

Cohort Study of Workers in the UK Glass-Reinforced Plastics Manufacturing Industry

Damien M McElvenny^{1,2}, Will Mueller¹, Yvette Christopher-de Vries¹, Anne Sleeuwenhoek¹, Ioannis Basinas², Martie van Tongeren², Lucy Darnton³, Mette Christensen^{4,5}, Henrik Kolstad^{4,5}

Introduction

- High exposures to styrene in glass-reinforced plastics manufacturing sector
- Usually no other workplace carcinogens present
- Small cohort (n = c1800) previously included in IARC study (Kogevinas et al 1994)
- Study part of an update to the IARC study, coordinated by Aarhus University (cohorts from Denmark, Finland, Italy, Norway, USA, n = c95,000)
- Primary interest in haematopoietic cancers, although other cancer sites of interest e.g. oesophagus, nose & nasal cavities and lung
- Recently upgraded by IARC to “probably carcinogenic” (Group 2A)

Methods

- Study clearances (Ethics, Health Research Authority Confidentiality Advisory Group, NHS Digital Information Group Advising on Release of Data)
- Trace workers for mortality, cancer incidence at NHS central register
- Calculate SIRs and SMRs, and (if enough power) subgroup analyses, including by exposure category

Institutional Affiliations

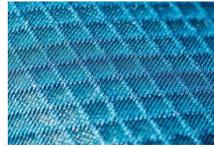
¹Institute of Occupational Medicine

²University of Manchester

³Health and Safety Executive

⁴Aarhus University

⁵Aarhus University Hospital



Current progress

- All study clearances now obtained
- Currently assembling cohort for tracing
- Background cancer rates being assembled
- Anticipating analysis being completed by end of Jan 2023
- Anticipate submitting as a short report for Occup Environ Med
- International study exposure assessment, based on study cohort data and literature search, nearing completion
- Anticipate international study being completed towards end of 2023



Policy Implications

- The international study is the most powerful study to date to address the carcinogenicity of styrene

Funding

- Health & Safety Executive, UK
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- No conflicts of interest to declare

References

Kogevinas *et al* (1994). Scand J Work Environ Health 20: 251-61

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IOM Head Office

Research Avenue North,
Riccarton, Edinburgh,
EH14 4AP

Tel: 0131 449 8000

Fax: 0131 449 8084

Web: www.iom-world.org

Email: iom@iom-world.org