

MANAGEMENT OF ADULTS WITH MODERATE TO SEVERE COVID-19



NATIONAL CLINICAL EVIDENCE TASKFORCE

COVID-19

FORMS OF GUIDANCE

Evidence-Based Recommendation (EBR)
Consensus Recommendation (CBR)
Practice Point (PP)

Types of EBRs

RECOMMENDATION FOR USE

RECOMMENDATION AGAINST USE

CONDITIONAL RECOMMENDATION FOR USE

CONDITIONAL RECOMMENDATION AGAINST USE

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Setting of care

ACCESS TO CARE

This flowchart should be applied after considering the clinical presentation of the patient and risk factors that might increase their overall risk of poor outcomes. Refer to [Pathways to Care for Adults flowchart](#).

MANAGING RISK OF INFECTION

As per the current national guidance on the use of personal protective equipment (PPE) in hospitals during the COVID-19 outbreak:

- use eye protection
- use P2/N95 respirators
- use other PPE as per NHMRC IPC recommendations

PP [ICEG; NHMRC]

Testing and monitoring of inpatients

BASELINE TESTING AND DIAGNOSTIC WORK UP

In all people with confirmed or presumed COVID-19, perform haematology, biochemistry laboratory testing, a CXR and an ECG on admission. PP [Taskforce]

Investigate people with suspected or confirmed COVID-19 for influenza, CAP and other differential diagnoses as per usual practice. PP [Taskforce]

Refer to the latest [CDNA guidelines](#) for advice on testing for SARS-CoV-2.

Refer to the latest [CDNA guidelines](#) for advice on targeted sampling for whole genome sequencing of COVID-19 cases.



Definition of disease severity

Moderate illness

A stable patient with evidence of lower respiratory tract disease:

- during clinical assessment, such as
 - oxygen saturation 92-94% on room air at rest
 - desaturation or breathlessness with mild exertion
- or on imaging

Severe illness

A patient with signs of moderate disease who is deteriorating OR

A patient meeting any of the following criteria:

- respiratory rate ≥ 30 breaths/min
- oxygen saturation $< 92\%$ on room air at rest or requiring oxygen
- lung infiltrates $> 50\%$

MONITORING AND MARKERS OF CLINICAL DETERIORATION

Monitoring

For people with COVID-19, monitor markers of clinical progression, such as rapidly progressive respiratory failure and sepsis, especially on days 5 to 10 after onset of symptoms. CBR [Taskforce]

In all people with confirmed or presumed COVID-19, perform ECG and haematology and biochemistry laboratory tests as clinically indicated to monitor for complications, such as acute liver injury, acute kidney injury, acute cardiac injury or shock. PP [Taskforce]

Only repeat CXR in people with confirmed or presumed COVID-19 if clinically indicated (e.g. in cases of clinical deterioration or recent intubation). PP [Taskforce]

Do not routinely perform CT scanning in people with confirmed or presumed COVID-19. PP [Taskforce]

Supportive care in hospital

DRUG TREATMENTS FOR COVID-19

Refer to the current summaries of drug treatments for COVID-19:

- [Drug treatments for adults with COVID-19](#)
- [Drug treatments for pregnant or breastfeeding women with COVID-19](#)

Refer to the [decision support tool](#) for specific guidance on drug treatments for at risk adults with COVID-19 who do not require oxygen.

These drug treatments should still be considered for other evidence-based indications in people who have COVID-19. PP [Taskforce]

FLUID MANAGEMENT

In all patients with confirmed or presumed moderate to severe COVID-19, use a restrictive fluid management strategy, avoiding the use of 'maintenance' intravenous fluids, high volume enteral nutrition, and fluid bolus for hypotension. PP [Taskforce/ANZICS]

RESPIRATORY SUPPORT

In people with confirmed or presumed COVID-19 and a $\text{SaO}_2 \leq 92\%$ or significantly below baseline, initiate supplemental oxygen (1-4 L/min) via nasal prongs. PP [Taskforce]

SUPPORTIVE THERAPY

In people with suspected or confirmed COVID-19 with signs and symptoms consistent with bacterial pneumonia, prescribe antibiotics according to local or national pneumonia guidelines.

Consider early de-escalation or cessation of antibiotics if bacterial pneumonia is excluded. PP [Taskforce]

In people with suspected or confirmed COVID-19 with onset of symptoms < 48 hours, request an influenza PCR test.

If disease is severe, consider prescribing oseltamivir 75 mg BD (or a renally adjusted dose). If the influenza PCR is negative, cease oseltamivir. PP [Taskforce]

In all people with confirmed or presumed COVID-19, anticipate complications such as arrhythmias, cardiac impairment, sepsis and multi-organ dysfunction, and address using existing standards of care. PP [Taskforce/ACEM]

Supportive care in hospital (cont.)

VENOUS THROMBOEMBOLISM PROPHYLAXIS

VTE prophylaxis

Use prophylactic doses of anticoagulants, preferably low molecular weight heparin (LMWH) (e.g. enoxaparin 40 mg once daily or dalteparin 5000 IU once daily) in adults with moderate, severe or critical COVID-19 or other indications, unless there is a contraindication, such as risk for major bleeding. Where the estimated glomerular filtration rate (eGFR) (see below) is less than 30 mL/min/1.73m², unfractionated heparin or clearance-adjusted doses of LMWH may be used (e.g. enoxaparin 20 mg once daily). **EBR** [Taskforce]

For body weights outside 50-90 kg or heights outside 150-180 cm, calculate the BSA and multiply the eGFR by BSA/1.73. **PP** [Taskforce]

Increased-dose VTE prophylaxis

Do not routinely offer therapeutic anticoagulant dosing in adults with severe or critical COVID-19. There is no additional indication for therapeutic dosing for anticoagulants in adults with severe or critical COVID-19 beyond current standard best practice. **EBR** [Taskforce]

OTHER TREATMENTS

In all people with confirmed or presumed COVID-19, switch nebulisers to metered aerosols with spacers if possible. **PP** [Taskforce/ANZICS]

In people with confirmed or presumed COVID-19, consider alternative routes of administration for intranasal medicines, recognising that in some situations administration via the intranasal route may be a safer option for affected individuals and healthcare workers. **PP** [Taskforce]

Escalation of care

HOSPITALS WITH ICU

Urgently refer people with suspected or confirmed COVID-19 to intensive care if they are haemodynamically unstable, have rapidly worsening tachypnoea or hypoxaemia, or require ≥ 40% FiO₂ to maintain SaO₂ ≥ 92% (or acceptable saturations in those with lower baselines). **PP** [Taskforce]

HOSPITALS WITHOUT ICU

Consider the need for early transfer of people with suspected or confirmed COVID-19 to a higher-level facility with an ICU. **PP** [Taskforce]

When preparing for transfer of people with suspected or confirmed COVID-19, consider infection control implications and whether intubation is required prior to transfer, as per local retrieval team policies. **PP** [Taskforce]

People with suspected or confirmed COVID-19 who are clinically ready for hospital discharge should be encouraged to stay at home until their acute symptoms have resolved. **PP** [Taskforce/CDNA]

In patients with severe COVID-19 offer appropriate rehabilitation to optimise recovery, including early hospital rehabilitation. Plan transition of care to the community, including handover to general practice. **PP** [Taskforce]

VTE prophylaxis

Do not prescribe apixaban prophylaxis after discharge from hospital for adult patients who have been hospitalised with COVID-19 unless they have developed a thromboembolic event in hospital, or have another clinical indication to start or re-start prophylactic apixaban therapy. **EBR** [Taskforce]

Follow up care

- Assist people to connect to a GP if they do not have one.
 - When the acute phase of the illness has resolved, and the patient is mobile, undertake a comprehensive review to assess their ongoing and rehabilitation needs.
 - Review medications that were stopped or started.
- PP** [Taskforce]

HORMONE THERAPIES

Oestrogen-containing therapies

In women who have COVID-19 and who are taking oral menopausal hormone therapy (MHT), manage these medications as per usual care. In women who stop or suspend oral MHT, review the indication for this and consider transitioning to a transdermal preparation. Manage transdermal MHT as per usual care. **CBR** [Taskforce]

In women who have COVID-19 and who are taking oestrogen-containing contraception, manage these medications as per usual care. **CBR** [Taskforce]

In women who stop or suspend contraception when they have COVID-19, restart contraception at the time of discharge or when acute symptoms have been resolved. **CBR** [Taskforce]

For details of high level respiratory support see the **RESPIRATORY SUPPORT FOR ADULTS WITH SEVERE TO CRITICAL COVID-19** Clinical Flowchart

Sources

- ACEM** - Australasian College for Emergency Medicine Clinical guidelines for the management of COVID-19 in Australasian emergency departments. Update 10 November 2021.
- ANZICS** - The Australian and New Zealand Intensive Care Society (ANZICS) COVID-19 Guidelines. V3.0, 20 October 2020.
- CDNA** - Coronavirus Disease 2019 (COVID-19) Communicable Diseases Network Australia (CDNA) National Guidelines for Public Health Units.
- ICEG** - Guidance on the use of personal protective equipment (PPE) for health care workers in the context of COVID-19
- National Clinical Evidence Taskforce** - Australian guidelines for the clinical care of people with COVID-19.
- NHMRC** - Australian Guidelines for the Prevention and Control of Infection in Healthcare (2019)