

Sheet metal worker study links construction tasks to COPD risk

Airways obstruction among sheet metal workers participating in a respiratory screening program

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Overview

More than 12 million Americans suffer from a form of COPD (Chronic Obstructive Pulmonary Disease) such as bronchitis and emphysema. Most cases are associated with smoking, but occupational exposures are another important risk factor. Researchers examined detailed medical and work histories, as well as X-rays, for 3944 current and former Sheet Metal Workers whose work tasks were associated with exposure to respirable silica, asbestos, wood and cement dusts, fiberglass, paints and other established respiratory hazards. The data, collected as part of a medical screening program, enabled investigators to link specific occupational tasks to increased COPD risk.

Key Findings

- Smoking, a major cause of COPD, was considerably less prevalent among workers participating in the Sheet Metal Occupational Health Institute Trust (SMO HIT) medical screening program than for construction workers or U.S. males overall.
- The overall prevalence of COPD among medical screening program participants was 10.0% (95% CI=9.0-10.9).
- Exposures to man-made mineral fibers (MMMF, aka fiberglass), cement dusts, drywall dusts, and spray painting were statistically associated with COPD risk in analyses that considered all exposures collectively.
- Carbon arc welding and exposure to urethane foam insulation were associated with increased risk of COPD in analyses that considered each exposure separately.
- Bystander exposure to spray painting operations was associated with increased COPD risk.

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See full report:

<http://bit.ly/1vMYwbM>

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