



Heroin in Our Community: What You Need to Know

Objectives

- ▶ Following the training, participants will be able to:
 - ▶ Identify the warning signs that someone is using opioids.
 - ▶ Describe the history of the opioid epidemic.
 - ▶ Understand current trends in heroin/prescription drugs.
 - ▶ Identify resources if they know someone who is addicted to opioids.

Opium

- ▶ **Opium:** the highly addictive narcotic drug acquired in the dried latex form from the opium poppy
- ▶ Opium poppy means the “sleep-bringing poppy” in Latin; plan species both opium and poppy seeds are derived from
- ▶ Opiates are family of drugs derived from opium

Opioids

- ▶ Opioids are family of drugs derived from opium.
- ▶ Opioids referred to synthetic opiates only, now used for entire family of opiates.
- ▶ Attaches to receptors in the brain.
- ▶ Once attached, they send signals to the brain of the “opioid effect” which blocks pain, slows breathing, and has a general calming and anti-depressing effect

Prescription Opioids

- ▶ Codeine
- ▶ Oxycodone (OxyContin[®], Percodan[®], Percocet[®])
- ▶ Hydrocodone (Vicodin[®])
- ▶ Meperidine Meperidine (Demerol[®])
- ▶ Hydromorphone (Dilaudid[®])
- ▶ Morphine

What is Heroin?

- ▶ Opioid drug synthesized from morphine
- ▶ White or brown powder or as a black sticky substance, known as “black tar heroin”
- ▶ Heroin’s popularity is increasing because it is seen as less expensive and easier to obtain than prescription opioids
- ▶ Can be injected, inhaled by snorting/sniffing, and smoked
- ▶ All 3 routes deliver the drug to the brain VERY rapidly
- ▶ The effects peak 1 - 2 hours after taking the drug and can last up to 6 hours

Adverse Health Effects

Short-Term Effects:

- ▶ Feelings of intense pleasure, wellbeing
- ▶ confusion,
- ▶ slowed breathing
- ▶ decreased blood pressure & heart rate
- ▶ Pain relief
- ▶ Dry mouth
- ▶ Drowsiness
- ▶ Suppressed cough reflex
- ▶ Reduced sexual urges
- ▶ Slurred & slow speech
- ▶ Impaired coordination
- ▶ Nausea and vomiting
- ▶ Constricted pupils
- ▶ Sweating & itching
- ▶ Increased urination
- ▶ Death

Adverse Health Effects

Long-Term Effects:

- ▶ Dependency
- ▶ Irregular menstrual cycle
- ▶ Constipation
- ▶ Loss of sex drive
- ▶ Depression
- ▶ Skin infections
- ▶ Heart infections
- ▶ Lung infections
- ▶ Collapsed veins and tattoos
- ▶ HIV/AIDS
- ▶ Hepatitis C
- ▶ Fetal effects
- ▶ Death

Warning Signs

- ▶ Impaired motor coordination
- ▶ “Nodding out” or symptoms of narcolepsy
- ▶ Weight loss
- ▶ Reduction in muscle tone and athletic drive
- ▶ Dilated pupils
- ▶ Pale, emaciated skin coloring

Warning Signs

- ▶ Decreased appetite
- ▶ Loss of interest in activities once enjoyed
- ▶ Mood swings
- ▶ Lashing out in violent, angry ways
- ▶ Insomnia or excessive sleeping

History

- ▶ Earliest referenced dates back to 3400 B.C. - opium poppy cultivated in lower Mesopotamia.
- ▶ Sumerians referred to the opium poppy as “Hul Gil” - the “Joy Plant”
- ▶ Father of Medicine, Hippocrates, acknowledged opium’s usefulness as a narcotic and styptic in treating internal diseases, diseases of women and epidemics.
- ▶ Alexander the Great introduced opium to India near 330 B.C., and the Arabs, Greeks and Romans used it as a sedative.

History

- ▶ In 1806 a German chemist isolated morphine from opium and named it morphine after the god of dreams, Morpheus
- ▶ Morphine soon became the “mainstay” of medical treatment in the United States throughout the nineteenth century, used to treat pain, anxiety and respiratory problems as well as “consumption” and “women’s ailments.”
- ▶ Morphine was commonly used as a pain killer during the Civil War. Because such a large number of soldiers became addicted to the opiate given to them for battle injuries, the post-war morphine addiction prevalent among them came to be known as “Soldier’s Disease.”
- ▶ Heroin was synthesized as a derivative of morphine in 1898 and offered as a cough suppressant, as a “non-addictive” morphine substitute.

History of Heroin

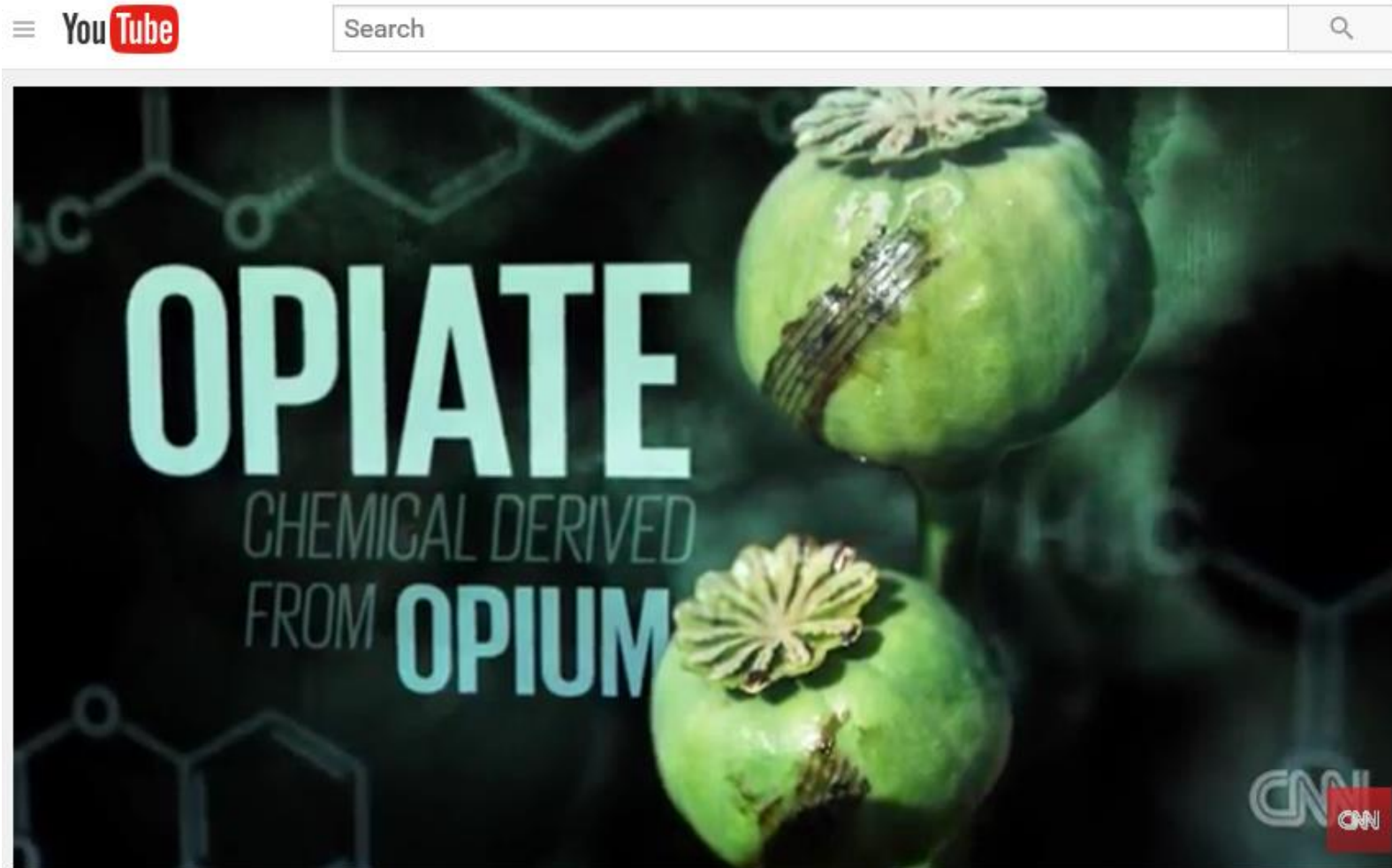
- ▶ late 1800's to the early 1900's the reputable drug companies of the day began manufacturing over-the-counter drug kits.
- ▶ Kits contained a glass barreled hypodermic needle and vials of opiates (morphine or heroin) and/or cocaine packaged neatly in attractive engraved tin cases.
- ▶ Heroin, morphine and other opiate derivatives were unregulated and sold legally in the US until 1920 when Congress recognized the danger of these drugs and enacted the Dangerous Drug Act.
- ▶ By 1925 there were an estimated 200,000 heroin addicts in the country.

The Effects of Heroin Nationally

- ▶ **Medical & social consequences:**
 - ▶ Hepatitis, HIV/AIDS
 - ▶ Fetal effects
 - ▶ Increase in crime and violence
 - ▶ Disruptions in family, workplace and education environments
 - ▶ Costs billions....

Effects on the Brain

- ▶ [Brain on Opiates](#)



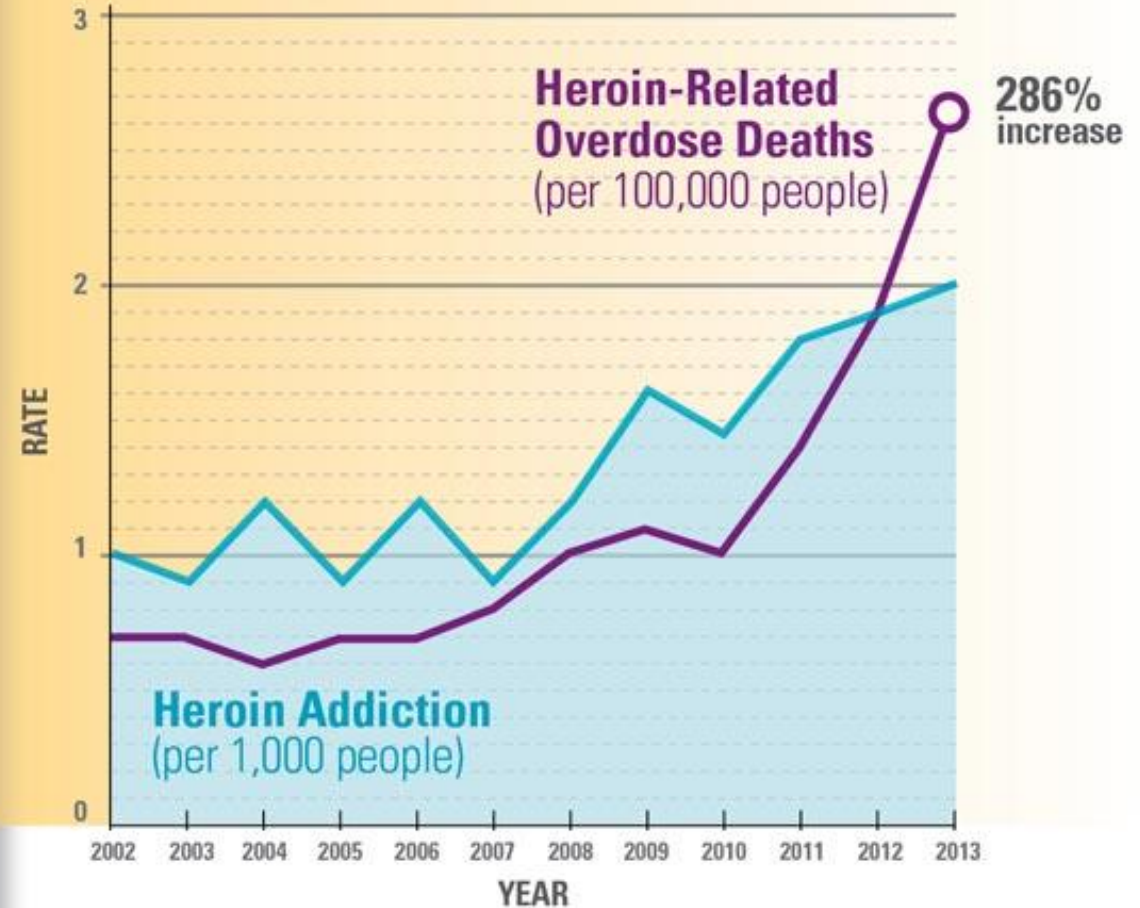
The Effects of Heroin Nationally

- ▶ 4.8 million people have used heroin at some point in their lives.
- ▶ Among people between the ages of 12 and 49, the average age of first use was 24.5.
- ▶ 169,000 people aged 12 or older used heroin for the first time within the past 12 months.
- ▶ Approximately 300,000 people were regular (past-month) users of heroin.

Heroin Use Has INCREASED Among Most Demographic Groups

	2002-2004*	2011-2013*	% CHANGE
SEX			
Male	2.4	3.6	50%
Female	0.8	1.6	100%
AGE, YEARS			
12-17	1.8	1.6	--
18-25	3.5	7.3	109%
26 or older	1.2	1.9	58%
RACE/ETHNICITY			
Non-Hispanic white	1.4	3	114%
Other	2	1.7	--
ANNUAL HOUSEHOLD INCOME			
Less than \$20,000	3.4	5.5	62%
\$20,000-\$49,999	1.3	2.3	77%
\$50,000 or more	1	1.6	60%
HEALTH INSURANCE COVERAGE			
None	4.2	6.7	60%
Medicaid	4.3	4.7	--
Private or other	0.8	1.3	63%

Heroin Addiction and Overdose Deaths are Climbing



SOURCES: National Survey on Drug Use and Health (NSDUH), 2002-2013.
National Vital Statistics System, 2002-2013.

The Effects of Heroin in Ohio

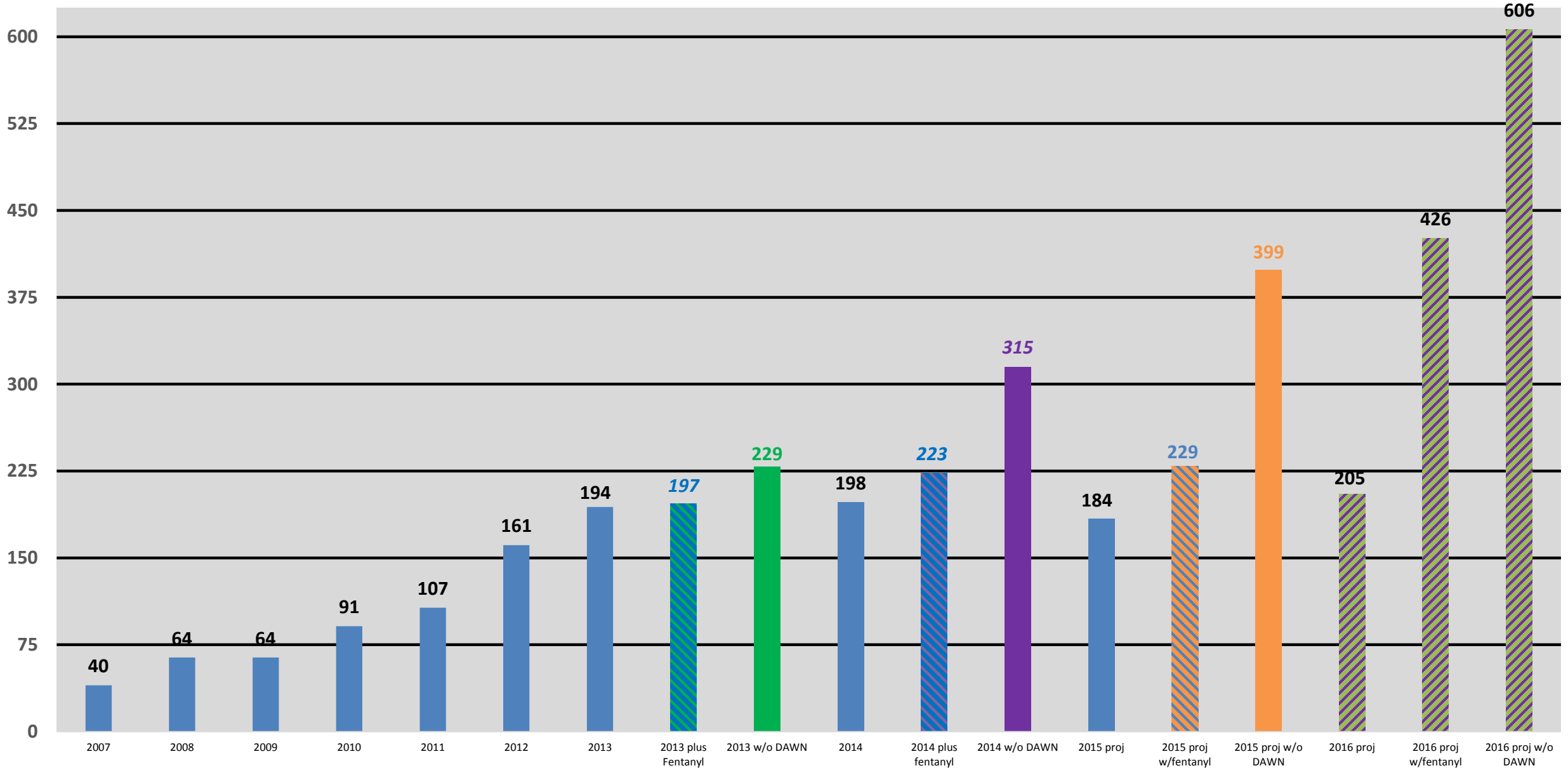
Table 1. High Risk Groups for Fatal Overdose by Substance

Prescription Opioids	Heroin
• White males & females	• White & black males
• Males aged 25-34 & 45-54	• Males aged 25-34
• Females aged 45-54	• Females aged 25-34
• Rural and suburban	• Urban and suburban
• Southern Ohio	• NE and Southern Ohio

Cuyahoga County Heroin Related Overdose Deaths 2007-2016*

Projected deaths with DAWN Saves and Fentanyl as overdose Deaths

(* 2016 projected based on preliminary 1st quarter data)



Making the Epidemic Bigger: Adding Fentanyl to the Mix

- ▶ Responsible for the majority of recent overdose deaths, outpacing heroin
- ▶ Between Jan 2014 - May 2015, Fentanyl killed 998 Ohioans
- ▶ Killed 89 Cuyahoga County residents in 2015; 37 in 2014; 5 in 2013

Making the Epidemic Bigger: Adding Fentanyl to the Mix

- ▶ Synthetic and short-acting opioid analgesic
- ▶ 100x more potent than Morphine
- ▶ 50x more potent than Heroin
- ▶ Primary use is for managing acute or chronic pain associated with advanced cancer.

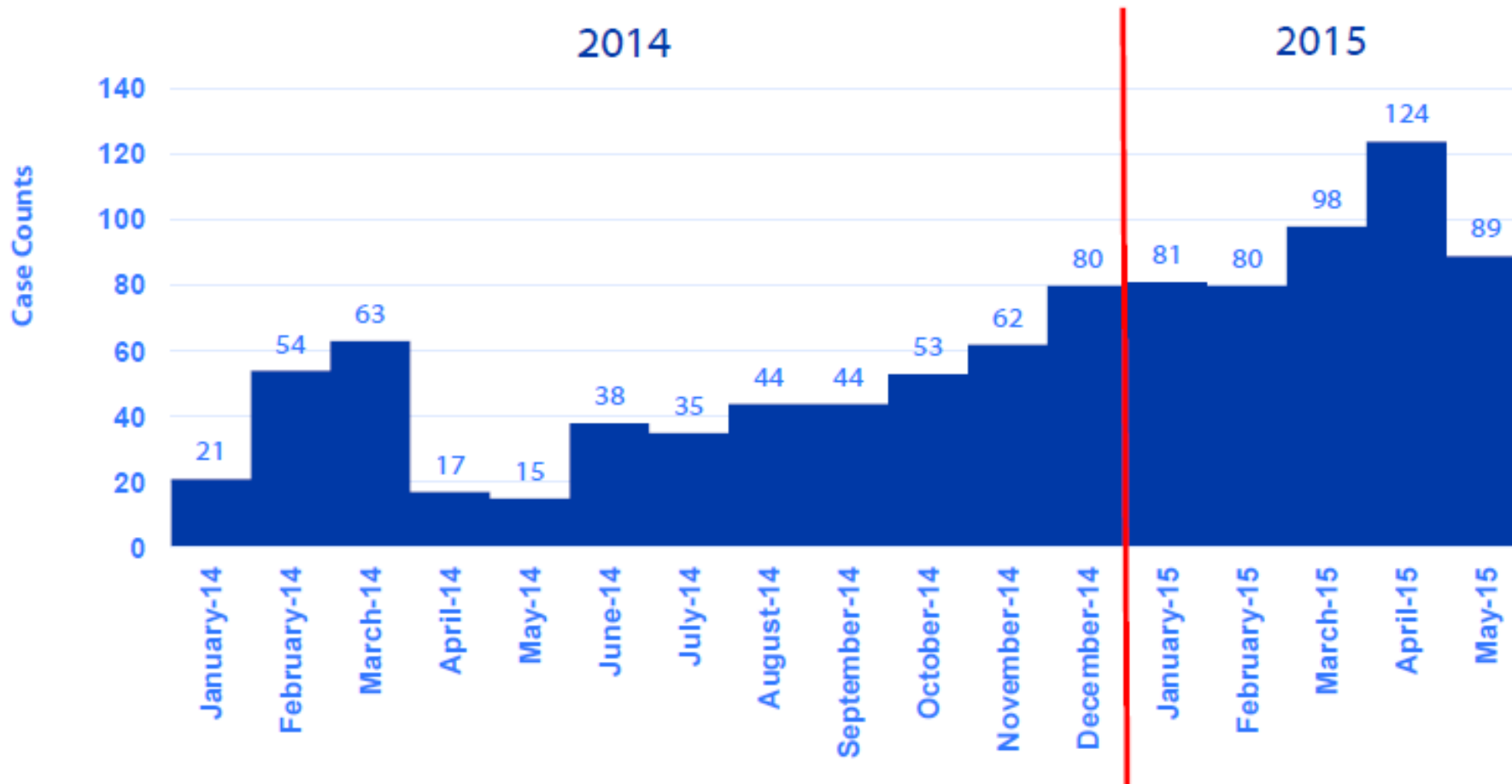


Non-Pharmaceutical Fentanyl

- ▶ Non-Pharmaceutical Fentanyl (NPF) is illegally made and sold through drug markets for its heroin-like effect
- ▶ Mixed with heroin and/or cocaine as a combination product - with or without the user's knowledge - to increase its euphoric effects

Vital Statistics: Fentanyl-Related Unintentional Overdose Deaths

Ohio State Resident Fentanyl-Related Unintentional Overdose Deaths
by Month, January 2014-May 2015



Illicit Fentanyl Supply in Ohio

- ▶ Production expanding globally
- ▶ Fentanyl-cut heroin primarily marketed as heroin - users typically unaware of its presence in the product
- ▶ Route of entry into US is evolving
 - ▶ Ohio is a major drug distribution point for the upper Midwest and east coast
 - ▶ Rising trend towards internet purchases delivered via USPS/FedEx

CURRENT PUBLIC HEALTH CRISIS

No. of Fatal Cases due to heroin/fentanyl in March – 50

19 - City of Cleveland Residents

31 - Suburban Residents- Brecksville, Brook Park (3), Chardon, Cleveland Heights (2), Columbia Station (2), Euclid (2), Lakewood (4), Middleburgh Heights, North Olmsted, North Royalton, Olmsted Township, Parma (4), Parma Heights, Peninsula, South Euclid (2), Strongsville, Westlake (2), One out of State resident - PA

VICTIMS

Victims' ages range from 20 – 69

35 Male victims; 15 Female victims

6 African American victims; 4 Hispanic victims; 40 Caucasian victims

EXPONENTIAL RATE OF INCREASE

In 2015, one person died every day in Cuyahoga County from a drug overdose.

In 2016, during January and February, one person died every day in Cuyahoga County from a heroin or fentanyl overdose. January was a record for fentanyl deaths, broken again in February.

Since March 9, 2016, two people have died every day in Cuyahoga County from a heroin or fentanyl overdose. March set a new record for fentanyl deaths. At least **123** victims died already in 2016.

Source: Cuyahoga County Medical Examiner's Office revised 4-15-16



Resources in Our Community

- ▶ **Project DAWN:** community-based overdose education and naloxone distribution program created as a way to combat Ohio's opioid overdose epidemic.
- ▶ Cuyahoga County launched Project DAWN on March 1, 2013 and has since registered over 500 participants and documented at least 31 lives saved.
- ▶ **What is Naloxone?**
 - ▶ A medication that can reverse an overdose caused by an opioid drug (heroin or prescription pain medications).
 - ▶ When administered during an overdose, Naloxone blocks the effects of opioids on the brain and quickly restores breathing.

Resources in Our Community

- ▶ What's in the Kit?
 - ▶ 2 vials of Naloxone medication
 - ▶ 2 nasal atomizers (the medication is sprayed into the nose of the individual experiencing an overdose)
 - ▶ 1 face mask
 - ▶ 1 educational DVD
 - ▶ 1 educational booklet



Resources in Our Community

- ▶ Where can I receive my FREE kit?

- ▶ MetroHealth Hospital, a key partner of the Task Force, dispenses kits to eligible patients in the Emergency Department as well as several community sites including:

Cuyahoga County Board of Health - Fridays from 9 a.m. - noon

Free Clinic of Greater Cleveland - Fridays from 1-5 p.m.

The kits are FREE when obtained at the above locations. With the passage of HB 170, the kits may now be dispensed to the addict as well as a family member, friend, or loved one.

References

- ▶ 2013 National Survey on Drug Use and Health: Summary of National Findings.
<http://www.samhsa.gov/data/sites/default/files/NSDUHresultsPDFWHTML2013/Web/NSDUHresults2013.pdf>.
- ▶ Brownstein, MJ. A brief history of opiates, opioid peptides, and opioid receptors. *Proc Natl Acad Sci USA* June, 1993; 90(12): 5391-5393.
- ▶ "[BSBI List 2007](#)". *Botanical Society of Britain and Ireland*. Archived from [the original](#) (xls) on 2015-02-25. Retrieved 2014-10-17.
- ▶ Cuyahoga County Medical Examiner's Office Report. 3.15.16.
- ▶ National Center for Injury Prevention and Control. *The Fentanyl Crisis in Ohio: Findings from the Ohio Epi-Aid Investigation*. May 3, 2016.
- ▶ National Institute on Drug Abuse. March 2015. <https://www.drugabuse.gov/drugs-abuse/heroin>.
- ▶ Ohio Department of Mental Health and Addiction Services & Ohio Department of Health. *Increasing Heroin Overdoses in Ohio: Understanding the Issue*. April 2014.
<http://mha.ohio.gov/portals/0/assets/research/reports/heroinoverdosereportfin43014.pdf>.
- ▶ Renata Ferrari, R., Michela C., & Marco V. Risk Factors in Opioid Treatment of Chronic Non-Cancer Pain: A Multidisciplinary Assessment. *Pain Management - Current Issues and Opinions*. January 2012 available at <http://cdn.intechopen.com/pdfs-wm/26149.pdf>

References

- ▶ U. S. Department of Justice, Drug Enforcement Administration, DEA Investigative Reporting, January 2015.
- ▶ Yes, Bayer Promoted Heroin - Here are the ads that prove it. Business Insider Web site. <http://www.businessinsider.com/yes-bayer-promoted-heroin-for-children-here-are-the-ads-that-prove-it-2011-11?op=1>. Published on November 17, 2011. Accessed on October 2, 2014.
- ▶ Kritikos, PG & Papadaki SP. The history of the poppy and of opium and their expansion in antiquity in the eastern Mediterranean area. United Nations Office on Drugs and Crime (UNODC) *Bulletin on Narcotics*. 1967; (3). (Previously: Opium Throughout History. PBS Thirteen Web site. Accessed September 10, 2014.)
- ▶ Casey, E. History of Drug Use and Drug Users in the United States. Schaffer Library of Drug Policy. www.druglibrary.org/schaffer/history/casey1.htm. Published in 1978. Accessed on September 28, 2014.
- ▶ National Center for Injury Prevention and Control Centers for Disease Control and Prevention (CDC) Undetermined risk factors for fentanyl-related overdose deaths – Ohio, 2015 (EpiAid 2016-003)



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