



The following information resources have been selected by the National Health Library and Knowledge Service Evidence Virtual Team in response to your question. The resources are listed in our estimated order of relevance to practicing healthcare professionals confronted with this scenario in an Irish context. In respect of the evolving global situation and rapidly changing evidence base, it is advised to use hyperlinked sources in this document to ensure that the information you are disseminating to the public or applying in clinical practice is the most current, valid and accurate.

YOUR QUESTION

Is breastfeeding recommended in mothers with suspected or confirmed COVID-19?

What do the Centres for Disease Control and Prevention (United States) say?

[Interim Guidance on Breastfeeding for a Mother Confirmed or Under Investigation For COVID-19¹](#)

This interim guidance is intended for women who are confirmed to have COVID-19 or are persons-under-investigation for COVID-19 and are currently breastfeeding. This interim guidance is based on what is currently known about COVID-19 and the transmission of other viral respiratory infections. CDC will update this interim guidance as needed as additional information becomes available. For breastfeeding guidance in the immediate postpartum setting, refer to [Interim Considerations for Infection Prevention and Control of 2019 Coronavirus Disease 2019 \(COVID-19\) in Inpatient Obstetric Healthcare Settings](#).

TRANSMISSION OF COVID-19 THROUGH BREAST MILK: much is unknown about how COVID-19 is spread. Person-to-person spread is thought to occur mainly via respiratory droplets produced when an infected person coughs or sneezes, similar to how influenza (flu) and other respiratory pathogens spread. **In limited studies on women with COVID-19 and another coronavirus infection, Severe Acute Respiratory Syndrome (SARS-CoV), the virus has not been detected in breast milk; however we do not know whether mothers with COVID-19 can transmit the virus via breast milk.**

Guidance on breastfeeding for mothers with confirmed COVID-19 or under investigation for COVID-19: **Breast milk is the best source of nutrition for most infants. However, much is unknown about COVID-19. Whether and how to start or continue breastfeeding should be determined by the mother in coordination with her family and healthcare providers. A mother with confirmed COVID-19 or who is a symptomatic PUI should take all possible precautions to avoid spreading the virus to her infant, including washing her hands before touching the infant and wearing a face mask, if possible, while feeding at the breast. If expressing breast milk with a manual or electric breast pump, the mother should wash her hands before touching any pump or bottle parts and follow recommendations for proper pump cleaning after each use. If possible, consider having someone who is well feed the expressed breast milk to the infant.**

¹ Centres for Disease Control and Prevention. https://www.cdc.gov/coronavirus/2019-ncov/prepare/pregnancy-breastfeeding.html#anchor_1584169714 [Accessed 23/03/2020].

What does the Health Protection Surveillance Centre (Ireland) say?

Health Protection Surveillance Centre²

To date no evidence has been found to suggest that the virus is present in the breast milk of mothers with COVID-19. There has been no evidence of virus transmission in breastmilk from previous experience with other coronaviruses such as SARS-CoV or MERS-CoV and therefore the risk of transmission through breast milk is likely to be low. The mother should be encouraged to express breastmilk so that the neonate can receive the benefits of breastmilk and to maintain the mother's milk supply in order that breastfeeding can continue once mother and baby are reunited. If expressing breast milk using a pump, this should be dedicated to the mother for the duration of hospitalisation and should be cleaned and disinfected as per the manufacturer's instructions. The expressed breast milk (EBM) container should be transported from the mother's room to the storage location in a plastic-specimen transport bag. Storage conditions should be as per local policy however the EBM should be clearly marked and stored in a patient specific container box separate from EBM of other patients. If a mother with COVID-19 decides to care for her infant herself then breastfeeding should be encouraged as normal.

What does UpToDate say?

Coronavirus Disease 2019 (COVID-19)³

It is unknown whether the virus can be transmitted through breast milk. The only report of testing found no virus in the maternal milk of six patients [108]. However, droplet transmission could occur through close contact during breastfeeding. Thus, mothers with confirmed COVID-19 or symptomatic mothers with suspected COVID-19 should take precautions to prevent transmission to the infant during breastfeeding including assiduous hand hygiene and use of a facemask. Alternatively, to minimize direct contact, the infant can be fed expressed breastmilk by another caregiver until the mother has recovered, provided that the other caregiver is healthy and follows hygiene precautions. Women who choose not to breastfeed must take similar precautions to prevent transmission through close contact when formula is used.

What does the international literature say?

RCOG (21 March 2020). Coronavirus (COVID-19) Infection in Pregnancy: Information for healthcare professionals Version 4⁴

It is reassuring that in six Chinese cases tested, breastmilk was negative for COVID-19; however, given the small number of cases, this evidence should be interpreted with caution. The main risk for infants of breastfeeding is the close contact with the mother, who is likely to share infective airborne droplets. In the light of the current evidence, we advise that the benefits of breastfeeding outweigh any potential risks of transmission of the virus through breastmilk. The risks and benefits of breastfeeding, including the risk of holding the baby in close proximity to the mother, should be discussed with her. This guidance may change as knowledge evolves.

For women wishing to breastfeed, precautions should be taken to limit viral spread to the baby:

- Hand washing before touching the baby, breast pump or bottles
- Avoiding coughing or sneezing on the baby while feeding at the breast
- Considering wearing a face mask while breastfeeding, if available
- Following recommendations for pump cleaning after each use
- Considering asking someone who is well to feed expressed milk to the baby

² Health Protection Surveillance Centre. <https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/pregnancypostpartumguidance/Guidance%20for%20management%20of%20suspected%20COVID-19%20in%20pregnant%20and%20post%20partum%20period%20V1.pdf>. [Accessed 25/03/2020]

³ UpToDate. <https://www.uptodate.com/contents/coronavirus-disease-2019-covid-19> [UpToDate: Accessed 24/03/2020]

⁴ Morris et al. (2020). <https://www.rcog.org.uk/globalassets/documents/guidelines/2020-03-21-covid19-pregnancy-guidance-2118.pdf> [Accessed 24/03/2020]



British Columbia Centre for Disease Control (23 March 2020). Interim Guidance: Public Health Management of cases and contacts associated with novel coronavirus (COVID-19) in the community⁵

For breastfeeding mothers: considering the benefits of breastfeeding and the insignificant role of breast milk in transmission of other respiratory viruses, breastfeeding can continue. If the breastfeeding mother is a case, she should wear a surgical/procedure mask when near the baby, practice respiratory etiquette, and perform hand hygiene before and after close contact with the baby.

Calda et al. (10 March 2020). Coronavirus infection and pregnancy⁶

The Czech Society for Ultrasound in Obstetrics and Gynecology of the Czech Medical Association issues this opinion in connection with statements of the World Health Organization (WHO) and other international authorities regarding the concerns about COVID-19 infection in pregnancy. The impact of this year's coronavirus COVID-19 infection on pregnant women seems to be less severe than in previous years of H1N1 influenza type A, SARS-CoV or MERS-CoV. From the information published so far it was not possible to prove the transmission of infection from mother to fetus. It also seems that there is no risk of vertical transmission during breastfeeding. This opinion does not replace the recommendations and opinions issued by governmental bodies such as the Ministry of Health and others, and concerns solely consultation of pregnant women.

Wang et al. (2020). (Ann Transl Med 20 February 2020). Chinese expert consensus on the perinatal and neonatal management for the prevention and control of the 2019 novel coronavirus infection⁷

The possibility of the vertical transmission of 2019-nCoV cannot be ruled out. Infants should not be fed with the breast milk from mothers with confirmed or suspected of 2019-nCoV. If the suspected or diagnosed mother and her breast milk test negative for 2019-nCoV, infants should be fed with breast milk. Donor milk can be considered for use after being screened for 2019-nCoV, because the virus may be excreted into the milk during the incubation period.

Li et al. (Arch Dis Child Fetal Neonatal Ed. 04 March 2020). Proposal for prevention and control of the 2019 novel coronavirus disease in newborn infants⁸

Newborn infants deserve more concern due to their immature immune system and the possibility of mother to infant transmission. Neonatologists belonging to the Chinese Neonatologist Association of Chinese Doctor Association have proposed measurements for the prevention and control of COVID-19 in neonates.

Newborns are considered at high risk of COVID-19 if they are born to mothers diagnosed with COVID-19, or have close contact with someone with probable or confirmed COVID-19, whether or not they present with symptoms.

Avoid breast feeding from COVID-19 mother until recovery. Strict hand hygiene and disinfecting environment protocol are required.

⁵ British Columbia Centre for Disease Control. http://www.bccdc.ca/resource-gallery/Documents/Guidelines%20and%20Forms/Guidelines%20and%20Manuals/Epid/CD%20Manual/Chapter%20-%20-%20CDC/2019-nCoV-Interim_Guidelines.pdf. [Accessed 24/02/2020].

⁶ Calda et al. https://www.actuajgyn.com/pdf/cz_2020_242.pdf. [Accessed 23/03/2020].

⁷ Wang et al. <https://www.ncbi.nlm.nih.gov/pubmed/32154287>. [Accessed 23/03/2020].

⁸ Li et al. <https://www.ncbi.nlm.nih.gov/pubmed/32132140>. [Accessed 23/03/2020].

Chen, H et al. (Lancet. Published 07 March 2020). Clinical characteristics and intrauterine vertical transmission potential of COVID-19 infection in nine pregnant women: a retrospective review of medical records⁹

Results showed that breastmilk samples from mothers with COVID-19 infection appeared to be free from SARS-CoV-2.

Rasmussen. (Am J Obstet Gynecol. Published 24 February 2020) Coronavirus Disease 2019 (COVID-19) and Pregnancy: What obstetricians need to know¹⁰

Whether COVID-19 can be transmitted through breastmilk is unknown. We are aware of a single report of SARS-CoV testing of breastmilk in a mother who had recovered from SARS and no viral RNA was detected; however, the specimen was collected ~130 days after illness onset. SARS-CoV antibodies were seen in breastmilk of that patient but not in another patient who was infected at 7 weeks gestation with breastmilk tested at postpartum days 12 and 30. Breastmilk was tested for SARS-CoV-2 in six of the mothers reported by Chen et al. ; all 402 specimens were negative. Until additional data are available, mothers who intend to breastfeed and are well enough to express breastmilk should be encouraged to do so; breastfeeding can be instituted after she is no longer considered infectious.

Favre. (Lancet Infect Dis. Published 03 March 2020). Guidelines for pregnant women with suspected SARS-CoV-2 infection (Correspondence)¹¹

Newborns of mothers positive for SARS-CoV-2 should be isolated for at least 14 days or until viral shedding clears, during which time direct breastfeeding is not recommended.

Jie Qiao. (Lancet. Published 07 March 2020) What are the risks of COVID-19 infection in pregnant women?¹²

Based on evidence from the latest studies and expert recommendations, as well as previous experiences from the prevention and control of SARS, the National Health Commission of China launched a new notice on Feb 8, 2020,¹⁵ which proposed strengthening health counselling, screening, and follow-ups for pregnant women, reinforcing visit time and procedures in obstetric clinics and units with specialised infection control preparations and protective clothing, and emphasised that neonates of pregnant women with suspected or confirmed COVID-19 infection should be isolated in a designated unit for at least 14 days after birth and should not be breastfed, to avoid close contact with the mother while she has suspected or confirmed COVID-19 infection.

⁹ Chen et al. <https://www.ncbi.nlm.nih.gov/pubmed/32151335>. [Accessed 24/03/2020].

¹⁰ Rasmussen. <https://www.ncbi.nlm.nih.gov/pubmed/32105680>. [Accessed 24/03/2020].

¹¹ Favre et al <https://www.ncbi.nlm.nih.gov/pubmed/32142639>. [Accessed 24/03/2020]

¹² Jie Qiao et al. <https://www.ncbi.nlm.nih.gov/pubmed/32151334>. [Accessed 24/03/2020].



Produced by the members of the National Health Library and Knowledge Service Evidence Team.[†] Current as at 25 March 2020. This evidence summary collates the best available evidence at the time of writing. Emerging literature or subsequent developments in respect of COVID-19 may require amendment to the information or sources listed in the document. Although all reasonable care has been taken in the compilation of content, the National Health Library and Knowledge Service Evidence Team makes no representations or warranties expressed or implied as to the accuracy or suitability of the information or sources listed in the document. This evidence summary is the property of the National Health Library and Knowledge Service and subsequent re-use or distribution in whole or in part should include acknowledgement of the service.

The following PICO(T) was used as a basis for the evidence summary:

<p>Population P person location condition/patient characteristic</p>	Mothers with confirmed or suspected COVID-19
<p>Intervention I length location type</p>	Breastfeeding
<p>Comparison C another intervention no intervention location of the intervention</p>	
<p>Outcome O</p>	Risk of infection to the neonate

The following search strategy was used in Embase:

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1 exp Coronavirinae/
2 covid-19.ab,ti.
3 coronavirus.ab,ti.
4 "corona virus".ab,ti.
5 (wuhan adj3 virus).ab,ti.
6 ("2019-nCoV" or "2019 ncov").ab,ti.
7 "severe acute respiratory syndrome coronavirus 2".ab,ti.
8 ("2019" and (new or novel) and coronavirus).ab,ti.
9 1 or 2 or 3 or 4 or 5 or 6 or 7 or 8
10 ("breast feed*" or breastfeed* or "breast fed" or breastfed or lactat* or "breast milk" or breastmilk).ti,ab.
11 exp breast feeding/
12 exp breast milk/
13 10 or 11 or 12
14 limit 13 to yr="2019 -Current"
  
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[†] Helen Clark, Librarian, Sligo University Hospital [Author]; Shauna Barrett, Librarian, Cork University Hospital [Author]; Brendan Leen, Regional Librarian, HSE South, St. Luke's General Hospital, Kilkenny; Elaine Conway [Clinical Advisor]; Siobhan Egan [Clinical Advisor].

