Nevada State Unintentional Drug Overdose Reporting System

Report of Deaths from January to June 2020 - *Statewide*

Overview: The Centers for Disease Control and Prevention (CDC) Overdose Data to Action (OD2A) is a program that 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 biannual report highlights **overdose mortality** within the state of Nevada utilizing the State Unintentional Drug Overdose Reporting System (SUDORS) for the period beginning ***January 1, 2020 to June 30, 2020***, with comparisons from the same period in 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); or a death classified as a drug overdose death by the Medical Examiner/Coroner.

Limitations: Data is 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, polysubstance use

Section 3: Circumstances preceding death

Section 4: Appendix (containing complete tables for sections 1-3)

Key Findings:

There was a 37% increase in drug overdose deaths of unintentional or undetermined intent among Nevada residents from the first half of 2019 (N=263) to the same period in 2020 (N=359). During the same time period:

- There was a statistically significant *increase in deaths seen in those aged 18-24* (**181% increase)**.
- There was a statistically significant *increase in deaths among Hispanics* (**221% increase)**.
- There was a statistically significant *decline in deaths in the Northern region* (**50% decrease**).
- There was a statistically significant *increase in deaths attributed to fentanyl* (**221% increase**).
- There was a statistically significant *increase in deaths attributed to benzodiazepines* (**100% increase**).
- There was a statistically significant *increase in deaths attributed to both opioids and benzodiazepines* (**122% increase**).

Questions or comments?

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

Nevada Department of Health and Human Services
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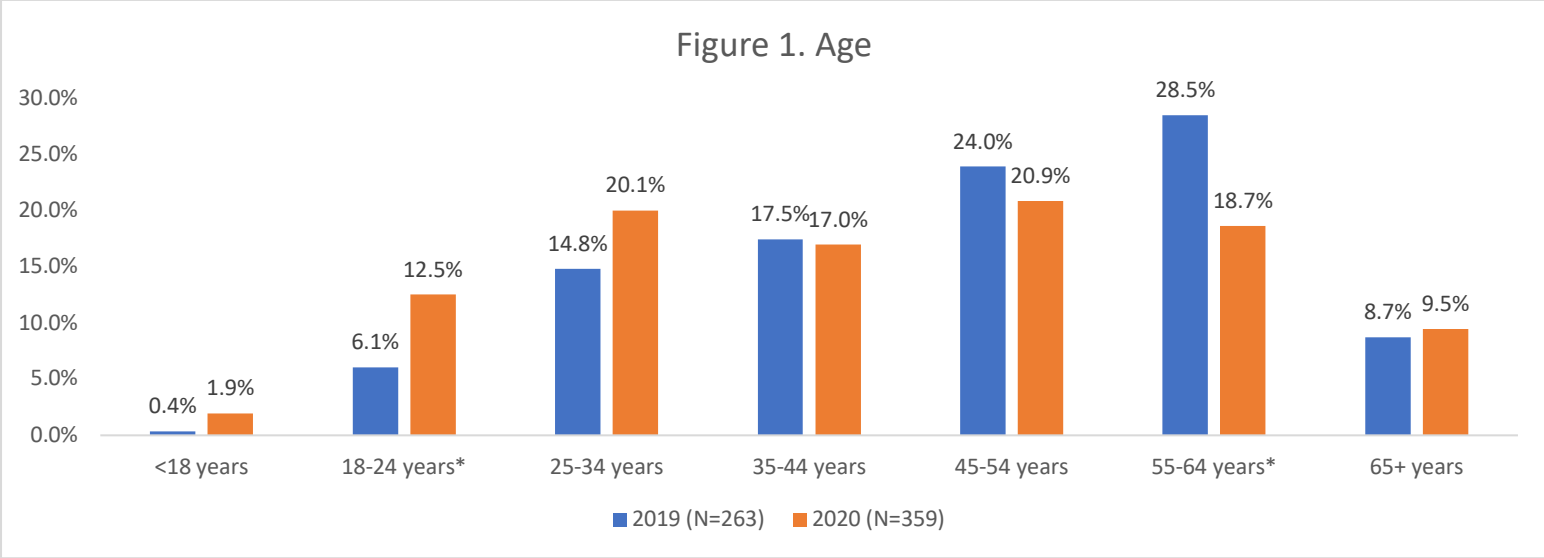
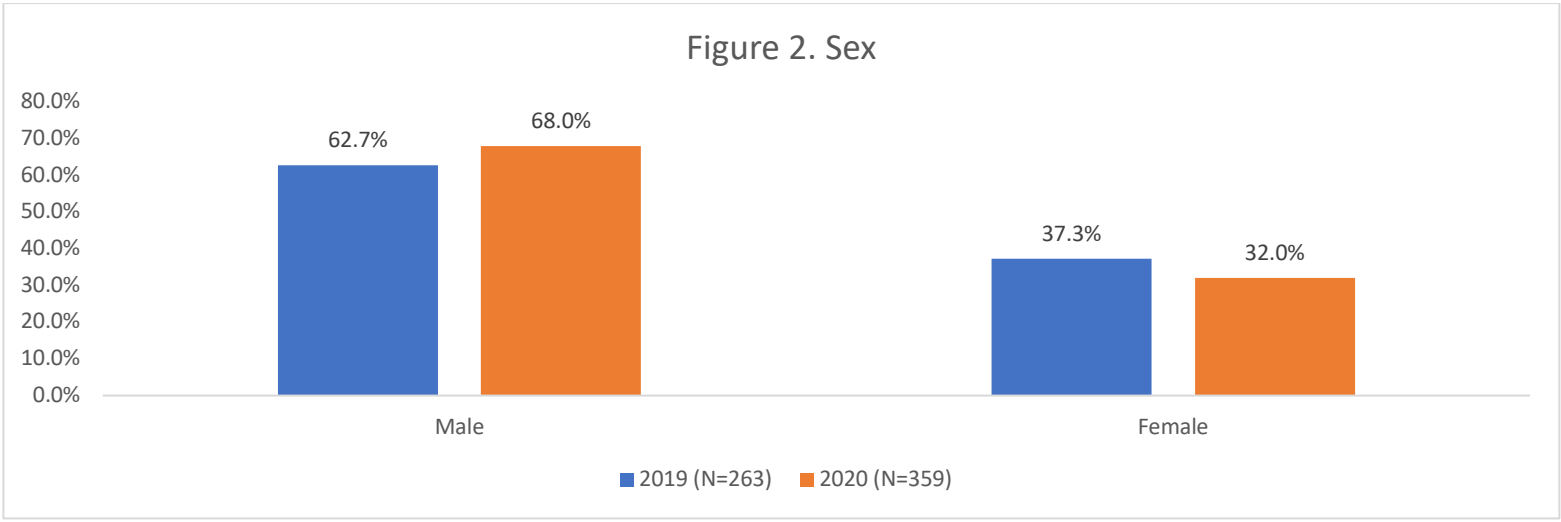
NV-OD2A
OVERDOSE DATA TO ACTION

Nevada Public Health Training Center
Training & Workforce Development for Nevada

Section 1: Demographic Characteristics of Cases





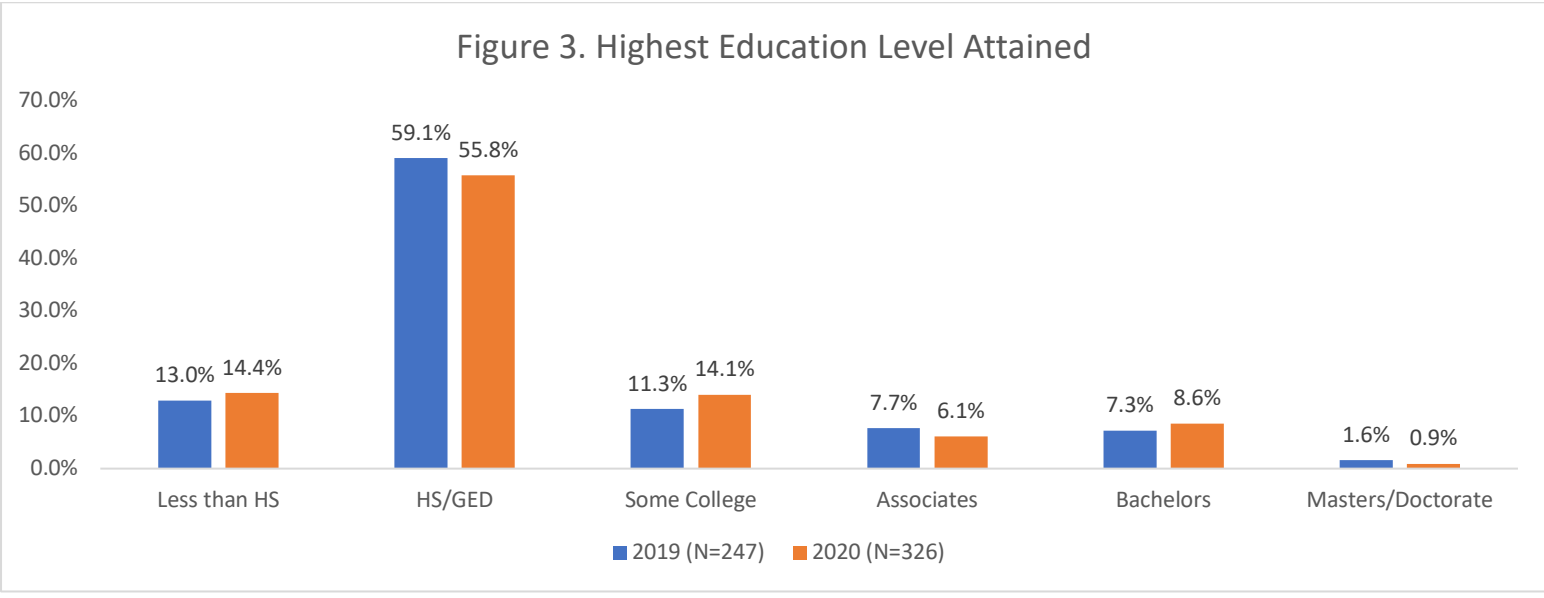


Figure 4. Race/Ethnicity

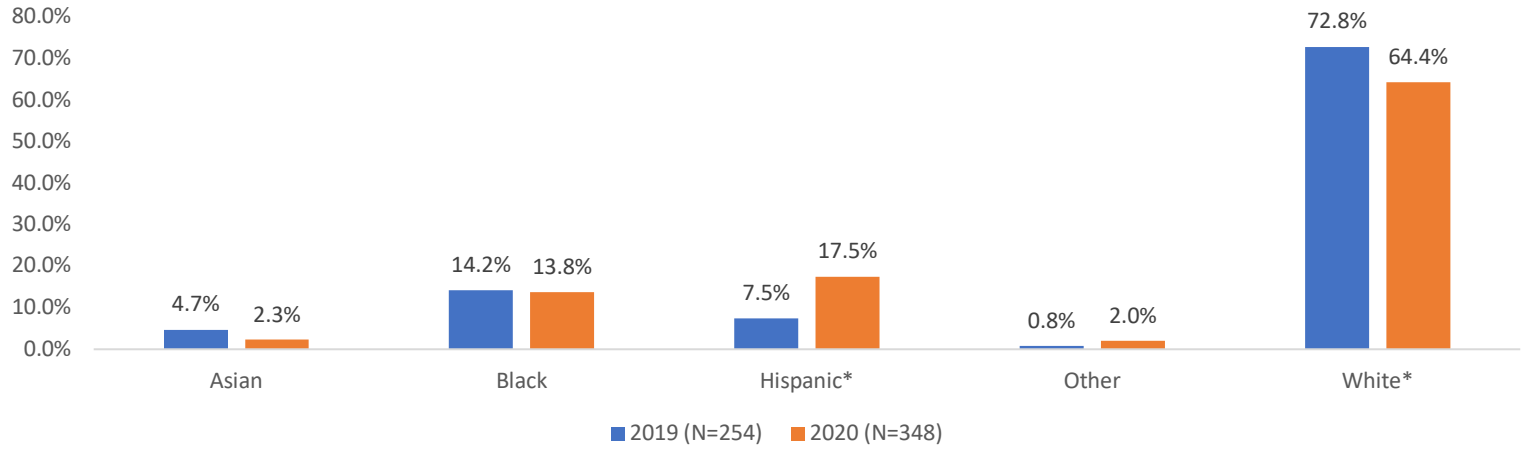


Figure 5. Behavioral Health Region

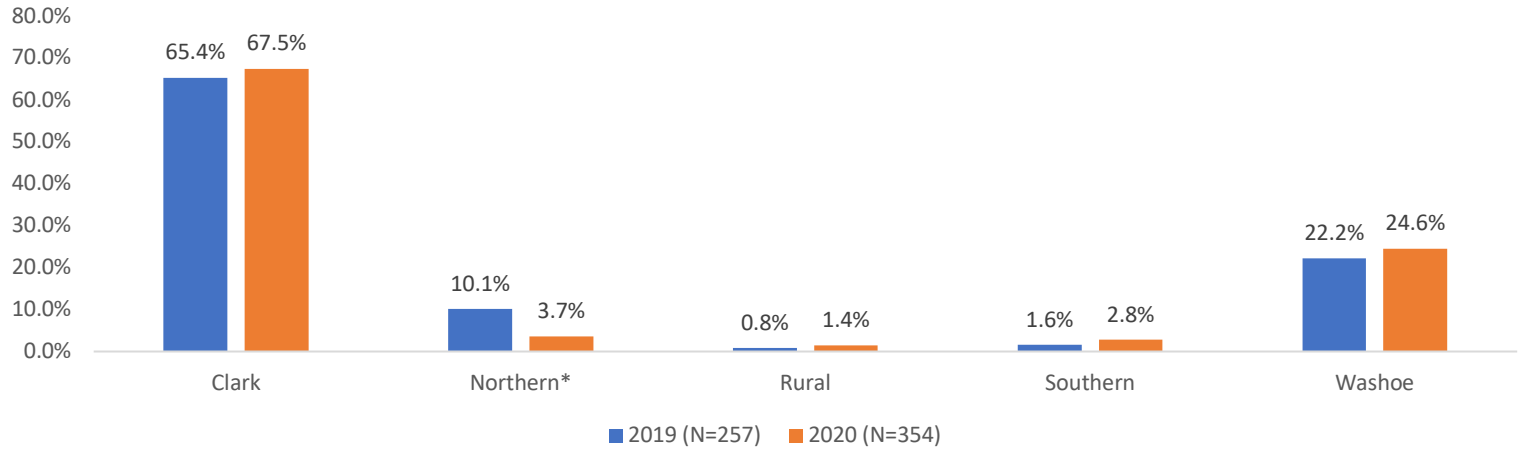
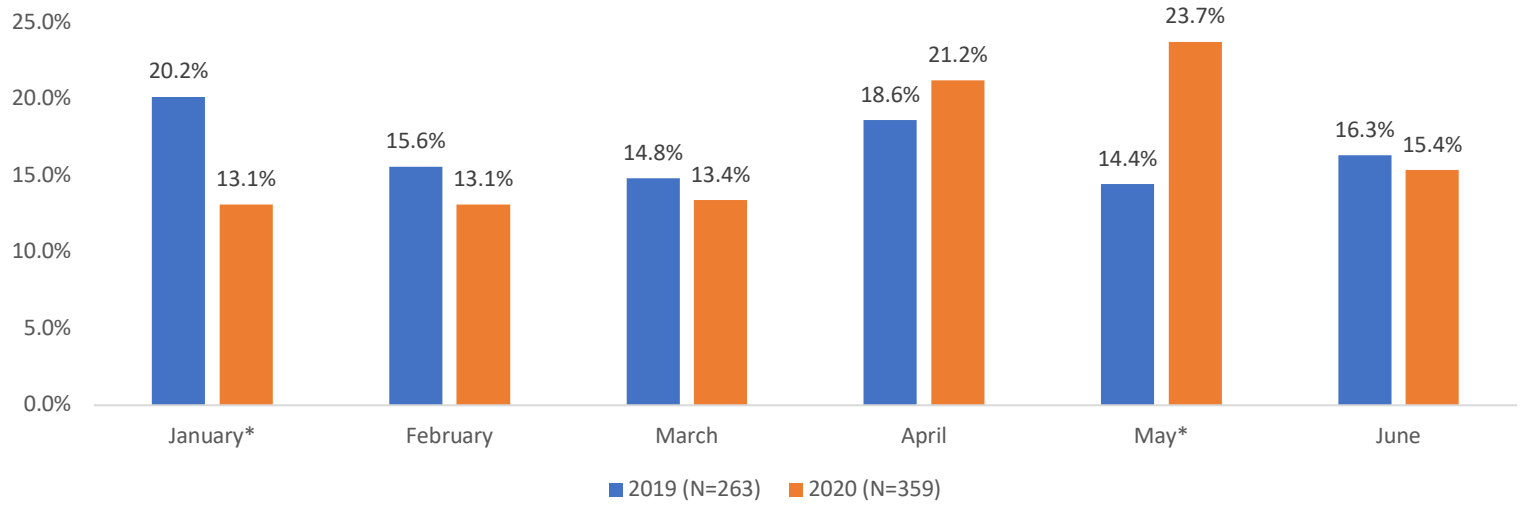
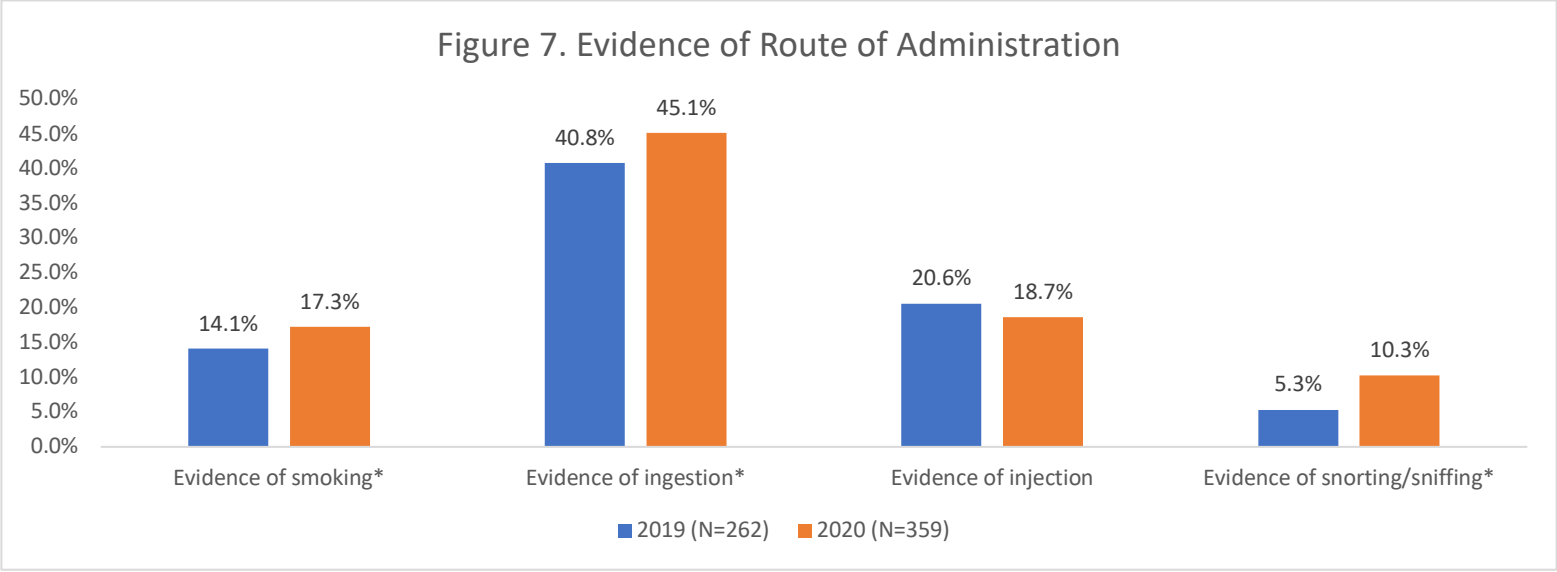
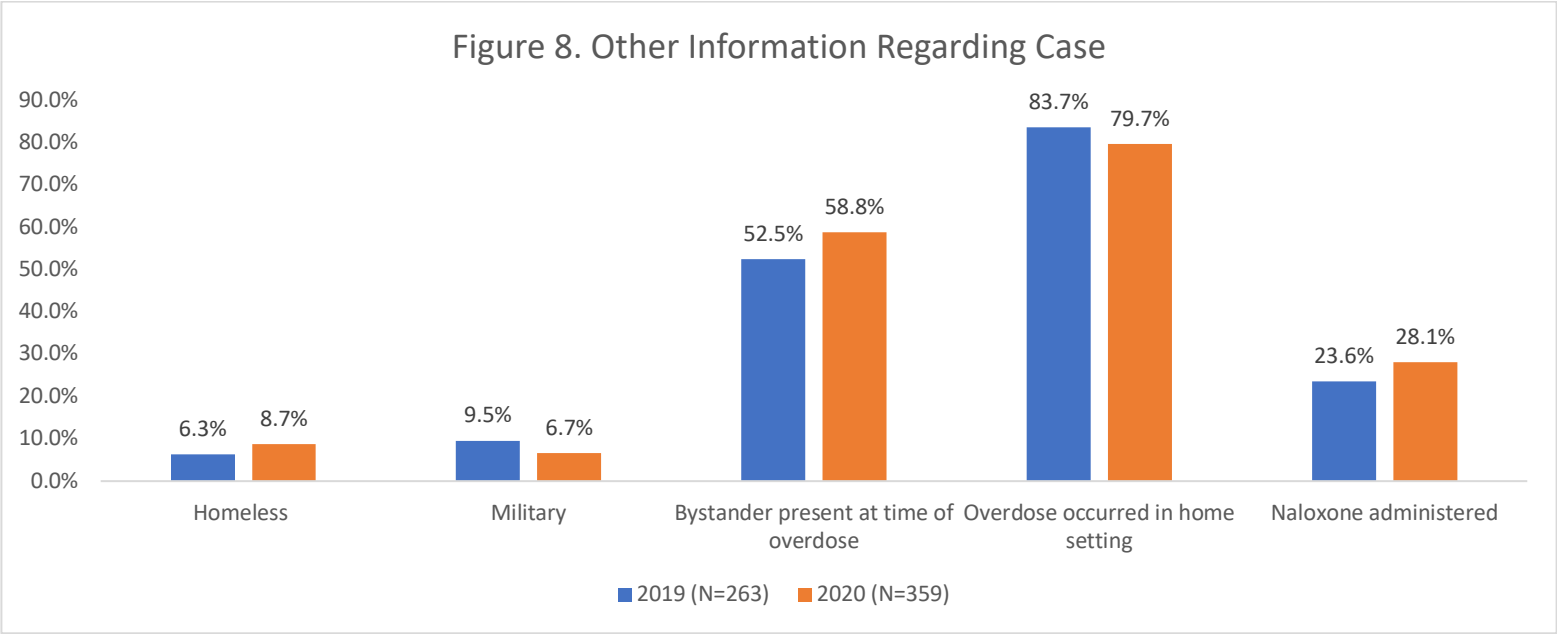


Figure 6. Percentage of Deaths by Month



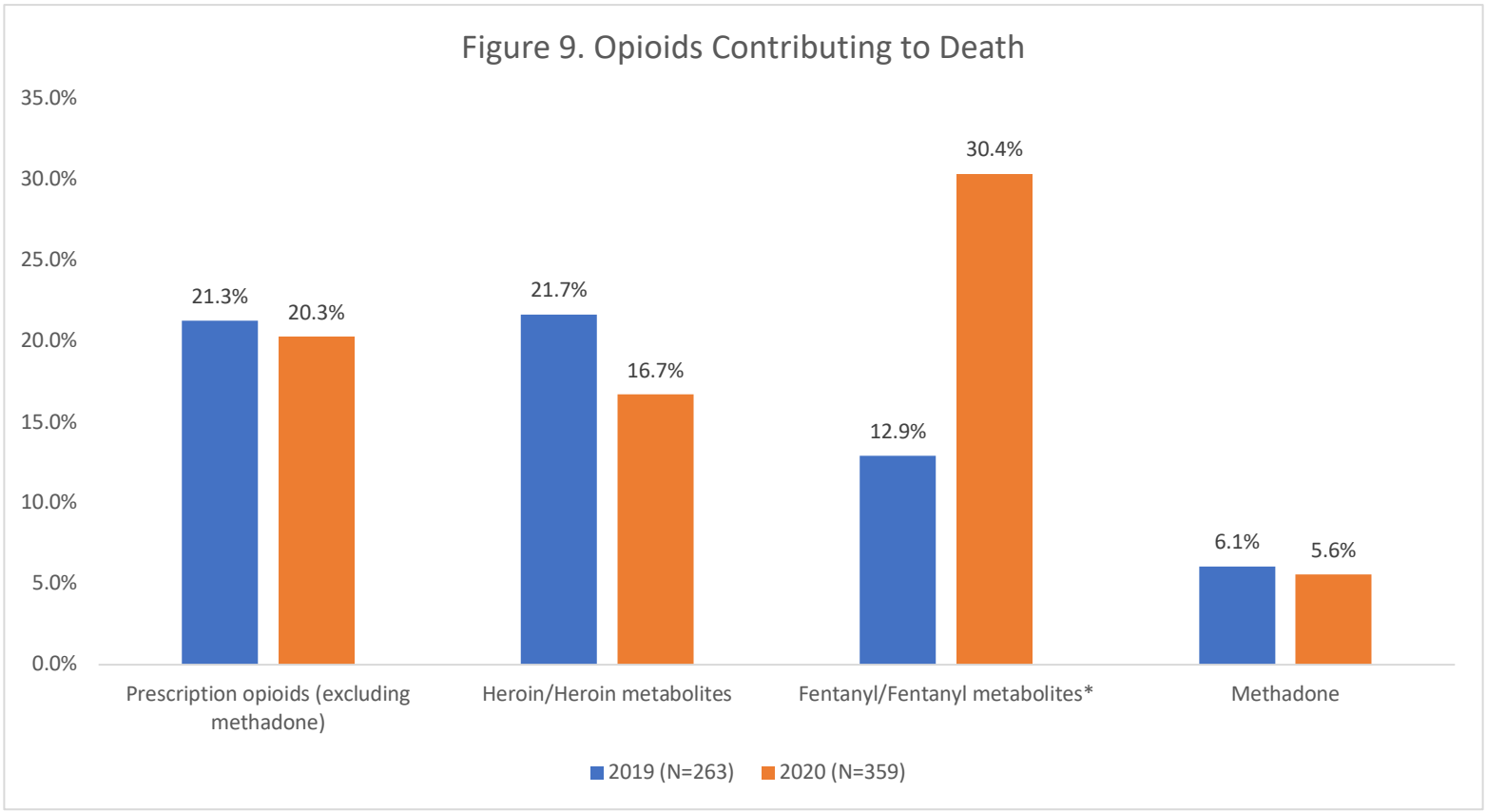




Data may not have been available for all cases in Figures above. Percentages exclude missing data, so these statistics may not represent he true proportion of case characteristics.

ummary: There were 263 drug overdose deaths of unintentional/undetermined intent in the first half of 2019, compared to 359 drug overdose deaths of unintentional/undetermined intent during the same time period in 2020 among Nevada residents. There vas a statisticaly significant increase in deaths seen in those aged 18-24 from the first half of 2019 (6.1%) to the first half of 2020 12.5%) (**Figure 1**). There was a statisticaly significant decrease in deaths seen in those aged 55-64 from the first half of 2019 28.5%) to the first half of 2020 (18.7%) (**Figure 1**). There was a statisticaly significant increase in deaths seen in those identified as Hispanic from the first half of 2019 (7.5%) to the first half of 2020 (17.5%) (**Figure 4**). There was a statistically significant decline in deaths in the Northern region from the first half of 2019 (10.1%) to the first half of 2020 (3.7%) (**Figure 5**). There was a statistically significant increase in deaths from May 2019 (14.4%) to May 2020 (23.7%) (**Figure 6**). There was a statistically significant increase n evidence of smoking substances (14.1% vs. 17.3%), ingesting substances (40.8% vs. 45.1%), and snorting/sniffing substances 5.3% vs. 10.3%) (**Figure 7**).

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



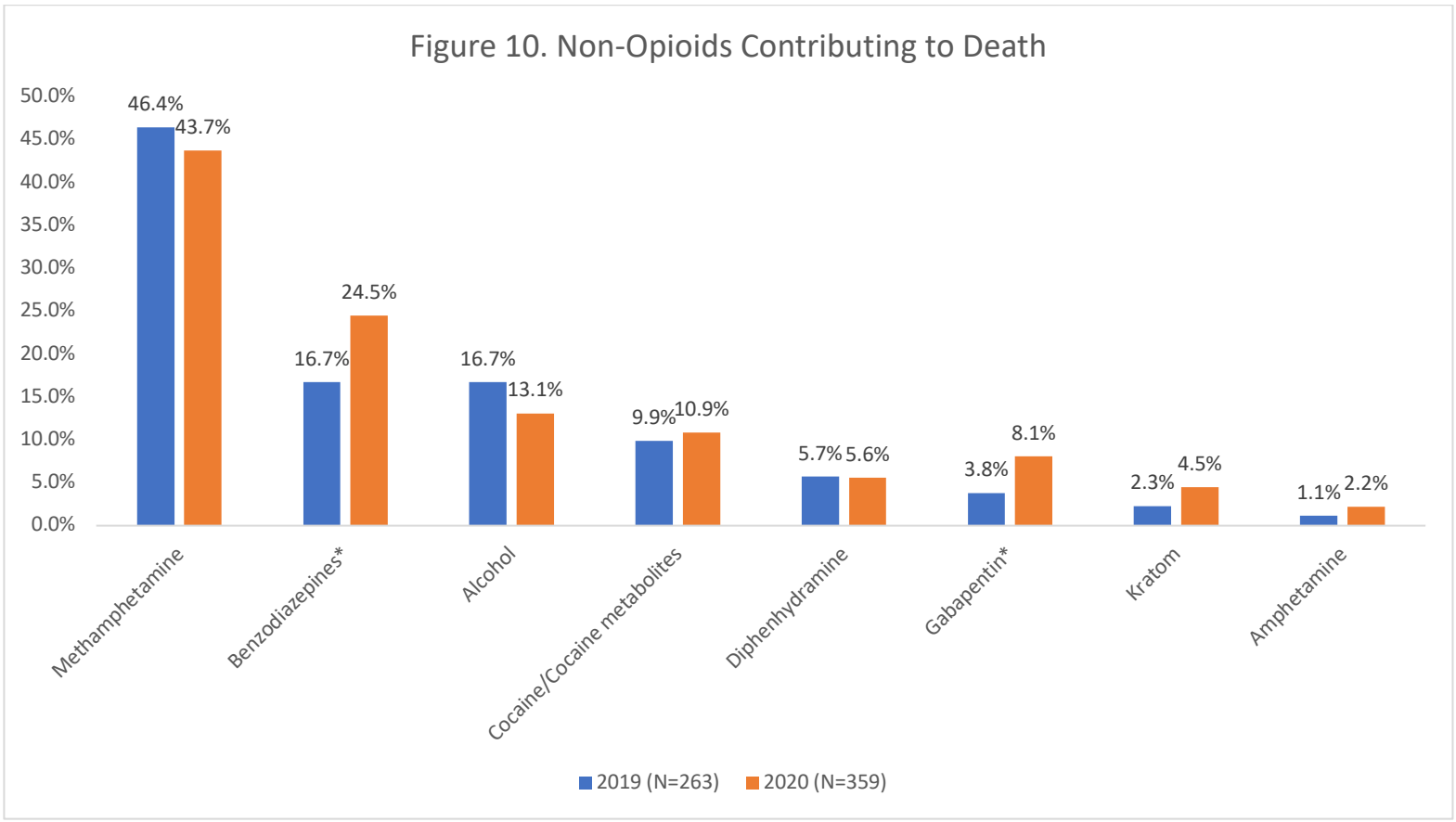
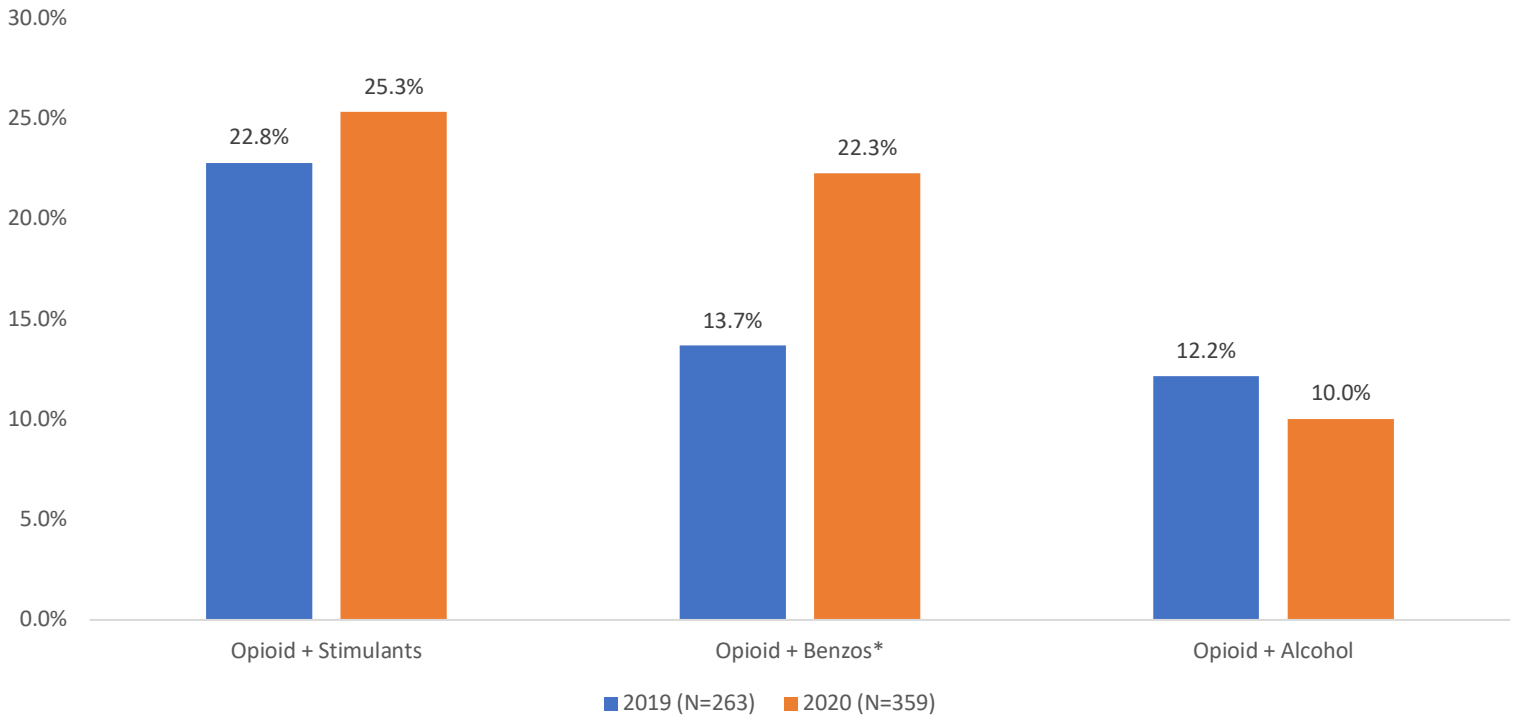


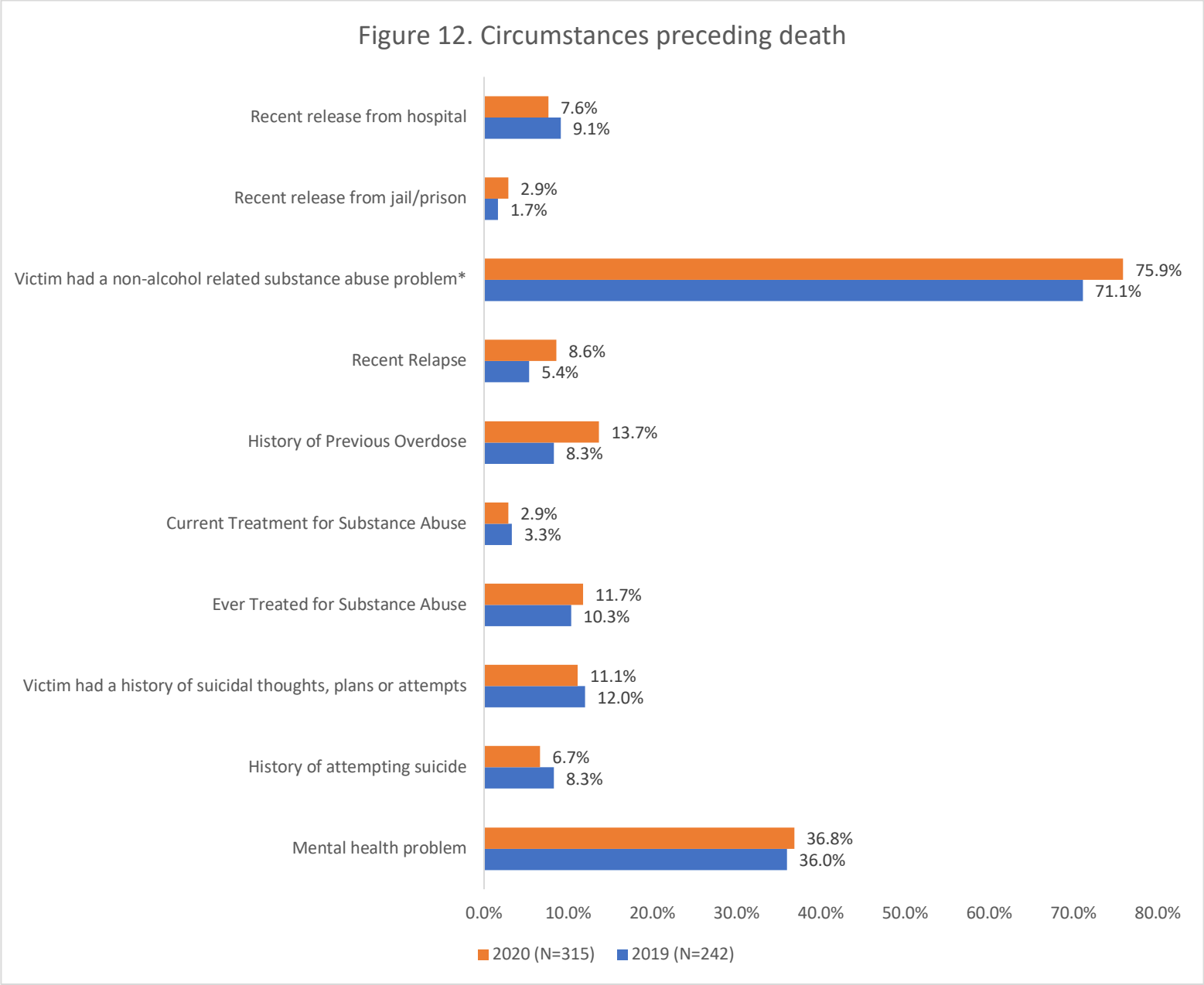
Figure 11. Deaths Where Polysubstances Contributed (Opioids + Other Substances)



Note: Substances listed in Figures 9-11 are not mutually exclusive, and decedents may have had multiple substances listed in the cause of death.

Summary: There was a statistically significant increase in deaths attributed to fentanyl from the first half of 2019 (12.9%) to the first half of 2020 (30.4%) (**Figure 9**). There was a statistically significant increase in deaths attributed to benzodiazepines from the first half of 2019 (16.7%) to the first half of 2020 (24.5%) (**Figure 10**). There was a statistically significant increase in deaths attributed to gapapentin from the first half of 2019 (3.8%) to the first half of 2020 (8.1%) (**Figure 10**). There was a statistically significant increase in deaths attributed to opioids and benzodiazepines from the first half of 2019 (13.7%) to the first half of 2020 (22.3%) (**Figure 11**).

Section 3: Circumstances Preceding Death



Circumstances prior to death were not available for all cases in Figure 7-9. Percentages exclude missing data and likely underestimate the true proportion of case characteristics.

Summary: There was a statistically significant increase in deaths among those who had a non-alcohol related substance abuse problem from the first half of 2019 (71.1%) to the first half of 2020 (75.9%) (**Figure 12**). In the first half of 2020, over 1/3 of cases were identified as having a mental health problem preceding death, 1 in 11 were recently released from the hospital, and 1 in 7 had a history of previous overdose (**Figure 12**).

Section 4: Appendix

Table 1. Demographic characteristics of unintentional or undetermined overdose-related deaths in Nevada, first half of 2019 to first half of 2020

Characteristic	2019 N[a]=263 (%)	2020 N[a]=359 (%)	Relative % Change[b]	Trend[c]
Age				
<18 years	1 (0.4%)	7 (1.9%)	600.0%	No significant change
18-24 years	16 (6.1%)	45 (12.5%)	181.3%	Significant Increase
25-34 years	39 (14.8%)	72 (20.1%)	84.6%	No significant change
35-44 years	46 (17.5%)	61 (17.0%)	32.6%	No significant change
45-54 years	63 (24.0%)	75 (20.9%)	19.0%	No significant change
55-64 years	75 (28.5%)	67 (18.7%)	-10.7%	Significant Decrease
65+ years	23 (8.7%)	34 (9.5%)	47.8%	No significant change
Sex				
Male	165 (62.7%)	244 (68.0%)	47.9%	No significant change
Female	98 (37.3%)	115 (32.0%)	17.3%	No significant change
Education				
Less than HS	32 (13.0%)	47 (14.4%)	46.9%	No significant change
HS/GED	146 (59.1%)	182 (55.8%)	24.7%	No significant change
Some College	28 (11.3%)	46 (14.1%)	64.3%	No significant change
Associates	19 (7.7%)	20 (6.1%)	5.3%	No significant change
Bachelors	18 (7.3%)	28 (8.6%)	55.6%	No significant change
Masters/Doctorate	4 (1.6%)	3 (0.9%)	-25.0%	No significant change
Race/Ethnicity				
Asian/Pacific Islander, non-Hispanic	12 (4.7%)	8 (2.3%)	-33.3%	No significant change
Black, non-Hispanic	36 (14.2%)	48 (13.8%)	33.3%	No significant change
Hispanic	19 (7.5%)	61 (17.5%)	221.1%	Significant Increase
Other, non-Hispanic[d]	2 (0.8%)	7 (2.0%)	250.0%	No significant change
White, non-Hispanic	185 (72.8%)	224 (64.4%)	21.1%	Significant Decrease
Homeless				
Yes	16 (6.3%)	31 (8.7%)	93.8%	No significant change
Military				
Yes	25 (9.5%)	24 (6.7%)	-4.0%	No significant change
Region[e]				
Clark	168 (65.4%)	239 (67.5%)	42.3%	No significant change
Northern	26 (10.1%)	13 (3.7%)	-50.0%	Significant Decrease
Rural	2 (0.8%)	5 (1.4%)	150.0%	No significant change
Southern	4 (1.6%)	10 (2.8%)	150.0%	No significant change
Washoe	57 (22.2%)	87 (24.6%)	52.6%	No significant change
Month				
January	53 (20.2%)	47 (13.1%)	-11.3%	Significant Decrease
February	41 (15.6%)	47 (13.1%)	14.6%	No significant change
March	39 (14.8%)	48 (13.4%)	23.1%	No significant change
April	49 (18.6%)	76 (21.2%)	55.1%	No significant change
May	38 (14.4%)	85 (23.7%)	123.7%	Significant Increase
June	43 (16.3%)	55 (15.4%)	27.9%	No significant change
Bystander present at time of overdose				

Yes	138 (52.5%)	211 (58.8%)	52.9%	No significant change
Overdose occurred in home setting				
Yes	220 (83.7%)	286 (79.7%)	30.0%	No significant change
Naloxone administered				
Yes	62 (23.6%)	101 (28.1%)	62.9%	No significant change
Route of administration				
Evidence of smoking	37 (14.1%)	62 (17.3%)	67.6%	Significant Increase
Evidence of ingestion	107 (40.8%)	162 (45.1%)	51.4%	Significant Increase
Evidence of injection	54 (20.6%)	67 (18.7%)	24.1%	No significant change
Evidence of snorting/sniffing	14 (5.3%)	37 (10.3%)	164.3%	Significant Increase

[a]Missing data excluded from percentage calculations.
[b]Relative percent change is the difference in 2019 and 2020 counts divided by 2019 counts, multiplied by 100.
[c]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 the first halves of 2019 and 2020 for a particular characteristic (p-value>0.05).
[d]Race/Ethnicity category of other includes Native American/Alaskan Native and other race.
[e]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 contributing to death among unintentional or undetermined overdose-related deaths in Nevada, first half of 2019 to first half of 2020

	2019	2020		
Substance*	**N[a]=263 (%)**	**N[a]=359 (%)**	**Relative % Change[b]**	**Trend[c]**
Opioids	157 (59.7%)	241 (67.1%)	53.5%	No significant change
Prescriptions (excluding methadone)	56 (21.3%)	73 (20.3%)	30.4%	No significant change
Heroin/Heroin metabolites	57 (21.7%)	60 (16.7%)	5.3%	No significant change
Fentanyl/Fentanyl metabolites	34 (12.9%)	109 (30.4%)	220.6%	Significant Increase
Methadone	16 (6.1%)	20 (5.6%)	25.0%	No significant change
Non-opioids				
Methamphetamine	122 (46.4%)	157 (43.7%)	28.7%	No significant change
Benzodiazepines	44 (16.7%)	88 (24.5%)	100.0%	Significant Increase
Cocaine/Cocaine metabolites	26 (9.9%)	39 (10.9%)	50.0%	No significant change
Diphenhydramine	15 (5.7%)	20 (5.6%)	33.3%	No significant change
Gabapentin	10 (3.8%)	29 (8.1%)	190.0%	Significant Increase
Kratom	6 (2.3%)	16 (4.5%)	166.7%	No significant change
Alcohol	44 (16.7%)	47 (13.1%)	6.8%	No significant change
Amphetamine	3 (1.1%)	8 (2.2%)	166.7%	No significant change
Polysubstance use				
Opioid + Stimulants	60 (22.8%)	91 (25.3%)	51.7%	No significant change
Opioid + Benzos	36 (13.7%)	80 (22.3%)	122.2%	Significant Increase
Opioid + Alcohol	32 (12.2%)	36 (10.0%)	12.5%	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]Relative percent change is the difference in 2019 and 2020 counts divided by 2019 counts, multiplied by 100.
[c]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 the first halves of 2019 and 2020 for a particular characteristic (p-value>0.05).

Table 3. Circumstances preceding death among unintentional or undetermined overdose-related deaths in Nevada, first half of 2019 to first half of 2020

	2019	2020		
Circumstances	**N[a]=242 (%)**	**N[a]=315 (%)**	**Relative % Change[b]**	**Trend[c]**
Mental health problem	87 (36.0%)	116 (36.8%)	33.3%	**No significant change**
History of attempting suicide	20 (8.3%)	21 (6.7%)	5.0%	**No significant change**
Victim had a history of suicidal thoughts, plans or attempts	29 (12.0%)	35 (11.1%)	20.7%	**No significant change**
Ever Treated for Substance Abuse	25 (10.3%)	37 (11.7%)	48.0%	**No significant change**
Current Treatment for Substance Abuse	8 (3.3%)	9 (2.9%)	12.5%	**No significant change**
History of Previous Overdose	20 (8.3%)	43 (13.7%)	115.0%	**No significant change**
Recent Relapse	13 (5.4%)	27 (8.6%)	107.7%	**No significant change**
Victim had a non-alcohol related substance abuse problem*	172 (71.1%)	239 (75.9%)	39.0%	**Significant Increase**
Recent release from jail/prison	4 (1.7%)	9 (2.9%)	125.0%	**No significant change**
Recent release from hospital	22 (9.1%)	24 (7.6%)	9.1%	**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]Relative percent change is the difference in 2019 and 2020 counts divided by 2019 counts, multiplied by 100.
[c]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 the first halves of 2019 and 2020 for a particular characteristic (p-value>0.05).