**A review of the evidence on perinatal and pediatric transmission risk in the first 18 months of the COVID-19 pandemic**

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COVID-19 was declared a global pandemic in 2020, impacting every country around the world. Among the 26 million total cases reported from low-and middle-income countries in the first 18 months of the pandemic, 11% were in children and adolescents under the age of 20 years.[[1]](#footnote-1) In 2021, UNICEF undertook a systematic review on the direct effects of SARS-CoV-2 on pregnant women, newborns, infants, and children. The review focused on transmission risk from pregnant women to fetuses and newborns, and among pediatric and adolescent populations.

We found that the overall rate of transmission from pregnant women to their newborns was very low. However, there did appear to be an increased risk of preterm birth and stillbirth among women infected during pregnancy. Children can transmit the virus to each other, but available research suggests this is at a lower rate than among adults or adolescents. At the time of our study, there was minimal evidence of transmission at schools and daycare centers that had implemented risk reduction procedures. However, there were very few rigorous studies that examined school transmission. There were also few studies that clarified if transmission to and from children and adolescents occurred in a household, school, or a community setting, or how well risk reduction policies were being enforced.

There are other significant data gaps from the first 18 months of the pandemic. Much of the early epidemiological research came from case studies and case series collected at health facilities, and few population-based or surveillance studies included pediatric populations. Across countries, there was a lack of reporting on standardized age categories and insufficient disaggregation by sub-populations at higher risk, making it difficult to understand the impact of SARS-CoV-2 infection on pregnant women, children, and adolescents. These data gaps highlight the need for greater Investments in country health information systems including surveillance data that cover all population groups. Research agendas on the COVID19 and future disease outbreaks should also be inclusive, ensuring pregnant women, children, and adolescents are not left out.

As the pandemic evolves, new risks (e.g., new variants) and new interventions (e.g., vaccines, more precise tests, and better treatment options) will continue to emerge. The impact of these changes on the short and long-term health of pregnant women, children, and adolescents will need to be continually reassessed so that response measures including clinical care are most effective.

1. [MPIDR - New Covid-19 Data Online: Weekly Death Counts for 15 Countries (mpg.de)](https://www.demogr.mpg.de/en/news_events_6123/news_press_releases_4630/press/new_covid_19_data_online_weekly_death_counts_for_15_countries_8005) [↑](#footnote-ref-1)