

COVID-19 infections in newborn babies

If I get COVID-19 around the time I have my baby, how likely is it that my baby will have COVID-19? Not very likely. In the first pandemic wave from March to April 2020, around 120,000 women in total gave birth in the UK and about 300 mothers had known COVID-19 around the time they had their baby. Of those mothers with COVID-19, only 14 babies were diagnosed with COVID-19 in the week after they were born, and 7 of these babies did not have any signs of the disease but were only diagnosed through a routine newborn testing because the mother had COVID-19.

Can I pass COVID-19 onto my baby in the womb? We don't know for sure yet, but this is very rare if it happens at all.

If my baby gets COVID-19 after she/he is born how likely is it that my baby will end up in neonatal care? In the first pandemic wave (March and April 2020) about 120,000 babies were born across the UK and only 66 of them had COVID-19 in the first 28 days after birth and were in hospital. About 1 in 3 of these babies (24 in total) were looked after on a neonatal unit or paediatric intensive care unit. However, some of these babies were premature and may have needed neonatal care because of this, rather than COVID-19.

If my baby ends up in neonatal care, how long is that likely to be for and what are the complications? The babies with COVID-19 did very well and were in hospital for an average of 2 days, and almost all went home after recovering and without any ongoing problems. A small number of babies were reported as being still in hospital at the time we were analysing all the information for the research and this may be because they were born more premature.

What if I don't have COVID-19, how likely is it that my baby will get COVID-19 in hospital when she/he is born, either on the labour ward or in a neonatal care unit? This is very unlikely. Over the study period more than 15,000 babies were looked after in neonatal units and only 6 babies in this study caught COVID-19 in hospital.

What are the chances of my baby dying if he or she gets severe COVID-19? Very low. In the first pandemic wave (March and April 2020), about 120,000 babies were born, only 66 babies had COVID-19 and none of these died from the infection.

Is my baby at increased risk of COVID-19 if she/he is from a Black, Asian or minority ethnic background compared to a white baby? Yes, there is a slightly increased risk. The overall incidence is still very low, and all the affected babies recovered well. Of the 66 babies who had COVID-19 in March and April, 12 were Asian, 8 were Black, 7 were from mixed ethnic backgrounds and 36 were White. If we use these numbers to make predictions for the whole UK population, we would expect that about 1 in every 2,000 white babies would have COVID-19, and that 1 in every 1,000 babies from Black, Asian or minority ethnic groups would have COVID-19.

Why is my baby at increased risk of severe COVID-19 infection if she/he is Black, Asian or minority ethnic? This study did not look into this directly. Understanding why these risks exist is very important in future research, but importantly the risk to all babies, whatever their ethnic background, is still very low.

How will I know my baby has COVID-19 once I've taken my baby home – what should I be looking out for? Look out for the same things as you would in any baby who you think might be ill – *a high temperature, fast or noisy breathing, not being responsive*, and bring them back to hospital through A&E if you are concerned.

Should I bring my baby into hospital if she/he has symptoms of COVID-19 after I return home after birth? Yes, bring them back to hospital through A&E if they have any symptoms.

Can I give my baby COVID-19 through my breast milk? This study did not look at this directly. This seems very unlikely though. From the beginning of the pandemic *women in the UK who have COVID-19 have been advised to keep their baby with them after birth and to breastfeed if they are well enough*, with hand washing and using a mask. This is because we know that breastfeeding gives a baby the very best start and that bonding between mother and baby is very important.

Is giving breastmilk protective against my baby getting COVID-19? We do not know, but *breastmilk has many other benefits for your baby*.

What if I get COVID-19 after I take my baby home from hospital - should I isolate from my baby? No, if you are well enough you should continue to be with your baby and to breastfeed if possible, but you should follow handwashing advice and wear a face mask. *Bonding with your baby and breastfeeding are very important and beneficial*.

Can I let family members who are not infected cuddle and kiss my baby or is this too great a risk? It is important to follow local and national lockdown rules and guidance, but family members within the same household who are not infected can kiss and cuddle your baby as normal.

Should I keep my other children home from nursery/school if my baby has COVID-19? Yes, you should follow local and *national isolation rules and guidance*.

If my baby gets COVID-19 around the time of birth, what are the likely long-term effects? We don't know yet as we have not had time to follow babies up for very long, but so far the small number of babies who caught COVID-19 have not had ongoing problems.

What are you going to do next with the information from this study? We hope to follow up these babies to check for long term effects. We also want to see how babies born to mothers with COVID-19 have done over the pandemic, including those babies who did not get COVID-19.

The *British Paediatric Surveillance Unit (BPSU)* collected the information we analysed on babies with COVID-19 in March and April this year, and will continue to collect information on all babies with COVID-19 throughout the pandemic.