

Postnatal care

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Infection control measures

- Mothers with suspected or confirmed SARS-CoV-2 infection should be **isolated from other healthy mothers and cared for according to standard infection control guidelines.**
- After the mother was transferred to the ward, **routine cleaning should be undertaken.**
- The surfaces of the equipment (including the obstetric table, ultrasound machine, and neonatal warm bed) in the isolation delivery room and the negative-pressure delivery room need to be wiped and disinfected immediately, preferably with 1000 mg/L chlorine-containing disinfectant; **75% ethanol** can be used for the no corrosion resistance instruments

Infection control measures

- **Spraying is not a recommended** method of disinfecting the equipment, as this can affect the components. Dedicated cleaning tools are required to avoid cross-contamination.
- The inspection room should be disinfected with **ultraviolet light for at least 60 min** each time, once or twice a day, with at least 30 min ventilation after irradiation.
- The ultrasound probe should be protected with a dark cloth during the irradiation. The room should be vacated when ultraviolet lamps are used

Maternal monitoring

- For **asymptomatic** patients with known or suspected COVID-19, postpartum maternal **monitoring is routine** (including postpartum vital signs, uterine contractions, maternal mental health, and other conditions of the mother should be monitored, and **attention paid to the prevention of postpartum hemorrhage and thrombosis**).

Maternal monitoring

- For **mild COVID-19** patients, monitoring vital signs and fluid balance (intake and output) **every 4 h for 24 h after vaginal delivery and 48 h after CD is advised.**
- For **moderate COVID-19 patients**, continuous pulse oximetry monitoring for the first 24 h or until clinical improvement occurs, whichever takes longer. **Follow-up laboratory investigations and chest imaging are individualized according to the course of the disease.**
- For patients with **severe or critical illness**, very close maternal monitoring and care on the labor and delivery unit or **intensive care unit** are indicated.

Venous thromboembolism prophylaxis

- Prophylactic-dose anticoagulation is recommended for pregnant/postpartum patients hospitalized for severe COVID-19, if not contraindicated.
- Anticoagulation is better discontinued when the patient is discharged to home.
- Patients with COVID-19 who do not warrant hospitalization for the infection or who are asymptomatic or mildly symptomatic and hospitalized for reasons other than COVID-19 (labor and delivery) do not require anticoagulation, unless they have other thrombotic risk factors, such as prior VTE or, in some cases, CD.
- Either low-molecular-weight heparin or unfractionated heparin is acceptable, and both are compatible with breastfeeding.

Postpartum analgesia

- Pain management is routine.
Acetaminophen is the preferred analgesic agent; however, *nonsteroidal antiinflammatory* drugs can be used when clinically indicated.

Postpartum fever

- The differential diagnosis of **postpartum fever** in patients with COVID-19 includes the infection itself as well as postpartum endometritis, surgical site infection, breast inflammation or infection, influenza, pyelonephritis, other viral or bacterial respiratory infections, and, rarely, pseudomembranous colitis due to *Clostridioides difficile*.
- The combination of composite symptoms, physical examination, and laboratory tests can usually distinguish among these disorders.
- **Acetaminophen** is the preferred antipyretic agent.

Criteria for Discontinuing Mother newborn Infection Precautions

- **Symptomatic mothers**—Previously symptomatic mothers with suspected or confirmed COVID-19 are not considered a potential risk of virus transmission to their neonates if they have met the criteria for discontinuing isolation and precautions
- At least **10 days have** passed since symptoms onset (**20 days** if have severe or critical illness or are severely immunocompromised).
- **At least 24 h have passed since their last fever without the use of antipyretics.**
- Symptoms have improved.

Criteria for Discontinuing Mother newborn Infection Precautions

- **Asymptomatic mothers**—For asymptomatic mothers identified through routine SARS-CoV-2 screening upon hospital admission, **at least 10 days** should have passed since the positive test before discontinuing mother–newborn infection precautions.

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- Women and their families should be advised about **safe sleeping and a smoke-free** environment, along with provision of clear advice about **careful hand hygiene and infection control measures** when caring for and feeding the baby

How should neonatal care for the baby be provided during the COVID-19 pandemic?

- Women and their healthy babies should remain together in the immediate postpartum period, if they do not otherwise require maternal critical care or additional neonatal care.
- Women with suspected or confirmed COVID-19 should remain with their baby and be supported to practice skin-to-skin/kangaroo care, if the newborn does not require additional medical care at this time.
- Adopt a precautionary approach for a woman who has suspected or confirmed COVID-19 and whose baby needs to be cared for in the neonatal unit, to minimize any risk of women-to-infant or women-to-staff transmission; at the same time, involve parents in decisions, mitigating potential problems for the baby's health and wellbeing and for breastfeeding, bonding and attachment.

Could mothers pass COVID-19 to their baby?

- Current evidence suggests that if transmission from a woman to her baby during pregnancy or birth (vertical transmission) does occur, **it is uncommon**.
- If your baby develops COVID-19 infection, it is not **affected by the mode of birth**, feeding choice or whether mother and baby stay together.
- In most reported cases of new-born babies with COVID-19, the **babies did not suffer severe infection**.

Will baby be tested for COVID-19?

- If mothers have **confirmed or suspected COVID-19** when the baby is born, doctors who specialize in the care of new-born babies (neonatologists) will examine baby and advise about their care.

Will baby be tested for COVID-19?

- The American Academy of Pediatrics (AAP) suggests for diagnosis of newborn infection to test at approximately 24 h of age and, if negative, again at approximately 48 h of age since some infants have had a negative test at 24 h only to have a positive test at a later time.
- If a healthy, asymptomatic newborn will be discharged prior to 48 h of age, a single test at 24–48 h of age can be performed and to obtain either a single swab of the nasopharynx, a single swab of the throat followed by the nasopharynx, or two separate swabs from each of these sites, and submit for a single test.

Feeding and caring for infants and young children of mothers with COVID-19

- **Breastfeeding** protects against morbidity and death in the post-neonatal period and throughout infancy and childhood. The protective effect is particularly strong against infectious diseases that are prevented through both direct **transfer of antibodies and other anti-infective factors** and long-lasting transfer of immunological competence and memory.

Feeding and caring for infants and young children of mothers with COVID-19

- WHO has concluded that mothers with suspected or confirmed COVID-19 **should not be separated from their infants.**
- Mother-infant contact and holding enhances thermoregulation and other physiological outcomes, significantly **reduces mortality and morbidity**, and improves child and parental attachment.

WHO

- **WHO recommend that mothers with suspected or confirmed COVID-19 should be encouraged to initiate and continue breastfeeding. From the available evidence, mothers should be counseled that the benefits of breast-feeding substantially outweigh the potential risks of transmission.**

If feeding is interrupted

- In situations when **severe illness in a mother** prevents her from caring for her infant or prevents her from continuing direct breastfeeding, **mothers should be encouraged and supported to express milk**, and the breast milk provided safely to the infant, while applying appropriate IPC measures.
- **If this is not possible**, consider wet nursing (defined as **another woman breastfeeds** the child) or appropriate breastmilk substitutes, informed by feasibility, safety, sustainability, cultural context, acceptability to mother and service availability.
- Mothers who are not able to initiate breastfeeding during the **first hour after delivery** should still be supported to breastfeed as soon as they are able.

Practices the mother should perform during all infant and childcare

- Perform frequent **hand hygiene** with **soap and water** or **alcohol-based** hand rub, especially before contact with her child.
- Perform **respiratory hygiene**: sneeze or cough into a tissue and immediately dispose of the tissue.
- Hands should immediately be washed with soap and water or alcohol-based hand rub.
- Clean and disinfect surfaces with which the mother has been in contact.
- Wear a **medical mask** until symptom resolution and criteria for release from isolation have been met.

Taking care when feeding

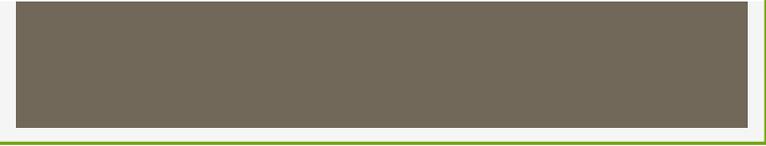
- The main risk of feeding is close contact between mother and her baby, as **if mother cough or sneeze, this could contain droplets that are infected with the virus**, leading to infection of the baby after birth.
- **Wash hands** before touching baby, breast pump or bottles
- Try to avoid coughing or sneezing on baby while feeding at the breast or from a bottle
- Consider wearing a mask or face covering while feeding
- Follow recommendations for pump/bottle cleaning after each use
- **Babies should not wear face masks as this risks suffocation.**

breastfeeding

- Additionally, breastfeeding mothers should be helped to **clean her chest with soap and water** if she has been coughing on it before breastfeeding.
- She **does not need to wash her breasts** prior to every breastfeed.

Postpartum office visit

- ❖ Postpartum outpatient care is better minimized during the pandemic and is appropriate to decrease the risk of exposure to infection.
- ❖ **Early postpartum assessments** for wound and blood pressure can be achieved through telemedicine facilities.
- ❖ A comprehensive postpartum visit is important after **12 weeks**, especially for those having comorbidities and in patients who lose insurance coverage at that time.
- ❖ Postpartum depression screening should be **done 4–8 weeks** after delivery for all patients.



What are the considerations for postnatal care for women and babies following admission with COVID-19?

- Following childbirth, effective **contraception should be discussed** with and offered to all women prior to discharge from maternity services

Thank you for your attention

