NIHR | Oxford Health Biomedical Research Centre

PRECISION PSYCHIATRY LAB

UNIVERSITY OF OXFORD

Pregnancy and the perinatal period – How to assess and manage mental health issues in pregnancy and the perinatal period in the context of the COVID-19 pandemic

Questions are arranged in groups covering topics listed under headings. Readers can, of course, focus only on areas of interest, but we would suggest that you read the answers to all questions within a group as the answers complement and overlap with each other.

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Clinical question	Guidance
Maternal mental health	
Please note that despite a systematic search of sources across English speaking countries (see appendix for full details), the guidelines which are currently available on maternal mental health come mainly from one country (the UK) and from a small number of organisations (for example, RCPsych and RCOG). As the situation evolves, we will continue to search and update the table, and we will add guidelines from different countries and organisations as these become available. Please do give feedback (or refer to systematic reviews for primary data to supplement your knowledge as needed): full details are on the front page of the website.	

1a. General guidance on management of maternal mental health during COVID-19
[link1]
[link2]
[link3]
	Guidance in the UK has been developed by the Royal College of Psychiatrists, Royal College of Obstetricians and Gynaecologists and NHS England and Improvement:
	• **General levels of anxiety, worry or distress:**
	  • The pandemic will result in an **increased amount of anxiety in the general population, and this is likely to be even more so for pregnant women.**
	  • These anxieties are likely to revolve around COVID-19 itself, the impact of social isolation resulting in reduced support from wider family and friends, the potential of reduced household finances and major changes in antenatal and other NHS care.
	  • **Acknowledging these difficulties** can help to contain some of these anxieties.
	  • This can be facilitated by maintaining access to midwifery (or maternity) services, accessing sources of self-help for anxiety and stress and when necessary self-referral to local IAPT (Improving Access to Psychological Therapies) Services in England (or equivalents in other nations).
	• **Mental illness:**
	  • Episodes of mental illness during pregnancy are **common and affect up to 1 in 5 pregnant women**.
	  • Mental illness covers **a full range of symptoms** from mild anxiety and depression to severe mood disorders and psychosis.

- Episodes of illness are **more likely to be precipitated by periods of social stress**.

Assessment and management:

- For mild symptoms of anxiety or low mood, **utilise interventions (e.g. lifestyle and behavioural), which may have helped with previous mild symptoms in the past,** or are evidence-based strategies for mental wellness (for example maintaining a daily routine, meeting up with friends, attending antenatal groups).
- Consider **how these interventions or strategies can be adapted** e.g. by technology to contact friends and family and attend virtual groups.
- **Continue to inform maternity services of any concerns** so that advice and additional support can be offered.
- Be aware that the change in appointment style will also make assessment for women experiencing domestic violence, women with safeguarding concerns and women who are misusing substances **more difficult (see section 1f)**.
- **Usual specialised antenatal and perinatal mental health services are still running**, albeit in a different form **(see section 1b),** and can offer additional assessment, advice and support.
- Postpartum psychosis is **directly associated** with a diagnosis of bipolar affective disorder or women who have had previous episodes of postpartum psychosis. Continue to **identify this group of women**, with **robust plans** in place for labour and the immediate postpartum period.
- **In the same way, also identify and formulate robust plans for women with previous psychotic illness, severe early postnatal depressive disorder or severe enduring mental illness.**

Maternal mental illnesses remain one of the leading causes of maternal death. The **MBRRACE-UK reports** (Mothers and Babies: Reducing Risk through Audits and Confidential Enquiries across the UK, https://www.npeu.ox.ac.uk/mbrrace-uk/reports) identified key red flags which should prompt **immediate referral to specialist perinatal mental health services**:

- Recent significant changes in mental state or emergence of new symptoms
- New thoughts or acts of violent self-harm
- New and persistent expressions of incompetency as a mother or estrangement from the infant

In addition, the latest rapid report from MBBRACE-UK highlights **the critical importance of face to face assessments for high risk cases.** New recommendations are:

- **Establish triage processes** to ensure that women with mental health concerns can be appropriately assessed, including face-to-face if necessary, and access specialist perinatal mental health services in the context of changes to the normal processes of care due to COVID-19.
- **Perinatal mental health services are essential** and face to face contact will be necessary in some circumstances. There is a clear role for involvement of the lead mental health obstetrician or midwife in triage and clinical review.
- Ensure that **referral with mental health concerns on more than one occasion is considered a 'red flag'**, which should prompt a clinical review irrespective of usual access thresholds or practice.
- **Update guidance** to reflect that **safeguarding actions, including removal to a place of safety if necessary**, should be followed in the context of public health measures such as lockdown.

1b. Antenatal and perinatal mental health services

Maternity services should continue to:

- **Identify those women who are most at risk** of maternal death or high morbidity in the postpartum period.

[link1]

- Develop **comprehensive management plans** for women at risk of postpartum psychosis and/or those women with a high degree of complexity.
- **Identify all women with a history of severe mental illness** so that additional support can be offered during the pregnancy and in the high-risk postpartum period.

Perinatal mental health services

- should give careful consideration of **how pregnant women are assessed** in community perinatal mental health teams following guidelines for community services. These services should continue to operate given perinatal morbidity.
- should undertake a **careful risk assessment on a case by case basis** before planning a psychiatric assessment of a patient on a maternity ward prior to discharge, and only proceed if women show symptoms of acute deterioration in mental state, or if there are significant safeguarding concerns that warrant a pre-discharge meeting requested by social care.
- Women who are well and on a stable treatment plan **should be discharged as soon as fit to leave hospital with their baby** and be reviewed by their clinician or allocated perinatal care coordinator the following working day via phone or by virtual review.
- Perinatal services will continue to **work closely with families** to ensure that partners and families are aware of the importance of early detection and seeking advice.
- Women who are under community perinatal services and **who need a psychiatric review post-delivery should be reviewed as quickly as possible** on the postnatal ward.

Advice for nursery nurses in perinatal care can be found at https://www.rcpsych.ac.uk/improving-care/ccqi/quality-networks-accreditation/perinatal-quality-network/pqn-webinars

Advice for health visitors can be found at https://ihv.org.uk/for-health-visitors/resources/resource-library-a-z/covid-19-coronavirus-guidance/ and at https://www.unicef.org.uk/babyfriendly/guidance-documents/

1c. Mother and Baby Units
[link1]

Mother and Baby Units (MBUs) are psychiatric inpatient units which accept women in the later stages of pregnancy or with their baby up to 12 months of age.

UK advice for MBUs:

Pregnancy as a risk factor requiring isolation

- PHE have identified pregnancy as a risk factor requiring isolation in the community for 12 weeks. This recommendation will also be implemented on the MBU, with pregnant women socially isolated on the unit during this time. This will be supported by the obstetric and midwifery services. **Pregnant women have received the advice to increase social isolation and so those admitted to the MBU should also follow this advice**. This needs to be considered at the time of admission.

Decisions about admission

- Psychiatric illnesses remain amongst the leading causes of maternal deaths. **It is important that women continue to have access to inpatient mother and baby units.**
- The **benefits of joint admission** with mother and baby, **for physically well mothers, outweigh the risks.** This decision can be **reviewed on a case by case basis** should the mother become physically unwell.

- In line with the latest RCOG guidance, all women on the MBU **will be helped to develop a COVID-19 management plan** (in line with the latest advice from RCOG), outlining what they would like to happen if they develop symptoms of COVID-19.

Involvement of family, friends, and significant others

- **Partners, co-parents and significant others should be involved in this plan. The needs of co-parents will be respected and contact should be facilitated within service protocols and making full use of technology.**
- Services will **continue to maintain links with Social Services, Health Visiting and community services** as needed.
- All professional contacts and meetings should be encouraged to happen **virtually** (with the exception of Mental Health Act assessments in line with guidance and the coronavirus bill).
- **Visitors to MBUs should be limited to partners, fathers or significant others**, with enquiry about possible symptoms and contact with those who may have COVID-19. Those who should be self-isolating will not be permitted onto the unit.

Discharge from MBUs

- **Discharge from MBUs must be planned safely**, as it is less likely women will receive face to face home visits during this time of crisis.
- **If the mother has suspected COVID-19 infection**, she should be isolated in the MBU isolation area as arranged by local infection control procedures. A decision should be made about whether the mother and baby remain on the unit based on the mother's wishes and case by case review.

VTE (venous thromboembolism) prevention and aftercare

- Refer to **Section 3c** for Guidelines for **VTE prevention and aftercare after general hospital admission** which may apply here.

General guidelines on contact with baby and breastfeeding

- Refer to **Section 2c** for General guidelines for **contact with the baby and breastfeeding** (which will need to be supplemented by appropriate and up to date specialist advice).

1d. Use of telepsychiatry in maternal mental health
[link2]
[link3]
[link4]
[link5]
[link6]
[link7]

(For general guidance on telepsychiatry during COVID-19, please see the separate table on Digital Technologies and Telepsychiatry).
There is currently little specific published guidance on the use of telepsychiatry in perinatal mental health. However, there are examples of primary papers reporting its use, one of which can be found at https://ps.psychiatryonline.org/doi/10.1176/appi.ps.201900143.

UK guidance:

Pre-COVID-19 NICE guidance on antenatal and postnatal mental health (CG192) suggests:

- remote consultation as an option for milder symptoms of anxiety
- clinicians should consider the setting in which they will be providing assessment and treatment (e.g. remote consultations by phone or video).

RCOG guidance during COVID-19

- care providers should employ **teleconferencing and videoconferencing where possible**
- consider **which appointments can be most appropriately conducted remotely**

- supporting women at risk of or currently experiencing mental health problems is included as a category where remote appointments will generally be appropriate.

Possible limitations of virtual consultations:

- some women will not have sufficient remote access
- there may be challenges in relationship-building remotely especially among vulnerable groups, in women for whom English is not their first language
- women may have additional queries regarding their care with less face-to-face contact.

(Refer to the table on telepsychiatry for other potential limitations of remote consultation, including in this situation, difficulties which pregnant women may face in accessing a sufficiently private location for consultation)

- Clinicians will need to weigh up the level and intensity of care the mother and baby require against the potential risk of infection involved in face to face assessment and treatment (see https://www.nice.org.uk/guidance/cg192 for details).
- **Risk assessment for the provision of face-to-face antenatal care** should be undertaken to ensure that women with particular vulnerabilities, including psycho-social and safeguarding issues as well medical and obstetric complications, are prioritised (https://www.rcog.org.uk/en/news/antenatal-care-should-be-standardised-to-the-minimum-targets-set-out-in-new-guidance-say-professional-bodies/).
- Perinatal mental health services are essential and **face to face contact will be necessary in some circumstances**. There is a clear role for involvement of the lead mental health obstetrician or midwife in triage and clinical review.

(The Oxford Centre for Anxiety Disorders and Trauma (OxCADAT) have provided guidance in how to remotely deliver the NICE recommended cognitive therapies for PTSD, Social Anxiety Disorder and Panic Disorder.)

1e. Psychotropic prescribing in the context of COVID-19
[link8]
[link9]
[link10]

There is currently little specific guidance on modifying prescribing during pregnancy/the perinatal period in the context of COVID-19. **(For advice on prescribing lithium, benzodiazepines, and long-acting antipsychotics in general during COVID-19, please see the linked tables).**

Prescribers should continue to follow general (pre-COVID-19) prescribing advice in pregnancy:

- The decision to start, stop, continue or change a medicine before or during pregnancy **should be made together with the patient and prescribing clinician.**
- When deciding whether to use a medicine in pregnancy, **weigh up** how the medicine might improve the patient's and/or their unborn baby's health against any possible problems that the drug may cause.
- Reproductive toxicity is governed by a dose-effect relationship therefore it is recommended at all times to **use the lowest effective dose**.
- There exists a sensitive period for different drug-related effects therefore always **consider the stage of pregnancy and the known stage-specific risks for the drug in question**.
    - During the *first trimester*, drugs can produce congenital malformations (teratogenesis), and the period of greatest risk is from the third to the eleventh week of pregnancy.

- During the *second* and *third trimesters*, drugs can affect the growth or functional development of the foetus, or they can have toxic effects on foetal tissues.
- Drugs given shortly before term or during labour can have adverse effects on labour or the neonate after delivery.

- **Changes in pharmacokinetics** must also be considered when using medicines in pregnancy: drug absorption, distribution, metabolism and excretion may all be affected.
- Medicines may **vary in their ability to transfer across the placental barrier**. Fat soluble drugs cross more easily than water soluble drugs. All oral medicines that are well-absorbed will eventually pass the placental membrane.

General advice from the National Institutes of Health (NIH) in the US:

- Potentially effective treatment for COVID-19 should not be withheld from pregnant women because of theoretical concerns related to the safety of therapeutic agents in pregnancy.
- Decisions regarding the use of drugs approved for other indications or investigational agents for the treatment of COVID-19 in pregnant patients must be made with shared decision-making between the patient and the clinical team, considering the safety of the medication for the woman and the fetus and the severity of maternal disease, and Involving the multidisciplinary team in these discussions.
- For detailed guidance on the use of COVID-19 therapeutic agents in pregnancy, please refer to Antiviral Therapy and Immune-Based Therapy guidelines.

1f. Assessment of risk
[link1]
[link2]
[link11]
[link12]

Assessment of safeguarding may be more challenging, but usual referrals should not be delayed.

The change in appointment style will also make assessment of women experiencing domestic violence, women with safeguarding concerns and women who are misusing substances more difficult.

Domestic abuse

(For issues related to domestic abuse and remote assessment, please refer to the tables on telepsychiatry (section 4e) and domestic abuse)
For UK advice on domestic abuse in the context of COVID-19:

- https://www.gov.uk/government/publications/coronavirus-covid-19-and-domestic-abuse
- https://www.vamhn.co.uk/covid-19-resources.html (webinar facilitated by NHSE/I's Perinatal Mental Health Programme Team on responding to domestic violence and abuse and associated safeguarding concerns in perinatal women in the context of COVID-19).

Risk of harm to children

If there is a risk of, or there are concerns about, suspected child maltreatment in the context of antenatal or postpartum care, follow local safeguarding protocols (https://www.nice.org.uk/guidance/cg192).

For UK advice on safeguarding children in the context of COVID-19:

- https://learning.nspcc.org.uk/safeguarding-child-protection/coronavirus
- https://www.scie.org.uk/care-providers/coronavirus-covid-19/safeguarding/children

	Suicidality
	
	General advice (pre-COVID-19) for assessing suicide risk in antenatal or postnatal care:
	• Carry out a risk assessment in conjunction with the woman and, if she agrees, her partner, family or significant other, and focus on areas that are likely to present possible risk, e.g.:
	  • self-neglect, self-harm, suicidal thoughts and intent
	  • risks to others including the baby
	  • smoking, drug or alcohol misuse
	  • domestic violence and abuse
	• If there is a risk of self-harm or suicide:
	  • assess whether the woman has adequate social support and is aware of sources of help
	  • arrange help appropriate to the level of risk, including specialist mental healthcare where appropriate
	  • inform all relevant healthcare professionals, including GP and those identified in the care plan
	  • advise the woman and her partner, family or significant other, to seek further help if the situation deteriorates.

1g. Support services and information for pregnant women and mothers (including those with specific mental health diagnoses). [link1] [link13]	UK online services and groups: • Action on Postpartum Psychosis (APP) https://www.app-network.org/peer-support/, accessed via app@app-network.org. • Bipolar UK • Maternal OCD • OCD and coronavirus • Beat Eating Disorders • The PANDAS Foundation • Anxiety UK UK general information on COVID-19 and pregnancy: • https://www.rcpsych.ac.uk/mental-health/treatments-and-wellbeing/perinatal-care-and-covid-19 • https://www.rcog.org.uk/en/guidelines-research-services/guidelines/coronavirus-pregnancy/covid-19-virus-infection-and-pregnancy/ • https://www.nhsinform.scot/illnesses-and-conditions/infections-and-poisoning/coronavirus-covid-19/parents-and-families/coronavirus-covid-19-pregnancy-and-newborn-babies • Coronavirus (COVID-19) information for children, families and professionals, edpsy.org.uk • Parenting through Coronavirus, Institute of Health Visiting • Families Under Pressure • Evidence-based self-care, Parent-Infant Foundation • Parenting Through Coronavirus (COVID-19), PATH • Supporting children and young people with worries about COVID-19, University of Reading United States: • https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/pregnancy-breastfeeding.html

- https://www.acog.org/patient-resources/faqs
- COVID-19: Questions Your Patients May Have, American Society for Reproductive Medicine
- Supporting Families During COVID-19, Child Mind Institute
- Resources for Supporting Children's Emotional Well-being during the COVID-19 Pandemic, Child Trends
- COVID-19 Fact Sheet / COVID-19 in Pregnancy and Breast-feeding: Podcast Mother to Baby, US
- Parent/Caregiver Guide to Helping Families Cope with the Coronavirus Disease 2019, The National Child Traumatic Stress Network
- COVID Resources for Families, Wisconsin Alliance for Infant Mental Health
- Helping Families in Time of Crisis, Zero to Thrive

Canada:

- https://www.canada.ca/en/public-health/services/publications/diseases-conditions/pregnancy-advise-mothers.html
- University of Toronto, Canada have created a 'pandemic pregnancy guide' at https://www.obgyn.utoronto.ca/news/pandemic-pregnancy-guide-2020. Follow at Instagram (@pandemicpregnancyguide) or Twitter (@PandemicPreg) as a setting for pregnant women to ask questions about COVID-19 and its effects on them and their baby.

Australia:

- Resources for coping during COVID-19, Antenatal & Postnatal Psychology Network
- COVID-19 Resources, Centre for Perinatal Psychology
- Birdie and the Virus, Children's Health Queensland Hospital and Health Service
- COVID-19 support, Gidget Foundation
- Letter to new or soon-to-be fathers, SMS Dads, University of Newcastle

International:

- https://www.unicef.org/serbia/en/coronavirus-disease-covid-19-what-parents-should-know
- https://www.unicef.org/serbia/en/pregnancy-breastfeeding-and-coronavirus
- How to talk to your child about coronavirus disease 2019, Unicef
- Coronavirus disease (COVID-19) advice for the public: Advocacy, World Health Organization

The International Marcé Society for Perinatal Mental Health has further resources those including from non-English speaking countries.

Physical effects of COVID-19 on pregnant women and their babies

(Specialist guidance on physical complications and the associated restrictions related to COVID-19 should be sought where appropriate from your local specialist Obstetrics and Gynaecology department. Mental health clinicians should only advise within the limits of their knowledge and competency. However, during the COVID-19 pandemic, patients may ask for general advice on physical matters and we hope the following signposts to websites are helpful in providing general sources of information.)

Please note that guidance in this area is rapidly changing. Please always consult individual sources to obtain the most up to date guidance.

2a. Are pregnant women at greater risk from COVID-19?

Risk of infection

- There is as yet **no robust evidence that pregnant women are more likely to become infected than other healthy adults**.

[link2]
[link14]

Severity of COVID-19 symptoms

- It is known from other respiratory infections (e.g. influenza, SARS) **that pregnant woman who contract significant respiratory infections in the third trimester (after 28 weeks) are more likely to become seriously unwell.**
- The **WHO** states that **pregnant women or recently pregnant women with additional risk factors** such as older age, who are overweight, and have pre-existing medical conditions such as hypertension and diabetes **seem to have an increased risk of developing severe COVID-19**. When pregnant women develop severe disease, they also seem to more often require care in intensive care units than non-pregnant women of reproductive age.
- The **UK Government includes pregnant women in the** group classed as '**clinically vulnerable**'. Furthermore, **women who are pregnant with significant congenital or acquired heart disease are considered 'clinically extremely vulnerable'**.

2b. What are the possible effects on babies of mothers who contract COVID-19?
[link2]
[link14]
[link15]
[link16]

(Research is still ongoing and so it is possible that guidance may change.)

1) Risk of miscarriage/pregnancy loss

UK guidance (RCOG):

- There are currently **no data suggesting an increased risk of miscarriage or early pregnancy loss** in relation to COVID-19.
- Case reports from early pregnancy studies with SARS and MERS do not demonstrate a convincing relationship between infection and increased risk of miscarriage or second trimester loss.

Canadian guidance (SOGC) (COVID-19 in pregnancy):

- Miscarriage in the first trimester, stillbirth, intrauterine growth restriction, and preterm birth have been reported in pregnancies affected by SARS and MERS.
- Evaluation is ongoing to determine whether there are any effects of COVID-19 on pregnant individuals and their foetuses.
- Rates of preterm birth among women infected with COVID-19 during the second and third trimester may be lower than initially reported.
- As with SARS and MERS, pregnancy outcomes are likely to be closely associated with the severity of maternal illness.

US guidance (SFMF) (https://www.smfm.org/covidclinical):

- There is very limited data regarding risks associated with infection in the first and second trimesters.
- Currently, there are inadequate data about COVID-19 and the risk of miscarriage or congenital anomalies.
- Preterm delivery has been reported among women positive for COVID-19 during pregnancy. However, it appears that some of these cases may be iatrogenic and not due to spontaneous preterm labour.

2) Risk of foetal abnormality

- There is currently **no evidence to suggest that COVID-19 causes problems with the baby's development**. There is **no evidence currently that the virus is teratogenic**.
- However, **it is not possible to give absolute assurance to any pregnant woman** that contracting COVID-19 carries no additional risk to her baby or to her. Absence of evidence does not equal evidence of absence.

3) Vertical transmission

	Vertical transmission is the transmission from a woman to her baby antenatally or intrapartum. • The WHO currently states that it is not known whether vertical transmission can occur for COVID-19. • In the US, the ACOG states that there is no conclusive evidence. • In the UK, the RCOG states that vertical transmission is probable. There have been case reports in which this appears likely, but reassuringly the babies were discharged from hospital and are well.
2c. Advice on breastfeeding in the context of suspected/confirmed COVID-19 [link17] [link18] [link19] [link20] [link21]	**WHO recommendations on breastfeeding and COVID-19** include the following: • Active COVID-19 has not, to date, been detected in the breastmilk of any mother with confirmed/suspected COVID-19. • Benefits of breastfeeding substantially outweigh the potential risks of transmission of COVID-19. • Mothers should continue breastfeeding, even if **confirmed or suspected to have COVID-19,** as breastfeeding reduces neonatal, infant and child mortality in all settings (including high resource), but should use **specific precautions** (see https://www.who.int/emergencies/diseases/novel-coronavirus-2019/question-and-answers-hub/q-a-detail/q-a-on-covid-19-and-breastfeeding for up to date advice). **A decision tree** for breastfeeding in context of COVID-19: Guidance for health care and community settings from the **WHO** is contained at https://www.who.int/docs/default-source/maternal-health/faqs-breastfeeding-and-covid-19.pdf?sfvrsn=d839e6c0_5 **Advice for women in the UK with confirmed or suspected COVID-19** is that they can breastfeed, but should take the following precautions to limit transmission of the virus: • **Wash your hands** before touching your baby, breast pump or bottles • Try to **avoid coughing or sneezing** on your baby while feeding at the breast • Consider wearing a **face mask** while breastfeeding, if available • Follow recommendations for **pump cleaning** after each use • Consider **asking someone who is well** to feed your expressed breast milk to your baby The Public Health Agency of Canada (PHAC) **and Canadian Pediatric Society** also recommend that mothers with suspected or proven COVID-19 can continue to breastfeed, whilst using precautions as outlined above. The **U.S. Centers for Disease Control (CDC)** recommend that mothers and their health care providers discuss the benefits and risks of breastfeeding and come to a shared decision. If breastfeeding is chosen, the precautions described should be followed.
2d. What are the current obstetric and paediatric surveillance programmes? [link22]	The **UK Obstetric Surveillance System (UKOSS)** has launched a registry for all women admitted to UK hospitals with confirmed COVID-19 infection in pregnancy from March 2020. As part of **paediatric surveillance, PHE are monitoring**: • Clinical follow up of laboratory-confirmed cases in neonates up to 28 days of age (British Paediatric Surveillance Unit (BPSU) https://bpsu.org.uk). Cases will be linked to the surveillance of COVID-19 in pregnant women and their babies in progress through the UK Obstetric Surveillance System (UKOSS). • Risk of vertical transmission during pregnancy (periCOVID) (pericovid@sgul.ac.uk).

2e. If I want to compare guidelines across countries on specific issues where can I do this?	• A Cochrane review of national clinical practice guidelines for key questions relating to COVID-19 and the care of pregnant women and their babies is available at: https://pregnancy.cochrane.org/news/covid-19-review-national-clinical-practice-guidelines-key-questions-relating-care-pregnant • The Burnet Institute in Australia has produced a rapid review of maternal health recommendations related to the COVID-19 pandemic available at https://www.burnet.edu.au/projects/435_ • The Geneva Foundation for Medical Education and Research has a list of Obstetrics and Gynaecology guidelines across countries available at: https://www.gfmer.ch/Guidelines/Maternal_neonatal_infections/Coronavirus.htm
Managing healthcare contact in pregnancy and the peripartum during the COVID-19 pandemic	
3a. Advice for pregnant women without COVID-19 symptoms [link2] [link19] [link23]	**In the UK, pregnant women are classed as a 'vulnerable group' by PHE** (see section 2a. above) and should therefore follow the social distancing measures that have been issued to the general public: • **Avoid contact with someone who is displaying symptoms** of coronavirus (COVID-19) • **Avoid non-essential use of public transport** when possible • **Work from home** where possible • **Avoid large and small gatherings** in public spaces and with friends and family • **Use telephone or online services** to contact your GP or other essential services • Significantly **limit your face-to-face interaction** with friends and family if possible Women in their third trimester (more than 28 weeks pregnant) should be particularly attentive to social distancing and minimising contact with others. In the UK, pregnant healthcare workers at any stage of pregnancy should be offered a choice about whether to work in patient-facing roles during the pandemic. From the third trimester, pregnant women can continue working where the risk assessment supports this. Further **UK occupational health advice** is available from: • https://www.rcog.org.uk/en/guidelines-research-services/guidelines/coronavirus-pregnancy/(occupational health advice) • https://alama.org.uk/covid-19-medical-risk-assessment/pregnancy-and-covid-19/
3b. Advice for pregnant women with mild COVID-19 symptoms [link15] [link19] [link24] [link25]	• **Pregnant women who develop symptoms of COVID-19** are advised **to self-isolate**. • **Expectant management at home may be appropriate for many women.** • Anyone with particular concerns about themselves or their baby during self-isolation is **advised to contact their midwife or their maternity team.** • Women who are due to attend an antenatal appointment during self-isolation should contact their midwife or antenatal clinic. Unless urgent, it will likely be delayed until isolation ends. • Women with COVID-19 **can breastfeed but should follow specific precautions** (see Section 2c).
3c. Advice for healthcare professionals in caring for pregnant women who have confirmed/suspected COVID-19	**General UK advice:** • Healthcare providers are recommended to employ strict infection prevention and control measures, as per local Health Protection guidance.

[link2]
[link26]
[link27]

- Evolving evidence suggests that, within the general population, there is a cohort of asymptomatic individuals or those with very minor symptoms who are carrying the virus, although the incidence is unknown (https://www.nejm.org/doi/full/10.1056/nejme2009758).
- Whilst pregnant women are not necessarily more susceptible to viral illness in general, **changes to their immune system** in pregnancy **can be associated with more severe symptoms.** This is particularly true towards the end of pregnancy.

A Cochrane review of national clinical practice guidelines for key questions relating to COVID-19 and the care of pregnant women and their babies found consensus of 80% or above across guidelines from up to 19 different countries that for all pregnant women (regardless of COVID-19 status), **a surgical mask** or N-95 respirator should be worn during hospital appointments.

In the UK, from the 15th June, **PHE advise that:**

- **all staff in hospitals in England must wear surgical masks**
- **visitors and outpatients to hospitals must wear face coverings at all times.**

After a hospital admission with COVID-19 in pregnancy/during labour:

VTE prevention:

Infection with COVID-19 is likely to be associated with an increased risk of maternal venous-thromboembolism (VTE), in view of the following factors:

- Pregnancy, with or without COVID-19, is a hypercoagulable state
- Emerging evidence suggests that individuals admitted to hospital with COVID-19 are also hypercoagulable
- **Reduced mobility** resulting from self-isolation at home or hospital admission is likely to increase the risk further.

Therefore, the following are recommended for the prevention of maternal VTE:

- **At the time of discharge from hospital following a period of care for confirmed COVID-19, which include the birth of their baby, all women should be prescribed at least 10 days of prophylactic LMWH** (low molecular weight heparin).
- This should be offered **regardless of the mode of birth**.
- **A longer course of LMWH should be offered where indicated** according to existing guidance.

General advice:

- Families should be provided with **guidance about how to identify signs of illness** in their newborn or worsening of the woman's symptoms and provided with **appropriate contact details** if they have concerns.
- Give usual advice about safe sleeping and a smoke-free environment, along with **clear advice about careful hand hygiene and infection control measures** when caring for and feeding the baby.
- RCPCH guidance recommends that all families self-isolate at home for 14 days after the birth of a baby to a woman with active COVID-19 infection.
- Where is it essential that women receive a face-to-face review in the community, midwives are advised to wear **appropriate PPE and follow social distancing and infection control guidance**.

- To reduce the exposure to the risk of infection during home visits, **other members of the household should be advised not to be present in the room** when the midwife is examining the woman and her baby.
- Pregnancy and birth during the COVID-19 pandemic will also have a **significant impact on the psychosocial wellbeing of women and their families** (see section 1 for further details).

Advice for **health visitors in the UK** is at https://ihv.org.uk/for-health-visitors/resources/resource-library-a-z/covid-19-coronavirus-guidance/

US guidance:

- An algorithm for assessing the level of care required in outpatients for pregnant patients with symptoms of COVID-19 from the American College for Obstetricians and Gynecologists is available at: https://www.acog.org/-/media/project/acog/acogorg/files/pdfs/clinical-guidance/practice-advisory/covid-19-algorithm.pdf
- NIH guidance: https://www.covid19treatmentguidelines.nih.gov/overview/pregnancy-and-post-delivery/
- Centers for Disease Control and Prevention (CDC) guidance: https://www.cdc.gov/coronavirus/2019-ncov/hcp/inpatient-obstetric-healthcare-guidance.html
- American College of Obstetricians and Gynecologists (ACOG) guidance: https://www.acog.org/clinical/clinical-guidance/practice-advisory/articles/2020/03/novel-coronavirus-2019
- Society for Maternal Fetal Medicine guidance: https://www.smfm.org/covid19

Canadian guidance:

- An algorithm for care of pregnant patients with possible CIVID-19 is available from the **Society of Obstetricians and Gynaecologists of Canada** at: https://sogc.org/common/Uploaded%20files/COVID-19_algorithm_VP_March%2017_EN2_rev.pdf

Australian and New Zealand guidance:

- **RANZCOG** (Royal Australian and New Zealand College of Obstetricians and Gynaecologists) at: https://ranzcog.edu.au/RANZCOG_SITE/media/RANZCOG-MEDIA/Women's%20Health/Global%20Health/RANZCOG-COVID-19-Guide-for-Resource-limited-Environments.pdf (page10).

Worldwide guidance

- https://marcesociety.com/covid-19-perinatal-mental-health-resources/#resources-for-clinicians has resources for clinicians from many different countries.