

# Idaho Resident Alcohol-Related Deaths

## Deaths from 1999 to 2018

Bureau of Vital Records and Health Statistics  
Division of Public Health  
Idaho Department of Health and Welfare  
February 2020

# Idaho Resident Alcohol-Related Deaths

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## Idaho Resident Alcohol-Related Deaths

In 2020, the National Institute on Alcohol Abuse and Alcoholism (NIAAA), reported the number of national death certificates mentioning alcohol more than doubled from 1999 to 2017 (latest year national data are available). Deaths are identified as alcohol-related if an alcohol-induced cause was listed as the underlying cause of death or as contributing to the person's cause of death. In 2017, 2.6 percent of deaths nationally reported an alcohol-induced cause as the underlying cause or contributing to death. The national report from NIAAA can be found at <https://niaaa.nih.gov/>.

The number of alcohol-related deaths among Idahoans more than tripled from 137 deaths in 1999 to 501 in 2018. In 2018, 3.5 percent of all Idaho resident deaths reported alcohol as the cause of death or contributing to the death.

**Table 1:** Idaho Resident Alcohol-Related Deaths, Number of Deaths in Which Alcohol was the Underlying Cause and a Contributing Cause of Death by Year, and Percent of Total Deaths, 1999-2018:

Year	Alcohol-Related Deaths			Total Idaho Resident Deaths	Percent of Total Deaths
	Underlying Cause of Death	Contributed To Death	Total		
1999	89	48	137	9,508	1.4%
2000	107	89	196	9,535	2.1%
2001	122	89	211	9,751	2.2%
2002	125	74	199	9,909	2.0%
2003	134	83	217	10,364	2.1%
2004	116	83	199	10,013	2.0%
2005	135	113	248	10,513	2.4%
2006	128	121	249	10,556	2.4%
2007	151	109	260	10,742	2.4%
2008	174	109	283	10,927	2.6%
2009	166	123	289	11,065	2.6%
2010	171	156	327	11,411	2.9%
2011	185	142	327	11,990	2.7%
2012	219	171	390	11,993	3.3%
2013	231	199	430	12,426	3.5%
2014	233	206	439	12,610	3.5%
2015	239	191	430	13,031	3.3%
2016	221	243	464	13,370	3.5%
2017	218	242	460	14,007	3.3%
2018	271	230	501	14,263	3.5%
<b>Total</b>	<b>3,435</b>	<b>2,821</b>	<b>6,256</b>	<b>227,984</b>	<b>2.7%</b>

The alcohol-related death rate (number of deaths per 100,000 people) more than doubled in Idaho from 1999 to 2018 and nearly doubled in the U.S. from 1999 to 2017.

**Table 2:** Idaho and U.S. Resident Alcohol-Related Deaths, Number of Deaths and Rate per 100,000 People, 1999-2018 (Idaho) and 1999-2017 (U.S.):

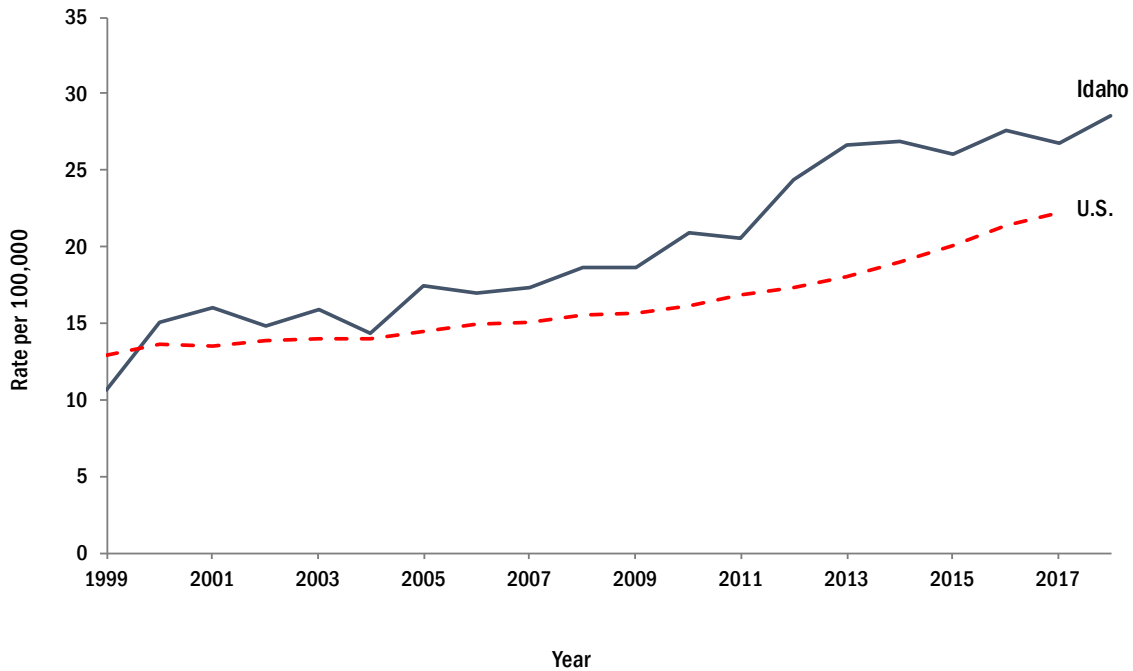
Year	Idaho		Year	United States	
	Deaths	Rate		Deaths	Rate
1999	137	10.7	1999	35,862	12.9
2000	196	15.1	2000	38,190	13.6
2001	211	16.0	2001	38,391	13.5
2002	199	14.8	2002	39,845	13.9
2003	217	15.9	2003	40,500	14.0
2004	199	14.3	2004	41,135	14.0
2005	248	17.4	2005	42,901	14.5
2006	249	17.0	2006	44,321	14.9
2007	260	17.3	2007	45,393	15.1
2008	283	18.6	2008	47,247	15.5
2009	289	18.7	2009	48,160	15.7
2010	327	20.9	2010	50,121	16.2
2011	327	20.6	2011	52,235	16.8
2012	390	24.4	2012	54,306	17.3
2013	430	26.7	2013	57,086	18.1
2014	439	26.9	2014	60,442	19.0
2015	430	26.0	2015	64,640	20.1
2016	464	27.6	2016	69,227	21.4
2017	460	26.8	2017	72,371	22.2
2018	501	28.6	2018		
<b>1999 to 2018:</b>			<b>1999 to 2017:</b>		
Number increase	364		Number increase	36,509	
Percent increase	265.7%	167.3%	Percent increase	101.8%	72.1%

Rate: Number of deaths per 100,000 people.

U.S. Source: Centers for Disease Control and Prevention (CDC), National Center for Health Statistics. Multiple Cause of Death 1999-2017 on CDC WONDER Online Database, released December 2018. Data are from the Multiple Cause of Death Files, 1999-2017, as compiled from data provided by the 57 vital statistics jurisdictions through the Vital Statistics Cooperative Program. Accessed at <http://wonder.cdc.gov/mcd-icd10.html> on Jan 22, 2020.

Note: Data from the CDC differ slightly from data reported by the National Institute on Alcohol Abuse and Alcoholism.

**Figure 1:** Idaho and U.S. Resident Alcohol-Related Deaths Rate per 100,000 People, 1999-2018 (Idaho) and 1999-2017 (U.S.):



From 1999 to 2018, there were 6,256 alcohol-related deaths among Idahoans. Of the 6,256 deaths, 3,435 deaths reported the underlying cause of death was an alcohol-induced cause, and 2,821 deaths were not an alcohol-induced cause, but alcohol was reported as contributing to the death. Underlying causes of death that are alcohol-induced causes are:

- pseudo-Cushing’s syndrome;
- mental and behavioral disorders due to alcohol use;
- degeneration of nervous system due to alcohol;
- alcoholic polyneuropathy; alcoholic cardiomyopathy;
- alcoholic gastritis;
- alcoholic liver disease;
- alcohol-induced chronic pancreatitis;
- alcohol-induced acute pancreatitis;
- findings of alcohol in blood;
- accidental poisoning by and exposure to alcohol;
- intentional self-poisoning (suicide) by exposure to alcohol; and
- poisoning by and exposure to alcohol, undetermined intent.

Causes of death in which alcohol contributed to the death, but was not the underlying cause of death, include diseases and conditions such as heart disease and cancer, and injury-related deaths such as accidental falls, motor vehicle crashes, and drug overdoses. From 1999 to 2018, nearly 40 percent of alcohol-related deaths were due to alcoholic liver disease.

**Table 3:** Idaho Resident Alcohol-Related Deaths by Cause of Death and Percent of All Alcohol-Related Deaths, 1999-2018:

<b>Cause of Death</b>	<b>Deaths</b>	<b>Percent</b>
<b>Alcoholic liver disease*</b>	<b>2,393</b>	<b>38.3%</b>
<b>Accident</b>	<b>838</b>	<b>13.4%</b>
<b>Drug overdose</b>	<b>288</b>	<b>4.6%</b>
<b>Motor vehicle accident</b>	<b>185</b>	<b>3.0%</b>
<b>Fall</b>	<b>108</b>	<b>1.7%</b>
<b>Alcohol overdose*</b>	<b>106</b>	<b>1.7%</b>
<b>Drowning and submersion</b>	<b>35</b>	<b>0.6%</b>
<b>Suffocation</b>	<b>27</b>	<b>0.4%</b>
<b>Fire</b>	<b>11</b>	<b>0.2%</b>
<b>Firearm</b>	<b>10</b>	<b>0.2%</b>
<b>All other accidents</b>	<b>68</b>	<b>1.1%</b>
<b>Mental and behavioral disorders due to alcohol use*</b>	<b>787</b>	<b>12.6%</b>
<b>Diseases of heart</b>	<b>538</b>	<b>8.6%</b>
<b>Malignant neoplasms</b>	<b>320</b>	<b>5.1%</b>
<b>Intentional self-harm (suicide) not by alcohol</b>	<b>250</b>	<b>4.0%</b>
<b>Chronic lower respiratory diseases</b>	<b>189</b>	<b>3.0%</b>
<b>Viral hepatitis</b>	<b>119</b>	<b>1.9%</b>
<b>Cerebrovascular diseases</b>	<b>88</b>	<b>1.4%</b>
<b>Diabetes mellitus</b>	<b>68</b>	<b>1.1%</b>
<b>Alcoholic cardiomyopathy*</b>	<b>57</b>	<b>0.9%</b>
<b>Alcohol-induced acute pancreatitis*</b>	<b>35</b>	<b>0.6%</b>
<b>Septicemia</b>	<b>33</b>	<b>0.5%</b>
<b>Influenza and pneumonia</b>	<b>31</b>	<b>0.5%</b>
<b>Degeneration of nervous system due to alcohol*</b>	<b>26</b>	<b>0.4%</b>
<b>Essential hypertension and hypertensive renal disease</b>	<b>23</b>	<b>0.4%</b>
<b>Peptic ulcer</b>	<b>20</b>	<b>0.3%</b>
<b>Alcohol-induced chronic pancreatitis*</b>	<b>14</b>	<b>0.2%</b>
<b>Pneumonitis due to solids and liquids</b>	<b>14</b>	<b>0.2%</b>
<b>Homicide</b>	<b>9</b>	<b>0.1%</b>
<b>All other causes of death</b>	<b>404</b>	
<b>Total Alcohol-related deaths</b>	<b>6,256</b>	<b>100.0%</b>

\*Cause of death in which the underlying cause of death was an alcohol-induced cause.

From 1999 to 2018, the alcohol-related death rate doubled among Idaho males and tripled among Idaho females. However, every year from 1999 to 2018, the rate for males was twice or triple the rate for females. From 1999 to 2018, there were 4,594 Alcohol-related deaths among males, and 1,662 deaths among females.

**Table 4:** Idaho Resident Alcohol-Related Deaths by Sex, Number of Deaths and Rate per 100,000 People, 1999-2018:

Year	Total		Males		Females	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1999	137	10.7	103	16.1	34	5.3
2000	196	15.1	138	21.3	58	9.0
2001	211	16.0	153	23.1	58	8.8
2002	199	14.8	150	22.3	49	7.3
2003	217	15.9	158	23.1	59	8.7
2004	199	14.3	151	21.6	48	6.9
2005	248	17.4	182	25.4	66	9.3
2006	249	17.0	177	24.0	72	9.9
2007	260	17.3	188	24.9	72	9.7
2008	283	18.6	210	27.4	73	9.6
2009	289	18.7	219	28.2	70	9.1
2010	327	20.9	235	29.9	92	11.8
2011	327	20.6	232	29.2	95	12.0
2012	390	24.4	300	37.6	90	11.3
2013	430	26.7	331	41.0	99	12.3
2014	439	26.9	335	40.9	104	12.7
2015	430	26.0	302	36.4	128	15.5
2016	464	27.6	343	40.7	121	14.4
2017	460	26.8	344	40.0	116	13.5
2018	501	28.6	343	39.0	158	18.1

1999 to 2018:

Number increase	364		240		124	
Percent increase	265.7%	167.3%	233.0%	142.2%	364.7%	241.5%

Rate: Number of deaths per 100,000 males and females.



From 1999 to 2018, the alcohol-related death rate more than doubled among Idaho white residents. The rate for American Indians or Alaskan Native residents did not increase at the same rate as white residents, but the rate for American Indians or Alaskan Native in 2018 (53.5 deaths per 100,000 American Indians or Alaskan Native population) was nearly twice the rate as white Idahoans in 2018 (28.3 deaths per 100,000 white population).

**Table 5:** Idaho Resident Alcohol-Related Deaths by Race and Ethnicity, Number of Deaths and Rate per 100,000 People, 1999-2018:

Year	White		American Indian or Alaskan Native		Non-Hispanic		Hispanic	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1999	129	10.4	7	36.2	131	11.1	6	6.2
2000	176	14.1	19	92.3	188	15.8	8	7.9
2001	195	15.3	15	71.2	204	16.8	7	6.5
2002	187	14.5	11	51.6	189	15.4	10	8.8
2003	199	15.1	13	59.7	204	16.4	13	10.9
2004	183	13.6	9	41.0	188	14.8	11	8.9
2005	231	16.8	12	54.9	233	17.9	15	11.5
2006	231	16.4	10	43.7	237	17.9	12	8.6
2007	236	16.4	15	63.3	242	17.9	18	12.2
2008	265	18.2	13	50.8	274	20.0	9	5.8
2009	270	18.3	16	60.1	278	20.1	11	6.7
2010	309	20.6	14	47.0	311	22.3	15	8.5
2011	304	20.1	18	58.7	305	21.7	19	10.4
2012	364	24.0	21	67.9	362	25.7	28	15.1
2013	400	26.1	21	66.1	405	28.5	25	13.1
2014	413	26.6	17	52.0	414	28.8	24	12.2
2015	398	25.3	20	59.9	398	27.4	32	15.8
2016	431	27.0	19	55.5	445	30.2	18	8.7
2017	435	26.7	12	34.5	435	29.0	25	11.6
2018	470	28.3	19	53.5	475	31.0	26	11.7

1999 to 2018:

Number increase	341		12		344		20	
Percent increase	264.3%	172.1%	171.4%	47.8%	262.6%	179.3%	333.3%	88.7%

Rate: Number of deaths per 100,000 people in the race or ethnicity group.

Numbers and rates by year are not shown for Asian or Pacific Islanders or for Black Idaho residents. From 1999 to 2018, there were a total of 22 deaths among Asian or Pacific Islanders and there were 20 total deaths among Black residents. See table 8 for five-year aggregate number of deaths and rates for all races and Hispanic ethnicity.

**Table 6:** Idaho Resident Alcohol-Related Deaths by Age Among People Aged Under 45, Number of Deaths and Rate per 100,000 People, 1999-2018:

Year	Age <25		Age 25-34		Age 35-44	
	Deaths	Rate	Deaths	Rate	Deaths	Rate
1999	4	1.9	4	2.6	22	11.8
2000	4	2.0	8	4.7	29	15.0
2001	3	1.4	5	2.9	34	17.7
2002	4	1.9	3	1.7	28	14.7
2003	6	2.8	6	3.3	22	11.5
2004	10	4.5	7	3.8	25	13.0
2005	3	1.3	8	4.2	32	16.4
2006	3	1.4	10	4.9	43	22.2
2007	4	1.9	15	7.2	35	18.0
2008	6	2.8	17	8.0	27	14.0
2009	4	1.7	13	6.2	31	16.3
2010	6	2.7	13	6.2	39	20.4
2011	6	2.2	18	8.6	42	21.9
2012	8	3.5	16	7.6	41	21.1
2013	6	2.7	20	9.4	30	15.2
2014	11	4.8	21	9.8	47	23.5
2015	2	0.9	18	8.3	45	22.2
2016	9	3.9	21	9.5	43	20.9
2017	4	1.7	23	10.2	53	24.9
2018	10	4.2	21	9.1	43	19.5

**1999 to 2018:**

Number increase	6		17		21	
Percent increase	150.0%	121.1%	425.0%	250.8%	95.5%	65.5%

Rate: Number of deaths per 100,000 people in the age group. The rate for Age < 25 is based on the number of deaths among Idahoans aged under 25, and the population for people aged 15 to 24.

**Table 7:** Idaho Resident Alcohol-Related Deaths by Age Among People Aged 45 and Older, Number of Deaths and Rate per 100,000 People, 1999-2018:

Year	Age 45-54		Age 55-64		Age 65-74		Age 75+	
	Deaths	Rate	Deaths	Rate	Deaths	Rate	Deaths	Rate
1999	38	23.3	28	25.2	26	35.4	15	21.9
2000	51	30.0	37	34.4	45	59.2	22	31.5
2001	54	30.3	48	42.1	44	57.1	23	32.0
2002	54	29.5	54	44.6	35	44.9	21	28.7
2003	64	34.0	58	45.4	38	47.5	23	30.4
2004	61	31.5	46	34.0	32	38.3	18	23.9
2005	82	40.8	69	47.7	34	39.2	20	25.9
2006	66	32.5	74	48.5	28	31.6	25	31.1
2007	79	38.3	69	42.9	42	45.6	16	19.3
2008	91	43.7	71	42.5	46	47.1	25	29.6
2009	85	41.4	71	41.3	56	54.9	29	34.0
2010	80	38.4	101	56.0	62	56.6	26	30.5
2011	89	43.1	95	50.3	51	44.3	26	29.7
2012	116	57.1	110	57.2	61	49.5	38	42.6
2013	101	50.4	167	85.2	75	57.2	31	33.7
2014	89	44.7	150	75.2	82	59.1	38	40.1
2015	105	52.8	155	76.1	77	52.8	28	28.6
2016	75	37.8	160	76.8	112	72.9	44	43.5
2017	91	45.6	159	75.1	85	52.8	45	43.2
2018	104	52.0	171	79.6	121	71.9	31	28.2

1999 to 2018:

Number increase	66		143		95		16	
Percent increase	173.7%	123.5%	510.7%	215.6%	365.4%	103.3%	106.7%	28.8%

Rate: Number of deaths per 100,000 people in the age group.

**Table 8:** Idaho Resident Alcohol-Related Deaths by Race, Ethnicity, Sex, and Age Group, Number of Deaths and Rate per 100,000 People, Five-Year Aggregate 2014--2018:

<b>Demographic</b>	<b>Deaths</b>	<b>Rate</b>
<b>Total</b>	<b>2,294</b>	<b>27.2</b>
<b>Race</b>		
White	2,147	26.8
American Indian	87	51.0
Asian Pacific Islander	12	7.3
Black	10	9.8
Other or Not stated	38	NA
<b>Ethnicity</b>		
Non-Hispanic	2,167	29.3
Hispanic	125	12.0
Not Stated	2	NA
<b>Sex</b>		
Male	1,667	39.4
Female	627	14.9
<b>Age</b>		
<15	0	NA
15-24	36	3.1
25-34	104	9.4
35-44	231	22.2
45-54	464	46.6
55-64	795	76.6
65-74	477	62.2
75+	186	36.6
Not Stated	1	NA

Rate: Number of deaths per 100,000 people in the race, ethnicity, sex, and age group.

NA: not applicable.

**Table 9:** Idaho Resident Alcohol-Related Deaths by Public Health District of Residence and Year, Number of Deaths and Rate per 100,000 People, 2014–2018 and Total:

Public Health District 1			Public Health District 2			Public Health District 3		
Year	Deaths	Rate	Year	Deaths	Rate	Year	Deaths	Rate
2014	101	45.6	2014	24	22.4	2014	57	21.3
2015	86	38.2	2015	23	21.4	2015	70	25.7
2016	112	48.7	2016	29	26.8	2016	67	24.2
2017	108	46.0	2017	33	30.4	2017	70	24.7
2018	124	51.6	2018	36	32.8	2018	76	26.1
Total	531	46.1	Total	145	26.8	Total	340	24.4

Public Health District 4			Public Health District 5			Public Health District 6		
Year	Deaths	Rate	Year	Deaths	Rate	Year	Deaths	Rate
2014	108	23.0	2014	42	22.0	2014	54	32.0
2015	106	22.2	2015	37	19.2	2015	54	32.0
2016	114	23.4	2016	51	26.3	2016	53	31.1
2017	110	21.9	2017	40	20.3	2017	51	29.6
2018	122	23.6	2018	38	19.1	2018	59	33.7
Total	560	22.8	Total	208	21.4	Total	271	31.7

Public Health District 7			Idaho Total		
Year	Deaths	Rate	Year	Deaths	Rate
2014	53	25.3	2014	439	26.9
2015	54	25.5	2015	430	26.0
2016	38	17.6	2016	464	27.6
2017	48	21.9	2017	460	26.8
2018	46	20.6	2018	501	28.6
Total	239	22.1	Total	2,294	27.2

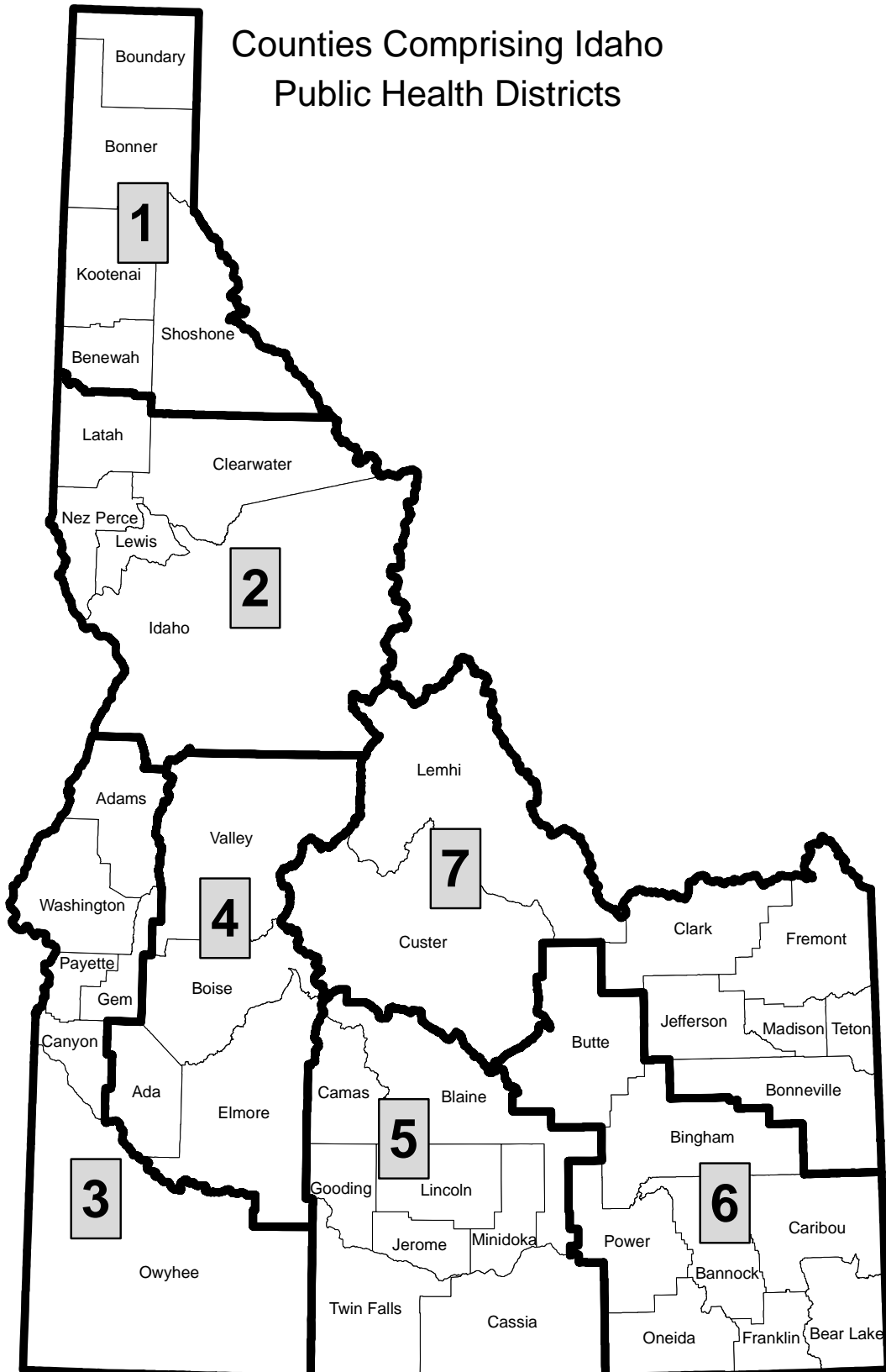
Rate: Number of deaths per 100,000 people residing in the Public Health District or in Idaho.

**Table 10:** Idaho Resident Alcohol-Related Deaths by County of Residence, Number of Deaths and Rate per 100,000 People, Five-Year Aggregate, 2014–2018:

<u>Residence</u>	<u>Deaths</u>	<u>Rate</u>	<u>Residence</u>	<u>Deaths</u>	<u>Rate</u>
Ada	493	22.1	Gooding	17	22.4
Adams	7	35.0	Idaho	31	38.0
Bannock	160	37.7	Jefferson	19	13.6
Bear Lake	12	40.1	Jerome	16	13.8
Benewah	44	96.3	Kootenai	317	41.1
Bingham	60	26.4	Latah	32	16.3
Blaine	35	32.0	Lemhi	25	64.1
Boise	3	8.3	Lewis	7	36.4
Bonner	100	46.7	Lincoln	4	15.1
Bonneville	152	27.0	Madison	7	3.6
Boundary	23	39.8	Minidoka	11	10.7
Butte	5	38.9	Nez Perce	51	25.3
Camas	0	0.0	Oneida	2	9.2
Canyon	227	21.4	Owyhee	19	33.1
Caribou	13	37.6	Payette	46	39.8
Cassia	22	18.6	Power	11	28.7
Clark	0	0.0	Shoshone	47	75.1
Clearwater	24	56.0	Teton	12	21.9
Custer	6	28.9	Twin Falls	103	24.6
Elmore	44	33.3	Valley	20	38.3
Franklin	8	12.0	Washington	19	37.7
Fremont	18	27.7			
Gem	22	25.6	Idaho Total	2,294	27.2

Rate: Number of deaths per 100,000 people residing in the county or in Idaho

# Counties Comprising Idaho Public Health Districts



District 1	District 2	District 3	District 4	District 5	District 6	District 7
Benewah	Clearwater	Adams	Ada	Blaine	Bannock	Bonneville
Bonner	Idaho	Canyon	Boise	Camas	Bear Lake	Clark
Boundary	Latah	Gem	Elmore	Cassia	Bingham	Custer
Kootenai	Lewis	Owyhee	Valley	Gooding	Butte	Fremont
Shoshone	Nez Perce	Payette		Jerome	Caribou	Jefferson
		Washington		Lincoln	Franklin	Lemhi
				Minidoka	Oneida	Madison
				Twin Falls	Power	Teton