

Where opiates killed the most people in 2015

By Christopher Ingraham December 13, 2016

More than 33,000 people died of opioid overdoses in the United States last year. But speaking of an “opiate epidemic” is in some ways a misnomer. The latest data from the Centers for Disease Control and Prevention show that the country is in fact dealing with multiple opioid epidemics right now — each with a distinct geographic footprint.

The geography of opioid deaths

Starting with the big picture, here's a map of total opioid death rates by state. County-level data would be preferable, but the CDC suppresses data for many small counties to protect the privacy of the people who live there. The data in this map encompasses everything from heroin to hydrocodone to more powerful synthetic drugs like fentanyl.

Nationally, there are about 10.4 deaths by opioid overdose for every 100,000 people. But as you can see, these deaths aren't evenly distributed across the country. New England and the Ohio/Kentucky/West Virginia region stand out as two obvious hot spots. Conversely, rates are low in Texas, California, the northern Plains states and Hawaii.

The geography of heroin deaths

Here's what the distribution of heroin deaths looks like.

Even at the state level the CDC has to suppress some of the data for privacy concerns, mostly in low population states where there are few overall deaths. This map generally follows the contours of the previous one, with a few notable differences: Kentucky stands apart from Ohio and West Virginia for having fewer heroin deaths than its neighbors.

Up in New England, heroin is a much bigger issue in the southern states in that region (Massachusetts and Connecticut in particular) than in places like Maine, Vermont or New Hampshire.

The geography of synthetic opioid deaths

Here's a look at what the CDC classifies as “synthetic opioid” deaths. These are primarily due to substances like fentanyl, the powerful painkiller that's been making headlines lately. But there may be some fatalities from other synthetic opiate products, like tramadol, in here as well. Note that overdose deaths from methadone, a synthetic used to help people quit addictions to other opiate drugs, aren't included here.

The pattern here is markedly different than it is on the heroin map. Synthetic opioid deaths — again, we're primarily talking fentanyl — are almost exclusively an East Coast phenomenon. Nationally, the death rate from synthetic opioids is 3.1 per 100,000. But in Rhode Island, it's 13.2; in Massachusetts, 14.4; and in New Hampshire, which has the highest synthetic opioid death rate in the country, 24.1 out of every 100,000 people died from synthetic opiates in 2015.

Ohio and West Virginia stand out on this map, too.

The geography of 'classic' opioid deaths

Finally, here's a look at deaths from what we might call the “classic” opioid painkillers — substances like hydrocodone and oxycodone. The CDC refers to these as “natural” or “semi-synthetic” opioids, essentially a technical term referring to how similar they are to the chemicals found in natural opium from poppy plants.

These deaths are highly concentrated in two places: West Virginia in the East, and Utah in the West. It's the only category for which certain states, like Massachusetts and Ohio, aren't near the top of the national rankings.

One important thing to keep in mind: In the CDC's data set, these categories aren't mutually exclusive. If a person dies with, say, both fentanyl and heroin in their system, that fatality will show up in the counts for both the heroin and synthetic opiate categories.

Many opioid overdose deaths do involve multiple substances, either combinations of opioids, or opioids in conjunction with things like alcohol, cocaine or other drugs.

The important takeaway here is that there's not just one opiate epidemic but several. For policymakers, this may mean that solving the problem will similarly require a more nuanced basket of solutions than a blanket “war on drugs.” A strategy to reduce pill overdoses in Utah may not have any effect on fentanyl deaths in Massachusetts.

And if they aren't careful, certain interventions may actually make the problems worse. One unintended consequence of years of crackdowns on prescription painkillers was a resurgence in the use of heroin, for example.

A table containing the raw data from CDC's WONDER database is below.

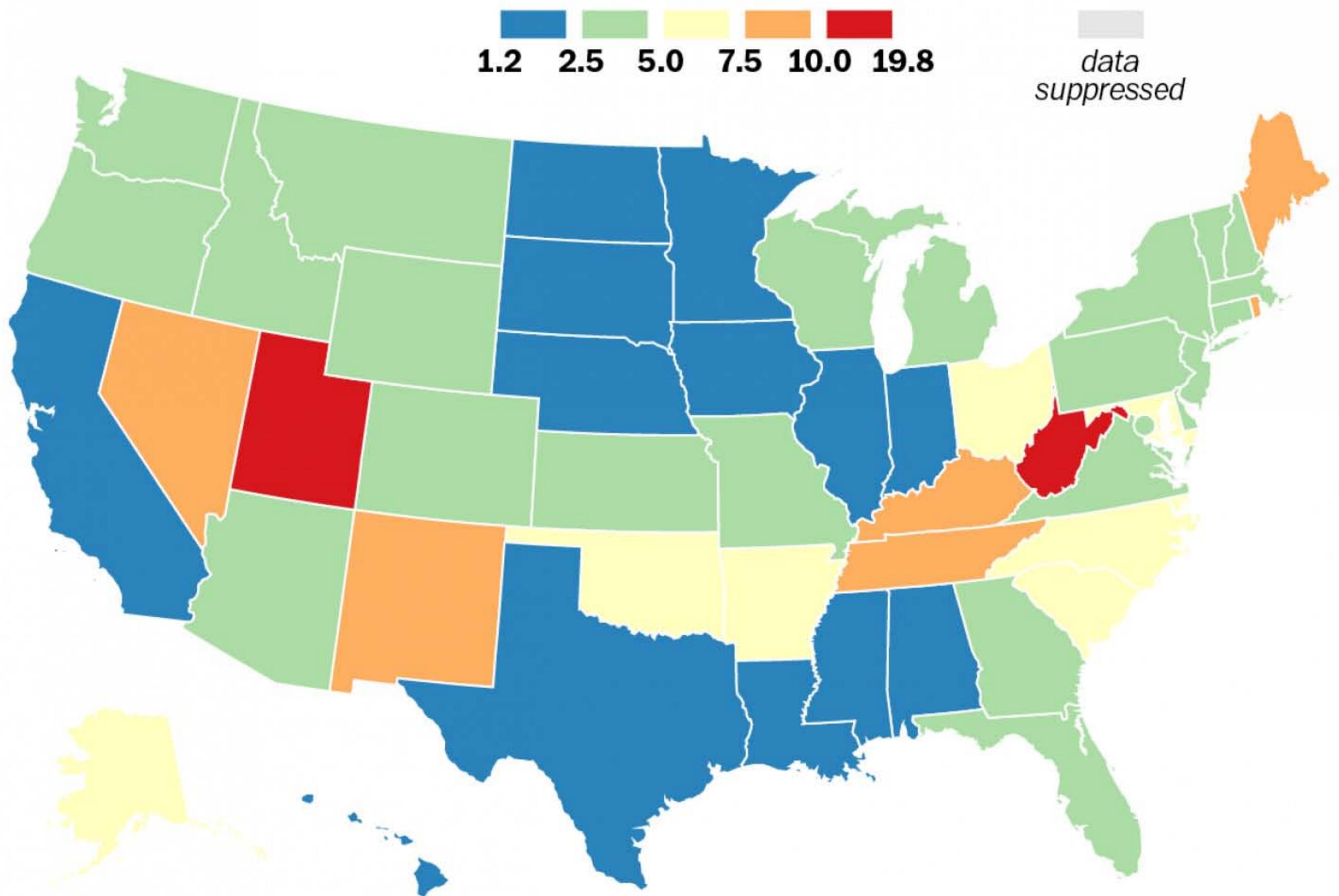
STATE	POPULATION	ALL OPIATE DEATHS	HEROIN DEATHS	SYNTHETIC OPIATE DEATHS	NATURAL OPIATE DEATHS
Alabama	4,858,979	282	111	70	87
Alaska	738,432	86	37	14	51
Arizona	6,828,065	671	247	72	298
Arkansas	2,978,204	203	Suppressed	44	144
California	39,144,818	2018	593	229	1019
Colorado	5,456,574	495	159	64	259
Connecticut	3,590,886	685	390	211	183
Delaware	945,934	133	64	38	36
District of Columbia	672,228	98	67	26	21
Florida	20,271,272	1838	567	610	789
Georgia	10,214,860	858	222	284	435
Hawaii	1,431,603	62	15	13	37
Idaho	1,654,930	90	16	16	51
Illinois	12,859,995	1381	844	278	271
Indiana	6,619,680	536	240	120	147
Iowa	3,123,899	170	45	44	75
Kansas	2,911,641	150	21	36	74
Kentucky	4,425,092	885	310	323	382
Louisiana	4,670,724	287	126	38	108
Maine	1,329,328	238	52	116	102
Maryland	6,006,401	1087	405	357	398
Massachusetts	6,794,422	1550	634	949	225
Michigan	9,922,576	1309	646	457	380
Minnesota	5,489,594	338	115	55	125
Mississippi	2,992,333	150	38	35	73
Missouri	6,083,672	692	303	183	237
Montana	1,032,949	48	Suppressed	Suppressed	26
Nebraska	1,896,190	55	Suppressed	13	30

STATE	POPULATION	ALL OPIATE DEATHS	HEROIN DEATHS	SYNTHETIC OPIATE DEATHS	NATURAL OPIATE DEATHS
Nevada	2,890,845	419	82	32	259
New Hampshire	1,330,608	380	78	285	63
New Jersey	8,958,013	862	508	243	237
New Mexico	2,085,109	351	156	42	160
New York	19,795,791	2166	1058	668	705
North Carolina	10,042,802	1171	393	300	554
North Dakota	756,927	34	Suppressed	Suppressed	15
Ohio	11,613,423	2698	1444	1234	690
Oklahoma	3,911,338	427	36	93	277
Oregon	4,028,977	331	102	34	150
Pennsylvania	12,802,503	1362	663	429	460
Rhode Island	1,056,298	254	45	137	95
South Carolina	4,896,146	554	100	161	322
South Dakota	858,469	27	Suppressed	Suppressed	10
Tennessee	6,600,299	1038	205	251	643
Texas	27,469,114	1287	523	186	473
Utah	2,995,919	448	127	62	357
Vermont	626,042	79	33	33	25
Virginia	8,382,993	820	353	270	276
Washington	7,170,351	692	303	65	261
West Virginia	1,844,128	629	194	217	356
Wisconsin	5,771,337	622	287	112	249
Wyoming	586,107	46	Suppressed	Suppressed	28

Christopher Ingraham writes about politics, drug policy and all things data. He previously worked at the Brookings Institution and the Pew Research Center. [Follow @cingraham](#)

Natural opioid deaths in 2015

Age-adjusted natural opioid overdose death rate (per 100,000)



Heroin deaths in 2015

Age-adjusted heroin overdose death rate (per 100,000)

