Nevada State Unintentional Drug Overdose Reporting System

Opioid Trend Report, 2018-2019 - *Statewide*

Overview: The Centers for Disease Control and Prevention (CDC) Overdose Data to Action (OD2A) program supports state, territorial, county, and city health departments in obtaining more comprehensive and timelier data on overdose morbidity and mortality. The program is meant to enhance opioid overdose surveillance, reporting, and dissemination efforts to better inform prevention and early intervention strategies.

The information contained in this report highlights **opioid overdose mortality** of unintentional/undetermined intent within the state of Nevada utilizing the State Unintentional Drug Overdose Reporting System (SUDORS) for the period beginning ***January 1, 2018 to December 31, 2019***.

Data Source: SUDORS uses death certificates and coroner/medical examiner reports (including post-mortem toxicology testing results) to capture detailed information on toxicology, death scene investigations, route of drug administration, and other risk factors that may be associated with a fatal overdose.

Case Definitions: A death that occurred in Nevada where the decedent's place of residence was Nevada and was assigned any of the following ICD-10 underlying cause-of-death codes on the death certificate: X40-44 (unintentional drug poisoning) or Y10-Y14 (drug poisoning of undetermined intent), with opioids listed as a contributing cause of death (T40.0-T40.4, T40.6); or a death classified as an opioid overdose death of unintentional or undetermined intent by the Medical Examiner/Coroner.

Limitations: Data are delayed due to the time required to abstract data from multiple sources. Data completeness is dependent on information documented at time of death and therefore leads to large amounts of missing data.

The report includes details on:

Section 1: Demographic Characteristics of Cases

Section 2: Breakdown of Top Substances Listed in the Cause of Death

Section 3: Mental Health, Substance Use, and Institutionalization Prior to Death

Section 4: Appendix with tables for Sections 1-3

Key Findings:

There were 625 opioid-involved overdose deaths of unintentional/undetermined intent among Nevada residents from January 1, 2018 to December 31, 2019 in Nevada.

- There was a statistically significant increase in opioid-involved deaths seen in those aged 0-24 from 2018 to 2019.
- There was a statistically significant decrease in opioid-involved deaths seen in those aged 65 from 2018 to 2019.
- There was a statistically significant increase in opioid-involved deaths in Washoe County from 2018 to 2019.
- There was a statistically significant increase in fentanyl-involved deaths, and decrease in prescription opioid-involved deaths from 2018 to 2019.
- There was a statistically significant increase in cocaine-involved opioid deaths, and decrease in amphetamine-involved opioid deaths from 2018 to 2019.
- There was a statistically significant decrease in cases ever receiving substance abuse treatment and mental health treatment before death.

Questions or comments?

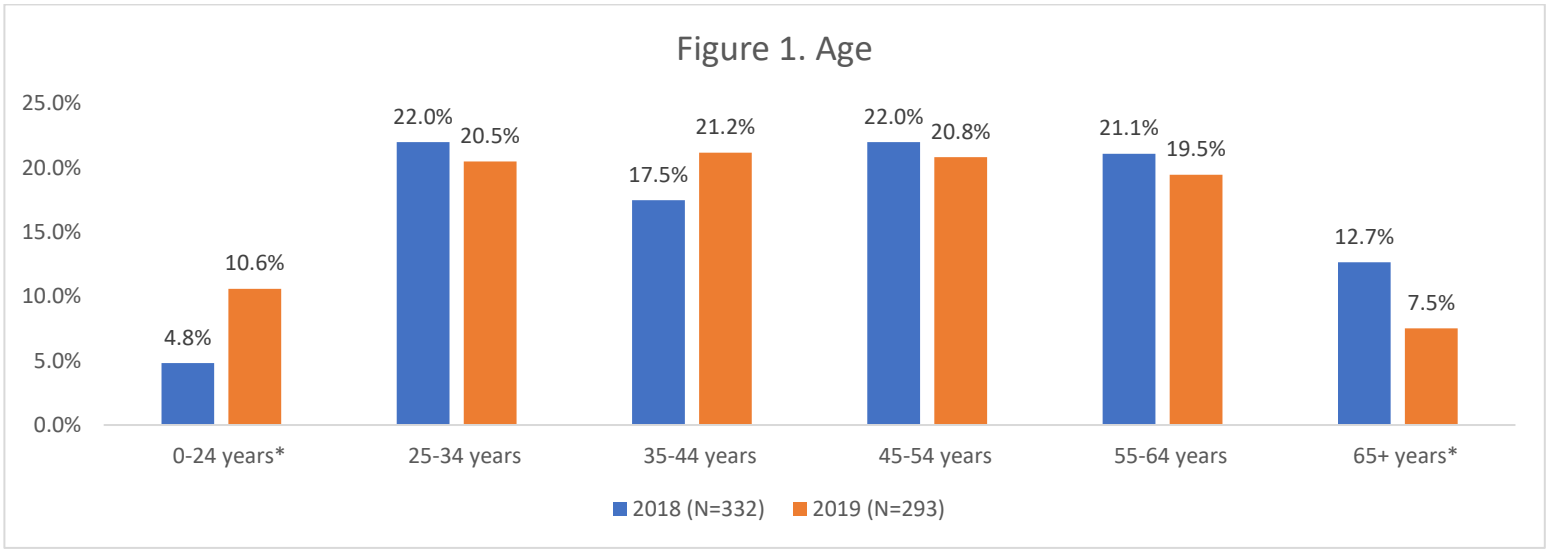
Please contact Nevada OD2A's opioid epidemiologist, Shawn Thomas, MPH, at shawnt@unr.edu.

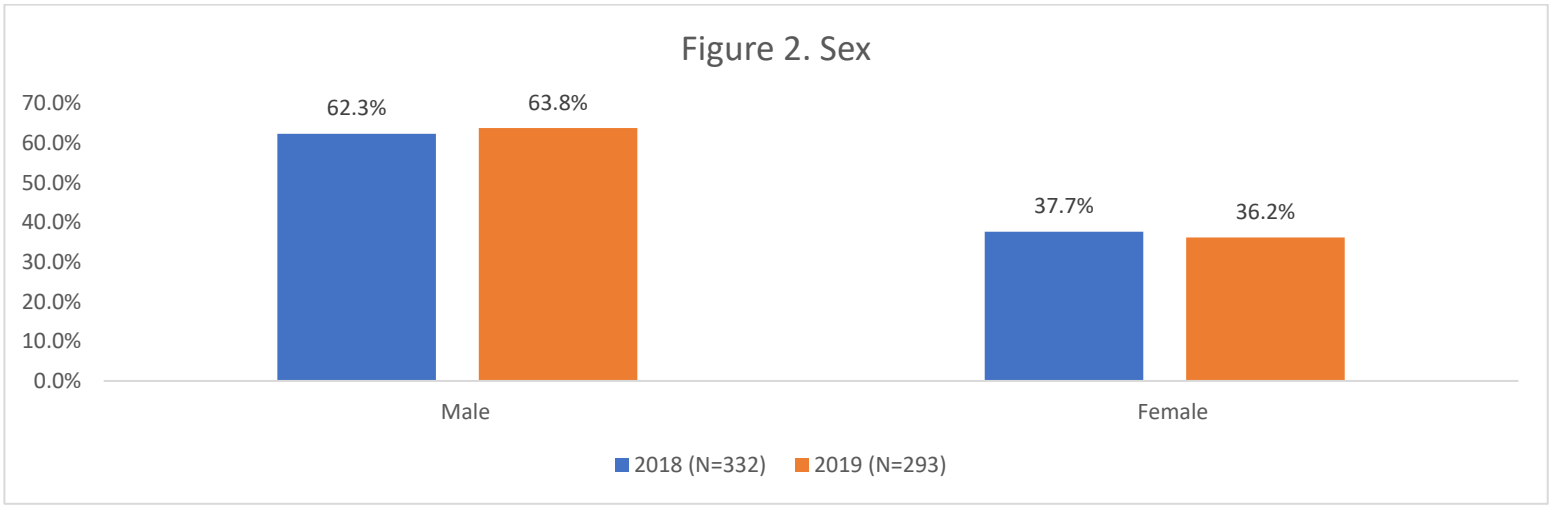
Nevada Department of Health and Human Services
Helping People. It's who we are and what we do.

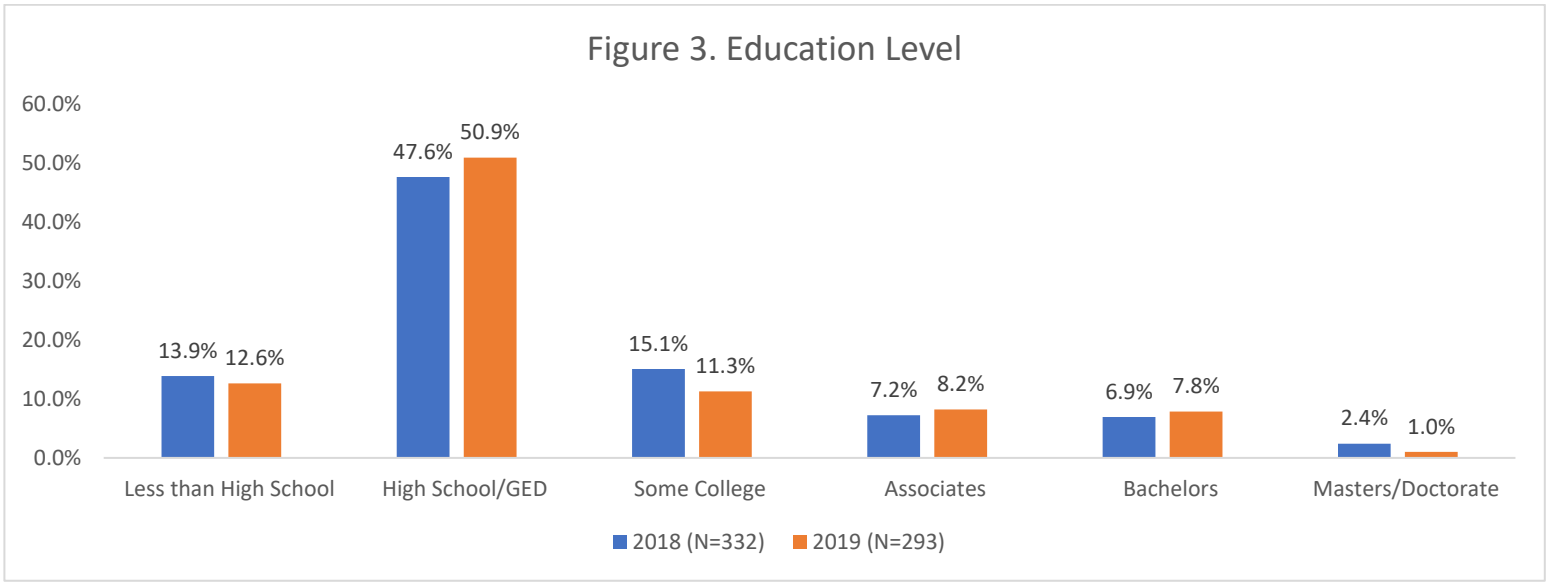
NV-OD2A
OVERDOSE DATA TO ACTION

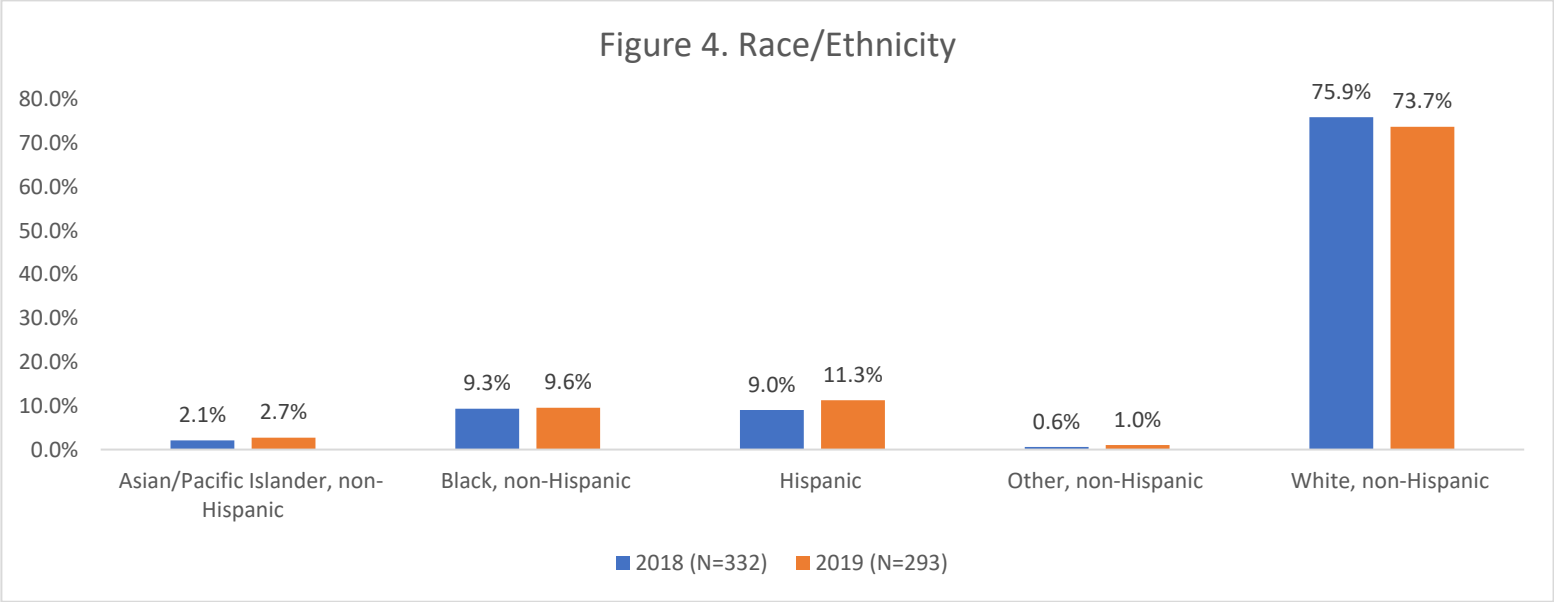
Nevada Public Health Training Center
Training & Workforce Development for Nevada

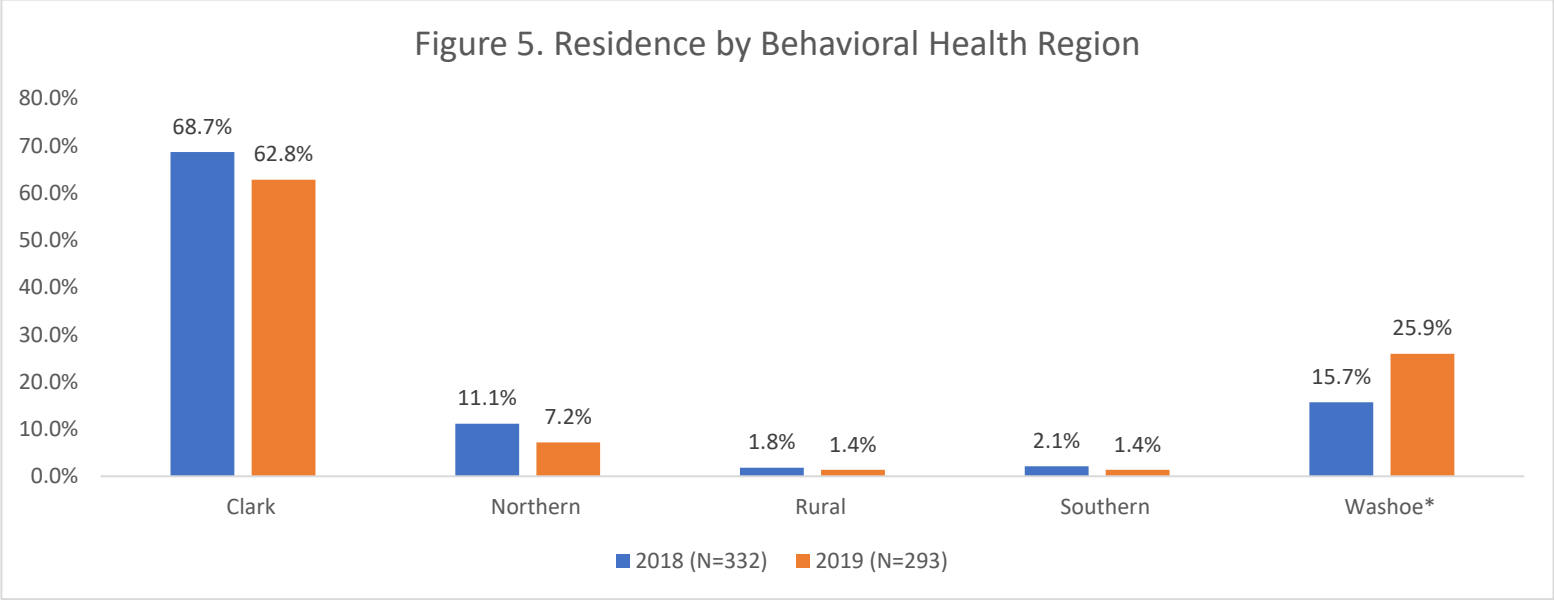
Section 1: Demographic Characteristics of Opioid Overdose Deaths (2018-2019)







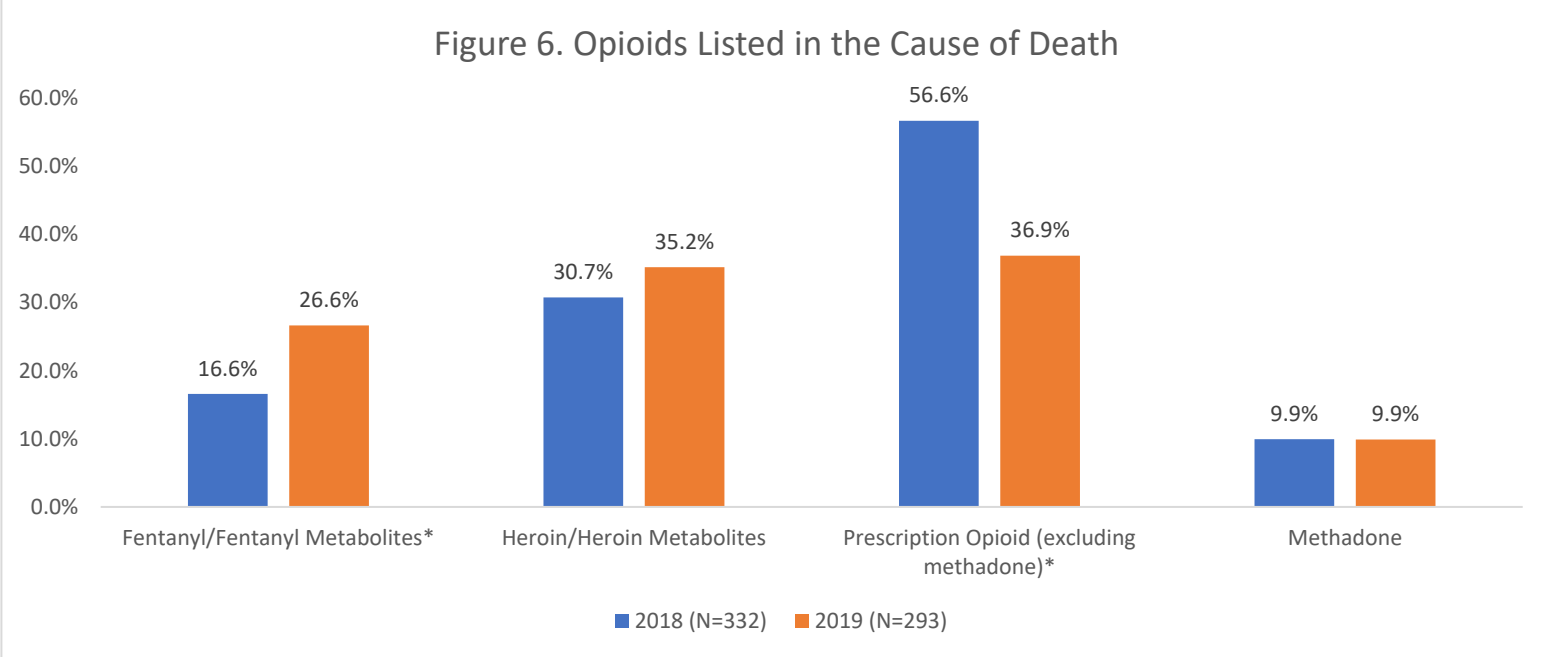


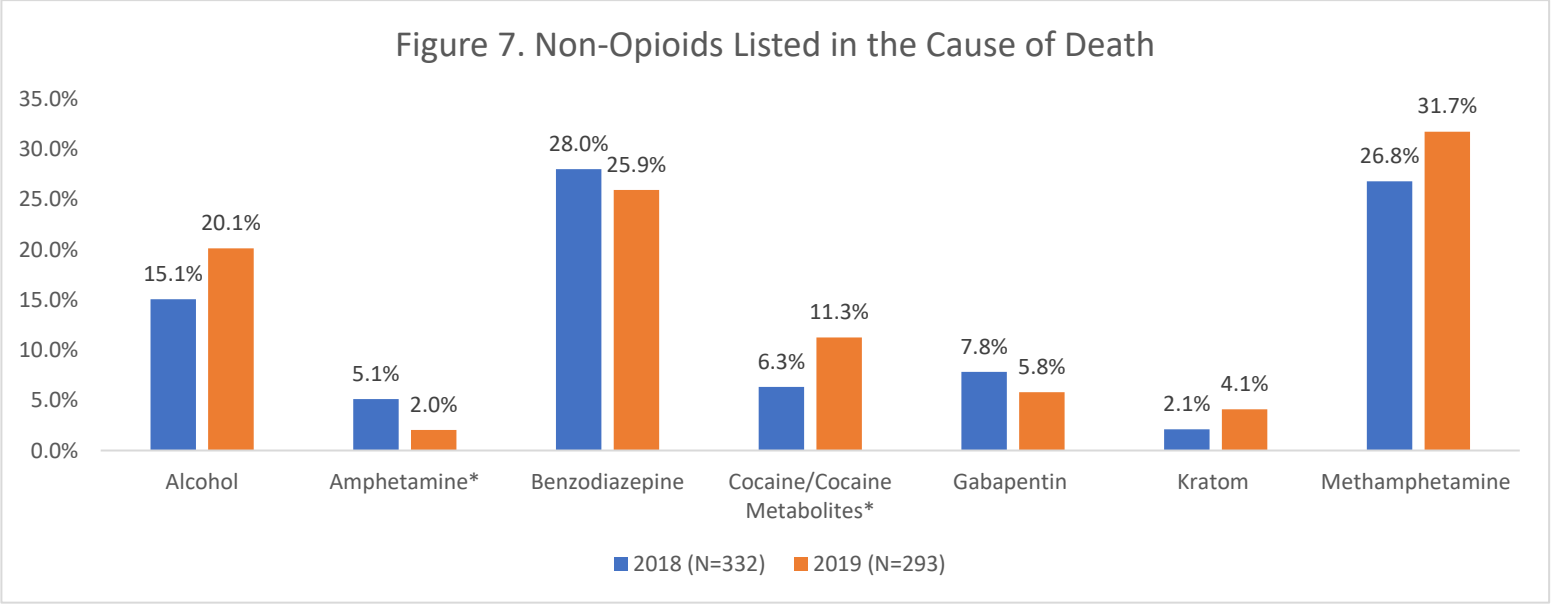


***Indicates statistically significant difference in a specific characteristic between years (p-value<0.05).**
NOTE: Data not available for all cases in Figures 1-4. Percentages exclude missing data, so these statistics may not represent the true proportion of case characteristics.

Summary: There were 332 opioid-involved overdose deaths of unintentional/undetermined intent in 2018, compared to 293 opioid-involved overdose deaths of unintentional/undetermined intent in 2019 among Nevada residents. There was a statistically significant increase in opioid-involved deaths seen in those aged 0-24 from 2018 (4.8%) to 2019 (10.6%) (Figure 1). There was also a statistically significant decrease in opioid-involved deaths seen in those aged 65 from 2018 (12.7%) to 2019 (7.5%) (Figure 1). There was a statistically significant increase in opioid-involved deaths in Washoe County from 2018 (15.7%) to 2019 (25.9%) (Figure 5).

Section 2: Breakdown of Top Substances Listed in the Cause of Death

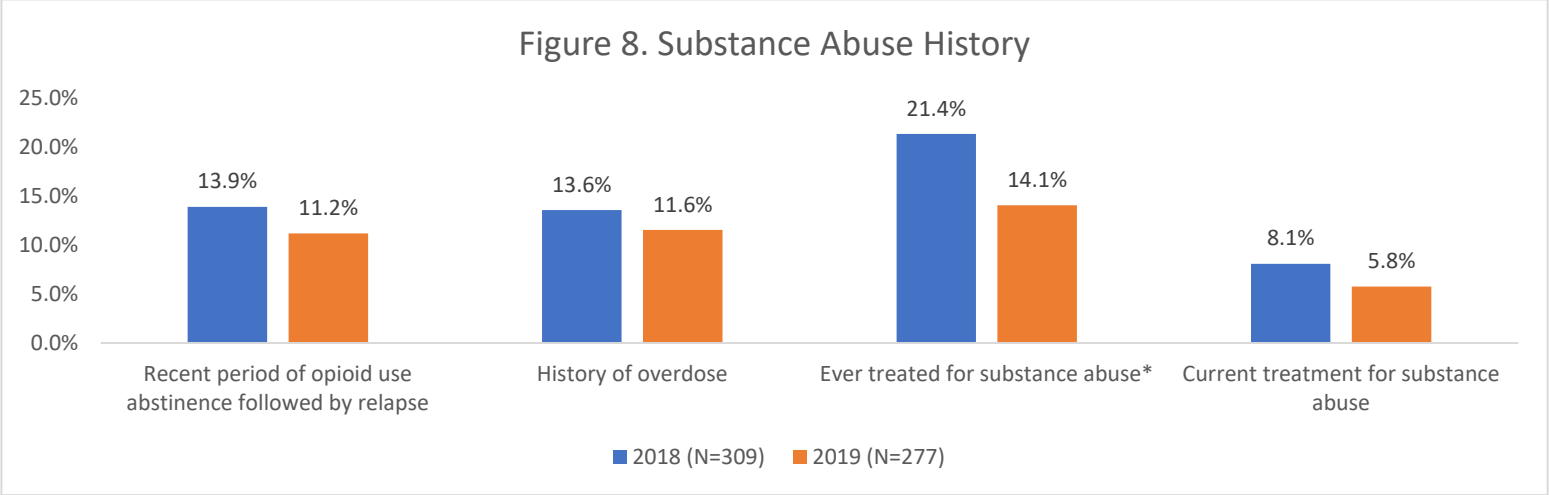


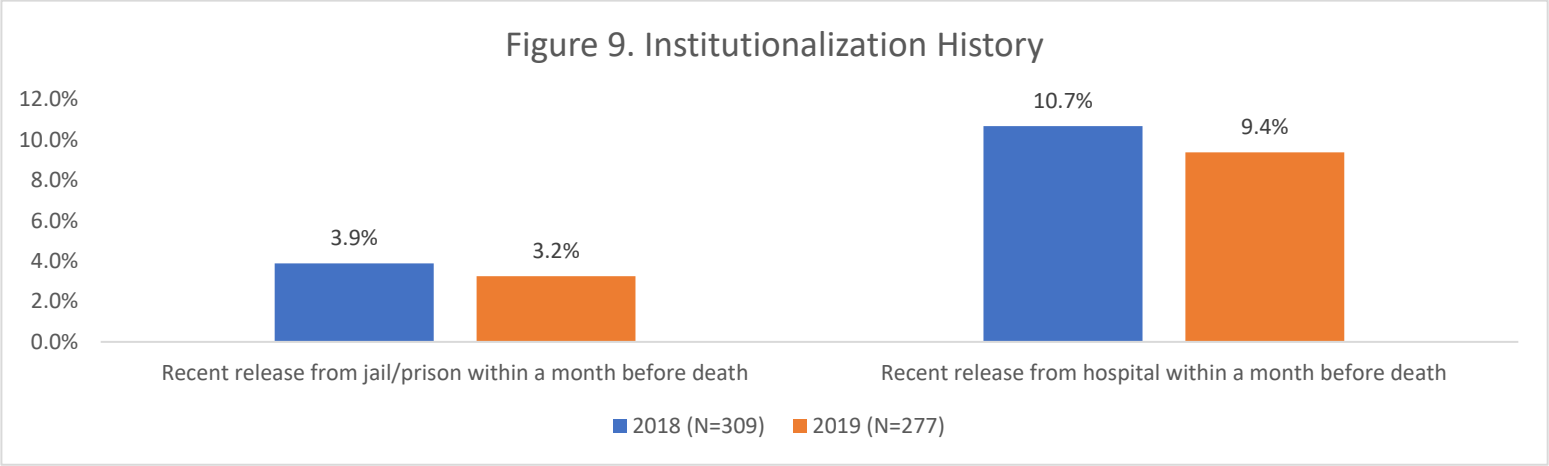


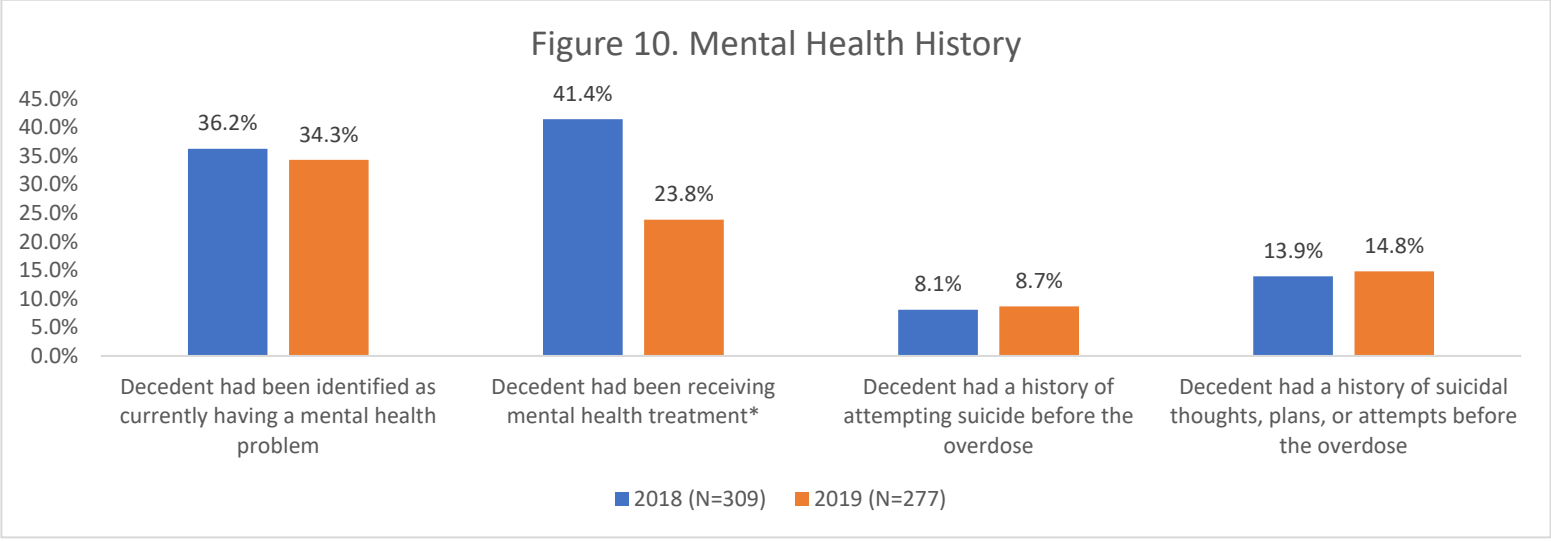
***Indicates statistically significant difference in a specific characteristic between years (p-value<0.05).**
NOTE: Substances listed in Figures 6 and 7 are not mutually exclusive, as decedents may have had multiple substances listed in the cause of death.

Summary: There was a statistically significant increase in fentanyl-involved deaths from 2018 (16.6%) to 2019 (26.6%) (Figure 6). There was a statistically significant decrease in prescription opioid-involved deaths from 2018 (56.6%) to 2019 (36.9%) (Figure 6). There was a statistically significant increase in cocaine-involved opioid deaths from 2018 (6.3%) to 2019 (11.3%) (Figure 7). There was a statistically significant decrease in amphetamine-involved opioid deaths from 2018 (5.1%) to 2019 (2.0%) (Figure 7).

Section 3: Mental Health, Substance Use, and Institutionalization Prior to Death







***Indicates statistically significant difference in a specific characteristic between years (p-value<0.05).**
NOTE: Circumstances prior to death were not available for all cases in Figure 8-10. Percentages exclude missing data and likely underestimate the true proportion of case characteristics.

Summary: There was a statistically significant decrease in cases ever receiving substance abuse treatment from 2018 (21.4%) to 2019 (14.1%) (Figure 8). There was a statistically significant decrease in cases receiving mental health treatment prior to death from 2018 (41.4%) to 2019 (23.8%) (Figure 10).

Section 4: Appendix

Table 1. Demographic characteristics of unintentional or undetermined opioid overdose-related deaths in Nevada by year of death, 2018-2019

	2018	2019			
Characteristic	**N[a]=332 (%)**	**N[a]=293 (%)**	**Absolute % Change[b]**	**Relative % Change[c]**	**Trend[d]**
Age					
0-24 years	16 (4.8%)	31 (10.6%)	5.8%	119.5%	**Significant Increase**
25-34 years	73 (22.0%)	60 (20.5%)	-1.5%	-6.9%	**No significant change**
35-44 years	58 (17.5%)	62 (21.2%)	3.7%	21.1%	**No significant change**
45-54 years	73 (22.0%	61 (20.8%)	-1.2%	-5.3%	**No significant change**
55-64 years	70 (21.1%)	57 (19.5%)	-1.6%	-7.7%	**No significant change**
65+ years	42 (12.7%)	22 (7.5%)	-5.1%	-40.6%	**Significant Decrease**
Sex					
Male	207 (62.3%)	187 (63.8%)	1.5%	2.4%	**No significant change**
Female	125 (37.7%)	106 (36.2%)	-1.5%	-3.9%	**No significant change**
Education Level					
Less than HS	46 (13.9%)	37 (12.6%)	-1.2%	-8.9%	**No significant change**
HS/GED	158 (47.6%)	149 (50.9%)	3.3%	6.9%	**No significant change**
Some College	50 (15.1%)	33 (11.3%)	-3.8%	-25.2%	**No significant change**
Associates	24 (7.2%)	24 (8.2%)	1.0%	13.3%	**No significant change**
Bachelors	23 (6.9%)	23 (7.8%)	0.9%	13.3%	**No significant change**
Masters/Doctorate	8 (2.4%)	3 (1.0%)	-1.4%	-57.5%	**No significant change**
Race/Ethnicity					
Asian/Pacific Islander, non-Hispanic	7 (2.1%)	8 (2.7%)	0.6%	29.5%	**No significant change**
Black, non-Hispanic	31 (9.3%)	28 (9.6%)	0.2%	2.3%	**No significant change**
Hispanic	30 (9.0%)	33 (11.3%)	2.2%	24.6%	**No significant change**
Other, non-Hispanic[e]	2 (0.6%)	3 (1.0%)	0.4%	70.0%	**No significant change**
White, non-Hispanic	252 (75.9%)	216 (73.7%)	-2.2%	-2.9%	**No significant change**
Was Homeless					
Yes	14 (4.2%)	22 (7.5%)	3.3%	78.1%	**No significant change**
Previously Served in Armed Forces					
Yes	29 (8.7%)	19 (6.5%)	-2.3%	-25.8%	**No significant change**
Residence (By Behavioral Health Region)[f]					
Clark	228 (68.7%)	184 (62.8%)	-5.9%	-8.6%	**No significant change**
Northern	37 (11.1%)	21 (7.2%)	-4.0%	-35.7%	**No significant change**
Rural	6 (1.8%)	4 (1.4%)	-0.4%	-24.5%	**No significant change**
Southern	7 (2.1%)	4 (1.4%)	-0.7%	-35.3%	**No significant change**
Washoe	52 (15.7%)	76 (25.9%)	10.3%	65.6%	**Significant Increase**

[a]Missing data excluded from percentage calculations.

[b]Absolute percent change is the difference between 2018 and 2019 percentages.

[c]Relative percent change is the absolute percent change divided by the 2018 percentage, multiplied by 100.

[d]Trend indicates whether a percent change was statistically significant, p-value<0.05. Red indicates if the trend was significant and going in a harmful direction (e.g. increase in substance as a contributing cause of death). Green indicates if the trend was significant and going in a less harmful direction (e.g. decrease in substance as a contributing cause of death). No significant change indicates there was no statistically significant change between 2018 and 2019 for a particular characteristic (p-value>0.05).

[e]Race/Ethnicity category of other includes Native American/Alaskan Native and other race.

[f]Behavioral health regions were categorized as follows: Northern (Carson City, Storey, Douglas, Lyon, Churchill), Rural (Humboldt, Pershing, Lander, Eureka, Elko, White Pine), and Southern (Mineral, Esmeralda, Nye, Lincoln).

Table 2. Top substances listed in the cause of death among unintentional or undetermined overdose related deaths among Nevada residents by year, 2018-2019

	2018	2019			
Substance*	**N[a]=332 (%)**	**N[a]=293 (%)**	**Absolute % Change[b]**	**Relative % Change[c]**	**Trend[d]**
Opioids					
Fentanyl/Fentanyl Metabolites	55 (16.6%)	78 (26.6%)	10.1%	60.7%	**Significant Increase**
Heroin/Heroin Metabolites	102 (30.7%)	103 (35.2%)	4.4%	14.4%	**No significant change**
Prescription Opioids (excluding methadone)	188 (56.6%)	108 (36.9%)	-19.8%	-34.9%	**Significant Decrease**
Methadone	33 (9.9%)	29 (9.9%)	0.0%	-0.4%	**No significant change**
Non-Opioids					
Alcohol	50 (15.1%)	59 (20.1%)	5.1%	33.7%	**No significant change**
Amphetamine	17 (5.1%)	6 (2.0%)	-3.1%	-60.0%	**Significant Decrease**
Benzodiazepine	93 (28.0%)	76 (25.9%)	-2.1%	-7.4%	**No significant change**
Cocaine/Cocaine Metabolites	21 (6.3%)	33 (11.3%)	4.9%	78.1%	**Significant Increase**
Gabapentin	26 (7.8%)	17 (5.8%)	-2.0%	-25.9%	**No significant change**
Kratom	7 (2.1%)	12 (4.1%)	2.0%	94.2%	**No significant change**
Methamphetamine	89 (26.8%)	93 (31.7%)	4.9%	18.4%	**No significant change**

***Only the most common substance types were included, and those substances that were involved in less than 5 cases were excluded.**
[a]Substances are not mutually exclusive, and decedents may have had multiple substances listed as the cause of death, so individual counts may have exceeded the total and percentages may exceed 100%.
[b]Absolute percent change is the difference between 2018 and 2019 percentages.
[c]Relative percent change is the absolute percent change divided by the 2018 percentage, multiplied by 100.
[d]Trend indicates whether a percent change was statistically significant, p-value<0.05. Red indicates if the trend was significant and going in a harmful direction (e.g. increase in substance as a contributing cause of death). Green indicates if the trend was significant and going in a less harmful direction (e.g. decrease in substance as a contributing cause of death). No significant change indicates there was no statistically significant change between 2018 and 2019 for a particular characteristic (p-value>0.05).

Table 3. Circumstances preceding death among unintentional or undetermined opioid overdose related deaths among Nevada residents by year, 2018-2019

	2018	2019			
Characteristic	**N[a]=309 (%)**	**N[a]=277 (%)**	**Absolute % Change[b]**	**Relative % Change[c]**	**Trend[d]**
Substance Abuse History					
Recent period of opioid use abstinence followed by relapse	43 (13.9%)	31 (11.2%)	-2.7%	-19.6%	**No significant change**
History of overdose	42 (13.6%)	32 (11.6%)	-2.0%	-15.0%	**No significant change**
Ever treated for substance abuse	66 (21.4%)	39 (14.1%)	-7.3%	-34.1%	**Significant Decrease**
Current treatment for substance abuse	25 (8.1%)	16 (5.8%)	-2.3%	-28.6%	**No significant change**
Institutionalization History					
Recent release from jail/prison within a month before death	12 (3.9%)	9 (3.2%)	-0.6%	-16.3%	**No significant change**
Recent release from hospital within a month before death	33 (10.7%)	26 (9.4%)	-1.3%	-12.1%	**No significant change**
Mental Health History					
Decedent had been identified as currently having a mental health problem	112 (36.2%)	95 (34.3%)	-1.9%	-5.4%	**No significant change**
Decedent had been receiving mental health treatment	128 (41.4%)	66 (23.8%)	-17.6%	-42.5%	**Significant Decrease**

Decedent had a history of attempting suicide before the overdose	25 (8.1%)	24 (8.7%)	0.6%	7.1%	**No significant change**
Decedent had a history of suicidal thoughts, plans, or attempts before the overdose	43 (13.9%)	41 (14.8%)	0.9%	6.4%	**No significant change**

Note: Circumstances prior to death were not available for all cases and missing data were excluded. These findings likely underestimate the true proportion of case characteristics.

[a]The total number of decedents reflects investigations where circumstances were known prior to death.

[b]Absolute percent change is the difference between 2018 and 2019 percentages.

[c]Relative percent change is the absolute percent change divided by the 2018 percentage, multiplied by 100.

[d]Trend indicates whether a percent change was statistically significant, p-value<0.05. Blue indicates if the trend was significant. No significant change indicates there was no statistically significant change between 2018 and 2019 for a particular characteristic (p-value>0.05).