

NICU COVID-19 IPC Clinical Guidance

Preventing Transmission of COVID-19 to neonates

Intra-uterine transmission of the SARS-CoV-2 virus from a COVID-infected woman to fetus can occur via the placenta. However, this is an uncommon event, estimated to occur in 1-3% of mothers who have COVID-19 around the time of delivery. Postnatal transmission of COVID-19 to neonates is more common, thus requiring more focused efforts to prevent COVID-19 infection in neonates.

Breastfeeding is encouraged with appropriate precautions. SARS-CoV-2 is not transmitted through breastmilk. Postnatal transmission is via respiratory droplets and close contact.

Current [data](#) (Table 7 Total Hospitalizations, ICU admissions and deaths (ever) among COVID-19 cases in Alberta by age group) suggests that the population under 1 year of age has comparable rates of severe COVID-19 (e.g., hospitalization and ICU admission) as older adult age groups. It is important that neonates are protected from infection, and that preventive strategies are employed in the hospital and in the home environment.

Guiding principles

Preventing COVID-19 transmission to neonates is a priority. Early breastfeeding and skin-to-skin contact should be encouraged, using appropriate precautions. Each NICU environment may not be able to accommodate COVID-19 positive parents/caregivers due to lack of private rooms and the general layout of the unit. As such, site-specific accommodations may need to be used. There may be site-specific measures that need to be considered in addition to what is outlined in this provincial guidance document.

CARE OF PREGNANT PERSON

Pregnant person has core respiratory/loss of smell or taste/gastrointestinal symptoms:

- 1. Testing:** COVID-19 test for pregnant person. Contact IPC if positive.
- 2. Additional (isolation) precautions:** [Contact and Droplet Precautions](#)
- 3. PPE for neonate providers:** [Contact and Droplet Precautions](#); if neonate is anticipated to need resuscitation, neonatal team to wear an N95 respirator

Pregnant person is close contact of confirmed or probable COVID-19 case with or without symptoms for COVID:

- 1. Testing:** COVID-19 test for pregnant person if symptomatic. Contact IPC if positive.
- 2. Additional (isolation) precautions:** [Contact and Droplet Precautions](#); pregnant person is considered a probable case if a close contact and is symptomatic
- 3. PPE for neonate providers:** [Contact and Droplet Precautions](#); if neonate is anticipated to need resuscitation, neonatal team to wear an N95 respirator

Pregnant person has expanded symptoms only, no risk factors for COVID:

- 1. Testing:** COVID-19 test for pregnant person. Contact IPC if positive.
- 2. Additional (Isolation) precautions:** Routine Practices
- 3. Neonate:** Use [Contact and Droplet Precautions](#) until COVID-19 test result for pregnant person is available. If negative and alternative diagnosis is determined for woman's expanded symptoms then isolation for neonate can be discontinued

Pregnant person associated with a facility outbreak:

Assess Risk

Uncertain or possible risk – put on [Contact and Droplet Precautions](#)

No or low risk – Routine Practices

CARE OF NEONATE

Pregnant person is COVID-19 negative

1. Testing: No need to test neonate unless symptoms develop

2. Additional (isolation) precautions: [Routine Practices](#) for neonate

Pregnant person is COVID-19 positive or pending result

1. Testing: Test neonate at 24 hours of life; if neonate positive, repeat COVID-19 test at 24-48 hours from initial test in case of maternal contamination: if any neonate swabs are positive, notify IPC

2. Additional (isolation) precautions: [Contact and Droplet Precautions](#) for neonate

Neonate's first 24-hour swab is POSITIVE

If neonate is discharged

1. Testing: Provide close community follow-up; If neonate becomes symptomatic, assess and collect specimen(s) for Respiratory Pathogen Panel and COVID-19 and other investigations as appropriate

If neonate remains in NICU

1. Testing: Repeat COVID-19 test for neonate 48 hours from initial test.

2. Additional (isolation) precautions: [Contact and Droplet Precautions](#) for neonate

3. Consult: Contact IPC for additional advice after repeat swab results are known

Neonate's first 24-hour swab is NEGATIVE

If neonate is discharged

1. Testing: No testing required at this stage: advise family to seek care in the community if infant develops COVID-19 symptoms

If neonate remains in NICU

1. Testing: Repeat COVID-19 test 48 hours from initial test to clarify COVID-19 status, or sooner if new/worsening respiratory/gastrointestinal symptoms develop

2. Additional (isolation) precautions: If neonate has had postnatal contact (e.g. breastfeeding, skin to skin contact /kangaroo care, irrespective of masking) with a woman/DFSP who is COVID-19 positive or probable, place neonate on [Contact and Droplet Precautions](#) for 10 days; pregnant person is considered a probable case if a close contact and is symptomatic

IPC may update this guidance on a case-by-case basis as more clinical information becomes available