

Facility Name: Middlesex Therapeutic Community Residence	
Policy and Procedure: Respirator Fit Testing	
Revised:	Effective Date: 05/10/2021

POLICY:

As part of MTCR's compliance with OSHA standard 1910.134(c) which requires employers to develop and implement a written respiratory protection program, MTCR will be administering fit testing procedures within this standard on site with MTCR personnel.

PROCEDURE:

Personnel providing fit testing will follow the procedure outlined in the OSHA 29 CRF regulation and MTCR's full written respiratory protection program.

Personnel providing fit testing will receive appropriate training from a qualified provider.

Employees whose position requires the use of a respirator should be preferably clean-shaven, but at a minimum cannot have facial hair that interferes with the seal of the respirator to the face.

Employees will receive education regarding the proper use of the respirator model to which they are fit tested. Education will include identifying when respirator use is required, how to properly don and doff the respirator, how to perform a user seal check, how and when to clean and disinfect the respirator (if applicable), and how and when to dispose of a respirator. Education shall occur at the time of hire for new employees and at that time of approval of the RPP for current employees. Education will occur annually thereafter.

1. Ensure all necessary supplies are available to provide testing. This includes:
 - a. HALO PAPR, ENVO Mask and N95 respirators (referred to as facepiece)
 - b. Medical Questionnaire and Fit Test Form
 - c. Qualitative Fit Test Kit: Fit test solutions (Bitrex and/or Saccharine solutions), two nebulizers, fit test hood
 - d. Quantitative Fit test supplies: PortaCount machine
2. Obtain medical questionnaire and ensure it has been signed off by a licensed medical professional (minimal qualification is RN).
3. Provide a fit test form to the employee and have them complete section one and sign at the bottom.
4. Ensure each individual does not have any taste or smell issues. If there is concern for this follow the instruction for Sensitivity testing outlined in the written respiratory protection program.
5. Provide the employee with a respirator (either N95, PAPR or ENVO mask, depending on available supply).
6. Ensure employee has placed the facepiece properly on their face and instruct employee to complete a user seal check. If the employee fails the user seal checks, select another type of facepiece.

7. Perform fit test using either quantitative method or qualitative method, depending on model or respirator selected.
 - a. Qualitative fit testing method take place with N95 respirators, EnvoMask Respirators and Halo PAPRS.
 - b. Quantitative fit testing method is preferred for Halo PAPR.
8. Qualitative Fit Test Procedure:
 - a. Place hood over employee's head.
 - b. Administer 10 puffs of Bitrex or Saccharine solution into the hood. Instruct employee to breath regularly for one minute.
 - c. Repeatedly supply puff of solution approximately every 30 seconds throughout all test exercises.
 - d. Instruct the employee to perform the following test exercises for one minute each.
 - i. Take deep breaths.
 - ii. Turn head slowly side to side.
 - iii. Move head up and down slowly.
 - iv. Instruct employecce to talk. Employee should talk loud enough to be heard clearly by the test conductor. Have employee read out loud the following text:
Rainbow Passage-
 1. *Rainbow Passage:* When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.
 - v. Instruct employee to bend over at the waist as if to touch their toes.
 - vi. Breathe normally.
 - e. Employee can remove mask and hood.
 - f. The fit test is considered failed if an employee tastes the solution at any time during the test.
 - g. The fit test is passed if the employee does not taste the solution throughout all test exercises.
9. Quantitative Fit Test Procedure
 - a. Employee must wear respirator for five (5) minutes before beginning fit testing procedure.
 - b. Check the respirator to ensure the sampling probe and line are properly attached to the facepiece and that the respirator is fitted with a particular filter capable of preventing significant penetration by the ambient particles used for the fit test as per the manufacturer's instruction.
 - c. Check for the adequacy of the respirator fit and proper positioning.
 - d. Instruct employee to perform a user seal check.
 - e. Follow the manufacturer's instructions for operating the Portacount machine.
 - f. Employee shall perform the following test exercises for one minute each:
 - i. Take deep breaths.
 - ii. Turn head slowly side to side.
 - iii. Move head up and down slowly.

- iv. Instruct employee to talk. Employee should talk loud enough to be heard clearly by the test conductor. Have employee read out loud the following text:

Rainbow Passage

1. *Rainbow Passage*: When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.
 - v. Grimace. The employee shall grimace by smiling or frowning for 15 seconds only.
 - vi. Instruct employee to bend over at the waist as if to touch their toes.
 - vii. Breathe normally.
 - g. Inquire about the comfort of the respirator. If respirator was uncomfortable, select another model and repeat fit testing procedure.
10. Complete the fit test form, entering employee's pass/fail status, date of fit test, model to which employee was fit tested, size of respirator, style and overall fit factor (if quantitative method was used).
11. Send all completed fit test forms to Respirator Program Administrators to be retained per OSHA Standard 29 CRF 1910.134 and 29 CFR1910.1020.

Approved by	Signature	Date
Sarah Squirrelle, Commissioner of DMH		5/12/21