

Mortality and burden of disease due to alcohol in Europe and in the Netherlands

Ziekte en sterfte als gevolg van alcoholgebruik in Europa en in Nederland

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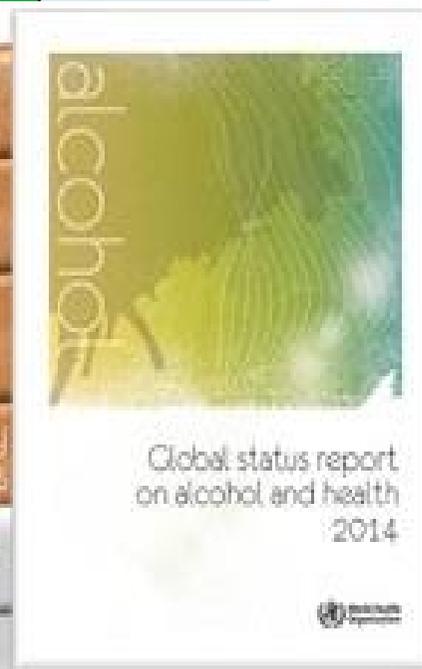
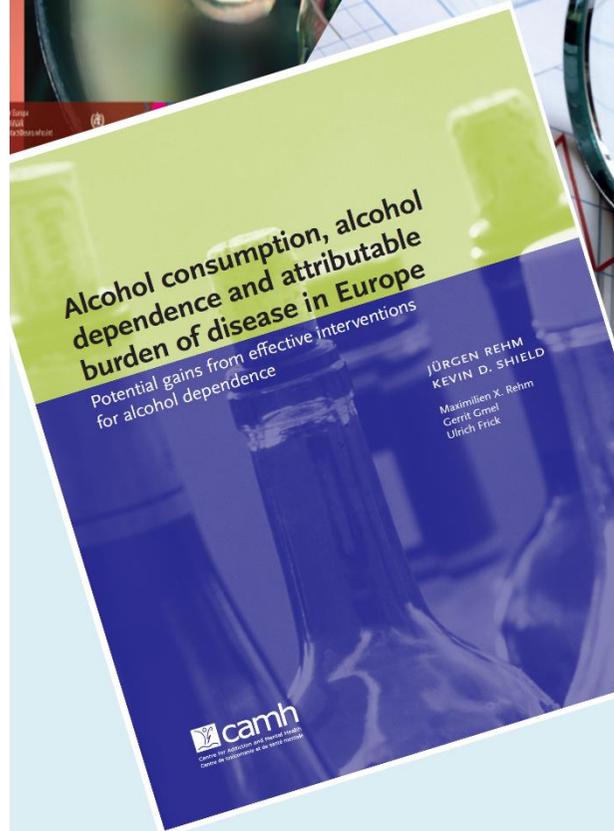
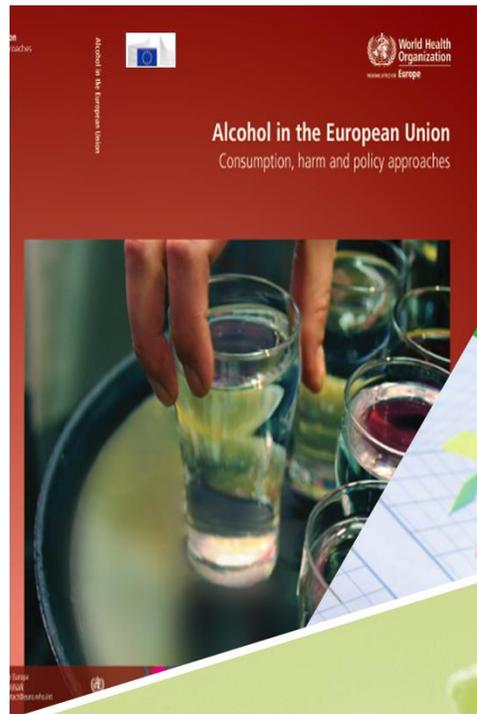
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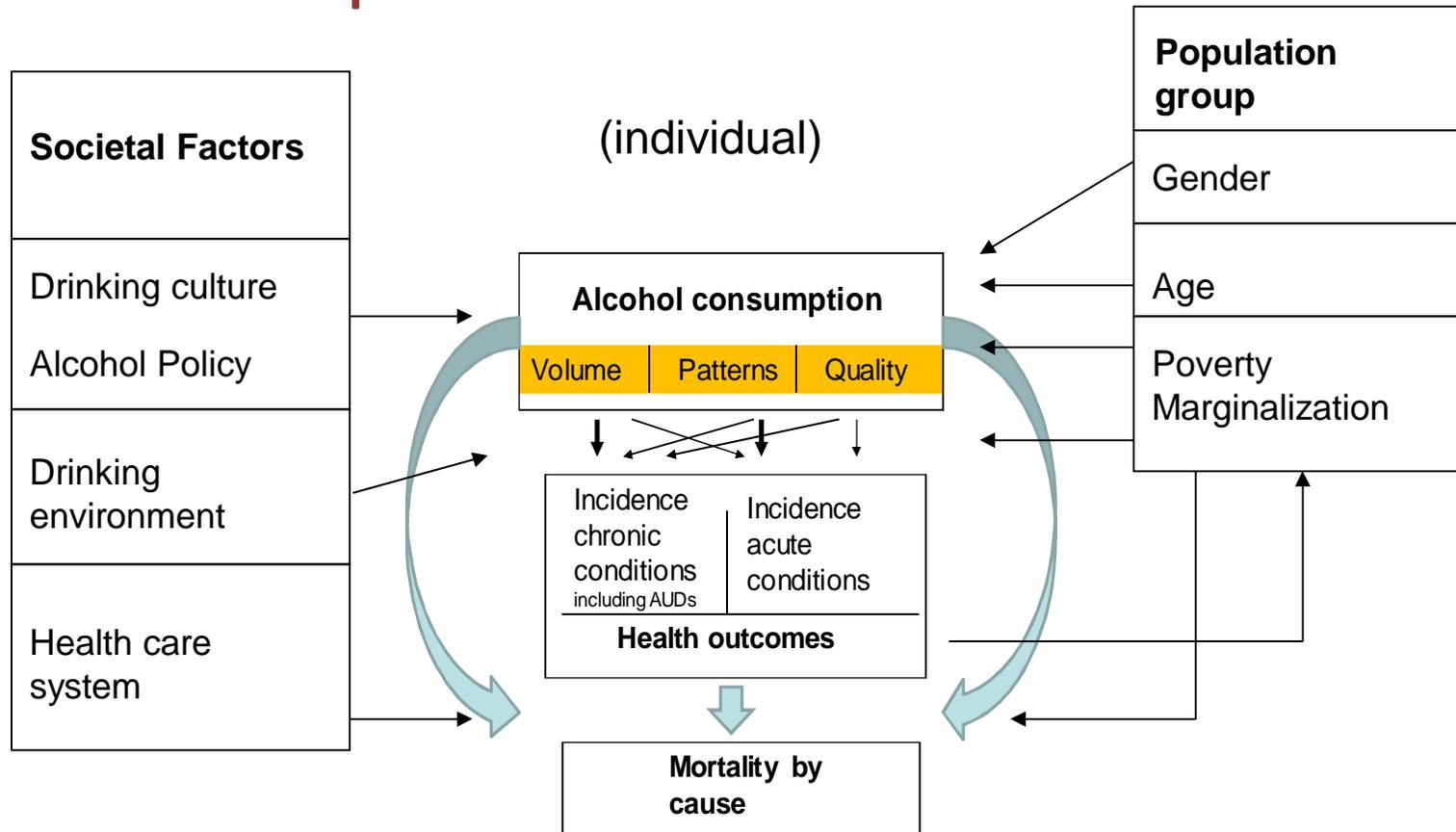
Basis



Many peer-reviewed publications on details in the last three years



Currently used model for alcohol comparative risk assessment

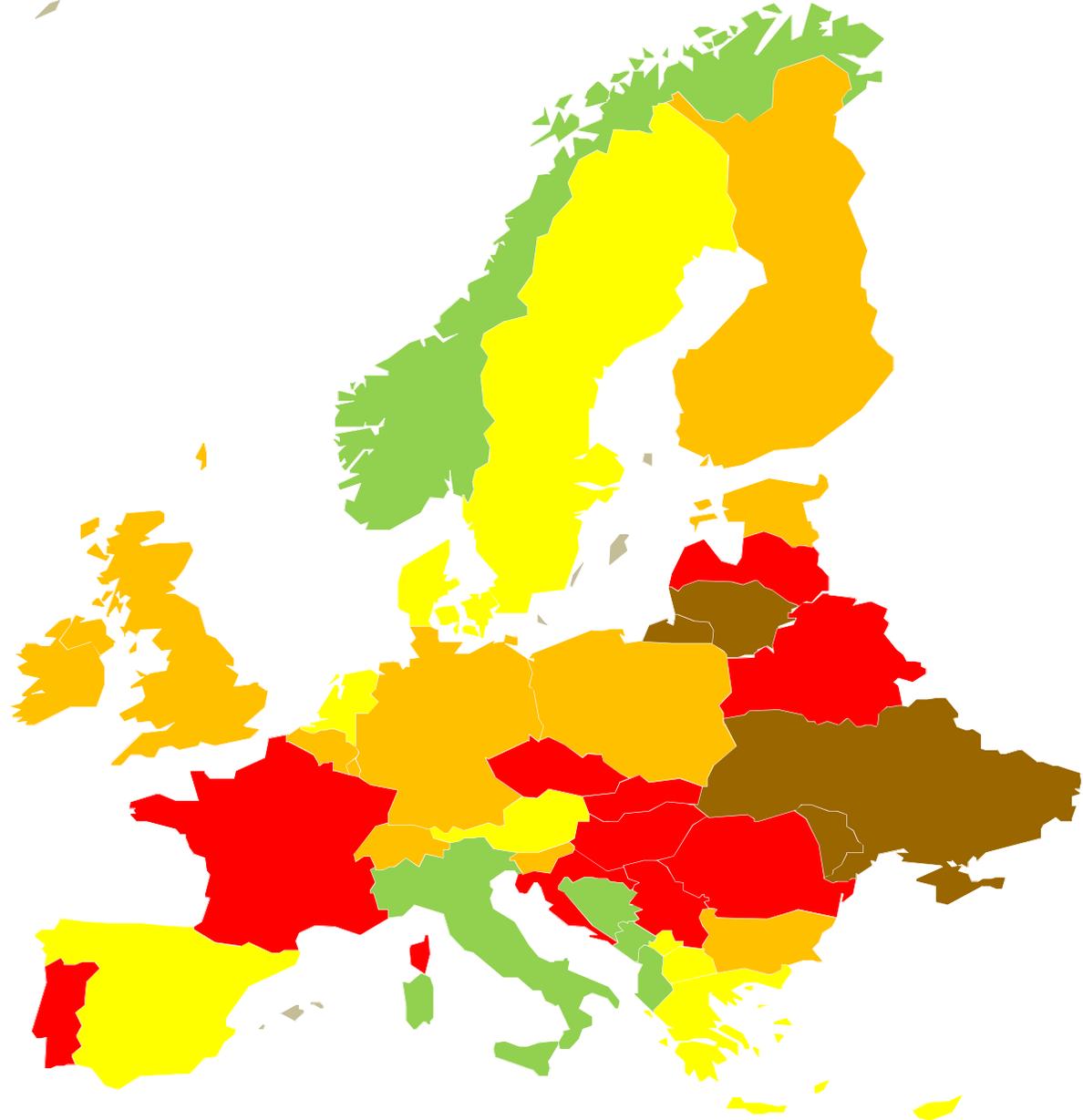


About twice the global average

ALCOHOL EXPOSURE IN EUROPE

Alcohol consumption in Europe 2012

Adult per capita
consumption
(ethanol):
Green: 5 - < 8 litres
Yellow: 8 - < 10 l
Orange: 10 - < 12 l
Red: 12- < 15 l
Brown: 15+ l

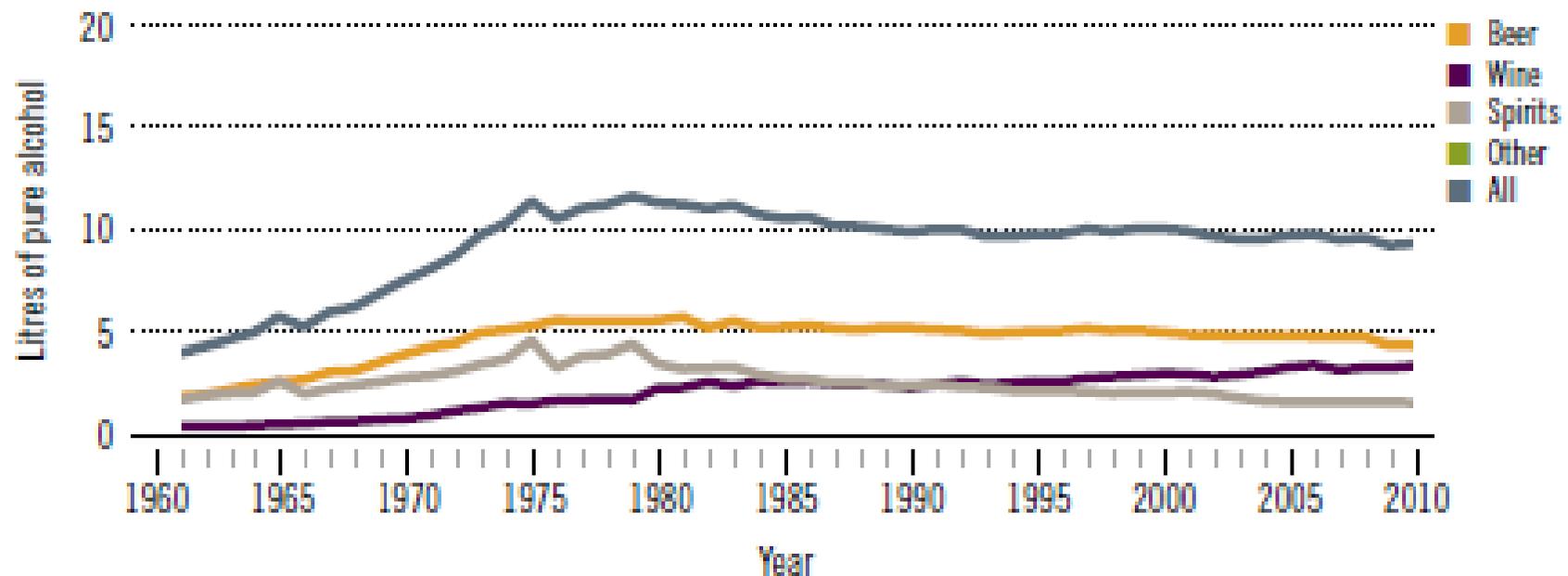


And some specifics of the Netherlands (from the Global Status Report 2014)

ALCOHOL CONSUMPTION: LEVELS AND PATTERNS

Recorded alcohol per capita (15+) consumption, 1961–2010

Data refer to litres of pure alcohol per capita (15+).

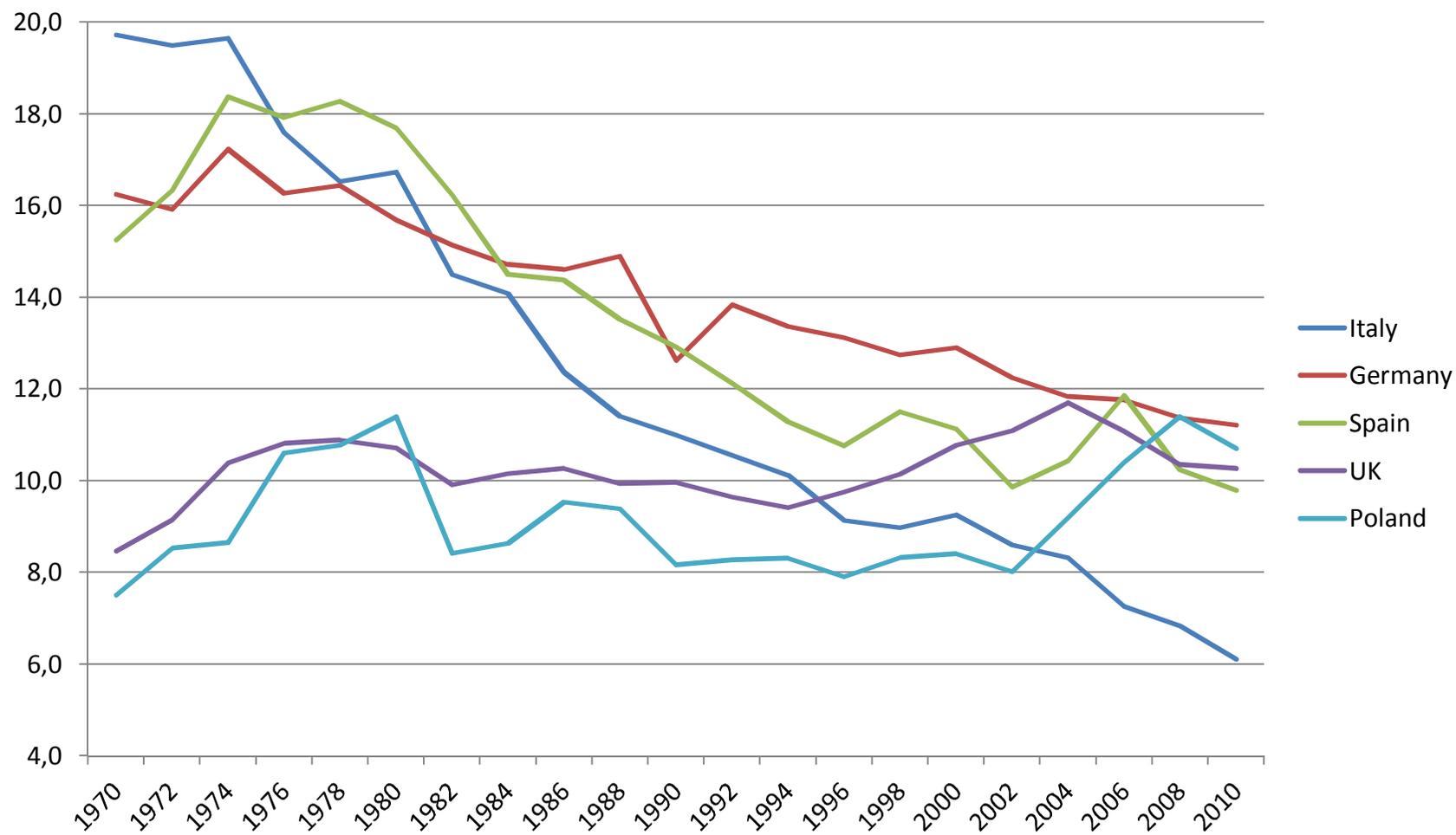


GSRAH cont.

Alcohol per capita (15+) consumption (in litres of pure alcohol)

	Average 2003–2005	Average 2008–2010	Change
Recorded	9.6	9.4	→
Unrecorded	0.5	0.5	→
Total	10.1	9.9	→
Total males / females		14.0 6.0	
WHO European Region	11.9	10.9	

And some country differences in trend (recorded only)

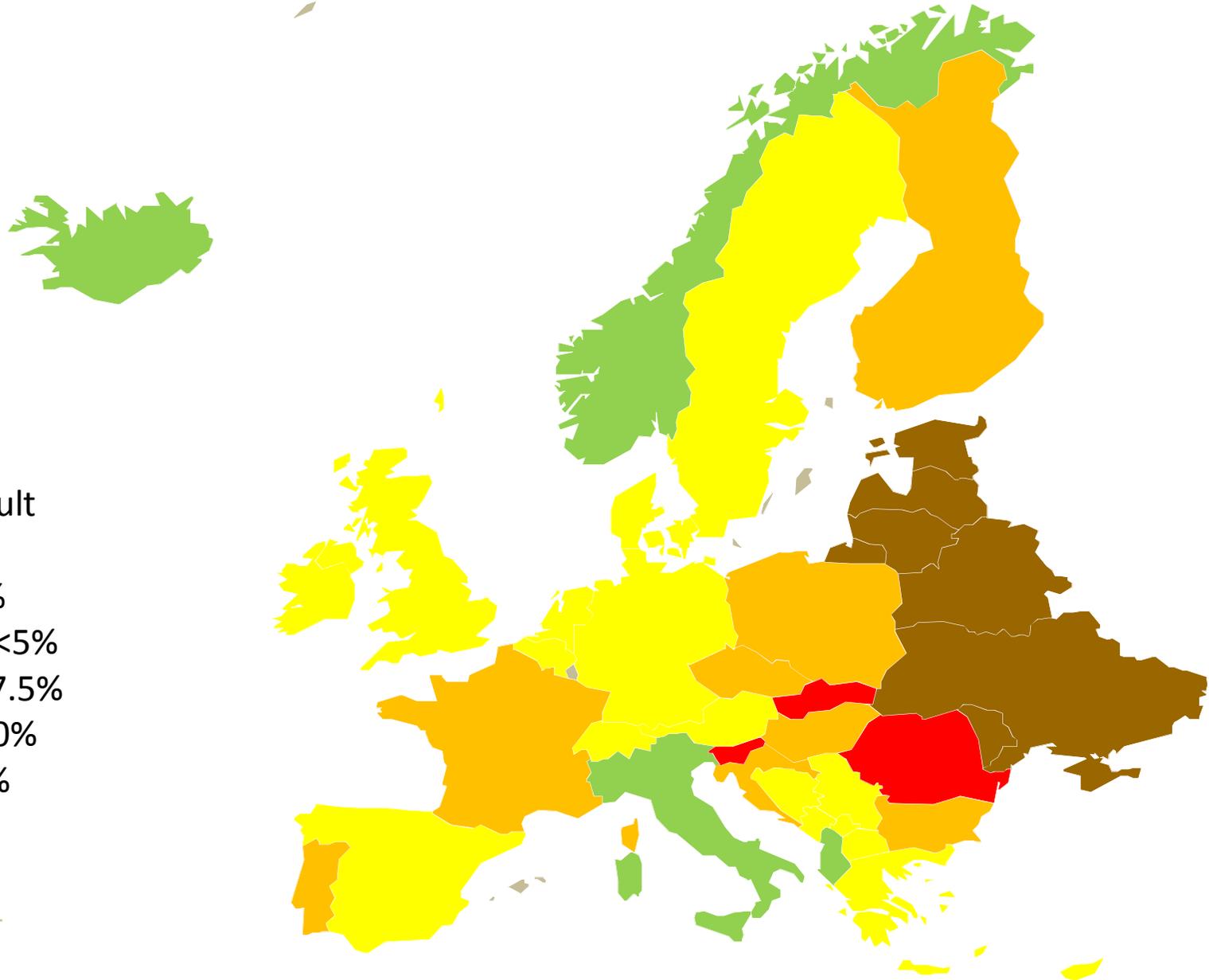


2012 harm is high in Europe

ALCOHOL-ATTRIBUTABLE HEALTH HARM

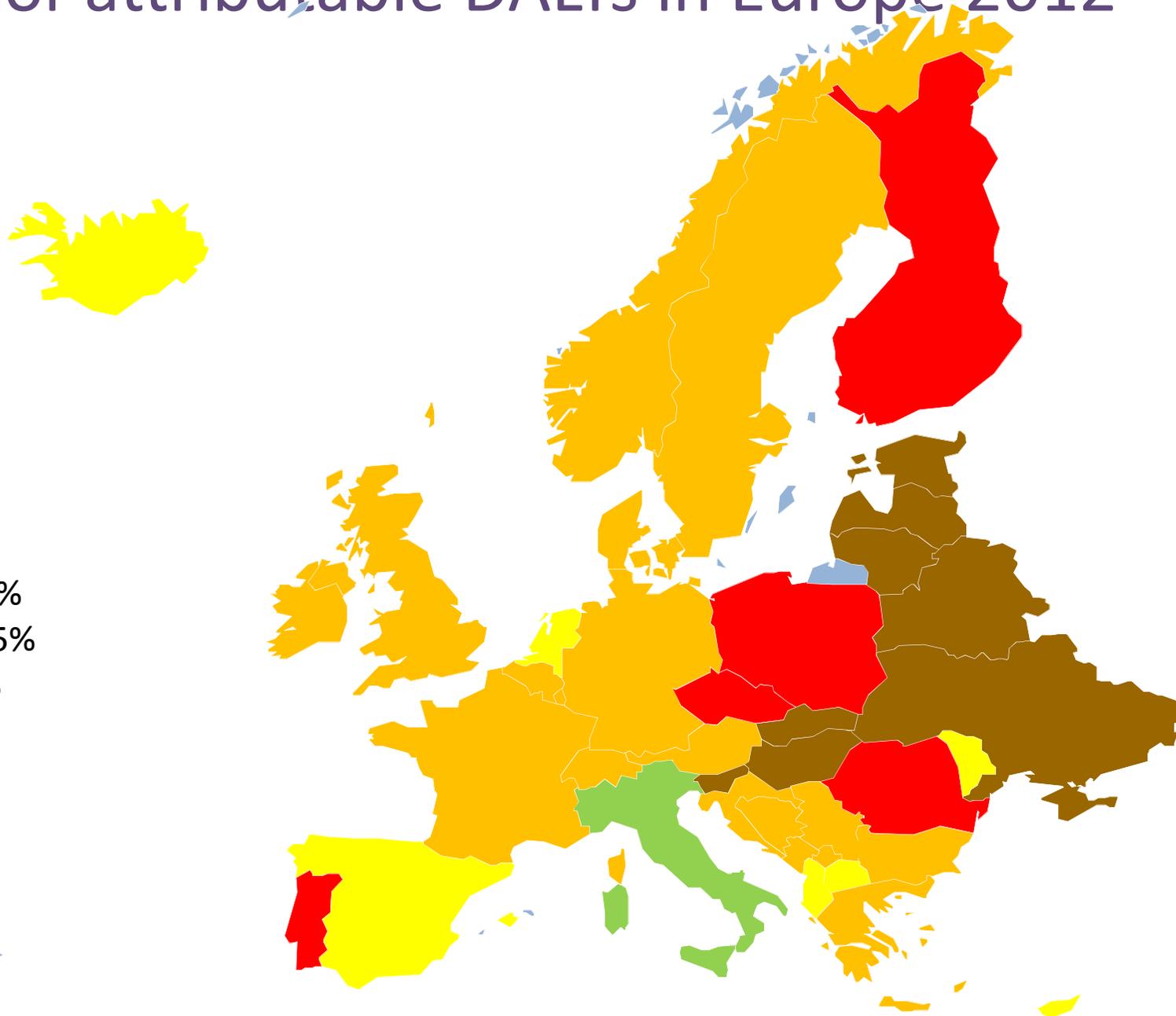
Alcohol-attributable deaths in Europe 2012

In % of all adult
deaths:
Green: <2.5%
Yellow: 2.5 - <5%
Orange: 5 - <7.5%
Red: 7.5 - <10%
Brown: 10+ %



Alcohol-attributable DALYs in Europe 2012

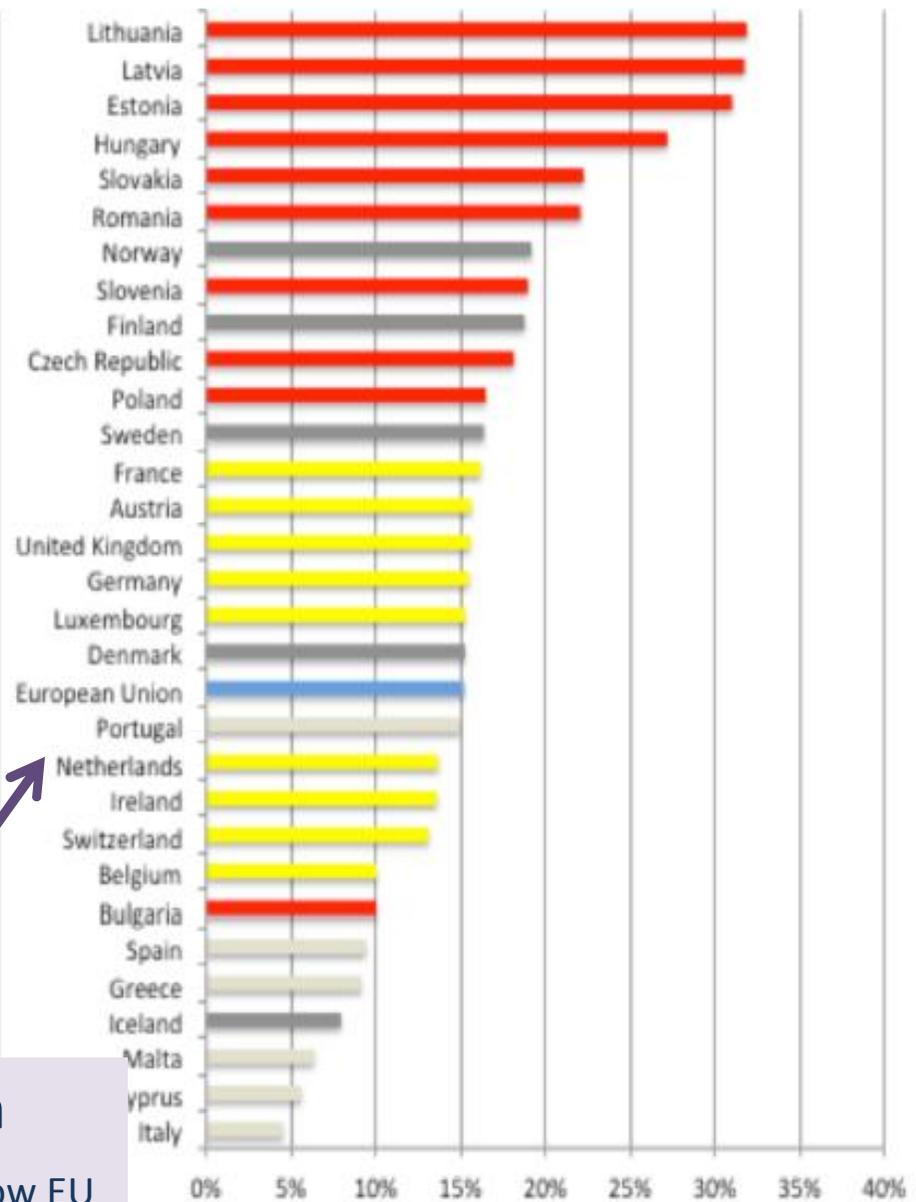
In % of all adult
DALYs:
Green: < 2.5%
Yellow: 2.5 - <5%
Orange: 5 - <7.5%
Red: 7.5 - <10%
Brown: 10+ %



Women 15 to 64 years of age
Proportion of DALYs attributable to alcohol consumption



Men 15 to 64 years of age
Proportion of DALYs attributable to alcohol consumption



2009 NL in European comparison (slightly below EU average)

And the Netherlands cont. 2012

“ Based on GSRAH

Age	Category	Men	Women	Total
15 to 64 years of age	Total deaths	13,713	9,995	23,708
	Deaths due to alcohol	1,159	526	1,684
	Percent of deaths due to alcohol	8.4%	5.3%	7.1%
All ages	Total deaths	67,796	72,013	139,809
	Deaths due to alcohol	2,647	1,104	3,751
	Percent of deaths due to alcohol	3.9%	1.5%	2.7%

And the Netherlands cont.

HEALTH CONSEQUENCES: MORTALITY AND MORBIDITY

Age-standardized death rates (ASDR) and alcohol-attributable fractions (AAF), 2012

	ASDR*		AAF (%)	
Liver cirrhosis, males / females	5.7	2.5	63.8	67.9
Road traffic accidents, males / females	6.8	2.2	6.3	2.6

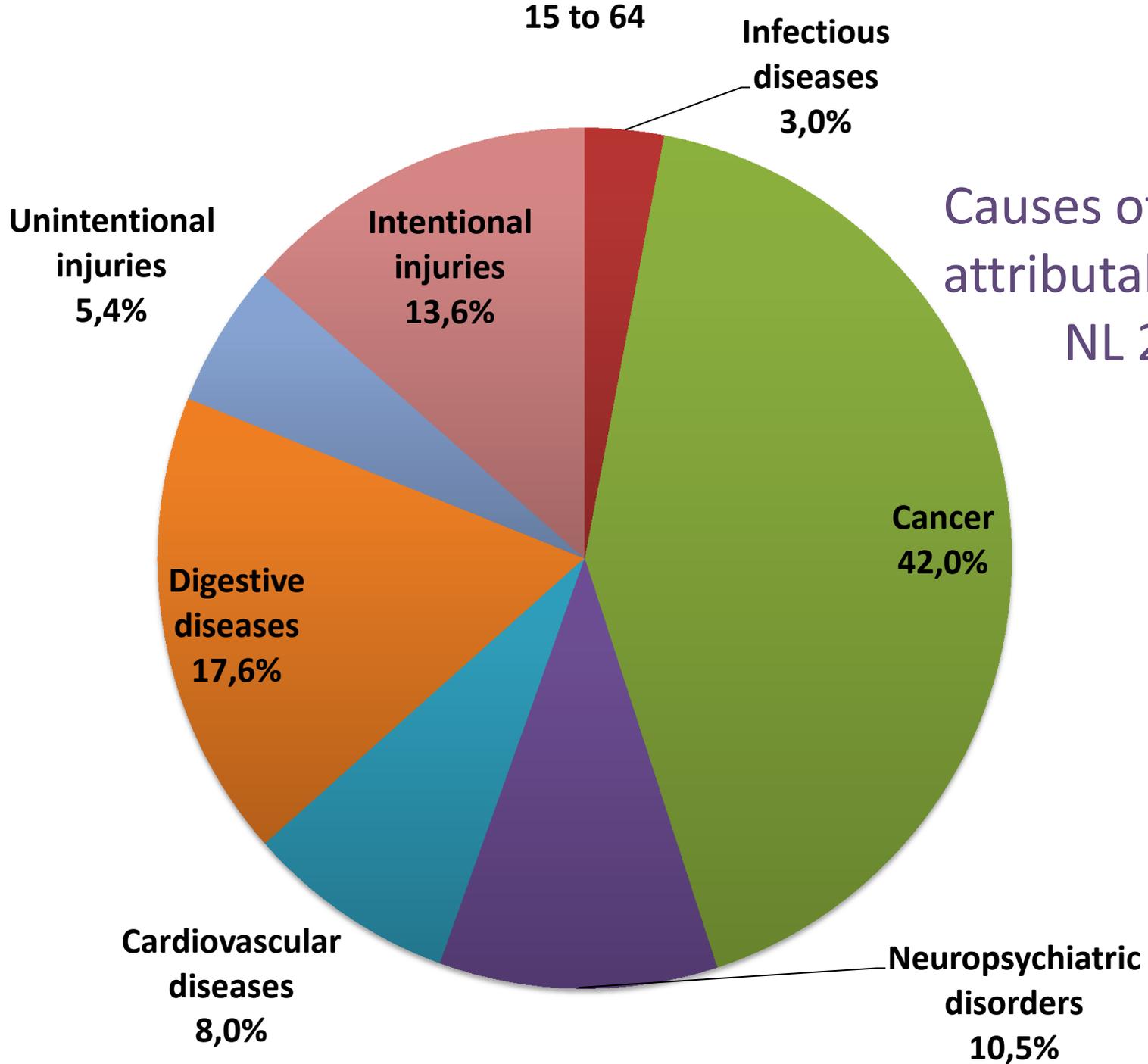
*Per 100 000 population (15+).

Years of life lost (YLL) score*, 2012

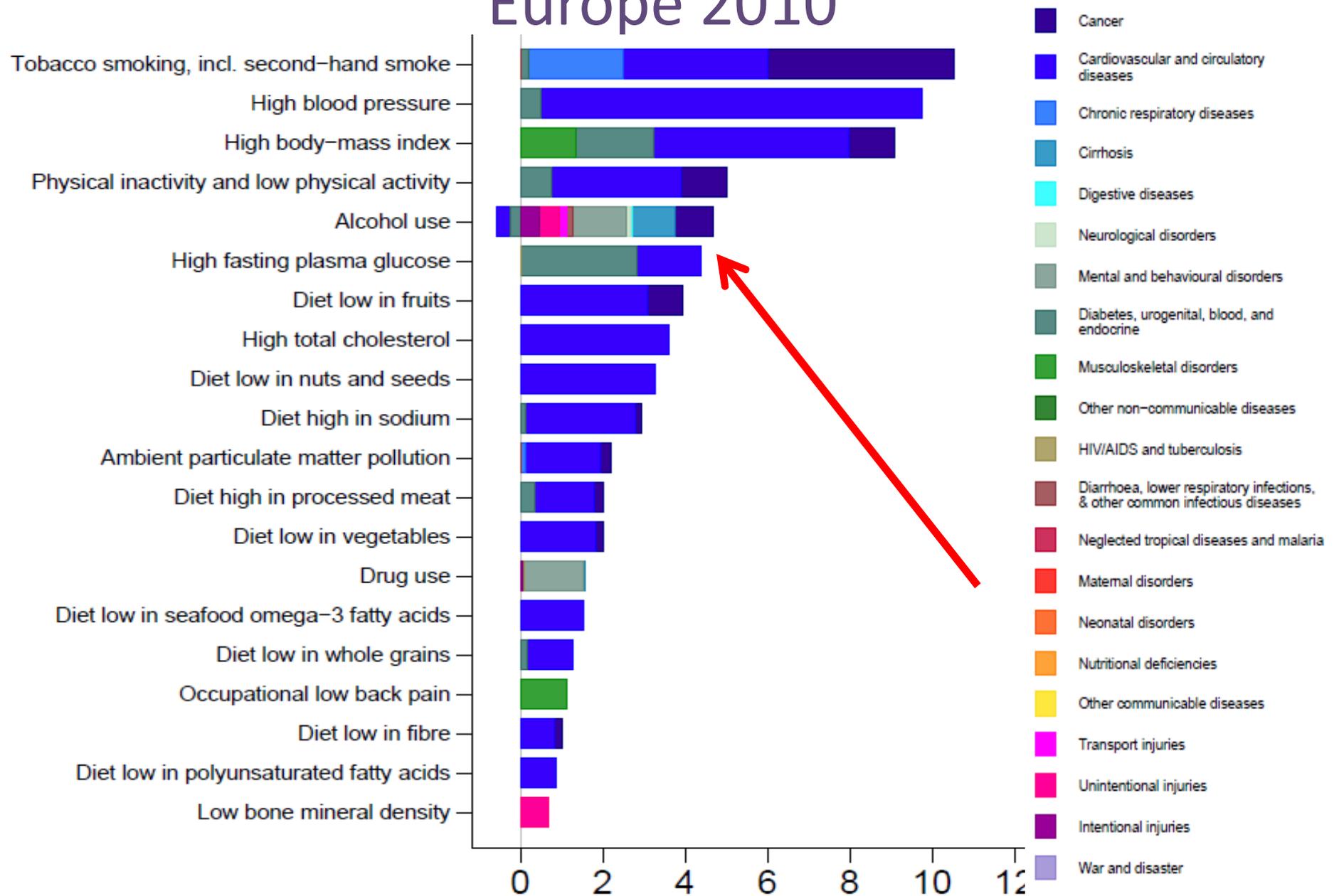
LEAST < 1 2 3 4 5 > MOST

*Based on alcohol-attributable years of life lost.

Causes of alcohol-attributable death
NL 2012



Comparison to other risk factors Western Europe 2010



And it is not only health burden

	Individual	Family	Work	Society
Health burden	Morbidity from diseases caused or worsened by AD and associated premature mortality	Injury; stress-related problems for other family members; FASD; interpersonal violence	Injury	Acute care hospitalisations for health problems caused by alcohol; injuries; infectious diseases; FASD
Social burden	Decreases in functionality associated with AD (blackouts, hours of drunkenness); decrease in social role; loss of friendships; stigma	Problems with parental roles, partnership roles, and roles as caregiver in general (e.g., to parents)	Team problems; others having to compensate for lack of productivity	Social costs of alcohol; vandalism
Economic burden	Dependent on society and on SES of person with AD; often cost of alcohol plus cost of possible job loss or absenteeism; possible social drift downwards	Financial problems resulting from health and social consequences of alcohol impacting on family budget and household expenses	Absenteeism and other productivity costs (mainly suboptimal performance when working and disability, short- and long-term); replacement costs in case of premature mortality or long-term disability	Productivity losses; health care costs; costs in the legal sector (police, court, prisons)

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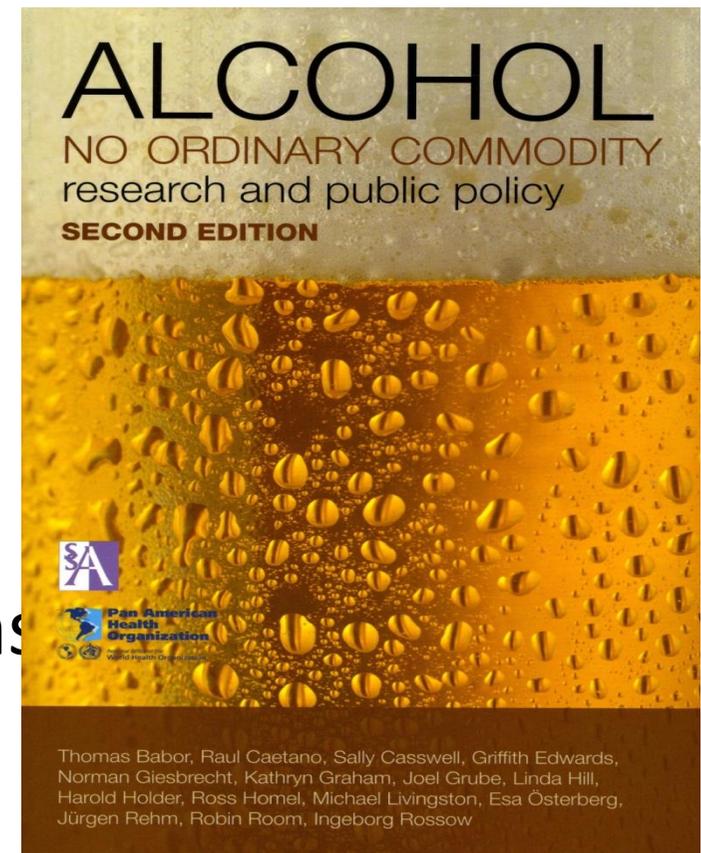
jenny; 17-2-2012

Conclusions

- “ Overall Europe is still the region with the highest alcohol consumption in the world (Eastern Europe higher than EU) and the Netherlands are slightly below the EU average.
- “ So overall, harm is still high (**more than every 10th death in the EU before age 65 is due to alcohol!**) and can and should be reduced. Again the EU is slightly below.
- “ Harm is not restricted to health or to the drinker.

Need for interventions

- “ Prevention is important
- “ WHO “best buys” for cost-effective prevention ->
 - . Taxation
 - . Reduction of availability
 - . Marketing ban
- “ Let us not forget interventions for heavy drinking including treatment



Why is alcohol treated so differently?

Usually governments act, if the lifetime death risk is 1 in a million for involuntary risk, and 1 in 1,000 for voluntary risk. Alcohol-attributable risk rates are way over these thresholds, both for voluntary and involuntary risks.

Consider these fact:

- “ Alcohol is not covered by normal food regulations (producers do not even have to give ingredients, nor are there warning labels).
- “ Alcohol is the only psychoactive substance without a binding international treaty.
- “ Alcohol is treated ambiguously by public health (overestimation of cardio-protective effect).
- “ Information about alcohol risks are insufficient. The majority do not know the cancer risks, just to give one example.

Why does society accept a higher risk for alcohol than for other voluntary or involuntary risks?

Jürgen Rehm^{1,2,3,4,5*}, Dirk W Lachenmeier^{5,6} and Robin Room^{7,8,9}

Abstract

Background: Societies tend to accept much higher risks for voluntary behaviours, those based on individual decisions (for example, to smoke, to consume alcohol, or to ski), than for involuntary exposure such as exposure to risks in soil, drinking water or air. In high-income societies, an acceptable risk to those voluntarily engaging in a behaviour seems to be about one death in 1,000 on a lifetime basis. However, drinking more than 20 g pure alcohol per day over an adult lifetime exceeds a threshold of one in 100 deaths, based on a calculation from World Health Organization data of the odds in six European countries of dying from alcohol-attributable causes at different levels of drinking.

Discussion: The voluntary mortality risk of alcohol consumption exceeds the risks of other lifestyle risk factors. In addition, evidence shows that the involuntary risks resulting from customary alcohol consumption far exceed the acceptable threshold for other involuntary risks (such as those established by the World Health Organization or national environmental agencies), and would be judged as not acceptable. Alcohol's exceptional status reflects the vagaries of history, which have so far resulted in alcohol being exempted from key food legislation (no labelling of ingredients and nutritional information) and from international conventions governing all other psychoactive substances (both legal and illegal). This is along with special treatment of alcohol in the public health field, including reflecting overestimation of its beneficial effect on ischaemic disease when consumed in moderation.

Summary: A much higher mortality risk from alcohol than from other risk factors is currently accepted by high income countries.