

# **Utah health status update**

### Key findings

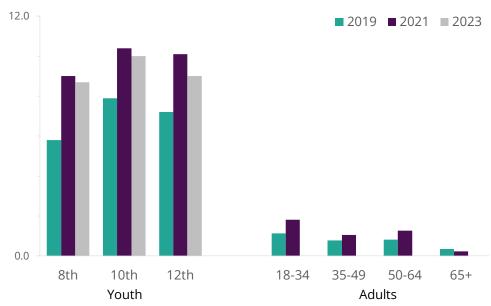
- The lack of social connection poses a significant risk to your health and longevity. The mortality impact of socially disconnectedness is similar to that of smoking as many as 15 cigarettes a day.<sup>7</sup>
- Utah youth are at increased risk of feeling socially isolated, with feelings of social isolation peaking in the 10th grade.
- From 2019 to 2021 there were significant increases in feelings of social isolation that remained high into 2023.



### Loneliness and social isolation in Utah

U.S. Surgeon General Dr. Vivek Murthy released a new <u>Surgeon</u>. <u>General Advisory</u> in May 2023, calling attention to "the public health crisis of loneliness, isolation, and lack of connection in our country." Later in the year, the World Health Organization announced a new <u>Commission on Social Connection</u> "to address loneliness as a pressing health threat, promote social connection as a priority, and accelerate the scaling up of solutions in countries of all incomes." These actions were taken in response to research and data showing how loneliness can significantly impact health. Socially isolated people have a 29% increased risk of heart disease, a 32% increased risk of stroke,<sup>1</sup> and increased susceptibility to viruses and respiratory illness.<sup>2</sup> They are at increased risk for mental health issues like anxiety, depression,<sup>3</sup> and dementia.<sup>4,5</sup> Finally, life expectancy is impacted by a 29% increase

**Prevalence of individuals categorized as severely socially isolated by grade (youth)/age group (adults) and year, Utah, 2019, 2021, and 2023** Figure 1. Youth were much more likely to be categorized as severely socially isolated, and feelings of social isolation increased significantly for all youth groups and for adults 18–34 between 2019 and 2021.



Source: youth - SHARP Prevention Needs Assessment; adults - BRFSS

in the likelihood of early death.<sup>6</sup> According to research from Julianne Holt-Lunstad at Brigham Young University, the mortality impact of being socially disconnected is similar to that caused by smoking as many as 15 cigarettes a day.<sup>7</sup>

Utah has collected data about social isolation and loneliness on our youth and adult public health surveys, the Utah Student Health and Risk Prevention (SHARP) and Behavioral Risk Factor Surveillance System (BRFSS) surveys since 2019. This data is used to identify at-risk groups, monitor trends, and inform prevention and mitigation efforts.

Surveys in Utah showed that youth respondents were significantly more likely to indicate feelings of social isolation, with feelings of social isolation peaking in the 10th grade (Figure 1). The oldest adult age group (65+) were the least likely to indicate feelings of social isolation (Figure 1) even while the group as a whole might be more likely to have smaller social networks than the youth respondents.<sup>8</sup>

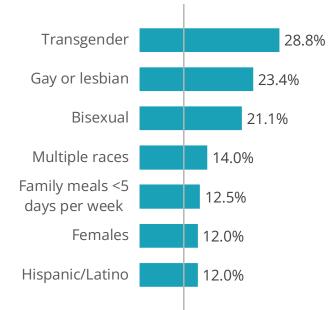
While youth indicate more feelings of social isolation, some adults did say they felt socially isolated. In those same surveys, 9.4% (ageadjusted rate) of Utah adults indicated that they always or usually felt socially isolated from others.

The 3 years of data available showed a statistically significant increase in the prevalence of feelings of social isolation between 2019 and 2021. The largest percentage point increases were among 8th-grade youth (5.8% up to 9.0%, Figure 1). While the prevalence of youth categorized as feeling severely socially isolated decreased between 2021 and 2023, prevalence remained elevated from 2019 numbers (Figure 1). The differences in feelings of social isolation are not only related to a person's age. Analysis of other demographic indicators in the 2023 SHARP survey highlights other groups of youth who are in need of special attention when we work to address this major public health issue. Specifically, youth who reported they were LGBTQ, multiracial, female, or Hispanic were more likely to be categorized as severely socially isolated (Figure 2). Data analysis also highlighted the importance of family meals. Youth who indicated they had family meals together 5 or more times a week were 50% less likely to report feeling severely socially isolated compared to those who indicated they ate together as a family less than 5 days per week (6.3% vs 12.6%).

### Percentage of youth with severe social isolation for select groups with the highest scores, Utah, 2023

Figure 2. Youth who reported they were LGBTQ, multiracial, female, Hispanic, or who did not have family meals together 5 or more days a week were significantly more likely to be categorized as severely socially isolated.

9.2% of all Utah youth respondents were categorized as severely socially isolated



Source: SHARP Prevention Needs Assessment



Many of these same disparities continue into adulthood according to BRFSS data. The data show 18.2% of adults who are Black and 15.5% of adults who reported they were LGBTQ+ indicated that they always or usually felt socially isolated from others, significantly higher than the 9.4% of all adults (age-adjusted rates).

Utah has started to work to address this public health priority, but efforts are still in the beginning stages and there is a need for continued coordination and support across the state. The Utah Department of Health and Human Services (DHHS) took its first step in 2023 with the release of the Youth Connectedness Toolkit. Later in 2023, building connectedness was added as one of the new priorities of the Utah Health Improvement Plan (UHIP). We established workgroups to focus on youth, low-income populations, and people who have disabilities. An additional workgroup will focus on better understanding the data as it relates to social connectedness and health outcomes, as well as increasing awareness. Each workgroup developed a work plan with objectives, strategies, and activities aimed to increase connectedness in Utah. More information about the 2023-2028 UHIP will be shared in the Health Status Update soon.

1. Valtorta NK, Kanaan M, Gilbody S, Ronzi S, Hanratty B. Loneliness and social isolation as risk factors for coronary heart disease and stroke: systematic review and metaanalysis of longitudinal observational studies. Heart. 2016;102(13):1009–1016.

2. Cohen S. Psychosocial Vulnerabilities to Upper Respiratory Infectious Illness: Implications for Susceptibility to Coronavirus Disease 2019 (COVID-19). Perspect Psychol Sci. 2020:1745691620942516.

3. Mann F, Wang J, Pearce E, et al. Loneliness and the onset of new mental health problems in the general population. Soc Psychiatry Psychiatr Epidemiol. 2022;57(11):2161–2178.

4. Penninkilampi R, Casey AN, Singh MF, Brodaty H. The Association between Social Engagement, Loneliness, and Risk of Dementia: A Systematic Review and Meta-Analysis. J Alzheimers Dis. 2018;66(4):1619–1633. 5. Lazzari C, Rabottini M. COVID-19, loneliness, social isolation and risk of dementia in older people: a systematic review and meta-analysis of the relevant literature. Int J Psychiatry Clin Pract. 2021:1–12.

6. Holt-Lunstad J, Smith TB, Baker M, Harris T, Stephenson D. Loneliness and social isolation as risk factors for mortality: a meta-analytic review. Perspect Psychol Sci. 2015;10(2):227–237.

7. Holt-Lunstad J, Robles TF, Sbarra DA. Advancing social connection as a public health priority in the United States. Am Psychol. 2017;72(6):517–530.

8. Child ST, Lawton L. Loneliness and social isolation among young and late middle-age adults: Associations with personal networks and social participation. Aging Ment Health. 2019 Feb;23(2):196–204. doi: 10.1080/13607863.2017.1399345. Epub 2017 Nov 24. PMID: 29171764; PMCID: PMC5967985.



### Key findings

- The neonatal mortality rate in planned OOH births is 3 times higher than the rate in planned hospital births. These estimates will be explored in future reports and used by the <u>OOH</u> <u>Birth Committee</u> to guide quality improvement efforts in and out of hospital.
- About 10% of planned OOH births were transferred to a hospital during labor. A majority of these transferred patients had no prior births.
- More individuals with pre-existing medical conditions had planned hospital births. This likely contributed to the higher observed prevalence of NICU admission, maternal uterine infection, and cesarean section,<sup>1</sup> along with other possible contributing factors.



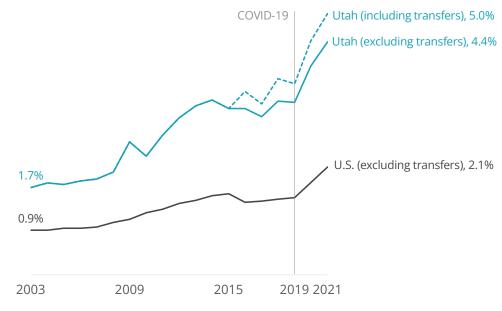
## Out-of-hospital (OOH) birth outcomes in Utah, 2016–2021

Out-of-hospital (OOH) birth, defined as birth that is planned to occur and completed in a home or birth center, has been increasing in Utah and nationally for the past 2 decades (Figure 1). OOH births are more than twice as common in Utah as the U.S. overall, at 4.4% compared to 2.1% in 2021. OOH birth is also increasing at a faster rate in Utah than nationally, with a particularly dramatic increase following the initial spread of COVID-19 in 2019. The Utah DHHS Office of Vital Records started collecting data on transfers from an OOH setting to a hospital in 2015, but these transfers typically aren't distinguished from hospital births in national birth statistics. The rare ability we have in Utah to report on transfers is critical to better understand and improve OOH birth outcomes.

This article describes selected characteristics of people who choose to deliver in OOH settings and several outcomes of these deliveries. We analyzed all live, term (≥37 weeks) births without lethal anomalies that occurred in Utah to Utah residents from 2016–2021. OOH births

### Planned OOH births, Utah and U.S., 2003–2021

Figure 1. The prevalence of OOH birth has been increasing both nationally and in Utah for the past 2 decades.



Note: Utah data are restricted to live, term births without lethal anomalies delivered in Utah to Utah residents. Out-of-hospital (OOH) births are births which at the time of labor were planned to occur at home or in a birth center. The solid line represents completed out-of-hospital births while the dashed line shows all planned out-of-hospital births including intrapartum transfers to hospital. Intrapartum transfer data is only available starting in 2015.

Source: Centers for Disease Control and Prevention, National Center for Health Statistics. National Vital Statistics System, Natality on CDC WONDER Online Database.



in this analysis include births which, at the time of labor, were planned to occur at home or in a birth center.

A total of 257,310 live, term infants without lethal anomalies were born in Utah to Utah residents between 2016–2021. Of these, 10,056 planned to be delivered out of hospital. Those who planned OOH births were more likely to identify as White, non-Hispanic, and 35 years or older. They were also less likely to have certain risk factors for poor birth outcomes including gestational diabetes and hypertension, obesity, prior cesarean, and third trimester smoking (Table 1).

### Maternal characteristics by planned birth setting, Utah, 2016–2021

Table 1. Individuals who were pregnant with the following characteristics were more likely to plan OOH births: age 35+, non-Hispanic, White race, and without complicating factors including gestational diabetes or hypertension, obesity, prior cesarean, or third trimester smoking.

Characteristic	ООН	Hospital
35 years and older	19%	14%
Hispanic	7%	18%
White	93%	84%
Gestational diabetes	1%	6%
Gestational hypertension	1%	7%
Obese	13%	23%
Prior cesarean	6%	14%
Smoked in third trimester	1%	3%

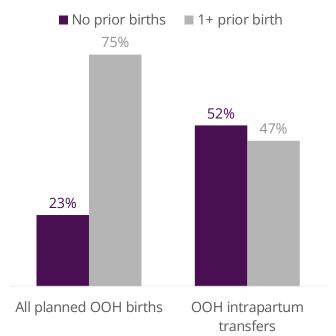
Source: Utah Office of Vital Records and Statistics

Of the planned OOH births in our sample, 10% (N = 1,013) were transferred to a hospital during labor but before delivery (intrapartum). An additional 3% (N = 299) were transferred after delivery (postpartum), for maternal or neonatal care. A greater proportion of planned birth center births were transferred, intrapartum or postpartum, compared to intended home

births (16% versus 12%). More than half of the intrapartum transfer patients had no prior births even though those with no prior births made up only 23% of planned OOH births (Figure 2).

### Overall planned OOH births and transfers by parity, Utah, 2016–2021

Figure 2. Although only 23% of planned out-of-hospital birthers had no prior births, 52% of transfer patients were first time birthers.



Source: Utah Office of Vital Records and Statistics

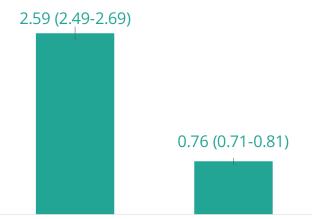
Higher risk deliveries are typically managed in-hospital. This is reflected in the data in Table 1, where we show that fewer individuals who were pregnant with gestational diabetes or hypertension planned to deliver OOH. Because in-hospital deliveries are more likely to be complex pregnancies, we expect to see higher rates of interventions and morbidities in hospital births compared to OOH births. As expected, our data shows that planned hospital births had higher prevalence of neonatal intensive care unit (NICU) admissions (6% versus 1%), chorioamnionitis (uterine infection)



(3% versus 1%), and cesarean section (21% versus 3%).<sup>1</sup> Planned hospital labors were also more likely to be induced (18% versus 2%) or augmented (27% versus 4%) than those planned to occur OOH.

Rates of newborn death within the first 28 days of life (neonatal mortality) were more than 3 times higher for planned OOH births, at 2.59 per 1,000 births, compared to hospital births, at 0.76 per 1,000 (Figure 3). This trend is consistent with previous estimates, and mortality reviews recommend prevention strategies. The Utah DHHS Perinatal Mortality Review (PMR) Committee—composed of neonatologists, obstetricians, midwives, and many other neonatal and maternal specialists—reviews deaths of all Utah infants attributed to perinatal conditions and recommends prevention strategies.

**Neonatal mortality rate per 1,000 live births by planned birth setting, Utah, 2016–2021** Figure 3. Rates of neonatal mortality were found to be three times higher among OOH deliveries than those born in hospital.



Source: Utah Office of Vital Records and Statistics

The <u>Utah Women and Newborns Quality</u> <u>Collaborative</u> facilitates the <u>OOH Birth</u> <u>Committee</u>, which is an inter-professional collaboration with the goals of analyzing the current state of OOH births in Utah; identifying maternal and neonatal safety issues related to OOH births; and creating statewide action items to address the recognized safety issues. The findings presented in this article will be used to guide the committee's priorities.<sup>2</sup>

### Recommendations

- Hospital and OOH birth attendants should be familiar with the Utah Women and Newborn Quality Collaborative (UWNQC) transfer tools and follow the recommendations in <u>Utah Best</u> <u>Practice Guidelines: Transfer to Hospital from</u> <u>Planned Out-of-Hospital Birth</u>
- People who will be giving birth should be counseled about the potential risks and benefits of their birth setting options.
- Those who plan an OOH birth—especially those who haven't given birth before—should know about the chances of transfer to a hospital and work with their midwife on a transfer plan before labor begins.
- Hospital and emergency services staff, midwives, and doulas should look for educational opportunities to improve collaboration and continuity of care during the transfer process.

<sup>1.</sup> Cesarean delivery is not performed OOH. OOH cesarean deliveries occurred after transfer to a hospital from an OOH setting.

<sup>2. &</sup>lt;u>OOH Birth Committee</u> meetings are generally held on the second Tuesday of each month from 3:00–4:30 pm via Zoom, and are open to the public. Contact <u>uwnqc@utah.gov</u> to be added to the email distribution.

# Spotlights



### Impact of the School Stock Albuterol Program in Utah

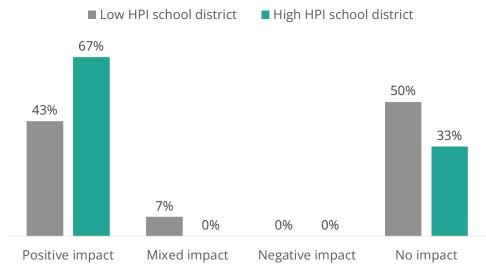
Stocking albuterol in schools can be an important resource to students when personal inhalers are not available to help control asthma attacks at school. In Utah, schools can obtain and distribute albuterol to students when there is a trained adult (training can be found <u>here</u>) or a school nurse available to administer the albuterol. About 12% of Utah schools implemented the School Stock Albuterol Program (SSAP) during the 2022–2023 school year. Access to asthma medication in schools remains critically important, especially in disadvantaged areas. Those living in disadvantaged areas are more likely to have unmet medical needs<sup>1</sup> like access to asthma medication. The <u>Healthy Places Index (HPI)</u> and SSAP survey data were used to measure the impact of the SSAP on students, guardians, and the school based on HPI scores. School districts were assigned high (good) if their HPI score was at or above the 50th percentile and low (improvement needed) if their HPI score was below the 50th percentile.

Data from the SSAP survey was collected to improve the SSAP training, support the program, and identify barriers to program implementation. All students (N=13) who were given stock albuterol were able to return to class. About 83% (N=5) of respondents reported that guardians responded "positively" or "very positively" to the program. About 67% (N= 4) of respondents in high HPI school districts and about 43% (N=6) of respondents in low HPI school districts reported a "positive Impact" on the school. Zero respondents reported that the SSAP had a "negative Impact" on the school. About 7% or 1 respondent from a low HPI school district reported a "mixed Impact" because it was difficult to get staff to complete the online training. Several respondents (N=6) reported "no impact" because they had not used the stock albuterol in their school. However, several respondents who reported "no Impact" said that it was "nice to have" because it provided a "sense of security." Overall, the SSAP had positive impacts on students, guardians, and the school regardless of HPI designation. The Utah Asthma Program plans to work with partners to increase the number of schools with the SSAP and reduce barriers to implementation including training evaluation.

1. Kirby JB, Kaneda T. Neighborhood socioeconomic disadvantage and access to health care. J Health Soc Behav. 2005 Mar;46(1):15–31. doi: 10.1177/002214650504600103. PMID: 15869118.

### Percentage of School Stock Albuterol Program (SSAP) survey respondents by school district Healthy Places Index (HPI) and impact of SSAP on schools

Figure 1. Respondents from low HPI school districts reported less frequently that SSAP had a positive impact on their school when compared to respondents from high HPI school districts.



Source: School Stock Albuterol Survey, 2022 and 2023, Utah Asthma Program, Utah Department of Health and Human Services

## Monthly health indicators

Monthly report of notifiable diseases, January 2024	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 <u>https://coronavirus.utah.gov/case-counts/</u>						
Campylobacteriosis (Campylobacter)	28	38	28	38	0.7		
Hepatitis A (infectious hepatitis)	0	1	0	1	0.0		
Hepatitis B, acute infections (serum hepatitis)	2	2	2	2	1.3		
Influenza	Weekly	updates at <u>htt</u>	ps://epi.utah.g	<u>;ov/influenza-re</u>	eports/		
Meningococcal disease	0	0	0	0	0.0		
Pertussis (whooping cough)	7	18	7	18	0.4		
Salmonellosis (Salmonella)	25	20	25	20	1.2		
Shiga toxin-producing Escherichia coli (E. coli)	6	9	6	9	0.6		
Shigellosis (Shigella)	7	8	7	8	0.9		
Varicella (chickenpox)	6	13	6	13	0.5		
West Nile (human cases)	0	0	0	0	0.0		
Quarterly report of notifiable diseases, 4th quarter 2023	Current quarter # cases	Current quarter # expected cases (5-yr average)	# cases YTD	# expected cases YTD (5-yr average)	YTD standard morbidity ratio (obs/exp)		
Chlamydia	2,609	2,688	10,927	10,867	1.0		
Gonorrhea	637	808	2,635	3,113	0.8		
HIV/AIDS*	44	31	167	137	1.2		
Syphilis	51	47	307	176	1.7		
Tuberculosis	8	7	34	24	1.4		
Medicaid expenditures (in millions) for the month of December 2023	Current month	Expected/ budgeted for month	Fiscal YTD	Budgeted fiscal YTD	Variance over (under) budget		
Mental health services	\$ 145.0	\$ 174.1	\$ 243.4	\$ 243.0	\$ 0.4		
Inpatient/outpatient hospital services	110.3	160.8	141.7	146.9	(5.2)		
Nursing home services	175.6	255.7	414.4	470.8	(56.4)		
Pharmacy services	10.9	12.1	52.2	105.4	(53.2)		
Physician/osteo services‡	11.9	41.5	49.9	53.2	(3.3)		
Medicaid expansion services	89.4	543.6	34.3	47.7	(13.4)		
Total Medicaid§	3,501.1	4,601.8	2,123.9	3,613.4	(1,489.5)		

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

\* Diagnosed HIV infections, regardless of AIDS diagnosis.

# Medicaid payments reported under physician/osteo services do not include enhanced physician payments.



### Monthly health indicators

Program enrollment for the month of January 2024	Current month	Previous month	% changel  from previous month	1 year ago	% change   from 1 year ago
Medicaid	341,606	359,680	-5.0%	492,122	-30.6%
CHIP (Children's Health Insurance Plan)	9,444	9,249	+2.1%	5,515	+71.2%
Commercial insurance payments#	Current data year	Number of members	Total payments	Payments per member per month (PMPM)	% change** from previous year
Medical	2022	12,035,192	\$ 4,057,120,087	\$ 337.10	+3.6%
Pharmacy	2022	11,211,332	1,048,715,815	93.54	+9.5%
Dental	2022	8,688,828	229,619,441	26.43	-7.4%
Annual community health measures	Current data year	Number affected	Percent\rate	% change   from previous year	State rank†† (1 is best)
Obesity (adults 18+)	2022	762,300	31.1%	+0.6%	16 (2022)
Child obesity (grade school children)	2018	38,100	10.6%	0.0%	n/a
Cigarette smoking (adults 18+)	2022	164,200	6.7%	-6.9%	1 (2022)
Vaping, current use (adolescents)	2023	19,300	6.0%	-23.1%	n/a
Binge drinking (adults 18+)	2022	313,700	12.8%	+9.4%	1 (2022)
Influenza immunization (adults 65+)	2022	273,700	66.5%	-4.9%	34 (2022)
Health insurance coverage (uninsured)	2021	248,800	7.4%	-14.0%	n/a
Motor vehicle traffic crash injury deaths	2022	310	9.1 / 100,000	-8.0%	12 (2021)
Drug overdose deaths involving opioids	2022	435	12.8 / 100,000	-5.1%	11 (2021)
Suicide deaths	2022	717	21.1 / 100,000	+9.5%	38 (2021)
Unintentional fall deaths	2022	457	13.4 / 100,000	+10.8%	38 (2021)
Traumatic brain injury deaths	2022	701	20.6 / 100,000	-0.5%	24 (2021)
Arthritis prevalence (adults 18+)	2022	551,500	22.5%	+7.7%	17 (2022)
Asthma prevalence (adults 18+)	2022	269,600	11.0%	+13.4%	32 (2022)
Diabetes prevalence (adults 18+)	2022	213,200	8.7%	+8.7%	15 (2022)
High blood pressure (adults 18+)	2021	638,700	26.7%	+3.5%	11 (2021)
Poor mental health (adults 18+)	2022	622,500	25.4%	+0.8%	32 (2022)
Coronary heart disease deaths	2022	1,863	54.7 / 100,000	-2.0%	7 (2021)
All cancer deaths	2022	3,500	102.8 / 100,000	-1.5%	1 (2021)
Stroke deaths	2022	958	28.1 / 100,000	+10.2%	11 (2021)
Births to adolescents (ages 15–17)	2022	257	3.0 / 1,000	-10.8%	11 (2021)
Early prenatal care	2022	33,326	72.8%	-5.5%	n/a
Infant mortality	2022	226	4.9 / 1,000	+5.3%	11 (2021)
Complete immunization by age 2‡‡	2022	36,800	78.3%	+5.0%	4 (2022)

|| Relative percent change. Percent change could be due to random variation.

# Figures subject to revision as new data is processed.

\*\* Percent change is due to changes in membership as well as changes in data suppliers included.

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

## Childhood 7-series (4:3:1:3:3:1:4) data from 2022 NIS for children aged 24 months (birth year 2020).