COVID - 19 and Pregnancy, Maternal and Newborn Care
Maternal Child Bulletin #3 – June 13, 2020

The purpose of this bulletin is to share current information and Nova Scotia guidance about care for pregnant and childbearing persons and newborns during the COVID-19 pandemic. Our NS guidelines may differ from those of other countries and possibly from other Canadian provinces. Please consult with IWK and/or NSHA program leaders before adopting any guidance from outside of NS. The format of this document is adapted with permission from bulletins produced by Vancouver Coastal Health Authority. Our thanks for their willingness to share with Nova Scotia.

Knowledge, understanding and terminology about COVID-19 is changing rapidly. Information in this document will be modified in response to new data and evidence. ***NEW*** content added will be indicated as such. Please check http://rcp.nshealth.ca/ to ensure you are referring to the latest Maternal Newborn Care Bulletin.

Sections Included in this Bulletin

GENERAL PRINCIPLES FOR ALL COVID-19 POSITIVE INDIVIDUALS 2
GENERAL INFORMATION ABOUT COVID-19 IN THE PREGNANT AND NEWBORN POPULATIONS 2
USE OF PPE FOR HEALTH CARE ENCOUNTERS 3
DEFINITION OF AGMPs 3
ASSISTED REPRODUCTION 4
ANTEPARTUM CARE 4
Low-risk 4
Women who have co-morbidities, known or suspected maternal obstetrical and/or fetal health concerns 5
Antenatal Corticosteroids 5
NSAIDs 6
POSSIBLE COVID-19 THERAPIES 6
INTRAPARTUM CARE AND IMMEDIATE POSTBIRTH NEWBORN CARE 6
PPE use for health care providers on Maternity Units 6
Why is labour & delivery not an "aerosolized event" since there is heavy breathing, screaming? 9
Home Birth 9
Labour analgesia 9
Fever in labour (> 38°) 10
POSTPARTUM/POSTNATAL CARE 10
Vertical transmission & risk to Infants 10
Care for the well/asymptomatic infant of a mother/parent who is known, or suspected COVID-19 positive 11
UPDATE ON EARLY YEARS PUBLIC HEALTH SERVICES 11
PREGNANT HEALTH CARE WORKERS 12
DATA COLLECTION/CODING NOVA SCOTIA DATA 12
RESOURCES 13

GENERAL PRINCIPLES FOR ALL COVID-19 POSITIVE INDIVIDUALS

- The primary method of transmission continues to be DROPLET. Droplets are too large to be airborne for long periods of time. They quickly settle onto surfaces at distances of < 2 meters from the source, which is the rationale for physical/social distancing recommendations.
- Screening in the community is done in designated COVID-19 Screening Centres. Screening criteria may change, based on the evolving situation in NS. For current guidance, see https://when-to-call-about-covid19.novascotia.ca/en .
- People who have screened positive for COVID-19 are followed by public health with daily phone calls. A person is considered recovered 10 days after the onset of symptoms, provided only mild symptoms persist. Public health will determine the date of onset and the date the person is determined to be recovered. There may be a residual cough that persists longer, and the patient is not considered infectious. Clarification: For patients in the community who have tested positive for COVID-19, follow up swabs to determine 'negative' results are not necessary. Swabs are based on a PCR, which will remain positive when live virus is no longer present. Thus follow up swabs would not indicate ongoing transmission risk in the absence of symptoms. Note: For patients who are admitted for COVID-19 the advice about repeat swabs may be different.
- People who are known or suspected of having COVID-19, and those who are being investigated, will be given a surgical/procedural mask (droplet precautions) to wear in public areas of a health care facility. Note: A mask for droplet precautions will also be provided for anyone with respiratory symptoms.
- ***NEW*** A LIMITED number of tests with a rapid turn-around time are available at IWK and NSHA **for use in selected cases**. At this time testing can be done every day of the week during the day but hours may vary by day of the week. Contact Infectious Diseases to request testing. Note: The allotment of kits may vary from week to week, depending on availability.
- For those who are known or suspected to be COVID-19 positive, no visitors, support persons/companions are allowed during medical appointments in hospital. *Exception: one parent/guardian allowed for children, including newborns.*
- Those who are positive for COVID-19 or suspected to be positive, and persons under investigation (i.e. PUI), will have health care appointments by telephone or other technology. In-person appointments will be delayed until recovery, unless in-person contact is needed to assess the need for changes in management. Primary care providers will not offer home visits for those who are COVID-19 positive, or suspected to be positive, but clinic appointments can be arranged if required.
- For those who are known or suspected to be COVID-19 positive, no visitors, support persons/companions are allowed during hospital admissions.
- Women who are positive for COVID-19, and those who are suspected to be positive or under investigation, cannot have a support person/companion accompany them in labour.

GENERAL INFORMATION ABOUT COVID-19 IN THE PREGNANT AND NEWBORN POPULATIONS

- Available data indicate that pregnant people ARE NOT at increased risk for COVID-19 infection, or at increased risk of morbidity/mortality from COVID-19 infection.

GENERAL INFORMATION ABOUT COVID-19 IN THE PREGNANT AND NEWBORN POPULATIONS (continued)

- ***NEW*** Recent Canadian information suggests that vertical transmission **MAY** be possible if the mother is immunocompromised, has radiographic pneumonia or experiences persistence of specific risk factors.* Maternal and neonatal care pathways have been adjusted to reflect this possibility and will be updated as further information becomes available.
- For a COVID-19 positive patient who is admitted or going to need hospital care, please notify the appropriate IWK or NSHA obstetrical or neonatal/pediatric consultant on call. Formal consultation will depend on the clinical situation but discussion is required.
- For a COVID-19 positive patient, a discussion with the facility Anesthesia Department is important. The timing of the discussion is determined locally, based on practices in each facility. A formal consultation closer to the expected delivery date should be considered.
- Documentation of confirmed infection with COVID-19 during pregnancy, even if recovered, is essential for on-going surveillance. Including the date infection confirmed (date of swab) is important, if known, so that gestational age at infection can be calculated. The prenatal record and maternal admission forms are the best options for documentation of prenatal infection. For mothers and infants who have confirmed COVID-19 infection during hospital admission, COVID-19 infection should be documented on progress notes.

*1 or more persistent read flags: HR greater than 120 bpm or less than 50 bpm, RR greater than 30/min or less than 10/min, SBP less than 90 mmHg, SpO2 less than 94%, hemoptysis, respiratory distress/inability to complete sentences, altered level of consciousness) at the time of delivery.

USE OF PPE FOR HEALTH CARE ENCOUNTERS

- **Surgical/procedure mask required** for all personnel working in patient care areas in any role, or for anyone entering an ambulatory or inpatient care area.
- **Droplet/Contact Precautions** (gown, gloves, surgical/procedure mask, face protection) required for contact with someone who is known or suspected to be COVID-19 positive and **will not need an Aerosol-Generating Medical Procedures (AGMP)**
- **Airborne/Contact precautions** (gown, gloves, fit tested N95 mask, face protection) required for contact with someone who is known, or suspected to be COVID-19 positive who **will need/ is likely to need an AGMP. Newborns < 24 hours old are the exception to this guidance**. ***NEW*** As vertical transmission **MAY** be possible in rare circumstances, maternal care providers MUST ensure timely communication of any maternal risk factors that would lead to the use of airborne precautions for newborn resuscitation.

DEFINITION OF AGMPs (IWK and NSHA links lead to a joint NSHA-IWK document)

IWK
http://pulse.iwk.nshealth.ca/load_file.cfm?section=depserv&theFile=AGMPs%20for%202019%20Novel%20Coronavirus%20March%202020%20FINAL%5F%2Epdf
NSHA
http://policy.nshealth.ca/Site_Published/covid19/document_render.aspx?documentRender.IdType=6&documentRender.GenericField=&documentRender.Id=76545

ASSISTED REPRODUCTION

- Please see the Atlantic Assisted Reproductive Therapies (AART) website for updated information about resumption of services and any operational changes as a result of COVID-19. http://www.aart.ca/

ANTEPARTUM CARE

Low-risk

Schedule of 9 Prenatal Contacts for Low Risk Pregnant Patients who are COVID-19 Negative:

For low-risk pregnant patients and those for whom there are no identified maternal obstetrical or fetal concerns, it is acceptable to adjust the prenatal visit schedule to align with the WHO Antenatal Care Model (2016). The visit schedule below includes nine prenatal visits and is a slight modification of the WHO schedule. Please note: These visits may be virtual or in-person and the schedule may be adjusted based on clinical judgement. ***NEW*** Clarification: This visit schedule may be continued for low-risk pregnant patients, or adjusted based on clinical assessment and the ability to manage physical distancing requirements.

FIRST TRIMESTER:	• Contact 1: before 12 weeks
SECOND TRIMESTER:	• Contact 2: at 20 weeks • Contact 3: at 26 weeks
THIRD TRIMESTER:	• Contact 4: at 30 weeks • Contact 5: at 34 weeks • Contact 6: at 36 weeks • Contact 7: at 38 weeks • Contact 8: at 39 weeks • Contact 9: at 40 weeks
POSTDATES:	Return for monitoring and discussion re: induction at 41 weeks if not given birth.

For low-Risk Pregnant Persons who are known, or suspected of being COVID-19 positive:

- All prenatal visits should be virtual while the pregnant person is home on isolation. In-person visits, laboratory investigations and ultrasounds should be delayed until recovery is determined and the person has been cleared from isolation by Public Health.
- If an in-person visit is deemed necessary, make arrangements for the visit to take place in the most appropriate area.
- For those who are confirmed COVID-19 positive, the primary care provider/delegate should conduct a daily phone call to assess symptoms of COVID-19 and pregnancy concerns, using COVID Home Questionnaire as the basis for discussion (http://pulse.iwk.nshealth.ca/COVID-19/page/?id=16715 or https://covid19hub.nshealth.ca/friendly.php?s=covid-19/care/ptpop_maternity).
- Send a referral to IWK Maternal Fetal Medicine for development of a plan for ongoing fetal surveillance after the patient is considered recovered.

- Prenatal laboratory testing is an important aspect of prenatal care. These investigations should be offered as usual and should be scheduled in conjunction with prenatal visits as much as possible, taking into consideration local lab requirements and operational issues.
- A temporary alternate screening option for gestational diabetes mellitus (GDM) has been proposed by the SOGC and Diabetes Canada, to reduce the challenge of physical distancing during screening and to address the burden on labs, where capacity is an issue. The alternative approach is:
    - Hemoglobin A1c (HbA1c) and a random (non-fasting) glucose instead of a 50g-GCT (Trutol) at 24-28 weeks' gestation. The requisition must indicate that the patient is pregnant.
    - Early screening for a high risk patient can be done with the same screening approach and diagnostic limits or you could order the HbA1C and a FASTING blood glucose (see http://rcp.nshealth.ca/sites/default/files/clinical-practice-guidelines/GDM%20Alternate%20screening%20algorithm_28April2020.pdf)
    - Labs that have implemented this approach will automatically change a GCT (Trutol) ordered to HbA1c and random glucose.
    - Postpartum screening for women who were diagnosed with GDM will be deferred until the pandemic is over.
- ***NEW*** Vaginal swabs may be used again for prenatal/perinatal CT/GC testing.
- Prenatal ultrasounds are an important aspect of prenatal care. These investigations should be offered as usual and should be scheduled in conjunction with prenatal visits as much as possible **with the exception of some first trimester ultrasounds** as noted below.
- A first trimester ultrasound is not required in the following circumstances: conception date known and/or LMP reliable with no identified risk factors or complications, IVF pregnancy (Note: cycles currently postponed in NS). (http://pulse.iwk.nshealth.ca/COVID-19/page/?id=16715 or https://covid19hub.nshealth.ca/friendly.php?s=covid-19/care/ptpop_maternity).

Women who have co-morbidities, known or suspected maternal obstetrical and/or fetal health concerns

- Schedule prenatal visits based on medical needs.
- Not all contacts have to be in-person and virtual care can be considered.
- For questions about precautions for women who are known to be COVID-19 positive, or are being investigated for COVID-19, and for questions about accompanying support people, please refer to guidance from the NSHA and the IWK Health Centre as guidance may change.

Antenatal Corticosteroids

- Currently, based on the understood risk vs. benefit, the SOGC recommends continued routine administration of antenatal corticosteroids up to 34+6 weeks gestation. This is because of their demonstrated benefit for absolute risk reduction in respiratory distress syndrome, perinatal death and intraventricular hemorrhage. This approach may be modified in some situations, based on Individual maternal and neonatal risk benefit assessment.
- It is noted that the critical care literature does not support corticosteroids for ARDS/ventilated patients, but does allow them in certain medical conditions such as asthma. The literature is controversial regarding possible harm with steroids from delayed viral clearance, psychosis with high cumulative doses, diabetes (with doses equivalent to 5mg of betamethasone) and possible osteonecrosis.

NSAIDs

There has been a large amount of controversy around the theoretical risk of NSAID use in COVID-19 positive patients. We recommend the following:

- ASA is appropriate for risk reduction in pregnancy.
- NSAIDs such as ibuprofen/naproxen/diclofenac should not be used in pregnancy due to risk of oligohydramnios, and premature closure of the ductus.
- Acetaminophen can be used for fever in pregnancy and labour as per existing protocols.
- NSAIDs are indicated postpartum for analgesia, and can be used postpartum for patients with known or suspected COVID-19 and those under investigation who have mild symptoms, unless better evidence to the contrary emerges.
- NSAIDs are generally not indicated in critically ill patients regardless of COVID-19 status, given risks for AKI and GI bleeding. Therefore, careful thought should be taken before their use in very ill patients.

POSSIBLE COVID-19 THERAPIES

- There are a number of investigational therapies including Remdesivir, Cholorquine, Hydroxychloroquine +/- Azithromycin, Protease Inhibitors, Colchicine and convalescent plasma. None of these therapies are recommended at this time. Trials are currently underway.
- If any of these therapies prove beneficial, a number of them have safety data available for pregnancy to potentially guide their use. However, we must await the results.

INTRAPARTUM CARE AND IMMEDIATE POSTBIRTH NEWBORN CARE

Please note:

- ***NEW*** Although recent Canadian information suggests that vertical transmission **MAY** be possible if a COVID-19 positive mother is immunocompromised, has radiographic pneumonia or specific risk factors, these situations are extremely rare. Therefore infants born to mothers known or suspected to be positive for COVID-19 are considered negative for COVID-19 at birth, unless the mother is immunocompromised, has radiographic pneumonia or specific risk factors.*
- ***NEW*** For a woman who is COVID-19 positive, or was COVID-19 positive at any time in pregnancy, send the placenta for pathology. Do not send placental swabs at this time.
- Labour and delivery ***DOES NOT*** cause aerosolization. Droplets produced by talking, screaming, coughing or sneezing are LARGER than droplet nuclei and do not travel long distances.

PPE use for health care providers on Maternity Units	
Asymptomatic pregnant patient, general patient encounters.	Proper hand hygiene as per usual patient interactions. Surgical/procedure mask only for all **direct** patient care. No additional PPE required.
Asymptomatic pregnant patient, in labour.	Proper hand hygiene as per usual patient interactions. Surgical/procedure mask only for all **direct** patient care. No additional PPE required.
Asymptomatic pregnant patient, at delivery.	Blood and Body Fluid PPE (gown, surgical/ procedure mask, gloves, eye protection) due to risk of blood and body fluid exposure.

Known or suspected COVID-19/PUI pregnant patient throughout labour and delivery.	Droplet/Contact precautions (gown, gloves, surgical/ procedure mask, face protection) throughout all patient encounters.
Known or suspected COVID-19/PUI pregnant patient with known AGMP	All personnel in room use airborne PPE (gown, gloves, eye protection and fit tested N95 mask). This includes cesarean sections under general anesthetic.
Known or suspected COVID-19/PUI pregnant patient with possible AGMP	All personnel in the room use contact/droplet PPE which includes gown, gloves, eye protection and surgical/ procedure mask. In principle, airborne PPE should be reserved for situations where the risk for **maternal/adult AGMP is high, *NEW* or if the mother is immunocompromised, has radiographic pneumonia or specific risk factors***. For cesarean sections under regional anesthesia the risk of conversion to general anesthesia is low. However, local circumstances may influence the decisions about care provider PPE. ***Note: Babies born to COVID-19 positive mothers are considered COVID-19 negative at birth, unless the mother is immunocompromised, has radiographic pneumonia or specific risk factors.* Airborne PPE is not required for AGMP in the newborn *NEW* unless the mother meets these clinical criteria.***

*1 or more persistent read flags: HR greater than 120 bpm or less than 50 bpm, RR greater than 30/min or less than 10/min, SBP less than 90 mmHg, SpO2 less than 94%, hemoptysis, respiratory distress/inability to complete sentences, altered level of consciousness) at the time of delivery

Newborn of a known or suspected COVID-19 positive mother	Attendance of specialized/additional personnel at delivery for babies of COVID-19 positive mothers is not routinely indicated if there are no other indications/ anticipated needs. According to the CPS, only essential and experienced personnel should attend, maintaining a distance of at least 2 meters from the mother. Notification that the mother is in labour is reasonable with a plan for on-going updates established as determined by the local clinicians. ***NEW*** If the mother is immunocompromised, has radiographic pneumonia or risk factors that **MAY** be associated with vertical transmission,* use of airborne precautions for all staff is appropriate, in case the newborn requires an AGMP. Decisions about when to notify the care providers who would be called for resuscitation should be made locally but need to include consideration of the time required to don the appropriate PPE.
Newborn of a known or suspected COVID-19 positive mother requiring resuscitation	Principles guiding resuscitation management have been provided by the CPS. Some local modifications may be made based on team composition and physical environment. • ***NEW*** If the mother is immunocompromised, has radiographic pneumonia or risk factors that **MAY** be associated with vertical transmission,* use of airborne precautions for all staff is appropriate, in case the newborn requires an AGMP. • Management of the newborn can occur in the delivery suite, provided this can occur further than 2 meters from the mother. If the mother is intubated or other AGMP are occurring, ideally resuscitation should be performed in an adjacent room, according to the CPS. To minimize use of airborne PPE and exposure of the resuscitation team, the newborn could be brought outside the room by a delivery room attendee. This approach minimizes risk to care providers caused by rapid doffing and donning of PPE and reduces exposure for the newborn. • COVID-19 related neonatal respiratory distress is highly unlikely at birth, and the differential diagnosis for neonatal respiratory distress should consider more common causes of illness.

*1 or more persistent read flags: HR greater than 120 bpm or less than 50 bpm, RR greater than 30/min or less than 10/min, SBP less than 90 mmHg, SpO2 less than 94%, hemoptysis, respiratory distress/inability to complete sentences, altered level of consciousness) at the time of delivery

	• Infant may be placed skin-to-skin after the mother has removed garments worn during birth, washed her hands and donned a face mask. Breastfeeding or expressing breast milk should be initiated based on mother's feeding choice. If the mother's chest is exposed to respiratory droplets after her gown is removed, she should wash her breasts gently prior to skin-to-skin contact and breastfeeding or expressing breast milk. • Delayed cord clamping may continue; however, the family should be informed in advance that there is a risk (albeit low) of transmission. IWK and NSHA clinical pathways available at these links: IWK http://pulse.iwk.nshealth.ca/COVID-19/page/?id=16715 NSHA https://covid19hub.nshealth.ca/friendly.php?s=covid-19/care/ptpop_maternity

Why is labour & delivery not an "aerosolized event" since there is heavy breathing, screaming?

- There are two forms of droplets, the size of which dictates whether an infectious agent is deemed to be transmitted via droplets (requiring standard droplet precautions) vs. "droplet nuclei" (requiring PPE for aerosol-generating procedures such as N95 masks).
- Droplet nuclei are small particles less than 5 micrometres that contain the infectious agent. Aerosol-generating medical procedures can increase the likelihood of producing these types of droplet nuclei.
- In contrast, droplets produced by talking, screaming, coughing or sneezing are LARGER than droplet nuclei and do not travel long distances. Screaming, speaking or other scenarios in labour DO NOT produce droplet nuclei.
- Therefore, PPE for aerosol-generating procedures (i.e. N95 masks) are not required for labour & delivery except when aerosol-generating procedures are performed.

Home Birth

NEW An incremental resumption of home-based midwifery services, including home birth, has been implemented in both NSHA and IWK.

Labour analgesia

- Labour analgesia is important!
- ***NEW*** Use of nitrous oxide for labour analgesia has been resumed, at this time for COVID-19 negative women only. Appropriate filters and cleaning procedures must be followed. As nitrous oxide use is not an AGMP, it is likely the option can be extended to all laboring women in the near future.
- The SOGC advises consideration of an early epidural for COVID-19 positive women to reduce the chances of needing urgent anesthesia and the increased potential for a general anesthetic in those situations. Advance planning re equipment and supplies is required as the epidural cart cannot be brought into the room.

Fever in labour (> 38°)

- The most common cause of fever in labour will continue to be chorioamnionitis.
- In addition to chorioamnionitis and COVID-19, remember to keep a broad differential diagnosis for fever in labour, depending on the patient's symptoms and risk factors (Barton et al, Severe sepsis in Pregnancy).
- Be more suspicious for COVID-19 (similar to Influenza) if a patient has **respiratory symptoms**, such as **new or worse SOB**, **cough**, +/- **GI symptoms** and remember that Influenza is still circulating!
- If you suspect COVID-19 or other respiratory infection, immediately initiate **droplet precautions** and do a **nasopharyngeal swab** for COVID-19. It is not necessary to include an influenza test for those with signs of ILI.

Box 1. Causes of Severe Sepsis and Septic Shock in Pregnancy and the Puerperium

- Acute pyelonephritis
- Retained products of conception
  - Septic abortion
  - Conservative management of placenta accreta or percreta
- Neglected chorioamnionitis or endomyometritis
  - Uterine microabscess or necrotizing myometritis
  - Gas gangrene
  - Pelvic abscess
- Pneumonia
  - Bacterial examples
    - Staphylococcus
    - Pneumococcus
    - Mycoplasma
    - Legionella
  - Viral examples
    - Influenza
      - H1N1
    - Herpes
    - Varicella

POSTPARTUM/POSTNATAL CARE

Vertical transmission & risk to Infants

- ***NEW*** Although recent Canadian information suggests that vertical transmission **MAY** be possible if the mother is immunocompromised, has radiographic pneumonia or specific risk factors,* these situations are extremely rare. Unless these clinical criteria are present, infants born to mothers known or suspected to be COVID-19 positive are considered negative for COVID-19 at birth.
- ***NEW*** All women who have chosen to breastfeed should be supported to do so. There is a case report of COVID-19 in breast milk in a mother who was immunocompromised. Though care was taken, the authors could not rule out the possibility of respiratory contamination of breastmilk. Health care providers should discuss the benefits of breastfeeding including protection against infections, and ways to reduce the risk of horizon transmission of virus during breastfeeding.
- Good hand hygiene around the infant is **essential**.
- If the mother has confirmed/suspected COVID-19, recommend good hand hygiene and wearing of a surgical/procedure mask when engaging in infant care and feeding to prevent postnatal transmission to the infant. If the mother's chest is exposed to respiratory droplets before feeding, she should wash her breasts gently prior to skin-to-skin contact and breastfeeding or expressing breast milk.
- There are no additional precautions for mothers who are breastfeeding or expressing breast milk to feed to their infant.
- Mother can remove the procedure mask in her room and should ensure 2 meter separation from the infant when not providing direct care

*1 or more persistent read flags: HR greater than 120 bpm or less than 50 bpm, RR greater than 30/min or less than 10/min, SBP less than 90 mmHg, SpO2 less than 94%, hemoptysis, respiratory distress/inability to complete sentences, altered level of consciousness) at the time of delivery

Care for the well/asymptomatic infant of a mother/parent who is known, or suspected COVID-19 positive

- Care for mother and infant together in a private room.
- Use droplet/contact precautions (gown, gloves, surgical/procedure mask, and eye protection)
- Monitor infant vital signs q2-4h as per local guidance and newborn condition.
- Collect neonatal nasopharyngeal swab for COVID-19 (for epidemiological surveillance) 24-36 hours after birth or at discharge (whichever is earlier). ***NEW*** Additional swabs may be indicated in future, based on national guidance and validation of laboratory testing protocols.
- If suctioning or resuscitation required, move to designated area
    - If < 24 hours droplet/contact precautions (very unlikely to be COVID-19 related)
    - If ≥ 24 hours use airborne/contact precautions (possibility could be COVID-19 related)
- Expedite discharge (after collection of 24-hour newborn screen for inherited conditions and bilirubin) while ensuring dyad safety.
- Ensure usual discharge teaching including discussion of contraception. Defer newborn hearing screen (ensure post-pandemic follow-up process in place).
- If infant becomes unwell, refer to IWK/NSHA care path for babies < 2 hours of age or ≥ 2 hours of age. *Note: If infant is **< 24 hours of age**, use droplet/contact precautions. Airborne precautions (e.g. N95 mask) are **not required for AGMPs unless the infant is ≥ 24 hours of age**.*
- Postpartum screening for women who were diagnosed with GDM will be deferred until the pandemic is over.

IWK and NSHA clinical pathways available at these links:
IWK: http://pulse.iwk.nshealth.ca/COVID-19/page/?id=16715
NSHA: https://covid19hub.nshealth.ca/friendly.php?s=covid-19/care/ptpop_maternity

UPDATE ON EARLY YEARS PUBLIC HEALTH SERVICES

Due to redeployment of staff to deal with the COVID-19 pandemic response, Public Health Early Years programs and services are being delivered largely by phone or methods of virtual support. Details are below.

- All postpartum clients will continue to receive the *Loving Care books*, and Infant Feeding Resources prior to discharge from hospital.
- A Public Health Nurse will continue to contact all families within 3-5 days of being discharged from hospital to home. The Public Health Nurse will be available to provide support to families, however the services will be primarily through phone and virtual support.
- Families who are currently being supported in the Enhanced Home Visiting Program, will continue to be supported through phone and virtual support.
- Public Health will continue to provide childhood immunization services to infants and children who do not have access to a primary care provider.
- Public Health's 'Pregnancy & Parenting Support' webpage – www.nshealth.ca/pregnancyandparenting – includes a variety of credible resources and information for families. This page is also available in French at www.nshealth.ca/pregnancyandparenting-fr
- All other Public Health Early Years services will be deferred until further notice.

PREGNANT HEALTH CARE WORKERS

- There is limited data about the unique risks for pregnant individuals from COVID-19. What is known so far suggests that:
    - Pregnant individuals ARE NOT at increased risk for infection, or at increased risk of morbidity/mortality from infection.
    - There is no strong evidence to date that COVID-19 is vertically transmitted.
    - The vast majority of infants born to mothers who have been COVID-19 positive are healthy, with near-term prematurity being most common adverse outcome.
- Therefore, pregnant health care workers may continue to work. Use of PPE appropriate for the work environment is important, as it is for all health care workers.
- Every effort should be made to avoid confirmed pregnant health care workers caring directly for patients with **confirmed** COVID-19.
- Pregnant health care workers with additional co-morbidities (such as cardiac disease, hypertension, lung disease, etc.) should review their risks for COVID-19 exposure with their own healthcare provider and connect with employer Occupational Health, Safety & Wellness if appropriate.
- Pregnant health care workers may choose to begin their maternity leave early under the Employment Insurance Act, or explore using entitlement banks (i.e. vacation, time in lieu) or taking an unpaid personal leave of absence prior to the start of their maternity leave. Employees are asked to connect with their manager and the Benefits Department for any questions regarding these arrangements.

DATA COLLECTION/CODING NOVA SCOTIA DATA

- The Canadian Institute for Health Information (CIHI) has introduced codes for confirmed and suspected COVID-19 infection during admission. These codes will be used for both maternal and infant infection. The Reproductive Care Program of Nova Scotia has added a code for COVID-19 infection during pregnancy to the Nova Scotia Atlee Perinatal Database.
- Documentation of confirmed infection with COVID-19 during pregnancy, including documentation for those who have recovered, is essential for on-going surveillance. Including the date infection confirmed (date of swab) is important, if known, so that gestational age at infection can be calculated. For newborn swabs, include the date and time. The time will make it possible to differentiate between swabs taken at birth and swabs takes at 24-36 hours of age, for the sites that are doing both.
- Please see documentation recommendations below.

Period of Confirmed COVID-19 Infection	Suggested Form / Location for Documentation
During Pregnancy	• Prenatal Record • Maternal Admission Forms (for antenatal and/or delivery admissions)
During Birth Admission (Maternal Infection)	• Progress Notes
During Birth Admission (Newborn Infection)	• Progress Notes • Newborn Admission/Discharge Form
During Postpartum or Neonatal Admission (Identified prior to or during hospital readmission)	• Admission Forms / History & Physical • Progress Notes

RESOURCES

Breastfeeding Committee for Canada (BCC)
http://www.breastfeedingcanada.ca/BCC.aspx
Resources tab includes BCC Key messages: Infant feeding and COVID-19 pandemic

Canadian Paediatric Society (CPS)
COVID-19 information and resources for paediatricians (relevant for all care providers working with newborns, infants, children, youth and their families)
https://www.cps.ca/en/tools-outils/covid-19-information-and-resources-for-paediatricians

Public Health Agency of Canada Pregnancy, childbirth and caring for newborns: Advice for mothers during COVID-19
https://www.canada.ca/en/public-health/services/publications/diseases-conditions/pregnancy-advise-mothers.html

Society of Obstetricians & Gynaecologists of Canada (SOGC)
COVID-19 Information and Education pages. Currently SOGC CPGs and other education resources can be accessed from the SOGC website without a password (usually available to members only).
https://www.sogc.org/en/

World Health Organization
http://www.emro.who.int/nutrition/nutrition-infocus/breastfeeding-advice-during-covid-19-outbreak.html

IWK Health Centre staff resources
http://pulse.iwk.nshealth.ca/

Nova Scotia Health Authority staff resources
http://intra.nshealth.ca/Pages/Welcome.aspx