

Richland County Addiction RC Safety Council Edition



**Facts, Physiology, More
Facts, and Future Hope**

Joseph Bocka MD

8 / 6 / 1

Someone just died of a drug overdose, 8 minutes from now somebody else will. This is reality now people. Every 8 minutes someone's father, mother, daughter or son will lose their life to this monster.

Opiates every 8 mins

Alcohol every 6 mins

Tobacco every 1 min

OH-IO



2

Richland County ODs



**We're #16 / 88
counties**

2016

2017

2018



551

638

357

61

46

44

2018 Richland County Overdoses - (January 01 – December 31)

Agency	Overdose Totals	Overdose Death Totals
Mansfield	257	32
RCSO	66	9
Shelby	16	3
Ontario	8	0
Lexington	3	0
Bellville	6	0
Butler	1	0
TOTALS	357	44

2017 Richland County Overdoses - (January 01 – December 31)

Agency	Overdose Totals	Overdose Death Totals
Mansfield	460	23
RCSO	116	16
Shelby	40	2
Ontario	14	2
Lexington	5	2
Bellville	3	1
TOTALS	638	46

Decrease of 44.04% for overdoses and a decrease of 4.35% for overdose deaths

2018

2019 (to March 13)



70

52

8

8

Who Doesn't this Effect?

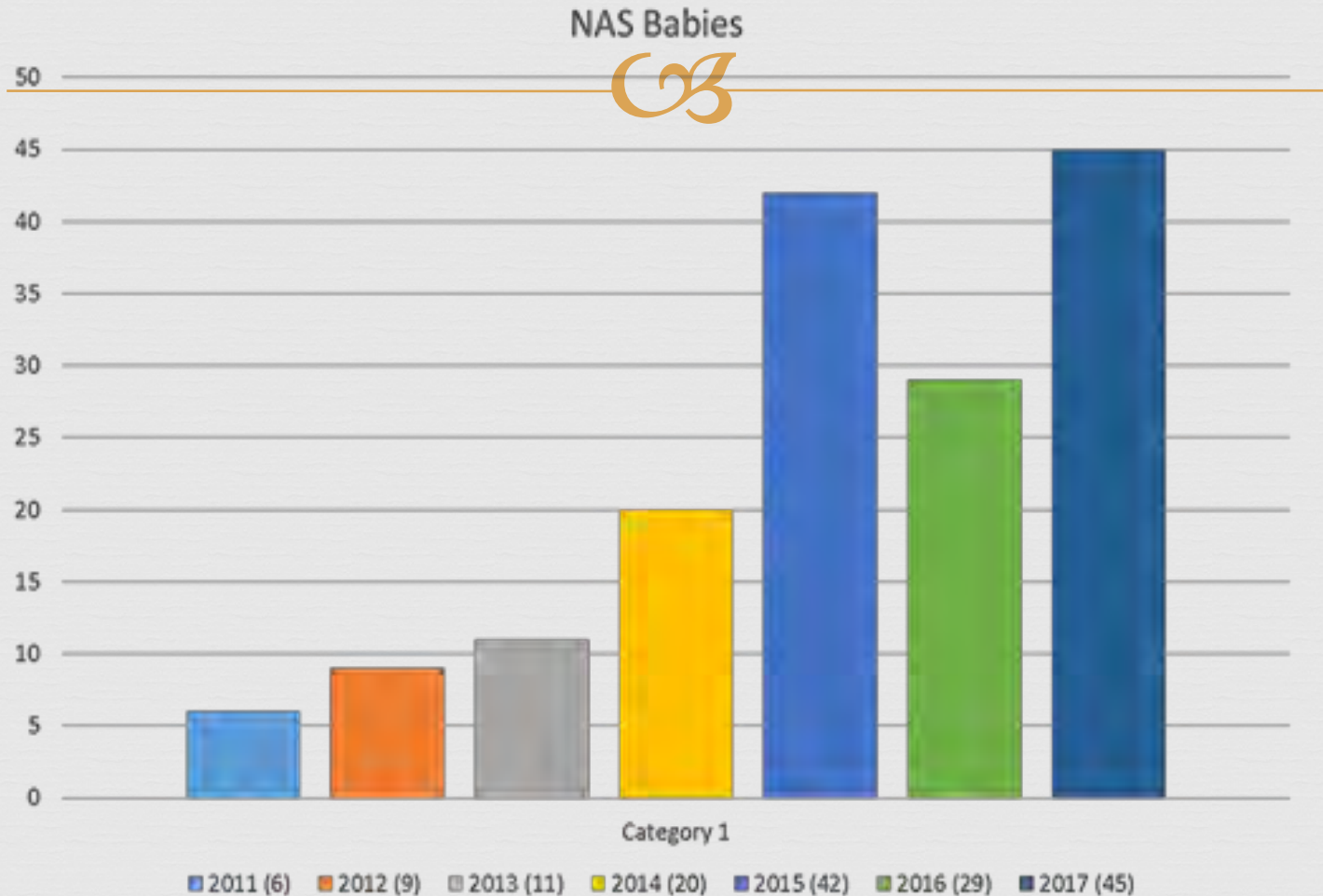


- ❧ Accidental in 2 year old
- ❧ Up through 80s.
- ❧ In utero?
- ❧ Neonates (NAS)

Neonatal Abstinence Syndrome

**2 to 3
weeks**

Mansfield NAS Babies



Who Doesn't this Effect?



❧ Families broken

❧ Grandparents with custody/care

❧ Total Richland County hits math

If OD 1% of time 35,700 $1/1000=357,000$

❧ GSWs, Robberies and Thefts – Jail / Prison

You Can't Trust Your Dealer



3

Heroin?



❧ 6% Heroin

❧ **Fentanyl** (50 to 100 X) or 13 analogues - majority of cases

❧ **1 gram = 5 to 100 mg?**

❧ **6-Acetylmorphine (MAM)**

❧ **Synthetic marijuana / Posh** (including very potent **4-cyano CUMYL-BUTINACA** and **5-fluoro EDMB-PINACA**), bath salts, meth, cocaine, **tramadol**

❧ **Psychostimulants: 3-Fluorophenmetrazine & Ethylaminohexanophenone**

❧ **Caffeine, diphenhydramine, procaine, benzocaine, quinine, levamisole (deworming med), meat tenderizer, «assorted vegetable matter »**

Lethal Dose



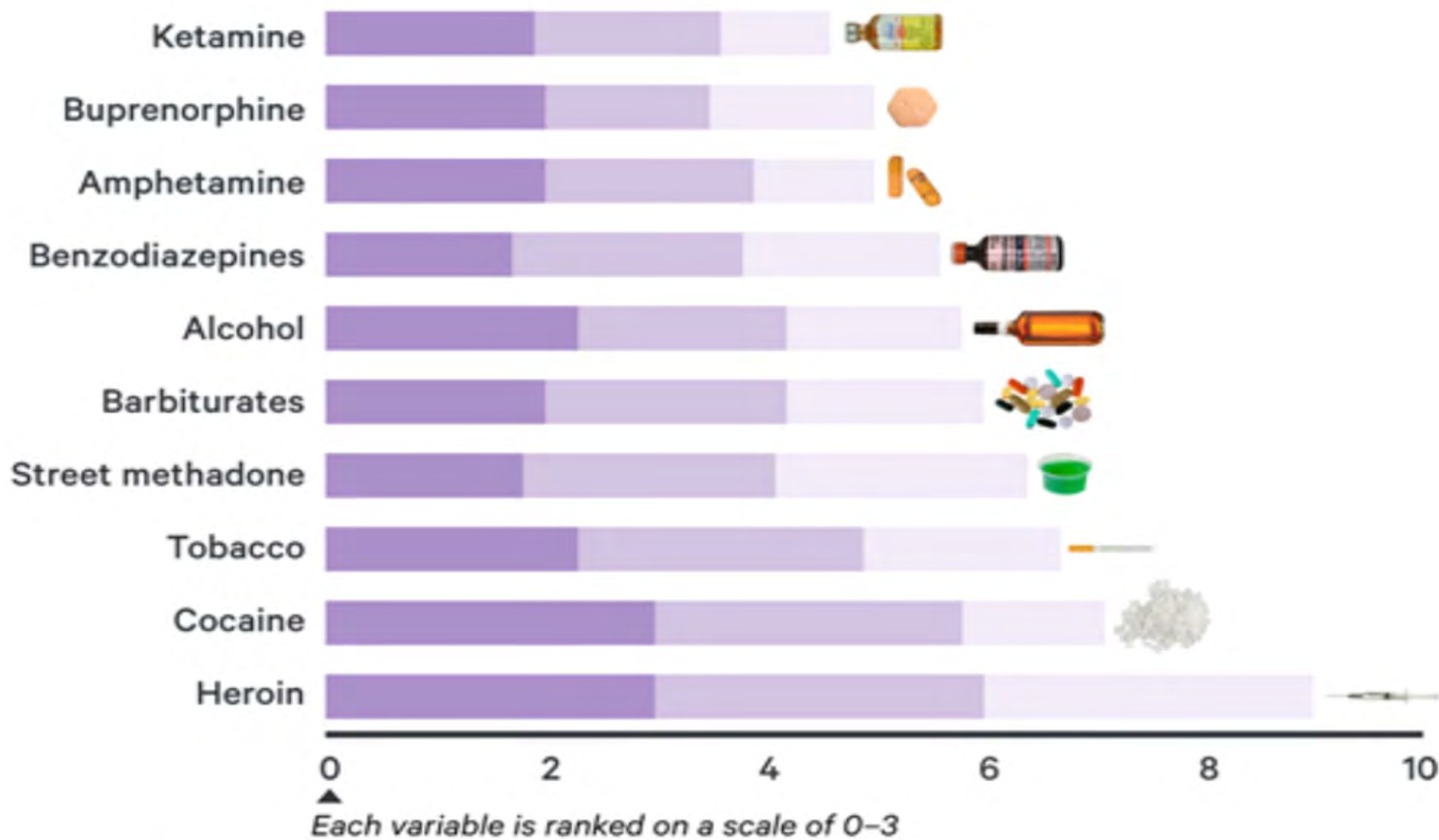
Always Something New





The 10 most addictive drugs

Pleasure Psychological dependence Physical dependence



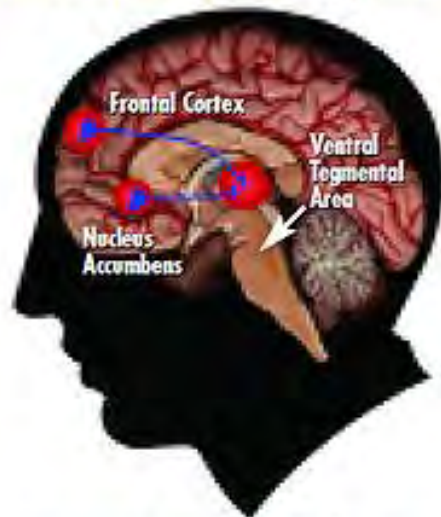


3 WEEKS

Addicted
Hyperalgesia
Genes?

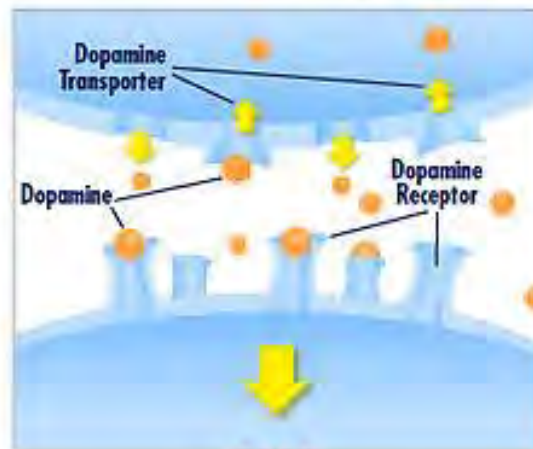
DRUGS OF ABUSE TARGET THE BRAIN'S PLEASURE CENTER

Brain reward (dopamine) pathways



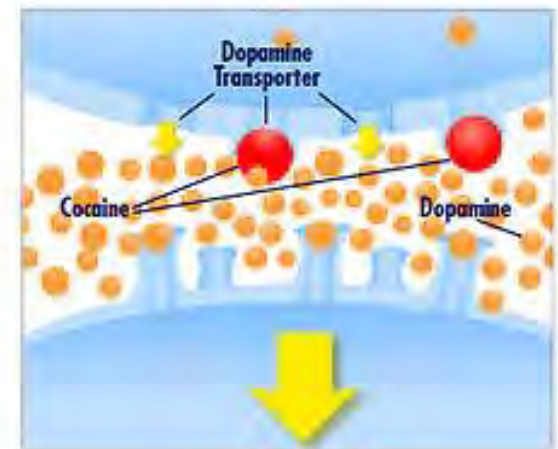
These brain circuits are important for natural rewards such as food, music, and sex.

Drugs of abuse increase dopamine



FOOD

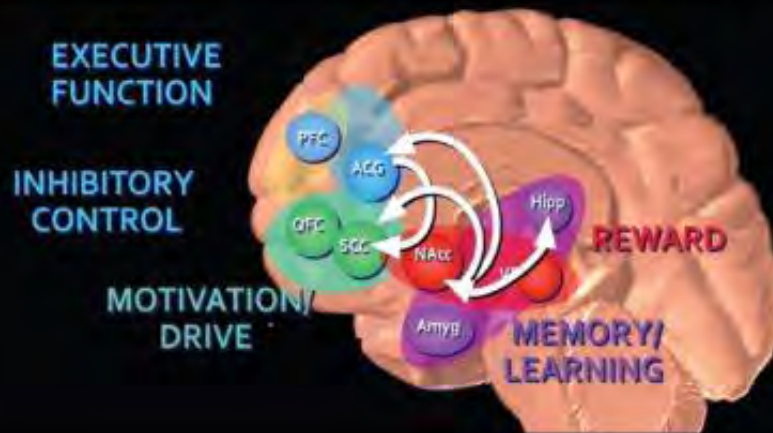
Typically, dopamine increases in response to natural rewards such as food. When cocaine is taken, dopamine increases are exaggerated, and communication is altered.



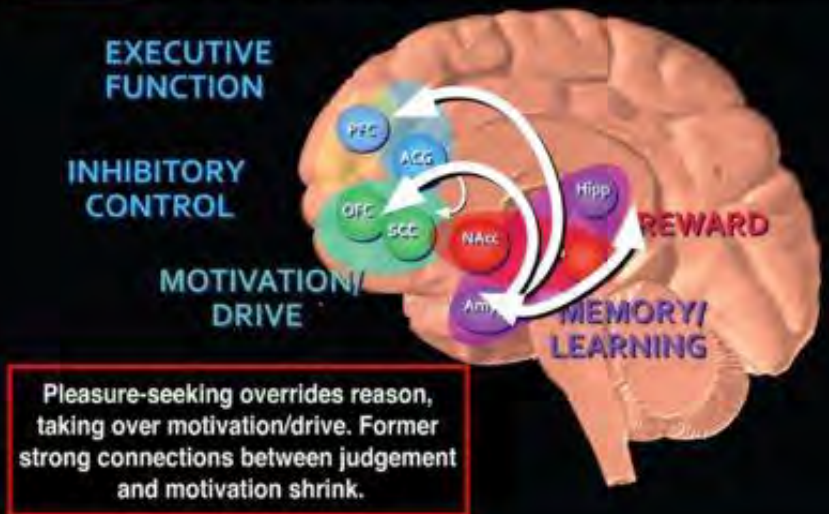
COCAINE



BEFORE substance use/addiction



AFTER substance use/addiction



Withdrawal and Remission?



3 days

3 months

3 years

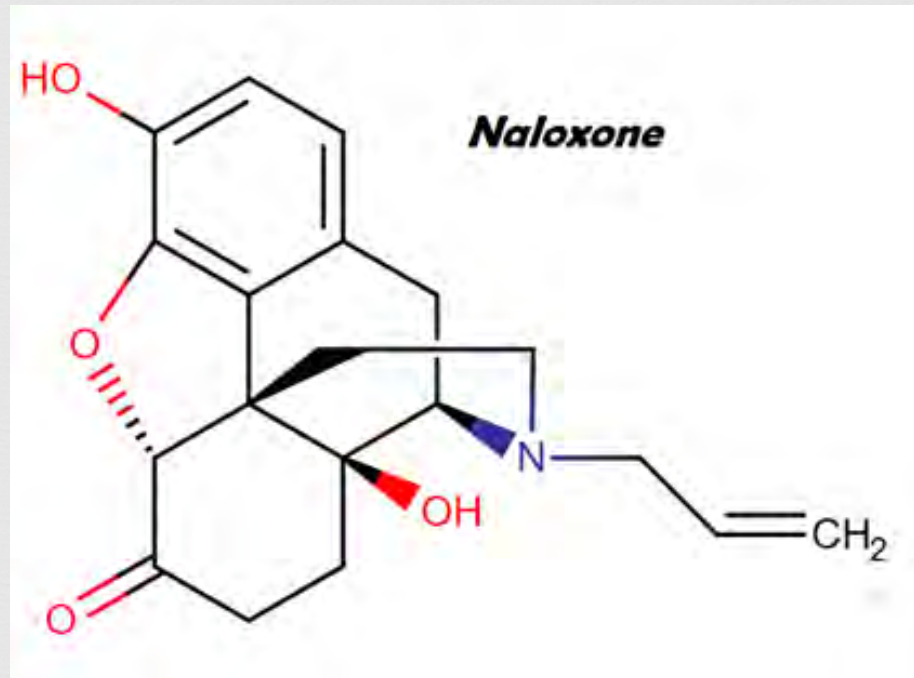


WHY?



- ❧ Decreasing Overdoses
- ❧ Not decreasing deaths nearly as much

Naloxone (Narcan)



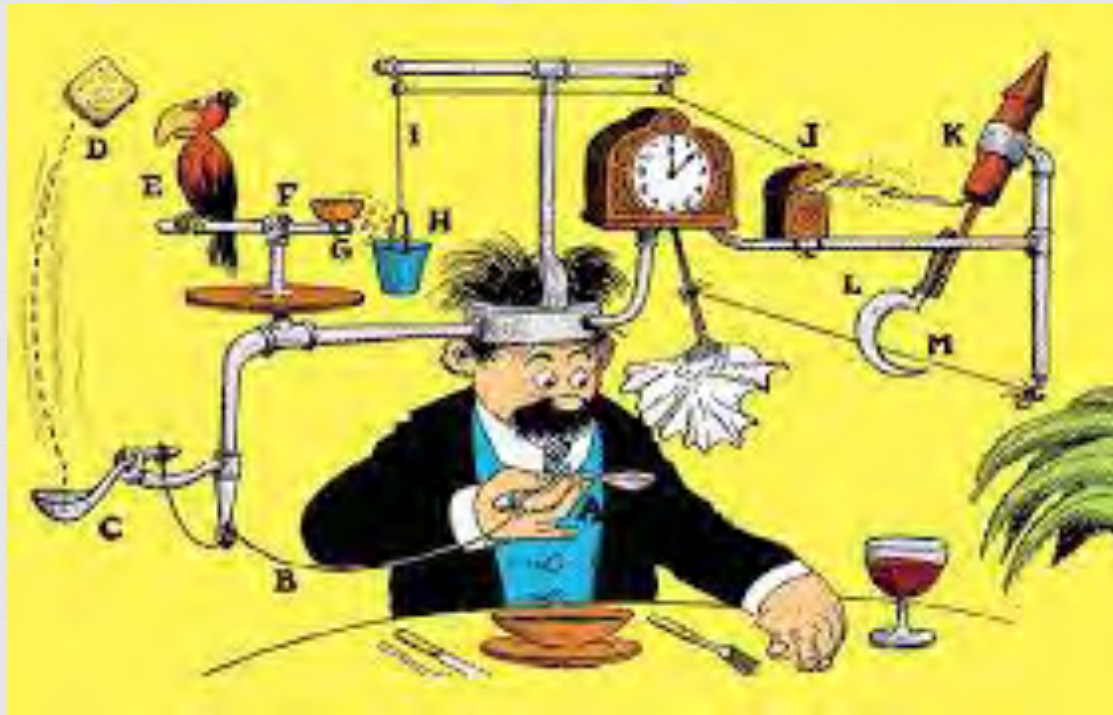
RC Doses of Narcan in 2018



> 1000

> 2000 in 2017

Starts the Process of HOPE





30

Richland County Opiate Board



Local Help, Local Hope★

Overdoses ARE Preventable.

2-1-1



547 Overdoses 49 Deaths
2016 Richland Co.

*Get Connected,
Get Answers.*



Richland County Opiate Board

Opiate Response Team



- ❧ Twice a week
- ❧ Not if active warrant
- ❧ Law Enforcement / CHW / Treatment Specialist
- ❧ Now initiated in Mansfield and Ontario Emergency Departments
- ❧ Not just the person that ODeD

252 Responses

3/1/2017 to 2/28/2019



**Contact was made with 143 individuals (55%)
108 of the individuals contacted or (76%)
entered treatment**

- ❧ **Shelby had 21 responses with 12 (57.14%) resulted in contact and 9 (75%) of those contacted entered treatment**
- ❧ **Mansfield had 223 with 120 (54%) resulted in Contact and 93 (78%) of those contacted entered treatment.**
- ❧ **Richland County Sheriff had 16 responses with 11 (68.75%) resulted in Contact and 6 (54.55%) of those contacted entered treatment.**

*treatment data is tracked through billable services, which can run 6-8 weeks delayed.

Contact was also made with



- ❧ 65 *Targeted* individuals resulting in 38 entering treatment.
- ❧ 40 *Family* members resulting in 17 entering treatment.
- ❧ 39 *Other supports* resulting in 21 entering treatment.
- ❧ And 35 people who had *information left* at their residence entered treatment.

*treatment data is tracked through billable services, which can run 6-8 weeks delayed.

Treatment Outcomes



- ❧ 56 have reach 30 days
- ❧ 35 have reach 60 days
- ❧ 32 have reach 90 days
- ❧ 22 have reach 120 days

*treatment data is tracked through billable services, which can run 6-8 weeks delayed.

How Many RC Residents are getting Addiction Treatment?



- ✧ Number of people receiving treatment in Richland County for an **Opiate Use Disorder** in SFY 2018

2,832

- ✧ Number of People receiving treatment in Richland County for a **Substance Use Disorder** in SFY 2018

4,627



BEGINNINGS WITHDRAWAL MANAGEMENT CENTER



NEW BEGINNINGS PHASE II

Road to Recovery is not Smooth and Straight



7

That's a lot of GRACE!!

Outpatient Medically Assisted Treatment

MAT components

Supportive Meds



❧ Acute withdrawal

- ❧ Anti-emetics
- ❧ Stomach cramps / spasms
- ❧ Muscle cramps
- ❧ Insomnia

❧ Long Term

- ❧ Antidepressants
- ❧ Cravings - tailor for drug(s) of choice
- ❧ * Gabapentin/Neurontin
- ❧ * Loperamide

Address Medical Issues



16/88 for active Hepatitis C

Buprenorphine



- ❧ An Opiate
- ❧ Subutex (buprenorphine)
- ❧ Suboxone (Buprenorphine + naloxone)
- ❧ **Mu Receptor Activation%**
 - ❧ Fentanyl 90%
 - ❧ Hydromorphone 80%
 - ❧ Morphine 75%
 - ❧ Buprenorphine 50%
- ❧ **Mu Binding Strength**
 - ❧ Naltrexone > Buprenorphine > Fentanyl > Hydromorphone > Morphine

Naltexone



∞ Oral up to 24 hours

∞ Vivitrol (30 day IM shot)

6 Months Clean



80 % Vivitrol

40% Suboxone

2% On Own



?



**At What Age Does
the Brain Usually
Stop Developing?**

25



❧ **Drinking Alcohol by age 14 – 15.2% at age 25**

After age 21 – 2.1 % at age 25

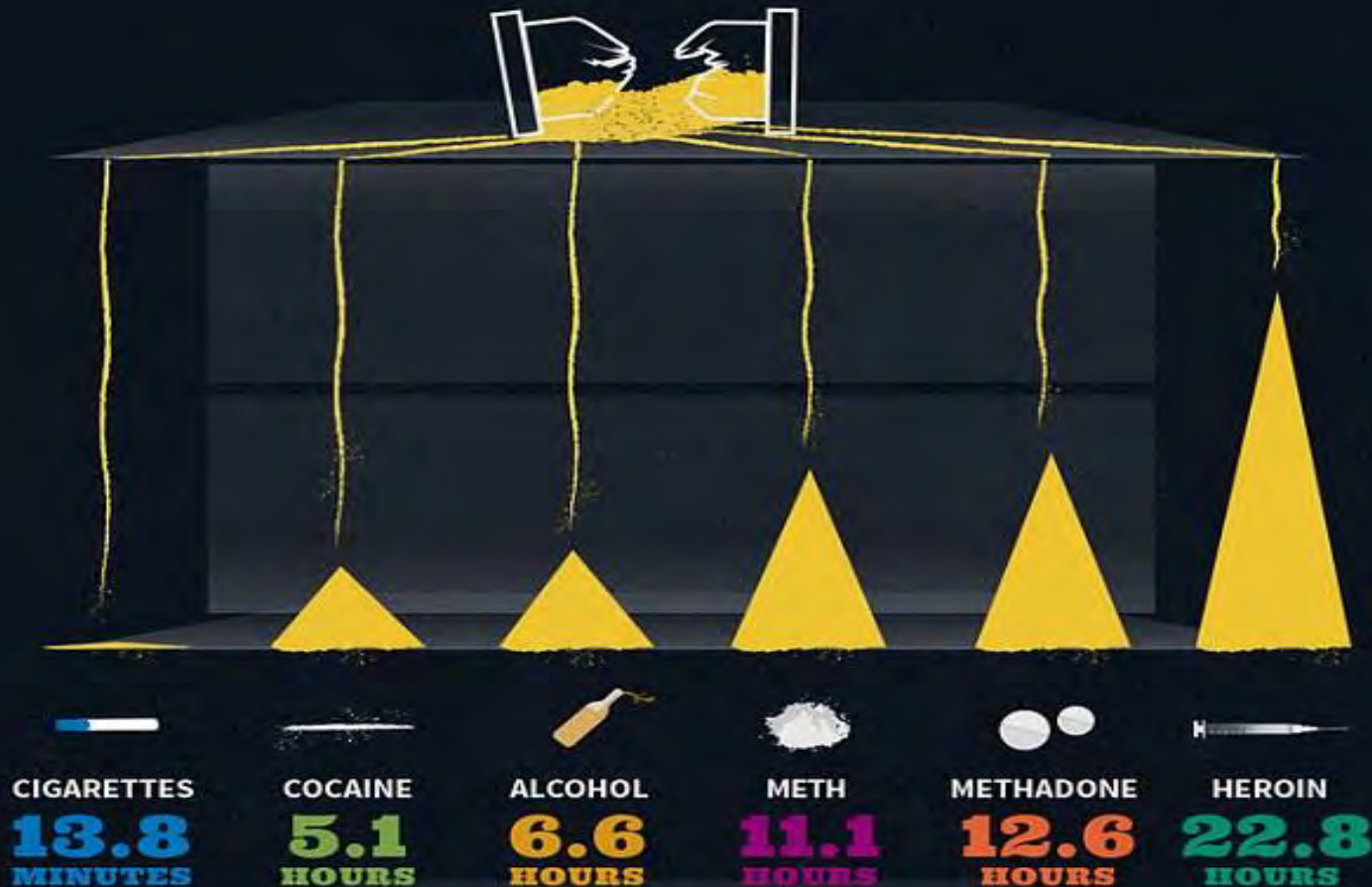
❧ **Marijuana by age 14 – 38% at age 25**

After age 21 – 5.4% at age 25

❧ **Heroin by age 14 – 71% at age 25**

After age 21 - 2% at age 25

HOW MUCH TIME DOES A LIFELONG ADDICT LOSE EACH TIME THEY USE?



The total time lost for each individual use is heavily dependent on how many times the average daily dose is segmented. For example, the daily dose of cocaine is segmented by 6.6 (lines), while the daily dose of alcohol is segmented by 2.14 (drinks).

CHRONIC USER OF CIGARETTES

LIFE LOST

13%



AVERAGE AGE TO BEGIN REGULAR USE



17.8

NUMBER OF DOSES PER DAY



One Pack
(20 CIGARETTES)

AVERAGE AGE OF DEATH



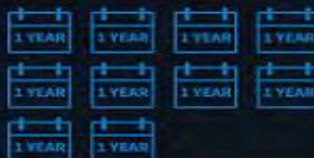
68.7

NUMBER OF YEARS USING



50.9

YEARS LOST



10

1 HOUR



=



**ONE CIGARETTE COULD
COST A CHRONIC SMOKER
13.8 MINUTES
OF HIS OR
HER LIFE.**



12 HRS.

*The normal dosage per day (1 pack of cigarettes) could cost a chronic smoker **4.6 HOURS** OF HIS OR HER LIFE.*

CHRONIC USER OF ALCOHOL

♥
LIFE LOST

29%



AVERAGE AGE
TO BEGIN
REGULAR USE



16

NUMBER OF
DOSES PER DAY



2.14
(DRINKS)

AVERAGE
AGE OF DEATH



55.6

NUMBER OF
YEARS USING



39.6

YEARS LOST



12 HRS.



ONE DRINK COULD COST A
CHRONIC DRINKER

6.6 HOURS OF
HIS OR HER
LIFE.



12 HRS.



12 HRS.

The normal dosage per
day (2.14 drinks) could
cost a chronic drinker
**14.1 HOURS OF
HIS OR HER LIFE.**

*CDC defines a heavy drinker (male)
as someone who consumes 15 or
more drinks in a week.

CHRONIC USER OF COCAINE

LIFE LOST

44%



AVERAGE AGE TO BEGIN REGULAR USE



20

NUMBER OF DOSES PER DAY



6.6 LINES
(1 gram, 6.6 lines,
around 150 mg each)

AVERAGE AGE OF DEATH



44.5

NUMBER OF YEARS USING



24.5

YEARS LOST



34.3

12 HRS.

=



ONE LINE COULD COST A CHRONIC COCAINE USER 5.1 HOURS OF HIS OR HER LIFE.

USERS OFTEN DO MORE THAN ONE LINE PER SITTING.

24 HRS.



The normal dosage per day (6.6 lines) could cost a chronic cocaine user **33.7 HOURS OF HIS OR HER LIFE.**

**Social-recreational users typically use much less than regular users. Regular users can consume 1-2 grams of cocaine per day as tolerance builds.*

12 HRS.



CHRONIC USER OF HEROIN

LIFE LOST



52%



AVERAGE AGE TO BEGIN REGULAR USE



23

NUMBER OF DOSES PER DAY



3

AVERAGE AGE OF DEATH



37.5

NUMBER OF YEARS USING



14.5

YEARS LOST



41.2

24 HRS.



=



**SHOOTING UP ONE TIME
COULD COST A CHRONIC
HEROIN USER**

**22.8 HOURS
OF HIS OR
HER LIFE.**



24 HRS.



24 HRS.



12 HRS.



12 HRS.

*The normal dosage per day
(3 injections) could cost a
chronic heroin user
**68.4 HOURS OF HIS
OR HER LIFE.***

CHRONIC USER OF METHAMPHETAMINE

LIFE LOST



53%



AVERAGE AGE TO BEGIN REGULAR USE



19.7

NUMBER OF DOSES PER DAY



5.3
HITS

AVERAGE AGE OF DEATH



36.8

NUMBER OF YEARS USING



17.10

YEARS LOST



41.9

12 HRS.



=



ONE HIT COULD COST A
CHRONIC METH USER
**11.1 HOURS OF
HIS OR HER
LIFE.**



24 HRS.



24 HRS.



12 HRS.

The normal dosage per day
(5.3 hits) could cost a
chronic meth user
**58.8 HOURS OF HIS
OR HER LIFE.**

Pilots 24 hours after smoking one joint

- ✧ Difficulty in aligning with and landing on runway
- ✧ Increased vertical & lateral deviation from required flight path
- ✧ Lateral deviation on approach to land twice pre-marijuana test
- ✧ Significant increase in distance from center of runway on touchdown
- ✧ One pilot landed off the runway entirely
- ✧ Pilots not aware of any impairment

Yesavage JA, Leirer VO, Denari M, Hollister LE. Carry-over effects of marihuana intoxication on aircraft pilot performance: a preliminary report. Am J Psychiatry 1985; 142:1325-9.

How to Lose Video Games and Increase Chance of Heart Attack



Half (1960s) vs Full Marijuana Cigarette / Vape

❧ Heart Rate

Smoked - up 10/20

Vaped - up 20/25

❧ Reaction Time

Smoked Increased 150% / 170%

Vaped Increased 350% / 500%

❧ Effects lasted 6 to 8 hours while blood levels 3 to 4 hrs

Spindle TR, Cone EJ, Schlienz NJ, et al. Acute Effects of Smoked and Vaporized Cannabis in Healthy Adults Who Infrequently Use Cannabis A Crossover Trial. JAMA Netw Open. 2018;1(7):e184841.
doi:10.1001/jamanetworkopen.2018.4841



Substance Abuse Disorder 6 times
more likely to commit suicide



6

Teens using THC 3-6 times increased
risk of **Schizophrenia** as adult



3 to 7

Richland County Suicides



☞ 2017 – 22 confirmed deaths from suicide
(17 in 2016)

☞ 2 by overdose

☞ Ages 19 to 83

☞ 2 females

☞ 2018 – 26 to 27 – 12 substance abuse

☞ 5 females

First Responders



SINCE 2017

**MORE FIRST RESPONDERS
HAVE DIED FROM SUICIDE
THAN IN THE LINE OF DUTY**

First Responder EAP

CATALYST
— LIFE SERVICES —

After The Call
Counseling Services for Public Safety Personnel



THERE IS HELP TO ADDRESS MENTAL HEALTH CONCERNS

The nature of emergency service work exposes first responders to increased levels of trauma, in addition to everyday personal and occupational stressors. Post-traumatic stress disorder is common in people with careers where they are continually exposed to traumatic events including police officers, emergency personnel, 911 dispatchers, and firefighters.

Our confidential counseling services, provided by a peer with over 25 years of experience in public safety, are designed for public safety providers.

Counseling is held in the Rehab building to help assure anonymity.

Contact Catalyst at 419-522-4357 (HELP)

When calling be sure to let them know that you are a public safety provider and they will connect you with Angie Hoptry

Providers may be referred by Dr. Bocka as well.

Sessions are by appointment only.

How do I get an Addict
to want to change



Success Tips



- ❧ Don't give up – please help support me (**GRACE**)
- ❧ Demand **honesty**. Don't be afraid to call me out on relapses and discuss triggers and temptations and develop back up plans to back up plans
- ❧ Don't give me cash
- ❧ Keep me **busy** (**Think on these things**)
- ❧ Don't let me be **alone**
- ❧ Help me get, set, and achieve **goals**
- ❧ **Get rid** of old drugs, paraphernalia, contacts
- ❧ Help me **get in** with **groups** and get a **sponsor**
- ❧ **Exercise** (get those natural endorphins going-walk?)

http://OpiateAddictionRichlandCounty.com



In crisis?
Call 419-522-HELP(4357)

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Local Help – Local Hope

[I Need Help.](#)


[Someone I Know Needs Help.](#)

[My Employee Needs Help.](#)

http://OpiateAddictionRichlandCounty.com

Richland County Opiate x

https://opiateaddictionrichlandcounty.com/



Three Ways You Can Make A Difference

Talk to Your Kids

It's important to talk to your kids about prescription safety and to safeguard your medicines.

Find Alternatives for Pain

Discuss alternate ways to manage your pain that don't involve prescription opioids with your doctor.


Properly Dispose of Medications

Disposing of unused, unwanted medications leads to the reduction of misuse and availability of prescription drugs.

Request A FREE Recovery Resource Packet

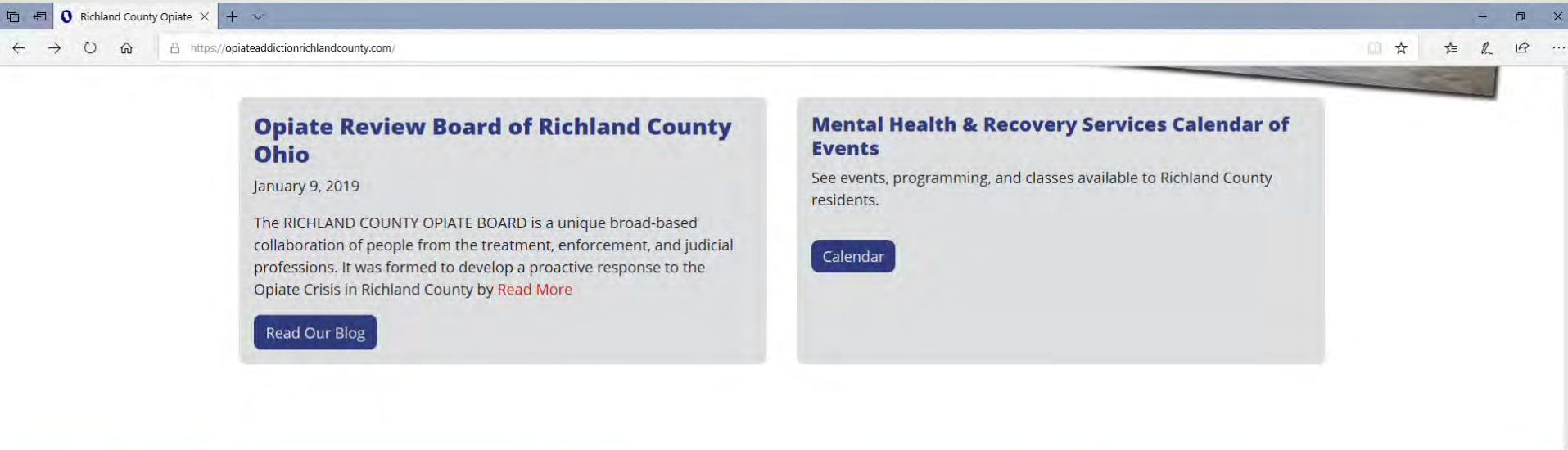
Name *

Email *

☐ I'm not a robot 



http://OpiateAddictionRichlandCounty.com



In crisis?
Call [419-522-4357](tel:419-522-4357)

Name *

Email *

Comments

☐

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Send

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So What Can We Do?



- ❧ Get Speakers/facts
- ❧ Narcan Training
 - Narcan Training: A Survivor & Rescuer's Approach
 - Tuesday June 25th 2019 Main Library 5pm to 6pm
- ❧ Encourage foster care training
- ❧ Help **grandparents** and others suddenly with kids
- ❧ **Pray** for **all** involved (First Responders, EDs, chaplains)
- ❧ Help support **group** meetings (especially transport / time off)
- ❧ CACY and Mid Ohio Youth **Mentoring kids** hang out with now **greatly effects where they will be in 5 years**
- ❧ May need to provide **safe home** (?from other areas)
- ❧ Supportive jobs
- ❧ Provide **FAMILY**
- ❧ **Every person is different**



BOCKAJ@TSFHS.ORG

