DHB Office
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12 April 2022

[redacted]

Response to a request for official information

[redacted]

Thank you for your request for official information as received 14 March 2022 by Nelson Marlborough Health (NMH)[1], followed by the necessary extension of time 11 April 2022, where you seek the following information.

1. ***Policies regarding birthing people who test positive for Covid19 and their ability to have a support person of their choosing throughout their labour and birth in your hospitals and birth centres.***

NMH response:
This response is in regard to the inpatient management of pregnant women, with confirmed or probable COVID-19, who are admitted to Nelson Hospital or Wairau Hospital.

Please see attached *NMH Clinical Guideline COVID-19 in pregnancy – Inpatient Management* (page 6) which outlines, as part of care in labour, that *'one support person can be present, with appropriate PPE, if current hospital policy allows'*.

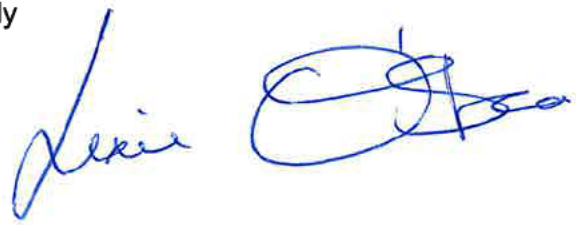
We can manage mothers who present with a COVID -19 positive test as we have a birth room that is an isolation birth room. One support person can accompany a woman in labour for the duration of labour. The support person is required to wear an N95 mask and remain in their partner's birth room. Meals are provided and the support person would share the en-suite facilities in the room. After the birth the support person would go home.

This response has been provided under the Official Information Act 1982. You have the right to seek an investigation by the Ombudsman of this decision. Information about how to make a complaint is available at www.ombudsman.parliament.nz or free phone 0800 802 602. If you have any questions about this decision please feel free to email our OIA Coordinator OIArequest@nmdhb.govt.nz

[1] Nelson Marlborough District Health Board

I trust that this information meets your requirements. NMH, like other agencies across the state sector, supports the open disclosure of information to assist the public's understanding of how we are delivering publicly-funded healthcare. This includes the proactive publication of anonymised Official Information Act responses on our website from 10 working days after they have been released. If you feel that there are good reasons why your response should not be made publicly available, we will be happy to consider.

Yours sincerely



Lexie O'Shea
Chief Executive

Encl: *NMH Clinical Guideline COVID-19 in pregnancy – Inpatient Management* (7 Pages)

COVID-19 in pregnancy – Inpatient Management

Purpose / Scope

To guide clinicians in the management of pregnant or postpartum women with confirmed or probable COVID-19 who are admitted to hospital. The clinical management of COVID-19 is evolving and flexibility is needed.

General Principles

- Hospitalised pregnant patients with COVID-19 should be managed the same as non-pregnant patients with a few additional considerations:
  - Maternal risk factors for severe disease:

Unvaccinated
Age >35y
BMI > 30
Late second or third trimester
Pre-existing medical conditions (hypertension, diabetes, lung disease, serious cardiac disease, chronic kidney and liver disease)
Pre-existing compromised immunity (taking immunosuppression)
Socioeconomic deprivation or minority ethnic groups
Smoker

  - Need for birth including decisions around:
    1. Steroid choice for fetal lung maturation
    2. Magnesium sulphate for fetal neuroprotection
    3. VTE prophylaxis dose and timing
- Pregnant patients can compensate and maintain normal oxygen saturations until sudden decompensation.
- Interpretation of laboratory results should be based on pregnancy-specific normal ranges.
- COVID-19 infection is associated with increased risk of preeclampsia and HELLP syndrome.
- Monitoring the baby by fetal heart rate monitoring and ultrasound scans should be individualised. Consider whether the result of monitoring will change management plans.
- In the clinically deteriorating pregnant patient, the priority should be to stabilise the patient's condition, as it is in other maternity emergencies. All hospital staff must prioritise putting on appropriate PPE before any patient interaction.
- The decision for emergency delivery should be a multidisciplinary discussion between senior clinicians with the patient and their whanau, and performed either:
  - To facilitate maternal resuscitation (including the need for prone positioning), OR
  - For immediate concerns regarding fetal wellbeing
- Women should be offered the opportunity to enrol in the NZ COVID-19 in Pregnancy Registry co-ordinated through the Liggins Institute at the University of Auckland.

Initial Management

	MILD	MODERATE	SEVERE / CRITICAL
DEFINITION	No symptoms; **OR** URTI symptoms; **OR** cough, myalgia, fatigue with oxygen sats >94% on room air and NO shortness of breath	Stable patient presenting with shortness of breath, RR>20, or reduction in oxygen saturation on room air. Can maintain oxygen sats ≥94% with up to 4 L/min oxygen via nasal prongs	Patients meeting **any** of the following criteria: • Respiratory rate ≥30/min • Oxygen saturation <94% on 4L/min oxygen via nasal prongs • Clinically deteriorating
BASELINE TESTS	• Pulse oximetry • CXR and blood tests unlikely to alter management	• FBC, U&E, LFTs, CRP, uric acid • Urinary PCR (protein : creatinine ratio) • Ferritin • Blood & urine cultures if febrile • G&H • CXR/consideration of bacterial pneumonia if worsening	• FBC, U&S, LFTs, CRP, uric acid, coag screen, ferritin, BNP, troponin, d-dimer, G&H • Urinary PCR • Venous blood gas (consider arterial) • ECG • Investigations for pneumonia as per medical team • Sepsis bundle if febrile or shocked
	• **If the diagnosis of COVID-19 is highly suspected, but unable to be confirmed by PCR:** Collect serum sample in acute phase for COVID-19 serology (and repeat ≥2 weeks later). Discuss confirmatory testing options with Microbiology/ID		
TREATMENT ESCALATION PLANNING	• Assess ability to safely isolate in community. • See COVID-19 Case Management in the Community	• Assess & document maternal risk factors for severe disease • Use MEWS chart for observations • Admit under Physicians, with early consultation with Obstetrics, Anaesthetists, Midwifery, and Paediatrics	
	NOTE – any new deterioration > 5 days post onset of illness requires careful assessment, observation & judgement. Severe COVID-19 frequently develops with a rapid deterioration		
LOCATION DECISION	• Encourage discharge • Liaise with local Public Health Unit and GP	• Admit to hospital • Multidisciplinary care	• Admit to hospital • Multidisciplinary care • ICU review
MONITORING	• Frequency and type of fetal heart beat monitoring and ultrasound monitoring should be individualised, depending on gestational age and clinical severity • Watch for respiratory failure and secondary sepsis, especially days 5-10 of illness • Screen for preeclampsia at each assessment in pregnancies > 20/40 gestation • CXR / CPTA can be performed if needed in pregnancy • Repeat laboratory investigations as appropriate • Anticipate complications such as preeclampsia, delirium, VTE, arrhythmias, cardiac impairment, acute kidney injury, sepsis, multi-organ dysfunction, or medication side effects		
NOTIFICATION	• If not already notified e.g by laboratory, then contact Medical Officer of Health / Public Health Unit • Offer opportunity to enrol in NZ COVID-19 in Pregnancy Registry		
CLINICAL TRIALS	• As the optimal management of COVID-19 is not yet known, the **standard of care is to be offered enrolment in a clinical trial,** if available • Locally available COVID-19 clinical trials (e.g. 'REMAP-CAP' and 'ASCOT-ADAPT') are currently not enrolling from NMDHB		

Supportive Management

MODALITY	PATIENT SUB-GROUPS	RECOMMENDATION
RESPIRATORY SUPPORT	All patients	• Switch nebulisers to metered dose inhalers via spacer • Monitor closely for worsening hypoxia if increased work of breathing or respiratory rate • Never position flat on back; left lateral preferred
	SpO_2 <94% at rest	• Administer oxygen (1-4 L/min) via standard nasal prongs • Aim for SpO_2 96-98% • Use Hudson mask (5-10 L/min) or Venturi device if higher flow rates required • Encourage trial of self-proning, as able with gestation
	Unable to maintain SpO2 ≥94% on conventional oxygen at 6 L/min via Hudson mask (required Fi02 >36%)	• Consider CPAP or High Flow Nasal Oxygen (HFNO) • *Choice depends on availability, staff expertise, patient tolerance* • Encourage use of self-proning
FLUID MANAGEMENT	• Assess for hypovolaemia and correct as required • Avoid excessive resuscitation or 'maintenance' fluids • Anticipate and monitor ongoing fluid losses	
VTE PROPHYLAXIS	• ***All patients enrolled in ASCOT-ADAPT or REMAP-CAP (anticoagulation domains)***	• ***As per trial protocol***
	Hospitalised pregnant or postpartum adults: • mild COVID-19 • <u>OR</u> severe and critical COVID-19 <u>UNLESS:</u> • Delivery expected within 24 hours • Platelets < 50 • Active bleeding / coagulopathy • Severe hypertension (>160/110) • Other risk factors for obstetric haemorrhage e.g. placenta previa	Enoxaparin 40mg SC once daily • Consider increasing dose if weight >90 kg • Adjust dose for impaired renal function
	Hospitalised pregnant or postpartum adults with Moderate COVID-19 <u>AND</u> no contra-indication to anticoagulation (as above)	Therapeutic dose anticoagulation **should be considered** over standard prophylaxis for up to 14 days, or until clinical recovery (discharge or resolved hypoxia) Enoxaparin 1mg/kg SC twice daily (max 150mg BD) • Adjust dose for impaired renal function **All other patients should receive standard prophylaxis** as detailed above
	VTE prophylaxis should be continued for: • At least 10 days following discharge from hospital • Minimum of 6 weeks if the woman is post-partum and has additional risk factors (discuss with Obstetrics) or ongoing morbidity (including limited capacity to exercise in managed isolation)	

INTENSIVE CARE	ICU review should be prompted by the following: • Significant oxygen requirement (e.g. requiring FiO2 of 0.4 to maintain SpO_2 >94%, or needing HFNO or CPAP) • Increased work of breathing with impending respiratory failure • Rapidly worsening tachypnoea or hypoxaemia • Haemodynamically unstable and / or hypotension not responsive to fluid bolus • **Consider emergency delivery if required to facilitate maternal resuscitation (including the need for prone positioning), or for immediate concerns regarding fetal wellbeing. This should include a multidisciplinary discussion between senior clinicians and the patient and their whanau.**	
ANTIBIOTIC THERAPY	Antibiotics should not be used for treatment of mild or moderate COVID-19. Bacterial co-infection is uncommon.	
	Severe/critical COVID-19 especially with any deterioration occurring 5-10 days after onset and/or >3 days after hospital admission	• Evaluate for secondary infection, including hospital-acquired infection • Discuss with local Infectious Diseases / Microbiology team if concern for secondary infection
COMMUNICATION & HOLISTIC CARE	• Clearly communicate typical symptoms and anticipated clinical course with patient, family/whānau or carers • Reinforce importance of complying with all Public Health messages, including self-isolation and testing • When possible, explain risks, benefits and likely outcomes of treatments with patients, family/whānau or carers • Ensure midwifery involvement so wrap-around antenatal and postnatal care can be provided for the mother and baby • Use an interpreting service to assist communication if required • Facilitate regular clinical updates, and video calls between patient family/whānau or carers • Routinely refer to local cultural and/or spiritual support services • Consider early involvement of Palliative Care and/ or Liaison Psychiatry services to assist with symptom management, particularly anxiety, dyspnoea and delirium/agitation • Ensure appropriate housing, financial and social support is in place prior to discharge (including a working phone) • If welfare or cultural support issues identified, liaise with Public Health or Supported Isolation and Quarantine Service, as per COVID-19 Case Management in the Community	
THERAPIES FOR EXISTING INDICATIONS	• Nocturnal CPAP for Obstructive Sleep Apnoea	Consider changing usual vented CPAP mask to a non-vented mask + expiratory port + filter (decision depends on equipment availability and staff expertise)
	• Oral contraceptive pill (with or without oestrogen)	• Usual care (i.e. may be continued in COVID-19 unless otherwise contra-indicated)
	• Corticosteroids for asthma/COPD (inhaled or oral, with or without bronchodilators)	• Usual care • Do not use a nebuliser unless definite clinical need
	• Oral menopausal hormone therapy / HRT	• Consider stopping until after recovery
	• Pregnancy supplements and medications	• Continue
SURGERY	• **Caesarean Section (elective and emergency) should not be deferred if clinically indicated. Mode of delivery should remain based on obstetric indications, as per usual care** • Elective minor surgery should generally be deferred until at least four weeks, and major surgery until 8-12 weeks, following recovery from COVID-19 if patient outcome is not compromised • Acute surgical procedures that are indicated during active COVID-19 infection should be discussed with ID	

COVID-19 Therapeutics

MODALITY	PATIENT SUB-GROUPS	RECOMMENDATION
STEROIDS	Adults who do not require oxygen	Do not use systemic steroids to treat COVID-19
	Adults without oxygen requirement, but another evidence-based indication for systemic steroids (e.g. asthma/COPD exacerbations)	Steroids as per usual practise
	Pregnancy with sustained oxygen requirement to maintain SpO2 ≥94%	If steroids needed for fetal lung maturation (usually < 34^{+6} weeks): • dexamethasone 6mg IM every 12 hours for four doses • THEN either prednisone 40mg PO daily, OR hydrocortisone 80mg IV twice daily If steroids <u>not</u> required for fetal lung maturation, use non-fluorinated steroids: • prednisone 40mg PO daily OR hydrocortisone 80mg IV twice daily OR methylprednisolone 40mg IV once daily Total duration is 10 days total OR until discharge, whichever is sooner.
	Note risk of **gestational diabetes:** monitor BSLs closely and start GIK (pregnancy) if elevated.	
ANTI-VIRAL THERAPY	***All patients enrolled in ASCOT-ADAPT trial (anti-viral domain)***	***As per trial protocol & randomisation (in addition to remdesivir, if indicated below)***
	Adults with mild COVID-19	• Do not use remdesivir • Do not use any other anti-viral outside of a clinical trial
	Adults within the first 7 days of illness, with moderate COVID-19 • *Note – must have ALT <5 x ULN and/or ALT <3 x ULN and bilirubin <2 x ULN*	Consider remdesivir if >12/40 gestation and if benefits likely to outweigh possible harm: • 200mg IV on day 1, then 100mg IV q24h for up to further 4 days (maximum 5 days total) • PHARMAC access form to be completed • Have a low threshold to stop if any potential adverse effects from remdesivir (e.g. liver injury, bradycardia, hypotension, hypersensitivity) • Avoid remdesivir if <12/40 gestation • Remdesivir is compatible with breastfeeding
	Adults with severe / critical COVID-19 OR moderate illness after day 7 of illness	• Do not start remdesivir • Complete course (5 days) if started earlier in illness • Do not use any other anti-viral outside of a clinical trial
	Adults with severe immunocompromise with any stage/severity of COVID-19	Discuss with infectious diseases team
IMMUNE MODULATION THERAPY	**In patients receiving systemic steroids in combination with immune modulation, we recommend screening for, and consider empiric treatment of latent infection, e.g. Hepatitis B or strongyloidiasis (in patients who have lived in an endemic region)**	

	There are no trials of immune modulation therapies currently recruiting in New Zealand	
	Adults with moderate COVID-19 • AND receiving systemic steroids • AND elevated CRP or other evidence of severe systemic inflammation OR clinically deteriorating • AND there is not another active, severe concurrent infection Adults with severe / critical COVID-19: • Within 24h (as soon as possible) of starting HFNO, NIV, mechanical ventilation or organ support • AND receiving systemic steroids • AND there is not another active, severe secondary infection	Give tocilizumab: • 8mg/kg IV (actual body weight) rounded to nearest 200mg (max dose 800mg), as a single dose • *Notes:– risk of secondary infection may be increased; CRP response is inhibited, and consequent reduction in CRP does not necessarily correlate with response to treatment* • *May cause raised ALT and thrombocytopenia, mimicking preeclampsia or HELLP syndrome* • *Tocilizumab actively crosses the placenta after 28/40, but no evidence of harm. Neonates should defer live vaccination (ie Rotarix, BCG) for up to 6 months if exposed to tocilizumab (notify paediatricians and LMC). All other vaccinations are safe* • *Compatible with breastfeeding*
	COVID-19 not meeting the criteria above	Do not use immune modulation therapy

Care in Labour

- One support person can be present, with appropriate PPE, if current hospital policy allows
- IV access with bloods sent for FBC, U&Es, LFT, uric acid, and G&H
- MEWS chart – minimum hourly obs (temperature, BP, PR, RR, SaO2)
- Continuous fetal monitoring
- Analgesia:
    - Entonox can be used with a single patient microbiological filter
    - Consider early epidural in labour (to lower chance of needing GA)
- Advise that there may be a delay in attendance of emergencies due to PPE requirements
- Consider consent in advance for interventions
- Follow standard practice for active management of third stage, and PPH
- Usual practice for delayed cord clamping
- Can still have skin-to-skin contact but recommend maternal chest and abdomen are wiped beforehand, and the mother wears a mask and practises good hand hygiene
- Breastfeeding should be encouraged, and the mother wears a mask and practises good hand hygiene
- Women and their babies should be kept together unless mother or baby need critical care postnatally
    - *Note: neonatal transfers to tertiary units likely to proceed as usual*

Discharge Planning and Follow-up

FURTHER INVESTIGATIONS	• **Fetal growth ultrasound scan in two weeks** • **Other tests as per the medical team**	
DISCHARGE DESTINATION	• Suspected or positive cases must be notified to Medical Officer of Health before discharge • Medical Officer of Health / Public Health Service will assess where and for how long the patient needs to isolate. See Nelson-Marlborough Community HealthPathway for COVID-19 Case Management in the Community	
CLEARANCE FROM ISOLATION	The Medical Officer of Health will authorise release from isolation regardless of whether the patient is at home or in hospital	
FOLLOW-UP	All patients	• Telephone follow-up with GP within 2 weeks • VTE prophylaxis organised • Ensure LMC aware • Referral to Obstetric Clinic • Encourage vaccination if not fully vaccinated. Vaccination is recommended from 4 weeks after clinical recovery. If a patient has received either monoclonal antibodies or convalescent plasma delay vaccination until at least 90 days after treatment.
	Patients with significant respiratory symptoms, or other persistent organ dysfunction	Follow-up as per the medical team

Links to Other Guidelines

- **Australian COVID-19 living guidelines:** https://covid19evidence.net.au/
- **NICE (UK) living guideline:** https://www.nice.org.uk/guidance/ng191
- **National Institute of Health (USA):** https://www.covid19treatmentguidelines.nih.gov/
- **WHO COVID-19 living guideline:** https://www.who.int/publications/i/item/WHO-2019-nCoV-clinical-2021-1
- **Ontario COVID-19 Science Advisory Group guideline (Canada) :** https://covid19-sciencetable.ca/sciencebrief/clinical-practice-guideline-summary-recommended-drugs-and-biologics-in-adult-patients-with-covid-19-2/
- **Australian guidance for Pregnancy and perinatal care:** https://covid19evidence.net.au/