

Breastfeeding and Shared Decision-Making During COVID-19

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Relevant Disclosures

- California Breastfeeding Coalition, Board of Directors

Outline

- Background about breastfeeding rates
- Why maternity care practices to support breastfeeding matter
- What does the CDC/AAP recommend in the setting of COVID-19 and breastfeeding?
- How we can support breastfeeding with shared decision making

Breastfeeding and prevention of illness

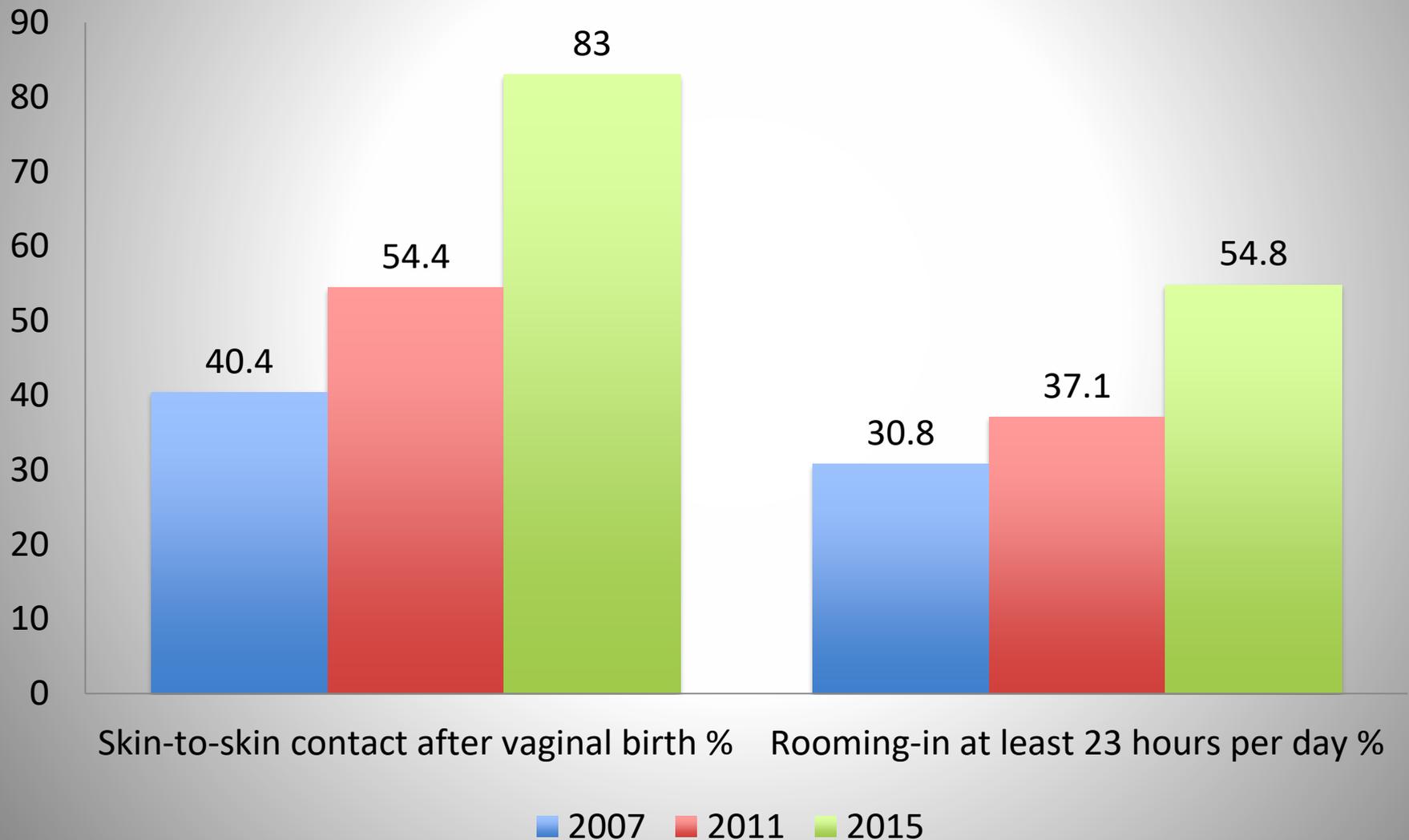
- **Breastfeeding protects against child illness and death**, especially against infectious diseases
- Children who are not breastfed are at higher risk from infectious diseases as well as lifelong ill-health from some non-communicable diseases
- For mothers, **breastfeeding protects against breast cancer** and improves birth spacing, and may protect against ovarian cancer and type 2 diabetes



United States Breastfeeding Rates

	2007	2014/2017	2014/17 Non- Hispanic Black	2014/2017 Hispanic
Ever	75.0	82.5/84.1	68.0/73.7	84.8/84.1
6 months	43.8	55.3/58.6	41.5/47.8	52.5/55.4
1 year	22.4	33.7/35.3	21.5/26.1	31.7/33.9
Exclusive breastfeeding				
To 3 months				
To 6 months		46.6/46.9	32.7/38.7	45.5/41.5
Received formula before 2 days of age (percent)		24.9/25.6	15.0/21.2	24.5/21.5
		15.5/19.2		

mPINC Survey: Percent of hospitals where infants experience skin-to-skin and rooming-in



Exclusive Breastmilk Feeding

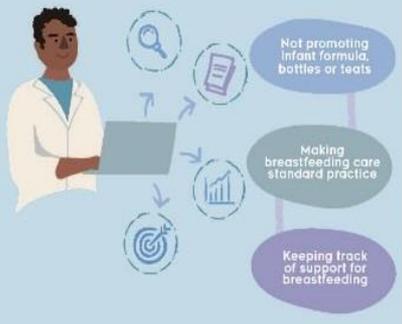
- Associated with an increase in duration of breastfeeding
- Mothers more likely to be exclusively breastfeeding at 3 months (43% vs. 6.4%) when birthed at a Baby Friendly hospital—experiencing skin-to-skin care, rooming-in.
- Skin-to-skin care stabilizes infant glucose and increased breastfeeding.
- Dose-response relationship between the duration of breastfeeding and reduction in infant mortality
- Need to address “Las dos cosas”

Ref: Moore ER, et.al. Early skin-to-skin contact for mothers and their health newborn infants. The Cochrane Database of Systematic Reviews 2016

Patterson JA, et.al. The effect of Baby-Friendly status on exclusive breastfeeding in U.S. Hospitals

1 HOSPITAL POLICIES

Hospitals support mothers to breastfeed by...



2 STAFF COMPETENCY

Hospitals support mothers to breastfeed by...



3 ANTENATAL CARE

Hospitals support mothers to breastfeed by...



4 CARE RIGHT AFTER BIRTH

Hospitals support mothers to breastfeed by...



5 SUPPORT MOTHERS WITH BREASTFEEDING

Hospitals support mothers to breastfeed by...



6 SUPPLEMENTING

Hospitals support mothers to breastfeed by...



7 ROOMING-IN

Hospitals support mothers to breastfeed by...



8 RESPONSIVE FEEDING

Hospitals support mothers to breastfeed by...



9 BOTTLES, TEATS AND PACIFIERS

Hospitals support mothers to breastfeed by...



The TEN STEPS to Successful Breastfeeding



10 DISCHARGE

Hospitals support mothers to breastfeed by...



Evidence for Skin to Skin: *Mother*

- Decreases maternal stress and improves paternal perception of stress in the relationship with baby
- Depression scores and salivary cortisol levels lower over the first month among postpartum mothers providing SSC
- Enhances opportunity for early first breastfeed, which in turn leads to more readiness to breastfeed, organized suckling pattern, and **more success in exclusive and overall breastfeeding**

Evidence for Skin to Skin: *Baby*

– More likely to have successful breastfeed with first feed

- Greater stability of cardiorespiratory system
- Higher blood glucose levels
- Decreases pain in the newborn
- Improves gastrointestinal adaptation
- Leads to more restful sleep patterns, less crying and better growth
- Improved bonding (fMRI)

Early Skin-to-Skin & Exclusive Breastfeeding

Outcome variable	Early-SSC group (n = 20)	Control group (n = 21)	RR/ difference in means ¹	P
Modified infant BAT score ²	8 (5–10)	9 (5–10)	–	0.64
Modified BAT score ≥8, n	10 (50%)	11 (52.4%)	0.9 (0.6 to 1.7)	0.89
EBF at 48 h, n	19 (95%)	8 (38.1%)	2.5 (1.4 to 4.3)	0.001
EBF at 6 weeks, n	18 (90%)	6 (28.6%)	3.2 (1.6 to 6.3)	0.001
Salivary cortisol ³ , µg/dl	0.54 (0.25–0.86)	0.9 (0.3–2.1)	–	0.09
Maternal perception score at 48 h after delivery	12.5 ± 1.9	10.7 ± 1.7	1.7 (0.5 to 2.8)	0.005
Infant's weight at 48 h, g	2,714 ± 220	2,574 ± 275	139 (–18 to 298)	0.11

Ref: Thukral A, et al. *Neonatology* 2012;102:114–119

Newborn Bath

- Vernix caseosa, (composed of water, proteins, barrier lipids, and antimicrobial agents), contributes to skin hydration, lower pH, and protection against pathogens, suggesting that vernix removal in non-folded locations immediately post birth can be unfavorable
 - Mutic AD, et al. MCN Am J Matern Child Nurs.
 - Coughlin CC, Taieb A. Pediatric Dermatology. 2014
- Delayed immersion vs. immediate sponge baths reduce hypothermia (no increase in bf) (Brogen 2017)
- **2 hours vs. >12 hours associated with increased exclusive breastfeeding AOR=1.49 [95% CI 1.14, 1.96] (Dicioccio 2019)**
- Increased overall breastfeeding AOR=2.66; [95% CI 1.29, 5.46] (Preer 2013)

Ten Steps Support Exclusive Breastfeeding for those Most Vulnerable: *Issue of Equity*

TABLE 2 Associations Between Improvements in Maternity Practices and Breastfeeding Initiation and Exclusivity

	Overall		African American		Hispanic		White	
	Rate Ratio	95% CI	Rate Ratio	95% CI	Rate Ratio	95% CI	Rate Ratio	95% CI
Breastfeeding initiation								
Skin-to-skin care, vaginal delivery	1.09	(1.03–1.15)	1.12	(0.99–1.26)	1.21	(1.07–1.37)	1.04	(0.97–1.11)
Skin-to-skin care, cesarean delivery	1.15	(1.08–1.23)	1.38	(1.25–1.53)	1.19	(1.07–1.32)	1.05	(0.99–1.12)
Rooming in	1.07	(1–1.15)	1.15	(0.99–1.32)	1.02	(0.93–1.12)	1.08	(0.99–1.18)
Breastfeeding exclusivity								
Skin-to-skin care, vaginal delivery	1.14	(1.04–1.25)	1.19	(0.94–1.52)	1.33	(0.9–1.95)	1.17	(0.96–1.44)
Skin-to-skin care, cesarean delivery	1.20	(1.07–1.34)	1.65	(1.31–2.08)	1.50	(1.18–1.91)	1.10	(1–1.21)
Rooming in	1.10	(0.99–1.22)	1.54	(1.14–2.07)	1.30	(0.89–1.89)	1.12	(0.99–1.28)



Merewood A, Bugg K, Burnham L, et al. Addressing Racial Inequities in Breastfeeding in the Southern United States. *Pediatrics*. 2019;143(2):e20181897.

CDC (4/4/2020)

- “Determination of whether to keep a mother with known or suspected COVID-19 and her infant together or separated after birth on a **case-by-case basis**, using **shared decision-making** between the mother and the clinical team.”

CDC: Mother/Baby Contact

- “The many **benefits of mother/infant skin-to-skin contact** are well understood for mother-infant bonding, increased likelihood of breastfeeding...and though transmission of SARS-CoV-2 after birth with infectious respiratory secretions is a concern, **the risk of transmission and the clinical severity...in infants are not clear.**”

CDC: Co-isolation

- Keep newborn 6 feet away from mother
- Physical barriers
- If feeding at the breast, mother should place facemask, hand hygiene before feed

CDC 8/3/2020 update

“Early and close contact between the mother and neonate has many well-established benefits. The ideal setting for care of a healthy, term newborn while in the hospital is in the mother’s room, commonly called “rooming-in.” Current evidence suggests the risk of a neonate acquiring SARS-CoV-2 from its mother is low. Further, data suggests that there is **no difference in risk of SARS-CoV-2 infection to the neonate whether a neonate is cared for in a separate room or remains in the mother’s room.**”

CDC: *8/3/20 Transmission*

- Transmission of SARS-CoV-2, the virus that causes COVID-19, to neonates is thought to occur primarily **through respiratory droplets** during the postnatal period.
- There are **insufficient data to make recommendations on routine delayed cord clamping or immediate skin-to-skin care** for the purpose of preventing SARS-CoV-2 transmission to the neonate.
- Healthcare providers **should respect maternal autonomy** in the medical decision-making process.

CDC: *8/3/20 Risk to Newborn*

- Current evidence suggests that SARS-CoV-2 infections in neonates are uncommon. If neonates do become infected, **the majority have either asymptomatic infections or mild disease** (i.e., do not require respiratory support), and they recover.
- Severe illness in neonates appears to be rare.
- Neonates with underlying medical conditions and preterm infants (<37 weeks gestational age) may be at higher risk of severe illness from COVID-19.

CDC: *8/3/20 IPC Precautions*

- Mothers should wear a mask and practice hand hygiene during all contact with their neonates. Of note, plastic infant face shields are not recommended and masks should not be placed on neonates or children younger than 2 years of age.
- Engineering controls, such as maintaining a physical distance of >6 feet between the mother and neonate or placing the neonate in an incubator, should be used when feasible.

AAP: NICU

- Mothers and partners who are COVID-19 persons under investigation (PUIs) should not enter the NICU until their status is resolved.
- Extending isolation period to 14-20 days from onset of symptoms or first positive test (whichever comes first) is a reasonable option that will provide additional protection in the NICU.

AAP: NICU

- Mothers of NICU infants may express breast milk for their infants during any time that their infection status prohibits their presence in the NICU. Centers should make arrangements to receive this milk.
- Mothers to be instructed on hygiene/precautions.
- Safety of banked donor milk

Breastmilk and Virus Contamination

- Isolated case reports of SARS-CoV-2 detection in breast milk, but not active virus replication¹
- In 18 pregnant people with SARS-CoV-2
 - 1/64 breastmilk samples with SARS-CoV-2
 - **Holder pasteurization killed virus in milk²**
- Breastfeeding does **not** seem to be associated with neonatal SARS-CoV-2 infections³

1 GroB, Detection of SARS-CoV-2 in human breast milk. *Lancet*. May 2020. 2 Chambers C, et al. Evaluation for SARS-CoV-2 in Breast Milk From 18 Infected Women. *JAMA*. 2020;324(13):1347–1348. 3. Raschetti, R., Vivanti, A.J., Vauloup-Fellous, C. *et al.* Synthesis and systematic review of reported neonatal SARS-CoV-2 infections. *Nat Commun* **11**, 5164 (2020).

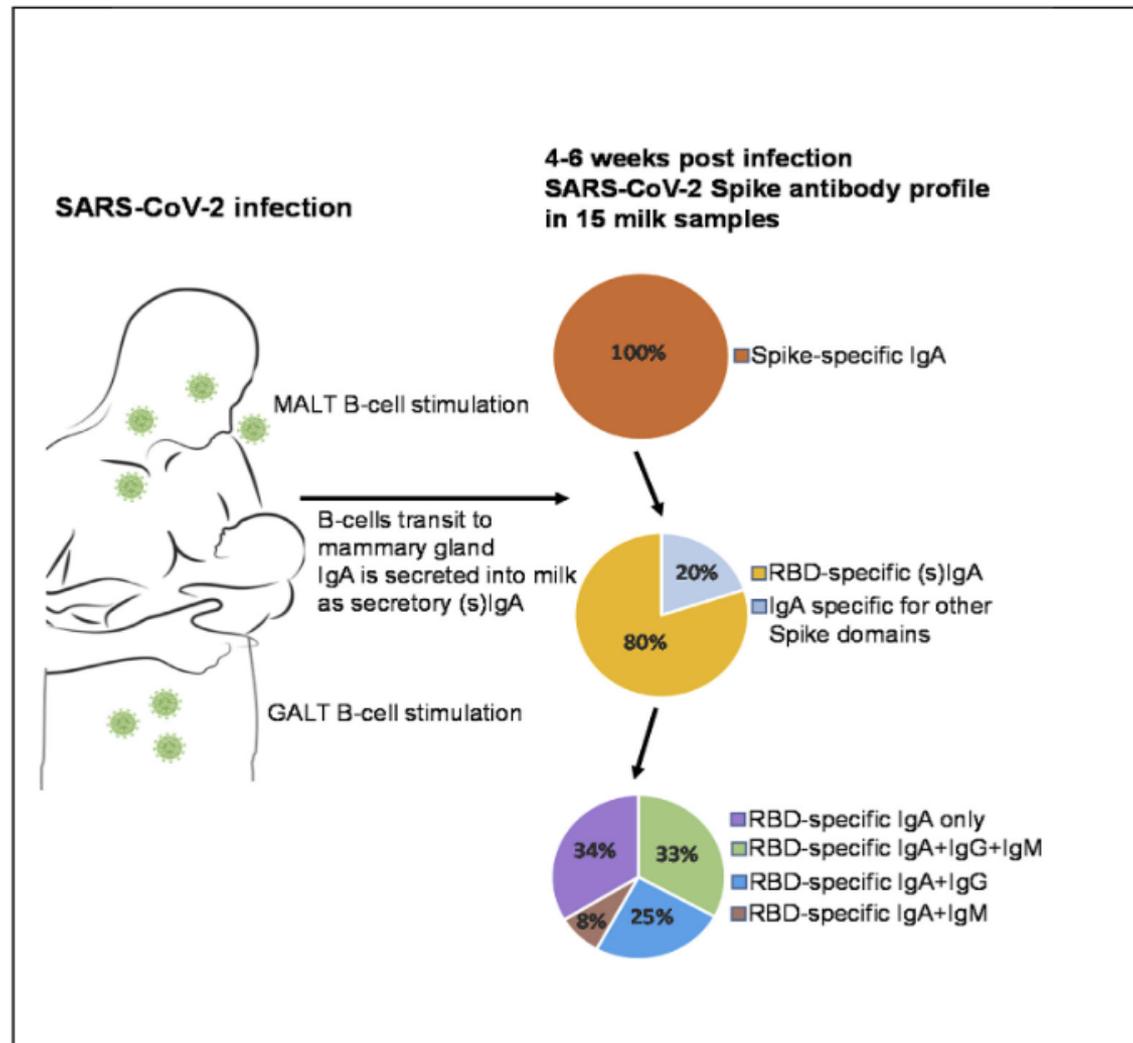
Outcomes of Newborns

- First 101 newborns born to mothers with SARS-CoV-2
- Masks, rooming-in, 6 feet distance when mother resting, hand hygiene
- Direct breastfeeding and skin-to-skin encouraged
- 2 newborns tested positive, no clinical illness

Outcomes of newborns born to mothers with SARS-CoV-2 infections at a large medical center in New York City, JAMA Pediatrics (2020)

Article

Robust and Specific Secretory IgA Against SARS-CoV-2 Detected in Human Milk



Alisa Fox, Jessica Marino, Fatima Amanat, Florian Krammer, Jennifer Hahn-Holbrook, Susan Zolla-Pazner, Rebecca L. Powell

rebecca.powell@mssm.edu

HIGHLIGHTS

All milk from recovered donors contained significant SARS-CoV-2-specific IgA

Most IgA could bind the Receptor-Binding Domain (important neutralization epitope)

Most Receptor-Binding Domain-specific IgA was in secretory (s) form

sIgA is durable in the mucosa, and thus potentially as a respiratory therapeutic

Exclusive Breastmilk Feeding When Dyads Separated

BRIEF REPORT

ACTA PÆDIATRICA
WILEY

Multi-centre study showed reduced compliance with the World Health Organization recommendations on exclusive breastfeeding during COVID-19

Ruth del Río¹ | Emilia Dip Pérez^{2,3} | Miguel Ángel Marín Gabriel^{4,5}  |
the Neo-COVID-19 Research Group

43.5% didn't have immediate skin-to-skin → strong negative correlation with exclusive breastfeeding

Ref: Del Rio R, et al.
ActaPaediatr.
2020:00:1-2

Newborn and infant risk of COVID-19

- **Newborns and infants are at low risk of COVID-19 infection**
- Of the few young children with COVID-19, most have had asymptomatic or mild illness
- Active SARS-CoV-2 virus has not been detected in breast milk to date
- No evidence of virus transmission through breastfeeding
- Antibodies and bio-active factors in breast milk may fight against COVID-19 infection if baby is exposed
 - sIgA detected in breastmilk
 - Lactoferrin likely protects against infection

The benefits of breastfeeding substantially outweigh the risks of illness associated with COVID-19

One Approach to Conversations

L

- Listen to what moms are saying

O

- Ask open-ended questions

V

- Validate feelings

E

- Educate on point



After Listening and Acknowledging

Step two: Ask open ended questions

- “What are your plans for breastfeeding?”
 - “Have you thought about breastfeeding your baby?” (YES/NO)
- “What have you heard about COVID-19 and breastfeeding?”
 - “Do you know the recommendations for COVID + moms?” (YES/NO)
- “What are your feelings about directly breastfeeding or being separated and expressing your milk?”
 - “Are you okay with us separating the baby and pumping your milk?” (YES/NO)

“What” is the key word!

Validating Feelings

- “It sounds like you are scared by this diagnosis....”
- “It sounds like this is hard for you to be without your mother, sister...”

Educate

- http://californiabreastfeeding.org/wp-content/uploads/2020/08/SharedDecisionMaking_Revised_8_10_20.pdf

A Parent's Guide to Shared Decision-Making for COVID-19 and Breastfeeding

**Wash your hands
before and after
touching or feeding
your baby**



**Cover your
nose and mouth
with a mask
or cloth when
breastfeeding or
expressing**



**Keep 6 feet distance
between you and baby
when not feeding or
caring for your baby**



**Have another
healthy adult help
with baby's care
when possible**



California Breastfeeding Coalition Tool

Examples of some breastfeeding care options for mothers with COVID-19:

Talk with your health care providers about options for care that work for your situation.

Skin-to-skin care

Improves breastfeeding and baby transitions; decreases depression for mothers

Care Options

- Immediate skin-to-skin care after birth
- Skin-to-skin delayed and with a healthy caregiver

Newborn bath

Delayed bath helps normal newborn transitions; bathing may reduce virus exposure

Care Options

- Delay baby bath until after first feeding
- Bathe baby immediately after birth

California Breastfeeding Coalition Tool

Based On:

World Health Organization

May 2020

[Frequently Asked Question: Breastfeeding and COVID-19 for health care workers.](#)

American Academy of Pediatrics

July 2020

[FAQs: Management of Infants Born to COVID-19 Mothers and Breastfeeding Guidance Post Hospital Discharge for Mothers or Infants with Suspected or Confirmed SARS-CoV-2 Infection.](#)

Centers for Disease Control

Temporary separation of baby from mother

Not shown to reduce virus exposure; may be hard to create a strong milk supply

Care Options

- Baby in mother's room with 6 feet distance and possible curtain barrier
- Baby cared for in a separate room

Breastfeeding

Protects baby from infections and illnesses; provides many health benefits for baby and mother

Care Options

- Baby feeds at the breast
- Mother's milk is expressed and fed to baby by a healthy caregiver

Tools for Lactation Support

- <https://firstdroplets.com/>
- <http://californiabreastfeeding.org/focus-areas/covid-19-coronavirus/>