USING STANDARDISED INCIDENCE RATE RATIOS TO COMPARE THE INCIDENCE OF MEDICALLY-REPORTED WORK-RELATED ASTHMA ACROSS OCCUPATIONS AND INDUSTRIES

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Objectives To develop methodology to compare the incidence of work-related ill-health (WRI) within occupations and industries and to identify those with significantly raised incidence of WRI.

Methods The Health and Occupation Reporting network (THOR) collects reports of WRI from clinical specialists, including respiratory physicians. Absolute incidence rates cannot be accurately calculated using these data because of difficulties in determining denominators for the population at risk. However the Labour Force Survey (LFS) provides estimates of the number of people employed in UK occupations and industries. We calculated directly standardised incidence rate ratios (SRRs) using reports of work-related asthma to THOR from 2002 to 2008 and the LFS population denominators. The CIs take in to account the increased variance due to some clinical specialists reporting only during a randomly assigned month per year (sample reporters). Further consideration is given to the high proportion of eligible physicians reporting to THOR by means of a finite population correction.

Results The occupations with the highest SRRs for work-related asthma included bakers and flour confectioners (males SRR 57; 95% CI 43 to 74, females 47; 26–85) and vehicle spray painters (males 44; 31–62). The industries with the highest SRRs were manufacturing of basic metals (males 16; 12–21) and manufacturing of motor vehicles (males 10; 8–12, females 29; 19–42).

Conclusions SRRs provide a useful way of identifying occupations and industries at increased risk of WRI when applied to these THOR data and may help in targeting occupational health resources.