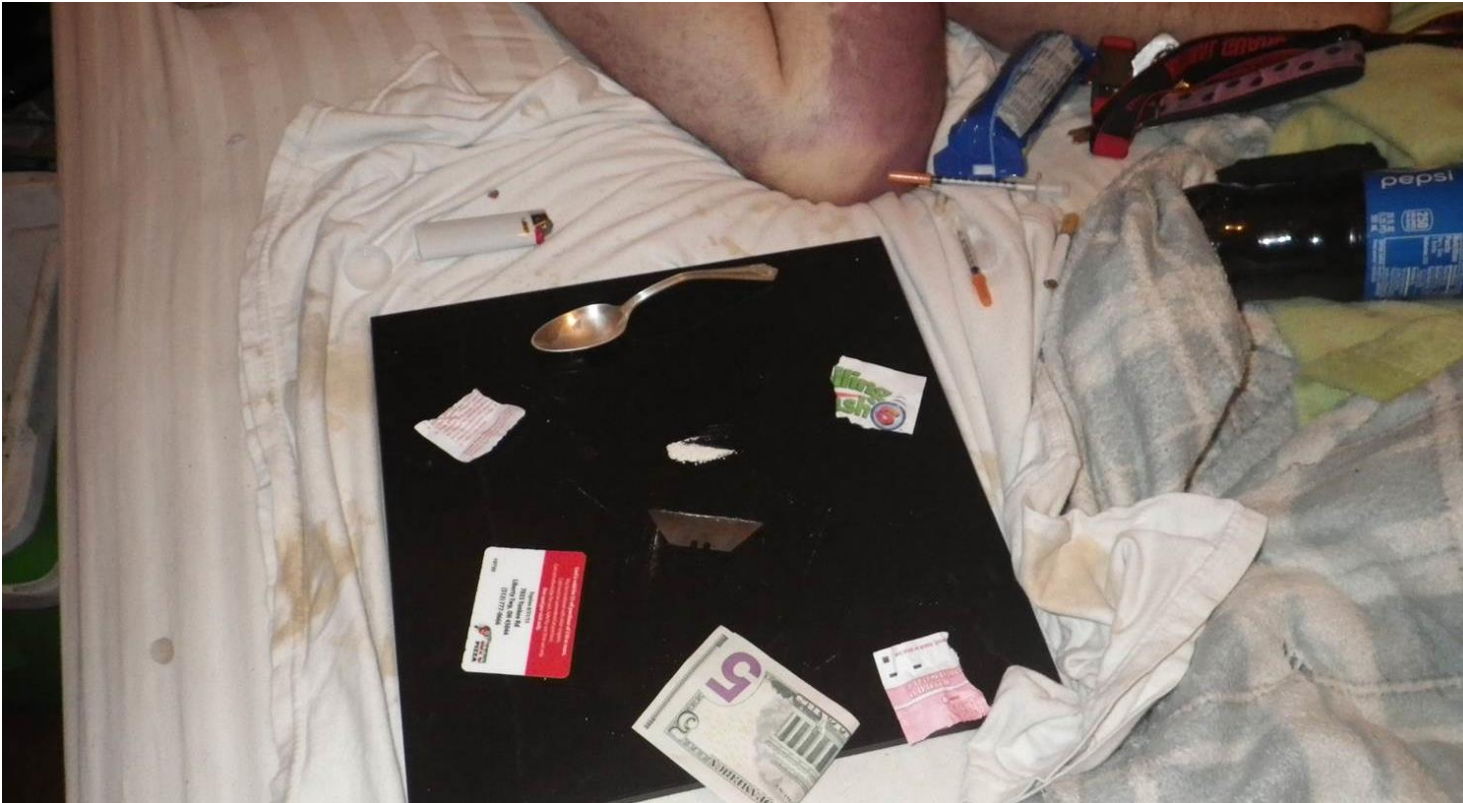


# Heroin: It's Closer Than you Think

Jennifer Mason  
EMS Coordinator

## Addiction doesn't discriminate



## Meet Kyle

- Kyle is seven here
- He is in 2<sup>nd</sup> grade
- Kyle LOVES baseball and plays with the local Little League
- Kyle's Mom is his class mother



## Percent of Students Reporting Marijuana, Cigarette, Vape Use in Past Month, 12<sup>th</sup> Grade



Denotes significant difference between 2021 and 2022

SOURCE: University of Michigan, 2022 Monitoring the Future Study

# But What About Kyle



Kyle enrolled in a vocational graphic arts program through his High School

Excelled – Honor roll  
Perfect attendance

Why would anyone suspect anything?  
Graduated 2007



# **August 2007 Changed the World**

At least for one family



*Heroin is extremely powerful,  
dangerous, addicting, and deadly*

*Takes users quickly from  
experimentation to dependency to  
death*





# What is Heroin?

Heroin (like opium and morphine) is made from the resin of poppy plants. Milky, sap-like opium is first removed from the pod of the poppy flower. This opium is refined to make morphine, then further refined into different forms of heroin



Poppy oozing  
sap to  
eventually be  
cooked down  
into heroin



## What is Heroin?

Heroin was first manufactured in 1898 by the Bayer pharmaceutical company of Germany and marketed as a non-addictive cough medicine



In its purest form, heroin is a fine white powder. But may be found to be rose gray, brown or black in color. The coloring comes from additives which have been used to dilute it







Because heroin is cut with a variety of additive agents, the color of the final product can be anything from white to brown.

Can be cut with:

- Caffeine
- Flour
- Chalk
- Talcum powder
- Sucrose
- Starch
- Powdered milk



Amount of actual heroin contained in a batch can range anywhere from 3 to 99%, according to Johns Hopkins University

# The Real Problem

Heroin's negative effects may be particularly volatile due to the unpredictability of composition

The user buying heroin on the street never knows the actual strength of the drug in that particular packet. Thus, users are constantly at risk of an overdose.

Particularly volatile after detox

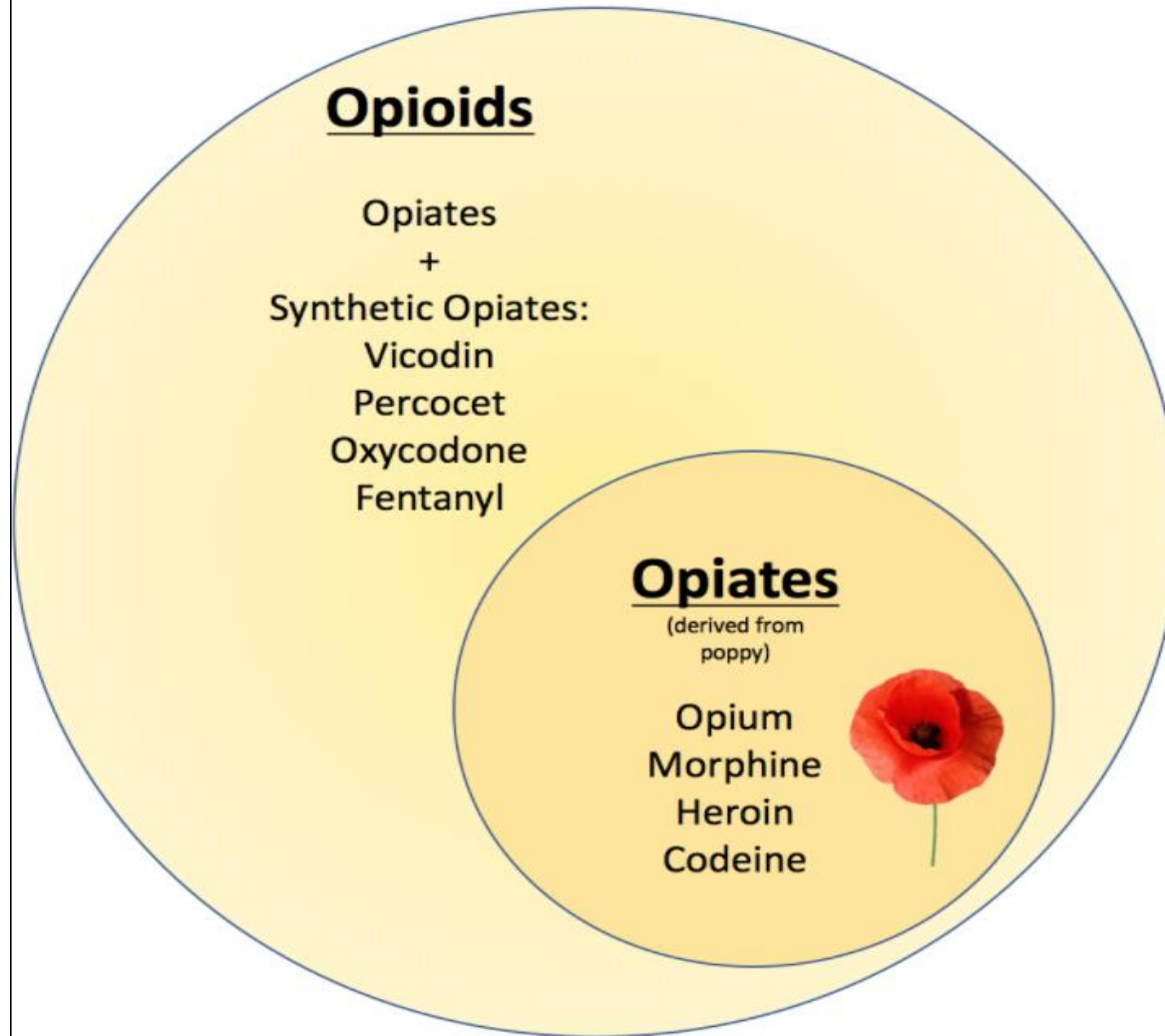
Heroin can be injected, smoked or sniffed, giving the user a false sense of security

OxyContin is the brand name for the drug containing oxycodone





# Opiates Are a Subset of Opioids



# Not all opioids are created equally

## From strongest to weakest

Fentanyl

Heroin

Hydromorphone – Dilaudid

Oxymorphone - Opana

Methadone

Oxycodone – OxyContin, Roxicodone, Percocet (about 50% stronger than hydrocodone)

Morphine (only non-synthetic on the list)

Hydrocodone – Vicodin (commonly abused with alcohol)

Codeine (often in prescribed cough medicine)

Meperidine – Demerol (first synthetic ever invented)

Tramadol - Ultram

- Afghanistan produces > 90% of illicit heroin globally. They are the world's leading opiate producer
- But Latin America has evolved as the primary supplier of heroin – Sinaloa Operatives





# US-Mexico drug tunnel



San Luis,  
Arizona











- "This tunnel was very well constructed and would have taken this Drug Trafficking Organization a long time to dig and would have been very expensive," court documents state. "This tunnel necessarily required a combination of several individuals on both sides of the border, engaged in an intricate, risky transnational conspiracy to construct such a secretive structure."



# Voluntary Behavior?

A person makes the initial voluntary choice, but with continued use something happens that flips the switch from voluntary to compulsive

WHY?

Continued use changes the way your brain functions

## ADDICTION

- Impairs clear thinking
- You no longer feel ok without
- Impairs ability to control your behavior



# Withdrawal

If he does not get another fix, he will begin to experience withdrawal.  
Withdrawal includes the extreme physical and mental symptoms which are experienced  
if the body is not supplied again with the next dose

Narcan can send an addict immediately into withdrawal

## Withdrawal Symptoms

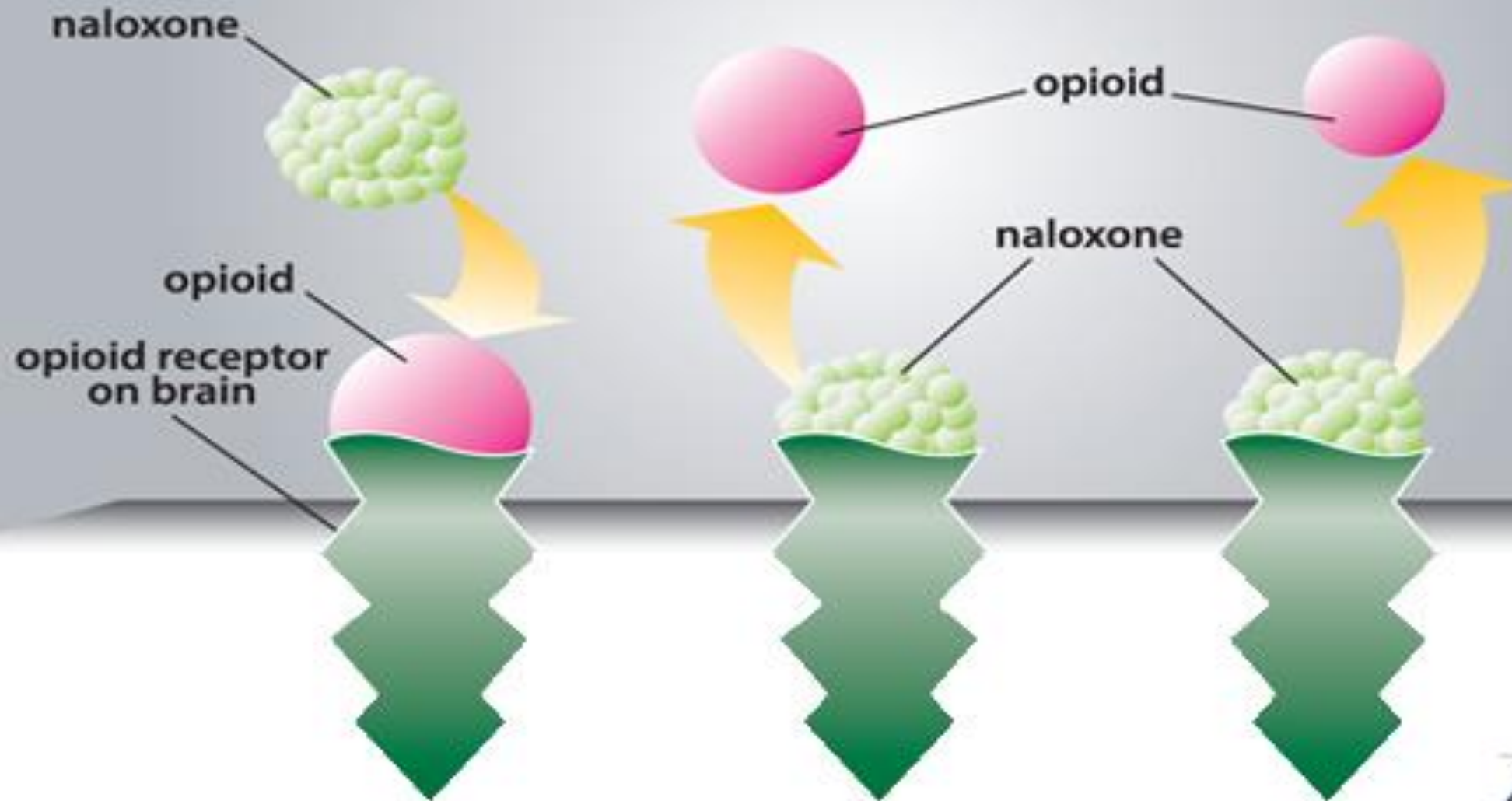




# Naloxone reversing an overdose

Naloxone has a stronger affinity to the opioid receptors than opioids, such as heroin or oxycodone, so it knocks the opioids off the receptors for a short time (30-90 minutes).

This allows the person to breathe again and reverse the overdose.

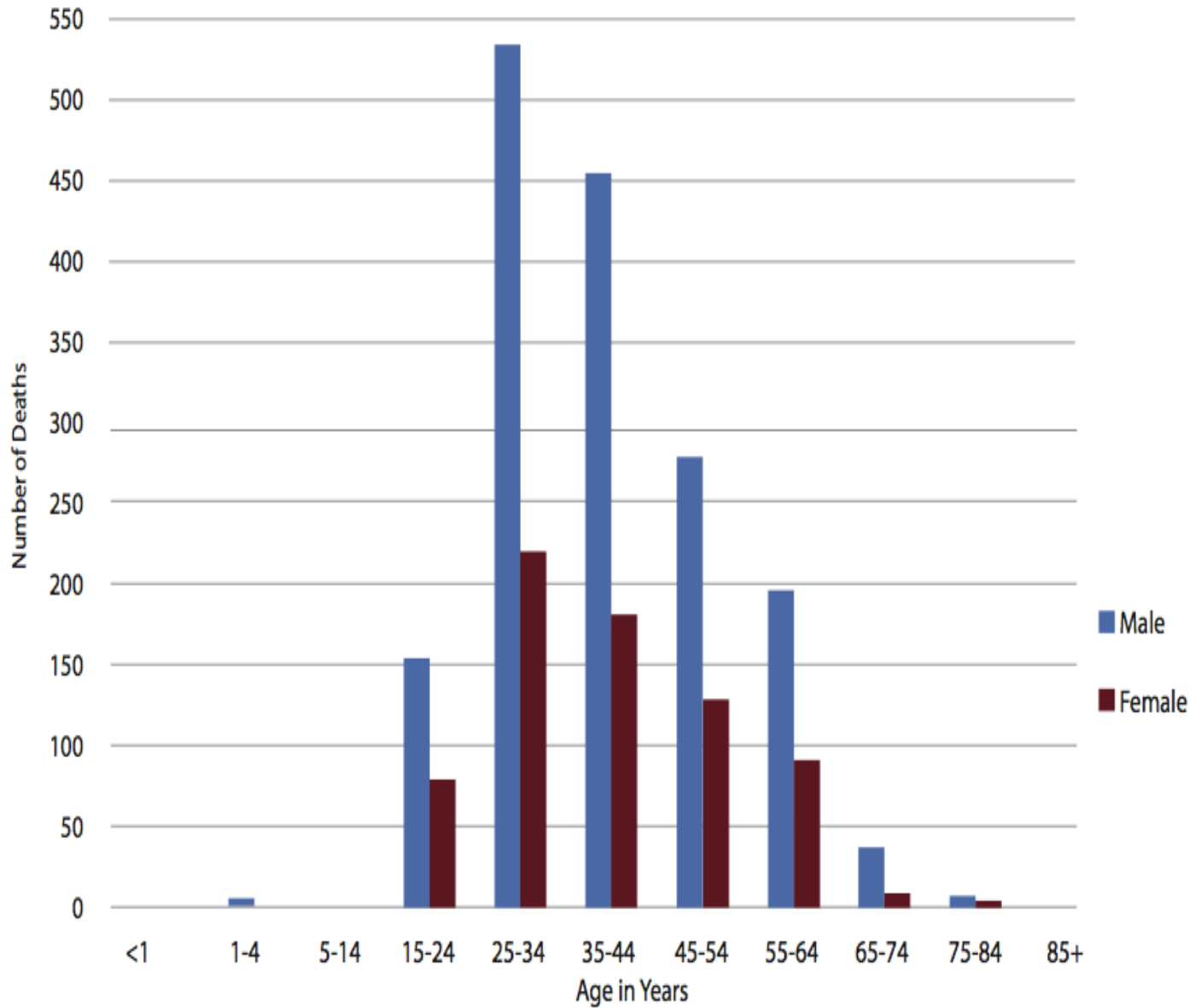


COPE

# Opioids Differ

Drug	Duration	Potency
Methadone	24-32 hours	****
Heroin	6-8 hours	*****
Oxycontin	3-6 hours	*****
Codeine	3-4 hours	*
Demerol	2-4 hours	**
Morphine	3-6 hours	***
Fentanyl	2-4 hours	*****

**Figure 3: Fentanyl and Related Unintentional Overdose Deaths, by Age and Sex, Ohio, 2016**



Source: Ohio Department of Health, Bureau of Vital Statistics; analysis conducted by ODH Violence and Injury Prevention Program.  
Includes Ohio residents who died due to unintentional drug poisoning (underlying cause of death ICD-10 codes X40-X44).

**Drug overdose mortality rates vary widely across the U.S.**

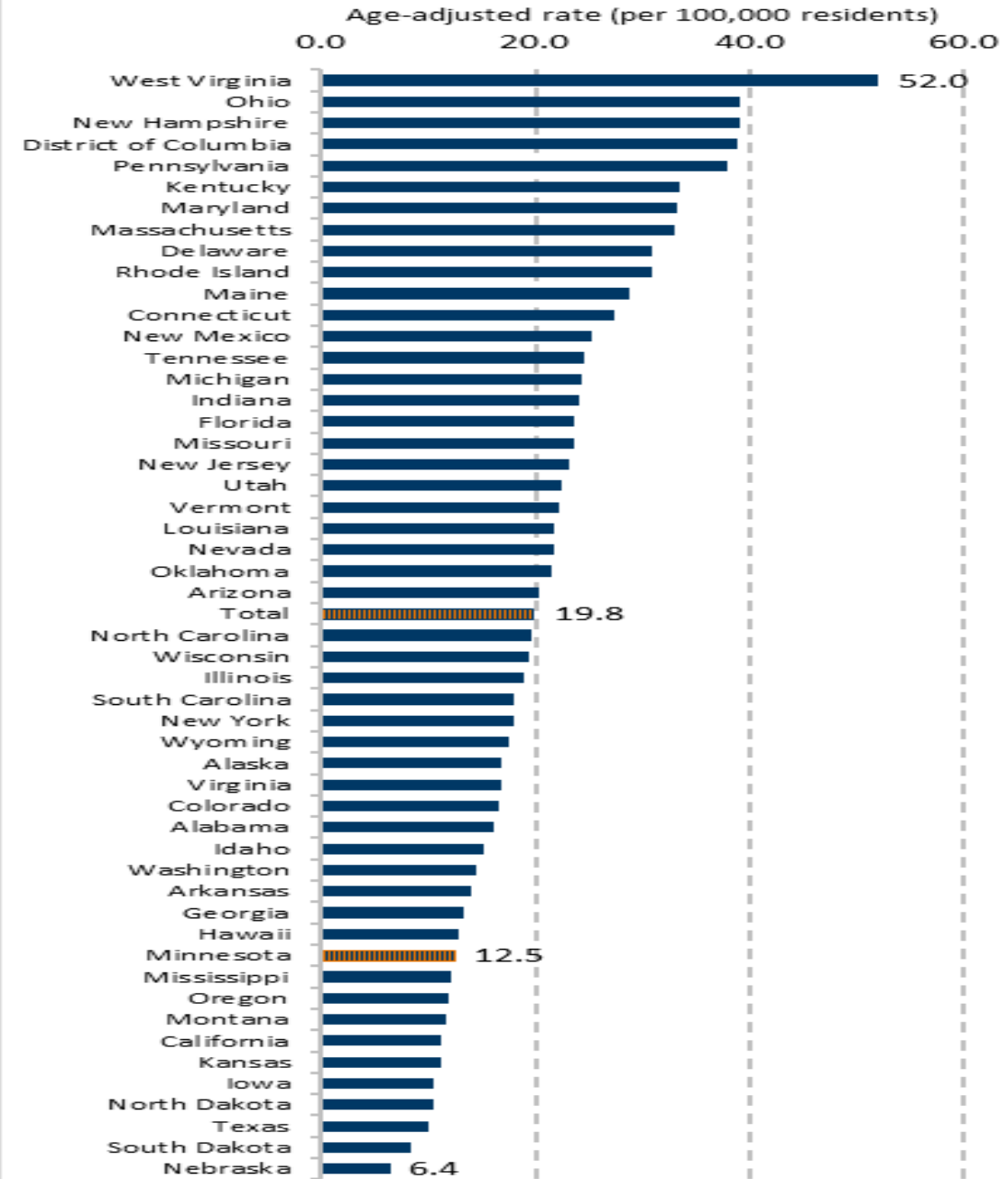
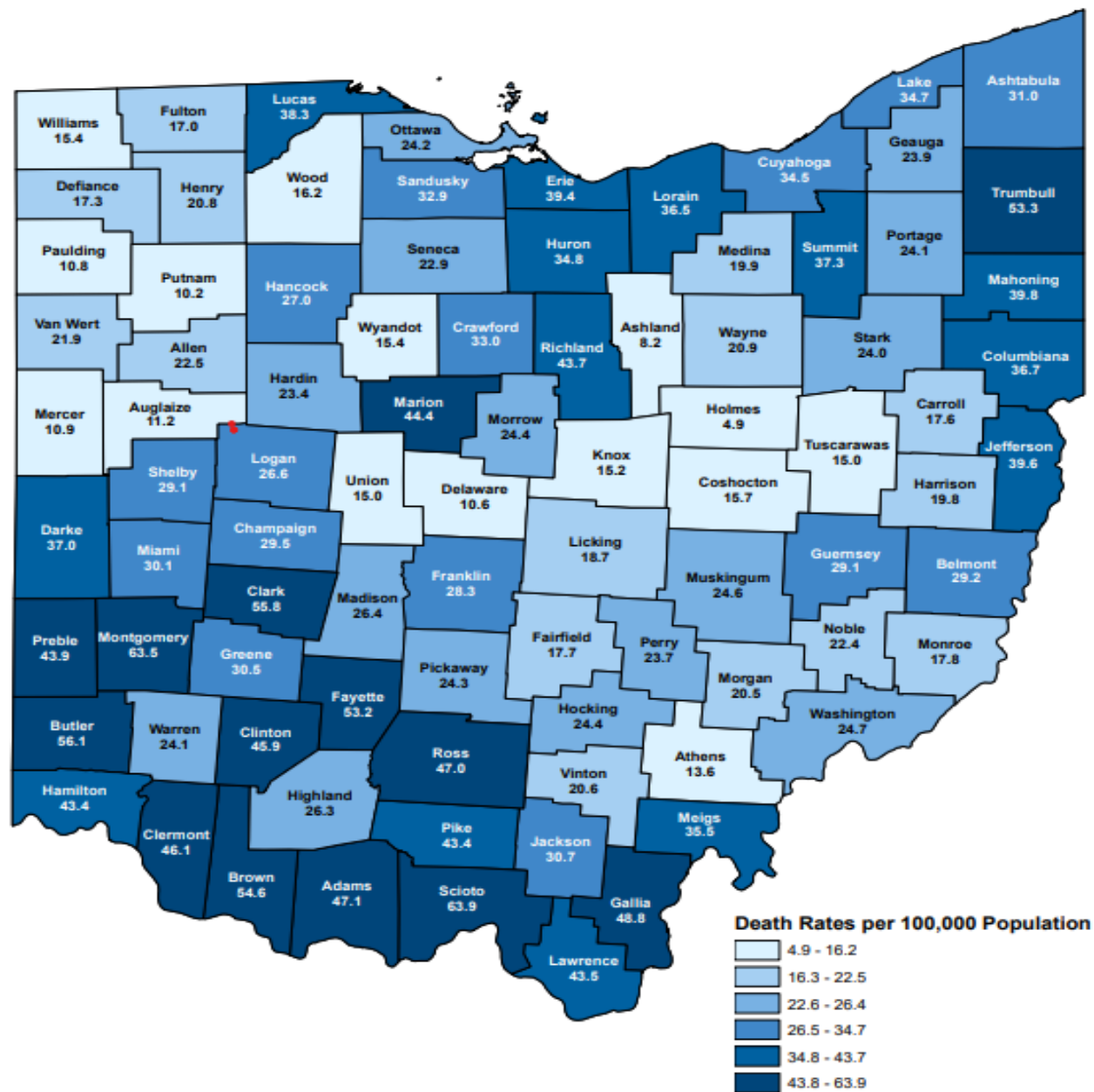


Figure 12. Average Age-Adjusted Rate of Unintentional Drug Overdose Deaths by County, Ohio, 2014-2019





# OhioTotal Hepatitis C Case Rates

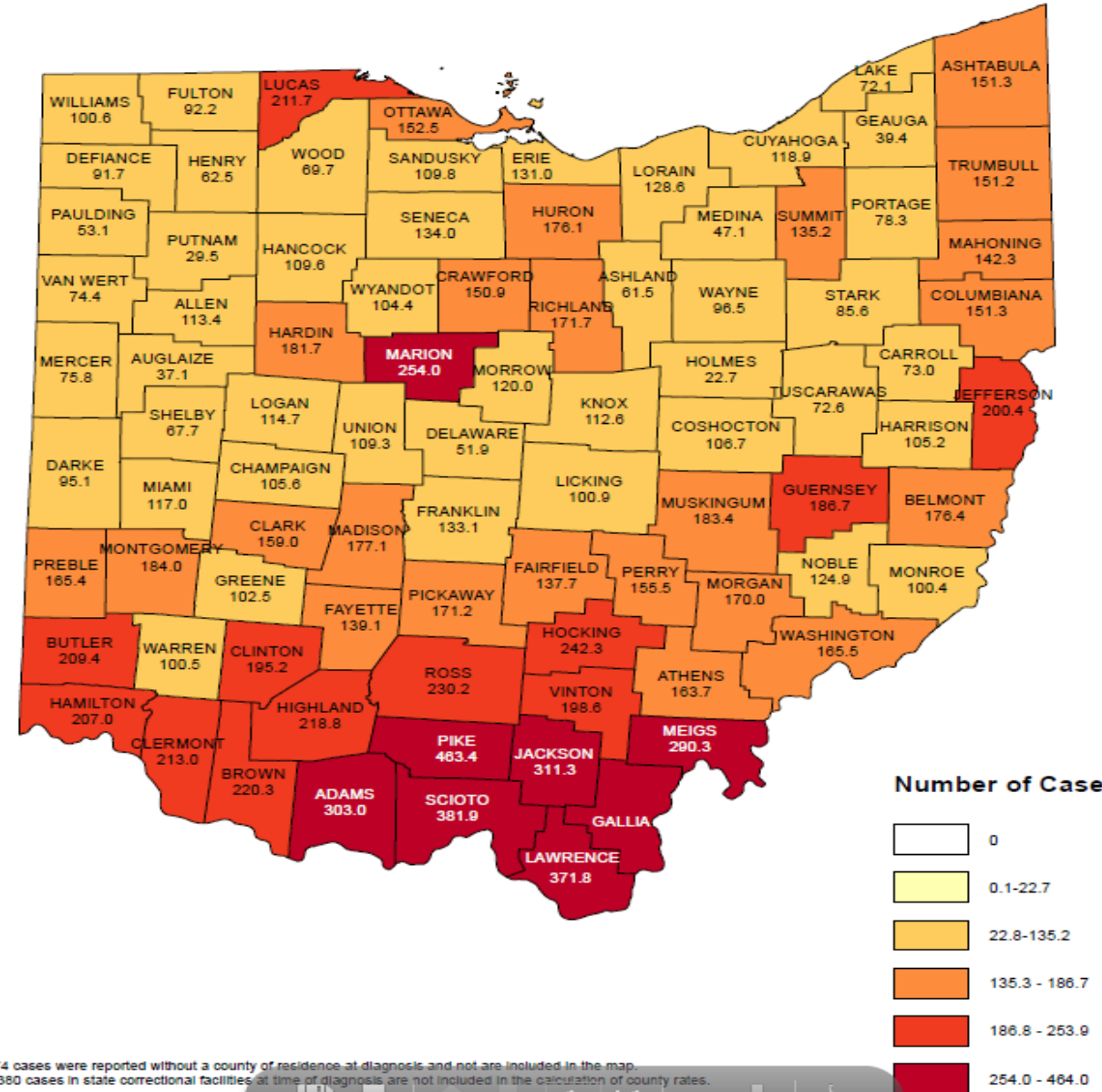
By County<sup>1</sup>, 2018

Ohio Rate = 158.7 per 100,000 population

(County Rates Exclude Cases Diagnosed in State Correctional Facilities)

## Long Term Effects

It is estimated that of the 35,000 new hepatitis C infections each year in the United States, over 70% are from drug users who use needles



1) 374 cases were reported without a county of residence at diagnosis and not included in the map.

2) 1,380 cases in state correctional facilities at time of diagnosis are not included in the calculation of county rates.

# “I’LL JUST TRY IT ONCE.”

**Warning:** Even a single dose of heroin can start a person on the road to addiction.

Although we know what happens to the brain when someone becomes addicted, we can’t predict how many times a person must use a drug before becoming addicted



## On the Front Lines



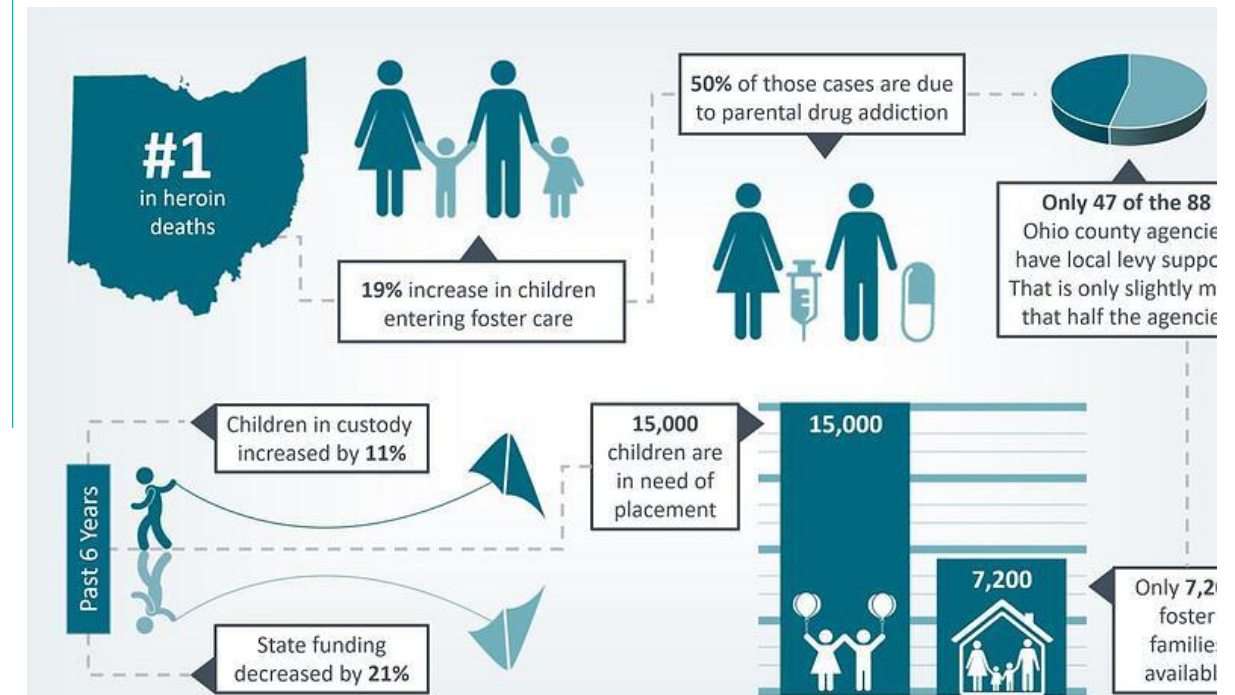


# IMPACT



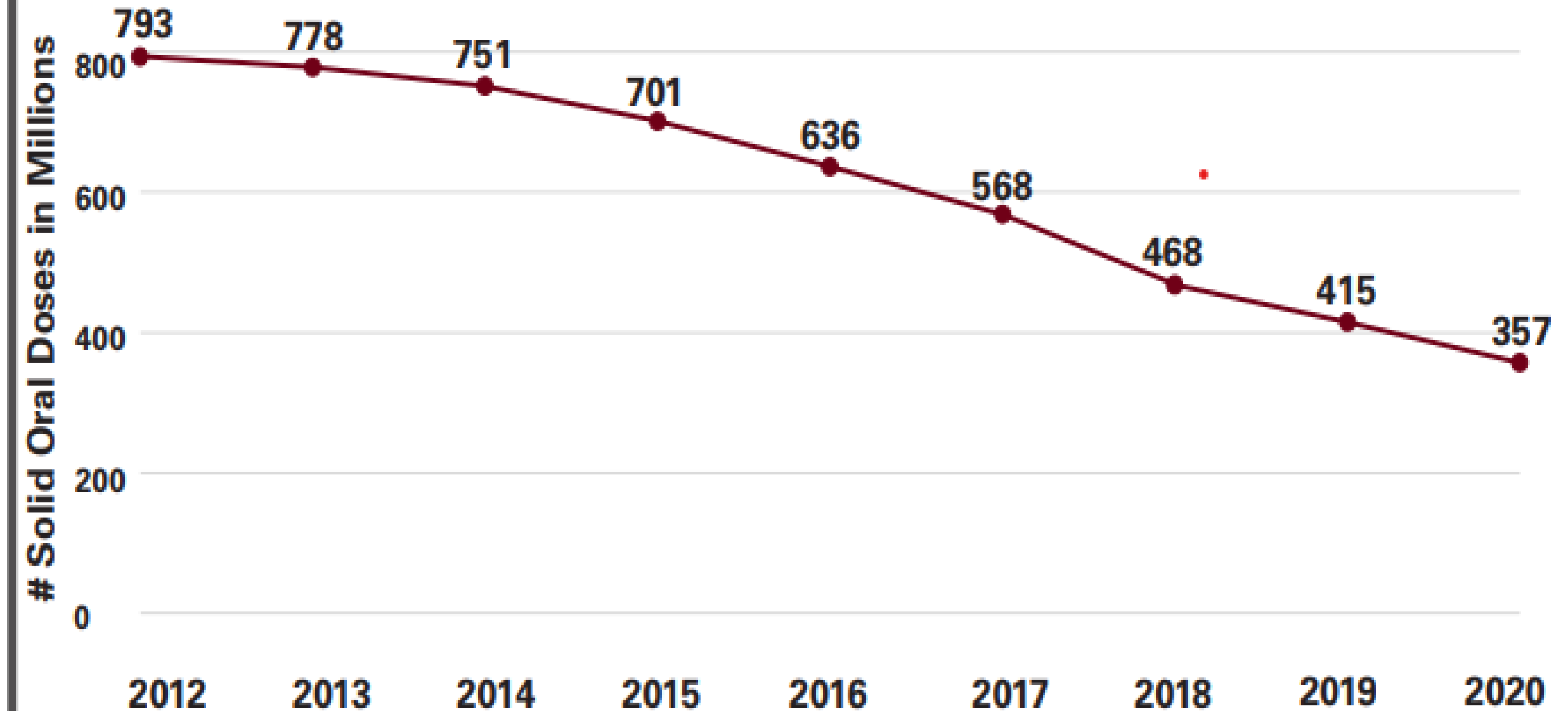
## Foster Care

- 50% due to drug addiction
- 15k in need of placement, only 7200 foster families





**Chart #1 - Opioid Solid Doses Dispensed to Ohio Patients, by Year**



# The TRUE cost of Heroin

## Alcohol

- Bottle of wine a night ~ \$8 = \$2920/year
- 12 pack of beer a night ~ \$9 = \$3285/year
- Bottle of vodka a night ~ \$15 = \$5,475/year

## Heroin

- Single hit ~ \$10 \$3,650/year (stamp bag)
- Average cost of a daily heroin habit ~ \$150 = \$54,750



IS MY CHILD USING  
HEROIN?








# Paraphernalia

## Check their belongings

- Foil
- Baggies
- Lighters !!!!!
- Syringes
- Spoons
- Belts
- Scales
- Belts
- Scales





- 
- Heroin starts cheap and quickly gets expensive
  - Are expensive items missing?
  - Have you checked their savings?
  - Checked your credit cards lately?

## What About Kyle?

Kyle was living with a friend and said he needed money for his share of the utilities

Kyle sold two Xboxes, 2 Laptops, 2 cell phones

The utensil drawer was down to 3 spoons

Foil/lighters were found in the room

HERES YOUR SIGN...not for Kyle's mom. She didn't believe until his OD, and even still didn't believe he was an addict

# WHAT TO DO IF YOU SUSPECT USE



- Immediately seek professional help
- Formal assessment to determine needs
- Quick admission into treatment for best chance at recovery
- Be persistent in seeking assistance

# What About Kyle?

Center for Chemical Addictions Treatment

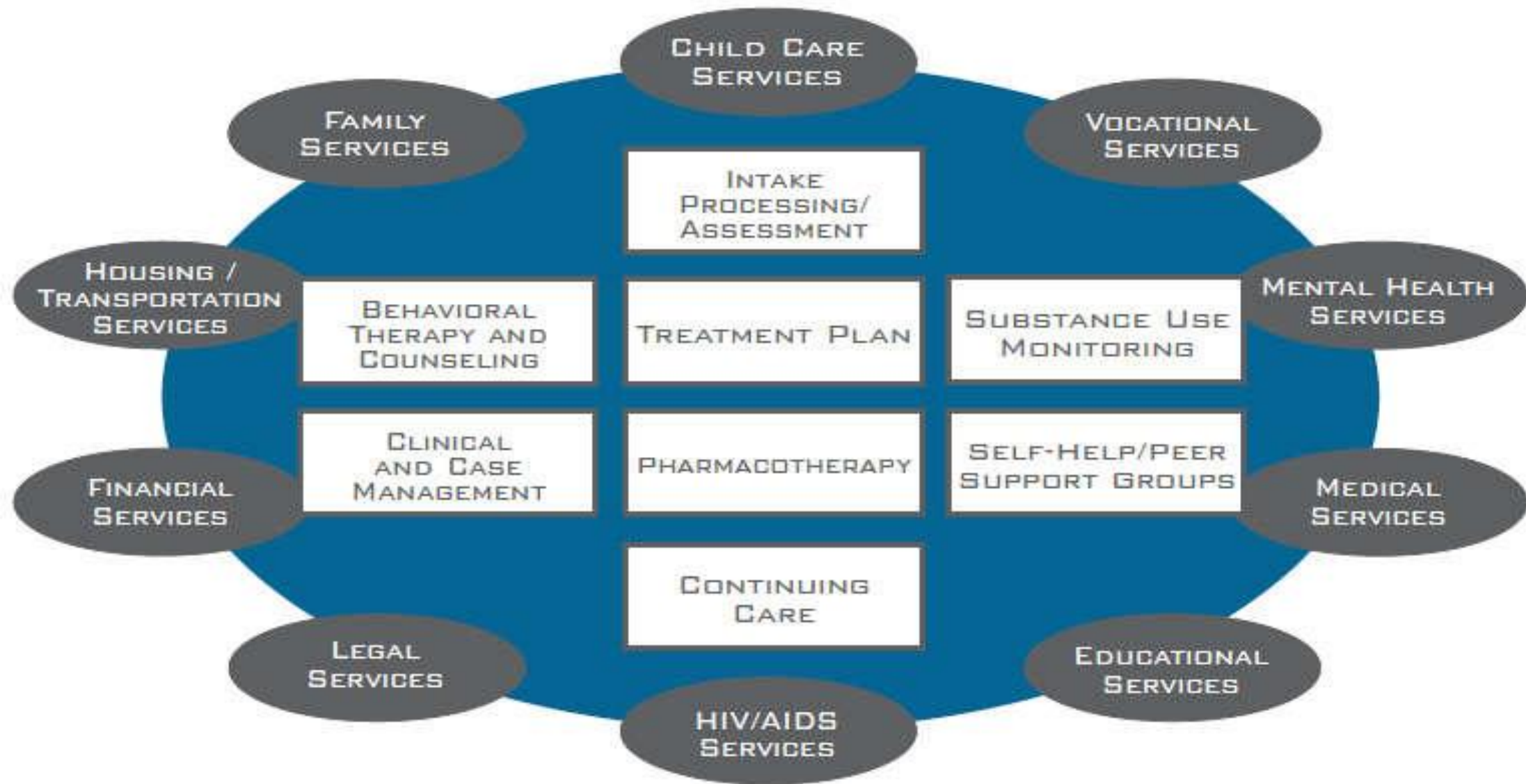
<http://www.ccatsober.org/>

Locally (IP and IOP)

- Sojourner
- Modern Psychiatry & Wellness
- Butler Behavioral Health
- Brightview
- Beckett Springs
- Kettering Behavioral Medicine Center
- Lindner Center of Hope
- DeCoach

[2021-2022 PROVIDER SERVICE GUIDE.pdf](#)  
[\(bcmhars.org\)](#)

## *Components of Comprehensive Drug Abuse Treatment*



*The best treatment programs provide a combination of therapies and other services to meet the needs of the individual patient.*



## Back to Kyle











# DON'T MISS THE SUBTLE SIGNS

- *Number of heroin cases and deaths point to growing epidemic that needs to be taken seriously*
- *Heroin isn't just for hardened addicts in big city alleyways; it's in our suburban schools and towns and is spreading quickly to young people across the country*
- ***NEVER dismiss or underestimate gravity of epidemic by thinking “you or your child would never try heroin” - I thought my child would never try heroin***
- *The same teen that refuses to put a needle in his or her arm will more readily snort/sniff the same drug, wrongly believing it's less dangerous/less addicting*
- *Heroin is extremely powerful, dangerous, addicting, and takes users quickly from experimentation to dependency to death*

# QUESTIONS?

**Presented By:**  
**Jennifer Mason,**  
**Paramedic, EMS-I**

**EMS Coordinator**  
**Kettering Health**



**Heroin....it's closer than you think**