

ASTHMA - AN OCCUPATIONAL HAZARD?

The type of work you do can put you at greater risk of developing asthma as an adult, a new study by Australia's leading respiratory research organisation, the Woolcock Institute of Medical Research, has found.

Funded by the CRC for Asthma, the paper published in this month's issue of *Occupational Medicine*, indicated occupational factors may be associated with an estimated 9.5% of cases of adult-onset asthma in New South Wales (NSW).

This represents almost a tenth of adult-onset asthma cases in Australia, both men and women, which may be prevented if exposure to known occupational inducing/sensitising agents were eliminated.

The population-based study surveyed over 5000 randomly selected subjects (aged 18 – 49 years) from across the state. Participants completed questionnaires enabling the Woolcock Institute of Medical Research to examine the association of asthma with reported exposure to a list of occupations known to be at risk from occupational asthma.

Occupational asthma (OA) is defined as asthma due to causes and conditions attributable to a particular occupational environment and not to stimuli encountered outside of the workplace.

After adjusting for sex, age and smoking variables the study found working in any high-risk job or exposure at the time of asthma onset was significantly associated with adult-onset asthma.

Associate Professor, Guy Marks, Epidemiology Research Leader at the Woolcock Institute of Medical Research, explains that although respiratory and occupational medicine specialists have long recognised work-related asthma as a problem, its importance has not been widely recognised in the community.

“What we did know, and what was reflected in the survey results, is that certain industries and occupations, and the sensitising agents found in these jobs, present a higher risk of inducing occupational asthma than others,” he said.

“These high-risk occupations are wide and varied, encompassing everything from automobile body repair, electronic equipment manufacture and farm work, to bakeries, hairdressing and the pharmaceutical industry.

The study also addressed the risk of developing adult-onset asthma due to short term, high level exposure to irritants, such as those implicated in sudden onset irritant-induced asthmas or RADS. It found that while these exposures were strongly linked to adult-onset asthma symptoms, they are relatively rare, with a population attributable risk of 0.2%.

A summary of the paper can be found at: <http://occmed.oxfordjournals.org/cgi/content/abstract/56/4/258>.

Johnson A, Toelle BG, Yates D, Belousova E, Ng K, Corbett S, et al. Occupational asthma in New South Wales (NSW): a population-based study. *Occup Med* 2006;56(4):258-262.

-end-