

Historical exposure to asbestos of (Dutch) firefighters




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Non-disclosure

Disclosure of speaker's interests	
(Potential) conflict of interest	None
Portentially relevant company relationships in connection with event	-
<ul style="list-style-type: none">• Sponsorship or research funding• Fee or other (financial) payment• Shareholder• Other relationship, i.e. ...	<ul style="list-style-type: none">----



IAS



- Allowance (Advice to Social Insurance Bank)
- Mediation for damages – (ex) employers
- Information and knowledge exchange

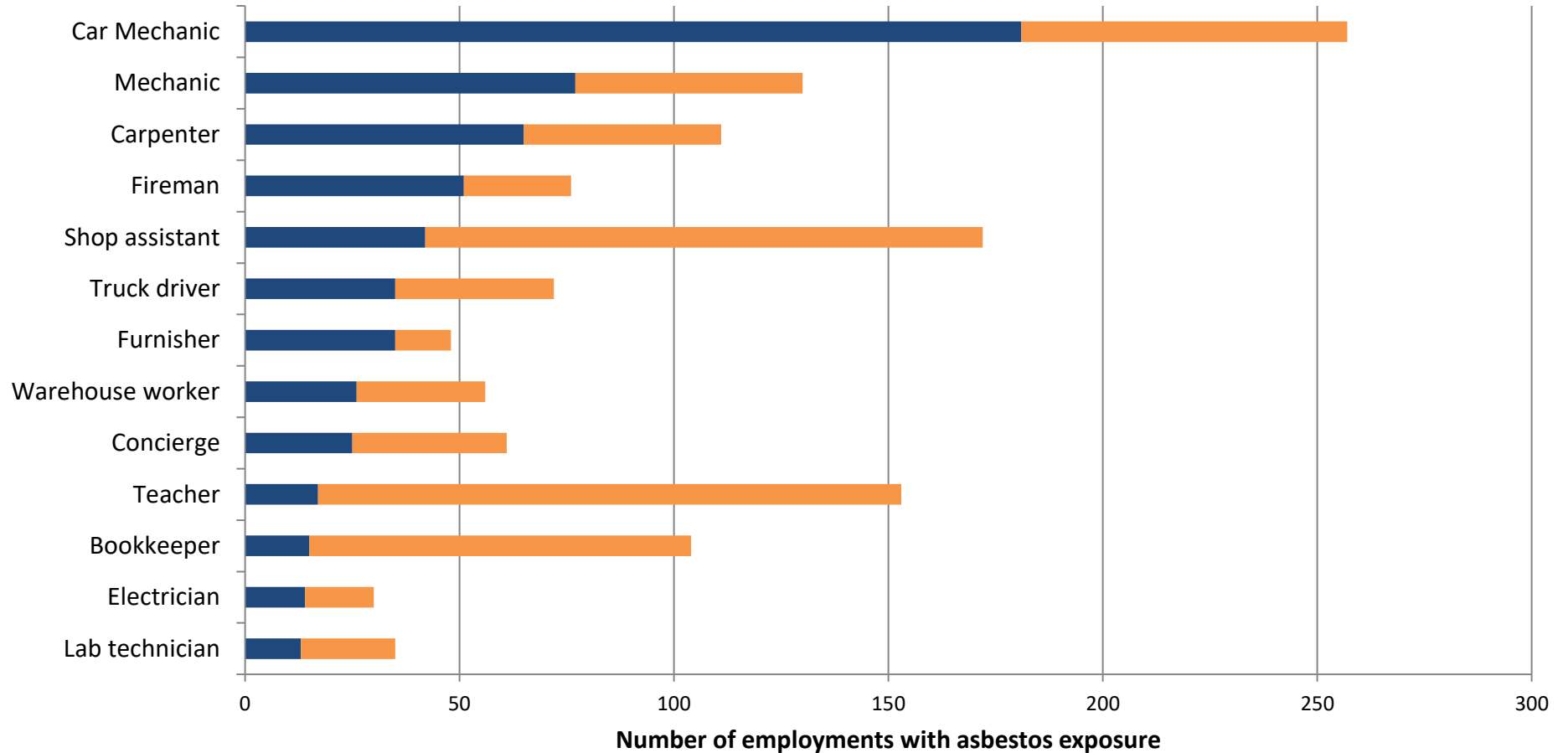
Joint initiative of:

- Employers and Workers associations
- Asbestos Victims Committee
- Association of Insurance Companies
- Government

Database IAS

Trade and Services

■ Certain ■ Possible






Purpose

- List of occupations Health Council (1998)
- Analysis database IAS

What do we know about historical exposure of firefighters to asbestos? (2020-2021)

IARC June 2022:

Occupational exposure as a firefighter is carcinogenic for humans (Group 1) based on sufficient evidence in humans for mesothelioma and bladder cancer.



Source

- During fire (construction build before 1995)
 - Primary exposure limited (denaturation >1200 ° Celsius)
 - Secondary exposure more important
 - Collapsing buildings
 - Preventive demolition
 - Stirring debris
- Other
 - Fire station (building and car repair)
 - Drill hall
 - **Inspection buildings**
 - Dirty clothes
 - Clothes (**helmet**, gloves)
 - Screens / blankets

Exposure

Period	Level of exposure	Explanation	Chances of being exposed	Explanation
Before 1960	+++	Asbestos in building, ships et cetera Dirty clothes	+++	Some use of gas mask
Starting 1960	+++		++	Selfcontained breathing apparatus sometimes available/used
Starting 1995	++	No asbestos in new buildings Central cleaning of clothes	+	Selfcontained breathing apparatus always available, used during fire and demolition. Procedures clothes/cleaning
Around 2019	+	5% fires has asbestos materials	-/+	Selfcontained breathing apparatus consequently used

Incidence

- Diagnosis code (ICD10, 1990, mesothelioma)
- Follow-up period / cohort size
- Compare countries

Study	Cohort	Origin cohort	SIR (95% btbi)	Exposure indicators
Pukkula, 2014	16.422	Scandinavië	1,55 (0,90-2,48)	Years of service
Daniels, 2014	29.993	VS	2,29 (1,60-3,19)	Years of service
Glass, 2017	157.931	Australië	0,64 (0,46-0,87)	Years of service 53% incidents were fires (of which 13% fire in a building)

IARC june 2022:

Occupational exposure as a firefighter is carcinogenic for humans (Group 1) based on sufficient evidence in humans for mesothelioma and bladder cancer.

Male/female, professional/volunteer

Lessons: New and emerging risks

- Oral history
 - Firefighter is not only a firefighter
 - Drill hall
 - Dirty clothes
 - Availability / use
- Epidemiology
 - What do we know about exposure?
 - Diagnosis code



Thanks ...

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