

## Mortality in the cleaning sector

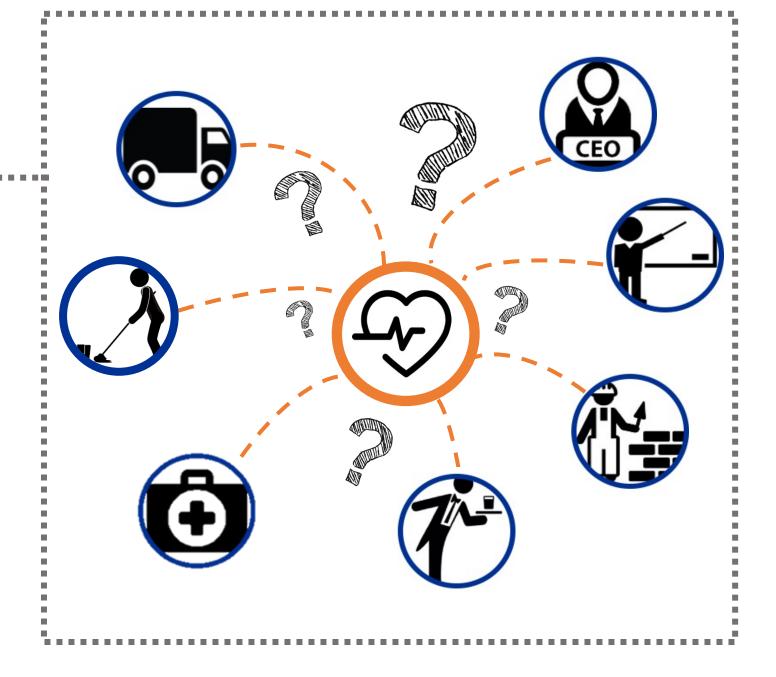
the role of cancer

dr. Laura Van den Borre

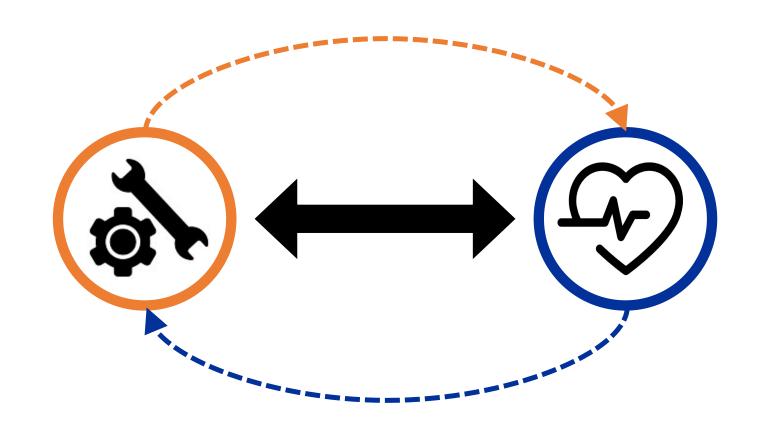
ETUI Conference Women, work and cancer

## Problem

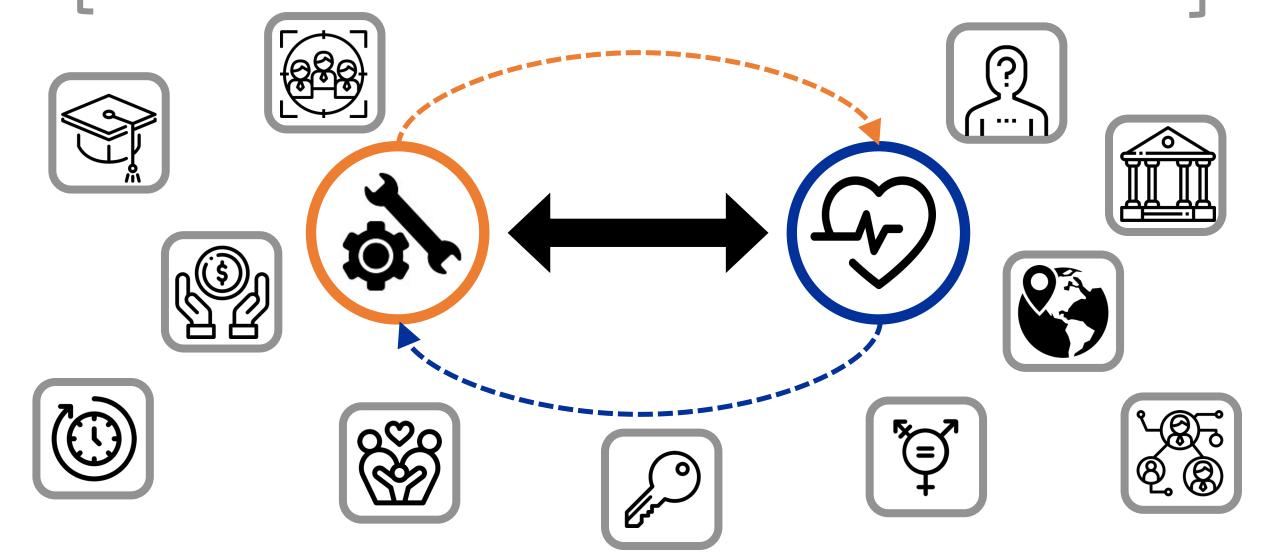
Scarce research on occupational health and mortality differences in Belgium



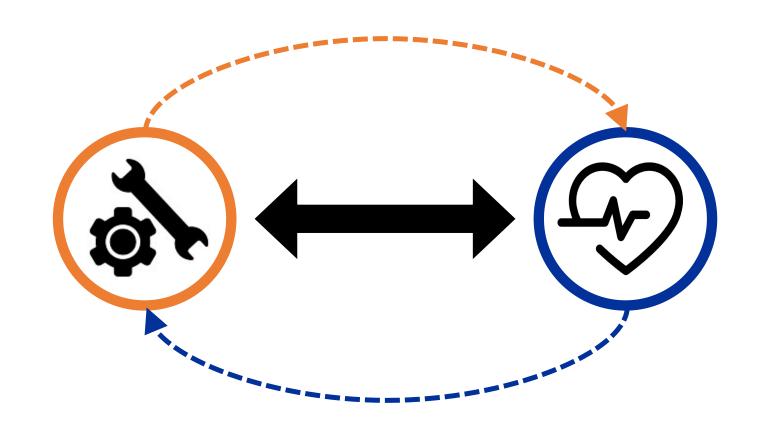
# Occupation, health & mortality: a complex, multidimensional relationship



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## **Data**

Census 1/3/1991

Census 1/10/2001

National register: All-cause mortality 1/3/1991 - 31/12/2011

Death certificates 1/3/1991-31/1/1997

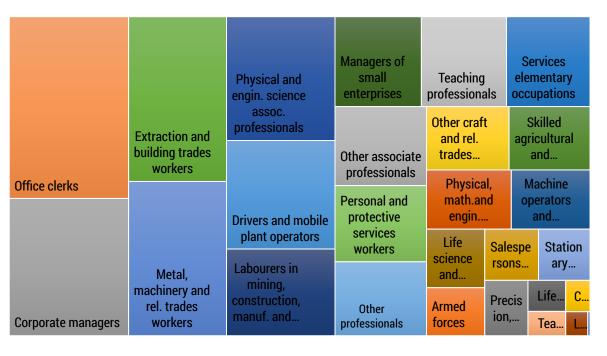
Cause-specific mortality (ICD-9)

Death certificates 1/10/2001-31/12/2011

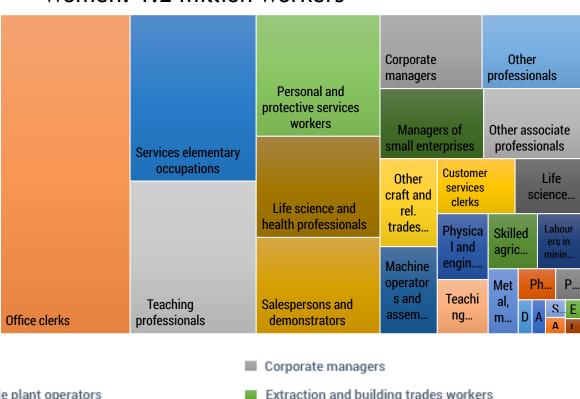
Cause-specific mortality (ICD-10)

## Study population: 1991 workforce

Men: 1.9 million workers



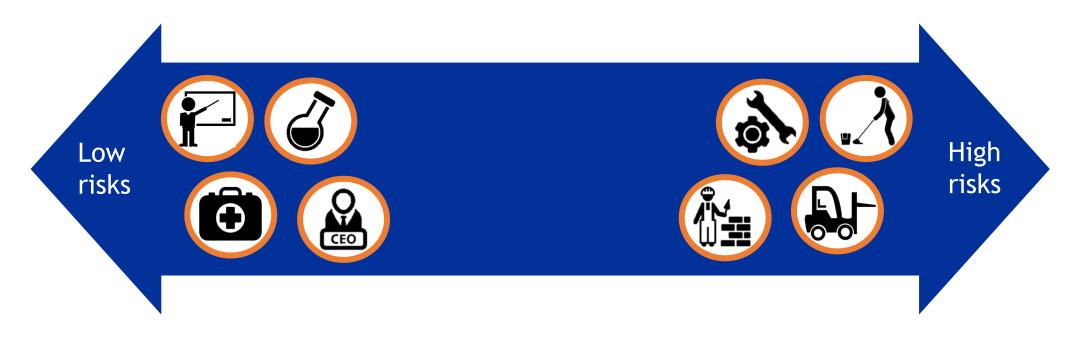
Women: 1.2 million workers





- Extraction and building trades workers
- Life science and health assoc. professionals
- Managers of small enterprises
- Other associate professionals
- Personal and protective services workers

## Large health and mortality differences by occupation

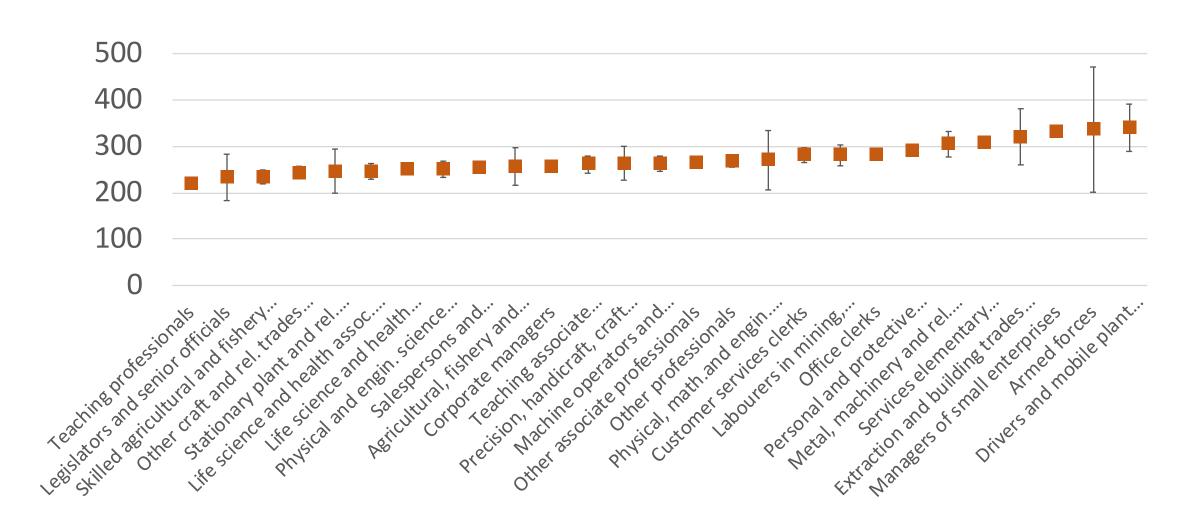


Pattern was found in the male and female workforce

Large occupational variation among preventable causes of death

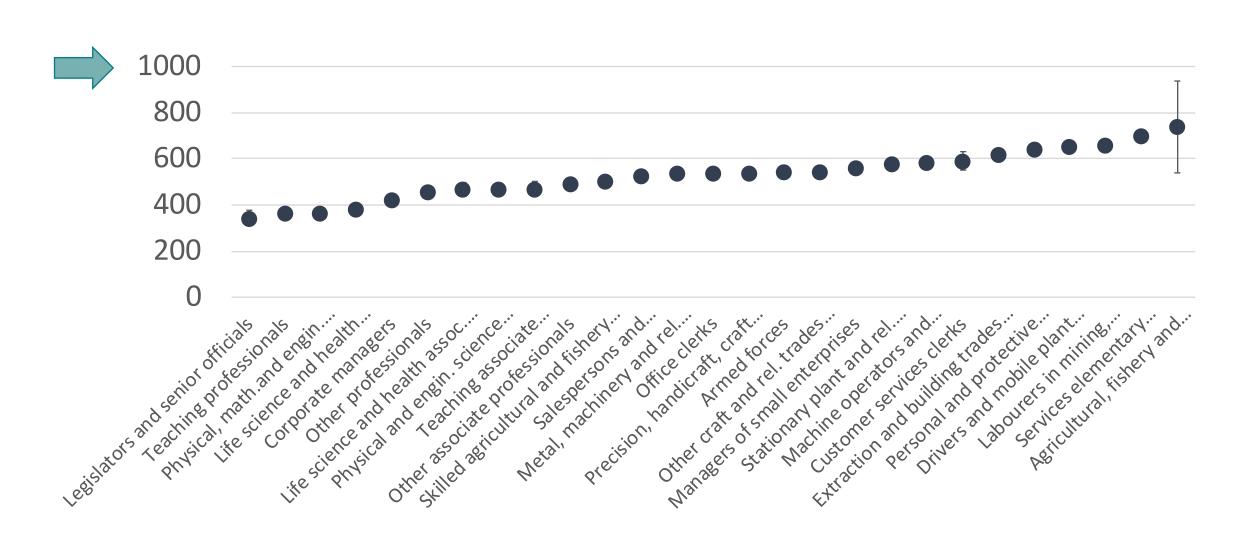
## All-cause mortality among female workers (1991-2011)

Directly standardised mortality rates per 100,000 & 95% confidence intervals Reference: male and female working population in 1991

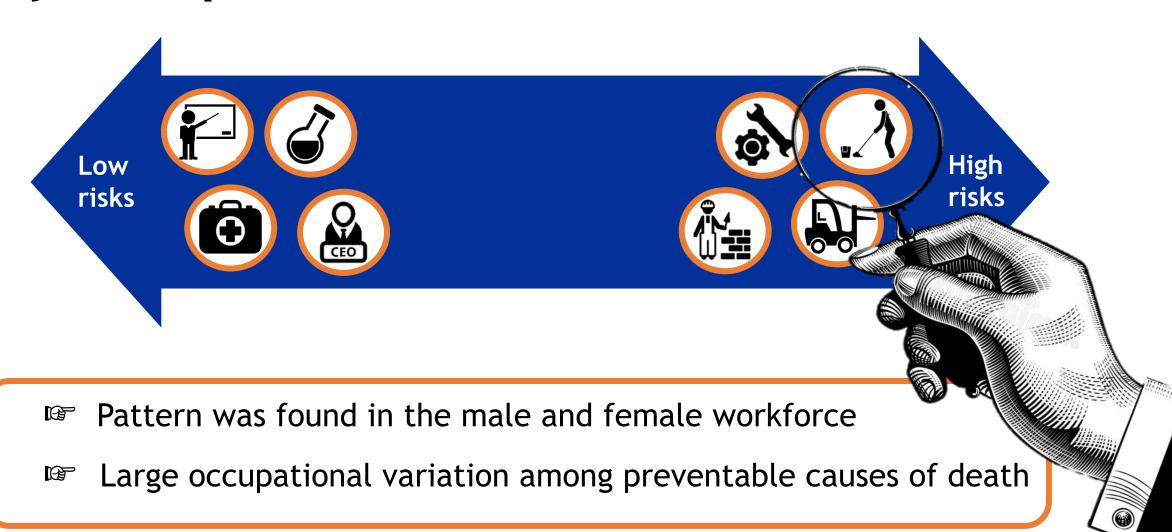


## All-cause mortality among male workers (1991-2011)

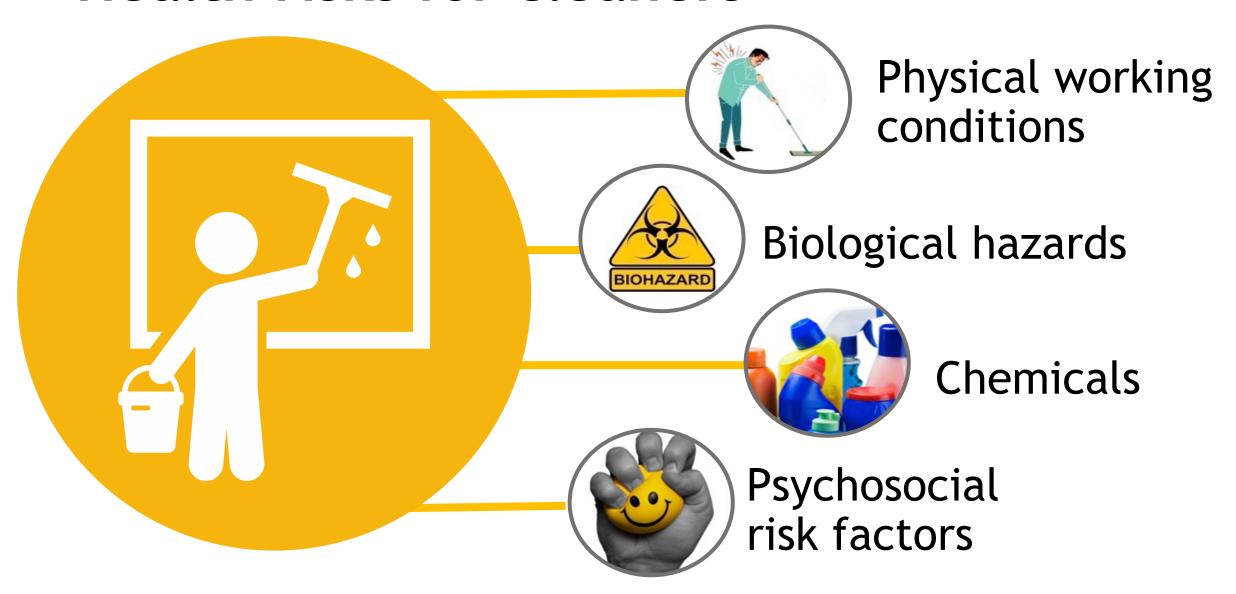
Directly standardised mortality rates per 100,000 & 95% confidence intervals Reference: male and female working population in 1991



# Large health and mortality differences by occupation

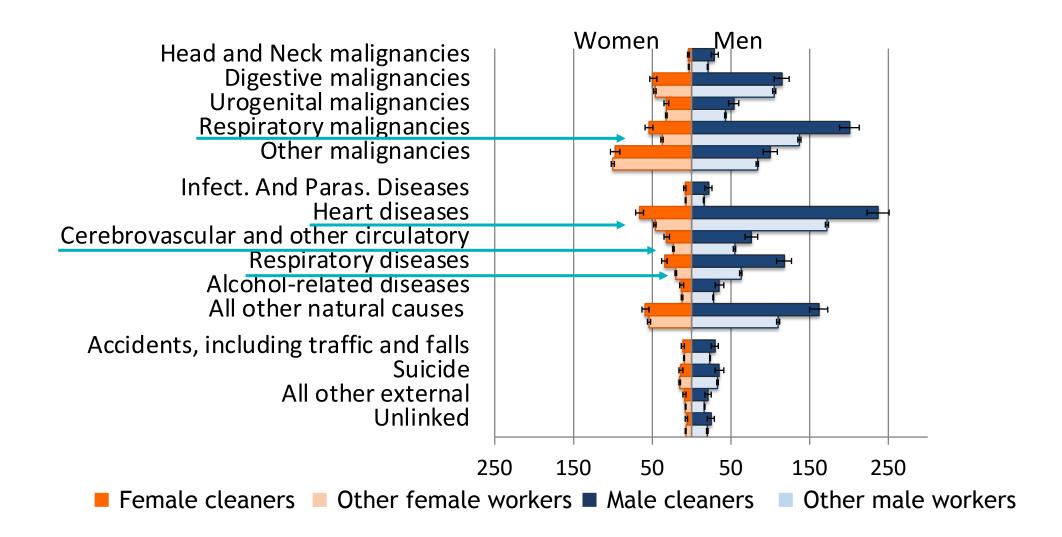


## Health risks for cleaners



### Mortality among cleaners and other workers (2001-2011)

Directly standardised mortality rates per 100,000 & 95% confidence intervals Reference: Sex-specific working population in 1991





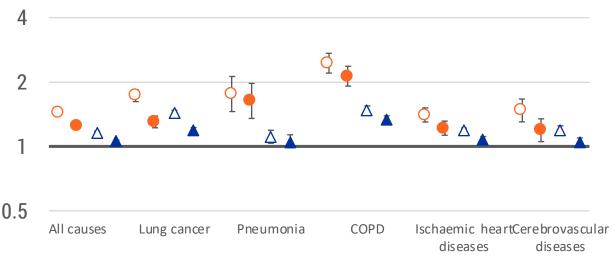
Professional cleaning is associated with significant excess in mortality among male and female cleaners

Excess deaths due to

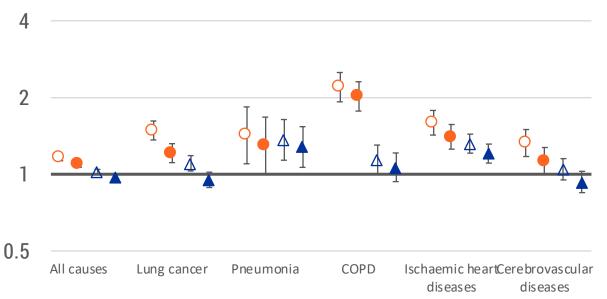
- COPD
- Lung cancer
- Pneumonia
- Ischemic heart diseases
- Cerebrovascular diseases



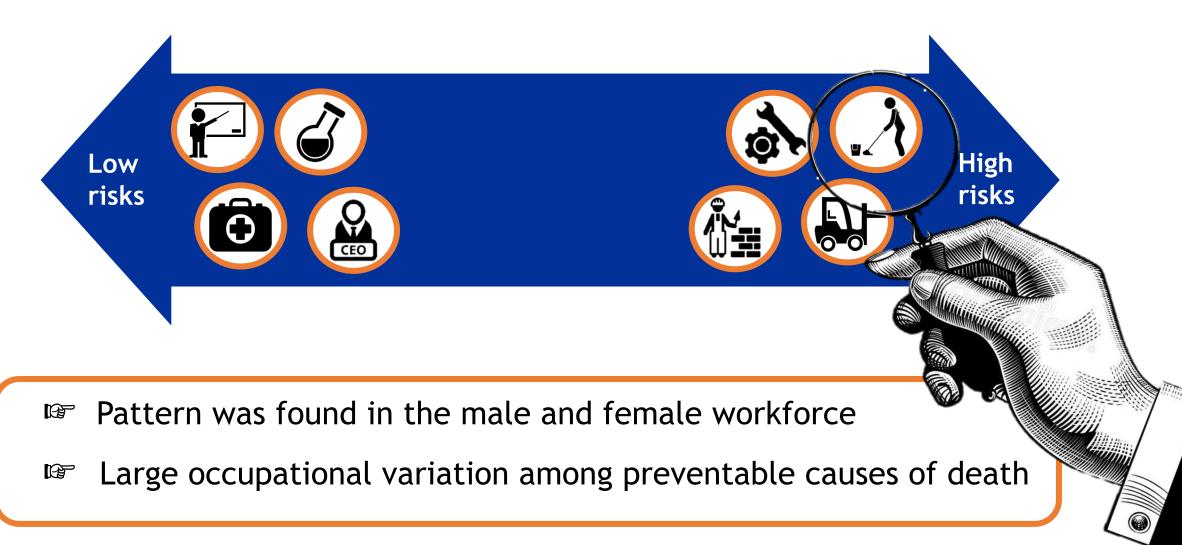
#### Male SMRs with reference to non-manual workers



#### Female SMRs with reference to non-manual workers



# Large health and mortality differences by occupation



Hazard ratios & 95% confidence intervals Reference: female teachers in 1991

### Respiratory malignancies

3 x higher

Metal, machinery & rel. trades workers

2x higher

- Services elementary occupations
- Managers of small enterprises
- Pers. & protect. services workers
- Customer services clerks
- Machine operators and assemblers

> 50% higher

- Office clerks
- Other professionals
- Other associate professionals
- •Other craft & rel. trades workers
- Corporate managers

Hazard ratios & 95% confidence intervals Reference: female teachers in 1991

### Digestive malignancies

>30% higher

- Other associate professionals
- •Metal, machinery & rel. workers

>20% higher

- Sales & services elementary occupations
- Managers of small enterprises
- •Pers. & protect. services workers

Hazard ratios & 95% confidence intervals Reference: female teachers in 1991

## Urogenital malignancies

>30% higher

•Other craft and rel. trades workers

>20% higher

- Managers of small enterprises
- Pers. & protect. services workers
- Skilled agricultural and fishery workers

Hazard ratios & 95% confidence intervals Reference: female teachers in 1991

## Head & neck malignancies

>50% higher

Sales and services elementary occupations

## To do list:

Reduction of occupational health differences

- ☐ "Poor data makes for poor prevention"
- ☐ Clear integrated strategy for Belgian workforce
- ☐ Target occupational risk factors & lifestyle
- ☐ Inclusive prevention for workforce









