

Work-related cancer and vulnerable groups

Tony Musu

EU-OSHA workshop on carcinogens & work-related cancer
Berlin, 3-4 September 2012

Overview

- Background information on occupational cancers in the EU
- Vulnerable groups ?
- What do we know about underestimation of exposure to vulnerable groups?
- Which strategies exist to overcome underestimation?
- How to support vulnerable groups?

Background information on occupational cancers in the EU

- 1 280 000 cancer deaths estimated in the EU-27 in 2011
- ETUI estimates that at least 8% of cancer deaths are work-related (generalized under-reporting)
- cancer is now the main cause of “death by working conditions” in Europe
- manual workers are more exposed to carcinogens than white-collar workers (important social inequalities of health)
- while industrial employment is shrinking, the number of workers exposed to carcinogens is not going down
- multiple exposures is the general situation
- occupational cancers are preventable

Vulnerable groups?

- Women
- Ageing workers (> 50)
- Young workers (15 – 24)
- Temporary & part-time workers
- Outsourced workers
- Low qualified migrant workers

Women die less frequently from cancer than man

Standardised cancer death rate in the EU-25, 2003

Men	Women
255 per 100 000	143 per 100 000

Source: Mangeot, ETUI, 2007

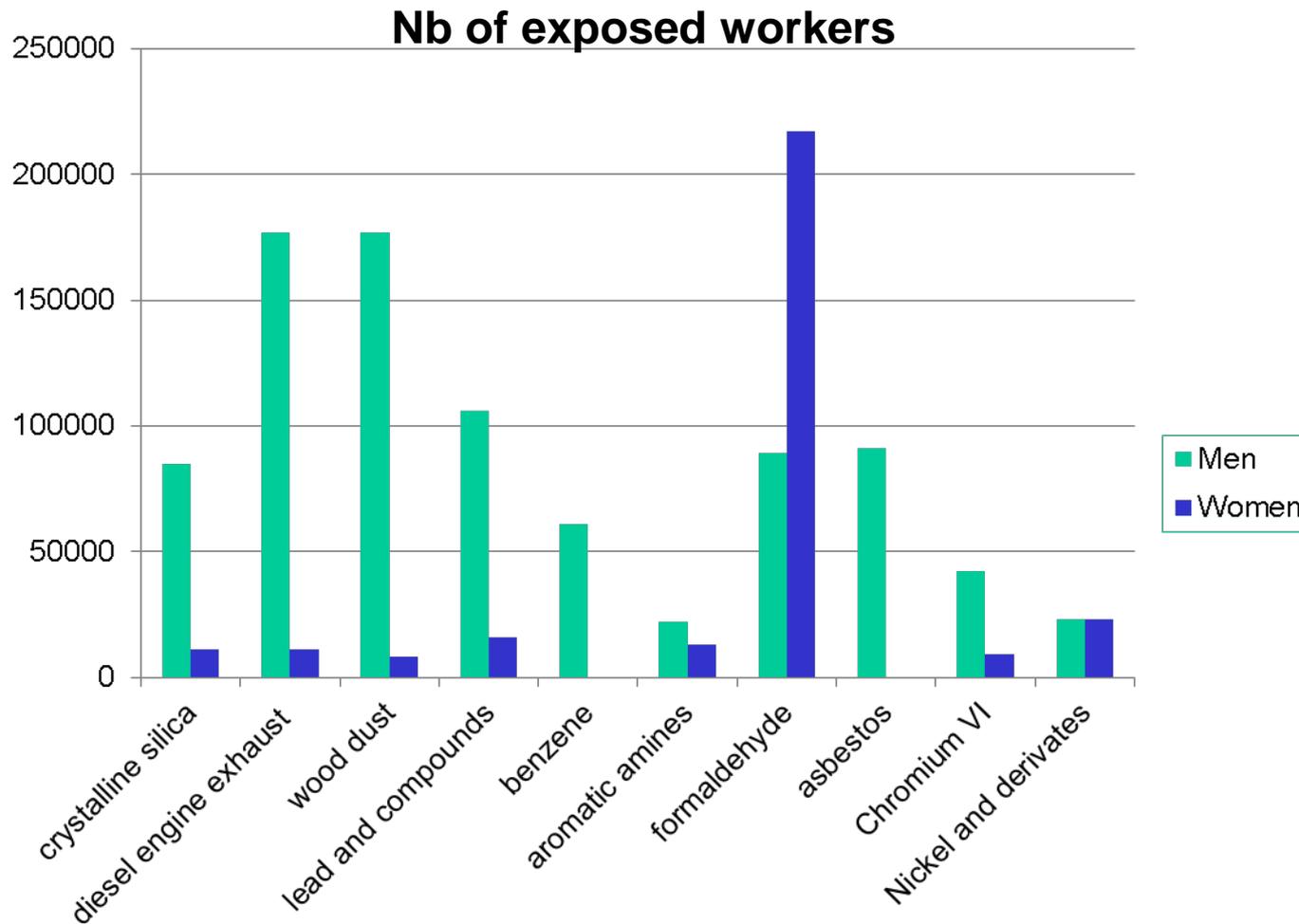
Data on occupational cancer mortality

Dol & Peto, 1981		Olsen et al, Nordic Countries 1997		IARC, France, 2005		
Global death (%)	Estimation range	Men (%)	Women (%)	Men (%)	Women (%)	Global death (%)
4	2-8	3	< 1	3,7	0,5	2,4

Source: Afsset , 2009

Exposure to some carcinogens at work by gender (1)

Source: SUMER survey, France , 2004
(48190 questionnaires, data extrapolated to 12 million workers)



Exposure to some carcinogens at work by gender (2)

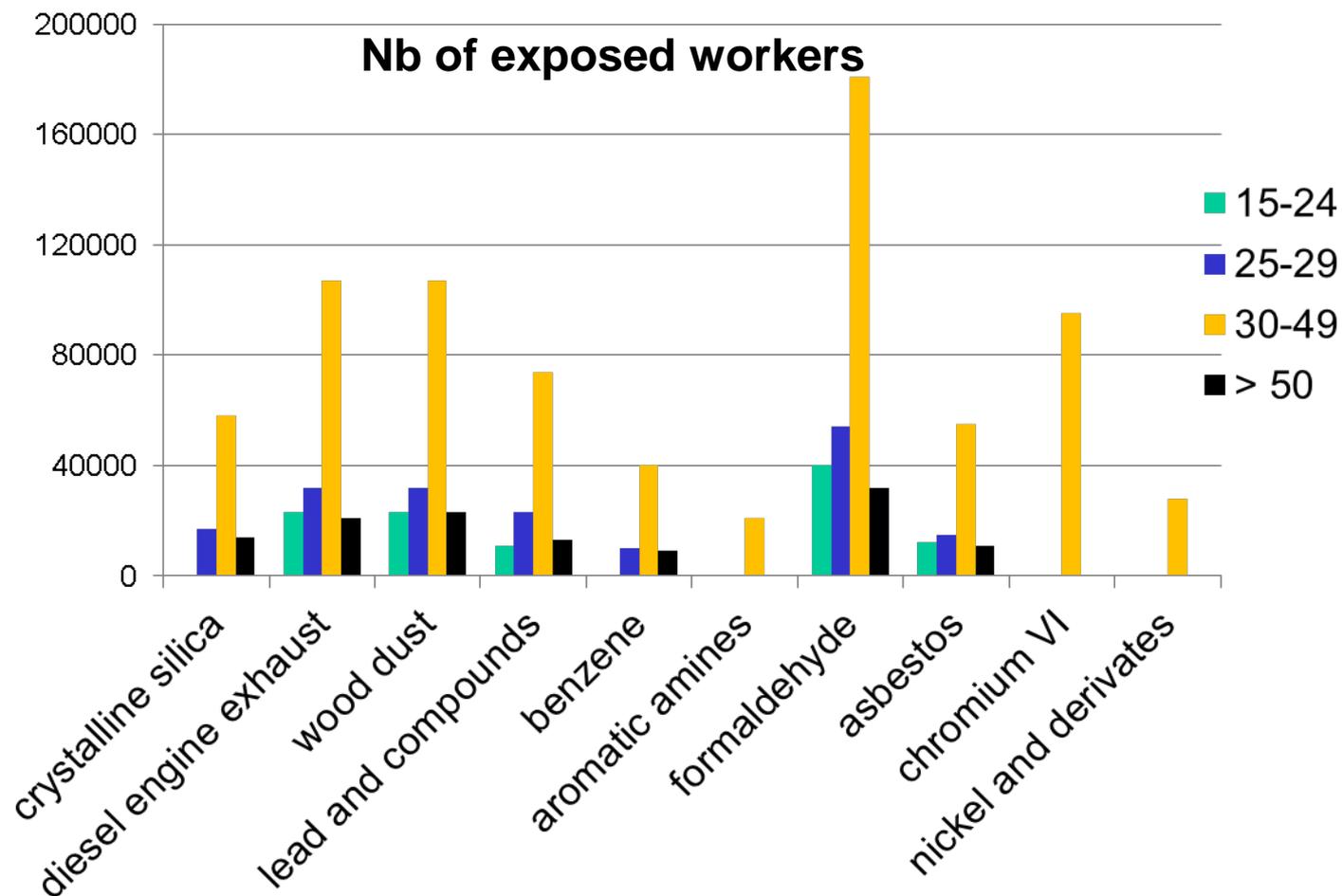
- Men are generally more exposed than women
- Greater concentration of men in particular high-cancer risk jobs (eg: construction, automobile repair, metal industries)

But :

- scarce data on women & occupational cancers (except breast cancer & night shift)
- little understanding as to how physiologic sex differences might impact susceptibility to occupational cancer (Camp, 2004)
- only 35% of all articles on occupational cancers published between 1971 and 1990 include women (Mangeot, ETUI,2007)
- Women are exposed at work but also in unpaid house work (eg: cleaning products)
- Female occupational cancers invisible ?

Exposure to some carcinogens at work by age (1)

Source: SUMER survey, France , 2004
(48190 questionnaires, data extrapolated to 12 million workers)



Exposure to some carcinogens at work by age (2)

- Most exposed group age is 30-49 in the SUMER survey
- Young workers and ageing workers also exposed to carcinogens but specific data are scarce

Characteristics	
Young workers	Ageing workers
Lack experience & less cautious than older workers	Natural deterioration of physical and mental capacities
Overrepresented in certain sector (restaurants) and more likely to work night shifts	Longer exposure to risk factors and multiple exposures more likely (also increasing employment rate)
Exposure when young can lead to later development of occupational diseases	Greater risk of developing health problems (including cancers)

Source: adapted from Milieu, 2011

Exposure of temporary & part-time workers to carcinogens

- In France, between 20 000 and 30 000 workers per year are exposed to ionizing radiation in the maintenance of nuclear power plants (Thébaud-Mony, 2000)
- Industrial cleaning and maintenance is often subcontracted (= outsourcing the risk). In that sector, most occupational cancers are observed in subcontracted workers (APCME, 2009)
- No EU-wide data

Characteristics

Often low-skilled manual workers

Job insecurity (likely to accept harder working conditions)

Fewer opportunities to receive training

Less medical surveillance, less unionisation

Short but cumulative exposures, multi exposures

Source: adapted from Milieu, 2011

Exposure of migrant workers to carcinogens

- 3,5 million persons settling each year in a new country of residence in the EU-27 with more non-EU than EU citizens. Half of all immigrants younger than 29 years old (Eurostat, 2010)
- No EU-wide data on occupational cancer cases

Characteristics

Over-qualified workers or low skilled manual workers

Numerous migrant domestic workers

Undocumented migrant workers believed to face the worst working conditions and greatest OSH risks

Source: adapted from Milieu, 2011

Which strategies exist to overcome underestimation of exposure? (1)

Active research projects:

- SUMER survey (France): data collected by occupational health doctors aimed at mapping workers' exposure to chemical, physical and biological agents
- GISCOP93 survey (France): data collected by researchers aimed at recreating the work history of patients diagnosed with cancer in 3 hospitals of Paris region & improving recognition and compensation
- OCCAM project (Italy): Occupational Cancer Monitoring by automatic linkage of cancer cases (and controls) identified in Hospitals with the information available in the Social Security archives (= name of employing firm and sector in which workers are employed for each year of employment)

Which strategies exist to overcome underestimation of exposure? (2)

Importance of OSH legislation enforcement:

- Under the Carcinogens & Mutagens Directive (2004/37/EC) employers are obliged to perform a risk assessment and reduce the use (substitution > closed system > control). Also obligation to keep track of workers' exposures. Enforcement particularly needed in SMEs.

Creating National Exposure Data Bases:

- National systems of occupational health records should be developed to ensure adequate recording of workplace exposures and occupational cancer risk factors.

Which strategies exist to overcome underestimation of exposure? (3)

Continued epidemiologic and cancer research is needed:

- Lack of accurate measurement tools for many known and suspected carcinogens. Effects of multiple agent exposures are poorly understood

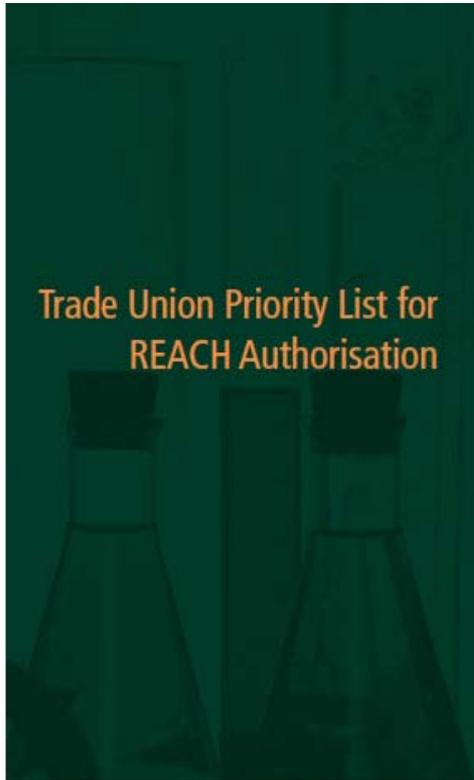
Physicians need to consider occupational and environmental factors:

- Medical professionals ask infrequently about patient workplace and home environment when taking a medical history. Additional training and awareness raising campaigns are needed.

How to support vulnerable groups ?

- Occupational cancers are preventable: safer alternatives to many currently used carcinogens are urgently needed. The REACH regulation can be an incentive for substitution.
- Workers representation is key: OSH situation always better in companies with trade union representatives
- Awareness raising campaigns targeted to vulnerable workers can help inform about carcinogen exposures and how to minimize them – A sectorial approach might be more effective
- Vulnerable workers (like all workers) should have access to preventive services

Trade Union Priority List for REACH Authorisation



- 334 substances of very high concern
- Widely used at the workplace and linked to occupational diseases
- If they are included in the REACH candidate list, development of safer alternatives will be promoted
- The TU list is available on line: www.etuc.org/a/6023

for REACH Authorisation



etui.
european trade union institute



■ Version 2.0, June 2010
With main uses indicated in each entry



Thank you, further info on:

<http://www.etui.org/Topics/Health-Safety/Occupationalcancer>

<http://www.etui.org/Topics/Health-Safety/Chemicals-and-REACH>

<http://www.etuc.org> > Our activities > REACH

References

Mangeot, ETUI, 2007. Occupational cancer, the Cinderella disease:

AFSSET, 2009; Avis Cancers et environnement:

Camp et al, Clin Chest Med, 2004

Sumer, 2004 : <http://travail-emploi.gouv.fr/etudes-recherche-statistiques-de,76/statistiques,78/conditions-de-travail-et-sante,80/les-enquetes-surveillance-medicale,1999/2099,2099/sumer-1994-fiches-par-nuisance,14390.html>

Milieu, 2011; OSH risks for the most vulnerable workers:

APCME, 2009: <http://www.apcme.net/theme/Produits/telechargement/Cancers/ARC-INCA.pdf>

Thébaud-Mony, 2000: L'industrie nucléaire, sous-traitance et servitude, Inserm, 2000

Eurostat 2010, Health and Safety at work in Europe (1999-2007) :

http://epp.eurostat.ec.europa.eu/cache/ITY_OFFPUB/KS-31-09-290/EN/KS-31-09-290-EN.PDF

Giscop93, 2004:

OCCAM