

# Utah health status update

## Key findings

- Of the trauma patients tested in 2018–2021, 27% (2,952) were positive for alcohol, 46% (4,015) were positive for drugs, and 44% of those who tested positive for alcohol also tested positive for drugs (figure 1).
- Opioids, cannabinoids, benzodiazepines, other drugs, and amphetamines were the most common drugs found in the systems of trauma patients (figure 2).
- Rural counties had a higher number of injuries per 100,000 people (653.9 vs. 349.5) than urban counties and more AOD injuries (60.9 vs. 41.9) (figure 3).

## Comparison of rural and urban alcohol and drug-influenced traumatic injuries in Utah, 2018–2021

Traumatic injuries are the leading cause of preventable death and disability in Americans younger than age 45.<sup>1</sup> Alcohol and other drugs (AOD) significantly increase the risk of serious injury and contribute to further unnecessary death.<sup>2,3,4</sup> Injuries related to AOD are highest in rural areas of the country.<sup>5,6</sup> The Utah Trauma Registry (UTR) collects traumatic injury data from every hospital in the state which meets severity inclusion criteria specified by the American College of Surgeons (ACS).

Alcohol and drug-influenced traumatic injuries in the Utah Trauma Registry (UTR) between 2018 and 2021 show:

- The use of alcohol and other drugs (AOD) increased the severity of injuries in Utah trauma patients.
- Utah had more AOD injuries and deaths per 100,000 people in rural counties than in urban counties.
- The mean age of rural AOD trauma patients was younger than their counterparts in urban counties.
- The AOD injuries may go under-reported since most patients were not screened at the hospitals.

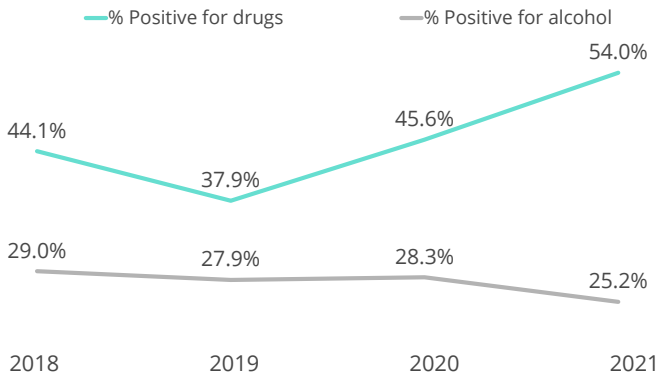
More than 50,000 traumatic injuries were reported in Utah during 2018–2021. In this time period, nearly 20% (10,767) of trauma patients were tested for alcohol and 16% (8,769) were tested for other drugs during their hospital treatment. Of these trauma patients tested, 27% (2,952) were positive for alcohol, 46% (4,015) were positive for drugs, and 44% of those who tested positive for alcohol also tested positive for drugs (figure 1). Thirty-two percent of those who tested positive for drugs also tested positive for alcohol. Opioids, cannabinoids, benzodiazepines, other drugs, and amphetamines were the most common drugs found in the systems of trauma patients (figure 2).



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### Percentage of positive drug and alcohol results from trauma patients,\* Utah, 2018–2021

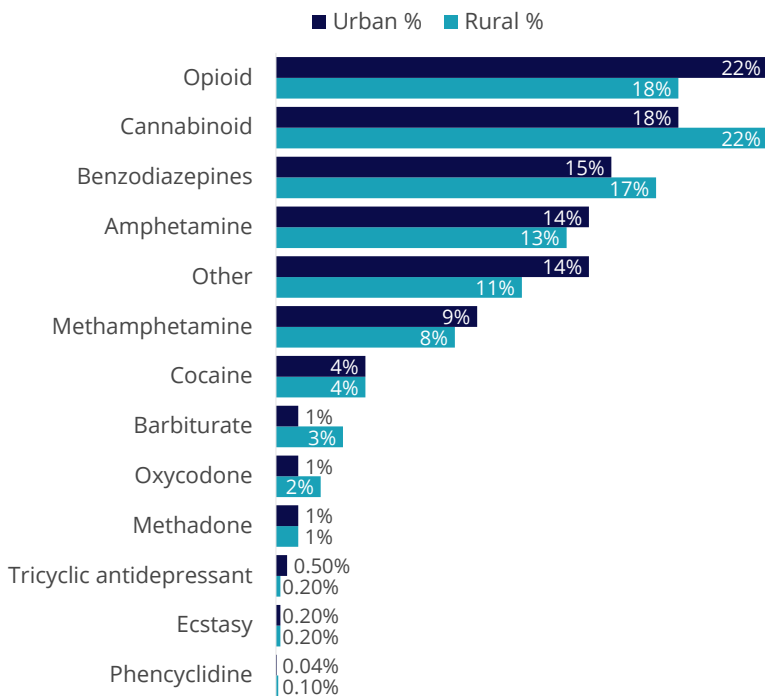
Figure 1. The percentage of drug positive tests in trauma patients increased to 54% in 2021.



Source: Utah Trauma Registry, Intermountain Injury Control and Research Center, University of Utah  
\*Included trauma patients whose injuries occurred in Utah.  
Note: Blood alcohol above 0.0009 percent was included.

### Percentage of positive drug tests found in urban and rural trauma patients by drug type, Utah 2018–2021

Figure 2. Opioids, cannabinoids, and benzodiazepines were the most common drugs found in patients tested.



Source: Utah Trauma Registry, Intermountain Injury Control and Research Center, University of Utah  
Note: Individuals may have tested positive for multiple drugs.

Consistent with the past reports at the state level, AOD injuries had a higher mean injury severity score (ISS), meaning those injuries were more serious.

The mean age was younger in rural counties versus urban counties for both AOD injuries (43.1 vs. 45.7) and fatalities (44.6 vs. 47.1). Rural counties had a higher rate of all injuries (653.9 vs. 349.5) and AOD injuries (60.9 vs. 41.9) than urban areas per 100,000 people (figure 3). Fatalities per capita were higher in rural counties than urban counties for all injuries (13.9 vs. 10.3) as well as for AOD injuries (2.2 vs. 1.7).

### Per-capita alcohol or drug-related incidents, fatalities, mean age, and injury severity score comparison by state, urban, and rural regions, Utah, 2018–2021

Figure 3. Rates of AOD-related fatalities were higher in rural (60.9) areas than in urban (41.9) areas in Utah.

Injury type	State		Urban*		Rural†	
	All injuries	AOD injuries	All injuries	AOD injuries	All injuries	AOD injuries
Injury incidents	53,663	5,963	36,194	4,337	17,469	1,626
per 100,000 people**	411.9	45.8	349.5	41.9	653.9	60.9
Mean age	53.4	45.0	54.4	45.7	51.3	43.1
Mean ISS^	7.6	8.7	7.5	8.6	7.7	8.8
Fatalities	1,439	239	1,069	180	370	59
per 100,000 people	11.1	1.8	10.3	1.7	13.9	2.2
Mean age	58.2	46.5	58.7	47.1	56.8	44.6
Mean ISS^	12.6	15.1	12.5	15.2	13.0	14.9

Source: Utah Trauma Registry, Intermountain Injury Control and Research Center, University of Utah  
Note urban and rural counties are defined using the website, <https://ruralhealth.health.utah.gov/portal/county-classifications-map/>.  
\*Urban counties include Cache, Weber, Davis, Salt Lake, and Utah.  
†Rural counties include Box Elder, Carbon, Duchesne, Iron, Morgan, Sanpete, Sevier, Summit, Tooele, Uintah, Wasatch, and Washington.  
Frontier counties designated as rural include Beaver, Daggett, Emery, Garfield, Grand, Juab, Kane, Millard, Piute, Rich, San Juan, and Wayne.  
^Injury severity score (ISS) is a cumulative value of injury severity based on the results of diagnostic procedures (e.g., X-ray, CT scan, MRI, etc.). The scores range from 0 to 75. An ISS greater than 15 is considered major trauma. Baker SP, O’Neill B, Haddon W, et al. (1974)

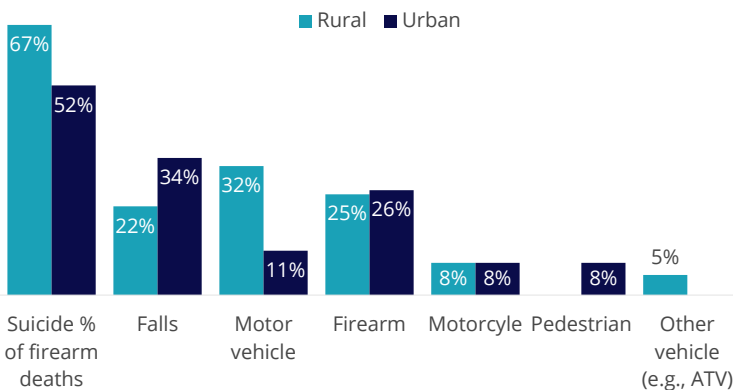


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When causes of fatal AOD injuries were evaluated, rural counties had more motor vehicle deaths (32%) while urban counties had more deaths from falls (34%) (figure 4). This contrasts the difference in distances, lifestyles, and outdoor activities that take place in Utah's rural and urban areas. Rural counties also had a higher percentage of suicide by firearm under the influence of AOD than urban counties. Since most trauma patients are not AOD screened, it is reasonable to assume AOD injuries and fatalities in Utah are greatly under-reported.

**Top five causes of AOD injury deaths in rural and urban regions, Utah, 2018–2021**

Figure 4. Rural counties had higher rates of AOD motor vehicle and suicide deaths while urban had more falls and pedestrian injury deaths.



Source: Utah Trauma Registry, Intermountain Injury Control and Research Center, University of Utah

\*Gunshot wounds due to suicide were identified as having an ICD-10-CM external causes of morbidity code of intentional self-harm (X71–X83) with a firearm.

Screening trauma patients for AOD is a complex issue. The ACS recommends routine screening of all trauma patients, however, it has been reported that the alcohol exclusion law of some insurance coverage may influence patient consent and the decision of care providers for screening.<sup>7,8</sup> While Utah has never adopted or explicitly prohibited alcohol exclusion laws,<sup>9</sup> most hospitals test trauma patients on an as-needed basis (e.g., to provide safe clinical care, on the recommendations of social workers, for vehicle-related injuries, or as required by law enforcement).

The ACS also suggests injury prevention education and AOD abuse intervention starting at trauma centers may reduce future fatality and recurrences of AOD injuries.<sup>10</sup> Although many Utah trauma centers use such programs, identifying rural hot spots of AOD injuries and directing cause-specific prevention efforts to those areas may result in better outcomes. For more information on trauma injury data visit <https://bemsp.utah.gov/>.

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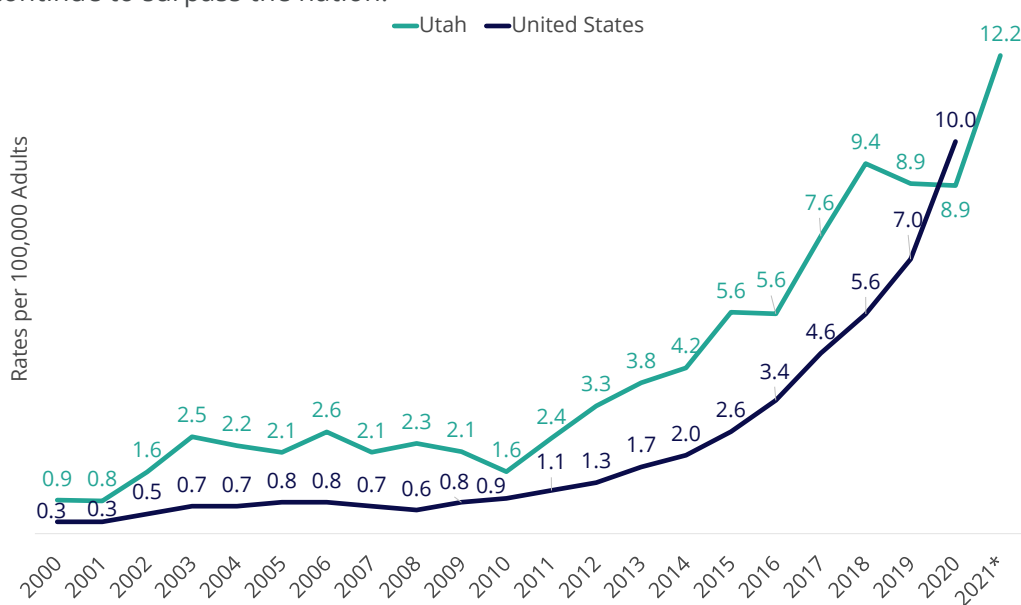


## Methamphetamine-involved death trends in Utah

Accidental and undetermined deaths involving methamphetamine continue to increase at a concerning rate nationwide and in Utah. Methamphetamine is a highly addictive stimulant which can produce an overdose often leading to a stroke, heart attack, or organ problems.<sup>1</sup> Rates of accidental and undetermined methamphetamine-involved deaths are consistently higher in Utah when compared with the nation. Rates of methamphetamine-involved deaths in Utah and the U.S. sharply increased since 2015. Utah's methamphetamine-involved deaths increased nearly 2.5 times from 5.6 per 100,000 adult population in 2015 to 12.2 in 2021 (figure 1).<sup>2,3</sup>

### Death rates for methamphetamine-involved drug overdoses, Utah vs. U.S., 2000–2021\*

Figure 1. The rates of methamphetamine-involved accidental and undetermined drug overdoses in Utah continue to surpass the nation.



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics  
Utah Department of Health and Human Services Office of Medical Examiner  
\*2021 data is preliminary. Interpret with caution. No US data available for 2021.

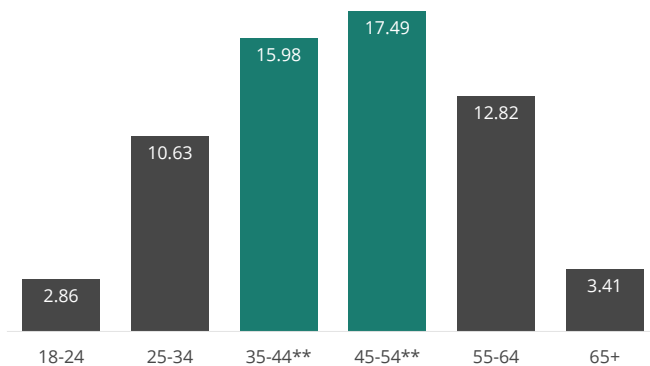
During 2020 to 2021, people within age groups 35–44 and 45–54 had significantly higher rates of methamphetamine-related accidental and undetermined overdose deaths when compared to all age groups combined.<sup>2</sup> Utahns aged 35–44 had a rate of 17.49 per 100,000 adults and ages 45–54 had a rate of 15.98 per 100,000 adults (figure 2). Age group 35–44 observed the highest count (n=144) of methamphetamine-involved deaths in the last two years.<sup>3,4</sup>

In 2021, among all accidental and undetermined methamphetamine-involved deaths in Utah, 57% involved opioids, 35% involved heroin, and 20% involved fentanyl analogs with methamphetamine at the time of the overdose.<sup>3</sup> Approximately 36% of accidental and undetermined overdose deaths involved methamphetamine use only. In a toxicology assessment, most individuals were found to have three or fewer drugs in their test result.<sup>3</sup> During 2020 to 2021 opioids (60.68%) and heroin (37.86%) were the most common drug found in accidental and undetermined methamphetamine-involved deaths in Utah (figure 3).

Spotlight article continued

## Methamphetamine-related drug overdose death rates per 100,000 adult population by age group, Utah (aggregated), 2000–2021\*

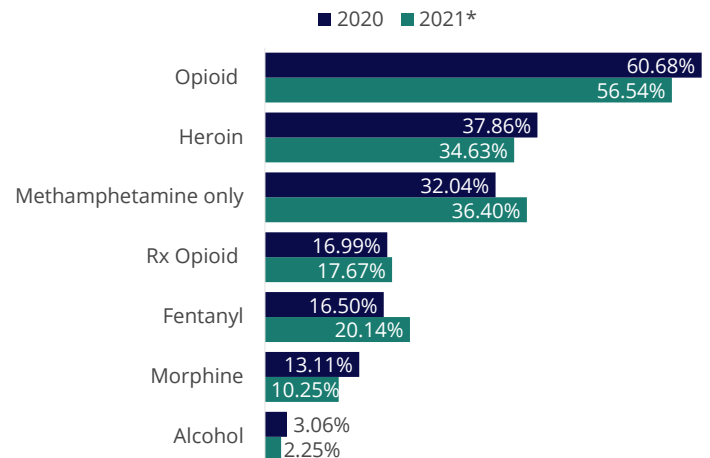
Figure 2. The rates of methamphetamine-involved accidental and undetermined drug overdoses in Utah continue to surpass the nation.



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics  
Utah Department of Health and Human Services Office of Medical Examiner  
\*2021 data is preliminary. Interpret with caution  
\*\*Statistically significantly higher than the average value

## Percentage of other drugs involved in methamphetamine-related overdose deaths, by drug type, Utah, 2020–2021\*

Figure 3. Opioids and heroin were the most common drugs found in accidental and undetermined methamphetamine-involved deaths in Utah.



Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics  
Utah Department of Health and Human Services Office of Medical Examiner  
\*2021 data is preliminary. Interpret with caution

The Utah Opioid Fatality Review Committee made several strong recommendations to prevent methamphetamine and heroin overdose deaths. These recommendations include:

- Provide intervention at the time of admission to the emergency department and ensure continued care following emergency department admission, i.e., immediate treatment options.
- Provide education for family and friends explaining the need to continually check on loved ones with addiction disorders.
- Provide employment opportunities for those with addiction histories, reduce the risk to employers, and offer incentives.

A list of complete recommendations will be available in the 2021 Heroin and Methamphetamine Fatality Review report, which will be available soon at <https://vipp.health.utah.gov/opioid-overdoses-data/>.

1. National Institute of Drug Abuse, Methamphetamine Drug Facts <https://nida.nih.gov/publications/drugfacts/methamphetamine#:~:text=Methamphetamine%20is%20a%20stimulant%20drug,snorting%2C%20or%20injecting%20the%20drug>  
2. Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics (CDC Wonder)  
3. Utah Department of Health and Human Services Office of Medical Examiner  
4. Population Data: National Center for Health Statistics (NCHS) through a collaborative agreement with the U.S. Census Bureau, IBIS Version 2020; data queried via [Utah's Indicator-Based Information System for Public Health \(IBISPH\)](#)

# Monthly health indicators

Monthly report of notifiable diseases, October 2022	Current month # cases	Current month # expected cases (5-yr average)	# cases YTD	# expected cases YTD (5-yr average)	YTD standard morbidity Ratio (obs/exp)
COVID-19 (SARS-CoV-2)	Weekly updates at <a href="https://coronavirus.utah.gov/case-counts/">https://coronavirus.utah.gov/case-counts/</a>				
Influenza*	Updates at <a href="http://health.utah.gov/epi/diseases/influenza">http://health.utah.gov/epi/diseases/influenza</a>				
Campylobacteriosis (Campylobacter)	62	42	560	475	1.2
Salmonellosis (Salmonella)	26	26	332	306	1.1
Shiga toxin-producing Escherichia coli (E. coli)	20	18	232	164	1.4
Pertussis (Whooping Cough)	6	17	90	248	0.4
Varicella (Chickenpox)	5	15	69	122	0.6
Shigellosis (Shigella)	6	6	78	46	1.7
Hepatitis A (infectious hepatitis)	<5	<5	<5	<5	n/a
Hepatitis B, acute infections (serum hepatitis)	<5	<5	17	20	0.9
Meningococcal Disease	<5	<5	<51	<5	0.6
Quarterly report of notifiable diseases, 3rd quarter 2022	Current quarter # cases	Current quarter # expected cases (5-yr average)	# cases YTD	# expected cases YTD (5-yr average)	YTD standard morbidity ratio (obs/exp)
HIV/AIDS†	37	40	104	100	1.0
Chlamydia	2,866	2,707	9,328	10,695	0.9
Gonorrhea	837	816	2,688	3,005	0.9
Syphilis	71	40	187	153	1.2
Tuberculosis	8	5	26	16	1.6
Medicaid expenditures (in millions) for the month of October 2022	Current month	Expected/ budgeted for month	Fiscal YTD	Budgeted fiscal YTD	Variance over (under) budget
Mental health services	\$8	\$2	\$46	\$54	(\$7.6)
Inpatient hospital services	\$23	\$8	\$41	\$43	(\$2.1)
Outpatient hospital services	\$4	\$1	\$7	\$8	(\$0.8)
Nursing home services	\$60	\$52	\$50	\$54	(\$3.8)
Pharmacy services	\$12	\$4	\$36	\$39	(\$3.0)
Physician/osteo services‡	\$4	\$3	\$20	\$21	(\$0.9)
Medicaid expansion services	\$35	\$45	\$264	\$331	(\$67.1)
***Total Medicaid	\$232	\$156	\$1,007	\$1,220	(\$212.4)

|| Comparisons include previous data year 2020. Updates for COVID-19 can be found at <https://coronavirus.utah.gov>. This includes case counts, deaths, number of Utahns tested for disease, and latest information about statewide public health measures to limit the spread of COVID-19 in Utah.

\* More information and weekly reports for influenza can be found at <http://health.utah.gov/epi/diseases/influenza>.

† Diagnosed HIV infections, regardless of AIDS diagnosis.

Notes: Data for notifiable diseases are preliminary and subject to change upon the completion of ongoing disease investigations.

‡ Medicaid payments reported under physician/osteo Services do not include enhanced physician payments.

\*\*\*The Total Medicaid program costs do not include costs for the PRISM project.

# Monthly health indicators

Program enrollment for the month of October	Current month	Previous month	% change <sup>§</sup> from previous month	1 year ago	% change <sup>§</sup> from 1 year ago
Medicaid	466,728	482,605	-3.3%	436,036	+7.0%
CHIP (Children's Health Insurance Plan)	7,381	6,213	+18.8%	8,906	-17.1%
Commercial insurance payments <sup>#</sup>	Current data year	Number of members	Total payments	Payments per member per month (PMPM)	% change <sup>§</sup> from previous year
Dental	2021	6,426,514	\$ 183,425,231	\$28.54	+4.3%
Medical	2021	12,277,219	\$ 3,996,141,589	\$325.49	+11.1%
Pharmacy	2021	10,843,802	\$ 926,553,357	\$85.45	+4.0%
Annual community health measures	Current data year	Number affected	Percent\rate	% change from previous year	State rank <sup>**</sup> (1 is best)
Suicide deaths	2020	651	20.1 / 100,000	-1.9%	42 (2020)
Asthma prevalence (adults 18+)	2021	315,200	9.7%	0.0%	21 (2021)
Poor mental health (adults 18+)	2021	540,700	25.2%	9.1%	37 (2021)
Influenza immunization (adults 65+)	2020	261,400	69.9%	2.0%	20 (2021)
Drug overdose deaths involving opioids	2020	432	13.3 / 100,000	7.3%	20 (2019)
Unintentional fall deaths	2020	651	20.0 / 100,000	-1.9%	17 (2019)
Infant mortality	2020	366	11.3 / 100,000	4.6%	17 (2018)
Traumatic brain injury deaths	2020	2,272	69.9 / 100,000	6.1%	15 (2019)
Obesity (adults 18+)	2021	663,700	30.9%	8.0%	17(2021)
Diabetes prevalence (adults 18+)	2021	260,000	8.0%	-2.4%	15 (2021)
Births to adolescents (ages 15-17)	2020	318	4.1 / 1,000	7.7%	10 (2018)
Childhood immunization (4:3:1:3:3:1:4)††	2020	47,970	74.6%	-2.5%	19 (2020)
Motor vehicle traffic crash injury deaths	2020	299	9.2 / 100,000	27.6%	7 (2019)
High blood pressure (adults 18+)	2021	867,700	26.7%	3.5%	12 (2021)
Cigarette smoking (adults 18+)	2021	206,500	7.3%	-18.0%	1 (2021)
Binge drinking (adults 18+)	2021	264,500	11.7%	2.6%	1 (2021)
Coronary heart disease deaths	2020	1,853	57.0 / 100,000	12.0%	1 (2021)
All cancer deaths	2020	3,459	106.4 / 100,000	3.7%	1 (2021)
Stroke deaths	2020	916	28.2 / 100,000	-1.0%	1 (2021)
Child obesity (grade school children)	2018	38,100	10.6%	11.6%	n/a
Vaping, current use (grades 8, 10, 12)	2019	37,100	12.4%	11.3%	n/a
Health insurance coverage (uninsured)	2020	383,500	11.8%	-6.3%	n/a
Early prenatal care	2020	34,716	75.9%	0.0%	n/a

<sup>§</sup> Relative percent change. Percent change could be due to random variation.

<sup>#</sup> Figures subject to revision as new data is processed.

<sup>\*\*</sup> State rank in the United States based on age-adjusted rates where applicable.

<sup>††</sup> Data from 2020 NIS for children aged 24 month (birth year 2018).