REACH,
Impact on Occupational Health

Tony Musu

European Trade Union Confederation

Workshop for State Authorities

Impacts of Chemicals policy – How to measure it ?
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Overview:

1. Statistics on chemicals-related occupational diseases in EU-15
2. RPA study
3. ETUC study
4. Conclusions

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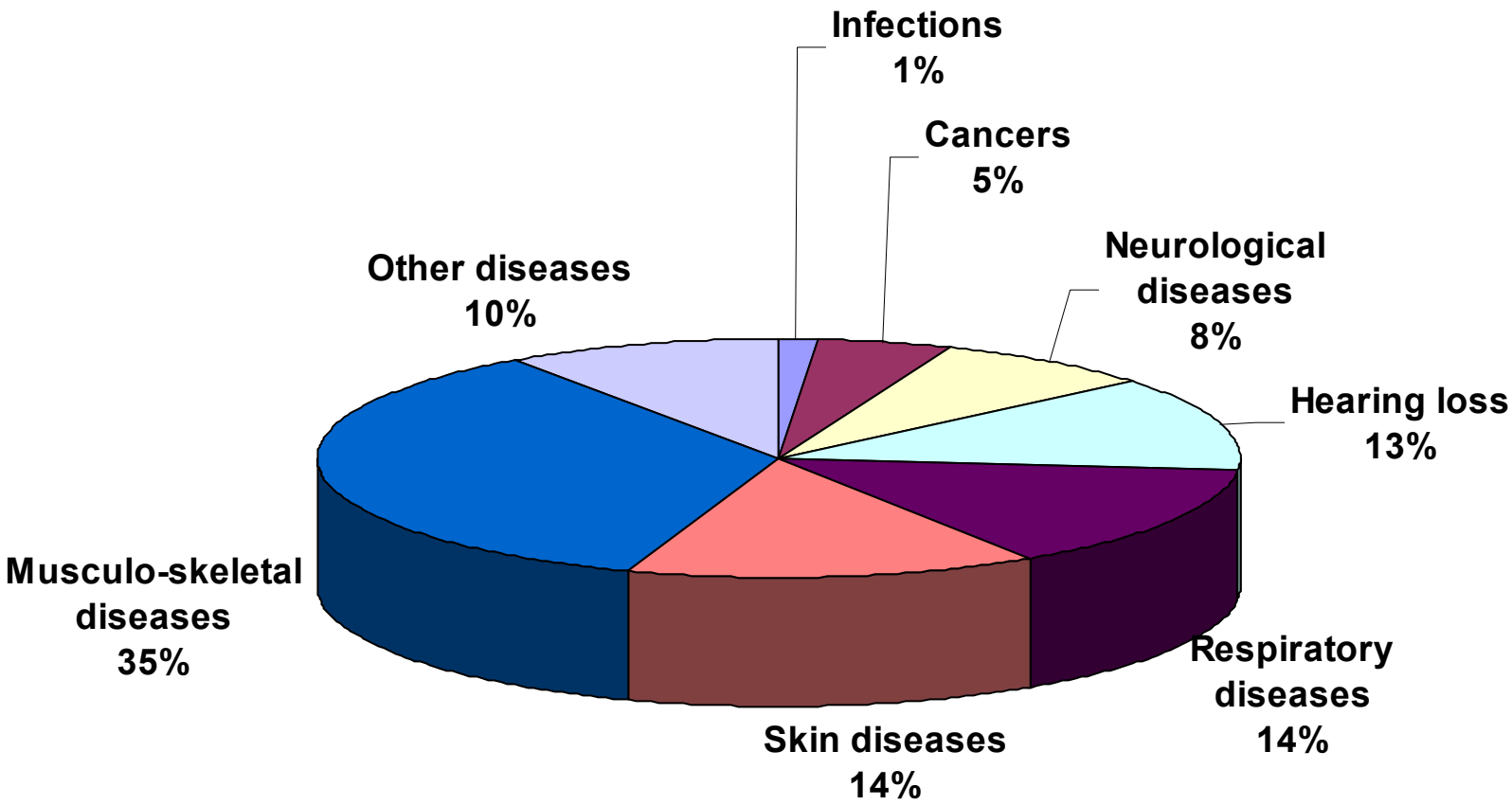
Recognised Occupational diseases in Europe in 2001



Source: EODS Eurostat, 2004

How many are chemicals-related ?

Occupational diseases	% linked to chemicals exposure	% amongst all recognised diseases	% chemicals related amongst all recg. diseases
Cancers	4 – 90* %	5 %	0.2 - 4.5* %
Neurological diseases	2 %	8 %	0.2 %
Respiratory diseases	36 – 89* %	14 %	5.0 – 12.5* %
Skin diseases	88 %	14 %	12.3 %
Total			~ 18% to 30* %

(*): including chemical dust

Source: extrapolated from EODS Eurostat, 2004

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Health Benefits from REACH:

Assumption:

- Information on health effects from chemicals will lead to reduction of exposure and prevention of illness
- Some of the chemicals-related occupational diseases are linked to unknown effects from these chemicals

Step 1: Health impact scenarios on the number of cases reduced under REACH

	Lower bound	Upper bound
	Cases associated with exposure to Unknown chemicals	**Cases associated with exposure to Non-specific chemicals**
Cancers	2 167	4 333
Neurological diseases	50	485
Eye disorders	50	50
Respiratory diseases	275	3 680
Skin diseases	1 350	12 000

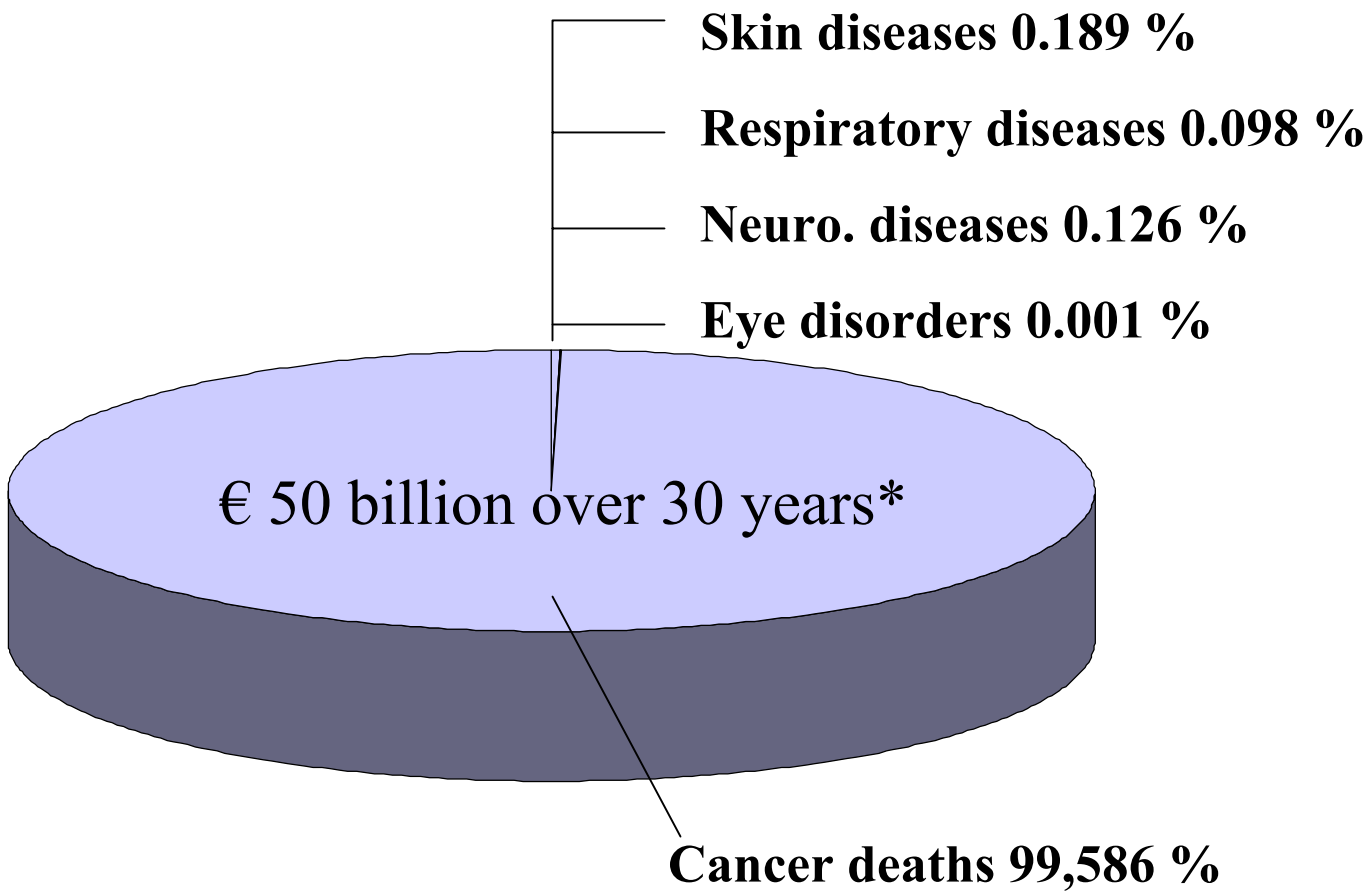
Step 2: Estimation of the economic costs per case per year

	Cost per Case per Year (€)
Cancers	€ 2.14 million
Neurological diseases	€ 11 570
Eye disorders	€ 600
Respiratory diseases	€ 1 180
Skin diseases	€ 640

These costs include:

- costs of medical treatment
- the value of lost output
- human costs (for cancer = value of a statistical life)

Step 3: Economic value of the future diseases avoided as a result of REACH (= results step 1 X results step 2)



(*): 2000 prices, discounted over 30 years at 3%

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Objective of the ETUC (ongoing) study ?

- Assessment of the impact of REACH on occupational health with a focus on skin and respiratory diseases

Why a focus on those 2 occupational diseases ?

- Benefits from REACH are underestimated in the RPA study because underdeclaration was not considered
- 88 % of occupational skin diseases are related to chemicals exposure
- 36 % of occupational respiratory diseases are related to chemicals exposure
- Short time lag between exposure and effects (reflecting the present work conditions)

Methodology of the ETUC study ?

- Based on RPA methodology (3 steps)

Diffrence with RPA study ?

- Health impact scenarios (step 1) are calculated from the « real » number of cases of occupational diseases

In what range is that « real » number ?

- Minimum : nb of recognised cases (eg: data from MS' insurance bodies) = RPA study
- Maximum : number: nb of self-reported cases (questionnaires completed by individual workers)

	RPA study (estimation of recognised cases/year)*	LFS (self-reported cases/ year)*
Skin diseases	18 000	200 000 (x 11)
Respiratory diseases	17 000	600 000 (x 35)

* In the EU-15

LFS = Labour Force Survey, Eurostat 1999 ad hoc module

→ « Real » nb of cases is somewhere in the middle

How to estimate the real number of occupational diseases ?

- Review the litterature dealing with underdeclaration in the different european countries
- Voluntary surveillance schemes for the reporting of occupational disorders:

Examples in Great Britain:

SWORD: respiratory diseases

EPIDERM : skin diseases

Estimated benefits for « real » number of cases:

Assumption: real nb of cases = half nb of self-reported cases

	RPA benefits estimation (€ million)	Correction factor	Our provisional estimation (€ million)
Skin diseases	**100** (0.189 % of 50 billion)	**5.5**	**550**
Respiratory diseases	**50** (0.098 % of 50 billion)	**17.5**	**875**
Total			**1 425**

4. Conclusions:

- REACH direct costs: € 2.3 billion
- REACH benefits for occupational skin and respiratory diseases only : € 1.425 billion

➡ REACH is clearly an opportunity to reduce the nb of chemicals-related occupational diseases and the associated costs for both industry and the society

further info on:

http://tutb.etuc.org