CLINICAL GUIDELINE
Coronavirus Disease (COVID-19) in Pregnancy, Labour and Postpartum

Western Health

COVID - 19

Be Safe -- Be Smart -- Be Kind

VERSION 5: LAST UPDATED 06/09/2021

This document must be read in conjunction with *Care of the Unwell Woman in Pregnancy, Labour and Postpartum* Clinical Guideline on the Western Health Microsite.

Contents

1. Abbreviations

AMUM	Associate Midwife Unit Manager
ANC	Antenatal Clinic
CTG	Cardiotocograph
EMR	Electronic Medical Record
FSE	Fetal Scalp Electrode
GBS	Group B Streptococcus

GP	General Practitioner
IOL	Induction of Labour
MAC	Midwifery Assessment Centre
MERS	Middle East Respiratory Syndrome
MGP	Maternity Group Practice
MFM	Maternal Fetal Medicine
MUM	Midwife Unit Manager
MWIC	Midwife In Charge
NIC	Nurse In Charge
NST	Newborn Screening Test
OGTT	Oral Glucose Tolerance Test
PPE	Personal Protective Equipment
QRG	Quick Reference Guide
SBR	Serum Bilirubin
WH	Western Health

2. References

This document version has been developed from the Victorian Department of Health and Human Services Maternity and Neonatal Care During Coronavirus (COVID-19) Clinical Guideline (updated 16th October 2020).

Previous version were developed from the developed from the Monash Health Coronavirus (COVIS-19) Infection in Pregnancy Clinical Guideline; the significant work of the Monash Maternity Guideline Development Group is acknowledged.

3. Overview

3.1 Background

Coronavirus (COVID-19) is caused by a novel strain of coronavirus (SARS-CoV-2) affecting humans. Some coronaviruses can cause illness similar to the common cold and others can cause more serious diseases such as Severe Acute Respiratory Syndrome (SARS) and Middle East Respiratory Syndrome (MERS). Understanding of the behaviour of coronavirus (COVID-19) is still developing.

Based on currently available information, pregnant women who become unwell with coronavirus (COVID-19) are at higher risk of hospitalisation and requiring intensive care. Pregnant women should therefore be considered a potentially vulnerable group, particularly from 28 weeks gestation.

Pregnant women should be encouraged to follow the standard advice to protect themselves and others against coronavirus (COVID-19), such as mask wearing outside the home, good hand hygiene, physical distancing practices and vaccination. All pregnant women are eligible for vaccination against COVID-19 (refer to Section 4.1.1). They should report possible symptoms (including fever, cough or difficulty breathing) to their health care provider. Pregnant women should also be encouraged to have the seasonal influenza vaccine, as this will help to prevent them and their baby from catching influenza. Special consideration should be given to pregnant women with other medical illnesses, who may be at higher risk of contracting coronavirus (COVID-19).

For definitions of terms including low-risk suspected, high-risk suspected and confirmed COVID-19 cases, refer to:

COVID-19 Testing criteria, Risk Categorisation, De-isolation and Bed Allocation Guideline.

3.2 Transmission (including transmission from mother to baby)

This virus appears to spread readily, through respiratory, fomite or faecal methods. Healthcare providers are recommended to employ strict infection prevention and control (IPC) measures as per https://coronavirus.wh.org.au.

Emerging evidence suggests vertical transmission (transmission from mother to baby antenatally or intrapartum) is probable, although the proportion of pregnancies affected and the significance for the neonate is yet to be determined.

Case reports from early pregnancy studies with SARS and MERS do not demonstrate a convincing relationship between infection and increased risk of miscarriage or second trimester loss. It is considered unlikely that infection will increase risks of fetal abnormality.

There is limited information on the transmission of the virus through breastmilk. Based on this, breast milk feeding should be supported in neonates born to mothers with suspected or confirmed COVID-19, while applying necessary precautions for infection prevention (refer to Section 4.7).

3.3. Care after Recovery

Women who have recovered from coronavirus (COVID-19) and have been cleared from isolation, use usual care pathways.

Women who have been cleared from isolation should be encouraged to continue to adhere to hygiene and physical distancing measures to protect themselves and their babies, as the extent of acquired immunity is unknown.

Women who have recovered from coronavirus (COVID-19) and have been cleared from isolation do not require testing if they are hospitalised for a non-coronavirus (COVID-19) related condition, unless symptoms reappear.

If symptoms reappear, they should immediately isolate and be retested for SARS-CoV-2.

4. Clinical Guideline Detail

4.1 Antenatal Advice

4.1.1 Advice for ALL Pregnant Women

Coronavirus (COVID-19) resources for the general public and health professionals (including translated resources) are available on the government website: https://www.dhhs.vic.gov.au/victorian-public-coronavirus-disease-covid-19. All pregnant women booked at Western Health are to be encouraged to access and be familiar with the Victorian Government website.

For pregnant women who meet the criteria for COVID-19 testing but are asymptomatic, they are asked to proceed with testing in the community as per advice available at https://www.coronavirus.vic.gov.au/getting-tested. Advise pregnant women who are symptomatic and unwell to call MAC on 9055 2300 or their GP for further advice.

Advise women with symptoms to **call ahead** before they attend MAC on 9055 2300 or their GP or other medical services so that advice about contact and masks can be given. All medical appointments should be discussed in advance so that steps to minimise contact with others can be taken. If it is an emergency, they should phone 000 and inform the operator of possible COVID-19 exposure.

Coronavirus (COVID-19) vaccination for pregnant women:

- Pregnant women are a priority group for COVID-19 vaccination, and should routinely be offered vaccination as per current advice available in the DHHS Shared Decision-making Guide for Women who are Pregnant, Breastfeeding or Planning Pregnancy.
- Vaccination can be arranged via the COVID-19 Online booking system, or by calling the Hotline on 1800 675 398. Women are encouraged to discuss this with their pregnancy care provider.
- For further information also see:
    - RANZCOG COVID-19 Vaccination in Pregnant and Breastfeeding Women

4.1.2 Advice for Pregnant Women Who Require Self–Isolation or Quarantine

Advise pregnant women who require self-isolation or quarantine to stay indoors and avoid contact with others for the duration of their isolation. For details refer to:

Coronavirus (COVID-19) resources for the general public

Isolation for Coronavirus (COVID-19)

Advise women to contact the Women's Clinic on 8345 1727, and inform them if they are currently in self-isolation as a COVID-19 quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 case, and request advice on attendance.

Appointments may be delayed, rescheduled or undertaken as a telephone appointment if appropriate. Encourage women if they are concerned and require **urgent medical advice to call MAC 9055 2300 in the first instance**. If attendance at the hospital is advised, pregnant women are requested to travel by private transport, accompanied by only 1 support person, and to present to MAC and wear a mask. Refer to Section 4.1.3.

The process of COVID-19 diagnosis is changing rapidly. If diagnostic tests are advised, pregnant women should follow advice given, which should not be altered based on pregnancy status.[1]

4.1.3 Advice for Pregnant Women with Suspected COVID-19 When Hospital Attendance is Necessary

For women who are in quarantine, a Tier 1 or a Tier 2 exposure who is still awaiting test results and their partners (who would be either primary or secondary close contacts and who are permitted to attend with them), the following is required for hospital attendance:

- Treating teams will, wherever possible, liaise with women before they attend to ensure they know to tell the team they have arrived prior to entering the building
- Women and partners will be met outside and be given N95 masks, and N95 masks are to be used throughout their stay
- Women should be escorted directly to an isolation room where possible or single room (with ensuite).
- Women and partners are to be kept together as a 'single unit' throughout their stay at JKWC
- Women and partners will be allocated to a room and are not permitted to leave the room (unless for a specific medical reason such as requiring transfer to operating theatre) throughout their stay.
- All staff who enter the room must use Tier 3 PPE or as per current WH guidelines.

A log sheet must be maintained of all staff providing care to women who are suspected or confirmed COVID-19. The AMUM should ensure that this is completed by all staff each shift.

4.1.4 Advice for all pregnant women with confirmed COVID-19 who require admission

All coronavirus (COVID-19) positive pregnant women in the community who require admission for acute care (including ANC/day case/MAC) requires consultation with the MFM Fellow or MFM On-Call Consultant. Based on the individual clinical scenario, the woman may be referred to Monash Medical Centre under the COVID-19 streaming pathway or reviewed at JKWC for assessment. .

4.2 Antenatal COVID-19 Status Screening and Management

4.2.1 Antenatal Status Screening and Management for Women with Scheduled Appointments

Advise pregnant women that maternity care is essential, and while routine visits may be reduced or rescheduled, she should still report urgent concerns such as reduced fetal movements, vaginal bleeding or contractions.

All women booked for a scheduled appointment in antenatal clinic, MFM clinic, MGP clinic or MAC will be contacted the day prior to their appointment via 'Bing' text message and requested to screen against the *COVID-19 Outpatient Screening Tool* for risk factors.

All women who have a "YES" response to any of the Maternity Services screening criteria will be advised to contact the ANC phone room who will transfer the call to the relevant ANC team AMUM. The Team AMUM and Obstetric Team Lead/On Call Consultant will then review the medical record of the woman and develop an appropriate management plan.

There are some situations where overlap between pregnancy symptoms and COVID-19 symptoms may cause confusion (e.g. fever with ruptured membranes, shortness of breath with pre-eclampsia). Therefore, assessment of the wellbeing of the woman and her fetus initially takes precedence over COVID-19 testing. Advice may therefore include referral to MAC for obstetric review first (full PPE required) with subsequent referral to Western Health's Respiratory Clinic, or direct referral to the Western Health's Respiratory Clinic for testing.

Routine appointments and testing for women in quarantine, suspected or confirmed COVID-19 (growth scans, OGTT, GBS testing, antenatal community or secondary care appointments) should be delayed until after the recommended period of isolation even if this means that the consultation or investigation (e.g. GTT or morphology scan) is deferred until outside of the recommended "optimal" testing time. This decision must be discussed with a Level 3 Clinician.

Advice to attend more urgent pre-arranged appointments (fetal medicine surveillance, high risk maternal secondary care) will require a senior decision on urgency and potential risks/benefits.

If it is deemed that obstetric or midwifery care cannot be delayed until after the recommended period of isolation, infection prevention and control measures should be arranged locally to facilitate care. Pregnant women in isolation who require urgent appointments, ultrasound or fetal monitoring will be given an appointment time to attend MAC where monitoring and consultation can occur in a designated area for such patients.

If a woman presents to ANC/MFM for their scheduled appointment with potential COVID-19 symptoms, that women should be provided with a mask immediately if not already wearing and remain in the consultation room. The AMUM should be notified immediately and the AMUM and Obstetrics Team Lead should undertake a review of the woman's medical history to determine if the woman requires a face to face consultation. If it is determined that face to face assessment is not required, that woman should be directed to WH's Respiratory Clinic for testing and a follow up appointment should be scheduled at a later date.

If it is determined that the woman requires a face to face consultation, the clinician should dress in full PPE for the consultation. After the consultation, the woman should then be referred to WH's Respiratory Assessment Clinic for testing. Following the consultation, deep cleaning of the room and equipment is required.

4.2.2 Antenatal Status Screening for Women with a Planned Homebirth

In addition to the above, women booked for a planned homebirth should be made aware of the current screening processes, and advised that these screening questions will be asked of her at the time of labour.

A diagnosis of COVID-19 is an exclusion for homebirth. If birth at home is planned, a discussion should be initiated with the woman regarding the potentially increased risk of fetal and maternal compromise in women infected with COVID-19. The woman should be advised to attend the hospital for birth, where the fetus can be monitored using CTG, and appropriate monitoring of the neonate can occur in the postpartum period. This guidance may change as more evidence becomes available.

4.2.3 Antenatal Status Screening for Women who Present to MAC for an Unplanned Visit

All women who present to MAC will be screened using the *COVID-19 Outpatient Screening Tool* or COVID-19 Initial Screening Tool on the EMR.

For asymptomatic women who are not in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19, following screening, care should proceed as normal.

There are some situations where overlap between pregnancy symptoms and COVID-19 symptoms may cause confusion (e.g. fever with ruptured membranes, shortness of breath with pre-eclampsia). Therefore, assessment of the wellbeing of the woman and her fetus initially takes precedence over COVID-19 testing.

Obstetric care and management should **ONLY** begin once appropriate PPE is in place, however do not delay obstetric management in an emergency to test for COVID-19.

For women who are symptomatic and do NOT require ongoing obstetric care, she can be referred to the WH COVID-19 Respiratory Assessment Clinic for COVID-19 testing; note that depending on respiratory clinic hours this testing may be the following day. **Refer to Section 4.3**

4.2.4 Perinatal Mental Health

Perinatal mental health problems are common, affecting up to 1 in 5 women. The coronavirus (COVID-19) pandemic has created a challenging environment and is likely to increase all women's risk of perinatal mental health conditions, particularly perinatal anxiety.

Regular assessment of women's perinatal mental health remains essential and women should be asked about their mental health at every contact, and women who require further support should be offered information on resources and local services. For more information, see Perinatal Anxiety and Depression Australia (PANDA): Supports to help expecting and new parents anxious about coronavirus.

4.3 Testing for Suspected COVID-19

Location of testing will depend on the obstetric clinical picture.

4.3.1 Women who are in quarantine, low risk suspected, high-risk suspected or confirmed coronavirus (COVID-19) who do not require hospital admission

If the woman does not require ongoing obstetric care, she should be referred for COVID-19 testing at the COVID-19 Respiratory Assessment Clinic, **noting that testing may occur the following day**

Advise the woman to return home in private transport and:

- Isolate until coronavirus (COVID-19) test results are available or symptoms resolve, whichever is longer
- Isolate if testing was declined
- Attend an emergency department if symptoms worsen

4.3.2 Women in quarantine, low-risk suspected, high-risk suspected and confirmed coronavirus (COVID-19) who require hospital admission

- Ensure the woman is wearing a surgical face mask
- Ensure the woman is admitted to an appropriate single room/isolation room based on level of exposure risk and as per WH guidelines
- COVID-19 testing should occur in the woman's ward location, the woman should not be transferred while awaiting a result.
- Limit contact to essential staff only.
- Wear PPE as per current WH advice.
- Support persons may only attend in line with current WH visitor guidelines and must wear appropriate PPE
- Create isolation alert in EMR "Contact and droplet precautions" and ensure appropriate signage on the doors.
- Terminal room clean as per the QRG
- Consult with the multidisciplinary team early

4.3.3 Women Who Develop New Symptoms During Admission

As the estimated incubation period is up to 14 days, staff must be aware of the possibility that an infected woman may present asymptomatically, developing symptoms later during an admission. All inpatient women (and neonates) are to be screened for emergent symptoms daily; this should be recorded in the EMR screening tool 'per shift COVID-19 Assessment in the last 24 hours'. In the event of new onset respiratory symptoms or unexplained fever, treat as suspected COVID-19. Medical staff should perform COVID-19 testing in the woman's ward location as per Section 4.3.2.

4.4 Early Labour Assessment for Women in Quarantine, low-risk Suspected, High-risk Suspected or Confirmed COVID-19

All women are encouraged to call MAC for advice in early labour, prior to attending. Women should be reminded of the current WH visitor and support person restrictions (unless extenuating circumstances). **If labour appears to be established, care should ideally commence in a Birthing room where labour care can continue.** Women in this category who are assessed to be in early (latent) labour upon phone triage should be encouraged to remain at home as per standard practice.

When a woman attends MAC for labour assessment:

- If there are no concerns regarding the condition of either the woman or neonate, women who would usually be advised to return home until labour is established, can still be advised to do so, if appropriate transport is available.
- Women should be given the usual advice regarding signs and symptoms to look out for, but in addition should be told about symptoms that might suggest deterioration related to COVID-19 following consultation with the medical team (e.g. difficulty in breathing, fever greater than 38.0 C).

When a woman with confirmed COVID-19 is admitted to MAC or Birthing, refer to Section 4.5

Maternal observations MUST include temperature, respiratory rate and oxygen saturations. If the woman has signs of sepsis, investigate and treat as per SOMANZ guidelines. If she has signs of (community acquired) pneumonia, consider active COVID-19 as the cause.

Only essential staff should enter the room, and support person should be limited to one (unless extenuating circumstances). All support people must also wear a mask during the visit.

4.5 Intrapartum Care for Women in quarantine, low-risk Suspected, high-risk suspected or Confirmed COVID-19

Unwell women should be provided care in accordance with *Care of the Unwell Woman in Pregnancy, Labour and Postpartum.*

Staff may refer to the following Quick Reference Guides when caring for a woman with suspected or confirmed COVID-19:

QRG - COVID-19 Vaginal Birth

QRG - COVID-19 Caesarean Section

4.5.1 Spontaneous Labour

When a woman with confirmed COVID-19 is admitted to MAC or Birthing:

- The MWIC and On-Call Obstetric Consultant should be informed immediately.
- Consult with the MFM Fellow or MFM on-Call Consultant regarding location of ongoing care as per Section 4.1.4
- The MWIC should then notify the Access Manager/Afterhours Manager and Theatre NIC
- The On-Call Obstetric Consultant should notify the On-Call Consultant Anaesthetist.
- Notification to the Operations Manager, Head of Obstetrics, Divisional Director and Clinical Services Director will occur through the normal communication channels.

All women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID19 should be managed on a Red Pathway of Care.

Efforts should be made to minimise the number of staff members entering the room including specifying essential personnel for emergency scenarios.

Care should be provided in accordance with ***Care of the Unwell Woman in Pregnancy, Labour and Postpartum***, with maternal observations and assessment be continued as per standard practice, and must include temperature, respiratory rate and oxygen saturations.

Continuous electronic fetal monitoring (CTG) in labour is recommended. COVID-19 has been detected in vaginal secretions, and given the lack of data, the use of FSE should be avoided wherever possible.

All women requiring an interpreter should have a consent for caesarean section completed on admission to Birthing in the event a caesarean section is required and there is difficulty in accessing interpreters. Consider also discussing/consenting for instrumental birth and/or trial of instrumental birth in theatre at this time.

Women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 are NOT for Code Green caesareans section (see section 7.5.3.1). To mitigate the possible increased maternal and neonatal risk, the following principles should be applied in the intrapartum setting:

- Obstetrician-led labour management, with consideration given to the need for more frequent vaginal examinations and/or augmentation of labour
- Early escalation to Level 3 clinician where a CTG is identified as abnormal
- Early discussion with woman and support person where there is concern about fetal compromise
- Lower threshold for caesarean section, where there is concern about fetal compromise

Fetal blood sampling should not be conducted

Delayed cord clamping is appropriate unless there is an urgent need for neonatal resuscitation. Routine separation of a mother and a healthy baby should not be undertaken, given the potential detrimental effects on feeding and bonding. Encourage skin-to-skin contact with mother and baby, providing there is not a need for urgent neonatal care.

4.5.1.1 Pain Management

Epidural analgesia should be recommended before, or early in labour, to women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 to minimise the need for general anaesthesia if urgent birth is needed. For patients with mild respiratory disease, ensure platelet count within 48 hours, for patients with moderate to severe respiratory disease (requiring supplemental oxygen), ensure platelet count within 12 hours of request. Second person must be available to assist proceduralist.

Nitrous oxide use for women with suspected or confirmed COVID-19 may be used, it must be performed in a negative pressure room or a single room if an air purifier is available, and the disposable breathing system and one-way filter must be single patient use, disposed of as per usual practice. A surgical mask is sufficient for staff.

Water immersion for labour and birth is considered appropriate for women who screen negative for coronavirus (COVID-19) risk factors. If there is a local outbreak, or increasing rates of local community transmission, Western Health may suspend the use of water immersion. At these times, showers can still be used for pain relief when required, as women can come out of the bathroom for assessment during labour.

4.5.1.2 Mode and Length of Birth

Mode of birth should not be influenced by the presence of COVID-19, unless the woman's respiratory condition necessitates urgent birth. Discuss mode of birth with the woman, taking into consideration her preferences and any obstetric indications for intervention.

In case of deterioration in the woman's symptoms, make an individual assessment regarding the risks and benefits of continuing the labour, versus preceding to emergency caesarean birth if this is likely to assist efforts to resuscitate the mother. As donning PPE is time consuming, emergency procedures need to be called as early as clinically possible. This may impact on the decision to delivery interval, and women and their families should be told about this possible delay.

An individualised decision should be made regarding shortening the length of the second stage of labour with elective instrumental birth in a symptomatic woman who is becoming exhausted or hypoxic.4.5.2 Caesarean Birth

Women in quarantine, low-risk suspected, high-risk suspected of confirmed COVID-19 should be informed that it may not be possible for a support person to be in theatre during the caesarean.

An N95 mask must be worn by all staff present for a delivery in theatre, due to the risk of aerosolisation should a general anaesthetic be required during the procedure

4.5.2.1 Elective Caesarean Birth

In cases where elective caesarean birth cannot safely be delayed, the general advice for services providing care to women admitted when affected by suspected/confirmed COVID-19 should be followed.

4.5.2.2 Emergency Caesarean Birth

Obstetric management of caesarean birth should be according to usual practice, noting that where there is concern about fetal compromise, obstetric medical staff should have a low threshold for caesarean section to allow for sufficient time for all staff present in theatre to don appropriate PPE.

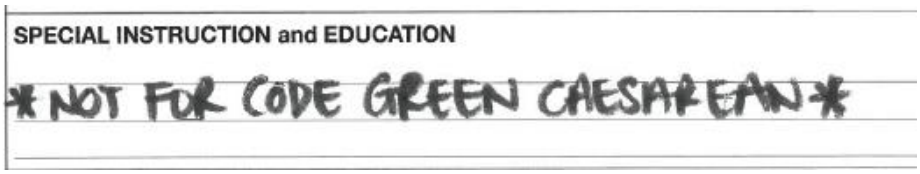
4.5.2.3 Code Green Caesarean Section

To allow for all staff present in theatre to don appropriate PPE, **Code Green Caesarean Section MUST NOT be utilised for women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID19.** Refer to section 4.5.1 for intrapartum care and management strategies to minimise possible maternal and neonatal risk.

Where the need for an emergency caesarean section is identified, this should be performed as a Category 1 procedure (i.e. target of 30 minutes).

This information must be provided to the woman and her support person by the duty medical team, including assurance that the principles of Best Care will be maintained, and that low threshold for performing a caesarean section would be applied should this be clinically indicated.

All women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 must have clear identification on their partogram that they are NOT for Code Green Caesarean, and documentation in the progress notes that this has been explained to the woman and her support person.



As for elective caesarean birth, an individual assessment should be made regarding the urgency of planned IOL for women with mild symptoms and confirmed COVID-19. If IOL cannot safely be delayed, the general advice for care to women admitted to hospital when affected by suspected/confirmed COVID-19 must be followed.

4.5.4 Placenta

The placenta should be regarded as infectious. Given the limited information about vertical transmission, placental histopathology is recommended.

Document the woman's coronavirus (COVID-19) status and required test on the pathology request:

- Women with confirmed coronavirus (COVID-19), request histopathology and PCR for SARS-CoV-2

Swabs are not required for viral testing but should still be taken for the appropriate clinical context, for example suspicion of bacterial chorioamnionitis.

4.6 Postnatal Care for Women in Quarantine, Low-risk Suspected, High-risk Suspected or Confirmed COVID-19

Ensure that all women in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 have this clearly documented in their discharge summary for the Maternal and Child Health Nurse, GP and/or outsourced home visits.

Any women or neonates requiring readmission for postnatal obstetric or neonatal care during the period of home isolation due to quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 are advised to phone ahead to contact MAC. The place of admission will depend on the level of care required for mother or neonate.

4.6.1 Postnatal Care of the Neonate

Refer to *Coronavirus Disease (Covid-19) in Newborns*.

There is limited data to guide the postnatal management of neonates of mothers who tested positive for COVID-19 in the third trimester of pregnancy. Immediately following birth, the mother should don a mask and be supported with skin to skin contact and breastfeeding, where her neonate is term, healthy and not expected to require admission to Newborn Services.

4.6.2 Postnatal Home Visits

Refer to *Coronavirus Disease (COVID-19) and Maternity at Home Care*.

Consideration should always be given to the option of telephone appointments where suitable, and to the use of measures to limit exposure (e.g. conducting part of visit via telephone) where a visit is proceeding (e.g. SBR, urgent weight required).

All women eligible for a home visit should be screened using the *COVID-19 Outpatient Screening Tool* on the Maternity Ward prior to discharge (for visits scheduled for day after discharge) OR via phone call the day prior to the home visit (all other home visits).

4.7 Neonatal Feeding for Women with Suspected or Confirmed COVID-19

Please refer to the following Quick Reference Guides when caring for a woman with suspected or confirmed COVID-19:

QRG – COVID-19 Expressed Breastmilk

The main risk for neonates of breastfeeding is the close contact with the mother. In the light of the current evidence, the benefits of breastfeeding outweigh any potential risks of transmission of the virus through breast milk and that breast milk feeding should not be restricted.

If it is necessary to separate mother and neonate, encourage mother to express breast milk if able, in order to establish and maintain her milk supply. Discontinue separation as soon as possible according to the mother and neonate's wellbeing, disease severity, laboratory results and local capacity requirements.

4.7.1 Breastfeeding

Parents in quarantine, low-risk suspected, high-risk suspected or confirmed COVID-19 should:

- Pay strict attention to hand washing before touching the neonate, breast pump or bottles.
- Wear a face-mask for feeding and continue until they meet the criteria for release from isolation
- Follow recommendations for routine pump cleaning after each use.
- Consider asking someone who is well to feed expressed milk to the neonate.

Where mothers are expressing breast milk in hospital, a dedicated breast pump must be used.

4.7.2 Bottle Feeding

When bottle feeding with formula or expressed milk, strict adherence to sterilisation guidelines is recommended. Consider advice as above regarding hand washing and close contact.