

QUALITY PROCEDURE

**RESIDENTIAL AGED CARE
SERVICES**

**N95 MASK
FIT TESTING**

1.0 PRIOR TO FIT TESTING

- 1.1 Staff are to choose a mask from several masks available. If more than one mask is chosen the person administering the test is to take note of the others in case they are needed.
- 1.2 Staff are to position the mask and conduct a fit check. If staff are unsure how to fit the mask, the person administering the test is to show them how to put the mask on and fit check it.
- 1.3 The mask is to be worn for 5 minutes prior to commencement of the fit test to assess the comfort and adequacy of fit.
- 1.4 Assessment of comfort to include a review of the following points:
 - Position of the mask on the nose
 - Room for eye protection
 - Room to talk
 - Position of mask on face and cheeks
- 1.5 Assessment for adequacy of fit will consider the following:
 - Chin properly placed
 - Adequate strap tension – not overly tight
 - Fit across nose bridge
 - Mask of proper size to span the distance from nose to chin
 - Tendency of respirator to slip
 - Self-observation in a mirror to evaluate fit and mask position
- 1.6 If the fit is found to be unacceptable, staff will be given the opportunity to select a different mask.
- 1.7 The test is not to be conducted if there is any hair growth between skin and mask sealing surface i.e., stubble, beard, mustache, sideburns.
- 1.8 Any apparel that interferes with a satisfactory fit shall be altered or removed.

2.0 FIT TESTING

- 2.1 Fit testing is divided into 2 parts – Sensitivity Screening and Fit Testing
- 2.2 **Sensitivity Screening** is intended to determine if the staff member being tested can detect the taste of the aerosol being used – either bitter or sweet – and is conducted **without a mask**.

- 2.3 **Fit Testing** is designed to determine if the mask being worn matches the staff members features and seals adequately to their face.
- 2.4 Staff are to be given a description of the fit test prior to the test commencing.
For example: "Today we are testing to ensure that the N95 mask you wear while at work fits properly and gives you the best protection. The test will be done in two sections, using a hood and some sugar/bitter spray. Firstly, I will get you to put the hood on without a mask. I will then spray some solution into the mask and ask you to tell me when you can taste it. Once you can taste it, I will get you to take the hood off and put on your N95 mask on and ask you to fit check it. Once your mask is fit correctly, I will get you to put the hood back on. I will then pump in the number of sprays of solution that were required for you to taste it into the hood, to make sure that your mask is fitted properly.
- If you can taste the solution through the mask, we will readjust your mask and try again. If you can still taste the solution after the mask has been refitted, we will try another mask.*
- If you can't taste the solution, I will take you through 8 simple exercises that mimic the way that your head and face naturally move during the day to make sure that the mask is secure to your face. The exercises take about one minute each.*
- You will be asked to let me know if you taste the sweet/bitter taste at any time during the test.*
- If you start to feel hot or claustrophobic, please let me know and we can halt the test for a moment"*
- 2.5 Commence the testing using the **Saccharin Solution** as most people are able to taste the sweet taste.

3.0 SENSITIVITY SCREENING:

Staff do not wear a mask for this part of the test.

- 3.1 Staff can rinse their mouth out with water, but cannot eat, drink chew gum etc. for 15 minutes prior to the test.

- 3.2 Staff place a testing hood over their head, with the clear plastic section at the front. Ask the staff member to breathe through their mouth with their tongue slightly out and to report when they taste a sweet/bitter taste.
- 3.3 Place the nozzle of the atomizer into the small hole in the front of the testing hood. Direct the nozzle away from the staff members nose and mouth and rapidly spray the Sensitivity Solution into the hood.
- 3.4 10 squeezes are initially required. Ask the staff member if they taste sweet/bitter taste. If they can, the sensitivity is recorded as 10 and the sensitivity test is complete.
- 3.5 If the staff response is negative rapidly spray 10 more squeezes of the solution into the hood. Ask the staff member if they taste sweet taste. If they can, the sensitivity is recorded as 20 and the sensitivity test is complete.
- 3.6 If the staff response is negative rapidly spray 10 more squeezes of the solution into the hood. Ask the staff member if they taste sweet taste. If they can, the sensitivity is recorded as 30 and the sensitivity test is complete.
- 3.7 If staff are unable to taste a sweet taste after 30 sprays of the solution ask them to take a small drink of water, as a dry mouth can make tasting the solution difficult.
- 3.8 Ask the staff member to replace the hood and begin spraying the solution into the hood in 10 spray increments, checking with the staff member as to whether they can taste a sweet taste.
- 3.9 If the staff member is unable to taste the sweet taste after the second set of 30 sprays, the Sensitivity test will need to be started again, using the bitter tasting solution (Bitrex). The staff member will then be asked to report if they taste a bitter taste.
- 3.10 Once staff have tasted the sweet/bitter taste they are asked to remember it for the next part of the test.
- 3.11 The person administering the test is to take note of the sensitivity level – 10, 20 or 30 sprays – and record it on the 'Initial Number of Sprays of Solution' section of the Competency Form.

FIT TESTING:

- 4.1 The staff member will don an N95 mask and fit correctly. A fit check will then be conducted with the staff member (*e.g.*, 'can you show me how you fit check your mask'). If staff are unable to demonstrate how to fit check their mask the person administering the test is to discuss the process of fit checking with them.
- 4.2 Once the fit check is completed the staff member will place the hood over their head with the clear plastic at the front.
- 4.3 As before, staff shall breathe through their slightly open mouth and be asked to indicate if they taste a sweet/bitter taste. **They do not have to have their tongue out for the Fit Test.**
- 4.4 The tester squeezes the number of sprays identified in the sensitivity test (10, 20 or 30) to prime the hood and check the fit of the mask.
- 4.5 If staff do not taste a sweet/bitter taste, the person administering the test begins to take them through the 8 exercises and the staff member is asked to report if they experience a sweet/bitter taste.
- 4.6 Half the number of squeezes used in the sensitivity test (*i.e.*, 5, 10 or 15) will be administered every 30 seconds for the duration of the test.
- 4.7 If the taste is not detected, then the fit is deemed satisfactory, and the test has been passed. The person administering the test will need to record the type, size and model number of the mask on the Competency Form
- 4.8 If the staff member reports tasting the sweet/bitter solution remove and re-check the fit of the mask. Once this is completed, replace the hood and the tester will squeeze the number of sprays identified in the sensitivity test (10,20 or 30) to prime the hood and check the fit of the mask. If the staff member continues to report tasting the sweet/bitter solution, the mask fit is deemed unsatisfactory, and the fit test has failed. The staff member will then choose a new mask and the fit test process will commence again with the new mask.
- 4.9 If the staff member reports tasting the sweet/bitter solution during any of the activities the mask fit is deemed unsatisfactory, and the fit test has failed. The staff member will then choose a new mask and the fit test process will commence again with the new mask.

5.0 FIT TEST ACTIVITIES:

- 5.1 The following activities are completed by the staff member. They will need to breathe through their open mouth but will not need to extend their tongue as they did for the Sensitivity Screening. The person administering the test will need to guide the staff member through each activity, timing each activity as it happens.
- 5.1.1 **Normal breathing for 1 minute**
Have the staff member either sit or stand in a normal position and ask them to breathe normally through their mouth.
- 5.1.2 **Deep breathing for 1 minute**
Have the staff member either sit or stand in a normal position and ask them to breathe slowly and deeply through their mouth, taking care not to hyperventilate or make themselves feel dizzy.
- 5.1.3 **Turning head**
Have the staff member either sit or stand in a normal position and ask them to slowly turn their head from side to side. Ask them to hold their head still at each end of the turn and breath through their mouth. Staff **do not** have to do this quickly.
- 5.1.3 **Moving head up and down for 1 minute**
Have the staff member either sit or stand in a normal position and ask them to move their head up and down, breathing through their mouth in the 'up' position (i.e., looking upwards.) Staff **do not** have to do this quickly.
- 5.1.4 **Talking for 1 minute**
Have the staff member either sit or stand in a normal position and ask them to count aloud, starting at one – slowly and loudly enough to be heard by the person conducting the test.
- 5.1.5 **Grimace for 15 seconds**
Have the staff member either sit or stand in a normal position and ask them to smile or laugh or frown.
- 5.1.6 **Bending over for 1 minute**
Have the staff member stand in a normal position and ask them to bend at the waist and then stand up straight, as if they were going to touch their toes or place something on a table. They are to continue this movement for 1 minute. Staff **do not** have to do this quickly.
- 5.1.7 **Normal breathing for 1 minute**
Have the staff member stand in a normal position and ask them to relax and breathe normally through their mouth.

6.0 ADDITIONAL INFORMATION

- 6.1 The hood needs to be thoroughly cleaned with Isowipes between each person and allowed to dry.
- 6.2 Both atomizers need to be thoroughly wiped over between each person and allowed to dry.
- 6.3 When spraying the solution into the hood, direct the nozzle away from the staff members nose and mouth.
- 6.4 Closely observe staff for any signs of discomfort or distress as some staff can feel claustrophobic in the hood. If this happens, stop the test, and allow the staff member to remove the hood and the mask for a short period of time. Once the staff member is feeling better have them replace the mask, fit check it and continue with the test. You will also need to prime the hood (i.e., spray the initial number of sprays – 10, 20 or 30 – into the hood) before you recommence the test.
- 6.5 If the bulb on the atomizer (especially the one containing the sweet fit testing solution) becomes more difficult to squeeze, empty the solution out of the atomizer, dismantle it and wash it out with warm water only. Dry, reassemble and refill the atomizer.
- 6.6 It can be helpful to demonstrate what you are asking staff to do (e.g., breathe with your mouth slightly open and your tongue slightly out, turning your head from side to side, moving your head up and down etc.)
- 6.7 Dismantle both atomizers at the end of the testing and wash them out in warm water and leave to air dry overnight.

7.0 MONITORING

- 7.1 A list of current staff which includes a photo of the mask they have been Fit Tested for will be provided to all Facilities.
- 7.2 These lists are to be published and placed in a folder. A folder is then to be placed in each Nurses Station, Reception, the Clinical Nurse office and the Director of Care office.

- 7.3 Following the initial set up of these lists the Director of Care/Clinical Nurse will be responsible for keeping both the list and the folders up to date with any changes to either staff or masks.
- 7.4 Staff are to use this list to check that they are using the correct mask at the beginning of their shift.
- 7.5 More formal checks will be undertaken by either the RN, CN or DOC using the RNC-F-329 N95 Mask Monitoring auditing tool found on the intranet.
- 7.6 Initially, this audit is to be undertaken on every shift for 7 days. Each area (e.g., Nursing Home, Hostel etc.) are to complete an audit. When completed, audits are to be signed off by the person who has undertaken the audit and the audit tool is to be provided to the DOC for review.
- 7.7 At the end of the initial 7 days, if the audit results are satisfactory, the audits can be conducted weekly and on random days. They will still need to be conducted in each area and for each shift.
- 7.8 In the event of any staff noncompliance, the staff member involved will be counselled and the frequency of auditing increased until such times as compliance is reached.

8.0 REFERNCED DOCUMENTS

[Qualitative Fit Test \(QLFT\) \(OSHA 1910.134 \(US\) Fit Test Protocols\)](#)

[Fit Testing for tight-Fitting Respirators 2021. Worksafe.qld.gov.au](#)

RNC-F-329 N95 Mask Monitoring