

Health Expectancy in Latvia

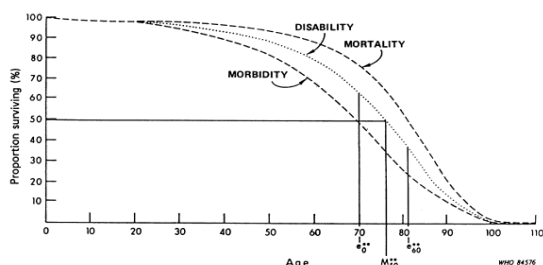
What is health expectancy?

Health expectancies were first developed to address whether or not longer life is being accompanied by an increase in the time lived in good health (the compression of morbidity scenario) or in bad health (expansion of morbidity). So health expectancies divide life expectancy into life spent in different states of health, from say good to bad health. In this way they add a dimension of quality to the quantity of life lived.

How is the effect of longer life measured?

The general model of health transitions (WHO, 1984) shows the differences between life spent in different states: total survival, disability-free survival and survival without chronic disease. This leads naturally to life expectancy (the area under the 'mortality' curve), disability-free life expectancy (the area under the 'disability' curve) and life expectancy without chronic disease (the area under the 'morbidity' curve).

The general model of health transition (WHO, 1984): observed mortality and hypothetical morbidity and disability survival curves for females, USA, 1980.



e_{00}^{**} and e_{60}^{**} are the number of years of autonomous life expected at birth and at age 60, respectively. M_{50}^{**} is the age to which 50% of females could expect to survive without loss of autonomy.

There are in fact as many health expectancies as concepts of health. The commonest health expectancies are those based on self-perceived health, activities of daily living and on chronic morbidity.

How do we compare health expectancies?

Health expectancies are independent of the size of populations and of their age structure and so they allow direct comparison of different population sub-groups: e.g. sexes, socio-professional categories, as well as countries within Europe (Robine et al., 2003).

Health expectancies are most often calculated by the Sullivan method (Sullivan, 1971). However to make valid comparisons, the underlying health measure should be truly comparable.

To address this, the European Union has decided to include a small set of health expectancies among its European Community Health Indicators (ECHI) to provide summary measures of disability (i.e., activity limitation), chronic morbidity and perceived health. Therefore the Minimum European Health Module (MEHM), composed of 3 general questions covering these dimensions, has been introduced into the Statistics on Income and Living Conditions (SILC) to improve the comparability of health expectancies between countries.* In addition life expectancy without long term activity limitation, based on the disability question, was selected in 2004 to be one of the structural indicators for assessing the EU strategic goals (Lisbon strategy) under the name of “Healthy Life Years” (HLY).

Further details on the MEHM, the European surveys and health expectancy calculation and interpretation can be found on www.eurohex.eu.

What is in this report?

This report is produced by the Joint Action European Health and Life Expectancy Information System (EHLEIS) as part of a country series. In each report we present:

- Life expectancies and Healthy Life Years (HLY) at age 65 for the country of interest and for the overall 25 European Union member states (EU25), using the SILC question on long term health related disability, known as the GALI (Global Activity Limitation Indicator), from 2005 to 2012. The wording of the question has been revised in 2008.
- Health expectancies based on the two additional dimensions of health (chronic morbidity and self-perceived health) for the country of interest, based on SILC 2012;
- Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union (EU25) from 2005 to 2012.

References

Jagger C., Gillies C., Moscone F., Cambois E., Van Oyen H., Nusselder W., Robine J.-M., EHLEIS Team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet*. 2008;372(9656) 2124-2131
Robine J.-M., Jagger C., Mathers C.D., Crimmins E.M., Suzman R.M., Eds. *Determining health expectancies*. Chichester UK: Wiley, 2003.
Sullivan D.F. *A single index of mortality and morbidity*. HSMHA Health Reports 1971;86:347-354.
World Health Organization. *The uses of epidemiology in the study of the elderly: Report of a WHO Scientific Group on the Epidemiology of Aging*. Geneva: WHO, 1984 (Technical Report Series 706).

* Before the revision of 2008, the translations of the module used in some countries were not optimum (See Eurostat-EU Task Force on Health Expectancies common statement about the SILC data quality). This revision is being evaluated.

Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Latvia and the European Union (EU25) based on SILC (2005-2012)

Key points:

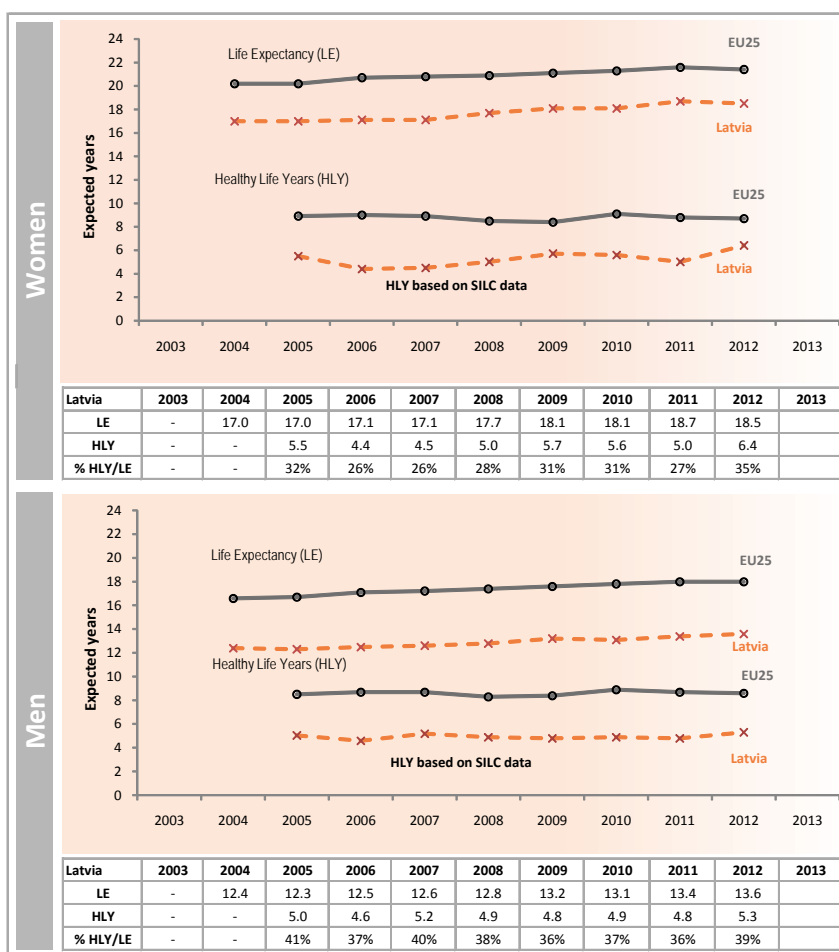
Latvian life expectancy (LE) at age 65 has increased by 1.5 years for women and 1.2 year for men over the period 2004-2012.

LE was below the EU25 average (21.4 for women and 18.0 for men) in 2012, 4.4 years for men and 2.9 years for women.

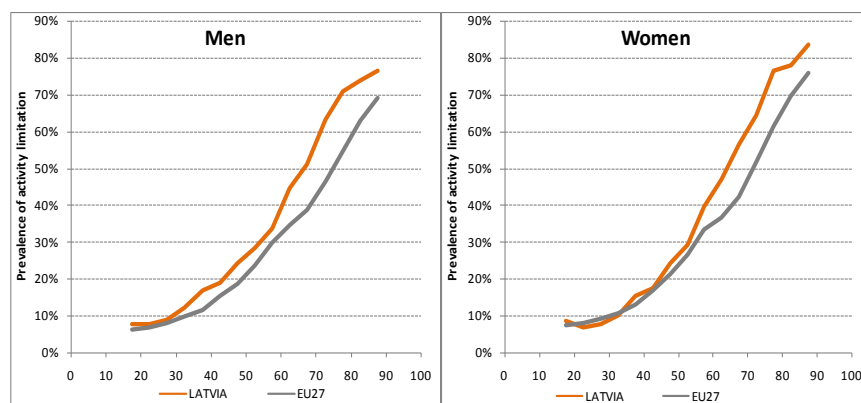
The HLY series, initiated in 2005 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 35% and 39% of their life without *self-reported long-term activity limitations* respectively.

In 2012 the HLY values for Latvia are 2.3 years and 3.3 years below the EU25 average (8.7 for women and 8.6 for men) for women and men respectively.

Since 2006 HLY tends to increase for women and men in Latvia and notably in 2012. Note that the wording of the GALI question was not changed in 2008.



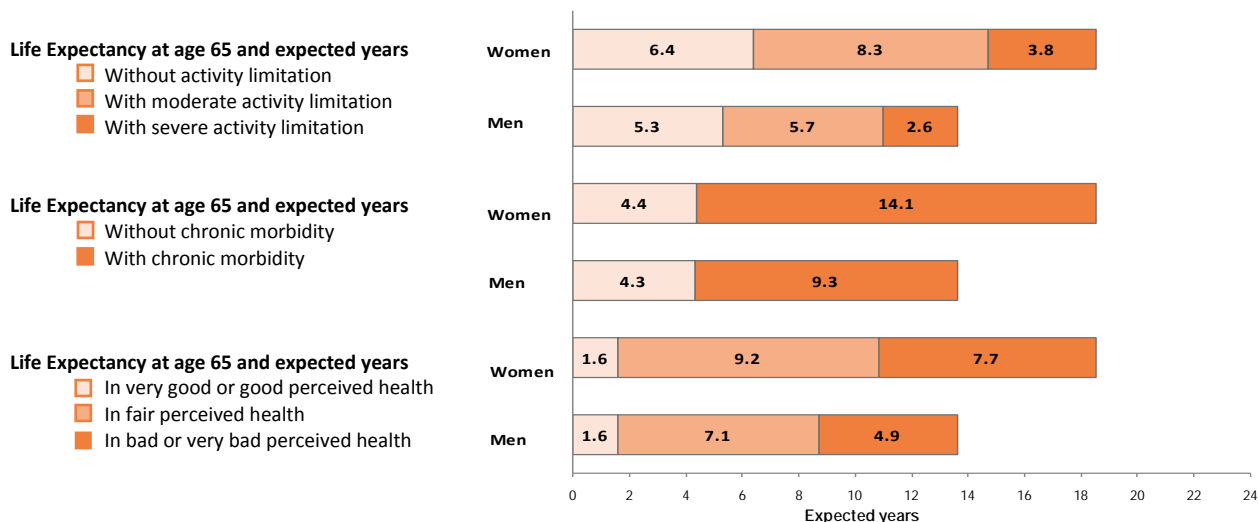
Prevalence of activity limitation in Latvia and in the European Union (EU27) based on the GALI question, by sex and age group (SILC, Mean 2010-2012)



Reports of limitation in usual activities strongly increase with age in the European Union and women systematically report slightly more activity limitation than men. Compared to the mean trajectory by age observed in the European Union in the years (2010-2012), Latvia tends to display similar prevalence rate of activity limitation before the age of 30 years for men and 45 years for women and slightly higher after these ages.

These results should be interpreted with caution as samples sizes in the SILC survey vary remarkably; for instance in 2012 they ranged from 5342 in Denmark to 40287 in Italy. In 2012, the sample size for Latvia comprised 7462 women and 5502 men aged 16 years and over.

Life and health expectancies at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for Latvia (Health data from SILC 2012)



Key points:

In 2012 LE at age 65 in Latvia was 18.5 years for women and 13.6 years for men.

Based on the SILC 2012, at age 65, women spent 6.4 years (35% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 8.3 years (45%) with moderate activity limitation and 3.8 years (20%) with severe activity limitation.*

Men of the same age spent 5.3 years (39% of their remaining life) without activity limitation compared to 5.7 years (42%) with moderate activity limitation and 2.6 years (19%) with severe activity limitation.*

Although women lived more years without chronic morbidity and/or without disability, compared to men, they spent a larger proportion of their life in ill health and these years of ill health were more likely to be years with severe health problems.

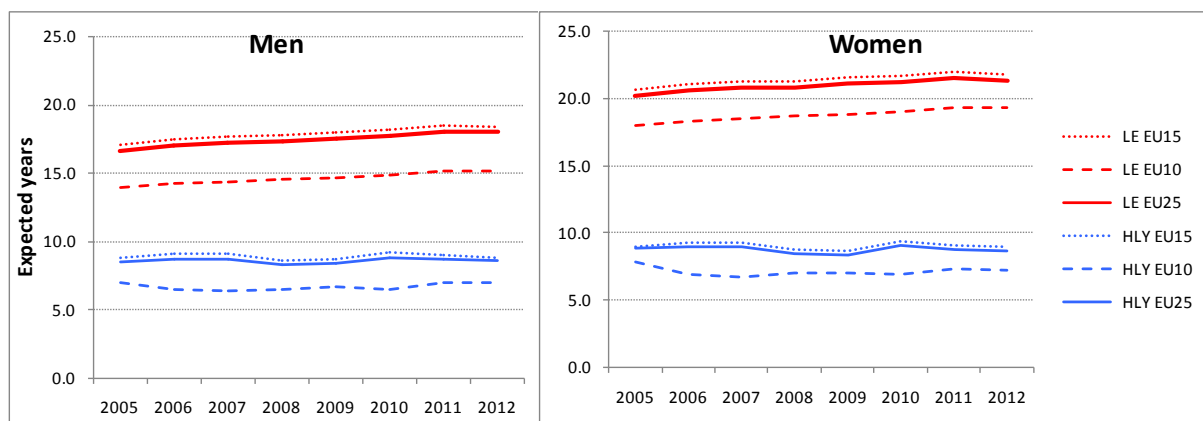
These results should be interpreted cautiously given the lack of the institutional population, such as people living in nursing homes.

* These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Latvia

- Dubkova N, Krumins J. Life expectancy and health expectancy in Latvia: changes and interpretation problems. Research papers of the Central Statistical Bureau of Latvia 2012. Riga, 2012, p21-33.
- Krumins J. Health Policy and Recent Changes in Mortality and Life expectancy in Latvia. *Humanities and Social Sciences: Latvia*. 2008; 1 (54): 57-71.
- Jagger C., Gillies C., Mascone F., Cambois E., Van Oyen H., Nusselder W.J., Robine J.-M., EHLEIS team. Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis. *The Lancet*. 2008; 372(9656):2124-2131.
- Jagger C., Robine J.-M., Van Oyen H., Cambois E. *Life expectancy with chronic morbidity*. In: European Commission, editor. *Major and chronic diseases - report 2007*. Luxembourg: European Communities; 2008. p. 291-304.
- Khoman E., Weale M. *Healthy life expectancy in the EU Member States: ENEPRI Research report n°33 - AHEAD WP5*. sl: ENEPRI; 2006.
- Jagger C., EHEMU team. *Healthy life expectancy in the EU 15*. In: Institut des Sciences de la Santé, editor. *Living longer but healthier lives: how to achieve health gains in the elderly in the European Union Europe Blanche XXVI, Budapest, 25-26 November 2005*. Paris: ISS; 2006. p. 49-62.

Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union (EU25) from 2005 to 2012



Key points:

Over the 7 years period, since EHLEIS monitors the number of *Healthy Life Years* (HLY) in the European Union (EU), the total life expectancy at age 65 (LE_{65}) has increased by 1.34 years for men and by 1.18 years for women in the EU25, leading to a very small decrease in the gender gap (3.43 vs. 3.59 years). The change over time is quite similar for all Member States (MS) and the initial gap between the old EU15 and the new MS (EU10) hardly changed: 3.1 years in 2005 (17.1 vs. 14.0) and 3.2 years in 2012 (18.4 vs. 15.2) for men; 2.6 years in 2005 (20.6 vs. 18.0) and 2.4 years in 2012 (21.8 vs. 19.4) for women.

The evolution of the HLY is less favourable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY_{65}), for men, increased only by 0.06 years in the EU15 and decreased by 0.02 years in the EU10 and, for women, decreased by 0.06 years in the EU15 and by 0.69 years in the EU10. There have been little changes in the observed inequality between the EU15 and the new MS. These gaps fluctuated between 1.8 and 2.8 years for men and between 1.1 and 2.6 years for women without any clear trends. In 2012, the HLY reached 8.8 and 9.0 years for men and women in EU15 and 7.0 and 7.2 years for men and women in EU10.

As a consequence of these different trends, the proportion of years lived with activity limitation after the age of 65 years increased: from 48.6% to 52.0% for men and from 56.3% to 58.8% for women in the EU15; from 50.0% to 54.1% for men and from 56.1 to 62.7 for women in the EU10. Observed trends in HLY for both males and females challenge current EU objectives on active and healthy aging.

The **European Health and Life Expectancy Information System** (EHLEIS) is part of **BRIDGE-Health** (Bridging Information and Data Generation for Evidence-based Health Policy and Research) which aims to prepare the transition towards a sustainable and integrated EU health information system within the third EU Health Programme, 2014-2020 (www.bridge-health.eu). EHLEIS comes from the EU Health Monitoring Programme with the two EURO-REVES projects (1998-2002). It was designed within the European Health Expectancy Monitoring Unit Project (EHEMU, 2004-2007) under the first EU Health Programme and has been developed by the EHLEIS Project (2007-2010) under the second EU Health Programme and then expanded by the Joint-Action on the Healthy Life Years (2011-2014). Technically, EHLEIS is maintained by the French National Institute of Health and Medical Research (INSERM) in Montpellier. See www.eurohex.eu for more information. Since its inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports *Healthy Expectancy in ...*

Acknowledgements

Juris Krumins and Natalja Dubkova (University of Latvia) have contributed to this report and its translation.

Reported self-perceived health, chronic morbidity, activity limitations, and reasons for unmet need for medical care by sex and age group in Latvia, %* (data from SILC 2012)

	Men					Women				
	Total	16–24	25–49	50–64	65+	Total	16–24	25–49	50–64	65+
Self-perceived health										
Good	51.4	86.2	64.0	31.8	10.8	43.1	85.4	63.8	28.4	8.2
Fair	35.9	11.4	30.4	51.3	52.7	39.7	13.0	31.4	55.2	49.5
Bad	12.7	2.4	5.7	16.9	36.5	17.2	1.6	4.8	16.5	42.2
Chronic morbidity										
With chronic morbidity	31.0	9.1	19.6	41.9	68.4	39.6	8.2	19.6	45.4	76.5
Without chronic morbidity	69.0	90.9	80.4	58.1	31.6	60.4	91.8	80.4	54.6	23.5
Reported activity limitations										
With severe activity limitation	6.0	1.5	2.7	6.3	19.0	7.8	0.3	2.3	5.7	20.9
With moderate activity limitation	19.7	7.2	12.5	26.2	42.3	24.4	6.8	12.5	28.7	45.0
Without activity limitation	74.3	91.3	84.7	67.5	38.7	67.8	92.9	85.2	65.6	34.1
Reasons for unmet need for medical care										
could not afford	49.3	41.6	46.1	54.5	49.9	59.4	42.2	61.9	62.7	55.8
waiting list	5.8	12.9	4.5	4.7	8.9	7.3	12.8	5.7	8.7	6.9
could not take time	8.8	4.8	14.2	6.6	0.9	6.2	16.4	9.3	7.1	1.1
too far to travel	2.5	-	1.1	1.8	7.3	4.0	-	1.0	2.3	9.0
fear of doctors	5.0	3.1	5.2	4.7	5.6	1.3	1.5	1.7	0.5	1.6
wanted to wait and see if problem got better on its own	24.8	35.8	25.8	23.7	21.9	17.9	22.1	19.3	15.1	18.6
didn't know any good doctor	2.0	-	2.0	1.4	3.5	1.6	-	0.6	2.4	1.9
other reasons	1.8	1.9	1.1	2.6	2.0	2.4	5.1	0.4	1.2	5.1

*Estimated values may not sum up to the total of 100% due to rounding

Source: Central Statistical Bureau of Latvia

Key points:

Based on SILC 2012 data self-perceived health for men and women differs significantly, especially in terms of reported good health, where the gap between sexes produce 8.3 percent points. Similar situation has been observed for reported chronic morbidity and reported activity limitations, where the overall proportion of men without chronic morbidity and activity limitations exceeded proportion for women by 8.6 and 6.5 percent points respectively. A greater sex differences in reported health evaluations appear in older ages where women start perceiving their state of health much more critically than men.

Data on reasons for unmet need for medical care supports and complements previous observations. Figures demonstrate, that men not only perceive their state of health more optimistically, but also treat it more flippantly. On average 24.8% of men had make a choice to wait and see if problem got better on its own while for women that proportion was 17.9%. Fear of doctors was a reason for unmet need for medical care for 5.0% of men while only 1.3% among women. The least sex differences for unmet need for medical care were among answers “could not afford”. That reason had a largest proportion among other reasons for unmet need for medical care for both sexes, but a specific weight for women in all age groups was higher than for men.