The investigation of occupational asthma is more favourably undertaken than occupational rhinitis

Dr Robert Michael Phillips, 2006

ABSTRACT

Study objectives: Electricity cable workers within the utility industries are exposed to two respiratory hazards: MDI isocyanate and metal solder flux. This study sets out to evaluate the nature, character and prevalence of work related respiratory symptoms and lung function within a group of electricity cable workers. The workers are exposed to different levels of hazard.

The study will test whether the medical management of electricity cable workers is applied more favourably when presented with lower respiratory symptoms than upper respiratory symptoms.

The study sets out to test the null hypothesis that medical management of workers presenting with either upper or lower respiratory symptoms are equivalent.

The study is a retrospective examination of existing health surveillance records for one complete year of 659 electricity cable workers in four regions of the UK. The regions are Central and Southern Scotland, North West England and North Wales.

Results: All 659 workers (100%) within the study were screened by questionnaire. 13 (0.8%) workers did not complete lung function tests. 648 (98.3%) workers were referred for medical review by an Occupational Physician. There were differences in the nature and prevalence of work related respiratory symptoms between the high exposure and a control group. Rhinitis or running nose symptoms ($p= 0.016 \text{ OR} = 3.637$) was the only significant symptom found. Lung function was found to have no significant difference in the exposure groups. Occupational Physicians medically managed lower symptom cases by recording medical histories and requesting serial peak expiratory flow investigations. These medical actions were balanced by second medical appointment reviews in only upper symptom cases and all 3 cases referred for independent review were upper symptoms.

Conclusion: Medical management of worker respiratory symptoms is balanced despite a significant greater prevalence of an upper symptom (rhinitis).

Key words: electricity worker, asthma, rhinitis, health surveillance.