



August 6 2020

COVID-19 Guidance on the use of personal protective equipment by health care workers in areas with significant community transmission

This advice has been developed by the Infection Control Expert Group on the basis of expert opinion, following direct consultation with frontline clinicians who have managed cases in areas with high community transmission. For additional guidance on infection prevention and control during the COVID-19 pandemic, see the [Department of Health website](#).

The advice for health care workers about using personal protective equipment (PPE) during patient encounters is being continually reviewed as the situation changes. Check with your state or territory health department for specific advice for your jurisdiction.

In geographic areas with significant community transmission of COVID-19 (as defined by jurisdictional public health units) and in specified clinical settings, health care workers may need to take *extra precautions above those usually indicated for standard and transmission-based precautions*.

All PPE should be used in line with the principles in the [Australian Guidelines for the Prevention and Control of Infection in Healthcare \(2019\)](#), acknowledging the unique circumstance of COVID-19.

Health care workers who use particulate filter respirators (PFRs) such as P2 or N95 respirators, must be trained in their correct use, including how to perform fit-checking and safe removal. Unless PFRs are used correctly, their effectiveness will be compromised and the risk of infection (to the wearer) increased.

PFRs with valves should not be used, as there is a risk of exhaled air, from wearers who are infected, containing viral particles.

Routine clinical care

In geographic areas with significant community transmission of COVID-19:

- **In all clinical settings**, use standard precautions^{1,2} (including eye protection) AND wear a surgical mask.
- **For routine non-hospital care and hospital care of individual patients with suspected, probable or confirmed COVID-19, who are in quarantine or have acute respiratory symptoms**, use contact³ and droplet⁴ precautions, including eye protection.

¹ [Approach 3 Standard Precautions Photo](#) (Australian Commission on Safety and Quality in Health Care [ACSQHC])

² For the care of all patients undertake a risk assessment to determine the need for additional PPE, in accordance with the [Australian Guidelines for the Prevention and Control of Infection in Healthcare \(2019\)](#)

³ [Contact Precautions in addition to Standard Precautions](#) (ACSQHC)

⁴ [Droplet Precautions in addition to Standard Precautions](#) (ACSQHC)

Challenging patient behaviours in specified clinical settings

ICEG recommends that, until further evidence is available, PFRs should be used in emergency departments, residential care facilities, COVID-19 wards, and other hospital in-patient settings, in areas with significant community transmission, where one or both of the following apply:

1. **For the clinical care of patients with suspected, probable or confirmed COVID-19, who have cognitive impairment, are unable to cooperate, or exhibit challenging behaviours** (see below). In this context, consider the use of contact, droplet and airborne⁵ precautions (including eye protection), including the use of a PFR, instead of a surgical mask.
2. **Where there are high numbers of suspected, probable or confirmed COVID-19 patients AND a risk of challenging behaviours and/or unplanned aerosol-generating procedures** (e.g. including intermittent use of high flow oxygen). In this setting, consider extended use of PFRs, for up to 4 hours, if tolerated, to avoid the need for frequent changes of face covering.

This advice is based on the following:

- Recent experience in these settings, suggests an increased risk of health care worker infection, despite apparent compliance with infection control precautions.
- Anecdotally, this increased risk is associated with **challenging behaviours**, such as shouting, by patients who find instructions hard to follow (e.g. secondary to cognitive impairment⁶ or mental illness), especially in the first week of infection, when viral load may be high.
- These transmissions seem to have occurred in the setting of prolonged, close patient contact. It remains unclear whether this reflects enhanced infection potential via predominant modes of transmission (i.e. increased dispersal of infectious droplets and heavy environmental contamination) or aerosolisation due to enhanced physiological activities.
- Therefore, it is uncertain that the risk will be reduced by use of a PFR and past experience indicates that health care worker infections can occur despite their use.
- However, it is plausible **that correct use of a PFR**, in conjunction with all other recommended infection prevention and control measures, may provide added protection.

Aerosol generating procedures

Health care workers should consider the following:

- Avoid performing unnecessary aerosol generating procedures (AGPs).
- If an AGP is required, use contact, droplet and airborne precautions (including eye protection).
- Ensure procedures are conducted in a closed door single negative pressure room, if available, and only essential health care workers remain in the room during the procedure.
- Following an AGP, the room should remain vacant for at least 30 minutes,⁷ followed by appropriate environmental cleaning.

⁵ [Approach 1 Airborne Standard Precautions photo](#) (ACSQHC)

⁶ A [fact sheet](#) produced by the Australian Commission on Safety and Quality in Health Care to support provision of safe care for people with cognitive impairment during COVID-19 is available at <https://www.safetyandquality.gov.au/our-work/cognitive-impairment/cognitive-impairment-and-covid-19>

⁷ Source: <https://www.cdc.gov/infectioncontrol/guidelines/environmental/appendix/air.html#tableb1>