

Reminders!

Administering Sensitivity and Fit Test Solutions

Use bitter (Bitrex) or sweet (Saccharine) solutions for fit testing. **Do not interchange** bitter with sweet solutions between the sensitivity and fit tests.

Sensitivity Test:

- Perform before every fit test!
- **Use the Sensitivity Solution** (weak solution)
- Determines the number of squeezes needed for an employee to detect the taste. This is their “taste point.” The taste point is crucial for knowing how much test solution to give during the fit test.
- If the wait time between sensitivity test and fit test is more than 30 minutes, repeat sensitivity test

Important! Employees must have nothing by mouth for 15 minutes prior to testing. No food, drink (other than water), gum, breath mints, tobacco, vape, etc.

Instructions:

1. Have the employee remove their mask. Place the test hood over the employee’s head.
2. Instruct the employee to open their mouth and slightly stick out their tongue.
3. Administer the Sensitivity Solution while counting the number of squeezes until the employee tastes the solution. Write this number down.
4. Take off the hood. Have the employee rinse out their mouth with plain water and wipe around their face with a tissue.

Fit Test:

- **Use the Fit Test Solution** (strong solution)
- In the table below, under Sensitivity Solution, find the range that includes the number of squeezes when the employee first tasted the sensitivity solution (e.g., tasted at 4 squeezes, use row “1 to 10”)
- Follow across the table to find the number of squeezes needed for the Fit Test

Instructions:

1. Employee inspects, dons, and seal checks the respirator. Place test hood over the employee’s head.
2. Instruct employee to breathe through their mouth and tell you if, at any time, they taste the solution.
3. Administer the initial squeezes to build concentration inside the hood (i.e., 10, 20, or 30 squeezes).
4. After initial squeezes, start fit test exercises using ½ the number of squeezes every 30 seconds.
5. Perform each fit test activity for **one full minute** while delivering the fit test solution every 30 seconds.

Sensitivity Solution	Fit Test Solution	
# of squeezes until taste	Initial # of squeezes	# of squeezes per 30 seconds
1 to 10	10	5
11 to 20	20	10
21 to 30	30	15
Over 30	Stop and use different solution or method	

Example

Timing Bitrex with Fit Test Exercises

This example shows how to deliver Bitrex in sequence with the respirator fit test exercises. Perform each fit test exercise in the order outlined below. Each fit test exercise is done continuously for 60 seconds. If there is a delay in starting an exercise, adjust the timing of the squeezes to start with the exercise.

Example Scenario:

During the sensitivity test, the employee **tastes Bitrex at 6 squeezes**.

This means during the fit test, the Bitrex timing would be:

- an **initial 10** squeezes at the start of the fit testing exercises, AND
- **5 squeezes every 30 seconds** thereafter while doing each of the fit test exercises.

In this example, the fit test **starts at 2:00pm**:

Fit Test Bitrex Time (every 30 seconds)	# of squeezes	Fit Test Exercises	Fit Test Exercise Duration
Just before 2:00:00 pm	10		
Start 2:00:00 pm		Normal Breathing	Start
2:00:30	5	Normal Breathing	Continue
2:01:00	5	Deep Breathing	Start
2:01:30	5	Deep Breathing	Continue
2:02:00	5	Head side to side*	Start
2:02:30	5	Head side to side*	Continue
2:03:00	5	Head up and down**	Start
2:03:30	5	Head up and down**	Continue
2:04:00	5	Talking (constantly)***	Start
2:04:30	5	Talking (constantly)***	Continue
2:05:00	5	Bending Over+ (or jogging in place)	Start
2:05:30	5	Bending Over+ (or jogging in place)	Continue
2:06:00	5	Normal Breathing	Start
2:06:30	5	Normal Breathing	Continue
2:07:00	0	End test	End test

*Head side to side: Have employee slowly turn chin toward shoulder, pause, take a breath. Then, chin toward other shoulder, pause, take a breath. Keep repeating at a comfortable pace for 60 seconds.

**Head up and down: Have employee slowly lift chin toward ceiling, pause, take a breath. Then, bring chin down toward chest, pause, take a breath. Keep repeating at a comfortable pace for 60 seconds.

***Talking (constantly): Have employee continuously read Rainbow Passage out loud or continuously count out loud from 1 to 100.

+Bending over: Have employee slowly bend forward at the hips (as if picking up something from the floor or a chair), then stand back up. Keep repeating bending/standing up until next test. Do this at a comfortable pace.