



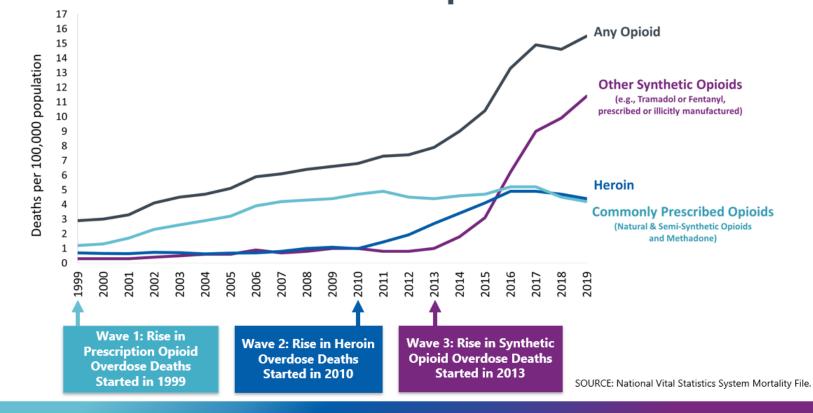
PRESCRIPTION MONITORING PROGRAM

Carly Bartz-Overman & Fan Xiong November 18, 2021

The PMP as a Prevention Strategy

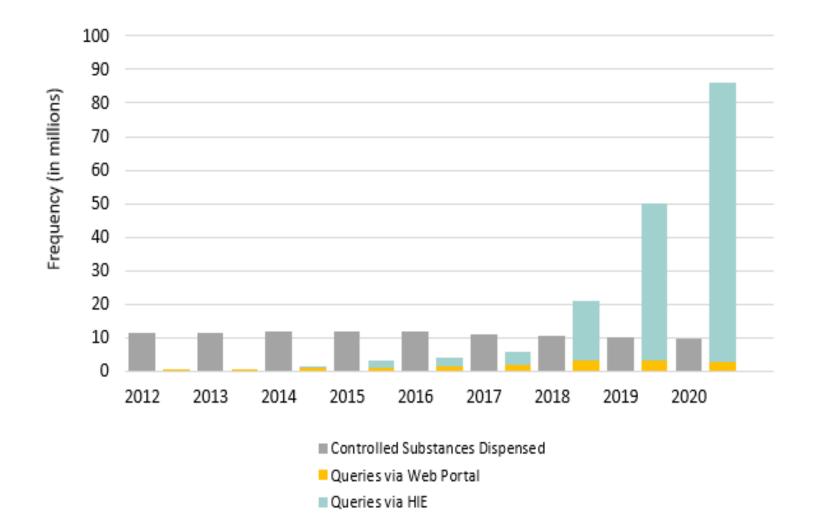
- What it is
 - Repository of dispensing records
- How it works
 - Information in-information out
 - Dispensing data submitted to PMP
 - Users view/query PMP
- Why it's important
 - Helps inform prescriptive decision-making
 - Improves patient care, reduces prescription drug misuse
 - Component in integrated approach to reducing opioid overdose



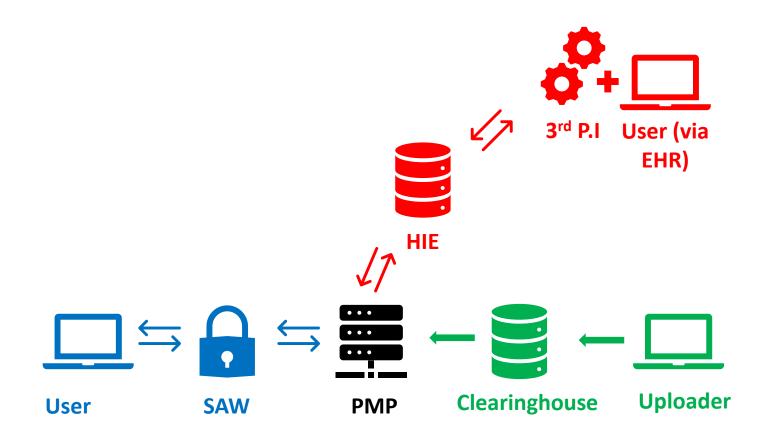


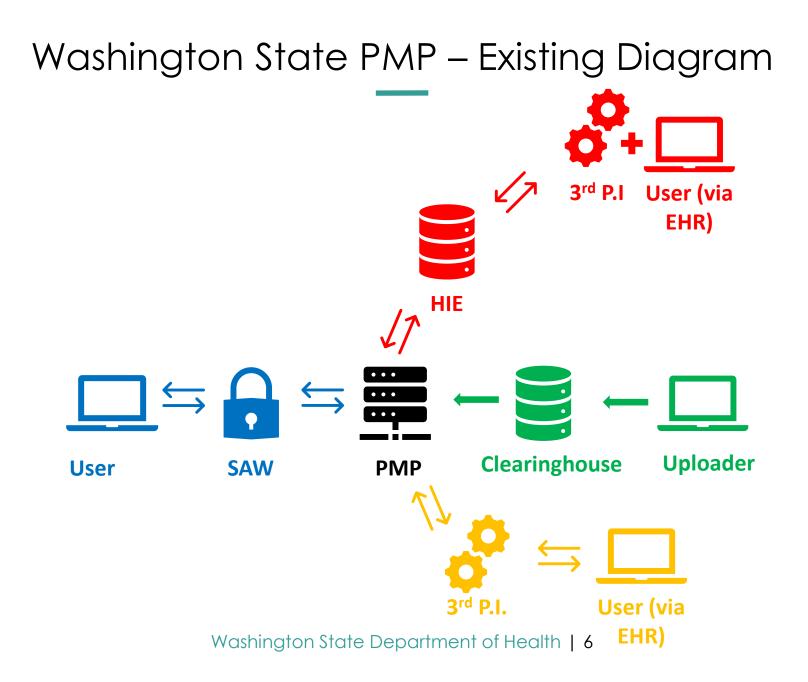
Three Waves of the Rise in Opioid Overdose Deaths

PMP Prescriptions Dispensed and Queries by Calendar Year



Washington State PMP – Previous Diagram





Interjurisdictional Data Sharing

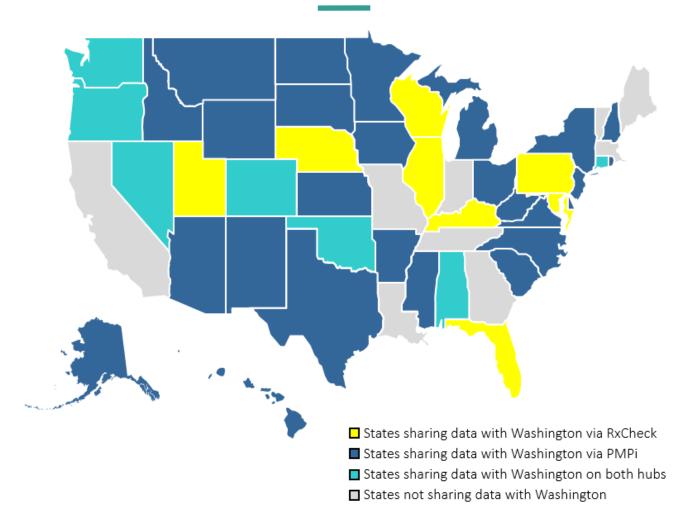
- Why
 - Full picture of patient's prescriptive history
 - Discourage prescription shopping across state lines
- How

Washington joined RxCheck in Dec. 2018 Washington joined PMPi in Apr. 2019

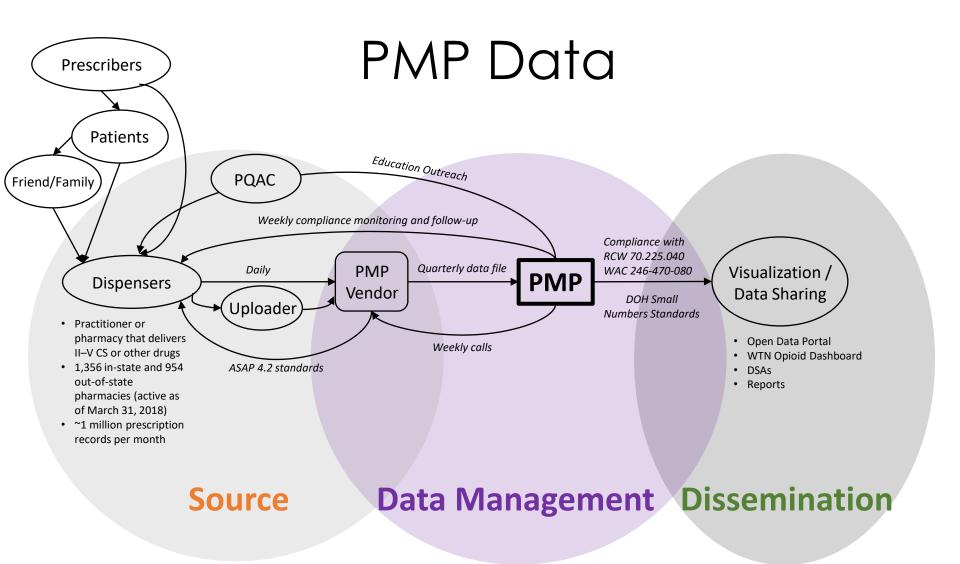




Interjurisdictional Data Sharing







Improvements in Data Sources

- PMP data
 - On average, we followed up with 70–200 pharmacies each week regarding reporting compliance (timeliness and frequency).
 - Quarterly data checks (e.g., unverifiable prescriber DEA #s) (since 2016q3)
 - Weekly calls with PMP Vendor
 - ASAP 4.2A submission guidelines to dispensers/uploaders
 - Education outreach to dispensers via PQAC

What is Not Required to be Reported to the Washington PMP

- Prescriptions dispensed outside the state
- Prescriptions prescribed for \leq 24 hours
- Prescriptions prescribed/administered to a patient in a hospital
- Prescriptions dispensed from Department of Corrections pharmacy unless offender is released with a prescription
- Prescriptions dispensed from an Opioid Treatment Program
- Prescriptions dispensed from federally-operated pharmacies (Indian Health Services and Veterans Affairs report voluntarily)
- Prescriptions from treatment and methadone programs are restricted from reporting (42-CFR federal law)

Public Health Surveillance Projects

Routine Public Health Surveillance Projects

- Washington Tracking Network (WTN) Public Health Opioid Prescribing Metrics Dashboard
 - Opioid Prescriptions and Drug Overdoses Data :: Washington State
 Department of Health
 - Data is updated quarterly (latest data is for 2021Q2).
 - Provides BREE-based opioid metrics by state, ACH, and county.
- Socrata Open Data Portal
 - <u>Prescription Monitoring Program (PMP) Public Use Data | Data.WA |</u>
 <u>State of Washington</u>
 - Provides prescription-record level data for public use.
 - All identifiers are removed.
 - Data is updated quarterly (latest data is for 2021Q2).

Routine Public Health Surveillance Projects

- PMP Death Data Linkage
 - The linked data is used to fulfill data requests from various surveillance systems or projects through a DSA:
 - Maternal Mortality Review Board (MMR)
 - Deaths with Dignity
 - State Unintentional Drug Overdose Reporting System (SUDORS)
 - WSIRB-approved Research Projects
 - The process is conducted annually with the finalized death data or semi-annually with the preliminary death data file.

Routine Public Health Surveillance Projects

• PMP – Birth Data Linkage

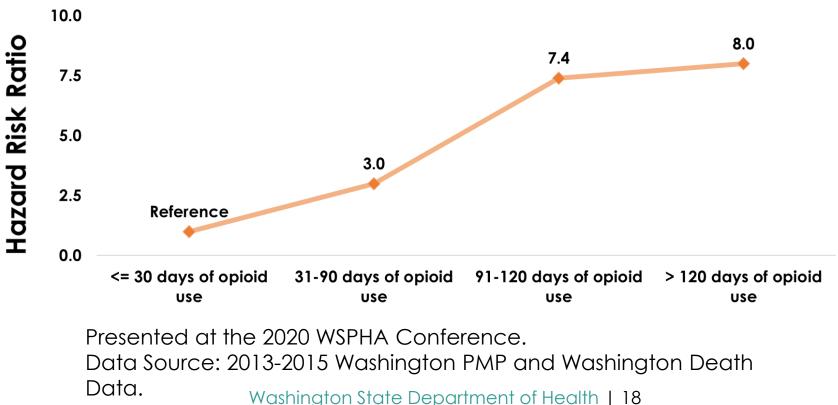
- In development
- The goal is to examine potential associations between prescription drug and maternal/birth factors.
- Better Prescribing and Better Treatment (BPBT)
 - <u>Better Prescribing, Better Treatment (wsma.org)</u>
 - Collaboration between Washington State Medical Association, Washington State Hospital Association, Washington State Department of Health, and the Washington State Health Care Authority.
 - WSMA sends prescribers in the state an opioid prescribing feedback report using data from the PMP.
 - The report shows how prescribers' opioid prescribing practices compare to others in the hospital, health system, or medical group, as well as within their specialty.
 - Participation is by opting-in via their organization's Chief Medical Officer (CMO).

Other Data and Research Projects

Prescription Opioid Fatal Overdose Risk Factors Study

There is an increased risk of a fatal prescription opioid poisoning death with increasing days of opioid use.

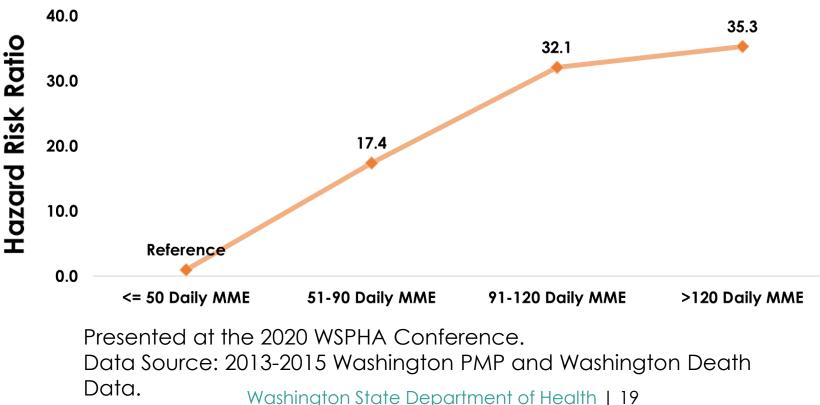
Hazard Rate for Risk of Prescription Opioid Overdose Death by Duration of Prescription Opioid Usage



Prescription Opioid Fatal Overdose Risk Factors Study

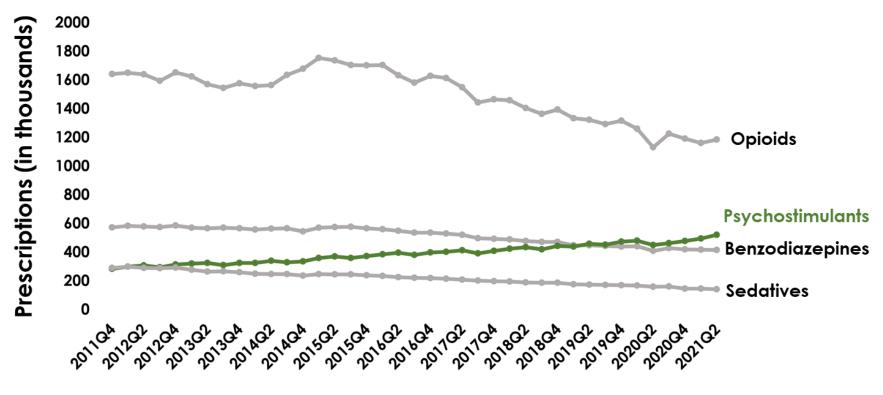
There is an increased risk of a fatal prescription opioid poisoning death with increasing dosage of opioid use.

Hazard Rate for Risk of Prescription Opioid Overdose Death by Dosage of Prescription Opioid Usage



Prescription Psychostimulant Trends

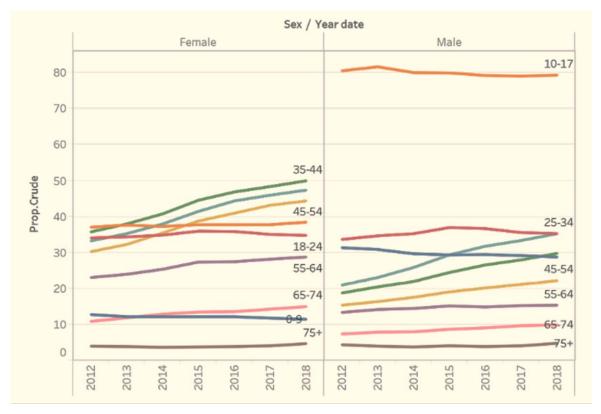
Psychostimulant prescriptions are the only increasing major prescription drug class.



Data Source: 2011-2021 Washington PMP. Washington State Department of Health | 20

Prescription Psychostimulant Trends

Psychostimulant prescription varies by sex and age.



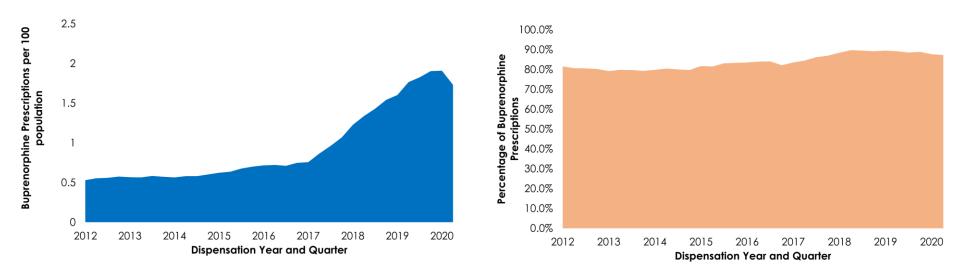
Presented at the 2020 WSPHA Conference. Data Source: 2012-2018 Washington PMP.

Buprenorphine Prescribing in Washington State

The rate of buprenorphine prescriptions has increased significantly.

Sex-Age Adjusted Buprenorphine Prescriptions by All Healthcare Providers per 100 population

Percentage of Buprenorphine Prescriptions Prescribed by Waivered Healthcare Providers

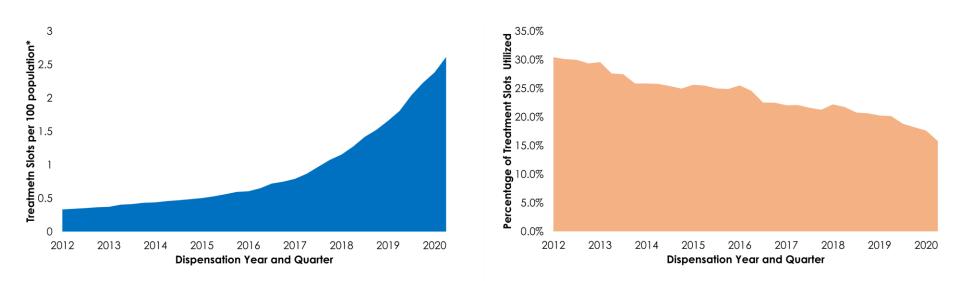


Presented at the 2021 WSPHA Conference. Data Source: Washington Prescription Monitoring Program and SAMHSA.

Treatment Slots and Utilization in Washington State

The total number of MOUD **treatment slots has increased** and **almost** 1 out of 5 treatment slots are utilized.

Total Treatment Slots per 100 population* Percentage of Treatment Slots Utilized

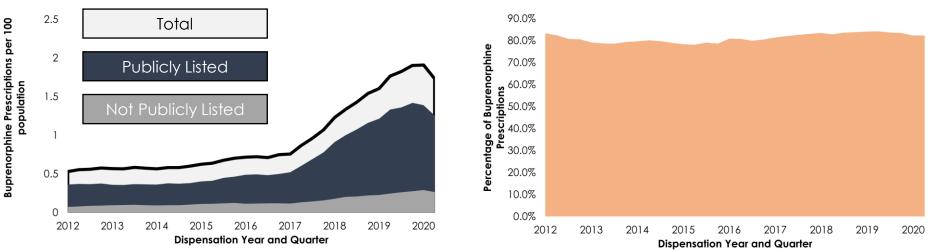


*Not age- or sex- adjusted. Presented at the 2021 WSPHA Conference. Data Source: Washington Prescription Monitoring Program and SAMSHA.

Waivered Healthcare Providers in Washington State

Approximately 80% of all buprenorphine prescriptions from waivered healthcare providers are from those **publicly listed**.

Sex-Age Adjusted Buprenorphine Prescriptions by Waivered Providers and Public Listing Status per 100 population Percentage of Waivered Healthcare Providers who prescribed a buprenorphine and publicly listed



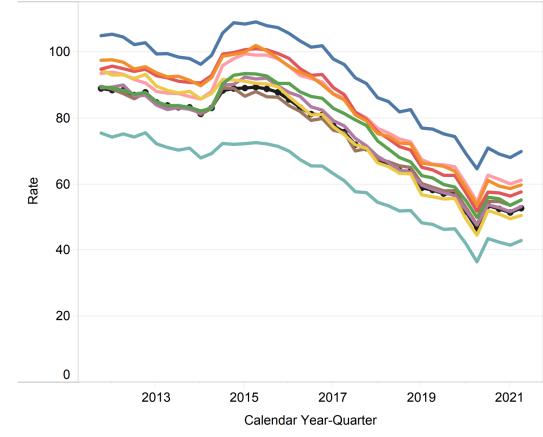
Presented at the 2021 WSPHA Conference. Data Source: Washington Prescription Monitoring Program and SAMSHA.

Prescription Opioid Trends During Covid19 Pandemic

Opioid prescriptions did decline during 2020Q2 due to the pandemic.

Data Source: 2011-2021 Washington PMP.

Graph is from <u>WTN</u> <u>Dashboard</u>. Age-Sex Adjusted All Opioid Prescription Rate per 1,000 population by ACH Region, 2011-2021

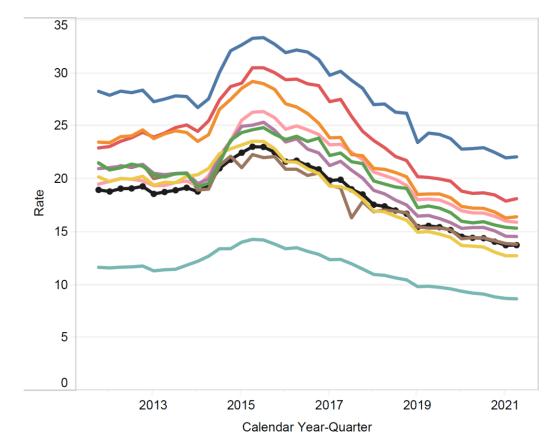


Prescription Opioid Trends During Covid19 Pandemic

Chronic opioid prescriptions did NOT seem to decline during 2020Q2 due to the pandemic.

Data Source: 2011-2021 Washington PMP.

Graph is from <u>WTN</u> <u>Dashboard</u>. Age-Sex Adjusted Chronic Opioid Prescription Rate per 1,000 population by ACH Region, 2011-2021



Requesting Data

- Requesting PMP data for statistical, educational, or research purposes?
 - Use this form: <u>https://fortress.wa.gov/doh/opinio/s?s=PMPDataRequest</u>





Updates to Overdoses in WA State

Recent updates with preliminary 2021 data

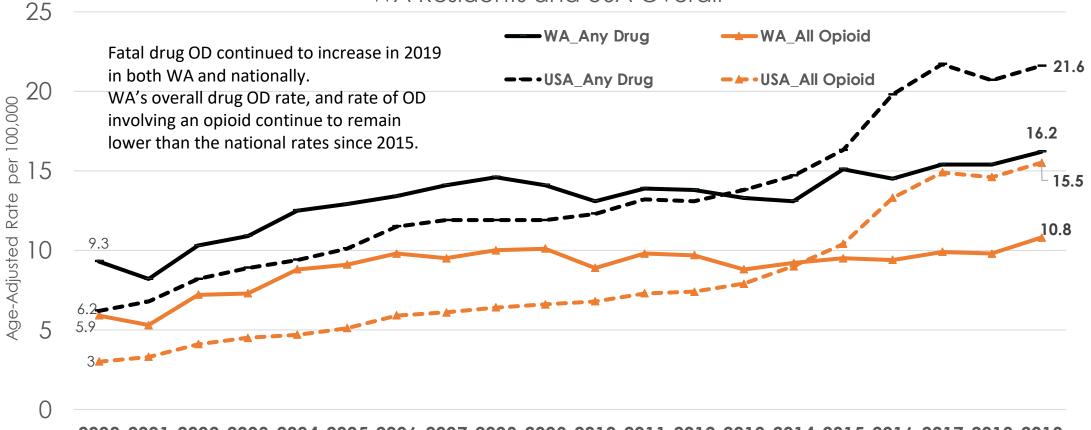
WA DOH – IVP/S&E ORWG Meeting 18Nov2021

Drug overdose deaths

- The overdose death data are from Washington DOH Death Certificates.
- The definition of drug overdose is based on ICD-10.
- any_drug is defined by the following ICD-10 codes as underlying causes of death:
 - X40-X44: Accidental poisonings by drugs
 - X60-X64: Intentional self-poisoning by drugs
 - X85: Assault by drug poisoning
 - **Y10-Y14**: Drug poisoning of undetermined intent
- Once a case is a drug overdose as defined above, specific drugs can be defined from the multiple causes of death, allowing multiple choices in case of polysubstance.

Overdose Death Rate by Drug Type, USA and WA (2000-2019)

WA Residents and USA Overall

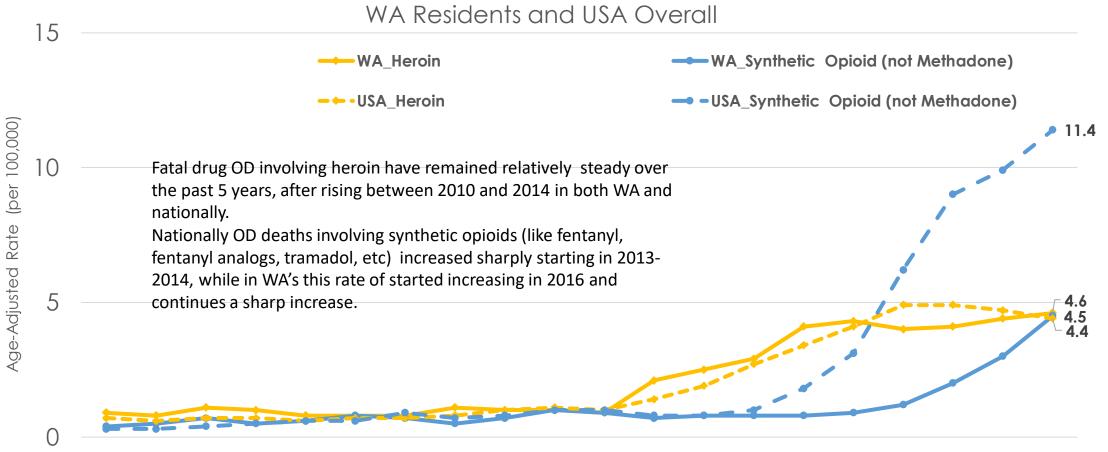


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Washington State Department of Health

Source: WA DOH death certificates CDC Wonder

Overdose Death Rate by Drug Type, USA and WA (2000-2019)

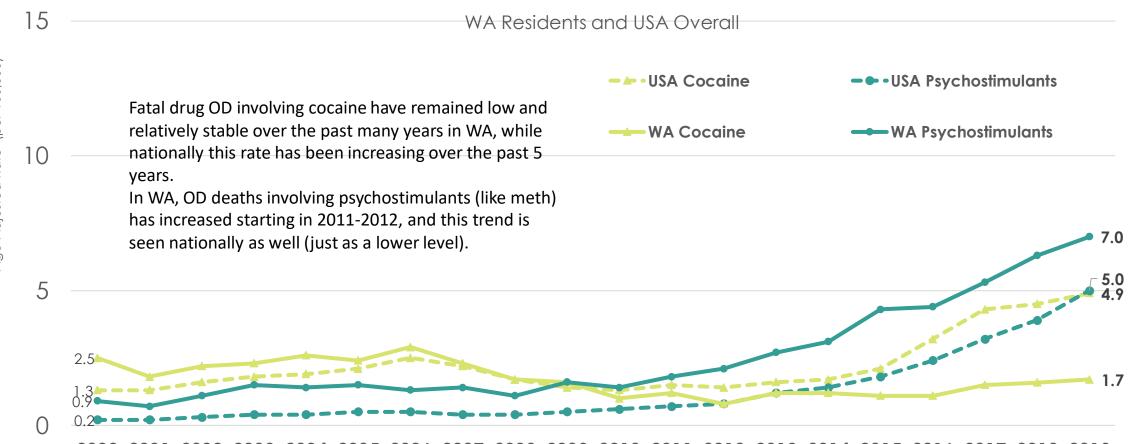


2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Washington State Department of Health

Source: WA DOH death certificates CDC Wonder

Overdose Death Rate by Drug Type, USA and WA (2000-2019)



2000 2001 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019

Washington State Department of Health

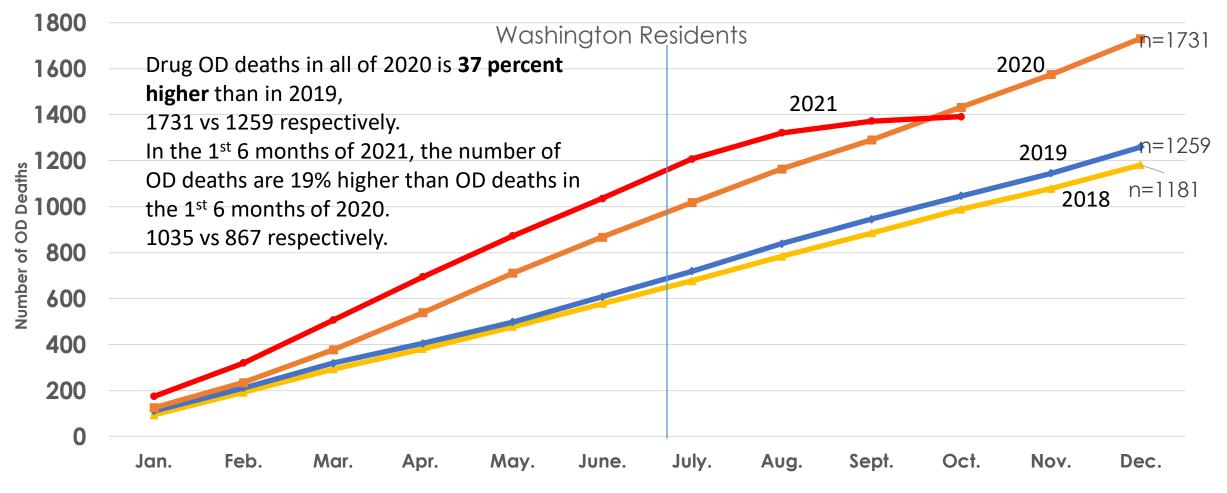
Source: WA DOH death certificates CDC Wonder

Confirmed WA State Overdose Deaths

Drug Type	2021*	2020	2019	2018	2017
Any Drug	1391	1731	1259	1181	1163
Any Opioid	978	1194	827	744	739
Heroin	230	384	347	329	306
Synthetic opioids	716	672	337	224	142
Rx opioid (not fentanyl)	228	328	267	305	342
Psychostimulants	702	728	540	473	390
Cocaine	150	187	132	129	111

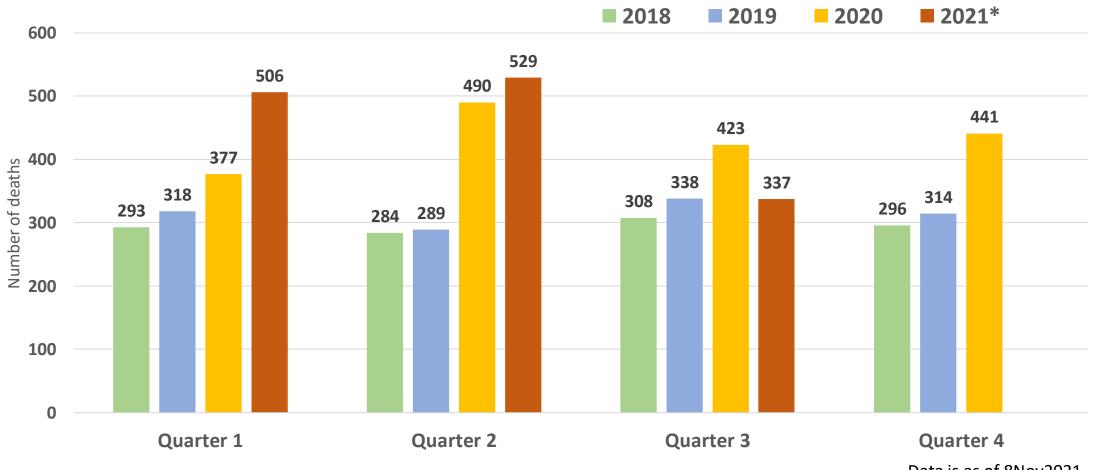
*2021 data are preliminary and will change. Data is as of 8Nov2021. Source: WA DOH death certificates

Annual cumulative overall drug overdose deaths by month (2018-2021*)



- 2021 data are preliminary and will change.
- Data run: 8Nov2021

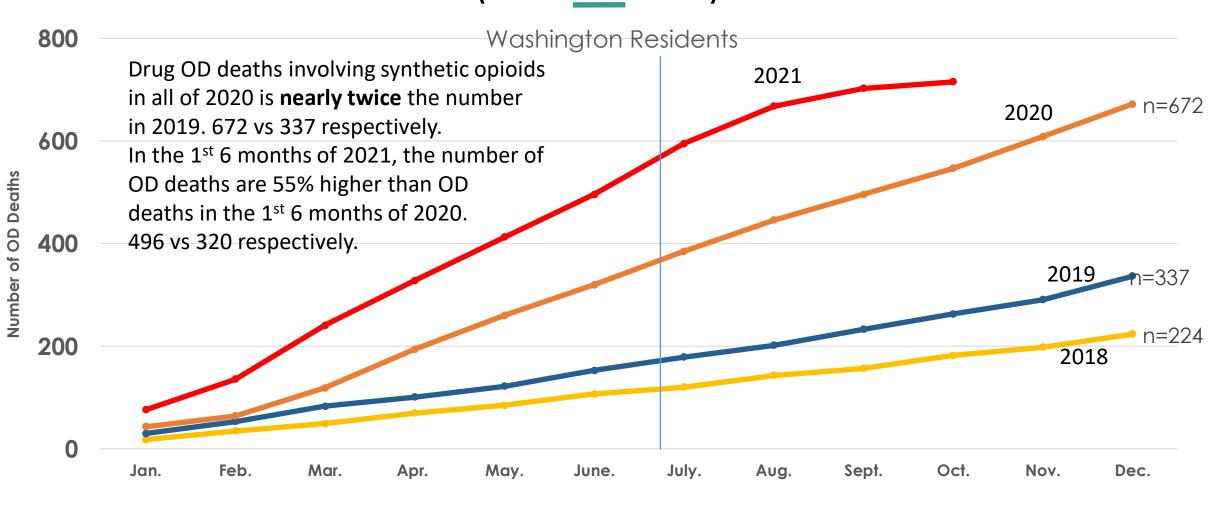
Number of overdose deaths by quarter



* 2021 data are preliminary and will change.

Data is as of 8Nov2021. Source: WA DOH death certificates

Annual cumulative drug overdose deaths involving non-methadone synthetic opioids by month (2018-2021*)



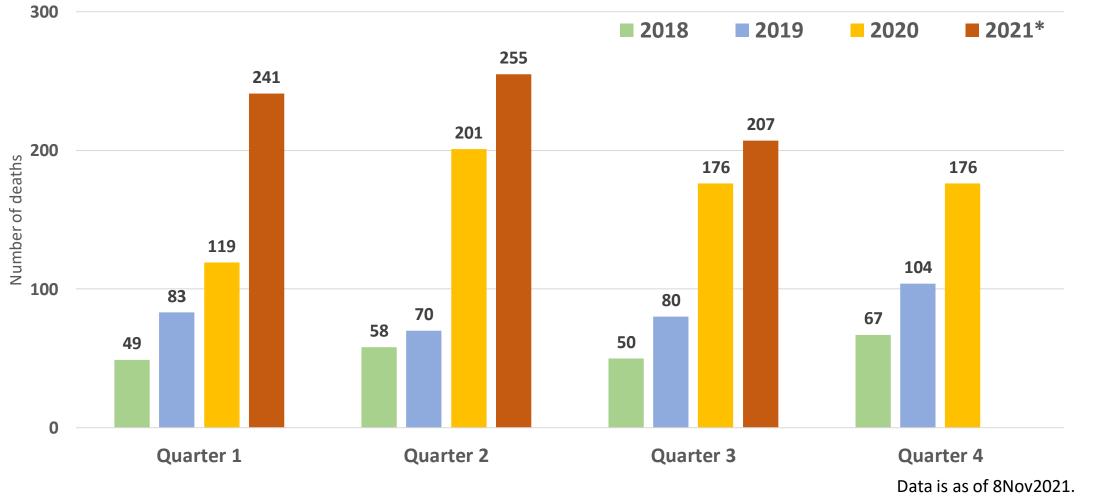
2021 data are preliminary and will change.

Data run: 8Nov2021

Washington State Department of Health

Source: WA DOH death certificates

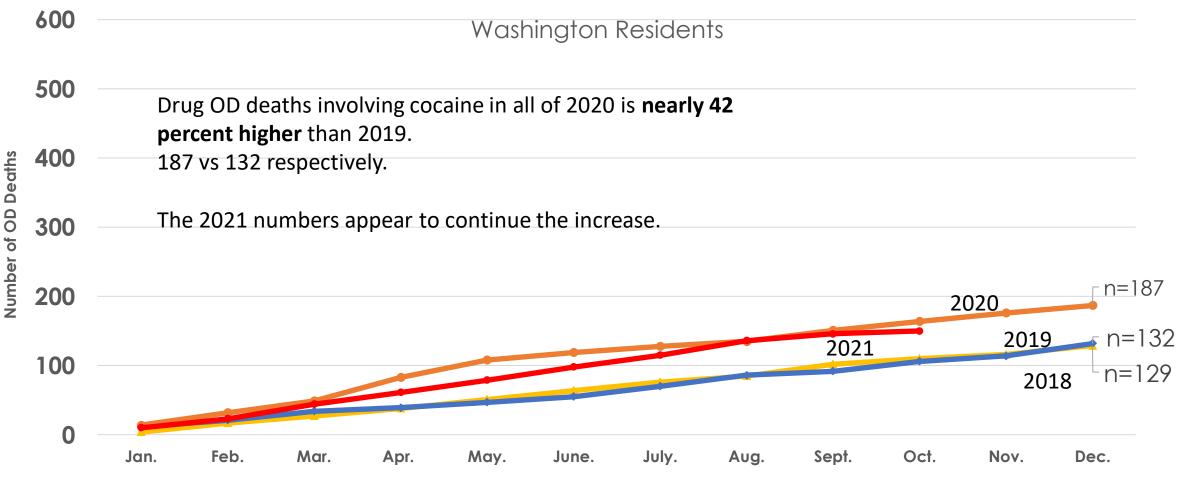
Number of overdose deaths involving non-methadone synthetic opioids by quarter



*2021 data are preliminary and will change.

Data is as of 8Nov2021. Source: WA DOH death certificates

Annual cumulative drug overdose deaths involving cocaine by month (2018-2021*)



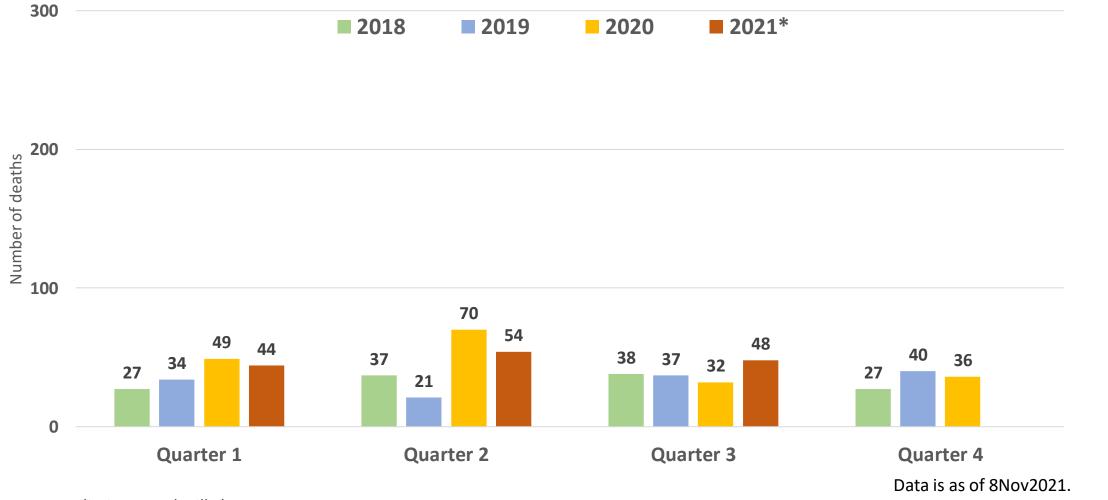
• 2021 data are preliminary and will change.

Data run: 8Nov2021

Washington State Department of Health

Source: WA DOH death certificates

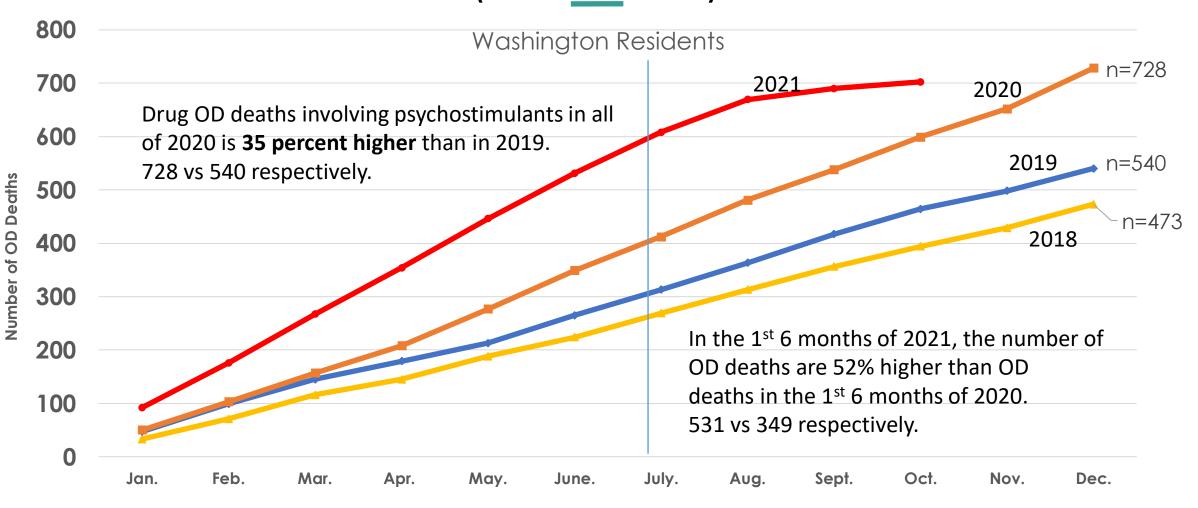
Number of overdose deaths involving cocaine by quarter



*2021 data are preliminary and will change.

Source: WA DOH death certificates

Annual cumulative drug overdose deaths involving psychostimulants by month (2018-2021*)



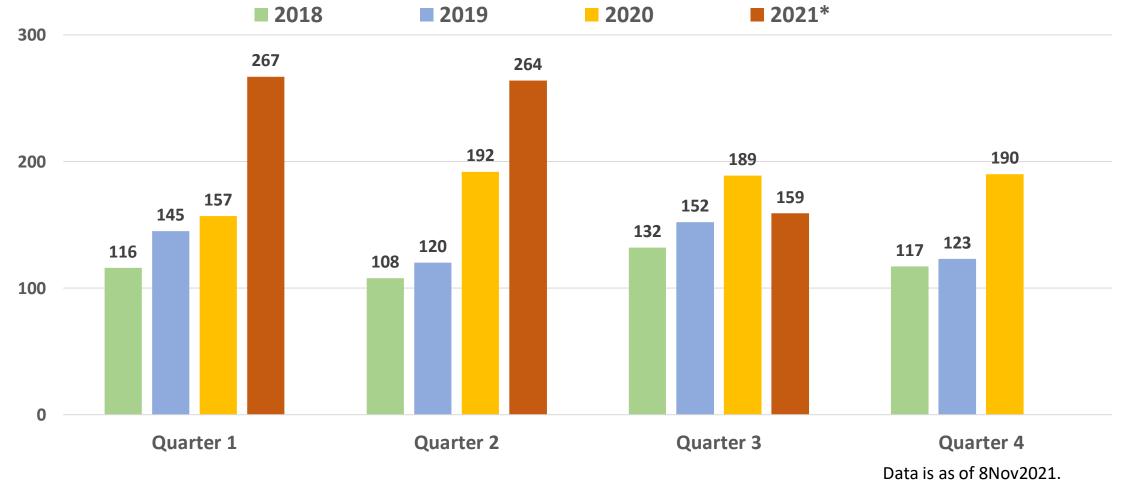
• 2021 data are preliminary and will change.

• Data run: 8Nov2021

Washington State Department of Health

Source: DOH death certificates

Number of overdose deaths involving a psychostimulant by quarter



*2021 data are preliminary and will change.

Source: WA DOH death certificates

Annual cumulative drug overdose deaths involving Rx opioids by month (2018-2021*)

	600					Wash	nington I	Residen	ts					
	500	After	r several '	years of (declining		hs involvi							
	400	•	ids, drug out 23 p			0 1	oids in all	2020						
Deaths	400	328	vs 267 re	spectivel	у.							2020	n=328	
OD	300	So far, the 2021 data appears to show a continued										2020 n=305		
Number of	000	incre	ease in th	e numbe	er of rx op	oioid OD	deaths. 2021					2018 2019	_ n=267	
Nun	200						2021							
	100													
	0	Jan.	Feb.	Mar.	Apr.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	

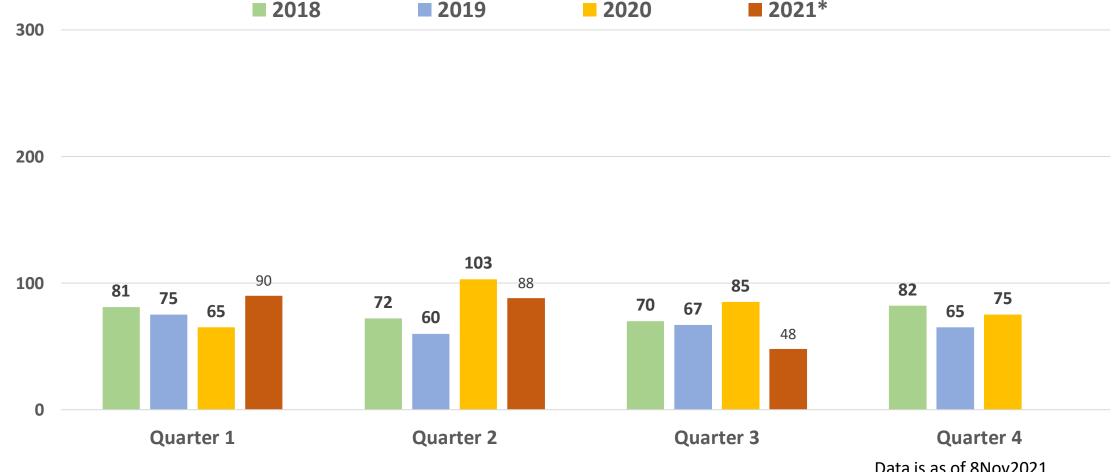
• 2021 data are preliminary and will change.

• Data run: 8Nov2021

Washington State Department of Health

Source: WA DOH death certificates

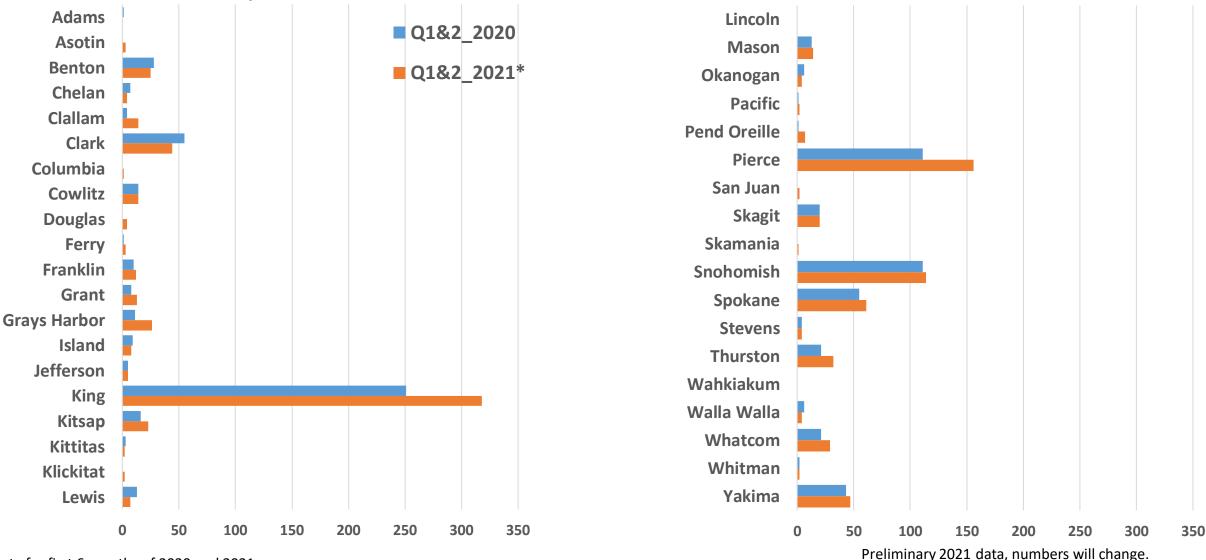
Number of overdose deaths involving a Rx opioid by quarter



* 2021 data are preliminary and will change.

Data is as of 8Nov2021. Source: WA DOH death certificates

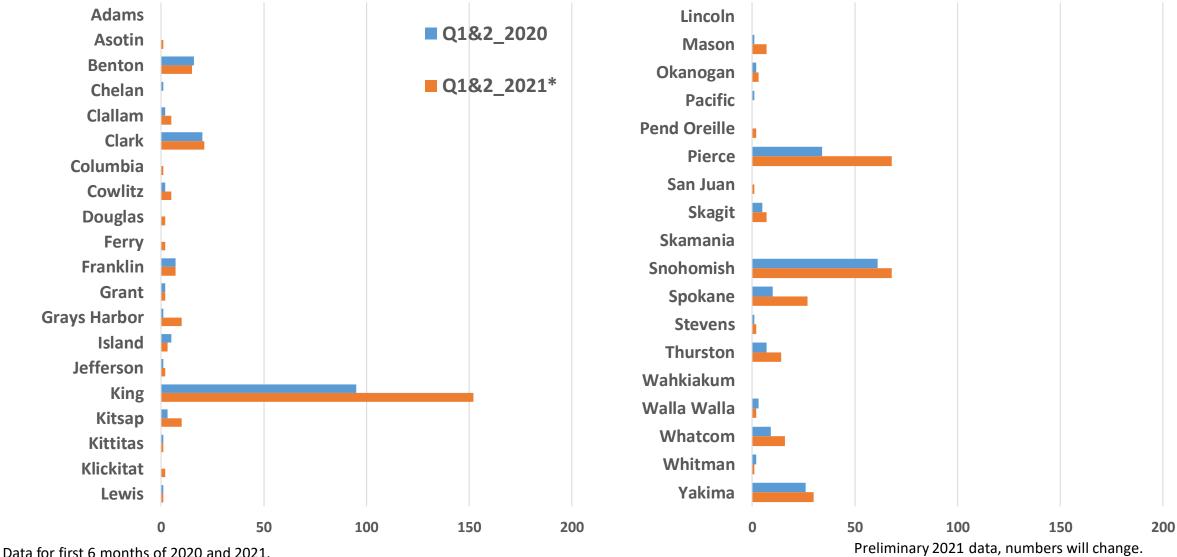
Overall drug overdose death counts by county compare first 6 months of 2020 and 2021*



Data as of 8Nov2021

Data for first 6 months of 2020 and 2021. Source: WA DOH death certificates

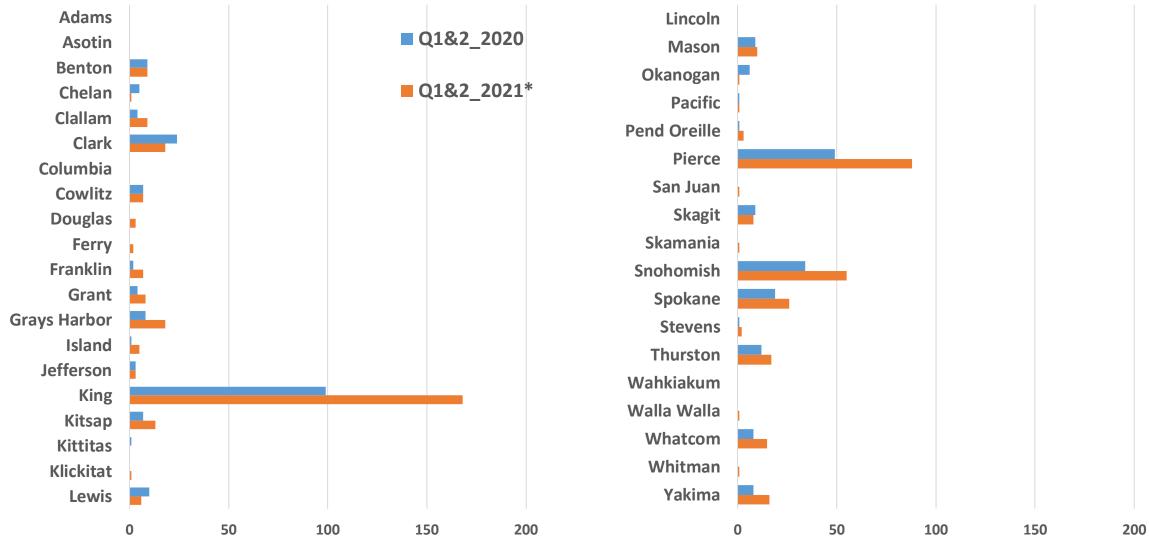
Drug overdose death involving synthetic opioids counts by county compare first 6 months of 2020 and 2021*



Source: WA DOH death certificates

Preliminary 2021 data, numbers will chang Data as of 8Nov2021

Drug overdose death involving psychostimulants counts by county compare first 6 months of 2020 and 2021*

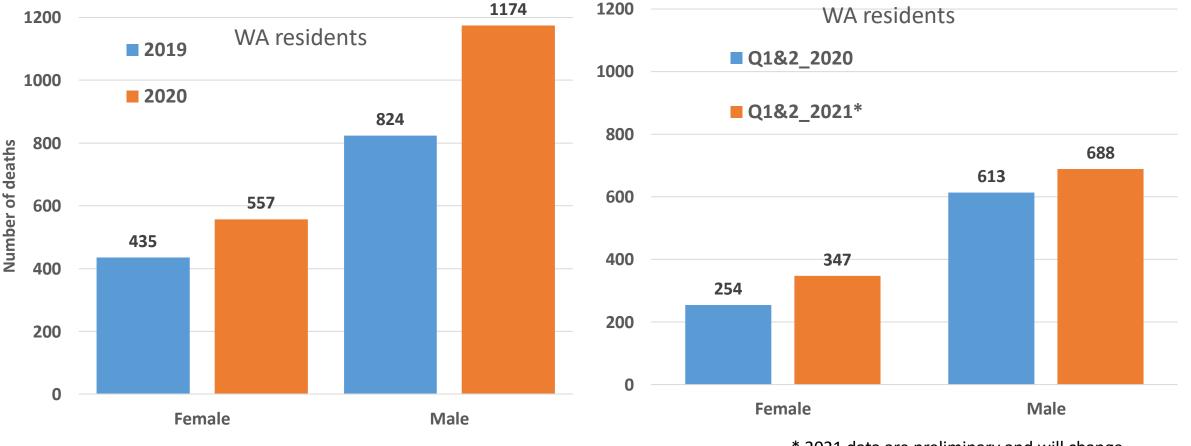


Data for first 6 months of 2020 and 2021. Source: WA DOH death certificates Preliminary 2021 data, numbers will change. Data as of 8Nov2021

Overall drug overdose deaths by sex

Compare 2019 and 2020 (full years)

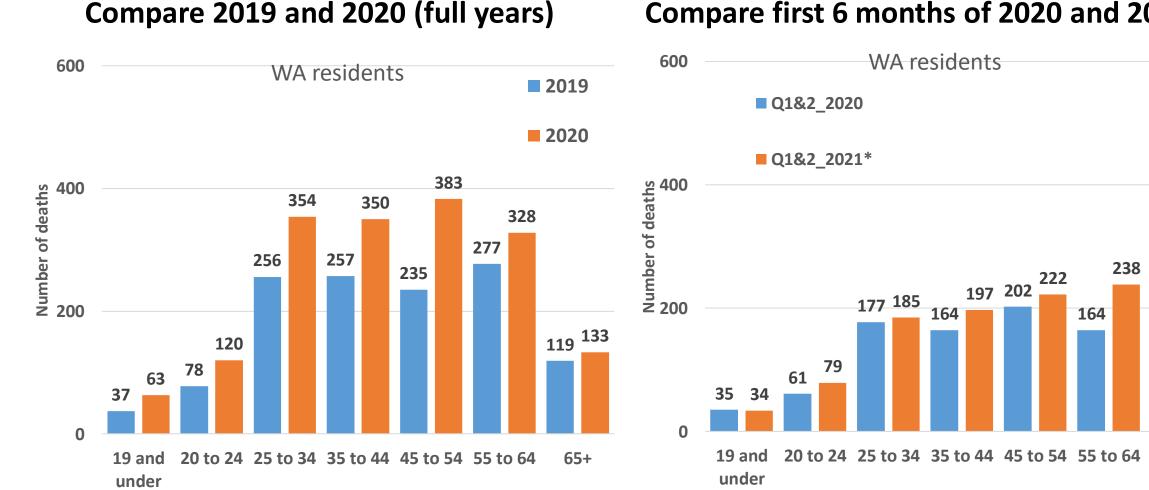




Source: DOH death certificates.

* 2021 data are preliminary and will change. * Data as of 8Nov2021

Overall drug overdose deaths by age



Source: DOH death certificates.

Compare first 6 months of 2020 and 2021*

* 2021 data are preliminary and will change. Data as of 8Nov2021

80

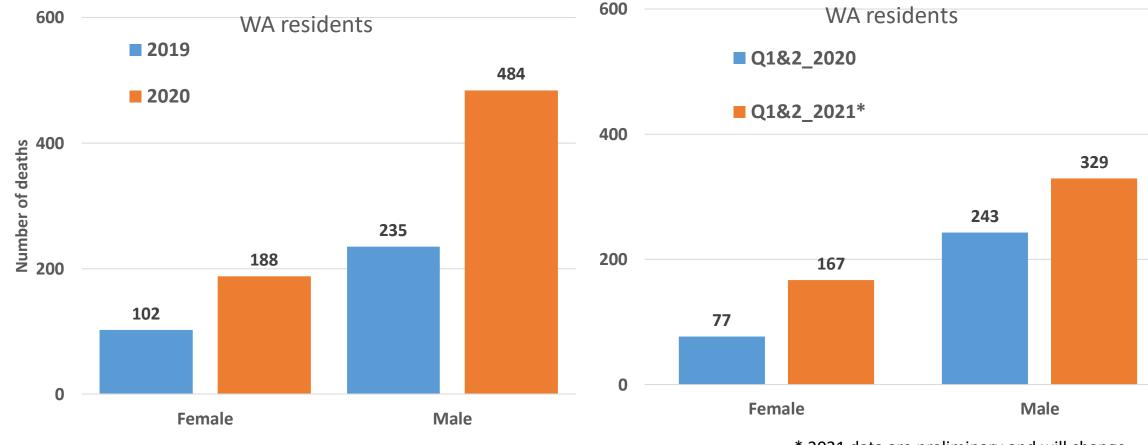
64

65+

Drug overdose deaths involving synthetic opioids by sex

Compare 2019 and 2020 (full years)

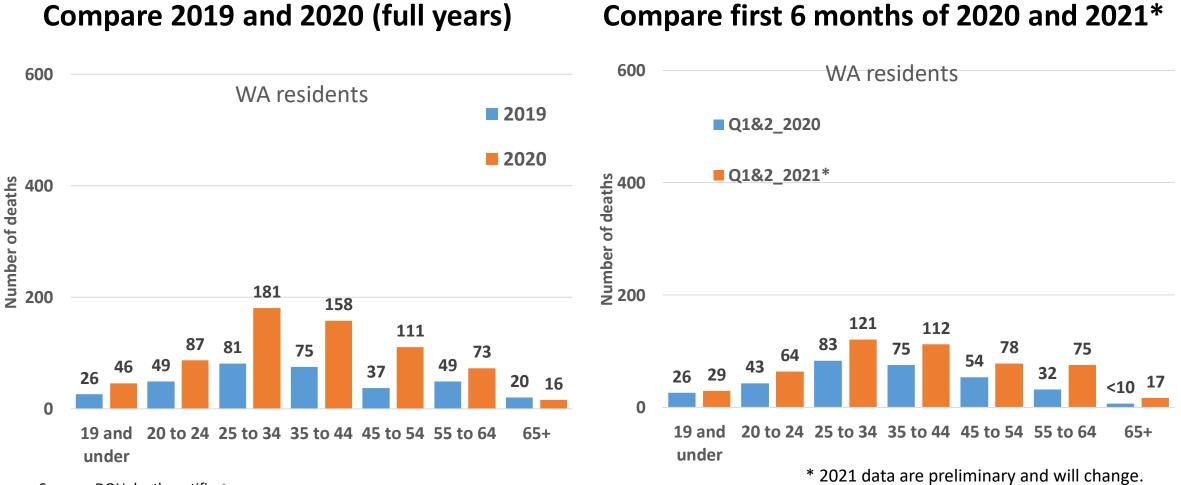




Source: DOH death certificates.

* 2021 data are preliminary and will change. Data as of 8Nov2021

Drug overdose deaths involving synthetic opioids by age



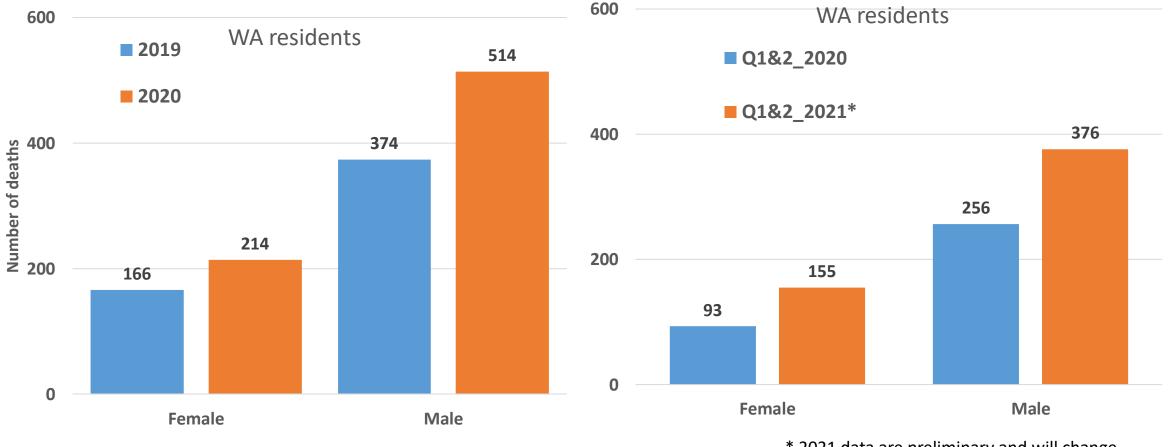
Data as of 8Nov2021

Source: DOH death certificates.

Drug overdose deaths involving psychostimulants by sex

Compare 2019 and 2020 (full years)

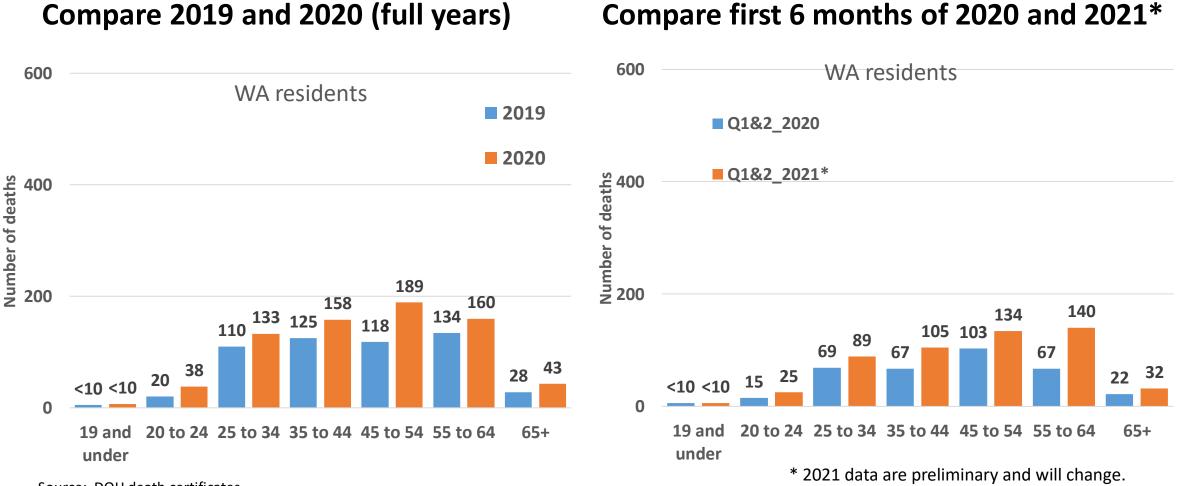
Compare first 6 months of 2020 and 2021*



Source: DOH death certificates.

* 2021 data are preliminary and will change. Data as of 8Nov2021

Drug overdose deaths involving psychostimulants by age

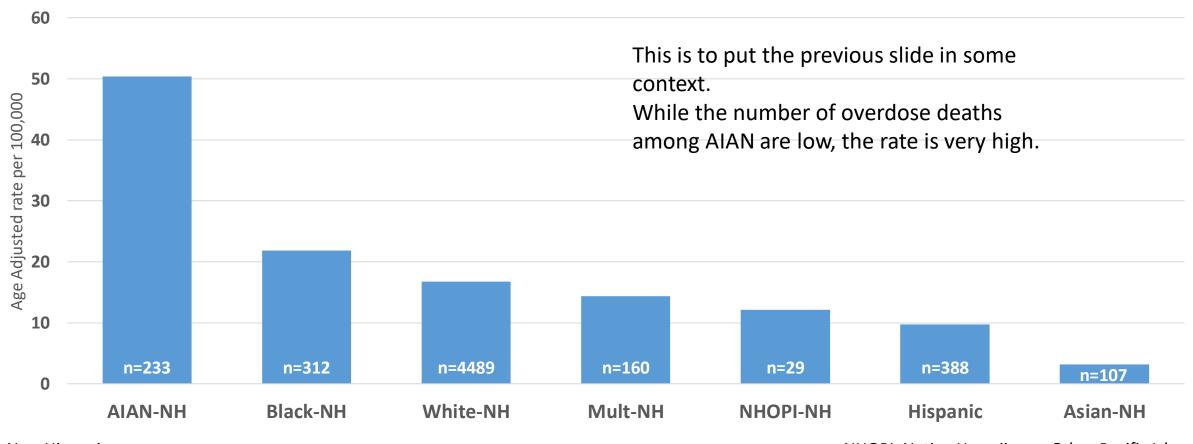


Source: DOH death certificates.

Data as of 8Nov2021

Drug overdose deaths disproportionally affect American Indian and Alaskan Native populations

WA residents (2015-2019)



NH: Non-Hispanic AIAN: American Indian/Alaskan Native

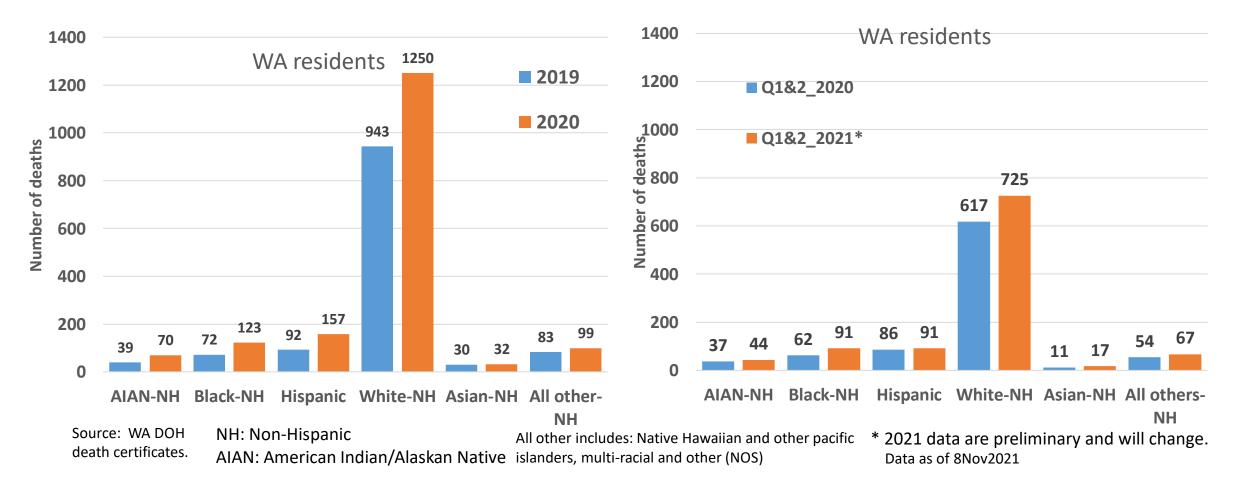
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NHOPI: Native Hawaiian or Other Pacific Islander Multi: Multi-racial

Overall drug overdose deaths by race/ethnicity

Compare 2019 and 2020 (full years)

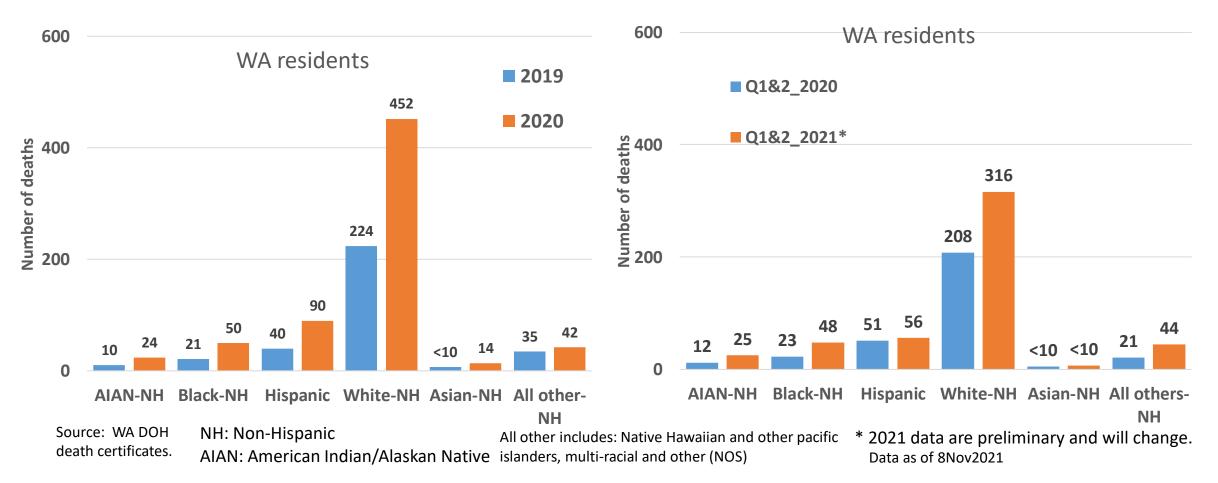
Compare first 6 months of 2020 and 2021*



Drug overdose deaths involving synthetic opioids by race/ethnicity

Compare 2019 and 2020 (full years)

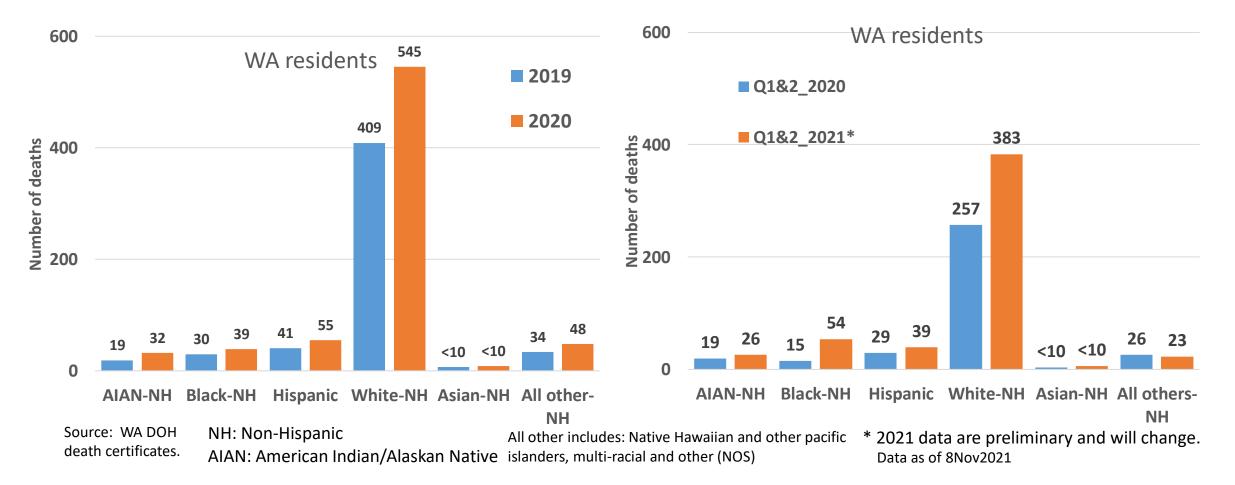
Compare first 6 months of 2020 and 2021*



Drug overdose deaths involving psychostimulants by race/ethnicity

Compare 2019 and 2020 (full years)

Compare first 6 months of 2020 and 2021*

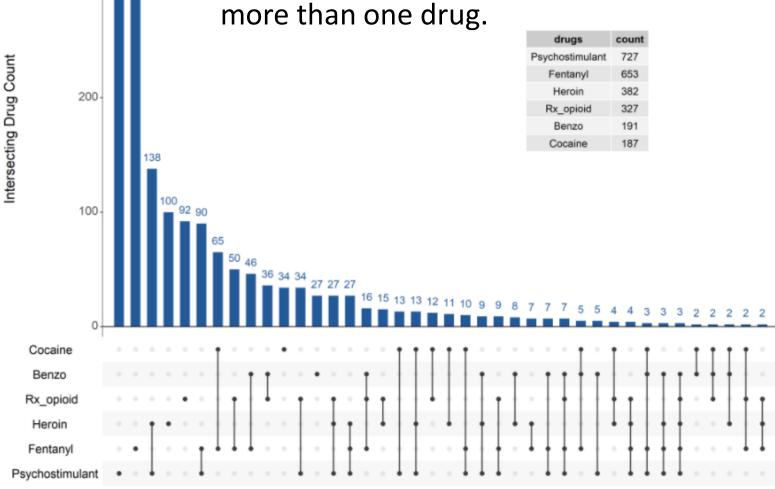


Polysubstance use (2020)

314

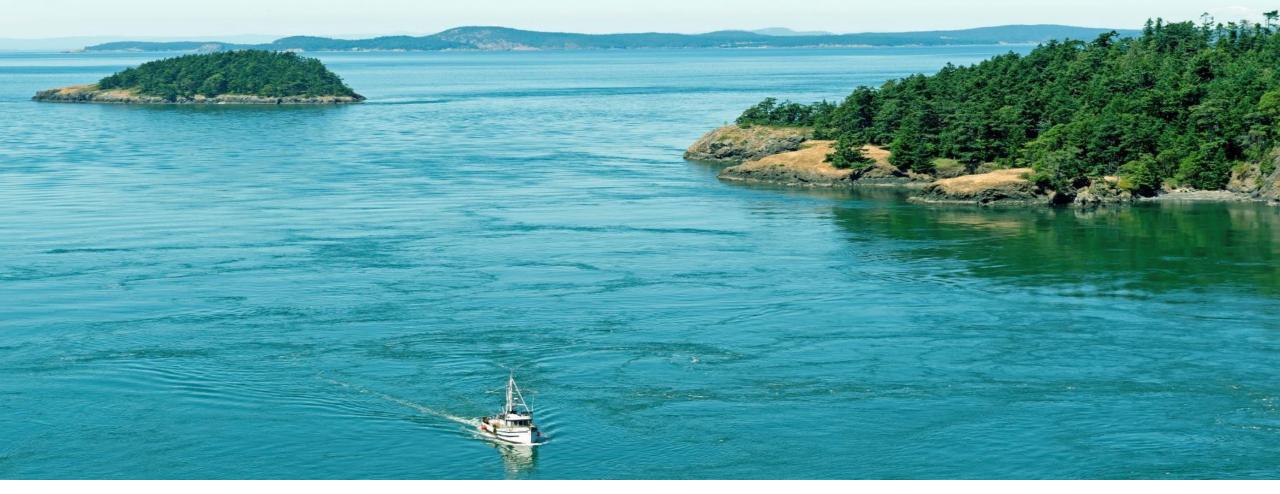
300

Polysubstance combination for selected drugs The majority of the drug overdose deaths included more than one drug.



Thank you

Data available at: <u>www.doh.wa.gov/OverdoseData</u> Email contact: <u>Injury.data@DOH.WA.GOV</u>





STATE UNINTENTIONAL DRUG OVERDOSE REPORTING SYSTEM (SUDORS)

Dana Drummond, MPH

DOH Surveillance and Evaluation / Injury and Violence Prevention

State Unintentional Drug Overdose Reporting System (SUDORS)

2019-2020

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State Unintentional Drug Overdose Reporting System (SUDORS)

Case Definition:

- Acute drug toxicity must have caused the death
- Unintentional/accident and Undetermined manner of death
- Death occurred within jurisdiction regardless of residence and location of overdose
- All ages included
- Substance Types: street drugs, prescription drugs, OTC drugs, dietary supplements



Death Certificates

Demographics
Decedent residence information
Cause of death information



Medical Examiner/Coroner Reports

Scene evidence of drug use
Timing and context of overdose
Medical and social history/circumstances



Toxicology Results

All substances detected
Substances that caused death
Prescription status of substances

*Prior to September 2019, SUDORS was limited to only unintentional opioid overdose deaths. OD2A funding has expanded data collection to all unintentional and undetermined drug overdose deaths.

SUDORS Data Workflow

1. Identify Cases	2. Import cases	3. Abstraction	4. Quality Control	5. Data Analysis
1. Identify SUDORS Cases	2. Import Cases into SAMS	3. Abstraction of MEC Reports	4. Quality Control	5. Data release for Analysis
Twice a month IVP Epidemiologist identifies a SUDORS case based on ICD-10 codes (X40–X44, Y10– Y14 and T40.[0-4,6]) and the county of injury from the death certificate data. The death data are updated weekly and made available by the Center for Health Statistics	The epidemiologist prepares the selected cases file following CDC specifications and import into CDC SAMS (Secure Access Management Services). Notify the SUDORS abstractors of the new uploaded cases	DOH NVDRS/SUDORS team has MOU with ME/Coroners and Law Enforcement agencies throughout the state for access to MEC and LE reports in violent deaths and overdose deaths. Those reports are abstracted through the NVDRS/SUDORS online database following CDC guideline.	CDC SUDORS review all the drug overdose cases entered through SAMS and send a quality control report for any needed correction or feedback	Every semester CDC prepares cumulative flat files with derived variables accounting for the complexity of the drug classification. Most of the data analyses are based on those flat files.

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What makes SUDORS data so unique?

It captures unique variables that cannot be found on the death certificate such as circumstances that may have contributed to the overdose and evidence found at the scene.

- Circumstances: substance use history, school problems, financial problems, employment problems, relationship problems, life stressors
- Homeless status
- Mental health diagnosis and treatment
- Pain management history: prescribed opioids, undergoing pain treatment, past injury
- Naloxone administration and by whom
- Route of drug administration
- Death scene paraphernalia

What makes SUDORS data so unique?

It includes toxicology results, which provides a complete list of substances present that may not have been listed as a cause of death on death certificate.

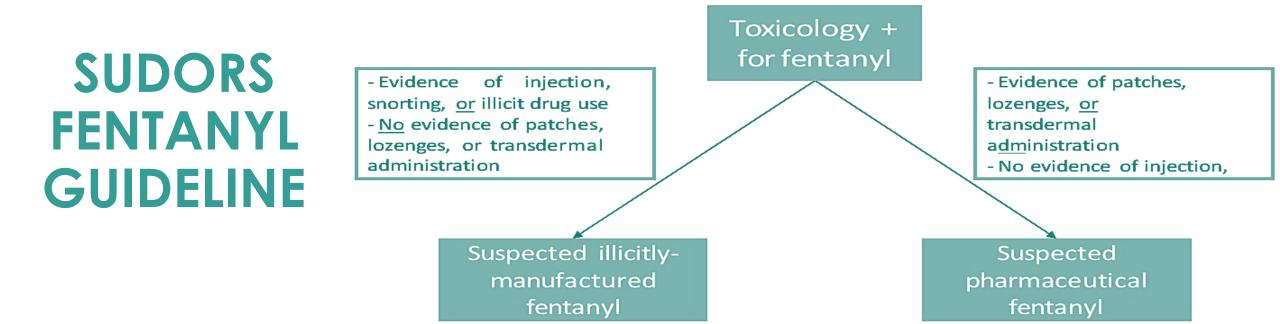
It provides guidelines to determine if an overdose was due to an illicitly manufactured substance based on evidence found at the scene

Fentanyl Guideline

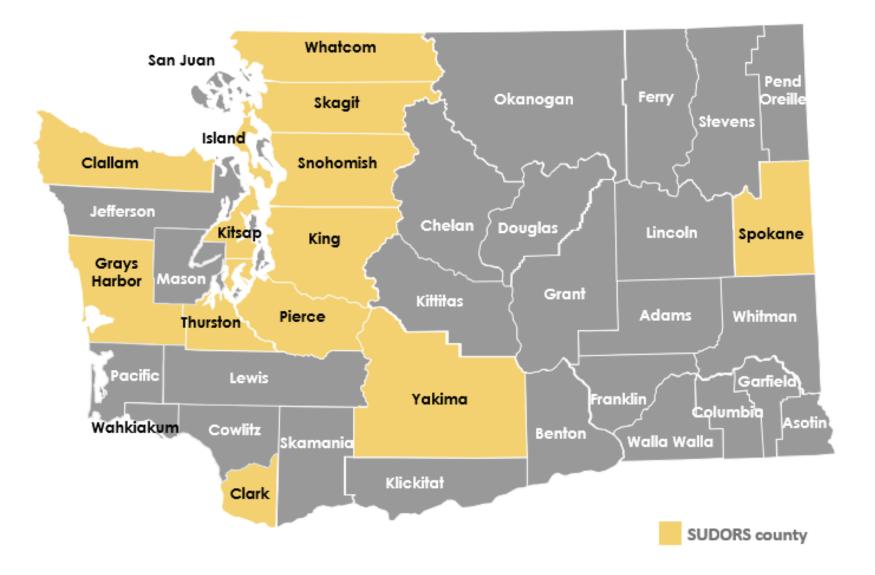
• Heroin Guideline

It links to the Prescription Monitoring Program (PMP) to determine the number of opioid prescriptions decedents received prior to the overdose, the number of prescribers, and number of pharmacies.

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			Toxicology p	ositivefor:	Scene evidence of:		
SUDORS HEROIN			6-MAM <u>or</u> diacetylmorphine	Morphine	Injection, illicit drug use, <u>or</u> history of heroin abuse	Prescription morphine use	
GUIDELINE		Confirmed	\checkmark	✓ / ×	√ / ×	✓ / ×	
GUIDELINE	Heroin	Probable	×	\checkmark	\checkmark	×	
		Suspected	×	\checkmark	×	×	
	Morphine	Suspected	×	✓	×	✓	



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Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020

SUDORS 2019-2020

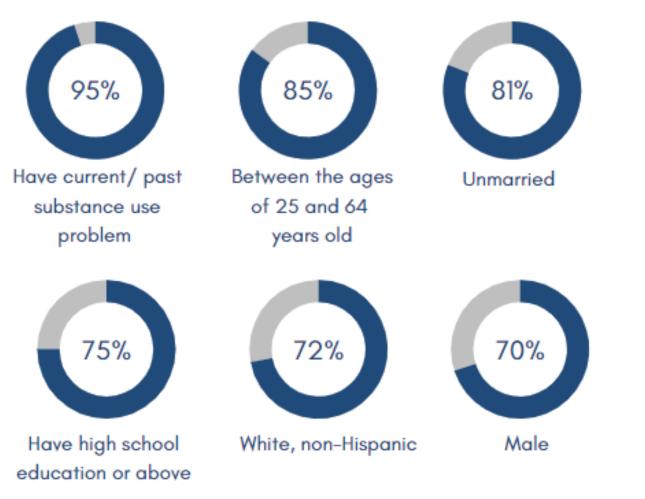
DOH currently partners with **13** county medical examiners and coroners to collect unintentional and undetermined overdose death data.

These county cases represent more than **75%** of all unintentional and undetermined overdose deaths in the state.

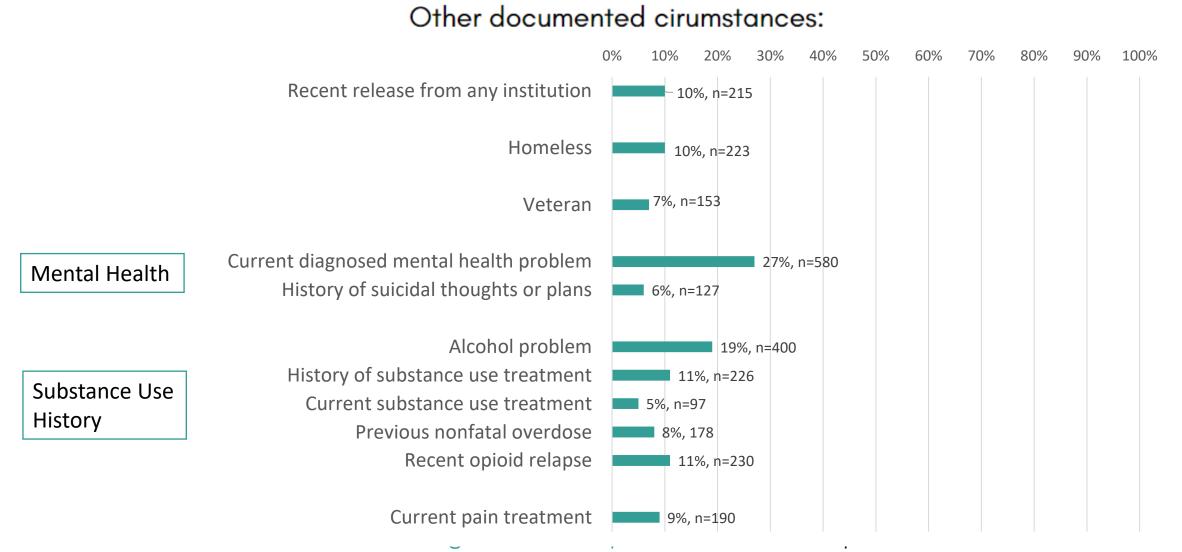
Between January 1, 2019 and December 31, 2020, there were **2,140** overdose deaths that occurred in the SUDORS counties (802 in 2019 and 1,338 in 2020).

WHO are the overdose decedents?

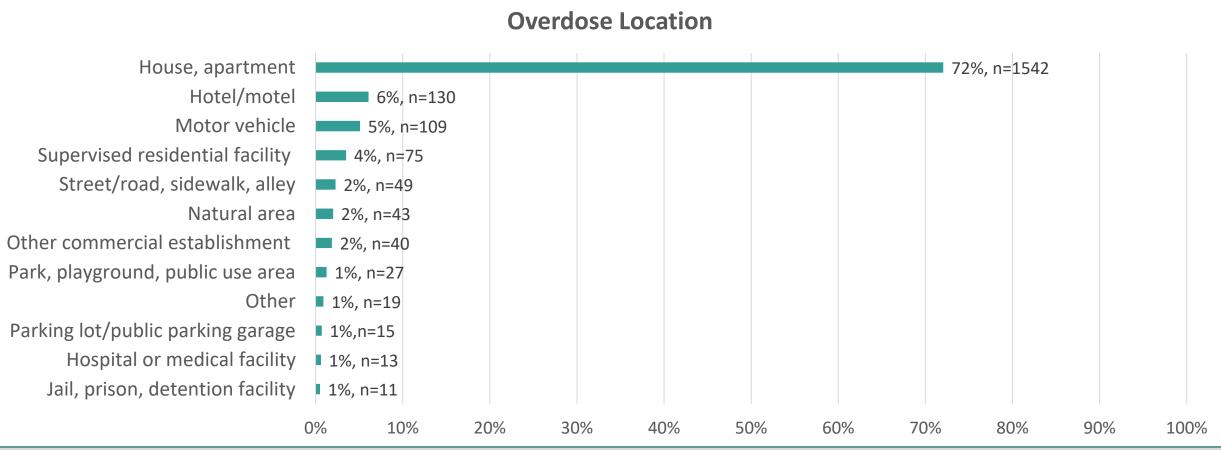
Overdose death decedents are predominately:



WHO are the overdose decedents? (2019-2020)



WHERE do overdoses occur? (2019-2020)



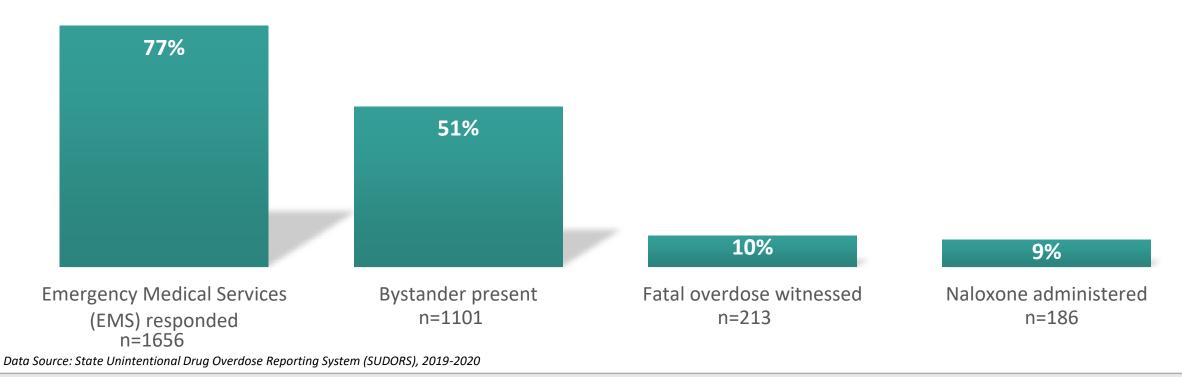


72% of overdose deaths occurred in a house or apartment

64% of overdose deaths occurred in the decedents home

WHERE do overdoses occur? (2019-2020)

Overdose Response



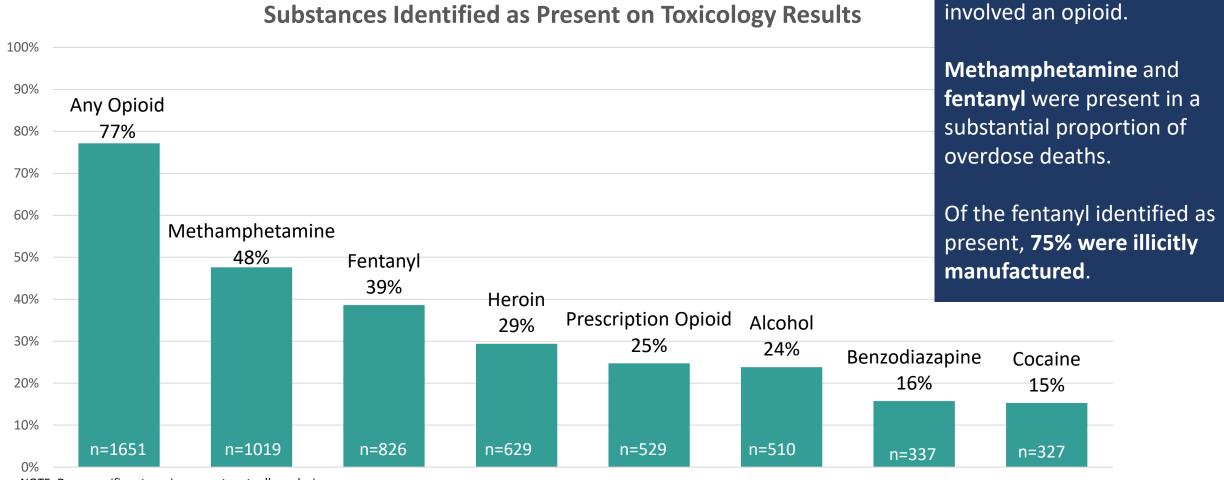
Definitions:

Bystander is an individual who was physically nearby either during or shortly preceding an overdose who potentially had an opportunity to intervene and respond to the overdose.

Witness: a person, aged 11 years or older, witnessed the decedent use the substance(s) that resulted in his/her overdose.

WHAT drugs were identified? (2019-2020)

77% of overdose deaths



NOTE: Drug specific categories are not mutually exclusive.

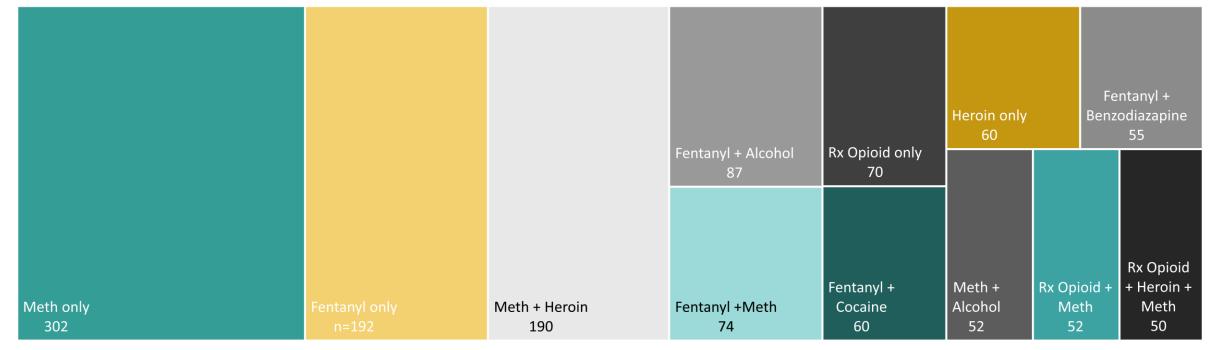
Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020

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WHAT drugs were identified? (2019-2020) Polysubstance Use

97% of all overdose deaths had more than one substance identified as present on toxicology results.

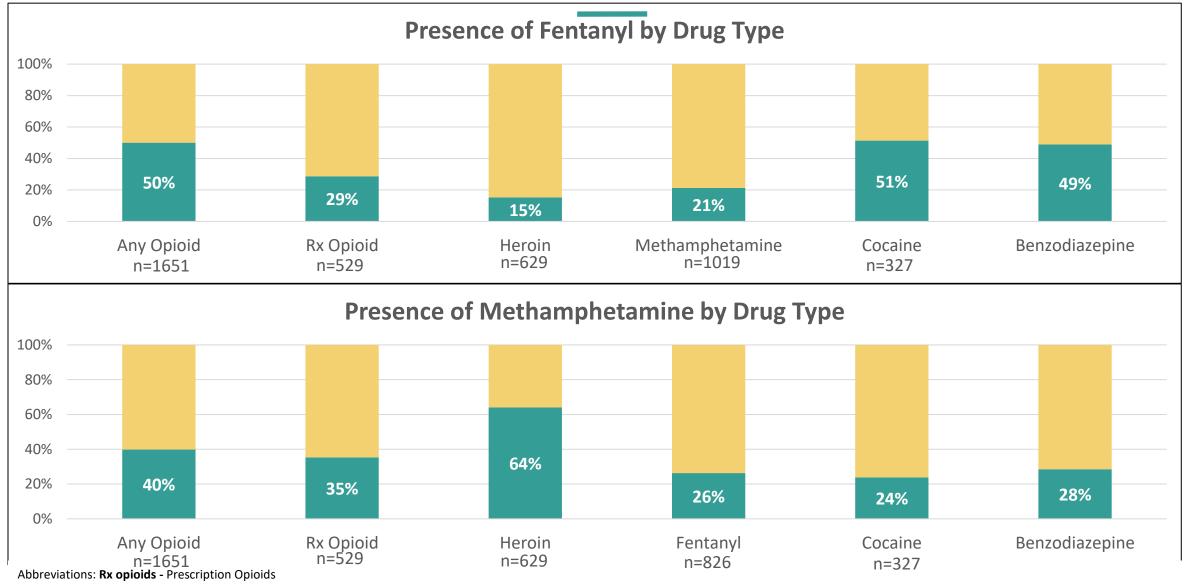
12 Common Drug Combinations



NOTE: Graph does not include all possible drug types

Abbreviations: Meth – Methamphetamine, Rx opioids - Prescription Opioids

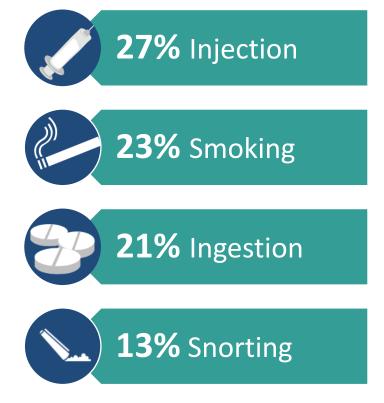
WHAT drugs were identified? (2019-2020) Polysubstance Use: Co-Use of Fentanyl and Methamphetamine



NOTE: Drug specific categories are not mutually exclusive.

HOW are drugs being used? (2019-2020) Scene Evidence

Route of Administration

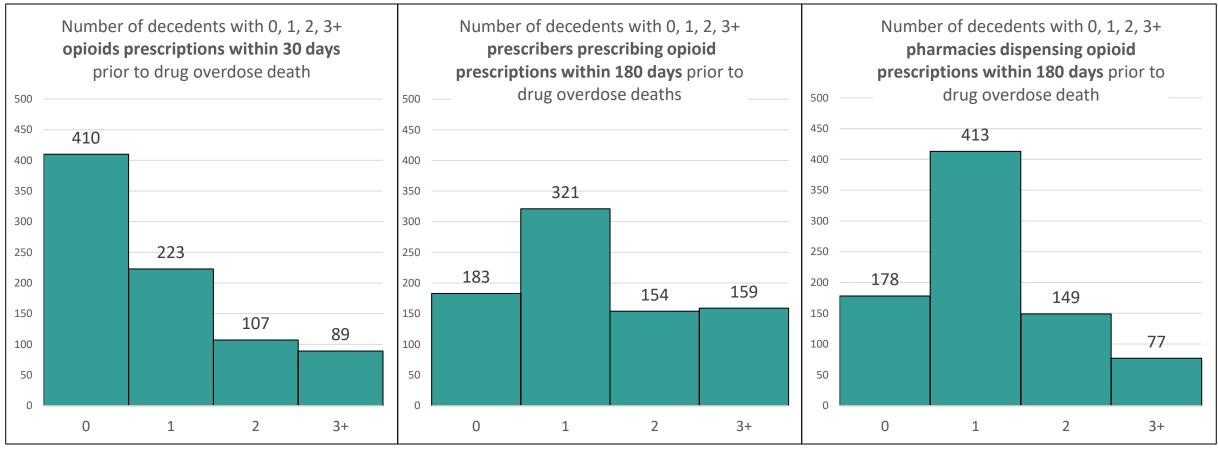


Other Evidence Found at the Scene

Evidence Found at the Scene	% of overdose deaths		
Evidence of Rapid overdose	9% (184)		
Evidence of Illicit Drug Use	43%		
Evidence of Prescription Drugs	36% (769)		
Not prescribed to victim	10% (205)		
Prescribed to victim	14% (307)		
Unknown who prescribed	23% (486)		

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SUDORS and Prescription Monitoring Program (2019-2020)



Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020

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Changes in overdose deaths (2019 vs 2020)

	Changes in SUDORS Overdose Deaths	2019 (Total = 802) % of overdose deaths	2020 (Total=1338) % of overdose deaths
1	Increase in overdose deaths involving fentanyl (especially illicitly manufactured fentanyl, 24% vs 32%)	31%(252)	43% (574)
	Increase in evidence of prescription drugs not prescribed to the victim	6% (48)	12% (157)
	Increase proportion of overdose deaths with a bystander present	49% (390)	51% (711)
	Increase in proportion of decedents who were ever treated for substance abuse	8% (62)	12% (164)
	Increase in proportion of decedents with a mental health diagnosis or problem	24% (198)	28% (382)
	Increase in proportion of decedents who had a recent opioid relapse	9% (76)	12% (154)
	Decrease in proportion of decedents who were homeless	13% (105)	9% (118)
	Decrease in proportion of injection drug use	31% (247)	25% (340)
	Decrease in proportion of overdose deaths involving heroin	34% (275)	26% (354)
	Decrease in proportion of overdose deaths involving prescription opioids	27% (214)	24% (315)
2	Decrease in proportion of overdose deaths that had EMS present	80% (645)	76% (1011)

Potential Opportunities for Intervention

73% of decedents had at least one potential opportunity for linkage to care prior to death or implementation of a life-saving action at the time of overdose.



51% **Bystander Present**

1,101 decedents had a person present or nearby at the time of the overdose. Some bystanders did not actually witness the fatal drug use.



10% Recent release from institution

215 decedents were released within the month before their death from prison/jail (2%), a hospital (6%), residential treatment facility, psychiatric hospital, or long-term care facility.



Naloxone Administered

186 decedents received naloxone at the time of overdose. 50 bystanders administered naloxone.



27% Mental Health Problem

580 decedents had a documented mental health problem or diagnosis



10%

Fatal Drug Use Witnessed

213 decedents had someone who witnessed the decedent use the substance(s) that resulted in his/her overdose.

9%



Previous non-fatal overdose

178 decedents had history of a nonfatal overdose.

11% Ever treated for substance use disorder

226 decedents were currently in treatment or received



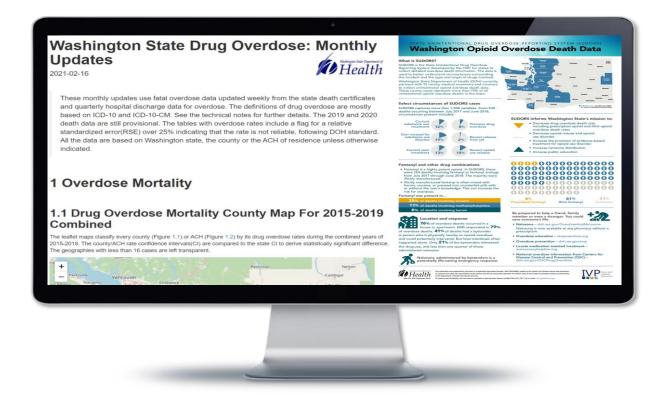
Current pain treatment

190 decedents were treated for chronic or acute pain at the time of the overdose



Where to find SUDORS and Overdose data?

- <u>WA State Monthly Overdose</u>
 <u>Updates</u>
- WA State SUDORS Infographic
- For overdose data requests, please contact: <u>injury.data@doh.wa.gov</u>



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Thank you

Data available at: <u>www.doh.wa.gov/OverdoseData</u> Email contact: <u>Injury.data@DOH.WA.GOV</u>



Washington State Department of Health is committed to providing customers with forms and publications in appropriate alternate formats. Requests can be made by calling 800-525-0127 or by email at civil.rights@doh.wa.gov. TTY users dial 711.