P48 OCCUPATIONAL EXPOSURES AND RISK OF ADULT ONSET ASTHMA IN THE 1958 BIRTH COHORT FROM AGE 16 TO AGE 42 YEARS

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Objectives We have analysed occupational exposures and the association of adult onset asthma in the 1958 British birth cohort.

Methods By age 42, 9488 cohort members had provided a full occupational history and health information. Blind to asthma status we re-coded job descriptions into the ISCO-88 scheme and applied an Asthma Specific Job Exposure Matrix with an expert evaluation step. Adult onset asthma was defined as reporting 'ever asthma' at ages 33 or 42 and excluding all those who reporting 'ever asthma/wheezy bronchitis' at ages 7, 11 or 16. The risk of adult onset asthma associated with "ever" working in jobs with occupational exposures was determined in logistic regression analysis adjusted for sex, smoking, region, father's social class at birth and childhood hayfever.

Results After excluding childhood asthma the sample consisted of 7406 cohort members with a 9% prevalence of adult onset asthma. Nine specific exposures had and increased risk of asthma, including HMW flour and HMW enzymes exposures (OR 2.12 95% CI 1.17 to 3.85 and OR 2.32 95% CI 1.22 to 4.42), LMW cleaning products (OR 1.67 95% CI 1.26 to 2.22), LMW metal fumes (OR 1.45 95% CI 1.02 to 2.07) and textile production (OR 1.7195% CI 1.12 to 2.61). Four "low risk" irritant exposure groups were also associated with asthma, including combustion fumes and ETS.

Conclusions Several occupational exposures were associated with an increased risk of adult onset asthma by age 42 in this cohort of adults born in 1958. This analysis confirms in a British population existing knowledge about occupations associated with the development of asthma in working life.