Alcohol in Europe

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Based on

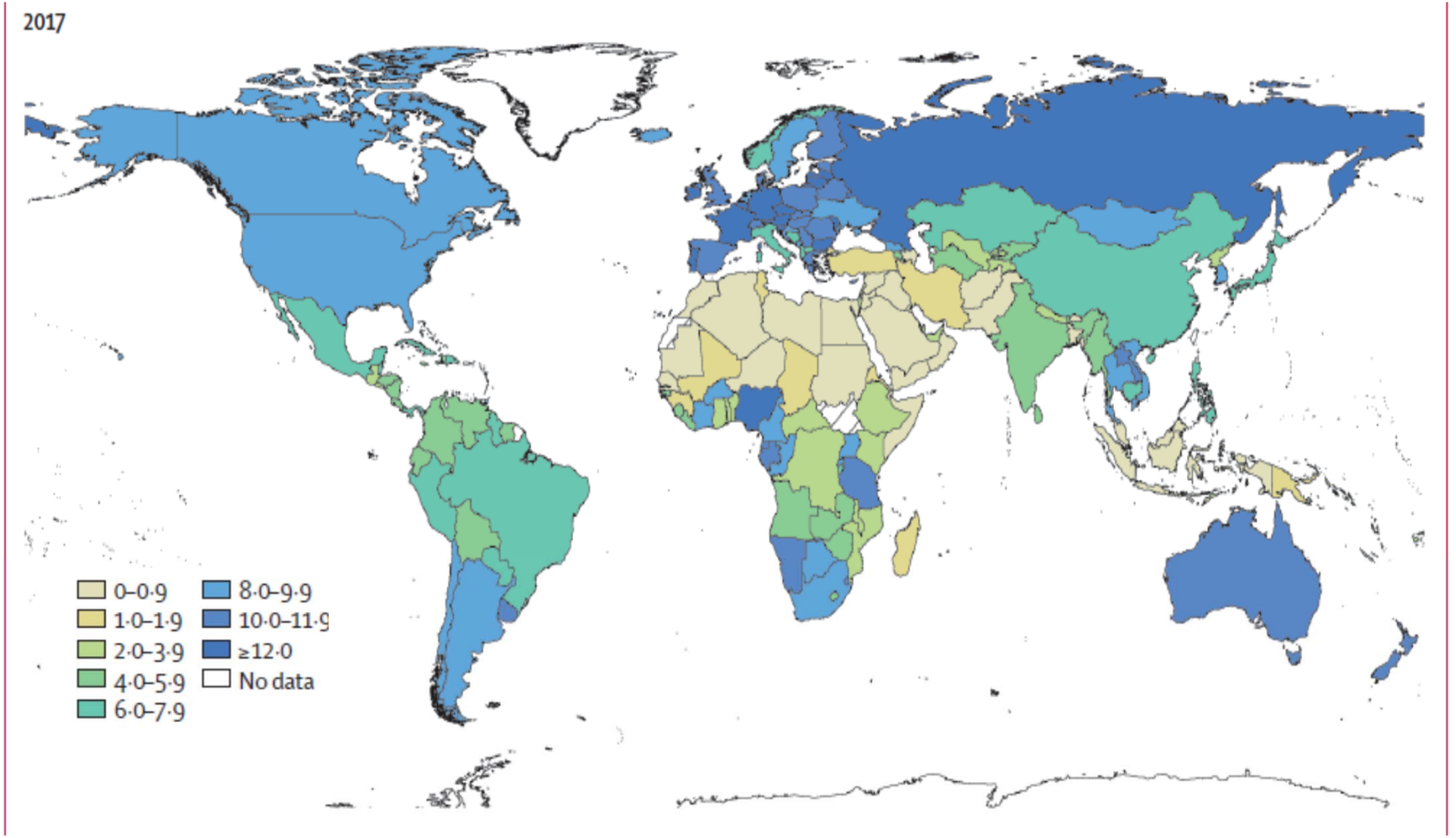
Alcohol Status Report 2019 – alcohol consumption, harm and policy responses in 30 countries

Last deliverable of: Monitoring of national policies related to alcohol consumption and harm reduction (MOPAC)

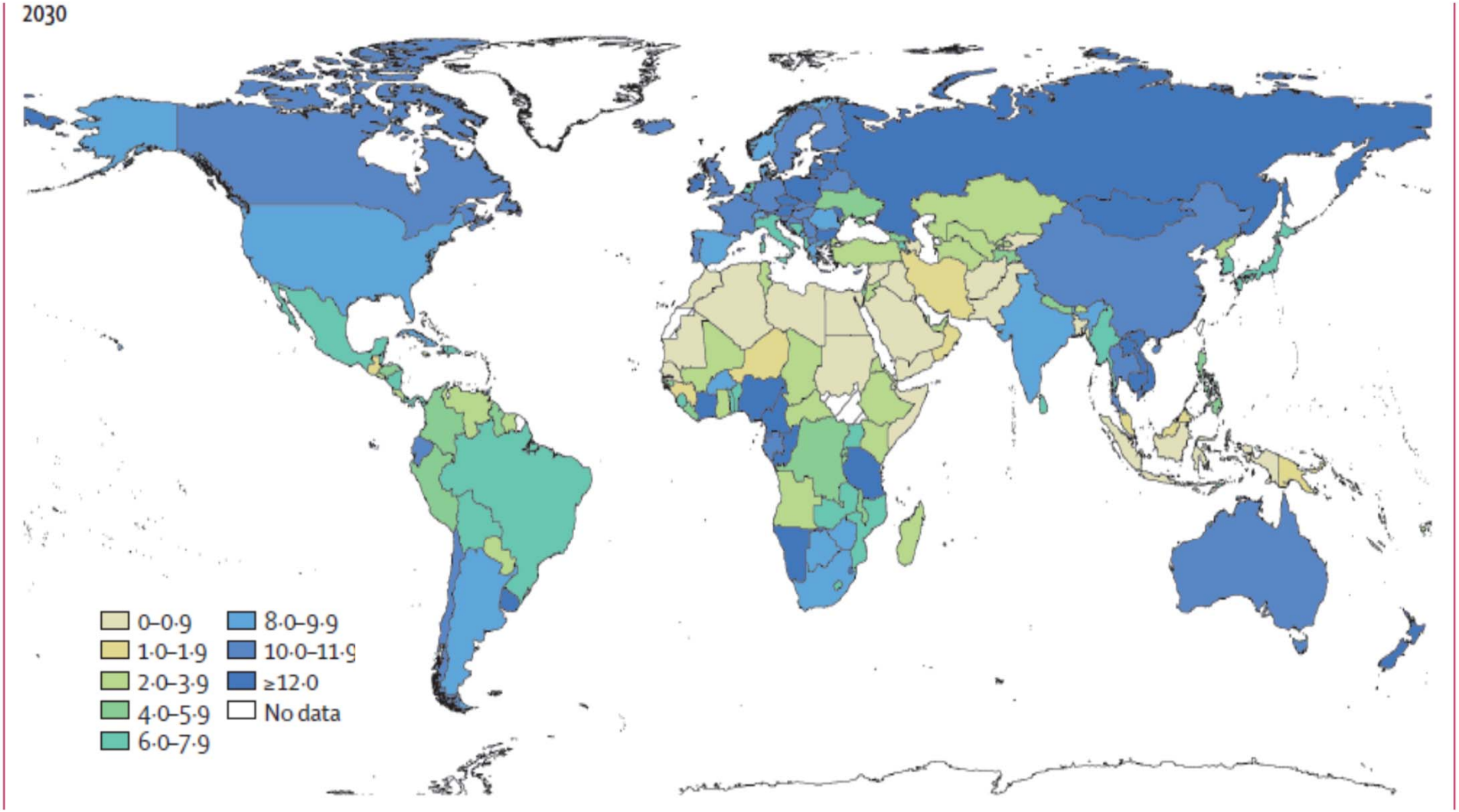
Alcohol exposure 2017 – trends from 1990

The WHO European Region is still the region with the highest consumption level and the highest prevalence of heavy drinking.

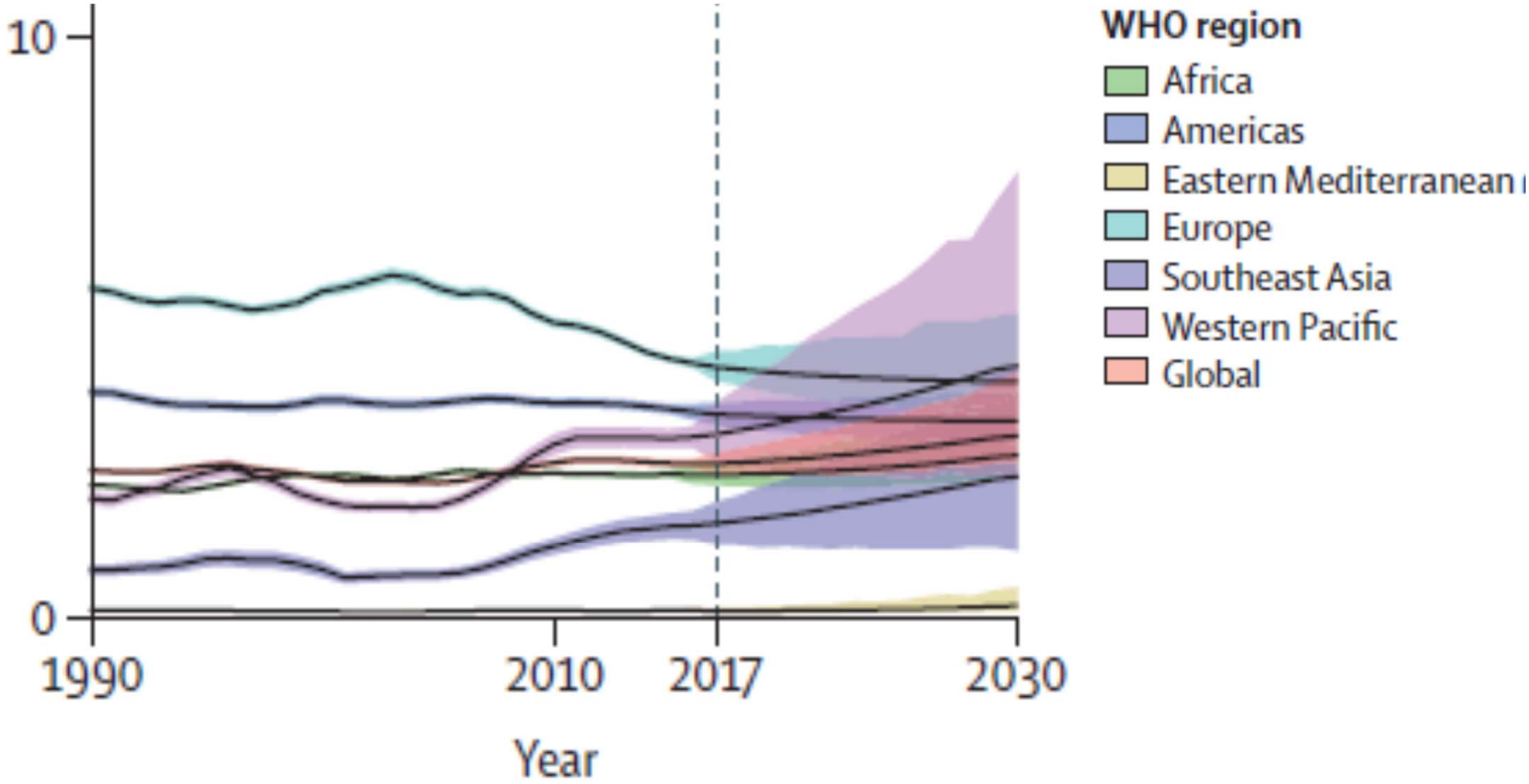
Alcohol consumption in 2017 (Manthey et al., Lancet, 2019)



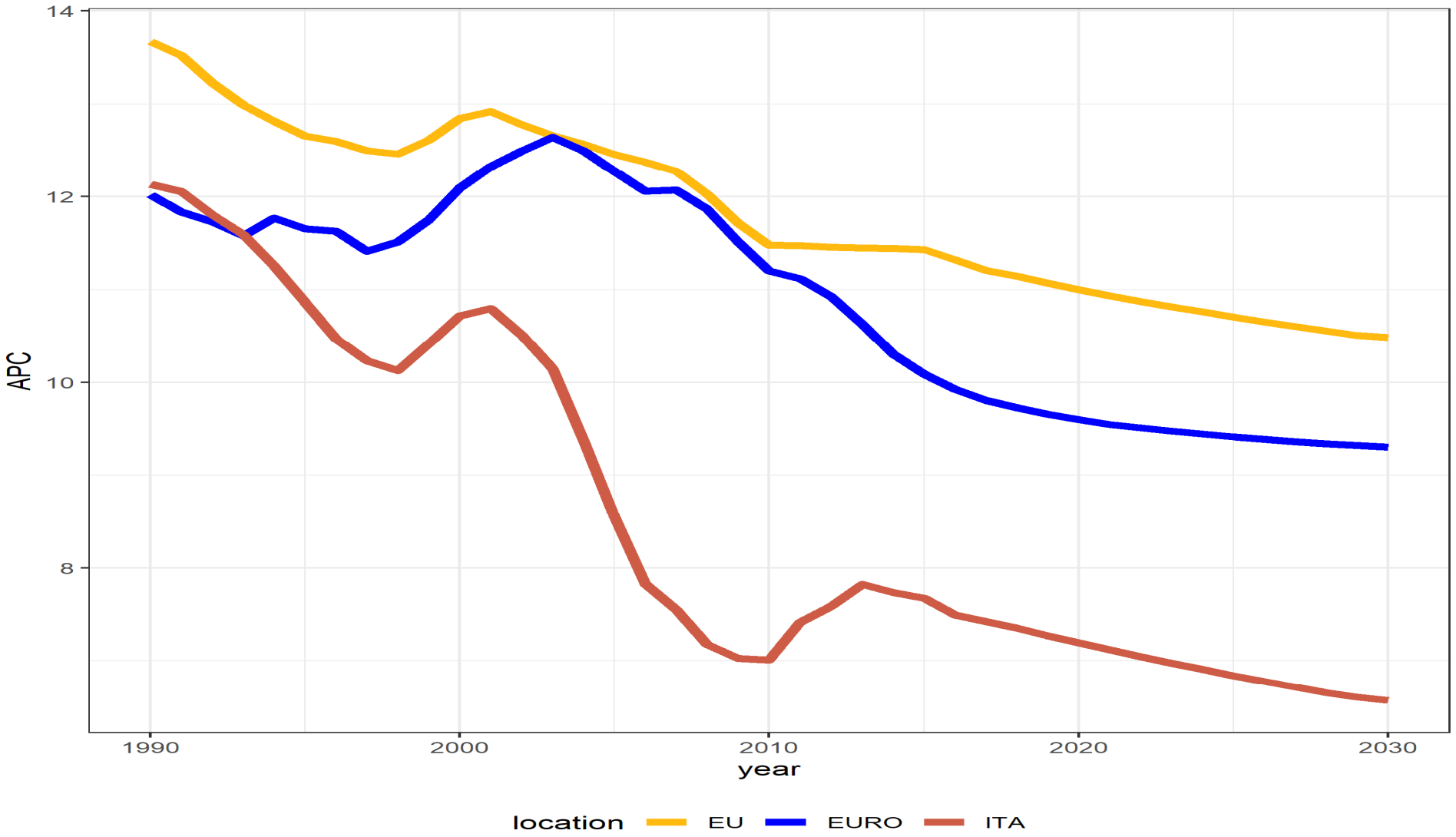
Alcohol consumption in 2030 (Manthey et al., Lancet 2019) – the world becomes has more “blue regions”



Adult per capita alcohol consumption 1990 – 2030 (Manthey et al., Lancet 2019)

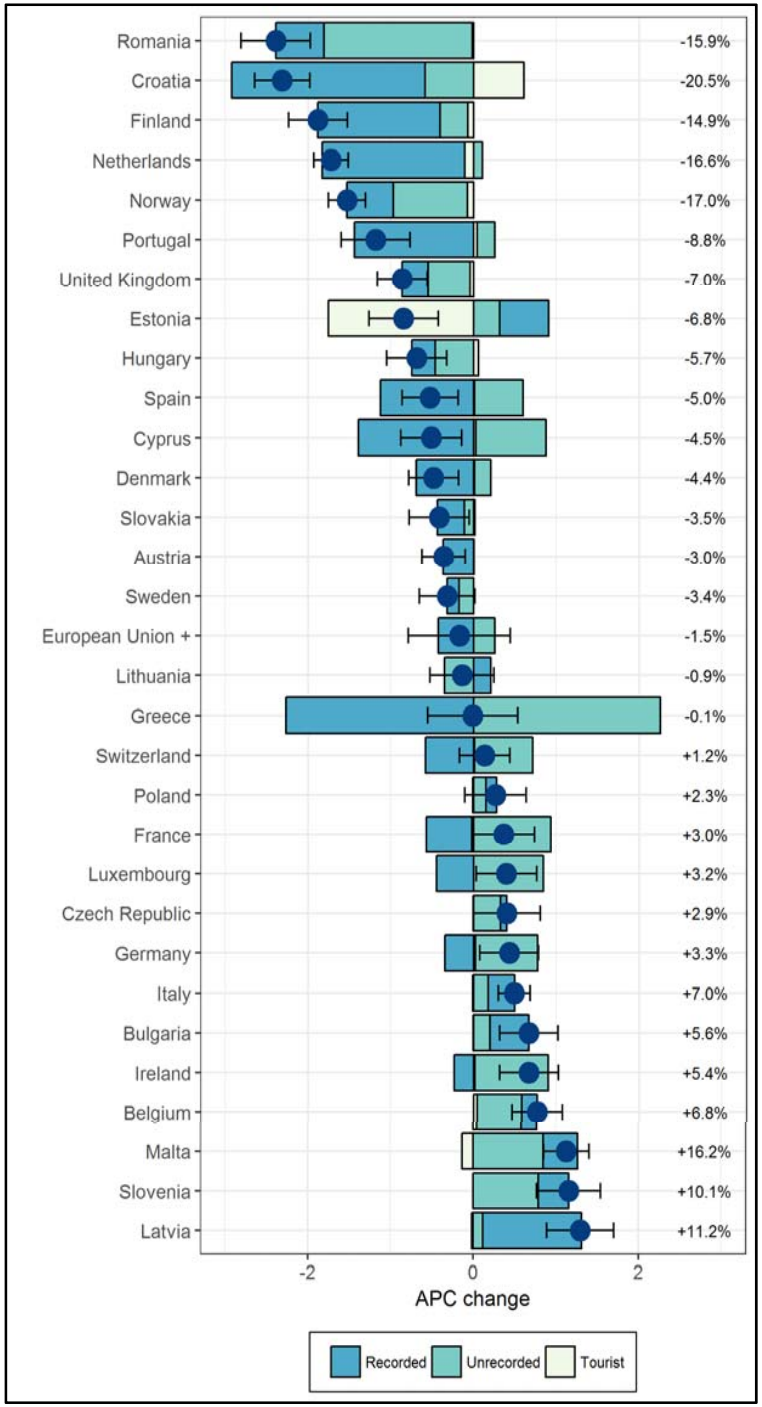


And for the long term: Italy, the EU and WHO European Union (own calculations for APD based on Manthey et al., 2019)



Changes from 2010: no overall change in the EU+ (MOPAC 2019)

Adult alcohol *per capita* consumption between 2010 and 2016 by country and across all EU+ countries. Round dots represent the change in total APC along with the confidence intervals (thin bars with whiskers to the left and right of the dot)



Clear changes now being seen in the Eastern parts of WHO European Region

Poster Child Russia:

Alcohol use indicators also decreased substantially.
The most important indicator, adult per capita consumption, decreased from 2010 to 2016 by 26.1%, from 15.8 L (95% CI 15.2–16.5) to 11.7 L (11.2–12.2) of pure alcohol (both figures are based on 3-year moving averages).
Heavy episodic drinking (defined as consuming 60 g or more of pure alcohol on at least one drinking occasion in the past 30 days) decreased by 14.3%, from 49.4% (95% CI 26.2–61.0) in 2010 to 42.3% (20.8–54.6) in 2016.
Age-standardized mortality rates went 22%.
(Rehm & Ferreira-Borges, 2018)

Burden of alcohol-attributable disease

Current burden: 928,800 deaths (95% CI: 844,500 - 1,011,900) in 2016; this means every 10th death in the WHO European Region would not happen without alcohol use!

Alcohol-attributable disease and injury for MOPAC 2018 (green partly protective; blue new; brown: not estimated!)

Chronic disease:

Infectious disease: TB, **HIV/AIDS**, pneumonia

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

Neuropsychiatric diseases: AUD, **depression**, primary epilepsy

Diabetes

Cardiovascular diseases: Hypertensive diseases, **ischemic heart disease, cardiomyopathy,** atrial fibrillation and flutter, **ischemic stroke**, hemorrhagic stroke

Gastrointestinal diseases: Liver cirrhosis, pancreatitis

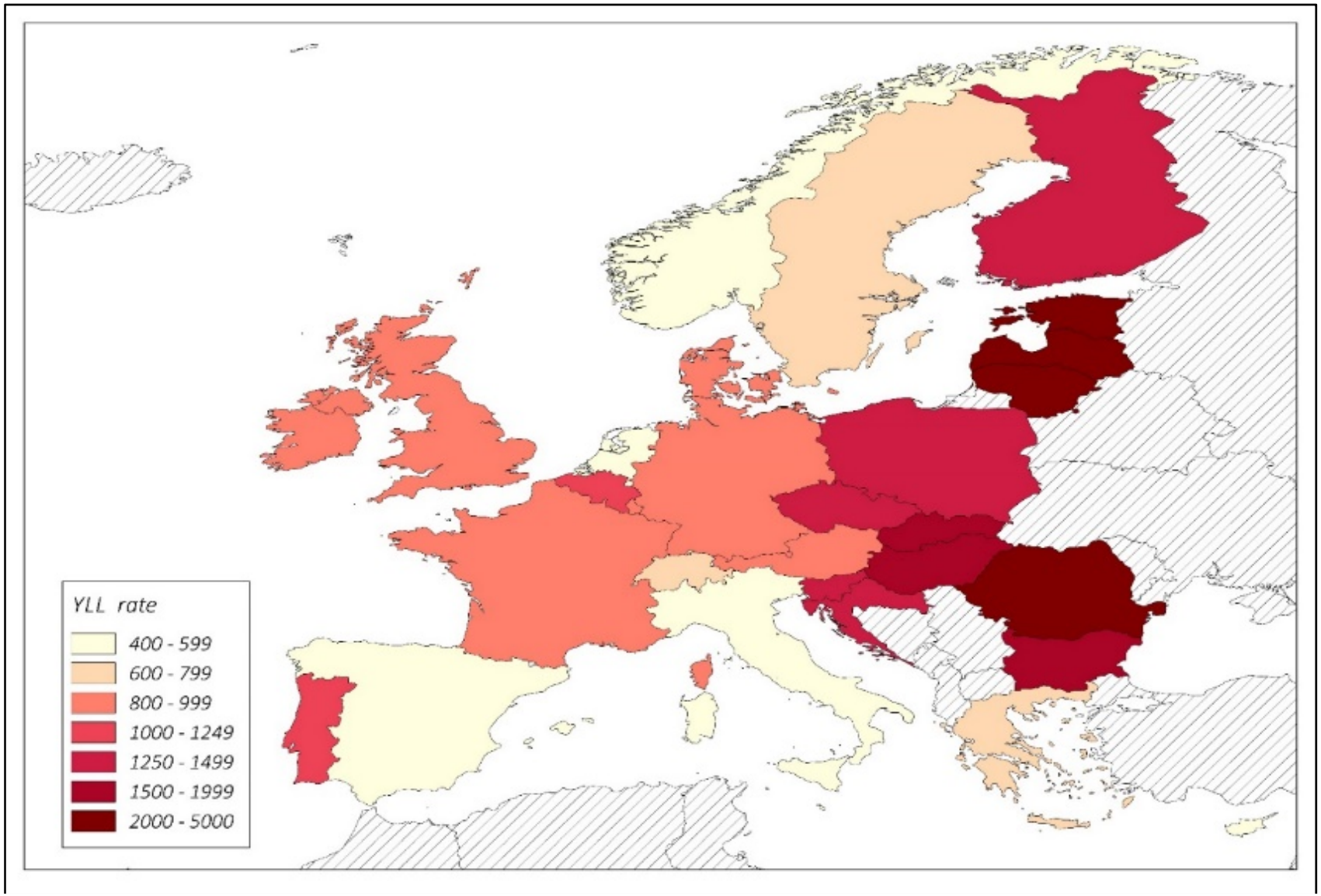
Conditions arising during perinatal period: FAS/FASD

Injury:

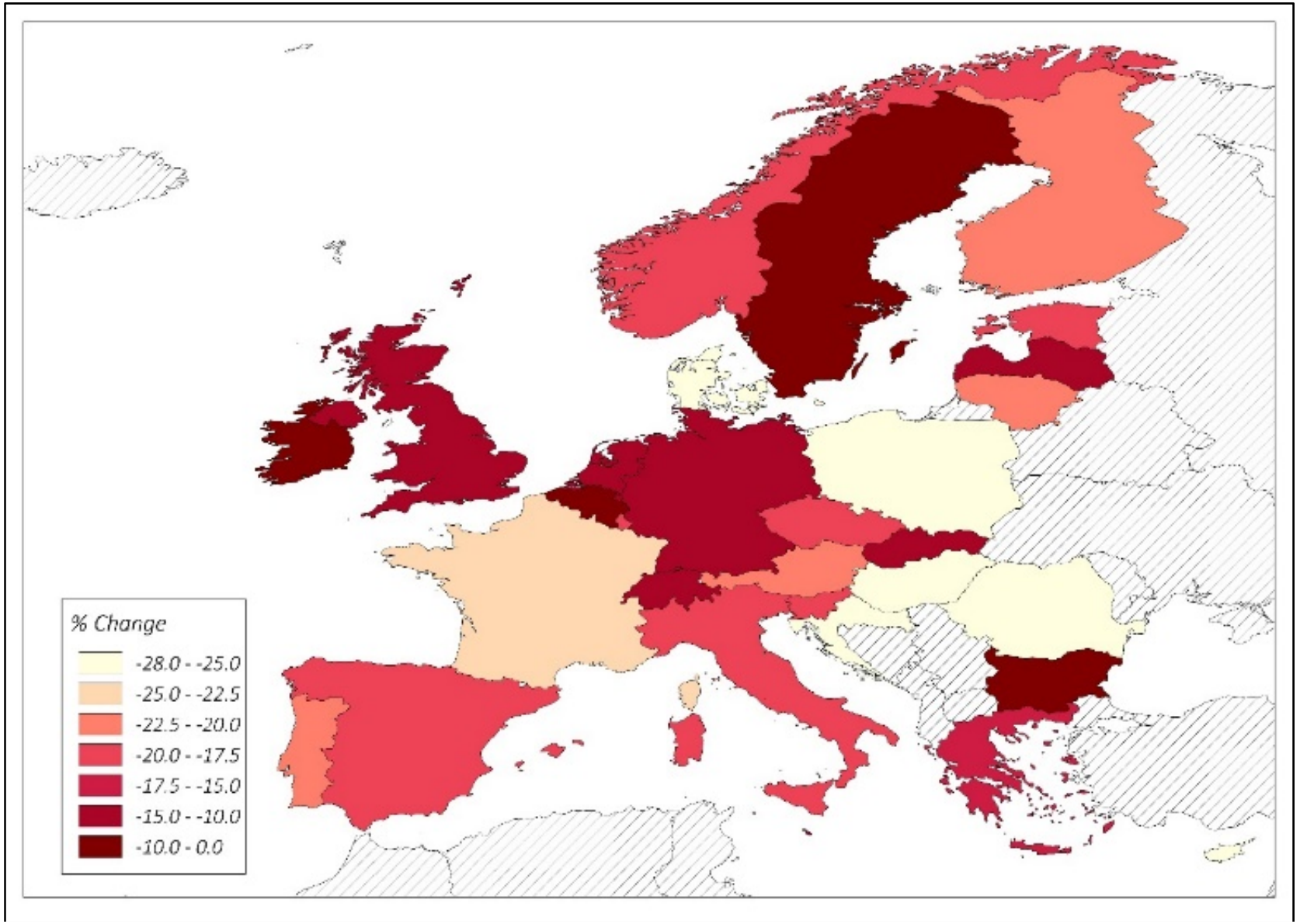
Unintentional injury: Traffic injury, drownings, falls, poisonings, other unintentional injuries

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

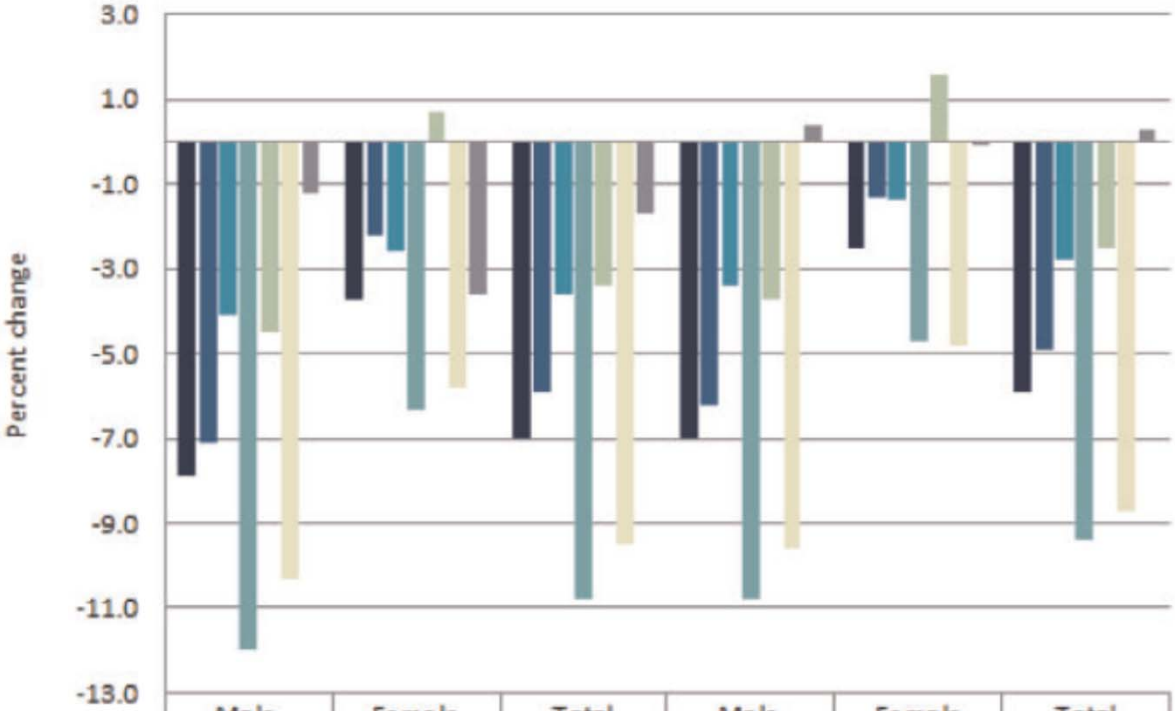
Age-standardized rates of alcohol-attributable years of life lost (YLL) to premature mortality in the EU+ in 2016 (MOPAC)



Proportional change in age-adjusted alcohol-attributable rates of years of life lost (YLL) per 100,000 in EU+ between 2010 and 2016



A wider look: changes 2010-2016 due to all substances (Rehm et al., 2019 EJPH)



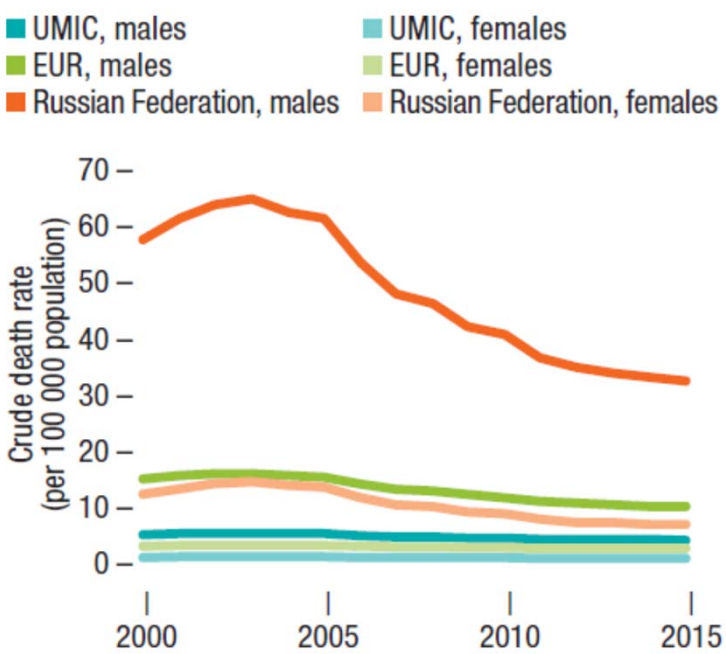
	Male	Female	Total	Male	Female	Total
	YLL			DALY		
WHO Europe	-7.9	-3.7	-7.0	-7.0	-2.5	-5.9
EU	-7.1	-2.2	-5.9	-6.2	-1.3	-4.9
Central-western EU	-4.1	-2.6	-3.6	-3.4	-1.4	-2.8
Central-eastern EU	-12.0	-6.3	-10.8	-10.8	-4.7	-9.4
Mediterranean	-4.5	0.7	-3.4	-3.7	1.6	-2.5
Eastern WHO European Region	-10.3	-5.8	-9.5	-9.6	-4.8	-8.7
Southeastern WHO European Region	-1.2	-3.6	-1.7	0.4	-0.1	0.3

So all is well: alcohol-attributable disease had decreased even in the parts of Europe where use did not decrease

- And burden of disease rates did decrease even more in the Eastern part of WHO Euro!
- And prevalence of heavy drinking occasions decreased as well!
- But this is only part of the story, as mortality rates are mainly based on:
  - Overall health gains in age-adjusted mortality rates
  - Shifts in the population age-distribution
  - Shifts in other risk factors
- There seems to be a general flattening of gains in all-cause death rates, and an associated flattening of life expectancy. Thus, there will be a flattening of decreases in alcohol-related death rates independent of changes in alcohol consumption.
- There are increases in income inequality, which will lead to increases in alcohol attributable harm, independent of changes in alcohol consumption; and
- Reductions of heavy drinking patterns in EU+ countries seem to have come to a halt, and heavy drinking was a main driver in reducing alcohol-related harm since 2010.

- 2005 — • Strengthening of the control system for production, distribution, and sales (wholesale and retail) of alcohol, and no sales at selected public spaces. • Mandatory excise stamp on all alcoholic beverages for sale in the domestic market. • Ban on sales of alcoholic beverages containing more than 15% ethanol alcohol by volume (ABV) in selected public places, by individuals, and other places not properly licensed.
- 2008 — • Advertising ban for alcohol on all types of public transportation infrastructure. • Alcohol excise duties increase 10% per year a
- 2010 — • Adoption of a natio -related harm and prevent alcoholism among the Russian tablishment of a minimum retail price for beverages stronger th ohol by drivers and 0.0% blood alcohol concentration for drivi
- 2011 — • Strict enforcement ility for the sale of alcohol products to minors. • Prohibiti entation of an initiative to improve the treatment system
- 2012 — • Prohibition of sales advertising on the internet and in electronic media.
- 2013 — • Ban on alcohol adve ease in minimum retail prices of spirits. • A limit of 0.16 mg/l (a athalyzer test introduced while maintaining a "zero tolerance" r drink-driving.
- 2014 — • A "Development of mful use of alcohol. • Further increase in fines for alcohol sal repeated violation. • Increase of alcohol excise duties by 33% a pirits. • Relaxed advertising laws to accommodate domestic wir ons on advertising beer and beverages until 2019, in conne the Russian Federation in 2018. —
- 2015 — • Decrease in the minimum price of vodka. • Initiation of the social communication project "Health Factory", aimed at addressing risk factors (including alcohol-use disorders) and targeted towards active people of working age.

Death rate from alcohol use per 100 000 population in the Russian Federation,[a] WHO European Region, and upper middle-income countries (UMIC), 2000–2015

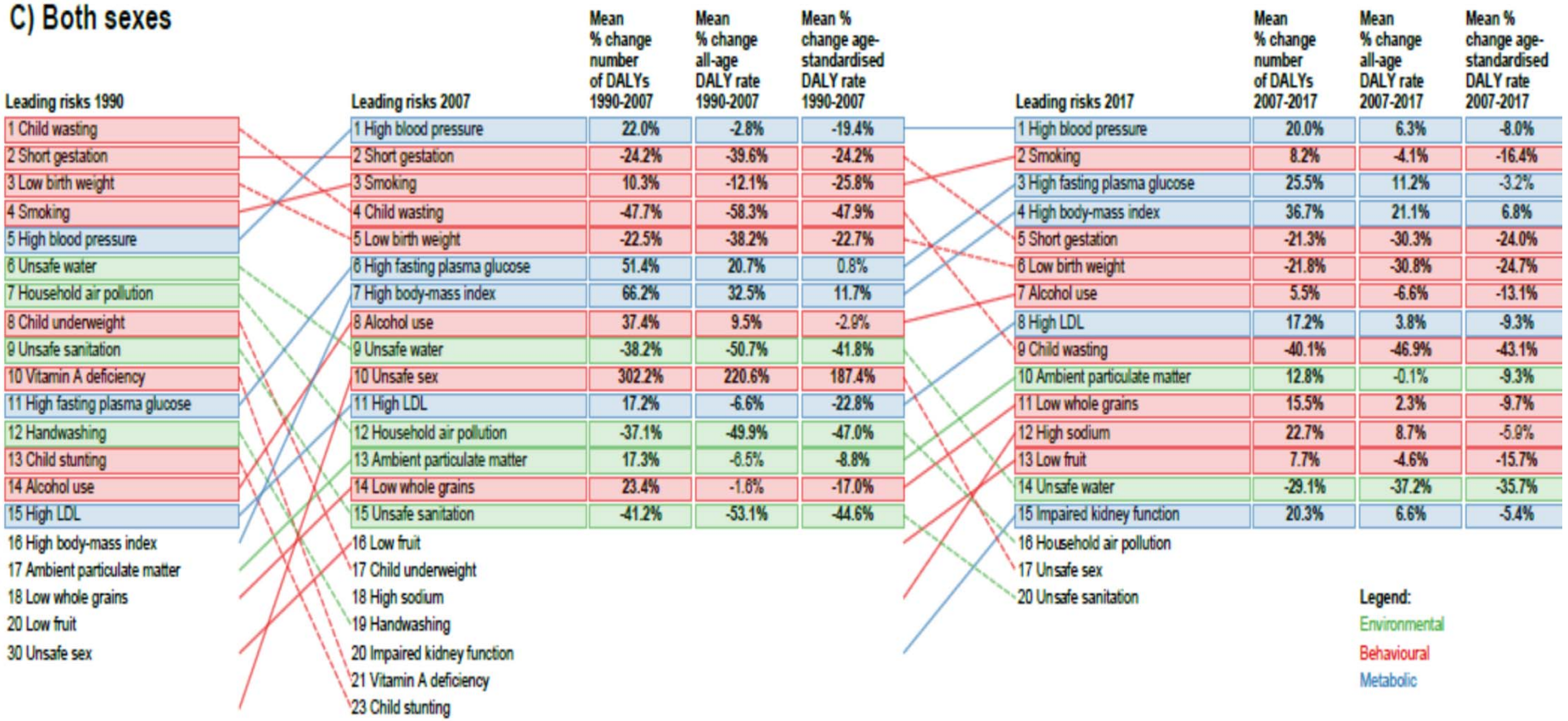


[a] Latest year of data from the Russian Federation is 2011. Estimates for 2012–2015 are projections based on trends in prior years.

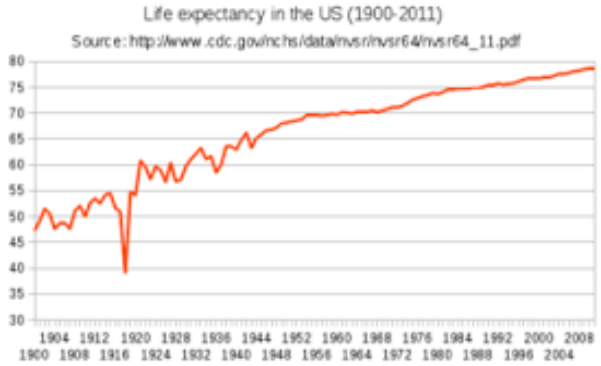
Warning signs

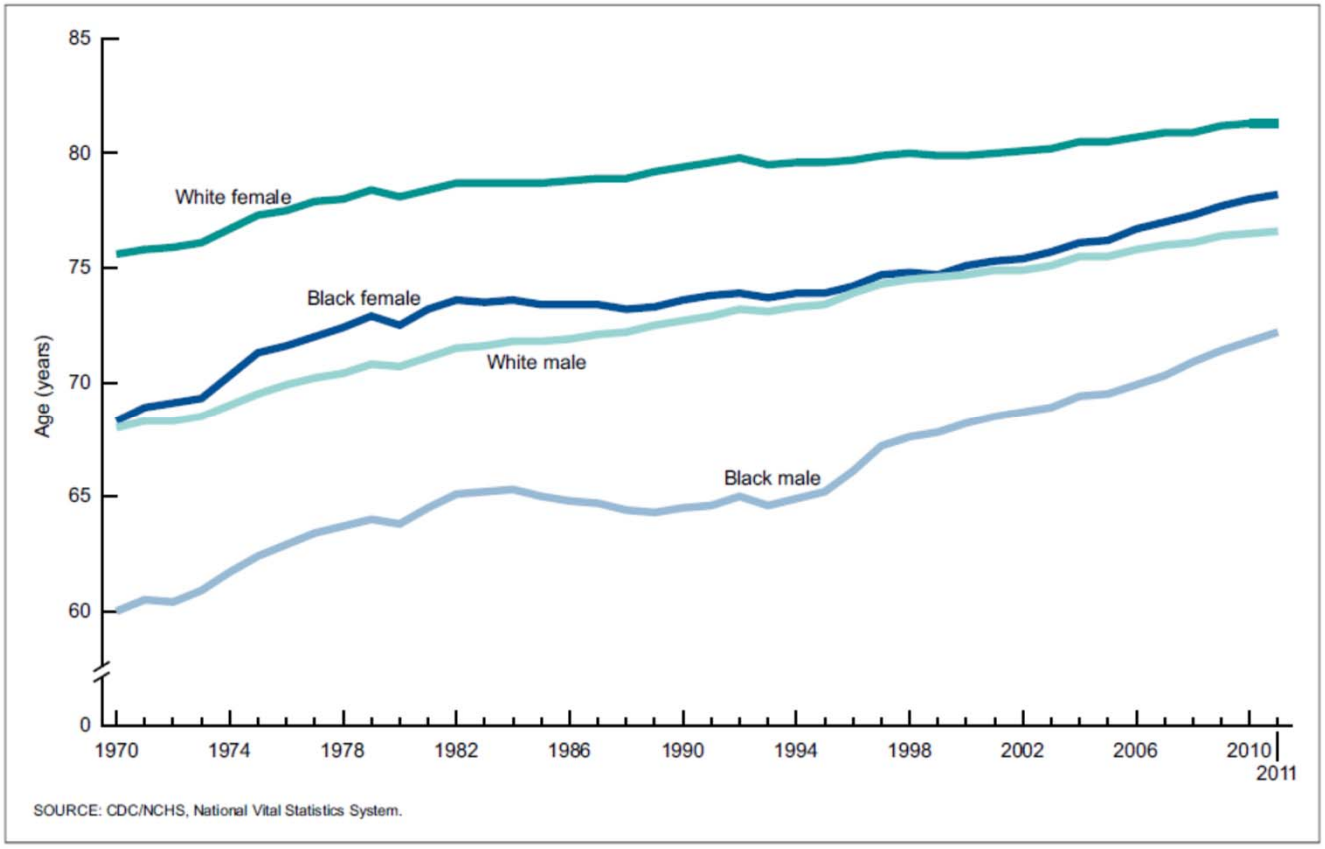
Alcohol has been increasing in impact as a risk factor!

Resulting trends (GBD 2017)



Trends in life expectancy in the US – going up forever?





Above since 1900; left from 1970 to 1990

Causes of death responsible (Case & Deaton, 2015,2017; Rehm & Probst, 2018)

Poisoning/ overdose

- Opioids (prescription opioids, heroin)
- Alcohol
- Other pharmaceutical

Suicide

- Alcohol
- Illegal drugs

Liver cirrhosis

- In the Americas >60% alcohol-attributable
- Illegal drugs → HCV

The overall losses in life expectancy in the last year are mainly due to the same reasons!

Conclusion

- Alcohol use continues to cause a high burden of mortality and disease in Europe (almost 1 million deaths per year!).
- Europe is the region of the world with the highest consumption and the highest alcohol-attributable fractions.
- However, alcohol-attributable burden of disease indicators went down over the past 5 years, especially in Eastern Europe (there driven by alcohol control policies).
- There are signs that these developments will come to a halt if there are no alcohol policy actions!