



Covid-19: Nine in 10 pregnant women with infection when admitted for delivery are asymptomatic, small study finds

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Nearly 90% of pregnant women admitted to hospital for delivery who test positive for SARS-CoV-2 have no symptoms of the infection, a small study has found.¹

Researchers led by Dena Goffman at Columbia University Irving Medical Center in New York, USA, screened all 215 pregnant women admitted to two New York City hospitals from 22 March to 4 April 2020 for symptoms of covid-19 and for infection with SARS-CoV-2. The results, reported in a letter to the *New England Journal of Medicine*,¹ showed that four women (1.9%) had fever or other symptoms of covid-19 on admission and tested positive for SARS-CoV-2.

Swabs from 210 of the 211 women with no symptoms or fever on admission were tested, and 29 cases (13.7%) were positive for SARS-CoV-2. This means that 29 of the 33 women (87.9%) who tested positive for the virus had no symptoms of covid-19 when admitted to hospital for delivery.

Three of the 29 women who tested positive for the virus and were initially asymptomatic subsequently developed fever but were discharged from hospital after giving birth, with a median stay of two days. Two were treated with antibiotics for presumed endomyometritis, although one did not have symptoms, and one patient was presumed to be febrile owing to covid-19 and was given supportive care.

One further patient who initially tested negative for SARS-CoV-2 on admission became symptomatic post partum and tested positive three days later.

False negatives

Overall, the study found that 13.5% of pregnant women studied were SARS-CoV-2 positive but asymptomatic, and 1.9% were symptomatic and SARS-CoV-2 positive. However, the researchers cautioned, “The true prevalence of infection may be under-reported because of false negative results of tests to detect SARS-CoV-2.”

They acknowledged that their findings of prevalence might have limited generalisability in areas with lower infection rates, but they concluded, “The potential benefits of a universal testing approach include the ability to use covid-19 status to determine hospital isolate practices and bed assignments, inform neonatal care, and guide the use of personal protective equipment.”

A few studies have now reported rates of asymptomatic cases. A small, unpublished analysis of data from the National Health Commission in China claimed that 130 of 166 new infections (78%) identified in the 24 hours to 1 April were asymptomatic.² However, it was not clear how these cases were identified.

And an unpublished Italian study, in which all 3300 people living in the isolated village of Vò in northern Italy were tested, claimed that about half of the 90 people who tested positive for SARS-CoV-2 had no symptoms.³

In contrast, a report by the World Health Organization on covid-19 in China from February⁴ found that “the proportion of truly asymptomatic infections is unclear but appears to be relatively rare and does not appear to be a major driver of transmission.” That report concluded, “The majority of the relative rare cases who are asymptomatic on the date of identification/report went on to develop disease.”

1 Sutton D, Fuchs K, D'Alton M, Goffman D. Universal screening for SARS-CoV-2 in women admitted for delivery. *N Engl J Med* 2020. 10.1056/NEJMc2009316. 32283004

2 Day M. Covid-19: four fifths of cases are asymptomatic, China figures indicate. *BMJ* 2020;369:m1375. 10.1136/bmj.m1375.32241884

3 Day M. Covid-19: identifying and isolating asymptomatic people helped eliminate virus in Italian village. *BMJ* 2020;368:m1165. 10.1136/bmj.m1165.32205334

4 World Health Organization. Report of the WHO-China joint mission on coronavirus disease 2019 (COVID-19). Feb 2020. www.who.int/docs/default-source/coronaviruse/who-china-joint-mission-on-covid-19-final-report.pdf.

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