

Guideline: Aerosol generating respiratory therapies - Respiratory physiotherapy



Endorsed by Queensland Statewide Respiratory Clinical Network

Some respiratory physiotherapy interventions generate a high level of aerosolised droplets that spread widely, which can increase the risk of transmission of respiratory viruses to healthcare workers.

Please make sure respiratory physiotherapy techniques are the most appropriate intervention for your patient with acute respiratory viral illness (including COVID-19).

The purpose of this document is to provide guidance and support to respiratory physiotherapists to deliver care during the COVID-19 pandemic.

Remember

- Respiratory (chest) physiotherapy interventions include airway clearance techniques (active cycle of breathing technique, forced expiratory technique, percussion and vibrations, Positive Expiratory Pressure (PEP) therapy (including bubble PEP), positioning and gravity assisted postural drainage, intra or extra pulmonary high frequency oscillation devices, autogenic drainage), secretion clearance removal (huff and cough, suctioning, assisted or stimulated cough maneuvers, cough assist machine), and mobilisation and exercise prescription which may trigger a cough and/or sputum expectoration.
- **Ensure contact, droplet and airborne precautions are in place. Healthcare workers should be fully vaccinated and wearing fit-tested N95 masks and eye protection.** ([Australian guidelines for SARS-CoV-2 infection prevention and control of COVID-19 in healthcare workers \(magicapp.org\)](#))
- During techniques which may encourage or provoke a huff or cough, cough etiquette and hygiene is essential.
 - Teach techniques, then leave the room for huff and cough and continue to monitor outside the room if possible, e.g. via telephone.
 - If this is not possible, staff should be positioned ≥ 2 metres away and out of the 'blast zone' or line of cough.
 - Teach cough hygiene including encouraging turning of head away and coughing into elbow and/or encouraging 'catch your cough' with a tissue, then dispose of tissue and perform hand hygiene.
- Avoid nebulisation of bronchodilator medication or saline (refer to Aerosol generating respiratory therapies: nebulisers).
- Sputum induction should not be performed unless necessary. In this case, ascertain whether the patient is productive of sputum and able to clear sputum independently.

- Any room which has had an aerosol generating procedure in it requires airborne precautions for a minimum of 30 minutes after. The exact time depends on air changes per hour. Refer to the Queensland Health: [Interim infection prevention and control guidelines for the management of COVID-19](#) in healthcare settings.
- For patients with COVID-19 receiving respiratory support, use single and negative pressure rooms wherever possible. If none are available, other alternatives are single rooms, or shared ward spaces with cohorting of confirmed COVID-19 patients. The additional relative risk of infection to healthcare workers associated with specific oxygen therapies and respiratory support is uncertain but is thought to add minimal additional risk in an environment where transmission of infection with COVID-19 is already high. [Australian guidelines for the clinical care of people with COVID-19 \(magicapp.org\)](#).

IMPORTANT: Prioritise respiratory physiotherapy interventions performed independently by the patient over therapist-delivered interventions to reduce the risk of transmission of viruses to health care workers.

Version Control

Version	Date	Author	Changes	Date approved by CSRG	Proposed Review Date
0.1	12/03/2020	Statewide Respiratory Clinical Network Steering committee	New document		
1.0	27/10/2021	Changes made and endorsed by the Statewide Respiratory Steering Committee	Updated content. Format changes.		27 April 2022
2.0	9/12/2021	Statewide Respiratory Clinical Network Steering committee	Endorsed by the COVID Response System Group (CSRG).		27 April 2022
2.1	13/12/2021	Changes made and endorsed by the Statewide Respiratory Steering Committee	Purpose statement and Workforce and funding considerations added. Renamed Guideline.	22/12/2021	27 April 2022
2.2	12/01/2022	Statewide Respiratory Clinical Network	Changes (highlighted) to align with Australian Guidelines for the clinical care of people with COVID-19 – Respiratory Management. Reorder of dot points to highlight PPE / vaccination information.	25/01/2022	27 April 2022