# Investigating the Impact of COVID-19 during Pregnancy

Based on what is known at this time, pregnant women might be at an increased risk for severe illness from COVID-19 compared to non-pregnant women. Additionally, pregnant women with COVID-19 might have an increased risk of adverse pregnancy outcomes, such as preterm birth.

CDC is supporting multiple efforts to better understand the impact of COVID-19 during pregnancy on both the mother and infant. Data collected as part of these efforts can help direct public health action and inform clinical guidance for the care of affected pregnant women and their infants.



### **Pregnancy and Neonatal Surveillance**

Health departments report cases of COVID-19 to CDC, including pregnancy status of the case. In addition, health departments have the option of completing a separate, short pregnancy and newborn-specific supplemental form for pregnant women with laboratory-confirmed COVID-19. Data collected include information about the following:

- timing of infection during pregnancy;
- severity of disease;
- · outcome of the pregnancy; and
- whether the newborn was also diagnosed with COVID-19.

Health departments can also choose to submit their data on COVID-19 cases among pregnant women and their infants up to six months of age to CDC through an existing surveillance activity—<u>Surveillance for Emerging Threats to Mothers and Babies Network (SET-NET)</u>.

See the most recent data on COVID-19 during pregnancy

### Maternal and Infant Health Surveillance: COVID-19 Supplement

CDC's Division of Reproductive Health will collaborate with the <u>Council of State and Territorial Epidemiologists</u> to provide support and resources to states and jurisdictions to add a COVID-19 questionnaire supplement to their maternal and infant health surveillance systems. One example of these systems is the <u>Pregnancy Risk Assessment Monitoring System (PRAMS)</u>, which routinely collects population-based data on maternal behaviors and experiences before, during, and shortly after pregnancy. The questionnaire supplement will collect data on the effect of COVID-19 on pregnant and postpartum women and infants. Findings will inform jurisdictional public health response activities to support pregnant and postpartum women and infants.



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### Impact of SARS-CoV-2 Infection during Pregnancy on Obstetric and Neonatal Outcomes - Icahn School of Medicine at Mt. Sinai

The <u>Icahn School of Medicine at Mt. Sinai</u> is conducting a study to determine SARS-CoV-2 sero-prevalence among pregnant women, that is, the estimated percentage of pregnant women who have been infected with SARS-CoV-2, the virus that causes COVID-19. Using data from electronic health records, the study will also examine associations between SARS-CoV-2 infection and adverse pregnancy outcomes. Researchers will determine the extent to which SARS-CoV-2 infection impacts pregnant women in underserved communities in New York City and will explore the role of maternal psychosocial stress.

## Perinatal COVID-19 in the U.S.: Surveillance and Epidemiology - <u>Children's Hospital</u> <u>of Philadelphia (CHOP)</u> and the <u>University of Florida, College of Medicine -</u> Jacksonville

This national registry will identify the current burden of SARS-CoV-2 infection during pregnancy, inform clinical care practices, and provide data for future studies on prevention, diagnosis, and treatment of COVID-19. The study uses a robust, real-time national registry to capture information about pregnant women with COVID-19 and their newborn infants. The information collected will contribute to a greater understanding of the potential modes, risk factors, and rates of transmission of SARS-CoV-2 infection during pregnancy and the impact on the newborn.

### Epidemiology of SARS-CoV-2 in Pregnancy and Infancy (ESPI) Network

### **ESPI – Electronic Cohort Study**

This study will collect information from the medical records of women at three participating sites who received prenatal care and reached the end of their pregnancy during March 2020 through February 2021. Data collection will include information about the following:

- · demographic and maternal characteristics;
- · medical conditions;
- prenatal care;
- pregnancy complications, including ambulatory care visits and hospitalizations for acute illness;
- postpartum care;
- laboratory test results for SARS-CoV-2 and influenza;
- pregnancy outcomes; and
- selected infant outcomes through 6 months of age.

This study aims to understand the characteristics of SARS-CoV-2 infection during pregnancy, up to six months after the end of pregnancy, and among infants up to six months of age. It also aims to identify risk factors for severe COVID-19 disease, describe use of investigational and off-label therapeutics, and evaluate effects of medically attended SARS-CoV-2 infection on pregnancy and infant outcomes.

#### **ESPI – Community Cohort Study**

This multisite collaboration is designed to estimate the incidence of asymptomatic and symptomatic SARS-CoV-2 infection and understand the characteristics of SARS-CoV-2 infection in pregnant women. This includes the spectrum of illness and risk factors for infection and severe illness. As a secondary objective, this study will examine the effect of SARS-CoV-2 infection during pregnancy on pregnancy and newborn outcomes. The study will enroll pregnant women at <28 weeks of pregnancy. The women will be followed with weekly surveillance for SARS-CoV-2 infection and symptoms of COVID-19-like illness through the end of their pregnancies. Information on end-of-pregnancy, infant, and postpartum outcomes will be collected from participants at approximately 2-4 weeks after the end of their pregnancies.