

Table 1. Number, crude and age-adjusted rates of drug overdose deaths involving fentanyl, hydrocodone, hydromorphone, oxycodone and oxymorphone, by U.S. Department of Health and Human Services region: United States, Provisional analysis, 2018

Note: The numbers in this table were corrected on May 12, 2022.

		Fentanyl ¹		
	Public Health Region ²	Number	Crude rate	Age-adjusted rate ³
U.S. Total		30,230	9.25	9.59
Region 1	CT, ME, MA, NH, RI, VT	3,415	23.01	24.30
Region 2	NJ, NY, and NYC	4,429	15.58	15.81
Region 3	DE, DC, MD, PA, VA, WV	5,964	19.34	19.88
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	5,684	8.56	9.17
Region 5	IL, IN, MI, MN, OH, WI	7,189	13.69	14.43
Region 6	AR, LA, NM, OK, TX	690	1.63	1.67
Region 7	IA, KS, MO, NE	974	6.90	7.51
Region 8	CO, MT, ND, SD, UT, WY	195	1.61	1.61
Region 9	AZ, CA, HI, NV	1,369	2.68	2.71
Region 10	AK, ID, OR, WA	321	2.26	2.31
		Hydrocodone		
	Public Health Region ²	Number	Crude rate	Age-adjusted rate ³
U.S. Total		2,516	0.77	0.74
Region 1	CT, ME, MA, NH, RI, VT	56	0.38	0.34
Region 2	NJ, NY, and NYC	92	0.32	0.30
Region 3	DE, DC, MD, PA, VA, WV	190	0.62	0.59
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	602	0.91	0.89
Region 5	IL, IN, MI, MN, OH, WI	531	1.01	0.97
Region 6	AR, LA, NM, OK, TX	367	0.87	0.86
Region 7	IA, KS, MO, NE	108	0.77	0.79
Region 8	CO, MT, ND, SD, UT, WY	106	0.87	0.85
Region 9	AZ, CA, HI, NV	356	0.70	0.65
Region 10	AK, ID, OR, WA	108	0.76	0.73
		Hydromorphone		
	Public Health Region ²	Number	Crude rate	Age-adjusted rate ³
U.S. Total		681	0.21	0.20
Region 1	CT, ME, MA, NH, RI, VT	42	0.28	0.25
Region 2	NJ, NY, and NYC	57	0.20	0.19
Region 3	DE, DC, MD, PA, VA, WV	75	0.24	0.24
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	210	0.32	0.31
Region 5	IL, IN, MI, MN, OH, WI	81	0.15	0.15
Region 6	AR, LA, NM, OK, TX	56	0.13	0.13
Region 7	IA, KS, MO, NE	17	*	*
Region 8	CO, MT, ND, SD, UT, WY	38	0.31	0.31
Region 9	AZ, CA, HI, NV	79	0.15	0.14
Region 10	AK, ID, OR, WA	26	0.18	0.17
		Oxycodone		
	Public Health Region ²	Number	Crude rate	Age-adjusted rate ³
U.S. Total		5,070	1.55	1.52
Region 1	CT, ME, MA, NH, RI, VT	284	1.91	1.84
Region 2	NJ, NY, and NYC	543	1.91	1.86
Region 3	DE, DC, MD, PA, VA, WV	616	2.00	1.94
Region 4	AL, FL, GA, KY, MS, NC, SC, TN	1,389	2.09	2.05
Region 5	IL, IN, MI, MN, OH, WI	638	1.22	1.23
Region 6	AR, LA, NM, OK, TX	327	0.77	0.77
Region 7	IA, KS, MO, NE	190	1.35	1.38
Region 8	CO, MT, ND, SD, UT, WY	319	2.63	2.65

Region 9	AZ, CA, HI, NV	575	1.13	1.07
Region 10	AK, ID, OR, WA	189	1.33	1.27

Public Health Region ²	Oxymorphone		
	Number	Crude rate	Age-adjusted rate ³
U.S. Total	686	0.21	0.21
Region 1 CT, ME, MA, NH, RI, VT	31	0.21	0.19
Region 2 NJ, NY, and NYC	60	0.21	0.20
Region 3 DE, DC, MD, PA, VA, WV	111	0.36	0.36
Region 4 AL, FL, GA, KY, MS, NC, SC, TN	250	0.38	0.38
Region 5 IL, IN, MI, MN, OH, WI	64	0.12	0.12
Region 6 AR, LA, NM, OK, TX	43	0.10	0.10
Region 7 IA, KS, MO, NE	14	*	*
Region 8 CO, MT, ND, SD, UT, WY	30	0.25	0.24
Region 9 AZ, CA, HI, NV	69	0.14	0.12
Region 10 AK, ID, OR, WA	14	*	*

*Estimate does not meet NCHS confidentiality standards. Estimates based on counts less than 20 are suppressed in accordance with NCHS standards of reliability as specified in NCHS Data Presentation Standards for Proportions (available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf.)

¹ Includes drug overdose deaths involving fentanyl, fentanyl analogs, and fentanyl metabolites.

² U.S. Department of Health and Human Services (HHS) regions by state of residence: Region 1 (Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont), Region 2 (New Jersey, New York, and New York City), Region 3 (Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, and West Virginia), Region 4 (Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, and Tennessee), Region 5 (Illinois, Indiana, Michigan, Minnesota, Ohio, and Wisconsin), Region 6 (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), Region 7 (Iowa, Kansas, Missouri, and Nebraska), Region 8 (Colorado, Montana, North Dakota, South Dakota, Utah, and Wyoming), Region 9 (Arizona, California, Hawaii, and Nevada), and Region 10 (Alaska, Idaho, Oregon, and Washington).

³ Age-adjusted death rates (deaths per 100,000 standard population) were calculated using the direct method and adjusted to the 2000 standard population.

NOTES: Drug overdose deaths were identified using underlying cause-of-death codes X40–X44, X60–X64, X85, and Y10–Y14. Specific drugs were identified from the death certificate literal text using the Drug Mentioned with Involvement (DMI) methods. Deaths may involve other drugs in addition to the referent drug group. Counts are provisional and subject to change as additional search terms for drugs are identified. Deaths involving more than one referent drug group (e.g., a death involving both heroin and cocaine) were counted in both totals. To avoid counting the same death multiple times, the numbers and percentages for drug-specific deaths should not be summed. Caution should be used when comparing numbers and rates across regions. In 2018, the reporting of at least one specific drug in the literal text varied by region (Region 1, 98.8%; Region 2, 97.7%; Region 3, 88.6%; Region 4, 91.7%; Region 5, 93.5%; Region 6, 84%; Region 7, 89.3%; Region 8, 93.3%; Region 9, 90.5%; Region 10, 95.2%).

SOURCE: NCHS National Vital Statistics System, 2018.

Table 2. Number of drug overdose deaths involving select drugs, by age group and sex: United States, Provisional analysis, 2018

	Total		Female		Male	
	Number	Population	Number	Population	Number	Population
Fentanyl¹						
All Ages	30,230	326,838,199	8,151	165,877,686	22,079	160,960,513
<15 years	24	60,879,327	12	29,778,037	12	31,101,290
15 - 24 years	2,584	42,902,176	786	20,966,953	1,798	21,935,223
25 - 34 years	9,485	45,679,060	2,600	22,481,386	6,885	23,197,674
35 - 44 years	7,838	41,232,094	2,034	20,668,611	5,804	20,563,483
45 - 54 years	5,820	41,571,660	1,582	21,059,449	4,238	20,512,211
55 - 64 years	3,725	42,219,277	1,004	21,843,372	2,721	20,375,905
65+ years	748	52,354,605	133	29,079,878	615	23,274,727
Hydrocodone						
All Ages	2,516	326,838,199	1,230	165,877,686	1,286	160,960,513
<15 years	7	60,879,327	4	29,778,037	3	31,101,290
15 - 24 years	101	42,902,176	27	20,966,953	74	21,935,223
25 - 34 years	301	45,679,060	103	22,481,386	198	23,197,674
35 - 44 years	494	41,232,094	237	20,668,611	257	20,563,483
45 - 54 years	628	41,571,660	344	21,059,449	284	20,512,211
55 - 64 years	672	42,219,277	349	21,843,372	323	20,375,905
65+ years	312	52,354,605	166	29,079,878	146	23,274,727
Hydromorphone						
All Ages	681	326,838,199	329	165,877,686	352	160,960,513
<15 years	-	60,879,327	-	29,778,037	-	31,101,290
15 - 24 years	22	42,902,176	4	20,966,953	18	21,935,223
25 - 34 years	103	45,679,060	45	22,481,386	58	23,197,674
35 - 44 years	141	41,232,094	72	20,668,611	69	20,563,483
45 - 54 years	174	41,571,660	94	21,059,449	80	20,512,211
55 - 64 years	166	42,219,277	82	21,843,372	84	20,375,905
65+ years	75	52,354,605	32	29,079,878	43	23,274,727
Oxycodone						
All Ages	5,070	326,838,199	2,231	165,877,686	2,839	160,960,513
<15 years	9	60,879,327	3	29,778,037	6	31,101,290
15 - 24 years	235	42,902,176	66	20,966,953	169	21,935,223
25 - 34 years	755	45,679,060	249	22,481,386	506	23,197,674
35 - 44 years	1,076	41,232,094	454	20,668,611	622	20,563,483
45 - 54 years	1,330	41,571,660	637	21,059,449	693	20,512,211
55 - 64 years	1,244	42,219,277	603	21,843,372	641	20,375,905
65+ years	420	52,354,605	219	29,079,878	201	23,274,727
Oxymorphone						
All Ages	686	326,838,199	264	165,877,686	422	160,960,513
<15 years	1	60,879,327	-	29,778,037	1	31,101,290
15 - 24 years	40	42,902,176	13	20,966,953	27	21,935,223
25 - 34 years	131	45,679,060	44	22,481,386	87	23,197,674
35 - 44 years	146	41,232,094	51	20,668,611	95	20,563,483

45 - 54 years	167	41,571,660	71	21,059,449	96	20,512,211
55 - 64 years	153	42,219,277	64	21,843,372	89	20,375,905
65+ years	47	52,354,605	21	29,079,878	26	23,274,727

* Estimates based on counts less than 20 are suppressed in accordance with NCHS standards of reliability as specified in NCHS Data Presentation Standards for Proportions (available from: https://www.cdc.gov/nchs/data/series/sr_02/sr02_175.pdf.)

1 Includes drug overdose deaths involving fentanyl, fentanyl analogs, and fentanyl metabolites.

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SOURCE: NCHS National Vital Statistics System, 2018.