Contents
Introduction ........................................................................................................................................... 3
Purpose .................................................................................................................................................. 4
Elements of a Respiratory Protection Program .................................................................................. 4
   1. Infection Prevention and Control Measures ............................................................................. 4
   2. Vaccination Program and Compliance .................................................................................... 5
   3. Eye protection ........................................................................................................................... 5
   4. Masks and Respirators ............................................................................................................. 5
       4a. Surgical masks ....................................................................................................................... 5
       4b. Respirators .......................................................................................................................... 6
       4c. Respirator fit checking ......................................................................................................... 7
       4d. Respirator Fit Testing ........................................................................................................... 8
   5. Program requirements ............................................................................................................... 11
       5a. Fit Test assessor training: ..................................................................................................... 12
       5b. Education and training ......................................................................................................... 12
       5c. Skill/competency assessment of RPP .................................................................................... 13
   6. Legal and legislative framework .............................................................................................. 13
   7. Before using P2/N95 respirators (or equivalent)? .................................................................... 14
References ............................................................................................................................................. 15
Appendix A: Fit testing implementation checklist and compliance self-assessment ...................... 16
Introduction

With the emergence of global infectious diseases such as COVID-19 and Severe Acute Respiratory Syndrome (SARS), there is a need for health workers (HWs) to be able to work safely and be protected against the exposure to respiratory pathogens. In order for this to be done systematically, Local Health Districts (LHDs), Speciality Health Networks (SHNs) and NSW Ambulance are required to implement a Respiratory Protection Program (RPP). This document provides guidance for LHDs and SHNs regarding respiratory protection which uses a risk management approach based on the risk of exposure to infectious droplet and airborne pathogens. It is expected a RPP will complement existing Infection Prevention and Control (IPAC) and Work Health and Safety (WHS) programs. The Chief Executive of the LHD/SHN or NSW Ambulance assigns leadership responsibility, personnel and resources to implement and comply with this guidance.

This guidance document focuses on respiratory protection in relation to the use of respirator masks and what is required to ensure these are managed, worn and used safely. It does not address other aspects of infection prevention and control or other personal protective equipment (PPE). For information on infectious diseases that require the use of PPE that are not addressed in this document refer to Infection Prevention and Control Policy Directive and NSW Infection Prevention and Control Practice Handbook.

Existing respiratory protection controls have been implemented and are in place within NSW health successfully providing protection to our HWs against respiratory communicable diseases since the introduction of transmission-based precautions (1996). These earlier controls have successfully focused on fit checking and therefore, any RPP should continue to promote fit checking along with other controls detailed in this document. In circumstances where the potential exists for more widespread levels of community transmission to occur, it is acknowledged that there is an opportunity to develop a specific set of measures for higher risk procedures that utilises the fit testing process. It is important to note that the absence of fit testing does not automatically equate to inadequate protection in the same way the completion of fit testing does not equate to adequate protection every time a respirator is applied.

Fit checking at time of use has been and continues to be the most reliable method of ensuring the HW has achieved an optimal fit and required seal in real time. The evolving situation with COVID-19 is an opportunity to consider progressively and adopt over time additional controls such as fit testing whilst evidence remains inconclusive.

This document should be used in conjunction with national guidelines and NSW policies, procedures and guidelines.

Additional resources are:

Infection prevention and control: Application of PPE during COVID-19
Infection Prevention and Control: Management of COVID-19 in Healthcare Settings
Purpose

A RPP will help to protect HWs from hazards in relation to the transmission of airborne infectious agents as well as in some cases, dusts and other particles. Risks for HWs are not uniform and this document is designed for those HWs who are at the highest risk of exposure because they are performing respiratory aerosol generating procedures (AGPs) for patients with suspected, probable or confirmed respiratory infection (e.g. COVID-19) or communicable diseases with potential for airborne transmission (e.g. pulmonary or laryngeal Tuberculosis) (see Table 1 for examples of AGPs classified according to risk of airborne transmission of SARS-CoV-2). Respiratory protection is one aspect of both IPAC as well as WHS strategy for ensuring HWs safety at work.

Elements of a Respiratory Protection Program

1. Infection Prevention and Control Measures

The use of respiratory protection should be considered as an essential element of defence in the hierarchy of infection prevention measures; refer to Figure 1. Respiratory and facial protection is required for those organisms that are usually transmitted via the droplet or airborne route, or when airborne particles have been artificially created, such as during an AGPs. For more information on AGPs refer to CEC Infection Prevention and Control Aerosol-generating procedures in relation to COVID-19 document.

<table>
<thead>
<tr>
<th>Hierarchy of Control</th>
<th>Recommendation</th>
</tr>
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<tbody>
<tr>
<td>Elimination</td>
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<tr>
<td>Substitution</td>
<td>Immunisation (if vaccine preventable)</td>
</tr>
<tr>
<td>Engineering Controls</td>
<td>Negative pressure room</td>
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<tr>
<td></td>
<td>Sufficient ambient ventilation</td>
</tr>
<tr>
<td></td>
<td>Physical distancing</td>
</tr>
<tr>
<td>Administrative Controls</td>
<td>Hand hygiene</td>
</tr>
<tr>
<td></td>
<td>Early recognition of infectious status</td>
</tr>
<tr>
<td></td>
<td>Vaccination and screening of HWs</td>
</tr>
<tr>
<td></td>
<td>Surgical masks for patients with acute respiratory symptoms</td>
</tr>
<tr>
<td></td>
<td>Respiratory hygiene/cough etiquette</td>
</tr>
<tr>
<td>PPE</td>
<td>Respiratory protection</td>
</tr>
</tbody>
</table>

Figure 1: Hierarchy of infection prevention measures
Respiratory protective equipment is worn on the face, covers at least the nose and mouth, and is used to reduce the wearer’s risk of inhaling hazardous airborne particles (including dust particles and infectious agents), gases, or vapours. There are a range of PPE available that provide facial and respiratory protection, and this includes either a surgical mask or a respirator (P2/N95 mask), with or without eye protection.

**Note:** The virus that causes COVID-19 (SARS-CoV-2) is transmitted between people through close contact via droplets. The virus does not appear to be readily transmissible via small, airborne particles under non-aerosolising conditions. A respiratory AGP can disperse large volume and smaller particles into the air when performed on a patient suspected, probable or confirmed to have a respiratory infection such as COVID-19.

### 2. Vaccination Program and Compliance

Health workers may be exposed to, or transmit, vaccine-preventable respiratory infections such as influenza, measles, rubella and pertussis. Maintaining immunity in the HW population helps prevent transmission of vaccine-preventable diseases to and from HWs and patients.

HWs are required to follow the mandatory [Occupational Assessment, Screening and Vaccination against Specified Infectious Diseases](https://www.health.nsw.gov.au/oha/occupational-assessment-screening-vaccination-specifict-diseases). Australian Government Department of Health’s Responsibilities of Residential Aged Care Providers for Influenza Vaccination requirements should also be followed.

### 3. Eye protection

Mucous membranes including conjunctivae can be exposed to infective droplets and aerosols while providing care and therefore eye protection provides a barrier to infectious materials entering the eye and is often used in conjunction with other PPE.

Eye protection such as safety glasses, mask visor, goggles or a face shield should be worn when there is risk of blood or body substances splashing or spray into the eyes or when there is close contact with patients known to have an infectious disease transmitted via the droplet route. For further details refer to [CEC Application of PPE guidance document](https://www.clinicalexcellence.nsw.gov.au/).  

### 4. Masks and Respirators

#### 4a. Surgical masks

Surgical face masks provide a barrier to splashes and droplets to the face of the wearer. Some surgical masks also have integrated eye protection with a visor.

Ensure surgical masks are available to HWs that are:

- Fluid repellent and disposable
- Loose-fitting protection devices that create a physical barrier for the mouth and nose of the wearer
- Worn for the duration of the relevant exposure, task or procedure
- Changed if they become damaged, moist or contaminated with respiratory secretions
- Only worn once, and discarded following use

For more information on safe use of mask refer to [CEC Application of PPE during COVID-19](https://www.clinicalexcellence.nsw.gov.au/).
4b. Respirators

A particulate filter respirator (also known as a P2 or N95 mask) is used by an individual to provide respiratory protection. In the healthcare setting, this most commonly relates to the disposable filtering half-face mask. In this document the term respirator refers to masks used to protect HWs from airborne infectious particles. There are three main types of respirators available and these include:

- Disposable or filtering facepiece respirators (P2/N95 mask) where the entire respirator is discarded when it becomes unsuitable for further use due to completion of an episode of care, excessive resistance, physical damage or contamination.
- Reusable or elastomeric respirators, where the facepiece is cleaned and reused but the filter cartridges are discarded and replaced when they become unsuitable for further use; and
- Powered air purifying respirators (PAPRs), where a battery-powered blower moves the air flow through filters.

NB: the term mask is often used when referring to a respirator. The correct term for this level of protection is 'respirator'.

Use a correctly fitted P2/N95 disposable respirator when:

- Attending to patients with probable, suspected or confirmed respiratory infection or communicable diseases with potential for airborne transmission (e.g. pulmonary or laryngeal Tuberculosis)
- Performing respiratory AGP on a patient suspected, probable or confirmed with respiratory infection (e.g. COVID-19)
- By maintenance staff who may be exposed to inhalation of dangerous particulates and gases in the course of their work

Note: For COVID-19, P2/N95 respirators or masks are reserved for HWs conducting respiratory AGPs on patients with suspected, probable or confirmed COVID-19 (see Table 1 below for examples of AGPs).

P2/N95 respirators are also required for:

- HW caring for patients with airborne communicable disease such as pulmonary or laryngeal Tuberculosis, Measles or Varicella Zoster virus.
- HW conducting respiratory AGPs on patients with suspected, probable or confirmed respiratory infectious disease.

Ensure HWs are properly trained in the safe use of P2/N95 respirator, including fit checking to provide maximum protection. Refer to the Donning and fit checking of P2/N95 respirators in NSW healthcare settings video series available through HETI My Health Learning (Course code 319438161) for more information.

It is important to know that HWs with any amount of facial hair around the chin may NOT be able to achieve a seal with a disposable half face respirator (P2/N95). Australian and New Zealand standards and P2/N95 respirator manufacturers’ instructions for use (IFU) require no facial hair for the wearer to achieve a good facial seal. No member of staff is required or expected to undertake any work requiring a P2/N95 respirator unless an adequate facial seal can be achieved. Ensure a risk assessment is conducted on the possibility of removing facial hair (beard), redeployment or alternative respiratory protective device provision where the HW cannot achieve an adequate facial seal. Refer to Application of PPE.

[NSW Government Logo]

Infection Prevention and Control
Respiratory Protection in Healthcare
Version 1
Page 6 of 16
**TABLE 1 – Examples of Respiratory AGPs classified according to risk of airborne transmission of SARS-CoV-2**

<table>
<thead>
<tr>
<th>Procedure</th>
<th>Respiratory AGPs</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Precautions for COVID-19</strong></td>
<td><strong>See Contact, droplet and airborne</strong></td>
</tr>
</tbody>
</table>
| **Airway interventions** | - Tracheal intubation or extubation*  
- Manual mask ventilation*  
- Non-invasive ventilation* (e.g. bi-level positive airway pressure ventilation (BiPAP) and continuous positive airway pressure ventilation (CPAP))  
- Tracheostomy/tracheotomy (insertion and removal)  
- Laryngeal mask/supraglottic airway  
- Intentional or inadvertent disconnection/reconnection of closed ventilator circuit  
- High flow nasal cannula†  
- Open suctioning of airways |
| **Procedures involving the respiratory tract** | - Sputum induction§  
- Bronchoscopy  
- Thoracic surgery involving the lung  
- Maxillofacial surgery  
- Ear, nose and throat procedures that involve suctioning or high-speed drilling, including transphenoidal surgery |
| **Other procedures** | - Procedures that involve open suctioning of the upper airways (e.g. gastroscopy or transoesophageal echocardiography with suctioning)  
- Dental procedures with high-speed devices  
- Post-mortem procedures involving high-speed devices on the respiratory tract |

* Evidence for AGP being associated with transmission of acute respiratory infections

† High flow nasal cannula is a specific form of non-invasive respiratory support which delivers high flow gas (usually air plus supplemental oxygen) via large diameter nasal cannula which is humidified and heated. Flow rates can be given up to 60L/min in adults and 25L/min in children with an oxygen/air blender supplying oxygen at 21-100%.

§ Sputum induction is classified as a high risk AGP as it is performed using an ultrasonic nebuliser.

**4c. Respirator fit checking**

Fit checking or user seal check is a process to ensure that the P2/N95 respirator fits the wearer’s face snugly (i.e. creates a seal) to minimise the number of particles that bypass the filter through gaps between the wearer’s skin and the mask seal. The evidence clearly supports the need and benefit for fit checking, however, the evidence for fit testing remain inconclusive. The mask must be put on (donned) and taken off (doffed) correctly and worn throughout the exposure. A fit testing program can only be implemented if a fit checking process is already in place.

- Fit checking is a process used for all P2/N95 respirators regardless of whether or not fit testing is conducted.
- Fit checking at time of use is the most reliable method of ensuring the HW has achieved an optimal fit and required seal in real time.
- All HWs who are required to wear a P2/N95 respirator must have had education on the importance of fit checking and know how to fit check.
- Use a secondary person to assist assessment of fit check (buddy or colleague) where possible.
Fit checking requires a careful check of the mask seal each time a mask is put on to ensure that the respirator is properly applied.

HWS are to perform a fit check each time a mask is donned to check that a good facial seal is achieved i.e. the mask is sealed over the bridge of the nose and mouth and there are no gaps between the mask and the face.

Always refer to the manufacturer’s IFU for fit checking of individual brands and types of P2/N95 respirators.

If you have facial hair (including a one to two-day beard growth) be aware that an adequate seal cannot be guaranteed.

User seal check may vary depending on the brand or model of the respirator.

There are several different types of P2/N95 respirators available, and manufacturers provide fit checking instructions. Some of these mask types are covered by CEC Donning and fit checking of P2/N95 respirators in NSW healthcare settings video series available through HETI My Health Learning (Course code 319438161) for additional information.

4d. Respirator Fit Testing

Fit testing is a validated method that determines the brand and size of respirator that achieves an adequate seal on an individual’s face. Although there are a number of published studies that show that fit testing will detect air leakage in respirators that have passed a fit check, the evidence base for showing fit testing reduces risk of infection in HWS is currently very limited and equivocal. Despite this, current national opinion and consensus recommends fit testing for HWS working in high risk areas where respiratory AGP is performed on patient suspected or confirmed to have COVID-19 or providing care to patients under airborne precautions. In NSW, LHDs/SHNs are required to implement respirator fit testing in their facilities for HWS performing respiratory AGPs on patients with COVID-19 or providing clinical services to patients on airborne precautions in high risk areas.

Fit testing may be conducted using two different methods. The first is qualitative which results in a pass or fail response, and the second gives a quantitative result, providing an estimate of the number of particles that leak into a mask. Both methods require the wearer to be tested during normal breathing as well as other movements that would be expected during normal use (for example, talking, bending down and turning from side-to-side).

Fit testing of P2/N95 respirators must be provided for HWS responsible for routinely and regularly attending to patients in isolation for airborne spread infections, for example caring for patients with pulmonary or laryngeal Tuberculosis or those who are performing respiratory AGPs.

Health workers required to wear a respirator must be trained and assessed for competency in the use of all PPE as part of an ongoing training program. Advancement from fit checking to a fit testing program should be based on HWS' level of exposure to known airborne hazards (e.g. COVID-19) or identification of a new and emerging risk. The need for a fit testing program extends beyond COVID-19 and therefore an LHD/SHN fit testing program requires careful and planned implementation. Currently fit testing for HWS performing respiratory AGPs on COVID-19 patients take priority.

The following elements are required and should be addressed before the implementation of a respirator fit testing program:

- Annual training of HWS in respiratory protection (e.g. the respiratory hazards to which they are potentially exposed during routine and emergency situations)
• Proper donning, doffing and use of respirators
• Mandatory fit check (user seal check), training and competency assessment
• Fit check (user seal check) at point of use, every time a respirator is used
• HWs are to ensure that they have the physiological and psychological ability to wear a respirator

Priority for fit testing is based on the likelihood of caring for patients in an environment where airborne precautions are required.

Table 2 outlines a fit test prioritisation guide based on local risk assessment in consultation with WHS team and IPAC team.

Table 2 Fit testing prioritisation guide

<table>
<thead>
<tr>
<th>Risk category</th>
<th>HW category</th>
<th>Clinical area</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Targeted teams or identified individuals - Resuscitation / Intubation teams</td>
<td>Intubation teams, aeromedical clinicians, intensive care paramedics performing intubations or resuscitation on patients suspected or confirmed to have COVID-19</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Other Anaesthetics, Emergency department, intensive care unit, or other clinical groups performing intubation/respiratory AGP on patients suspected or confirmed to have COVID-19</td>
</tr>
<tr>
<td>2</td>
<td>Targeted critical care clinicians Identified Individuals of COVID-19 care teams</td>
<td>Hot zone teams (COVID-19 units, clinicians on designated COVID floors, general paramedics)</td>
</tr>
<tr>
<td>3</td>
<td>Clinicians providing direct care to patients in Airborne precautions</td>
<td>Disease requiring airborne precautions e.g. Pulmonary or laryngeal Tuberculosis, Measles, Varicella, SARS or emerging pathogens and any other disease for which public health guidelines recommend airborne precautions</td>
</tr>
<tr>
<td>4</td>
<td>Support staff in other patient care areas</td>
<td>Any other area / situation identified as high risk for health worker airborne transmissible disease exposure Maintenance staff who may be exposed to inhalation of dangerous particulates and gases in the course of their work</td>
</tr>
</tbody>
</table>
There are two types of facial fit test – qualitative and quantitative. There are no currently published data in health settings to support one method over the other for the protection of HWs against infection. The method used should align with individual HW requirements such as allergies or other health conditions.

**PAPRs and Fit Testing**

PAPRs can be described as respirators that protect the user by filtering out contaminants in the air and use a battery-operated blower to provide the user with clean air through a tight-fitting respirator, a loose-fitting hood, or a helmet.

Fit testing requirement for PAPR depends on the type of facepiece the respirator has, and some models have inbuilt mechanisms that will alert the user if a seal is not achieved.

Some tight fitting PAPRs with facepieces that form a tight seal to the wearer’s face, e.g., half-masks and full facepieces, may require fit testing regardless of the mode of operation.

Loose-fitting PAPRs, in which the hood or helmet is designed to form only a partial seal with the wearer’s face or hoods which seal loosely around the wearer’s neck or shoulders, do not require fit testing.

**Qualitative Fit Testing (QLFT)**

- Qualitative Fit Testing involves using test agents with distinctive taste or smell for detecting leakage via the respiratory interface seal of the RPE.
- A test agent such as saccharin or Bitrex™ (a bitter tasting substance) is used at a sensitivity level that demonstrates the user will be able to appropriately sense the presence of the test agent within the respirator by taste, smell or the urge to cough.
- Fit tests must be undertaken by a competent fit test operator
- QLFT is pass/fail and relies on the user’s senses using one of the AS/NZS 1715 accepted test agents:
  - Saccharin (sweet taste); can test respirators with a particulate filter of any class.
  - Bitrex® (bitter taste); can also test respirators with particulate filters of any class.
  - Isoamyl acetate (banana smell); only for testing respirators with organic vapor cartridges.

**Quantitative Fit Testing (QNFT)**

- Quantitative Fit Testing involves an objective measurement of the leakage of particles from inside the person’s mask using a numerical indicator called the fit factor.
- A machine (such as a PortaCount™ Plus machine) is used to measure the volume of particles inside the wearer’s mask compared with the surrounding ambient air.
- QNFT is undertaken using a PortaCount™ machine
- Fit tests must be undertaken by a competent fit test operator
5. Program requirements

A key component of a successful RPP is the assignment of responsibilities for the implementation and coordination of the program. The program should be overseen by a suitably trained person with an understanding of the principles of respiratory protection and the authority to implement the program. This is best led in a collaborative between WHS and IPAC.

A fit testing program includes the following components:

- Identification of a dedicated fit testing coordinator or assessor
- Training of an adequate number of internal staff to be competent in fit testing training and assessment
- A process to identify which employees are to be included in a fit testing program including those working in high risk clinical areas, and the priority for training
- Selection of appropriately certified P2/N95 respirators for fit testing which are same make, model and size of masks that employees are expected to use in practice
- Appropriate storage of disposable respirators according to manufacturer’s specifications (e.g. temperature and humidity) and stock should be controlled and rotated based on a use by date, expiry date or manufactured date
- Non-disposable respirators: A procedure and schedule for storing, inspecting and disposing of respirators, and also cleaning, disinfecting, repairing and maintaining respirators as per manufacturer’s instructions
- Training for staff in understanding transmission risk of airborne pathogens
- Training for staff in the proper use of masks including fit checking
- An evaluation framework to ensure the program responds to the needs of employees based on local risk assessment
- The fit testing assessors should undergo an annual competency assessment
- Documentation system should be established to record HW fit testing results (baseline and ongoing). This should be accessible to both HWs and managers providing the ability to continually determine the type of individuals fit tested respirator(s), including between LHDs/SHNs

Local Risk Assessment for fit testing

Implementation of LHD/SHN RPP requires careful consideration to identify those HWs that require the regular use of respirators for high risk procedures of infectious aerosols (respiratory AGPs COVID-19) or regular care of patients in airborne precautions (pulmonary or laryngeal Tuberculosis). All HWs should be trained on the potential risks of respiratory protection as part of mandatory Infection Prevention and Control education.

Implementing fit testing of HWs should be targeted to key clinicians and individuals at high risk of contact/exposure that requires use of respirators. Models of care should be implemented to assist in allocating risk to specific groups and individuals.

When developing and performing a risk assessment you should consider:

- Intubation teams for suspected, probable or confirmed COVID-19
- COVID-19 hot zone care teams
- Performing high risk respiratory AGP on suspected, probable or confirmed COVID-19
- Exposed to suspected, probable or confirmed patients with airborne transmissible disease
5a. Fit Test assessor training:

At the time of writing this guidance, there is no current industry standard for training or process for Fit Test Assessors within any Australian healthcare settings. Commercial providers and/or Occupational Hygienists are trained to perform fit testing.

Fit testing training is commissioned in the following way:

- Engage in an accredited and registered training organisation or suitably qualified person that has the capacity and capability to educate HW in using Quantitative or Qualitative fit testing methods with specific reference to the Health care setting. At the completion of the education the HW (Fit Test Assessor) is assessed as meeting requirements to perform fit testing. Over time the LHD/SHN should ensure they have adequate numbers of internal trainers. According to the Centres for Disease Prevention and Control (CDC) the fit testing program assessor does not have to be a health and safety professional, however, he or she must have knowledge of the principles of respiratory protection and the authority to implement the program.
- The fit test assessor should be able to establish a local fit test training program, conduct train the trainer and annual competency for fit test trainers.
- The LHD/SHN to confirm an education package to address the concepts and framework associated with a healthcare fit testing program. Assessment would be competency based against evidence-based criteria. Those deemed competent to perform fit testing assessment would be supported by LHD/SHN to perform fit testing at facility level.

Testing Protocols

There are 3 international testing protocols for Fit Testing, and each involves 7 basic exercises that the wearer must undertake during fit testing that simulate normal use of a respirator.

**HSE – Health Safety Executive Protocol**

- UK Based
- Must be done stepping, walking or cycling
- Must pass every test

**OSHA FAST – Occupational Safety Health Administration**

- 4 tests
- 2:29 minute total
- Validated in the US but not internationally

**OSHA – Occupational Safety Health Administration**

- US Based
- More globally accepted
- Involves 7 exercises plus an additional exercise (grimace)
- Done standing
- As long as overall fit factor is over the pass level, the test is passed. This means that the wearer can fail individual exercises and still pass the fit test.

5b. Education and training

All HWs required to wear PPE must be trained and assessed for competency at least annually in the use of all PPE as part of an ongoing training program. For more information on how to don and doff PPE refer to [CEC PPE training videos](#).

During times of increased need such as during a novel respiratory infectious disease pandemic, other brands of P2/N95 respirators may need to be sourced. Relevant HWs should be notified of
the alternative brands available in their workplace and variation in donning and fit checking processes with alternative brands. The need for a fit check at the time of use with available respirators should be reinforced to HWs to ensure that correct facial seal can be achieved prior to use.

To ensure a continued adequate fit, an annual skill/competency assessment is required which involves donning and doffing of the respirator and the ability to demonstrate an adequate fit check. Documentation of health workers fit checking competency is required. See Appendix A Implementation checklist and compliance self-assessment in respiratory protection.

Note: It is critical that all HWs who are likely to be responders for cardiopulmonary resuscitation have practiced safe, effective and rapid donning of PPE for airborne precautions.

5c. Skill/competency assessment of RPP

Health workers undertaking a respiratory protection knowledge and skill/competency assessment should demonstrate the following learning outcomes:

- An understanding of when respiratory protection is needed
- Knowledge of their facility respiratory protection procedures and need for annual fit checking and education
- Able to describe what aerosol and droplet transmission means and what health impact from exposure to infectious agents might occur to self and others if respiratory protection is not used properly
- Able to identify internal and external resources for obtaining information on respiratory protection. e.g. Manufacturer’s instructions, CEC application of PPE during COVID-19, Donning and fit checking of P2/N95 Respirators in NSW Healthcare Settings videos.
- What to do if a respiratory exposure occurs and whom to contact
- Able to describe circumstances when a respirator should be used and the impact of not wearing a respirator that fits the wearer
- An understanding of manufacturer’s specific instructions, methods of care, storage and disposal procedure for all respirator types
- Able to describe the purpose of fit checking and when the user seal check should be performed
- Able to demonstrate effective respiratory protection practice including correct donning, user seal check and doffing procedures when included in transmission-based precautions
- Able to demonstrate correct waste disposal and hand hygiene procedures

6. Legal and legislative framework

This clinical guideline provides information on general principles of respiratory protection for healthcare workers and is formally aligned with following legislation and standards:

**Australian/New Zealand Standards:**

- Standards Australia AS 4381:2015 - Single-use face masks for use in healthcare
- Standards Australia AS/NZS 1715:2009 - Selection, use and maintenance of respiratory protective equipment
- Standards Australia AS/NZS 1716:2012 - Respiratory protective devices
National Safety and Quality Health Service Standards:

- Standard 3 - Preventing and Controlling Healthcare Associated Infections Criterion 3.7.1 - requires infection prevention and control consultation regarding policies and procedures that address personal protective equipment.

Australian Guidelines for the Prevention & Control of Infection in Healthcare (2019):

- Recommends that where there is a high probability of airborne transmission due to the nature of the infectious agent or procedure then a correctly fitted P2/N95 respirator should be worn.

Principles for the Management of Tuberculosis in New South Wales PD 2014

- Tuberculosis (TB) Services are required to operate in accordance with this policy in conjunction with the current relevant guidelines for the prevention and control of tuberculosis in NSW, which reflect best practice for the clinical and public health management of TB.

7. Before using P2/N95 respirators (or equivalent)?

<table>
<thead>
<tr>
<th>Respiratory Protection Program</th>
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</thead>
<tbody>
<tr>
<td>If you are intending using a P2/N95 respirator (or equivalent) you should have a RPP in place. This program should include information on the type of respirators used and for what purposes; information on training; storage and maintenance; and information on your processes and practices for fit checking and testing based on local risk assessment.</td>
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<table>
<thead>
<tr>
<th>Respirator Fit Check and Fit Test</th>
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<tbody>
<tr>
<td>P2/N95 respirators are designed to be tight-fitting. Their performance relies almost entirely on ensuring a good seal between the respirator and the wearer’s face. If there is not a good seal, the device fails. Air leaks around respirator edges and the wearer will not get the level of protection needed to protect their health. No member of staff is required or expected to undertake any work requiring a P2/N95 respirator unless an adequate facial seal can be achieved.</td>
</tr>
<tr>
<td>The respirator must be a suitable size for the person’s face and facial hair (even stubble) may compromise the seal. A respirator fit check must be done every time a respirator is used and fit-test if the wearer fails to achieve a tight seal with available respirator or based on a local risk assessment. This is required for all tight-fitting respirators, including disposable P2, N95 and FFP2 respiratory protection.</td>
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<table>
<thead>
<tr>
<th>Risk Assessment</th>
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<tbody>
<tr>
<td>Respiratory protection is not worn in isolation, it is part of a wider planned risk management process. A risk assessment is needed to demonstrate when and where respirators are used within the workplace and requirement for fit testing.</td>
</tr>
</tbody>
</table>

Adapted from A Guide to Buying P2, or Equivalent, Respirators for use in the Australian & New Zealand Work Environment June 2020 – Version 1.0
References

10. Respiratory Protection Against Airborne Infectious Diseases Clinical Guideline v1.3 South Australia
## Appendix A: Fit testing implementation checklist and compliance self-assessment

<table>
<thead>
<tr>
<th>Organisation / Facility:</th>
<th>Date of Assessment:</th>
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<tbody>
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<thead>
<tr>
<th>Assessed by:</th>
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### Key Requirements

<table>
<thead>
<tr>
<th>Assignment of a program coordinator for the fit testing program</th>
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<tbody>
<tr>
<td>Notes:</td>
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</table>

<table>
<thead>
<tr>
<th>A priority list of employees and/or specific clinical settings have been identified for inclusion in a fit testing program</th>
</tr>
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<tr>
<td>Notes:</td>
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<table>
<thead>
<tr>
<th>Healthcare settings have a range of models and sizes of P2/N5 masks available for HWs</th>
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<tr>
<td>Notes:</td>
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<thead>
<tr>
<th>A knowledge and competency assessment program has been developed for infection prevention and control respiratory protection</th>
</tr>
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<tr>
<td>Notes:</td>
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</table>

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<thead>
<tr>
<th>Documentation for the fit testing program has been developed for the fit testing program that includes HW, clinical priority, respirator(s) (brand and size) and any identified risks</th>
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<tbody>
<tr>
<td>Notes:</td>
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</tbody>
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**Notes:**