Royal Cornwall Hospitals
NHS Trust

The Management of COVID-19 in Pregnancy Clinical Guideline

V2.2

February 2024

1. Aim/Purpose of this Guideline

1.1. The aim of this guideline is to guide Health Care professionals in the management of pregnant women with suspected or confirmed COVID-19 including when admitted to other wards outside of maternity.

1.2. To ensure pregnant women with suspected or confirmed COVID-19 receive appropriate advice and support diabetes during the COVID-19 Pandemic to ensure the best health outcomes.

1.3. For staff to be aware that guidance around COVID-19 changes rapidly and changes to required care will change regularly (New 2023).

1.4. This guideline makes recommendations for women and people who are pregnant. For simplicity of language the guideline uses the term women throughout, but this should be taken to also include people who do not identify as women but who are pregnant, in labour and in the postnatal period. When discussing with a person who does not identify as a woman, please ask them their preferred pronouns, and then ensure this is clearly documented in their notes to inform all health care professionals.

1.5. This version supersedes any previous versions of this document.

Data Protection Act 2018 (UK General Data Protection Regulation – GDPR) Legislation.

The Trust has a duty under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 to ensure that there is a valid legal basis to process personal and sensitive data. The legal basis for processing must be identified and documented before the processing begins. In many cases we may need consent; this must be explicit, informed, and documented. We cannot rely on opt out, it must be opt in.

Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 is applicable to all staff; this includes those working as contractors and providers of services.

For more information about your obligations under the Data Protection Act 2018 and UK General Data Protection Regulations 2016/679 please see the Information Use Framework Policy or contact the Information Governance Team.

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2. The Guidance

2.1. **Antenatal care**

2.1.1. Emerging data from the COVID-19 pandemic suggest that women who are most at risk of severe COVID-19 are those with co-morbidities, such as diabetes or obesity and women from a Black, Asian, or ethnic minority background (in particular, Asian, Black Afro Caribbean and Black African). Women in these groups already have significantly poorer pregnancy outcomes. For further risk factors, please see ‘pathway for pregnant and postnatal people calling to report covid

positive result' saved in the shared drive S:\TR11\Triage\Triage Pathways\COVID.

2.1.2. It is important to record the correct ethnicity at the booking appointment.

2.1.3. For COVID -19 or symptomatic pregnant women and people, please triage and arrange a review if symptoms indicate the need. Inpatient staff will then decide if on discharge a pulse oximeter is required.

2.1.4. Triage staff do not need to advise any pregnant person to collect a pulse oximeter if they are well.

2.1.5. The RCOG guidance is still to risk assess for VTE and offer 10 days of Low Molecular Weight Heparin (LMWH) if needed.

2.1.6. Advise women to avoid meeting people at higher risk from COVID-19 for 10 days, including other pregnant women (New 2023).

2.1.7. Reassure women that most pregnant women will have a mild illness and will recover at home but advise them of symptoms of deterioration. Advise women to remain hydrated and to keep mobile.

2.1.8. COVID-19 vaccines are strongly recommended in pregnancy. Vaccination is the best way to protect against the known risks of COVID-19 in pregnancy for both women and babies, including admission of the woman to intensive care and premature birth of the baby. (New 2023).

2.1.9. Pregnant women are urged to book a COVID-19 booster yearly.

2.1.10. Encourage women to report concerns regarding Covid-19 via maternity triage line and that COVID status should not delay urgent reviews (e.g., reduced fetal movements, vaginal bleeding etc).

2.2. **Admission of a pregnant woman with suspected COVID-19.**

2.2.1. When women phone maternity services for advice regarding symptoms which may be attributed to COVID-19, the healthcare professionals are also advised to consider differential diagnoses which are commonly seen in pregnant women and could otherwise explain fever, shortness of breath or similar. This includes, but is not limited to urinary tract infection, chorioamnionitis, pulmonary embolism etc.

2.2.2. It should be remembered that in Coronavirus infections the risks to pregnant women appeared to be increased during the last trimester of pregnancy.

2.3. **Before/on admission**

2.3.1. Signs of COVID include:

- Clinical/radiological evidence of pneumonia.
- Acute Respiratory Distress Syndrome (ARDS).

- Fever ≥37.8 AND at least one of acute persistent cough, hoarseness, nasal discharge/congestion, shortness of breath, sore throat, wheezing or sneezing.

- Loss of sense of taste or smell.

2.3.2. Please see 'pathway for pregnant and postnatal people calling to report covid positive result' for details of severe and moderate symptoms and recommended pathway of care. Saved in the shared drive S:\TR11\Triage\Triage Pathways\COVID (New 2023).

2.3.3. When a pregnant woman is admitted to the main hospital then the Obstetric registrar or Consultant Obstetrician on for delivery should be informed and a discussion with regards to the appropriateness of fetal monitoring at that stage is required (see below for more details). This will depend on gestation of pregnancy, need for maternal resuscitation, stability of the woman in case the CTG is abnormal. If the woman is not stable enough for delivery, then the CTG should be delayed until she is deemed fit enough.

2.3.4. An MDT discussion ideally involving a consultant physician, consultant obstetrician, midwife-in-charge, and consultant anaesthetist responsible for obstetric care should be arranged as soon as possible following admission. The discussion should be shared with the woman.

2.3.4.1. The following should be included:

- Key priorities for medical care of the woman and her baby, and her birth preferences.

- A VTE risk assessment in relation to pregnancy (New 2023).

- Agreement regarding the most appropriate location of care (e.g., intensive care unit, isolation room in infectious disease ward or other suitable isolation room) and lead specialty.

- Concerns among the team regarding special considerations in pregnancy, particularly the condition of the baby.

- The priority for medical care should be to stabilise the woman's condition with standard supportive care therapies.

2.3.5. The care of the pregnant woman should follow the general guidance on supportive care for adults diagnosed with COVID-19 as per WHO and the guidance on the management of patients with COVID-19 who are admitted to critical care by NICE. Particular considerations for pregnant women are:

2.3.5.1. Hourly observations in accordance with the MEOWS chart:

- Young fit women can compensate for a deterioration in respiratory function and are able to maintain normal oxygen saturations before they then suddenly decompensate.

- Signs of decompensation include an increase in oxygen requirements or FiO2 > 40%, a respiratory rate of greater than 30, reduction in urine output, or drowsiness, even if the saturations are normal. Escalate urgently if any of these signs develop in a woman who is pregnant or has recently given birth.

- Titrate oxygen to keep saturations >94%.

2.3.5.2. Radiographic investigations should be performed as for the non-pregnant adult; this includes chest X-ray and computerised tomography (CT) of the chest. Chest imaging, especially CT chest, is essential for the evaluation of the unwell patient with COVID-19 and should be performed when indicated, and not delayed because of fetal concerns. Abdominal shielding can be used to protect the fetus as per normal protocols.

2.3.5.3. Pregnant women are at a high risk of VTE due to their hypercoagulable state and therefore consider additional investigations to rule out differential diagnoses e.g., ECG, CTPA as appropriate, echocardiogram. The diagnosis of PE should be considered in women with chest pain, worsening hypoxia (particularly if there is a sudden increase in oxygen requirements) or in women whose breathlessness persists or worsens after expected recovery from COVID-19.

2.3.5.4. Do not assume all pyrexia is due to COVID-19.

2.3.5.5. Perform full sepsis screening and consider bacterial infection if the white blood cell count is raised (lymphocytes usually normal or low with COVID-19) and commence antibiotics.

2.3.5.6. Apply caution with IV fluid management. Try boluses in volumes of 250-500mls and then assess for fluid overload before proceeding with further fluid resuscitation. A fluid balance chart must be used (New 2023).

2.3.5.7. All pregnant women admitted with COVID-19 infection (or suspected COVID-19 infection) should receive prophylactic LMWH, unless birth is expected within 12 hours (e.g. for a woman with increasing oxygen requirements). Where women with complications of COVID-19 are under the care of other teams, such as intensivists or acute physicians, the appropriate dosing regimen of LMWH should be discussed in an MDT that includes a senior obstetrician and a local VTE expert.

2.3.5.8. The frequency and suitability of fetal heart rate monitoring should be considered on an individual basis, taking into consideration the gestational age of the fetus and the maternal condition. If urgent intervention for birth is indicated for fetal reasons, birth should be expedited as normal, as long as the maternal condition is stable. If maternal stabilisation is required before intervention for birth, this is the priority, as it is in other maternity emergencies, e.g., severe pre-eclampsia.

2.3.5.9. An individualised assessment of the woman should be made by the MDT to decide whether emergency caesarean birth or induction of labour is indicated, either to assist efforts in maternal resuscitation or where there are serious concerns regarding the fetal condition. Individual assessment should consider: the maternal condition, the fetal condition, the potential for improvement following elective birth and the gestation of the pregnancy. The priority must always be the wellbeing of the woman.

2.3.5.10. There is no evidence to suggest that steroids for fetal lung maturation, when they would usually be offered, cause any harm in the context of COVID-19. Steroids should therefore be given when indicated in NICE guidance. As per standard practice, urgent intervention for birth should not be delayed for their administration.

2.3.5.11. There are some reports that even after a period of improvement there can be a rapid deterioration. Following improvement in a woman's condition, consider an ongoing period of observation, where possible, for a further 24-48 hours. On discharge, advise the woman to return immediately if she becomes more unwell.

2.3.5.12. Be aware of the interim government guidance based on the results of the RECOVERY trial, which states that steroid therapy should be considered for 10 days or to hospital discharge (whichever is the sooner) for adults unwell with COVID-19 and requiring oxygen (in pregnant adults, use oral prednisolone 40mg once daily or intravenous hydrocortisone 80mg twice daily) (New 2023).

2.3.6. Thrombocytopenia is associated with severe COVID-19. For women with thrombocytopenia (platelets less than 50x109/L) stop aspirin prophylaxis and thromboprophylaxis and seek haematology advice.

2.3.7. Women who have been seriously or critically unwell from COVID-19, and discharged prior to birth, should be offered an ultrasound scan to assess the fetal biometry. This should be within the first 14 days following recovery and to consider further ultrasound monitoring on an individual basis (New 2023).

2.4. Intrapartum care

2.4.1. In addition to recommendations above for women with moderate or severe COVID-19 requiring intrapartum care it is also recommended that:

2.4.1.1. With regard to mode of birth, an individualised decision should be made.

2.4.1.2. The current evidence remains inconclusive about whether asymptomatic women who test positive for the virus should always be advised not to use water during labour and birth. Individualised risk assessment about the appropriateness of

providing labour or birth care in the pool should be undertaken for each woman by the midwifery team in discussion with the woman, based on the woman's individual presentation and the pool environment within the labour setting (New 2023).

2.4.1.3. Caesarean birth should be performed if indicated based on maternal and fetal condition as in normal practice.

2.4.1.4. In women with symptomatic COVID-19, there may be an increased risk of fetal compromise in active labour and of caesarean birth. Women with symptomatic suspected or confirmed COVID-19 should be advised to labour and give birth in an obstetric unit with continuous electronic fetal monitoring. This is not required for asymptomatic infection. (New 2023).

2.4.1.5. Given the association of COVID-19 with acute respiratory distress syndrome, women with moderate to severe symptoms of COVID-19 should be monitored using hourly fluid input/output charts. Efforts should be targeted towards achieving neutral fluid balance in labour, in order to avoid the risk of fluid overload.

2.4.1.6. A woman's care should be escalated urgently if signs of decompensation develop. These signs include increasing oxygen requirements, increasing respiratory rate above 25 breaths/minutes or a rapidly rising respiratory rate despite oxygen therapy, a reduction in urine output, acute kidney injury or drowsiness.

2.4.1.7. Strongly consider treatment with monoclonal antibodies in pregnant and breastfeeding women who are unwell in hospital settings, particularly if they are unvaccinated and/or have additional risk factors for severe illness. Monoclonal antibodies are also recommended for those in the community who meet specific very high-risk criteria.

2.4.2. **Birth partners**

COVID-19 positive women can have up to two birth partners. The birth partner may attend for labour and birth but will be asked to remain in the delivery room. One birth partner will be able to attend theatre or wards if they are covid positive. (New 2023).

2.5. **Postnatal care**

2.5.1. Skin to skin should be encouraged following usual guidance, unless the baby or women are too unwell. (New 2023).

2.5.2. Breastfeeding should be encouraged following usual guidance, unless the baby or women are too unwell. (New 2023).

2.5.3. All women admitted to hospital with COVID-19 infection should receive at least 10 days of prophylactic LMWH, following discharge from hospital.

3. Monitoring compliance and effectiveness

Information Category	Detail of process and methodology for monitoring compliance
Element to be monitored	Safe and effective treatment of patients with confirmed COVID-19 in pregnancy.
Lead	Angela Bellamy, Deputy Head of Midwifery
Tool	• Were all Black and Asian women referred to the Wren team? • If called triage, (symptomatic or positive) were they advised as per the guidance in the folder? • If called triage and were testing positive, were they referred to the pulse Ox team? Was a VTE risk assessment completed?
Frequency	Once in the lifetime of the guideline
Reporting arrangements	Confirmed cases of COVID-19 will be reported to UKOSS and discussed at Patient Safety.
Acting on recommendations and Lead(s)	Confirmed cases of COVID-19 will be reported to UKOSS and discussed at Patient Safety.
Change in practice and lessons to be shared	Required changes to practice will be identified and actioned within a month. A lead member of the team will be identified to take each change forward where appropriate. Lessons will be shared with all the relevant stakeholders.

4. Equality and Diversity

4.1. This document complies with the Royal Cornwall Hospitals NHS Trust service Equality and Diversity statement which can be found in the Equality Diversity And Inclusion Policy or the Equality and Diversity website.

4.2. Equality Impact Assessment

The Initial Equality Impact Assessment Screening Form is at Appendix 2.

Appendix 1. Governance Information

Information Category	Detailed Information
Document Title:	The Management of Covid-19 in Pregnancy V2.2
This document replaces (exact title of previous version):	The Management of Covid-19 in Pregnancy V2.1
Date Issued/Approved:	February 2024
Date Valid From:	February 2024
Date Valid To:	February 2026
Directorate / Department responsible (author/owner):	Helen Le Grys Consultant Obstetrician. Angela Bellamy, Deputy Director of Midwifery.
Contact details:	01872 25 5955
Brief summary of contents:	Management of Covid 19 in pregnancy.
Suggested Keywords:	Covid-19, pregnancy, midwifery, and obstetrics.
Target Audience:	**RCHT:** Yes **CFT:** No **CIOS ICB:** No
Executive Director responsible for Policy:	Chief Medical Officer
Approval route for consultation and ratification:	Maternity Guidelines Group
Manager confirming approval processes:	Caroline Chappell
Name of Governance Lead confirming consultation and ratification:	Tamara Thirlby
Links to key external standards:	None
Related Documents:	Coronavirus (COVID-19) Infection in Pregnancy (March 2022). Pregnancy and coronavirus (COVID-19). NHS online (October 2022).

Information Category	Detailed Information
	COVID-19 vaccines, pregnancy, and breastfeeding FAQs (May 2022). Royal Collage of Midwives, Clinical briefing: Clinical Briefing Sheet – Waterbirth during the COVID-19 Pandemic (June 2021) cb-waterbirth-during-covid.pdf (rcm.org.uk).
Training Need Identified?	No
Publication Location (refer to Policy on Policies – Approvals and Ratification):	Internet and Intranet
Document Library Folder/Sub Folder:	Clinical / Maternity and obstetrics

Version Control Table

Date	Version Number	Summary of Changes	Changes Made by
02 April 2020	V1.0	Initial version	Angela Bellamy, Deputy Head of Midwifery
February 2021	V1.1	Addition of 2.3.1. All pregnant women who are being/are admitted to hospital should be offered a routine swab to test for COVID. 2.4.2. guidance regarding birth partners	Angela Bellamy, Deputy Head of Midwifery. Helen Le Grys Consultant Obstetrician.
November 2021	V1.2	Number of changes as government guidance updated	Angela Bellamy, Deputy Head of Midwifery. Helen Le Grys Consultant Obstetrician.
April 2022	V1.3	Number of changes as government guidance updated	Angela Bellamy, Deputy Head of Midwifery. Helen Le Grys Consultant Obstetrician.
November 2022	V1.4	Number of changes as government guidance updated	Angela Bellamy, Deputy Director of Midwifery. Helen Le Grys Consultant Obstetrician.

Date	Version Number	Summary of Changes	Changes Made by
February 2023	V2.0	Full version update. Addition of compliance monitoring tool. Addition of new Trust template.	Angela Bellamy Deputy Director of Midwifery
November 2023	V2.1	Removal of reference to the triage flowchart. Pulse oximetry not offered to well Covid + people.	Sam Gale, Community matron
February 2024	V2.2	Update of 2.1.2	Catherine Wills, Maternity Guidelines Midwife

All or part of this document can be released under the Freedom of Information Act 2000.

All Policies, Strategies and Operating Procedures, including Business Plans, are to be kept for the lifetime of the organisation plus 6 years.

This document is only valid on the day of printing.

Controlled Document.

This document has been created following the Royal Cornwall Hospitals NHS Trust The Policy on Policies (Development and Management of Knowledge Procedural and Web Documents Policy). It should not be altered in any way without the express permission of the author or their Line Manager.

Appendix 2. Equality Impact Assessment

Section 1: Equality Impact Assessment (EIA) Form

The EIA process allows the Trust to identify where a policy or service may have a negative impact on an individual or particular group of people.

For guidance, please refer to the Equality Impact Assessment Policy (available from the document library) or contact the Equality, Diversity, and Inclusion Team rcht.inclusion@nhs.net

Information Category	Detailed Information
Name of the strategy / policy / proposal / service function to be assessed:	The Management of COVID-19 in Pregnancy Clinical Guideline V2.2
Directorate and service area:	Obstetrics and Gynaecology Directorate
Is this a new or existing Policy?	Existing
Name of individual completing EIA (Should be completed by an individual with a good understanding of the Service/Policy):	Angela Bellamy
Contact details:	01872 25 5955

Information Category	Detailed Information
1. Policy Aim - Who is the Policy aimed at? (The Policy is the Strategy, Policy, Proposal or Service Change to be assessed)	The aim of this guideline is to provide guidance for safe and effective treatment of patients with confirmed COVID-19 in pregnancy.
2. Policy Objectives	To provide safe and effective treatment to patients with confirmed COVID-19 in pregnancy.
3. Policy Intended Outcomes	To provide safe and effective treatment to patients with confirmed COVID-19 in pregnancy.
4. How will you measure each outcome?	Not to be measured currently as a temporary guideline
5. Who is intended to benefit from the policy?	All pregnant women with confirmed COVID-19 in pregnancy

Information Category	Detailed Information
6a. Who did you consult with? (Please select Yes or No for each category)	• Workforce: Yes • Patients/ visitors: No • Local groups/ system partners: No • External organisations: No • Other: No
6b. Please list the individuals/groups who have been consulted about this policy.	**Please record specific names of individuals/ groups:** Maternity Guidelines Group.
6c. What was the outcome of the consultation?	Guideline Agreed.
6d. Have you used any of the following to assist your assessment?	**National or local statistics, audits, activity reports, process maps, complaints, staff, or patient surveys:** No

7. The Impact

Following consultation with key groups, has a negative impact been identified for any protected characteristic? Please note that a rationale is required for each one.

Where a negative impact is identified without rationale, the key groups will need to be consulted again.

Protected Characteristic	(Yes or No)	Rationale
Age	No	
Sex (male or female)	No	
Gender reassignment (Transgender, non-binary, gender fluid etc.)	No	
Race	No	The clinical guideline reflects the additional risks posed to patients with BAME backgrounds.
Disability (e.g. physical or cognitive impairment, mental health, long term conditions etc.)	No	
Religion or belief	No	

Protected Characteristic	(Yes or No)	Rationale
Marriage and civil partnership	No	
Pregnancy and maternity	No	
Sexual orientation (e.g. gay, straight, bisexual, lesbian etc.)	No	

A robust rationale must be in place for all protected characteristics. If a negative impact has been identified, please complete section 2. If no negative impact has been identified and if this is not a major service change, you can end the assessment here.

I am confident that section 2 of this EIA does not need completing as there are no highlighted risks of negative impact occurring because of this policy.

Name of person confirming result of initial impact assessment: Sam Gale, Community Matron.

If a negative impact has been identified above OR this is a major service change, you will need to complete section 2 of the EIA form available here:
Section 2. Full Equality Analysis