

# Utah health status update

## Key findings

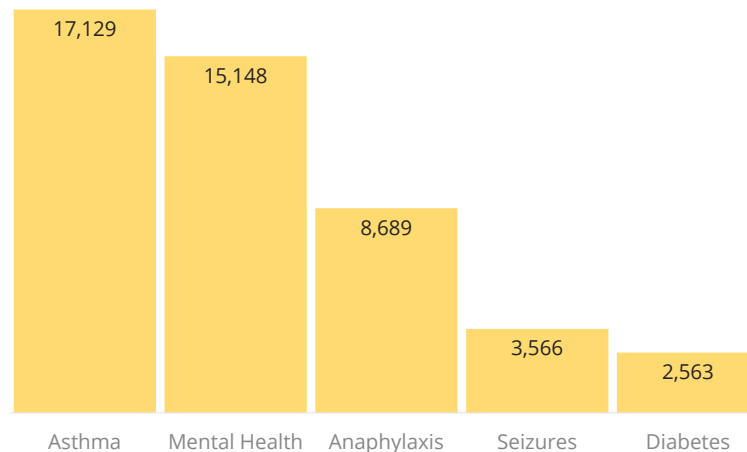
- The majority of health conditions reported by Utah students were asthma (17,129) and mental health (15,148) related (figure 1).
- The most common rescue medications for Utah students were asthma medications (5,434) and epinephrine (3,979) (figure 2).

## School nurse and student health report, 2021–2022 school year

Each year, de-identified student health information is collected by school nurses and submitted to the Utah Department of Health and Human Services. A school nurse is defined as a registered nurse with an assigned caseload of students in a school.<sup>2</sup> Utah had 674,351 students enrolled during the 2021–2022 school year with 47,095 student who reported a health condition. The majority of health conditions reported were asthma (17,129) and mental health (15,148) related (figure 1).

### Student health conditions reported in Utah, 2021–2022

Figure 1. Asthma and mental health were the most reported health conditions by Utah students in the 2021–2022 school year.



Source: Utah Department of Health and Human Services, Healthy Living Active Living.

Healthy students can achieve their highest educational potential.<sup>1</sup> Because many students in Utah schools are diagnosed with a chronic health condition, they often need medical interventions while at school. The following emergency rescue medications were administered by nurses and staff in addition to existing medication orders during 2021–2022:

- More than 7,700 students administered their own asthma rescue medication at school
- Forty-eight students received emergency epinephrine injections at school
- Nine students received stock albuterol at school
- 4 students received glucagon at school
- 3 staff or visitors received emergency epinephrine injections at school

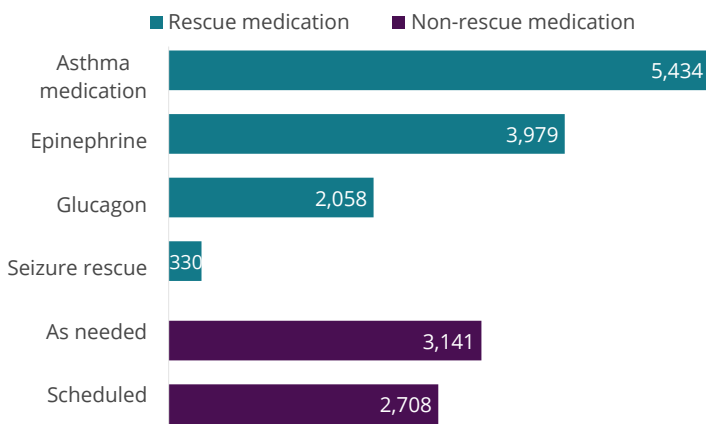


Feature article continued

Nearly 27,000 students had an individualized healthcare plan or emergency action plan developed by the school nurse.<sup>1</sup> The most common rescue medications needed were asthma medications (5,434) and epinephrine (3,979) (figure 2).

### Rescue and non-rescue medication required by students in Utah, 2021-2022

Figure 2. Asthma medication and epinephrine were the most common rescue medications needed by students.

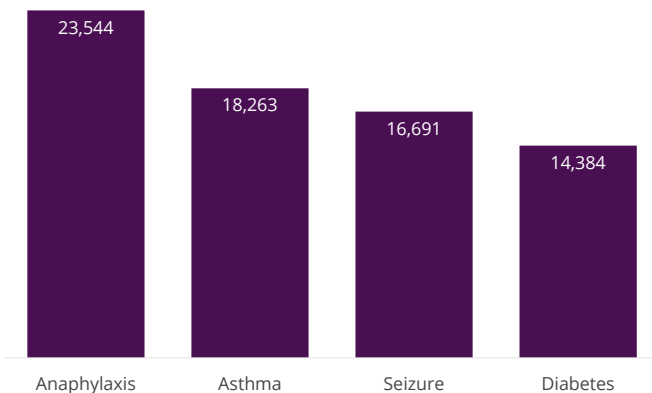


Source: Utah Department of Health and Human Services, Healthy Living Active Living.

Nurses train school staff every year to care for students with chronic health conditions since not every Utah school has a nurse. In 2021-2022, nurses trained staff on the needs of students with certain chronic conditions (figure 3) and trained students with healthy self-care practices (figure 4).

### Number of school staff trained by nurses on chronic health conditions, Utah, 2021-2022

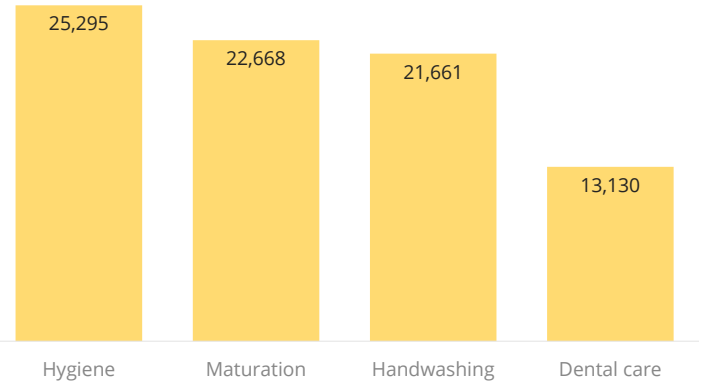
Figure 3. Nurses trained staff members to help meet the needs of students with chronic health conditions.



Source: Utah Department of Health and Human Services, Healthy Living Active Living.

### Number of students trained by nurses on self-care, Utah, 2021-2022

Figure 4. Nurses trained students on evidence-based best practices for healthy self-care.



Source: Utah Department of Health and Human Services, Healthy Living Active Living.

In addition to trainings and developing healthcare plans, school nurses in Utah performed distance vision screenings for 305,143 students, required by law (UCA 53A-11-203) resulting in 3,609 students receiving financial help for vision exam/glasses.

Utah has nearly 300 full-time equivalent school nurses to cover 1,046 schools. More than 700 additional full-time school nurses are needed to have a nurse in every Utah school. Financial limitations mean a school nurse serves multiple schools. In most cases there is no full-time school nurse on-site to help with student health concerns and trained staff members help manage the students' daily needs. While unlicensed staff can manage many responsibilities, they do not have the skill, knowledge, and experience of a licensed registered nurse. By having trained school nurses available all day, every day, in every school, more students are able to stay in class, ready to learn.<sup>4</sup>

1. Utah Department of Health and Human Services, Healthy Living Active Living. (August 2022). Nursing Services in Utah public schools: 2021-2022 (pending).

2. UCA 53E-1-102. Public education code definitions.

3. Utah State Board of Education (October 2021). 21-22 Fall enrollment.

4. The role and impact of nurses in American schools: A systematic review of research. Lineberry and Ickes, 2015.

## Key findings

- Males had the highest rate of suicide deaths at 31.4 per 100,000 population while females experienced the highest rate of emergency department encounters for suicide attempts at 196.9 per 100,000 population and suicidal ideation at 537.7 per 100,000 population (figure 1).
- Adults ages 45–64 had the highest rate of suicide deaths at 29 per 100,000 population while youth ages 10–17 experienced the highest rate of suicide ideation at 946.4 per 100,000 population (figure 2).

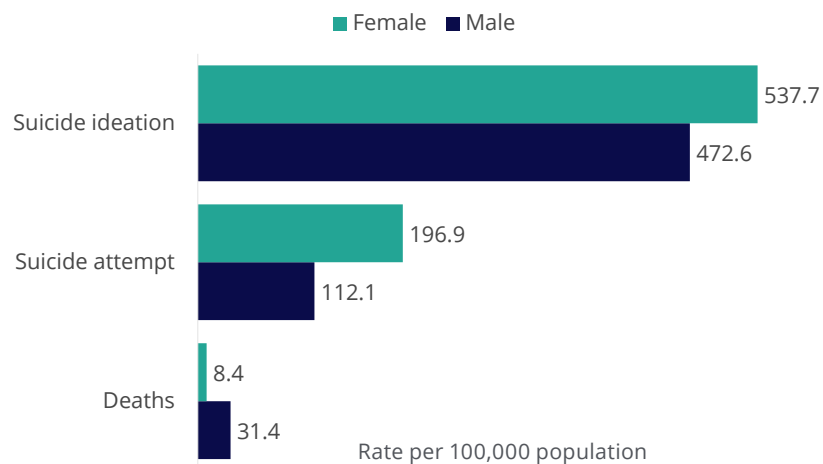
# Suicide mortality and suicidal behavior in Utah, 2020

Suicide and suicidal behaviors are serious public health concerns in Utah and nationally, negatively impacting individuals, families, and communities. In 2020, Utah had the ninth highest age-adjusted suicide rate in the U.S., with 651 deaths and 5,012 attempts.<sup>1,2,4</sup> Monitoring these trends and identifying populations disproportionately affected can help inform effective interventions to help reduce suicide in Utah.

Males experienced higher rates of suicide deaths (31.4 per 100,000 population) than females (8.4 per 100,000 population).<sup>1,3</sup> However, emergency department encounters of suicide attempts and ideation were higher among females (Figure 1).<sup>2</sup> Fifty-seven percent of males who died by suicide used a firearm; 29% of females died by suicide using a firearm.<sup>1</sup> Poisoning was the leading cause of suicide deaths among females, leading to 37% of suicide deaths.<sup>1</sup>

### Suicide mortality and suicidal behavior, rate per 100,000 population, by sex, Utah, 2020

Figure 1. Females in Utah had higher rates of suicide ideation and attempts, but males were more likely to die by suicide in 2020.



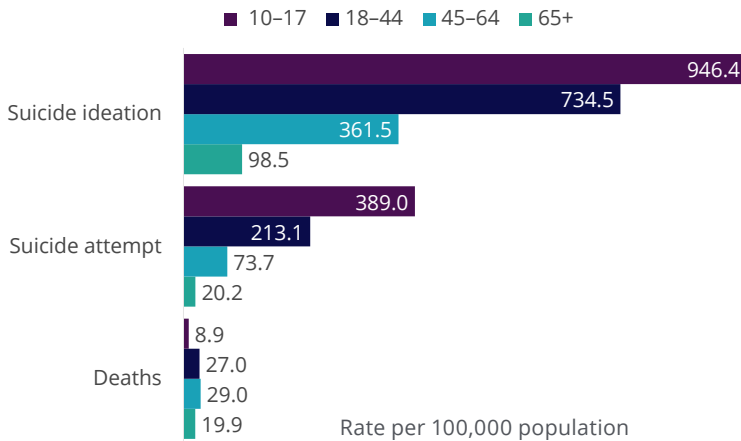
Source: Utah Department of Health and Human Services Death Certificate Database, Office of Vital Records and Statistics. Utah's Indicator Based Information System for Public Health (IBIS-PH)

Adults ages 45–64 had the highest rates of suicide deaths (29 per 100,000 population).<sup>1,3</sup> Emergency department encounters for suicide attempts and ideation were highest among youth aged 10–17 (figure 2).



### Suicide mortality and suicidal behavior, rate per 100,000 population, by age group, Utah, 2020

Figure 2. Youth ages 10-17 had the highest rates of suicide attempts and suicide ideation.



Source: Utah Department of Health and Human Services Death Certificate Database, Office of Vital Records and Statistics. Utah's Indicator Based Information System for Public Health (IBIS-PH).

In recent studies, suicide ideation and suicide attempts for youth age 10–17 increased by 23.4% and 12.3% from 2020–2021.<sup>2</sup> However, there was little or no change in rates of suicide attempts for all age groups overall during 2020–2021.<sup>2,3</sup> TriCounty Health District had the highest rate of suicide deaths in Utah from 2015–2020. In 2021, TriCounty also had the highest rate of emergency department encounters for suicide attempts and Tooele County had the highest rate of emergency department encounters for suicide ideation.<sup>1,3</sup>

A comprehensive approach to prevention, intervention, and postvention strategies is imperative to help reduce suicide and suicidal behaviors in Utah. The Utah Suicide Prevention State Plan was updated in 2022 and is a helpful guide for communities across the state for implementing tailored strategies for their areas. Important areas of focus should address suicide mortality for males, those in the 45–64 age group, and high rates of suicide behavior among youth ages 10–17 and females.

A focus on risk factor reduction with substance abuse, access to lethal means, access to care, relationship problems and intimate partner violence, and history of suicide attempts can help organizations more broadly impact their communities.<sup>4,5</sup>

September is suicide awareness month. Get involved by going to <https://liveonutah.org/resources/events/>. For more resources on suicide prevention visit:

- National Suicide Prevention Lifeline, dial 988, <https://988lifeline.org>
- SafeUT app, [healthcare.utah.edu/uni/programs/safe-ut-smartphone-app/](https://healthcare.utah.edu/uni/programs/safe-ut-smartphone-app/)
- Text “Help” to 741741
- Utah Suicide Prevention Coalition, [www.liveonutah.org/resources](https://www.liveonutah.org/resources)
- Live On Utah, <https://liveonutah.org/>
- American Foundation for Suicide Prevention, [www.afsp.org](https://www.afsp.org)
- National Alliance on Mental Illness Utah Chapter [www.namiut.org](https://www.namiut.org)
- Suicide Prevention Resource Center [www.sprc.org](https://www.sprc.org)
- Utah Poison Control Center, 1-800-222-1222, [uuhsc.utah.edu/poison/](https://uuhsc.utah.edu/poison/)

1. Utah Death Certificate Database, Office of Vital Records and Statistics, Utah Department of Health, 2016-2020 data queried via Utah's Indicator-Based Information System for Public Health (IBIS-PH) [cited 2022 July]. IBIS Version 2020

2. Utah Inpatient Hospital Discharge Data, Office of Health Care Statistics; Utah Emergency Department Encounter Database, Bureau of Emergency Medical Services, Utah Department of Health, 2020-2021

3. 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 (IBIS-PH) [cited 2022 July].

4. U.S. Centers for Disease Control and Prevention (CDC), Web-based Injury Statistics Query and Reporting System (WISQARS), 2020 data [cited 2022 July].

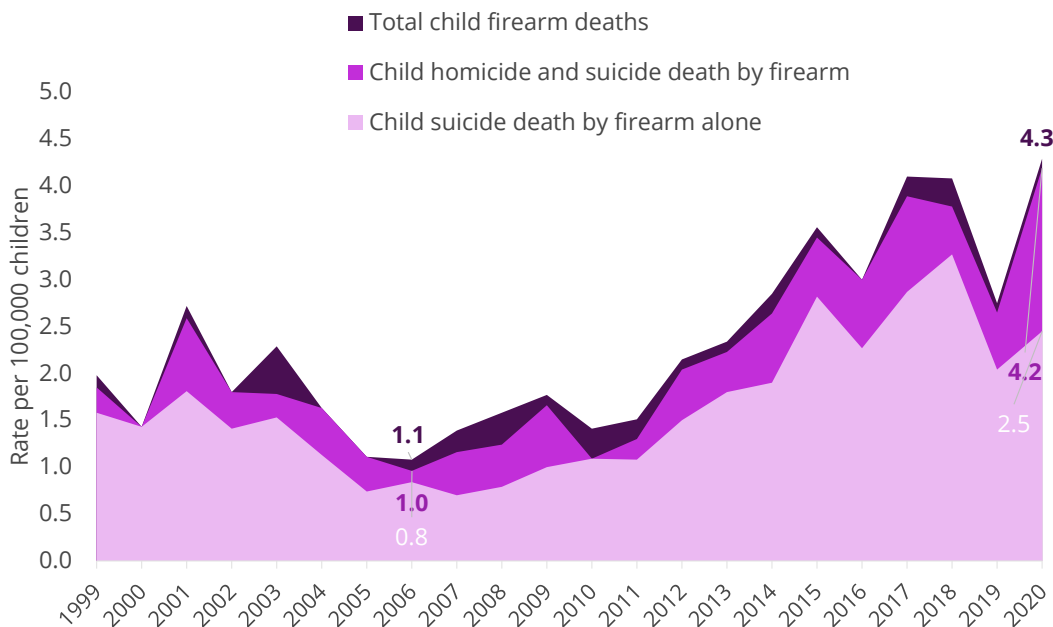
5. Utah Violent Death Reporting System, Violence & Injury Prevention Program, Utah Department of Health, 2016-2018 data [cited 2022 July].

## Firearm-related deaths among children ages 0–18 in Utah

Firearm-related deaths among children in Utah hit the highest recorded rate in 2020. Rates increased by nearly 4 times (1.1 to 4.3 per 100,000) since 2006 (figure 1).<sup>1</sup> The continued rise of suicide deaths by firearm and the significant increase in child homicide or assault from firearms in 2020 impacted the current highest rate of firearm-related deaths. Firearms were the leading cause of child injury death in 2020 followed by suffocation and motor vehicle and other transportation-related injury deaths (4.3 vs 3.27 and 2.96 per 100,000).<sup>1</sup>

### Rates of child injury deaths from firearms ages 0–18 in Utah by Year, 1999–2020 (n=460)<sup>1</sup>

Figure 1. Rates of child injury deaths by use of firearms increased to an all time high of 4.3 in 2020.



Source: Utah Department of Health and Human Services Death Certificate Database, Office of Vital Records and Statistics.

Two strong recommendations from the Utah Child Fatality Review Committee to prevent child firearm death include:

- Educate caretakers on the importance of safely storing their firearms; and
- Implement a validated screening tool statewide for access to firearms to be use by all therapists, counselors, and physicians.

The 2020 Child Fatality Review report will be available soon at <https://vipp.health.utah.gov/child-trauma-data/> to find the full list of recommendations.

1. Utah Department of Health and Human Services Death Certificate Database, Office of Vital Records and Statistics, 2020 data queried via Utah's Indicator Based Information System for Public Health (IBIS-PH) [cited 2022 July]. IBIS Version 2020.

# Monthly health indicators

Monthly report of notifiable diseases, August 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)	52	61	399	380	1.0
Salmonellosis (Salmonella)	34	39	268	251	1.1
Shiga toxin-producing Escherichia coli (E. coli)	33	28	167	127	1.3
Pertussis (Whooping Cough)	<5	28	73	209	0.3
Varicella (Chickenpox)	<5	11	48	95	0.5
Shigellosis (Shigella)	9	6	60	34	1.7
Hepatitis A (infectious hepatitis)	<5	<5	7	27	0.3
Hepatitis B, acute infections (serum hepatitis)	<5	<5	<5	9	0.0
Meningococcal Disease	<5	<5	<5	<5	0.0
West Nile (Human cases)	<5	12	<5	14	0.1
Quarterly report of notifiable diseases, 2nd 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†	28	31	28	31	0.9
Chlamydia	3,118	2,614	11,206	10,342	1.1
Gonorrhea	1,078	728	3,620	2,699	1.3
Syphilis	52	32	212	130	1.6
Tuberculosis	14	<5	18	12	1.6
Medicaid expenditures (in millions) for the month of July 2022	Current month	Expected/ budgeted for month	Fiscal YTD	Budgeted fiscal YTD	Variance over (under) budget
Mental health services	\$2	\$2	\$215	\$216	(\$0.9)
Inpatient hospital services	\$9	\$8	\$247	\$248	(\$1.1)
Outpatient hospital services	\$2	\$1	\$40	\$40	(\$0.8)
Nursing home services	\$53	\$52	\$375	\$376	(\$1.0)
Pharmacy services	\$3	\$4	\$152	\$154	(\$1.9)
Physician/osteo services‡	\$3	\$3	\$87	\$88	(\$0.9)
Medicaid expansion services	\$45	\$45	\$1,142	\$1,144	(\$1.6)
***Total Medicaid	\$156	\$156	\$4,484	\$4,484	(\$0.4)

|| 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 July	Current month	Previous month	% change <sup>§</sup> from previous month	1 year ago	% change <sup>§</sup> from 1 year ago
Medicaid	476,965	474,169	+0.6%	424,510	+12.4%
CHIP (Children's Health Insurance Plan)	6,365	7,126	-10.7%	9,521	-33.1%
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	2020	5,667,256	\$ 154,748,044	\$27.31	N/A
Medical	2020	11,631,161	\$ 3,365,207,356	\$289.33	-3.8%
Pharmacy	2020	10,845,512	\$ 889,492,538	\$82.01	+9.4%
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	20.0 / 100,000	-1.90%	40 (2019)
Asthma prevalence (adults 18+)	2020	250,600	10.80%	9.10%	39 (2020)
Poor mental health (adults 18+)	2020	540,700	23.30%	7.90%	37 (2020)
Influenza immunization (adults 65+)	2020	261,400	68.50%	7.20%	23 (2020)
Drug overdose deaths involving opioids	2020	432	13.3 / 100,000	7.30%	20 (2019)
Unintentional fall deaths	2020	651	20.0 / 100,000	-1.90%	17 (2019)
Infant mortality	2020	366	11.3 / 100,000	4.60%	17 (2018)
Traumatic brain injury deaths	2020	2,272	69.9 / 100,000	6.10%	15 (2019)
Obesity (adults 18+)	2020	663,700	28.60%	-2.10%	13 (2020)
Diabetes prevalence (adults 18+)	2020	188,000	8.10%	1.30%	17 (2020)
Births to adolescents (ages 15-17)	2020	318	4.1 / 1,000	7.70%	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	27.60%	7 (2019)
High blood pressure (adults 18+)	2020	598,700	25.80%	5.70%	7 (2019)
Cigarette smoking (adults 18+)	2020	206,500	8.90%	1.10%	1 (2020)
Binge drinking (adults 18+)	2020	264,500	11.40%	0.90%	1 (2020)
Coronary heart disease deaths	2020	1,853	57.0 / 100,000	12.00%	1 (2020)
All cancer deaths	2020	3,459	106.4 / 100,000	3.70%	1 (2020)
Stroke deaths	2020	916	28.2 / 100,000	-1.00%	1 (2020)
Child obesity (grade school children)	2018	38,100	10.60%	11.60%	n/a
Vaping, current use (grades 8, 10, 12)	2019	37,100	12.40%	11.30%	n/a
Health insurance coverage (uninsured)	2020	383,500	11.80%	-6.30%	n/a
Early prenatal care	2020	34,716	75.90%	0.00%	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).