



# Utah health status update

## Key findings

- During 2017–2021, infants born out-of-hospital in Utah were less likely to receive a hearing screening (92.9% vs. 99.2%), diagnostic tests (65.1% vs. 89.7%), early intervention services (66.7% vs 76.6%), and cCMV testing (38.5% vs. 85.5%) compared with infants born in hospital (figure 1).<sup>1</sup>
- The percentage of infants born out-of-hospital who received newborn hearing screenings, diagnostic hearing tests, and early intervention hearing services increased steadily from 2017 to 2021 (figure 2).

## Out-of-hospital births in Utah: Newborn hearing screening, diagnostics, and cCMV testing

The Utah Early Hearing Detection and Intervention (EHDI) Program adheres to the national 1-3-6 goals set by the [Joint Committee on Infant Hearing](#). These goals are defined as 1–screen all infants for hearing loss no later than 1 month of age, 3–ensure infants with failed hearing screenings receive a diagnostic audiological evaluation no later than 3 months of age, and 6–enroll infants with identified hearing loss in early intervention (EI) services no later than 6 months of age. Improved [communication competence](#), speech, and sign language are seen among children with hearing intervention needs when these milestones are met.<sup>1</sup>

In 2013, Utah was the first state in the nation to adopt hearing-targeted screening for congenital cytomegalovirus (cCMV), the leading non-genetic cause of hearing loss in newborns.<sup>3</sup> Newborns are referred for cCMV testing after a failed hearing screening. The cCMV test is time-sensitive and important to complete before the infant is 21 days old. The Utah EHDI program tracks adherence to newborn hearing services and testing. Completing hearing services can be difficult for families whose infants are born out-of-hospital. A 2011 national analysis found the third most reported weakness of EHDI programs were completing milestones with homebirths.<sup>2</sup>

Utah infants born out-of-hospital are less likely to complete recommended hearing services.<sup>4</sup> During 2017–2021, infants born out-of-hospital in Utah had a lower percentage of hearing screenings (92.9% vs. 99.2%), diagnostic tests (65.1% vs. 89.7%), early intervention services (66.7% vs 76.6%), and cCMV testing (38.5% vs. 85.5%) compared with infants born in hospital (figure 1).<sup>1</sup> However, the percentage of infants born out-of-hospital who were screened, diagnosed, and tested for cCMV increased nearly every year from 2017-2021 (figure 2).<sup>4</sup>

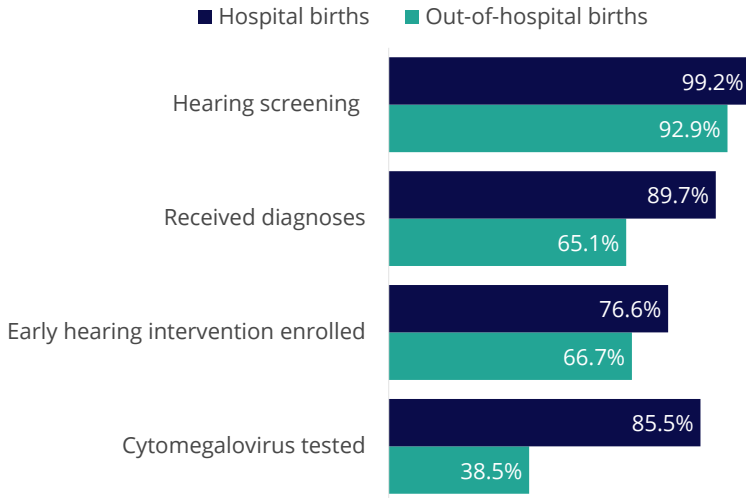




Feature article continued

### Percentage of infants who completed hearing services by birth site, Utah 2017–2021

Figure 1. Newborns born out-of-hospital had lower rates of completing hearing testing and CMV testing compared with newborns born in a hospital.

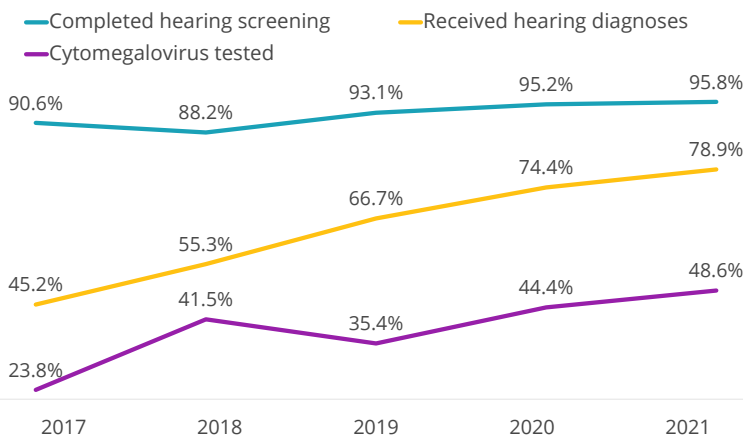


Source: Utah Department of Health and Human Services Early Hearing Detection and Intervention Program.

The percentage of infants born out-of-hospital who received a hearing screening increased from 90.6% in 2017 to 95.8% in 2021. The percentage of infants who completed testing for cytomegalovirus increased from 23.8% in 2017 to 48.6% in 2021 (figure 2).

### Percentage of infants born out-of-hospital who completed newborn hearing services by year, Utah, 2017–2021

Figure 2. CMV testing, hearing screening, and diagnostic evaluations steadily improved each year.



Source: Utah Department of Health and Human Services Early Hearing Detection and Intervention Program.

This data suggests while significant disparities to complete newborn hearing services exist for Utah infants born out-of-hospital, significant improvement has been observed from 2017–2021.

The Utah EHDI team provides hearing screening equipment to several midwives to use in out-of-hospital births. The EHDI follow-up coordinator/ midwife liaison forms strong relationships with midwives who work in Utah. These efforts have helped improve the achievement of hearing services completed for infants born out-of-hospital and the EHDI program works to promote and improve newborn hearing services for all births. The program continues to explore new ways to better serve families who choose home births.

For more information visit the Early Hearing Detection and Intervention website: <https://health.utah.gov/cshcn/programs/ehdi.html> or find resources on cCMV testing at <https://health.utah.gov/cshcn/programs/cmvm.html>.

1. The Joint Committee on Infant Hearing. The year 2019 Position Statement: Principles and Guidelines for Early Hearing Detection and Intervention Programs. *Journal of Early Hearing Detection and Intervention*. 1998; 4(2), 1-44. DOI: <https://doi.org/10.15142/ftpk-b748>
2. Houston KT, Bradham TS, Munoz KF & Guignard GH. Newborn Hearing Screening: An Analysis of Current Practices. *Volta Review*. 2011; 111(2), 109-120. DOI: 10.17955/tvr.111.2.m.672
3. Boppana SB, Ross SA, Fowler KB. Congenital cytomegalovirus infection: clinical outcome. *Clin Infect Dis* 2013; 57(4): S178-S181.
4. Utah Department of Health and Human Services Early Hearing Detection and Intervention Program. <https://health.utah.gov/cshcn/programs/ehdi.html>

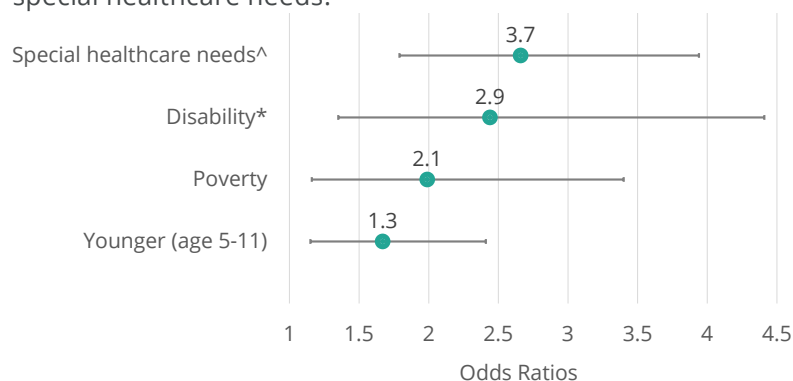
## Sociodemographic factors associated with frequent bullying, Utah, 2018–2021

Bullying is a public health problem that can negatively impact a person’s social, educational, mental, and physical health outcomes throughout childhood and into adulthood.<sup>1</sup> Research has found children who are bullied often report greater levels of fear and worry, disobedience, lying, and irritability, and are more likely to experience depression, anxiety, and social withdrawal.<sup>2</sup> Physical symptoms of bullying include sleep disorders, gastrointestinal problems, headaches, heart palpitations, and chronic pain.<sup>3</sup> Other research has shown those who experienced bullying in childhood report worse mental health problems in adulthood such as anxiety, depression, self-harm, suicidality, and substance misuse compared with those who were not bullied.<sup>4,5</sup>

The National Survey of Children’s Health (NSCH) is a nationally representative survey given to parents to report on the health and well-being of their children. This survey includes a question about whether their child is bullied. The analysis contains data about bullying among children ages 5–17 from the Utah NSCH report, 2018–2021. Bullying is defined as being picked on or excluded by other children at least once in the past 12 months. This analysis focuses on children who are frequently bullied, defined as experiencing bullying 1 to 2 times per month or more. The NSCH estimates that 53% of children (N = 332,229) in Utah are ever bullied and 14% (N = 88,077) are frequently bullied. Adjusting for potential confounding factors, the odds of parents reporting their child is frequently bullied in Utah are 1.7 times higher for younger children ages 5-11 years compared with children ages 12-17 years; 2.0 times higher for children who have experienced poverty—defined as often struggling to afford basic needs since their child was born; 2.4 times higher for children who have a disability\* and 2.7 times higher for children with special healthcare needs.^ Sex, race/ethnicity, adult education, and family structure show no significant association with reports of being frequently bullied. Knowledge of groups more affected by frequent bullying in Utah could help prevent bullying and target public health and school-based interventions for children who need the most intervention. For more information and resources for bullying prevention visit: <https://vipp.health.utah.gov/socioeconomic-conditions/>, <https://vipp.health.utah.gov/student-injuries/>, <https://utahparentcenter.org/resources/bullying/>, <https://www.schools.utah.gov/prevention/bullying>.

### Odds ratios of children ages 5-17 who reported being bullied by sociodemographic factors, Utah, 2018–2021

Figure 1. The ratio of bullying was highest among children with special healthcare needs.



Source: National Survey of Children’s Health, Health Resources and Services Administration, Maternal and Child Health Bureau. <https://mchb.hrsa.gov/data/national-surveys>.

Note: <sup>^</sup>Special healthcare needs includes conditions such as the need for or use of prescription medication, need for medical intervention services, functional limitations, need for or use of specialized therapy, ongoing emotional, behavioral, or developmental problems for which treatment or counseling is needed.

<sup>\*</sup>Disability includes any condition of the body or mind (impairment) that makes it more difficult for the person with the condition to do certain activities (activity limitation) and interact with the world around them (participation restrictions).<sup>6</sup>

1. Armitage R. Bullying in children: impact on child health. *BMJ Paediatr Open.* 2021 Mar 11;5(1):e000939. doi: 10.1136/bmjpo-2020-000939. PMID: 33782656; PMCID: PMC7957129.
2. Merrill RM, Hanson CL. Risk and protective factors associated with being bullied on school property compared with cyberbullying. *BMC Public Health.* 2016 Feb 12;16:145. doi: 10.1186/s12889-016-2833-3. PMID: 26873180; PMCID: PMC4752746.
3. Committee on the Biological and Psychosocial Effects of Peer Victimization: Lessons for Bullying Prevention; Board on Children, Youth, and Families; Committee on Law and Justice; Division of Behavioral and Social Sciences and Education; Health and Medicine Division; National Academies of Sciences, Engineering, and Medicine; Rivara F, Le Menestrel S, editors. *Preventing Bullying Through Science, Policy, and Practice.* Washington (DC): National Academies Press (US); 2016 Sep 14. 4. Consequences of Bullying Behavior. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK390414/>
4. Lereya S. et al. Adult mental health consequences of peer bullying and maltreatment in childhood: two cohorts in two countries. *April 28, 2015.* [http://dx.doi.org/10.1016/S2215-0366\(15\)00165-0](http://dx.doi.org/10.1016/S2215-0366(15)00165-0)
5. Gaete J, Tornero B, Valenzuela D, Rojas-Barahona CA, Salmivalli C, Valenzuela E, Araya R. Substance Use among Adolescents Involved in Bullying: A Cross-Sectional Multilevel Study. *Front Psychol.* 2017 Jun 28;8:1056. doi: 10.3389/fpsyg.2017.01056. PMID: 28701974; PMCID: PMC5487445.
6. Centers for Disease Control and Prevention: Disability <https://www.cdc.gov/ncbddd/disabilityandhealth/disability.html>

# Monthly health indicators

Monthly report of notifiable diseases, February 2023	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)	39	36	39	36	1.1
Salmonellosis (Salmonella)	25	20	25	20	1.2
Shiga toxin-producing Escherichia coli (E. coli)	8	8	8	8	1.0
Pertussis (Whooping Cough)	3	21	3	21	0.1
Varicella (Chickenpox)	8	17	8	17	0.5
Shigellosis (Shigella)	17	5	17	5	3.7
Hepatitis A (infectious hepatitis)	<5	<5	<5	<5	n/a
Hepatitis B, acute infections (serum hepatitis)	<5	<5	<5	<5	n/a
Meningococcal Disease	<5	<5	<5	<5	n/a
Quarterly report of notifiable diseases, 4th 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† (Q1 2023)	38	32	38	32	1.2
Chlamydia	2,951	2,806	11,052	10,879	1.0
Gonorrhea	824	854	3,158	3,128	1.0
Syphilis	68	47	233	176	1.3
Tuberculosis	7	8	33	24	1.4
Medicaid expenditures (in millions) for the month of February 2023	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 February	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 are subject to revision as new data is processed.

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

<sup>††</sup> Data from 2021 NIS is for children aged 24 month (birth year 2019).