

Nevada State Unintentional Drug Overdose Reporting System

Report of Deaths: January to December 2021 - 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, 2021 to December 31, 2021**, and the preceding year.

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. *Stimulants* speed up the body's systems and include methamphetamine, cocaine, and prescription stimulants (Adderall, Ritalin). *Benzodiazepines* are psychoactive drugs that are depressants that produce sedation, include sleep, and prevent seizures (brand names include Valium and Xanax) (DEA). *Potential opportunity for linkage to care or implementation of a life-saving action includes recent release from an institution within past month (prison/jail, treatment, hospital), previous nonfatal overdose, mental health diagnosis, ever treated for substance use disorder, bystander present when fatal overdose occurred, and fatal drug use witnessed.

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.

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Key Findings:

There were **736 drug overdose deaths (crude rate: 25.0 drug overdose deaths per 100,000 population)** of unintentional or undetermined intent among Nevada residents from **January to December, 2021:**

- The highest rate of overdose deaths occurred in *Washoe County (42 deaths per 100,000)*.
- The highest rate of overdose deaths occurred among *Black, non-Hispanic persons (38 deaths per 100,000)*.
- Nearly **two-thirds of deaths involved an opioid (64%), over half involved a stimulant (62%), and 27% involved both substances.**
- **Illicitly manufactured fentanyl and fentanyl analogs were involved in over 1 in 3 deaths (36%).**
- **Opioid deaths without stimulants:** highest prevalence of overdose occurring in a home, having a mental health diagnosis, having current treatment for pain, history of a previous overdose, and ever being treated for substance use disorder.
- **Stimulant deaths without opioids:** highest prevalence of overdose occurring among those experiencing homelessness, being recently released from a hospital, jail, or treatment facility, and ever serving in the U.S. Armed Forces.
- **78% 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***

Questions or comments?

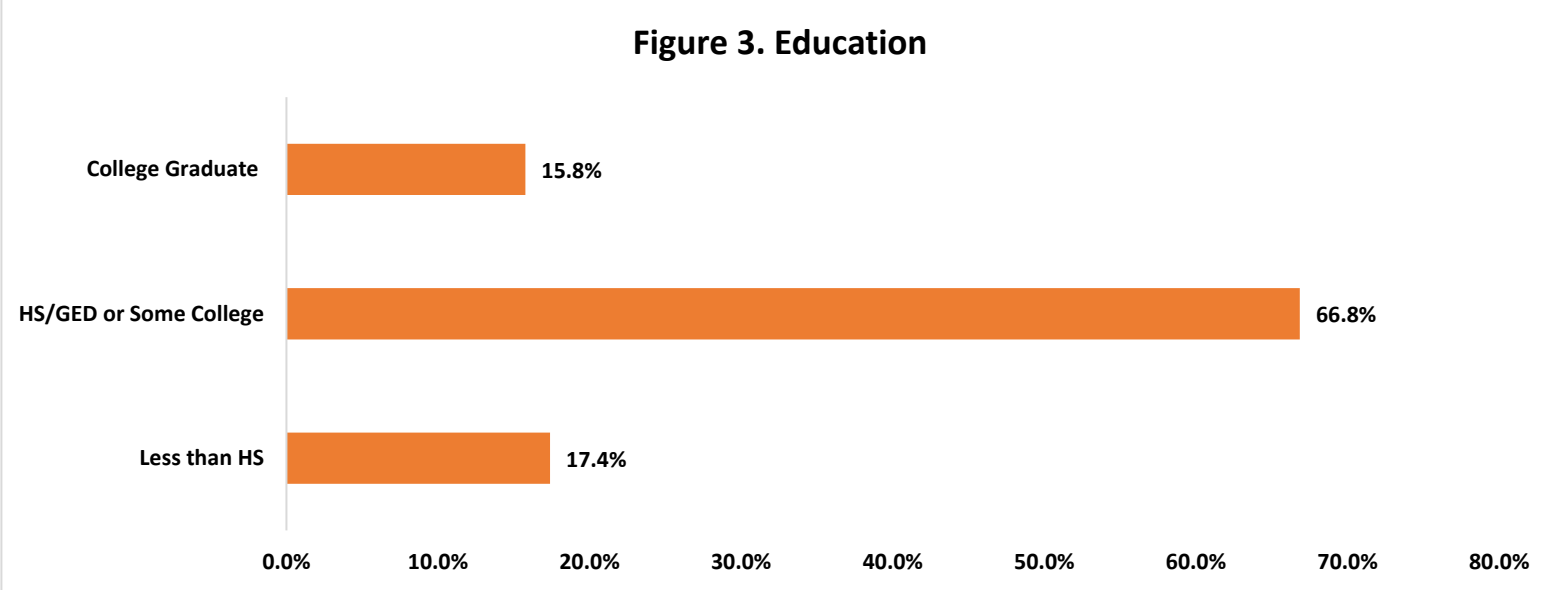
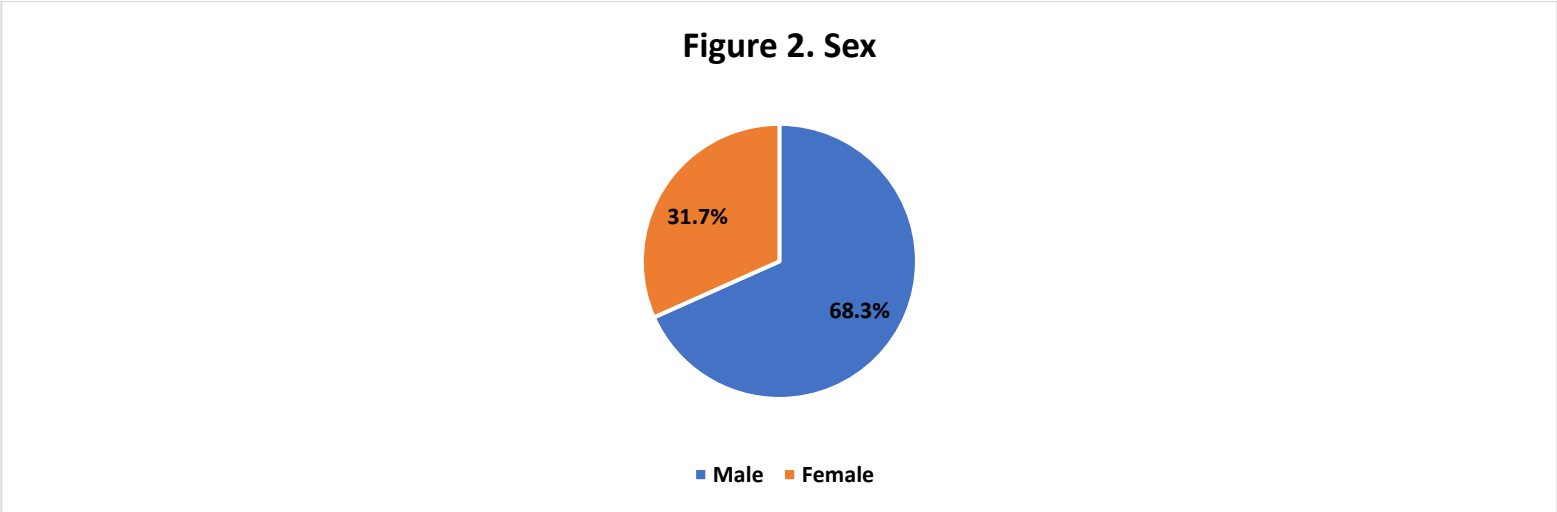
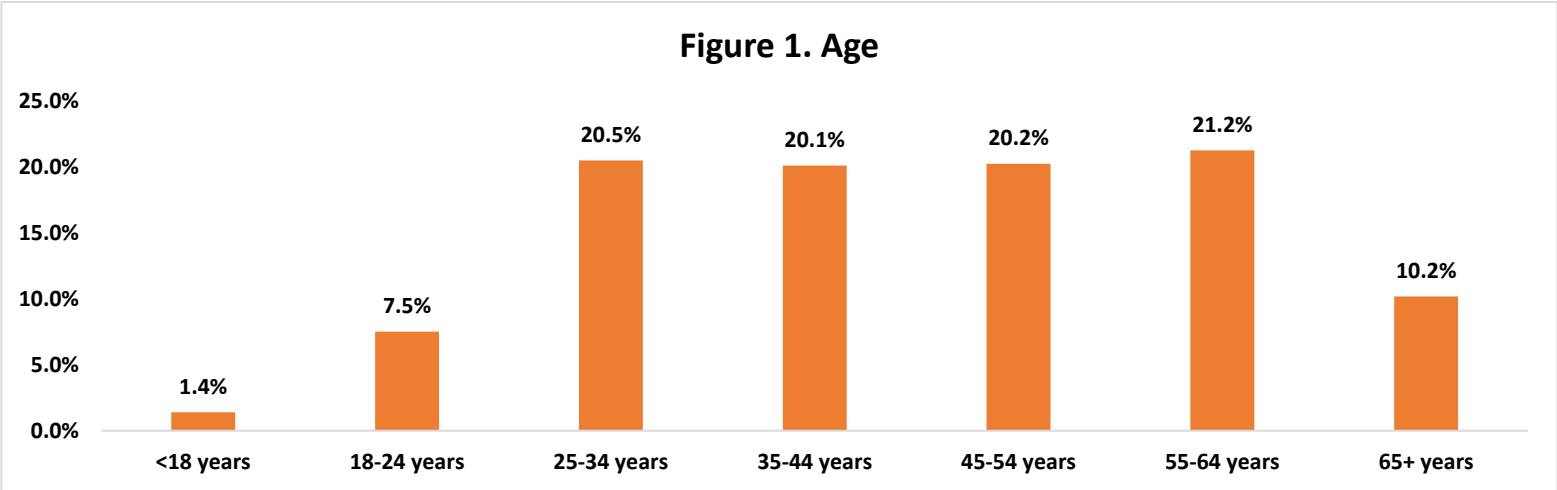
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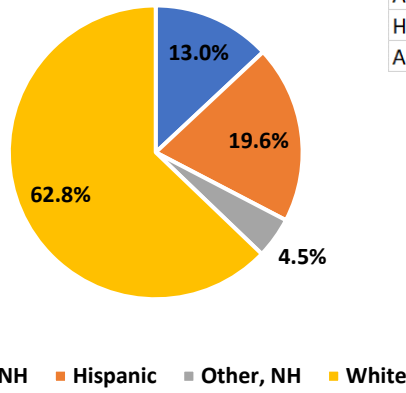


Section 1: Demographics, Toxicology, Circumstances of 2021 Cases (N=786)



Note: Missing data is excluded in percentage calculations.

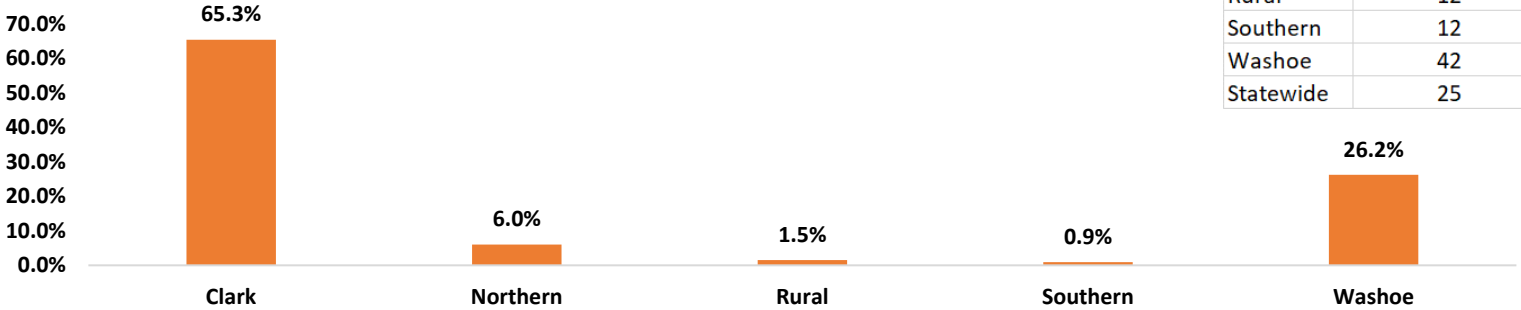
Figure 4. Race/Ethnicity



Race/Ethnicity	Rate per 100,000
Black, NH	38
White, NH	31
American Indian/Alaskan Native, NH	20
Hispanic	17
Asian and Other Pacific Islander, NH	6

Note: Missing data is excluded in percentage calculations. Other race includes Asian, Pacific Islander, Native American, Alaskan Native, and those identifying as other race. NH=Non-Hispanic

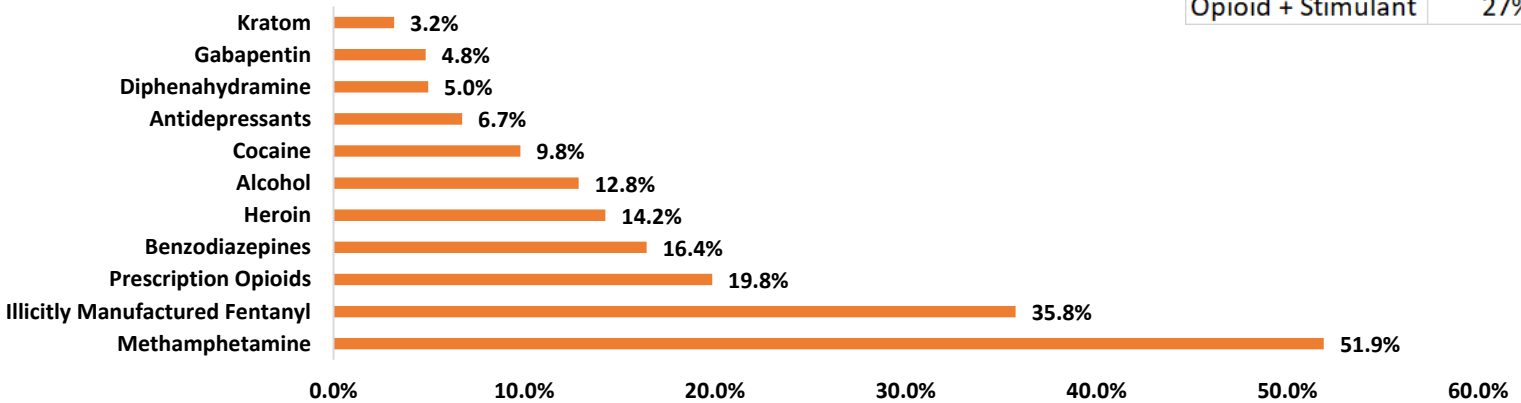
Figure 5. Overdose Location by Behavioral Health Region



Region	Rate per 100,000
Clark	22
Northern	24
Rural	12
Southern	12
Washoe	42
Statewide	25

Note: Behavioral health regions include the following counties: Northern (Carson City, Storey, Douglas, Lyon, Churchill Counties), Rural (Humboldt, Pershing, Lander, Eureka, Elko, White Pine Counties), Southern (Mineral, Esmeralda, Nye, Lincoln Counties), Clark (Clark County), and Washoe (Washoe County).

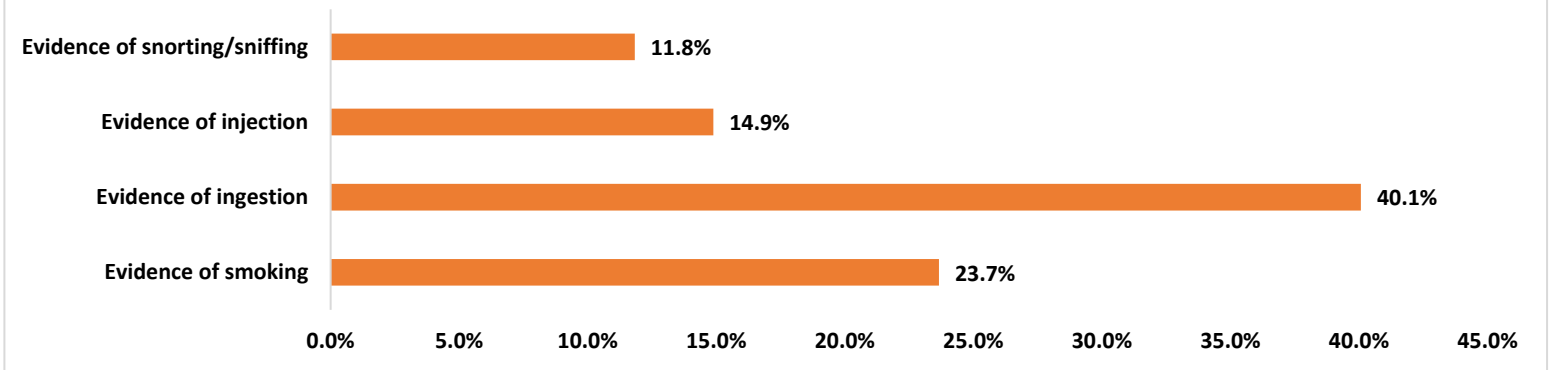
Figure 6. Most Common Substances Causing Death



Any Opioid	64%
Any Stimulant	61%
Opioid + Stimulant	27%

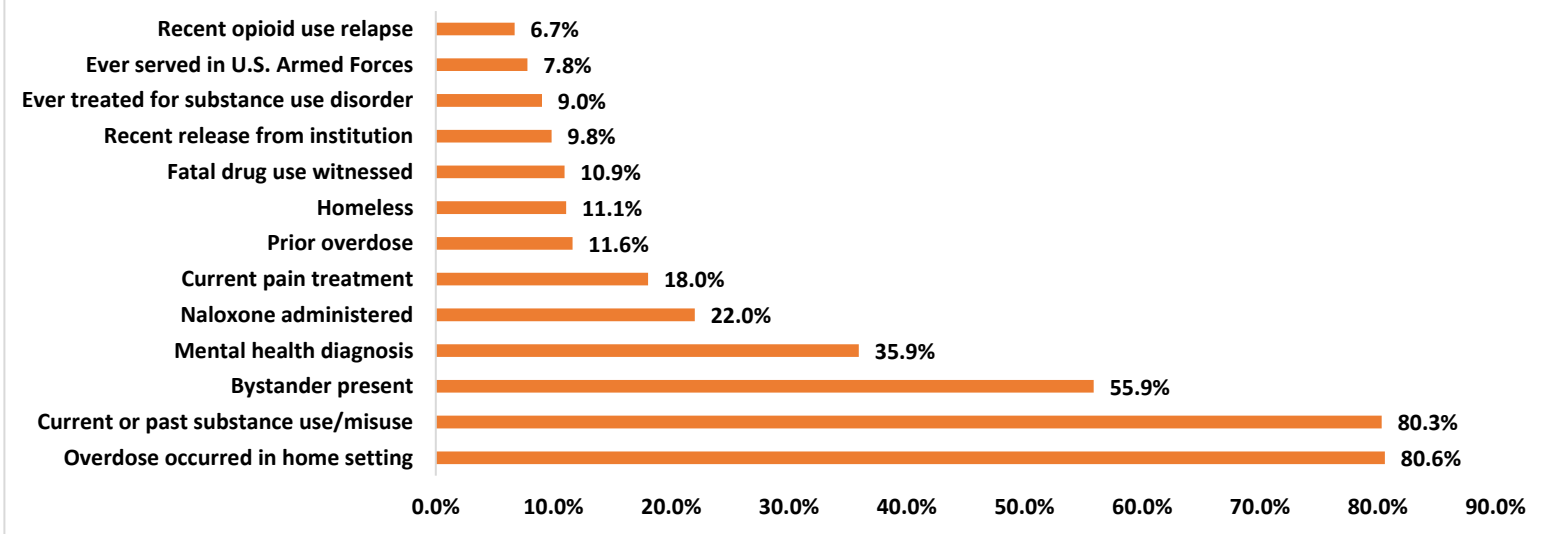
Note: Based on toxicology results for substances ruled by the Coroner/Medical Examiner as causing death. Substances are not mutually exclusive.

Figure 7. Suspected Route of Administration



Note: Suspected route of administration information is based on information documented during the death scene investigation, and due to limited information on scene in some investigations, may underestimate their occurrence.

Figure 8. Circumstances Documented



Note: Based on information documented during the death scene investigation, and due to limited information on scene in some investigations, may underestimate their occurrence. Percentages use the denominator of those who had known circumstances.

Summary: There were 786 drug overdose deaths of unintentional/undetermined intent from January to December, 2021 in Nevada among residents. Decedents were mostly between the ages of 25-64 (82%), mostly male (68%), possessed a high school degree or equivalent (67%), were White, non-Hispanic (63%), and had residency in Clark County (65%) (**Figures 1-5**).

Nearly 2 in 3 deaths involved an opioid (64%), over half of deaths involved a stimulant (61%), and 27% of deaths involved both an opioid and stimulant. Illicitly manufactured fentanyl and fentanyl analogs contributed to over 1 in 3 deaths (36%) (**Figure 6**). Methamphetamine contributed to over half of deaths (52%). The suspected route of administration for substances were as follows: evidence of oral ingestion (40%), evidence of smoking (24%), evidence of injection (15%), and evidence of snorting/sniffing (12%) (**Figure 7**).

The top five circumstances documented among decedents were overdose occurring in the a home setting (81%), having a current or past substance use/misuse history (80%), having a bystander present at the time of overdose (56%), having a mental health diagnosis (36%), and having naloxone administered (22%) (**Figure 8**).

Section 2: Comparisons: 2021 vs 2020

Table 1. Demographic characteristics of overdose decedents in Nevada among residents, 2020 vs 2021

	2020	2021		
Characteristic	N=789	N=786	Percent Change	Trend
Age				
<18 years	1.6%	1.4%	-15.1	No Significant Change
18-24 years	11.9%	7.5%	-37.0	Significant Decrease
25-34 years	18.9%	20.5%	8.5	No Significant Change
35-44 years	18.3%	20.1%	10.1	No Significant Change
45-54 years	20.0%	20.2%	1.0	No Significant Change
55-64 years	20.5%	21.2%	3.5	No Significant Change
65+ years	8.7%	10.2%	16.4	No Significant Change
Sex				
Male	68.3%	68.3%	0.0	No Significant Change
Female	31.7%	31.7%	0.0	No Significant Change
Education				
Less than HS	16.2%	17.4%	7.6	No Significant Change
HS/GED or Some College	67.7%	66.8%	-1.2	No Significant Change
College Graduate	16.2%	15.8%	-2.5	No Significant Change
Race/Ethnicity				
Black, NH	13.6%	13.0%	-4.3	No Significant Change
Hispanic	18.8%	19.6%	4.5	No Significant Change
Other, NH	5.3%	4.5%	-14.3	No Significant Change
White, NH	62.3%	62.8%	0.8	No Significant Change
Region				
Clark	69.7%	65.3%	-6.2	No Significant Change
Northern	4.8%	6.0%	26.4	No Significant Change
Rural	1.5%	1.5%	-0.5	No Significant Change
Southern	2.6%	0.9%	-65.2	Significant Decrease
Washoe	21.5%	26.2%	22.1	Significance Increase

Note: Missing data excluded from percentage calculations. Trend indicates whether a percent change was statistically significant. 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 2020 and 2021 for a particular characteristic. Race/Ethnicity category of other includes Native American/Alaskan Native, Native Hawaiian or Other Pacific Islander, or Asian. Behavioral health regions were categorized as follows: Northern (Carson City, Storey, Douglas, Lyon, Churchill), Rural (Humboldt, Pershing, Lander, Eureka, Elko, White Pine), Southern (Mineral, Esmeralda, Nye, Lincoln), Clark (Clark County), and Washoe (Washoe County).

Table 2. Top substances causing death and suspected route of administration, 2020 vs 2021				
	2020	2021		
Substance	N=789	N=786	Percent Change	Trend
Any Opioids	65.3%	63.5%	-2.7	No Significant Change
Illicitly Manufactured Fentanyl	32.4%	35.8%	10.2	No Significant Change
Prescription Opioids	22.8%	19.8%	-13.0	No Significant Change
Heroin	15.7%	14.2%	-9.3	No Significant Change
Any Stimulants	59.6%	60.8%	2.1	No Significant Change
Methamphetamine	47.7%	51.9%	8.9	No Significant Change
Cocaine	11.3%	9.8%	-13.2	No Significant Change
Other Substances				
Benzodiazepines	21.4%	16.4%	-23.4	Significant Decrease
Alcohol	12.8%	12.8%	0.4	No Significant Change
Antidepressants	7.9%	6.7%	-14.2	No Significant Change
Diphenhydramine	4.3%	5.0%	15.1	No Significant Change
Gabapentin	5.7%	4.8%	-15.2	No Significant Change
Kratom	3.3%	3.2%	-3.5	No Significant Change
Route of administration				
Evidence of smoking	18.6%	23.7%	27.0	No Significant Change
Evidence of ingestion	40.7%	40.1%	-1.5	No Significant Change
Evidence of injection	16.0%	14.9%	-6.8	No Significant Change
Evidence of snorting/sniffing	10.5%	11.8%	12.5	No Significant Change

Note: 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%. 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 2020 and 2021 for a particular characteristic. Route of administration based on death investigation reports.

Table 3. Circumstances associated with overdose in Nevada among residents, 2020 vs 2021				
	2020	2021		
Circumstance	N=691	N=732	Percent Change	Trend
Overdose occurred in home setting	87.6%	80.6%	-7.9	No Significant Change
Current or past substance use/misuse	73.5%	80.3%	9.3	No Significant Change
Bystander present	64.3%	55.9%	-13.0	No Significant Change
Mental health diagnosis	34.6%	35.9%	3.9	No Significant Change
Naloxone administered	26.0%	22.0%	-15.6	No Significant Change
Current pain treatment	21.9%	18.0%	-17.5	No Significant Change
Prior overdose	11.9%	11.6%	-2.1	No Significant Change
Homeless	10.1%	11.1%	9.2	No Significant Change
Fatal drug use witnessed	11.9%	10.9%	-7.9	No Significant Change
Recent release from institution	13.6%	9.8%	-27.7	No Significant Change
Ever treated for substance use disorder	11.7%	9.0%	-23.1	No Significant Change
Ever served in U.S. Armed Forces	7.7%	7.8%	1.5	No Significant Change
Recent opioid use relapse	7.1%	6.7%	-5.6	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. 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 2020 and 2021 for a particular characteristic.

Summary: There was a significant increase in the proportion of deaths that occurred in Washoe County from 2020 to 2021 (22% increase). There were significant decreases in the proportion of deaths among those aged 18-24 (37% decrease), occurring in the Southern Region (65% decrease), and benzodiazepines (23% decrease) (**Table 1**).

Section 3: Breakdown of Characteristics and Circumstances by Opioids and Stimulants, 2020-2021

Table 4. Demographic Characteristics by opioids, stimulants, and both substances among Nevada residents, 2020-2021						
	Opioid and Stimulant		Opioid, no Stimulant		Stimulant, no opioid	
	N=443	%	N=560	%	N=505	%
Age						
<18 years	6	1.4%	15	2.7%	2	0.4%
18-24 years	53	12.0%	84	15.0%	12	2.4%
25-34 years	120	27.1%	129	23.0%	54	10.7%
35-44 years	96	21.7%	107	19.1%	86	17.0%
45-54 years	80	18.1%	82	14.6%	132	26.1%
55-64 years	60	13.5%	93	16.6%	155	30.7%
65+ years	28	6.3%	50	8.9%	64	12.7%
Sex						
Male	302	68.2%	364	65.0%	371	73.5%
Female	141	31.8%	196	35.0%	134	26.5%
Education						
Less than HS	59	14.0%	86	16.1%	90	20.3%
HS/GED, Some College	308	73.2%	339	63.4%	303	68.2%
College Graduate	54	12.8%	110	20.6%	51	11.5%
Race/Ethnicity						
Black, NH	48	11.0%	64	11.6%	87	17.5%
Hispanic	88	20.2%	113	20.4%	86	17.3%
Other, NH	23	5.3%	21	3.8%	32	6.4%
White	277	63.5%	356	64.3%	292	58.8%
Behavioral Health Region						
Clark	307	69.9%	374	66.9%	333	67.3%
Northern	16	3.6%	31	5.5%	31	6.3%
Rural	8	1.8%	10	1.8%	3	0.6%
Southern	7	1.6%	12	2.1%	8	1.6%
Washoe	101	23.0%	132	23.6%	120	24.2%
Route of administration						
Evidence of smoking	122	27.5%	90	16.1%	117	23.2%
Evidence of ingestion	162	36.6%	324	57.9%	113	22.4%
Evidence of injection	131	29.6%	64	11.4%	46	9.1%
Evidence of snorting/sniffing	79	17.8%	69	12.3%	28	5.5%

Note: Yellow highlighted cells indicate the characteristic in each row with the highest percentage for each column. Understanding which characteristics are highest by substance can help inform specific activities to prevent overdose death. Opioid and stimulant includes deaths where an opioid and stimulant contributed to death. Opioid, no stimulant includes deaths where an opioid but not a stimulant contributed to death. Stimulant, no opioid includes deaths where a stimulant but not an opioid contributed to death. Calculations exclude overdose deaths where opioids or stimulants were not involved (N=67). Calculations exclude missing data. Suspected route of administration information is based on information documented during the death scene investigation, and due to limited information on scene in some investigations, may underestimate their occurrence. Behavioral health regions include the following counties: Northern (Carson City, Storey, Douglas, Lyon, Churchill Counties), Rural (Humboldt, Pershing, Lander, Eureka, Elko, White Pine Counties), Southern (Mineral, Esmeralda, Nye, Lincoln Counties), Clark (Clark County), and Washoe (Washoe County).

Table 5. Circumstances and other characteristics of decedents among Nevada residents, 2020-2021

Circumstance	Opioid and Stimulant		Opioid, no Stimulant		Stimulant, no opioid	
	N=443	%	N=560	%	N=505	%
Overdose occurred in home setting	327	80.9%	463	88.4%	270	62.5%
Current or past substance use/misuse	347	85.9%	374	71.4%	326	75.5%
Bystander present*	251	62.1%	307	58.6%	197	45.6%
Mental health diagnosis*	126	31.2%	231	44.1%	113	26.2%
Naloxone administered	109	27.0%	147	28.1%	47	10.9%
Current pain treatment	54	13.4%	181	34.5%	33	7.6%
Prior overdose*	46	11.4%	96	18.3%	18	4.2%
Homeless	31	7.7%	12	2.3%	73	16.9%
Fatal drug use witnessed*	71	17.6%	47	9.0%	25	5.8%
Recent release from institution*	43	10.6%	55	10.5%	52	12.0%
Ever treated for substance use disorder*	49	12.1%	71	13.5%	21	4.9%
Ever served in U.S. Armed Forces	19	4.7%	38	7.3%	39	9.0%
Recent opioid use relapse	50	12.4%	43	8.2%	3	0.7%

Note: Yellow highlighted cells indicate the characteristic in each row with the highest percentage for each column. Understanding which characteristics are highest by substance can help inform specific activities to prevent overdose death. Based on information documented during the death scene investigation, and due to limited information on scene in some investigations, may underestimate their occurrence. Percentages use the denominator of those who had known circumstances for each substance breakdown. *Potential opportunity for linkage to care or implementation of a life-saving action includes recent release from an institution within past month (prison/jail, treatment, hospital), previous nonfatal overdose, mental health diagnosis, ever treated for substance use disorder, bystander present when fatal overdose occurred, and fatal drug use witnessed.

Summary: There were 443 deaths where opioids and stimulants contributed, 560 deaths where opioids contributed, and 505 deaths where stimulants contributed to drug overdose deaths of unintentional/undetermined intent from 2020-2021 in Nevada among residents (**Table 4**).

Opioid + Stimulants: Decedents in this group had the highest prevalence of being between the ages of 25-34 (27%) and being between the ages of 35-44 (22%). Decedents had the highest prevalence of having a HS/GED, some college education (73%), having their overdose occur in Clark (70%) and in the Rural region (2%). Decedents had the greatest prevalence of current or past substance use/misuse (86%), having a bystander present at time of overdose (62%), had their fatal drug use witnessed (18%), and had recent opioid use after a period of abstinence (12%).

Opioids: Decedents in this group had the highest prevalence of being under the age of 18 (3%) and being between the ages of 18-24 (15%). Decedents had the highest prevalence of being female (35%), a college graduate (21%), Hispanic (20%), White, non-Hispanic (64%), and having their overdose occur in the Rural region (2%) and Southern region (2%). Decedents had the greatest prevalence of overdose occurring in a home setting (88%), having a mental health diagnosis (44%), having Naloxone administered (28%), having current treatment for pain (35%), history of a previous overdose (18%), and ever being treated for substance use disorder (14%).

Stimulants: Decedents in this group had the highest prevalence of being between the ages of 45-54 (26%), 55-64 (31%), and 65+ (13%). Decedents had the highest prevalence of being male (74%), having less than high school education (20%), Black, non-Hispanic (18%), Other, non-Hispanic (6%), and having their overdose occur in the Northern region (6%) and Washoe (24%). Decedents had the greatest prevalence of experiencing homelessness or housing insecurity prior to death (17%), being recently released from an institutional setting such as a hospital, jail, or treatment facility (12%), and ever serving in the U.S. Armed Forces (9%).