



COVID-19 Vaccinations for Pregnant People in Montana, 2021

What is PRAMS?

The Montana Pregnancy Risk Assessment
Monitoring System (PRAMS) is a survey of recent
mothers about their experiences and behaviors
before, during, and shortly after pregnancy.
PRAMS aims to improve the health of Montana
mothers and infants by collecting high-quality data
that is representative of the Montana population.
The project is a collaborative effort between the
Montana Department of Public Health and Human
Services (DPHHS) and the Centers for Disease
Control and Prevention (CDC).

COVID-19 Vaccine Supplemental Questionnaire

PRAMS supplemental questionnaires are used for short periods of time to collect data on topics of emerging concern. COVID-19 vaccination among pregnant people was the topic selected for the 2021 PRAMS cycle. Montana took part in implementing the supplemental questionnaire because it helped better assess the vaccination coverage among the pregnant and postpartum population. The supplemental questionnaire was completed by 1,169 mothers in Montana. Surveys were completed from May of 2021 until June of 2022.

Fast Facts

- In 2021, 71% of Montana pregnancies had vaccine availability during one or more trimesters.
- 21% of mothers received one or more doses of the COVID-19 vaccine during pregnancy and 22% received one or more doses after pregnancy.
- Concerns about the baby's safety were the most prevalent reason mothers chose not to get the COVID-19 vaccine.
- Work exposures to COVID-19 did not significantly impact the decision to get the COVID-19 vaccine while pregnant.
- Mothers living in NonCore areas had higher vaccination rates during pregnancy (32%) compared to mothers living in Metro (9%) and Micropolitan (7%) areas.

COVID-19 Vaccinations in 2021

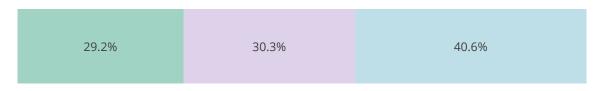
COVID-19 vaccine distribution began in December 2020 with defined phases. By mid-January of 2021 Montana was in phase 1B of the COVID-19 vaccine distribution. This phase included persons 16-69 years old with high-risk medical conditions and American Indians or other people of color who may be at increased risk for COVID-19 complications. Pregnancy was not considered to be a high-risk condition for COVID-19 illness and thus was not specifically included in this phase nor was it included in any of the other vaccine distribution phases. By April 1st, 2021, the COVID-19 vaccine eligibility expanded to everyone in Montana who was 16 years or older.



In Montana, only 2% (CI 0.5-1.0) of pregnant people in 2021 had their COVID-19 vaccine prior to getting pregnant. Whereas 21% (CI 18.4-23.7) of pregnant people in Montana were vaccinated with at least 1 dose of the vaccine during their pregnancy. An additional 22.6% (CI 19.5-25.6) of pregnant people in 2021 received their COVID-19 vaccine postpartum. Less than 30% of pregnancies in 2021 had severely limited vaccine availability during their pregnancy.

More mothers whose babies were born in May – December of 2021 were vaccinated with at least one dose during their pregnancy rather than receiving a postpartum COVID-19 vaccination. Postpartum vaccinations rates appeared to decrease overtime as the vaccine became more readily available.

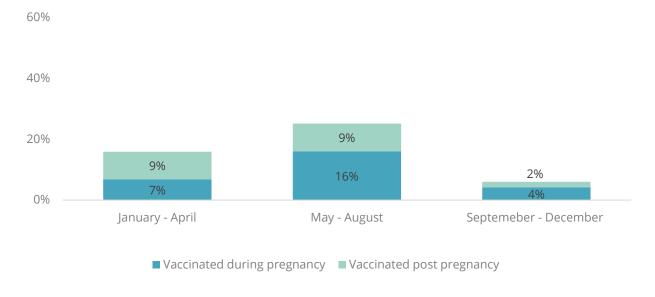
Most pregnant women had vaccine availability for at least one or more trimester of their pregnancy. % of mothers with vaccine availability by trimester, PRAMS 2021



- Limited vaccine availability/eligibility during at least a part of 1 trimester of pregnancy
- Vaccine available for at least 1 full trimester of pregnancy
- Vaccine available for at least 2 full trimesters of pregnancy

Most mothers were vaccinated mid-year.

% of mothers vaccinated during pregnancy by baby's birth month, PRAMS 2021



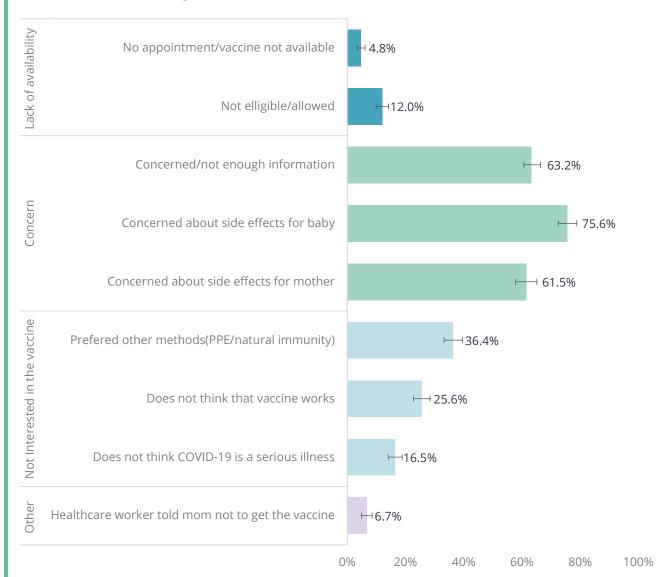


Vaccine Hesitancy

Many considerations influenced pregnant people's decisions not to get the COVID-19 vaccines. Participants were able to select multiple reasons that contributed to their decision to not to get the COVID-19 vaccine. Mothers who had babies born in January – August of 2021 reported more concern about the vaccine's effect or concern over the lack of information available.

Concerns about the baby's safety were the most prevalent reason mothers chose not to get the COVID-19 vaccine.

Reasons mothers chose not to get the COVID-19 vaccine, PRAMS 2021



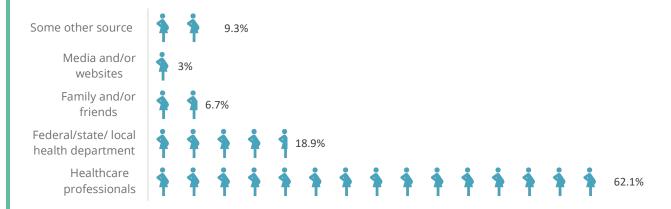
^{*} Only participants who did not get the vaccine during their most recent pregnancy answered this question



Participants indicated their primary source of information regarding COVID-19 vaccinations. Healthcare workers were the highest reported source of COVID-19 vaccine information, this category included doctors, nurses, pharmacist and other healthcare workers. Health departments were the second primary source of COVID-19 vaccination information, this category includes the CDC, the Food and Drug Administration (FDA), county health departments, and state health departments.

Most trusted source of COVID-19 vaccination information

% of most trusted source for COVID-19 vaccination information broken out by subgroups, PRAMS 2021



^{*}Respondents were only allowed to select one source of information for this question

Vaccination Demographics and Characteristics

Exposure to COVID-19 in work settings did not appear to have a strong influence in pregnant people's decision to get the COVID-19 vaccine. Pregnant people who had no public work exposures made up the largest group of those unvaccinated during their pregnancy.

Work exposures to COVID-19 did not significantly impact the decision to get the COVID-19 vaccine while pregnant.

% of mothers vaccinated versus unvaccinated by work setting, PRAMS 2021

Work exposure categories	Vaccinated during pregnancy % (95% CI)*	Unvaccinated during pregnancy % (95% CI)*
Works in a healthcare setting	8.1%	14.4%
	(6.4 – 9.9)	(1216.7)
Works in a public setting	7.4%	25.9%
	(5.7 – 9.0)	(22.9 – 28.8)
No public work exposure	8.1%	38.7%
	(6.4 – 9.9)	(35.5 – 41.9)

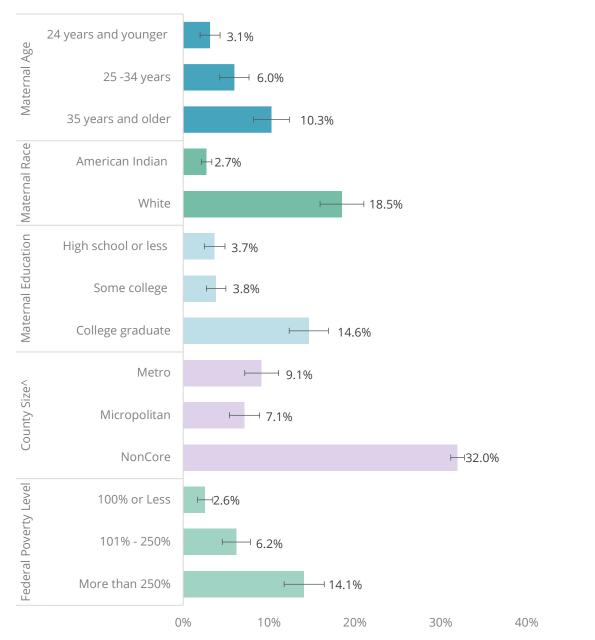
^{*}Weighted percent (95% Confidence Interval). Weighted Percent is the estimated percent representing a population based on only a sample of the population. The weighted percent considers sampling, nonresponse, and noncoverage to calculate the estimate.



When comparing vaccinated versus unvaccinated pregnant people by various demographic categories the unvaccinated group is larger in almost every demographic subcategory. Pregnant people who graduated college were more likely to have reported getting the vaccine when compared to pregnant people with high school education or those who completed some college education. White pregnant people had higher vaccination prevalence when compared to American Indian pregnant people.

Vaccinated pregnancies by demographics

% of mothers reporting COVID-19 vaccination by demographic subcategories, PRAMS 2021



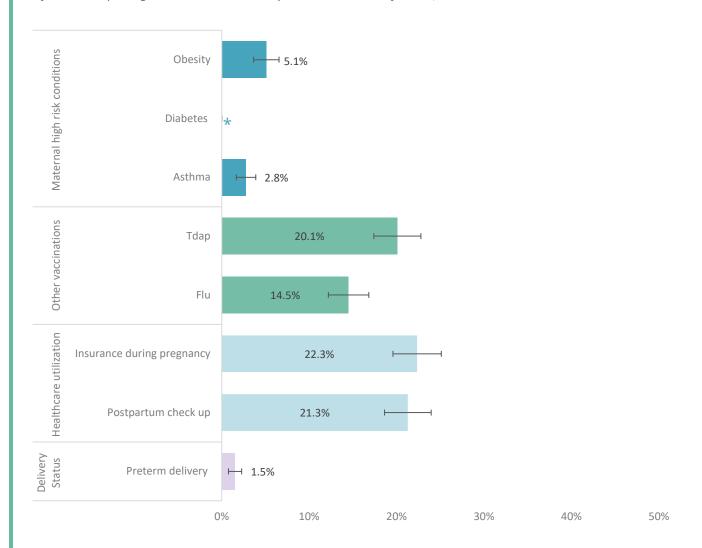
^NCHS Urban-Rural Classification Scheme for Counties



50%

Health indicators and vaccinated pregnancy

% of mothers reporting COVID-19 vaccination by various indicators of health, PRAMS 2021



^{*}Estimate have been suppressed because it is statistically unstable.

CDC Recommendations

COVID-19 vaccinations are recommended for people who are planning to become pregnant, at any point during pregnancy, and while breastfeeding as the vaccine is safe and effective. It is safe for pregnant people receive the COVID-19 vaccine at the same time as getting other vaccinations such as the flu vaccine. Babies are eligible for COVID-19 vaccination once they are 6 months old.



Resources

Vaccine Locators

The following links allow individuals to find places near them where they can receive vaccinations.

- https://www.mtreadyclinic.org/appointment/en/clinic/search
- https://www.vaccines.gov/

How CDC Monitors Vaccine Effectiveness

Due the prevalent concern over the safety of the COVID-19 vaccine we encourage individuals to take a look at the multilayered approach the CDC has taken to ensure the vaccine's efficacy.

https://www.cdc.gov/coronavirus/2019-ncov/vaccines/effectiveness/how-cdc-monitors.html

References

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- 2. Montana.gov, Montana Moves to Phase 1B of Vaccine Distribution, 2021. [Online] Available at: Montana Moves to Phase 1B of Vaccine Distribution (mt.gov)
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Suggested Citation

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