



What is a fit test?

A fit test is a validated method to determine whether the respirator being worn provides an adequate seal with a person's face. The test is done while a person is wearing a respirator attached to a testing unit and carrying out a number of physical movements. There are 2 types of fit test methods, and in Western Australian (WA) public hospitals the Quantitative Fit Test (QNFT) method is used.

A fit test does not replace the need to conduct a fit check every time a respirator is used.

What does QNFT Measure?

A quantitative fit test is an objective measurement of respirator fit. A testing unit called the Portacount® machine will be used in WA public hospitals. The Portacount® works by measuring the concentration of microscopic particles in the ambient air and the concentration of those particles that leak into the respirator. The ratio of these two concentrations is called the fit factor.

What do the results tell us?

The results indicate the effectiveness of the seal of a specific model of respirator against the face. While each physical movement done during the test gives a fit factor result, the overall fit factor from the combined scores is used to determine if the respirator provides the level of protection required. It is possible to have an adequate overall fit factor even if one of the physical movements returns an inadequate fit factor.

How long does the test go for?

After you have donned the respirator without assistance, you will wear the respirator for 5 minutes to ensure no further adjustments are required for comfort. You will then conduct four physical movements over 2.5 minutes: bending

Government of Western Australia
Department of Health

Respirator fit test results

Healthworker name: _____

Respirator Name	Size	FT Achieved	FT Not Achieved	NA
Essity BSN (Proshield)	Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Essity BSN (Proshield)	Medium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Halyard (Fluidshield)	Medium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3M 1860s	Small	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3M 1860	Medium	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3M 9320A+ (Aura)	One size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3M 1870+ (Aura)	One size	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

FT = Fit test NA = Respirator not assessed

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over, talking, turning your head from side to side, moving your head up and down. This sequence is repeated for each respirator tested. A fit test will be conducted against a minimum of two respirators.

What is a respirator?

A respirator is used by an individual to provide respiratory protection. All respirators require a fit test. Healthcare workers use respirators to provide protection against airborne infectious particles. The most commonly used respirator in WA public hospitals are disposable particulate filter respirators (PFRs, also known as P2 or N95 respirators).

Is there anything I need to do to prepare for the test?

- Do not smoke or vape for at least 30 minutes prior to the test
- Do not eat or drink for at least 30 minutes prior to the test
- Ensure you are clean shaven
- Tie back long hair
- Jewellery that interferes with the seal must be removed
- If you usually wear glasses you should wear these for the test.

Who is undertaking the test?

The test will be undertaken by a trained fit test operator.

What should I do after fit testing?

Your fit test operator will advise which respirators are suitable for you to use. You must only use these respirators. If you have difficulty accessing these respirators in your clinical area you should advise your line manager. Your fit test operator can advise how to access your records in the future.

You must perform a fit check to ensure an adequate seal every time you use a respirator.

What happens if I do not achieve a fit?

If you are not able to achieve an adequate fit factor with the respirators available in WA public hospitals the fit test operator will provide guidance about what to do.

If you are unable to achieve an adequate fit factor on a respirator you have previously been using it is important to know that this does not necessarily mean you have been exposed to airborne pathogens. Filtration of air by a PFR is only one of many measures that protect against airborne pathogens. Other measures include hand hygiene, face shields and other PPE, safe donning and doffing practices, changes to clinical practice and physical distancing.

Health Support Services has worked with your site to ensure a range of PFRs are available. They are all certified by the US National Institute for Occupational Safety and Health (NIOSH) and/or meet the relevant Australian Standards. All respirators provided for testing are listed on the Australian Register of Therapeutic Goods (ARTG). All PFRs have been approved for use by the relevant WA Committees. Some PFRs require the use of a face shield due to variation in the fluid resistance. Your fit test operator will advise if your recommended respirator requires the use of a face shield.

When do I need to be tested again?

If you find you are no longer able to achieve a fit check you should request another fit test. This might happen if the shape of your face changes significantly, often due to significant weight loss/gain, facial or dental surgery or scarring.

If there are changes to respirator availability you may be asked to complete another fit test.

*Acknowledgement to Illawarra Shoalhaven Local Health District, NSW Government Clinical Excellence Commission, Eastern Health (Victoria) and Western Health (Victoria).

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