Steve Sisolak
Governor

Richard Whitley
Director

State of Nevada

Department of Health and Human Services

Substance Use in Nevada – Data Update

Office of Analytics

Kyra Morgan, State Biostatistician

Setting the Stage – National & Regional Comparisons

The Substance Abuse and Mental Health Services Administration (SAMHSA) estimates –

- The prevalence of past-year substance use disorder in Nevada was 9.5% (or 241,000).
  - Regional average: 8.1%
  - National average: 7.4%

- The prevalence of past-year alcohol use disorder in Nevada was 6.2% (or 157,000).
  - Regional average: 5.9%
  - National average: 5.3%

Source: Behavioral Health Barometer: Nevada, Volume 6 (samhsa.gov)

Nevada Data Sources

Resources:

- Bureau of Behavioral Health Wellness and Prevention, Epidemiologic Profile, 2021
- Opioid Surveillance Dashboard
- Methamphetamine and Stimulant Surveillance Dashboard

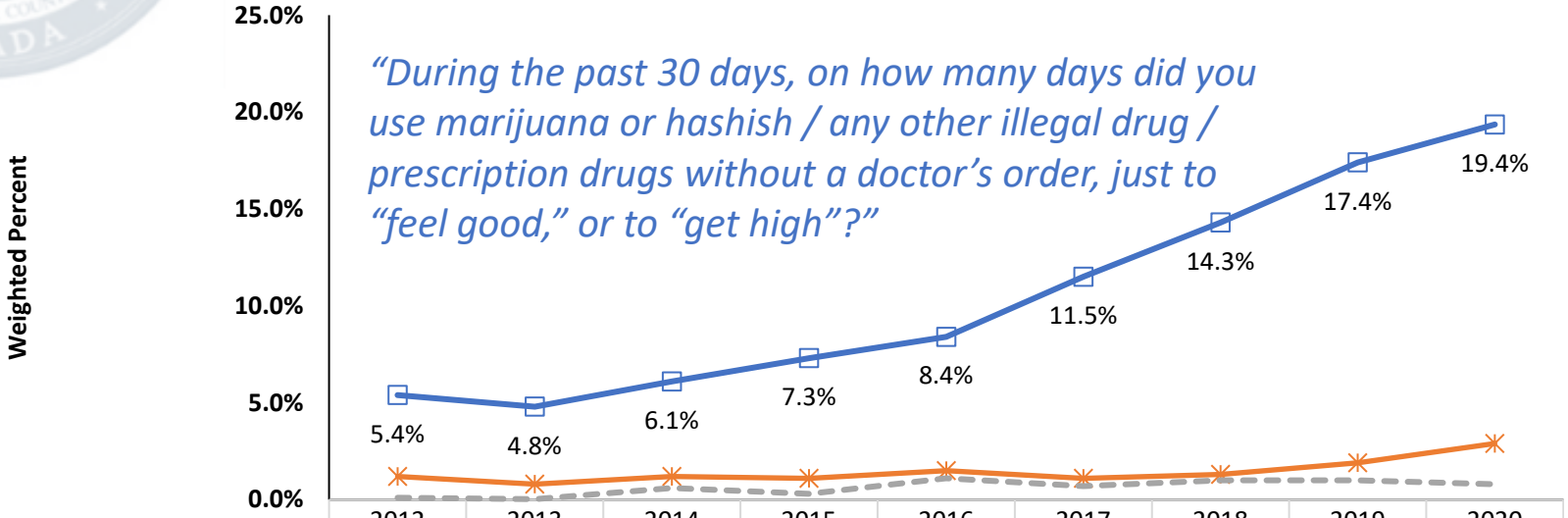
Data Sources:

- Behavioral Risk Factor Surveillance System (BRFSS)
- Statewide Hospital Billing Datasets
- Electronic Death Registry System (EDRS, Vital Records)
- State Unintentional Drug Overdose Reporting System (SUDORS)

Definitions:

- Alcohol/Drug-Related Emergency Department (ED) Encounter: an ED visit where alcohol/drug use or abuse is listed as part of the diagnosis.
- Alcohol/Drug-Related Inpatient (IP) Admission: an inpatient stay where alcohol/drug use or abuse is listed as part of the diagnosis.
- Alcohol/Drug-Related Poisoning: the primary reason for the visit is an overdose, and the patient record has specific billing codes for overdose or poisoning.
- Alcohol/Drug-Related Death: a death where a contributing factor to cause of death included drugs/alcohol.

Self Reported Use in the Last 30 Days (BRFSS)

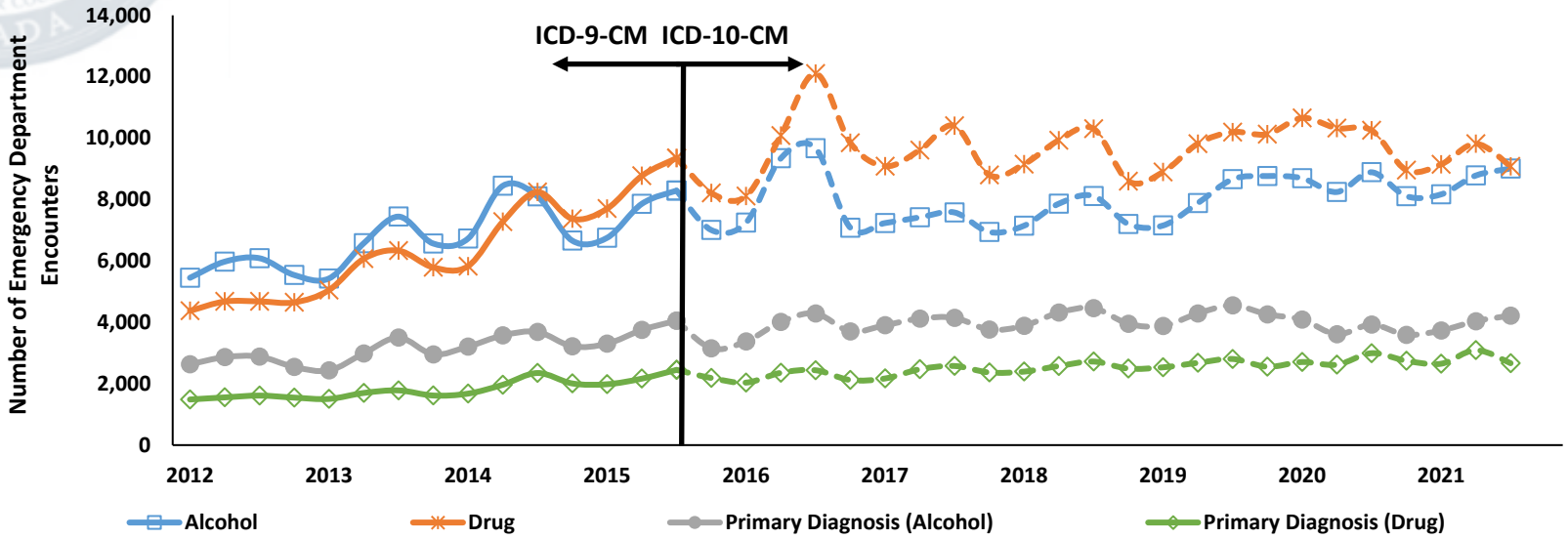


	2012	2013	2014	2015	2016	2017	2018	2019	2020
Marijuana/Hashish	5.4%	4.8%	6.1%	7.3%	8.4%	11.5%	14.3%	17.4%	19.4%
Illegal Drugs	1.20%	0.80%	1.20%	1.10%	1.50%	1.10%	1.30%	1.90%	2.90%
Prescription Drugs	0.1%	0.03%	0.60%	0.30%	1.10%	0.70%	1.00%	1.00%	0.80%

In 2020, 1 in 5 Nevadans surveyed by the BRFSS responded that they has used marijuana in the last 30 days. This is a 303% increase from the low of 4.8% (1 in 20 Nevadans) in 2013 and a 130% increase since marijuana became legal recreationally in 2017.

Other illegal drug use, as was self-reported in the BRFSS, increased significantly from 2019 to 2020 (53%).

Emergency Department (ED) Encounters for Alcohol & Drug Use



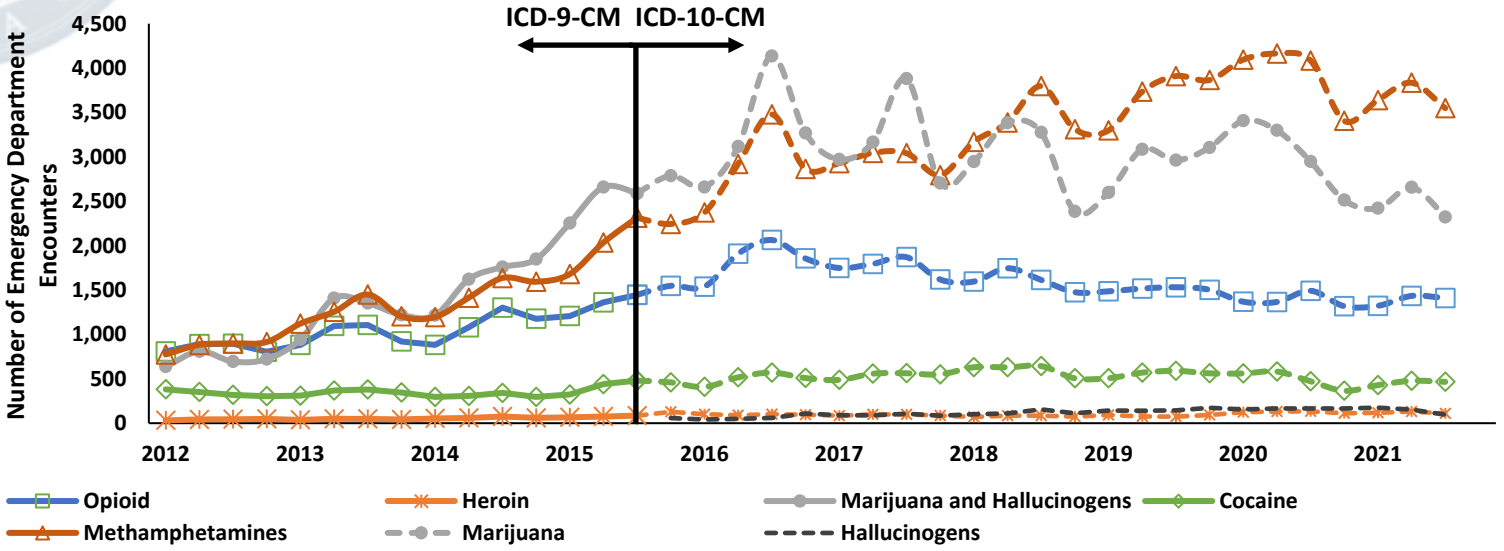
In any given quarter of 2021, there were approximately 8,600 alcohol and 9,300 drug related visits to Nevada emergency rooms.

Alcohol visits were more common than drug visits until 2014 when drug-related visits surpassed alcohol.

From 2017 to 2021, ED encounters related to alcohol have been trending up, while drug related ED encounters have varied with no significant increasing or decreasing trend.

In 2021, the number of ED encounters related to alcohol was nearly identical to that of drugs, at approximately 9,000.

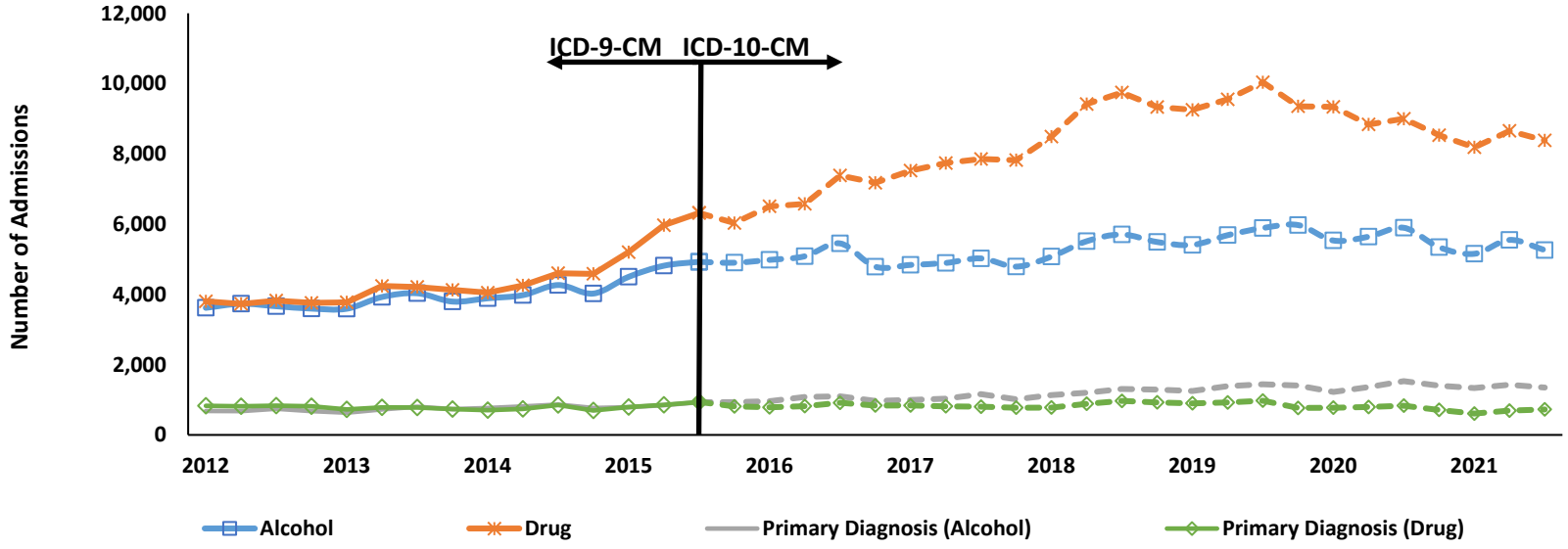
ED Encounters for Drug Use by Drug



Drug related ED encounters are most frequently associated with methamphetamines, followed by marijuana, opioids, and cocaine in that order.

- Methamphetamines: Increasing from 2012 to 2020, stable from 2020 to 2021
- Marijuana: Increasing from 2013 through 2016, decreasing from 2017 to 2021
- Opioids: Increasing from 2013 through 2016, decreasing from 2017 to 2021
- Cocaine: Relatively stable from 2012 through 2021

Inpatient (IP) Admissions for Alcohol & Drug Use

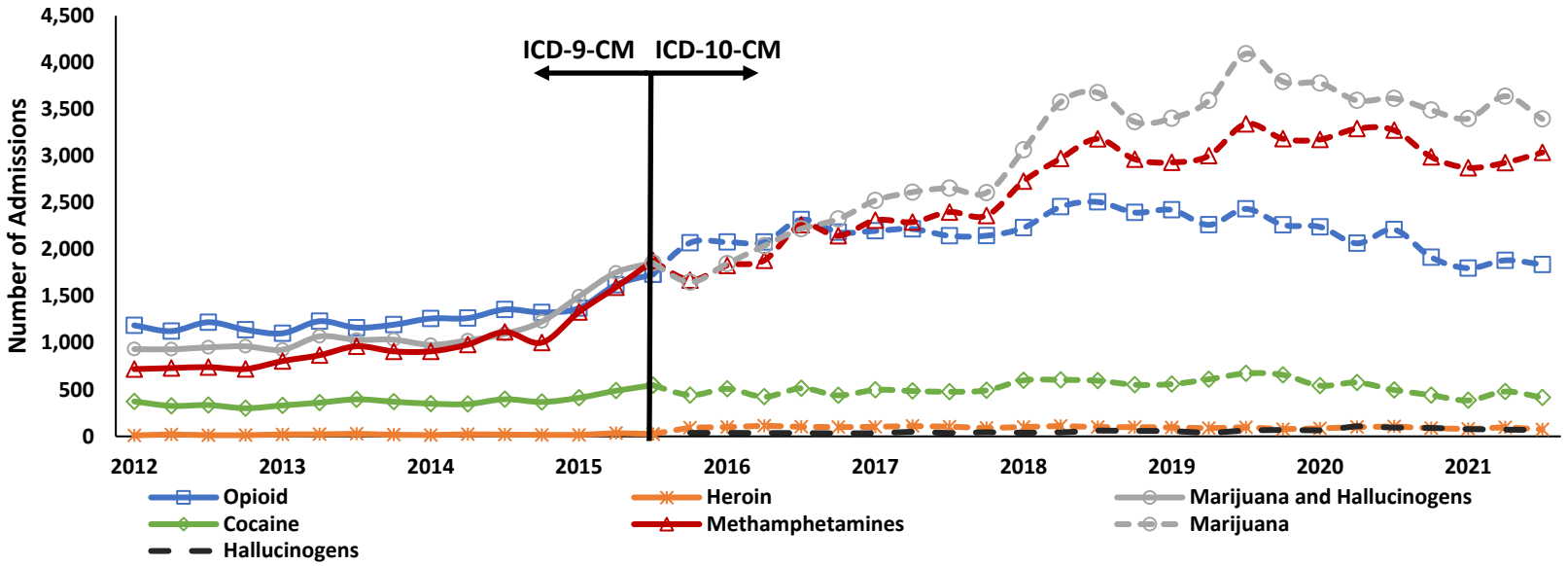


In any given quarter of 2021, there were approximately 5,300 alcohol and 8,400 drug related inpatient admissions to Nevada hospitals.

Admissions related to alcohol and drugs were comparable until 2014 when drug-related admissions began to increase much more quickly than alcohol-related admissions.

Admissions related to both alcohol and drugs increased from 2014 through 2019, and subsequently decreased in 2020 and 2021.

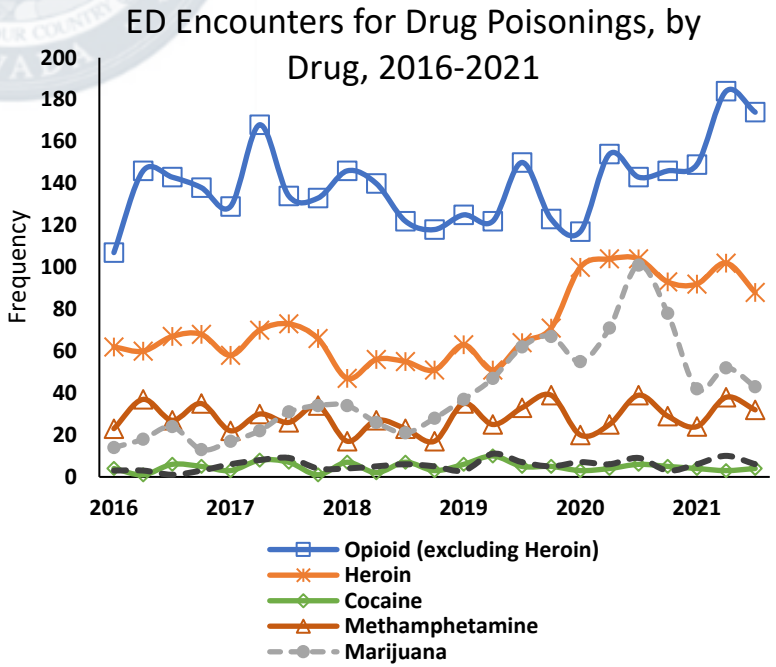
IP Admissions for Drug Use by Drug

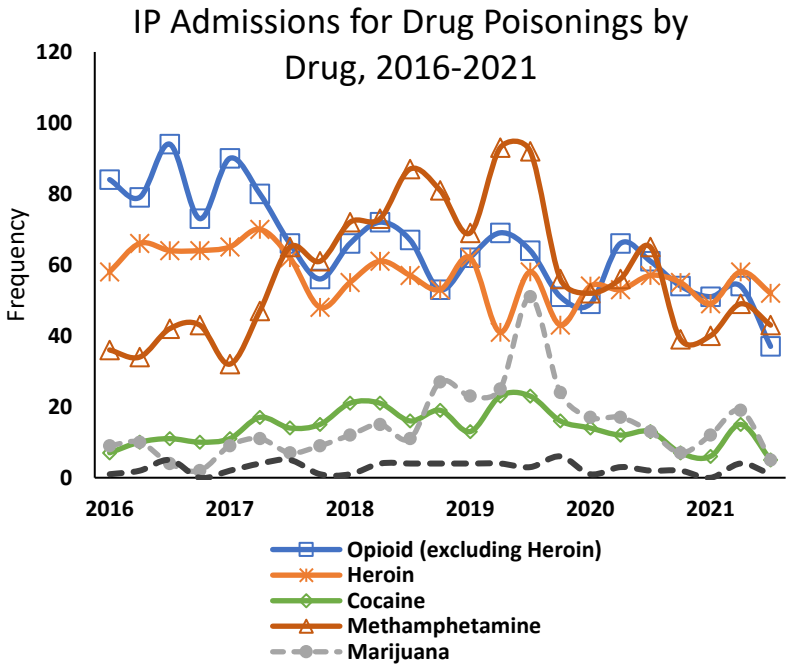


Drug related admissions are most frequently associated with marijuana, followed by methamphetamines, opioids, and cocaine, in that order.

- Marijuana: Increasing 2013-2019, decreasing 2020-2021
- Methamphetamines: increasing 2013-2019, decreasing 2020-2021
- Opioids: Increasing 2013-2016, decreasing 2017-2021
- Cocaine: Relatively stable from 2012-2021

Drug Poisonings by Drug, ED and IP





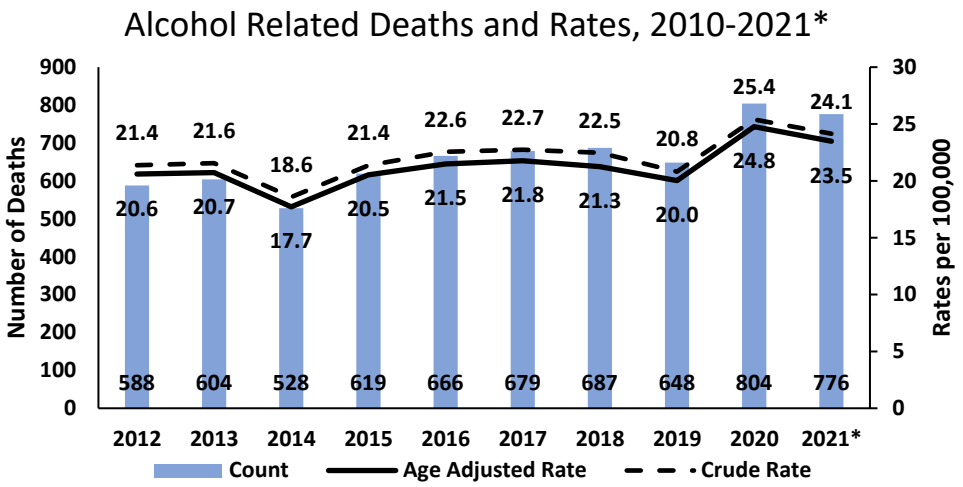
Although more Nevadans are presenting at the hospital with drug use related to methamphetamines and marijuana, opioids continue to be the primary drug involved in acute and life-threatening drug related poisoning.

While increases have been observed in ER encounters related to poisonings in 2020 and 2021, inpatient admissions have declined over that period.

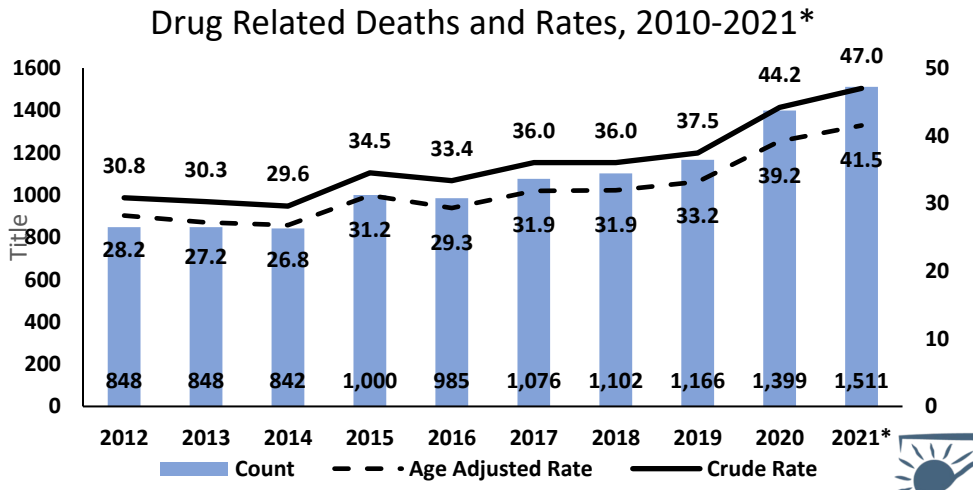
Alcohol and Drug-Related Deaths

Nevada observed:

- 804 alcohol-related deaths in 2020 and 776 alcohol-related deaths preliminarily in 2021.
  - Year-over-year (YOY) growth:
    - 2019-2020: +24%
    - 2020-2021: -3%
    - Average: +10%



- 1,399 drug-related deaths in 2020 and 1,511 drug related deaths preliminarily in 2021.
  - YOY growth:
    - 2019-2020: +20%
    - 2020-2021: +8%
    - Average: +14%

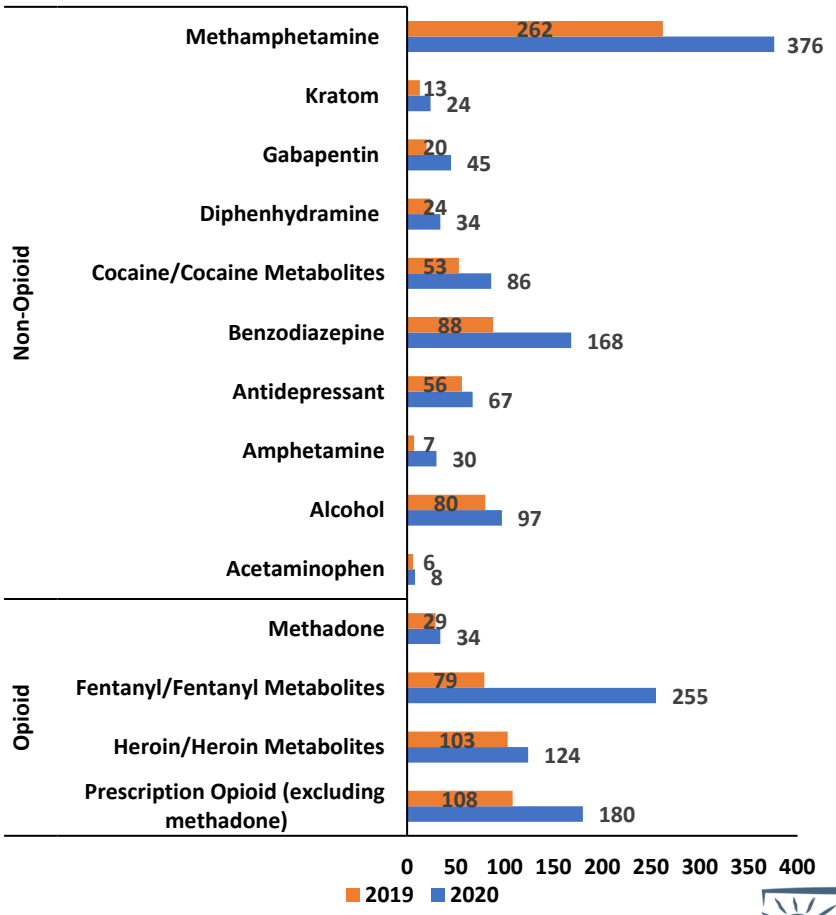


Unintentional/Undetermined Overdose Deaths by Substance

Methamphetamines were involved in the highest number of unintentional overdose deaths in both 2019 and 2020 and observed a significant increase year-over-year of 44%.

Benzodiazepines, Fentanyl and prescription opioids were also involved in a high number of unintentional overdose deaths, and observed significant increases YOY:

- Benzodiazepines : +91%
- Fentanyl : +223%
- prescription opioids (excluding methadone): +67%



Contact Information

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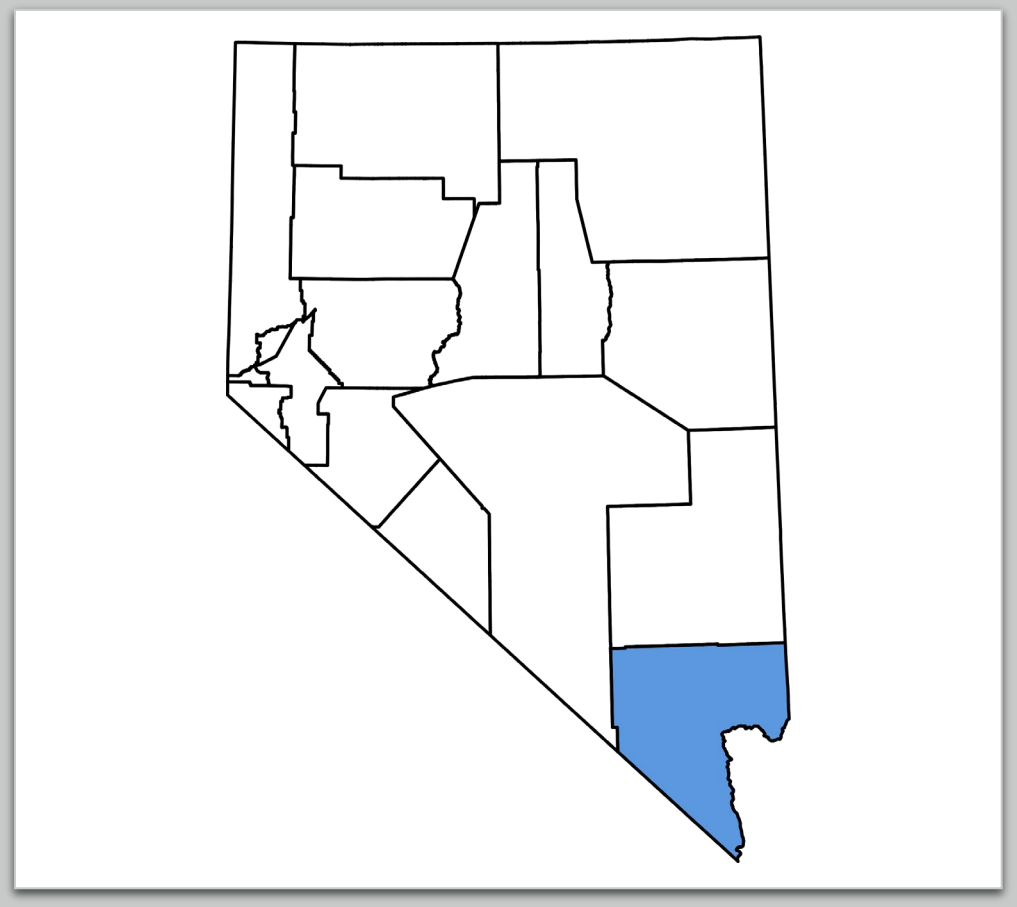
Please send requests for additional data to data@dhhs.nv.gov

CLARK COUNTY OVERDOSE DATA

A high-level overview of overdose data in Clark County

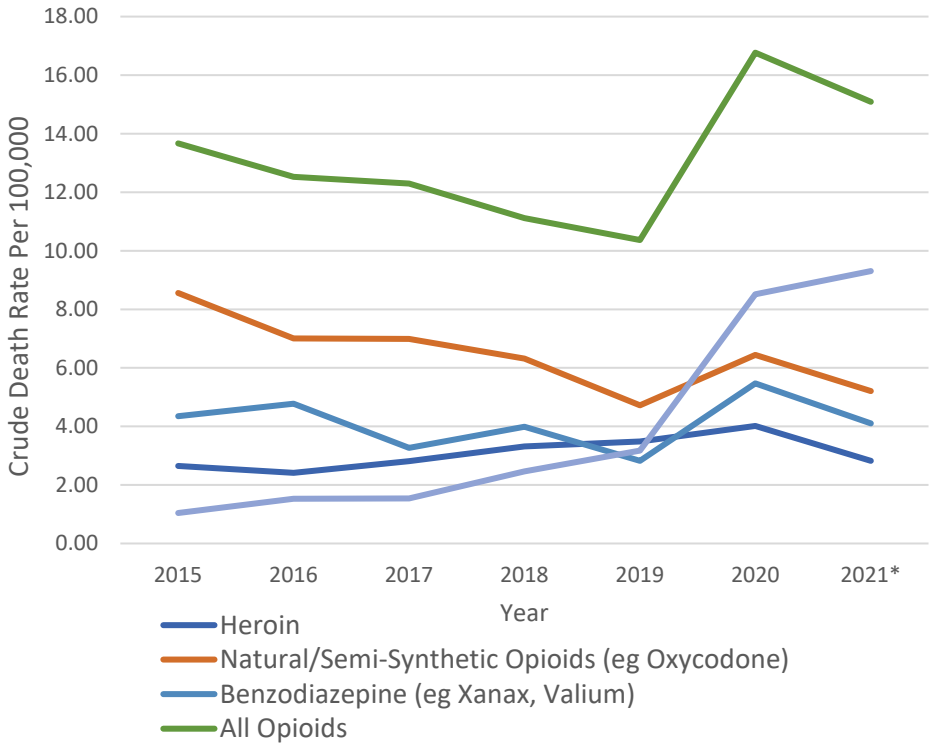
Brandon Delise, Epidemiologist

Southern Nevada Health District



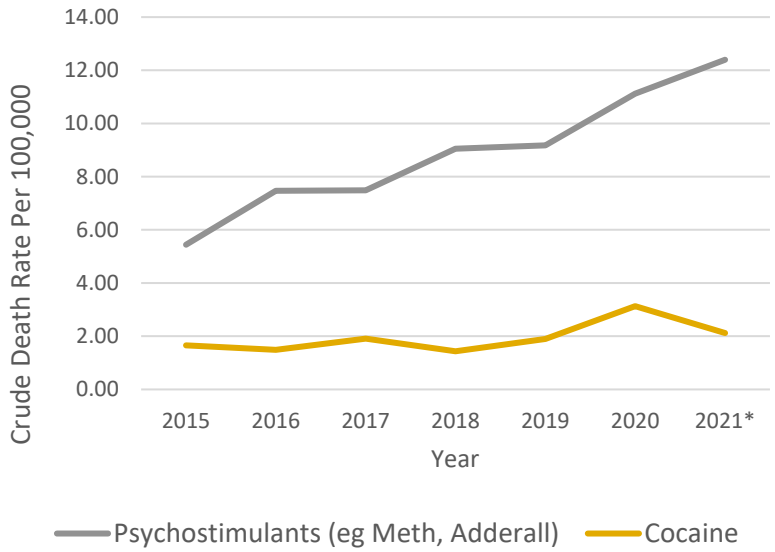
Overdose Death Rate (All Intents) Among Clark County Residents by Drug Class, 2015-2021

- The rate of fatal overdose involving synthetic opioids (etc. fentanyl, tramadol) reached its highest in in 2021.
  - The median age at death in 2021 was 32 years for a fatal overdose involving synthetic opioids and 49 years for a non-synthetic opioid overdose.
- The rate of fatal overdose involving all opioids and heroin reached its highest in 2020.



2021 data are provisional estimates and subject to change. Current as of 02/05/22. Data Sources: Nevada Electronic Death Registry System (2022). United States Census Bureau (2022). Note: Counts are NOT mutually exclusive

Overdose Death Rate (All Intents) Among Clark County Residents by Drug Class, 2015-2021 – continued



- The rate of fatal overdose involving psychostimulants (etc. meth, Adderall) reached its highest in in 2021.
  - From 2015-2021, fatal overdose involving psychostimulants increased 144%.
  - The median age at death in 2021 was 46 years for a fatal overdose involving psychostimulants.

2021 data are provisional estimates and subject to change. Current as of 02/05/22.
Data Sources: Nevada Electronic Death Registry System (2022). United States Census Bureau (2022). Note: Counts are NOT mutually exclusive

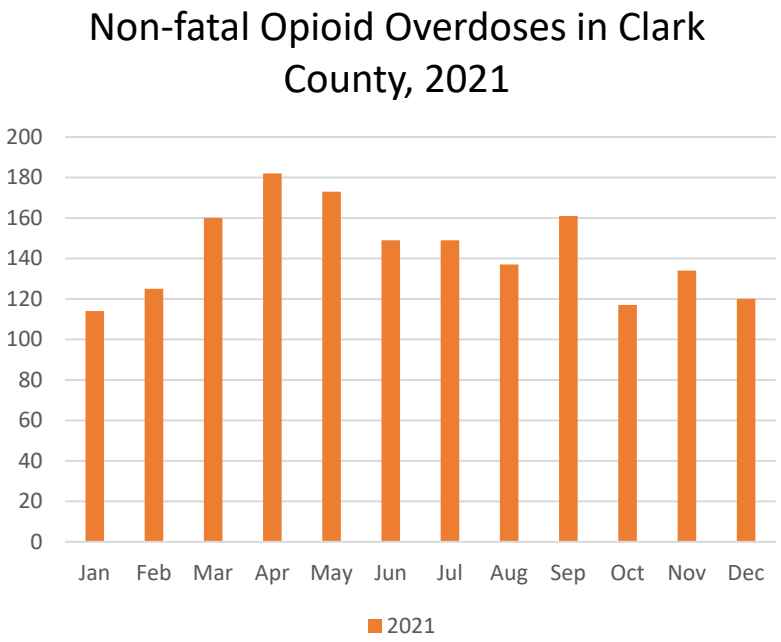
Clark County EMS: Non-fatal Opioid Overdose Data

Median age for a non-fatal opioid overdose in 2021

- Men - 42 years
- Women - 49 years

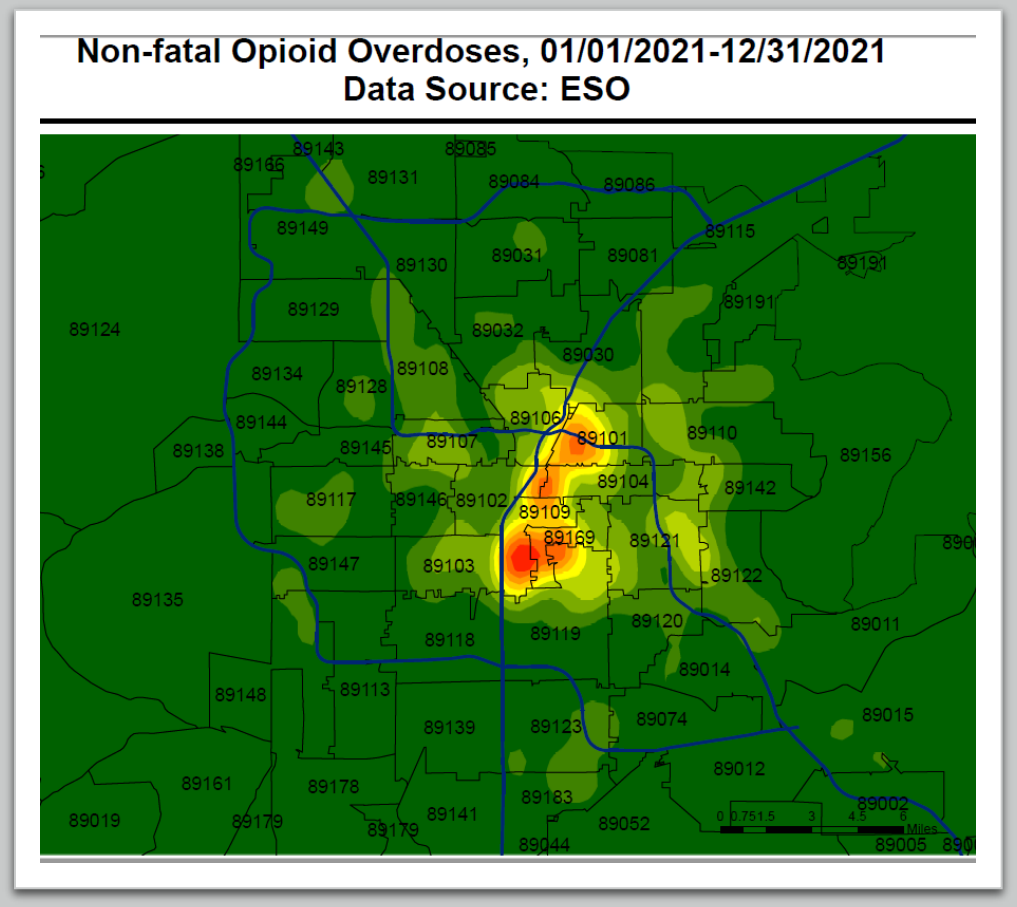
Top ZIP Codes with most non-fatal opioid overdose events in 2021:

1. 89101
2. 89119
3. 89109
4. 89121
5. 89102



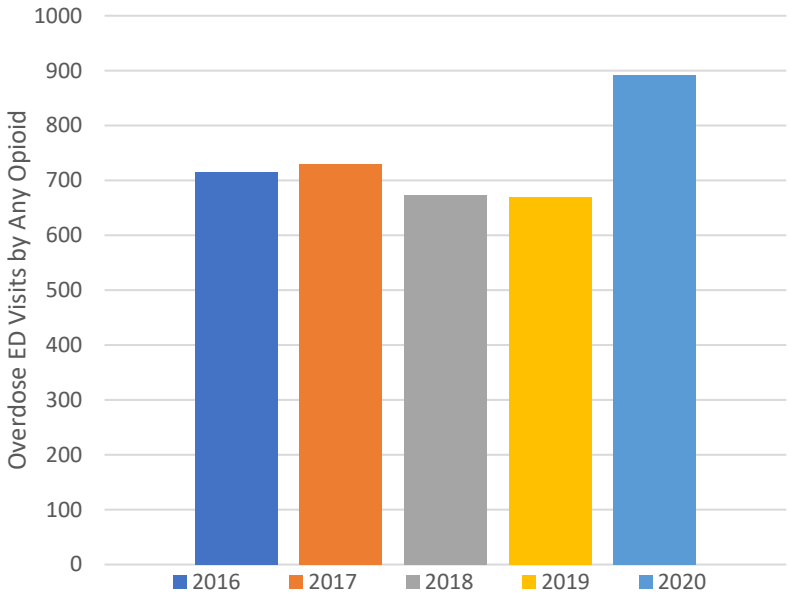
Data current as of 02/05/22. Data Source: ESO (2022)

Clark County EMS: Non-fatal Opioid Overdose Data- continued



Data current as of 02/05/22. Data Source: ESO (2022)

Emergency Department (ED) Visits Due to Opioid Poisoning in Clark County, 2016-2020



Median age for ED visits due to opioid poisoning in 2020:

- Men - 38 years
- Women - 41 years
- White/Caucasian – 40 years
- Black/African American – 42 years
- Asian or Pacific Islander – 30 years
- Hispanic – 33 years
- Native Am or Alaskan – 31 years

Data current as of 02/05/22. Data Source: Center For Health Information Analysis For Nevada (2022)

Overdose Data Trends - Washoe County

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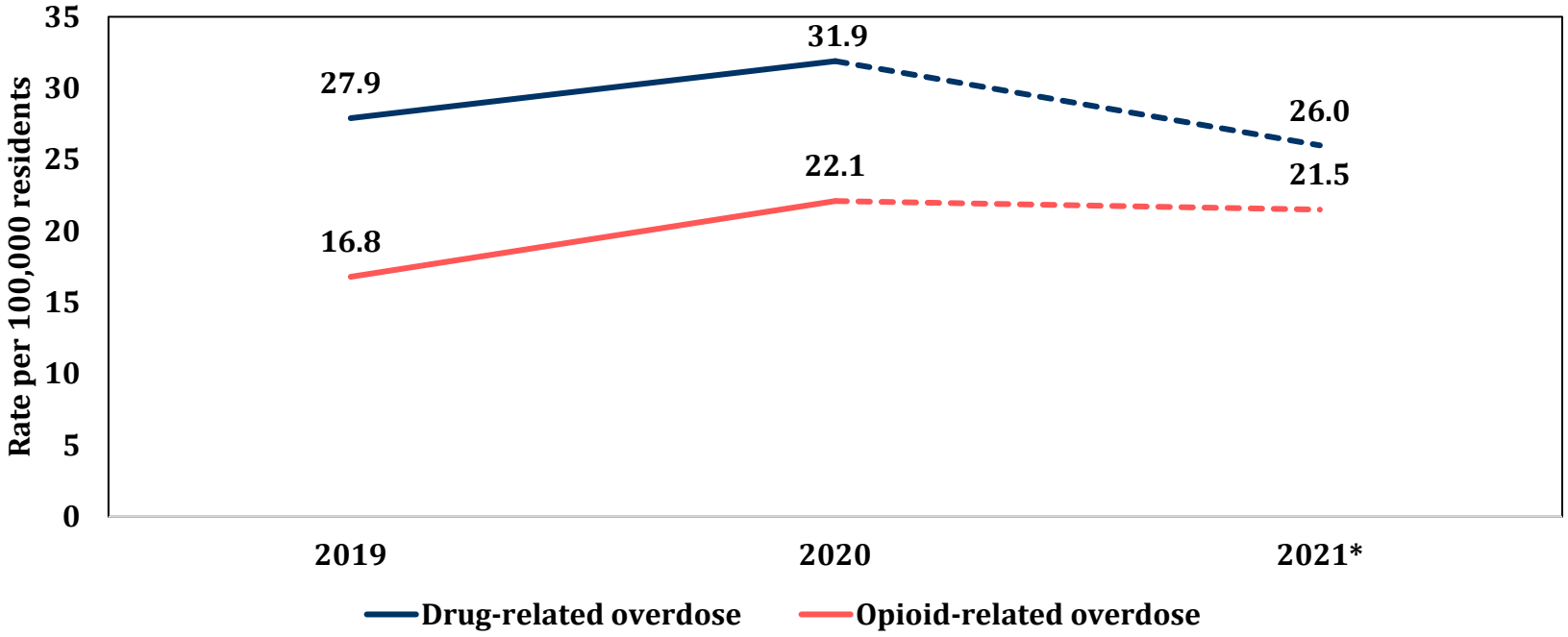
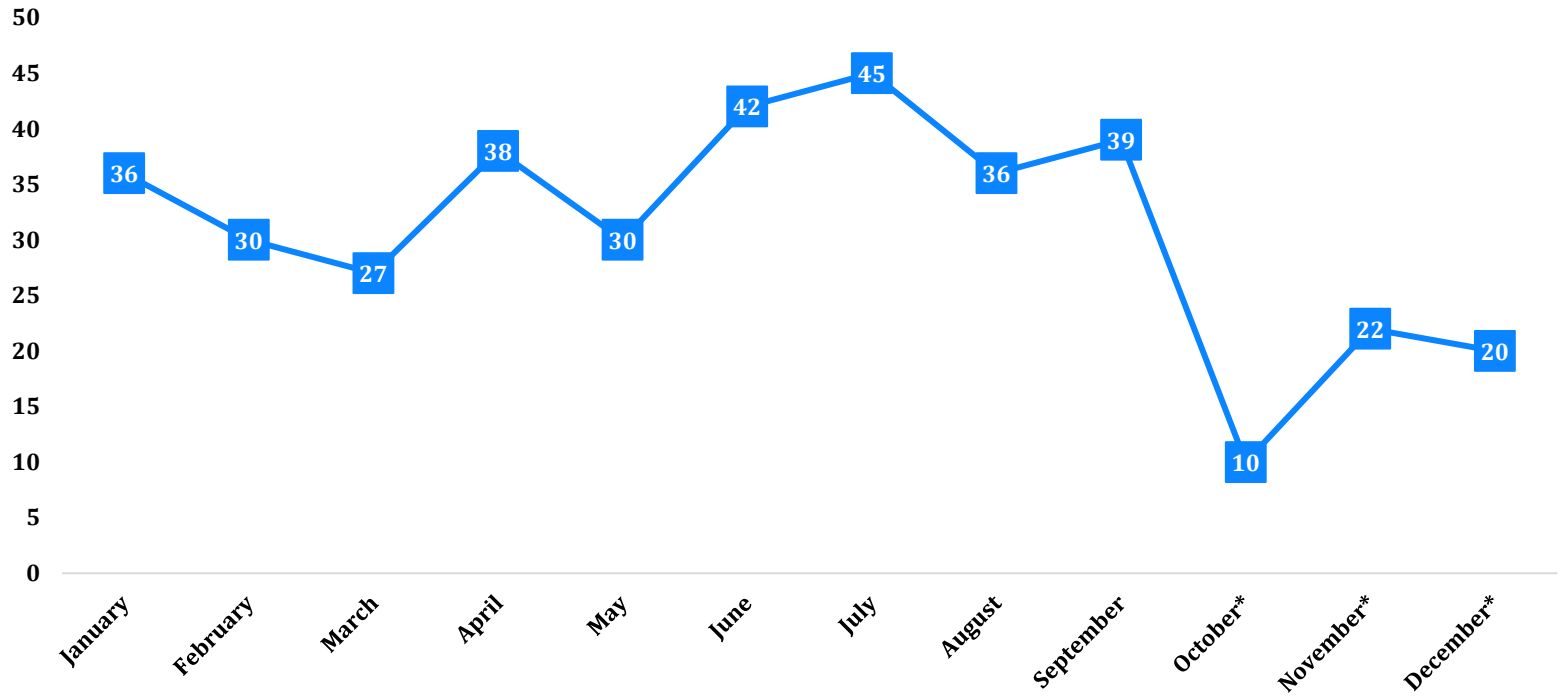
Figure 1. Rates of drug-related and opioid-related overdose deaths among residents in Washoe County by year, 2019-2021



*Data for 2021 are preliminary and may be subject to change. Deaths in the figure above come from the Nevada Electronic Death Registry System (EDRS), which includes information from cause of death from death certificates. The data above include the following: accidental poisonings, intentional self poisonings, assault by drug poisonings, and drug poisoning of undetermined intent among Nevada residents for 1) any drug-related overdose deaths and 2) where any of the following opioid-related substances contributed to the cause of death: opium, heroin, natural and semi-synthetic opioids, methadone, synthetic opioids, and other/unspecified opioids.

Figure 2. Count of suspected non-fatal opioid overdose incidents from ImageTrend in Washoe by month, Jan-Dec 2021 (N=375)



Data from the State Emergency Medical Services (EMS) platform ImageTrend. Cases were identified and flagged if they had one of the following: Primary or secondary impression/symptom: opioid-related; If naloxone was administered and patient's response improved; If patient narrative contained opioid-related and overdose-related keywords.
*Due to a delay in data being available in the system, the most recent months of data may be incomplete. Only contains incidents that have been captured and logged by these agencies, and may not represent those incidents that were not logged or overdoses where EMS agencies were not called/present.

Figure 3. Incidents by ZIP code in Washoe County, NV, 2021

Incident ZIP code	Count	Percentage
89431	50	13.4%
89433	9	2.4%
89434	3	0.8%
89436	6	1.6%
89439	2	0.5%
89442	2	0.5%
89451	1	0.3%
89501	46	12.3%
89502	73	19.5%
89503	36	9.6%
89506	21	5.6%
89508	1	0.3%
89509	43	11.5%
89511	10	2.7%
89512	56	15.0%
89519	2	0.5%
89521	4	1.1%
89523	9	2.4%

Data from the State Emergency Medical Services (EMS) platform ImageTrend. Cases were identified and flagged if they had one of the following: Primary or secondary impression/symptom: opioid-related; If naloxone was administered and patient's response improved; If patient narrative contained opioid-related and overdose-related keywords.

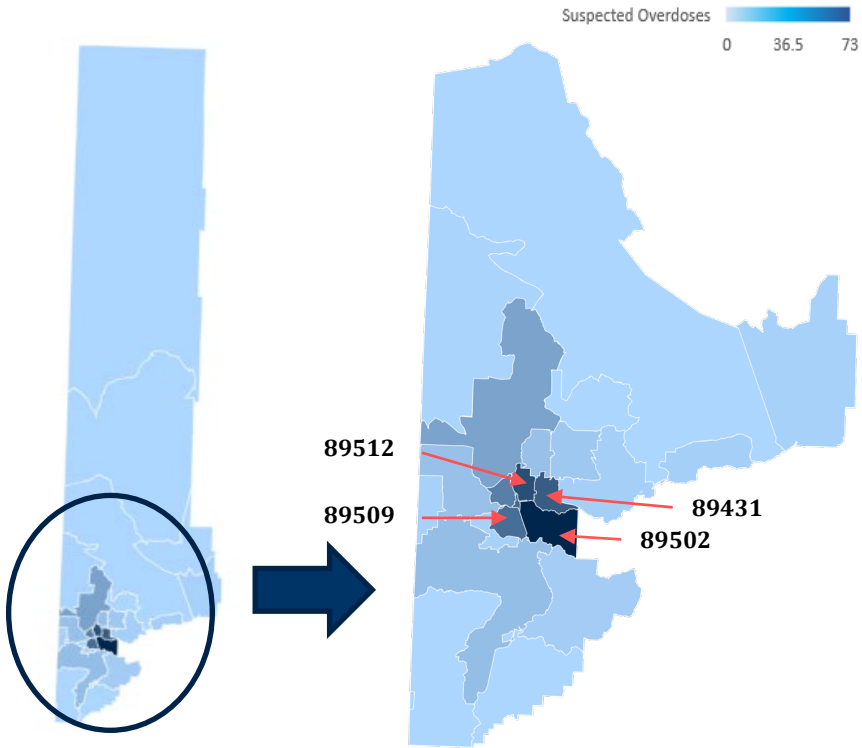
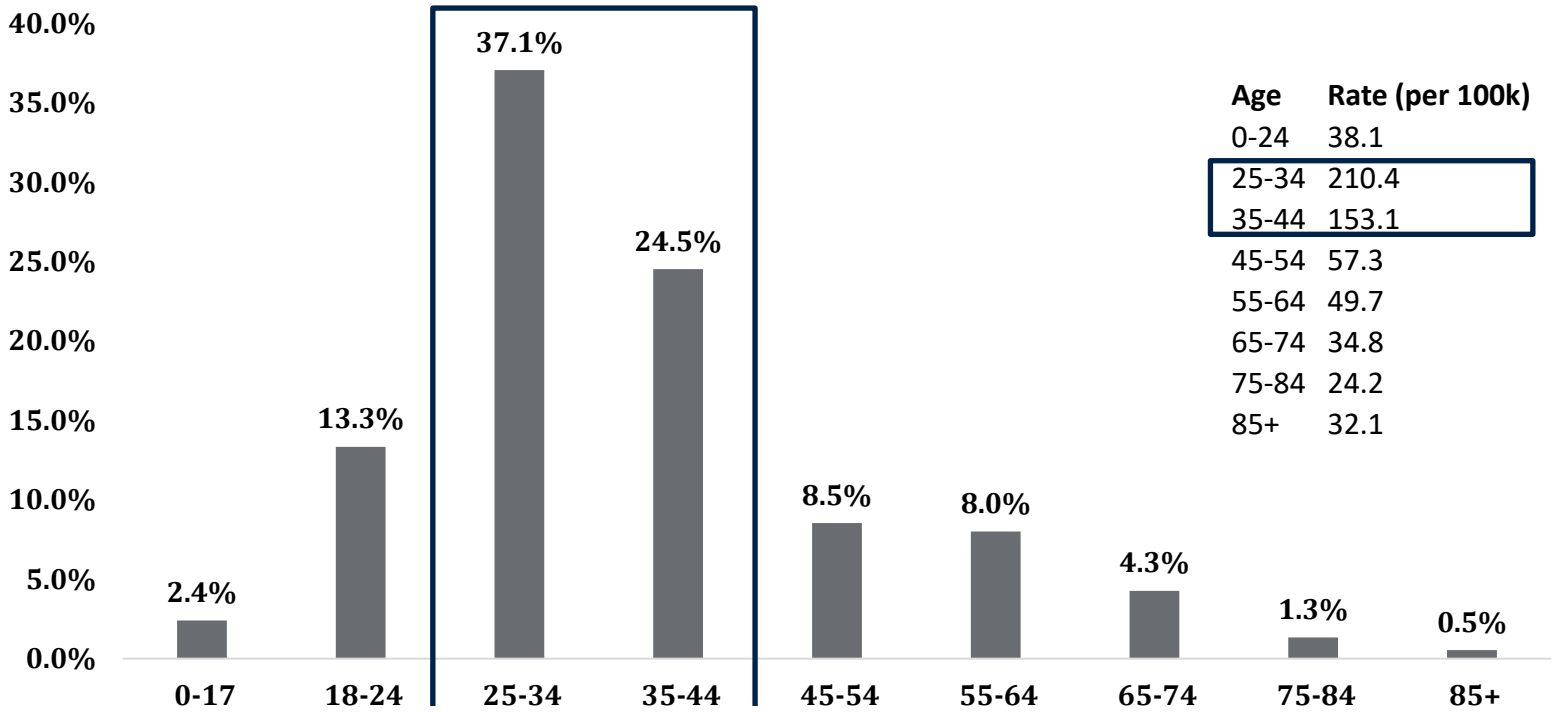


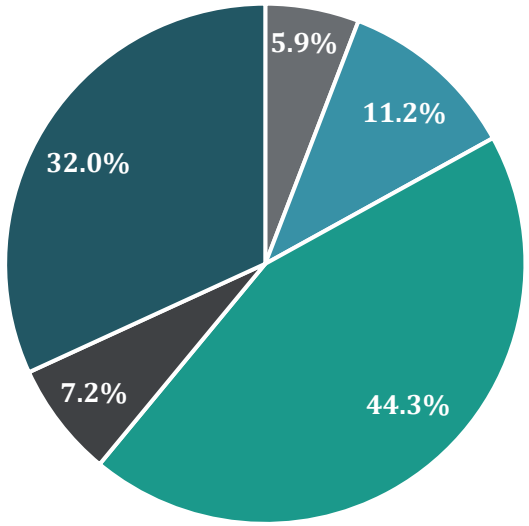
Figure 4. Percentage of suspected non-fatal opioid overdose incidents from ImageTrend in Washoe by age, Jan-Dec 2021 (N=375)



Age	Rate (per 100k)
0-24	38.1
25-34	210.4
35-44	153.1
45-54	57.3
55-64	49.7
65-74	34.8
75-84	24.2
85+	32.1

Data from the State Emergency Medical Services (EMS) platform ImageTrend. Cases were identified and flagged if they had one of the following: Primary or secondary impression/symptom: opioid-related; If naloxone was administered and patient's response improved; If patient narrative contained opioid-related and overdose-related keywords. State Demographer projections were used for rate calculations.

Figure 5. Percentage of suspected non-fatal opioid overdose incidents from ImageTrend in Washoe by Race/Ethnicity, Jan-Dec 2021 (N=375)



Race/Ethnicity	Rate (per 100k)
White, NH	56.4
Black, NH	179.4
Hispanic	33.6

Black or African American Hispanic or Latino White Other Not Recorded

Note: Other Race/Ethnicity includes Asian, American Indian/Alaskan Native, Native Hawaiian/Pacific Islander, Other, and Multi-racial. All categories are non-Hispanic (NH) unless otherwise specified. Not recorded race means that there was no information recorded about race/ethnicity. State Demographer projections were used for rate calculations.

Takeaways – Washoe 2021

- Drug-related and opioid-related **overdose deaths increased from 2019 to 2020.**
- There were **375 suspected non-fatal opioid overdose-related** EMS incidents in Washoe County in 2021.
- Rates were highest among **Black, non-Hispanic** (179.4 per 100,000 population), **25-34 years of age** (210.4 per 100,000 population).
- **Top 5 ZIP codes^** with the highest amount of suspected non-fatal opioid overdose-related EMS incidents: **89502, 89512, 89501, 89509, and 89431 (Sparks).**

^ZIP codes are all in Reno unless otherwise specified.

Overdose Mapping Application Program

ODMAP

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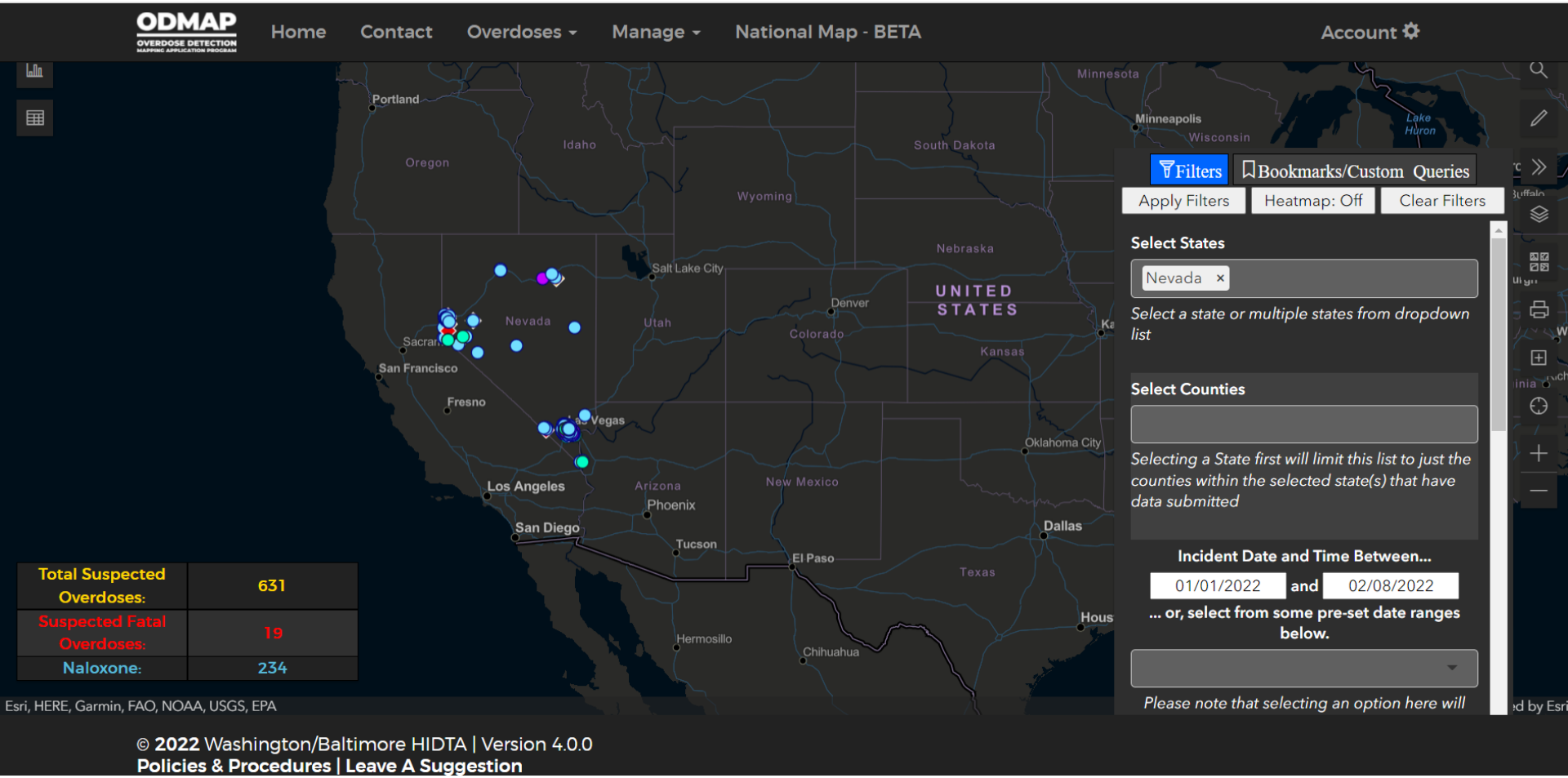
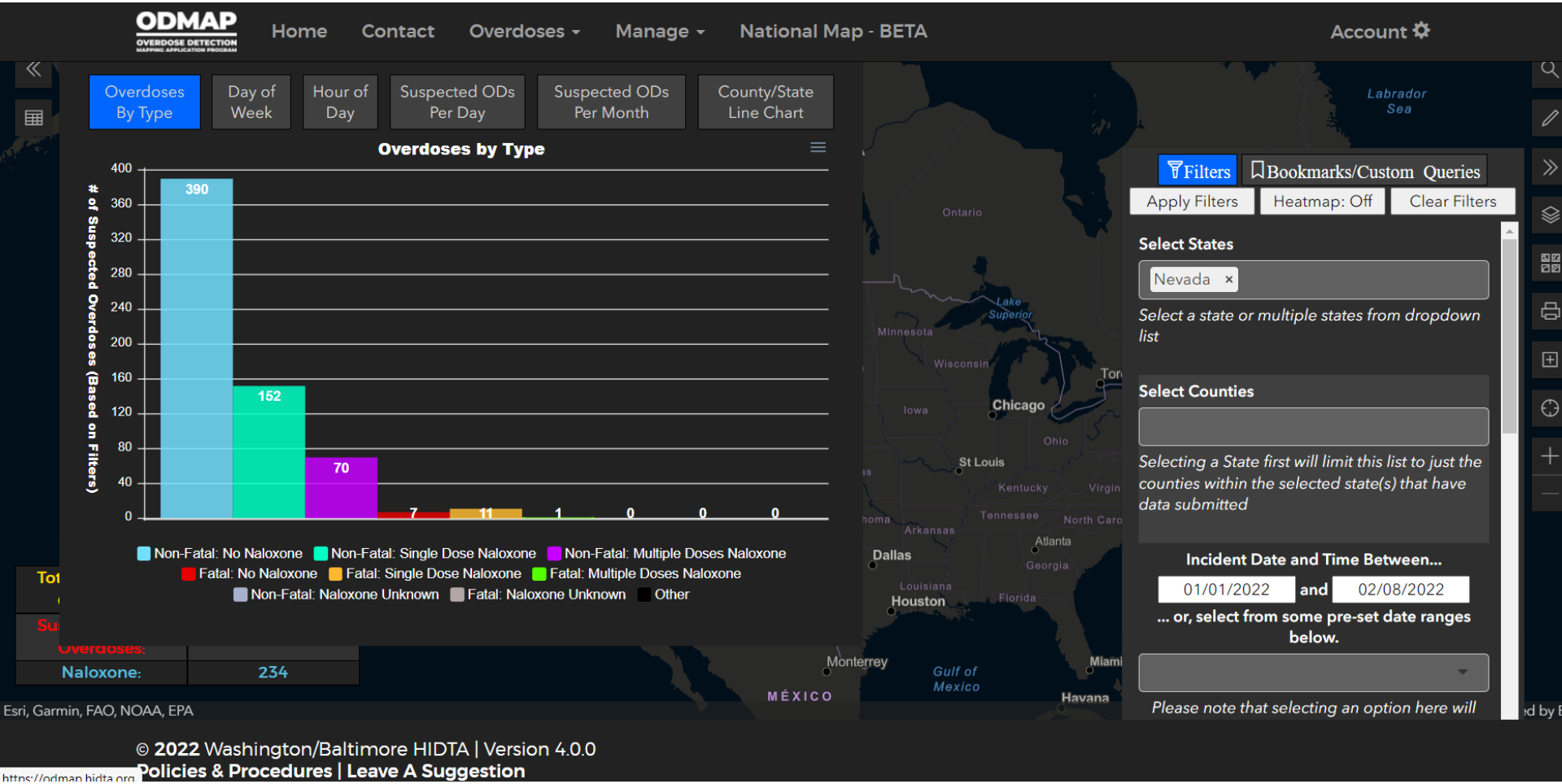
What is ODMAP

- The Overdose Mapping and Application Program (ODMAP) provides near real-time suspected overdose surveillance data to support public safety and public health efforts in mobilizing an immediate response to a sudden increase or spike in overdose events.
- Developed and offered free by the Washington DC/Baltimore High Intensity Drug Trafficking Area (HIDTA)
- Nevada is primarily using EMS data for suspected overdoses
- In other parts of the US, law enforcement enters the data on overdoses

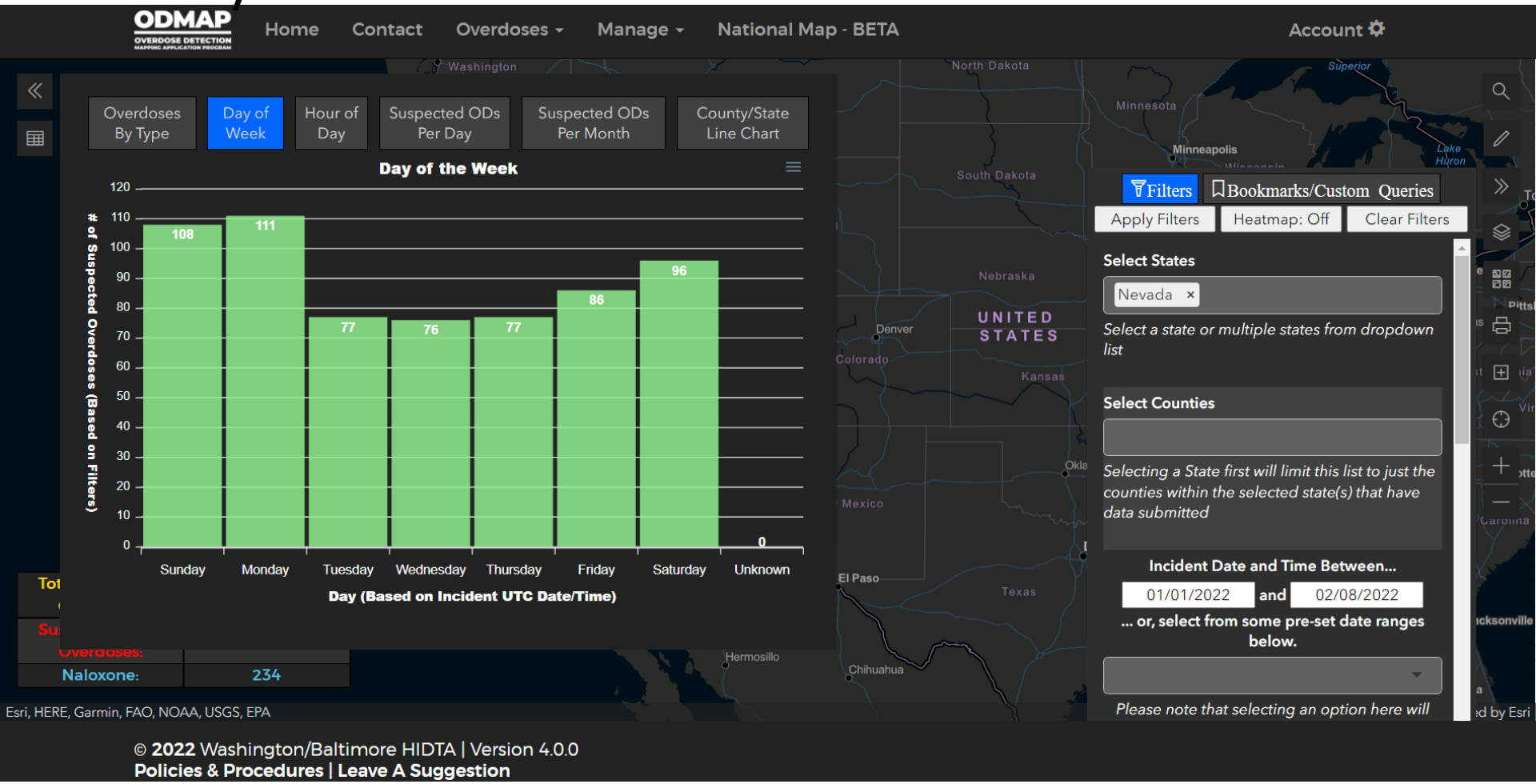
ODMAP


ODMAP
OVERDOSE DETECTION MAPPING APPLICATION PROGRAM
Home
Contact
Overdoses
Manage
National Map - BETA
Account
Filters
Bookmarks/Custom Queries
Apply Filters
Heatmap: Off
Clear Filters
Select States
Nevada
Select a state or multiple states from dropdown list
Select Counties
Selecting a State first will limit this list to just the counties within the selected state(s) that have data submitted
Incident Date and Time Between...
01/01/2022
and
02/08/2022
... or, select from some pre-set date ranges below.
Please note that selecting an option here will
Total Suspected Overdoses: 631
Suspected Fatal Overdoses: 19
Naloxone: 234
Esri, HERE, Garmin, FAO, NOAA, USGS, EPA
© 2022 Washington/Baltimore HIDTA | Version 4.0.0
Policies & Procedures | Leave A Suggestion

ODMAP: Overdoses by Type



ODMAP: Number of Overdoses by Day of the Week



ODMAP

- Suspected Overdoses – starting point
- Community Overdose Spike Response Plans
- Limitations with ODMAP data but the data in ODMAP with other data sets/law enforcement data provides a more complete picture

Data Implications and Surveillance Gaps

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School of Public Health, University of Nevada, Reno

What do we know?

- Emergency Department drug poisonings and drug overdose deaths continue to increase
  - Deaths attributed mostly to methamphetamine, fentanyl, opioids, and benzodiazepines.
- Minorites and Youth are being disappointedly impacted by overdose.
- Foundation has been laid to alert the public/ people who are using about potential risks

Surveillance System Gaps

Data System/ Source

- Emergency Department
- Emergency Medical Services (EMS)
- Overdose Detection Mapping Application Program (ODMAP)
- Vital Records
- Fatal Overdose Data (SUDORS)

Strength/Limitations

- Timely, Substance(s) Suspected
- Timely, Geo-Location, Substance(s) Suspected
- Timely, Geo-location, Substance(s) Suspected
- Substance Confirmed, cannot measure opioid use or misuse history (only death)
- Substance Confirmed, Significant Lag

The Problem with Postmortem….

- SUDORS data provides confirmatory toxicology data.
- SUDORS data is reported with a 6 to 9 month lag.
- We can’t wait for mortality data to tell us what is putting people at a higher risk of death.

If not Postmortem, then what?

- What does bio-surveillance of the drug supply look like?
  - Upstream testing touch points
    - Hospitals
    - Driving Under the Influence (DUI)
    - Syringe Service Programs (SSPs)
    - Wastewater Testing
  - Seized Drug Testing

Critical Issues in Addressing Drug Supply Surveillance Gaps

- No statewide forensic crime lab
- Existing drug lab capacity is forensic
- Limited formal data/information sharing agreements with public health in place
- Majority of seized drugs in Nevada are not tested timely

Recommendations for addressing system gaps

- Development of a statewide forensic toxicology lab that can support surveillance sample testing and other types public health bio-surveillance to increase the amount of information used to inform risk at the community level.
- Standardized data sharing agreements between public safety and public health entities that support information and data sharing and allow for redisclosure to inform risk messaging.
- Review existing state funding formulas for antemortem and toxicology testing.

Questions?