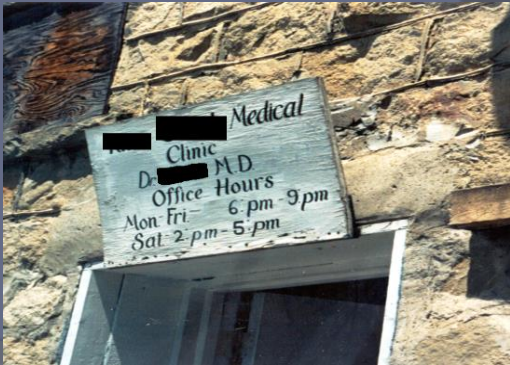
Outside the Scope

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Outside the Scope

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Outside the Scope

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Prescription-Drug Abuse


- Street value dependent on
 - brand vs generic
 - quick onset
- Intensity
 - whether a product can be injected or snorted successfully
- dosage
- current popularity of drug on street

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Less legal risk than illicit drugs

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Before Adderall Abuse



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Less Than 1 Year of Adderall Abuse



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Prescription Drug Abuse #POFPS44

Between July 2009 and January 2010, Jaclyn was prescribed 1,650 30-milligram pills of oxycodone, 300 generic Percocet pills and 210 generic Xanax tablets, according to the pharmacy records.



Overdose with Fentanyl Patches:
TOLERANCE!



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Tolerance to opioids.

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Intravenous Injection

“Slamming”—oral drugs are not designed for direct injection into blood

Grinding up pills and injecting suspension is extremely risky



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IV Injection

Some pill components do not dissolve well

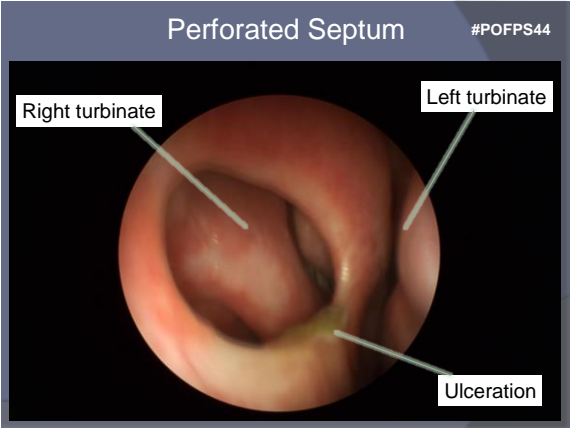
particles may clog blood vessels and block blood flow

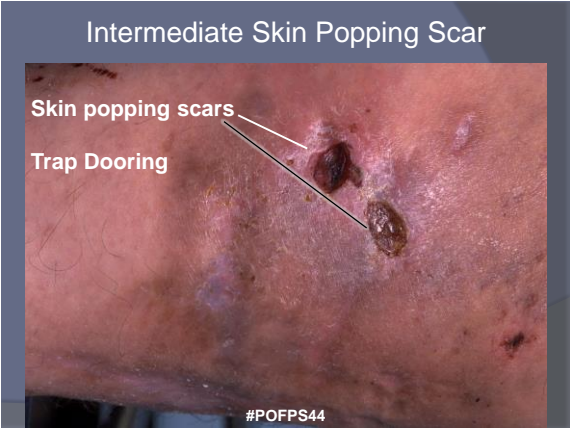
particles irritate blood vessels and may cause vascular inflammation and permanent damage

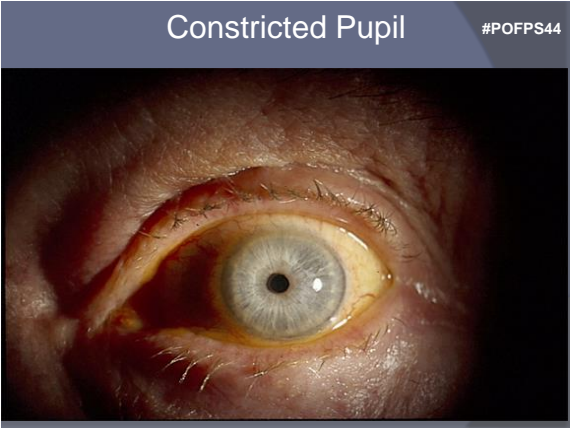


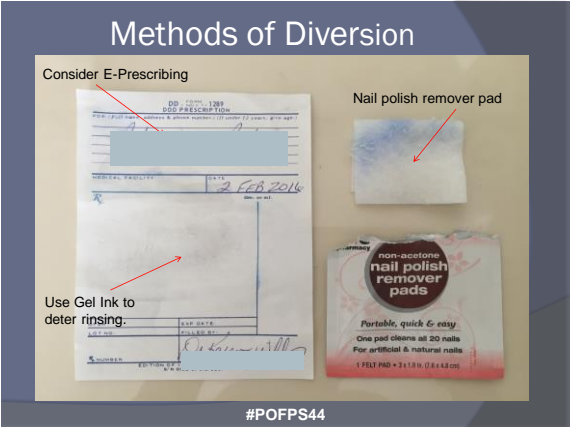
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Codeine Syrup



Defendant sold a mixture of corn syrup and Zzzz-Quil.

He had it labeled as Codeine with Promethazine

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Switchbacking with Heroin



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Lincoln County, KY
Buprenorphine behind hearts.



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Current Trends in Pennsylvania

Westmoreland County:

Female lied to prescriber about addiction to get buprenorphine, hid it in female bathroom at lobby of jail. Inmates cleaning would pick it up and sell in their cell block.

Somerset County:

Male prisoner found with buprenorphine strips taped to inside shirt pocket and taped to parts of his body.

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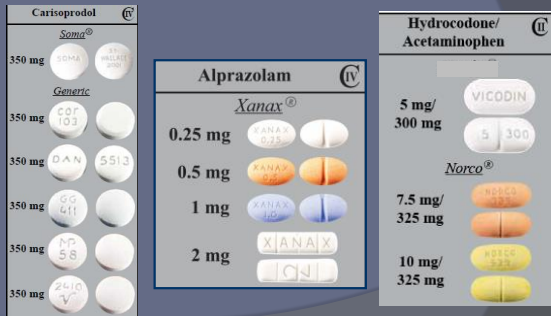
Franklin County, PA

Buprenorphine strips found hidden in a bible.



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Holy Trinity



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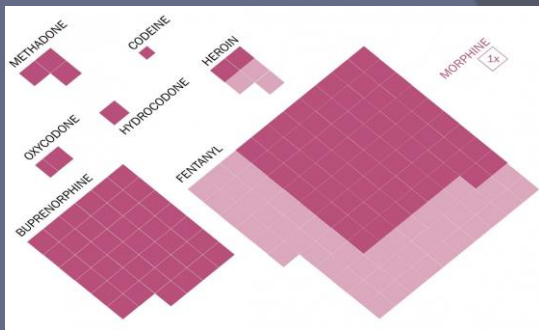
Hydrocodone, Alprazolam, Carisoprodol



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FENTANYL PRODUCTS

Comparison of Opioid Strengths to Morphine



https://www.washingtonpost.com/graphics/2017/health/opioids-scale/?hpid_hp-top-table-main_750643118773

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Carfentanyl

Carfentanyl was developed in 1974 by Jansen Pharmaceuticals under the brand name of Wildnil

Carfentanyl is an analogue of fentanyl

General anesthetic for large animals such as Elk, Moose, Elephants

Schedule II controlled substance federally

Limited to 19 grams production per year

<https://pubchem.ncbi.nlm.nih.gov/compound/carfentanyl#section=Top>
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Manufacture of Illicit Fentanyl

Key ingredient in making fentanyl is NPP

NPP is N-Phenethyl-4-piperidinone

NPP was placed on the United Nations list of scheduled drugs in 2017

NPP is typically purchased from China for about \$87.00 for 25 grams

Combined with about \$720.00 of other chemicals produce up to \$800,000.00 of counterfeit pills on the black market
<https://www.courts.com/articles/us-drugs/fentanyl-drugs-body-places/fentanyl-ingredients-or-ingredients-list/1403828102016>

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Lethal Dose of Carfentaniil



<https://www.washingtonpost.com/archive/local/2017/health/opioids/2017/08/16/lethal-dose-of-carfentanyil-is-100-times-smaller-than-fentanyl/2017/08/16/>

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Uneven Distribution of Active Ingredients



In the image above, blue represents fentanyl and white sugar represents inert ingredients that have been mixed applying typical methods used by illicit drug dealers to mix their products.

<https://www.tubeload.tv/watch/3--k6vD4R1HqjgQ>
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Hot Spots



In the image above, a “hot-spot” is demonstrated using typical mixing methods used by illicit drug dealers.

<https://www.tubeload.tv/watch/7--k6vD4R1HqjgQ>
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Cold Spots



In the image above, a “cold-spot” is demonstrated using typical mixing methods used by illicit drug dealers.

<https://www.tubeload.tv/watch/2--k6vD4R1HqjgQ>
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Molecular Alterations

Opiates 2.0
Evolved, improved pills. Most chemists in their labs created new analogs of fentanyl. None of them were better than the original. They are sold under 10 to 15 names as “opioid alternatives.”

Fentanyl
 $C_{21}H_{25}NO$

Weaker variations
Acetyl fentanyl $C_{21}H_{25}NO$
Propyl fentanyl $C_{24}H_{29}NO$
Propoxyfentanyl $C_{25}H_{31}NO$

Stronger variations
Carfentanyl $C_{26}H_{33}NO$
Butorphanol $C_{20}H_{27}NO$


<https://www.sciencemag.com/2017/04/11/104-chemists-and-100-000-are-devising-potential-new-versions-of-fentanyl-but-theyre-not-better-than-the-original/>
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Overdoses During Drug Call

by CORKY SIEMASZKO

An Ohio police officer was “still miserable” but recovering Monday after he accidentally overdosed on a dangerous drug that has cut a deadly swath through his state — fentanyl.

Patrolman Chris Green of the East Liverpool Police Department had just finished searching the car of two suspected drug dealers and was back at the police station when another officer spotted some white powder on his shirt.



Without thinking, he brushed it off with his bare hand — and passed out about an hour later, Chief John Lane said. It took four doses of Narcan to revive him.

“This happened on Friday, but he’s still got a headache, his chest hurts, he’s lying on the couch,” Lane told NBC News. “He’s still miserable.”


Green, who has been on the job for about five years, had worn the required gloves and mask to do the

The car of suspected drug dealers Justin Buckle and Cortez Collins. East Liverpool Police Department

<https://www.nbcnews.com/storyline/americas-heroin-epidemic/fentanyl-crisis-ohio-accidentally-overdoses-during-drug-call-n750741>

Step 1: Mixing Inert Ingredients

The mixer blends the inert ingredients together and converts the powders to a finer consistency.



This blender was seized by RCMP at an illicit fentanyl pill operation.

<https://news.vice.com/article/cops-in-canada-made-a-video-that-seems-to-show-how-to-make-fentanyl-laced-pills>
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Step 2: Adding Fentanyl

Fentanyl is added to the other ingredients in the tumbler.

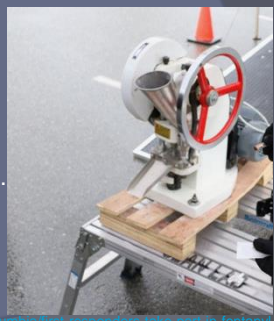


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<https://news.vice.com/article/cops-in-canada-made-a-video-that-seems-to-show-how-to-make-fentanyl-laced-pills>
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Step 3: Pressing the Powder

Press that can automatically compress powders into a pill form to make one pill at a time. Can produce thousands of pills in an hour.



<http://www.ctbc.ca/news/canada/western-columbia/first-responders-take-part-in-fentanyl-workshop-1-4098361>
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Step 4: Addition of Color and Hardeners

The tumbler adds hardeners and color to the pills. It also applies heat to the tablets to secure the colors and hardness to the tablets.



This piece of equipment was seized by RCMP at an illicit fentanyl pill lab.

<https://news.vice.com/article/cops-in-canada-made-a-video-that-seems-to-show-how-to-make-fentanyl-laced-pills>
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Step 5: Automated Pill Counter

An automated pill counter is often used to count large quantities of counterfeit pills.

This particular counter was seized by RCMP at an illicit fentanyl pill operation.



<https://www.cbc.com/news/canada/toronto-milke-a-video-that-seems-to-show-how-to-make-fentanyl-based-pills>

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Counterfeit Canadian Pill Die



<https://www.cbc.ca/news/canada/toronto-columbia-responders-take-part-in-fentanyl-workshop-1.4989861>

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History: Moscow Theatre Crisis

Carfentanil and Remifentanil were used in 2002 in the Moscow Theatre Hostage Crisis

Russian officials placed the drug combination into a theatre ventilation system to sedate 40 hostage takers who had taken 850 hostages

Afterward, rescuers used Naloxone to save some of the hostages

40 hostage takers and 130 hostages died as well as over 700 injured, mostly from breathing in the drug combination

<https://academic.oup.com/jat/article/36/9/647/785132>

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Fentanyl Overdoses

According to the Anoka County Medical Examiner’s Office:

Singer-Songwriter “Prince” died of a fentanyl overdose in 2016.

<https://www.anokacounty.us/DocumentCenter/View/10066e>

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Fentanyl Overdoses

According the Los Angeles County Coroner/Medical Examiner:

Singer-Songwriter Tom Petty died on October 2, 2017 of a combination of drugs including:

- Acetyl Fentanyl
- Despropionyl Fentanyl
- Fentanyl
- Oxycodone
- Temazepam
- Alprazolam

<http://mec.lacounty.gov/wp-content/mec/main/home/casereport/casereportdetail?CaseNumber=2017-07289>

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Fentanyl Manufacturing in China



<https://www.dea.gov/News/Counterfeit%20Prescription%20Pills.pdf>

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Fentanyl Packaging in China



<https://www.dea.gov/docs/Courierlet%20Prescription%20Pills.pdf>

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Fentanyl Pill Press in Los Angeles



<https://www.dea.gov/docs/Courierlet%20Prescription%20Pills.pdf>

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1 Kilogram of Fentanyl profits:

Figure 13. Potential Revenue Generated from Fentanyl Pill Sales Using 1 Kilogram of Fentanyl (in USC)

Amount of Fentanyl Per Pill	Price Per Pill	Price Per Pill	Price Per Pill
	\$10	\$15	\$20
1.5 milligrams (666,666 pills)	\$6.6 million	\$9.9 million	\$13.3 million
1 milligram (1 million pills)	\$10 million	\$15 million	\$20 million

Source: DEA

<https://www.dea.gov/docs/Courierlet%20Prescription%20Pills.pdf>

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Counterfeit Oxycodone 30mg Tabs with U-47700

Figure 5: Counterfeit Oxycodone Pills Containing U-47700.



<https://www.dea.gov/press/Counterfeit%20Prescription%20Pills.pdf>

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Counterfeit Oxycodone Tabs With U-47700



https://www.washingtonpost.com/national/counterfeit-opioid-pills-are-tricking-users-sometimes-with-lethal-results/2017/11/19/d34ed14-be4b-11e7-8444-a0d4f04b89eb_story.html?hpid_term=b67b903ad2bd

The Internet, and in particular social media sites



I got 2 oz of this red lean, who want it? \$60

Oct 17, 2013

11:53 am	Delivered: GARDNERS, PA
8:15 am	Out for Delivery: ASPERS, PA
8:03 am	Sorting Complete: ASPERS, PA
6:58 am	Arrival at Post Office: ASPERS, PA

Desert LEADS Sent 2/2/13

Processed through USPS Sort

I'm taking small orders today minimum of 50, 1MG XMAX for 50\$ plus shipping of your choice. email me today for details! I will also oblige one person to receive a FREE SAMPLE. EMAIL NOW!!!!

14 posts 95 followers 27 following

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