

Drug Overdose Deaths: Idaho Residents, 2014-2018



IDAHO DEPARTMENT OF HEALTH & WELFARE
DIVISION OF PUBLIC HEALTH
Bureau of Vital Records and Health Statistics

Drug Overdose Deaths: Idaho Residents 2014-2018

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- Prepared by** This report was prepared by Pam Harder, Research Analyst Supervisor, of the Idaho Department of Health and Welfare.
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Background

This report provides detailed data on drug overdose deaths for Idaho residents from 2014 to 2018 and ten-year trends based on 2009 to 2018, and 20-year trends based on 1999 to 2018. Deaths may have occurred in-state or out-of-state.

Drug Overdose Deaths: deaths where the underlying cause of death was acute poisoning by drugs. Drug overdose deaths include:

- accidental (unintentional) poisoning by drugs, medicaments, and biologicals
- suicide (intentional self-poisoning) by drugs, medicaments, and biologicals
- assault (homicide) by poisoning with drugs, medicaments, and biologicals
- poisoning by drugs, medicaments, and biologicals where the intent could not be determined

Not included in drug overdose deaths are overdose deaths by alcohol, gases, or vapors.

DATA SOURCES:

The World Health Organization (WHO) developed a standardized classification system for direct comparison of mortality for diseases, injuries, or conditions between state and national data. To quantify literal, narrative text from death certificates, the system employs the standardized codes set forth in the International Classification of Diseases 10th revision (ICD-10). In ICD-10 coding, an alphanumeric code is assigned to diseases, injuries, or conditions that were underlying or contributing factors to death. These codes are then used in quantitative mortality analysis and reporting.

Data for this report were obtained from two sources. First, literal information reported on the death certificate in the cause of death section and a check box marked for manner of death were used to assign an ICD-10 code for the underlying cause of death. Demographic information and the ICD-10 code for the underlying cause of death were obtained directly from each death certificate.

Second, literal information on the death certificate was used to categorize the drug(s) involved in the death. The National Center for Health Statistics' (NCHS) utilized a computer algorithm to translate literal descriptions of specific drugs on the death certificate to ICD-10 codes. NCHS provided the Bureau with these data. These codes were then grouped into drug categories. For a full list of ICD-10 codes, drug categories, and examples of qualifying literal descriptions of drugs, see the Technical Notes.

STATISTICS:

Age Group-Specific Mortality Rate: calculated by the number of deaths per 100,000 population by age group.

$$\frac{\text{Deaths within an age group from a specific cause}}{\text{Age group-specific population}} \times 100,000$$

Age-Adjusted Mortality Rate (Direct Method): calculated by the number of deaths per 100,000 standard population. Age-adjustment weights the age group-specific mortality rates by the proportion of each age group in a standard population.¹ This method calculates an artificial rate that can be used for comparison between populations that have different age compositions (so long as the rate was calculated using the same standard population). Idaho, the surrounding states, and the United States' age-adjusted rates were all calculated using the population estimate from the 2000 census as the standard population.

$$\frac{\text{Sum of [(age-specific death rates for selected population) x (standard population in corresponding age groups)]}}{\text{Sum of standard population}} \times 100,000$$

Population: All rates are given per 100,000 population. The population in the denominator relates directly to the group in the numerator. For instance, in Table 2, the age-adjusted drug overdose mortality rate for Idaho males in 2018 was 17.5. This means there were approximately 17.5 drug overdose deaths per 100,000 Idaho resident males in 2018, age-adjusted to the 2000 standard population. Similarly, in Table 7, the age-specific drug overdose mortality rate for those ages 25-34 was 21.6. This is interpreted as 21.6 drug overdose deaths per 100,000 Idaho residents ages 25-34 from 2014-2018.

Confidence Intervals: When calculating a mortality rate based on observed deaths to estimate a population's true mortality rate, the confidence interval (CI) indicates a range of values which will contain the true population mortality rate 95% of the time. Confidence intervals are a measure of uncertainty. The smaller the number of deaths upon which the calculated mortality rate was based, the wider the confidence interval will be. This demonstrates greater variability (and more uncertainty) with respect to the true population mortality rate. As a rule, rates calculated with less than 20 deaths are unstable and should not be relied upon. Smaller confidence intervals, such as those calculated for national data, are typically based on many deaths. Thus, they indicate less variability and more certainty regarding the true population mortality rate.

LIMITATIONS:

These data are subject to at least three limitations. The manner of death could not be determined for more than 9% of drug overdose deaths. Thus, the number of drug overdose suicides and accidents may be considerably underreported.

Certifiers are not required to report specific drugs involved in a drug overdose death on the death certificate; however, it is encouraged to report the specific drug(s) if known. During 2014-2018, 22% of deaths that were determined to be drug overdose did not report any drugs on the death certificate. The most common reason for lack of drug-specific information was that many counties did not have the funds to perform autopsies and toxicology on all suspected drug overdose deaths. In 2017, an online survey of Idaho county coroners regarding suspected drug overdose death investigation practices and barriers was completed. Of the 29 respondents, 66% indicated that one of the barriers to conducting an autopsy for every suspected overdose death in their county was that they did not have enough funding to pay for autopsies.² In addition, of the ten coroners who stated that <100% of their suspected drug overdose death cases received a toxicology test in 2016, 60% cited lack of funding to meet demands as one of the reasons.² As a result, the types of drugs involved in drug overdose deaths were substantially underreported and the data in this report likely underestimate the true mortality rate for specific drug categories.

On the other hand, 78% of death certificates where the death was determined to be drug overdose did report one or more specific drugs, which were grouped into drug categories. The percentage of drug overdose deaths where at least one drug was reported increased from 66% in 2014 to 88% in 2018. Thus, the data by type of drug must be interpreted carefully. An increase in the number of deaths with a specific drug reported may be due to better reporting in 2018 than in previous years.

Summary

Ten-Year Trend (2009-2018):

From 2009 to 2018, 2,105 deaths for Idaho residents were drug overdose. Over this period, the drug overdose mortality rate for Idaho residents increased 22% from 11.9 per 100,000 population in 2009 to 14.5 per 100,000 population in 2018. In comparing Idaho with the U.S., the difference in the age-adjusted rate in 2017 was statistically significant. In 2017, the U.S. rate of 21.7 deaths per 100,000 was significantly higher than Idaho's rate of 14.7 deaths per 100,000. As of September 2019, the latest U.S. data available is for 2017.

Five-Year Aggregate (2014-2018):

From 2014 to 2018, there were 1,167 drug overdose deaths among Idaho residents. This accounted for 2% of all deaths among residents. This is compared with 604 deaths out of 52,751 (1%) deaths the decade before from 2004-2008. From 2014-2018, the number of drug overdose deaths per year ranged from 211 in 2014 to 248 in 2018.

Sex:

From 2014-2018, the drug overdose mortality rate did differ significantly by sex for Idaho residents. The aggregate drug overdose mortality rate was 13.0 per 100,000 females compared with 16.0 per 100,000 males. From 2014-2018 there were 635 drug overdose deaths among Idaho males, and 532 drug overdose deaths among Idaho females. See Tables 2 and 3 for data by year and see Table 13 for five-year aggregate data by sex. The drug overdose mortality rate differed statistically significantly between Idaho residents and the United States for males in 2017 (latest year U.S. data were available as of September 2019).³ In 2017, the U.S. rate for males (29.1 deaths per 100,000 males) was significantly higher than the Idaho rate for males (16.7 deaths per 100,000 males), while the Idaho rate for females (12.5 deaths per 100,000 females) was not significantly different than the U.S. rate for females (14.4 deaths per 100,000 females).

Manner of Death:

Accidental poisoning was the leading manner of death for drug overdose deaths. From 2014-2018, 74% of drug overdose deaths were accidental (859 deaths). Suicide was the second-leading manner of death (205 deaths; 18% of drug overdose deaths), followed by deaths for which the intent could not be determined (9%). Less than 1% of drug overdose deaths were from assault (homicide).

Age group:

From 2014-2018, the age group with the highest drug overdose mortality rate was among Idahoans aged 45-54 (27.3 deaths per 100,000 population aged 45-54), followed by those ages 35-44 (26.7 deaths per 100,000 population aged 35-44). See Table 7 for age-specific rates for additional age groups.

Type of Drug:

The types of drugs involved in deaths were underreported on the death certificates. From 2014-2018, 78% of death certificates where a drug overdose death was indicated reported one or more specific drugs. In 2018, 88% of death certificates where a drug overdose death was indicated reported one or more drugs, compared with only 66% in 2014. From 2014-2018, 538 drug overdose deaths reported one or more opioid (59% of records with at least one drug reported). Opioids include Opium, Heroin, Natural and semisynthetic opioids such as Oxycodone, Methadone, Synthetic opioids, other than methadone such as Fentanyl, and other and unspecified narcotics. See Table 20 for the number of drug deaths listing specific Opioid drugs from 2014-2018.

Of the types of non-opioid drugs reported, Psychostimulants with abuse potential such as methamphetamine, were reported the most from 2014-2018 (248 deaths involved Psychostimulants with abuse potential).

Data for some demographics in this report are provided by county and/or district of residence. The person's place of death may have been in the same county as their residence, or may have occurred in another county in Idaho, or may have occurred in another state. Idaho has an interstate agreement to obtain death records for Idahoans who die in another state to include in Idaho's statistics.

COUNTIES COMPRISING IDAHO PUBLIC HEALTH DISTRICTS

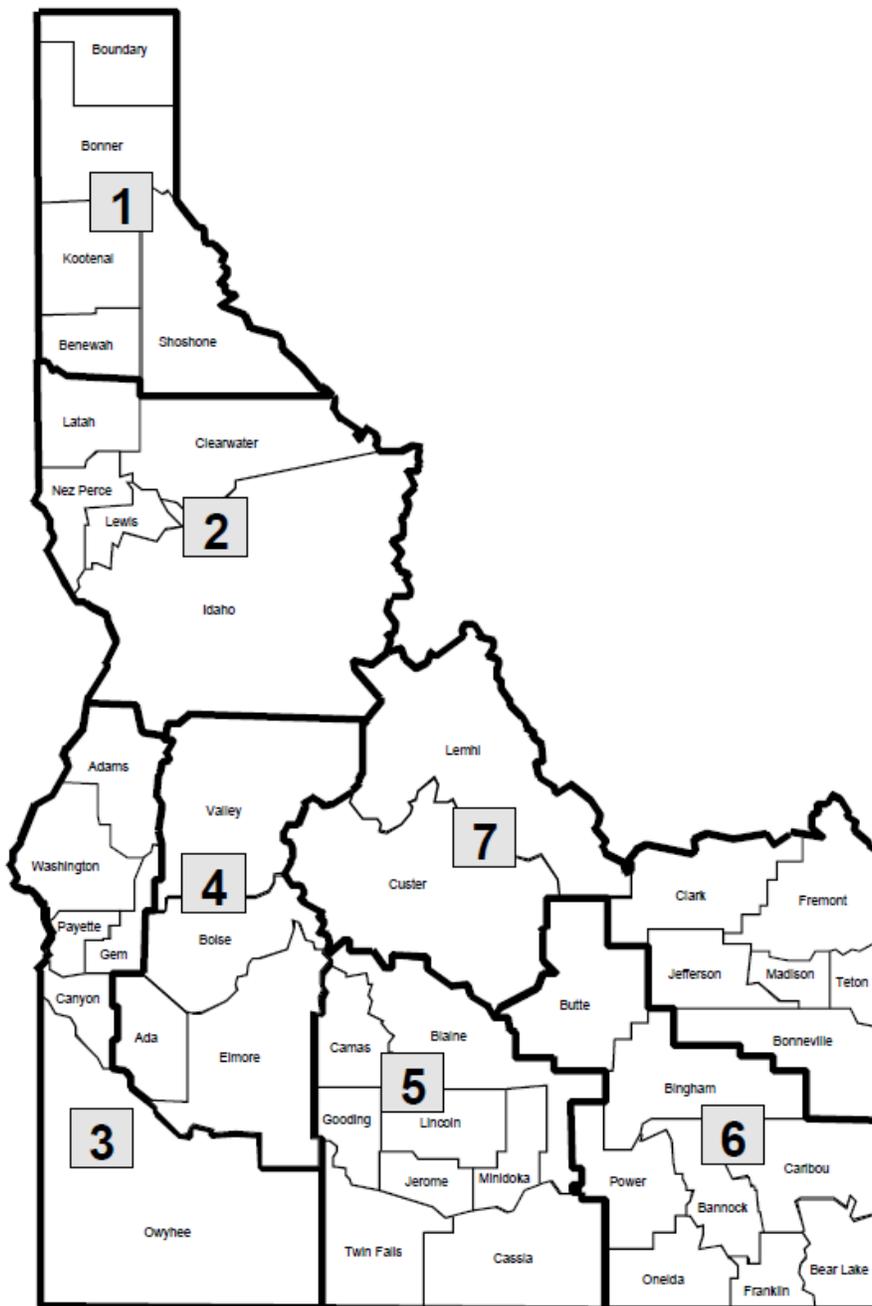


Table 1. Number of drug overdose deaths and age-adjusted mortality rates for drug overdose deaths by year: Idaho residents and the United States, 2009-2018.

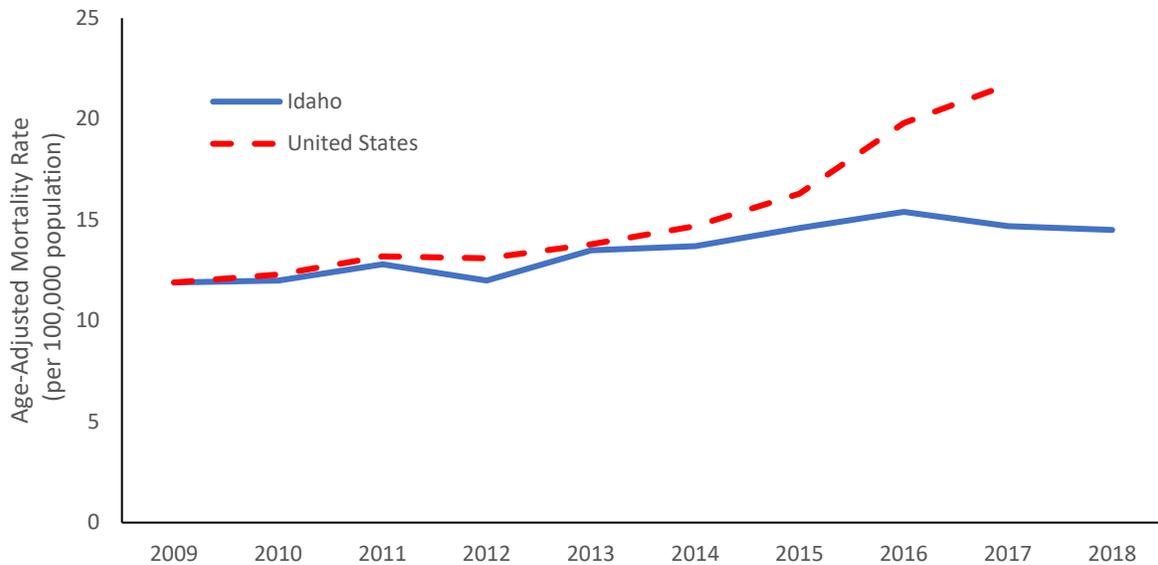
Year	TOTAL			
	Idaho		United States	
	Deaths	Age-Adjusted Rate (95% CI)	Deaths	Age-Adjusted Rate (95% CI)
2009	174	11.9 (10.1 - 13.6)	37,004	11.9 (11.8 - 12.1)
2010	180	12.0 (10.2 - 13.7)	38,329	12.3 (12.2 - 12.4)
2011	192	12.8 (11.0 - 14.7)	41,340	13.2 (13.1 - 13.3)
2012	183	12.0 (10.3 - 13.8)	41,502	13.1 (13.0 - 13.3)
2013	209	13.5 (11.6 - 15.3)	43,982	13.8 (13.7 - 13.9)
2014	211	13.7 (11.8 - 15.5)	47,055	14.7 (14.5 - 14.8)
2015	223	14.6 (12.6 - 16.5)	52,404	16.3 (16.2 - 16.4)
2016	244	15.4 (13.4 - 17.3)	63,632	19.8 (19.6 - 19.9)
2017	241	14.7 (12.8 - 16.5)	70,237	21.7 (21.5 - 21.9)
2018	248	14.5 (12.7 - 16.4)	NA	

Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

There was a significant increase in the age-adjusted drug overdose rate for United States residents from 2008 (11.9 per 100,000) to 2017 (21.7 per 100,000). The increase was not significant for Idaho.

The age-adjusted drug overdose rate for the United States in 2017 (21.7 per 100,000) was significantly higher than the Idaho age-adjusted rate in 2017 (14.7 per 100,000).

Figure 1. Age-adjusted mortality rate trend for drug overdose deaths: Idaho residents and the United States, 2009-2018.



U.S. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, December 2018. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>.

Table 2. Number of drug overdose deaths and age-adjusted mortality rates for drug overdose deaths by year: Idaho male residents and the United States male residents, 2009-2018.

Year	MALES			
	Idaho		United States	
	Deaths	Age-Adjusted Rate (95% CI)	Deaths	Age-Adjusted Rate (95% CI)
2009	76	10.3 (8.1 - 12.9)	22,593	14.8 (14.6 - 15.0)
2010	84	11.1 (8.9 - 13.7)	23,006	15.0 (14.8 - 15.2)
2011	98	13.0 (10.5 - 15.8)	24,988	16.1 (15.9 - 16.3)
2012	93	12.1 (9.8 - 14.8)	25,112	16.1 (15.9 - 16.3)
2013	106	13.5 (10.9 - 16.1)	26,799	17.0 (16.8 - 17.3)
2014	98	12.8 (10.4 - 15.7)	28,812	18.3 (18.0 - 18.5)
2015	115	15.1 (12.3 - 17.9)	32,957	20.8 (20.6 - 21.0)
2016	140	17.7 (14.7 - 20.7)	41,558	26.2 (25.9 - 26.4)
2017	135	16.7 (13.8 - 19.6)	46,552	29.1 (28.8 - 29.3)
2018	147	17.5 (14.6 - 20.3)	NA	

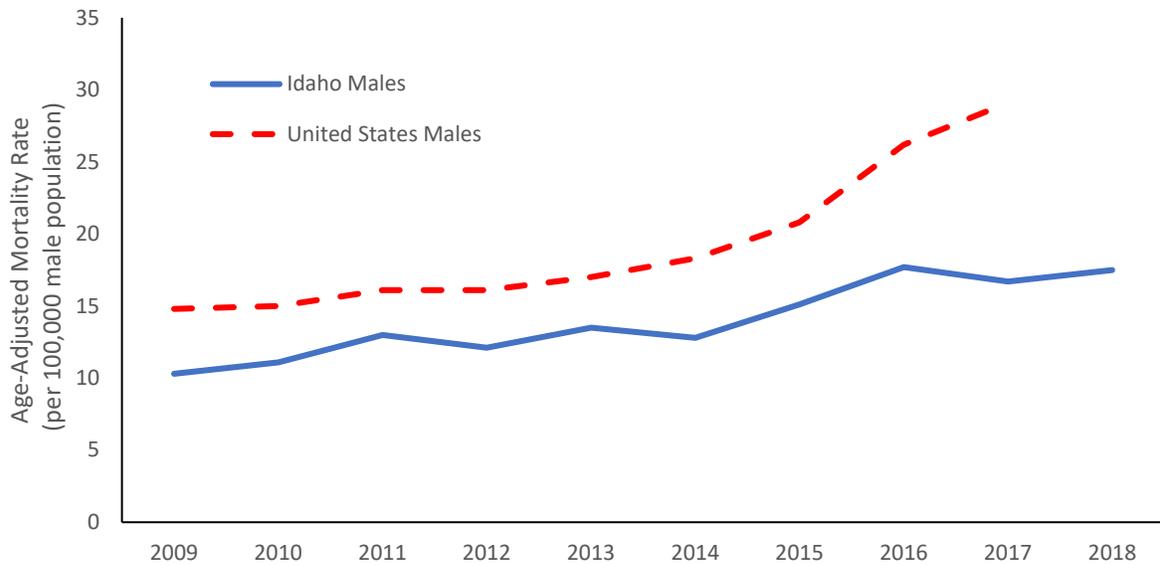
Age-adjusted rate: number of deaths per 100,000 male population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

There was a significant increase in the age-adjusted drug overdose rate for Idaho male residents from 2009 (10.3 per 100,000 males) to 2018 (17.5 per 100,000 males).

There was a significant increase in the age-adjusted drug overdose rate for United States male residents from 2009 (14.8 per 100,000 males) to 2017 (29.1 per 100,000 males).

The age-adjusted drug overdose rate for United States males in 2017 (29.1 per 100,000 males) was significantly higher than the Idaho age-adjusted rate for males in 2017 (16.7 per 100,000 males).

Figure 2. Age-adjusted mortality rate trend for drug overdose deaths: Idaho male residents and United States male residents, 2009-2018.



U.S. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, December 2018. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>.

Table 3. Number of drug overdose deaths and age-adjusted mortality rates for drug overdose deaths by year: Idaho female residents and the United States female residents, 2009-2018.

Year	FEMALES			
	Idaho		United States	
	Deaths	Age-Adjusted Rate (95% CI)	Deaths	Age-Adjusted Rate (95% CI)
2009	98	13.4 (10.9 - 16.3)	14,411	9.1 (9.0 - 9.3)
2010	96	12.7 (10.3 - 15.5)	15,323	9.6 (9.5 - 9.8)
2011	94	12.6 (10.2 - 15.4)	16,352	10.2 (10.1 - 10.4)
2012	90	12.0 (9.7 - 14.8)	16,390	10.2 (10.0 - 10.3)
2013	103	13.5 (10.8 - 16.1)	17,183	10.6 (10.4 - 10.7)
2014	113	14.4 (11.7 - 17.1)	18,243	11.1 (10.9 - 11.3)
2015	108	14.0 (11.3 - 16.7)	19,447	11.8 (11.7 - 12.0)
2016	104	12.9 (10.4 - 15.5)	22,074	13.4 (13.3 - 13.6)
2017	106	12.5 (10.1 - 14.9)	23,685	14.4 (14.2 - 14.6)
2018	101	11.4 (9.1 - 13.7)	NA	

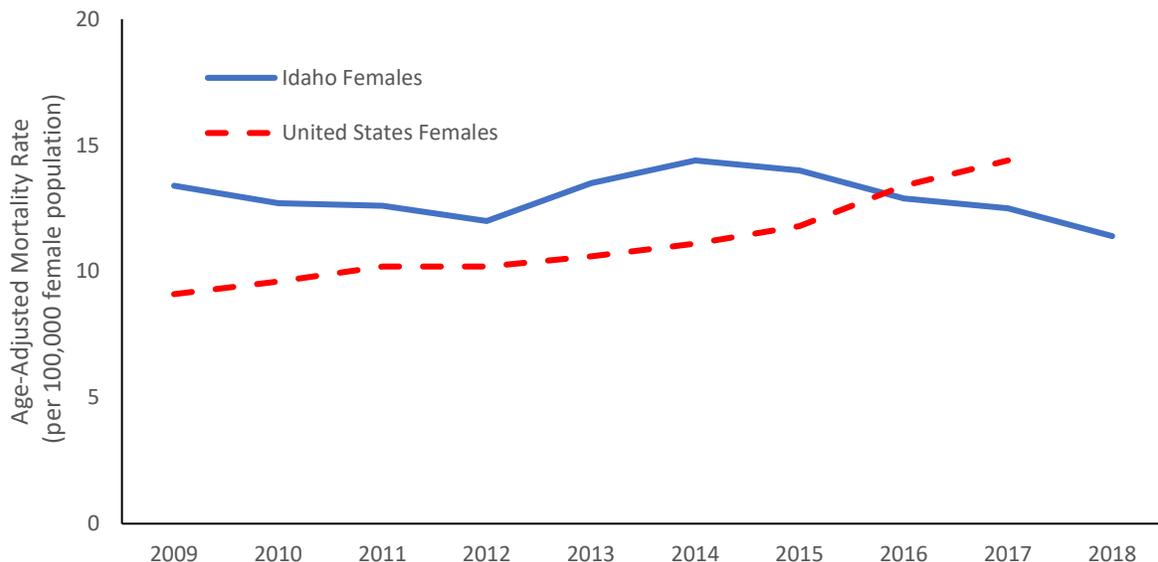
Age-adjusted rate: number of deaths per 100,000 female population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

There was not a significant difference in the age-adjusted drug overdose rate for Idaho females from 2009 to 2018.

There was a significant increase in the age-adjusted drug overdose rate for United States female residents from 2009 (9.1 per 100,000 females) to 2017 (14.4 per 100,000 females).

The age-adjusted drug overdose rate for United States females in 2017 did not differ significantly than the Idaho age-adjusted rate for females in 2017.

Figure 3. Age-adjusted mortality rate trend for drug overdose deaths: Idaho female residents and United States female residents, 2009-2018.



U.S. Source: Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, December 2018. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>.

Table 4. Number of drug overdose deaths and age-adjusted mortality rates for drug overdose deaths: Idaho residents, surrounding states, and the United States, 2013-2017 (aggregate).

Rank* (highest to lowest)	State	Deaths	Age-Adjusted Rate (95% CI)
14	Utah	3,128	22.5 (21.7 - 23.3)
18	Nevada	3,119	20.6 (19.9 - 21.4)
	United States	277,310	17.3 (17.2 - 17.3)
35	Idaho**	1,128	14.4 (13.5 - 15.2)
36	Washington	5,313	14.2 (13.9 - 14.6)
39	Montana	638	12.8 (11.8 - 13.9)
41	Oregon	2,518	12.1 (11.6 - 12.6)

Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

*Ranked among the 50 states and Washington DC based on age-adjusted rate.

**The source for the number of deaths and the age-adjusted rate (AAR) for Idaho is the Idaho Bureau of Vital Records and Health Statistics and differs slightly from the number and AAR from the Centers for Disease Control and Prevention (CDC). If CDC data had been used for Idaho, Washington and Idaho would be tied at 35th (age-adjusted rate of 14.2).

Table 5. Number of drug overdose deaths and mortality rates for drug overdose deaths by race: Idaho residents, 2014-2018 (by year and aggregate).

Year	White		Black		American Indian		Asian/Pacific Islander	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
2014	205	13.2	1	5.3	2	6.1	2	6.6
2015	217	13.8	1	5.1	3	9.0	-	0.0
2016	233	14.6	2	10	4	11.7	1	3.1
2017	230	14.1	1	4.7	5	14.4	2	5.8
2018	235	14.2	3	13.5	4	11.3	2	5.5
Total	1,120	14.0	8	7.8	18	10.6	7	4.2

Rate: number of deaths per 100,000 population in the race category. Not shown are the number of deaths among persons of another race, multiple race, or unknown race.

U.S. State Source (except Idaho): Centers for Disease Control and Prevention, National Center for Health Statistics. Underlying Cause of Death 1999-2017 on CDC WONDER Online Database, December 2018. Accessed at <http://wonder.cdc.gov/ucd-icd10.html>.

Table 6. Number of drug overdose deaths and mortality rates for drug overdose deaths by ethnicity: Idaho residents, 2014-2018 (by year and aggregate).

Year	Hispanic		Non-Hispanic	
	Deaths	Rate	Deaths	Rate
2014	6	3.1	205	14.3
2015	8	4.0	214	14.7
2016	7	3.4	236	16.0
2017	15	7.0	226	15.1
2018	12	5.4	236	15.4
Total	48	4.6	1,117	15.1

Rate: number of deaths per 100,000 population in the ethnic category. Not shown are the number of deaths among persons of unknown ethnicity.

Table 7. Number of drug overdose deaths and age-specific mortality rates for drug overdose deaths by age group for each year and in total: Idaho residents, 2014-2018.

Year	Number of Deaths by Age							
	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
2014	-	24	38	52	51	33	10	3
2015	2	18	33	69	55	33	11	2
2016	1	18	52	61	57	45	8	2
2017	2	13	60	46	61	35	18	6
2018	-	24	57	50	48	42	20	7
Total	5	97	240	278	272	188	67	20

Year	Age-Specific Death Rate							
	0-14	15-24	25-34	35-44	45-54	55-64	65-74	75+
2014	0.0	10.6	17.6	26.0	25.6	16.5	7.2	3.2
2015	0.6	7.9	15.2	34.1	27.7	16.2	7.5	2.0
2016	0.3	7.8	23.5	29.6	28.7	21.6	5.2	2.0
2017	0.5	5.5	26.6	21.6	30.6	16.5	11.2	5.8
2018	0.0	10.0	24.6	22.7	24.0	19.5	11.9	6.4
Total	0.3	8.4	21.6	26.7	27.3	18.1	8.7	3.9

Age-specific rate: number of deaths per 100,00 in age group.

Table 8. Number of drug overdose deaths and mortality rate and age-adjusted mortality rates for drug overdose deaths by Pubic Health District of residence for each year and in total: Idaho residents, 2014-2018.

Year	Deaths	Rate	Age-Adjusted Rate (95%CI)	Year	Deaths	Rate	Age-Adjusted Rate (95%CI)
District 1				District 2			
2014	18	8.1	*	2014	6	5.6	*
2015	33	14.7	17.1 (11.1-23.2)	2015	12	11.2	*
2016	30	13.0	14.0 (8.8-19.2)	2016	14	13.0	*
2017	36	15.3	15.5 (10.3-20.8)	2017	21	19.4	20.1 (11.1-29.0)
2018	35	14.6	14.2 (9.3-19.2)	2018	18	16.4	*
Total	152	13.2	14.1 (11.8-16.4)	Total	71	13.1	13.9 (10.5-17.3)
District 3				District 4			
2014	34	12.7	13.6 (8.9-18.2)	2014	72	15.4	15.5 (11.9-19.1)
2015	36	13.2	14.9 (10.0-19.8)	2015	51	10.7	10.6 (7.6-13.5)
2016	31	11.2	11.9 (7.6-16.1)	2016	74	15.2	15.2 (11.7-18.7)
2017	26	9.2	9.0 (5.4-12.5)	2017	78	15.5	15.1 (11.7-18.5)
2018	38	13.1	13.5 (9.1-17.9)	2018	74	14.3	13.8 (10.6-17.0)
Total	165	11.9	12.6 (10.6-14.5)	Total	349	14.2	14.0 (12.5-15.5)
District 5				District 6			
2014	11	5.8	*	2014	42	24.9	26.1 (18.0-34.1)
2015	31	16.1	17.4 (11.2-23.7)	2015	21	12.4	14.5 (8.2-20.9)
2016	25	12.9	14.3 (8.5-20.0)	2016	37	21.7	24.5 (16.5-32.6)
2017	25	12.7	14.5 (8.7-20.3)	2017	29	16.8	18.2 (11.4-25.0)
2018	34	17.1	18.4 (12.1-24.7)	2018	23	13.1	14.3 (8.3-20.2)
Total	126	13.0	14.2 (11.7-16.8)	Total	152	17.8	19.5 (16.3-22.6)
District 7							
2014	28	13.4	14.9 (9.2-20.6)				
2015	39	18.4	21.5 (14.6-28.4)				
2016	33	15.3	17.5 (11.4-23.5)				
2017	26	11.8	14.4 (8.8-20.0)				
2018	26	11.6	13.0 (7.9-18.1)				
Total	152	14.1	16.2 (13.6-18.9)				

Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

*Age-adjusted rates are not calculated for number of deaths of less than 20.

Rate: number of deaths per 100,000 population per district.

Table 9. Number of drug overdose deaths by county of residence and year: Idaho residents, 2014-2018.

Residence	Total	2014	2015	2016	2017	2018
Total	1,167	211	223	244	241	248
Ada	320	66	45	67	72	70
Adams	1	-	-	-	1	-
Bannock	99	27	12	22	22	16
Bear Lake	5	-	1	3	-	1
Benewah	9	1	4	2	1	1
Bingham	27	10	3	6	3	5
Blaine	9	1	1	1	4	2
Boise	5	2	-	2	1	-
Bonner	23	2	5	4	6	6
Bonneville	119	23	31	25	19	21
Boundary	5	2	1	-	1	1
Butte	2	1	-	1	-	-
Camas	-	-	-	-	-	-
Canyon	115	30	22	17	20	26
Caribou	2	-	-	-	2	-
Cassia	12	1	3	1	2	5
Clark	2	-	-	1	1	-
Clearwater	3	-	1	1	1	-
Custer	3	1	-	-	1	1
Elmore	13	2	2	2	5	2
Franklin	9	3	2	3	1	-
Fremont	5	-	1	2	2	-
Gem	18	1	3	5	2	7
Gooding	10	-	3	2	2	3
Idaho	12	1	3	2	4	2
Jefferson	7	-	2	2	1	2
Jerome	9	1	3	2	2	1
Kootenai	99	12	21	21	22	23
Latah	23	2	3	4	6	8
Lemhi	5	1	3	-	-	1
Lewis	1	-	-	1	-	-
Lincoln	4	-	1	1	-	2
Madison	6	2	2	1	1	-
Minidoka	14	3	4	1	1	5
Nez Perce	32	3	5	6	10	8
Oneida	1	-	-	-	-	1
Owyhee	8	2	4	-	-	2
Payette	21	1	7	9	1	3
Power	7	1	3	2	1	-
Shoshone	16	1	2	3	6	4
Teton	5	1	-	2	1	1
Twin Falls	68	5	16	17	14	16
Valley	11	2	4	3	-	2
Washington	2	-	-	-	2	-

Table 10. Number of drug overdose deaths and mortality rates for drug overdose deaths by county of residence: Idaho residents, 2014-2018 (aggregate).

Residence	Overdose Deaths	Five-Year Population	Rate
Total	1,167	8,439,044	13.8
Ada	320	2,230,262	14.3
Adams	1	20,093	5.0
Bannock	99	425,323	23.3
Bear Lake	5	29,812	16.8
Benewah	9	45,428	19.8
Bingham	27	227,753	11.9
Blaine	9	109,972	8.2
Boise	5	35,814	14.0
Bonner	23	213,557	10.8
Bonneville	119	561,983	21.2
Boundary	5	57,745	8.7
Butte	2	13,010	15.4
Camas	-	5,432	-
Canyon	115	1,061,148	10.8
Caribou	2	34,591	5.8
Cassia	12	118,073	10.2
Clark	2	4,385	45.6
Clearwater	3	43,202	6.9
Custer	3	20,705	14.5
Elmore	13	132,165	9.8
Franklin	9	66,396	13.6
Fremont	5	64,823	7.7
Gem	18	85,261	21.1
Gooding	10	75,844	13.2
Idaho	12	81,684	14.7
Jefferson	7	139,847	5.0
Jerome	9	117,157	7.7
Kootenai	99	768,024	12.9
Latah	23	196,195	11.7
Lemhi	5	38,990	12.8
Lewis	1	19,225	5.2
Lincoln	4	26,606	15.0
Madison	6	193,526	3.1
Minidoka	14	103,074	13.6
Nez Perce	32	200,773	15.9
Oneida	1	21,628	4.6
Owyhee	8	57,277	14.0
Payette	21	115,206	18.2
Power	7	38,565	18.2
Shoshone	16	62,628	25.5
Teton	5	55,402	9.0
Twin Falls	68	418,332	16.3
Valley	11	52,005	21.2
Washington	2	50,123	4.0

Rate: number of deaths per 100,000 population.

Table 11. Number of drug overdose deaths by city of residence: Idaho residents, 2014-2018 (aggregate).

City	Deaths	City	Deaths	City	Deaths
Boise	230	Emmett	16	Preston	8
Idaho Falls	100	Kuna	16	Sandpoint	8
Pocatello	75	Moscow	15	St. Maries	7
Nampa	66	Chubbuck	14	American Falls	6
Twin Falls	54	Burley	10	Osburn	6
Coeur D'Alene	43	Mountain Home	10	Rexburg	6
Meridian	43	Fruitland	9	Eagle	5
Caldwell	38	Hayden	9	Fort Hall	5
Post Falls	32	Jerome	9	Gooding	5
Lewiston	26	Middleton	9	Hailey	5
Blackfoot	20	Rupert	9	Priest River	5
Garden City	19	McCall	8	Shelley	5
Ammon	18	Payette	8	All other	190
				Total	1,167

Table 12. Number of drug overdose deaths by place of injury and place of death: Idaho residents, 2014-2018 (aggregate).

Place of Injury	Place of Death							Total
	Hospital- Inpatient	Hospital- ER	Hospital- DOA	Hospice facility	Nursing Home	Home	Other	
Home	104	65	7	7	-	643	93	919
Residential institution School, other institution, administration area	2	1	-	1	2	1	9	16
Street/highway	4	2	-	-	-	1	7	14
Trade and service area	5	3	1	-	-	2	33	44
Other place	4	-	-	-	-	-	28	32
Unspecified place	23	9	2	4	-	47	45	130
Total	148	83	10	12	2	694	218	1,167

DOA: dead on arrival to hospital.

Table 13. Summary of drug overdose deaths by manner of drug overdose and sex: Idaho residents, 2014-2018 (aggregate).

Five-Year Summary by Manner	Total	Female	Male
Total Drug Overdose Deaths	1,167	532	635
Age-adjusted rate and 95% CI*	14.6 (13.7 - 15.4)	13.0 (11.9 - 14.2)	16.0 (14.7 - 17.3)
Mean Age at Death in Years	43.7	47.2	40.7
Total Deaths, All Causes	67,281	32,093	35,188
Percent of Total Deaths from Drug Overdose	2%	2%	2%
Total Accidental Drug Overdose Deaths	859	373	486
Age-adjusted rate and 95% CI*	10.7 (10.0 - 11.5)	9.1 (8.1 - 10.0)	12.3 (11.2 - 13.4)
Mean Age at Death in Years	42.8	47.2	39.4
Total Accidental Deaths	4,104	1,564	2,540
Percent of Accidental Deaths from Drug Overdose	21%	24%	19%
Total Suicide Drug Overdose Deaths	205	112	93
Age-adjusted rate and 95% CI*	2.5 (2.2 - 2.9)	2.8 (2.2 - 3.3)	2.3 (1.8 - 2.8)
Mean Age at Death in Years	47.2	47.2	47.2
Total Suicide Deaths	1,844	405	1,439
Percent of Suicide Deaths from Drug Overdose	11%	28%	6%
Total Undetermined Intent Drug Overdose Deaths	101	46	55
Age-adjusted rate and 95% CI*	1.3 (1.0 - 1.5)	1.1 (0.8 - 1.5)	1.4 (1.0 - 1.8)
Mean Age at Death in Years	44.6	48.4	41.4
Total Undetermined Intent Deaths	148	61	87
Percent of Undetermined Deaths from Drug Overdose	68%	75%	63%

*Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

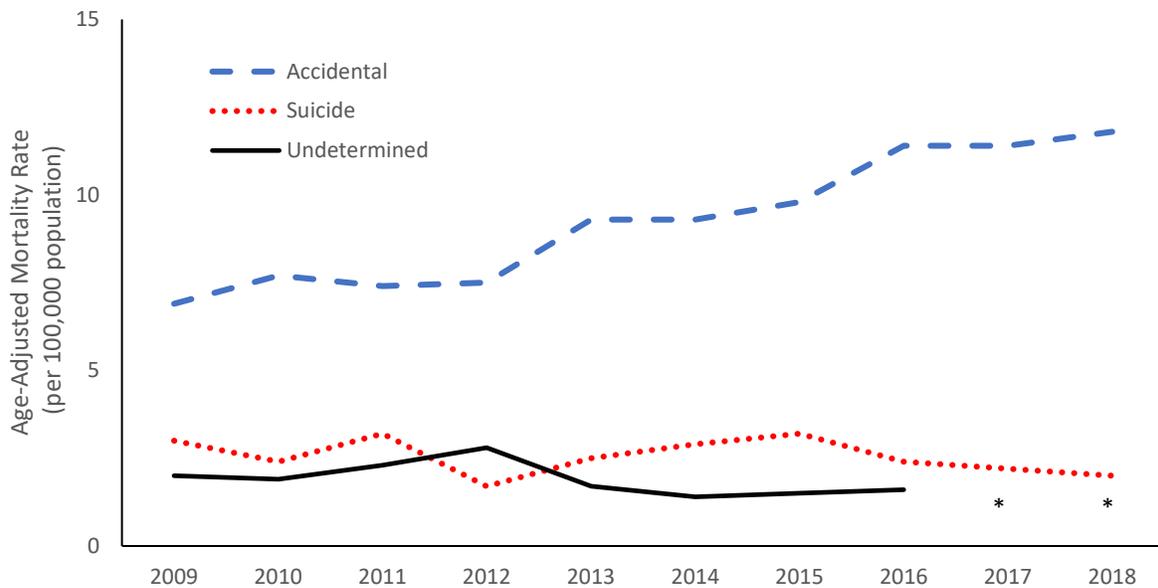
From 2014-2018, there were 2 assault drug overdose deaths; one each to a male and a female. These data are included in the summary for total drug overdose deaths.

Table 14. Number of drug overdose deaths and age-adjusted mortality rates (AAR) for drug overdose deaths by manner of death: Idaho residents, 2009-2018 by year, and 2014-2018 aggregate.

Year	Accident		Suicide		Undetermined	
	Deaths	AAR (95% CI)	Deaths	AAR (95% CI)	Deaths	AAR (95% CI)
2009	101	6.9 (5.5-8.3)	44	3.0 (2.2-4.0)	29	2.0 (1.3-2.8)
2010	116	7.7 (6.3-9.1)	35	2.4 (1.7-3.3)	29	1.9 (1.3-2.7)
2011	110	7.4 (6.0-8.8)	48	3.2 (2.3-4.2)	34	2.3 (1.6-3.2)
2012	114	7.5 (6.1-8.9)	27	1.7 (1.1-2.5)	41	2.8 (2.0-3.8)
2013	142	9.3 (7.7-10.8)	40	2.5 (1.8-3.4)	27	1.7 (1.1-2.5)
2014	145	9.3 (7.8-10.9)	44	2.9 (2.1-3.9)	22	1.4 (0.9-2.1)
2015	150	9.8 (8.2-11.4)	50	3.2 (2.4-4.3)	22	1.5 (0.9-2.2)
2016	181	11.4 (9.7-13.1)	38	2.4 (1.7-3.3)	25	1.6 (1.1-2.4)
2017	184	11.4 (9.7-13.0)	38	2.2 (1.5-3.0)	18	*
2018	199	11.8 (10.1-13.4)	35	2.0 (1.4-2.7)	14	*
2014-2018	859	10.7 (10.0-11.5)	205	2.5 (2.2-2.9)	101	1.3 (1.0-1.5)

AAR: Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate. Drug deaths from assault not shown. From 2009-2018 there were 3 assault deaths from drug poisoning: one each in 2012, 2015, and 2017 (not shown).

Figure 4. Drug overdose age-adjusted mortality rates by manner of death: Idaho residents, 2009-2018.



*Age-adjusted rates were unreliable when the rate was calculated with a numerator (number of deaths) of less than 20.

Table 15. Number of drug overdose deaths and age-adjusted mortality rates (AAR) for drug overdose deaths by manner and sex, Public Health District of residence, and age group: Idaho residents, 2014-2018 (aggregate).

	Accident		Suicide		Undetermined	
	Deaths	AAR (95% CI)	Deaths	AAR (95% CI)	Deaths	AAR (95% CI)
Total	859	10.7 (10.0-11.5)	205	2.5 (2.2-2.9)	101	1.3 (1.0-1.5)
Sex						
Female	373	9.1 (8.1-10.0)	112	2.8 (2.2-3.3)	46	1.1 (0.8-1.5)
Male	486	12.3 (11.2-13.4)	93	2.3 (1.8-2.8)	55	1.4 (1.0-1.8)
District						
1	115	10.9 (8.9-13.0)	26	2.1 (1.3-3.0)	11	*
2	59	11.7 (8.9-15.1)	9	*	3	*
3	114	8.6 (7.0-10.2)	39	3.0 (2.1-4.1)	11	*
4	262	10.5 (9.2-11.8)	72	2.9 (2.3-3.6)	15	*
5	84	9.4 (7.5-11.6)	23	2.6 (1.6-3.9)	19	*
6	97	12.7 (10.3-15.5)	18	*	37	4.5 (3.2-6.2)
7	128	13.7 (11.2-16.1)	18	*	5	*
Age Group**						
<15	3	0.2 (0.0-0.5)	0	0.0 (0-0.2)	1	0.1 (0.0-0.3)
15-24	79	6.8 (5.4-8.5)	12	1.0 (0.5-1.8)	6	0.5 (0.2-1.1)
25-34	197	17.7 (15.2-20.2)	27	2.4 (1.6-3.5)	16	1.4 (0.8-2.3)
35-44	194	18.6 (16.0-21.3)	56	5.4 (4.1-7.0)	27	2.6 (1.7-3.8)
45-54	202	20.3 (17.5-23.1)	44	4.4 (3.2-5.9)	26	2.6 (1.7-3.8)
55-64	128	12.3 (10.2-14.5)	43	4.1 (3.0-5.6)	17	1.6 (1.0-2.6)
65-74	42	5.5 (3.9-7.4)	19	2.5 (1.5-3.9)	6	0.8 (0.3-1.7)
75+	14	2.8 (1.5-4.6)	4	0.8 (0.2-2.0)	2	0.4 (0.0-1.4)

AAR: Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

*AAR were unreliable when the rate was calculated with a numerator (number of deaths) of less than 20.

**Rate by age group is an age-specific rate: number of deaths per 100,000 in the age group.

Number of deaths due to drug overdose by assault not shown. There were 2 deaths due to Idaho drug overdose by assault from 2014 to 2018.

Table 16. Drug overdose deaths by manner, Public Health District of residence, and year: Idaho residents, 2014-2018.

District 1	Total	2014	2015	2016	2017	2018
Accident	115	16	25	27	25	22
Suicide	26	2	5	2	7	10
Undetermined	11	-	3	1	4	3
Total	152	18	33	30	36	35

District 2	Total	2014	2015	2016	2017	2018
Accident	59	4	11	10	18	16
Suicide	9	2	1	3	2	1
Undetermined	3	-	-	1	1	1
Total	71	6	12	14	21	18

District 3	Total	2014	2015	2016	2017	2018
Accident	114	24	20	21	18	31
Suicide	39	8	13	8	7	3
Undetermined	11	2	3	2	-	4
Total	165	34	36	31	26	38

District 4	Total	2014	2015	2016	2017	2018
Accident	262	50	34	54	64	60
Suicide	72	17	16	15	11	13
Undetermined	15	5	1	5	3	1
Total	349	72	51	74	78	74

District 5	Total	2014	2015	2016	2017	2018
Accident	84	4	18	13	19	30
Suicide	23	4	5	5	5	4
Undetermined	19	3	8	7	1	-
Total	126	11	31	25	25	34

District 6	Total	2014	2015	2016	2017	2018
Accident	97	24	11	28	17	17
Suicide	18	6	6	1	4	1
Undetermined	37	12	4	8	8	5
Total	152	42	21	37	29	23

District 7	Total	2014	2015	2016	2017	2018
Accident	128	23	31	28	23	23
Suicide	18	5	4	4	2	3
Undetermined	5	-	3	1	1	-
Total	152	28	39	33	26	26

Number of deaths due to drug overdose by assault not shown. There were 2 deaths due to Idaho drug overdose by assault, one each in District 3 in 2017 and in District 7 in 2015.

Table 17. Number of drug overdose deaths by manner and county of residence: Idaho residents, 2014-2018 (aggregate).

Residence	Total	Accident	Suicide	Undetermined	Assault
Total	1,167	859	205	101	2
Ada	320	245	63	12	-
Adams	1	-	1	-	-
Bannock	99	55	11	33	-
Bear Lake	5	5	-	-	-
Benewah	9	8	1	-	-
Bingham	27	23	3	1	-
Blaine	9	4	4	1	-
Boise	5	-	4	1	-
Bonner	23	14	7	2	-
Bonneville	119	103	15	1	-
Boundary	5	3	1	1	-
Butte	2	1	-	1	-
Canyon	115	82	27	5	1
Caribou	2	-	1	1	-
Cassia	12	7	2	3	-
Clark	2	2	-	-	-
Clearwater	3	2	-	1	-
Custer	3	3	-	-	-
Elmore	13	8	4	1	-
Franklin	9	8	1	-	-
Fremont	5	2	1	2	-
Gem	18	10	5	3	-
Gooding	10	6	3	1	-
Idaho	12	7	4	1	-
Jefferson	7	6	-	1	-
Jerome	9	6	2	1	-
Kootenai	99	80	14	5	-
Latah	23	22	1	-	-
Lemhi	5	1	2	1	1
Lewis	1	-	1	-	-
Lincoln	4	4	-	-	-
Madison	6	6	-	-	-
Minidoka	14	8	1	5	-
Nez Perce	32	28	3	1	-
Oneida	1	1	-	-	-
Owyhee	8	5	2	1	-
Payette	21	15	4	2	-
Power	7	4	2	1	-
Shoshone	16	10	3	3	-
Teton	5	5	-	-	-
Twin Falls	68	49	11	8	-
Valley	11	9	1	1	-
Washington	2	2	-	-	-

Table 18. Years of potential life lost (YPLL) before age 75 due to drug overdose and non-drug overdose causes of death for each year and in total: Idaho residents, 2009-2018 and 2014-2018 aggregate. All data pertain to decedents under the age of 75.

Year	Drug Overdose Deaths				Non-Drug Overdose Deaths				Total Deaths
	Deaths	YPLL Total	YPLL Rate	Average	Deaths	YPLL Total	YPLL Rate	Average	
2009	173	5,546.5	379.8	32.1	4,578	82,984.0	5,682.0	18.1	4,751
2010	177	5,711.5	385.3	32.3	4,680	82,375.0	5,556.7	17.6	4,857
2011	187	6,086.5	406.4	32.5	4,809	82,546.5	5,512.1	17.2	4,996
2012	181	5,472.5	363.3	30.2	4,874	82,594.0	5,482.5	16.9	5,055
2013	206	6,297.0	414.2	30.6	5,279	89,229.5	5,869.6	16.9	5,485
2014	208	6,661.0	432.6	32.0	5,295	88,455.5	5,744.7	16.7	5,503
2015	221	6,955.5	446.7	31.5	5,395	88,191.5	5,663.5	16.3	5,616
2016	242	7,620.0	481.7	31.5	5,536	91,723.0	5,798.3	16.6	5,778
2017	235	7,251.5	449.6	30.9	5,776	92,236.0	5,718.7	16.0	6,011
2018	241	7,626.5	463.9	31.6	5,986	95,671.0	5,818.8	16.0	6,227
2014-2018	1,147	36,114.5	455.1	31.5	27,988	456,277.0	5,749.5	16.3	29,135

YPLL Rate: Calculated by the total number of years of potential life lost per 100,000 population aged less than 75 years.
 Average is average YPLL per death: calculated by the total number of years potential life lost divided by the number of deaths for decedent aged less than 75 years.
 During 2009-2018, 98% of decedents where the cause of death was drug overdose were aged less than 75 years, compared with 42% of decedents where the cause of death was non-drug overdose.

Figure 5. Average years potential life lost (YPLL) before age 75 per death trend for drug overdose and non-drug overdose causes of death: Idaho residents, 2009-2018.

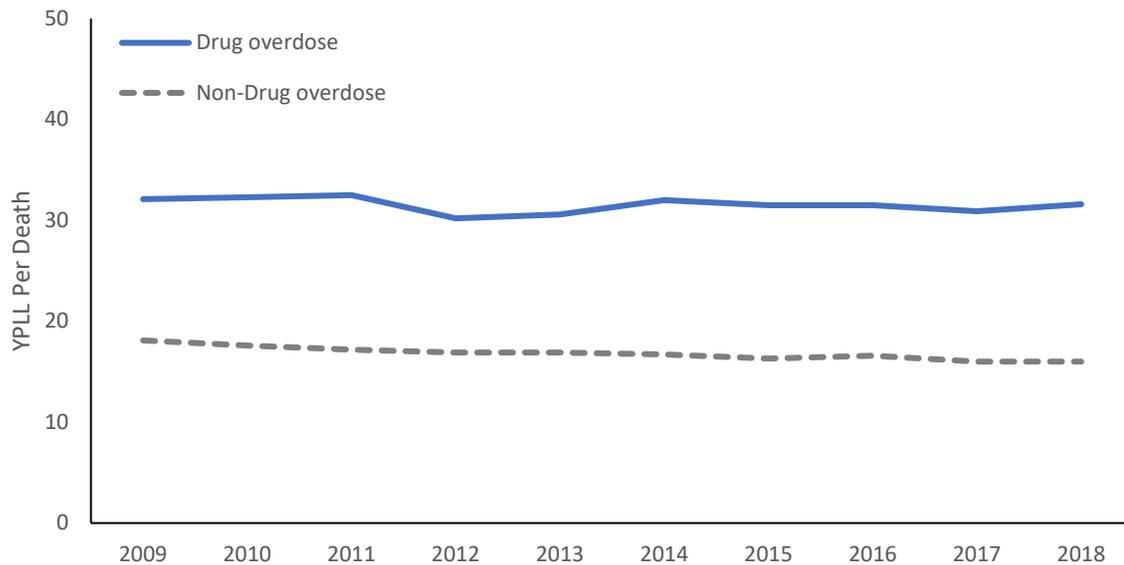


Table 19. Number and percent of death overdose deaths and age-adjusted mortality rate for drug overdose deaths by underlying cause of death (as specified by ICD-10 code): Idaho residents, 2014-2018 (aggregate).

ICD code	Underlying Cause of Death Description	Deaths	Percent	Age-Adjusted Rate (95%CI)
X41	Accidental poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism and psychotropic drugs	187	16.0%	2.3 (2.0-2.7)
X42	Accidental poisoning by and exposure to narcotics and psychodysleptics (hallucinogens)	222	19.0%	2.7 (2.4-3.1)
X44	Accidental poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances	438	37.5%	5.5 (5.0-6.1)
X61	Intentional self-poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs	36	3.1%	0.4 (0.3-0.6)
X62	Intentional self-poisoning by and exposure to narcotics and psychodysleptics (hallucinogens)	25	2.1%	0.3 (0.2-0.5)
X64	Intentional self-poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances	137	11.7%	1.7 (1.4-2.0)
Y11	Poisoning by and exposure to antiepileptic, sedative-hypnotic, antiparkinsonism, and psychotropic drugs, undetermined intent	22	1.9%	0.3 (0.2-0.4)
Y12	Poisoning by and exposure to narcotics and psychodysleptics [hallucinogens], not elsewhere classified, undetermined intent	28	2.4%	0.4 (0.2-0.5)
Y14	Poisoning by and exposure to other and unspecified drugs, medicaments, and biological substances, undetermined intent	49	4.2%	0.6 (0.5-0.8)
	ICD-10 codes with less than 10 deaths*	23	2.0%	
Total		1,167	100%	14.6 (13.7-15.4)

Age-adjusted rate: number of deaths per 100,000 population and aged-adjusted to the 2000 U.S. standard population. 95% CI is the 95% confidence interval for the age-adjusted rate.

Rates were unreliable when the rate was calculated with a numerator (number of deaths) of less than 20.

*Includes deaths due to X40. Accidental poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics; X43. Accidental poisoning by and exposure to other drugs acting on the autonomic nervous system; X60. Intentional self-poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics; X63 Intentional self-poisoning by and exposure to other drugs acting on the autonomic nervous system; X85. Assault by drugs, medicaments and biological substances; and Y10. Poisoning by and exposure to nonopioid analgesics, antipyretics and antirheumatics, undetermined intent.

Table 20. Number of drug overdose deaths by type of drug reported on the death certificate and number and percent of death certificates where no drug was specified by year and total: Idaho residents, 2014-2018.

Drug Overdose Deaths, Drug(s) Listed	2014	2015	2016	2017	2018	Total
TOTAL DEATHS	211	223	244	241	248	1,167
No drug listed	71	55	52	42	31	251
One or more drugs listed	140	168	192	199	217	916
Percent with one or more drug listed	66%	75%	79%	83%	88%	78%
Drug Overdose Deaths Reporting Opioids	2014	2015	2016	2017	2018	Total
DRUG OVERDOSE DEATHS REPORTING OPIOIDS	81	93	123	116	125	538
Opium	-	-	-	-	-	-
Heroin	12	17	26	24	33	112
Natural and semisynthetic opioid	44	54	59	60	69	286
Oxycodone/Hydrocodone/Codeine	41	46	46	52	58	243
Morphine	7	12	20	13	19	71
Methadone	18	12	16	16	10	72
Synthetic opioid other than methadone	14	16	27	28	30	115
Fentanyl	7	9	16	13	20	65
U-47700	-	-	7	3	-	10
Tramadol	6	7	4	8	5	30
Other/unspecified narcotic	8	4	7	10	5	34
Drug Overdose Deaths Reporting Non-Opioids	2014	2015	2016	2017	2018	Total
Cocaine	1	1	2	7	8	19
Cannabis	-	2	7	4	4	17
Lysergic acid diethylamide (LSD)	-	-	-	-	-	-
Benzodiazepines	23	25	33	28	29	138
Antibiotics, Antiparasitics, antagonist, non-opioid analgesics	6	9	5	11	13	44
Anesthetics, Antiepileptic, Sedative-Hypnotic	7	15	18	15	12	67
Antidepressants	21	23	23	34	24	125
Psychostimulants with abuse potential	32	40	50	54	72	248
Methamphetamine	30	39	49	51	71	240
Amphetamine	3	2	6	5	6	22
MDA/MDMA/ecstasy/GHB*	1	-	-	2	1	4
Psychotropic NEC	13	8	11	5	8	45

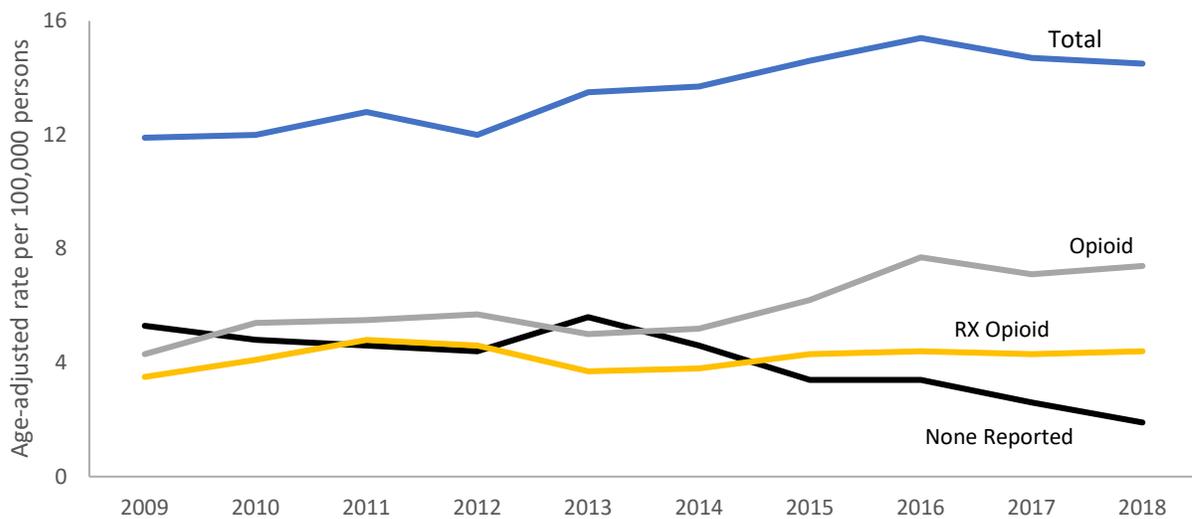
*MDA: 3,4-methylenedioxymethamphetamine, *MDMA: 3, 4 methylenedioxymethamphetamine -ecstasy
GHB: gamma-Hydroxybutyric acid.

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category.

Table 21. Number and age-adjusted rate (AAR) of drug overdose deaths, total, with no drugs reported, reporting opioid involvement, and reporting prescription pain reliever opioid involvement by year: Idaho residents, 2009-2018.

Year	Drug Overdose Deaths		No Specific Drugs Reported		Reporting Opioid Involvement		Reporting Prescription Pain Reliever Opioid Involvement	
	Deaths	AAR	Deaths	AAR	Deaths	AAR	Deaths	AAR
2009	174	11.9	77	5.3	64	4.3	52	3.5
2010	180	12.0	71	4.8	82	5.4	63	4.1
2011	192	12.8	70	4.6	83	5.5	72	4.8
2012	183	12.0	65	4.4	88	5.7	70	4.6
2013	209	13.5	84	5.6	80	5.0	60	3.7
2014	211	13.7	71	4.6	81	5.2	58	3.8
2015	223	14.6	55	3.4	93	6.2	64	4.3
2016	244	15.4	52	3.4	123	7.7	72	4.4
2017	241	14.7	42	2.6	116	7.1	70	4.3
2018	248	14.5	31	1.9	125	7.4	76	4.4

Figure 6. Age-Adjusted rates for total overdose deaths, with no drugs reported, with opioid involvement, and with prescription pain reliever opioid involvement reported: Idaho residents, 2009-2018.



Opioid involvement includes opium, heroin, natural and semisynthetic opioids such as Oxycodone and morphine, methadone, synthetic opioids such as Fentanyl, and other unspecified narcotics.

Prescription opioid (RX Opioid) includes only natural and semisynthetic opioids such as Oxycodone, and methadone.

Table 22. Number and percent of drug overdose deaths with one or more drug reported, and drug overdose deaths by type of opioid and type of non-opioid drug(s) reported on the death certificate by Public Health District of residence (HD): Idaho residents, 2014-2018 (aggregate).

Drug Overdose Deaths, Drug(s) Listed	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7
TOTAL DEATHS	152	71	165	349	126	152	152
No drug listed	14	11	69	32	45	26	54
One or more drugs listed	138	60	96	317	81	126	98
Percent with one or more drug listed	91%	85%	58%	91%	64%	83%	64%
Drug Overdose Deaths Reporting Opioids	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7
DRUG OVERDOSE DEATHS REPORTING OPIOIDS	83	31	55	184	46	89	50
Opium	-	-	-	-	-	-	-
Heroin	14	7	12	45	4	13	17
Natural and semisynthetic opioid	52	15	29	92	30	51	17
Oxycodone/Hydrocodone/Codeine	45	14	24	76	28	40	16
Morphine	19	-	9	24	3	15	1
Methadone	9	4	4	25	8	15	7
Synthetic opioid other than methadone	17	6	10	48	9	14	11
Fentanyl	9	3	6	27	6	10	4
U-47700	2	-	-	2	-	4	2
Tramadol	3	1	3	16	2	2	3
Other/unspecified narcotic	5	5	2	4	2	9	7
Drug Overdose Deaths Reporting Non-Opioids	HD 1	HD 2	HD 3	HD 4	HD 5	HD 6	HD 7
Cocaine	3	2	-	10	1	1	2
Cannabis	15	1	-	-	1	-	-
Lysergic acid diethylamide (LSD)	-	-	-	-	-	-	-
Benzodiazepines	20	9	13	45	14	31	6
Antibiotics, Antiparasitics, antagonist, non-opioid analgesics	12	3	4	9	5	7	4
Anesthetics, Antiepileptic, Sedative-Hypnotic	6	5	12	19	7	13	5
Antidepressants	15	10	17	38	9	19	17
Psychostimulants with abuse potential	39	16	30	99	18	22	24
Methamphetamine	38	16	30	94	17	21	24
Amphetamine	6	1	1	6	1	5	2
Psychotropic NEC	8	3	2	27	-	3	2

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category. See Technical Notes for more information by category.

Table 23. Number of drug overdose deaths, opioid-involved deaths, deaths with no drug listed, and number and percent with drugs listed by county of residence: Idaho residents, 2014-2018 (aggregate).

Residence	Total Overdose	Opioid-Involved	No Drug Listed	One or More Drugs Listed	Percent with Drug Listed
Total	1,167	538	251	916	78%
Ada	320	169	24	296	93%
Adams	1	1	-	1	100%
Bannock	99	59	17	82	83%
Bear Lake	5	5	-	5	100%
Benewah	9	5	1	8	89%
Bingham	27	13	6	21	78%
Blaine	9	1	3	6	67%
Boise	5	2	2	3	60%
Bonner	23	12	2	21	91%
Bonneville	119	31	48	71	60%
Boundary	5	2	1	4	80%
Butte	2	2	-	2	100%
Camas	-	-	-	-	NA
Canyon	115	29	61	54	47%
Caribou	2	1	1	1	50%
Cassia	12	7	3	9	75%
Clark	2	1	1	1	50%
Clearwater	3	-	-	3	100%
Custer	3	2	-	3	100%
Elmore	13	5	4	9	69%
Franklin	9	6	2	7	78%
Fremont	5	3	1	4	80%
Gem	18	9	6	12	67%
Gooding	10	6	1	9	90%
Idaho	12	3	4	8	67%
Jefferson	7	4	1	6	86%
Jerome	9	5	2	7	78%
Kootenai	99	58	7	92	93%
Latah	23	13	3	20	87%
Lemhi	5	-	2	3	60%
Lewis	1	-	-	1	100%
Lincoln	4	2	2	2	50%
Madison	6	4	1	5	83%
Minidoka	14	1	9	5	36%
Nez Perce	32	15	4	28	88%
Oneida	1	1	-	1	100%
Owyhee	8	4	1	7	88%
Payette	21	12	1	20	95%
Power	7	2	-	7	100%
Shoshone	16	6	3	13	81%
Teton	5	5	-	5	100%
Twin Falls	68	24	25	43	63%
Valley	11	8	2	9	82%
Washington	2	-	-	2	100%

Opioid involvement includes opium, heroin, natural and semisynthetic opioids such as Oxycodone and morphine, methadone, synthetic opioids such as Fentanyl, and other unspecified narcotics.

Table 24. Number and percent of drug overdose deaths with one or more drug reported, and drug overdose deaths by type of opioid and type of non-opioid drug(s) reported on the death certificate by manner of death: Idaho residents, 2014-2018 (aggregate).

Drug Overdose Deaths, Drug(s) Listed	Accident	Suicide	Undetermined	Total
TOTAL DEATHS	859	205	101	1,167
No drug listed	167	57	27	251
One or more drugs listed	692	148	74	916
Percent with one or more drug listed	81%	72%	73%	78%
Drug Overdose Deaths Reporting Opioids				
Drug Overdose Deaths Reporting Opioids	Accident	Suicide	Undetermined	Total
DRUG OVERDOSE DEATHS REPORTING OPIOIDS	434	62	42	538
Opium	-	-	-	-
Heroin	105	3	4	112
Natural and semisynthetic opioid	216	47	23	286
Oxycodone/Hydrocodone/Codeine	181	43	19	243
Morphine	61	5	5	71
Methadone	62	3	7	72
Synthetic opioid other than methadone	98	11	6	115
Fentanyl	62	-	3	65
U-47700	10	-	-	10
Tramadol	18	10	2	30
Other/unspecified narcotic	26	3	5	34
Drug Overdose Deaths Reporting Non-Opioids				
Drug Overdose Deaths Reporting Non-Opioids	Accident	Suicide	Undetermined	Total
Cocaine	17	2	-	19
Cannabis	16	-	1	17
Lysergic acid diethylamide (LSD)	-	-	-	-
Benzodiazepines	102	25	11	138
Antibiotics, Antiparasitics, antagonist, non-opioid analgesics	19	22	3	44
Anesthetics, Antiepileptic, Sedative-Hypnotic	41	23	3	67
Antidepressants	74	39	12	125
Psychostimulants with abuse potential	224	7	15	248
Methamphetamine	216	7	15	240
Amphetamine	20	1	1	22
Psychotropic NEC	27	15	3	45

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category. See Technical Notes for more information by category.

There were 2 deaths due to Idaho drug overdose by assault, both reported methamphetamine and are included in the total for “one or more drug reported”, Psychostimulants with abuse potential”, and “methamphetamine”.

Table 25. Trend of opioid-involved deaths by type of drug and year: Idaho residents, 1999-2018.

Year	Total Drug Overdose Deaths	Opioid-Involved	Natural, Semi-synthetic, & Synthetic Opioid	Prescription Opioid	Natural, and Semi-Synthetic Opioid	Synthetic Opioid
1999	61	23	12	12	8	2
2000	64	23	18	17	14	1
2001	99	45	39	34	27	7
2002	116	43	38	32	24	8
2003	102	49	46	42	27	5
2004	98	44	39	35	20	6
2005	110	43	37	30	24	5
2006	128	62	56	53	29	7
2007	120	56	50	43	30	10
2008	148	71	64	59	50	9
2009	174	64	62	52	38	11
2010	180	82	72	63	44	13
2011	192	83	76	72	51	7
2012	183	88	84	70	54	19
2013	209	80	69	60	52	15
2014	211	81	66	58	44	14
2015	223	93	76	64	54	16
2016	244	123	94	72	59	27
2017	241	116	89	70	60	28
2018	248	125	94	76	69	30
Total	3,151	1,394	1,181	1,014	778	240

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category.

Opioid involvement includes opium, heroin, natural and semisynthetic opioids such as Oxycodone and morphine, methadone, synthetic opioids such as Fentanyl, and other unspecified narcotics.

Natural, Semi-synthetics and Synthetic opioids include natural and semisynthetic opioids such as Oxycodone, methadone; and synthetic opioids, other than methadone.

Prescription opioid includes only natural and semisynthetic opioids such as Oxycodone, and methadone.

Natural and Semi-synthetics opioids include natural and semisynthetic opioids such as Oxycodone.

Synthetic opioids include synthetic opioids such as Fentanyl, other than methadone.

Table 25 (continued). Trend of opioid-involved deaths by type of drug, and number of drug overdose deaths with no drug listed and percent with drugs listed by year: Idaho residents, 1999-2018.

Year	Methadone	Heroin	No Specific Drug	Percent of drug deaths with one or more drugs reported
1999	4	5	31	49%
2000	3	1	20	69%
2001	9	6	24	76%
2002	10	4	36	69%
2003	21	2	29	72%
2004	22	5	38	61%
2005	11	3	43	61%
2006	32	4	44	66%
2007	20	3	46	62%
2008	16	1	58	61%
2009	15	1	77	56%
2010	26	1	71	61%
2011	23	2	70	64%
2012	22	1	65	64%
2013	13	6	84	60%
2014	18	12	71	66%
2015	12	17	55	75%
2016	16	26	52	79%
2017	16	24	42	83%
2018	10	33	31	88%
Total	319	157	987	69%

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category. See Technical Notes for more information by category.

Table 26. Trend of non-opioid-involved deaths by type of drug, and number of drug overdose deaths with no drug listed and percent with drugs listed by year: Idaho residents, 1999-2018.

Year	Total Drug Overdose Deaths	Cocaine	Cannabis	Benzo-diazepine	Sedative	Anti-depressant
1999	61	3	-	2	4	4
2000	64	5	-	6	2	15
2001	99	3	-	10	3	17
2002	116	2	-	8	8	15
2003	102	6	-	12	7	15
2004	98	2	-	6	5	12
2005	110	1	-	11	4	15
2006	128	-	-	17	3	13
2007	120	1	-	14	8	12
2008	148	1	1	23	10	28
2009	174	-	-	22	16	26
2010	180	-	-	27	8	20
2011	192	1	4	34	11	26
2012	183	2	5	22	11	19
2013	209	-	3	21	7	19
2014	211	1	-	23	7	21
2015	223	1	2	25	15	23
2016	244	2	7	33	18	23
2017	241	7	4	28	15	34
2018	248	8	4	29	12	24
Total	3,151	46	30	373	174	381

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category. See Technical Notes for more information by category.

Table 26 (continued). Trend of non-opioid-involved deaths by type of drug, and number of drug overdose deaths with no drug listed and percent with drugs listed by year: Idaho residents, 1999-2018.

Year	Psycho-stimulant	Antibiotic	No Specific Drug	Percent of drug deaths with one or more drugs reported
1999	-	-	31	49%
2000	3	2	20	69%
2001	5	10	24	76%
2002	6	5	36	69%
2003	8	5	29	72%
2004	8	2	38	61%
2005	15	1	43	61%
2006	6	2	44	66%
2007	10	4	46	62%
2008	-	9	58	61%
2009	16	3	77	56%
2010	13	6	71	61%
2011	17	5	70	64%
2012	11	4	65	64%
2013	26	3	84	60%
2014	32	6	71	66%
2015	40	9	55	75%
2016	50	5	52	79%
2017	54	11	42	83%
2018	72	13	31	88%
Total	392	105	987	69%

Decedents may be included more than once if more than one drug category was reported on the death certificate. Multiple mentions of a single drug category were counted only once for that category. See Technical Notes for more information by category.

Table 27. Drug overdose deaths with opioid and non-opioid drug(s) listed by year: Idaho residents, 2014-2018.

	2014	2015	2016	2017	2018	Total
Total Drug Overdose Deaths	211	223	244	241	248	1,167
Opioid drug(s) only listed	42	56	69	64	63	294
Non-opioid drug(s) only listed	59	75	69	83	92	378
Both opioid and non-opioid drug(s) listed	39	37	54	52	62	244
No drugs listed	71	55	52	42	31	251
Of the 244 opioid-involved drug overdose deaths with non-opioids listed, the non-opioids* drugs were:						
Cocaine	-	1	-	4	6	11
Cannabis	-	2	7	2	3	14
Benzodiazepines	19	16	25	18	20	98
Antibiotics	1	4	-	2	4	11
Sedative	2	6	15	5	6	34
Antidepressants	8	12	15	9	10	54
Psychostimulants	6	7	14	19	24	70
Psychotropic NEC listed	8	3	8	3	4	26

*More than one non-opioid drug may be listed.

From 2014 to 2018, there were a total of 538 drug overdose deaths with at least one opioid drug listed; of the 538 deaths, 294 listed only opioid drug(s) (54.6% of all opioid-involved deaths), and 244 deaths listed opioids with non-opioids (45.4% of all opioid-involved deaths).

See Technical Notes for more information by drug category.

Technical Notes

Drug Overdose Deaths:

The National Center for Health Statistics (NCHS) defines “drug overdose death” as a death in which the underlying cause of death was acute poisoning by drugs. These deaths do not include overdose deaths by alcohol, gases, or vapors.

Manner of Death:

Manner of death was determined using the following ICD-10 codes for underlying cause of death:

Drug Overdose

- X40-X44: Accident
- X60-X64: Suicide
- X85: Assault
- Y10-Y14: Undetermined Intent

Drug Categories: type of drug(s) written in the cause of death, other significant conditions leading to death, and/or description of injury sections of the death certificate. No drug, one drug, or more than one drug may have been reported on the death certificate. The literal text for specific drugs was converted to ICD-10 codes and provided to the Bureau from the NCHS multiple-cause-of-death program. Examples of drug names from the literal text that fell under each drug category are reported below:

Opioids

Opium (T40.0)

Heroin (T40.1)

Natural and Semisynthetic Opioids (T40.2)

Included, but was not limited to, the following drugs:

Codeine

Morphine

Hydrocodone

Oxycodone

Hydromorphone

Oxymorphone

Methadone (T40.3)

Synthetic Opioids Other Than Methadone (T40.4)

Included, but was not limited to, the following drugs:

Buprenorphine

Meperidine

Dextropropoxyphene

Pethidine

Fentanyl

Tramadol

Other and Unspecified Narcotics (T40.6)

Non-Opioids

Antibiotics, Antiparasitics, Antagonists, Non-Opioid Analgesics (T36.0-T39.9)

Included, but was not limited to, the following drugs:

<i>Acetaminophen</i>	<i>Salicylate</i>
<i>Ibuprofen</i>	<i>Tylenol</i>
<i>Levamisole</i>	

Cocaine (T40.5)

Cannabis (T40.7)

LSD (Lysergic acid diethylamide) (T40.8)

Other or unspecified psychodysleptics (hallucinogens) (T40.9)

Included, but was not limited to, the following drugs:

<i>Mescaline (peyote)</i>	<i>Psilocin (psychedelic mushrooms)</i>
<i>Psilocybin (psychedelic mushrooms)</i>	<i>Phencyclidine (PCP)</i>

Benzodiazepines (T42.4)

Included, but was not limited to, the following drugs:

<i>Alprazolam (Xanax)</i>	<i>Flurazepam</i>
<i>Chlordiazepoxide</i>	<i>Lorazepam (Ativan)</i>
<i>Clobazam</i>	<i>Midazolam</i>
<i>Clonazepam</i>	<i>Oxazepam</i>
<i>Clorazepate</i>	<i>Temazepam</i>
<i>Diazepam (Valium)</i>	<i>Triazolam</i>
<i>Estazolam</i>	

Anesthetics, Antiepileptic, Sedative-Hypnotic (T41.0-T42.9)

Included, but was not limited to, the following drugs:

<i>Barbiturate</i>	<i>Levodopa/Carbidopa</i>
<i>Butalbital</i>	<i>Lidocaine</i>
<i>Carisoprodol</i>	<i>Metaxalone</i>
<i>Clozapine</i>	<i>Methocarbamol</i>
<i>Carbamazepine</i>	<i>Nitrous oxide</i>
<i>Ethosuximide</i>	<i>Orphenadrine</i>
<i>Eszopiclone (Lunesta)</i>	<i>Phenobarbital</i>
<i>Etomidate</i>	<i>Phenytoin</i>
<i>Isoflurane</i>	<i>Propofol</i>
<i>Ketamine</i>	<i>Zolpidem (Ambien)</i>

Antidepressants (T43.0-T43.2)

Included, but was not limited to, the following drugs:

<i>Amitriptyline</i>	<i>Fluoxetine (Prozac)</i>
<i>Bupropion</i>	<i>Mirtazapine</i>
<i>Citalopram</i>	<i>Nortriptyline</i>
<i>Clomipramine</i>	<i>Trazodone</i>
<i>Doxepin</i>	<i>Venlafaxine</i>
<i>Desipramine</i>	

Psychostimulants with Abuse Potential (T43.6)

Included, but was not limited to, the following drugs:

<i>Adderall (amphetamine and dextroamphetamine)</i>	<i>Methylphenidate</i>
<i>Amphetamines</i>	<i>Ritalin</i>
<i>MDA (3,4-Methylenedioxyamphetamine)</i>	
<i>MDMA (3,4-Methylenedioxymethamphetamine-Ecstasy)</i>	
<i>Methamphetamine</i>	

Psychotropic, Not Elsewhere Classified (NEC) (T43.3-T43.5, T43.8-T43.9)

Included, but was not limited to, the following drugs:

<i>Chlorpromazine</i>	<i>Meprobamate</i>
<i>Haloperidol</i>	<i>Olanzapine</i>
<i>Hydroxyzine</i>	<i>Promethazine</i>

Other Non-Opioids (T44.0-T50.8*)

Included, but was not limited to, the following drugs:

<i>Benadryl</i>	<i>Methotrexate</i>
<i>Bleomycin</i>	<i>Metoclopramide</i>
<i>Chlorpheniramine</i>	<i>Metoprolol</i>
<i>Dextromethorphan</i>	<i>Propafenone</i>
<i>Digoxin</i>	<i>Propranolol</i>
<i>Diltiazem</i>	<i>Pseudoephedrine</i>
<i>Diphenhydramine</i>	<i>Verapamil</i>
<i>Doxylamine</i>	<i>Warfarin</i>

*T50.9 Other and unspecified drugs, medicaments and biological substances: death certificates that reported only this code were not considered as "reporting one or more drugs" as T50.9 was a general code indicating that no specific drugs were reported.

References

¹Lilienfeld, DE and Stolley, PD. *Foundations of Epidemiology*, 3rd Ed. Oxford University Press, 1994.

²*Bureau of Communicable Disease Prevention, Epidemiology Program*, Idaho Department of Health and Welfare (4/2017).

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