

Alcohol exposure and attributable harm in the EU

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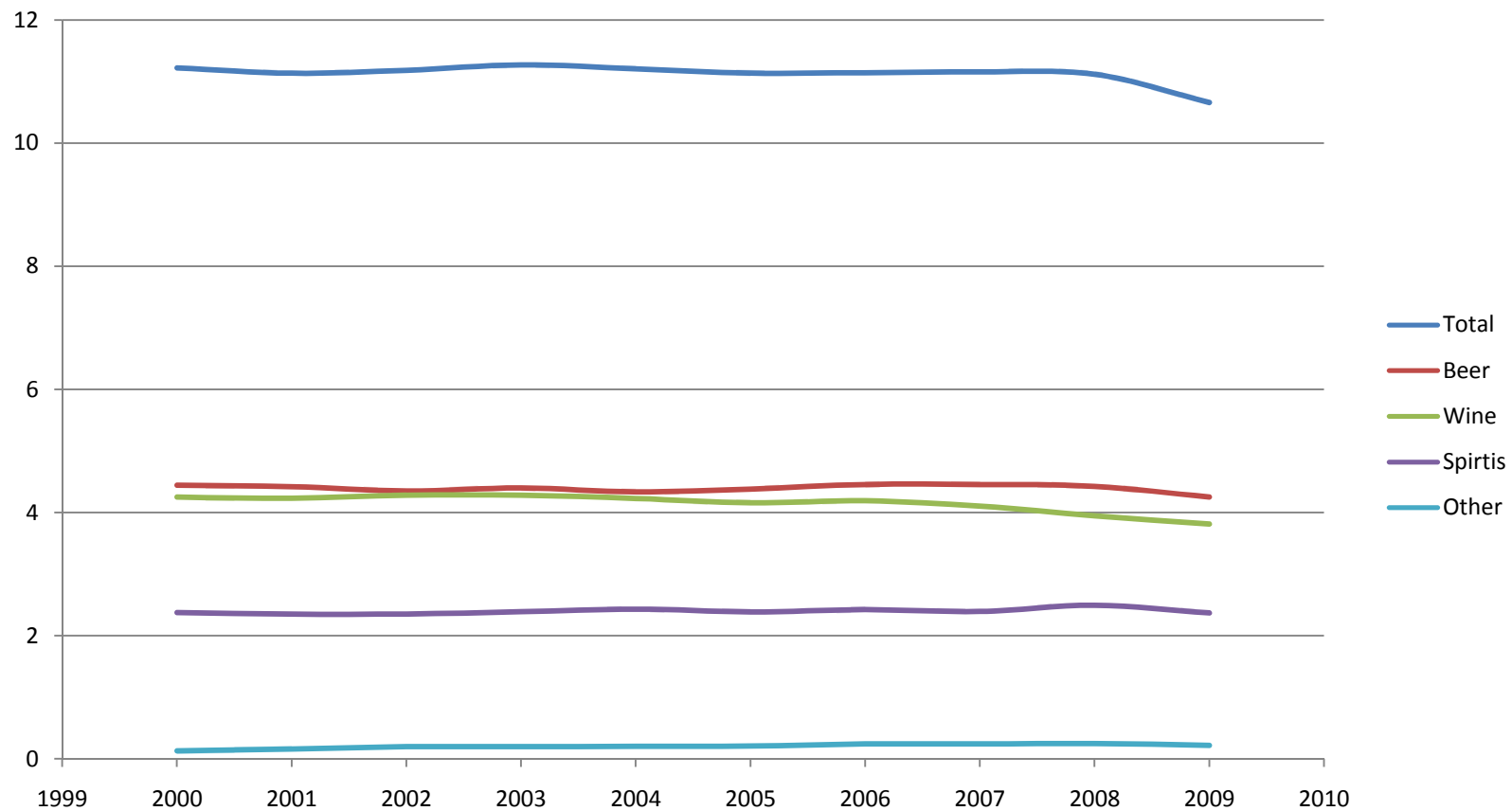
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High but stable

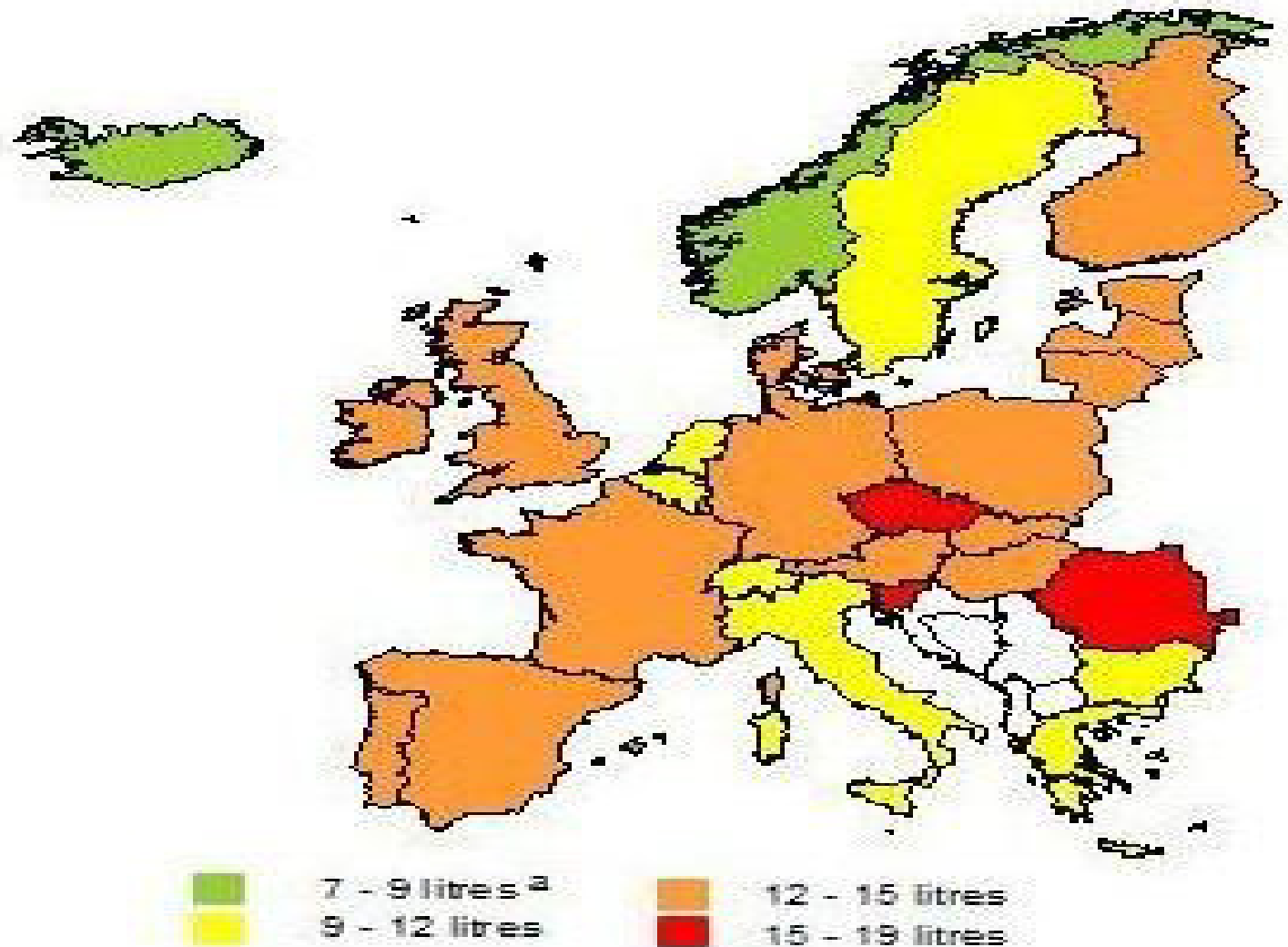
ALCOHOL EXPOSURE IN THE EU

Recorded alcohol consumption in the EU (in litres pure alcohol per capita 15+)

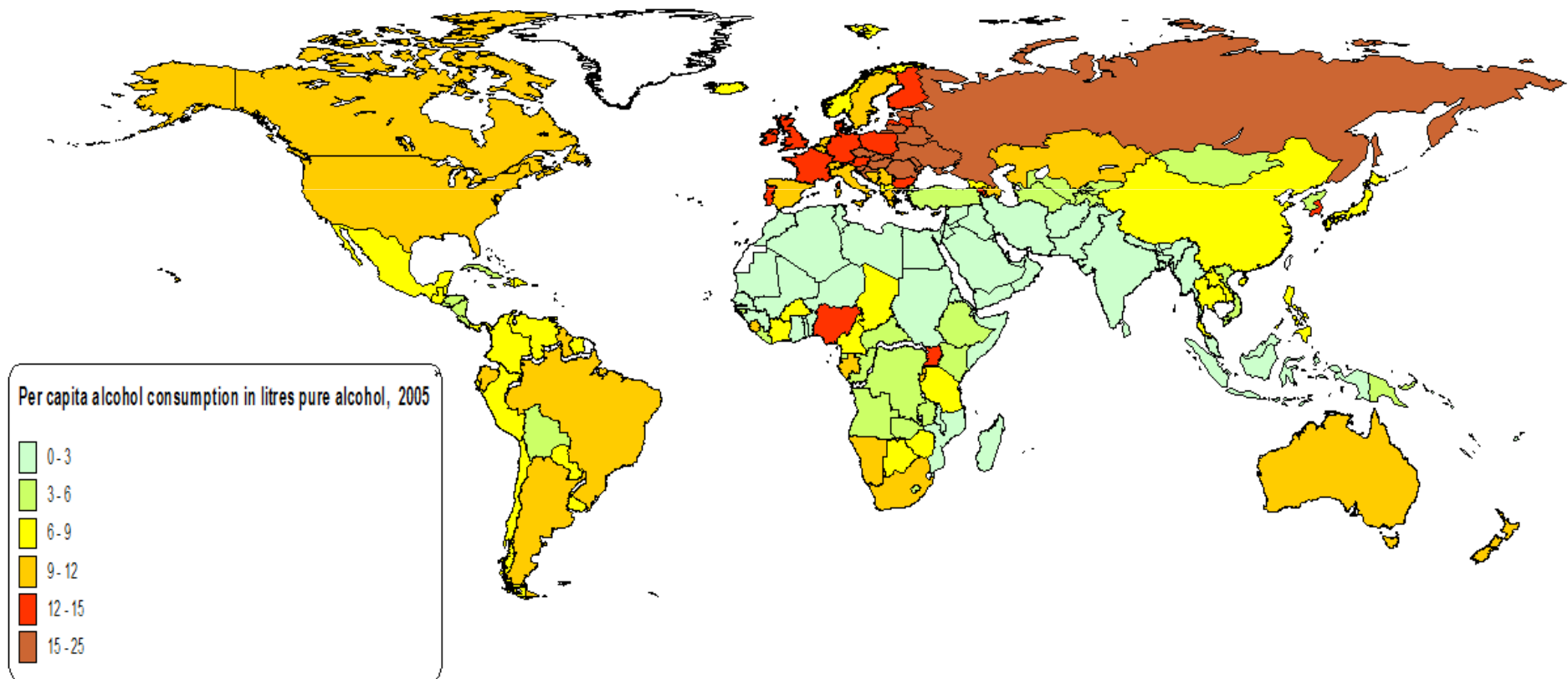
– stable but high (more than twice the world average)



Adult *per capita* consumption – recorded and unrecorded







Global drinking and European drinking 2005



What about unrecorded consumption?

- Relatively low in Europe: 1.6 l of the 12.4 l total consumption are unrecorded (about 13%)
- Globally, we have almost 30% of all alcohol consumption unrecorded
- What falls under the category of unrecorded varies in different European countries (cross-border shopping in Sweden and other Nordic countries, surrogate in Baltic, undeclared wine production in wine countries, moonshine in some countries)

Regional differences

Region		Adult per capita consumption in litres of pure alcohol ^a	Unrecorded per capita consumption in litres of pure alcohol	Hazardous drinking score
Central-eastern and eastern Europe		14.5 (1.7)	2.5 (0.8)	2.9 (0.3)
Central-western and western Europe		12.4 (0.8)	1.0 (0.5)	1.5 (0.9)
Nordic countries		10.4 (1.9)	1.9 (0.3)	2.8 (0.4)
Southern Europe		11.2 (1.7)	2.0 (0.5)	1.1 (0.3)
EU		12.4 (1.3)	1.6 (0.6)	1.9 (0.7)

^a The standard deviation is in each case indicated in the parentheses.

**HARM AND BURDEN OF DISEASE IN
2004 ESTIMATED BASED ON
CONSUMPTION IN 2009**

Alcohol-attributable disease and injury CRA 2000 (green mainly protective)

Chronic disease:

Cancer: Mouth & oropharyngeal cancer, esophageal cancer, liver cancer, female breast cancer

Neuropsychiatric diseases: Alcohol use disorders, unipolar major depression, primary epilepsy

Diabetes

Cardiovascular diseases: Hypertensive diseases, ischemic heart disease, ischemic stroke, hemorrhagic stroke

Gastrointestinal diseases: Liver cirrhosis

Conditions arising during perinatal period: Low birth weight, FAS

Injury:

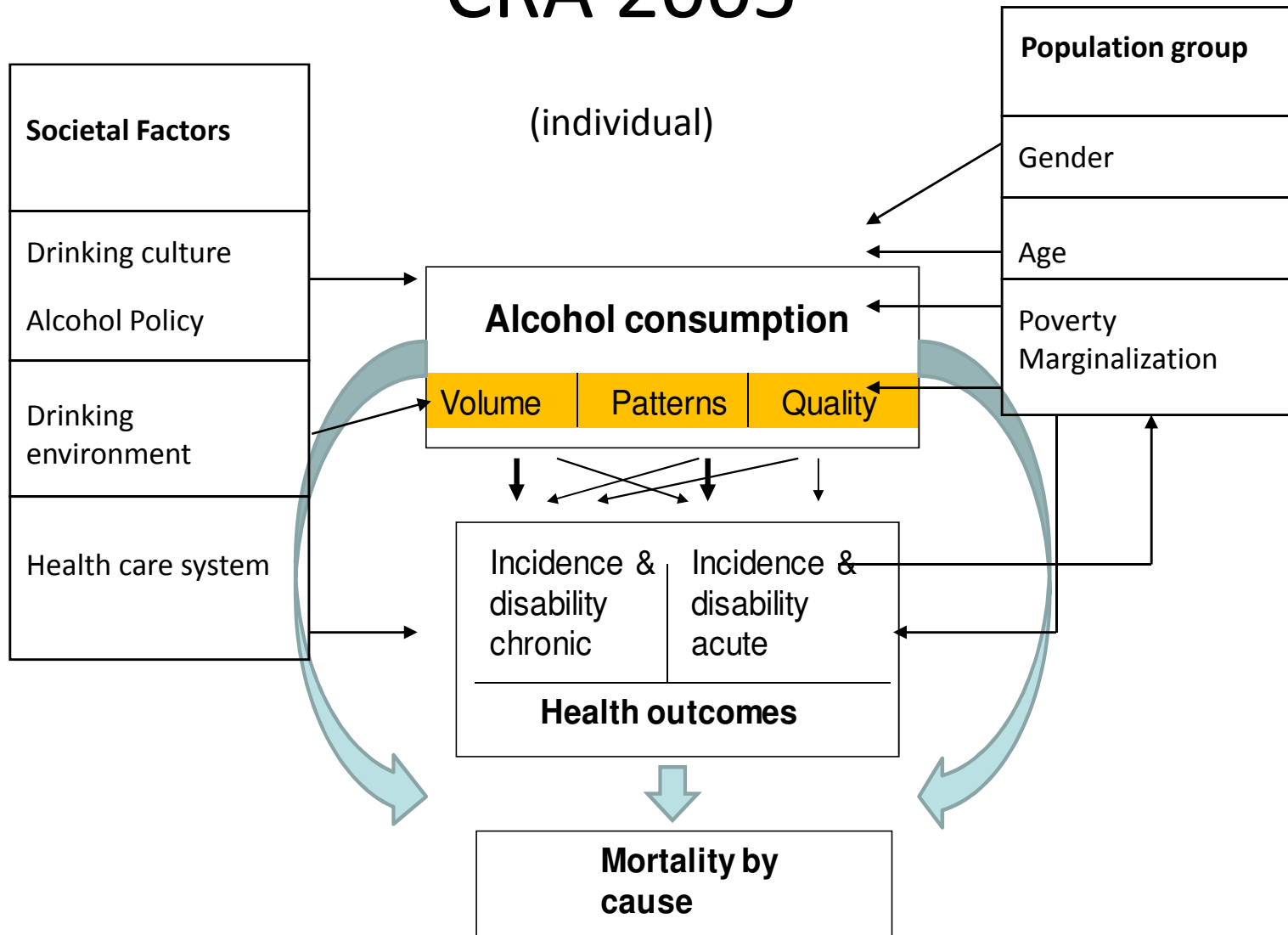
Unintentional injury: Motor vehicle accidents, drownings, falls, poisonings, other unintentional injuries

Intentional injury: Self-inflicted injuries, homicide, other intentional injuries

New developments with respect to causality: inclusion of alcohol-attributable disease categories

- ✓ Colorectal cancer included (IARC monograph meeting; Baan et al., 2007)
- ✓ Tuberculosis/pneumonia incidence and worsening the disease course included (see next slides)
- ✓ HIV incidence discussed but not included (not enough evidence for causality for incidence); enough evidence for alcohol worsening the disease cause, quantified based on recent meta-analyses
- ✓ Pancreatitis included (new disease category in GBD)
- ✓ Diverse new GBD injury categories (most injury categories have been causally linked to alcohol consumption)
- ✓ Revision of determination of risk relationship between alcohol consumption and primary epilepsy (excluding “alcoholic seizures” – in collaboration with epilepsy experts in GBD)

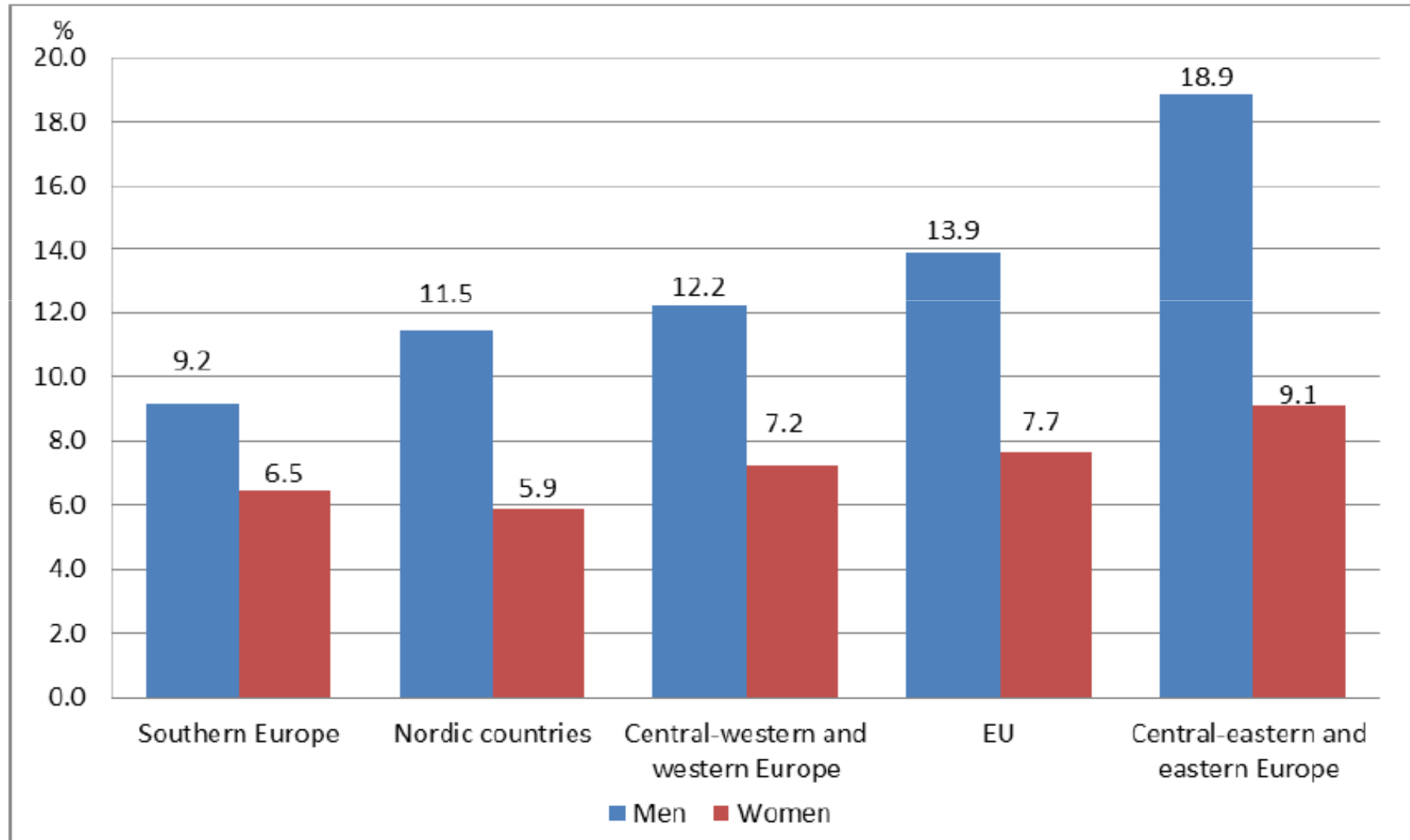
Currently used model for alcohol CRA 2005

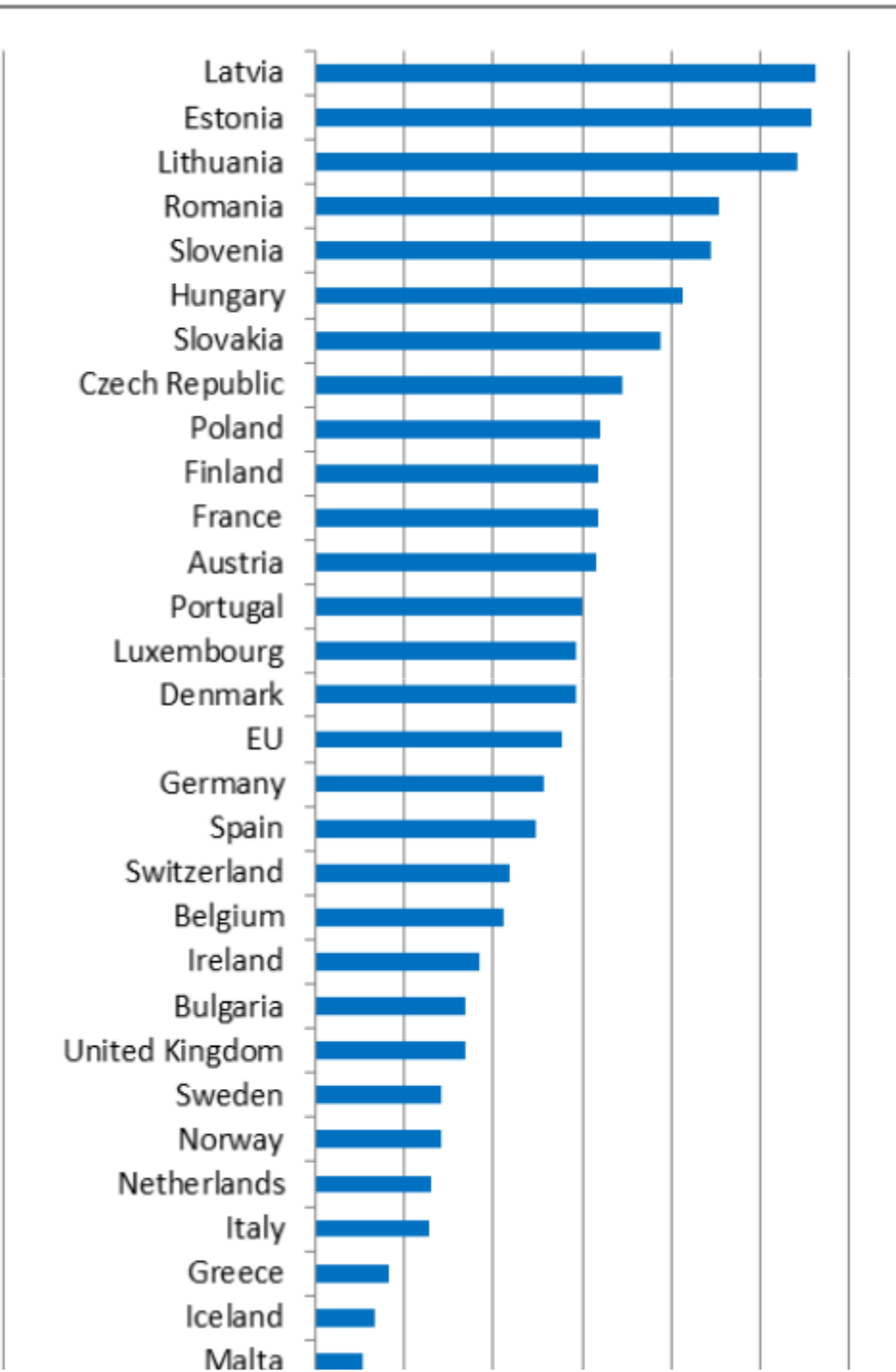
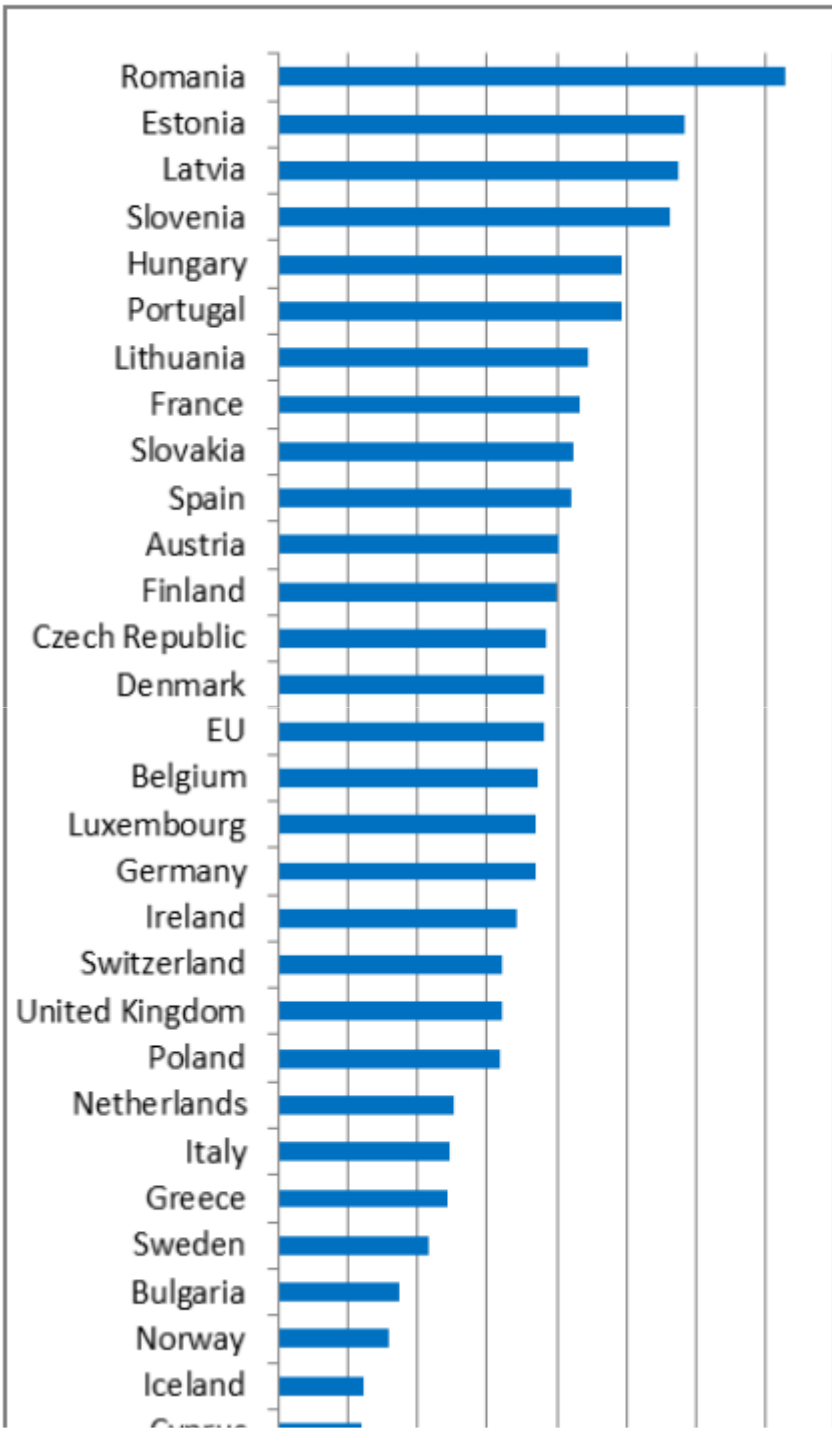


High exposure, high burden of mortality and disease

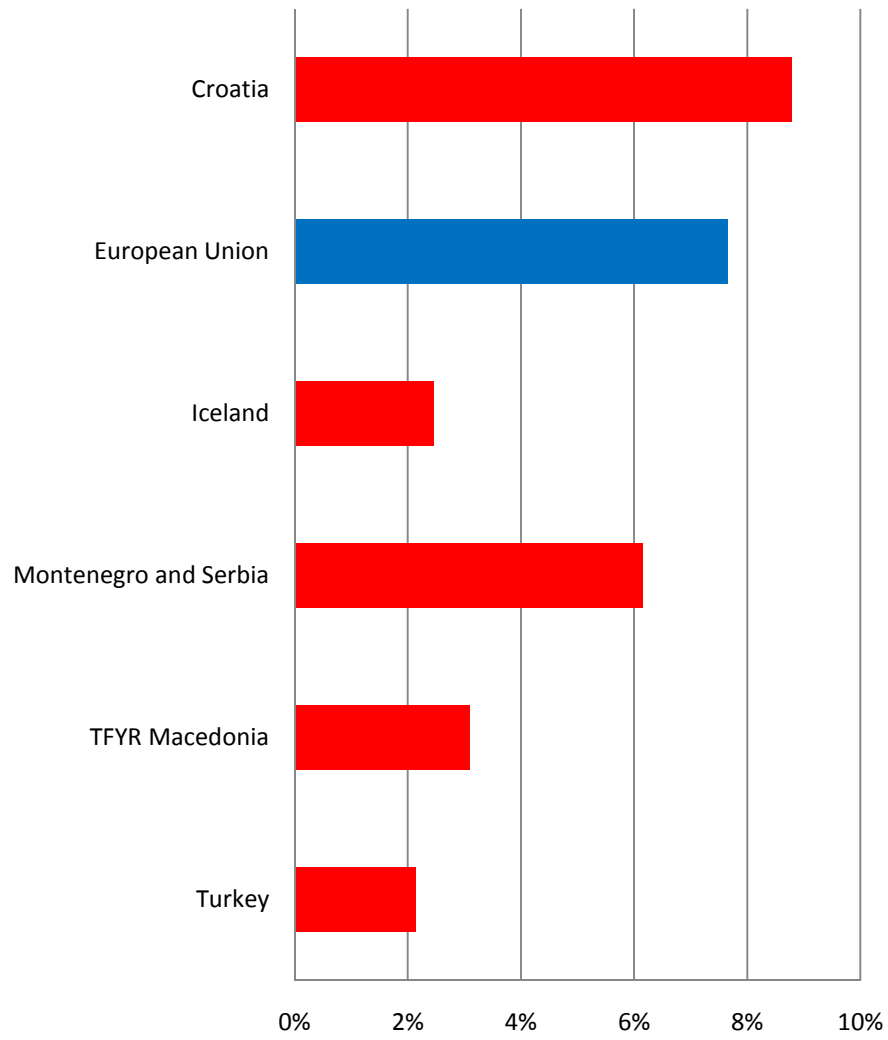
- For men between ages of 15 and 64, 1 in 7 deaths in 2004 were caused by alcohol (clearly premature deaths given the life expectancy in Europe)
- For women of the same age category, 1 in 13 deaths in 2004 were caused by alcohol

Regional variation of alcohol-attributable deaths to all deaths, 2004, 15-64 year olds

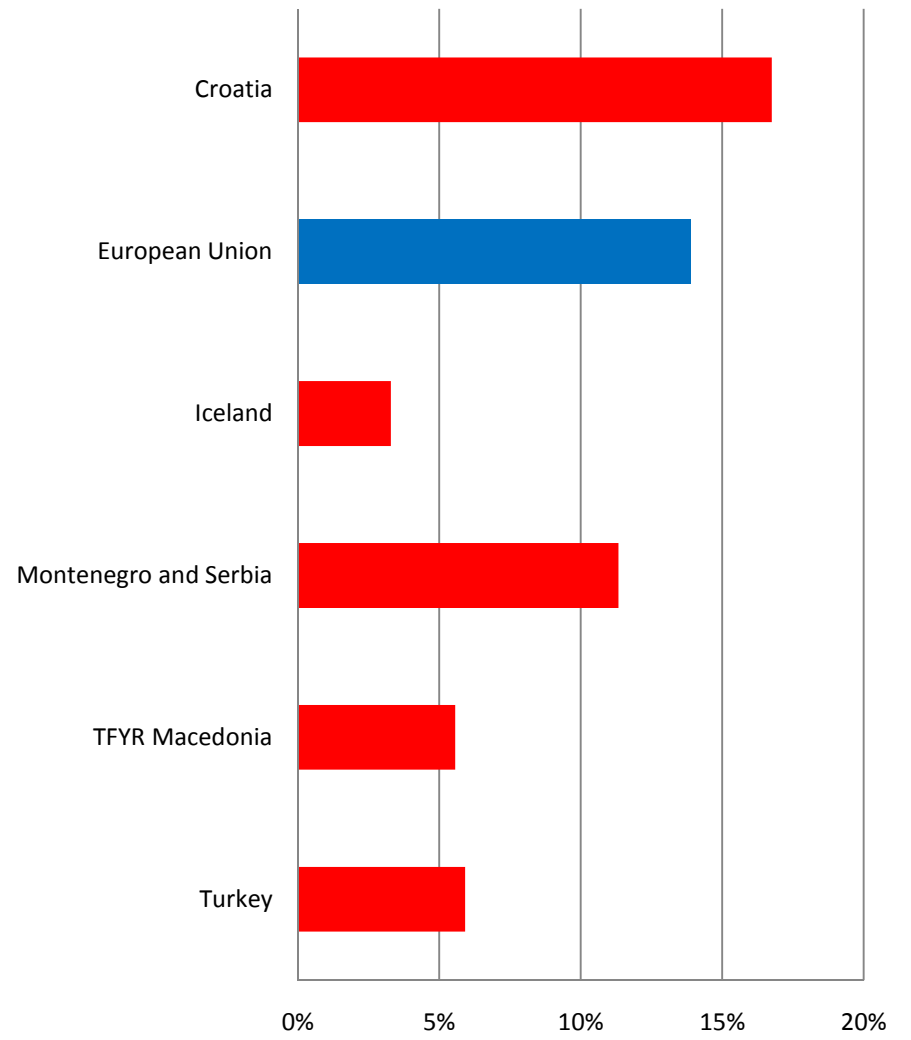




Women 15 to 64 years of age
Proportion of deaths attributable to alcohol consumption



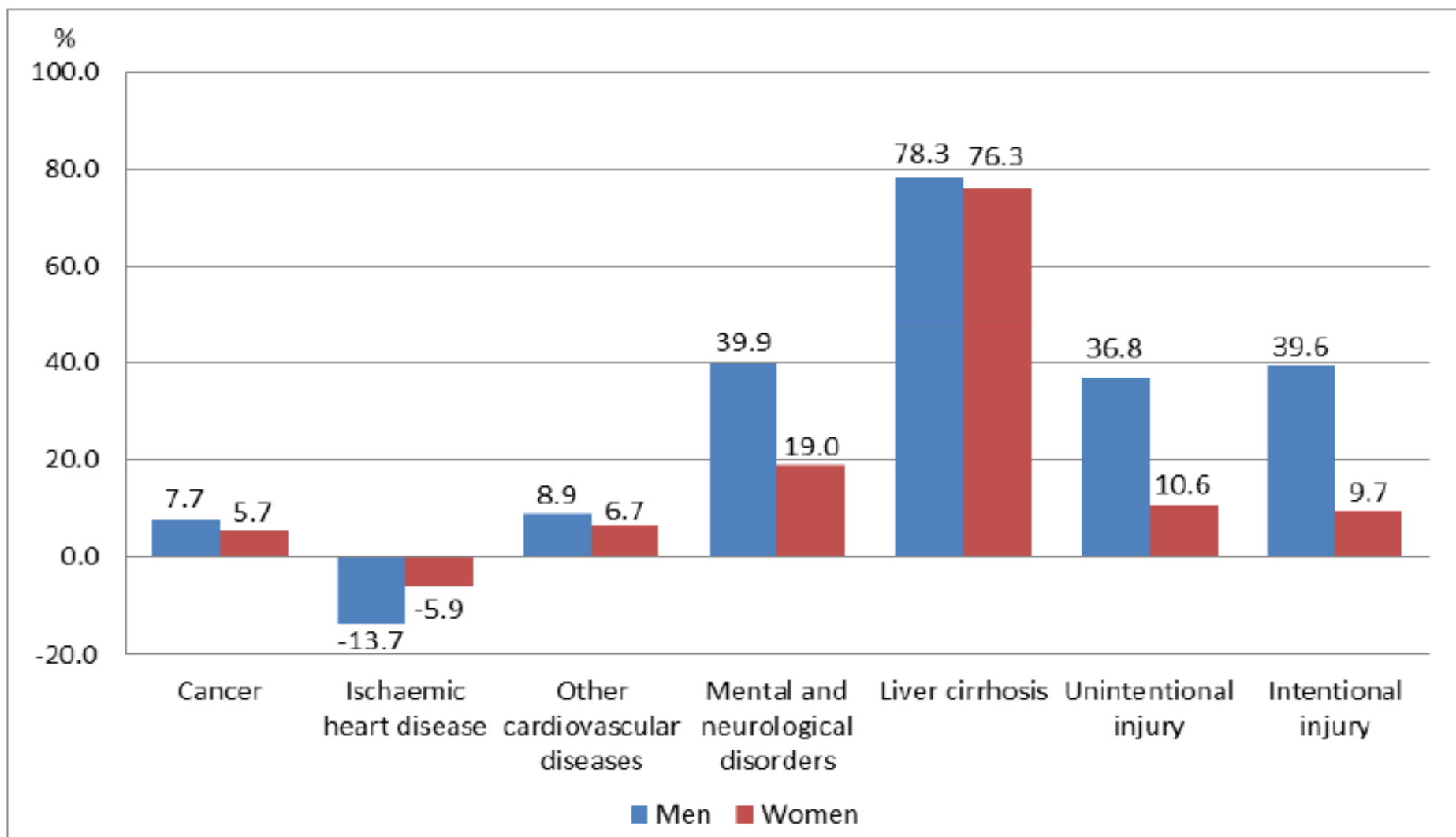
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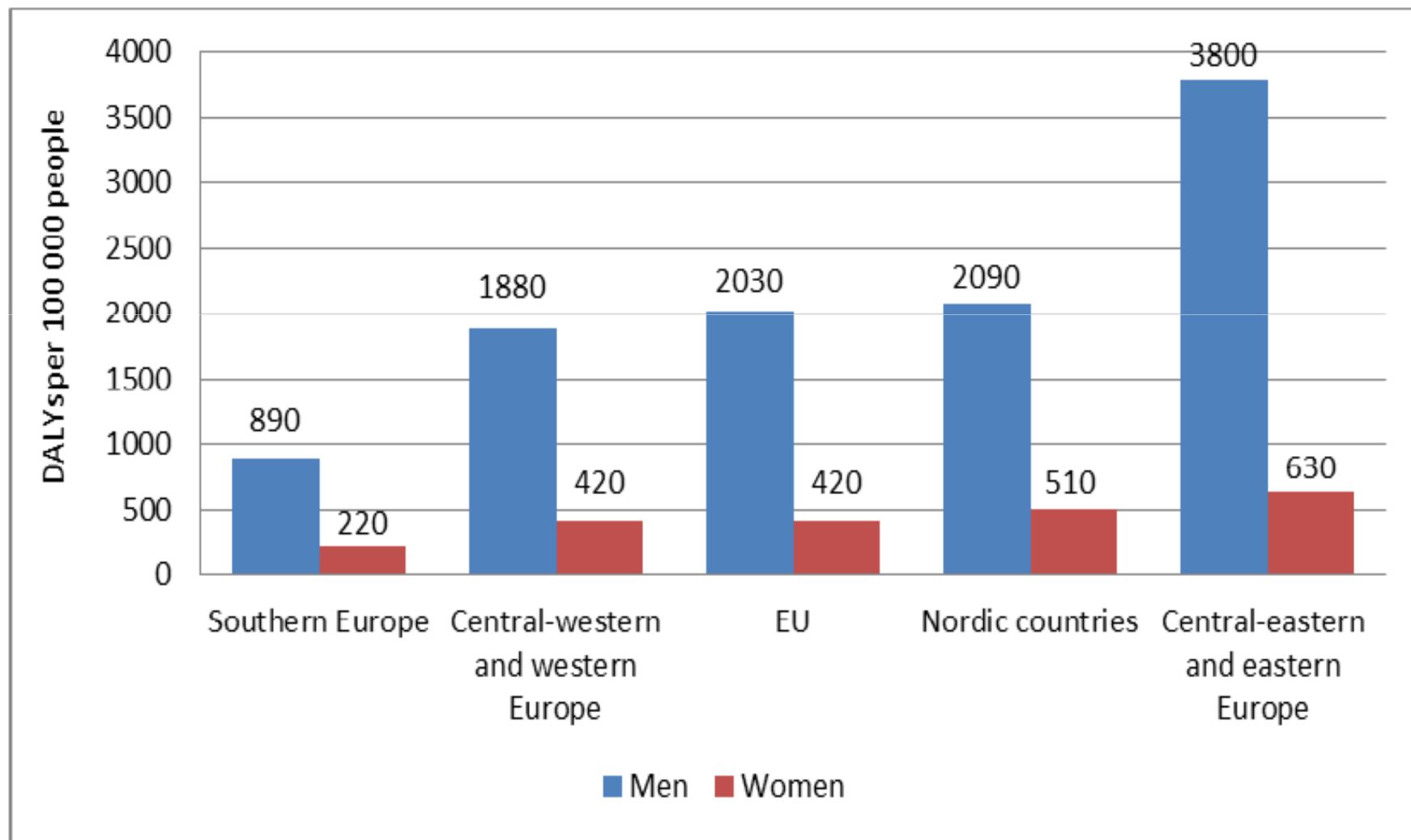
Deaths in the EU by major disease categories 2004

Effects	Men	Women	Men (%)	Women (%)
<i>Detrimental effects</i>				
Cancer	17 358	8 668	15.9	30.7
Cardiovascular diseases other than ischaemic heart disease	7 914	3 127	7.2	11.1
Mental and neurological disorders	10 868	2 330	9.9	8.3
Liver cirrhosis	28 449	10 508	26.0	37.2
Unintentional injury	24 912	1 795	22.8	6.4
Intentional injury	16 562	1 167	15.1	4.1
Other detrimental	3 455	637	3.2	2.3
Total detrimental	109 517	28 232	100.0	100.0
<i>Beneficial effects</i>				
Ischaemic heart disease	14 736	1 800	97.8	61.1
Other beneficial	330	1 147	2.2	38.9
Total beneficial	15 065	2 947	100.0	100.0

Proportion of deaths for major disease categories attributable to alcohol



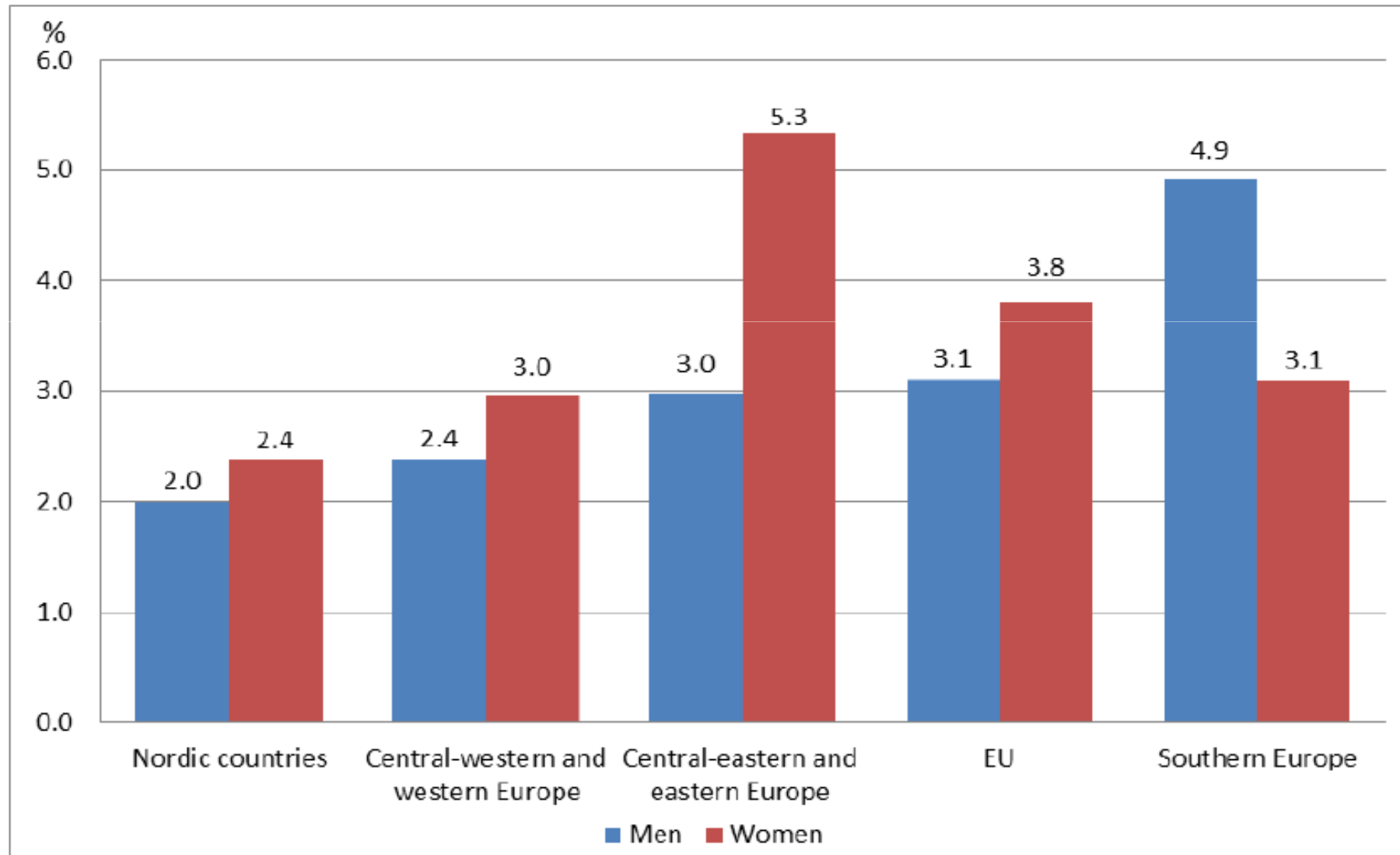
Regional variation of DALY rates per 100,000 people, 2004, 15-64 year olds



DALYs in the EU by major disease categories 2004

Effects	Men	Women	Men (%)	Women (%)
<i>Detrimental effects</i>				
Cancer	251 891	151 671	6.9	17.5
Cardiovascular diseases other than ischaemic heart disease	128 336	25 969	3.5	3.0
Mental and neurological disorders	1 691 310	382 584	46.3	44.2
Liver cirrhosis	512 560	212 676	14.0	24.6
Unintentional Injury	634 959	50 936	17.4	5.9
Intentional injury	347 225	24 147	9.5	2.8
Other detrimental	83 640	18 149	2.3	2.1
Total detrimental	3 649 921	866 131	100.00	100.00
<i>Beneficial effects</i>				
Ischaemic heart disease	275 588	87 887	94.8	48.3
Other beneficial	15 049	94 054	5.2	51.7
Total beneficial	290 637	181 941	100.0	100.0

Proportion of alcohol-attributable deaths caused by harm to others, 2004, 15-64 years old



Conclusions

- Alcohol consumption is stable in the EU and causing considerable harm
- Overall, harm is highest in Central Eastern part of Europe
- In Nordic countries, alcohol-attributable YLD are relatively high (higher toll of AUDs), especially given consumption
- Harm to others is considerable