

Gender disparities in life expectancy and mortality from preventable diseases in Latvia from 2000 to 2020

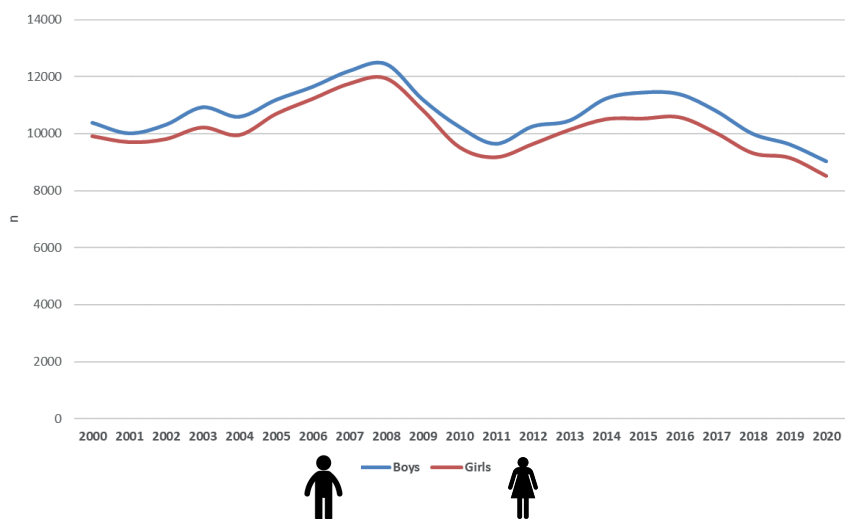
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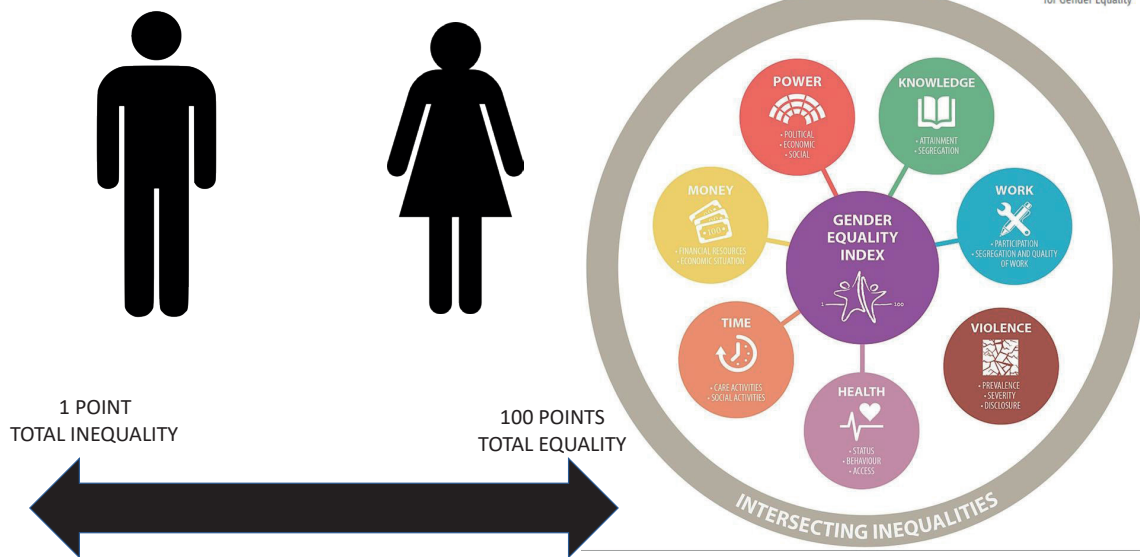
² Center for Disease Prevention and Control, Riga, Latvia

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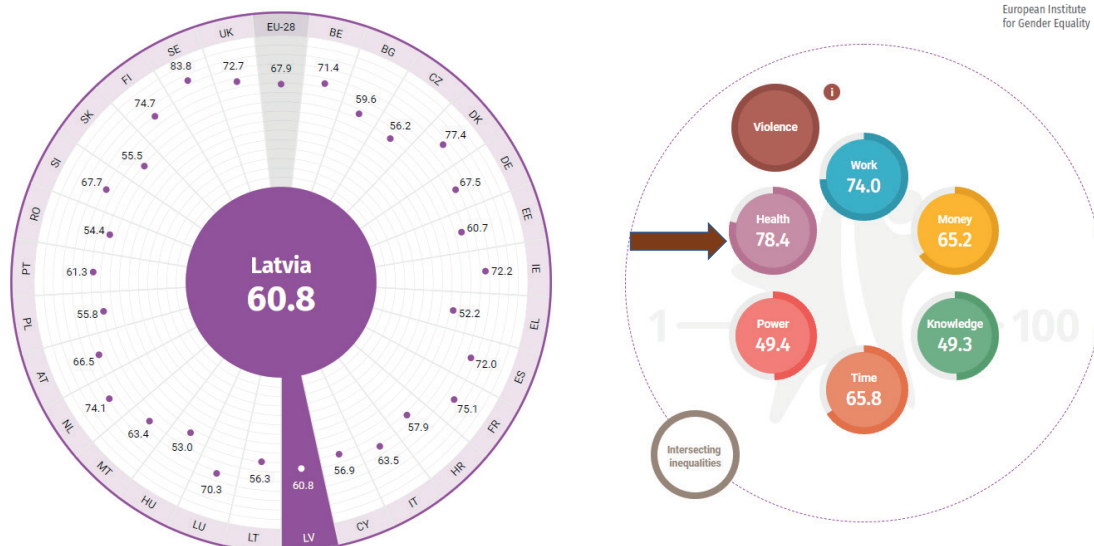
Number of live births by sex in Latvia: 2000 – 2020



GENDER EQUALITY INDEX

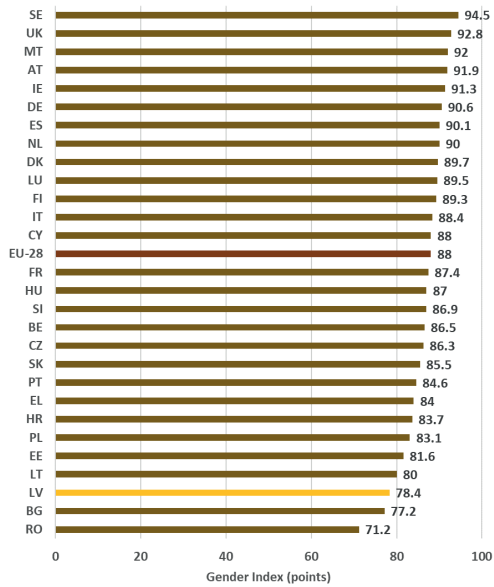


Gender Equality Index in Latvia 2020



<https://eige.europa.eu/gender-equality-index/2020/LV>

Gender equality index in health domain, EU: 2020



HEALTH INDICATORS

Health Status (Source: Eurostat. EU SILC, 2018)

- Percentage of people **assessing their health** as 'very good' or 'good' out of total;
- **Life expectancy at birth** (Source: Eurostat, 2018);
- **Healthy life years** measures the number of remaining years that a person of a specific age is expected to live without any severe or moderate health problems.

Health behaviours (Source: Eurostat. EHIS, 2014)

- Percentage of people who are not involved in **risky behavior**, i.e. do not smoke and are not involved in heavy episodic drinking. Heavy episodic drinking is intake of six drinks or 60+ grammes of pure alcohol on one occasion. monthly or more often. during the past 12 months;
- Percentage of people who are **physically active** at least 150 minutes per week and/or consume at least five portions of **fruit and vegetables** per day.

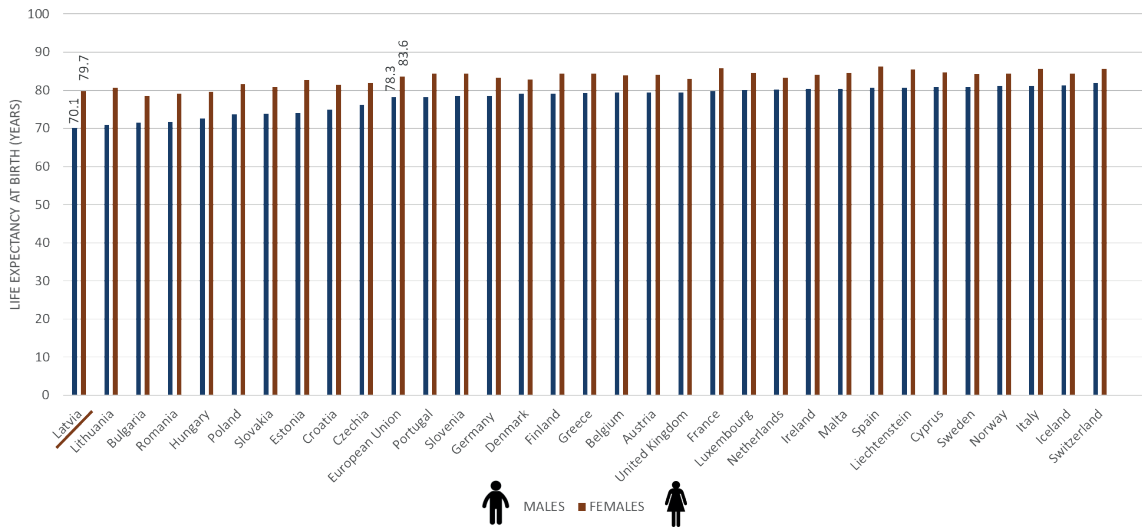
Access to health care (Source: Eurostat. EU SILC, 2018)

- Self-reported **unmet need for medical examination**;
- Self-reported **unmet need for dental examination**.

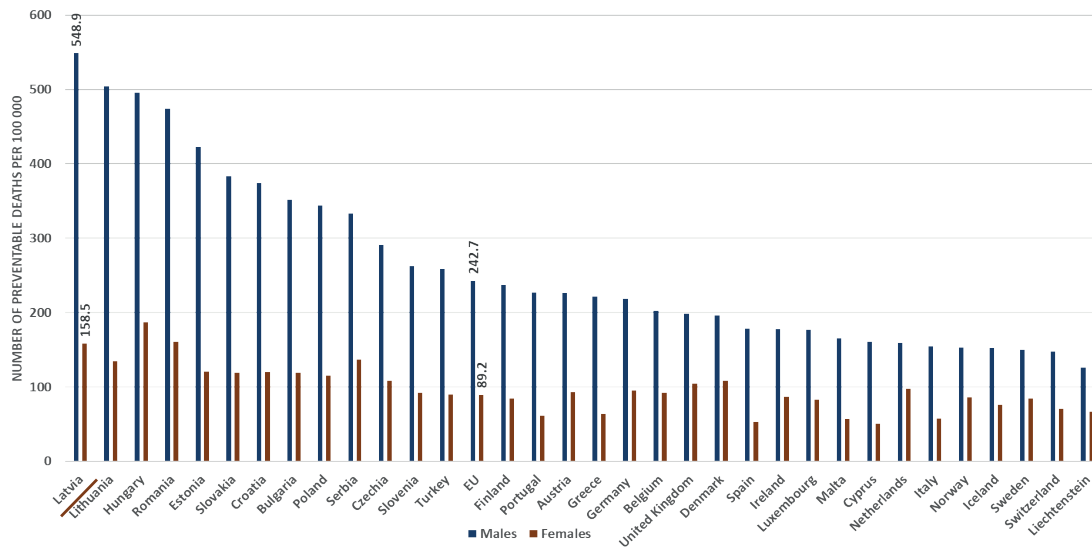
Gender Equality Index on health status

EU countries	Self-perceived health: good/very good (%)	Self-perceived health: good/very good (%)	Life expectancy at birth (years)	Life expectancy at birth (years)	Healthy life years at birth (years)	Healthy life years at birth (years)
EU-28	66.9	71.6	83.6	78.3	63.8	63.4
EE	49.7	54.2	82.7	74.0	55.0	52.7
LV	42.9	52.0	79.7	70.1	53.7	51.0
LT	41.1	48.9	80.7	70.9	59.1	56.3
PL	56.8	61.8	81.7	73.7	64.3	60.5

Life expectancy at birth, 2018: Eurostat



Preventable deaths rate per 100 000, 2018: Eurostat



❖ Study questions:

- A. Gender differences in trends in life expectancy in Latvia from 2000 to 2020;
- B. Gender differences in trends of leading causes of preventable deaths affecting both males and females for those under 75 years:
 - lung cancer (C33-C34),
 - chronic obstructive pulmonary disorders (COPDs) (J40 – J47),
 - ischemic heart diseases (I20 – I25),
 - cerebrovascular diseases (I60 – I69),
 - intentional self-harm (X66 – X84),
 - accidental injuries (W00 – X39; X46 – X59),
 - transport accidents (V01 – V99),
 - alcohol-related disorders and poisonings (E24.4, F10, G31.2, G62.1, G72.1, I42.6, K29.2, K70, K85.2, K86.0, Q86.0, R78.0, X45, X65, Y15)

❖ Methods:

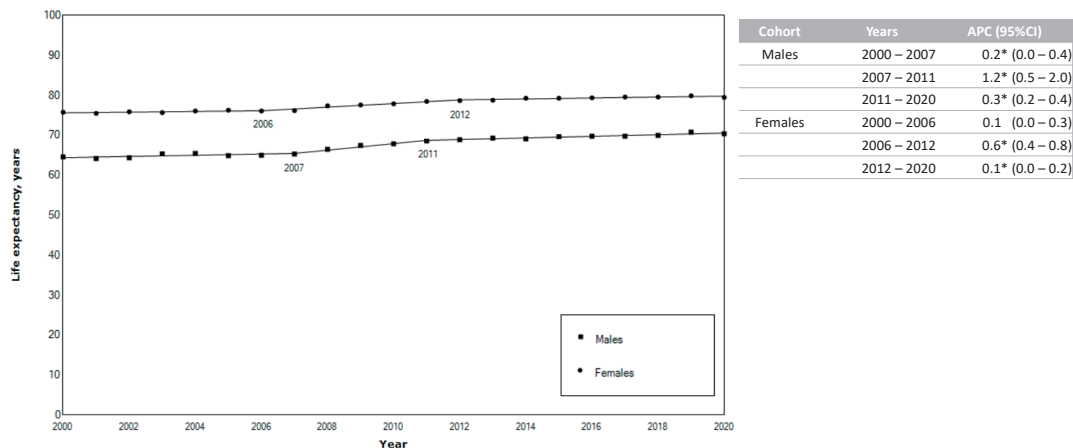
1) Data sources

- Life expectancy data (Central Statistical Bureau)
- Mortality data from National database of Causes of Death (Centre for Disease Prevention and Control)
- ICD-10 codes from the 2018 joint OECD/Eurostat list of preventable and curable causes of death were used.

2) Statistical analysis

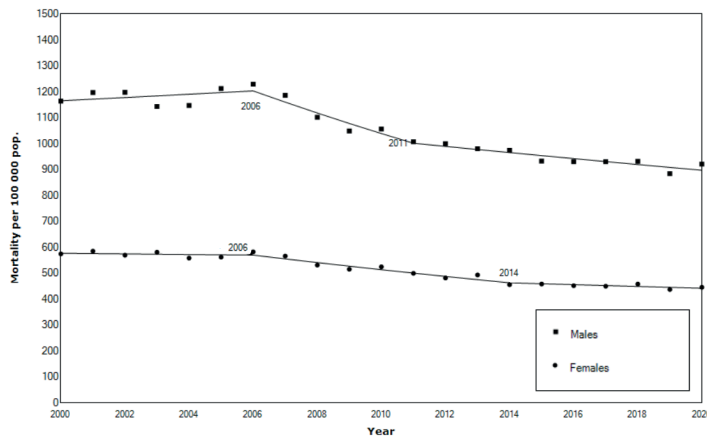
- Joinpoint regression analysis.
- The annual percentage change (APC) and the average annual percentage change (AAPC) in mortality rates with the corresponding 95% confidence interval (CI) were estimated. The two-sided P-value threshold was set at 0.05.

Life expectancy trends: 2000 – 2020



* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level. Final Selected Model: Males - 2 Joinpoints, Females - 2 Joinpoints, Rejected Coincidence.

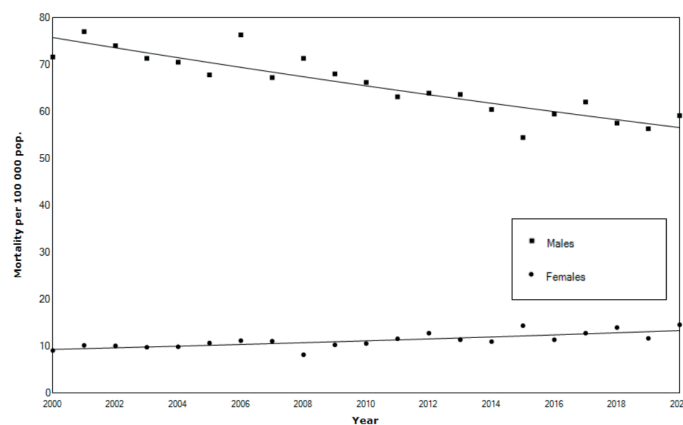
All-cause mortality per 100 000, persons under age of 75 years: 2000 – 2020



Cohort	Year	APC (95% CI)
Males	2000 – 2006	0.5 (-0.7 – 1.8)
Males	2006 – 2011	-3.6* (-5.8 – -1.4)
Males	2011 – 2020	-1.2* (-1.9 – -0.6)
Females	2000 – 2006	-0.2 (-1.2 – 0.8)
Females	2006 – 2014	-2.6* (-3.3 – -1.8)
Females	2014 – 2020	-0.8 (-1.7 – 0.2)

* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.
Final Selected Model: Males - 2 Joinspoints, Females - 2 Joinspoints. Rejected Coincidence.

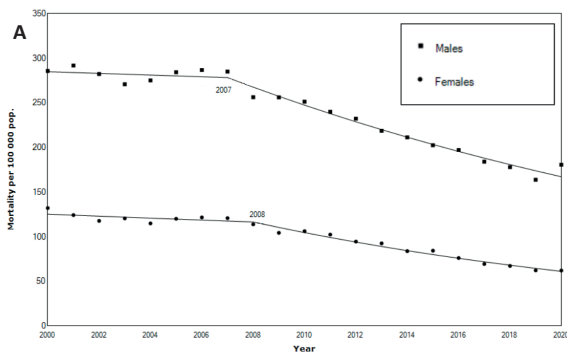
Mortality from lung cancer per 100 000, persons under age of 75 years: 2000 – 2020



Cohort	Years	APC (95% CI)
Males	2000 – 2020	-1.4* (-1.8 – -1.1)
Females	2000 – 2020	1.8* (1.1 – 2.6)

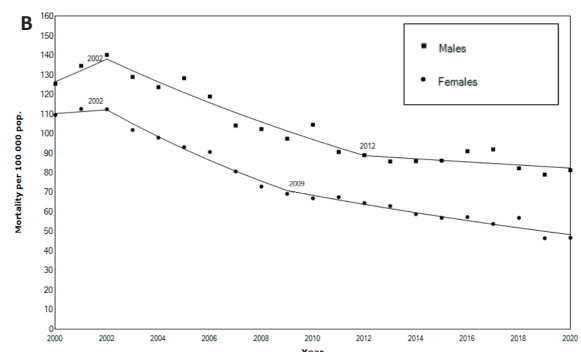
* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.
Final Selected Model: Males - 0 Joinspoints, Females - 0 Joinspoints. Rejected Coincidence.

Mortality per 100 000, persons under age of 75 years: 2000 – 2020 (A) ischemic heart diseases and (B) cerebrovascular diseases



* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.
Final Selected Model: Males - 1 Joinspoint, Females - 1 Joinspoint. Rejected Coincidence.

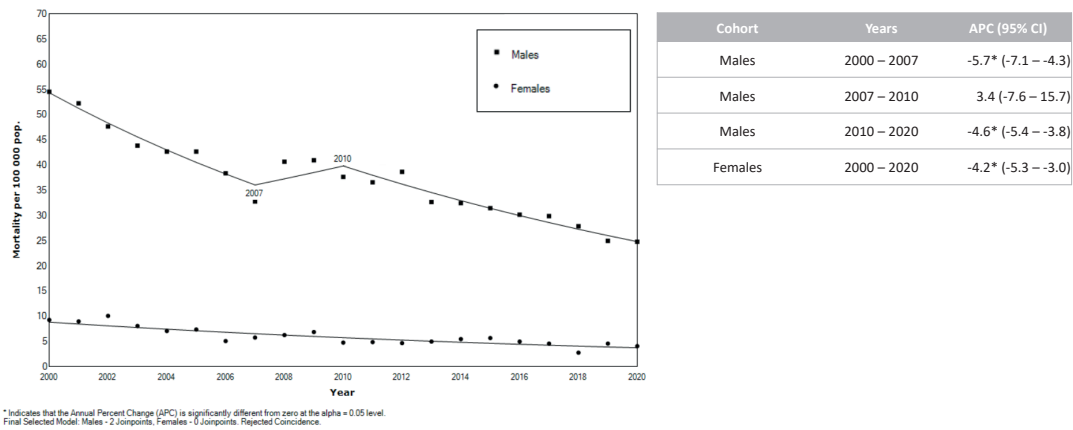
Cohort	Years	APC (95% CI)
Males	2000 – 2007	-0.3 (-1.6 – 1.0)
Males	2007 – 2020	-3.8* (-4.3 – -3.4)
Females	2000 – 2008	-0.9 (-2.1 – 0.3)
Females	2008 – 2020	-5.2* (-5.8 – -4.6)



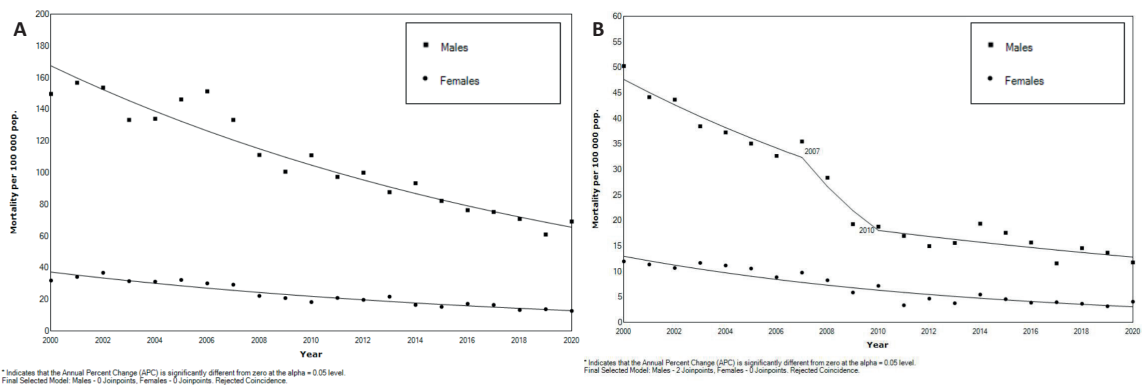
* Indicates that the Annual Percent Change (APC) is significantly different from zero at the alpha = 0.05 level.
Final Selected Model: Males - 2 Joinspoints, Females - 2 Joinspoints. Rejected Coincidence.

Cohort	Years	APC (95% CI)
Males	2000 – 2002	4.4 (-10.3 – 21.6)
Males	2002 – 2012	-4.3* (-5.6 – -3.0)
Males	2012 – 2020	-0.9 (-2.6 – 0.7)
Females	2000 – 2002	0.9 (-1.2 – 14.5)
Females	2002 – 2009	-6.3* (-8.3 – -4.3)
Females	2009 – 2020	-3.4* (-4.2 – -2.6)

Mortality from intentional self-harm per 100 000, persons under age of 75 years: 2000 – 2020



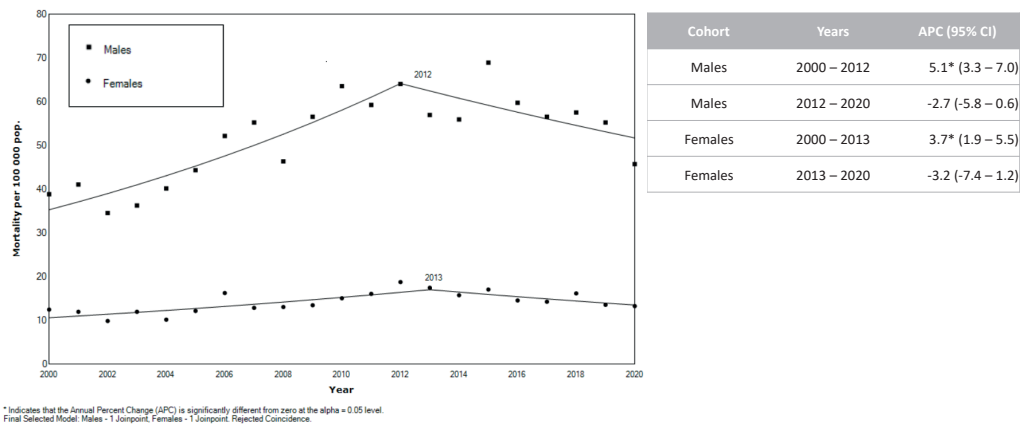
Mortality per 100 000, persons under age of 75 years: 2000 – 2020 (A) accidental injuries and (B) transport accidents



Cohort	Years	APC (95% CI)
Males	2000 – 2020	-4.6* (-5.1 – -4.0)
Females	2000 – 2020	-5.1* (-5.9 – -4.4)

Cohort	Years	APC (95% CI)
Males	2000 – 2007	-5.4* (-9.3 – -1.3)
Males	2007 – 2010	-17.7 (-40.1 – 13.2)
Males	2010 – 2020	-3.4* (-5.7 – -0.9)
Females	2000 – 2020	-6.9* (-8.2 – -5.6)

Mortality from alcohol-related disorders and poisonings per 100 000, persons under age of 75 years: 2000 – 2020



Conclusions

- While health status indicators on life expectancy and all-cause and preventable mortality have improved in Latvia over the last two decades, a significant gender gap in health status remains.
- In-depth analyses are required to understand the underlying individual and environmental factors accounting for gender variations in health.
- Persisting gender disparities in life expectancy and preventable mortality rates suggest a continuing lack of tailored public health policies to tackle the gender gap in health status in Latvia.

