

**SESLHD COVID-19 BUSINESS RULE SESLHDBR/094**

<b>Name</b>	<b>Aerosol-generating interventions (AGI) for conditions during the COVID-19 pandemic period</b>	
<b>What it is / In scope</b>	<p><u>Aerosol-generating therapies:</u></p> <ul style="list-style-type: none"> <li>• Non-invasive ventilation (NIV) including bilevel positive airway pressure therapy (Bi-PAP or VPAP)</li> <li>• Continuous positive airway pressure therapy (CPAP)</li> <li>• High flow nasal oxygen therapy (HFNO)</li> <li>• Nebulisers</li> <li>• Cough insufflator/exsufflator machine</li> <li>• Other AGI/AGP therapies i.e. sputum induction, Positive Expiratory Pressure (PEP) device use, suctioning and manual assist cough.</li> </ul> <p><u>Aerosol-generating diagnostics:</u></p> <ul style="list-style-type: none"> <li>• Spirometry</li> <li>• Peak flow monitoring</li> </ul>	
<b>Risk Rating</b>	High	<b>Review Date</b> September 2022, or increase in COVID-19 risk status in healthcare settings
<b>Who it applies to</b>	<p><b><u>Includes:</u></b> Adult inpatients in general ward areas, Coronary Care Unit, Emergency Departments (ED), Outpatients and patients enrolled in Respiratory coordinated Care Programs (RCCP).</p> <p><b><u>Excludes:</u></b> Intensive Care, Recovery, Anaesthetics and Operating Theatres, Obstetrics, Paediatrics.</p>	
<b>Why the need for BR</b>	<p>To ensure a safe clinical environment for clinicians and patients.</p> <p>To minimise delay in initiating standard aerosol generating therapies/diagnostics in the treatment of respiratory or cardiac conditions.</p>	
<b>Risk Assessment</b>	<p>A risk assessment must be conducted prior to the initiation of any of the above aerosol-generating interventions. Alternative therapies and investigations that avoid AGPs must be considered. Non-urgent investigations should be deferred.</p> <p>The risk assessment must be conducted by either a medical registrar, intensive care registrar, ED registrar, Advanced Trainee, consultant medical officer, respiratory CNC OR a senior physiotherapist.</p> <p>The patient should have had a SARS-CoV-2 PCR performed on admission and that result must be documented. If the result is unavailable or the patient has symptoms or signs consistent with COVID-19 the procedure must be performed in a negative pressure (or single room) with contact, droplet and airborne precautions. A rapid COVID-19 test can be requested by a registrar if needed without calling Infectious Diseases. The indication needs to be recorded on the request form.</p>	
<b>Documenting the Risk Assessment</b>	<p>The risk assessment should be highlighted/flagged in the medical record by using a heading such as Risk Assessment for AGP.</p>	

	<p>The documented Risk Assessment for AGP in the medical record must state:</p> <ul style="list-style-type: none"> <li>• actual clinical benefit of or specific indication for the AGP or alternative therapies</li> <li>• the <b><u>patient's COVID-19 status</u></b></li> <li>• assess the clinical setting and the most appropriate <b><u>location</u></b> for the aerosol generating procedure (AGP) or investigation</li> <li>• type of accommodation and type of precautions according to CEC guidelines.</li> </ul>
<b>Ceiling of Care</b>	For adults being admitted to hospital a discussion regarding ceiling of care should be held either at the time of admission or as soon as practicable. This includes appropriate documentation of ceiling of care and resuscitation orders in the event of initial treatment failure.
<b>Transmission based precautions</b>	As per Clinical Excellence Commission guidelines. <a href="https://www.cec.health.nsw.gov.au/keep-patients-safe/COVID-19/COVID-19-IPAC-manual">https://www.cec.health.nsw.gov.au/keep-patients-safe/COVID-19/COVID-19-IPAC-manual</a>
<b>Selection of PPE</b>	As per Clinical Excellence Commission guidelines. See links below <a href="https://www.cec.health.nsw.gov.au/keep-patients-safe/COVID-19/COVID-19-IPAC-manual">https://www.cec.health.nsw.gov.au/keep-patients-safe/COVID-19/COVID-19-IPAC-manual</a>
<b>Changes to practice: <u>Nurse / Allied Health initiated therapies</u></b>	<p>Ordinarily, in some clinical areas CPAP, bilevel NIV, prescription of nebulisers, spirometry and peak flow are nurse/allied health initiated.</p> <p>To optimise safety AGPs will cease to be nurse/allied health initiated for the duration of the COVID-19 pandemic period.</p> <p>Senior physiotherapists may approve spirometry and peak flow testing after an appropriate risk assessment.</p>
<b>Changes to practice: <u>Nebulisers</u></b>	<ul style="list-style-type: none"> <li>• Nurse/allied health initiated normal saline nebuliser prescription has been removed as a nurse initiated option in eMR.</li> <li>• All standing orders for nebulised medications have also been temporarily rescinded and removed from eMR.</li> <li>• Spacers and metered dose inhalers or dry powdered devices are the recommended delivery system for inhaled medications.</li> <li>• The decision to use nebulisers can only be made by the Admitting Medical Consultant in conjunction with the NUM or Nursing Team Leader of the proposed location</li> <li>• With the exception of the ED Resus bays, all in scope clinical areas, should remove mask nebuliser set ups from stocked shelves for the duration of the COVID-19 pandemic period.</li> </ul>
<b>Changes to practice: <u>Management of tracheostomy or laryngectomy</u></b>	<ul style="list-style-type: none"> <li>• Patients with a tracheostomy or laryngectomy requiring regular normal saline nebulisers /continuous humidification will require a risk assessment led by an Emergency, Respiratory or attending medical consultant on appropriate transmission based precautions.</li> <li>• Site specific management of in-line suction and closed circuits will be described in clinical business rules.</li> </ul>
<b>Changes to practice: <u>Domestic CPAP/Bi-level devices</u></b>	<ul style="list-style-type: none"> <li>• All inpatients usually on domestic CPAP/Bi-level devices should not use these therapies <b>until a risk assessment</b> is conducted by the attending medical consultant of the admitting team</li> <li>• For patients admitted under Respiratory Medicine or who are being consulted by Respiratory Medicine, domestic CPAP/ bilevel NIV devices can be used once a risk assessment is completed and documented by, or discussed with, the respiratory consultant.</li> </ul>

<b>Changes to practice: spirometry</b>	<ul style="list-style-type: none"> <li>Ward spirometry will not routinely be performed. Spirometry will only be performed if justified by specific clinical need and after risk assessment. Choice of PPE and location will be determined during the risk assessment.</li> <li>An in-line viral filter must be used.</li> </ul>
<b>When to use the BR</b>	Prior to the commencement of aerosol generating therapies or diagnostics for the treatment of respiratory or cardiac conditions.
<b>Why the rule is necessary</b>	CPAP, bilevel NIV, HFNO, nebulisers and cough insufflator/exsufflator machines and some physiotherapy techniques (see above) may increase the risk of transmission of respiratory infections to staff members and other patients as they are AGPs. Given the current prevalence of COVID-19 in the community, restrictions should be implemented to reduce the risk of transmission of influenza-like illness AND COVID-19 within the hospital setting.
<b>Who is responsible</b>	General Managers and Clinical teams
<b>Executive Sponsors</b>	Clinical Stream Director, Cardiac and Respiratory
<b>Author</b>	Cardiac and Respiratory Clinical Stream Committee

### Revision and Approval History

Date	Revision Number	Author and Approval
June 2020	Draft	Draft business rule endorsed by Executive Sponsor
June 2020	0	Approved by Clinical and Quality Council. Published by Executive Services
July 2021	1	Minor review. Risk Assessment section reworded to improve clarity and to emphasise that patient location and required precautions, is determined on a case by case basis. Scope extended to include Respiratory Coordinated Care Program (RCCP) patients. Links to CEC & ACI documents refreshed. Approved by the Executive Sponsor.
August 2021	2	Respiratory Physiotherapy guidelines link updated. Approved by Executive Sponsor.
March 2022	3	Responsibility for conducting risk assessment extended to respiratory CNC, senior physiotherapists. Removed requirement for risk assessment by Infectious Diseases. Aerosol generating techniques used in physiotherapy listed. Following sections removed: Initiating NIV in ED removed; Responsibility for conducting risk assessment. Approved by Executive Sponsor.

<b>Relevant Guidelines</b>	<b>Source</b>	<b>Link</b>
Aerosol generating respiratory therapies Nebulisers	ACI	<a href="https://aci.health.nsw.gov.au/__data/assets/pdf_file/0009/582822/ACI_Respiratory-High-risk-therapies_Nebulisers_V2.pdf">https://aci.health.nsw.gov.au/__data/assets/pdf_file/0009/582822/ACI_Respiratory-High-risk-therapies_Nebulisers_V2.pdf</a>
Respiratory Physiotherapy	ACI	<a href="https://www.health.nsw.gov.au/Infectious/covid-19/communities-of-practice/Documents/guide-respiratory-physiotherapy.pdf">https://www.health.nsw.gov.au/Infectious/covid-19/communities-of-practice/Documents/guide-respiratory-physiotherapy.pdf</a>
Transmission based precautions	CEC	<a href="http://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/transmission-based-precautions">http://www.cec.health.nsw.gov.au/keep-patients-safe/infection-prevention-and-control/transmission-based-precautions</a>
Personal Protective Equipment (PPE) guidelines	CEC	<a href="http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0006/580218/Infection-Prevention-and-Control-COVID-19-Personal-Protective-Equipment.pdf">http://www.cec.health.nsw.gov.au/__data/assets/pdf_file/0006/580218/Infection-Prevention-and-Control-COVID-19-Personal-Protective-Equipment.pdf</a>
COVID-19 Elective Surgery and Infection Prevention and Control precautions	ACSQHC	<a href="https://www.safetyandquality.gov.au/publications-and-resources/resource-library/covid-19-elective-surgery-and-infection-prevention-and-control-precautions">https://www.safetyandquality.gov.au/publications-and-resources/resource-library/covid-19-elective-surgery-and-infection-prevention-and-control-precautions</a>