

WANTED
VOLUNTEERS FOR RESPIRATOR RESEARCH STUDY at NIOSH Pittsburgh
Determination of the Half-facepiece Respirator Inward Leakage (IL) Test Inter-Panel Variability

The National Institute of Occupational Safety and Health (NIOSH) is asking for volunteers to be in a study to be conducted at NIOSH Pittsburgh (Bruce Research Center). Anyone who is interested might be able to participate in the study depending on face size and ability to safely wear a respirator.. Many workers rely on respirators to protect their health. The level of protection provided by most respirator types depends on how well the respirator keeps out the potentially harmful substances in the air. To insure filtering facepiece respirators and half facepiece particulate-removing elastomeric respirators work, NIOSH is proposing an inward leakage test for these respirators in the certification regulations. An inward leakage test measures how well these respirators keep the wearer from breathing the dust/potential hazardous particles present in room air.

The purpose of this project is to determine how different the results of the proposed test would be using different panels. That is, might a respirator pass on one panel of people and fail on another with different people.

During your first visit, you will be measured for face width and face length using calipers. You will also complete a medical screening questionnaire which will be used to determine if you can safely wear a respirator in this testing. In this study ten different respirator models will be tested four times for a total of forty tests. During that process you will be shown how to properly follow the user instructions to put on and adjust the respirator. Between each test of a particular respirator, you will remove the respirator, wait 1 or 2 minutes, and then redon the respirator. The estimated time that participating in this project is:

Description	Time
Completing Consent and Medical Screening Forms	20 minutes
Facial Measuring	10 minutes
IL Testing	10 hours
Totals	10 hours and 30 minutes

The total number of testing visits required is up to you, depending upon your schedule. The minimum length of a visit is one hour. You will receive reimbursement for your time at a rate of \$30 per hour.

As a test subject, there is no direct benefit to you. You will be helping others who regularly wear respirators in their jobs. The risk of injury is very low since you only need to stand and perform simple head movements, breathing, moving your arms, and talking while wearing a respirator. You may note that is slightly hard to breathe through the respirator and your skin under the respirator may feel warm or hot. The facepiece may bother your skin such as causing a rash. You may experience claustrophobia while wearing the respirator.

For more information about participating in this study, call Brenda Boutin at 304-285-5961 or Colleen Miller at 412-386-4956.