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

- **Wave 1:** Rise in Prescription Opioid Overdose Deaths Started in 1999
- **Wave 2:** Rise in Heroin Overdose Deaths Started in 2010
- **Wave 3:** Rise in Synthetic Opioid Overdose Deaths Started in 2013

Washington State PMP – Previous Diagram

User

SAW

PMP

HIE

Clearinghouse

Uploader

3rd P.I

User (via EHR)
Washington State PMP – Existing Diagram

[Diagram showing the connections between User, SAW, PMP, Clearinghouse, Uploader, 3rd P.I., and User (via EHR).]
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

- States sharing data with Washington via RxCheck
- States sharing data with Washington via PMPi
- States sharing data with Washington on both hubs
- States not sharing data with Washington
PMP Data
PMP Data

Dispensers

- Practitioner or pharmacy that delivers II–V CS or other drugs
- 1,356 in-state and 954 out-of-state pharmacies (active as of March 31, 2018)
- ~1 million prescription records per month

Prescribers

Patients

Friend/Family

PQAC

Weekly compliance monitoring and follow-up

Uploader

Weekly calls

ASAP 4.2 standards

Data Management

PMP

Quarterly data file

DOH Small Numbers Standards

Compliance with RCW 70.225.040 WAC 246-470-080

Visualization / Data Sharing

- Open Data Portal
- WTN Opioid Dashboard
- DSAs
- Reports

Source

Washington State Department of Health | 4
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 ≤ 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)
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
  - Prescription Monitoring Program (PMP) Public Use Data | Data.WA | State of Washington
  - 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)
  - [Better Prescribing, Better Treatment (wsma.org)](http://wsma.org)
  - 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
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

Presented at the 2020 WSPHA Conference.
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

Presented at the 2020 WSPHA Conference.

Washington State Department of Health | 19
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.
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*

![Graph showing increase in treatment slots from 2012 to 2020.]

Percentage of Treatment Slots Utilized

![Graph showing percentage of treatment slots utilized from 2012 to 2020.]

*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

- **Total**
- **Publicly Listed**
- **Not Publicly Listed**

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.

Washington State Department of Health | 24
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 WTN Dashboard.
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 WTN Dashboard.
Requesting Data

• Requesting PMP data for statistical, educational, or research purposes?
  • Use this form: 
    https://fortress.wa.gov/doh/opinio/s?s=PMPDataRequest
Questions?
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.
Fatal drug OD continued to increase in 2019 in both WA and nationally. WA’s overall drug OD rate, and rate of OD involving an opioid continue to remain lower than the national rates since 2015.

Source: WA DOH death certificates
CDC Wonder

Washington State Department of Health
Fatal drug OD involving heroin have remained relatively steady over the past 5 years, after rising between 2010 and 2014 in both WA and nationally. Nationally OD deaths involving synthetic opioids (like fentanyl, fentanyl analogs, tramadol, etc) increased sharply starting in 2013-2014, while in WA’s this rate of started increasing in 2016 and continues a sharp increase.
Overdose Death Rate by Drug Type, USA and WA (2000-2019)

Fatal drug OD involving cocaine have remained low and relatively stable over the past many years in WA, while nationally this rate has been increasing over the past 5 years. In WA, OD deaths involving psychostimulants (like meth) has increased starting in 2011-2012, and this trend is seen nationally as well (just as a lower level).

Source: WA DOH death certificates
CDC Wonder
# Confirmed WA State Overdose Deaths

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

*2021 data are preliminary and will change.
Data is as of 8Nov2021.  
Source: WA DOH death certificates
Drug OD deaths in all of 2020 is **37 percent higher** than in 2019, 1731 vs 1259 respectively.

In the 1st 6 months of 2021, the number of OD deaths are 19% higher than OD deaths in the 1st 6 months of 2020, 1035 vs 867 respectively.
Number of overdose deaths by quarter

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

* 2021 data are preliminary and will change.
Drug OD deaths involving synthetic opioids in all of 2020 is **nearly twice** the number in 2019. 672 vs 337 respectively.

In the 1st 6 months of 2021, the number of OD deaths are 55% higher than OD deaths in the 1st 6 months of 2020. 496 vs 320 respectively.

*2021 data are preliminary and will change.
Data run: 8Nov2021
Number of overdose deaths involving non-methadone synthetic opioids by quarter

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

*2021 data are preliminary and will change.
Annual cumulative drug overdose deaths involving cocaine by month (2018-2021*)

Drug OD deaths involving cocaine in all of 2020 is nearly 42 percent higher than 2019. 187 vs 132 respectively.

The 2021 numbers appear to continue the increase.

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

Source: WA DOH death certificates
Number of overdose deaths involving cocaine by quarter

*2021 data are preliminary and will change.

Data is as of 8Nov2021.
Source: WA DOH death certificates
Drug OD deaths involving psychostimulants in all of 2020 is **35 percent higher** than in 2019. 728 vs 540 respectively.

In the 1st 6 months of 2021, the number of OD deaths are 52% higher than OD deaths in the 1st 6 months of 2020. 531 vs 349 respectively.

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

Source: DOH death certificates
Number of overdose deaths involving a psychostimulant by quarter

*2021 data are preliminary and will change.

Data is as of 8Nov2021.
Source: WA DOH death certificates
After several years of declining OD deaths involving Rx opioids, drug OD deaths involving Rx opioids in all 2020 is about 23 percent higher than 2019. 328 vs 267 respectively.

So far, the 2021 data appears to show a continued increase in the number of Rx opioid OD deaths.
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 for first 6 months of 2020 and 2021.
Source: WA DOH death certificates

Preliminary 2021 data, numbers will change.
Data as of 8Nov2021
Drug overdose death involving synthetic opioids counts by county compare first 6 months of 2020 and 2021*

Data for first 6 months of 2020 and 2021. Preliminary 2021 data, numbers will change. Data as of 8Nov2021

Source: WA DOH death certificates
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)

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>435</td>
<td>824</td>
</tr>
<tr>
<td>2020</td>
<td>557</td>
<td>1174</td>
</tr>
</tbody>
</table>

Source: DOH death certificates.

Compare first 6 months of 2020 and 2021*

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1&amp;2_2020</td>
<td>254</td>
<td>613</td>
</tr>
<tr>
<td>Q1&amp;2_2021*</td>
<td>347</td>
<td>688</td>
</tr>
</tbody>
</table>

* 2021 data are preliminary and will change.  
* Data as of 8Nov2021
Overall drug overdose deaths by age

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 synthetic opioids by sex

**Compare 2019 and 2020 (full years)**

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>102</td>
<td>235</td>
<td>337</td>
</tr>
<tr>
<td>2020</td>
<td>188</td>
<td>484</td>
<td>672</td>
</tr>
</tbody>
</table>

**Compare first 6 months of 2020 and 2021***

<table>
<thead>
<tr>
<th></th>
<th>Q1&amp;2_2020</th>
<th>Q1&amp;2_2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>77</td>
<td>167</td>
</tr>
<tr>
<td>Male</td>
<td>243</td>
<td>329</td>
</tr>
</tbody>
</table>

Source: DOH death certificates.

* 2021 data are preliminary and will change. Data as of 8Nov2021.
Drug overdose deaths involving synthetic opioids by age

**Compare 2019 and 2020 (full years)**

**Compare first 6 months of 2020 and 2021***

**WA residents**

**Source:** DOH death certificates.

* 2021 data are preliminary and will change. Data as of 8Nov2021
Drug overdose deaths involving psychostimulants by sex

**Compare 2019 and 2020 (full years)**

<table>
<thead>
<tr>
<th></th>
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<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2019</td>
<td>166</td>
<td>374</td>
<td>540</td>
</tr>
<tr>
<td>2020</td>
<td>214</td>
<td>514</td>
<td>728</td>
</tr>
</tbody>
</table>

**Compare first 6 months of 2020 and 2021***

<table>
<thead>
<tr>
<th></th>
<th>Female</th>
<th>Male</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Q1&amp;2_2020</td>
<td>93</td>
<td>155</td>
<td>248</td>
</tr>
<tr>
<td>Q1&amp;2_2021*</td>
<td>376</td>
<td>376</td>
<td>752</td>
</tr>
</tbody>
</table>

Source: DOH death certificates.

* 2021 data are preliminary and will change.
Data as of 8Nov2021
Drug overdose deaths involving psychostimulants by age

Compare 2019 and 2020 (full years)

WA residents

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of deaths</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 and under</td>
<td>20</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 24</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>25 to 34</td>
<td>110</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 to 44</td>
<td>133</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 to 54</td>
<td>158</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 to 64</td>
<td>118</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>134</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 and under</td>
<td>28</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20 to 24</td>
<td>43</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Compare first 6 months of 2020 and 2021*

WA residents

<table>
<thead>
<tr>
<th>Age</th>
<th>Number of deaths</th>
<th>Q1&amp;2_2020</th>
<th>Q1&amp;2_2021*</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10</td>
<td>15</td>
<td></td>
<td></td>
</tr>
<tr>
<td>19 and under</td>
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<td>25</td>
<td></td>
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<tr>
<td>25 to 34</td>
<td>69</td>
<td></td>
<td></td>
</tr>
<tr>
<td>35 to 44</td>
<td>89</td>
<td></td>
<td></td>
</tr>
<tr>
<td>45 to 54</td>
<td>103</td>
<td></td>
<td></td>
</tr>
<tr>
<td>55 to 64</td>
<td>67</td>
<td></td>
<td></td>
</tr>
<tr>
<td>65+</td>
<td>32</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: DOH death certificates.

* 2021 data are preliminary and will change. Data as of 8Nov2021
Drug overdose deaths disproportionally affect American Indian and Alaskan Native populations

While the number of overdose deaths among AIAN are low, the rate is very high.

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

Source: WA DOH death certificates.

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

All other includes: Native Hawaiian and other pacific islanders, multi-racial and other (NOS)

* 2021 data are preliminary and will change. Data as of 8Nov2021
Drug overdose deaths involving synthetic opioids by race/ethnicity

### Compare 2019 and 2020 (full years)

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>WA residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIAN-NH</td>
<td>10</td>
</tr>
<tr>
<td>Black-NH</td>
<td>24</td>
</tr>
<tr>
<td>Hispanic</td>
<td>21</td>
</tr>
<tr>
<td>White-NH</td>
<td>50</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>40</td>
</tr>
<tr>
<td>All other-NH</td>
<td>90</td>
</tr>
<tr>
<td>Total</td>
<td>452</td>
</tr>
</tbody>
</table>

**Source:** WA DOH death certificates. **NH:** Non-Hispanic. **AIAN:** American Indian/Alaskan Native. All other includes: Native Hawaiian and other Pacific islanders, multi-racial and other (NOS).

### Compare first 6 months of 2020 and 2021*

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>WA residents</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIAN-NH</td>
<td>12</td>
</tr>
<tr>
<td>Black-NH</td>
<td>25</td>
</tr>
<tr>
<td>Hispanic</td>
<td>23</td>
</tr>
<tr>
<td>White-NH</td>
<td>48</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>51</td>
</tr>
<tr>
<td>All other-NH</td>
<td>56</td>
</tr>
<tr>
<td>Total</td>
<td>208</td>
</tr>
</tbody>
</table>

**Source:** WA DOH death certificates. **NH:** Non-Hispanic. **AIAN:** American Indian/Alaskan Native. All other includes: Native Hawaiian and other Pacific islanders, multi-racial and other (NOS). *2021 data are preliminary and will change. Data as of 8Nov2021.
Drug overdose deaths involving psychostimulants by race/ethnicity

**Compare 2019 and 2020 (full years)**

<table>
<thead>
<tr>
<th>WA residents</th>
<th>2019</th>
<th>2020</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIAN-NH</td>
<td>19</td>
<td>15</td>
</tr>
<tr>
<td>Black-NH</td>
<td>32</td>
<td>26</td>
</tr>
<tr>
<td>Hispanic</td>
<td>30</td>
<td>15</td>
</tr>
<tr>
<td>White-NH</td>
<td>55</td>
<td>54</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>&lt;10</td>
<td>29</td>
</tr>
<tr>
<td>All other-NH</td>
<td>34</td>
<td>39</td>
</tr>
</tbody>
</table>

**Source:** WA DOH death certificates.

**Compare first 6 months of 2020 and 2021**

<table>
<thead>
<tr>
<th>WA residents</th>
<th>Q1&amp;2_2020</th>
<th>Q1&amp;2_2021*</th>
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<tbody>
<tr>
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<td>19</td>
</tr>
<tr>
<td>Black-NH</td>
<td>30</td>
<td>26</td>
</tr>
<tr>
<td>Hispanic</td>
<td>39</td>
<td>54</td>
</tr>
<tr>
<td>White-NH</td>
<td>55</td>
<td>257</td>
</tr>
<tr>
<td>Asian-NH</td>
<td>&lt;10</td>
<td>&lt;10</td>
</tr>
<tr>
<td>All other-NH</td>
<td>34</td>
<td>39</td>
</tr>
</tbody>
</table>

**Source:** WA DOH death certificates.

**Data as of 8Nov2021**

* 2021 data are preliminary and will change.

**NH:** Non-Hispanic

**AIAN:** American Indian/Alaskan Native

**All other includes:** Native Hawaiian and other Pacific Islanders, multi-racial and other (NOS)
Polysubstance use (2020)

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

Data available at:  [www.doh.wa.gov/OverdoseData](http://www.doh.wa.gov/OverdoseData)

Email contact:  [Injury.data@DOH.WA.GOV](mailto:Injury.data@DOH.WA.GOV)
State Unintentional Drug Overdose Reporting System (SUDORS)

2019-2020
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.
1. Identify SUDORS Cases

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.

2. Import Cases into SAMS

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.

3. Abstraction of MEC Reports

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.

4. Quality Control

CDC SUDORS review all the drug overdose cases entered through SAMS and send a quality control report for any needed correction or feedback.

5. Data release for Analysis

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.
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.
### SUDORS Fentanyl Guideline

**Suspected illicitly-manufactured fentanyl**
- Evidence of injection, snorting, or illicit drug use
- No evidence of patches, lozenges, or transdermal administration

**Suspected pharmaceutical fentanyl**
- Evidence of patches, lozenges, or transdermal administration
- No evidence of injection,

### SUDORS Heroin Guideline

<table>
<thead>
<tr>
<th>Toxicology positive for:</th>
<th>Scene evidence of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>6-MAM or diacetylmorphine</td>
<td>Injection, illicit drug use, or history of heroin abuse</td>
</tr>
<tr>
<td>Morphine</td>
<td></td>
</tr>
<tr>
<td>Confirmed</td>
<td>✓</td>
</tr>
<tr>
<td>Heroin</td>
<td>Probable</td>
</tr>
<tr>
<td>Suspected</td>
<td>×</td>
</tr>
<tr>
<td>Morphine</td>
<td>Suspected</td>
</tr>
</tbody>
</table>
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:

- 95% have a current/past substance use problem
- 85% are between the ages of 25 and 64 years old
- 81% are unmarried
- 75% have a high school education or above
- 72% are White, non-Hispanic
- 70% are male

Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
### WHO are the overdose decedents? (2019-2020)

#### Mental Health
- **Observed recent release from any institution:** 10%, n=215
- **Homeless:** 10%, n=223
- **Veteran:** 7%, n=153

#### Substance Use History
- **Current diagnosed mental health problem:** 27%, n=580
- **History of suicidal thoughts or plans:** 6%, n=127
- **Alcohol problem:** 19%, n=400
- **History of substance use treatment:** 11%, n=226
- **Current substance use treatment:** 5%, n=97
- **Previous nonfatal overdose:** 8%, n=178
- **Recent opioid relapse:** 11%, n=230

#### Recent opioid relapse
- **Current pain treatment:** 9%, n=190

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**Data Source:** State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
72% of overdose deaths occurred in a house or apartment

64% of overdose deaths occurred in the decedents home

Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
WHERE do overdoses occur? (2019-2020)

Overdose Response

- Emergency Medical Services (EMS) responded \( n=1656 \) (77%)
- Bystander present \( n=1101 \) (51%)
- Fatal overdose witnessed \( n=213 \) (10%)
- Naloxone administered \( n=186 \) (9%)

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

Definitions:

**Bystander**: 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)

Substances Identified as Present on Toxicology Results

- Any Opioid: 77%
- Methamphetamine: 48%
- Fentanyl: 39%
- Heroin: 29%
- Prescription Opioid: 25%
- Alcohol: 24%
- Benzodiazepine: 16%
- Cocaine: 15%

NOTE: Drug specific categories are not mutually exclusive.

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

77% of overdose deaths involved an opioid.

Methamphetamine and fentanyl were present in a substantial proportion of overdose deaths.

Of the fentanyl identified as present, 75% were illicitly manufactured.
97% of all overdose deaths had more than one substance identified as present on toxicology results.
WHAT drugs were identified? (2019-2020)
Polysubstance Use: Co-Use of Fentanyl and Methamphetamine

Presence of Fentanyl by Drug Type

- Any Opioid: 50%
- Rx Opioid: 29%
- Heroin: 15%
- Methamphetamine: 21%
- Cocaine: 51%
- Benzodiazepine: 49%

Presence of Methamphetamine by Drug Type

- Any Opioid: 40%
- Rx Opioid: 35%
- Heroin: 64%
- Fentanyl: 26%
- Cocaine: 24%
- Benzodiazepine: 28%

Abbreviations: Rx opioids - Prescription Opioids
NOTE: Drug specific categories are not mutually exclusive.

Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
**HOW are drugs being used? (2019-2020)**

**Scene Evidence**

**Route of Administration**

<table>
<thead>
<tr>
<th>Method</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Injection</td>
<td>27%</td>
</tr>
<tr>
<td>Smoking</td>
<td>23%</td>
</tr>
<tr>
<td>Ingestion</td>
<td>21%</td>
</tr>
<tr>
<td>Snorting</td>
<td>13%</td>
</tr>
</tbody>
</table>

**Other Evidence Found at the Scene**

<table>
<thead>
<tr>
<th>Evidence Found at the Scene</th>
<th>% of overdose deaths</th>
</tr>
</thead>
<tbody>
<tr>
<td>Evidence of Rapid overdose</td>
<td>9% (184)</td>
</tr>
<tr>
<td>Evidence of Illicit Drug Use</td>
<td>43%</td>
</tr>
<tr>
<td>Evidence of Prescription Drugs</td>
<td>36% (769)</td>
</tr>
<tr>
<td>Not prescribed to victim</td>
<td>10% (205)</td>
</tr>
<tr>
<td>Prescribed to victim</td>
<td>14% (307)</td>
</tr>
<tr>
<td>Unknown who prescribed</td>
<td>23% (486)</td>
</tr>
</tbody>
</table>

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

Data Source: State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
## Changes in overdose deaths (2019 vs 2020)

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

### Potential Opportunities for Intervention

- **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.

- **27%** Mental Health Problem
  - 580 decedents had a documented mental health problem or diagnosis

- **11%** Ever treated for substance use disorder
  - 226 decedents were currently in treatment or received

- **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.

- **10%** Fatal Drug Use Witnessed
  - 213 decedents had someone who witnessed the decedent use the substance(s) that resulted in his/her overdose.

- **9%** Naloxone Administered
  - 186 decedents received naloxone at the time of overdose. 50 bystanders administered naloxone.

- **8%** Previous non-fatal overdose
  - 178 decedents had history of a nonfatal overdose.

- **9%** Current pain treatment
  - 190 decedents were treated for chronic or acute pain at the time of the overdose

**Data Source:** State Unintentional Drug Overdose Reporting System (SUDORS), 2019-2020
Where to find SUDORS and Overdose data?

- **WA State Monthly Overdose Updates**

- **WA State SUDORS Infographic**

- For overdose data requests, please contact: [injury.data@doh.wa.gov](mailto:injury.data@doh.wa.gov)
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.