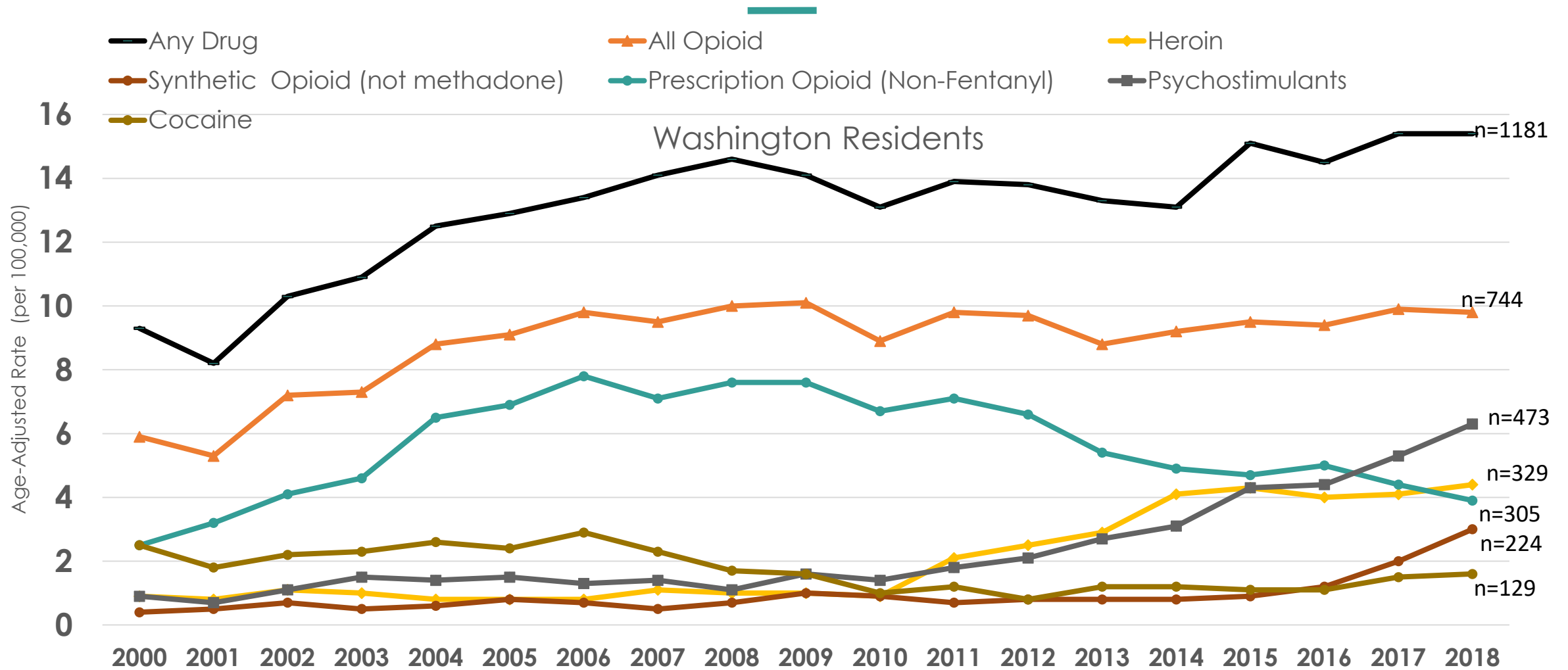


# Updates to Overdoses in WA State

Recent updates with 2019 and 2020 preliminary data

WA DOH – IVP/S&E  
ORWG Meeting 24Sept2020

# Overdose Death Rate by Drug Type (2000-2018)



## Confirmed Washington State overdose deaths

Data last updated on 2020-09-22 11:59:34

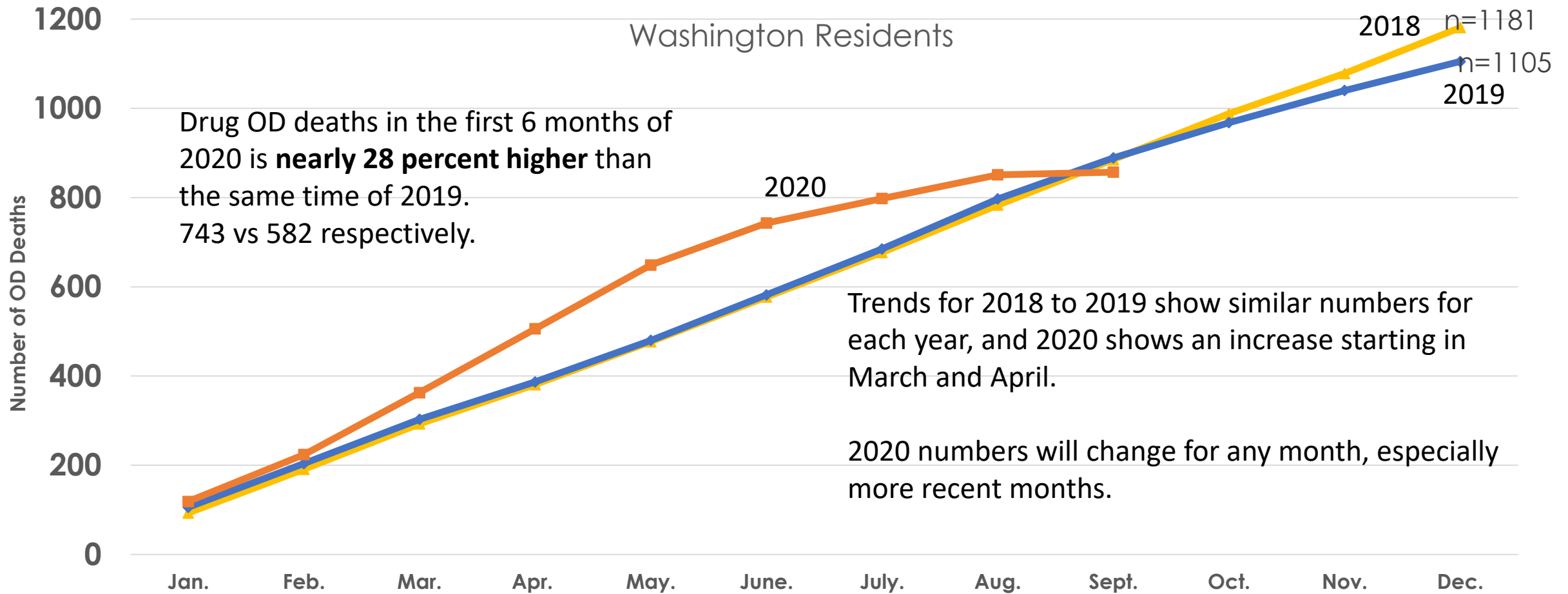
Drug Type	2020	2019	2018	2017
Any Drug	<b>857</b>	1105	1181	1163
Any Opioid	<b>578</b>	720	744	739
Cocaine	<b>118</b>	120	129	111
Fentanyl	<b>321</b>	279	198	120
Heroin	<b>180</b>	304	329	306
Methadone	<b>49</b>	68	96	119
Methamphetamine	<b>345</b>	501	486	391
Natural Semi Synth	<b>114</b>	174	218	249
Psycho Stimulant	<b>331</b>	478	473	390
Rx Opioid Non Fentanyl	<b>154</b>	233	305	342
Synth Not Methadone	<b>328</b>	288	224	142

2019 data is not yet finalized and could change.

2020 data will change.

Data is as of 22Sept2020.

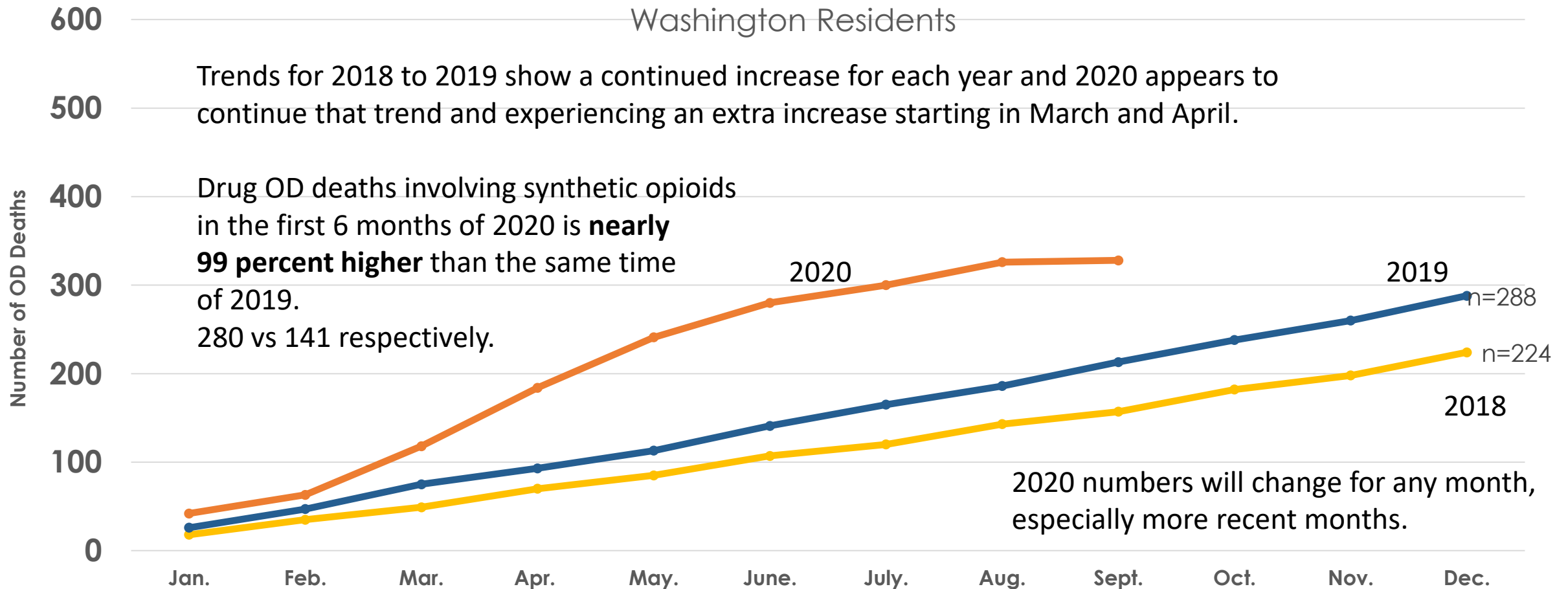
# Annual cumulative overall drug overdose deaths by month (2018-2020\*)



- 2019 & 2020 data not finalized.
- Data run: 22Sept2020

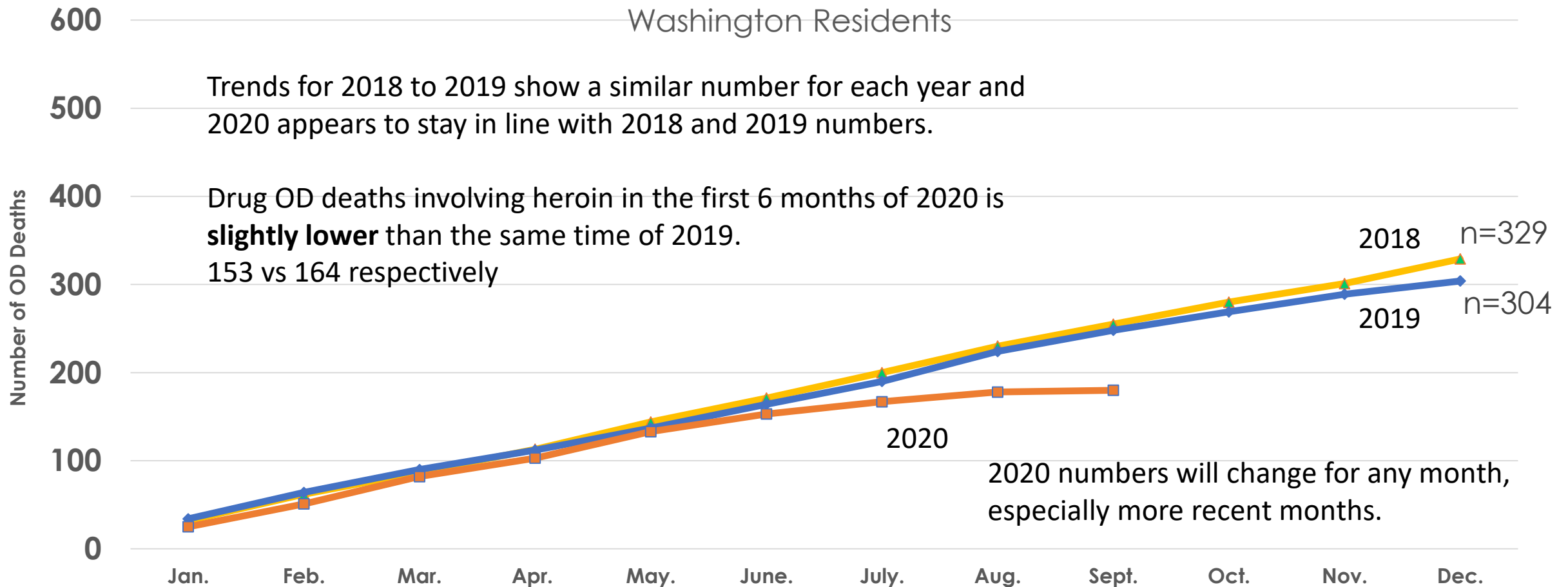


# Annual cumulative drug overdose deaths involving synthetic opioids by month (2018-2020\*)



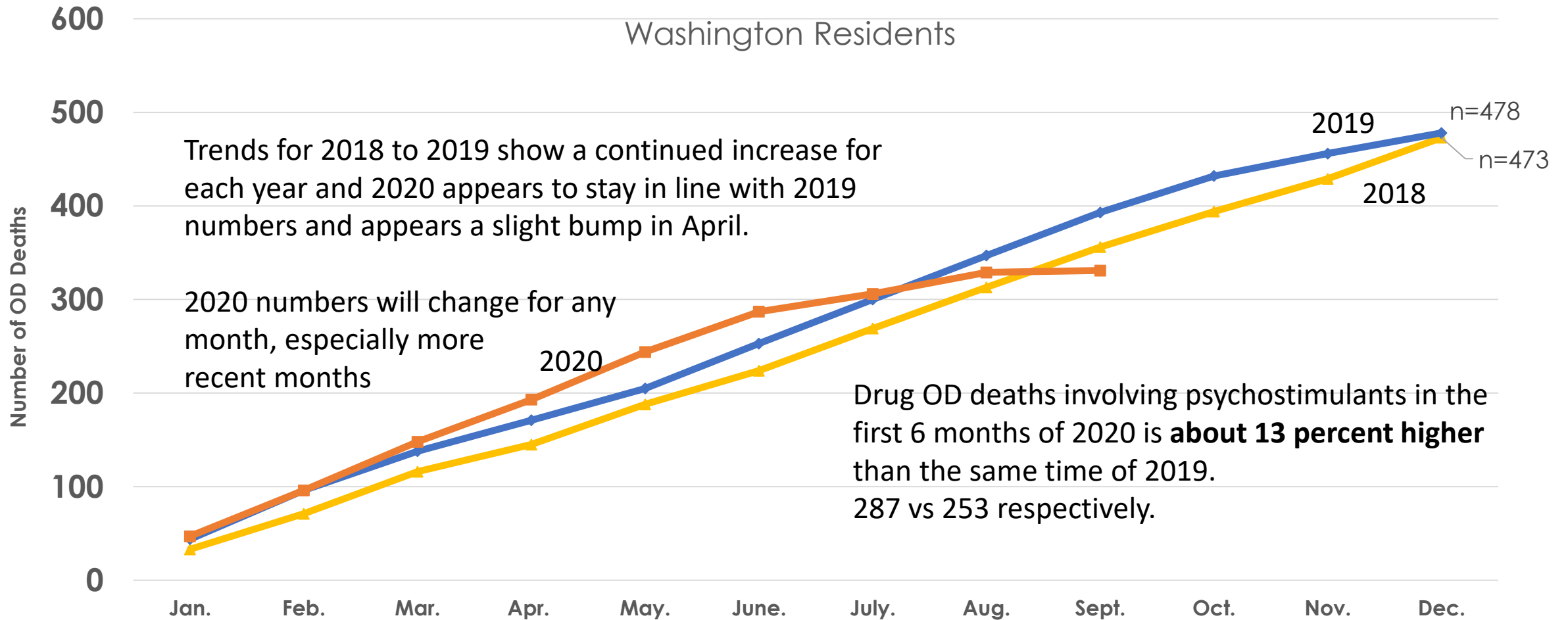
- 2019 & 2020 data not finalized.
- Data run: 22Sept2020

# Annual cumulative drug overdose deaths involving heroin by month (2018-2020\*)



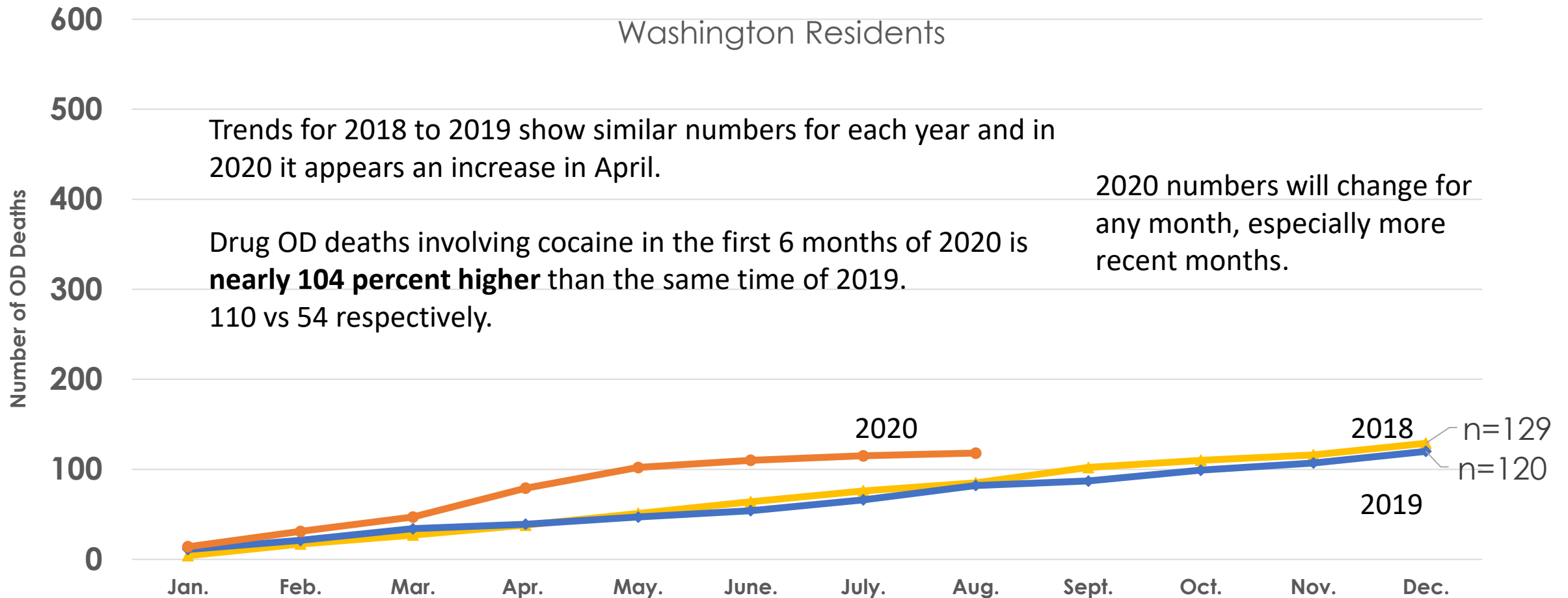
- 2019 & 2020 data not finalized.
- Data run: 22Sept2020

# Annual cumulative drug overdose deaths involving psychostimulants by month (2018-2020\*)



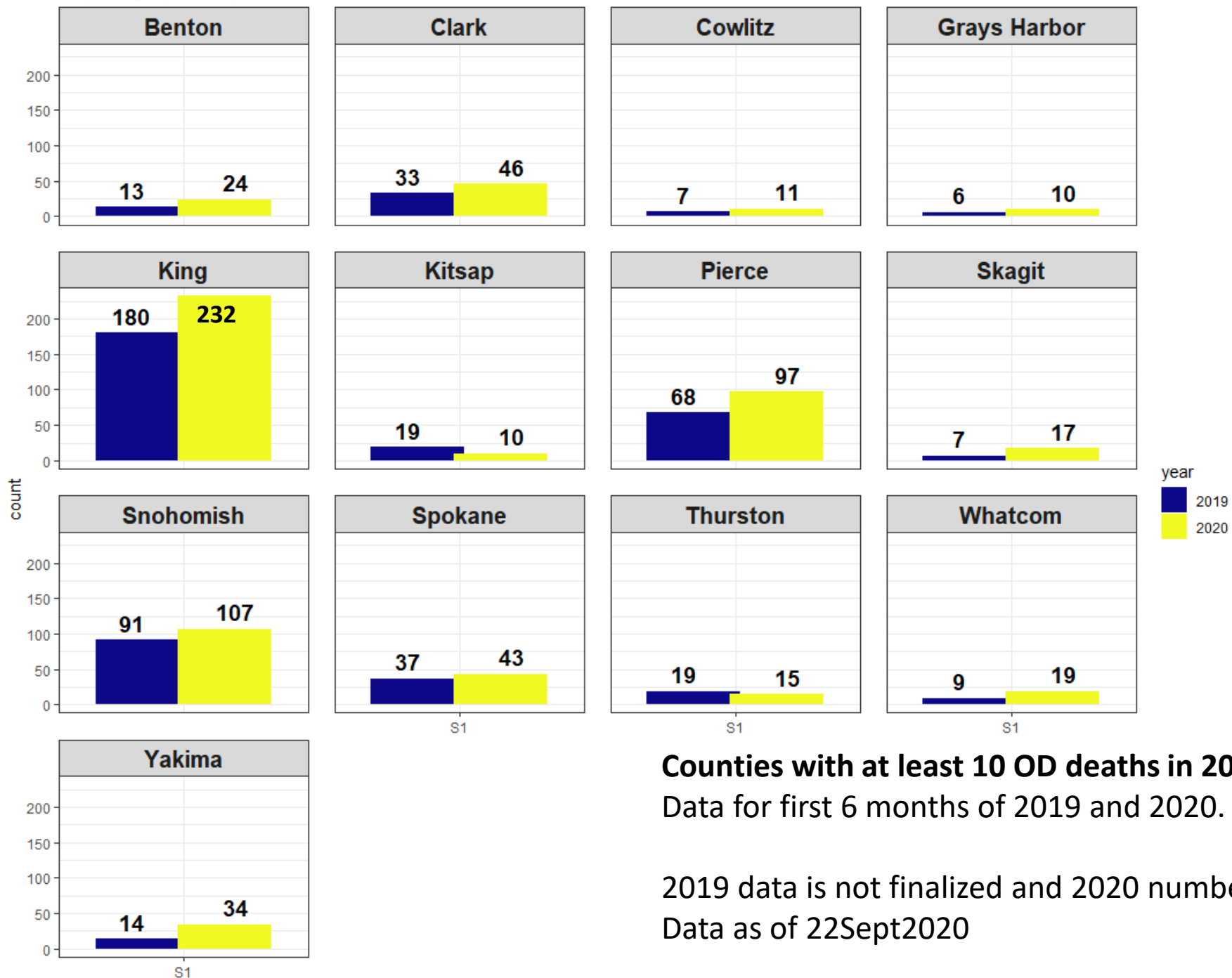
- 2019 & 2020 data not finalized.
- Data run: 22Sept2020

# Annual cumulative drug overdose deaths involving cocaine by month (2018-2020\*)



- 2019 & 2020 data not finalized.
- Data run: 22Sept2020

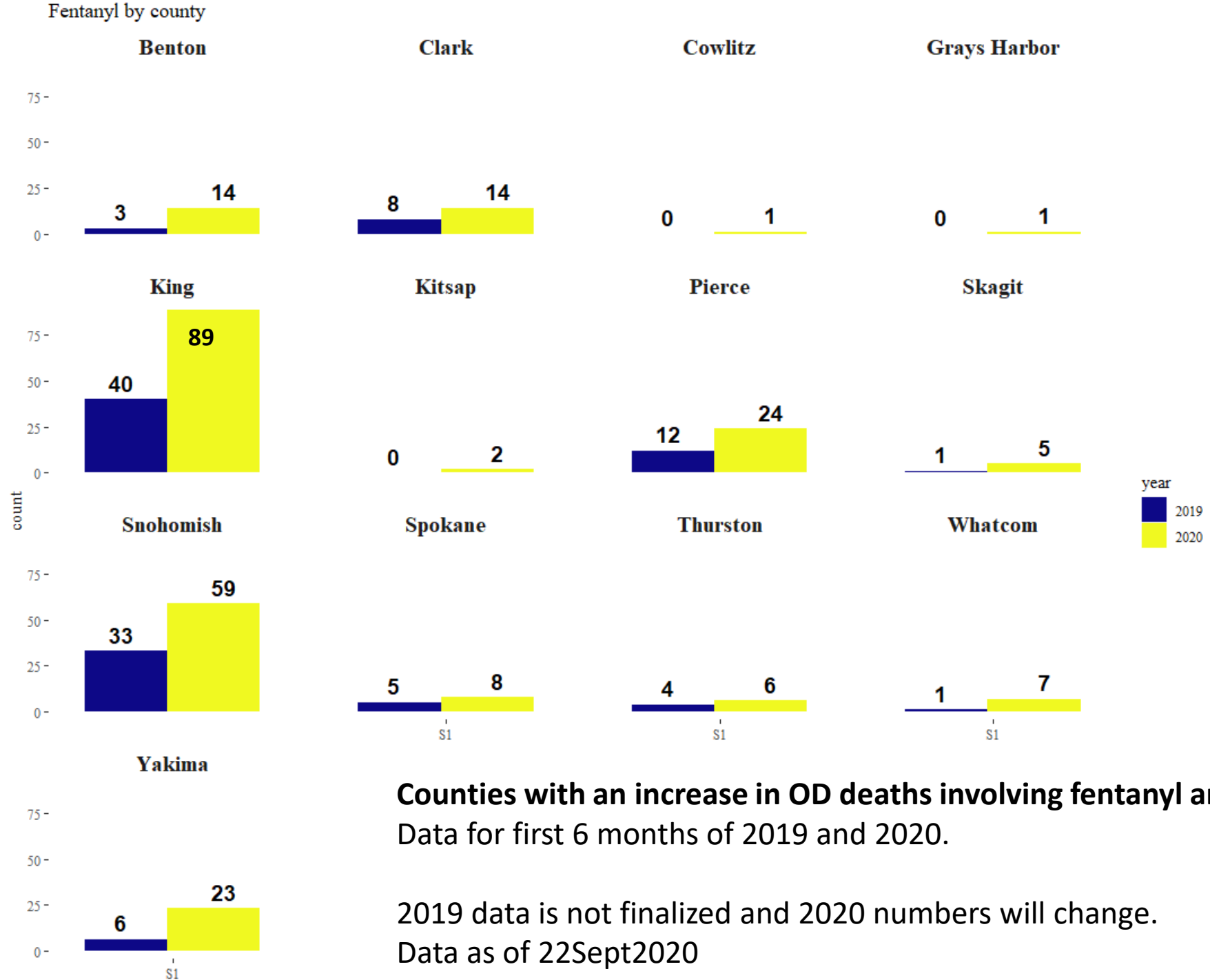
Any Drug by county



**Counties with at least 10 OD deaths in 2020**

Data for first 6 months of 2019 and 2020.

2019 data is not finalized and 2020 numbers will change.  
Data as of 22Sept2020



**Counties with an increase in OD deaths involving fentanyl and analogs**  
 Data for first 6 months of 2019 and 2020.

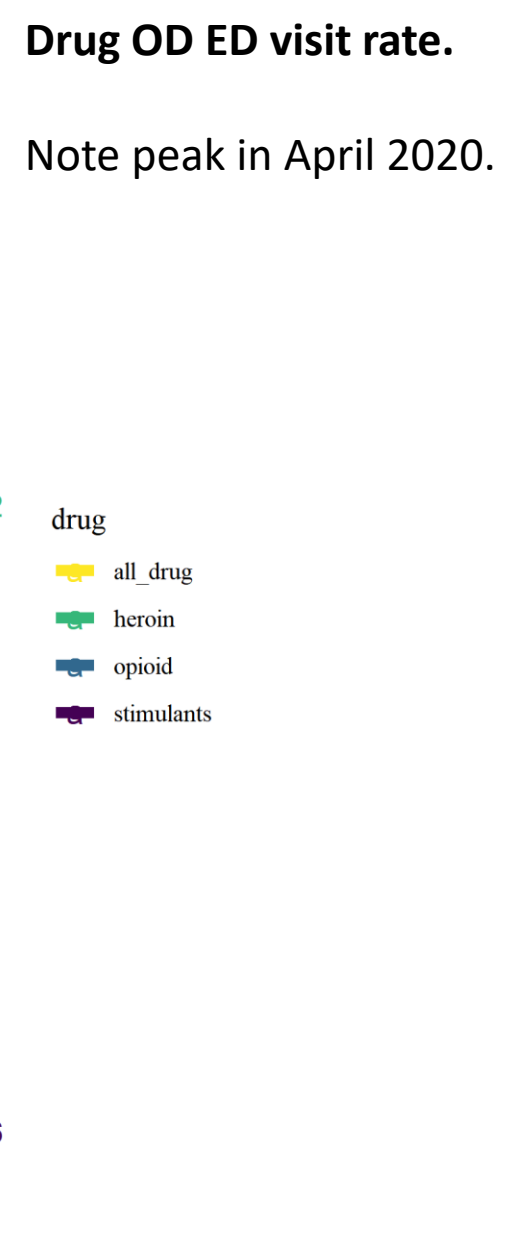
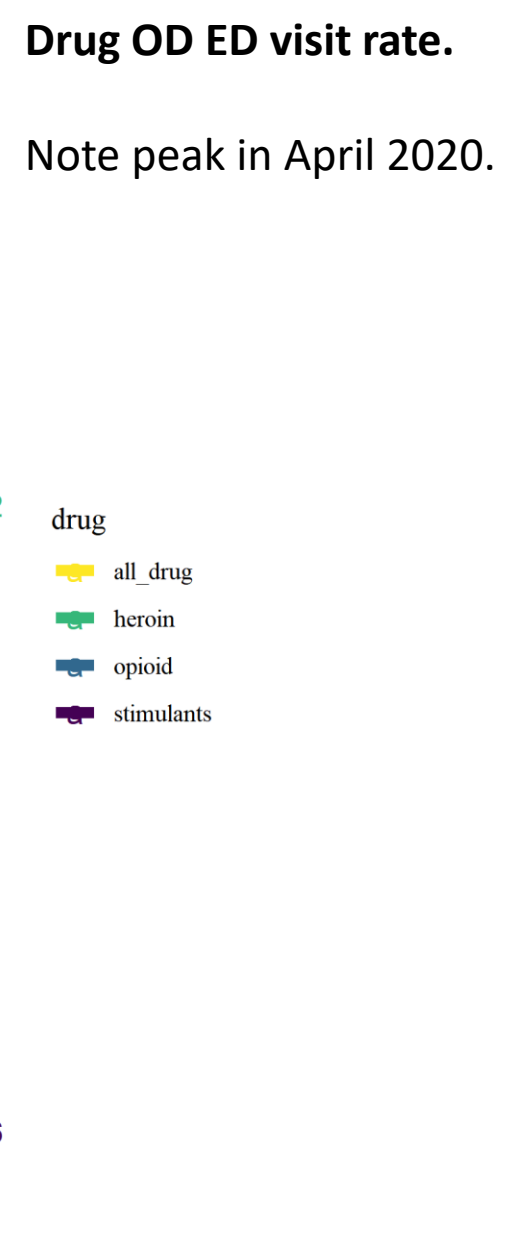
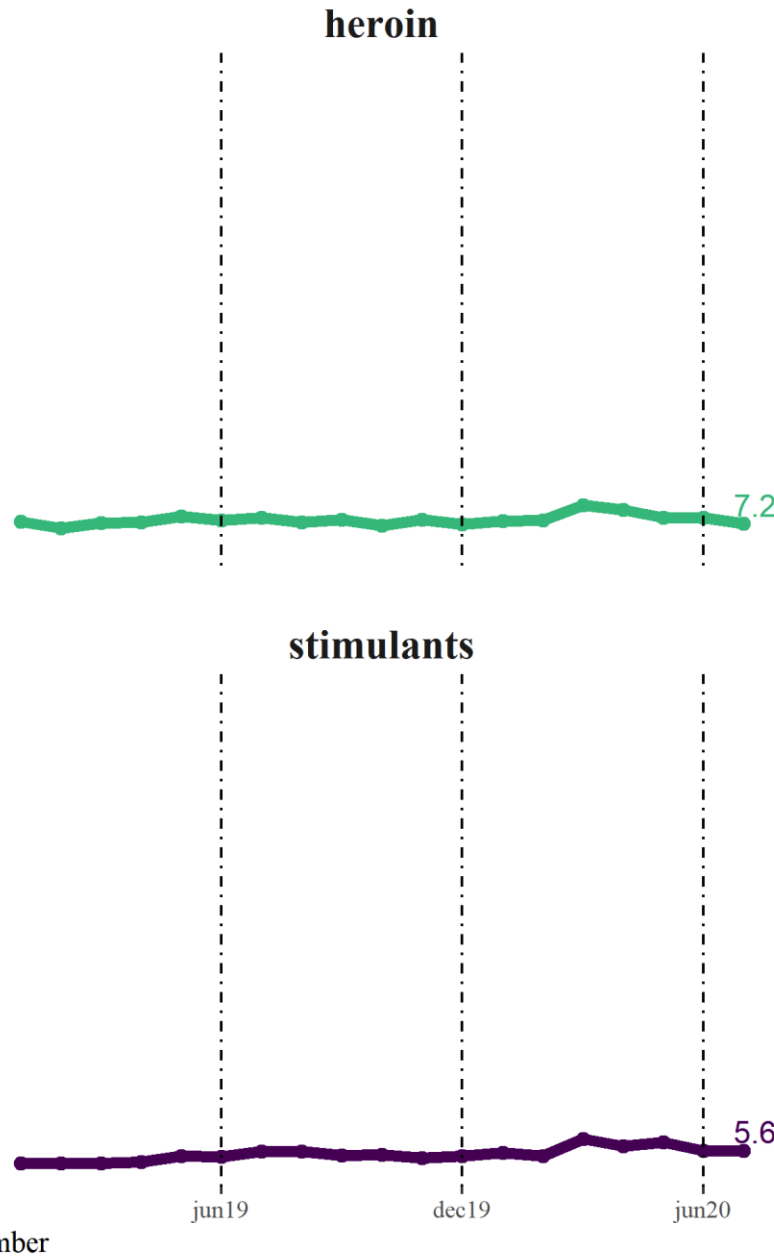
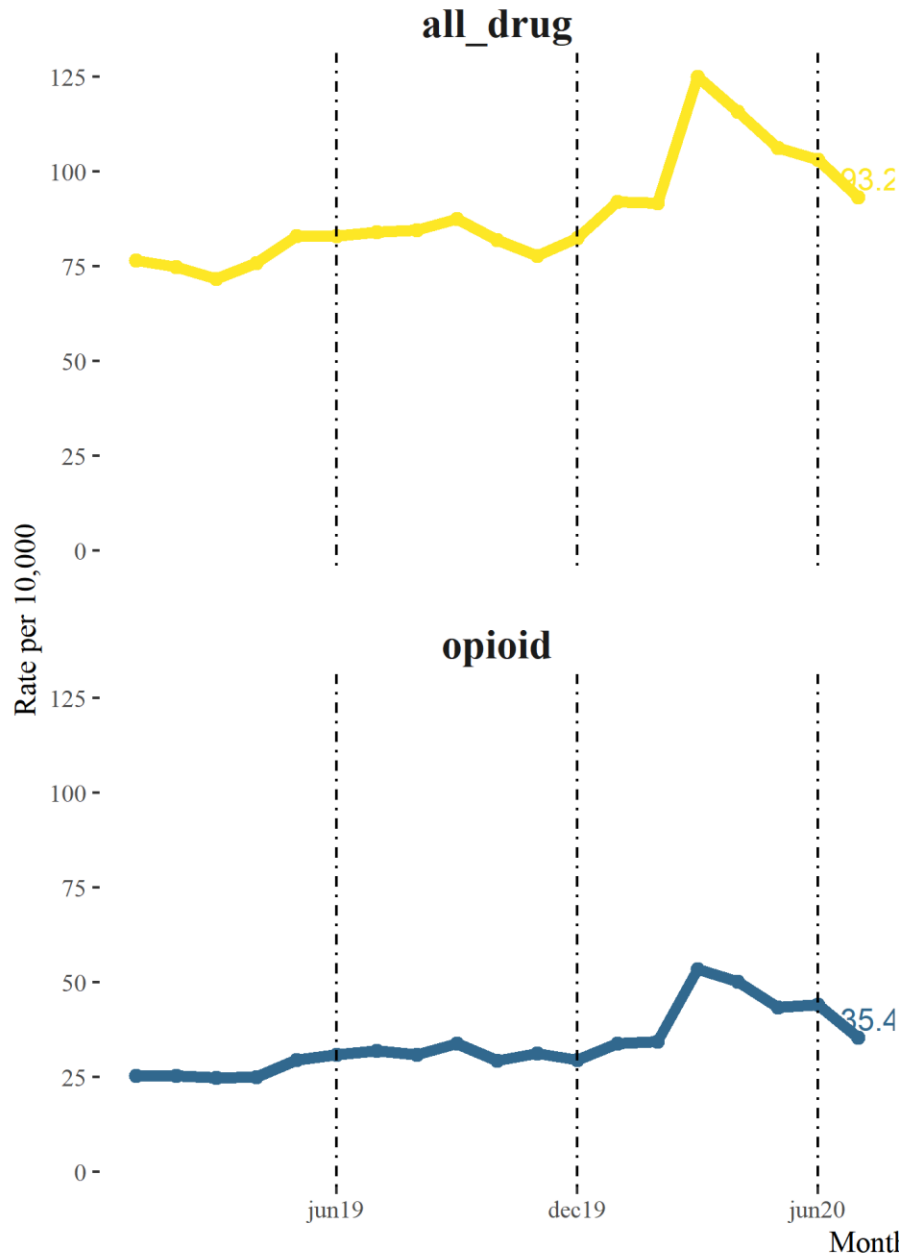
2019 data is not finalized and 2020 numbers will change.  
 Data as of 22Sept2020

# Overdose ED visits

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- **ED Visits**
- The data are from NSSP ESSENCE and updated daily. They are based on syndromic definition, a mix of keywords and codes from the chief complaint and diagnosis at discharge. They may not provide accurate count, but they are helpful for tracking trends. 89% of the ED contributed to the data.
- **ED data is based on CDC Syndromic definition**
- Use both Chief Complaint and Discharge diagnosis

Drug OD ED Rate  
From January 2019 to August 2020



**Drug OD ED visit rate.**  
Note peak in April 2020.

- drug
- all\_drug
  - heroin
  - opioid
  - stimulants



# Overdose hospitalizations

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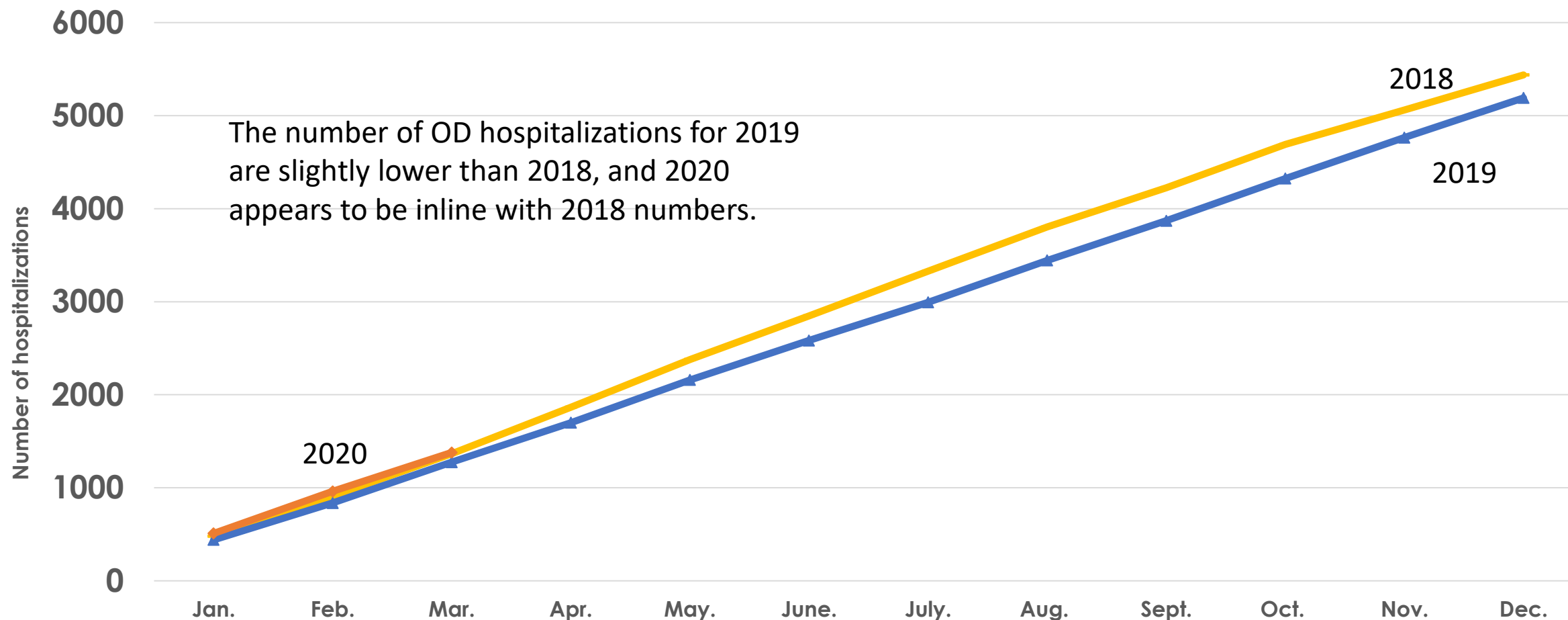
- The hospital discharge data are from CHARS
  - Comprehensive Hospital Abstract Reporting System (CHARS).
- The definition of drug overdose is based on ICD-10-CM.
- The data are available quarterly. The latest being the first quarter of 2020.
- **Hospitalization Cumulative Trends**
  - Hospitalization counts for drug overdose in the first quarter of **2020** is going back to **2018** level that was higher than **2019**.

# Summary Overdose hospitalizations

---

- The cumulative number of overdose hospitalizations for 2019 are slightly lower than 2018, and 2020 appears to be inline with 2018 numbers.
- The monthly rates of overdose hospitalizations for 2018 and 2019 are pretty similar, 2020 rates appear to be a little higher, but trending downward.

# Annual cumulative drug overdose hospitalizations by month (2018-2020)



• Data run: 22July2020

# CAUSES OF DEATH AND SUBSTANCE-RELATED MORTALITY AFTER PRISON RELEASE IN WASHINGTON STATE: 2014-2019

Presentation for the Washington State Department of Corrections on September 24, 2020

Allyson O'Connor, MPH, Jeanne M. Sears, PhD, RN, and  
Deborah Fulton-Kehoe, PhD, MPH

University of Washington



SCHOOL OF PUBLIC HEALTH  
UNIVERSITY of WASHINGTON

# Research Objectives

- Examine current trends in overdose and other leading causes of death for individuals released from Washington State prisons
- Compare findings to those reported in similarly-designed studies of mortality after prison release in Washington State for early 2000's
- **Goal:** Provide updated mortality statistics to inform future efforts to reduce overdose deaths post-release

**BACKGROUND**

# Previous Research

- Substance abuse is very common among incarcerated people
  - >80% lifetime use (Chamberlain et al., 2019)
  - Drug use disorder is higher for newly incarcerated women than men (Fazel et al., 2017)
- Reduced physiologic opioid tolerance after abstaining from use while in prison may contribute to the high risk of overdose (Binswanger, 2013)

# Previous Research, cont.

**Release from Prison — A High Risk of Death for Former Inmates** (NEJM, Binswanger et al., 2007)

- 1999-2003
- High mortality rates , especially due to overdose
- 3.5 times higher all-cause mortality rate for those released from prison compared to the non-incarcerated Washington State population

**Mortality After Prison Release: Opioid Overdose and Other Causes of Death, Risk Factors, and Time Trends From 1999 to 2009** (Annals of Internal Medicine, Binswanger et al., 2013)

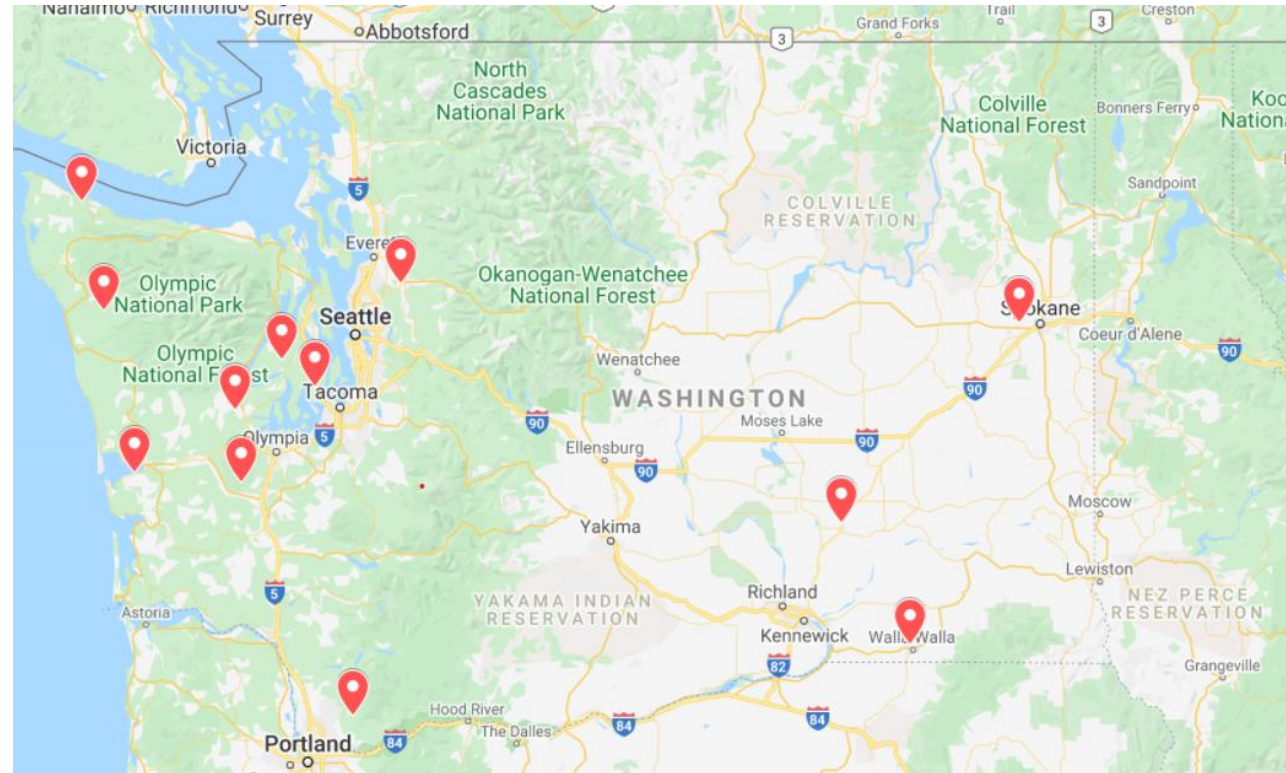
- Substance involved in overdose deaths changed to predominantly opioids



# Methods

# WA State Dept of Corrections (DOC)

- Prison system in Washington State
- DOC population in confinement: 19,361 (WADOC Fact Card, March 31, 2019)
- Demographics:
  - 92.1% male
  - 69.4% White, 17.9% Black
- DOC releases approximately 8,000 inmates annually
- DOC data of incarcerated individuals for this study covers the in-prison period



# Inclusion Criteria

- Released from WADOC prisons between January 1, 2014 and December 31, 2018
- n=34,044 individuals

The Washington State Institutional Review Board approved this study

# Exclusion Criteria

1. <18 years at time of release (17 persons)
2. Known to have died in prison (196 persons),
3. Died before release but was not known to have died in prison (19 persons)
4. Died on the day of release (1 person)

Final sample: n= 33,811

# Data Linkage

- DOC Prison Release Records were linked to WA State Dept of Health Death files
- DOH Death files: January 1, 2014 and December 31, 2019
- Linking variables:
  - Social Security Number (SSN)
  - Gender
  - First and last name
  - Alias names
  - Date of birth
- Substantial missing information for race and ethnicity data

# Statistical Analyses

- Exposure: Release from prison
- Outcome: ICD-10 cause of death (COD) codes
- Important Dates:
  - Release from prison
  - Reincarceration date
  - Date of death
  - End of study date (December 31, 2019)

## Definitions

**Overdose death:** Drug overdose (either unintentional, suicide, assault/homicide, or of undetermined intent) as underlying COD

**Substance-related death:** Deaths which had a drug listed in the multiple causes of death fields, but overdose was not necessarily underlying COD

# Statistical Analyses, cont.

- Mortality Rates:

- Interpreted as the risk of death
- We report mortality rates for all-cause mortality, the leading causes of death, non-overdose versus overdose deaths, and substance-related deaths
- Calculated as:

$$\frac{\# \text{ of deaths}}{\text{total person-years at risk after release}}$$

# Statistical Analyses, cont.

- Risk Factors for Death
  - Cox proportional hazards regression
  - Reports Hazard Ratios (HR)...  $HR=1$  means lack of risk association
  - Efron method for handling ties
- Assessed the association between individual characteristics and survival:
  - Age at release
  - Gender (male and female)
  - Race (white, black, and other)
  - Number of incarcerations prior to latest release
  - Drug-related conviction
  - Release year

# Results

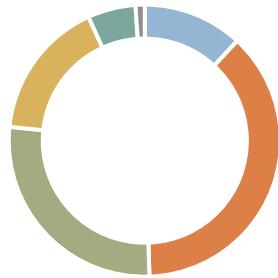


# Study Cohort

- 33,811 individuals included in study
- 39,705 releases between 2014-2018
- 862 deaths post-release were identified
  - Men: 789 deaths
  - Women: 73 deaths

# Characteristics Of Study Population

Age at Release



- 18-24 years
- 25-34 years
- 35-44 years
- 45-54 years
- 55-64 years
- 65+ years

Race

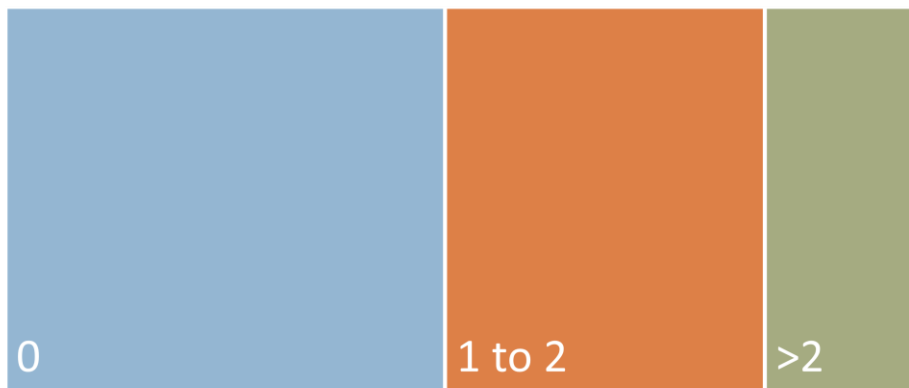


White

Black

Other

Number of WA incarcerations prior to latest release (Range 0-17)

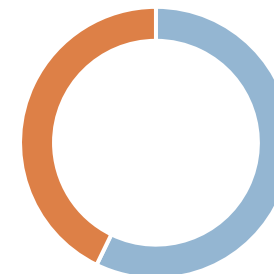


0

1 to 2

>2

Drug-related conviction for most recent incarceration



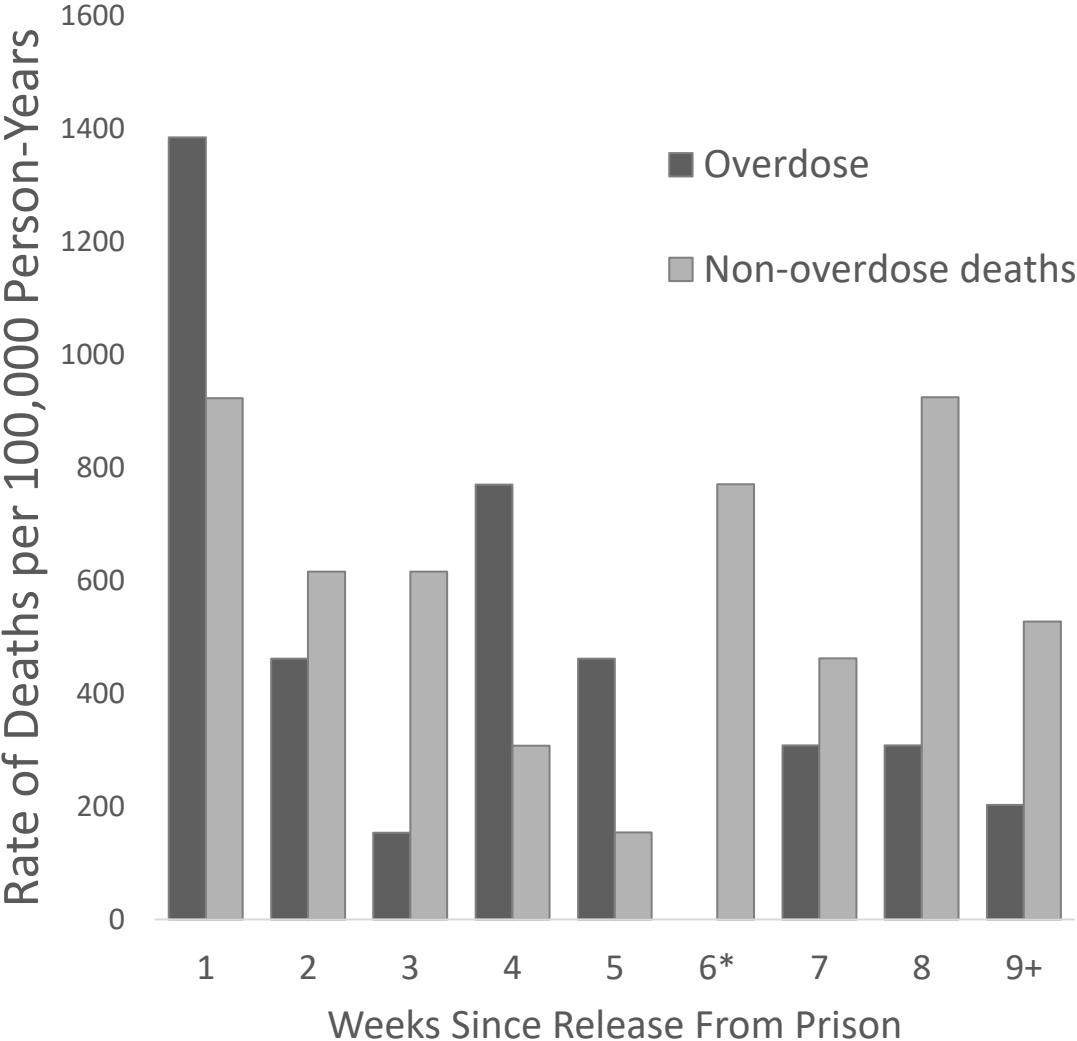
- No
- Yes

# Leading Causes Of Death After Release

Underlying Cause of Death	no. of deaths	Overall
		Deaths per 100,000 person-years (95% CI)
All-cause	862	747 (698-798)
<b>Overdose</b>	<b>249</b>	<b>216 (190-244)</b>
Cardiovascular disease	102	88 (73-107)
Homicide or assault	89	77 (63-95)
Cancer	72	62 (49-79)
Motor vehicle accident	63	55 (43-70)
Suicide	57	49 (38-64)
Respiratory Diseases	35	30 (22-42)
Liver Disease	30	26 (18-37)
Mental and behavioral disorders due to psychoactive substance use <sup>a</sup>	30	26 (18-37)
Other accident	26	23 (15-33)
Legal intervention involving firearms	14	12 (7-21)
Other	95	82 (67-101)

<sup>a</sup> – Deaths were drug-related but not classified as overdose deaths on death certificates.

# Mortality Rates For Overdose vs. Non-overdose



\*There were no overdose deaths in Week 6 since release.

# Substance-related Deaths

- 276 substance-related deaths observed (249 were overdose deaths)
- Psychostimulants and opioids were the most prevalent substances among substance-related deaths
  - Heroin most common opioid
- Overdose was the underlying cause of death in...
  - 95.0% of opioid-related deaths (n=151)
  - 86.9% of psychostimulant-related deaths (n=153)

# Substance-related Deaths

Substance involved <sup>b</sup>	no. of deaths	Overall
		Deaths per 100,000 person-years (95% CI)
Psychostimulant (including methamphetamine)	176	152 (131-177)
Opioid	159	138 (118- 161)
Heroin	122	106 (88-126)
Natural and semisynthetic opioid (i.e. codeine, morphine)	34	29 (21-41)
Methadone	16	14 (8-23)
Synthetic opioids (including fentanyl)	17	15 (9-24)
Alcohol	33	29 (20-40)
Cocaine	22	19 (13-29)
Benzodiazepines	16	14 (8-23)
Unspecified drug	105	91 (75-110)

<sup>a</sup> – Overdose may not have been listed as the underlying cause of death.

<sup>b</sup> – Not mutually exclusive as multiple substances may be listed for individuals with multiple causes of death.

Note: Not all substances listed as causes of death are reported in the table due to data suppression requirements.

# Common Substance Combinations Listed In Substance-related Deaths

Of substance-related deaths (n=276)<sup>a</sup>, 62.3% involved multiple substances (n=172)

Substance combination <sup>b</sup>	Overall	
	no. of deaths	Deaths per 100,000 person-years (95% CI)
Opioid and psychostimulant	83	72 (58-89)
Opioid and alcohol	18	16 (10-25)
Opioid and cocaine	17	15 (9-24)
Opioid and benzodiazepines	13	11 (7-19)

<sup>a</sup> – Overdose may not have been listed as the underlying cause of death.  
<sup>b</sup> – Not all substance combinations were listed due to suppression requirements for counts of 10 individuals or fewer.

# Risk Factors For Death

- Risk factors for all-cause, non-overdose, and overdose deaths:
  - Increasing age
  - Having previous incarcerations prior to the latest release
  - Drug-related conviction
- Women compared to men:
  - 32% reduced risk for all-cause death (HR 0.68; 95% CI: 0.53 to 0.86)
  - 37% reduced risk for non-overdose death (HR 0.63; 95% CI: 0.46 to 0.87)
  - No significantly different risk of overdose death (HR 0.78; 95% CI: 0.51 to 1.18)



# Discussion

# Important Findings

- Little change in all-cause death rates compared to the previous findings
- Drug overdose was the most common cause of death and was responsible for over a quarter of deaths after release from prisons
- Overdose mortality rates were higher in this study than previous Binswanger et al., 2013 study
  - This study, 2014-2019: **216** per 100,000 person-years (95% CI: 190 to 244) v.
  - 1999-2009: **167** per 100,000 person-years (95% CI: 153 to 181)
- Greatest risk of death continues to be immediately after release from prison

# Important Findings, cont.

- Women were not at increased risk of death from overdose compared to men after release
- Psychostimulants (e.g., methamphetamines) were more common than opioids as a cause of death
- Opioid-related death rate increased to even higher levels than previously found
- Multiple drugs in combination were more prevalent causes of death in this study compared to the previous findings

# Limitations

- Methods in this study differed slightly from previous Binswanger et al. papers
  - Could account for difference in overdose risk seen in women
- We used State Death Files rather than National Death Index
  - Out-of-state deaths of non-Washington residents may be missing from our analyses
  - Binswanger et al., 2007: 85% of deaths of former Washington State inmates occurred in Washington
- Need a better proxy for substance use than drug-related conviction variable

# Future Directions

- A North Carolina study found that in-prison mental health and substance abuse treatment was a risk factor for opioid overdose (Ranapurwala et al., 2018)
  - Look at these as risk factors
- Further analysis of gender-based differences in mortality
- Repeat the study in the future to compare mortality risk and risk factors for death
  - Help assess effectiveness of interventions to reduce overdose deaths post-release

# Acknowledgements

- WA Department of Corrections
  - Vasiliki (Bessie) Georgoulas-Sherry, PhD
  - Daryl Huntsinger
- WA Department of Health
  - Jennifer Alvisurez, MPH
  - Mary Catlin
  - Therese Hansen
  - Conrad Otterness

- Funding Source:

This project was funded by the Washington State Department of Health, DOH Contract # HED23819 AM1. This analysis was supported by the Cooperative Agreement, NU17CE002734, funded by the Centers for Disease Control and Prevention. Its contents are solely the responsibility of the authors and do not necessarily represent the official views of the Centers for Disease Control and Prevention or the Department of Health and Human Services.



**Thank You &  
Questions?**

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# Pandemics, Epidemics and Health Crises

Navigating Opioids, Pain Management and Substance Use Disorders in 2020



**Ed Bilsky, Ph.D.**

**Provost and Chief Academic Officer**

**Professor of Biomedical Sciences**







# The Opioid Crisis, Already Serious, Has Intensified During Coronavirus Pandemic

Overdose deaths rise as job losses and stress from Covid-19 destabilize people struggling with addiction

## THE WALL STREET JOURNAL

English Edition • Print Edition • Video • Podcasts • Latest Headlines

By [Jon Kamp](#) and [Arian Campo-Flores](#)

Updated Sept. 8, 2020 10:28 am ET

Home World U.S. Politics Economy Business Tech Markets Opinion Life & Arts Real Estate WSJ Magazine

When Covid-19 struck, the U.S. was already in the grip of an expanding drug-overdose crisis. It has only gotten worse since then.

Counties in states spanning the country, from Washington to Arizona and Florida, are reporting rising drug fatalities this year, according to data collected by The Wall Street Journal. This follows a likely record number of [deadly overdoses in the U.S. last year](#), with more than 72,000 people killed, according to federal projections.

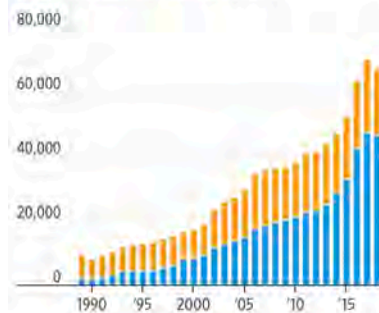
The pandemic has destabilized people trying to maintain sobriety or who are struggling with addiction during a time of increased social isolation and stress, according to treatment providers and public-health authorities. In a survey of U.S. adults released by the Centers for Disease Control and Prevention, 13% of respondents in June said they had started or increased substance use to deal with stress or emotions related to Covid-19.

### Fatalities Climb

Drug deaths have risen in the past three decades, in large part due to opioids.

#### Number of drug deaths per year

■ Opioid-related ■ Non-opioid



Note: Numbers for 2019 are provisional and include projections.

Source: Centers for Disease Control and Prevention

The drug deaths are adding to [the pandemic's toll](#), which includes more than 188,000 infection-related fatalities, but also other deaths linked to factors such as disruptions in health care and economic dislocation.

"It's a pretty stark reality here," said David Sternberg, clinical-services manager at the nonprofit group HIPS in Washington, D.C., which helps keep drug users safe and find treatment. "We've lost a lot of clients, a lot of patients."

Moreover, social-distancing limitations are [complicating treatment](#) for people who struggle with addiction and for the organizations that provide services to them.

Editorial

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## Pain Management



# Impact of COVID-19 on chronic pain patients: a pain physician's perspective

Saba Javed<sup>\*1</sup>, Joey Hung<sup>1</sup> & Billy K Huh<sup>2</sup>

<sup>1</sup>Department of Anesthesiology, University of Texas Health Science Center at Houston, Houston, TX 77030, USA

<sup>2</sup>Department of Anesthesiology, University of Texas MD Anderson Cancer Center, Houston, TX 77030, USA

\*Author for correspondence: [sabajaved23@gmail.com](mailto:sabajaved23@gmail.com)

“the field of chronic pain is one of the hardest hit from the COVID-19 pandemic leaving many patients over burdened with their chronic pain and their on-going treatment delayed.”

First draft submitted: 19 May 2020; Accepted for publication: 29 June 2020; Published online: 10 August 2020

**Keywords:** chronic pain • opioids • pain management

26 October 2017 and 1 March 2020, two important dates that will be remembered for years to come, former signifying the declaration of opioid crisis as a public health emergency in the USA and latter when coronavirus disease 2019 (COVID-19) was declared a pandemic in the USA [1]. Since 1999, more than 750,000 have people died due to the opioid crisis and, as of May 2020, over 90,000 Americans' lives have succumbed to the COVID-19 pandemic [2]. Two inherently distinct crises but ultimately unified with the commonality of creating suffering and death. It is obvious that COVID-19 has impacted all aspects of the human existence, particularly the healthcare arena including the patients, and more so the chronic pain patients. The full impact of the pandemic on this sub-population and ultimately the opioid crisis will reveal itself in the years to come, however at this juncture, it is critical to manage the needs of our patients and continue to provide physicians and other therapeutic access in traditional and nontraditional ways.





## Advocacy Resource Center

Advocating on behalf of physicians  
and patients at the state level

# Issue brief: Reports of increases in opioid-related overdose and other concerns during COVID pandemic

**\*Updated September 8, 2020**

As the COVID-19 global pandemic continues, so does the nation's opioid epidemic. The AMA is greatly concerned by an increasing number of reports from national, state and local media suggesting increases in opioid-related mortality—particularly from illicitly manufactured fentanyl and fentanyl analogs. More than 40 states have reported increases in opioid-related mortality as well as ongoing concerns for those with a mental illness or substance use disorder in counties and other areas within the state. This also includes new reports about the need for evidence-based harm reduction services, including sterile needle and syringe services and naloxone.

The AMA is pleased that the U.S. Substance Abuse and Mental Health Services Administration and U.S. Drug Enforcement Administration (DEA) have provided increased flexibility for providing buprenorphine and methadone to patients with opioid use disorder. The AMA is further pleased at increased flexibility provided by the DEA to help patients with pain obtain necessary medications.



# Advocacy Resource Center

Advocating on behalf of physicians  
and patients at the state level

## The AMA urges governors and state legislatures to take action

- Governors must adopt the new SAMHSA and DEA rules and guidance in-full for the duration of the national emergency—this includes flexibility for evaluation and prescribing requirements using telemedicine;
- States must enact as part of their own Emergency Orders and other actions a complete removal of prior authorization, step therapy and other administrative barriers for medications used to treat opioid use disorder;
- States must remove existing barriers for patients with pain to obtain necessary medications. This includes removing arbitrary dose, quantity and refill restrictions on controlled substances; and
- States must enact, implement and support harm reduction strategies, including removing barriers to sterile needle and syringe services programs.



THE CRISIS NEXT DOOR





OBITUARY

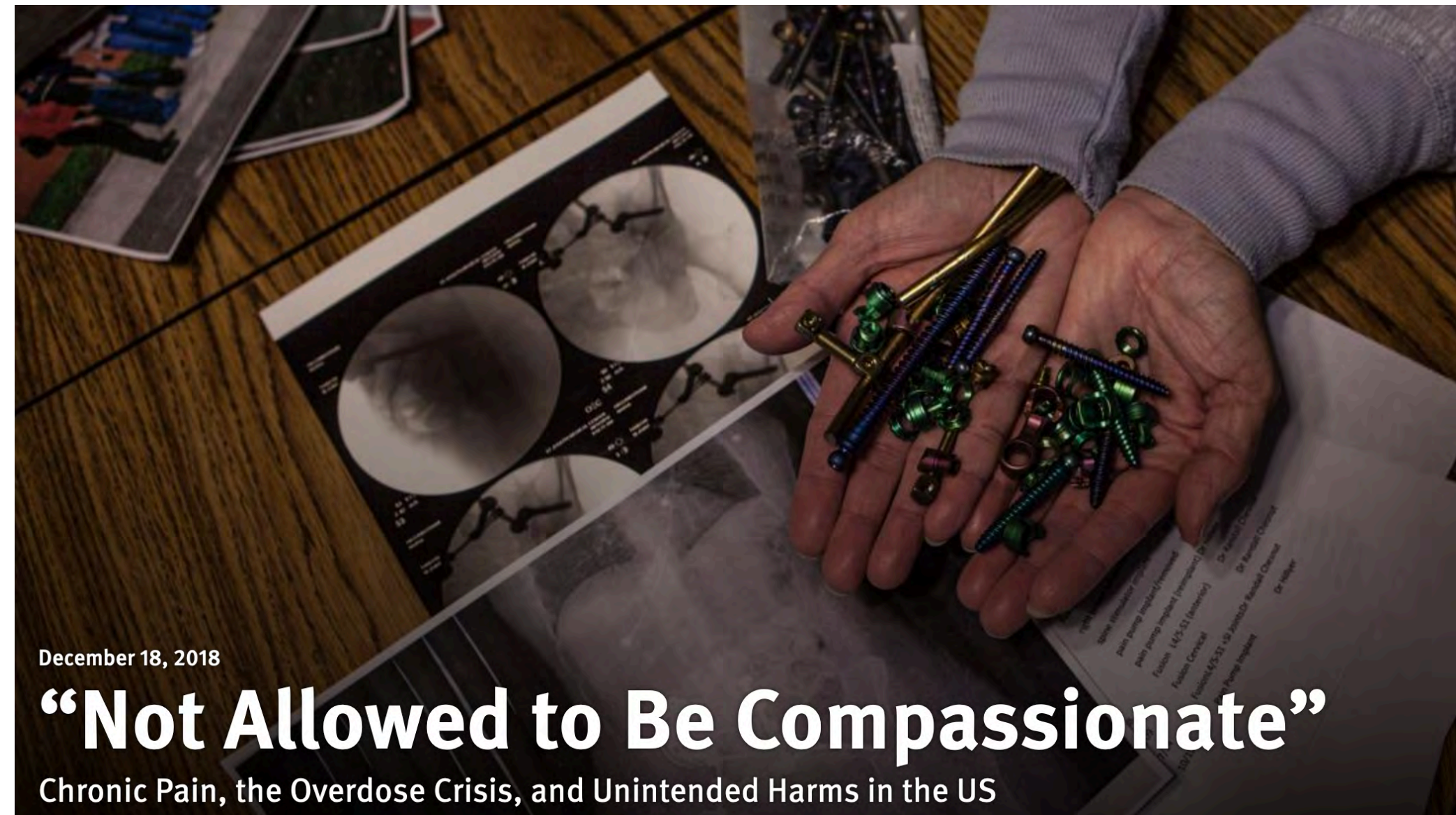
# Geoffrey Lars Vonbosse

FEBRUARY 3, 1987 - AUGUST 25, 2017



PLAY TRIBUTE MOVIE

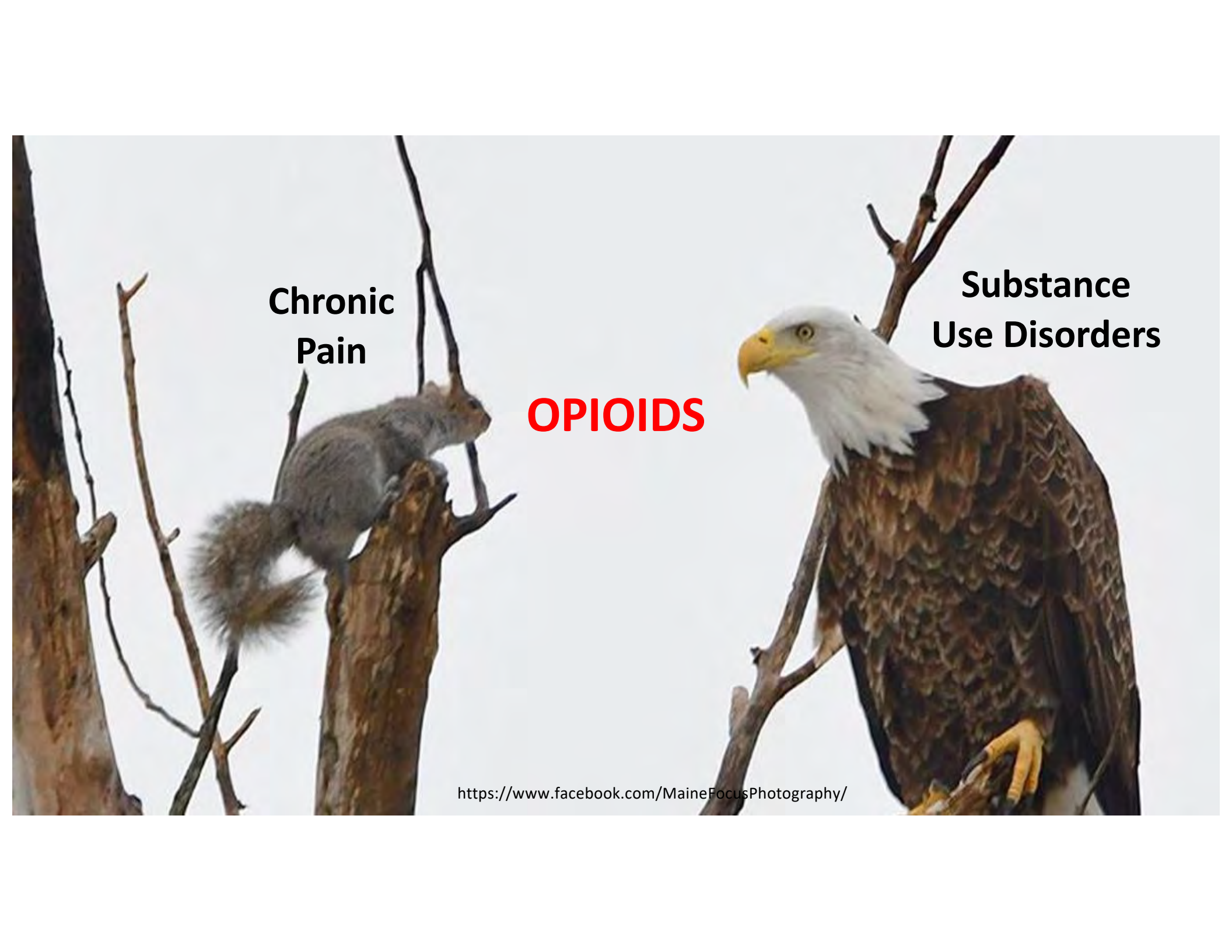




December 18, 2018

# “Not Allowed to Be Compassionate”

Chronic Pain, the Overdose Crisis, and Unintended Harms in the US



**Chronic  
Pain**

**OPIOIDS**

**Substance  
Use Disorders**

<https://www.facebook.com/MaineFocusPhotography/>



## I'd personally like to give a big **FXXK** YOU to EVERY OPIOID ADDICT!!!

Because of you, 100 million Chronic Pain Sufferers are now being screwed out of medication, lack of treatment, perception of drug seeker/addict, treated like shit, perceived as 2nd class citizen, etc. Rather than being PROPERLY taken care of, empathized with, and being heard...WE are the ADDICTS! WRONG! If you'd like to take a poll and ask any Chronic Pain Sufferer if they'd rather not take 1 pill and NOT have Chronic Pain, I will assure you that 99% of us would gladly switch!

So, we NEED your SUPPORT now more than EVER! We NEED you to SPEAK UP for us! FIGHT for us! FIGHT ALONG with us!

There is a MAJOR difference between ADDICTS and PATIENTS!

OPIOID ADDICTS: Misuse opioids by not following doctors instructors for how to take the medication. Also, taking the drug illegally and doing whatever you need to do to get more of the drug. Substance abuse can be physical, behavioral, and psychological! One clear sign is that you aren't able to stop yourself from using MORE than recommended along with doing ANYTHING to get the drug! The difference between drug tolerance, dependence, and addiction is tolerance and dependence are a NORMAL part of taking any opioid drug for a long time. You can be tolerant to, or dependent on a drug and NOT be addicted. Addiction is NOT normal! You are ADDICTED to a drug when it seems that neither your body or mind can function without the drug. Opioid Addiction causes you to obsessively seek out the drug, even when the drug use causes behavior, health, and even relationship problems!

So, quit trying to "HELP" addicts and actually stand up and HELP Chronic Pain Sufferers! We're the ones being overlooked and because of this "Opioid Epidemic" it's worse for us!



47

22 Comments

Like

Comment



# Two Critical Health, Social and Economic Challenges

## Acute and Chronic Pain



- Close to 100 million Americans experience chronic pain
- Estimated cost to the U.S. economy of >500 billion dollars annually
- Over 42,000 suicides in U.S./year --> lifetime prevalence of suicide attempts between 5% and 14% in individuals with chronic pain

## Opioid Misuse and Addiction



- ~2.5 million Americans meet the criteria for opioid use disorder (prescription opioids, heroin, etc.)
- Estimate cost to the U.S. economy of >56 billion dollars
- Over 29,000 overdose deaths due to prescription opioids and heroin in 2014 (~63% of drug related overdose deaths)

## Chronic Pain

- Anxiety
- Depression
- Sleep disorders
- PTSD
- OCD
- Substance use disorders



## Addiction

- Anxiety
- Depression
- Sleep disorders
- Bipolar Disorder
- Social Phobia
- Anxiety
- Schizophrenia
- Polysubstance abuse
- Adult ADHD



# Biology of Opioids, Pain and Addiction



The pain of cluster headache - Agnes Cecile





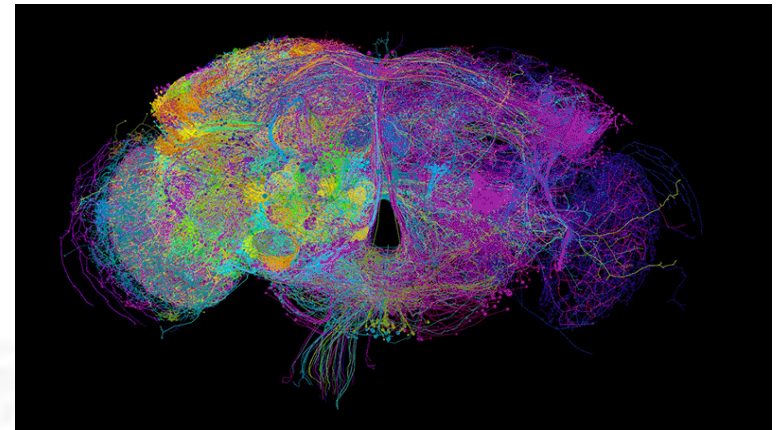




# *Drosophila melanogaster*

Neurons: 250,000

Synapses: <10,000,000



<https://auntfannies.com/fruit-fly-information/>

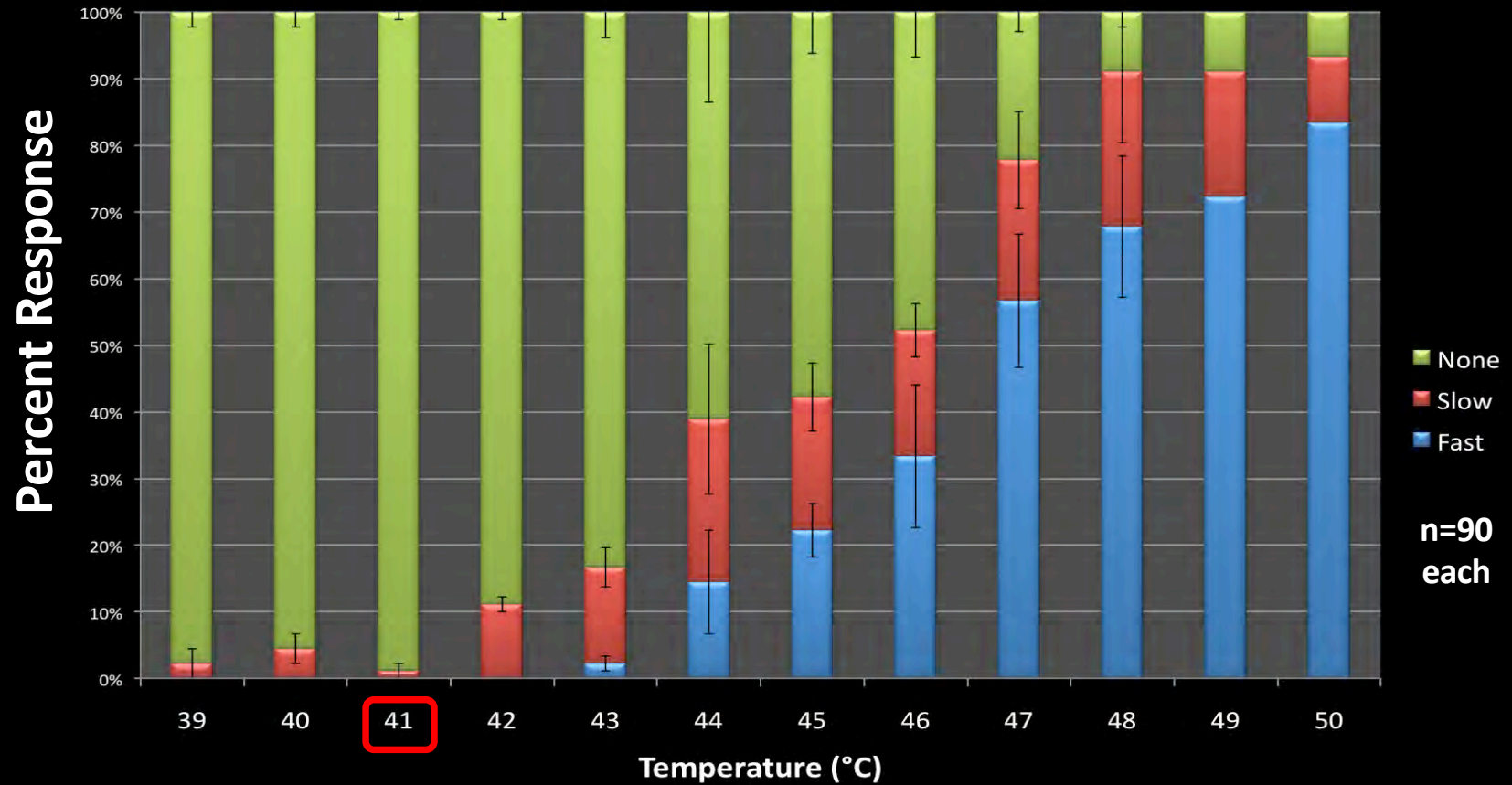


# Thermal Nociception Assay



Ganter Laboratory – Unpublished Data

# Temperature Response Curve



Ganter Laboratory – Unpublished Data

## Methods

Damage larval epidermis with UV-light

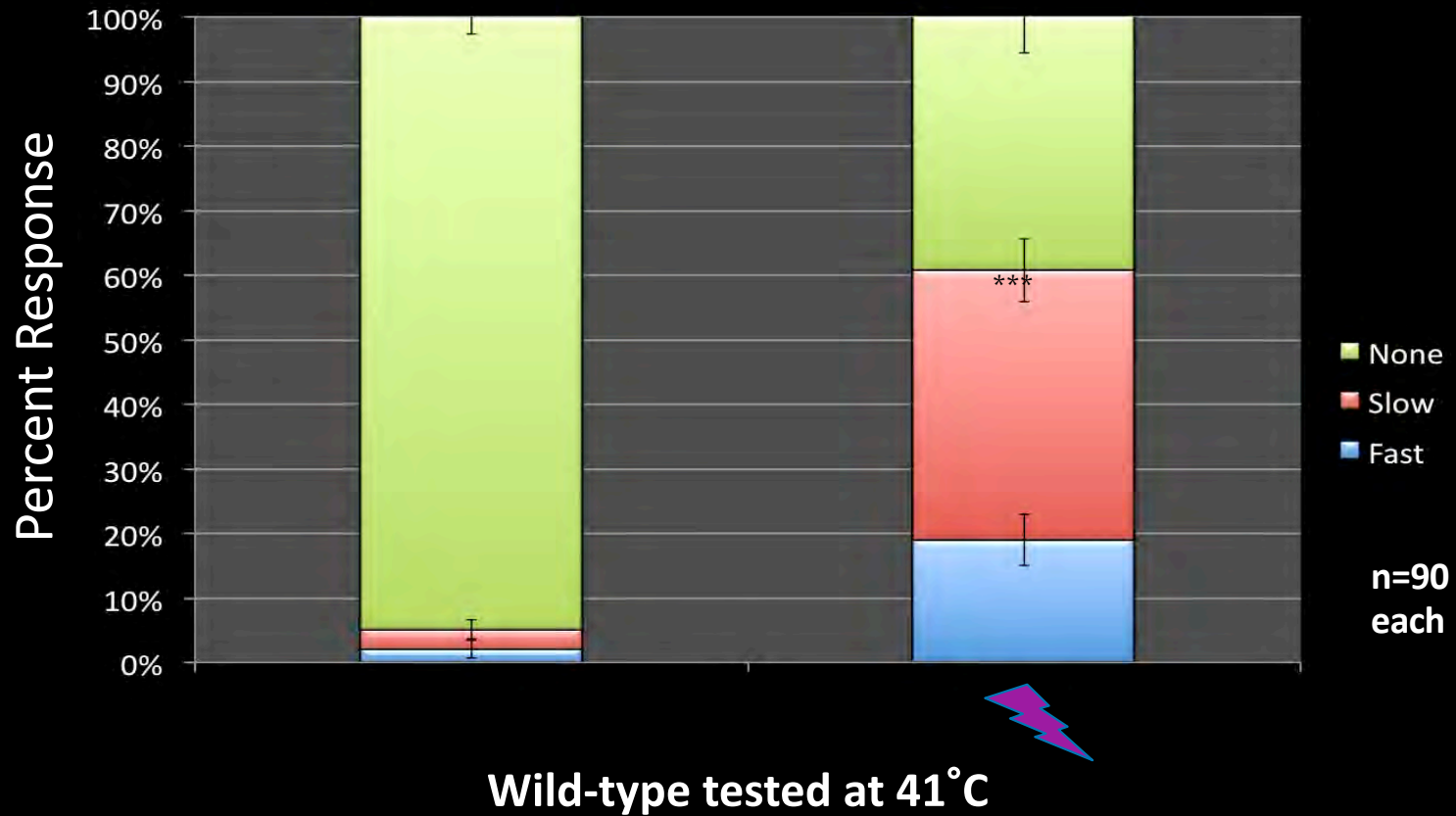


Test larval response to thermal stimulus



Ganter Laboratory – Unpublished Data

# UV-Induced Sensitization (Allodynia)



Ganter Laboratory – Unpublished Data

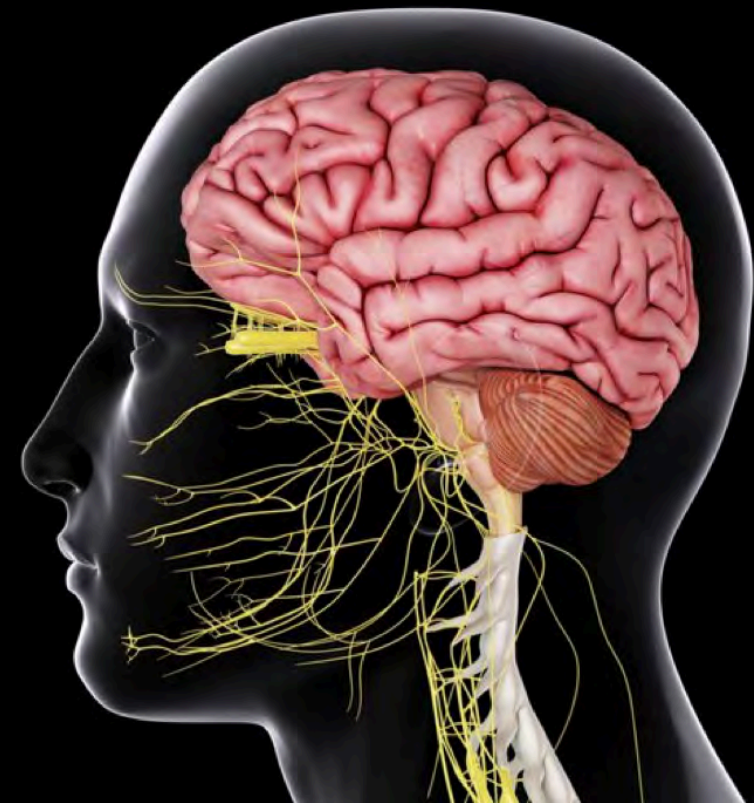




## *Homo Sapiens*

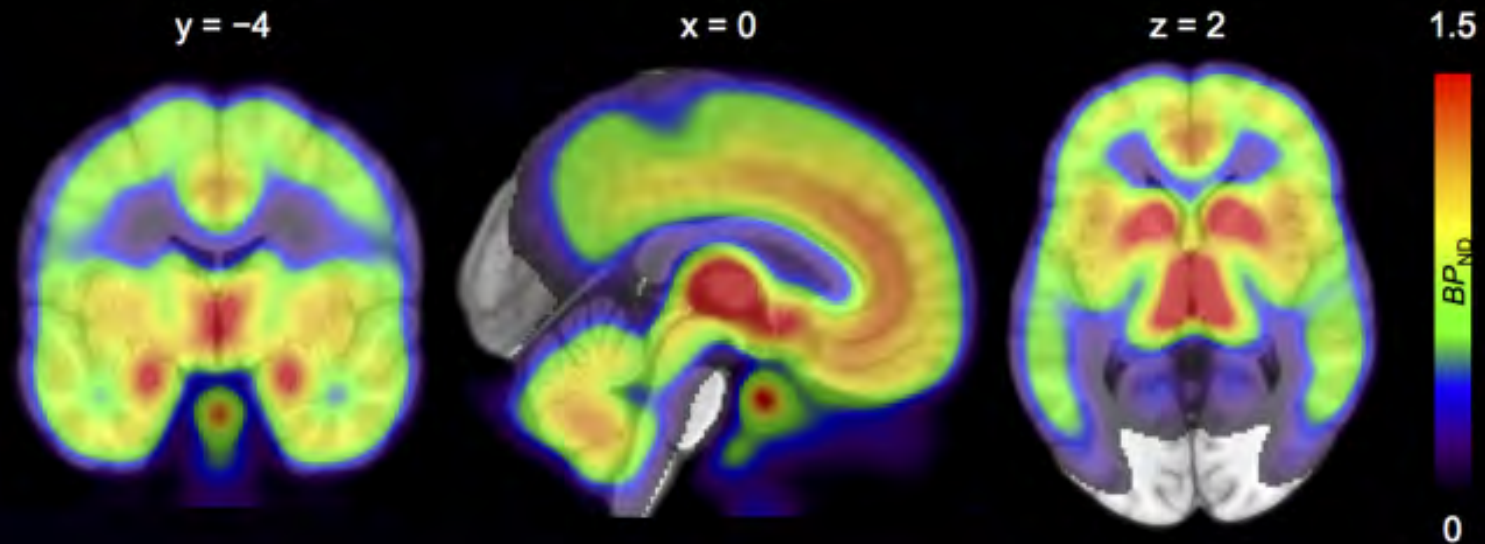
Neurons: 8,600,000,000

Synapses: 100,000,000,000,000





## Mean [ $^{11}\text{C}$ ]-carfentanil binding distribution in the brain



**Adult attachment style is associated with cerebral  $\mu$ -opioid receptor availability in humans**

Human Brain Mapping, Volume 36, Issue 9, pages 3621-3628, 5 JUN 2015 DOI: 10.1002/hbm.22866  
<http://onlinelibrary.wiley.com/doi/10.1002/hbm.22866/full#hbm22866-fig-0001>

# Evolution of vertebrate opioid receptors

Susanne Dreborg, Görel Sundström, Tomas A. Larsson, and Dan Larhammar\*

Department of Neuroscience, Uppsala University, Box 593, SE-75124 Uppsala, Sweden

Edited by Tomas Hökfelt, Karolinska Institutet, Stockholm, Sweden, and approved August 15, 2008 (received for review June 9, 2008)

**“These observations show that the vertebrate opioid system was already quite complex before the radiation of jawed vertebrates 450 million years ago”**







<https://www.nationalgeographic.com/animals/2018/08/orca-mourning-calf-killer-whale-northwest-news/>











**As I struggled to get out of my car on the arm of my fifteen-year-old son, a homeless man passed by. He saw me wince as my inflamed knee buckled under my weight.**

**Looking into my eyes, he said gently, "Your knee hurts. I hope it gets better soon."  
Then he walked on.**



**PNWU educates and trains health care professionals  
emphasizing service among rural and medically  
underserved communities throughout the Northwest.**



## ACEs:

- Inside and outside of the home
- Physical and verbal abuse
- Alcoholism and other SUDs
- Domestic violence
- Mental illness
- Parental separation
- Bullying

## Other Factors:

- Inability to cope
- Lack of life purpose
- Boredom
- Loneliness
- Lack of employment
- Unstable environment
  - Homelessness
  - living with someone else with an SUD

Cave of Despair, W. Truner



## News release

For immediate release  
Friday, October 18, 2019

# Washington residents can dispose of unused medications at take-back events Oct. 26

OLYMPIA – People around the state can safely dispose of their unused medications during events on Oct. 26.

The Drug Enforcement Administration (DEA) will be hosting drug take-back events from 10 a.m. to 2 p.m. at several [locations](#) in Washington. Prescription and over-the-counter medications will be accepted. Medications can remain in their original containers and labels do not need to be removed. Medications not in their original containers also will be accepted.

This take-back event helps support three statewide campaigns from the Health Care Authority: [Starts with One](#), [Tribal Opioid Solutions](#), and [Take Back Your Meds](#). These campaigns inform and educate young adults, their parents, and older adults about the dangers of prescription drug misuse and the importance of safe storage, use, and disposal, particularly for opioids.

About 75 percent of opioid misuse starts with people using medication that wasn't prescribed for them, usually taken from a friend or family member. Simple steps like safely disposing of unused medications can stop them from being misused.

"Participating in these take-back events is one way people can help tackle the opioid crisis and protect loved ones," said Dr. Charissa Fotinos, HCA deputy chief medical officer.

## Media contact

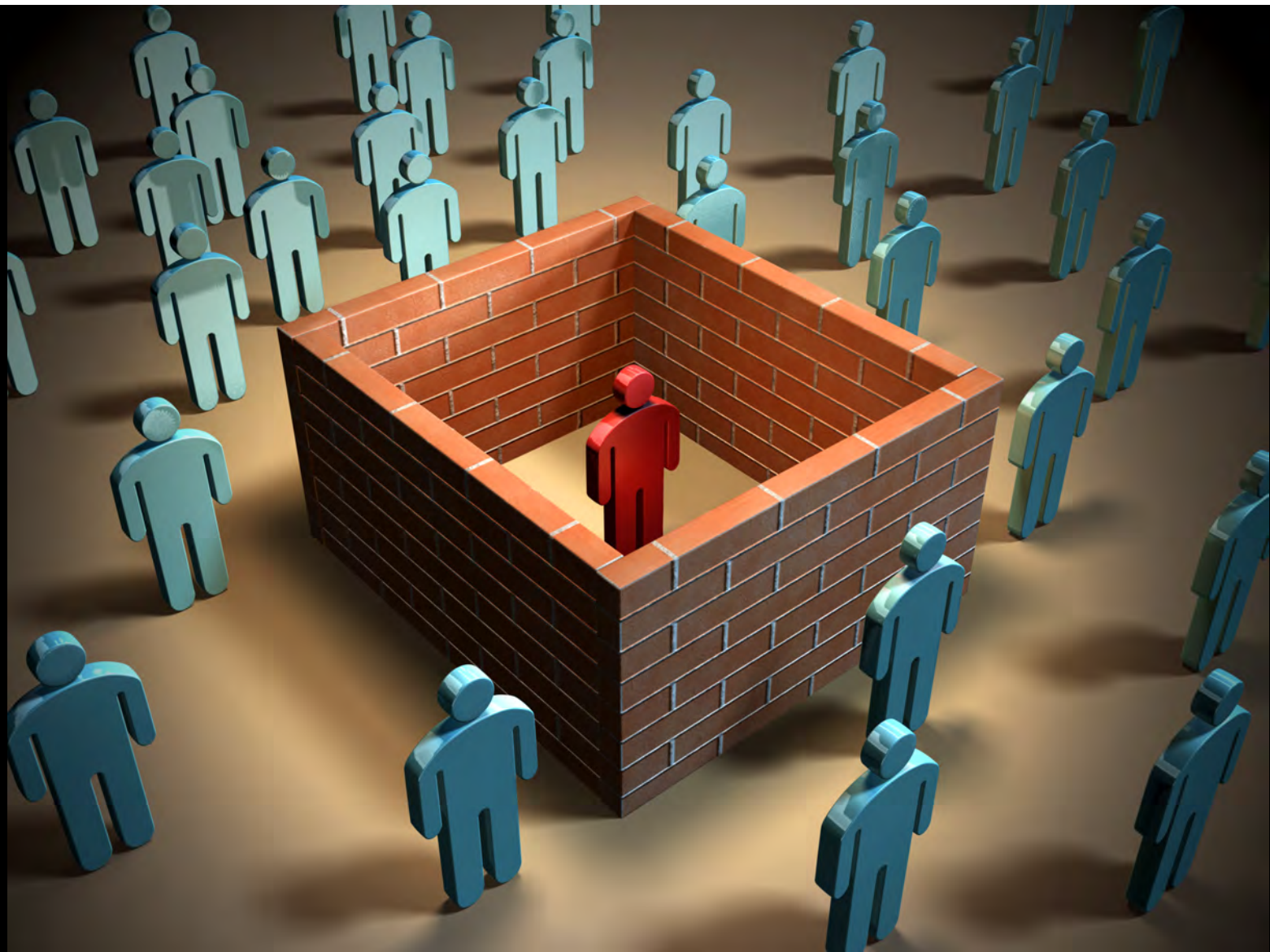
[Amy Blondin](#), Chief Communications Officer

360-725-1915 (office)

360-688-0131 (cell)



**Stigma**





## Most Recent Episode:



**TALK**  
**MENTAL HEALTH**

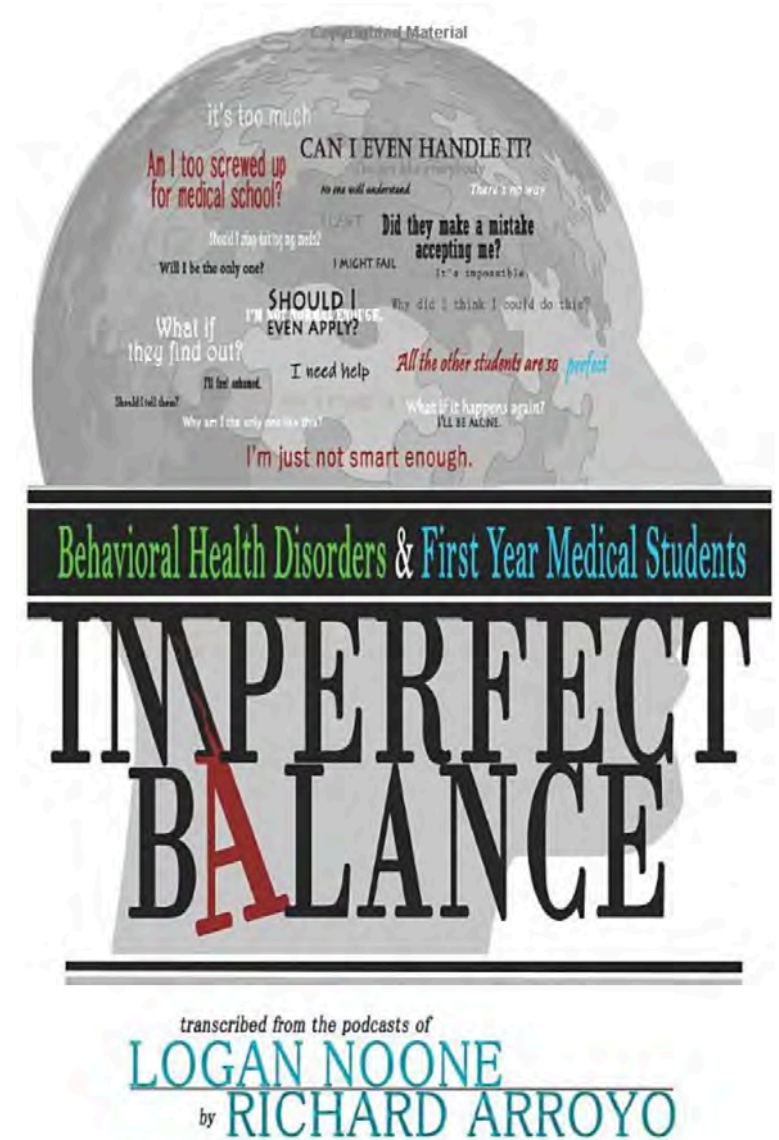
PLAY SAVE EPISODE

**WITH LOGAN NOONE**

## Ep. 50 - "Do No Harm" - Documentary Review about Physician Suicide:

3 days ago · 41 minutes

"Do No Harm" documentary shines a light on the epidemic of physicians and medical students that lose their life to suicide. Hannah, from episode 9, comes on to discuss our reactions and review to this movie. Sadly, as medical students, we weren't all that shocked by the movie. We talk about the worries we have for our future, and how we will avoid burnout in our life. We discuss ways we think the documentary could be improved, including how the healthcare system could change.



Copyrighted Material

it's too much

Am I too screwed up for medical school?

Will I be the only one?

What if they find out?

Should I tell them?

Why am I the only one like this?

I'm just not smart enough.

CAN I EVEN HANDLE IT?

Did they make a mistake accepting me?

SHOULD I EVEN APPLY?

I need help

All the other students are so perfect

Behavioral Health Disorders & First Year Medical Students

**IMPERFECT BALANCE**

transcribed from the podcasts of  
**LOGAN NOONE**  
by **RICHARD ARROYO**



**PNWU OPIOID SIMULATION**  
YAKIMA

**KIMA**  
**ACTION**  
**NEWS**









AEG16079 S.L.C.

*Schatz - Hatch Amendment*

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To direct the NIH to intensify and coordinate fundamental, translational, and clinical research with respect to the understanding of pain, the discovery and development of therapies for chronic pain, and the development of alternatives to opioids for effective pain treatments.

*Thanks for all your good work at VNE!*

*Sen. Susan Collins*

IN THE SENATE OF THE UNITED STATES—114th Cong., 2d Sess.

**S. 524**

To authorize the Attorney General to award grants to address the national epidemics of prescription opioid abuse and heroin use.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. SCHATZ (for himself, Mr. HATCH, Mr. TESTER, Mr. COCHRAN, and Ms. COLLINS) to the amendment (No. \_\_\_\_\_) proposed by Mr. GRASSLEY

Viz:

1 At the end of title I of the bill, add the following:

2 **SEC. 104. ENHANCING BASIC AND APPLIED RESEARCH ON**

3 **PAIN TO DISCOVER THERAPIES, INCLUDING**

4 **ALTERNATIVES TO OPIOIDS, FOR EFFECTIVE**

5 **PAIN MANAGEMENT.**

6 (a) IN GENERAL.—Out of any money appropriated

7 to the National Institutes of Health (referred to in this







## Governor signs Wilcox bill to help reduce agricultural worker suicides



FOR IMMEDIATE RELEASE

March 15, 2018

CONTACT: [John Handy, Communications Director](#) | 360-786-5758



### Governor signs Wilcox bill to help reduce agricultural worker suicides

A bill sponsored by [Rep. J.T. Wilcox](#) aimed at reducing the suicide rate among workers in the agricultural industry was signed into law by the governor Thursday.













**Rotary is a global network of 1.2 million neighbors, friends, leaders, and problem-solvers who see a world where people unite and take action to create lasting change – across the globe, in our communities, and in ourselves**

# The State of Washington



## Proclamation

**WHEREAS**, no community in Washington State is immune to accidental or intentional overdose, and drug overdose deaths remain high across the state, impacting urban, suburban, and rural communities, overdose deaths disproportionately affect American Indian/Alaskan Native communities and marginalized populations; and

**WHEREAS**, like many states, Washington is fighting concurrent epidemics - while prescription opioids are driving deaths in rural areas of the State, illicit opioid drugs are the primary drivers of deaths in suburban and urban areas; and

**WHEREAS**, more than 1100 Washington residents died from drug overdose deaths in 2018; and

**WHEREAS**, Washington State Health Care Authority, Department of Health, and University of Washington-Alcohol Drug Abuse Institute, local health jurisdictions, community organizations, syringe-service programs, and pharmacies collectively distributed overdose reversal medication to thousands of individuals in 2018; and

**WHEREAS**, Washington State acknowledges that there is a need to treat drug-related harm as a public health issue and invest in evidence-based practices that save lives and build communities; and

**WHEREAS**, Washington State has implemented a State Opioid Response Plan to strategically address the epidemic while investing in resources like the 24-hour Washington Recovery Helpline; and

**WHEREAS**, Washington State remains committed to raising awareness around drug overdose morbidity and mortality by reducing stigma through statewide initiatives related to education, prevention, treatment, and recovery support for substance use disorder; and

**WHEREAS**, International Overdose Awareness Day is an opportunity for all Washingtonians to stand beside those who have lost loved ones to an overdose and those who have a substance use disorder and are diligently working toward recovery;

**NOW, THEREFORE**, I, Jay Inslee, Governor of the state of Washington, do hereby proclaim August 31, 2020, as

### *Overdose Awareness Day*

in Washington, and I encourage anyone whose life has been impacted by substance use disorder to call the Washington Recovery Helpline at 1-866-789-1511.

Signed this 17<sup>th</sup> day of August, 2020

Governor Jay Inslee

