COVID-19 Guidelines for Maternity Services

Version 4.0
22 February 2022
<table>
<thead>
<tr>
<th>Version</th>
<th>Updated</th>
<th>Changes</th>
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</table>
| 4.0     | 22 February 2022 | • Substantial revision considering improved understanding of COVID-19 generally and in pregnancy, particularly regarding SARS-CoV-2 variants  
• Incorporation of vaccine guidance  
• Incorporation of testing guidance  
• Updating of clinical management pathways and flowcharts  
• Preparation for opening of state borders and anticipated community transmission  
• Revised title to incorporate scope for routine maternity care during pandemic and with endemic COVID-19 |
| 3.0     | 3 August 2020  | • Removed 2nd and 3rd stage labour with reference to PPE. |
| 2.0     | 24 April 2020  | • Amended structure to present information in table format and divide into two parts Clinical care and Facility and Workforce.  
• Included information on data collection to provide guidance on reporting COVID-19 infection to the Midwives Notification System (see 1.2).  
• Included considerations for the delivery of maternity care for all women during the COVID-19 pandemic (See Section 2).  
• Included information about PPE use for 2nd and 3rd stage labour for women with confirmed or suspected COVID-19 women in labour (Table 9).  
• Included information on testing for COVID-19 (Table 11)  
• Included information on medical imaging and threatened pre-term labour for women with suspected or confirmed COVID-19 (Table 14)  
• Included information on additional considerations for pregnant women who are moderately or severely unwell due to confirmed COVID-19 infection (See Section 5)  
• Included Appendix A - Modification of routine ultrasounds investigations in low-risk women  
• Included Appendix B - Screening and diagnosis of GDM during COVID-19 pandemic  
• Included Appendix D - COVID-19 in pregnancy (fact sheet)  
• Included Appendix E - COVID-19 and breastfeeding (fact sheet)  
• Included Appendix F - Information for COVID-19 women in labour (suspected or confirmed) (fact sheet) |
### Abbreviation of terms

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>AGB</td>
<td>Aerosol Generating Behaviours</td>
</tr>
<tr>
<td>AGP</td>
<td>Aerosol Generating Procedures</td>
</tr>
<tr>
<td>ABHR</td>
<td>Alcohol-based hand rub</td>
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<tr>
<td>ATAGI</td>
<td>Australian Technical Advisory Group on Immunisation</td>
</tr>
<tr>
<td>BP</td>
<td>Blood pressure</td>
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<tr>
<td>BW</td>
<td>Birth Weight</td>
</tr>
<tr>
<td>CALD</td>
<td>Culturally and Linguistically Diverse</td>
</tr>
<tr>
<td>CTG</td>
<td>Cardiotocograph</td>
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<tr>
<td>DM</td>
<td>Diabetes Mellitus</td>
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<tr>
<td>EBM</td>
<td>Expressed Breast Milk</td>
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<tr>
<td>ECMO</td>
<td>Extracorporeal Membrane Oxygenation</td>
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<tr>
<td>ED</td>
<td>Emergency department</td>
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<tr>
<td>EPDS</td>
<td>Edinburgh Postnatal Depression Scale</td>
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<tr>
<td>FBG</td>
<td>Fasting Blood Glucose</td>
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<tr>
<td>GA</td>
<td>General Anaesthetic</td>
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<tr>
<td>GBS</td>
<td>Group B Streptococcus infection</td>
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<tr>
<td>GDM</td>
<td>Gestational Diabetes Mellitus</td>
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<tr>
<td>GTT</td>
<td>Glucose Tolerance Test</td>
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<tr>
<td>HbA1</td>
<td>Haemoglobin subunit alpha</td>
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<tr>
<td>HCW</td>
<td>Health Care Worker</td>
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<tr>
<td>HSP</td>
<td>Health Service Provider</td>
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<tr>
<td>IP&amp;C</td>
<td>Infection prevention and control</td>
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<tr>
<td>MDT</td>
<td>Multidisciplinary team</td>
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<tr>
<td>mRNA</td>
<td>Messenger Ribonucleic acid</td>
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<tr>
<td>NIPT</td>
<td>Non-invasive Prenatal testing</td>
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<tr>
<td>OGTT</td>
<td>Oral Glucose Tolerance Test</td>
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<tr>
<td>PASS</td>
<td>Panic, Anxiety and Stress Support</td>
</tr>
<tr>
<td>PCR</td>
<td>Polymerase Chain Reaction</td>
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<tr>
<td>PFR</td>
<td>Particulate Filter Respirator</td>
</tr>
<tr>
<td>PPE</td>
<td>Personal protective equipment</td>
</tr>
<tr>
<td>RAT</td>
<td>Rapid Antigen Test</td>
</tr>
<tr>
<td>SAR</td>
<td>System Alert and Response</td>
</tr>
<tr>
<td>USS</td>
<td>Ultrasound scan</td>
</tr>
<tr>
<td>VTE</td>
<td>Venous thromboembolism</td>
</tr>
<tr>
<td>VC</td>
<td>Video call</td>
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<tr>
<td>WACHS</td>
<td>Western Australia Country Health Service</td>
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</table>
For women reporting COVID-19 symptoms: Assess before arrival where possible (e.g. by phone). Triage in location separate from usual admission routes. Prioritise single room. Implement transmission based upon precautions and wear appropriate PPE, a fit tested particulate filter respirator (PFR), protective eyewear, gown and gloves. Alert IP&C team

For women reporting COVID-19 symptoms: Assess before arrival where possible (e.g. by phone).

Triage in location separate from usual admission routes. Prioritise single room. Implement transmission based upon precautions and wear appropriate PPE, a fit tested particulate filter respirator (PFR), protective eyewear, gown and gloves. Alert IP&C team

Figure 1: Triage and assessment flowchart

Review testing criteria
Perform clinical risk assessment

No

Inpatient hospital care indicated?

Yes

Is isolation indicated?

No

No

Yes

Routine/ usual care

Self Isolate

Advise to be tested for COVID-19
Advise to return home using personal transport.

Ongoing antenatal care
- Resume usual mode of antenatal care after isolation period ends or negative test result
- Arrange alternate mode of antenatal care while self-isolation (if care cannot be delayed)
- Advise to telephone usual maternity service if concerned

COVID-19
- Provide advise on personal hygiene precautions
- Provide information about COVID-19
- Promote vaccination

Do not
- Go out to school/work/public areas or use public transport

Do
- Stay indoors at home
- Avoid contact with visitors
- Ventilate rooms by opening windows
- Separate self from other household members

Notify maternity services ASAP

On admission
- Commence transmission based as per IP&C Guidelines for health Care Facilities precautions
- Alert midwifery/obstetric/neonatal/infectious disease teams
- Limit visitors as per Public Hospital Visitor Guidelines
- Symptomatic treatment as indicated

Retrieval/transfer
- COVID-19 positive alone not an indication for transfer

Antenatal
- Perform necessary medical imaging
- Fetal surveillance as clinically indicated
- Maternal surveillance and SpO2

Birth
- Negative pressure room (if possible)
- Mode of birth not influenced by COVID-19 unless urgent delivery indicated
- Early consideration of neural blockade (to minimise risk from emergency GA)
- Lower threshold for escalation of clinical concerns

Co-location of mother and baby
- Co-location recommended
- Discuss risk/benefit with parents
- Determine need on individual basis

Feeding (breastfeeding or formula)
- Support maternal choice
- Breastfeeding not contraindicated

Risk minimisation strategies
- IP&C processes
- Inform about hand hygiene, sneeze and coughing etiquette, face mask use, close contact, social distancing and precautions during baby care, sterilisation

Advising to be tested for COVID-19
Testing Criteria
- Check WA Health website for current COVID-19 testing criteria (updated regularly) COVID-19 Testing Directions and COVID-19 Framework for System Alert & Response
- Advise to register positive result with HealthyWA

Close Contact
- As determined by current health advice. (CDNA National guidelines for public health units)
- If deemed to be a close contact follow Public Health Advice

Is quarantine or isolation indicated?

Yes

No

Is isolation indicated?

No

Yes

Advise to be tested for COVID-19
Advise to return home using personal transport.

Ongoing antenatal care
- Resume usual mode of antenatal care after isolation period ends or negative test result
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Part A: Clinical care

1 Introduction
There are now substantial data regarding the clinical manifestations of COVID-19 infection during pregnancy. It is evident that the clinical outcomes are different between variants of the virus, with the Delta variant being associated with a greater risk of severe disease than the wild type and the Omicron variant being substantially more transmissible.

1.1 Purpose
This guideline is based on the current available knowledge and may change as more evidence becomes available.

This guideline is intended to provide high-level guidance for maternity care facilities in developing their own procedures and policies around maternity care during the COVID-19 pandemic. It is not intended to provide detailed guidance on either specific broader health measures or specific management of COVID-19 in pregnant people. Such guidance is provided by the WA Department of Health and bodies such as the National COVID-19 Clinical Evidence Taskforce. Specific clinical queries about individual patients should be directed to relevant local specialists, referral centre consultants, or state-wide services such as the Maternal Fetal Medicine Service at King Edward Memorial Hospital.

Table 1. Clinical features of COVID-19 in pregnancy

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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</table>
| Coronavirus | • Coronavirus is the broad name for a type of virus. There are different kinds of coronaviruses (e.g. common cold, severe acute respiratory syndrome (SARS), Middle Eastern Respiratory Syndrome (MERS))  
• SARS-coronavirus-2 (SARS-CoV-2) is the name of the virus COVID-19 is the disease caused by SARS-CoV-2 |
| Clinical features of COVID-19 in pregnancy | • Pregnancy is an established risk factor for severe COVID-19  
• According to current US data:  
  o Hospitalisation is required in 20% of infections  
  o Intensive care unit admission required in 4%  
  o Ventilation required in 1%  
  o Extracorporeal membrane oxygenation required in 0.3%  
  o Death occurred in 0.2%  
• **Pregnant women** with comorbid conditions are at further increased risk of severe disease (cancer, kidney disease, liver disease, chronic lung disease, diabetes, heart disease, immunocompromise, mental ill health including depression, overweight and obesity, haemoglobinopathy, smoking, organ transplants, substance use, pre-eclampsia, advanced maternal age, some ethnic minority groups)  
• The Delta (B.1.617) variant of COVID-19 is associated with more severe disease in general and in pregnant women  
• The Omicron (B.1.1.529) variant of COVID-19 is significantly more transmissible than previous variants. Data on its propensity to cause severe disease in general are conflicting, and there are no data specific to pregnant people |
1.2 Data collection

To help inform future care and understanding of COVID-19 and its treatment and prevention, accurate data are needed.

Table 2. Data collections relevant to COVID-19 and pregnancy

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Notification of infectious diseases and related conditions</td>
<td>• COVID-19 is an urgently notifiable infectious disease under the Public Health Act 2016 and Public Health Regulations 2017. For notification instructions see Department of Health website and use the Suspect COVID-19 Notification Form</td>
</tr>
</tbody>
</table>
| Midwives Notification System         | • Perinatal databases (STORK database for public maternity services, local systems for private maternity services) will continue to be used to notify the Chief Health Officer of births attended as described at Midwives Notification System  
                                          • The diagnosis of COVID-19 with or without symptoms (or symptomatic and awaiting test results) during pregnancy or the birth event should be recorded as COVID-19 (coronavirus) and reported as an "other" item value of 026 in medical conditions during pregnancy |
| Other data collection systems        | • Hospitalisation events will be described in the Hospital Morbidity Data Collection and will be later linked with midwives’ notifications of births                                                                 |
2 Maternity care during COVID-19
This section applies to the provision of maternity care to all pregnant people irrespective of COVID-19 status.

2.1 Vaccination
Vaccination substantially reduces the risk of adverse maternal and perinatal outcomes associated with COVID-19. Pregnant women are a priority group for vaccination with mRNA vaccines.

Table 3. COVID-19 Vaccination and pregnancy

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Recommendation</strong></td>
<td>• Routinely recommend vaccination at the earliest opportunity to women who are planning a pregnancy, are already pregnant, or who are breastfeeding</td>
</tr>
<tr>
<td><strong>Vaccine type</strong></td>
<td>• Recommend mRNA vaccines (e.g. Pfizer (Comirnaty) or Moderna (Spikevax))                                                                                              • If first dose was Astra Zeneca vaccine, either of the mRNA vaccines or the AstraZeneca vaccine can be given for the second dose                                                                                     • For the third dose only use mRNA vaccines</td>
</tr>
<tr>
<td><strong>Administration schedule</strong></td>
<td>• Pregnancy may alter immune response to vaccination, but vaccination is clearly still effective                                                                                                                          • Emerging data suggest that variant strains may be more resistant to vaccine-derived antibodies                                                                                                                • Neutralising antibodies clearly increase with second and booster vaccine doses, and pregnant women are likely to benefit more from complete schedules and should be encouraged to receive second and booster doses as soon as they become eligible</td>
</tr>
<tr>
<td><strong>Safety</strong></td>
<td>• There is real-world evidence that vaccination is safe for women who are  o Pregnant  o Breastfeeding  o Planning pregnancy  o Undergoing IVF  o Known to have had COVID-19 in the past                                                                                                         • There is no evidence that vaccination increases risk of:  o Spontaneous miscarriage  o Adverse pregnancy outcomes                                                                                     • No evidence that vaccination adversely affects fertility                                                                                           • No side effects specific to pregnant women or their babies have been identified (although it is possible very rare side effects may still emerge)                                                        • Vaccine elicited antibodies have been found in neonatal cord blood following administration of the vaccine and in breast milk and passive immunity may be conferred</td>
</tr>
<tr>
<td><strong>Contraindications</strong></td>
<td>• Anaphylaxis to a previous dose of mRNA COVID-19 vaccine or any component of the vaccine, including polyethylene glycol                                                                                     • Myocarditis and/or pericarditis attributed to a previous dose of mRNA COVID-19 vaccine</td>
</tr>
<tr>
<td><strong>Timing of administration</strong></td>
<td>• The optimal time to have the vaccine during pregnancy is not known                                                                                     • Recommend at any stage of pregnancy                                                                                                                             • Follow ATAGI recommendations for dosing intervals</td>
</tr>
</tbody>
</table>
2.2 Perinatal mental health (for all women)

Table 4. Considerations for perinatal mental health

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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</table>
| **Context**  | • Isolation, bereavement, financial difficulties, insecurity and inability to access support systems are all widely recognised risk factors for mental ill-health  
               • The coronavirus epidemic increases the risk of perinatal anxiety and depression, as well as domestic violence. It is therefore critically important that support for women and families is strengthened as far as possible; that women are asked about mental health at every contact; and that women are urged to access support through remote means as far as possible  
               • Pregnant women and their families are likely to experience heightened anxiety and stress related to the COVID-19 pandemic in the community  
               • Awareness of the potential for more severe disease in pregnancy is also likely to be a significant stressor  
               • This can be assumed irrespective of personal COVID-19 status (negative, suspected, or confirmed)  
               • The long-term implications for mental health may lead to significant human and resource issues in the future |
| **Strategies**| • Provide consistent information to women and their families (refer to WA Health resources such as Coronavirus)  
                    • Ask women about their mental health at every contact  
                    • Adhere to usual/standard care recommendations (e.g. women centred care, respectful communication, consent and informed decision making)  
                    • Use standardised tools such as EPDS and PASS to assess for perinatal anxiety and depression as per routine clinical guidelines even if face-to-face visits are not possible  
                    • Allowing partners’ presence whenever possible could preserve maternal mental health and improve perceived hospital support.  
                    • Identify participant in care (essential visitor/support person) who will be with the woman throughout pregnancy, birth, postnatally |
| **Model of care**| • Support models of care that maximise continuity (e.g. midwifery continuity of care, case management, midwife navigator, GP, GP Obstetrician, private practice midwives or cultural supports such as health worker or a community organisation) |

- Recommend at least a 7-day interval between a dose of COVID-19 vaccine and other vaccines, including:
  - Influenza
  - Pertussis
- Seek specialist advice about the timing of vaccination for women with heart conditions (e.g. rheumatic heart disease, history of pericarditis or myocarditis)
- If history of COVID-19 infection, defer vaccination until the acute illness has resolved or for up to six months
- Defer vaccination in people who have received anti-SARS-CoV-2 antibody therapy (monoclonal or convalescent plasma) for three months
### 2.3 Visiting in-patient mothers and babies

#### Table 5. Hospital visiting

Hospitals are considered to be high-risk settings and as such some restrictions for visitors will be required.

<table>
<thead>
<tr>
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<th>Consideration</th>
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| Visitor restrictions    | - Hospitals are considered to be high-risk settings and as such some restrictions for visitors will be required  
                          - Be aware of the changing recommendations depending on level of community transmission  
                          - Advise women about the need and rationale for visitor restrictions to facilitate advance planning and manage expectations for care  
                          - Support the woman to identify an appropriate participant in care in labour and postpartum who will be deemed an essential visitor  
                          - Parents of babies admitted to the nursery should be facilitated to visit their babies, providing visitor requirements are met (vaccinated, asymptomatic, declaration of no recent close contact, appropriate PPE and/or as dictated by local unit policies)  
                          - Refer to the WA COVID-19 Public hospital visitor guidelines and local unit policies  
                          - From 31 January 2022 and whilst the Directive remains in place requiring all hospital visitors to be fully vaccinated or hold a valid medical exemption to vaccination:  
                            - Maternity care providers should make women under their care aware of this requirement and encourage support persons to become vaccinated in advance of the anticipated birth  
                            - Birth support persons should be considered “essential visitors” according to hospital visitor guidelines  
                            - Maternity services should have a uniform policy regarding an unvaccinated support person and the procedures which should be undertaken to allow them to visit, such as:  
                              - Negative rapid antigen test on day of visit  
                              - No symptoms of COVID-19  
                              - Wear a surgical mask at all times  
                              - Remain within the Labour and Birth Suite or Operating Theatre as applicable  
                            - Consider additional visitor attendance in the setting of serious complications  
                          |  
| During labour and Birth | - Each woman to identify an appropriate participant in care in labour and postnatally who should be allowed to remain with the woman during labour and birth and considered an “essential visitor” during periods of restricted hospital visitor access  
                          - Allow individual HSP to consider an extra support person if requested on |
2.4 Outpatient model of care (for all women)

Table 6. Outpatient maternity framework

Refer to [COVID-19 Guidelines for Outpatient Services](https://www.health.wa.gov.au)

<table>
<thead>
<tr>
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<th>Consideration</th>
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| **Triage to model of care** | - During the COVID-19 pandemic many outpatient services will be transitioning where possible to a virtual model of care  
- Pregnant women should be informed of the options available for accessing maternity care, including in the public and private sectors  
- Where a woman elects public care, maternity units should triage women to the most appropriate model of care:  
  o Low risk – midwifery only or shared care with GP or community midwife  
  o High risk – GP Obstetrician or Obstetrician  
  o All risk model of Midwifery Group Practice, if available  
- Collaborative maternity care includes a continuous assessment of obstetric complexity and referral as appropriate |
| **Requires physical visit** | Location options:  
- Outpatient clinic with own access  
- Community based service (dedicated specialist or GP obstetrician or private midwife)  
- Health service community building  
- Home visit  
Physical visit process:  
- Follow state and local policies about outpatient attendances and be mindful that these will vary depending on the degree of community transmission  
- Where there is established community transmission or for women who are susceptible to severe COVID-19, consider specific mitigation strategies to reduce the requirement for and length of physical attendances such as:  
  o Immediately prior to visit – phone to assess for COVID-19 risks  
  o Day prior to visit – phone or VC to assess need including history taking and explanation for physical appointment process  
  o For hospital visits – patient to wait outside building until called in (e.g. in personal car or safe social distance in grounds) |
2.5 Home visiting during COVID-19 pandemic (for all women)

Table 7. Home visiting during COVID-19 pandemic

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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<tbody>
<tr>
<td><strong>General principles</strong></td>
<td>• Use clinical judgement and consider individual circumstances when determining most appropriate model of healthcare delivery (i.e. is a home visit necessary)</td>
</tr>
<tr>
<td></td>
<td>• Hybrid models of care delivery (e.g. combination of telehealth and home visit) may assist in minimising contact duration</td>
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<tr>
<td></td>
<td>• Use advance planning to identify and:</td>
</tr>
<tr>
<td></td>
<td>o Prepare for the care likely to be required during the home visit</td>
</tr>
<tr>
<td></td>
<td>o Minimise equipment to be taken into the home</td>
</tr>
<tr>
<td></td>
<td>o Maintain infection prevention and control standards (e.g. hand hygiene, disposal of consumables, use of personal protective equipment (PPE), equipment cleaning, social distancing)</td>
</tr>
<tr>
<td><strong>Pre-visit assessment</strong></td>
<td>• Prior to entering the woman’s home, assess the clinical status and social circumstances of the woman and other residents at the home (e.g. by phone, telehealth)</td>
</tr>
<tr>
<td></td>
<td>• Use standard home visiting risk assessment tools and additionally ask:</td>
</tr>
<tr>
<td></td>
<td>o Do any residents have symptoms of COVID-19?</td>
</tr>
<tr>
<td></td>
<td>o Are any residents in isolation?</td>
</tr>
<tr>
<td></td>
<td>o Are there additional safety issues for the healthcare provider and/or the woman that may arise/be exacerbated by the COVID-19 pandemic or the home visit? (e.g. domestic and family violence, alcohol or substance use, high mobility of household residents)</td>
</tr>
<tr>
<td></td>
<td>• If risk of transmission or safety concerns identified, postpone the home visit and reschedule/make alternative arrangements as required</td>
</tr>
<tr>
<td><strong>During visit</strong></td>
<td>• Use PPE as required by current WA Health and local policies</td>
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<tr>
<td></td>
<td>• Perform hand hygiene prior to entry to and after completing the visit using an ABHR containing a minimum 60% alcohol. ABHR is not to be left in the vehicle when vacant as potential high temperatures in a closed vehicle can damage the efficacy of the product</td>
</tr>
<tr>
<td></td>
<td>• During the visit hand hygiene shall be performed as per the 5 Moments for Hand Hygiene</td>
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<tr>
<td></td>
<td>• Only essential equipment is to be brought into the home and cleaned with a detergent/disinfection wipe on completion</td>
</tr>
<tr>
<td></td>
<td>• Following completion of the visit, gown and gloves are removed inside the patient’s house, placed in the patient’s rubbish bin and hand hygiene performed.</td>
</tr>
<tr>
<td></td>
<td>• The surgical mask/PFR and eye protection can be removed outside of the home.</td>
</tr>
</tbody>
</table>
patient’s house and placed in the general waste bin and hand hygiene performed
- Maintain social distancing (1.5 metre from the woman) during the visit where possible (e.g. ask other family members to leave the room during visit, consider if assessment can be done outside – such as on verandah)

### 2.6 Specific recommendations for maternity care (for all women)

#### Table 8. Specific considerations for maternity care

<table>
<thead>
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| **Continue maternity care**                 | - Maternity care has been shown repeatedly to be essential, and studies in the United Kingdom and internationally have shown that if women do not attend antenatal services they are at increased risk of maternal death, stillbirth, and other adverse perinatal outcomes
  - Continue to provide facilities for face-to-face clinical visits where direct interaction, clinical examination, and physical maternal-fetal assessment are required
  - Provide options for Telehealth consultation for people who are geographically isolated, socially disadvantaged, required to isolate, or otherwise unable to attend physical antenatal visits
  - Individualise the schedule of antenatal visits (physical or Telehealth) based on obstetric complexity or other maternal-fetal factors |
| **Antenatal education**                     | - No group face to face classes
  - Develop options for online/telehealth antenatal education classes to maintain engagement and encourage parent networking |
| **Booking visit (phone or VC)**            | - Alternate plans should be considered to provide required paperwork via post or secure email systems prior to booking process
  - The booking in and risk stratification process for pregnant women must be done with a clinician (e.g. Midwife)
  - Psychosocial screening must be completed; domestic violence screening should be deferred to a face-to-face visit
  - Test results should be given over the phone or by secure messaging
  - Abnormal results should be given face-to-face or via secure video
  - Women with specific vulnerabilities or risks (e.g. CALD, Aboriginal women with mental health or drug and alcohol issues) should not be disadvantaged and all efforts should be made to ensure that services are enhanced to support these women
  - Care planning needs to take into consideration the risk factors identified, the context and the woman’s preferences |
| **Vaccination**                             | - Discuss, recommend, and offer COVID-19 vaccination to all pregnant women
  - Use existing tools to provide education and facilitate shared decision-making
  - Allow opportunities to revisit discussions with women who initially decline vaccination
  - Recommend other pregnancy vaccinations such as influenza and pertussis as per usual guidelines |
| **28 weeks (face-to-face where possible)**  | - Comprehensive assessment of maternal and fetal wellbeing (including weight, BP and urinalysis)
  - Review care plan
  - Review and discuss usual screening investigations (e.g. Glucose Tolerance Test, Full Blood Count, syphilis serology)
  - Review and discuss usual vaccinations: seasonal flu and pertussis |
| **36-37 weeks (face-to-face)** | • Offer Anti-D for Rh(D)-negative women as per routine guidelines  
• Comprehensive assessment of maternal and fetal wellbeing (including weight, BP and urinalysis)  
• Check fetal presentation (using point of care ultrasound if available)  
• Review care plan  
• Review and discuss screening tests (e.g. Full Blood Count)  
• Review Anti-D prophylaxis for Rh(D)-negative women  
• Offer GBS screening as per local guidelines |
| **38-39 weeks (phone or VC)** | • Face-to-face if significant risk factors |
| **40-41 weeks (face-to-face)** | • Comprehensive assessment of maternal and fetal wellbeing (including weight, BP and urinalysis)  
• Check fetal presentation (point of care ultrasound if available/required)  
• Bishop score if indicated  
• Review care plan |
| **Induction of labour** | • Offer induction of labour for standard clinical indications  
• Assess cervical favourability (e.g. Bishop score) prior to induction of streamline care in Labour and Birth Suite |
| **CTG monitoring** | • Offer CTG for standard clinical indications  
• COVID-19 can adversely affect placental function and COVID-19 positive or suspected women should be offered CTG (with relevant infection control precautions) if it is clinically indicated  
• Physical visit for duration of CTG  
• Consider remote CTG assessment in maternity units where this is established clinical practice and there is no other indication for physical assessment |
| **Ultrasound** | • For guidance on routine ultrasound in low risk woman (without any pre-existing maternal or fetal comorbidities), refer to [Appendix A: Modification of routine ultrasound investigations in low-risk women](#)  
• If clinical concerns, use clinical judgement and seek expert advice  
• Do not defer ultrasound assessments where urgent fetal assessment is required  
• Follow relevant state and local guidance on PPE  
• Develop and follow infection prevention protocols for disinfection of ultrasound equipment between patients |
| **Group B streptococcus** | • Follow local guidelines in offering GBS screening  
• RANZCOG states that either universal screening or risk-based approaches are both acceptable strategies |
| **Gestational diabetes mellitus screening** | • Offer screening for gestational diabetes to all women according to standard guidelines  
• Consider early testing for women with additional risk factors  
• During periods of Red and Black response categories as defined in the SAR, consider modified screening with fasting glucose and/or HbA1c in women without risk factors for GDM  
• Defer postpartum GTT for women with GDM where there is widespread community transmission and physical distancing at pathology collection centres is impaired  
• Do not defer postpartum GTT in women where there is a high suspicion of underlying Type 2 diabetes |
| **Maternal haemoglobin** | • Optimise haemoglobin prior to birth to minimise morbidity associated with blood loss and the subsequent need for blood products (which may be in short supply during the pandemic) |
- Refer to Lifeblood (Australian Red Cross) [Toolkit for Maternity Blood Management](http://www.lblood.org.au/toolkit/)

### Vulnerable women

- Women with comorbidities are at increased risk of severe COVID-19. These include:
  - preeclampsia
  - cancer
  - kidney disease
  - liver disease
  - chronic lung disease
  - diabetes
  - heart disease
  - immunocompromise
  - mental ill health including depression
  - overweight and obesity
  - haemoglobinopathy
  - smoking
  - organ transplants
  - substance use
  - advanced maternal age

- Seek expert clinical advice early in the pregnancy to plan care
- Encourage vaccination in women with such comorbidities
- Advise women with comorbidities to inform their maternity care provider immediately if they test positive for COVID-19 such that they can be considered for disease-modifying therapies, especially if they are immunocompromised or unvaccinated. Such therapies must be administered soon after infection in order to be effective which requires timely referral for consideration.
- Aboriginal and/or Torres Strait Islander women, and other culturally diverse groups may be more severely impacted
  - Involve appropriate cultural supports as required
- Identify women with vulnerability to severe disease to allow measures to reduce their exposure to other people during hospital visits, such as fast-tracking through antenatal clinics, attending at the start of clinics, optimising physical distancing, etc.

### Routine antenatal care in women requiring self-isolation (with asymptomatic COVID-19)

- Use Telehealth to conduct routine maternity care in women required to self-isolate but without demonstrated or suspected COVID-19
- Defer face-to-face visits where possible until isolation completed
- Defer routine screening investigations unless time-critical until isolation completed
- Do not defer physical visits for urgent maternity care where there are identified maternal-fetal risks or acute obstetric concerns
- Follow WA Health and local transfer, testing, infection prevention and PPE guidelines for confirmed or suspected COVID-19 patients requiring inpatient care for those women in isolation who require urgent face-to-face care
2.7 Routine postnatal care (for all women during COVID-19 pandemic)

Table 9. Routine postnatal care

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| Before discharge               | • A thorough clinical risk assessment should be performed including VTE and the specific care needs for women with vulnerabilities (e.g. mental health, substance use etc.)  
  • Where possible for newborn – Vitamin K, Hepatitis B vaccination, hearing screen and cardiac (pulse oximetry) screen |
| Early discharge                | • Promote early discharge with home follow-up which may be via phone, VC or short physical visit dependent on individual needs or risks  
  • All women/babies to receive daily assessment until minimum day 5 |
| Essential face-to-face visit   | • BP if pre-eclampsia  
  • Newborn bloodspot screening (Guthrie test), combine with weight visit at 48-72 hours  
  • Day 3 weight for babies at risk  
  • Day 5 weight and discharge  
  • Early or symptomatic jaundice requires blood test |
| Specific neonatal considerations for COVID-19 | • Refer to WA Health COVID-19 Guideline for Neonatal Services  
  • Neonates of women with confirmed COVID-19 being discharged postnatally should have surveillance for neonatal COVID-19 as per the above guideline in consultation with maternity unit paediatric staff |
| Mental health                  | • Include education regarding postnatal depression and anxiety in antenatal education  
  • Provide information and resources for early identification and support for women with/at risk of mental illness in the postpartum period |

3 Risk management

3.1 Risk containment

Table 10. Containment and risk minimisation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
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</thead>
</table>
| Containment                     | • Aims to slow the spread of the virus, reduce peak demand on health care services and allow care to be provided to more women and their families during the outbreak  
  • Carry out screening by history for all women and support persons attending for face-to-face maternity care  
  • Follow WA Health and local guidance for RAT as required  
  • If a woman is a probable or confirmed COVID-19 case:  
    o Assess for COVID-19 before arrival (e.g. by phone, telehealth)  
    o Triage in a location separate from usual hospital routes of admission or assessment  
  • Surgical face mask to be worn by woman and her close contacts for face-to-face contact |
3.2 Risk assessment

Table 11. Risk assessment

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk assessment</td>
<td>Follow WA Health and local guidelines regarding risk assessment and screening of hospital patients and visitors</td>
</tr>
</tbody>
</table>

3.3 Testing

Table 12. COVID-19 testing

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indications, testing methods, and sample collection</td>
<td>Follow CURRENT WA Health recommendations for testing at COVID-19 Information for health professionals. These are being updated frequently.</td>
</tr>
<tr>
<td></td>
<td>The use of PCR or RAT will vary depending on the degree of community transmission and the capacity of pathology services. Follow current WA Health and local guidance.</td>
</tr>
</tbody>
</table>

4 Maternity care in women with probable or confirmed COVID-19

This section describes the provision of care to women with probable or confirmed COVID-19, including routine antenatal, intrapartum, and postpartum care and an overview of the management of COVID-19 infection during pregnancy.
4.1 Routine outpatient antenatal care in women with COVID-19

Table 13. Routine antenatal care in women with COVID-19

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| Antenatal appointments      | • Use Telehealth for routine appointments  
                              • Where physical attendance is required, follow WA Health and local guidance for outpatient hospital attendances  
                              • Other members of the family may take part in the consultation using remote methods if the mother wishes and gives consent |
| Screening investigations     | • Defer non-urgent and non-time critical investigations until COVID-19 has cleared  
                              • Ultrasound:  
                                o First trimester screening for aneuploidy is time critical and must be performed between 11+0 weeks and 13+6 weeks even where isolation is required. Consider screening by NIPT from 10+0 weeks and deferring early anatomy assessment until isolation is completed.  
                                o Mid-trimester anatomy and cervical length assessment should be deferred until isolation is completed unless there are specific factors which make this more urgent.  
                              • Gestational diabetes mellitus:  
                                o Screening for GDM should continue as per routine guidelines but should be deferred until isolation is completed  
                                o Modified screening (avoiding OGTT in women with no GDM risk factors) may be used in system alert response level Red/Black  
                              • Group B Streptococcus:  
                                o Screening for GBS should continue as per routine guidelines but should be deferred until isolation is completed  
                                o Women who labour prior to GBS screening being completed should be managed according to risk factors for neonatal GBS sepsis and/or be offered PCR-based testing where available |
| Third trimester fetal assessment | • Third trimester ultrasound assessments should be deferred until isolation is completed unless there are acute concerns (such as established growth restriction or other maternal/fetal indicators warranting urgent fetal assessment)  
                              • CTG should be performed according to routine clinical guidelines. In women with active COVID-19 the requirement for CTG assessment should be considered by a senior clinician and only be used where there is established risk of fetal compromise and potential that it will alter clinical management  
                              • The role of home CTG using mobile technology is unclear and should only be used in units where this is established clinical practice  
                              • COVID-19 during pregnancy can affect placental function and fetal surveillance should be undertaken once the acute illness has resolved or earlier if there are any concerns for fetal wellbeing |
### Table 14. Antenatal complications in women with COVID-19

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Risk of preterm birth**     | • **Antenatal corticosteroids** should be used as per routine clinical guidelines  
                                |   o Corticosteroids may be used as part of treatment of COVID-19, this may provide fetal lung maturation depending on the agent used and dose e.g. Dexamethasone and Betamethasone cross the placenta whereas Prednisolone and Hydrocortisone do not.  
                                |   o Seek Maternal Fetal Medicine advice if there is uncertainty.  
                                | • **Tocolysis** may be used where clinically indicated.  
                                |   o Clinicians should be mindful of the potential for more severe adverse effects, particularly tachycardia and hypotension, in women with COVID-19 receiving calcium channel blockers (e.g. nifedipine) or betamimetics (e.g. salbutamol, terbutaline) for tocolysis.  
                                |   o Seek Consultant Obstetrician or Maternal Fetal Medicine advice if there is uncertainty.  
                                | • **Magnesium sulfate** should be used as per routine clinical guidance for either fetal neuroprotection prior to very preterm birth or maternal seizure prophylaxis in severe preeclampsia |
| **Interhospital transfer**    | • Women with COVID-19 requiring transfer for obstetric (non-COVID) complications should be transferred to the most appropriate maternity facility. This will be determined by the nature of the complication, the gestational age, receiving hospital capacity, and the potential for COVID-19 deterioration.  
                                | • Transfers should be optimised to an appropriate receiving service to prevent subsequent transfer.  
                                | • If there is widespread community transmission, obstetric transfers (COVID-19 and non-COVID-19) should be coordinated by a single point with oversight of capacity and service capability at all units.  
                                | • If transport or retrieval required, inform RFDS/NETSWA of suspected or confirmed COVID-19 status.  
                                | • Given the potential for maternal deterioration and preterm birth, consideration should be given to early transfer if there are features of more than mild disease depending on local capability for higher level care. |
| **Other complications**       | • Other obstetric complications in women with mild COVID-19 should be managed locally according to standard practice with COVID-19 precautions as per [WA Health](http://health.wa.gov.au) and local provisions.  
                                | • COVID-19 alone is not an indication for transfer to higher-level care. |
### 4.3 Inpatient antenatal care in women with COVID-19

#### Table 15. Antenatal care while an inpatient

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>On admission</strong></td>
<td>- Follow <a href="https://www.health.wa.gov.au">WA Health recommendations and public alerts</a> for inpatient infection prevention and control, isolation, specimen collection and PPE use&lt;br&gt;- To the extent possible, use single rooms and negative pressure isolation rooms as first option, followed by single room&lt;br&gt;- Follow WA health guidelines for patient placement (<a href="https://www.health.wa.gov.au">Infection Prevention and Control in Western Australian Healthcare Facilities</a>)&lt;br&gt;- Escort directly to the dedicated isolation room/area&lt;br&gt;- Alert obstetric/midwifery/neonatal/anaesthetic/infectious diseases teams of admission&lt;br&gt;- Woman and support person to wear mask and follow hand hygiene (if support person lives with woman then should also be assumed as COVID positive or suspected)&lt;br&gt;- Review the women’s psychological and emotional needs</td>
</tr>
<tr>
<td><strong>Maternal-fetal surveillance</strong></td>
<td>- In addition to usual maternal and fetal antenatal observations, monitor respiratory rate and SaO₂&lt;br&gt;  - Maintain index of suspicion for bacterial pneumonia&lt;br&gt;  - Be aware that patients with COVID-19 related lung disease may not develop tachypnoea even when hypoxic and a normal respiratory rate in a hypoxic person is not reassuring&lt;br&gt;  - Fetal surveillance as clinically indicated, being mindful that COVID-19 can affect placental function. The method of fetal surveillance should be individualised based on other obstetric risks, gestational age and viability, fetal growth and wellbeing parameters, and maternal condition. If uncertain involve Maternal Fetal Medicine Service for advice&lt;br&gt;  - Delay investigations/procedures that require the woman to be transported out of isolation whenever it is clinically safe, but do not defer urgent investigations if clinically required</td>
</tr>
<tr>
<td><strong>Medical imaging</strong></td>
<td>- Do not delay necessary medical imaging (e.g. chest imaging) because of concerns about fetal exposure&lt;br&gt;  - Apply radiation shield over the gravid uterus&lt;br&gt;  - Use lower-dose equipment and imaging protocols where available&lt;br&gt;  - Ultrasound scan for fetal wellbeing as indicated and after resolution of acute symptoms&lt;br&gt;  - If positive COVID-19 result occurs in first trimester, consider detailed morphology scan at 18–24 weeks&lt;br&gt;  - There is no evidence that COVID-19 infection during pregnancy increases the risk of fetal anomalies&lt;br&gt;  - There are mixed data about the risk of congenital abnormalities in the setting of maternal fever during embryogenesis, but the absolute magnitude of any adverse effect is likely to be small</td>
</tr>
</tbody>
</table>
## 4.4 Intrapartum care in women with COVID-19

### Table 16. Labour and birth

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Mode and setting**          | • A positive COVID-19 result **without other indications** is not an indication to expedite birth  
• Mode of birth should be according to standard obstetric indications and is not influenced by COVID-19  
• When a woman with COVID-19 is admitted to the Birth Suite, the following members of the MDT should be informed: consultant obstetrician, consultant anaesthetist, consultant paediatrician or neonatologist, midwife coordinator, operating theatre coordinator, and infection control staff  
• Follow local infection control protocols for COVID-19 positive patients. Use a negative pressure room (if possible) for labour and birth with only bare essentials left in room  
• The woman and participant in care should be given surgical mask on presentation.  
• Maternity staff should wear appropriate PPE when caring for women with COVID-19, including in labour. Follow [WA Health](http://www.health.wa.gov.au) and local guidance which includes PFR (fit checked), protective eye wear, gown and gloves  
• One participant in care only for the duration of the birth wearing surgical mask. Refer to WA Health and local guidance regarding hospital visitors, respecting the exceptional circumstance of birth and that the non-birthing parent should be allowed access to their child (born or unborn) where safely possible.  
• Support persons with COVID-19 should follow isolation guidelines as for the general public  
• Refer to [Appendix F: Information for COVID-19 women in labour (suspected or confirmed)](http://www.health.wa.gov.au) |
| **Caesarean section**         | • If elective caesarean has been planned, individually assess urgency and consider whether delivery can be safely deferred by use of increased fetal surveillance until isolation is completed  
• Weigh benefits of deferring planned caesarean section until COVID-19 resolution against the potential difficulty emergency caesarean section for a COVID-19 positive woman presenting in labour  
• Avoid general anaesthesia where possible as intubation may increase the risk of COVID-19 infection |
| **Water immersion/birth**     | • Although COVID-19 has been detected in faeces, there is no evidence of faecal-oral transmission  
• There is a small (but unquantifiable) risk that water contaminated with faeces could pose an infection risk to the baby and/or staff  
• Asymptomatic COVID-19 infection is not a contraindication to water immersion for labour or birth and these options should be considered according to routine guidelines  
• Waterproof PPE is required for maternity staff and water immersion should not be undertaken unless appropriate PPE can be provided  
• Water immersion and water birth are not recommended for women who are symptomatic with of COVID-19 due to potential for maternal-fetal compromise and increased requirement for monitoring |
| **Maternal and fetal monitoring** | • Be aware of the risk of deterioration in maternal-fetal condition during labour. Previously well women are able to compensate well for physiological insults but may rapidly decompensate with the additional physiological burden of labour  
• Continuous maternal SaO₂ monitoring is recommended in labour for women |
• Use intravenous fluid therapy judiciously to avoid fluid overload and pulmonary oedema but be aware of additional volume requirement in women with prolonged exertion, fever, sepsis, and epidural-related vasodilation
• Discuss the options for fetal monitoring in labour with women including that the severity of COVID-19 and the presence of maternal comorbidities impacts on fetal outcomes
• Use continuous CTG monitoring for all women with symptomatic COVID-19
• If asymptomatic, recommend continuous CTG monitoring for usual indications (i.e. it is not necessarily indicated for COVID-19 alone)
• Fetal scalp electrode monitoring and fetal blood sampling may be used according to standard guidelines
• If no remote access CTG viewing system available utilise telemetry where available to distance machine from mother and enable second staff member to view safely

<table>
<thead>
<tr>
<th>Neuraxial blockade</th>
<th>Consider neuraxial blockade (epidural analgesia) early in labour to minimise need for general anaesthesia if urgent birth required</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Nitrous oxide</th>
<th>Nitrous oxide use is no longer considered contraindicated in women with confirmed or suspected COVID-19</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If nitrous oxide is offered, face mask rather than mouthpiece may be preferable if available</td>
</tr>
<tr>
<td></td>
<td>Only use with a microbiological filter of less than 0.05µm pore size</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Documentation/communication</th>
<th>Minimise in room where possible</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Ensure a second midwife runner allocated outside room and for double checking CTG/medication with dedicated communication means with midwife in birth suite (consider use of walkie talkies, dedicated mobile phones, etc)</td>
</tr>
<tr>
<td></td>
<td>Utilise electronic means where available, or dedicated iPad/Smartphone placed in snap lock bags</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Intrapartum care</th>
<th>Routine maternal observations plus respiratory rate and continuous SaO₂</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td><strong>Cord clamping</strong> should be as per standard practice. There is no evidence that delayed cord clamping increases the risk of infection to the newborn</td>
</tr>
<tr>
<td></td>
<td>Manage placental tissue as per usual infectious human tissue protocols</td>
</tr>
<tr>
<td></td>
<td>Women should not be permitted to remove the placenta from the hospital given the potential for COVID-19 spread</td>
</tr>
<tr>
<td></td>
<td>Discuss restrictions with women prior to birth to assist management of expectation for care (e.g. if the woman was intending to bury/take the placenta home)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Clinical emergencies</th>
<th>PPE should be used even in emergency situations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Donning of PPE takes time, therefore, to facilitate a rapid response to a clinical emergency, consider:</td>
</tr>
<tr>
<td></td>
<td>• Offering neuraxial blockade early in labour (to avoid need for general anaesthetic should emergency anaesthetic be required)</td>
</tr>
<tr>
<td></td>
<td>• Lowering the threshold for escalation of clinical concerns</td>
</tr>
<tr>
<td></td>
<td>• Early notification to operating room team (e.g. if PPH)</td>
</tr>
</tbody>
</table>

| Skin to skin | If no resus required: wrap baby during optimal timing of cord clamping, while the woman/participant in care performs hand hygiene and replaces their face masks – then may place baby for skin to skin |

<table>
<thead>
<tr>
<th>Neonatal resuscitation</th>
<th>Anticipate the potential for neonatal resuscitation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>In increased risk scenarios (e.g. instrumental vaginal birth) ensure required neonatal personnel are present outside room with PPE in situ for birth. If resuscitation is not required at birth, then neonatal staff can stand down</td>
</tr>
<tr>
<td></td>
<td>In high risk scenarios (e.g. very preterm birth, significant fetal anomaly, suspected significant fetal compromise) neonatal staff should be present in...</td>
</tr>
</tbody>
</table>
4.5 Postnatal care in women with COVID-19

Table 17. Postnatal care

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **Co-location of mother and baby** | • Co-location of the well mother and the well-baby is recommended  
• Determine need on individual basis considering, for example, disease severity, maternal preference, psychological wellbeing, test results, local capacity, other clinical criteria  
• Support vigilant risk minimisation strategies (e.g. hand hygiene, use of face mask) during feeding and other close mother-baby interactions  
• Where separation of parents and infants is clinically required, parents should be allowed to visit their baby according to WA Health and local policies for hospital visitors and neonatal care |
| **Risk minimisation**          | • Provide information and education about risk minimisation strategies during usual mother-baby interactions (e.g. skin to skin, holding, cuddling, nappy change, feeding)  
• Refer to Table 9. Containment and risk minimisation  
• Discuss risks and benefits of close contact versus postnatal separation with parents (including discharge home of well-baby before unwell mother)  
• No evidence to support washing of maternal or baby skin before initial contact or breastfeeding as a risk minimisation strategy  
• Consult with clinical experts as required |
| **Feeding choice**             | • Provide usual support for maternal feeding preferences including for breastfeeding  
  o No detectable viral DNA found in breast milk to date  
• There is potential for neonatal infection from the mother via the respiratory/airborne route during close contact such as breastfeeding. Appropriate precautions should be taken to minimise this chance  
• Provide dedicated equipment (e.g. breast pump) and follow usual cleaning and disinfectant recommendations |
| **Expressed breast milk (EBM)** | • Support and encourage mother to express breast milk (if feeding preference)  
• Instruct and support adherence to IPC measures, including:  
  o Hand hygiene  
  o Use of single patient use items  
  o Equipment cleaning and disinfection and sterilisation when required  
  o Wearing of face mask (as risk of transmission is unknown)  
  o Wipe outside container of EBM with a disinfectant wipe and place/transfer in specimen bag  
• For Milk bank:  
  o Pasteurisation destroys other coronaviruses, but it is unknown if this applies to COVID-19  
  o May affect supply or availability of pasteurised donor human milk |
| **Discharge**                  | • Consider usual discharge criteria  
• Inform the woman about requirements for completing self-isolation (if not completed before discharge) |
5 Management of COVID-19 during pregnancy

This section contains information about additional considerations for pregnant women with moderate to severe symptoms of confirmed COVID-19.

The Australian National COVID-19 Clinical Evidence Taskforce describes COVID-19 severity in four categories. This categorisation is different from the WHO system in that it divides “non-severe” cases into “mild” and “moderate”. This is potentially useful in the Western Australian maternity context as it may better identify those women at risk of progression to severe disease and allow timely transfer to expert units.

Table 18. COVID-19 severity classification (Australian National COVID-19 Clinical Evidence Taskforce)

<table>
<thead>
<tr>
<th>Severity</th>
<th>Clinical criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• An individual with no clinical features suggestive of moderate or more severe disease</td>
</tr>
<tr>
<td></td>
<td>• No or mild symptoms and signs (fever, cough, sore throat, malaise, headache, muscle pain, nausea, vomiting, diarrhoea, loss of taste and smell)</td>
</tr>
<tr>
<td></td>
<td>• No new shortness of breath on exertion</td>
</tr>
<tr>
<td></td>
<td>• No clinical or radiological evidence of lower respiratory tract involvement</td>
</tr>
<tr>
<td>Moderate</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A stable patient but with evidence of lower respiratory tract involvement</td>
</tr>
<tr>
<td></td>
<td>o Clinical: SaO₂ 92-94% on room air at rest; desaturation or dyspnoea on mild exertion</td>
</tr>
<tr>
<td></td>
<td>o Radiological: features of lower respiratory tract involvement</td>
</tr>
<tr>
<td>Severe</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• A patient with signs of moderate disease who is deteriorating</td>
</tr>
<tr>
<td></td>
<td>o Respiratory rate &gt; 30 bpm</td>
</tr>
<tr>
<td></td>
<td>o SaO₂ &lt; 92% on room air at rest or requiring supplemental oxygen</td>
</tr>
<tr>
<td></td>
<td>o Lung infiltrates &gt; 50%</td>
</tr>
<tr>
<td>Critical</td>
<td></td>
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<tr>
<td></td>
<td>• A patient meeting any of the following criteria:</td>
</tr>
<tr>
<td></td>
<td>o Respiratory failure (defined as any of):</td>
</tr>
<tr>
<td></td>
<td>▪ Severe respiratory failure (PaO₂/FiO₂ &lt;200)</td>
</tr>
<tr>
<td></td>
<td>▪ Respiratory distress of acute respiratory distress syndrome (ARDS)</td>
</tr>
<tr>
<td></td>
<td>▪ Deteriorating despite non-invasive forms of respiratory support</td>
</tr>
<tr>
<td></td>
<td>▪ Requiring mechanical ventilation</td>
</tr>
<tr>
<td></td>
<td>o Hypotension or shock</td>
</tr>
<tr>
<td></td>
<td>o Impairment of consciousness</td>
</tr>
<tr>
<td></td>
<td>o Other organ failure</td>
</tr>
</tbody>
</table>

5.1 Management of mild COVID-19 during pregnancy
Women with mild COVID-19 during pregnancy who are fully vaccinated and without comorbidities generally recover spontaneously after a short acute illness.

Given that pregnancy is an established risk factor for severe disease the provision of COVID-19 care in pregnant women will be triaged into the WA COVID Care at Home Program coordinated centrally. This will allow COVID-19-related care to be provided by clinicians with relevant expertise in acute medicine. Responsibility for maternity care (routine care and management of obstetric complications) will remain with the patient’s public maternity unit or private care provider.

Pregnant women with relevant comorbidities may be considered for disease-modifying therapies during the early stages of mild or asymptomatic infections. These therapies aim to reduce the risk of progression to moderate and severe disease requiring hospital admission or intensive care. The evidence for such therapies is evolving rapidly and guidance can be sought from the National COVID-19 Clinical Evidence Taskforce.

Women with mild disease who show signs of deterioration will be referred for inpatient management to either their local maternity unit or a centralised service for severe COVID-19 in pregnancy depending on disease severity, local capability for higher level care, and capacity.

### 5.2 Management of moderate COVID-19 during pregnancy

Moderate COVID-19 is defined by evidence of lower respiratory tract involvement in a patient with otherwise mild symptoms and with normal respiratory observations and oxygen saturation.

Pregnant women with moderate COVID-19 have a relatively high risk of disease progression and should be managed as inpatients.

Specific management of COVID-19 in such patients should be directed by consultant physicians (respiratory, infectious disease, obstetric, intensive care, or general) as locally appropriate. Obstetric management should be by or in consultation with consultant obstetricians.

Consideration should be given to transfer to a higher-level service where there are other complicating factors (e.g. very preterm gestation, significant maternal comorbidities, other obstetric complications) or where there is potential for long delays in transfer should it be urgently required (e.g. remote location). In general, particularly in metropolitan units, these women should be managed at the maternity service where delivery is planned.

Women with moderate COVID-19 who do not respond to treatment or who have significant supplemental oxygen requirement are at significant risk of deterioration and may require delivery. Antenatal corticosteroids for fetal lung maturation should be considered in women under 34-37 weeks’ gestation taking into account any steroids that may have already been given as COVID-19 therapy. Neuroprotective magnesium sulfate can be used if delivery is planned under 32 weeks’ gestation.

Transfer should be considered depending on local capability to a unit with facilities for invasive ventilatory support.
Fetal surveillance should be undertaken during inpatient management, with the modality and frequency determined by gestation, maternal disease severity, and other maternal-fetal risk factors for fetal compromise.

Mode of birth should be determined based on usual obstetric indications and maternal condition. COVID-19 itself is not an indication for operative delivery. Close maternal-fetal monitoring is required given the potential for decompensation during labour.

### 5.3 Management of severe or critical COVID-19 during pregnancy

Severe COVID-19 is defined by progressive respiratory compromise, and critical COVID-19 with respiratory failure or other organ involvement.

Specific management of such patients should be directed by a multidisciplinary team including intensive care, respiratory, infectious disease, anaesthetic, neonatology, maternal-fetal medicine and other specialists. Delivery is likely to be required regardless of gestation and fetal viability in order to reduce the impact of pregnancy on maternal physiology.

**Care should be provided in dedicated centres with facilities for high-level respiratory support as pregnant women with severe disease are at greater risk of death than non-pregnant individuals.**

### 6 Newborn care

See [WA Health COVID-19 Guidance for Neonatal Services State-wide](#) and [WNHS guideline](#).

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**Part B: Facility and workforce**

### 7 Framework for maternity services

The guidance below provides a set of minimum requirements to ensure the continued operation of safe maternity services during the COVID-19 pandemic.

**Table 19. Framework for considering the impact for maternity services**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| Service provision    | • Continue to provide clinically indicated:  
|                      |   o Access to antenatal, intrapartum and postnatal care for women with and without COVID-19  
|                      |   o Access to neonatal care  
|                      | • Consider alternative means, for example telehealth, home visits  
|                      | • Consider locally appropriate plans for unanticipated maternal/fetal/neonatal transfer to higher level care where such facilities are not locally available |
| Consideration        | • Follow [WA Health](#) and [local pandemic plans](#)  
|                      | • Coordinate with hospital and health service response  
|                      | • Collaborate with infection control and infectious diseases specialists regarding isolation |
**Capacity management for maternity and gynaecological services**

**Table 20. Capacity management**

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| **High volume screening** | • Commence hospital avoidance strategies for antenatal/postnatal care  
  • Consider requirements for high volume screening of women on presentation to hospitals including:  
    o Direct entry to birth suites and pregnancy assessment units/obstetric review centres  
    o Via emergency departments |
| **Antenatal care**    | • Reduce hospital-based outpatient services for low risk women in anticipation of medical and midwifery services focussed on high risk outpatient and inpatients  
  • Establish pathways to redirect low risk women to community based antenatal care (e.g. GP, GP Obstetrician, community midwifery, privately practising midwives) |
| **High risk obstetrics** | • Continue services and focus (potentially limited) workforce on provision of high-risk services  
  • Consider which visits can be conducted via telehealth or phone  
  • Limited physical visits to 15 minutes where possible with remainder of visit followed up via phone/VC consult |
| **Birthing services** | • Continue services  
  • Maximise access for privately practising midwives (credentialed) and general practitioner-obstetricians  
  • Low risk patients are managed by midwives only |
| Postnatal services | • Continue inpatient services as clinically necessary  
• Redirect postnatal care to community-based midwifery care where possible (e.g. home visits) and telehealth options |
| Obstetric theatres | • Consider use relative to demand  
• Maintain emergency obstetrics capacity  
• Consider impact of theatre infection control procedures on theatre availability  
• Consider infection control requirements when operating on probable or confirmed COVID-19 patients |
| Elective gynaecology services | • Reduce elective gynaecological services to category one and urgent category 2 as per current WA Health advice |
| Hospital isolation | • Establish hospital isolation capacity for women (and their babies) with suspected or confirmed COVID-19 requiring hospital admission for maternity or other clinical care including:  
  o Antenatal clinics  
  o Pregnancy assessment units  
  o Birth suites  
  o Inpatient wards – antenatal, postnatal, gynaecology  
  o Peri-operative suites  
  o Neonatal units  
• Develop local protocols for management of women requiring inpatient or urgent outpatient care |

9 Staffing and workforce
Consider workforce management relative to surge demand and exposure risk of staff.

Table 21. Workforce

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Consideration</th>
</tr>
</thead>
</table>
| Absenteeism | • Additional skilled staff will be difficult to recruit, and a significant absenteeism rate can be expected  
• Commence any additional recruitment as soon as possible |
| Re-deployment of staff | • [RANZCOG](https://ranzco.org.au) recommends that, where possible pregnant health care workers be allocated to patients, and duties, that have reduced exposure to patients who are probable or confirmed cases  
• For clinical staff not currently providing frontline services, consider re-introduction to frontline services and clinical skills training as required  
• Consider redeploying staff whose usual roles (e.g. elective surgery and some outpatients) are suspended or reduced as part of the response, to non-specialist settings  
• Consider redeploying non-front-line clinician roles (e.g. educators, patient safety officers, project officers) to support clinically |
| Upskilling | • Commence upskilling of existing staff who may be required to be redeployed to meet surge demand |
| PPE training | • Ensure all clinical staff attend PPE training provided by the health services  
• Ensure all clinical staff undergo a fit test for use of PFR and are tested for 2 PFR. Options, brand, model and size must be recorded  
• Access online training provided by your health service |
| Quarantined staff | • If well, consider use in supporting clinical services remotely (i.e. telehealth outpatients) |
### Alternative models

- Consider capacity of public provided community-based services with respect to redirecting low risk antenatal care to community sites and/or community-based service providers (i.e., dedicated obstetric GP practices, private midwives)
- Alternative staffing models with reduced numbers of medical and midwifery/nursing staff should be developed
- Staffing in teams with same shift patterns or to specific clinical areas of work
- Protect obstetric medical practitioners’ expertise for women with risk factors only – midwives to manage all low risk women including birth
- Dedicate GPs who work across multiple specialities to one specialty i.e., obstetrics or anaesthetics or aged care only
- Midwives working in dual specialities to work in the one area of greatest local need i.e., ED only or maternity only
- Expand early discharge programs with community/telehealth follow-up
- Protect midwives from working in general areas during low maternity activity (i.e., establish midwifery on call rosters)

### Staff wellbeing

- Develop local systems for monitoring and enhancing staff wellbeing and facilitating access to appropriate professional care where required
- Make use of available technology to check in on staff wellbeing and help maintain connection to workplace
- Make available accessible resources such as mental health wellbeing support for employees during the COVID-19 Pandemic

### 10 Resources


- Queensland clinical guideline on [Perinatal care of suspected or confirmed COVID-19 pregnant women, 26 March 2020](http://health.wa.gov.au) (external site)

- Department of Health WA
  - [COVID Hub](http://health.wa.gov.au) (access to WA Health employees through HealthPoint)
  - [Health Care Providers and Provision of PPE](http://health.wa.gov.au) (internal site)
  - [COVID-19 Infection Prevention and Control in the Hospital Setting](http://health.wa.gov.au) (internal site)
  - [COVID-19 Guidelines for Outpatient Services](http://health.wa.gov.au) (internal site)
  - [Critical Supplies Snapshot](http://health.wa.gov.au) (access to WA Health employees through HealthPoint)
  - [WA COVID Care at Home](http://health.wa.gov.au) Program
  - [COVID-19 Public hospital visitor guidelines](http://health.wa.gov.au)
11 References


39 The Royal Australian and New Zealand College of Obstetricians and Gynaecologists. COVID-19 Statement. [Internet]. 2020 March 23 [cited 2020 April 23]. Available from:


# Appendix A Modification of routine ultrasounds investigations in low-risk women

<table>
<thead>
<tr>
<th>Scan</th>
<th>Asymptomatic</th>
<th>Symptomatic</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>11+0 to 13+6 weeks</strong></td>
<td>• Combined test (first trimester screen)</td>
<td>• Reschedule combined test in 2 weeks if still within gestational-age window</td>
</tr>
<tr>
<td></td>
<td>• Offer non-invasive prenatal testing (NIPT)</td>
<td>• Offer NIPT/serum screening and detailed scan 3–4 weeks after quarantine</td>
</tr>
<tr>
<td><strong>18+0 to 23+0 weeks</strong></td>
<td>• Anatomical scan</td>
<td>• Reschedule after quarantine in 2–3 weeks</td>
</tr>
<tr>
<td><strong>Fetal growth scan</strong></td>
<td>• Reduce numbers of scans as clinically appropriate</td>
<td></td>
</tr>
<tr>
<td><strong>in third trimester</strong></td>
<td>• Perform only for standard clinical indications</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Defer examinations until after completion of isolation where clinically safe to do</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• If no clinical review in late pregnancy (no fundal height measurement; fetal heart rate auscultation), consider brief late gestation scan to confirm presentation and fetal wellbeing (biometrics and amniotic fluid volume measurement)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Perform ultrasound assessment of fetal growth and wellbeing after resolution of acute illness in any woman with COVID-19 in pregnancy</td>
<td></td>
</tr>
</tbody>
</table>

*Modified from: ISUOG Consensus Statement on organization of routine and specialist obstetric ultrasound services in the context of COVID-19 (2020)*
Assess all women for risk factors

Risk factors or GDM clinical concerns?

Yes

Check FBG

- At 24–28 weeks gestation or
- If clinical concerns after first trimester

No

If FBG ≤ 4.6 mmol/L

OGTT not required

If FBG 4.7–5.0 mmol/L

OGTT recommended

- If COVID-19 suspected or confirmed seek expert clinical advice

OGTT advice for women

- Fast (except for water) for 8–14 hours prior to OGTT
- Take usual medications

If FBG ≥ 5.1 mmol/L

OGTT not required

Routine antenatal care

Unless clinical concerns

OGTT normal?

Yes

No

GDM diagnosis

HbA1c first trimester only

- ≥ 41 mmol/mol (or 5.9%)

OGTT one or more of:

- Fasting ≥ 5.1 mmol/L
- 1 hour ≥ 10 mmol/L
- 2 hour ≥ 8.5 mmol/L

Postnatal follow-up

- Delay OGTT for 6 months or
- If concerned about type 2 diabetes:

  - Continue self-monitoring
  - HbA1c at 4–6 months
  - Notify GP

Initial presentation after first trimester with risk factors

Use clinical judgement:

- Either FBG or OGTT

  o Consider risk factors, personal history, local risk of COVID-19

  o If OGTT is done at 12–24 weeks, individually assess if retesting at 24–28 weeks is required

Yes

No

HbA1c > 41 mmol/mol (5.9%)?

Yes

No

Source: Queensland Clinical Guideline. Maternity care for mothers and babies during the COVID-19 pandemic
### 14 Appendix C Guidance for PPE use by HCWs providing direct patient care

<table>
<thead>
<tr>
<th>Patient Scenario</th>
<th>Criteria</th>
<th>Hand hygiene</th>
<th>Surgical mask</th>
<th>PFR</th>
<th>Eye protection</th>
<th>Gloves</th>
<th>Gown</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient who does not meet the definition of probable or confirmed case</td>
<td></td>
<td><img src="Image" alt="Hand hygiene" /></td>
<td><img src="Image" alt="Surgical mask" /></td>
<td><img src="Image" alt="PFR" /></td>
<td><img src="Image" alt="Eye protection" /></td>
<td><img src="Image" alt="Gloves" /></td>
<td><img src="Image" alt="Gown" /></td>
</tr>
<tr>
<td>Patient who is a confirmed/probable case - meets the clinical and epidemiological criteria. (low or no community transmission)</td>
<td>All patients (excluding patient group below)</td>
<td><img src="Image" alt="Hand hygiene" /></td>
<td><img src="Image" alt="Surgical mask" /></td>
<td><img src="Image" alt="PFR" /></td>
<td><img src="Image" alt="Eye protection" /></td>
<td><img src="Image" alt="Gloves" /></td>
<td><img src="Image" alt="Gown" /></td>
</tr>
<tr>
<td>System Alert Response Level Amber/Red/Black (widespread community transmission)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Follow WA Health and local guidance</td>
<td></td>
</tr>
</tbody>
</table>
15 Appendix D COVID-19 in pregnancy

What is COVID-19 and coronavirus?

Coronavirus Disease 2019 (COVID-19) is caused by SARS-CoV-2 and is easily passed from person to person. In most people with good health, COVID-19 is mild, however pregnant women are considered an at-risk group. Pregnant women are not more likely to get COVID-19 but if they become infected with COVID-19, there is a higher risk of severe illness from COVID-19 and pregnancy complications such as stillbirth and premature birth.

How will COVID-19 affect you?

Pregnant women who become infected with COVID-19 have a higher risk of some complications, which may include:

- needing admission to hospital,
- an increased risk of needing admission to an intensive care unit
- an increased risk of needing breathing life support.

Some pregnant women are more likely to have severe illness from COVID-19, particularly if they:

- are older than 35 years
- are overweight or obese
- have pre-existing (pre-pregnancy) high blood pressure
- have pre-existing (pre-pregnancy) diabetes (type 1 or type 2)
- smoke
- have a heart or lung condition such as asthma.

For more information about the risks of COVID-19 in pregnancy see the Australian Government’s COVID-19 vaccination – Shared decision making guide for women who are pregnant, breastfeeding or planning a pregnancy.

How will COVID-19 affect your baby?

The risk of infection passing from mother to baby during pregnancy is thought to be low. So far, the virus has not been shown to pass from the mother to her baby before birth (this is called vertical transmission).

Some babies born to women with COVID-19 infection have been born early (prematurely). In most cases doctors advised that the baby should be born early because the mother was very unwell and requiring intensive care treatment.

Your maternity care provider will ensure that an appropriate plan of care is discussed with you. This may include a scan to monitor your baby’s growth during and following your recovery from COVID-19.

It is important that if you have any concerns about your pregnancy or baby that you contact your maternity care provider as early as possible.
If you have a high fever at any stage of your pregnancy call your healthcare provider or the COVID Hotline 13 268 43.

**Should I have the COVID-19 vaccination if I am pregnant or planning a pregnancy?**

Yes, COVID-19 vaccination is recommended for women who are pregnant, breastfeeding or planning a pregnancy.

It is important to know:

- Pregnant women are not more likely to get COVID-19 but if they become infected with COVID-19, there is a higher risk of severe illness from COVID-19 and pregnancy complications like preterm birth.
- COVID-19 vaccination may provide indirect protection to babies by transferring antibodies through the placenta (during pregnancy) or through breastmilk (during breastfeeding).

The Australian Technical Advisory Group on Immunisation (ATAGI) and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists (RANZCOG) recommended that pregnant women of all ages receive the Pfizer or Moderna COVID-19 vaccines at any stage of pregnancy.

Pregnant women who received a first dose of AstraZeneca COVID-19 vaccine can receive either an mRNA COVID-19 vaccine (Pfizer or ModernaCOVID-19 vaccines) or the AstraZeneca COVID-19 vaccine for their second dose, although an mRNA vaccine is preferred.

Pregnant women are a priority group for COVID-19 vaccination with these mRNA vaccines and are encouraged to discuss the decision in relation to timing of vaccination with their health professional. Women who are trying to become pregnant do not need to delay vaccination or avoid becoming pregnant after vaccination.

If you are pregnant or breastfeeding and have completed your primary 2-dose vaccination, it is recommended to have a booster four months after your primary dose.

**Is it safe to come to hospital?**

It is safe for you to come to hospital for antenatal clinic appointments. It is important to stay connected with your maternity care provider/s involved in your pregnancy and to contact them if you are worried about anything.

It is also important that you have all the usual tests, vaccinations and check-ups required during pregnancy.

Your maternity care provider will plan your care with you. Some of your appointments may be offered virtually using either phone or video. If you or your maternity care provider identifies any risks or concerns, then face to face appointments may be required and will be arranged with you.

Access to routine antenatal investigations, ultrasounds, maternal and fetal assessments can happen outside the hospital antenatal clinic. Your maternity care provider may make alternative arrangements for your care which may include being seen by your GP in the community or by a maternity care provider in your home.
Can COVID-19 be prevented or cured?

There is no cure, however vaccinations to reduce the severity of the disease are available. Other things you can do to reduce your chance of getting the infection include:

- Wearing a mask in public places
- Washing your hands regularly and frequently—use soap and water for at least 20 seconds or an alcohol-based hand sanitiser/gel
- Using social distancing (stay 1.5 metres away from other people)
- Avoiding anyone who has a fever, cough or symptoms of a cold or chest infection
- Avoiding touching your eyes, nose and mouth
- Stay home and get tested if you have any symptoms of COVID-19, however mild.

If you are unwell:

- Telephone your healthcare provider as soon as possible
- Take paracetamol for fever or pain, as per instructions on the packaging (avoid medications that contain ibuprofen if possible)
- Rest and drink plenty of water.

What if you or your family has COVID-19?

If you think you or a family member might have COVID-19, access the Coronavirus Symptom Checker, call your general practitioner (GP), COVID Hotline 13 268 43, or the National Coronavirus Helpline 1800 020 080.

When should you get tested for COVID-19 and self-isolate?

You may be required to get tested for COVID-19 and/or to self-isolate if you have:

- Tested positive for COVID-19, been tested for COVID-19 and are awaiting your result or have been identified as a close contact of a confirmed case of COVID-19. The COVID-19 Coronavirus: Testing and isolation guide provides further directions.
- Arrived into WA from overseas. Further information is available from the COVID-19 coronavirus: International travel webpage.
- Arrived into WA from a state or territory. Further information is available from the COVID-19 coronavirus: Interstate travel webpage.

How do you self-isolate?

If you have been advised to self-isolate, stay indoors and avoid contact with others. This means:

- Not going to school, work or public areas
- Not using public transport
- Staying at home and not bringing visitors to your home
- Ventilating rooms by opening windows
- Sleeping apart, where possible
- Using your own linen
- Using your own cutlery and utensils
- Separating yourself from other members of the household, where possible
- Increasing cleaning of shared areas.
Can you come to antenatal appointments if in self-isolation?

Contact your healthcare provider or hospital to:
• inform them that you are currently in self-isolation for suspected or confirmed COVID-19
• request advice on attending routine antenatal appointments.

What if you feel unwell or are worried during self-isolation?

If you begin to feel unwell (have a fever or shortness of breath, cough or a respiratory illness) while in self-isolation seek immediate medical attention. Call ahead to your general practitioner (GP) or emergency department and tell them about your situation before you arrive.

What if I go into labour during self-isolation?

If you go into labour, call the hospital, or your healthcare provider. Tell them that you are in self-isolation due to COVID-19. They will tell you what to do, and when and how to come to hospital.

If the suggested transport is by ambulance, call for an ambulance by dialling 000. Let the call taker at St John Ambulance WA know you are in labour and in self-isolation.

Will COVID-19 affect your birth plan?

Having COVID-19 will not by itself affect how your baby is born. If you are booked for an induction of labour or caesarean section, and have COVID-19, notify your health care provider immediately to discuss a plan.

There is no evidence that women with COVID-19 cannot have an epidural or use nitrous oxide. This will be discussed with you.

Continuous monitoring of your baby in labour is recommended (but is not compulsory). This is because some babies (whose mothers had COVID-19) showed signs of distress during labour. Monitoring can help detect problems as early as possible. This recommendation is the same as for other infections in pregnancy. Talk to your healthcare provider about any concerns you may have.

Your maternity care providers will provide you with support and care during your labour and birth. Maternity care providers caring for you will wear personal protective equipment (such as a face mask, face shield, gloves and apron/gown).

We recognise the importance of having a partner/support person to participate in your care. You can have one nominated partner/support person with you during labour and birth, to act as a participant in care.

You will be asked to nominate a participant in care who should not have suspected or confirmed COVID-19 and not be a close or casual contact waiting for test results. The person you choose to be your participant in care should consider their own individual health risk factors including their own COVID-19 vaccination status.

The participant in care will have to wear personal protective equipment. The staff will provide guidance on how to wear the equipment.
Because you have COVID-19, your participant in care will become a close contact and will need to get tested and self-isolate after the birth.

**Will having COVID-19 affect contact with my baby?**

In most cases keeping a mother and baby together is best. If either of you are very unwell this may not be possible. Your healthcare provider will talk with you about what you want and what your choices are. If you are very unwell, one option may be for your baby to go home with a well adult (e.g. well partner or relative).

If you have or may have COVID-19 it is important to do everything you can to prevent your baby getting the virus, even if you don't have symptoms. It is very important that you:

- get vaccinated
- wash your hands before and after touching your baby-use soap and water for at least 20 seconds or an alcohol-based hand sanitiser/gel
- routinely clean and disinfect surfaces you have touched
- have a healthy adult assist you to care for your baby where possible
- wear a mask while in close contact with your baby, including while feeding.

A small number of babies may develop mild or moderate symptoms in the weeks following birth and some may require additional hospital care. If your baby becomes unwell following birth, contact your GP or hospital. Call ahead and advise them you have/had COVID-19.

**Will your baby be tested for COVID-19?**

The need for testing your baby will be determined by the symptoms your baby has. In general, well babies will not be tested.
16 Appendix E Information for COVID-19 women in labour

As a woman in labour, you have the right to a safe and positive birth experience.

If you are a probable or confirmed COVID-19 case:

- you will be asked to wear a mask
- you will still be able to move in labour and birth to the position of your choice, but you will not be able to have a water birth
- you will have access to a range of pain relief options including an early epidural
- your baby's heart rate will be continuously monitored in labour
- you will be assisted with respiratory and hand hygiene prior to holding your baby.

Care Providers

Your maternity care providers will provide you with support and care during your labour and birth.

Maternity care providers caring for you will wear personal protective equipment (such as a face mask, face shield, gloves and apron/gown).

Support person

- We recognise the importance of having a partner /support person to participate in your care. You will be asked to nominate a participant in care who should not be a probable or confirmed COVID-19 case and not be a contact waiting for test results.
- You can have one nominated partner/ support person with you during labour and birth, to act as a participant in care.
- The person you choose to be your participant in care should consider their own individual health risk factors including their own COVID-19 vaccination status.
- The participant in care will have to wear personal protective equipment. The staff will provide guidance on how to wear the equipment.
- If your participant in care has a mask exemption, is unvaccinated or has a vaccination exemption they will be accompanied/escorted to your room, allowed to solely visit you and no other hospital area, required to maintain social distancing and IPC measures.
- Because you have COVID-19, your participant in care will likely become a close contact and will need to get tested and self-isolate after the birth.
- If your participant in care is a probable or confirmed case of COVID-19 they can have planned visits only with discussion with the IPC team and an approved IPC plan in place that includes education on donning and doffing PPE.
- Further information can be found in the COVID-19 Public hospital visitor guidelines (health.wa.gov.au)

If you have any concerns or questions, contact your maternity care provider.
17 Appendix F COVID-19 and breastfeeding

Should I have the COVID-19 vaccination if I am breastfeeding?
Yes, COVID-19 vaccination is recommended for women who are breastfeeding. It is important to know:

• COVID-19 vaccination may protect your baby by transferring antibodies through the placenta (during pregnancy) or through breastmilk (during breastfeeding).
• If you are breastfeeding, it is preferable for you to have a Pfizer or Moderna COVID-19 vaccine. The mRNA COVID-19 vaccines are the preferred vaccines for people aged under 60 years. You do not need to stop breastfeeding after vaccination.

This advice, and the evidence behind it, can be found in the Australian Government’s Shared decision making guide for women who are pregnant, breastfeeding or planning pregnancy.

If you have COVID-19, can you breastfeed?
Yes. If you want to breastfeed, this will be supported. There is no evidence that COVID-19 can be passed on to your baby in breast milk, and the benefits of breastfeeding and the protection it offers outweigh any possible risks.

Breastmilk is best for almost all babies. Breastfeeding helps you and your baby bond together. It also helps protect your baby against infection.

Your decision to breastfeed may involve thinking about your baby’s health, how sick you are and whether you are well enough to care for your baby. Your healthcare team will discuss your individual situation and feeding options with you.

What is advised about breastfeeding with other infections?
In general, breastfeeding helps protect against many illnesses. For example, when a mother has the flu, breastfeeding is still encouraged with extra care to avoid spreading the virus to her baby.

Can your baby get COVID-19 from breastfeeding?
The COVID-19 virus has not been found in breastmilk. However, COVID-19 is easily passed from person to person through close contact. You should take additional precautions while in close contact with your baby, (as you do for other infections).
What precautions should you take when looking after your baby?

If you have COVID-19, it is important to do everything you can to prevent your baby getting the virus, even if you don’t have symptoms.

It is very important that you:
- get vaccinated
- wash your hands before and after touching your baby using soap and water for 20 seconds or alcohol-based hand rub
- routinely clean and disinfect surfaces you have touched
- wear a mask while in close contact including while breastfeeding
- where possible use social distancing at home and in hospital
- have a healthy adult assist you to care for your baby where possible.

Can your baby be fed expressed breast milk?

Feeding your expressed breastmilk (EBM) to your baby is strongly supported. If you decide to feed your baby EBM, you will also need to think about:
- your health and your baby’s health
- where your baby is located
- who is looking after your baby?

Your healthcare team will discuss with you how they can support you and your feeding choices.

What precautions should you take with expressed breast milk?

- Wash your hands prior to touching the pump or bottle parts.
- Clean the pump and all its parts, and the bottle carefully after each use.
- If you are unwell, have a healthy caregiver feed the expressed breast milk to your baby where possible
- Remind other caregivers to wash their hands using soap and water for 20 seconds or alcohol-based hand rub before and after touching your baby.

Last updated 14 February 2022

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## Appendix G Management of COVID-19 in pregnant and postpartum women

### Confirmed COVID-19 in pregnant or postpartum woman

1. **Assess COVID-19 severity according to National COVID-19 Clinical Evidence Taskforce classification**

   - **MILD**
     - Asymptomatic or mild symptoms
     - No shortness of breath
     - No lower respiratory tract involvement
     - Offer Home Monitoring Program for high risk group who will provide care of COVID-19
     - Consider disease modifying therapies according to other risk factors
     - Inform usual maternity care provider to continue maternity care with appropriate modifications
     - Consider transfer out of remote locations
     - Isolate as per WA Health guidelines until acute illness resolves
     - Observe for clinical deterioration requiring escalation of care

   - **MODERATE**
     - Stable with evidence of lower respiratory tract involvement
     - SaO2 92-94% on air
     - Admit for inpatient management to local maternity unit
     - Consider disease modifying therapies according to other risk factors
     - Usual maternity care provider to continue maternity care in consultation with specialist obstetrician
     - COVID-19 care provided by consultant physicians as locally appropriate
     - Consider transfer out of regional/remote locations depending on local capacity and potential for extended transfer time
     - Observe for clinical deterioration requiring escalation of care

   - **SEVERE**
     - Respiratory rate > 30 bpm, supplemental O2 requirement, > 50% lung infiltrates
     - Admit/transfer to unit with capacity for invasive respiratory support and appropriate level neonatal care
     - COVID-19 and maternity care managed by multidisciplinary team
     - Prepare for delivery if there is disease progression. Consider antenatal corticosteroids, MgSO4, etc.
     - Observe for clinical deterioration requiring escalation of care

   - **CRITICAL**
     - Respiratory failure
     - Shock, altered consciousness, other organ involvement
     - Admit/transfer to unit with capacity for invasive respiratory support/ECMO and appropriate level neonatal care
     - COVID-19 and maternity care managed by multidisciplinary team
     - In general, stabilise maternal condition and expedite delivery in the maternal interest
Authority

Department of Health Western Australia.

These guidelines are for staff working in public hospitals in Western Australia. They are based on information available at the time of writing and may change as more information becomes available. These guidelines are a guide only and patients should be managed on a case-by-case basis.

The WA Department of Health wishes to acknowledge the:
- Queensland Health Department, COVID-19 Guidance for Maternity Services Guidelines
- Royal College of Obstetricians and Gynaecologists Coronavirus (COVID-19) Infection in Pregnancy Guidelines, upon which these Guidelines were developed.

These guidelines have been developed to be used in conjunction with the Department of Health’s Management of COVID-19 Guidance for Neonatal Services State-wide.

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