



NORA Symposium 2003

Abstracts

Paper Number: 114

Semi-Quantitative Mold Exposure Index Predicts Building-Related Respiratory Symptoms

JH Park, PL Schleiff, MD Attfield, JM Cox-Ganser, K Kreiss*

National Institute for Occupational Safety and Health, Division of Respiratory Disease Studies, Field Studies Branch, Morgantown, WV, USA

The National Institute for Occupational Safety and Health (NIOSH) investigated 13 college buildings to examine whether a semi-quantitative mold exposure index (EI) could efficiently predict work-related respiratory symptoms. We collected work-related symptom data and room locations/time fractions through questionnaires. Industrial hygienists classified rooms for factors including extent of water stain, visible mold, mold odor, and dampness. We estimated 323 individual EIs based on each factor or a combination of the factors weighted by time fraction in particular rooms. In logistic regression models adjusting for age, gender, job position, hire years, smoking, allergies, and use of latex gloves, we found a significant exposure-response relationship for wheeze (Odds Ratio(OR)=2.3) with stain-based EI. EI based on the combined factors showed significant exposure-response relationships for chest tightness (OR=2.2), and shortness of breath (OR=2.7). Our findings suggest that an observational semi-quantitative exposure index can support public health action to prevent risk of building-related respiratory disease.

Our semi-quantitative mold exposure index, based on visual and olfactory observation, was associated with building-related symptoms that may reflect asthma, hypersensitivity pneumonitis, and nasal/sinus disease. From a public health perspective, these observational findings justify action to control water damage with attention to hidden reservoirs of bioaerosols, in order to prevent building-related respiratory disease.

(Footnotes)

* Contact author email: gzp8@cdc.gov

20023376

NORA Symposium 2003



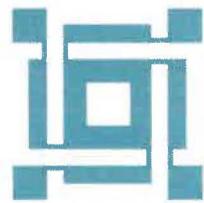
WORKING PARTNERSHIPS: APPLYING RESEARCH TO PRACTICE

June 23-24, 2003

Hilton Crystal City Hotel
Arlington, VA



NORA Symposium 2003



WORKING PARTNERSHIPS: APPLYING RESEARCH TO PRACTICE

June 23-24, 2003