

## Poster-discussion: Asthma

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**INCREASED RISK OF NASAL SYMPTOMS IN SWEDISH DENTAL TECHNICIANS DURING EXPOSURE TO METHYL METHACRYLATE, RAPID GLUE OR GRINDING**

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**Objectives** The aim was to estimate the relative risk of respiratory symptoms in Swedish dental technicians during exposure to methyl methacrylate (MMA), rapid glue or grinding in cured acrylate material, compared with controls.

**Methods** This was a retrospective cohort study among former dental technician students (n=2139). Controls comprised general population controls (n=2288) with similar distribution of age and sex as the dental technicians. A mailed questionnaire asked for asthma, rhinitis, other respiratory symptoms, work place exposures and smoking habits. The incidence rates of reported symptoms were calculated. For dental technicians, incidence rates were calculated during time with reported exposure to three different exposures; MMA, rapid glue or grinding in cured acrylate material. Incidence rates in controls were calculated from age 20 until answering the questionnaire. Incidence rate ratios (IRR) and 95 percent CI were calculated.

**Results** The response rate was 58% (1210 dental technicians and 1316 controls answered the questionnaire). IRRs for asthma and lower respiratory tract symptoms were around unity. IRRs for nasal symptoms were increased during the three exposures in dental technicians; IRR during exposure to MMA was for rhinitis 1.61 (CI 1.33 to 2.94), for nasal blockage at work 2.84 (2.19 to 3.63), and for a runny nose at work 2.29 (1.66 to 3.17). Smoking habits were similar in dental technicians and controls.

**Conclusions** Swedish dental technicians reported increased incidences of nasal symptoms during workplace exposures to MMA, rapid glue or grinding dust from cured acrylate material.