

COVID-19 – Workplace Hygiene Measures During Qualitative Fit Testing

Personal protective equipment for fit testers (PPE)

- Procedure mask: must be worn for the entire fit-test procedure
- Eye protection: may be worn depending on recommendations in effect for the facility

Note: The fit test procedure in this document applies when several participants are being trained and tested at the same time.

Step 1: Preparing the fit-test session

- Participants shall be informed of the criteria used to select participants before they attend the fit test session.
- If it is not possible to inform participants of the selection criteria before they arrive, the criteria must be clearly posted near the registration desk.
- During registration, only one person at a time may be signed in. Take steps to ensure that participants are separated by a distance of two metres in the area where they will wait before registering.
- When registering participants for the fit test, it is best to use a computer form instead of a paper form, to reduce the risk of contamination. When a paper form is used, it shall only be completed by the fit tester.
- The room used for the fit testing must be arranged so that participants are separated by a distance of two metres. Assign a place for the fit tester as well, separated by at least two metres from participants.
- Use clear signage (e.g. signs on the floor or walls, etc.) so that participants can easily find the way to their assigned place.
- Have a glass of water placed at each assigned place before participants arrive.
- For participants who come wearing a procedure mask, prepare a place (e.g.: disposable brown paper) where they can place their procedure mask after they have removed it, without leaving their assigned place.

Step 2: Welcome participants

- Selection of participants. The fit test will not be conducted on any person:

- Who has travelled outside the country in the past 14 days¹
- Who has the following symptoms: fever, new or worsening cough, difficulty breathing or sudden loss of sense of smell without nasal congestion, with or without loss of taste¹
- Who is awaiting the results of a COVID-19 test
- Who has been in unprotected contact with a person who is confirmed or presumed to have COVID-19
- Who is not on the list of the priority job titles and sectors for using N95 respirators
- Who is not in compliance with the usual pre-conditions (freshly shaven face, etc.)

b) If participants arrive wearing a procedure mask, tell them to keep it on.

c) Participants must wash their hands.

Step 3: Participants go to their assigned place

- a) If any participants are wearing a procedure mask, ask them to remove it without touching the outside of the mask.
- b) Participants must wash their hands.

Step 4: Sensitivity test

- a) For the 3M kits, ask participants to only touch the hood's plastic collar. For the other supplier kits, ask participants to only touch the lower edge of the hood.
- b) Tell participants that they must not take off the hood (after spraying) before the fit tester returns to his/her place.
- c) Tell participants that in order to reduce droplet emission inside the hood, they must not talk during the sensitivity test. Ask them to wave a hand when they have detected the taste of the sensitivity solution.
- d) Spray the sensitivity solution into the hood slowly, standing to one side of the participant, to reduce the risk of exposure to droplets from any participant who coughs during the procedure.

¹ For such situations, in principle the participant should not be at work. Notify the persons in authority of the situation.

- e) Direct the nebulizer nozzle towards the participant's mouth and spray the sensitivity solution into the hood. While this is being done, the participant shall breathe through his/her slightly open mouth with tongue extended.
- f) The nebulizer used for the sensitivity test cannot be used on more than one person without being cleaned and disinfected in between. The fit tester may proceed as follows:
 - Use one sensitivity test solution nebulizer per person. At the end of each fit test, use a disinfecting wipe to clean the outside surface of the nebulizer nozzle that is inserted into the hood. Use a different wipe for each nebulizer and be sure to keep the wipe in contact with the nebulizer for the recommended period of time.
 - If only one nebulizer is being used, the outside surface of the nebulizer nozzle that is inserted into the hood shall be cleaned with a disinfecting wipe after each participant. Change the disinfecting wipe each time the nebulizer nozzle is cleaned and keep the wipe in contact with nebulizer for the recommended period of time.
- g) Before the hood is removed, the fit tester shall give each participant the N95 respirator model he/she considers appropriate for each individual.
- h) The fit tester shall return to his/her assigned place and tell the participants they can remove their hood.
- i) Conclude the sensitivity tests by inviting participants to drink some water.

Step 5: Teach participants the correct methods for putting on and taking off the N95 respirator and performing a positive and negative pressure air-tightness test

- a) Given that fit testers wear a procedure mask, instruction and information will be provided by means of videos, posters, fact sheets, etc.
- b) Ask participants to don the N95 respirator as instructed and to conduct a positive and negative pressure test.
- c) Ask participants to wear the N95 respirator for at least 5 minutes to see if it is comfortable. This is an important step because the N95 respirator may be worn for extended periods of time.
- d) When respirator comfort has been checked, go to the next step.

Step 6: Fit test

- a) Apply the fit test protocol in effect in your facility (e.g. CSA Z94.4-13 protocol which has six one-minute steps).
- b) Before starting to spray the fit test solution, warn participants that they must not remove the hood when they detect the solution taste at any step during the procedure. They must wait for your signal before removing it.
- c) Make sure that the text to be read aloud (i.e., the description of a rainbow or a text about work activities) does not become a source of contamination. The text may be enlarged and placed so that participants can read it without touching it. Paper documents must be plasticized and cleaned with a disinfecting wipe after each fit test.
- d) It is not necessary to clean the outer surface of the nebulizer nozzle after inserting it into each participant's hood, because participants are wearing an N95 respirator.
- e) When one of the participants tastes the fit test solution during one of the steps in the procedure, the fit tester shall move to the position of the next participant to be tested before telling the participant who tasted the solution to remove their hood.
- f) In the final step of the fit test procedure, ask participants to break the seal between the respirator and their face in order to verify the fit test and the effectiveness of the N95 respirator. Before performing this step, the fit tester shall return to his/her assigned place.
- g) Participants shall dispose on the N95 respirator in accordance with the facility's procedure.
- h) Check participants to make sure the N95 respirator is comfortable to wear. Look at participants' faces to see if there is any obvious sign of discomfort on the nose or elsewhere on the face (e.g. a reddish pressure point). Checking to make sure that the N95 respirator is comfortable to wear is as important as checking the tightness of the seal.
- i) Participants must wash their hands.

Step 7: Completing the fit test register

- a) The fit tester washes his/her hands.
- b) It is best to use a computer form instead of a paper form to reduce the risk of contamination. When a paper form is used, it may only be completed by the fit tester.

- c) The fit tester gives participants the documents required in accordance with the facility's procedures.

Step 8: Cleaning and disinfecting the equipment used during the fit testing

- a) The fit tester shall wash his/her hands and don a pair of nitrile gloves.
- b) Be sure to keep disinfecting wipes in contact with surfaces for the recommended period of time.
- c) First, use disinfecting wipes to clean and disinfect the inside of the hood/collar.
 - Start by cleaning the inside of the collar
 - Then clean the plasticized part of the hood, starting from the collar and moving towards the top
 - Finish by cleaning the back part of the hood
- d) Use another wipe to clean the outside of the collar and hood.
- e) Use disinfecting wipes to clean any surfaces that may have been contaminated by participants during the fit-test procedure.
- f) Remove the gloves and wash hands
- g) Prepare the room for the next group.

Note: After nebulizers have been in use for four hours, they must be emptied, rinsed with water and disinfected with a disinfecting solution.

Reference Documents

- 3M. (March 2020). Fit Test Hygiene during COVID-19 Pandemic. 3M Technical Bulletin on cleaning equipment used for fit testing (hood, collar and nebulizer).
<https://multimedia.3m.com/mws/media/18191540/fit-test-hygiene-during-covid-19-pandemic.pdf>.
- Association canadienne de normalisation. (1993). *Choix, entretien et utilisation des respirateurs : santé et sécurité au travail* [CSA Z94.4-93]. Rexdale, Ont. : ACNOR.
- Canadian Standards Association . (2011). *Selection, Use and Care of Respirators* [CAN/CSA Z94.4-11]. Mississauga, Ontario: CSA.
- Centre intégré de santé et de services sociaux de l’Estrie – Centre hospitalier universitaire de Sherbrooke. (April 14, 2020). Procédure FIT-test N-95 en pandémie COVID-19.
- INSPQ. (April 7, 2020). Port du procedure mask en milieux de soins lors d’une transmission communautaire soutenue.
<https://www.inspq.qc.ca/sites/default/files/covid/2968-port-masque-milieux-soins-transmission-communautaire-soutenue-covid19.pdf>

Resources for Fit Testers

- ASSTSAS. Les six exercices du test d’ajustement.
<https://asstsas.qc.ca/publication/protection-respiratoire-les-6-exercices-du-test-dajustement-a51>
- ASSTSAS. Rappel des étapes clés pour utiliser votre APR N95.
<https://asstsas.qc.ca/publication/protection-respiratoire-rappel-des-etapes-cles-pour-utiliser-votre-apr-n95-b33>
- ASSTSAS. Ajustement des appareils de protection respiratoire - N95.
<https://asstsas.qc.ca/publication/ajustement-des-appareils-de-protection-respiratoire-n95-cp37>

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