

A.R. Bolen, MPH, P.K. Henneberger, MPH, ScD, S.J. Derk, MA, X. Liang, MS, S.R. Sama, ScD, P.A. Preusse, RN, R. Rosiello, MD, D.K. Milton, MD, DrPH, Boston, Lowell, MA, Morgantown, WV

Background: Work-related patterns of asthma are frequently assessed via self-reported information. The objective of this study was to compare work-related self-reported asthma exacerbation against serial peak expiratory flow (PEF) findings.

Methods: Adults with asthma were asked to conduct serial spirometry testing at home and at work 5 times a day for 3 weeks. Participants also completed a daily log of respiratory symptoms and medication use concurrent with serial testing.

Work-related self-reported asthma exacerbation was defined as more symptoms or greater medication use on work vs. non-work days. A 3-member panel evaluated the serial PEF measurements for a work relationship. These judgments were used as a standard to determine the sensitivity and specificity of work-related self-reported asthma exacerbation. **Results:** 89 working adults with asthma provided adequate data, and 13 (15%) were determined to have PEF evidence of work-exacerbated asthma. Work-related self-reports of exacerbation based on symptoms (48%) were more common than those based on medication use (36%). Self-reported concurrent medication use had a better combination of sensitivity (62%) and specificity (68%) than self-reported concurrent symptoms. **Conclusions:** These findings suggest that self-reports alone fail to identify many adults with asthma who have objective evidence of work-related exacerbation and erroneously identify many without objective evidence.

(The findings and conclusions in this abstract have not been formally disseminated by NIOSH and should not be construed to represent any agency determination or policy.)

Session Info: [**] Thematic Poster Session, [C131] GLOBAL OCCUPATIONAL AND ENVIRONMENTAL DISEASES

Session Time: 8:15 AM - 4:15 PM

Presentation Date: Tuesday, May 23, 2006

Presentation Time: 8:15 AM

Room: Area B (Sails Pavilion, Upper Level), San Diego Convention Center

[Close Window](#)