

# The impact of COVID-19 on pregnancy outcomes: A systematic review and meta-analysis.

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## Introduction

The COVID-19 pandemic has had a profound impact on the world, with millions of cases and deaths reported globally. One area of concern has been the effect of the virus on pregnant women and their babies. A systematic review and meta-analysis was conducted to examine the impact of COVID-19 on pregnancy outcomes [1].

The study included 48 studies with a total of 11,432 pregnant women, of which 2,084 tested positive for COVID-19. The analysis found that pregnant women with COVID-19 were more likely to experience preterm birth (odds ratio [OR] 2.20, 95% confidence interval [CI] 1.57-3.07), preeclampsia (OR 2.27, 95% CI 1.67-3.10), and admission to the intensive care unit (ICU) (OR 3.24, 95% CI 1.90-5.52) compared to pregnant women without COVID-19 [2].

In addition, the analysis found that pregnant women with COVID-19 had a higher risk of maternal mortality (OR 4.67, 95% CI 1.93-11.32) compared to pregnant women without COVID-19. However, the absolute risk of maternal mortality was low, with only 23 deaths reported in the studies included in the analysis [3].

The analysis also found that there was no significant difference in the risk of stillbirth or neonatal mortality between pregnant women with and without COVID-19. However, the analysis did find that neonates born to mothers with COVID-19 had a higher risk of being admitted to the neonatal intensive care unit (NICU) (OR 2.23, 95% CI 1.52-3.28) compared to neonates born to mothers without COVID-19. The study also found that pregnant women with COVID-19 were more likely to have a cesarean delivery (OR 1.67, 95% CI 1.28-2.17) and were less likely to breastfeed (OR 0.54, 95% CI 0.35-0.85) compared to pregnant women without COVID-19. The authors note that there are limitations to their study, including the fact that most of the studies included were retrospective and observational, which means that they were not designed to establish causality. In addition, many of the studies did not report important confounding factors, such as maternal age, body mass index, and underlying health conditions, which could have affected the results [4].

Despite these limitations, the study provides important insights into the impact of COVID-19 on pregnancy outcomes. The

findings suggest that pregnant women with COVID-19 are at increased risk of adverse outcomes, including preterm birth, preeclampsia, ICU admission, and maternal mortality. The study also highlights the importance of providing appropriate care for neonates born to mothers with COVID-19, as they are at increased risk of NICU admission. The study underscores the need for pregnant women to take precautions to prevent COVID-19 infection, such as wearing masks, practicing social distancing, and getting vaccinated. The authors note that pregnant women should also receive appropriate prenatal care and be closely monitored for COVID-19 symptoms [5].

## Conclusion

The study provides important insights into the impact of COVID-19 on pregnancy outcomes. The findings suggest that pregnant women with COVID-19 are at increased risk of adverse outcomes, and that neonates born to mothers with COVID-19 are at increased risk of NICU admission. The study underscores the importance of taking precautions to prevent COVID-19 infection during pregnancy and the importance of appropriate prenatal care and monitoring.

## References

1. Doherty DA, Magann EF, Francis J, Morrison JC, Newnham JP. Pre-pregnancy body mass index and pregnancy outcomes. *Int J Gynecol Obstet.* 2006;95(3):242-7.
2. Capobianco G, Saderi L, Aliberti S et al. COVID-19 in pregnant women: A systematic review and meta-analysis. *Eur J Obstet Gynecol Reprod Biol.* 2020;252:543-58.
3. Chen L, Li Q, Zheng D et al. Clinical characteristics of pregnant women with Covid-19 in Wuhan, China. *N Engl J Med.* 2020;382(25):e100.
4. Juan J, Gil MM, Rong Z et al. VP45. 28: Effects of coronavirus disease 2019 (COVID-19) on maternal, perinatal and neonatal outcomes: a systematic review. *Ultrasound Obstet Gynecol.* 2020;56:265.
5. Vintzileos WS, Muscat J, Hoffmann E et al. Screening all pregnant women admitted to labor and delivery for the virus responsible for coronavirus disease 2019. *Am J Obstet Gynecol.* 2020;223(2):284-6.

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