

ANZCA statement on personal protection equipment during the COVID-19 pandemic (30 March 2020)

The Australian and New Zealand College of Anaesthetists (ANZCA) acknowledges that there is significant and justified concern from anaesthetists, pain medicine specialists and indeed all clinicians across Australia and New Zealand regarding the appropriate use of personal protection equipment (PPE) during the current COVID-19 crisis.

These concerns principally relate to:

- The "*minimum threshold for PPE use*". In other words for which patients do I need to wear PPE?
- The adequacy of the PPE supply chain such that clinicians are confident to treat patients without worrying about compromising their own health and that of others.

Stocks of PPE are finite, and need to be used judiciously in readiness for their required availability in the coming weeks and months.

The college is well aware that there is no consistent national or international guidance on exactly where the minimum threshold for PPE requirement sits at present. It is clear from feedback that guidance and local practice are highly variable and frequently changing throughout Australia and New Zealand.

We are working with the College of Intensive Care Medicine, the Australian and New Zealand Intensive Care Society, the Australasian College for Emergency Medicine, the Australian Society of Anaesthetists, the New Zealand Society of Anaesthetists and the Australian Health Protection Principle Committee (AHPPC – the expert advisory body to Australia's chief medical officer) to inform a consensus statement on the appropriate use of PPE. We hope to release this consensus statement in the coming weeks, and are striving to ensure it will apply to both Australia and New Zealand.

We recognise that fellows across both nations are seeking advice now. Consequently, the college has prepared the following general advice, in addition to the current recommendations from the AHPPC presented in **Box 1**.

The college is advised there is insufficient community transmission in the Australian and New Zealand context to justify widespread changes to the current AHPPC recommendations. We appreciate geographic variation in the character and magnitude of the COVID-19 epidemic and strongly encourage health services or jurisdictions who wish to depart from this advice to consult their public health units.

As always, the most effective protection is frequent and effective hand hygeine



1. Hierarchies of PPE

PPE is one component of a hierarchy of protections for healthcare workers broadly specified as follows:

- a. The use of **standard precautions** (hand hygiene, cough etiquette, universal precautions) for routine care of all patients. Applied to procedures undertaken in the course of anaesthesia and pain medicine where there is the likelihood for splashing, splattering or spraying of blood or body fluids, this also includes the wearing of gloves, protective eyewear or face shields, masks, gowns and/or plastic aprons
- b. The use of **contact and droplet precautions** (surgical mask, eye shield or goggle protection, long sleeve gown, gloves) for routine care of patients with suspected or confirmed COVID-19.
- c. The use of contact and airborne precautions (P2 respirator, eye shield/goggle protection, imperviable gown, gloves +/- double gloves for primary airway proceduralist) when performing aerosol generating procedures in patients with suspected or confirmed COVID-19, and in critically ill patients with COVID-19. In certain very high risk circumstances, the use of powered air purifying respirators (PAPRs) may also be recommended.

BOX 1: Current AHPPC-endorsed national guidelines

- 1. The use of **ROUTINE PRECAUTIONS** in all patients who **ARE NOT** suspected or confirmed COVID-19
- The use of CONTACT and DROPLET PRECAUTIONS (surgical mask, eye protection, gowns, gloves, theatre hats, protective footwear) for routine care of patients with SUSPECTED OR CONFIRMED COVID-19,
- 3. The use of **CONTACT and AIRBORNE PRECAUTIONS** (P2 respirator, eye protection, gowns, gloves, theatre hat, protective footwear) when performing aerosol generating procedures in patients with **SUSPECTED OR CONFIRMED** COVID-19, and in critically ill patients with COVID-19.

Definition of "SUSPECTED OR CONFIRMED COVID-19" can be found at <u>this link</u> (see pages 5-6).

2. Risk stratification

- a. Most importantly, these protections include the early identification of high-risk patients these being: symptomatic patients with COVID-19, and asymptomatic patients at high risk of developing COVID-19 due to epidemiological factors (including close contacts and those with recent international travel). These are defined in the *COVID-19 National Guidelines for Public Health Units* and jurisdictional guidelines.
- b. Consultation with local infectious disease clinicians will guide risk stratification and management of patients whose risk of community acquired transmission is uncertain, for example symptomatic patients without confirmed infection or epidemiological risk factors and or patients who are classified as low-risk who live in geographic settings where apparent clusters of community acquired infection have been identified.

c. Given that the incidence of community acquired infection is currently low, patients without epidemiological risk factors or symptoms should be deemed low risk. The use of standard PPE in these patients is appropriate and contributes to preserving the PPE supplies.

Contact and Airborne Precautions for Aerosol generating procedures (AGPs)

There is broad consensus that the following procedures are classified as aerosol generating and where there is a confirmed or suspected COVID-19 case, **contact and airborne PPE** must be used:

- a. Bag and mask ventilation
- b. Tracheal intubation

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- c. Tracheal extubation
- d. Ventilation via supraglottic airways (including insertion and removal)
- e. Non-invasive ventilation including CPAP and BiPAP
- f. High flow nasal oxygen therapy
- g. Diagnostic and therapeutic instrumentation of the airway including bronchoscopy and tracheostomy.
- h. Surgical AGPs any surgical procedure where aerosolization of tissue is likely; for example, the use of pulsed lavage, the use of high-speed drills and laser techniques
- i. Cardiopulmonary Resuscitation (CPR)

4. Procedures Requiring Contact and Droplet Precautions.

4.1 Regional anaesthesia

Consistent with the above classification, where anaesthesia can be safely provided without any of the above AGPs, (for example neuraxial, regional and local anaesthesia) it is acceptable and appropriate to use droplet PPE.

The generally accepted requirement to don airborne PPE within 20-30minutes of an AGP (according to local room ventilation conditions) applies to situations in which unintended conversion to general anaesthesia occurs. In anticipation of this, consideration should be given to donning airborne PPE in preparation for time critical situations, such as emergency caesarean section, irrespective of the primary mode of anaesthesia.

4.2 All intravascular lines IV, CVC, arterial)

4.3 In theatre for non-aerosol generating procedures (AGP)

4.4 During recovery more than 20 minutes after AGP

4.5 Ward rounds, outpatients when less than two metres from patient



5. Training and preparation

It is well recognised that donning and in particular doffing of PPE carry risks of transmission of infection from patients to healthcare workers. It is essential that each and every one of us has received expert training on the use of PPE and the management of AGPs. This may take the form of watching videos and/or simulation training. There are a number of resource links for this on the college Library Guide pages <u>here</u>.

6. Wellbeing

Please actively manage your own wellbeing and that of others. This is a stressful time for all and we need to stay well to able to lead our departments and hospitals through this crisis.

PPE Supplies

We are also aware that the PPE supply is challenging and may be variable in certain areas at times.

National and regional bodies are trying to secure and enhance production and supply in both countries.

While the college cannot control that process, we categorically support the need for healthcare workers to be protected from the risk of transmission and are actively consulting with fellows and government to ensure that government strategies are informed by up to date information and in the best interests of our fellows across all regions and sectors.