Utah health status update

Key findings

- The percentage of people who gave birth and said their healthcare providers recommended the COVID-19 vaccine and the percentage of those who received the COVID-19 vaccine steadily increased as information about the safety of the vaccine during pregnancy increasingly reached the public throughout the year in 2021 (figure 1).
- The majority (62%) of Utah residents who delivered a live infant in Utah in 2021 said their healthcare provider was their most trusted source of COVID-19 vaccine information (figure 3).

COVID-19 vaccination during pregnancy, Utah 2021

Prior to the availability of COVID-19 vaccines, multiple studies found pregnant individuals with COVID-19 were more likely to be hospitalized, be admitted to the intensive care unit, require mechanical ventilation, and die from the illness when compared to non-pregnant individuals.[1-2] COVID-19 vaccines were granted Emergency Use Authorization (EUA) by the Food and Drug Administration (FDA) for vulnerable populations including pregnant individuals in December 2020. However, pregnant people were excluded from initial vaccine trials and only limited human data on safety during pregnancy were available during this emergency authorization.[3] Due to the exclusion of pregnant individuals in early clinical research, clinicians and their patients were left to weigh the risks of COVID-19 infection against the unknown safety risks of vaccination during pregnancy. In Utah, questions about vaccine trials and uncertainty about the safety of the vaccine prompted nearly 400 calls to MotherToBaby Utah, the state's teratogen information specialists, during 2021.

By June 2021, preliminary study findings were released indicating COVID-19 vaccines were safe to administer during pregnancy.[4] The American College of Obstetricians and Gynecologists (ACOG) and the Society for Maternal-Fetal Medicine (SMFM) then published recommendations for all pregnant individuals to be vaccinated against COVID-19[5] and the Centers for Disease Control and Prevention (CDC) began recommending the COVID-19 vaccination for pregnant people in August 2021.[6]

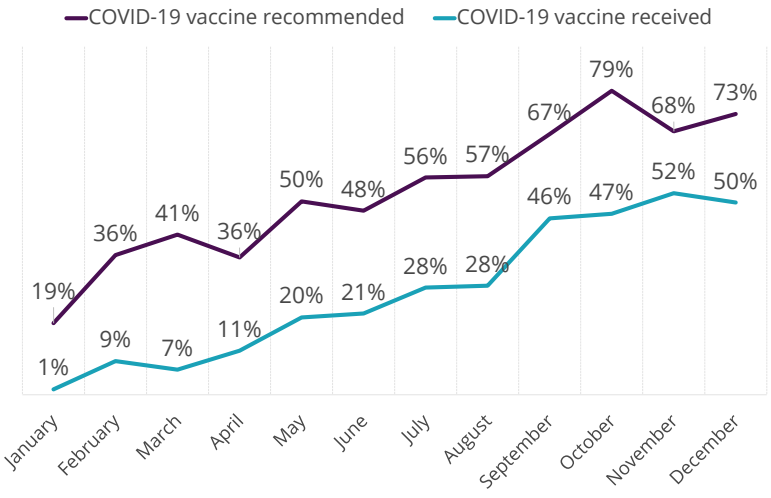
In April 2021, the Utah Pregnancy Risk Assessment Monitoring System (PRAMS) received funds from the Council of State and Territorial Epidemiologists (CSTE) to collect information about pregnancy experiences related to the COVID-19 vaccine. Results of the survey indicate fewer than a third (26.9%) of Utah residents who delivered a live infant in Utah in 2021 received the COVID-19 vaccine during pregnancy.

Feature article continued

The percentage who said their healthcare providers recommended the COVID-19 vaccine and the percentage who received the COVID-19 vaccine steadily increased as more information about the safety of the vaccine during pregnancy reached the public throughout the year (figure 1). However, the percentage who received the COVID-19 vaccine was consistently lower than the percentage who said their healthcare provider recommended it. Higher rates of receiving COVID-19 vaccination during pregnancy were found among those who graduated from college (40.1%) and those with incomes at or more than 185% of the federal poverty level (32.6%) when compared with those who did not graduate from college (17.3%) and those with incomes less than 185% of the federal poverty level (16.0%).

Percentage of people who said their healthcare provider recommended they receive a COVID-19 vaccine during pregnancy and percentage of people who received at least one dose of COVID-19 vaccine during pregnancy, Utah 2021

Figure 1. The percentage of people who said their healthcare providers recommended they receive the COVID-19 vaccine during pregnancy and the percentage of those who received a COVID-19 vaccine during pregnancy steadily increased from January to December 2021.



Source: Utah Department of Health and Human Services Pregnancy Risk Assessment Monitoring System (PRAMS), 2021

The Pregnancy Risk Assessment Monitoring System (PRAMS) survey asked what factors influenced the decision not to receive a COVID-19 vaccine during pregnancy. Results showed many factors influenced decisions about the vaccination; most notable were concerns about the safety of the vaccine. More than three-quarters (75.9%) of pregnant people cited concerns about side effects for their baby as the primary reason why they did not receive a COVID-19 vaccine (figure 2). In addition, 62.6% reported concern of side effects for themselves.

Percentage of people who said "Yes" to the reasons listed for not getting vaccinated during pregnancy, Utah 2021

Figure 2. More than three-quarters (75.9%) of people cited concerns about side effects for their baby as the primary reason why they did not receive a COVID-19 vaccine during their pregnancy.

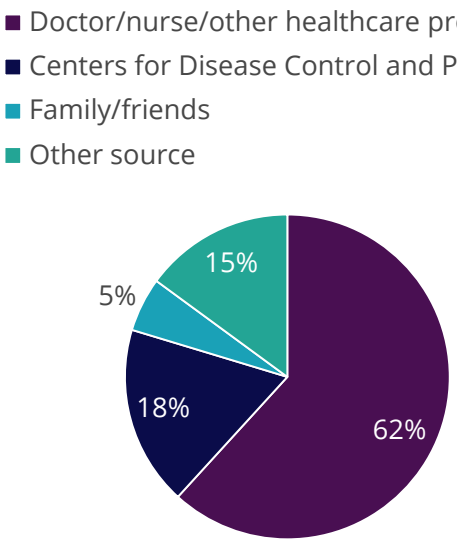
Survey question responses	Yes %
I was concerned about possible side effects of the COVID-19 vaccine for my baby	75.9%
I was concerned about possible side effects of the COVID-19 vaccine for me	62.6%
I didn't have enough information about the vaccine to feel comfortable getting it	54.4%
I was concerned that the COVID-19 vaccine was developed too fast	49.5%
I preferred using masks and other precautions instead	32.7%
I didn't think the vaccine would protect me against COVID-19	26.0%
I already had COVID-19	20.7%
I was not in one of the groups to get the COVID-19 vaccine	19.2%
I didn't think COVID-19 was a serious illness	12.1%
I didn't think I was at risk for COVID-19 infection	11.4%
The vaccine was not available or ran out in my area	7.9%
I don't think vaccines are beneficial	7.3%
My doctor or healthcare provider told me not to get the vaccine	6.1%
The staff at the vaccination site didn't want to give me the vaccine because I was pregnant	2.5%
I have an allergy or health condition that prevented me from getting the vaccine	1.9%
I couldn't get an appointment or was placed on a waiting list	1.2%

Source: Utah Department of Health and Human Services Pregnancy Risk Assessment Monitoring System (PRAMS), 2021

Feature article continued

The majority (62%) of Utah residents with a live infant delivery in Utah in 2021 said their healthcare provider was their most trusted source for information about the COVID-19 vaccine (figure 3). The second most trusted source was information from the Centers for Disease Control and Prevention (18%).

Most trusted sources of COVID-19 vaccine information among pregnant people, Utah 2021
Figure 3: The majority of Utah residents with a live infant delivery in Utah in 2021 said their healthcare provider was their most trusted source for information about the COVID-19 vaccine.



Source: Utah Department of Health and Human Services Pregnancy Risk Assessment Monitoring System (PRAMS), 2021
Note: The category titled "other source" included television/radio news, social media posts, health departments, pharmacists, miscellaneous websites, and the Food and Drug Administration (FDA).

People who are pregnant have a higher risk of becoming severely ill from COVID-19 compared with people who are not pregnant.[7] These risks include illness with admission to an intensive care unit (ICU), ventilation, increased risk of delivering a preterm (<37 weeks) and/or a stillborn infant, and death. Findings from the PRAMS survey highlight the strong influence of timing of the release of vaccine safety communication and sources of health information.

As COVID-19 continues to be a serious risk for pregnant people, targeted, strong, and clear public health messaging about the importance of receiving the vaccine must be maintained.

This research and data was limited to survey questions answered to help understand the decisions pregnant people made to receive or not receive the COVID-19 vaccine. This research did not assess differences between outcomes among pregnant people who were vaccinated and outcomes among pregnant people who were not vaccinated. Education and resources influence vaccination decisions and it is important to understand and support future vaccination efforts.

For more information about the safety of the COVID-19 vaccination during pregancy visit https://coronavirus.utah.gov/vaccine.

1. Ellington S, Strid P, Tong VT, et al. Characteristics of women of reproductive age with laboratory-confirmed SARS-CoV-2 infection by pregnancy status—United States, January 22–June 7, 2020. MMWR Morb Mortal Wkly Rep 2020;69:769-75.

2. Zambrano LD, Ellington S, Strid P, et al. Update: characteristics of symptomatic women of reproductive age with laboratoryconfirmed SARS-CoV-2 infection by pregnancy status—United States, January 22–October 3, 2020. MMWR Morb Mortal Wkly Rep 2020;69:1641-7

3. Riley L, mRNA Covid-19 Vaccines in Pregnant Women, Editorial June 2021. N Engl J Med 2021; 384:2342-2343

4. Shimabukuro T, Kim S, Myers T, et al. Preliminary Findings of mRNA Covid-19 Vaccine Safety in Pregnant Persons–April 2021. N Engl J Med 2021; 384:2273-2282

5. The American College of Obstetricians and Gynecologists ACOG and SMFM Recommend COVID-19 Vaccination for Pregnant Individuals https://www.acog.org/news/news-releases/2021/07/acog-smfm-recommend-covid-19-vaccination-for-pregnant-individuals

6. Centers for Disease Control and Prevention New CDC Data: COVID-19 Vaccination Safe for Pregnant People. https://www.cdc.gov/media/releases/2021/s0811-vaccine-safe-pregnant.html

7. Centers for Disease Control and Prevention New CDC Data: Investigating the Impact of COVID-19 During Pregnancy. https://www.cdc.gov/coronavirus/2019-ncov/cases-updates/special-populations/pregnancy-data-on-covid-19/what-cdc-is-doing.html

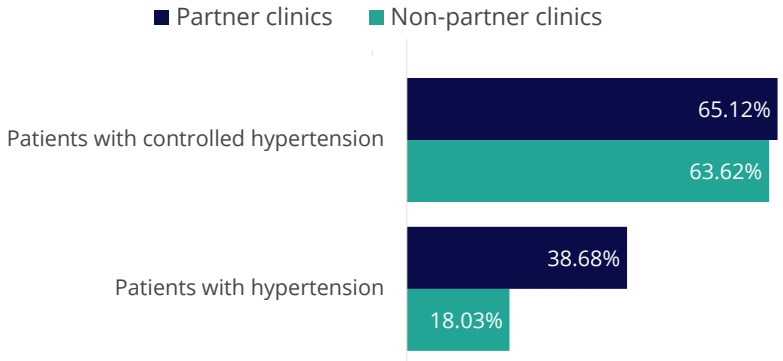
Hypertension control among HEAL program partner clinics

Hypertension is high blood pressure above 140/90 mmHg and is known as the silent killer because it often has no obvious signs or symptoms. Many people are not aware they have it.[1] Hypertension is a serious health problem which increases the risk for heart attack, stroke, or developing chronic kidney disease.[1] It is important to control blood pressure to below 140/90 mmHg through lifestyle changes and/or medication for people who live with hypertension. In the U.S., only 1 in 4 adults with hypertension have high blood pressure controlled.[1]

The Utah Department of Health and Human Services (DHHS) Healthy Environments Active Living (HEAL) program participates in the Utah Million Hearts Coalition (UMHC), made up of members from DHHS, non-profit health consulting, community health centers, Utah-based healthcare systems, American Heart Association, and local health departments with the goal to improve blood pressure management and control rates. The UMHC developed an award program to recognize participating clinics in the state with the Excellence in Blood Pressure Measurement and Control Award. The award highlights their work to identify best practices, measurement, and control for blood pressure to reduce hypertension. In 2022, 113 Utah participating primary care clinics applied for this award. Clinics working with the HEAL program who were also Million Hearts award applicants had a higher burden of patients with hypertension. However, the number of patients with controlled hypertension was higher among HEAL partners who applied than non-partner clinics. Partner clinics documented hypertension control in 65.12% of hypertensive patients, while non-partner clinics documented 63.62% of hypertensive patients in control (figure 1). The higher rates of hypertension control among partner clinics in this study show public health support could help with clinical quality improvement.

Percentage comparison between the HEAL program partner and non-partner clinics in hypertension-related outcomes, Utah, 2020–2021

Figure 1. Utah clinics working with the HEAL program had higher percentages of hypertension management and control compared with clinics who did not work with HEAL.



Source: Utah Department of Health and Human Services HEAL Program
Centers for Disease Control and Prevention, Million hearts 2022
Note: Data is from the 2022 Excellence in Blood Pressure Measurement and Control Award. Analysis was conducted by the Wyoming Survey & Analysis Center at the University of Wyoming (WYSAC).

1. Centers for Disease Control and Prevention High Blood Pressure Symptoms and Causes. Accessed November 21, 2022. https://www.cdc.gov/bloodpressure/about.htm

2. Centers for Disease Control and Prevention Facts About Hypertension. Accessed November 21, 2022. https://www.cdc.gov/bloodpressure/facts.htm

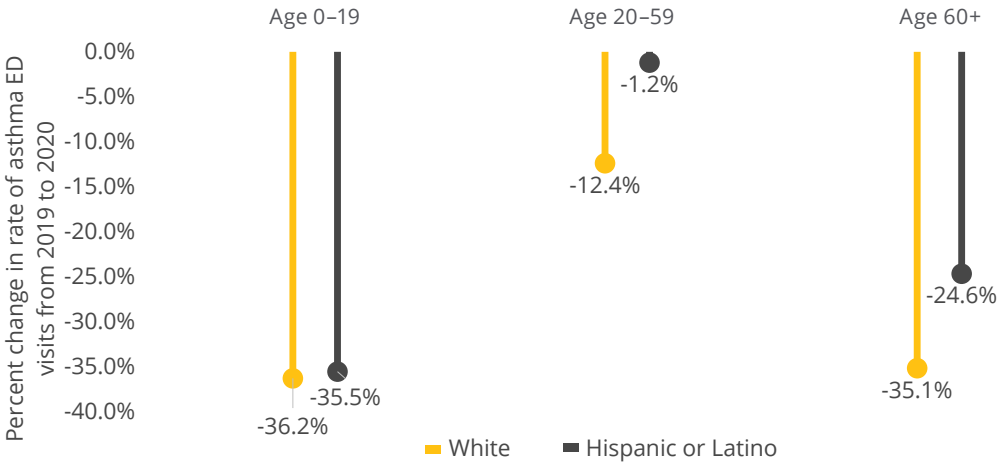
3. Centers for Disease Control and Prevention Estimated Hypertension Prevalence, Treatment, and Control Among U.S. Adults. 2022. Accessed November 21, 2022. https://millionhearts.hhs.gov/data-reports/hypertension-prevalence.html

Disparities in the improvement of asthma morbidity during the first year of the COVID-19 pandemic

Asthma is a respiratory condition worsened by viral infections like COVID-19. However, recent studies unexpectedly found a reduction in pediatric asthma emergency department (ED) visits during the first year of the 2020 COVID-19 pandemic.[1-3] These studies also found public health measures like social distancing, mask-wearing, school closures, and stay-at-home orders coincided with decreased viral exposures, decreased asthma attacks, and decreased asthma ED visits.[1-3]

Rates of asthma ED visits in Utah by age and race/ethnicity declined from 2019 to 2020. While the decline in ED visits was similar in people who identify as White (-36.2%) and Hispanic (-35.5%) younger than age 19, the decline was larger in the White population than the Hispanic population for adults ages 20–59 (-12.4% vs. -1.2%) (figure 1). For those aged 60 and older, people who identify as White had a larger reduction in asthma ED visit rates compared with people who identify as Hispanic (-35.1% vs. -24.6%).

Percentage decrease in asthma emergency department rates by age and race/ethnicity, Utah, 2019 to 2020
Figure 1. Adults aged 20+ who identify as White had a larger reduction in asthma emergency department rates when compared with adults who identify as Hispanic. There was little difference for those aged 0–19 between these groups.



Source: Utah Department of Health and Human Services Emergency Department Encounter Database, Bureau of Emergency Medical Services
Note: Data from emergency department visit rates can be found here. https://ibis.health.utah.gov/ibisph-view/query/selection/ed/EDSelection.html

People who identify as Hispanic aged 20–59 had the smallest reduction in asthma ED visit rates from 2019 to 2020 compared with people who identify as White and other Hispanic age groups. It is important to understand how the combined effect, or intersectionality of age and ethnicity, resulted in differing effects of protective public health measures on health outcomes. It should be noted the asthma ED rates among people who identify as Hispanic (20.4 per 10,000 ED visits) was higher across all age groups when compared with people who identify as White (15.8 per 10,000 ED visits).[4] To address health disparities we must understand how demographic characteristics intersect and contribute to differences in health outcomes.

1. Arsenault S, Hoofman J, Poowuttikul P, Secord E. Sustained decrease in pediatric asthma emergency visits during the first year of the COVID-19 pandemic. Allergy Asthma Proc. 2021; 42(5): 400-402. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8677502/

2. Ulrich L, Macias C, George A, Bai S, Allen E. Unexpected decline in pediatric asthma morbidity during the coronavirus pandemic. Pediatric Pulmonology. 2021; 56(7): 1951-1956. https://onlinelibrary.wiley.com/doi/full/10.1002/ppul.25406

3. Akelma Z, Baskaya N, Cetin S, Bostanci I, Ozmen S. Improvement in school-aged children with asthma during the Covid-19 pandemic. Pediatric Pulmonology. 2022; 57(10): 2518-2523. https://onlinelibrary.wiley.com/doi/full/10.1002/ppul.26068

4. Utah Department of Health and Human Services Asthma Program. Health Indicator Report of Asthma-related Emergency Department (ED) Visits. Public Health Indicator Based Information System (IBIS). November 2022. https://ibis.health.utah.gov/ibisph-view/indicator/view/AsthED.RacEth.html

Monthly health indicators

Monthly report of notifiable diseases, November 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 https://coronavirus.utah.gov/case-counts/				
Influenza*	Updates at http://health.utah.gov/epi/diseases/influenza				
Campylobacteriosis (Campylobacter)	14	38	574	514	1.1
Salmonellosis (Salmonella)	19	24	351	330	1.1
Shiga toxin-producing Escherichia coli (E. coli)	10	12	242	176	1.4
Pertussis (Whooping Cough)	10	20	100	268	0.4
Varicella (Chickenpox)	3	17	72	139	0.5
Shigellosis (Shigella)	5	5	83	51	1.6
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	<5	<5	0.6
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† (Q3 2022)	37	40	104	100	1.0
Chlamydia	2,951	2,806	11,052	10,879	1.0
Gonorrhea	826	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 November 2022	**Current month**	**Expected/ budgeted for month**	**Fiscal YTD**	**Budgeted fiscal YTD**	**Variance over (under) budget**
Mental health services	$18	$2	$93	$54	$38.9
Inpatient hospital services	$50	$8	$81	$43	$37.5
Outpatient hospital services	$5	$1	$15	$8	$7.4
Nursing home services	$19	$52	$92	$54	$38.6
Pharmacy services	$12	$4	$64	$39	$24.7
Physician/osteo services‡	$4	$3	$29	$21	$8.1
Medicaid expansion services	$101	$45	$532	$331	$200.7
***Total Medicaid	$574	$156	$990	$1,220	($229.6)

|| 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 November	Current month	Previous month	% change§ from previous month	1 year ago	% change§ from 1 year ago
Medicaid	496,104	490,551	+1.1%	439,406	+12.9%
CHIP (Children's Health Insurance Plan)	5,968	6,153	-3.0%	9,061	-34.1%
Commercial insurance payments#	**Current data year**	**Number of members**	**Total payments**	**Payments per member per month (PMPM)**	**% change§ 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** (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

§ Relative percent change. Percent change could be due to random variation.
# Figures subject to revision as new data is processed.
** State rank in the United States based on age-adjusted rates where applicable.
†† Data from 2020 NIS for children aged 24 month (birth year 2018).