



Coronavirus COVID-19

BC Centre for Disease Control | BC Ministry of Health



Delivery Considerations for a Newborn Born to a Mother/Individual who is a Confirmed Case of, or Under Clinical Investigation for, COVID-19

May 27, 2021

This guidance is based on known evidence as of May 27, 2021. It is intended for health-care providers caring for newborns born to individuals that:

- **Are a close contact of a person under clinical investigation for COVID-19;**
- **Have symptoms suggestive of COVID-19;**
- **Are under clinical investigation for COVID-19; or**
- **Have a confirmed diagnosis of COVID-19.**

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Definitions

COVID-19 disease categories as used in this document: ^{1,2}

- **Confirmed case:** A person or newborn with laboratory confirmation of a positive SARS-CoV-2 test result.
- **Person under clinical investigation:** Mother/individual or caregiver who meets the criteria for SARS-CoV-2 testing and is waiting to be tested or waiting for the results of a test. A pregnant mother/individual who presents during labour with a temperature above 38 degrees Celsius will be tested for SARS-CoV-2 even in the absence of [exposure criteria and/or close contact](#) with a person with a confirmed COVID-19 diagnosis, or a person under clinical investigation for COVID-19.
- **Newborn under investigation:** A newborn who is symptomatic and/or had close contact with a person with a confirmed COVID-19 diagnosis or a person under clinical investigation for COVID-19. They can be either waiting to be tested for SARS-CoV-2 or waiting for the results of a test.
- **Close contact:** A person or newborn who had close physical contact with, or who lived with a person with, a confirmed COVID-19 diagnosis or a person under clinical investigation for COVID-19.

Maternal critical illness: A pregnant mother/individual with any of the following: ³

- Is intubated;
- SpO2 measures < 94% in room air;
- Is on supplemental oxygen due to COVID-19;
- Receives end-organ support;
- Is significantly immunosuppressed (e.g., HIV with CD4<200); and/or
- Deemed collectively by members of the delivery team as critically unwell.

Newborn: Infant in the first 28 days after birth.

Mother/individual: The term individual is used in this guideline to be inclusive of transgender individuals who gave birth to the newborn and in cases where the caregiver of the newborn is not the mother/individual (e.g., foster parent).

Vertical transmission: Transmission of infection directly from mother/individual to embryo, fetus or newborn during the perinatal period through the placenta or human milk.

Horizontal transmission: Transmission of infection from one person to another through contact with bodily fluids (respiratory droplets, sputum, blood, etc.).

General Information

SARS-CoV-2 is a novel coronavirus that causes COVID-19 illness in adults, children and newborns. The incubation period is two to 14 days, with a median of five days.⁴ Studies continue to show that COVID-19 infection in newborns is uncommon and most newborns who may become infected are asymptomatic or present with mild to moderate disease.^{5, 7, 8}



Overall, pregnancy outcomes among reported cases of COVID-19 infection during pregnancy are mostly good; spontaneous and iatrogenic preterm birth are the most commonly reported adverse outcomes.⁵⁻⁷ While there is currently no reported increased risk of congenital anomaly, available data is limited and, at this time, the risk of teratogenicity cannot be excluded.^{5,6}

While there is no strong evidence of vertical transmission of SARS-CoV-2, the newborn is at risk for postpartum horizontal transmission.^{5-7,9-11} The rate of infection in the newborn born to a parent with a confirmed diagnosis of COVID-19, or is a person under clinical investigation, does not vary regardless of mode of delivery, breast/chest feeding or rooming-in practices.¹¹

Recommendations

Personal Protective Equipment (PPE)

Refer to health authority specific guidance and the BCCDC's resources on [PPE](#) and [aerosol generating medical procedures \(AGMP\)](#) for the most up-to-date information.

Droplet and contact precautions are recommended for all team members involved in the direct care of a newborn born to a mother/individual who is a confirmed case of, or under clinical investigation for, COVID-19.^{5,12}

There is no strong evidence of vertical transmission of SARS-CoV-2. Therefore, the risk of transmission during AGMPs employed during newborn resuscitation at birth remains low and additional airborne precautions are not warranted.^{5,7,9,10,13,14} Airborne precautions for care teams are only indicated:

- In the case of AGMPs such as intubation and general anesthesia of the mother/individual that has a confirmed COVID-19 diagnosis or who is under clinical investigation for COVID-19.¹⁵
- For maternal/individual [critical illness](#).

General Preparations Regarding Space and Equipment

While designated space, equipment and number of health-care professionals in attendance during the birth will be different at each site, consider the following when preparing to care for a newborn following delivery:

- Perform equipment checks prior to the mother/individual with confirmed or suspected COVID-19 entering the labour and delivery area.
- Commonly used equipment for newborn resuscitation should be readily available at the resuscitation area. Consider placing the equipment in a plastic bag to minimize the risk of contamination of the equipment.
- If staff numbers allow, consider removing unnecessary equipment including the newborn resuscitation cart from the delivery room to further limit the potential for contamination. In this case, keep the newborn resuscitation cart outside the delivery room and assign a team member to pass equipment for vascular access, medications and other supplies to the resuscitation team if required.



- Newborn resuscitation can occur in the maternal/individual labour and delivery area if a distance of two metres can be maintained between the newborn resuscitation area and the mother/individual.⁵ If a distance of two metres cannot be maintained, assess the risk of exposure and follow PPE recommendations as described in the [risk assessment and management of health-care worker exposures to COVID-19](#).
- Sites may consider using an adjacent room for newborn resuscitation as it may be difficult to completely protect the newborn from horizontal transmission of SARS-CoV-2 during maternal/individual AGMP or in the case of maternal/individual critical illness.⁵ In this case, an assigned team member will bring the newborn to the resuscitation room. This team member will don appropriate [PPE](#) as required. This will minimize the need for the newborn resuscitation team to take additional airborne precautions.

Preparation for Delivery

While most newborns born to COVID-19 confirmed mothers/individuals do not require resuscitation, the team responsible for newborn care should be notified of fetal distress and other risk factors to allow the team to prepare for anticipated resuscitation of the newborn.⁵ Team members responsible for newborn resuscitation must perform a huddle to review case specific preparation, including anticipated equipment for newborn resuscitation, PPE needs, delayed cord clamping and team member roles.

Notify the team responsible for newborn resuscitation at the start of second stage of labour or at the time of transfer of the mother/individual to the operating room to ensure there is enough time to don appropriate [PPE](#). Minimize the number of people in the delivery area by limiting access to only those directly involved in the care of the newborn or mother/individual.

General Management Principles (See Figure 1)

Management of the Newborn at the Time of Birth

Prior to birth, discuss skin-to-skin and the potential risk for horizontal spread of COVID-19 to the newborn with the mother/individual. The decision to allow the newborn to transition while skin-to-skin should be a shared decision between the health-care professional and mother/individual based on current best evidence.

The maternal/individual team will warm, dry and stimulate the newborn.^{5,16} Once the newborn is delivered, and mother/individual chooses to do skin-to-skin, they should put on a face mask to limit horizontal spread of COVID-19 to the newborn. Allow newborn to transition while skin-to-skin as per local guidelines.

Continue to practice delayed cord clamping^{5,16} unless contraindicated (more information is available on page 6 in the [Provincial Perinatal Guidelines Standards for Neonatal Resuscitation](#)). When ready to transfer the newborn to the postpartum unit, transfer newborn in mother/individual's arms following intra-hospital⁵ and local infection prevention and control (IPC) transfer guidelines. Newborn can also be transferred to the postpartum unit in a closed incubator preferable (if available) to minimize the possibility of spreading infection. If a closed incubator is not available, clear the pathway to the postpartum unit to minimize potential contamination.



Management of the Newborn that is Unwell or Requires Additional Care at the Time of Birth

If possible, the newborn team should maintain a two metre distance from the mother/individual.⁵ The maternal/individual team will warm, dry and stimulate the newborn.^{5,16} Delayed cord clamping may be considered^{5,16} unless otherwise [contraindicated](#).

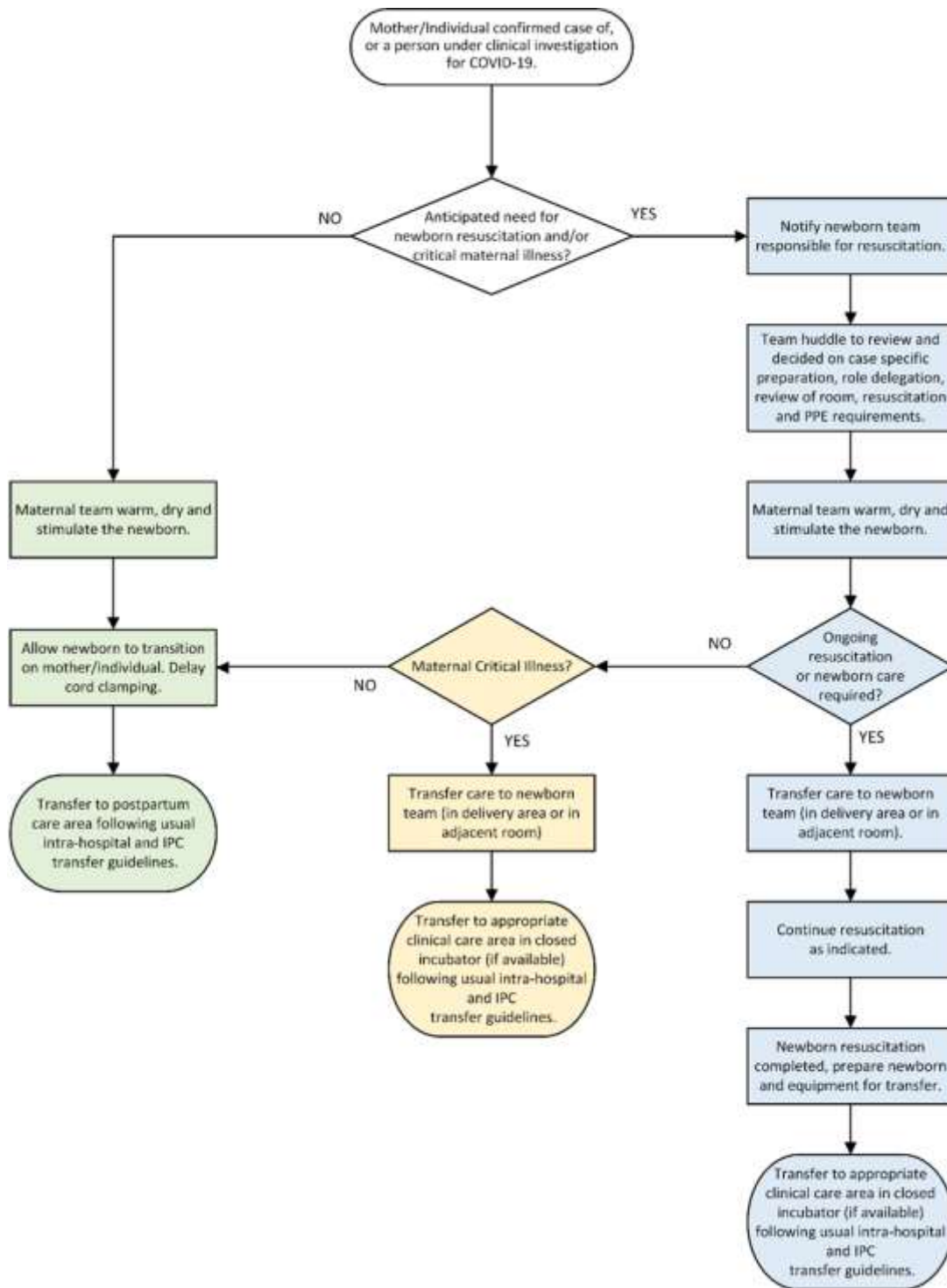
If ongoing resuscitation of the newborn is required, newborn care will be transferred to the newborn team for further management either in the [delivery suite](#) or in an [adjacent area](#).⁵ After completion of newborn resuscitation, prepare the newborn and equipment for transfer to the neonatal intensive care unit (NICU), special care nursery or designated stabilization area.

Transfer the newborn to the transport incubator (closed incubator preferable, if available) to minimize the possibility of spreading infection. If a closed incubator is not available, clear the pathway to NICU, special care nursery or designated stabilization area to minimize potential contamination. Consult local IPC for site-specific intra-hospital patient transfer guidance.



Management Algorithm

Figure 1: Management of the Newborn Born to Mother/Individual who is a Confirmed or Person under Clinical Investigation for COVID-19



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