

process, production and elementary occupations. (Abstract P4 Table 1). The reported prevalence of doctor-diagnosed respiratory disease was low (15%), in particular smoking related lung disease (COPD, 5%). An increased prevalence of impaired work performance was seen in breathless individuals with co-existent respiratory, cardiovascular or musculoskeletal disease with highest rates in those with declared lung disease. Dyspnoea, in many cases probably the result of COPD, is strongly and independently associated with sub-optimal performance at work in later life. Strategies to better accommodate employees with breathlessness will be needed if, as planned, the age of the UK workforce does increase.

P5 AIRWAY RESPONSIVENESS MEASUREMENTS IN ASTHMATIC RECRUITS TO EMERGENCY SERVICES

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Asthmatics undertaking emergency service work are thought to be at increased risk of severe bronchoconstriction with sudden exertion or exposure to irritants such as fire smoke, pepper spray or CS gas. The risks are poorly quantified and there are no clear guidelines to assist employers. We investigated the value of airway responsiveness measurements in 40 applicants to the police service who were thought to have asthma at a pre-employment examination. Their mean age was 25 years (SD 6 years); 22 (55%) were male. Only 15 (37%) reported active symptoms (wheeze, breathlessness or cough). Their median FEV1 was 106% of predicted (range 77–125%) and only 3 demonstrated airflow obstruction. Airway responsiveness was measured as PD₂₀.FEV₁ to methacholine using the Newcastle dosimeter technique¹ 16 (40%) had measurements in the ‘definite’ asthma range, that is, PD₂₀.FEV₁<200 µg; 6 in the “equivocal” range PD₂₀.FEV₁<200–1000 µg; and 18 in the ‘normal’ range PD₂₀.FEV₁>1000 µg. There was a clear relationship between pre-employment FEV1 and PD20 within the definite asthma group (F_(1,14)= 9.15; p<0.001) but there were no significant associations between PD20 category and symptoms, medication use or lung function. We conclude that airway responsiveness measurements are practical in this setting and identify more than 50% of asthmatics as probably at low risk of marked bronchoconstriction. Further follow-up of the cohort will be necessary to more precisely determine the risks (Abstract P5 Table 1).

Abstract P5 Table 1

	n	Current symptoms	Preventer inhaler	Median FEV1
Definite asthma	16	8 (50%)	12 (75%)	106%
Equivocal asthma	6	1 (17%)	5 (83%)	109%
Normal	18	6 (33%)	10 (55%)	107%

REFERENCE

1. Stenton SC, et al. *Occup Med* 1993;43:203–6.

P6 WORK-RELATED RESPIRATORY SYMPTOMS IN THE UK: DO PRIMARY CARE PHYSICIANS MISS DIAGNOSTIC OPPORTUNITIES IN OCCUPATIONAL ASTHMA?

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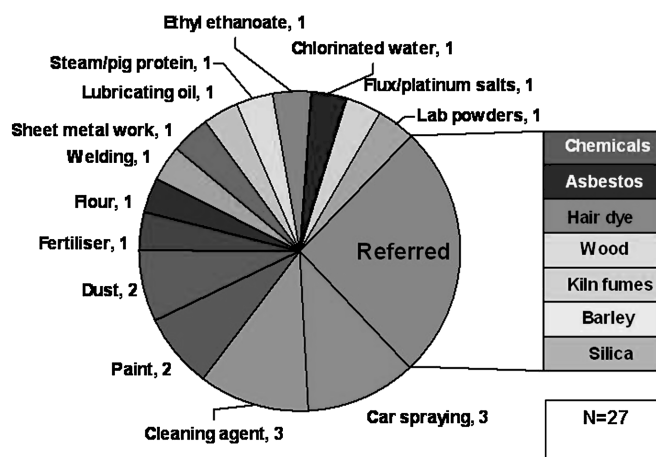
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Introduction and objectives Occupational lung disease is prevalent and costly. Population-based studies show that up to 20 cases of occupa-

tional lung disease per 100 000 workers per year should be identified.¹ The Health and Safety Executive estimates the cost of occupational asthma to our society to be over £1.1 billion for each 10 year period.² The prognosis of these individuals is better if they are removed from exposure quickly; however, this policy leads to unnecessary job loss in cases where the diagnosis is wrong.³ Little is known about the number of workers who present to primary care with work-related symptoms, or what proportion of these are referred for hospital specialist advice once a work-related element has been identified.

Methods The Health & Occupation Reporting network in General Practice (THOR-GP) at the University of Manchester, collects work-related ill-health data from between 250 and 300 GPs trained to diploma level in occupational medicine. Cases of undiagnosed respiratory disease, reported as unspecified work-related respiratory symptoms between 2006 and 2009 were retrospectively identified. The cases were subdivided into exposure (if known) and categorised as referred if sent to a hospital specialist for further investigation.

Results In 2006–2009 GPs reported 4902 cases of work-related ill-health, of which 115 (2%) were reports of respiratory disease. 27 cases of non-specified work-related respiratory illness were identified. Only 26% (7/27) were referred for a specialist opinion despite uncertainty of diagnosis. Of those not referred, the majority (17/20) were exposed to known asthmagens as illustrated in Abstract P6 Figure 1 (consensus view after exposure review from three occupational/respiratory physicians).



Abstract P6 Figure 1 Agents attributed to cases reported with respiratory symptoms referred to hospital specialists.

Conclusions More than three quarters of the cases with undiagnosed work-related symptoms identified in primary care were not referred to secondary care for diagnostic clarification. 85% of these cases were exposed to known asthmagens. The lack of diagnosis and/or specialist assessment in these cases may have significant impact on disease prognosis, disability and socio-economic cost to society.

P7 OCCUPATIONAL EOSINOPHILIC CONSTRICTIVE BRONCHIOLITIS WITH ASTHMA IN A FOAM CUTTER CAUSED BY SOYA BEAN PRODUCTS

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Introduction and background Soya bean dust is a recognised cause of asthma. More recently Soya bean has been used in the