

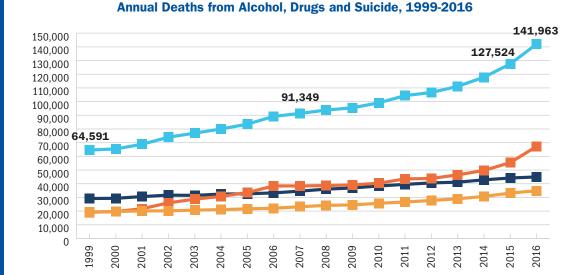


Pain in the Nation Update:

DEATHS FROM ALCOHOL, DRUGS AND SUICIDE REACH THE HIGHEST LEVEL EVER RECORDED

Rates for People of Color Rise Dramatically Although Still Below the Rates of White Americans

According to the most recent data, in 2016, 142,000 Americans, the highest number ever recorded, died from alcohol- and drug-induced fatalities and suicide – an average of one every four minutes.¹ These 142,000 'despair deaths' in 2016 add to the more than one million Americans who died from drugs, alcohol or suicide in the previous decade (2006 to 2015).² For context, deaths from these three causes are nearly identical in number as those who died in 2016 from stroke, the fifth leading cause of death in United States, and are greater than the number of Americans who died in all U.S. wars since 1950 combined.^{3,4}



Suicide Deaths

Alcohol Deaths

Drug Deaths

Source: CDC WONDER

Total Deaths

For the second year in a row, alcohol, drug and suicide deaths also increased at a record pace, with an 11 percent increase — or more than 14,000 additional deaths — between 2015 and 2016 and a seven percent increase from 2014 to 2015. In comparison, the death rate of heart disease and cancer, the leading causes of death in the United States, declined between 2015 and 2016, as they have over the previous decade as well.⁵

Other main findings:

- Racial Disparities: While drug overdoses were still highest among Whites in 2016, there were disproportionally large increases in drug deaths among racial/ethnic minority groups, particularly among Black Americans. In the previous decade, Blacks had relatively low drug overdose rates averaging 35 percent lower than Whites between 2006 and 2015. However, between 2015 and 2016, Blacks experienced an alarming increase of 39 percent in drug-related deaths.⁶
- Synthetic Opioids: Deaths from synthetic opioids including fentanyl and carfentanil doubled from 2015 to 2016 from 9,600 to 19,400 and was the driving force for the extraordinary increase in drug deaths. (Alcohol, other types of drug and suicide deaths also increased but by a much lower amount.) The lethality of these drugs puts users at extremely high risk compared with heroin, fentanyl is 50 times more potent and carfentanil is 5,000 times more potent than heroin.
- Regional Disparities: The Northeast and Midwest had the largest increase in alcohol, drug and suicide deaths between 2015 and 2016. Six states and Washington, D.C. saw alcohol, drug and suicide death rates increase by more than 20 percent: Delaware (25 percent); Illinois (21 percent); Maryland (40

percent), New Jersey (22 percent), Ohio (21 percent), Pennsylvania (25 percent) and Washington, D.C. (58 percent).

Trust for America's Health (TFAH) and Well Being Trust (WBT) recently issued projections in the November 2017 Pain in the Nation: The Drug, Alcohol and Suicide Epidemics and the Need for a National Resilience Strategy report, which found that if drug, alcohol and suicide deaths had continued on the trajectory of the past decade, they could reach 1.6 million over the next decade.

However, the substantial rise in deaths in 2016 puts the country past the "worst case scenario" projection trajectory. If deaths continue to grow at the similar rates as from 2015 to 2016, deaths could top more than 2 million in the coming decade (2016-2025). This would mean more than 287,700 individuals could die from these three causes in the year 2025, double the current number who died in 2016.8

This brief details the recent increases and still-developing trends in the synthetic opioid crisis and the slower, decade-long growth in alcohol, drug and suicide deaths across demographic groups and geography based on new data on 2016 deaths from the Centers for Disease Control and Prevention (CDC). It also highlights the need for additional attention and funding on these issues as well as key policy recommendations and the need to build a National Resilience Strategy.



WHAT ARE OPIOIDS AND SYNTHETIC OPIOIDS?

Opioids are a class of drug that interact with opioid receptors on nerve cells, reducing pain and producing euphoria. Regular use can lead to dependence and misuse can lead to overdose. When the opioid epidemic began a couple of decades ago, it was driven primarily by common prescription opioid drugs. In 2009, it moved towards more potent, illicit opioids: first, heroin, and then in 2013, towards synthetic opioids.

Here is a breakdown of the most common kinds of opioids:

- Heroin is an illicit opioid that is twice as potent as morphine.
- Synthetic opioids, including fentanyl and carfentanil, are extremely strong opioids. Fentanyl is a medication that is 100 times as potent as morphine and most frequently used in anesthesia. Carfentanil, 10,000 times as potent as morphine, is a large animal tranquilizer (e.g. elephants). Fentanyl and carfentanil, and their analogs, are also produced illicitly for recreational purpose and are extremely dangerous, proving deadly in miniscule amounts. 10
- Methadone is a prescription opioid medication used to treat individuals who are addicted to opioids; it reduces withdrawal symptoms and cravings, as well as blocks highs from other opioids.

Synthetic Opioid Trends: Death Rates Climb Sharply Among Usual and New Groups

Deaths from synthetic opioids doubled between 2015 and 2016 and surpassed, for the first time, the numbers of deaths related to heroin and the most common prescription opioids (in 2016, 19,400 died from synthetic opioids, 15,500 died from heroin and 14,500 died from natural/semisynthetic opioids like morphine and codeine). Additionally:

- Death rates from synthetic opioids have increased dramatically in the past 15 years:
- They doubled between 2015 and 2016 (3.0 to 6.0 deaths per 100,000);
- Increased 718 percent over the past decade; and
- Have grown by more than 2,000 percent since 1999.

 Opioid deaths that did not involve synthetic opioids dropped 3 percent from 23,500 in 2015 to 22,800 in 2016.

There were large increases in synthetic opioid deaths across the spectrum of Americans — including all sexes, age groups, race/ethnicities, geographic regions and both urban and rural communities. The groups with the highest rates of synthetic opioid overdoses in 2015 saw large increase in 2016 as well, with deaths among:

- Whites increasing 94 percent to 6.6 deaths per 100,000;
- Men increasing 110 percent to 8.7 deaths per 100,000;

- Adults ages 25-44 increasing 110 percent to 12.8 deaths per 100,000;
- Northeasterners increasing 111 percent to 11.5 deaths per 100,000; and
- Midwesterners increasing 111 percent to 7.9 deaths per 100,000.

Unlike prior years, other demographic groups, who previously had a relatively low impact from the opioid epidemic, began to be affected at higher rates.

Racial/ethnic minority groups all had higher than average proportional increases in opioid and synthetic opioids deaths between 2015 and 2016, with Blacks seeing particularly large increases in the number of people.

DRUG, OPIOID AND SYNTHETIC OPIOID DEATHS PER 100,000 IN 2015, 2016 AND PERCENT CHANGE 2015 -2016 (CDC WONDER)

	All Drug Deaths				A	II Opioid Death	s		Synthetic Opioid Deaths				
	2015	2016		Change	2015	2016	Change		2015	2016	Change		
Overall	17.2	20.8		21%	10.3	13.1		27%	3.0	6.0		102%	
Female	12.6	14.2		13%	7.0	8.4		20%	1.9	3.4		84%	
Male	22.0	27.6		26%	13.7	17.9		31%	4.1	8.7		110%	
Black	12.6	17.6		39%	6.3	10.0		58%	2.0	5.5		169%	
Asian	3.1	3.6		16%	1.2	1.7		41%	0.3	0.7		140%	
White	19.2	22.9		19%	11.8	14.6		24%	3.4	6.6		94%	
Latino	7.8	9.6		24%	4.4	6.0		35%	0.9	2.6		183%	
0-17	0.5	0.5		6%	0.3	0.3		15%	<0.1	0.1		N/A	
18-34	22.0	28.3		29%	15.3	20.4		33%	5.1	10.6		106%	
35-54	30.8	36.6		19%	18.0	22.6		26%	5.1	10.4		105%	
55-74	17.2	20.2		17%	8.8	10.7		21%	2.0	3.7		87%	
75+	4.7	4.5		-5%	1.1	1.1		1%	0.2	0.2		31%	
Northeast	20.8	27.6		32%	13.5	18.9		40%	5.5	11.5		111%	
Midwest	18.4	22.7		23%	11.8	15.8		34%	3.8	7.9		111%	
South	16.1	19.7		23%	9.7	12.2		26%	2.7	5.4		98%	
West	15.3	15.9		4%	7.6	7.8		2%	0.9	1.2		43%	
Metro	17.3	21.2		22%	10.4	13.5		29%	3.1	6.3		107%	
Non-Metro	17.0	18.7		10%	9.5	10.5		11%	2.6	4.1		60%	

Among Black Americans:

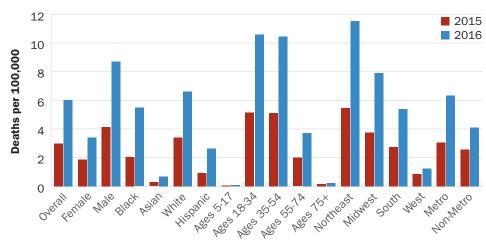
- Total drug-related deaths increased 39 percent from 12.6 to 17.6 per 100,000 between 2015 and 2016.
- Opioid overdose deaths increased 58 percent — from 6.3 to 10.0 per 100,000 between 2015 and 2016.
- Synthetic opioid deaths increased 169 percent from 2.0 to 5.5 per 100,000 between 2015 and 2016. Just a few years prior, in 2012, the synthetic opioid death rate for Blacks was 0.3 deaths per 100,000.
- Heroin deaths increased 45 percent from 3.0 to 4.4 per 100,000 between 2015 and 2016.

While Blacks still died from all drugs (as well as specifically opioids and synthetic opioids) less often than the overall population in 2016 (17.6 vs. 20.8 deaths per 100,000), this may not be true for long if the recent trends hold.

Latinos and Asian Americans also historically have had relatively low rates of opioid and synthethic opioid drug overdoses and saw disproportionately large increases between 2015 and 2016:

- Latinos saw opioid death rates increase 35 percent and synthetic opioids death rates increase 183 percent between 2015 and 2016.
- Asians saw opioid deaths rates increase 41 percent and synthetic opioids death rates increase 140 percent between 2015 and 2016.

Synthetic Opioid Deaths in the United States, 2015 and 2016



Source: CDC WONDER

Population/Group

U.S. LIFE EXPECTANCY FALLS AGAIN IN 2016

Life expectancy in the United States decreased in 2015 for the first time in decades, and then again in 2016 — and the three public health crises have been major contributing factors to this shift. Death rates from unintentional injuries (which includes unintentional overdoses and poisonings) and suicide increased, while other leading causes

of preventable deaths — like heart disease and cancer — decreased. This shift fell mostly on young Americans, who have been most affected by the opioid crisis and saw increasing death rates between 2015 and 2016, while older age groups continued to have had declining death rates.¹²

2016 Drug, Alcohol and Suicide Deaths: Steady Increases Continue To Climb

There were 43.9 alcohol, drug and suicide deaths per 100,000 in the United States in 2016, an 11 percent increase from the 39.7 deaths per 100,000 in 2015. In addition to the opioid epidemic, deaths from alcohol, other types of drug and suicide have continued to climb steadily.

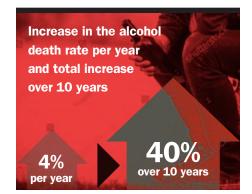
Of note, between 2015 and 2016, Blacks, young adults and those living in the Northeast and Midwest had particularly large increases. Separate trends in alcohol, drug and suicide are below followed by a state-by-state analysis.

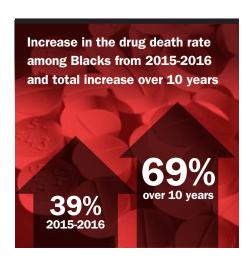
Trends in alcohol deaths

- In 2016, 34,900 Americans died from alcohol-related causes.¹³
- Over the past decade (2007-2016), the alcohol death rate has trended up, increasing an average of 4 percent annually and 40 percent total over the past decade.
- The rate that Americans died from alcohol increased by 5 percent between 2015 and 2016, from 10.3 to 10.8 deaths per 100,000.
- Alcohol death rates in 2016 continued to be highest among: men (15.9 per 100,000); Whites (11.9 per 100,000); adults ages 45-64 (25.5 per 100,000); and Westerners (14.9 per 100,000).
- Groups with the largest proportional increases between 2015 and 2016 were: young adults 18-34 (11 percent increase) and those living in the Midwest (10 percent) and non-metro areas (10 percent).

Trends in drug deaths

- In 2016, 67,300 Americans died from drug-related causes. For context, this is more Americans than died in the entirety of the Vietnam War.¹⁴
- The rate that Americans died from drugs increased by 21 percent between 2015 and 2016, from 17.2 to 20.8 deaths per 100,000.
- Over the past decade (2007-2016), the drug death rate has risen substantially, increasing an average of 5 percent annually and 63 percent total over the past decade. The increases have been much larger since 2012, with average annual increases of 11 percent since then.
- Drug death rates in 2016 continued to be highest among: men (27.6 per 100,000); Whites (22.9 per 100,000); adults 25-54 years old (36.3 per 100,000); and Northeasterners (27.6 per 100,000).
- The drug death rate among Blacks jumped 39 percent between 2015 and 2016 from 12.6 to 17.6 deaths per 100,000. Over the past decade (2007-2016), the death rate increased by a total 69 percent, with death rates actually declining annually between 2007 and 2010 before increasing 10 percent or more each year since 2013.
- Latinos (24 percent increase), 18-34 year olds (29 percent) and those living in the Northeast (32 percent) and Metro areas (22 percent) also had relatively large increases in drug death rates between 2015 and 2016.



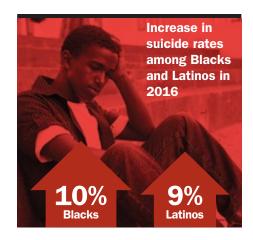


Trends in suicide deaths

- In 2016, nearly 45,000 Americans died from suicide. For context, this is more than died in car crashes in 2016. 15
- The rate of suicide deaths increased between 2015 and 2016, from 13.7 to 13.9 deaths per 100,000.
- Over the past decade (2007-2016), the suicide rate has slowly trended up, increasing an average of 2 percent annually and 21 percent total over the past decade.
- Suicide rates continued to be highest among: men (21.8 per 100,000); Whites (15.9 per 100,000); and those aged 45-65 and above 75 (19.2 and 18.4 per 100,000 respectively).

Non-Metro

- Girls ages 10 to 14 have had particularly large increases in suicide over the decade (231 percent increase) and continued to go up in 2016 (by 8 percent). Their suicide rate remains relatively low compared with the overall population.
- Suicide rates among Blacks and Latinos in 2016 escalated more than other demographic groups (10 and 9 percent increases, respectively).
 Suicide rates among those 45 years and older actually declined by 1 percent (while suicide among those under 45, increased by 4 percent).



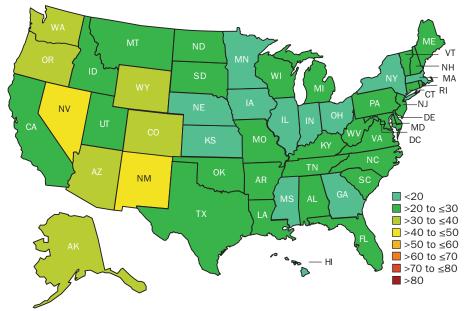
ALCOHOL, DRUG AND SUICIDE DEATHS PER 100,000 IN 2015, 2016 AND PERCENT CHANGE 2015 -2016 (CDC WONDER)											
		Alcohol Deaths			Drug Deaths		Suicide Deaths				
	2015	2016	Change	2015	2016	Change	2015	2016	Change		
Overall	10.3	10.8	5%	17.2	20.8	21%	13.7	13.9	1%		
Female	5.6	5.9	5%	12.6	14.2	13%	6.2	6.2	0%		
Male	15.2	15.9	5%	22.0	27.6	26%	21.5	21.8	2%		
Black	6.5	6.7	3%	12.6	17.6	39%	5.6	6.1	10%		
Asian	2.0	2.1	5%	3.1	3.6	16%	6.5	6.8	5%		
White	11.4	11.9	5%	19.2	22.9	19%	15.8	15.9	1%		
Latino	7.9	8.2	4%	7.8	9.6	24%	5.8	6.4	9%		
0-17	<0.1	<0.1	N/A	0.5	0.5	6%	1.9	2.1	10%		
18-34	2.1	2.3	11%	22.0	28.3	29%	15.2	15.9	5%		
35-54	15.4	15.5	1%	30.8	36.6	19%	18.7	18.6	-1%		
55-74	24.6	25.9	5%	17.2	20.2	17%	17.4	17.4	-1%		
75+	9.5	10.1	6%	4.7	4.5	-5%	18.4	18.4	0%		
Northeast	7.9	8.4	6%	20.8	27.6	32%	10.8	10.8	1%		
Midwest	9.5	10.5	10%	18.4	22.7	23%	13.9	14.4	3%		
South	8.9	9.5	7%	16.1	19.7	23%	14.3	14.4	0%		
West	15.1	14.9	-2%	15.3	15.9	4%	14.9	15.0	1%		
Metro	10.1	10.4	4%	17.3	21.2	22%	13.0	13.2	1%		

State Analysis

The growth in alcohol, drug and suicide deaths is geographically widespread
— although rates and trends vary substantially across regions and urban/rural divides. See chart on page 10 for alcohol, drug and suicide deaths.

- Alcohol, drug and suicide deaths: 44 states plus Washington, D.C. saw increasing rates of alcohol, drug and suicide deaths from 2015 to 2016, five states saw declines (Oregon, Mississippi, Washington, Montana and Wyoming), and one state stayed the same (New Mexico). Delaware (25 percent increase), Maryland (40 percent), Pennsylvania (25 percent increase) and Washington, D.C. (58 percent) all saw increases of 25 percent or more.
 - States with the highest alcohol, drug and suicide death rates in 2016 were: West Virginia (80.3 per 100,000), New Mexico (76.8 per 100,000) and Alaska (67.1 per 100,000).
 - States with the lowest alcohol, drug and suicide death rates in 2016 were: Texas (30.0 per 100,000), Mississippi (30.5 per 100,000) and Nebraska (31.0 per 100,000).
- Alcohol deaths: 41 states had increasing alcohol death rates and nine states plus Washington, D.C. had declining alcohol death rates between 2015 and 2016. Nine states had increases of 15 percent or more (Alabama, Arkansas, Delaware, Illinois, Maryland, North Dakota, Tennessee, West Virginia and Wisconsin.)

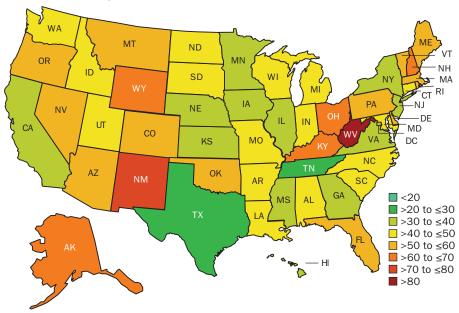
1999 Alcohol, Drug and Suicide Deaths Per 100,000



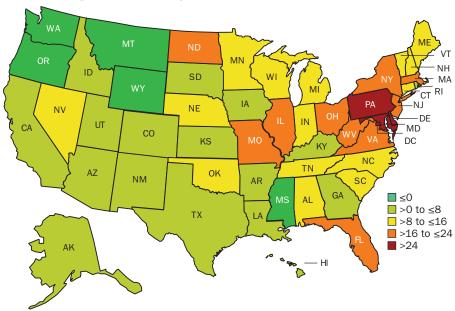
- States with the highest alcohol death rates were: New Mexico (32.1 per 100,000), Alaska (24.7 per 100,000) and Wyoming (23.7 per 100,000).
- States with the lowest alcohol death rates were: Maryland (5.9 per 100,000), Mississippi (6.0 per 100,000) and New Jersey (6.5 per 100,000).
- Drug deaths: 46 states plus Washington, D.C. had growing rates of drug deaths between 2015 and 2016, three states declined (Arkansas, Kansas and Montana), and one state stayed the same (Washington). There were 22 states and Washington, D.C. with increases of more than 15 percent.
 - States with the highest drug death rates were: West Virginia (49.8 per 100,000), District of Columbia (40.5 per 100,000) and Ohio (38.5 per 100,000).

- States with the lowest drug death rates were: Nebraska (7.7 per 100,000), South Dakota (8.7 per 100,000) and Texas (10.6 per 100,000).
- Suicide deaths: 26 states plus Washington, D.C. had increasing suicide rates, 23 states had declining suicide rates and one state stayed the same (Oregon) between 2015 and 2016. Washington, D.C. was the only locale studied that saw an increase in suicide of more than 15 percent.
 - States with the highest suicide death rates were: Alaska (26.0 per 100,000), Montana (25.6 per 100,000) and Wyoming (24.6 per 100,000.)
 - States with the lowest suicide death rates were: District of Columbia (5.9 per 100,000), New Jersey (7.7 per 100,000) and New York (8.5 per 100,000).

2016 Alcohol, Drug and Suicide Deaths Per 100,000



Percent Change in Alcohol, Drug and Suicide Death Rates, 2015-2016



DRUG, ALCOHOL AND SUICIDE DEATH RATES PER 100,000 IN 1999 AND 2015 AND 2025 PROJECTIONS (CDC WONDER)													
	Alcohol Deaths		Drug De		eaths			Suicide I	Deaths	Alcohol, Drug & S		Suicide Deaths	
	2015	2016	Change	2015	2016	Cha	ange	2015	2016	Change	2015	2016	Change
Alabama	6.5	8.1	25%	16.7	17.6		5%	15.4	16.2	5%	37.7	40.9	9%
Alaska	21.8	24.7	13%	17.2	18.6		8%	27.2	26.0	-4%	64.9	67.1	3%
Arizona	18.7	19.1	2%	19.8	21.6		9%	18.7	18.3	-2%	54.6	57.1	5%
Arkansas	8.1	9.6	18%	14.3	14.2		-1%	19.4	18.6	-4%	39.6	40.4	2%
California	13.2	12.9	-2%	12.8	13.0		1%	10.6	10.9	3%	35.2	35.4	0%
Colorado	15.7	16.6	5%	16.4	17.6		7%	20.0	21.1	5%	49.6	52.7	6%
Connecticut	9.5	9.4	-1%	23.0	27.9		21%	10.7	11.1	4%	41.4	46.2	12%
Delaware	8.5	10.9	29%	22.0	30.3		38%	12.9	12.5	-3%	42.1	52.5	25%
DC	11.9	11.7	-1%	19.3	40.5		110%	5.1	5.9	16%	36.0	57.0	58%
Florida	12.3	12.9	5%	16.7	24.1		45%	15.8	15.2	-4%	42.5	50.2	18%
Georgia	7.1	7.7	8%	13.4	14.2		6%	12.9	13.7	6%	32.3	34.4	7%
Hawaii	6.6	6.8	2%	12.2	14.5		19%	14.0	12.2	-13%	31.6	32.4	3%
Idaho	14.5	13.1	-9%	13.5	15.4		14%	21.7	20.9	-4%	47.0	47.2	1%
Illinois	7.4	8.7	18%	14.6	19.2		32%	10.6	11.1	4%	31.1	37.6	21%
Indiana	10.4	10.7	2%	19.8	23.7		20%	14.5	15.6	7%	43.4	48.6	12%
Iowa	11.0	12.1	10%	10.6	10.8		1%	13.9	14.4	4%	33.8	35.8	6%
Kansas	9.5	9.9	4%	12.0	11.5		-4%	16.4	17.7	8%	36.0	36.8	2%
Kentucky	10.5	11.3	7%	30.1	34.4		14%	17.5	17.0	-3%	57.0	61.4	8%
Louisiana	8.3	6.9	-16%	19.3	22.1		15%	15.5	14.5	-6%	41.9	42.5	2%
Maine	14.6	14.4	-1%	20.9	27.7		33%	17.7	17.0	-4%	51.0	56.2	10%
Maryland	5.0	5.9	17%	22.0	34.7		58%	9.2	9.7	6%	34.9	49.1	40%
Massachusetts	9.3	10.1	9%	27.2	34.9		28%	9.4	9.3	-2%	44.6	52.9	19%
Michigan	9.9	10.4	4%	23.3	27.2		17%	14.2	13.7	-3%	45.7	49.6	9%
Minnesota	10.9	12.1	11%	11.9	13.6		14%	13.3	13.5	1%	34.4	37.7	10%
Mississippi	5.8	6.0	2%	12.3	12.5		1%	14.4	12.8	-11%	31.5	30.5	-3%
Missouri	8.4	8.8	5%	18.0	23.3		29%	17.3	18.6	8%	41.8	48.6	16%
Montana	18.8	17.6	-6%	14.7	13.0		-11%	26.3	25.6	-3%	57.7	54.7	-5%
Nebraska	10.5	11.5	10%	7.3	7.7		4%	11.8	12.9	10%	28.6	31.0	9%
Nevada	15.0	16.0	7%	21.8	23.1		6%	19.3	22.1	15%	53.0	57.3	8%
New Hampshire	13.0	13.2	1%	32.5	37.1		14%	17.1	18.3	7%	59.6	65.9	11%
New Jersey	5.9	6.5	11%	16.8	23.8		42%	8.8	7.7	-13%	30.4	37.1	22%
New Mexico	31.5	32.1	2%	24.7	25.2		2%	24.0	22.6	-6%	76.8	76.8	0%
New York	7.5	7.9	6%	15.2	19.7		30%	8.3	8.5	2%	29.8	35.0	18%
North Carolina	9.1	9.5	4%	16.3	20.1	_	23%	14.0	13.5	-3%	37.5	41.2	10%
North Dakota	12.7	14.9	18%	8.6	11.3		32%	16.4	18.5	13%	36.6	43.3	18%
Ohio	8.8	9.9	12%	29.4	38.5		31%	14.2	14.7	3%	50.9	61.5	21%
	13.6	15.2	12%	19.2	21.4			20.2		4%	51.2	56.2	10%
Oklahoma							12%		21.0				
Oregon	22.2	20.3	-9%	15.1	15.9		5%	18.9	18.9	0%	53.9	53.1	-1%
Pennsylvania	6.9	7.3	7%	26.4	37.2		41%	14.8	15.4	4%	46.2	57.9	25%
Rhode Island	13.8	14.0	1%	30.1	31.2		4%	12.0	11.9	-1%	53.8	55.7	4%
South Carolina	10.1	11.5	14%	16.2	18.7		15%	15.2	16.4	8%	40.0	45.1	13%
South Dakota	17.7	18.4	4%	8.4	8.7		3%	20.2	18.8	-7%	44.0	44.5	1%
Tennessee	9.7	11.1	15%	23.4	26.2		12%	16.2	16.7	3%	47.4	52.1	10%
Texas	7.5	7.9	5%	9.9	10.6		7%	12.4	12.5	1%	28.9	30.0	4%
Utah	8.9	9.1	3%	22.3	22.5		1%	21.0	20.3	-3%	48.6	49.0	1%
Vermont	15.3	15.7	2%	17.7	21.0		18%	16.5	18.9	15%	47.4	53.2	12%
Virginia	7.8	8.0	2%	12.8	17.2		34%	13.3	13.9	4%	32.4	37.7	16%
Washington	15.3	14.0	-9%	16.6	16.6		0%	15.9	15.7	-1%	45.5	44.1	-3%
West Virginia	10.5	12.7	21%	40.7	49.8		22%	18.4	19.8	7%	67.6	80.3	19%
Wisconsin	11.1	12.9	16%	15.5	19.1		23%	15.2	15.0	-1%	39.7	45.3	14%
Wyoming	25.9	23.7	-8%	16.9	17.6		4%	26.8	24.6	-8%	67.2	63.5	-5%

Conclusion and Recommendations

TFAH's 2017 *Pain in the Nation* report called for the creation of a National Resilience Strategy that takes a comprehensive approach by focusing on prevention, early identification of issues and effective treatment. These new data reinforce the need for additional focus and funding at the national, state and local levels to address the opioid epidemic and the underlying, long-term increases in alcohol, other drug and suicide deaths.

For every one of these deaths, many more Americans are affected, directly or through family and friends, by substance misuse, addiction, mental illness and other crises. These new data also demand policymakers rethink what communities are affected by the opioid crisis and ensure funding and policies are directed to all the people and places in need.

These are complicated and far-reaching problems that require a wide range of policies, practices and programs in response. The 2017 report highlighted more than 60 research-based recommendations, including:

- Improve Pain Management and
 Treatment by helping people heal
 physically, mentally and emotionally.
 Approaches must acknowledge that
 there are different types of pain and
 experts from mental health, medical
 care and other disciplines must
 develop team-based solutions that
 focus on proactively addressing pain
 before it gets worse.
- Stem the Opioid Crisis with a full-scale approach — including promoting responsible opioid prescribing practices (such as provider education and best practices for Prescription Drug Monitoring Programs); public education about misuse and safe



disposal of unused drugs; "hotspot" intervention strategies; anti-trafficking to stop the flow of heroin, fentanyl and other illicit drugs; and expanding the use and availability of rescue drugs, sterile syringes and diversion programs.

• Address the Impact of the Opioid
Epidemic on Children — and the
Need for a Multi-Generational
Response that includes substance use
disorder treatment for parents and
wrap-around services for children
and families, including grandparents
and other relatives who help care
for children, and expand support
for the foster care system. Model

programs have been twice as effective in helping mothers achieve sobriety, reduced state custody placement of children by half and had a return on investment of \$2.22 for every \$1 spent on child welfare programs.

- Expand and Modernize Mental
 Health and Substance Use Disorder
 Treatment Services Toward a Goal
 of Focusing on the "Whole Health" of
 Individuals by prioritizing innovative
 integrated delivery models for rural and
 underserved urban areas and expanding
 the provider workforce, including those
 who can deliver medication-assisted
 treatment. Some effective substance use
 treatment programs have a return of
 \$3.77 per \$1 invested.
- Lower Excessive Alcohol Use through evidence-based policies, such as by increasing pricing, limiting hours and density of alcohol sales, enforcing underage drinking laws and holding sellers and hosts liable for serving minors. For example, a 10 percent increase in the price of alcoholic beverages is shown to reduce consumption by 7.7 percent.
- Prevent Suicides by expanding crisis intervention services; anti-bullying and social-emotional learning in schools; and support systems for Veterans; and better integrating mental health into primary care. For instance, the Zero Suicide model program has shown 80 percent reductions in suicides.
- Expand and Modernize Mental
 Health and Substance Use Disorder
 Treatment Services Toward a Goal
 of Focusing on the "Whole Health" of
 Individuals by prioritizing innovative
 integrated delivery models for rural and
 underserved urban areas and expanding

- the provider workforce, including those who can deliver medication-assisted treatment. Some effective substance use treatment programs have a return of \$3.77 per \$1 invested.
- Prioritize Prevention, Reduce Risk Factors and Promote Resilience in Children, Families and Communities by limiting trauma and adverse experiences, which have the biggest long-term impact on later substance misuse, and promoting better mental health. For instance, nurse family home visiting programs have a return of \$5.70 for every \$1 invested, and early childhood education programs have a \$4 to \$12 return for every \$1 invested.
- Reboot Substance Misuse Prevention and Mental Health in Schools by scaling up evidence-based life- and coping-skills programs and inclusive school environments and increasing the availability of mental health and other services. Top school substance misuse prevention programs have a \$3.80 to \$34 return for every \$1 invested; social-emotional learning programs have an \$11 for \$1 return; and school violence prevention (including suicide) programs have a \$15 to \$81 for \$1 return.

This analysis makes it clear that TFAH's and WBT's projections from November were conservative. With the dramatic increase in death rates across racial minorities, the country is definitively on track for the worst possible case scenario. TFAH and WBT strongly recommend that the resources and expertise needed to prevent more deaths be provided as soon as possible—and the nation come together to support the creation of a National Resilience Strategy.

APPENDIX: CDC Multiple Cause of Death Data Methodology

Unless otherwise referenced, data used in this report are from the National Center for Health Statistics' Multiple Cause of Death Files, 1999-2016, and were accessed via the CDC WONDER Online Database (http://wonder.cdc.gov/mcd-icd10.html).

For alcohol and drug deaths, TFAH used CDC's categories, Drug/Alcohol Induced Causes, as the underlying causes of death, and for suicide deaths used the Injury Intent category of suicide. Since a small number of deaths are categorized as being alcohol or drug-induced as well as a suicide, TFAH removed duplicates (ICD-10 underlying causes of death codes X60-65) when determining combined death totals.

For deaths related to specific drugs, TFAH used ICD-10 codes as follows:

- All opioid deaths: X40-44, X60-64, X85 and Y10-14 underlying causes of death codes plus T40.0-40.4 and T40.6 multiple causes of death codes.
- Synthetic opioid deaths: X40-44, X60-64, X85 and Y10-14 underlying causes of death codes plus T40.4 multiple causes of death code.
- Heroin deaths: X40-44, X60-64, X85 and Y10-14 underlying causes of death codes and drug type T40.1 multiple causes of death code.
- Common prescription opioid deaths: X40-44, X60-64, X85 and Y10-14 underlying causes of death codes and T40.2 multiple causes of death code.

Note: CDC and other analyses of drug deaths may use a slightly narrower drug overdose category compared with the Drug Induced Cause category used in this brief.



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- 2 Hohmann, J. "The Daily 202: Trump over performed the most in counties with the highest drug, alcohol and suicide mortality rates," *Washington Post*, December 9, 2016. Available at: https://www.washingtonpost.com/news/powerpost/paloma/daily-202/2016/12/09/daily-202-trump-over-performed-the-most-in-counties-with-the-highest-drug-alcohol-and-suicide-mortality-rates/584a2a59 e9b69b7e58e45f2e/.
- 3 According to CDC Multiple Cause of Death data, in 2016: 635,260 Americans died from heart disease; 598,038 died from cancer; 154,596 died from chronic lower respiratory disease; 161,374 died from accidents; and 142,142 died from stroke; 141,963 died from alcohol, drugs and suicide.

- 4 According to the U.S. Departments of Veterans Affairs and Defense, 102,125 Americans died in war since 1950 including 36,574 in the Korean War, 58,220 in the Vietnam War, 383 in Desert Shield/Desert Storm and 6,948 in the Global War on Terror (through February 7, 2018): "America's Wars Fact Sheet," U.S. Department of Veterans Affairs, May 2017. Available: https://www.va.gov/opa/publications/factsheets/fs_americas_wars.pdf; "DOD Casualty Report", U.S. Department of Defense, accessed February 7, 2018. Available: https://www.defense.gov/casualty.pdf
- 5 According to CDC Multiple Cause of Death data, the death rate from heart disease and cancer was 391.4 per 100,000 in 2007, 382.6 per 100,000 in 2015 and 381.7 per 100,000 in 2016.
- 6 CDC Multiple Cause of Death data show that, between 2006 and 2016, Blacks averaged 10.0 drug deaths per 100,000 and Whites averaged 15.5 drug death per 100,000.
- 7 "DEA Issues Carfentanil Warning to Police and Public", *U.S. Drug Enforcement Agency*, September 22, 2016. Available at: https://www.dea.gov/divisions/hq/2016/hq092216.shtml.
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- 11 Many opioid deaths include multiple kinds of opioids, are counted in all applicable categories and should not be added together.
- 12 Kochanek, K, et al. "Mortality in the United States, 2016", *National Center for Health Statistics*, Data Brief No. 293, December 2017. Available: https://www.cdc.gov/ nchs/products/databriefs/db293.htm.
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- 14 There were 58,220 U.S. military fatal casualties of the Vietnam War according to the U.S. military statistics: "Vietnam War U.S. Military Fatal Casualty Statistics", *National Archives*, January 2018. Available: https://www.archives.gov/research/military/vietnam-war/casualty-statistics.
- 15 According to CDC data, 38,748 Americans died in car crashes in 2016.



