

How many cancers can we prevent when increasing alcohol excise tax?

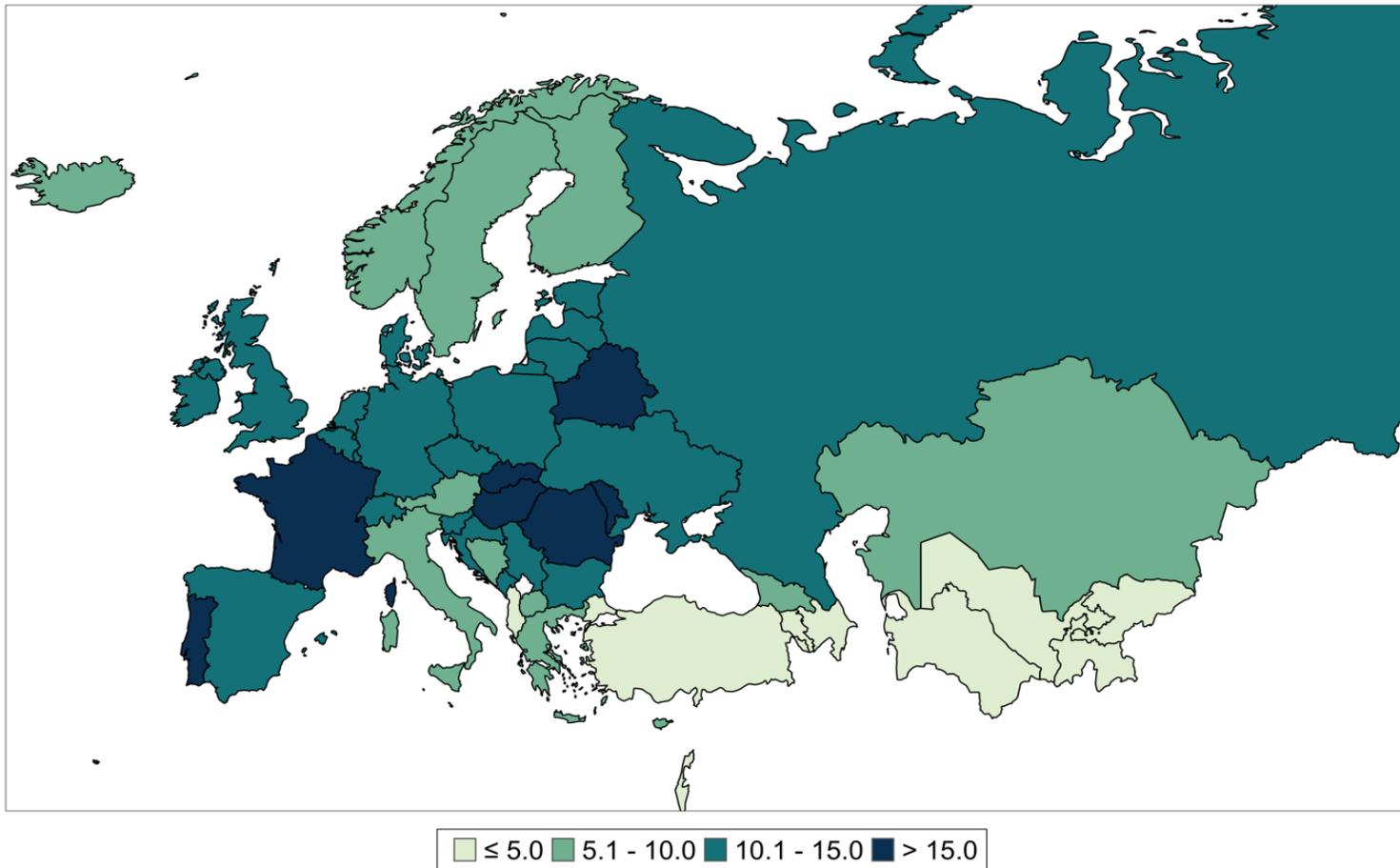
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The scope of the problem: alcohol-attributable cancers in Europe (WHO European Region) in 2018

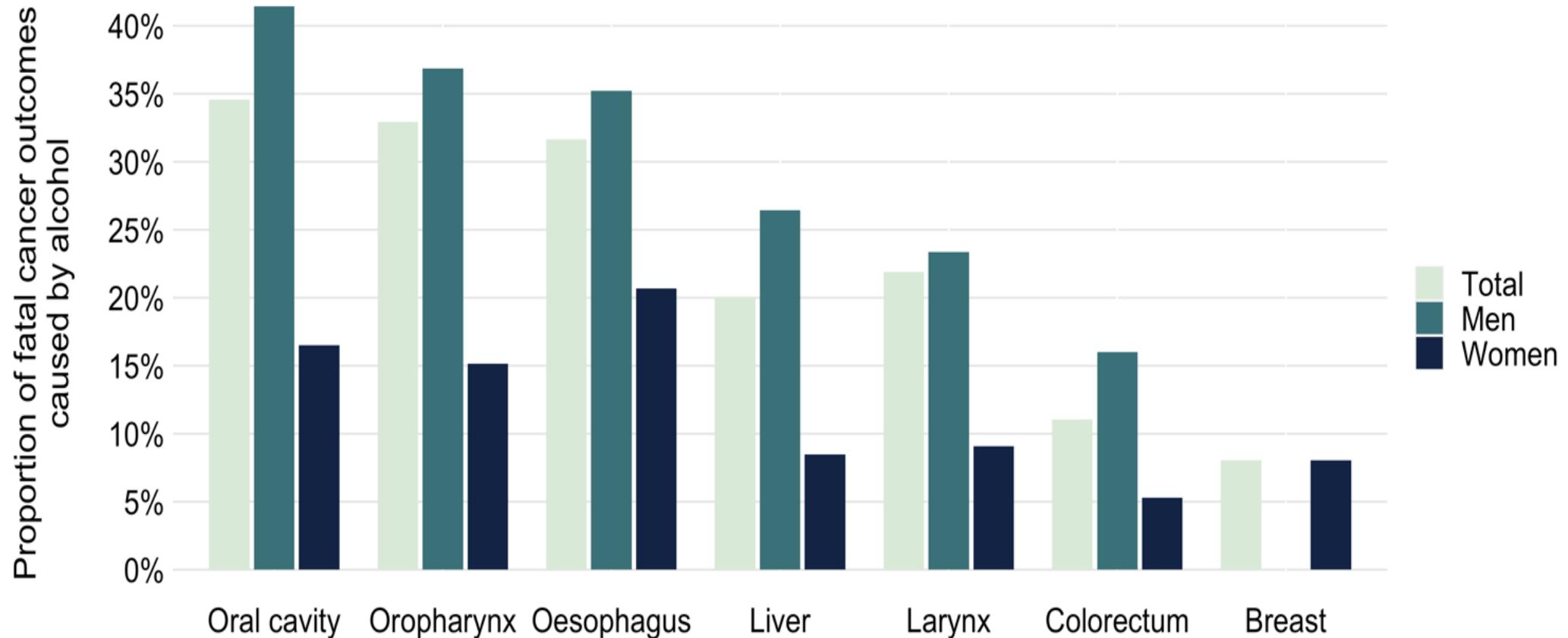
Age-standardised rates of cancer cases caused by alcohol per 100,000



In 2018, about 4 million people developed cancer within the Region, of which 4.3% were due to drinking alcohol.

Thus, a total of about 180,000 cases of cancer (70,000 cancer cases in women and more than 110,000 cases in men) were caused by alcohol. In the same year, alcohol drinking caused 92,000 cancer deaths.

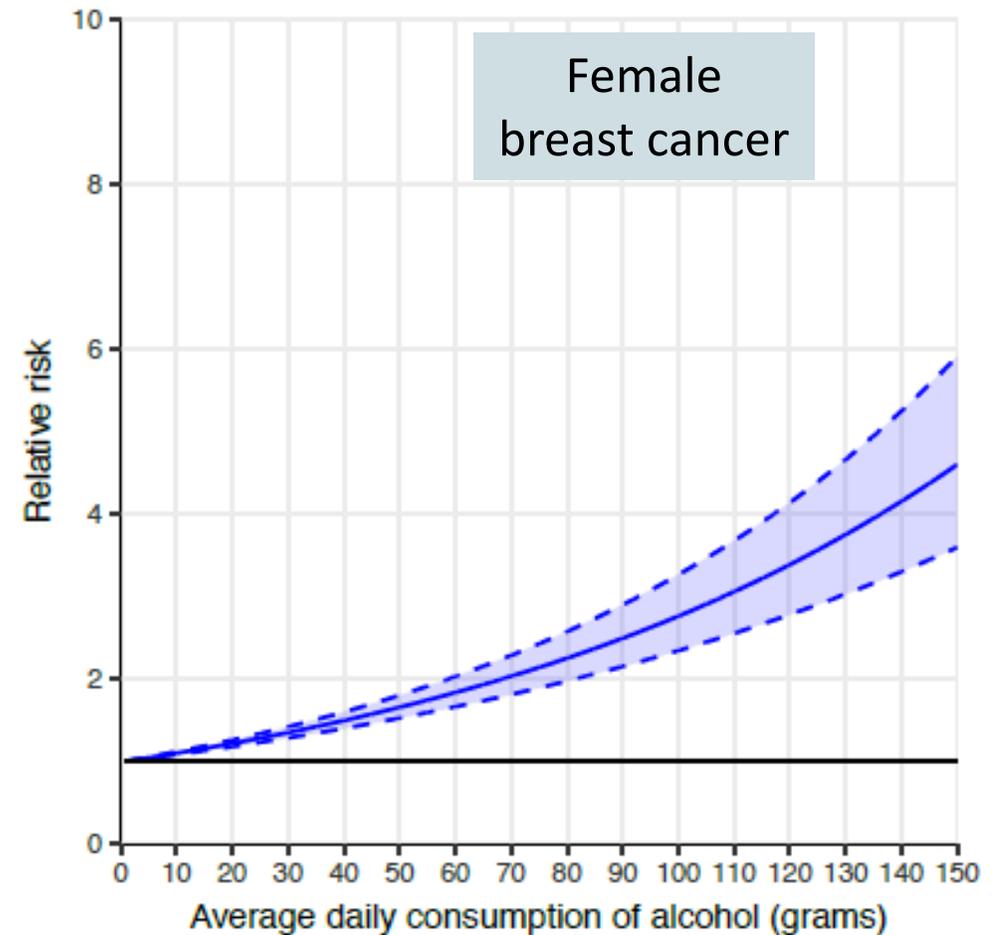
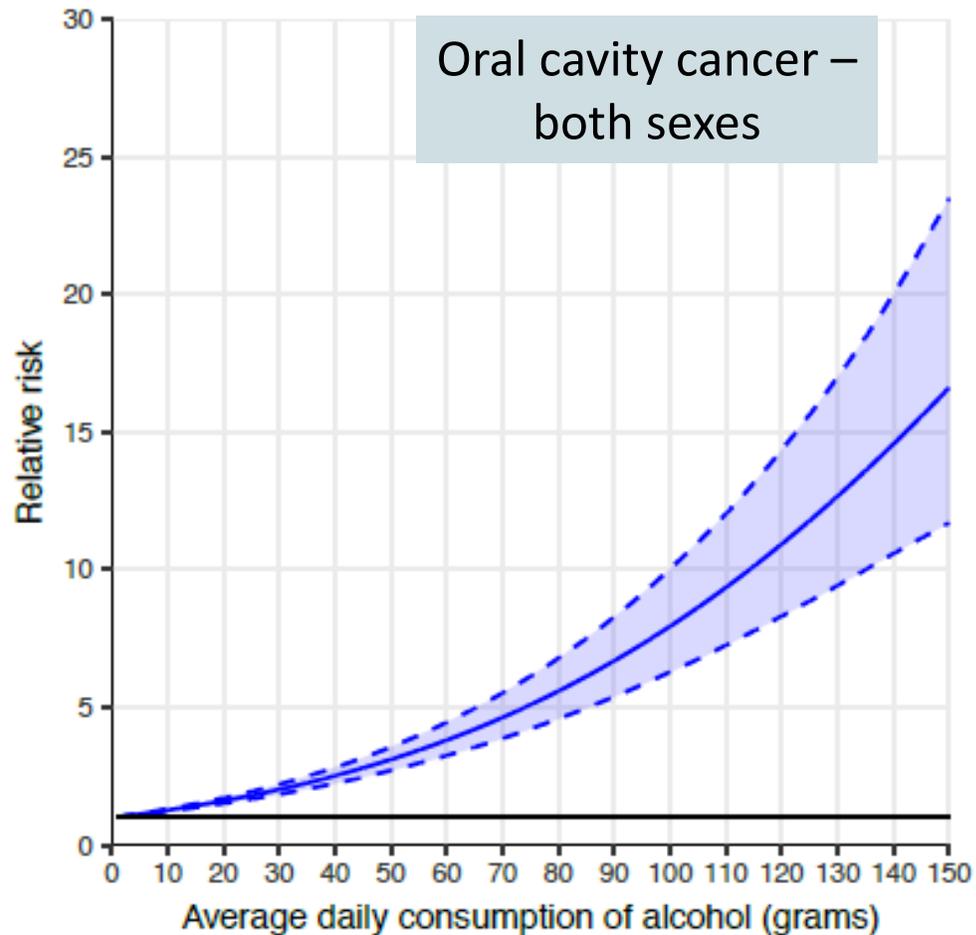
Which cancers are caused by alcohol? Alcohol-attributable fraction



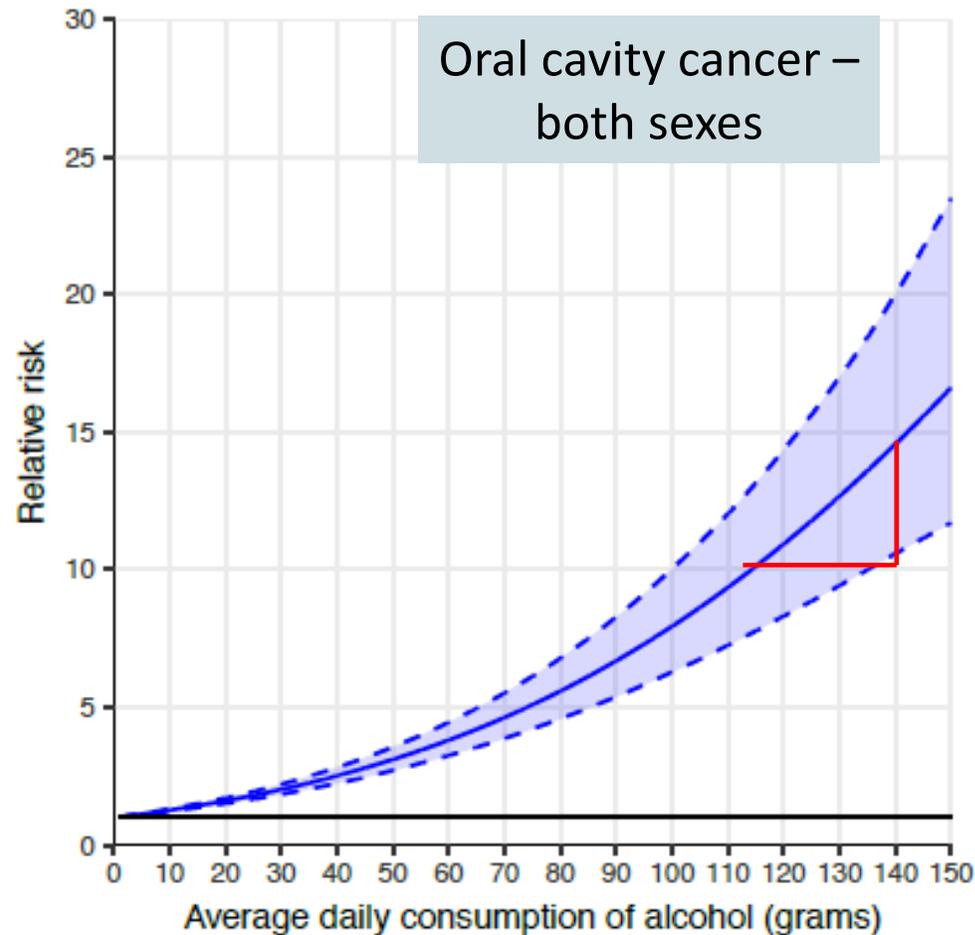
Interpretation: 4 out of 10 cancers of the oral cavity are due to alcohol, and would not occur in a alcohol free society

Source: WHO European Region & IARC, 2020

For each of these cancers there is a dose-response relationship: the more you drink on average the higher the risk



Implications: reduction of risk if you drink less (and this is most important for heavy drinkers)



Example: if you reduce your drinking by about 25 grams per day (two drinks in most European countries, three drinks in the UK), you reduce your risk by 1/3 from being 15 times that of an abstainer to 10 times that of an abstainer. If you reduce it further to about 2 drinks a day, your risk will be on 2-3 fold the risk of an abstainer!

➤ Your cancer risk can be substantially reduced by drinking less alcohol

Increases in excise taxes for alcohol achieves exactly this: a risk reduction for all (some examples of cancer cases saved with different taxation increases for European countries)

Country	Increasing current excise duties by 20%	Increasing current excise duties by 50%	Increasing current excise duties by 100%
Germany	132	334	673
Italy	95	238	480
Kazakhstan	12	29	59
Sweden	20	49	100

Cancer cases averted in 2018 if each country had implemented the proportion of excise duties to consumer prices currently used in Finland

Country	Number of cancers averted	% Alcohol-attributable cancers averted	% Cancers averted / all cancers*
Germany	1,616 (1,284-1,941)	7.35 (5.84-8.83)	1.02 (0.81-1.22)
Italy	791 (697-914)	7.91 (6.79-9.13)	0.62 (0.53-0.71)
Kazakhstan	80 (63-99)	4.85 (3.81-5.97)	0.72 (0.57-0.89)
Sweden	92 (78-108)	6.49 (5.49-7.62)	0.55 (0.46-0.64)

Conclusions

- Alcohol taxation is relatively low in large parts of Europe, especially in the EU
- Increases in excise taxation for alcohol would lead to marked public health gains, in cancer, but also for other chronic disease and injuries
- And we did not model extreme and unrealistic cases: adopting the taxation level of a EU country would already lead to thousands of cancer cases averted