

**Building Related Asthma Research in Public Schools (New)**

Principal Investigator:

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## Appendix I: Notification Letters

### 1. Notification Letter for Spirometry

(on NIOSH Letterhead)

Re: Cover Letter for Notification

Date: \_\_\_\_\_

Dear Mr/Ms \_\_\_\_\_:

Thank you for participating in the health surveys at your workplace conducted by the National Institute for Occupational Safety and Health. The entire project team wishes to thank you for your participation. These medical evaluations were part of the NIOSH study at \_\_\_\_\_. Enclosed is a report of your test results.

*Use sentence 1 if the participant authorized NIOSH to send the results their physician at the time of consent.*

1. We have provided your test results to your physician, as you so requested.

*Use sentence 2 if the participant did not authorize NIOSH to send the results their physician at the time of consent.*

2. We suggest you provide this information to your personal physician, so that it may be added to your medical records.

#### Standard Breathing Tests

The purpose of these standard breathing tests is to determine how your lung function compares to an average person's lung function. The tests include measurement of forced vital capacity (FVC); one second forced expiratory volume (FEV<sub>1</sub>); and calculation of the ratio of FEV<sub>1</sub>/FVC. FVC is the total amount of air you can force out of your lungs after breathing in as deeply as you can; FEV<sub>1</sub> is the amount of air you breathe out in the first second.

We use FEV<sub>1</sub>, FEV<sub>1</sub>/FVC, and FVC to evaluate your breathing; a low FEV<sub>1</sub> and FEV<sub>1</sub>/FVC may indicate an "obstructive" impairment to exhaling rapidly. This means that your lungs may not be emptying out the air as fast as they should. A low FVC may indicate a "restrictive" impairment of lung capacity. This means that your lungs are not filling up with as much air as they should when you breathe in or that they do not empty out as much air as they should when you breathe out.

Your measured FEV<sub>1</sub> and FVC are evaluated by comparing them to the normal values for the general population considering your age, height, sex and race. Pulmonary function is considered "normal" if FEV<sub>1</sub>, FVC, and FEV<sub>1</sub>/FVC are in the top 95% for the group you are being compared to.

Your results are shown on the Pulmonary Function Tests report on a separate page in this letter. The recommendations and interpretations that appear after your results are based on your overall lung function test scores. They show (*results of normal lung function.*)

OR

(*obstructive/restrictive changes*). Abnormal test results, by themselves, should be interpreted only as an indicator of impaired lung function, not as a diagnosis of specific diseases. Furthermore, they should not necessarily be interpreted in any individual case as being due to either occupational exposures in general or specific exposures at the work place. That determination can only be made after a more complete medical evaluation.

Sincerely yours,

Medical Officer  
Field Studies Branch  
Division of Respiratory Disease Studies

## 2. Notification Letter for Serial Spirometry

(on NIOSH Letterhead)

Date: \_\_\_\_\_

Dear Mr/Ms \_\_\_\_\_:

Thank you for participating in the health survey conducted by the National Institute for Occupational Safety and Health (NIOSH) during *DATES*. Enclosed are the results of your serial spirometry (the breathing tests that you performed five times per day during *DATES*).

### **Explanation of Test Results**

The purpose of serial spirometry is to evaluate changes in lung function across the days and weeks in relation to possible inhaled substances at work. An important way to find out if you have work-related asthma is to perform frequent breathing measurements at and away from work. The test that you performed includes measurements of the peak expiratory flow (PEF) (this is how fast you can forcefully blow air out of your lungs after taking a deep breath and indicates how open the airways are, or how difficult it is to breathe), and the 1-second forced expiratory volume (FEV<sub>1</sub>) (this is the amount of air that you can breathe out in the first second of exhaling). We looked at daily variability in your lung function as well as patterns in your lung function when at work and when away from work. Daily variability in PEF and FEV<sub>1</sub> was calculated by subtracting the daily minimum measurement from the daily maximum measurement divided by the mean value across the study period. Daily variability equal to or greater than 20 percent in PEF or 15 percent in FEV<sub>1</sub> was considered to be higher than normal. Excessive variability of peak flow rate and/or FEV<sub>1</sub> may occur with asthma. Evidence of a work-related pattern was found if higher than normal variability occurred during the work week and improved on days away from work. We have attached graphs from this testing to show trends in your pulmonary function over the testing period.

### **Results of Serial Spirometry**

*(Please insert individual interpretations here).*

*Use sentence 1 if the participant authorized NIOSH to send the results their physician at the time of consent.*

1. We have provided your test results to your physician, as you so requested.

*Use sentence 2 if the participant did not authorize NIOSH to send the results their physician at the time of consent.*

2. We suggest you provide this information to your personal physician, so that it may be added to your medical records.

These test results should not be considered a diagnosis of disease and do not independently disprove a diagnosis that you may currently have. That determination can only be made by your personal physician. Longer serial spirometry is often needed to demonstrate the presence or absence of a work-related pattern.

Again, thank you for your participation in this survey. If you have questions about these results, please feel free to contact our office at our toll-free number 1-800-232-2114 or call me directly at (304) 285-XXXX.

Sincerely,

Medical Officer  
Field Studies Branch  
Division of Respiratory Disease Studies