

# Alcohol and work

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FASE project

Liverpool 18 March 2009

## Structure of presentation

1. Work-place alcohol-related harm
2. Policies and programmes to reduce work-place alcohol-related harm

## But, first:

1. Very few publications and good quality studies!
2. Need to re-package what was once a hot issue, but does not seem a hot issue now (except by the Commission!)

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## Work-place alcohol-related harm

1. Societal level effects
2. Social costs studies and lost productivity
3. Premature mortality
4. Area level studies
5. Individual level studies
  - a) Absenteeism
  - b) Presenteeism
6. And, the economic crisis?

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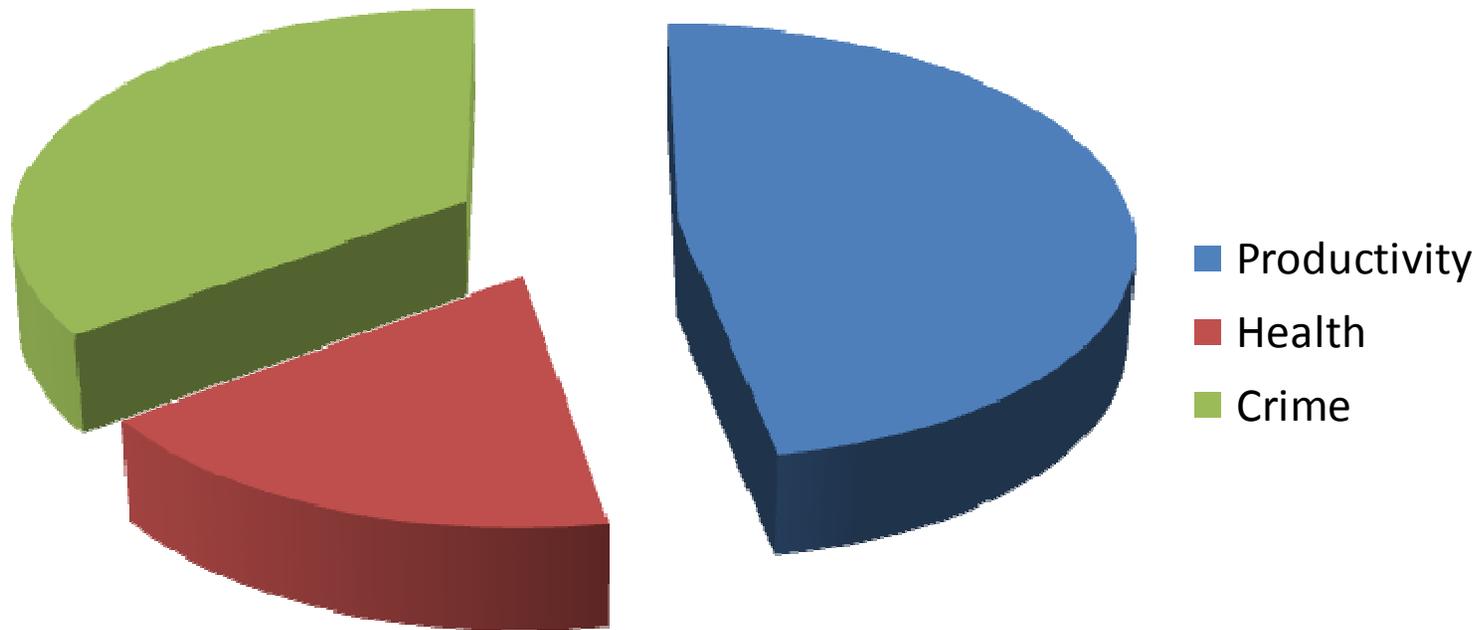
## Societal level effects

A Swedish study found that a 1-litre increase in total consumption was associated with a 13% increase in sickness absence among men ( $P < 0.05$ ). The relationship was not statistically significant for women.

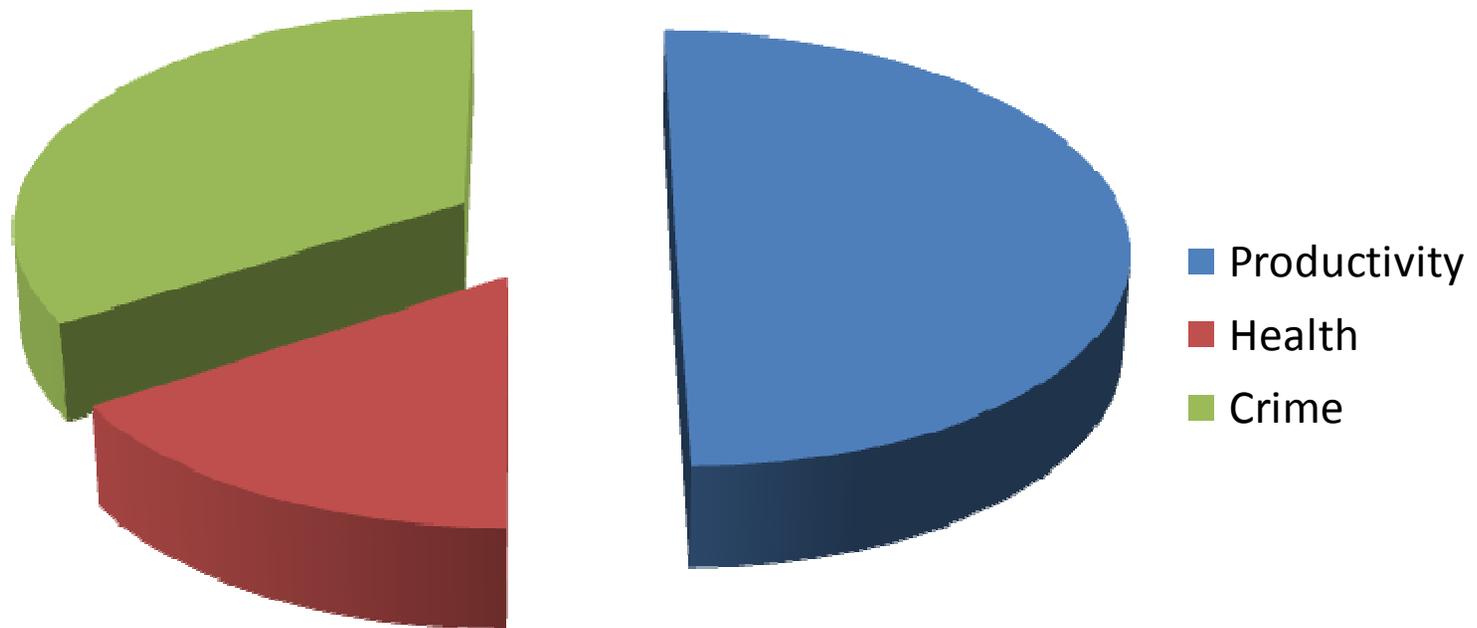
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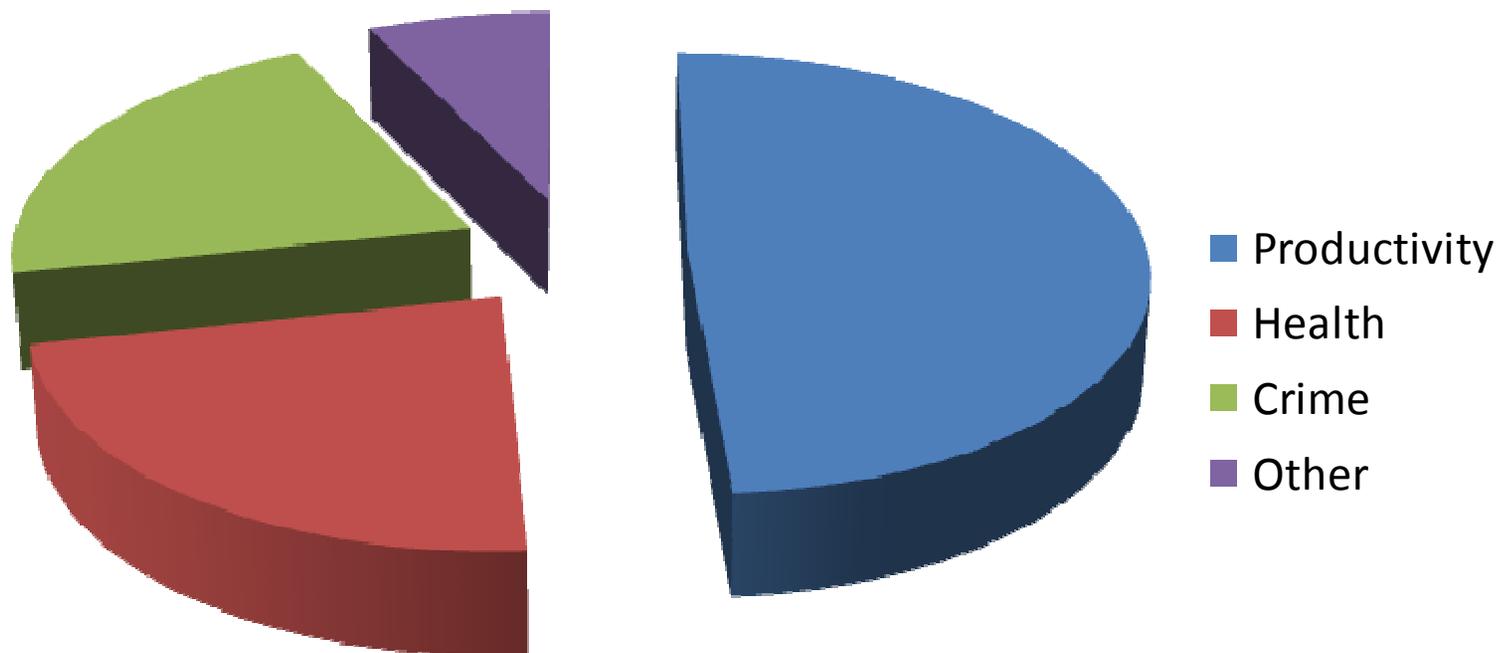
# Social costs Europe



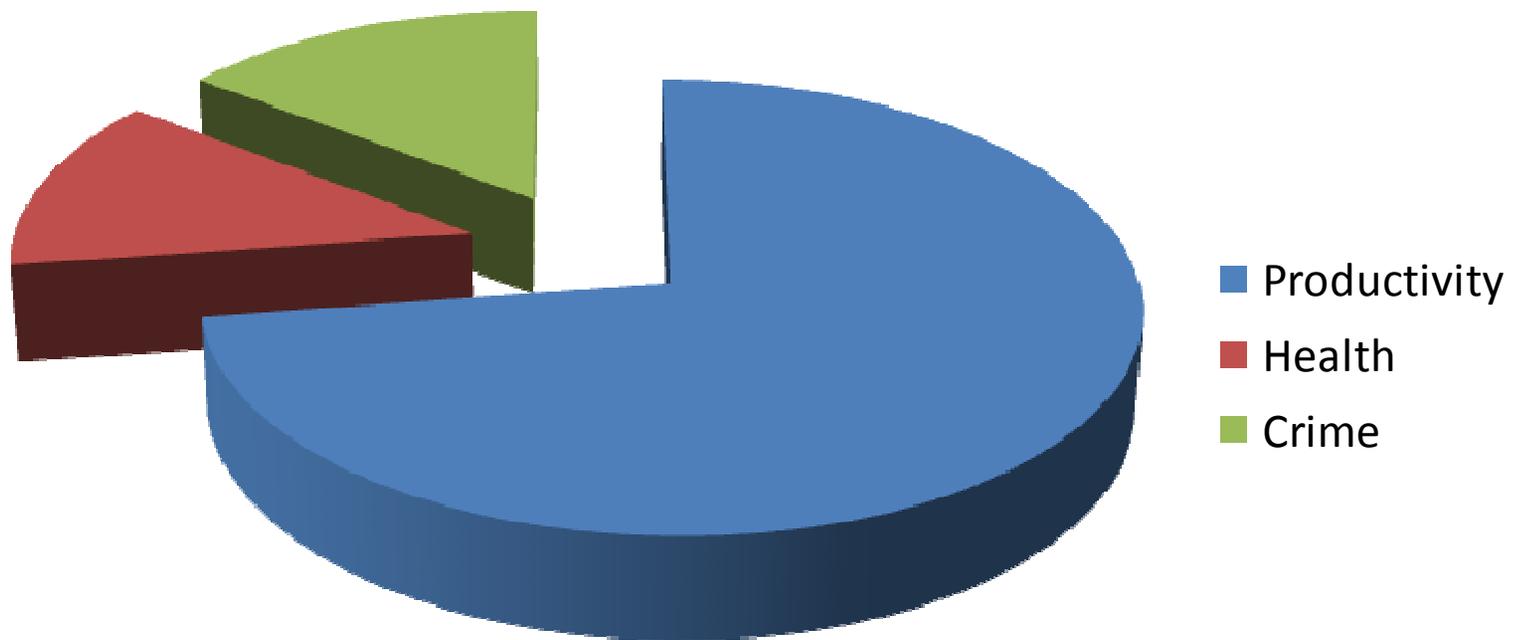
# Social costs France



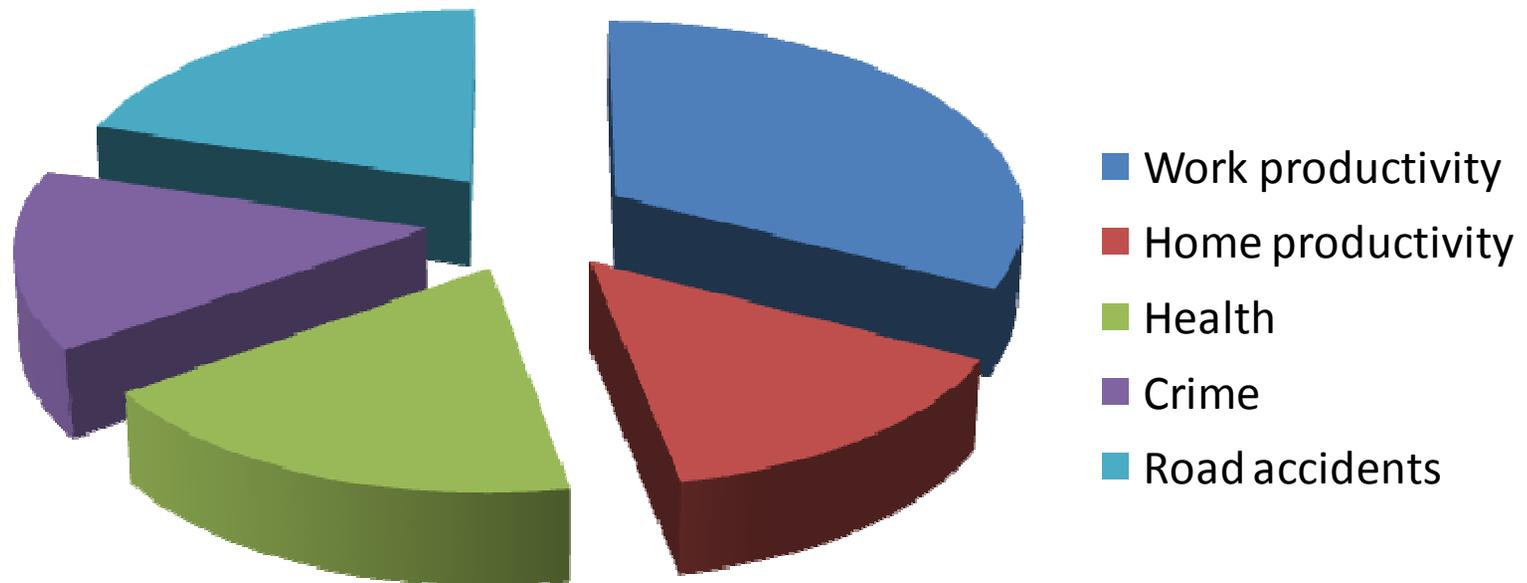
# Social costs Canada



## Social costs US



# Social costs Australia



# Work-place alcohol-related harm

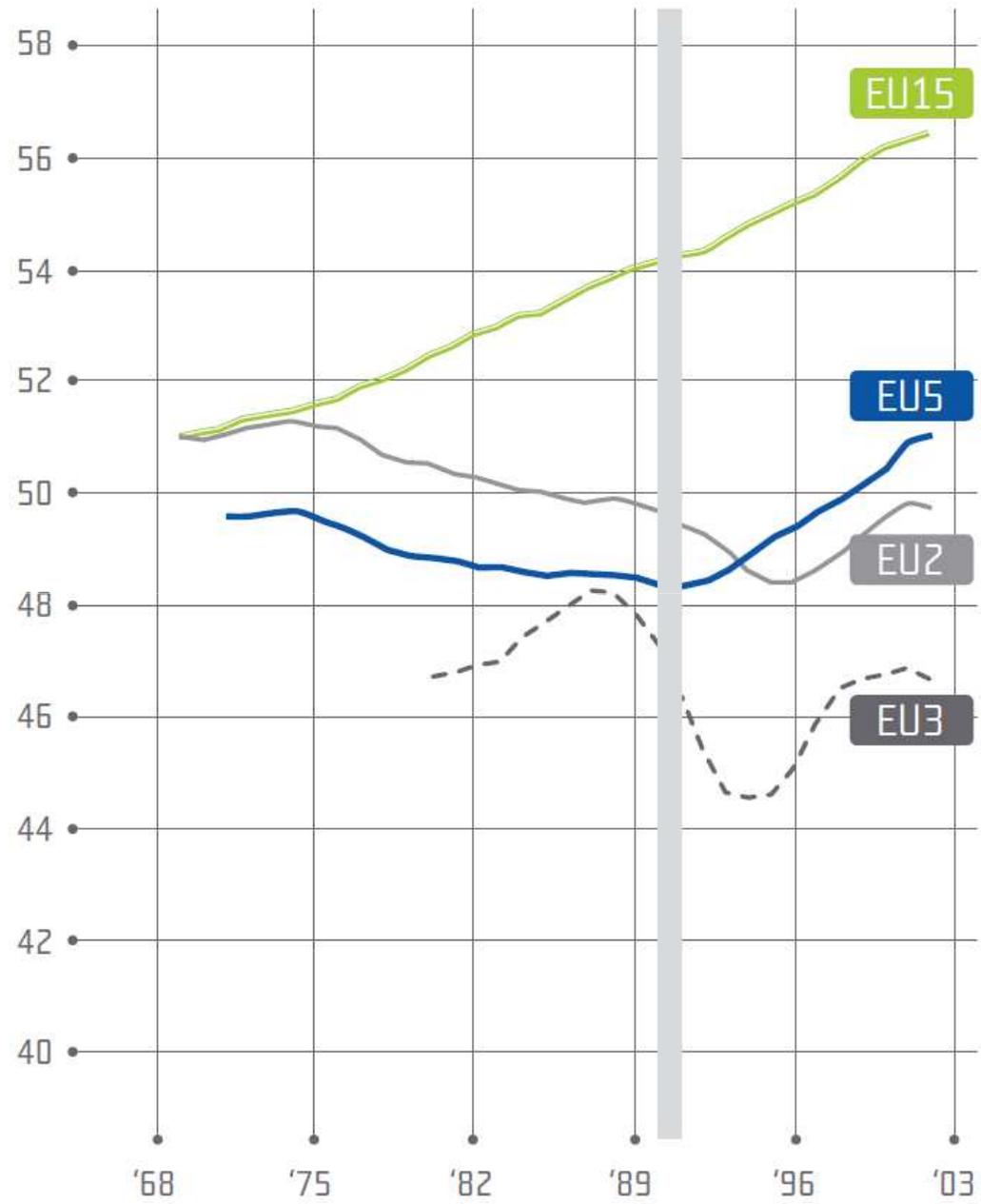
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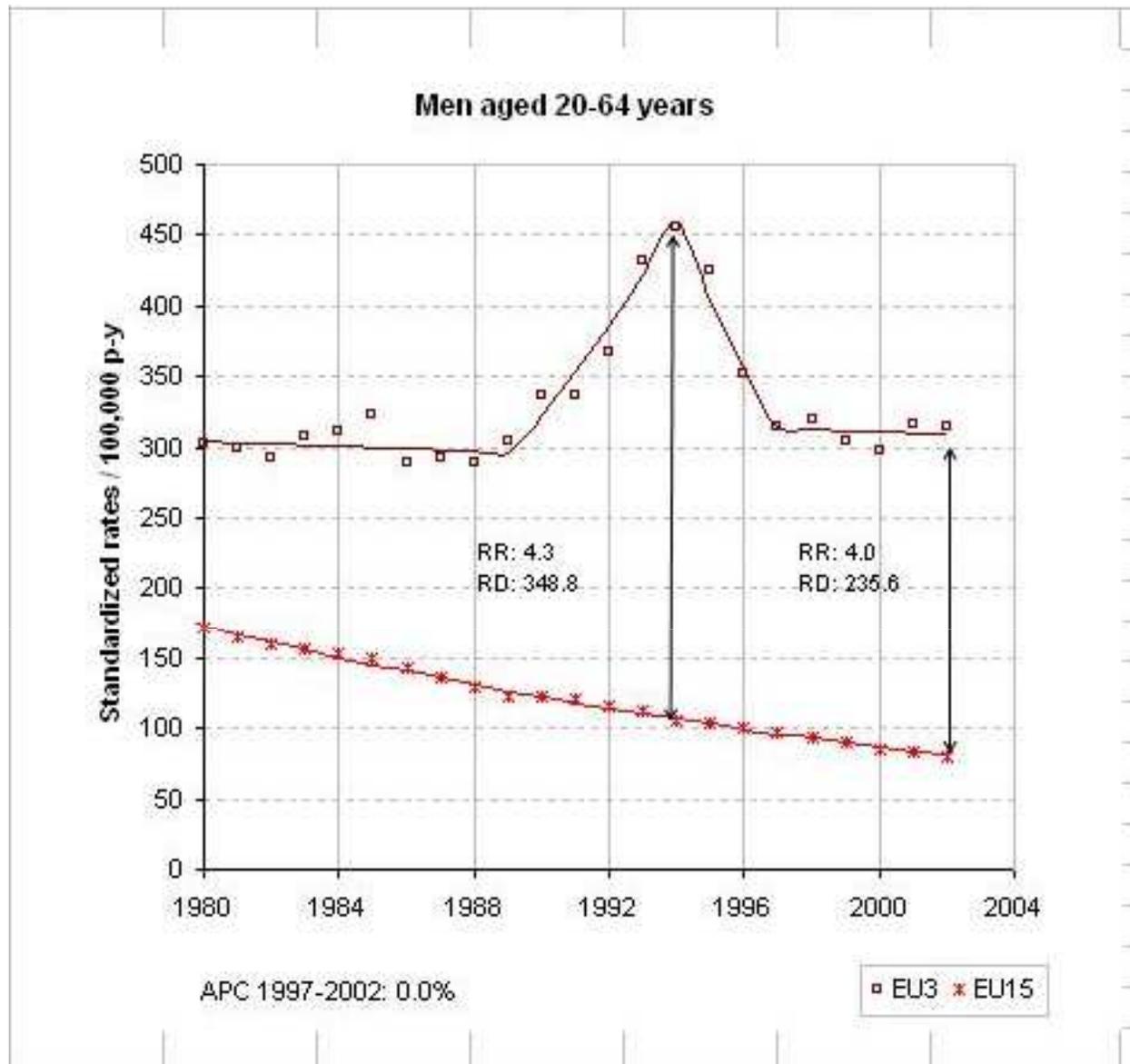
# Closing the health gap in European Union

Edited by  
Witold Zatoński



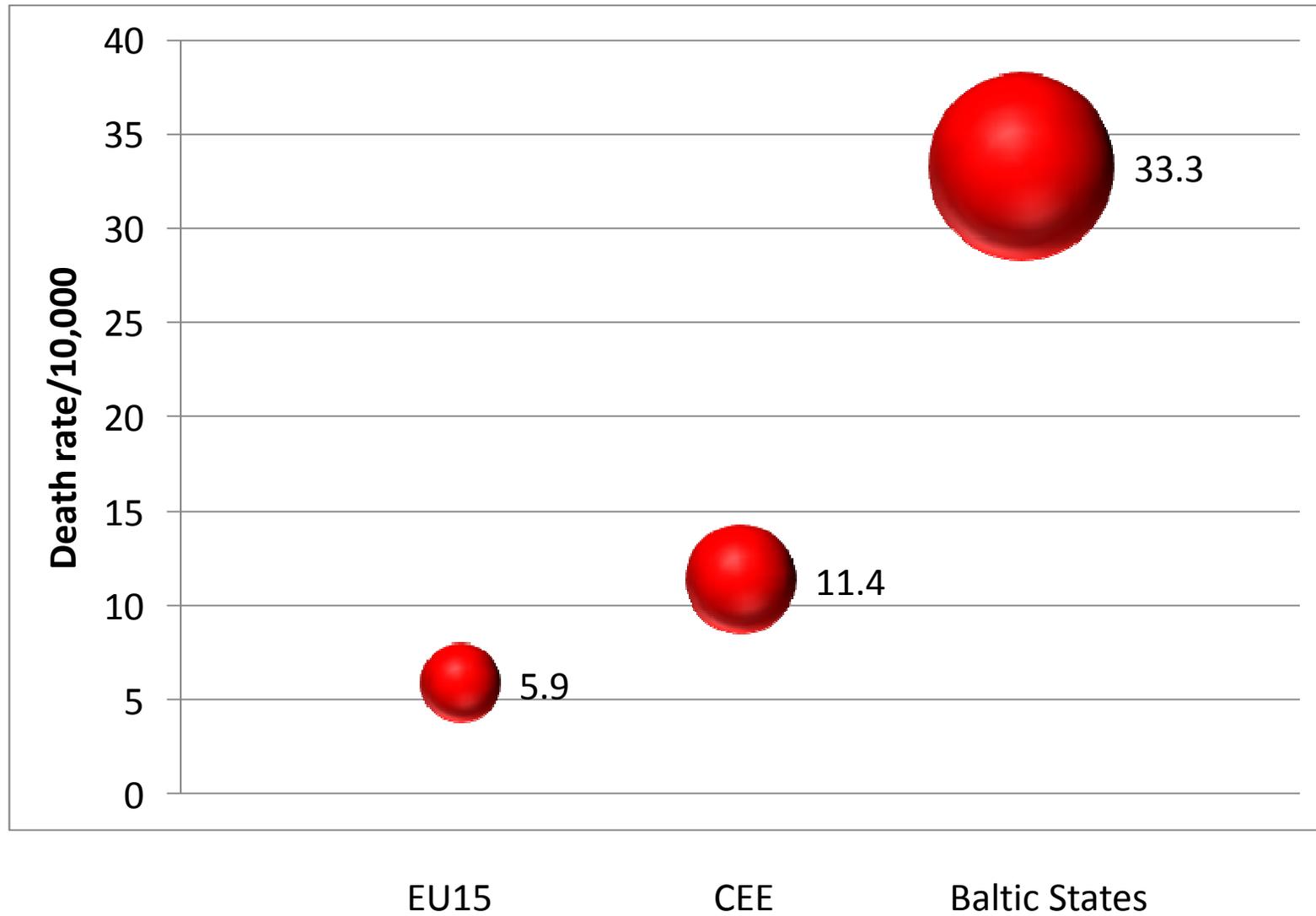
Life expectancy at the age of 20 years

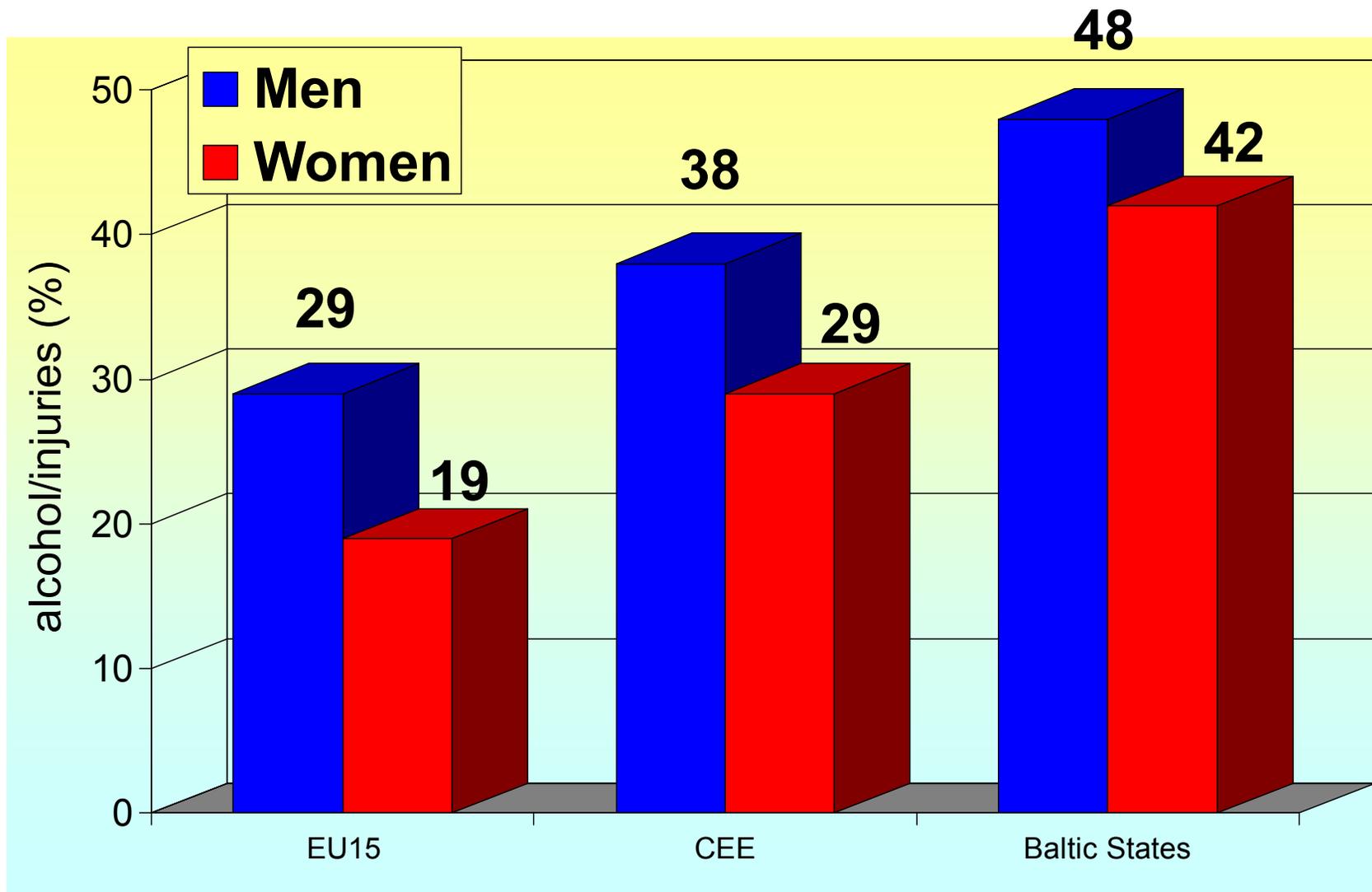




Cardiovascular mortality in the Baltic States (EU3) 1980-2002, compared with the EU15.

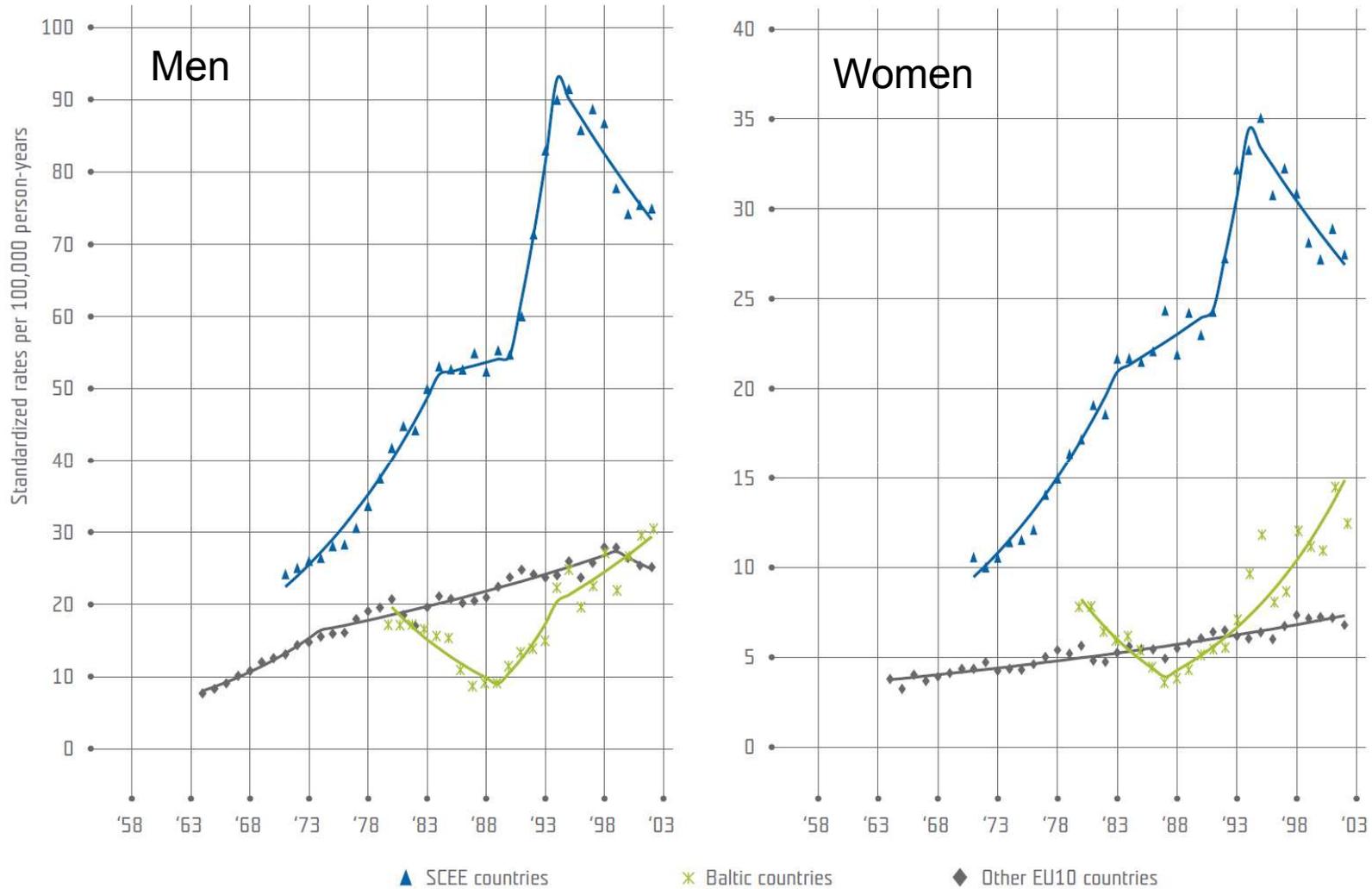
## Death rates/10,000 fatal injuries, men 20-64 years





share of alcohol injuries in all injuries, 2002

## Liver cirrhosis mortality in different parts of Europe



Southern part of central and eastern European countries (SCEE): Hungary, Romania, Slovenia

Baltic States: Estonia, Latvia, Lithuania

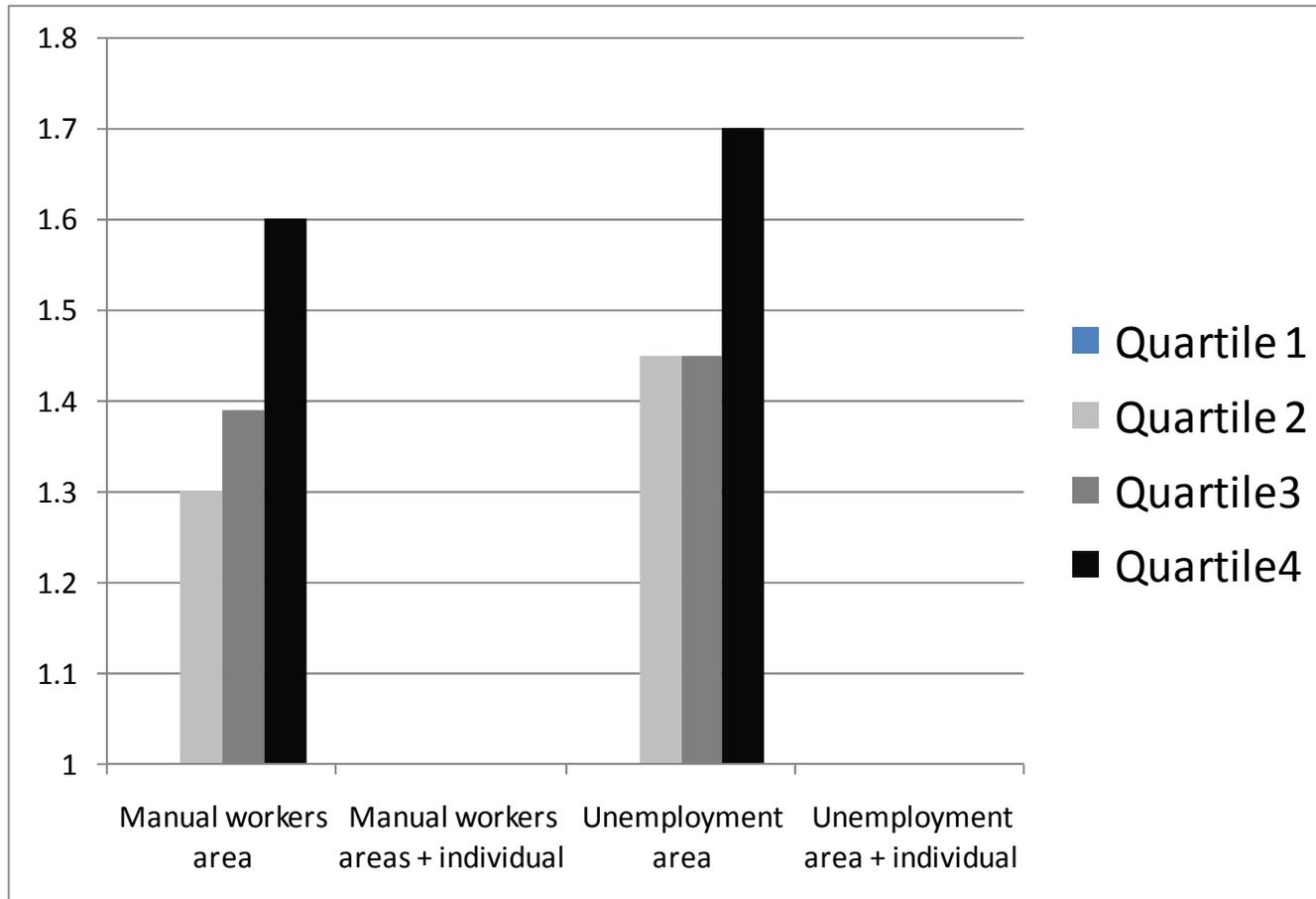
Other EU10 countries: Bulgaria, Czech Republic & Slovakia, Poland

About 25% of the difference in life expectancy between the EU10 and the EU15 for men aged 20-64 years in 2002 can be attributed to alcohol.

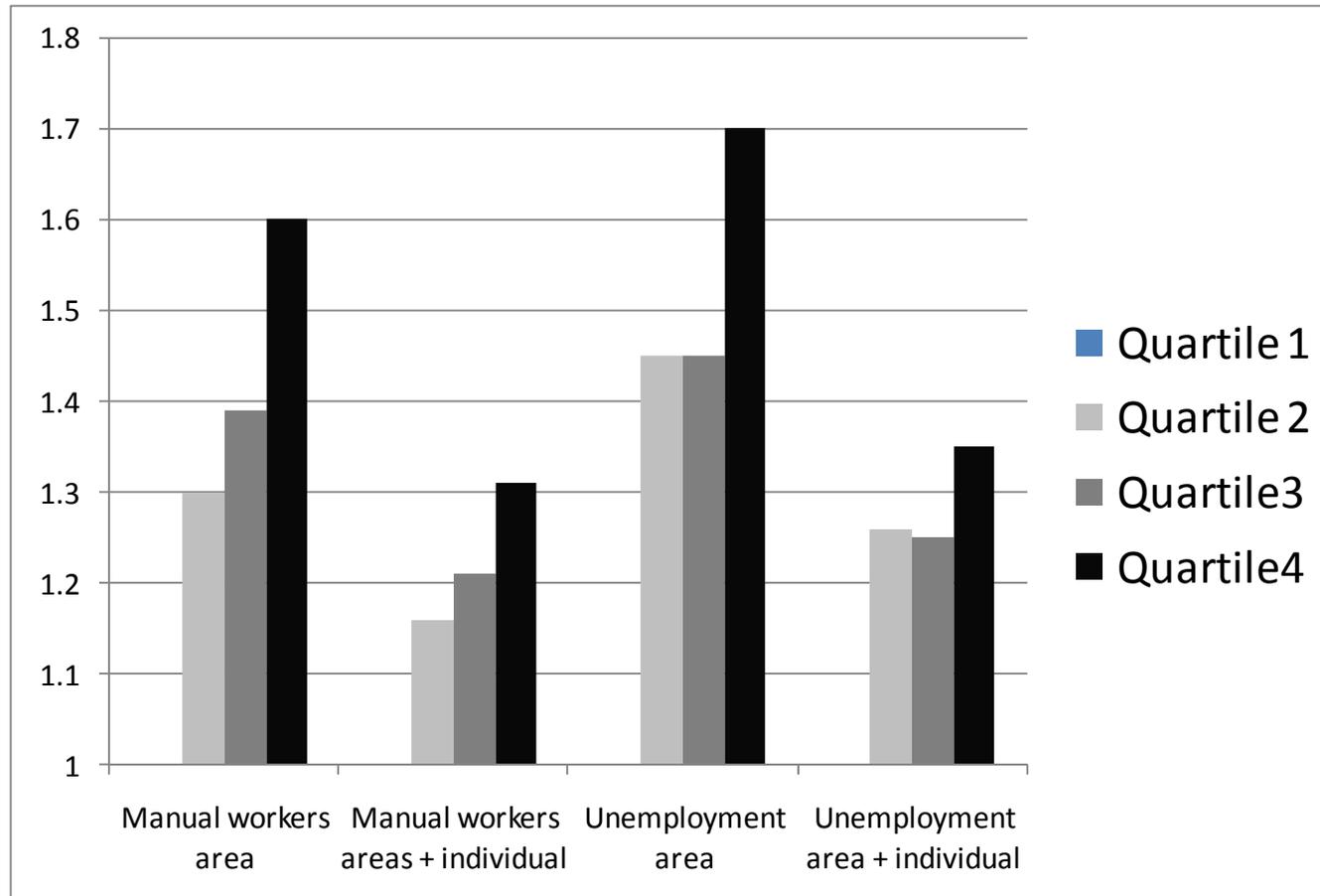
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## Alcohol-related mortality rate ratios by area level variables, men aged 25-64 in Finland, 1991-1996



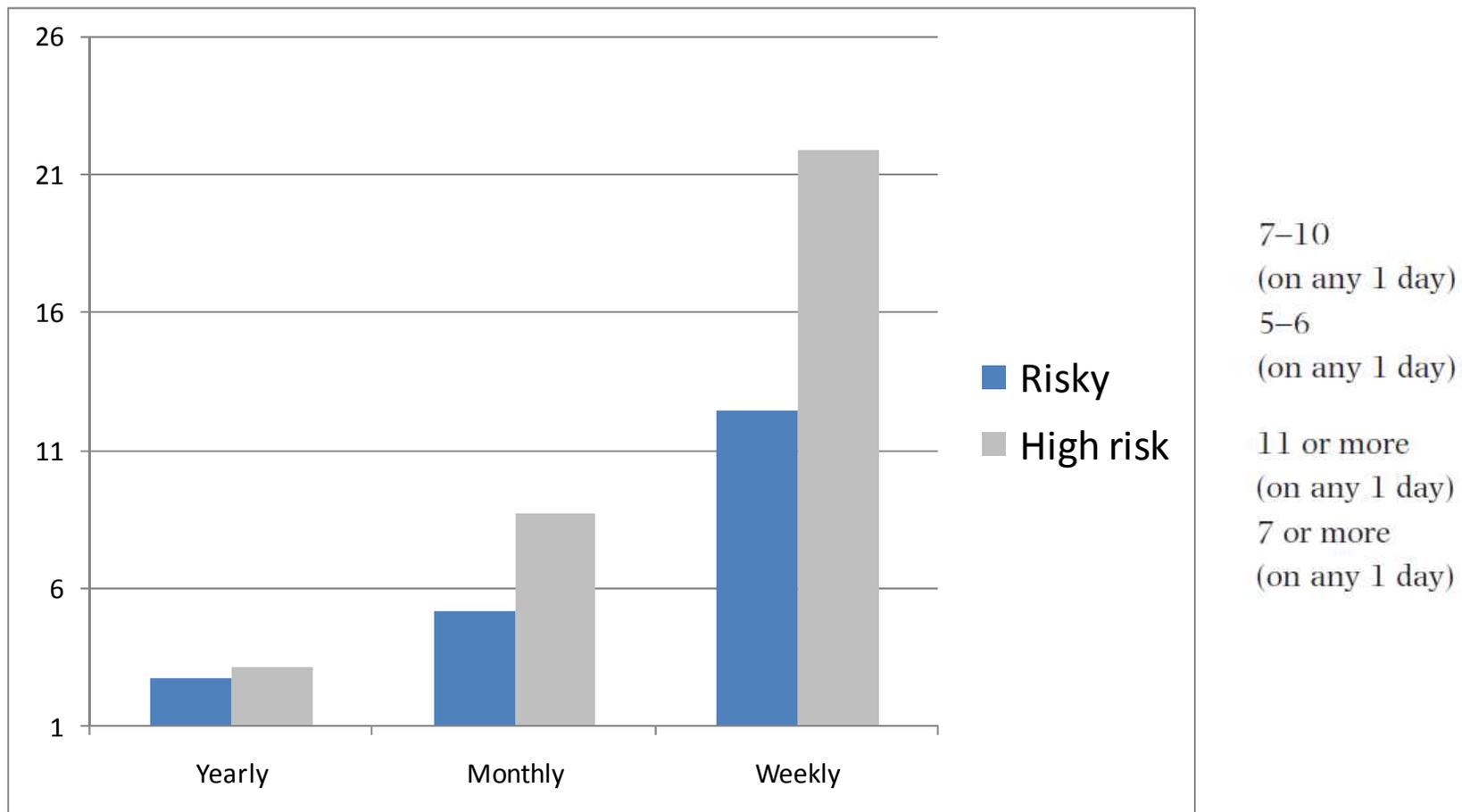
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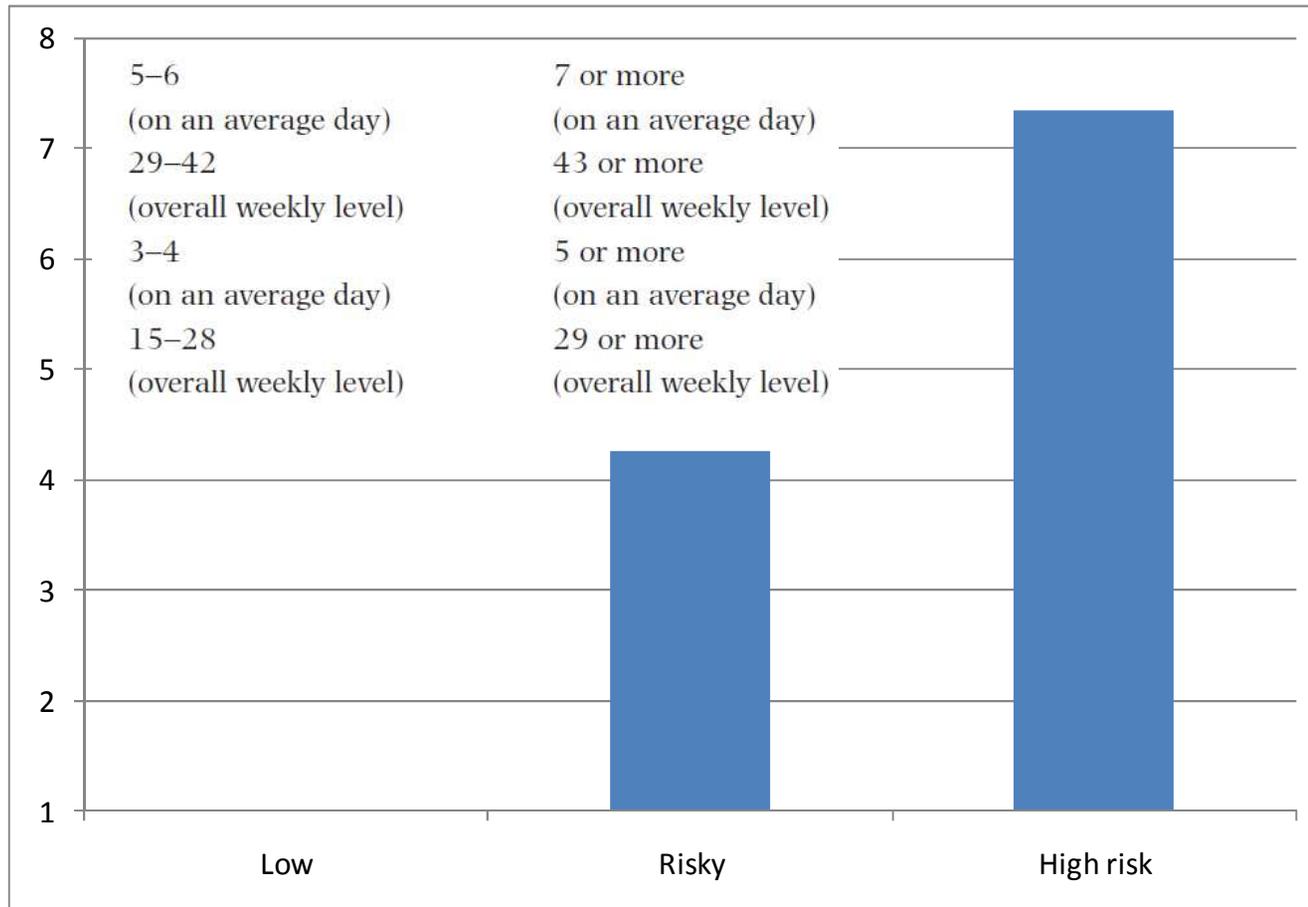
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Adjusted ORs for absenteeism in previous 3 months by drinking category (short term risk levels)

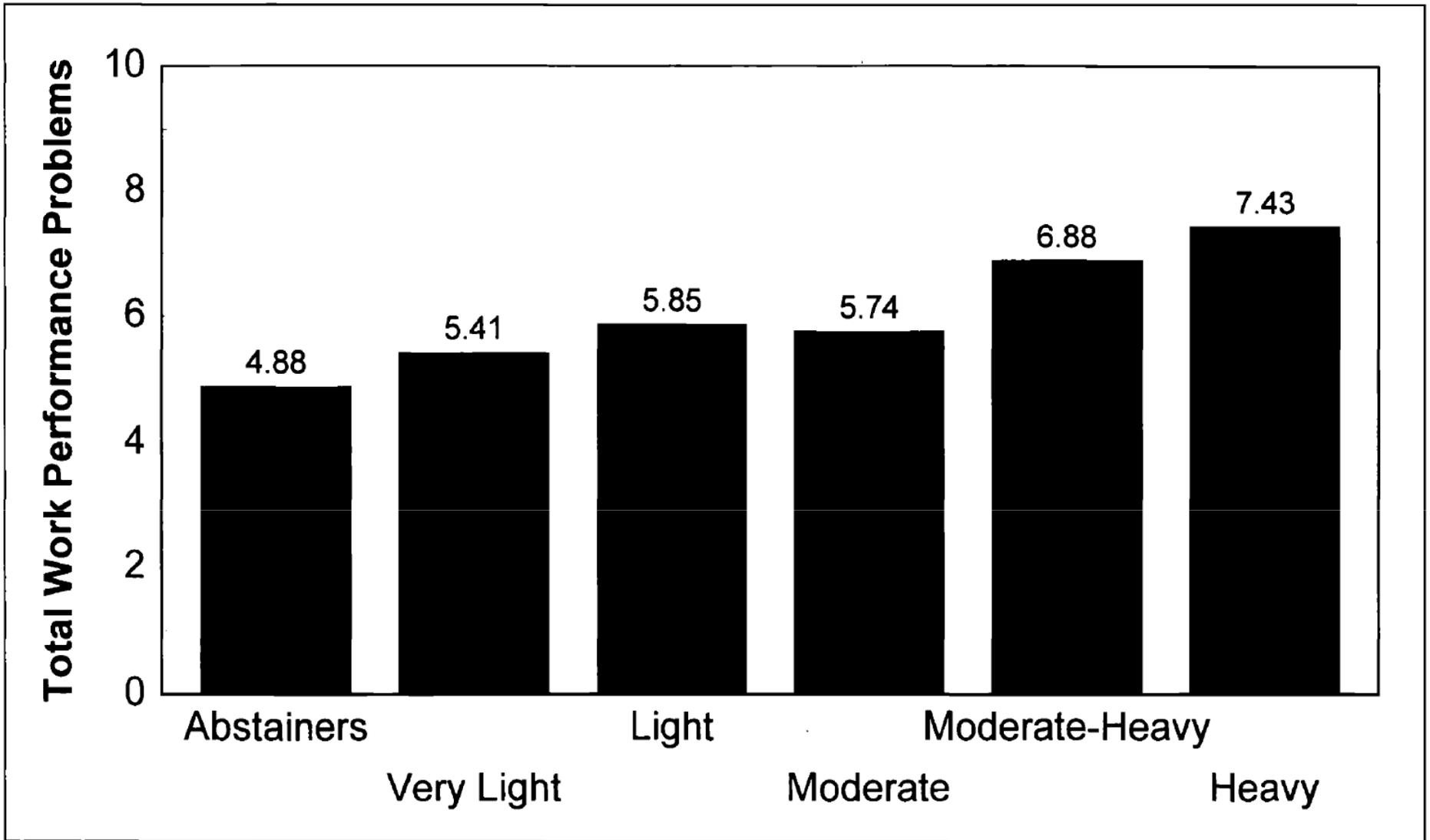


## Adjusted ORs for absenteeism in previous 3 months by drinking category (long term risk levels)



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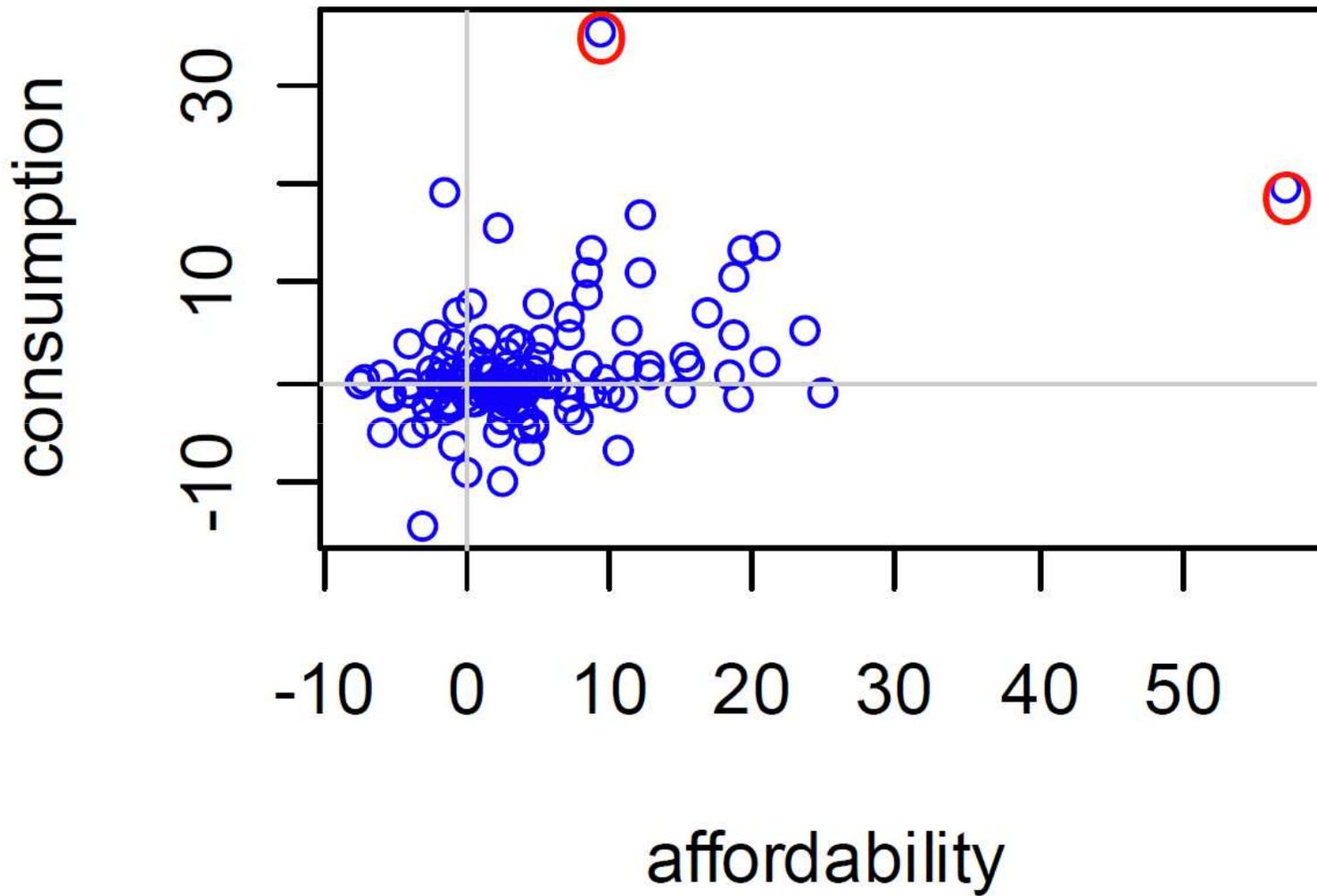
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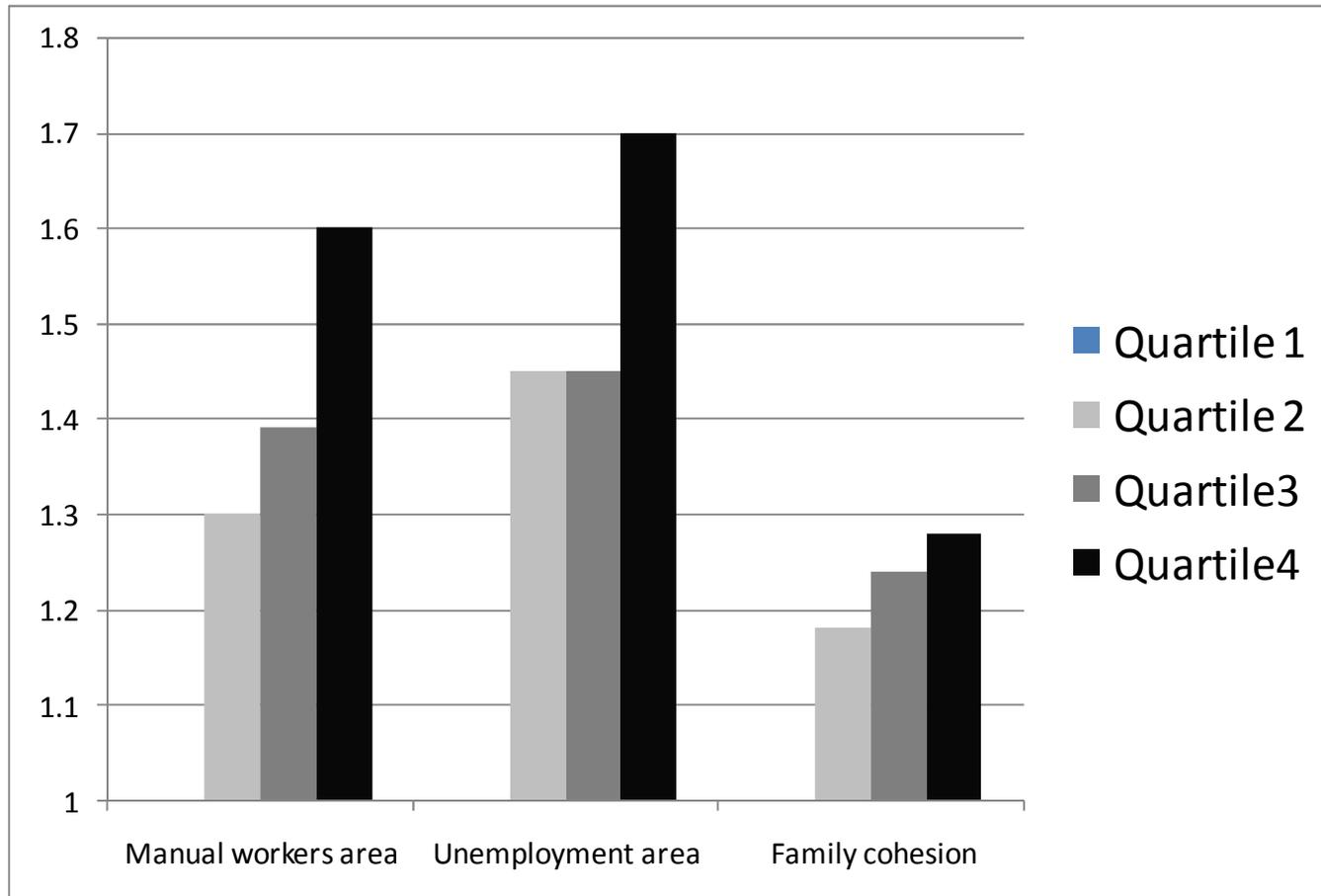
# Economic Crash

- On the one hand, changes in affordability, which is a function of relative price and disposable income
- On the other hand, changes in social dislocation and social cohesion

# Annual change in index



## Alcohol-related mortality rate ratios by area level variables, men aged 25-64 in Finland, 1991-1996



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# **Policies and programmes to reduce workplace alcohol-related harm**

1. Population-based interventions
2. Structural factors
3. Individually directed interventions

# **Policies and programmes to reduce workplace alcohol-related harm**

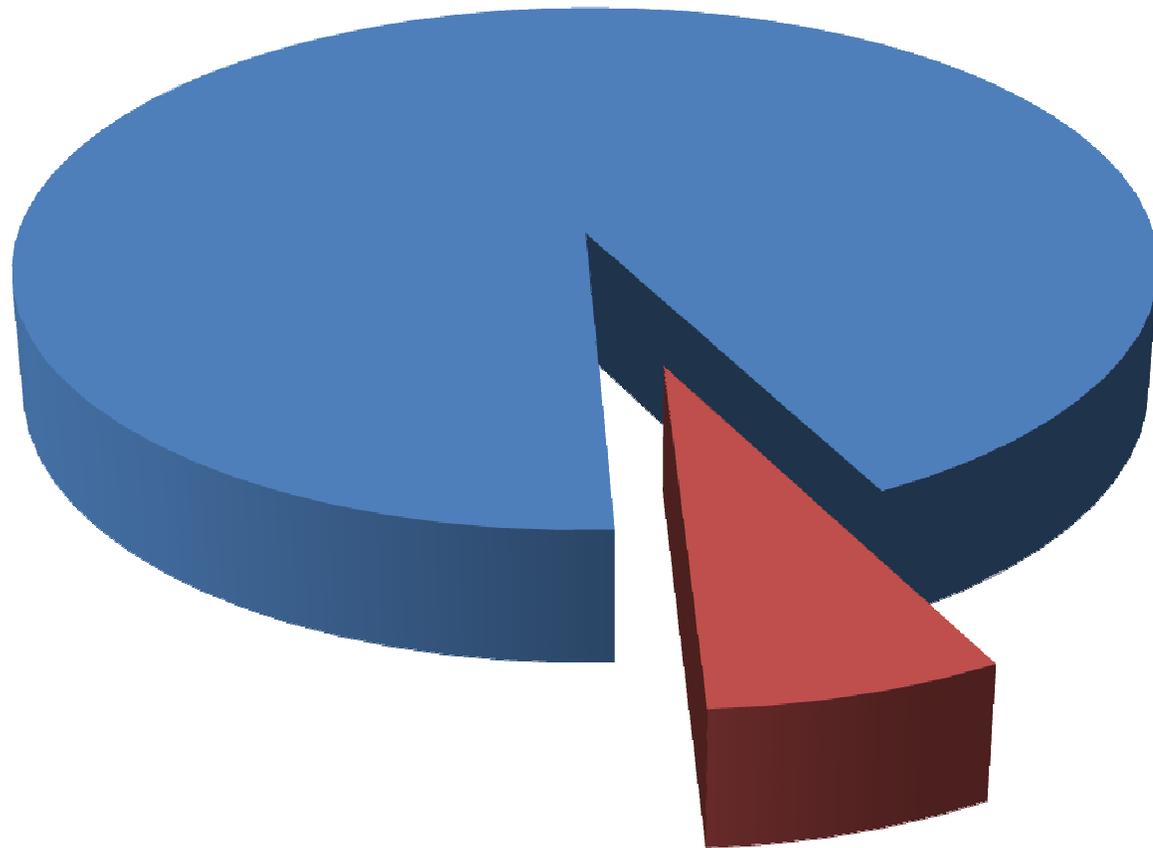
- 1. Population-based interventions**
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## Avoidable burden studies

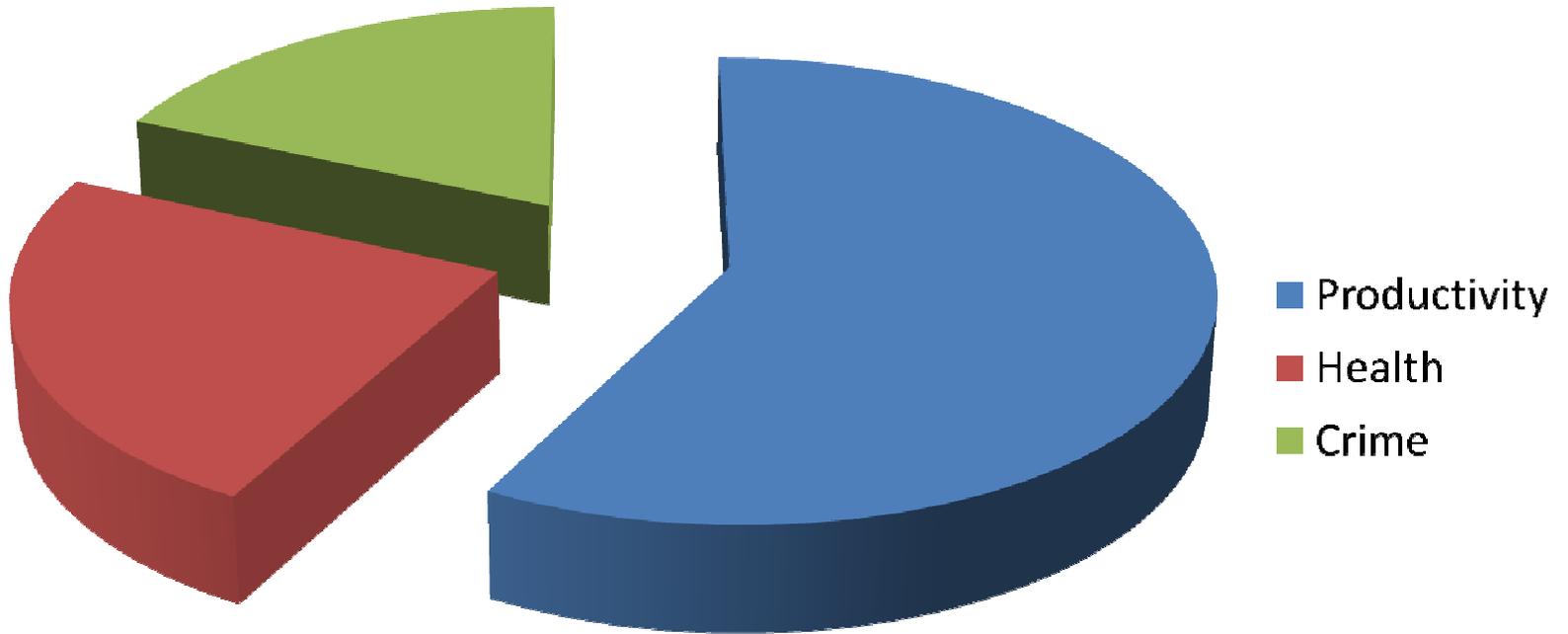
Canadian study is based on the evidence of the effectiveness of interventions designed to reduce or alleviate the effects of alcohol use disorders to determine the maximum reduction in burden that can be achieved by the interventions.

## Avoidable burden studies

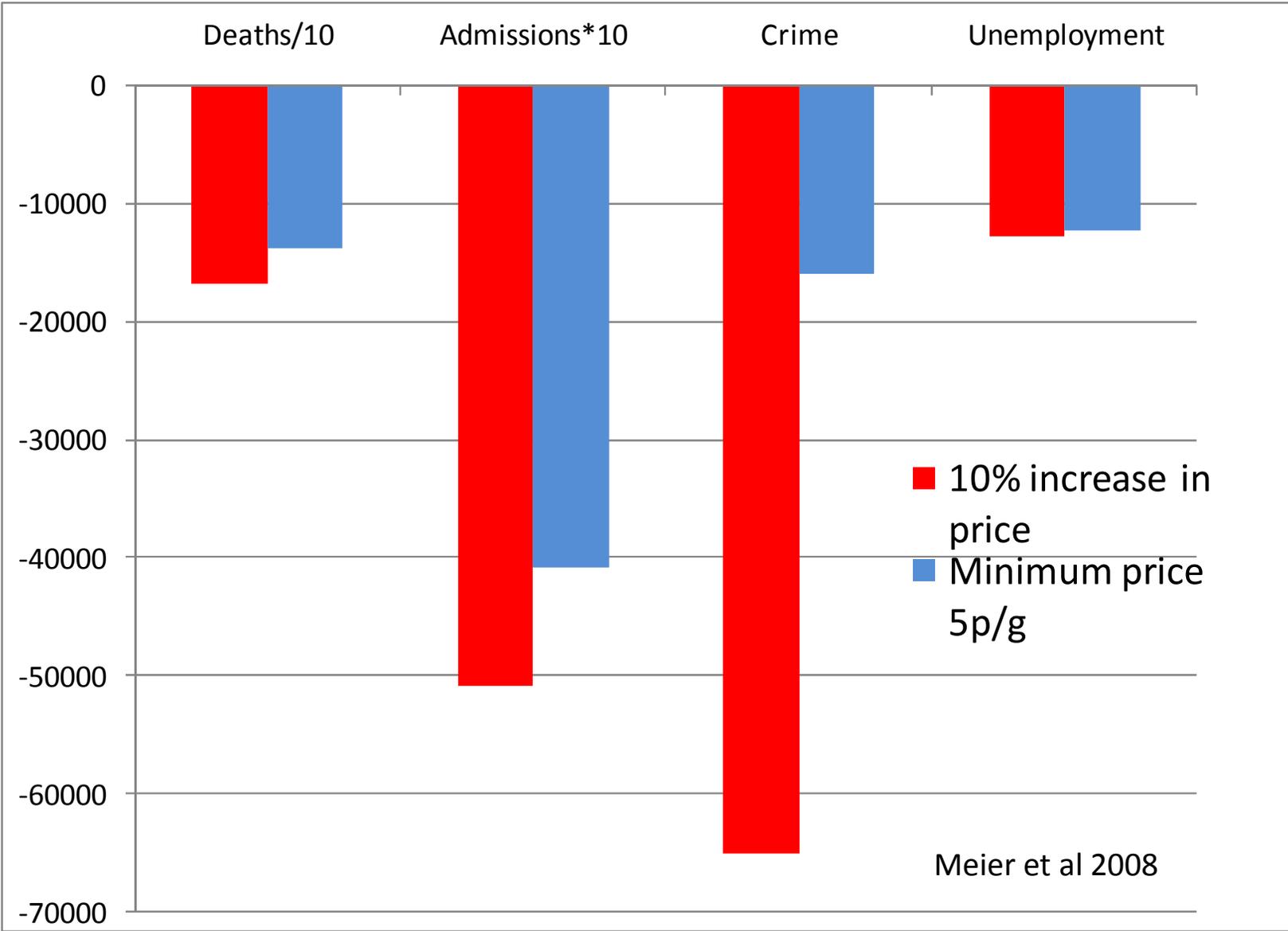
1. Taxation increases
2. Lowering BAC limit from 0.8g/L to 0.5g/L
3. Zero BAC for all drivers under the age of 21
4. Increasing the minimum legal drinking age from 19 to 21 years
5. Safer Bars intervention
6. Brief interventions
7. Change from a government monopoly to privatized alcohol sales



■ Total burden    ■ Avoidable burden



# Impact of 10% increase in price and minimum price (5 pence/g alcohol) on health and social outcomes, England

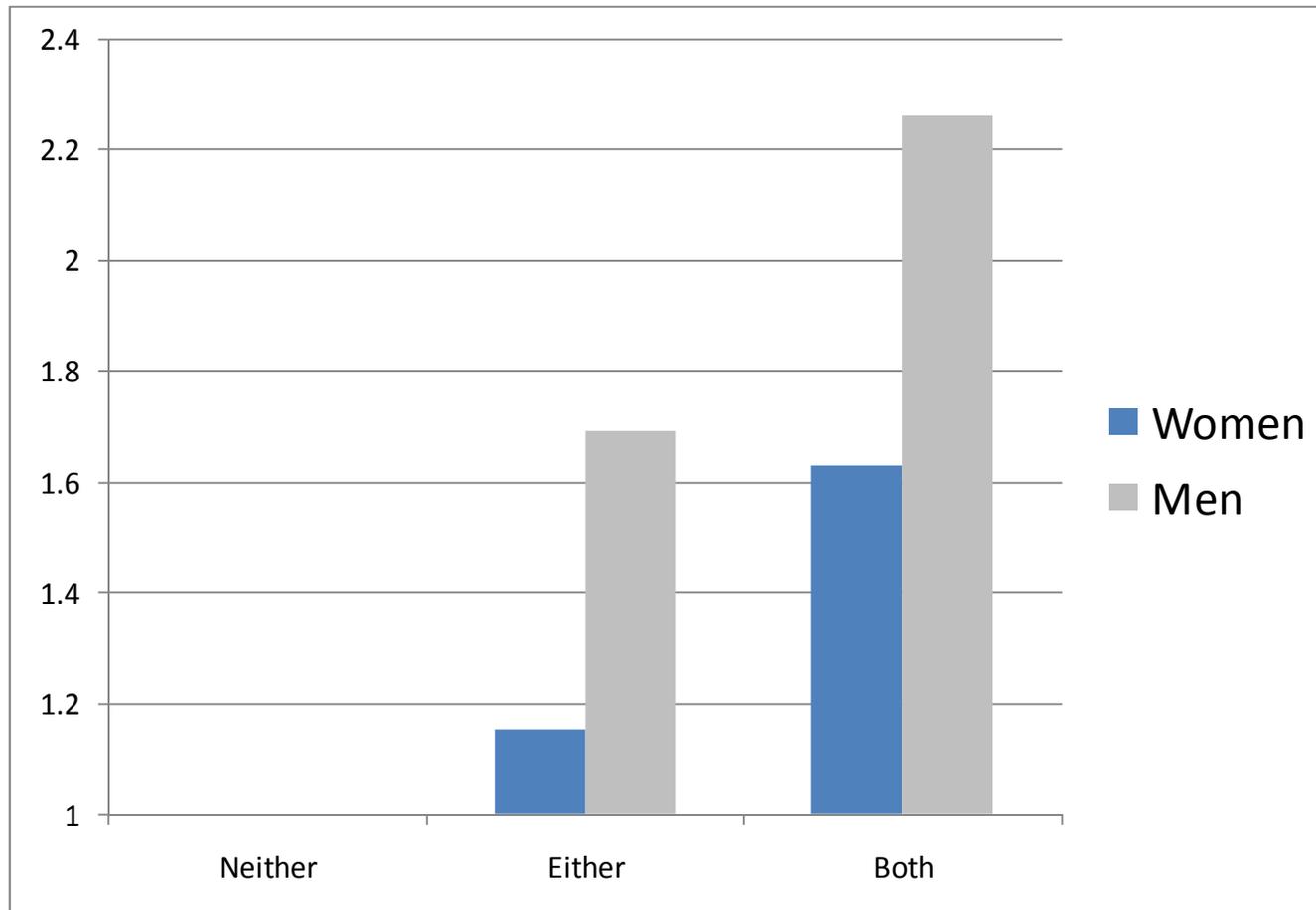


Meier et al 2008

# **Policies and programmes to reduce workplace alcohol-related harm**

1. Population-based interventions
- 2. Structural factors**
3. Individually directed interventions

ORs for alcohol dependence at phase 3 by characteristics at phase 1: high effort, low reward



# **Policies and programmes to reduce workplace alcohol-related harm**

1. Population-based interventions
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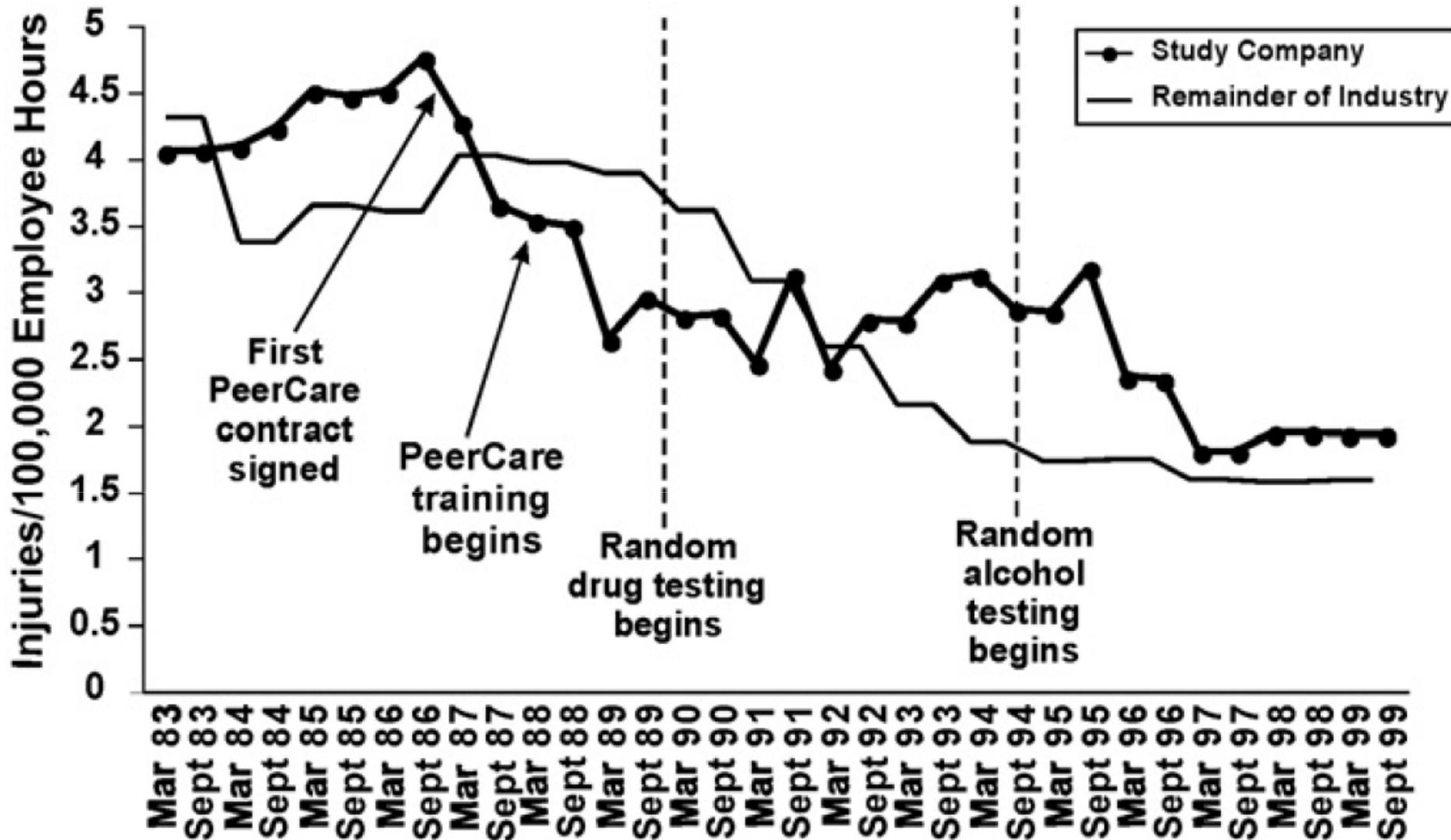
## Individually directed interventions

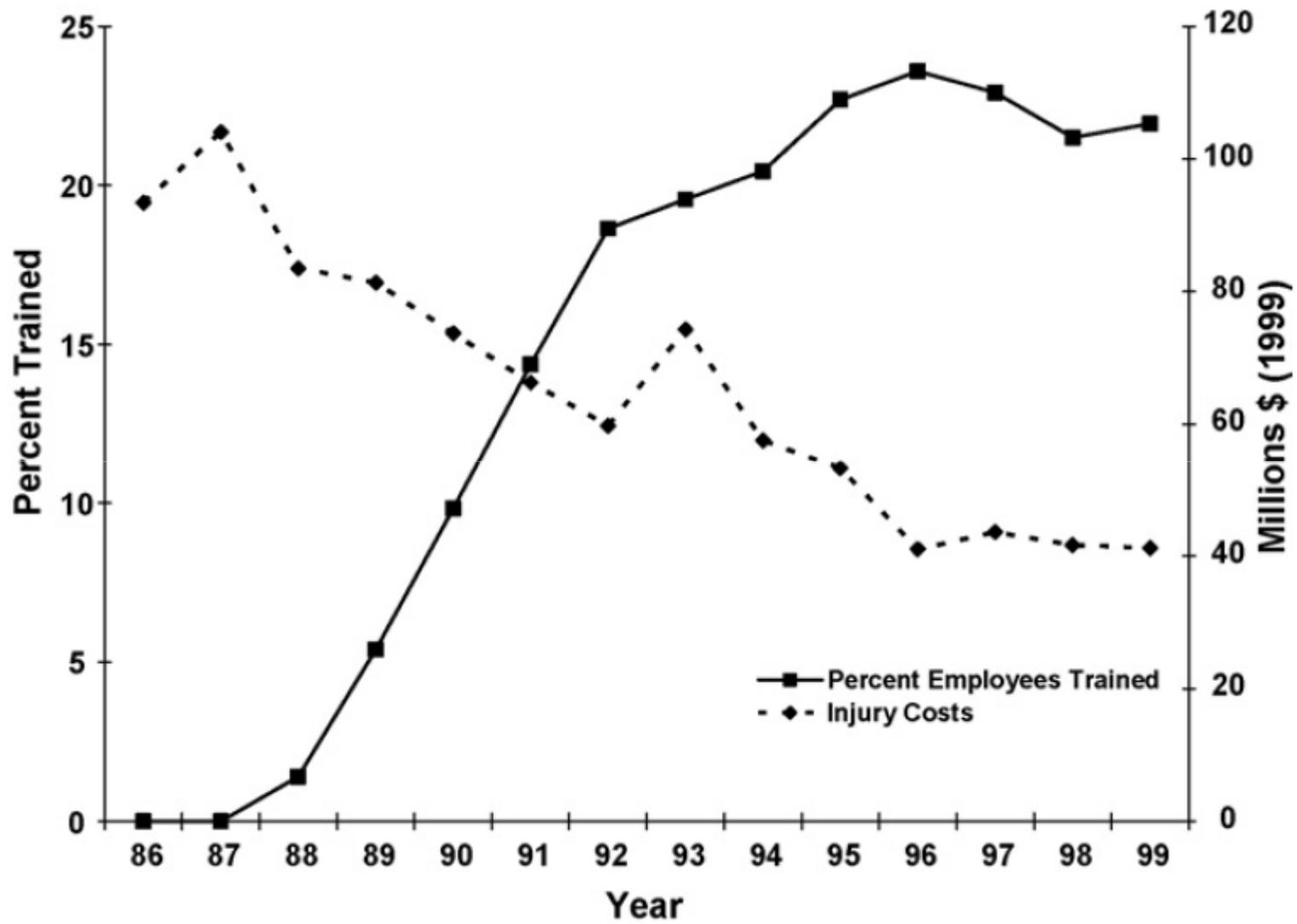
10 studies comprised three broad types of interventions:

1. psychosocial skills training
2. brief intervention, including feedback of results of self-reported drinking, life-style factors and general health checks
3. and alcohol education delivered via an internet website

## **Individually directed interventions**

9/10 studies with some positive outcome, but variable and often very poor methodology, and usually self-report measures of consumption and problems





## Conclusions

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# **Policies and programmes to reduce workplace alcohol-related harm**

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## Recommendations

1. Given alcohol's role in impairing cognitive and decision making functions (not reviewed), strong argument for alcohol-free work place

## Recommendations

2. Given the dose response relationship, with no safe level, between alcohol and the risk of injury (not reviewed), strong argument for alcohol-free work place in high risk industries (construction, transport etc)

## Recommendations

3. Given the impact of structural factors on increasing the risk of alcohol use disorders (as well as other health outcomes), strong argument for extensive (and difficult) structural changes in work management

## Recommendations

4. Not much robust positive evidence for the impact of prevention programmes and interventions, but assessment of reduced work performance should include assessment of alcohol use disorders

## Recommendations

5. But, powerful evidence that the good old alcohol policy measures (tax and so on) impact on absenteeism and presenteeism, and can reduce the alcohol-related burden of lost productivity