



# RESPIRATORY PHYSIOTHERAPY, PERSONAL PROTECTIVE EQUIPMENT & COVID-19

## POSITION STATEMENT

**Respiratory physiotherapy interventions are aerosol generating procedures (AGPs) that are clinically indicated for some patients with suspected or confirmed COVID-19.**

Where these interventions are indicated, **physiotherapists who perform them must have access to the recommended personal protective equipment** including N95 respirator (fit-tested, seal checked), isolation gown, gloves, and eye protection (goggles or face shield).

**Denying patients access to these needed interventions and/or limiting access to recommended PPE for respiratory physiotherapy interventions places patients, physiotherapists, other health professionals and the community at risk of infection and/or negative health outcomes.**

**The OPA calls on the Chief Medical Officer of Health and the Emergency Operations Committee to immediately clarify the guidance provided to include respiratory physiotherapy interventions as an AGP and to ensure that all health professions, including physiotherapists, have access to the recommended PPE in the provision of these services.**

## BACKGROUND

Recent directives from Public Health Ontario and from the Chief Medical Officer of Health speak to the use of Personal Protective Equipment (PPE) for health professionals. These directives make distinctions based on whether procedures are Aerosol Generating Procedures (AGP) or not in determining the level of PPE needed for specific interventions.

The list of interventions include activities performed by physiotherapists in Ontario under their own authority or through delegation by another health professional with the authority to do so.

Directive #1 for Health Care Providers and Health Care Entities revised March 30<sup>th</sup> 2020 states that “Health Providers and Health Care Entities must review and adopt the Technical Brief ‘Updated IPAC Recommendations for Use of Personal Protective Equipment for Care of

Individuals with Suspected or Confirmed COVID-19' dated March 25, 2020.<sup>1</sup> The IPAC<sup>2</sup> lists the following as AGMPs:

- Endotracheal intubation, including during cardio-pulmonary resuscitation
- Cardio-pulmonary resuscitation during airway management
- Open airway suctioning
- Bronchoscopy (Diagnostic or Therapeutic)
- Autopsy
- Sputum induction (Diagnostic or Therapeutic)
- Non-invasive positive pressure ventilation for acute respiratory failure (CPAP, BiPAP3-5)
- High flow oxygen therapy

Furthermore, the recommended use of PPE for health professionals performing AGP interventions with patients with suspected or confirmed COVID-19:

*"Airborne, Droplet and Contact precautions, including: N95 respirator (fit-tested, seal checked), isolation gown, gloves, eye protection (goggles or face shield), negative pressure room, if available"*<sup>3</sup>

The OPA has become aware of some organizations that are interpreting these directives and IPAC guidelines to either:

1. Stop all respiratory physiotherapy interventions as it is 'not recommended' based on previous guidance that lists sputum induction as an intervention to be avoided for COVID-19 patients unless clinically indicated; or
2. Exclude respiratory physiotherapy (also referred to as chest physiotherapy) from the list of AGPs and thereby denying access to recommended PPEs to physiotherapists.

**Both of these interpretations are incorrect and their applications are placing patients, physiotherapists, other health professionals and the community at risk of infection and/or negative health outcomes.**

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<sup>1</sup> COVID19 Directive #1 for Health Care Providers and Health Care Entities – Revised March 30, 2020

<sup>2</sup> <https://www.publichealthontario.ca/-/media/documents/ncov/updated-ipac-measures-covid-19.pdf?la=en> accessed April 2, 2020

<sup>3</sup> Ibid



Recently published (30 March 2020) Physiotherapy Management for COVID-19 in the Acute Hospital: Recommendations to Guide Clinical Practice<sup>4</sup> has been endorsed by the World Confederation of Physical Therapy and national organizations including the Canadian Physiotherapy Association and set out specific guidelines for the physiotherapy interventions recommended by the best available evidence.

Respiratory physiotherapy is recommended for COVID-19 patients with or without co-existing respiratory or neuromuscular comorbidities who have evidence of consolidation within the lungs and/or difficulty clearing pulmonary secretions. Patients who exhibit indications for these interventions should have access to them to avoid deterioration of their respiratory status and an escalation of interventions.

All respiratory physiotherapy interventions are potentially AGPs as they aim to increase sputum clearance often through increased force expiration and increased force of cough. These interventions are not akin to normal coughing and therefore must be viewed as sputum inducing AGPs with the associated recommended precautions applied.

From the guidelines the list of respiratory physiotherapy interventions that can be considered AGPs:

- Cough generating procedures e.g. cough during treatment, huff.
- Positioning/gravity assisted drainage techniques and manual techniques (e.g. expiratory vibrations, percussion, manual assisted cough) that may trigger a cough and the expectoration of sputum
- Use of positive pressure breathing devices (e.g. IPPB), mechanical insufflation-exsufflation
- (MI-E) devices, intra/extra pulmonary high frequency oscillation devices (e.g. The Vest, MetaNeb, Percussionaire)
- PEP and oscillating PEP devices
- BubblePEP
- Nasopharyngeal or oropharyngeal suctioning etc.
- Manual hyperinflation (MHI)
- Open suction
- Saline instillation via and open circuit / endotracheal tube
- Inspiratory muscle training, particularly if used with patients who are ventilated and disconnection from a breathing circuit is required

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<sup>4</sup> **The International Guideline for Physiotherapy Management of COVID-19 in the Acute Hospital Setting:** An international team of expert researchers and clinicians within the intensive care and acute cardiorespiratory fields have developed these recommendations for physiotherapy management for COVID-19 in the acute hospital setting. <https://doi.org/10.1016/j.jphys.2020.03.011>. **Citation:** Thomas P, Baldwin C, Bissett B, Boden I, Gosselink R, Granger CL, Hodgson C, Jones AYM, Kho ME, Moses R, Ntoumenopoulos G, Parry SM, Patman S, van der Lee L (2020): Physiotherapy management for COVID-19 in the acute hospital setting. Recommendations to guide clinical practice. Version 1.0, published online 30 March 2020. Journal of Physiotherapy



- Sputum inductions
- Any mobilisation or therapy that may result in coughing and expectoration of mucus.

Some organizations have cited that the studies to date have been insufficient to classify some of these interventions as AGPs however these are the very interventions that are used to achieve sputum induction. At this time, especially in the context of the COVID-19 pandemic, decisions related to treatment and guidelines for PPE must be based on the application of the best available evidence to ensure timely access to care and safety of patients and health care professionals.