

# PORTACOUNT® RESPIRATOR FIT TESTING THE PREFERRED METHOD

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## RESPIRATOR FIT TESTING CASE STUDY #1

Trudeau Institute is a private biomedical research institute located in Saranac Lake, New York. Scientists from around the world work at the Institute to better understand the immune system for the purpose of preventing and treating human disease.

The Institute has a respiratory protection program for employees who may have occupational exposure to the infectious agents that are being studied. In the past, they conducted qualitative fit testing using either saccharin or Bitrex. Most recently, they had the opportunity to try another method, quantitative fit testing with the TSI PortaCount® Respirator Fit Tester.

Tina Charbonneau is the Safety Coordinator/Biosafety Officer in charge of fit testing at Trudeau. Tina found that while employees complained about the unpleasant taste of saccharin, and especially Bitrex, this was not enough to justify looking for a new method. What did concern Tina was the fact that the qualitative method was indeed subjective and that staff members could cheat the system. "There are ways of getting around the fit test by lying about not being able to taste the Bitrex. Therefore, when the opportunity to try the PortaCount Fit Tester became available, I jumped at the chance to try it!" Tina said.

Initially, laboratory workers were not thrilled with the thought of a new method for fit testing. However, after being fit tested with the PortaCount Fit Tester, the response was

overwhelmingly positive. Employees commented that they now have more confidence in their respirators, knowing that they successfully passed the fit test using the more rigorous PortaCount method. Tina likes the fact that it eliminates dependence on the employee's sensory interpretation, saying, "With the PortaCount Fit Tester there is no issue, I can tell that the respirator fits properly."



Tina went on to say that the required OSHA procedure for the qualitative methods like saccharin and Bitrex are difficult to do correctly. Now she has complete confidence in the PortaCount method. She feels much better about how well the respirators are working, and about each person's ability to wear the respirator properly. While using the PortaCount Fit Tester, Tina found that people using one specific model N95 respirator were having great difficulty passing the fit test. As a result, that particular respirator is no longer offered to Trudeau employees.

Tina acknowledges that one of the best things about the PortaCount method is the ability to conduct fit testing while the respirator wearer simulates real life motions. The measurement is made while employees breathe, talk and move, just as they would on the job. "The PortaCount Fit Tester can be used as respirator training tool as well as a fit testing device by helping the

employee see how movements and respirator strap adjustments affect the fit," she said.

Another bonus to the PortaCount method over the saccharin and Bitrex qualitative methods is the computer software and its ability to generate reports for recordkeeping. This makes it easier to document results and even give copies to employees that show they passed the fit test, and what respirators they are qualified to use.

The PortaCount quantitative method has been a successful solution to the issues Trudeau Institute faced with the qualitative method.

For more information about the PortaCount Respirator Fit Tester, visit [www.tsi.com/portacount-respirator-fit-tester-8038](http://www.tsi.com/portacount-respirator-fit-tester-8038).

To review educational support options TSI offers, visit [www.tsi.com/pcacademy](http://www.tsi.com/pcacademy).



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