

Presentation for
2nd World Conference on Family Health

Alcohol availability, premature mortality, and life expectancy in Estonia

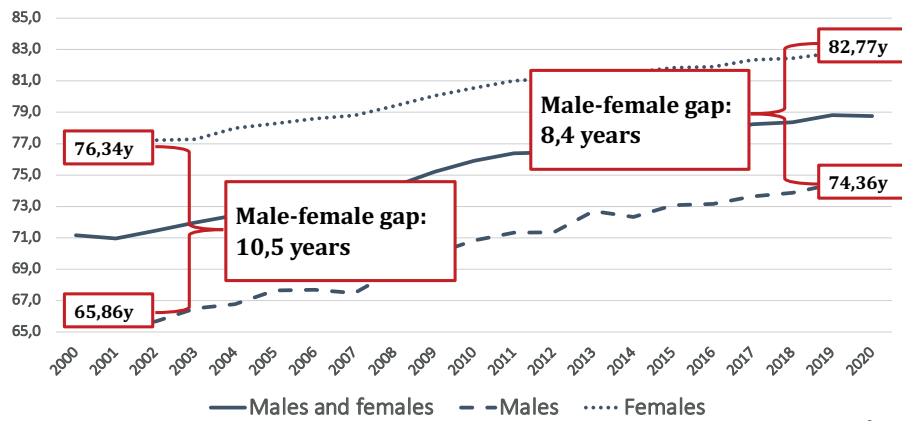
by Relika Stoppel

25.10.2021

Outline:

- **Life expectancy**
- **Premature mortality**
- **Main risk factors**
- **Alcohol consumption**
- **Alcohol-attributable and alcohol-related mortality**
- **Alcohol control policies**

Life expectancy in Estonia at birth, by sex and year



Source: Statistics Estonia

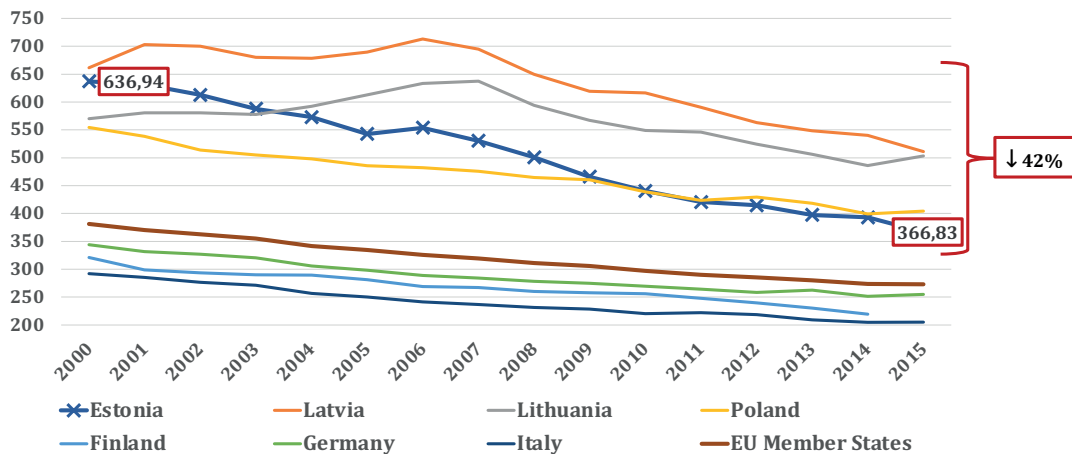
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Premature mortality rate per 100,000:

Age-standardized overall premature mortality rate (from 30 to under 70 years) for four major non-communicable diseases (cardiovascular diseases, cancer, diabetes mellitus and chronic respiratory diseases)



Source: WHO 2021

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Life expectancy in Estonia at birth, by sex and year

- Male-female life expectancy gap is closing
- Premature mortality is decreasing
- What are the main contributors?
 - Possible explanation: risk factors & lifestyle

Source: Statistics Estonia & The World Factbook

Risk factors* compared to other countries

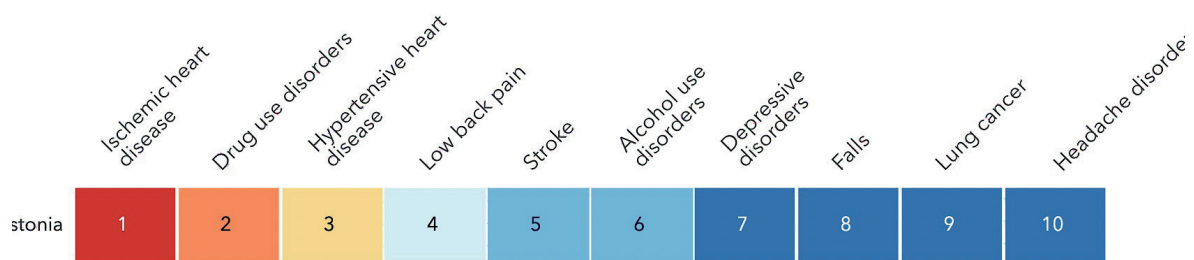
*Top 10 causes of death and disability (DALYs) (2019)

	Ischemic heart disease	Drug Use disorders	Hypertensive heart disease	Low back pain	Stroke	Alcohol use disorders	Depressive disorders	Falls	Lung cancer	Headache disorders
Estonia	1	2	3	4	5	6	7	8	9	10
Comparison group mean (High SDI)	1	33	34	4	2	26	10	12	6	9
Czechia	1	29	47	2	4	19	10	5	6	8
France	6	28	78	1	10	15	5	4	2	3
Latvia	1	17	30	3	2	9	8	6	11	10
Lithuania	1	12	41	4	2	11	7	5	9	10
Qatar	1	45	50	5	4	68	8	12	17	10
Slovakia	1	47	28	3	2	20	14	4	5	9
Slovenia	2	28	26	1	4	13	10	3	5	8

Source: GBD 2019

Risk factors* compared to other countries

*Top 10 causes of death and disability (DALYs) (2019)



Source: GBD 2019

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Outline II

- Alcohol consumption: trends
- Alcohol-attributable and alcohol-related mortality
- Alcohol control policies
- Discussion

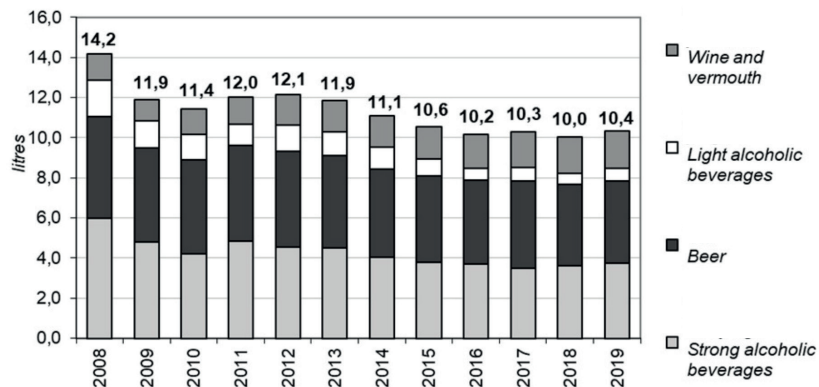
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Total consumption of alcohol

By beverage categories 2008–2019 (litres per capita 15+ in 100% alcohol)



* Consumption equals legal sales minus exports and consumption by tourists in Estonia plus illegal sales (only for strong alcoholic beverages) and buying from abroad.

Source: EKI 2020

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Alcohol-attributable mortality — Definition

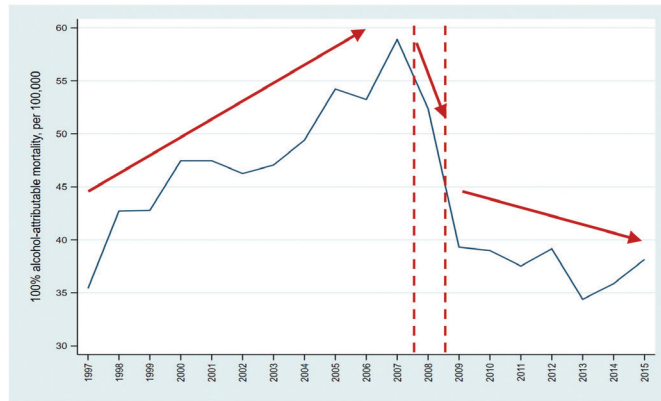
- Alcohol-attributable mortality – mortality that is per definition to 100% attributable to alcohol consumption, e.g., alcohol intoxication, alcoholic liver disease, poisoning by exposure to alcohol.

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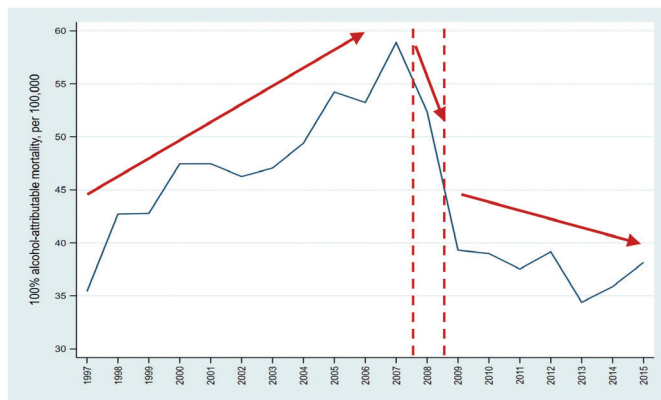
Alcohol-attributable mortality — Trends



The policy reduced AAM by ca. 40%.

Source: Stoppel 2021

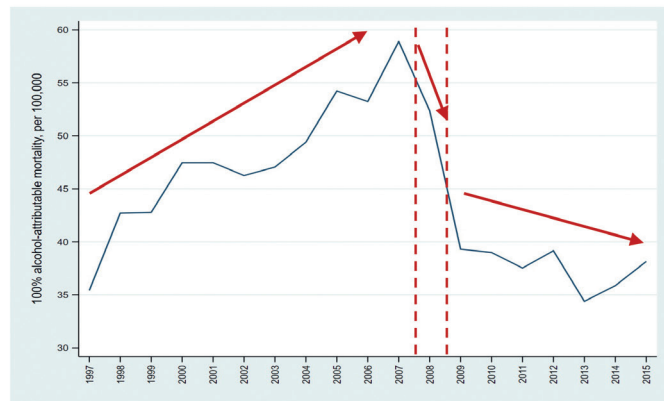
Alcohol-attributable mortality — Trends



Most effective for:
- age group 35–49
- male population

Source: Stoppel 2021

Alcohol-attributable mortality — Trends



Similar effects on alcohol-related mortality.

Source: Stoppel 2021

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To sum up:

- Life expectancy is going up
- Premature mortality is declining
- Alcohol and other behavioral risk factors contribute to premature mortality
- Alcohol control policy:
 - reduced alcohol availability
 - reduced consumption
 - decrease in premature mortality
 - decrease in mortality
 - increase in life expectancy
 - positive impact on overall health

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**Thank you
for your attention!**

Sources:

- EKI (Estonian Institute of Economic Research) 2020: Alcohol market, consumption and harms in Estonia Yearbook 2020, <https://www.ki.ee/>
- Estonia Country Health Profile 2019: https://ec.europa.eu/health/sites/default/files/state/docs/2019_chp_et_english.pdf
- GBD 2019: Global Burden of Disease <http://www.healthdata.org/estonia>
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- Stoppel, R. (2021): Alcohol Availability and Alcohol-Attributable Mortality: Economic Implications following a Change in Sales Policy. CESifo Economic Studies, ifab008, 1–21. DOI: [10.1093/cesifo/ifab008](https://doi.org/10.1093/cesifo/ifab008).
- The World Factbook: <https://www.cia.gov/the-world-factbook/>
- WHO 2021: https://gateway.euro.who.int/en/indicators/h2020_1-premature-mortality/