

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-19⁵ 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.

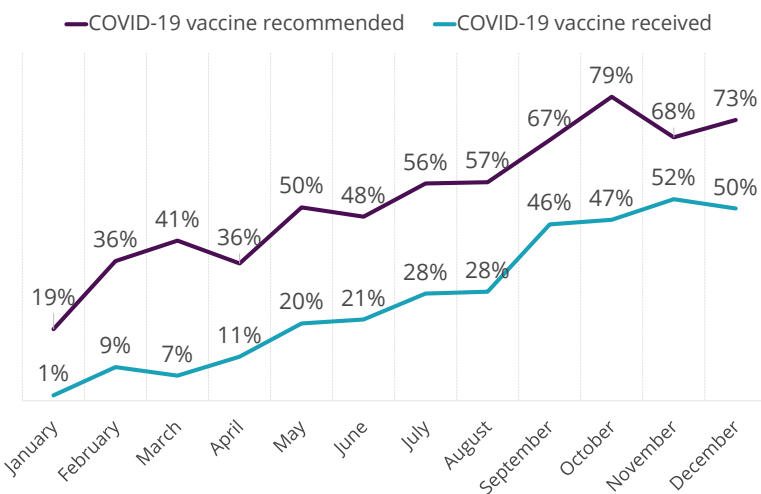


Feature article continued

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



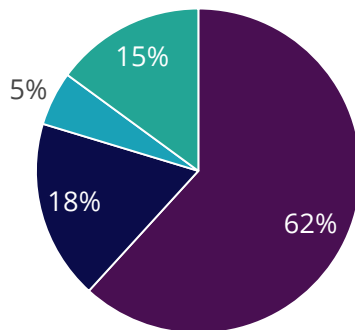
Feature article continued

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.

- Doctor/nurse/other healthcare provider
- Centers for Disease Control and Prevention
- Family/friends
- Other source



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 pregnancy 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 laboratory-confirmed 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>