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Health Expectancy in Austria

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).


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 subgroups: 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 Core 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 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 2004 to 2012. The wording of the question has been revised in 2008.
• Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
• 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, distinguishing between Western Europe (EU15) and new members (EU10).

References

* 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). The revision is being evaluated.
Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Austria and the European Union (EU25) based on SILC data (2004-2012)

Key points:
Between 2004-2012 Austrian life expectancy (LE) at age 65 increased by 1.1 years for women and 1.3 years for men. This indicator value is slightly below the EU25 average in 2012 for women and similar for men (21.4 years for women and 18.0 for men). The HLY series on the basis of SILC data shows this indicator value for Austrian women being 0.8 years above the EU25 average of 8.7 in 2012 and Austrian men can expect 8.9 years HLYs which is also slightly above the EU25 average of 8.6. Thus in 2012 women and men at age 65 can expect to spend 45% and 49% respectively of their remaining life without self-reported long-term activity limitations. Compared to earlier trends, the phrasing of the SILC question may explain the lower level of reported activity limitations as people report limitations of different severity. Nevertheless between 2008 and 2012 HLY increased for men by 1.5 and for women by 2.0 years. Note that the wording of the Gali question was changed in Austria in 2008 to better reflect the EU standard.

Prevalence of activity limitation in Austria 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 3 years (2010-2012), Austria tends to display slightly higher prevalence rates of activity limitation before age 65 and after age 80, but lower prevalence rates in between.

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 Austria comprised 6046 women and 5431 men aged 16 years and over.
**Key points:**

In 2012, LE at age 65 in Austria was 21.3 years for women and 18.1 years for men.

Based on SILC 2012 data, women at age 65 spent 9.5 years (45% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.6 years (31%) with moderate activity limitation and 5.2 years (24%) with severe activity limitation.*

Men of the same age spent 8.9 years (49% of their remaining life) without activity limitation compared to 5.2 years (29%) with moderate activity limitation and 4.0 years (22%) with severe activity limitation.*

Although the total number of years lived by men as well as their healthy life years were less than those for women, the relative number of healthy life years were greater for men than women on all severity levels. Therefore compared to men, women 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 with caution as health states of people living in institutions or nursing home are not surveyed.

* These may not sum to Life Expectancy due to rounding

**Publications and reports on health expectancies for Austria**

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

Acknowledgements

Marc Luy (Vienna Institute of Demography of the Austrian Academy of Sciences) has contributed to this report and its translation.
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).


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 subgroups: 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 Core 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.

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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Union (EU15) and new members (EU10).

References


* 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.
**Key points:**

Belgian life expectancy (LE) at age 65 has increased by 1.1 years for women and 1.2 years for men over the period 2004-2012. By 2012 LE was below the EU25 average for women (21.4) and for men (18.0).

The new HLY series, initiated in 2004 with the SILC data, shows values for Belgium being in 2012 above the EU25 average (8.7 for women and 8.6 for men) by 2.4 year for women and 2.1 year above for men.

In 2012 women and men at age 65 can expect to spend 52% and 60% of their life without self-reported long-term activity limitation respectively. HLY increased significantly between 2011 and 2012.

Note that the wording of the GALI question was slightly changed in Belgium in 2005 to better reflect the EU standard.

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

![Graphs showing prevalence of activity limitation for men and women in Belgium and EU27 (SILC, Mean 2010-2012)](image)

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 3 years (2010-2012), Belgium tends to display same prevalence rates of activity limitation before the age of 50 years for men and 45 years for women and lower prevalence rates after this age for both sexes.

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 Belgium comprised 5803 women and 5389 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 Belgium (Health data from SILC 2012)

Key points:
In 2012, LE at age 65 in Belgium was 21.3 years for women and 17.7 years for men.
Based on the SILC 2012, at age 65, women spent 11.1 years (52% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.5 years (31%) with moderate activity limitation and 3.7 years (17%) with severe activity limitation.*
Men of the same age spent 10.7 years (60% of their remaining life) without activity limitation compared to 4.7 years (27%) with moderate activity limitation and 2.3 years (13%) with severe activity limitation.*
The number of years lived in very good or good perceived health, the years lived without chronic morbidity and the HLY were greater for women than men. However, compared to men, women spent a larger proportion of their life in ill health, and spent more 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.

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Publications and reports on health expectancies for Belgium


**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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

**Acknowledgements**

Herman Van Oyen (Scientific Institute of Public Health) has contributed to this report and its translation.
Health Expectancy in Bulgaria

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).

![Graph of general model of health transition](image)

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 subgroups: 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 Core 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](http://www.eurohex.eu).

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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
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References


* 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 Bulgaria and the European Union (EU25) based on SILC (2005-2012)

**Key points:**

Bulgarian life expectancy (LE) at age 65 has increased by 1.1 years for women and 0.7 years for men over the period 2004-2012. By 2012 LE for men and women was below the EU25 average (21.4 for women and 18.0 for men).

Because Bulgaria joined the European Union in 2007, health expectancy based on activity limitation (HLY) is not available before 2007.

The HLY series, initiated in 2008 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 55% and 63% of their life without *self-reported long-term activity limitations* respectively. The HLY value for Bulgaria is above the EU25 average (8.7 for women and 8.6 for men) by 0.8 years for women and similar to the EU25 average for men in 2012. These results should be interpreted with great caution as the wording of the SILC questions was clearly different in Bulgaria compared to other EU countries. Between 2008 and 2012 HLY remained almost stable for men and women.

Prevalence of activity limitation in Bulgaria and in the European Union (EU25) 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 3 years (2010-2012), Bulgaria tends to display lower prevalence rates of activity limitation at all ages for both sexes.

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 Bulgaria comprised 6773 women and 6036 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 Bulgaria (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in Bulgaria was 17.3 years for women and 13.9 years for men.

Based on the SILC 2012 at age 65, women spent 9.5 years (55% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 5.7 years (33%) with moderate activity limitation and 2.0 years (12%) with severe activity limitation.*

Men of the same age spent 8.7 years (63% of their remaining life) without activity limitation compared to 3.8 years (27%) with moderate activity limitation and 1.4 years (10%) with severe activity limitation.*

Although the total years lived by men, the years lived without activity limitation and the years lived without chronic morbidity were less than those for women, the number of years lived in very good or good perceived health was greater for men than women.

Compared to men, women spent a much 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.

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Publications and reports on health expectancies for Bulgaria

- Mutafova MN. Integral indicators for assessing health of the population "Propeller publishing", S., 2007, 300p
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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Acknowledgements

Adriana Tetevenska (National Statistical Institute) has contributed to this report and its translation.
**Health Expectancy in Croatia**

**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).


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

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**What is in this report?**

This report is produced by the 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 2004 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

**References**


* 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). The revision is being evaluated.
Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Croatia and the European Union (EU25) based on SILC (2004-2012)

Key points:

Between 2004-2012 Croatian life expectancy (LE) at age 65 increased by 1.2 years for women and 1.2 years for men. This indicator value was below the EU25 average in 2012 (21.4 years for women and 18.0 for men).

The new HLY series on the basis of SILC data shows this indicator value for Croatian women being 0.7 year below the EU25 average of 8.7 in 2012, and Croatian men can expect 7.7 years HLYs which is also below the EU25 average of 8.6.

Thus in 2012 women and men at age 65 can expect to spend 44% and 51% respectively of their remaining life without self-reported long-term activity limitations. Between 2011 and 2012 HLY increased for men by 0.2 and for women by 1.1 years.

Prevalence of activity limitation in Croatia 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 3 years (2010-2012), Croatia tends to display slightly lower prevalence rates of activity limitation before the age of 40 years for men and 50 years for women and similar 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 Croatia comprised 7048 women and 6180 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 Croatia (Health data from SILC 2012)

Key points:
In 2012, LE at age 65 in Croatia was 18.7 years for women and 15.0 years for men.
Based on SILC 2012 data, women at age 65 spent 8.2 years (38% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.6 years (33%) with moderate activity limitation and 2.9 years (29%) with severe activity limitation.*
Men of the same age spent 7.7 years (46% of their remaining life) without activity limitation compared to 5.4 years (31%) with moderate activity limitation and 1.9 years (23%) with severe activity limitation.*
Although the total number of years lived by men were less than those for women, the number of healthy life years were greater for men than women on all severity levels. Therefore compared to men, women 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 with caution as health states of people living in institutions or nursing home are not surveyed.
* These may not sum to Life Expectancy due to rounding.

Publications and reports on health expectancies for Croatia
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in …

Acknowledgements

Vlasta Deckovic-Vukres (Croatian Institute of Public Health) has contributed to this report and its translation.
Health Expectancy in Cyprus

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).

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 subgroups: 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 Core 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.

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• 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 2006 to 2012. The wording of the question has been revised in 2008.

• Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;

• 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Cypriot life expectancy (LE) at age 65 has increased by 1.1 year for women and 1.4 years for men over the period 2004-2012. From 2004 onwards LE for men and women has an increasing trend and by 2012 LE for women and men was below the EU25 average (21.4 for women and 18.0 for men).

The HLY series using the SILC data, initiated in 2006 in Cyprus, shows that in 2012 women and men at age 65 can expect to spend 38% and 49% of their life without self-reported long-term activity limitations respectively.

The HLY values for Cyprus are 1.0 year below the EU25 average of 8.7 for women in 2012 and 0.2 year above the EU25 average of 8.6 for men. Between 2011 and 2012 HLY strongly increased for women and slightly increased for men.

Prevalence of activity limitation in Cyprus 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 3 years (2010-2012), Cyprus tends to display slightly lower prevalence rates of activity limitation for both sexes but slightly higher prevalence rates after the age of 60 years for women and 75 years for men.

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 Cyprus comprised 5868 women and 5176 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 Cyprus (Health data from SILC 2012)

**Key points:**

In 2012, LE at age 65 in Cyprus was 20.4 years for women and 17.9 years for men.

Based on the SILC 2012 at age 65, women spent 7.7 years (38% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.7 years (33%) with moderate activity limitation and 6.1 years (30%) with severe activity limitation.*

Men of the same age spent 8.8 years (49% of their remaining life) without activity limitation compared to 4.9 years (27%) with moderate activity limitation and 4.3 years (24%) with severe activity limitation.*

Although the total years lived by men were less than those for women, for all the health expectancies the years of life spent in positive health were significantly greater for men than women.

Compared to men, women 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 Cyprus**


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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

**Acknowledgements**

Eleni Kyriacou (Institute of Health Information and Statistics) has contributed to this report and its translation.
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).

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 subgroups: 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 Core 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.

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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
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- Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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 the Czech Republic and the European Union (EU25) based on SILC (2005-2012)

Key points:

Czech life expectancy (LE) at age 65 has increased by 1.6 years for women and 1.5 years for men over the period 2004-2012. LE was below the EU25 average (21.4 for women and 18.0 for men) in 2012 by 2.2 years for women and 2.3 years for men. The HLY series, initiated in 2005 with the SILC data, show that in 2012 women and men at age 65 can expect to spend 46% and 53% of their life without self-reported long-term activity limitations respectively. The HLY values for the Czech Republic in 2012 is 0.2 year above the EU25 average (8.7 for women and 8.6 for men) for women and 0.3 year below for men. The whole series should be interpreted with caution due to successive changes in the wording of the questions in the Czech Republic (in 2007 and then in 2008). Especially, the wording of the GALI question was changed to better reflect the EU standard. Stable since 2007, HLY decreased slightly for men and slightly increased for women between 2011 and 2012.

Prevalence of activity limitation in the Czech Republic 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 3 years (2010-2012), the Czech Republic tends to display slightly lower prevalence rates of activity limitation at all 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 the Czech Republic comprised 9149 women and 8161 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 the Czech Republic (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in the Czech Republic was 19.2 years for women and 15.7 years for men.

Based on the SILC 2012, at age 65, women spent 8.9 years (46% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.0 years (36%) with moderate activity limitation and 3.3 years (17%) with severe activity limitation.*

Men of the same age spent 8.3 years (53% of their remaining life) without activity limitation compared to 5.3 years (34%) with moderate activity limitation and 2.0 years (13%) with severe activity limitation.*

Although the total years lived by men were less than those for women, the number of years lived in good health was, whatever the indicator used, almost the same, being only slightly greater for women than men. Therefore, compared to men, women 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 the Czech Republic

- Daňková Š. Délka života ve zdraví a projekt EHLEIS v České republice [Healthy life expectancy and project EHLEIS in the Czech Republic]. In Langhamrová J., Šídlo L. (eds) Zdraví – výzvy a rizika, sborník z XLIII. konference České demografické společnosti, Praha, 2013
**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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 at age 65 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.

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Health Expectancy in Denmark

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](image)

* and are the number of years of mortality 18 years of morbidity and 60 years of disability, respectively. is the age at which 50% of females could expect to experience induced 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?

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References


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*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 Denmark and the European Union (EU25) based on SILC (2005-2012)

Key points:

Danish life expectancy (LE) at age 65 has increased by 1.2 years for women and 1.6 years for men over the period 2004-2012. In 2012 LE for both sexes was below the EU25 (21.4 for women and 18.0 for men).

Because the wording of the GALI question in the Danish survey was changed in 2008 to better reflect the EU standard, HLY estimates for Denmark are shown only from 2008. The Danish values were much higher than the EU25 average in 2012 (8.7 for women and 8.6 for men), 4.2 and 2.2 years higher for women and men respectively. Therefore, Danish women and men at age 65 can expect to spend 64% and 61%, respectively, of their remaining life without self-reported long-term activity limitations. HLY remained almost stable for women but strongly decreased for men between 2011 and 2012 in Denmark. The results should be interpreted with caution as the samples sizes are small.

Prevalence of activity limitation in Denmark 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 3 years (2010-2012), Denmark tends to display higher prevalence rates of activity limitation before the age of 60 years and much lower after this age.

Indeed prevalence of activity limitation reaches only 51% for men and 43% for women in Denmark at age 85 and over versus 70% and 78% respectively for men and women in the European Union on average.

These results should be interpreted with caution as the samples sizes in the SILC survey vary remarkably; for instance in 2012 they ranged from 5342 in Denmark to 40287 in Italy. Furthermore, the lack of institutionalized people in the Danish SILC surveys, such as people living in nursing homes, might contribute to an explanation of the results. In 2012 the sample size for Denmark comprised 2757 women and 2585 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 Denmark (Health data from SILC 2012)

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
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<tbody>
<tr>
<td>Without activity limitation</td>
<td>12.9</td>
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<td>With moderate activity limitation</td>
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<td>5.2</td>
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<tr>
<td>With severe activity limitation</td>
<td>1.6</td>
<td>1.7</td>
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<td>Without chronic morbidity</td>
<td>12.1</td>
<td>10.2</td>
</tr>
<tr>
<td>With chronic morbidity</td>
<td>8.1</td>
<td>7.3</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>In very good or good perceived health</td>
<td>11.2</td>
<td>9.4</td>
</tr>
<tr>
<td>In fair perceived health</td>
<td>6.5</td>
<td>6.3</td>
</tr>
<tr>
<td>In bad or very bad perceived health</td>
<td>2.5</td>
<td>1.8</td>
</tr>
</tbody>
</table>

Key points:

In 2012, LE at age 65 in Denmark was 20.2 years for women and 17.5 years for men.

Based on the SILC 2012, at age 65, women spent 12.9 years (64% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)) 5.8 years (29%) with moderate activity limitation and 1.6 years (8%) with severe activity limitation.*

Men of the same age spent 10.6 years (61% of their remaining life) without activity limitation, 5.2 years (30%) with moderate activity limitation and 1.7 years (10%) with severe activity limitation.*

Although for all the health expectancies the years of life spent in positive health were slightly greater for women than men, women spent a larger proportion of their life in ill health.

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

*These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Denmark

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 (LE₆₅) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY₆₅), 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 Health Expectancy in ...

Acknowledgements

Henrik Brønnum-Hansen (University of Copenhagen) has contributed to this report and its translation.
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).

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 subgroups: 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 Core 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.eurohix.eu.

What is in this report?

This report is produced by the 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 2004 to 2012. The wording of the question has been revised in 2008.
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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 Estonia and the European Union (EU25) based on SILC (2004-2012)

Key points:

Estonian life expectancy (LE) at age 65 has increased by 2.5 years for women and 1.9 years for men over the period 2004-2012. LE was below the EU25 average in 2012 (21.4 for women and 18.0 for men) although the gap with the EU25 average is reducing for women.

HLY series, initiated in 2004 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 28% and 36% of their life without self-reported long-term activity limitations respectively. In 2012 the HLY values for Estonia are 3.2 years, for women and men, below the EU25 average (8.7 for women and 8.6 for men).

The wording of the GALI question was changed in Estonia in 2008 to better reflect the EU standard. After a strong increase in 2009, HLY remained almost stable between 2009 and 2012 for both women and men.

Prevalence of activity limitation in Estonia 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 3 years (2010-2012), Estonia tends to display higher prevalence of activity limitation at all ages for men and at almost all ages except between 25 and 45 years for women.

Activity limitation in Estonia start to increase already from age 45 for men and from age 50 for women.

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 Estonia comprised 6384 women and 5518 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 Estonia (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in Estonia was 20.3 years for women and 14.9 years for men.

Based on the SILC 2012, at age 65, women spent 5.5 years (27% of their remaining life) without activity limitation (corresponding to HLYs), 8.7 years (43%) with moderate activity limitation and 6.0 years (30%) with severe activity limitation.*

Men of the same age spent 5.4 years (36% of their remaining life) without activity limitation compared to 5.9 years (36%) with moderate activity limitation and 3.6 years (24%) with severe activity limitation.*

Although the total years lived by men were 5.4 years lower than that lived by women, the number of years lived without chronic morbidity, without activity limitation, or in good perceived health was about the same. Compared to men, women spent a larger proportion of their life with chronic morbidity, disability and/or poor perceived health and these years of ill health were more likely to be years with severe health problems.

* These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Estonia

- Vals K. Haiguskoormuse tõttu kaotatud eluaastad Eestis [Health loss due to burden of disease in Estonia]; University of Tartu; 2005.
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 Health Expectancy in ...

Acknowledgements
Mare Ruuge and Kati Karelson (National Institute for Health Development, Department of Health Statistics) have contributed to this report and its translation.
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).


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 subgroups: 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 Core 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.eurolex.eu.

What is this report?

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- 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 2004 to 2012. The wording of the question has been revised in 2008.
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Union (EU15) and new members (EU10).

References


* 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 Finland and the European Union (EU25) based on SILC (2004-2012)

Key points:

Finnish life expectancy (LE) at age 65 has increased by 0.9 years for women and 1.3 years for men over the period 2004-2012. By 2012 LE was slightly above the EU25 average (21.4 for women and 18.0 for men) for women and slightly below for men.

The HLY series, initiated in 2004 with the SILC data, shows values in Finland being in 2012 0.3 year above the EU25 average (8.7 for women and 8.6 for men) for women and 0.2 year below for men.

In 2012 women and men at age 65 can expect to spend 42% and 47% of their life without self-reported long-term activity limitations respectively.

Between 2011 and 2012 HLY increased for women and remained stable for men in Finland. The whole series should be interpreted with caution due to successive changes in the wording of the question used especially in 2007.

Prevalence of activity limitation in Finland 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 3 years (2010-2012), Finland tends to display a higher prevalence rate of activity limitation before the age of 65 years and a similar prevalence after this age.

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 Finland comprised 5086 women and 5221 men aged 16 years and over.
Key points:

In 2012, LE at age 65 in Finland was 21.6 years for women and 17.8 years for men.

Based on the SILC 2012, at age 65, women spent 9.0 years (42% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY), 9.1 years (42%) with moderate activity limitation and 3.5 years (16%) with severe activity limitation.*

Men of the same age spent 8.4 years (47% of their remaining life) without activity limitation compared to 6.5 years (36%) with moderate activity limitation and 2.9 years (16%) with severe activity limitation.*

Although the total years lived by men were less than those for women, the number of years lived without chronic morbidity, without activity limitation, or in good perceived health was about the same. Compared to men, women spent a larger proportion of their life with chronic morbidity, disability and/or poor perceived 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 Finland

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 Health Expectancy in ...

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Marja Jyhla (University of Tempere) and Seppo Koskinen (National Institute of Health and Welfare) have contributed to this report and its translation.
Health Expectancy in France

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 observed mortality and hypothetical morbidity and disability survival curves for females, USA, 1980.

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 subgroups: 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 Core 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 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 2004 to 2012. The wording of the question has been revised in 2008;

- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;

- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

French life expectancy (LE) at age 65 has increased by 1.3 years for women and 1.4 years for men over the period 2004-2012. By 2012 LE for both sexes was the highest in the EU25, the EU25 average being 21.4 for women and 18.0 for men. The HLY series, initiated in 2004 with the SILC data continues the earlier stable trend for France and is above the EU25 average of 8.7 for women and 8.6 for men. In 2012 women and men at age 65 can expect to spend respectively 44% and 49% of their life without self-reported long-term activity limitations respectively. Between 2011 and 2012 HLY slightly decreased in France for men but increased notably for women. Note that the wording of the GALI question was marginally changed in France in 2008 to better reflect the EU standard. The small yearly variations observed since 2007 (decrease for men in 2008 or for women in 2009) are possibly due to random fluctuations. Between 2004 and 2012, the proportion HLY/LE (%), higher for men than women, slightly decreased for women and slightly increased for men. We can underline the strong contrast between the excellent rank of France in the EU25 for LE at age 65 and the middle range for HLY.

Prevalence of activity limitation in France 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 3 years (2010-2012), France tends to display a similar prevalence rate of activity limitation before 55 years and a lower after this age for both sexes.

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 France comprised 11875 women and 10867 men aged 16 years and over.
Key points:
In 2012, LE at age 65 in France was 23.4 years for women and 19.1 years for men.
Based on the SILC 2012, at age 65, women spent 10.4 years (44% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.9 years (29%) with moderate activity limitation and 6.1 years (26%) with severe activity limitation.*
Men of the same age spent 9.4 years (49% of their remaining life) without activity limitation compared to 5.8 years (30%) with moderate activity limitation and 3.9 years (20%) with severe activity limitation.*
Although all health expectancies were greater for women than men, women 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 home.

*These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for France
Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union (EU25, EU15 and EU10) 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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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. These 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 Health Expectancy in ...

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Health Expectancy in Germany

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).


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 subgroups: 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 Core 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 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 GALL (Global Activity Limitation Indicator), from 2005 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALL question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

German life expectancy (LE) at age 65 has increased by 1.1 years for women and 1.5 years for men over the period 2004-2012. LE was close the EU25 average by 2012 (21.4 for women and 18.0 for men), 0.2 year above for men and 0.2 year below for women.

The HLY series, initiated in 2005 with the SILC data, shows values for Germany being in 2012 below the EU25 average (8.7 for women and 8.6 for men) by 1.8 years for women and 1.9 for men. In 2012 women and men at age 65 can expect to spend 33% and 37% of their life without self-reported long-term activity limitations respectively. Note that the wording of the GALI question was changed in Germany in 2008 to better reflect the EU standard. This may explain the strong decrease in HLY observed between 2007 and 2008 in Germany, especially for men. Between 2011 and 2012 HLY slightly decreased for women and remained stable for men.

Prevalence of activity limitation in Germany 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 3 years (2010-2012), Germany tends to display a slightly higher prevalence rate of activity limitation at all ages and for both sexes.

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 Germany comprised 12258 women and 11329 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 Germany (Health data from SILC 2012)

Key points:
In 2012, LE at age 65 in Germany was 21.2 years for women and 18.2 years for men.
Based on the SILC 2012 at age 65, women can expect to spent 6.9 years (33% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 8.2 years (39%) with moderate activity limitation and 6.1 years (29%) with severe activity limitation.*
Men of the same age spent 6.7 years (37% of their remaining life) without activity limitation compared to 7.3 years (40%) with moderate activity limitation and 4.2 years (23%) with severe activity limitation.*
Although for all the health expectancies the years of life spent in positive health were slightly greater for women than men, women 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.

* These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Germany
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLYLE), 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.

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Acknowledgements

Jurgen Thelen (Robert Koch Institute) has contributed to this report and its translation.
Health Expectancy in Greece

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).


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 subgroups: 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 Core 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 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 2004 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Greek life expectancy (LE) at age 65 has increased by 1.2 years for women and men over the period 2004-2012. In 2012, LE for women was below the EU25 average (21.4 for women and 18.0 for men) and 0.1 year above for men. The HLY series, initiated in 2004 with the SILC data, shows values for Greece being in 2012 similar for men to the EU25 average (8.7 for women and 8.6 for men) and lower by 1.2 year for women. In 2012 women and men at age 65 can expect to spend 35% and 47% of their life without self-reported long-term activity limitations respectively. Note that the wording of the GALI question was changed in Greece in 2007 and 2008. But it is not clear whether this better reflects the EU standard and can explain the strong decrease in HLY observed since 2007 in Greece. HLY decreased for men and women between 2011 and in 2012.

Prevalence of activity limitation in Greece 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 3 years 2010-2012, Greece tends to display lower prevalence rate of activity limitation before the age of 75 years for men and 65 years for women and slightly higher after this age.

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 Greece comprised 6092 women and 5606 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 Greece (Health data from SILC 2012)

### Key points:

In 2012, LE at age 65 in Greece was 21.0 years for women and 18.1 years for men.

Based on the SILC 2012, at age 65, women spent 7.3 years (35% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.1 years (34%) with moderate activity limitation and 6.6 years (31%) with severe activity limitation.*

Men of the same age spent 8.6 years (47% of their remaining life) without activity limitation compared to 5.1 years (28%) with moderate activity limitation and 4.4 years (24%) with severe activity limitation.*

Although the total years lived by men were less than those for women, for all the health expectancies the years of life spent in positive health were greater for men than women.

Compared to men, women spent a much larger proportion of their life in ill health. 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 Greece


- Χρήστος Μπάγκαβος, Η κατάσταση υγείας του πληθυσμού στην Ελλάδα, Προσδόκιμο επιβίωσης και προσδόκιμο υγείας, Ινστιτούτο Εργασίας ΓΣΕΕ, Παραστρατηγήριο Οικονομικών και Κοινωνικών Εξελίξεων, Ερευνητική Μονάδα Κοινωνικής Πολιτικής Φτώχειας και Αισιοδοξίας, Θεσσαλονίκης. Οχθουόμιρος 2012. ISBN: 978-960-9571-21-0


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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY65) 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.

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EHLEIS Country Reports  
Issue 8 – April 2015

Health Expectancy in Hungary

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).

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 subgroups: 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 Core 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.

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This report is produced by the 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;

• Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;

• 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Hungarian life expectancy (LE) at age 65 has increased by 0.8 years for women and 0.9 years for men over the period 2004-2012. LE was below the EU25 average (21.4 for women and 18.0 for men) in 2012 by 3.7 years for men and 3.3 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 45% of their life without self-reported long-term activity limitations respectively.

In 2012 the HLY values for Hungary are 2.3 years below the EU25 average (8.7 for women and 8.6 for men) for women and 2.2 years below for men.

Between 2011 and 2012 HLY increased in Hungary for men and women.

Note that the wording of the GALI question was changed in 2008 to better reflect the EU standard.

Prevalence of activity limitation in Hungary 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 observed in the European Union in the 3 years (2010-2012), Hungary tends to display lower prevalence rate of activity limitation before the age of 45 years for men and 50 for women and slightly higher after this age.

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 Hungary comprised 13096 women and 10750 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 Hungary (Health data from SILC 2012)

Key points:

In 2012 LE at age 65 in Hungary was 18.1 years for women and 14.3 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]), 7.5 years (41%) with moderate activity limitation and 4.3 years (24%) with severe activity limitation.*

Men of the same age spent 6.4 years (45% of their remaining life) without activity limitation compared to 5.1 years (36%) with moderate activity limitation and 2.7 years (19%) with severe activity limitation.*

Although for all the health expectancies the years of life spent in positive health were greater or equal for women than men, women spent a larger proportion of their life in ill health.

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

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Publications and reports on health expectancies for Hungary

- See also Nők és férfiak Magyarországon, 2012 (in press) and the website: http://portal.ksh.hu/pls/ksh/docs/hun/thm/2/indi2_8_1.html
- The social development indices in Hungary (Health status 2000-2011) http://www.ksh.hu/thm/2/indi2_8_1.html
**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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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**Acknowledgements**

Zsuszanna Szabo (Central statistical Office of Hungary) has contributed to this report and its translation.
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).

![Diagram of health transition model](image)

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 subgroups: 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.

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What is in this report?

This report is produced by the 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 2004 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


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* 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.
Key points:

Irish life expectancy (LE) at age 65 has increased by years for women and years for men over the period 2004-2012. LE for both sexes by 2012 was below the EU25 average (21.4 for women and 18.0 for men). The HLY series, initiated in 2004 with the SILC data, shows values for Ireland in 2012 above the EU25 average of 8.7 for women and 8.6 for men.

In 2012 women and men at age 65 can expect to spend 58% and 61% of their life without self-reported long-term activity limitations respectively. Between 2009 and 2010 HLY strongly increased for men and women and in 2012 continued to increase for women and remained stable for men.

Note that the wording of the GALI question did not need to be changed in Ireland in 2008.

Prevalence of activity limitation in Ireland 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 3 years (2010-2012), Ireland tends to display lower prevalence rates of activity limitation after the age of 30 years for both sexes.

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 Ireland comprised 4634 women and 4161 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 Ireland (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in Ireland was 21.1 years for women and 18.0 years for men.

Based on the SILC 2012, at age 65, women spent 12.2 years (58% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.2 years (29%) with moderate activity limitation and 2.7 years (15%) with severe activity limitation.*

Men of the same age spent 10.9 years (61% of their remaining life) without activity limitation compared to 4.2 years (23%) with moderate activity limitation and 2.9 years (16%) with severe activity limitation.*

Although the total number of years lived without activity limitation or without chronic morbidity was similar for men and women, women spent a larger proportion of their life in ill health. However, the total number of years lived in very good or good perceived health was less for men than for women and the proportion of their life similar.

These results should be interpreted cautiously given the lack of the institutional population, such as people living in nursing homes (see: http://www.cso.ie/releasespublications/nationaldisabilitysurvey06first.htm).

* These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Ireland

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

Acknowledgements
Kevin MacCormack (Central Statistics Office) has contributed to this report.
Health Expectancy in Italy

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 transition (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).

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 subgroups: 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 Core 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 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 GALLI (Global Activity Limitation Indicator), from 2004 to 2012. The wording of the question has been revised in 2008 for most countries. However it was made in 2007 in Italy;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALLI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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).
Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Italy and the European Union (EU25) based on SILC (2004-2012)

Key points:

Italian life expectancy (LE) at age 65 has increased by 0.8 years for women and 1.1 years for men over the period 2004-2012. LE was above the EU25 average (21.4 for women and 18.0 for men) in 2012.

The HLY series, initiated in 2004 with the SILC data, shows values for Italy in 2012 being below the EU25 average which is 8.7 for women and 8.6 for men. In 2012 women and men at age 65 can respectively expect to spend 32% and 42% of their life without self-reported long-term activity limitations. The strong decrease observed before 2007 should be interpreted with caution because of the changes that have annually occurred in the wording of the GALI. Between 2007 and 2011 HLY remained almost stable for women and men in Italy but all remained below the EU 25 average. In the most recent data from 2011 to 2012 HLY remained stable for women but decreased for men.

*Data on activity limitation for 2010 have been estimated as the mean prevalence of 2009 and 2011 data
Time series of LE may be different from previous report because they have been recalculated according to Eurostat estimated.

Prevalence of activity limitation in Italy 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, Italy tends to display similar or slightly lower prevalence rate of activity limitation before the age of 70 years for men and 65 for women and slightly higher after this age.

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 Italy comprised 21126 women and 19161 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 Italy (Health data from SILC 2012)

Key points:
In 2012, LE at age 65 in Italy was 22.1 years for women and 18.5 years for men.
Based on the SILC 2012, at age 65, women spent 7.1 years (32% of remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 8.7 years (39%) with moderate activity limitation and 6.3 years (28%) with severe activity limitation.*

Men of the same age spent 7.7 years (42% of remaining life) without activity limitation compared to 6.9 years (37%) with moderate activity limitation and 3.9 years (21%) with severe activity limitation.*

Although total years lived by men were less than those for women, the numbers of years lived in very good or good perceived health and the years lived without activity limitation were slightly larger for men. However, the number of years lived without chronic morbidity was greater for women than men.

Compared to men, women 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 with caution given the lack of the institutional population, such as people living in nursing homes, and the sample size. For Italy it comprises 5633 women and 4349 men aged 65+ years in 2012.

* These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for Italy

ISTAT. Il Benessere equo e sostenibile. 2012 http://www.misuredelbenessere.it/


ISTAT. Un sistema informativo territoriale su sanità e salute / [Regional data-set on health]. Rome: ISTAT; 2006.
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_EU) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY_EU), 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.

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Acknowledgements

Luisa Frova and Alessandra Battisti (ISTAT) have contributed to this report and its translation.
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).


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 subgroups: 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 Core 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).

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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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, distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
**Key points:**

Latvian life expectancy (LE) at age 65 has increased by 1.5 years for women and 1.2 years 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.
### 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

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 favorable. 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.

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Acknowledgements

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

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).


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 subgroups: 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 Core 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).

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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Prevalence of activity limitation in Lithuania 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 3 years 2010-2012, Lithuania tends to display lower prevalence rate of activity limitation before the age of 60 years for men and 65 years for women, but higher prevalence after these ages for both sexes.

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 Lithuania comprised 6109 women and 5115 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 Lithuania (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in Lithuania was 19.2 years for women and 14.1 years for men.

Based on the SILC 2012 at age 65, women spent 6.1 years (32% of their remaining life) without activity limitation corresponding to Healthy Life Years (HLY), 8.0 years (42%) with moderate activity limitation and 5.1 years (27%) with severe activity limitation.*

Men of the same age spent 5.6 years (40% of their remaining life) without activity limitation compared to 5.7 years (40%) with moderate activity limitation and 2.7 years (19%) with severe activity limitation.*

Although women lived slightly more years 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.

The number of years lived by men and women without chronic morbidity or in good perceived health was similar.

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 Lithuania


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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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**Acknowledgements**

Nadezda Lipunova (Health information Center) has contributed to this report and its translation.
EHLEIS Country Reports
Issue 8 – April 2015

Health Expectancy in Luxembourg

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).

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 subgroups: 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 expectations among its European Core 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?

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- 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 2004 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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 Luxembourg and the European Union (EU25) based on SILC (2004-2012)

Key points:

Luxembourg life expectancy (LE) at age 65 has increased by 0.9 years for women and 1.9 years for men over the period 2004-2012. By 2012 LE is similar to the EU25 average (21.4 for women and 18.0 for men) for women and 0.4 year above for men.

The HLY series, initiated in 2004 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 56% and 63% of their life without self-reported long-term activity limitations respectively.

In 2012 the HLY values for Luxembourg are above the EU25 average (8.7 for women and 8.6 for men) for women and men, by 3.2 years and 3.0 years respectively.

HLY slightly increased for women and men between 2011 and 2012 in Luxembourg.

Prevalence of activity limitation in Luxembourg 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 3 years (2010-2012), Luxembourg tends to display similar prevalence rate of activity limitation before the age of 50 years but very much lower after this age for both sexes.

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 Luxembourg comprised 6386 women and 6193 men aged 16 years and over.
Key points:

In 2012 LE at age 65 in Luxembourg was 21.4 years for women and 18.4 years for men.

Based on the SILC 2012, at age 65, women spent 11.9 years (56% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 5.8 years (27%) with moderate activity limitation and 3.7 years (17%) with severe activity limitation.*

Men of the same age spent 11.6 years (63% of their remaining life) without activity limitation compared to 4.1 years (22%) with moderate activity limitation and 2.7 years (15%) with severe activity limitation.*

Although for all the health expectancies the years of life spent in positive health were greater for women than men, women spent a slightly larger proportion of their life in ill health.

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

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

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without activity limitation</td>
<td>11.9</td>
<td>11.6</td>
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<tr>
<td>With moderate activity limitation</td>
<td>5.8</td>
<td>4.1</td>
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<td>With severe activity limitation</td>
<td>3.7</td>
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<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>Without chronic morbidity</td>
<td>13.3</td>
<td>11.6</td>
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<tr>
<td>With chronic morbidity</td>
<td>8.1</td>
<td>6.8</td>
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</table>

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td>In very good or good perceived health</td>
<td>9.3</td>
<td>9.0</td>
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<tr>
<td>In fair perceived health</td>
<td>8.1</td>
<td>6.1</td>
</tr>
<tr>
<td>In bad or very bad perceived health</td>
<td>4.0</td>
<td>3.4</td>
</tr>
</tbody>
</table>

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### Publications and reports on health expectancies for Luxembourg

- Peltier F., Thill G., Schockmel M. *83 ans d’espérance de vie pour les femmes et 78 ans pour les hommes*. STATEC, Statnews n°26-2008
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 (LE65) 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 did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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Acknowledgements

Ioana Cristina Salagean (Statec Luxembourg) has contributed to this report and its translation.
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).


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

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To address this, the European Union has decided to include a small set of health expectancies among its European Core 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).

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References


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

Key points:

Maltese life expectancy (LE) at age 65 has increased by 1.9 years for women and 1.3 years for men over the period 2004-2012. By 2012 LE for both men and women is very close to the EU25 average (21.4 for women and 18.0 for men).

The HLY series, initiated in 2005 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 58% and 71% of their life without self-reported long-term activity limitations respectively. In 2012 the HLY values for Malta are above the EU25 average (8.7 for women and 8.6 for men) by 3.5 years for women and 3.9 years for men. A slow but consistent increase in HLY can be observed, except for a dip in 2006, Furthermore, from 2006 onwards, the gap between HLY and EU 25 has been increasing. Note that the wording of the GALI question in Malta was not changed in 2008 however was amended in 2012.

Prevalence of activity limitation in Malta 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 3 years 2010-2012, Malta tends to display strongly lower prevalence rate of activity limitation at all ages and for both sexes, women reaching almost the EU27 at age 85 years.

These results should be interpreted with caution as samples sizes in the SILC survey vary remarkably; for instance they ranged from 5342 in Denmark to 40287 in Italy. In 2012, the sample size for Malta comprised 5233 women and 4887 men aged 16 years and over.
### Key points:

In 2012, LE at age 65 in Malta was 21.0 years for women and 17.6 years for men.

Based on the SILC 2012 at age 65, women spent 12.2 years (58% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 5.5 years (26%) with moderate activity limitation and 3.3 years (16%) with severe activity limitation.*

Men of the same age spent 12.5 years (71% of their remaining life) without activity limitation compared to 3.8 years (22%) with moderate activity limitation and 1.3 years (7%) with severe activity limitation.*

Although total years lived by men was less than those for women, the numbers of years lived in very good or good perceived health and years lived without activity limitation were almost similar for women and men. However the number of years lived without chronic morbidity was slightly greater for women than men.

Compared to men, women 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.

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### Publications and reports on health expectancies for Malta

**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 favorable. 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.

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**Acknowledgements**

Dorothy Gauci and Deborah Stoner (Ministry of Health, Health Information and Research) have contributed to this report.
Health Expectancy in The Netherlands

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.

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References


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

Key points:

Dutch life expectancy (LE) at age 65 has increased by 1.1 years for women and 1.7 years for men over the period 2004-2012. By 2012 LE for Dutch men and women was very close to the EU25 average (21.4 for women and 18.0 for men).

The HLY series, initiated in 2005 with the SILC data, show values for the Netherlands being in 2012 above the EU25 average (8.7 for women and 8.6 for men) by 1.4 years for women and men. In 2012 women and men at age 65 can expect to spend 48% and 56% of their life without self-reported long-term activity limitations respectively. Note that the wording of the GALI question was changed in the Netherlands in 2008 to better reflect the EU standard. This led to a clear decrease in HLY for men and women between 2007 and 2008. After a decrease of HLY for men and women between 2009 and 2010, in 2011 HLY increased, although for women only slightly. In 2012 HLY continued to increase for women but decreased slightly for men.

Prevalence of activity limitation in the Netherlands 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 3 years (2010-2012), the Netherlands tends to display similar prevalence rate of activity limitation for men before the age of 55 years but lower after this age and for women higher prevalence rate before the age of 65 years but lower after this age.

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 the Netherlands comprised 5492 women and 4674 men aged 16 years and over.
Life and health expectancy at age 65 based on activity limitation (Healthy Life Years), chronic morbidity and perceived health for The Netherlands (Health data from SILC 2012)

### Key points:

In 2012 LE at age 65 in the Netherlands was 21.0 years for women and 18.0 years for men.

Based on the SILC 2012 at age 65, women spent 10.1 years (48% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 8.3 years (39%) with moderate activity limitation and 2.6 years (12%) with severe activity limitation.*

Men of the same age spent 10.0 years (56% of their remaining life) without activity limitation compared to 5.9 years (33%) with moderate activity limitation and 2.1 years (12%) with severe activity limitation.*

For all the health expectancies the years of life spent in positive health were greater or slightly greater for women than women but men spent a larger proportion of their life in ill health.

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

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### Publications and reports on health expectancies for The Netherlands


### Life Expectancy at age 65 and expected years

#### Women

<table>
<thead>
<tr>
<th>Activity Limitation</th>
<th>Expected Years</th>
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<tbody>
<tr>
<td>Without activity limitation</td>
<td>10.1</td>
</tr>
<tr>
<td>With moderate activity limitation</td>
<td>8.3</td>
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<tr>
<td>With severe activity limitation</td>
<td>2.6</td>
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#### Men

<table>
<thead>
<tr>
<th>Activity Limitation</th>
<th>Expected Years</th>
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<tr>
<td>Without activity limitation</td>
<td>10.0</td>
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<tr>
<td>With moderate activity limitation</td>
<td>5.9</td>
</tr>
<tr>
<td>With severe activity limitation</td>
<td>2.1</td>
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### Life Expectancy at age 65 and expected years

#### Women

<table>
<thead>
<tr>
<th>Chronic Morbidity</th>
<th>Expected Years</th>
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<tbody>
<tr>
<td>Without chronic morbidity</td>
<td>9.6</td>
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<td>With chronic morbidity</td>
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<table>
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<tr>
<th>Chronic Morbidity</th>
<th>Expected Years</th>
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<td>Without chronic morbidity</td>
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### Life Expectancy at age 65 and expected years

#### Women

<table>
<thead>
<tr>
<th>Perceived Health</th>
<th>Expected Years</th>
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<tbody>
<tr>
<td>In very good or good perceived health</td>
<td>10.9</td>
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<td>In fair perceived health</td>
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<tr>
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<th>Expected Years</th>
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<td>In very good or good perceived health</td>
<td>10.8</td>
</tr>
<tr>
<td>In fair perceived health</td>
<td>5.5</td>
</tr>
<tr>
<td>In bad or very bad perceived health</td>
<td>1.7</td>
</tr>
</tbody>
</table>
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

Acknowledgements
Wilma Nusselder (Erasmus University), Coen van Gool (National Institute for Public health and the Environment) and Jan-Willem Bruggink (Centraal Bureau voor de Statistiek) have contributed to this report and its translation.
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).

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 subgroups: 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 Core 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 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;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Polish life expectancy (LE) at age 65 has increased by 1.6 years for women and 1.2 years for men over the period 2004-2012. By 2012 LE was lower than the EU25 average (21.4 for women and 18.0 for men) by 1.5 years for women and 2.6 years for men.

The HLY series, initiated in 2005 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 39% and 48% of their life without *self-reported long-term activity limitations* respectively.

In 2012 the HLY values for Poland are below the EU25 average (of 8.7 for women and 8.6 for men) by 0.9 year for women and 1.2 years for men. The HLY values remained stable in Poland since 2007, increased between 2010 and 2011 and slightly decreased in 2012 for both sexes.

Note that there are some differences in the wording of the GALI question the years 2005 and in 2006-2008 and 2009-2010 in Poland.

### Prevalence of activity limitation in Poland 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 3 years (2010-2012), Poland tends to display similar or slightly lower prevalence rate of activity limitation at all ages for both sexes.

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 Poland comprised 16337 women and 14418 men aged 16 years and over.
Key points:

In 2012, LE at age 65 in Poland was 19.9 years for women and 15.4 years for men.

Based on the SILC 2012, at age 65, women can expect to spend 7.8 years (39% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY), 7.5 years (38%) with moderate activity limitation and 4.6 years (23%) with severe activity limitation.*

Men of the same age can expect to spend 7.4 years (48% of their remaining life) without activity limitation compared to 4.8 years (31%) with moderate activity limitation and 3.1 years (20%) with severe activity limitation.*

Although total years lived by men were less than those for women, the numbers of years lived in very good or good perceived health and the years lived without chronic morbidity were similar. However, the number of years lived without activity limitation was slightly greater for women than men.

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 Poland


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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

Acknowledgements

Bogdan Wojtyniak (National Institute of Public Health) has contributed to this report and its translation.
Health Expectancy in Portugal

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).


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 subgroups: 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 Core 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 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 2004 to 2012. The wording of the question has been revised in 2008;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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 Portugal and the European Union (EU25) based on SILC (2004-2012)

Key points:

Portuguese life expectancy (LE) at age 65 has increased by 1.3 years for women and men over the period 2004-2012. LE for both sexes was below the EU25 average until 2010 but was similar to the EU25 average in 2011 for women and was slightly below the EU 25 average (21.4 for women and 18.0 for men) in 2012.

The HLY series, initiated in 2004 with the SILC data, shows values for Portugal being in 2012 higher than the EU25 average (8.7 for women and 8.6 for men) by 0.3 and 1.3 years for women and men respectively. In 2012 women and men at age 65 can expect to spend 42% and 56% of their life without self-reported long-term activity limitations respectively.

Since 2006 HLY remained stable for women and men in Portugal, increased notably in 2011 and highly in 2012.

Note that the wording of the GALI question was changed in 2008 to better reflect the EU standard.

Prevalence of activity limitation in Portugal 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 3 years (2010-2012), Portugal tends to display higher prevalence rate of activity limitation at all ages for women and similar for men to the EU27.

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 Portugal comprised 7527 women and 6327 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 Portugal (Health data from SILC 2012)

**Key points:**

In 2012 LE at age 65 in Portugal was 21.3 years for women and 17.6 years for men.

Based on the SILC 2012, at age 65, women spent 9.0 years (42% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.6 years (31%) with moderate activity limitation and 5.7 years (27%) with severe activity limitation.*

Men of the same age spent 9.9 years (56% of their remaining life) without activity limitation compared to 4.2 years (24%) with moderate activity limitation and 3.5 years (20%) with severe activity limitation.*

Although total years lived by men were less than those for women, for all the health expectancies the years of life spent in positive health were greater for men than women. Therefore compared to men, women 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 Portugal**

**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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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](http://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](http://www.eurohex.eu) for more information. Since it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

**Acknowledgements**

Carlos Matias Dias (National Institut of Health) has contributed to this report and its translation.
Health Expectancy in Romania

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).


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 Core 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 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 2007 to 2012. The wording of the question has been revised in 2008;

- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;

- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Romanian life expectancy (LE) at age 65 has increased by 1.5 years for women and 0.8 year for men over the period 2004-2012. By 2012 LE for men and women was largely below the EU25 average (21.4 for women and 18.0 for men).

The HLY series, initiated in 2007 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 29% and 41% of their life without self-reported long-term activity limitations respectively.

The HLY values for Romania are 3.6 years and 2.7 years below the EU25 average (8.7 for women and 8.6 for men) for women and men respectively in 2012. The HLY values decreased strongly between 2009 and 2010 for both sexes, continued a small decrease in 2011 but increased in 2012.

Note that the wording of the GALI question was changed in 2008 and change again in 2010.

Prevalence of activity limitation in Romania 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 3 years (2010-2012), Romania tends to display lower prevalence rate of activity limitation before the age of 50 years for men and 45 years for women but higher prevalence 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 Romania comprised 8259 women and 7547 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 Romania (Health data from SILC 2012)

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th></th>
<th></th>
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<tbody>
<tr>
<td>Without activity limitation</td>
<td>5.1</td>
<td>7.5</td>
<td>5.1</td>
<td></td>
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<tr>
<td>With moderate activity limitation</td>
<td>5.9</td>
<td>5.6</td>
<td>3.0</td>
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<tr>
<td>With severe activity limitation</td>
<td>6.8</td>
<td>10.9</td>
<td></td>
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<tr>
<td>Life Expectancy at age 65 and expected years</td>
<td></td>
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<tr>
<td>Without chronic morbidity</td>
<td>7.1</td>
<td>7.4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>With chronic morbidity</td>
<td>2.7</td>
<td>8.9</td>
<td>6.0</td>
<td></td>
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<tr>
<td>Life Expectancy at age 65 and expected years</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>In very good or good perceived health</td>
<td>3.7</td>
<td>7.4</td>
<td>3.5</td>
<td></td>
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<tr>
<td>In fair perceived health</td>
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</tr>
<tr>
<td>In bad or very bad perceived health</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

Key points:

In 2012, LE at age 65 in Romania was 17.7 years for women and 14.5 years for men.

Based on the SILC 2012 at age 65, women spent 5.1 years (29% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.5 years (42%) with moderate activity limitation and 5.1 years (29%) with severe activity limitation.*

Men of the same age spent 5.9 years (40% of their remaining life) without activity limitation compared to 5.6 years (38%) with moderate activity limitation and 3.0 years (20%) with severe activity limitation.*

Although the total years lived by men were less than those for women, for all the health expectancies the years of life spent in positive health were greater for men than women. Therefore compared to men, women 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 Romania

- INS (2015), *Women and men, life and work partnership*.
- INS (2013), *Evolution of mortality in Romania*;
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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in...

Acknowledgements

Marcela Postelvíc (National Institute of Statistics) has contributed to this report and its translation.
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).

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 subgroups: 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 Core 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 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;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Slovak life expectancy (LE) at age 65 has increased by 1.4 years for women and 1.3 years for men over the period 2004-2012. LE was below the EU25 average (21.4 for women and 18.0 for men) by 3.4 years for men and 2.9 years for women in 2012.

The HLY series, initiated in 2005 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend respectively 17% and 24% of their life without self-reported long-term activity limitations. In 2012 the HLY values for Slovakia are below the EU25 average (8.7 for women and 8.6 for men) by 5.6 years and 5.1 years for women and men respectively. Note that the wording of the GALI question was changed in 2008 to better reflect the EU standard. This led to a clear decrease in HLY for men and women between 2007 and 2008.

Then from 2008 to 2010 HLY remained almost stable for women and men and slightly increased in 2011 and continue to increase in 2012.

Prevalence of activity limitation in Slovakia 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 3 years 2010-2012, Slovakia tends to display higher prevalence rate of activity limitation after the age of 35 years for women and men, this prevalence reaching 100% at age 85 for men.

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 Slovakia comprised 7340 women and 6262 men aged 16 years and over.
Life Expectancy at age 65 and expected years

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<tr>
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<td>With severe activity limitation</td>
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<td>Without activity limitation</td>
<td>3.5</td>
<td>6.7</td>
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Life Expectancy at age 65 and expected years

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<td>Without chronic morbidity</td>
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<td>Without chronic morbidity</td>
<td>5.0</td>
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Life Expectancy at age 65 and expected years

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<td>In very good or good perceived health</td>
<td>2.3</td>
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<td>In fair perceived health</td>
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<td>In bad or very bad perceived health</td>
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<td>In very good or good perceived health</td>
<td>3.2</td>
<td>5.8</td>
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<td>In fair perceived health</td>
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<td>In bad or very bad perceived health</td>
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Key points:

In 2012 LE at age 65 in Slovakia was 18.5 years for women and 14.6 years for men.

Based on the SILC 2012, at age 65, women spent 3.1 years (17% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 8.8 years (48%) with moderate activity limitation and 6.6 years (36%) with severe activity limitation.*

Men of the same age spent 3.5 years (24% of their remaining life) without activity limitation compared to 6.7 years (46%) with moderate activity limitation and 4.4 years (30%) with severe activity limitation.*

Although total years lived by men were less than those for women, for all the health expectancies the number of years of life spent in positive health were greater for men than women. Therefore compared to men, women 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 Slovakia

- Mészáros J. Stredná dĺžka života v zdraví podľa EHS 2009. INFOSTAT Bratislava nov. 2010
**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 (LE₆₅) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually, the life expectancy without any reported activity limitation at age 65 (HLY₆₅), 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](http://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](http://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 *Health Expectancy in ...*

**Acknowledgements**

Michal Katusa (Statistical Office of the Slovak Republic) has contributed to this report and its translation.
EHLEIS Country Reports  
Issue 8 – April 2015

Health Expectancy in Slovenia

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 transition (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).


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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 Core 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 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;
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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). The revision is being evaluated.
Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Slovenia and the European Union (EU25) based on SILC (2005-2012)

Key points:

Slovenian life expectancy (LE) at age 65 has increased by 1.7 years for women and 2.1 years for men over the period 2004-2012. LE was below the EU25 average (21.4 for women and 18.0 for men) in 2012. However gaps are reducing.

The new HLY series, initiated in 2005 with the SILC data, shows that in 2012 women and men at age 65 can expect to spend 33% and 43% of their life without self-reported long-term activity limitations respectively. In 2012 the HLY values for Slovenia are below the EU25 average (8.7 for women and 8.6 for men) for men and women. Between 2005 and 2009 HLY increased for men in Slovenia. For women, HLY increased until 2007 then stabilized. Note that the wording of the GALI question changes in Slovenia in 2010. However, this slightly change hardly explains the strong decrease of HLY observed in 2010 and continued in 2011. In 2012 HLY remained stable for women and increased for men.

Prevalence of activity limitation in Slovenia and in the European Union (EU25) 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 3 years 2010-2012, Slovenia tends to display globally higher prevalence rate of activity limitation at all ages and for both sexes.

These results should be interpreted with caution, samples sizes in the SILC survey vary remarkably ranging between 5342 in Denmark to 40287 in Italy for instance in 2012. In 2012, the sample size for Slovenia comprised 4884 women and 4321 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 Slovenia (Health data from SILC 2012)

Life Expectancy at age 65 and expected years

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<td>With severe activity limitation</td>
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<td>3.8</td>
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Life Expectancy at age 65 and expected years

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<td>With chronic morbidity</td>
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Life Expectancy at age 65 and expected years

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<tr>
<td>In very good or good perceived health</td>
<td>5.2</td>
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<td>In fair perceived health</td>
<td>8.1</td>
<td>6.7</td>
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<tr>
<td>In bad or very bad perceived health</td>
<td>7.7</td>
<td>5.0</td>
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Key points:

In 2012, LE at age 65 in Slovenia was 21.1 years for women and 17.1 years for men.

Based on the SILC 2012, at age 65, women spent 6.9 years (33% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 7.6 years (36%) with moderate activity limitation and 6.6 years (31%) with severe activity limitation.*

Men of the same age spent 7.3 years (43% of their remaining life) without activity limitation compared to 6.0 years (35%) with moderate activity limitation and 3.8 years (22%) with severe activity limitation.*

Although for life expectancy without chronic morbidity and for life expectancy without activity limitation the years of life spent in positive health were greater for women than men, women 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 Slovenia

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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Acknowledgements
Metka Zaletel (National Institute of Public Health) has contributed to this report and its translation.
Health Expectancy in Spain

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 transition (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).

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 subgroups: 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 Core 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.

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* Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
* 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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). The revision is being evaluated.
Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Spain and the European Union (EU25) based on SILC (2004-2012)

Key points:

Spanish life expectancy (LE) at age 65 has increased by 1.3 years for women and 1.2 years for men over the period 2004-2012. LE was above the EU25 average (21.4 for women and 18.0 for men) in 2012.

The new HLY series, initiated in 2004 with the SILC data, shows values for Spain being in 2012 0.3 year above the EU25 average (8.7 for women and 8.6 for men) for women and 0.5 year above for men.

In 2012 women and men at age 65 can expect to spend 39% and 49% of their life without self-reported long-term activity limitations respectively.

Note that the wording of the GALI question was changed in Spain in 2008 to better reflect the EU standard.

This may explain the strong decrease in HLY observed for men and women between 2007 and 2008. Between 2010 and 2011 HLY increased for both sexes but it decreased slightly in 2012.

Prevalence of activity limitation in Spain 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 3 years 2010-2012, Spain tends to display lower prevalence rate of activity limitation at all ages except at age 85 and over where the prevalence become slightly higher than EU27.

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 Spain comprised 14640 women and 13570 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 Spain (Health data from SILC 2012)

Key points:
In 2012, LE at age 65 in Spain was 22.8 years for women and 18.7 years for men.
Based on the SILC 2012, at age 65, women spent 9.0 years (39% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 9.4 years (41%) with moderate activity limitation and 4.4 years (19%) with severe activity limitation.*
Men of the same age spent 9.2 years (49% of their remaining life) without activity limitation compared to 7.0 years (38%) with moderate activity limitation and 2.5 years (13%) with severe activity limitation.*
Although total years lived by men were less than those for women, for life expectancy in very good or good perceived health and for life expectancy without activity limitation the years of life spent in positive health were greater for men than women. Therefore compared to men, women spent a larger number of years and a larger proportion 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 Spain

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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 it inception, EHLEIS is working with a network of correspondents throughout the EU, especially for the production of the yearly country reports Health Expectancy in ...

Acknowledgements
Juan Luis Gutierrez-Fisac (Ministry of Health) has contributed to this report and its translation.
Health Expectancy in Sweden

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 transition (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).

![Graph showing observed and hypothetical morbidity and mortality curves for females, USA, 1980.]

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 subgroups: 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 Core 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 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 2004 to 2012. The wording of the question has been revised in 2008.
- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
- 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), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
Key points:

Swedish life expectancy (LE) at age 65 has increased by 0.4 years for women and 1.0 years for men over the period 2004-2012. LE was above the EU25 average (21.4 for women and 18.0 for men) for men but was below for women in 2012. The new HLY series, initiated in 2004 with the SILC data, shows values for Sweden in 2012 being above the EU25 average (8.7 for women and 8.6 for men) by 6.7 and 5.4 years for women and men respectively. In 2012 women and men at age 65 can expect to spend 73% and 76% of their life without self-reported long-term activity limitations respectively. The HLY trends should be interpreted with caution. Before 2006 (values not displayed) the wording of the GALI question was not comparable with the later years. The new wording was again changed in 2008. Between 2008 and 2010 HLY strongly increased in Sweden for women and men but slightly decreased in 2011. In 2012 HLY slightly increased for both sexes.

Prevalence of activity limitation in Sweden 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 3 years (2010-2012), Sweden tends to display much lower prevalence rate of activity limitation after the age of 30 years for both sexes. Indeed this prevalence reaches only about 35% for men and women at age 85 and over versus 70% and 75% in the European Union.

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 Sweden comprised 3490 women and 3138 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 Sweden (Health data from SILC 2012)**

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Without activity limitation</strong></td>
<td>15.4</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>With moderate activity limitation</strong></td>
<td>3.5</td>
<td>2.8</td>
</tr>
<tr>
<td><strong>With severe activity limitation</strong></td>
<td>2.2</td>
<td>1.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Without chronic morbidity</strong></td>
<td>10.4</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>With chronic morbidity</strong></td>
<td>10.6</td>
<td>8.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Life Expectancy at age 65 and expected years</th>
<th>Women</th>
<th>Men</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>In very good or good perceived health</strong></td>
<td>13.3</td>
<td>12.5</td>
</tr>
<tr>
<td><strong>In fair perceived health</strong></td>
<td>6.3</td>
<td>4.4</td>
</tr>
<tr>
<td><strong>In bad or very bad perceived health</strong></td>
<td>1.5</td>
<td>1.5</td>
</tr>
</tbody>
</table>

Key points:

In 2012, LE at age 65 in Sweden was 21.1 years for women and 18.5 years for men.

Based on the SILC 2012, at age 65, women spent 15.4 years (73% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 3.5 years (17%) with moderate activity limitation and 2.2 years (10%) with severe activity limitation.*

Men of the same age spent 14.0 years (76% of their remaining life) without activity limitation compared to 2.8 years (15%) with moderate activity limitation and 1.7 years (9%) with severe activity limitation.*

Although for all the health expectancies the years of life spent in positive health were greater for women than men, women spent a slightly larger proportion of their life in ill health.

These results should be interpreted cautiously depending on response rate problems in the SILC survey.

* These may not sum to Life Expectancy due to rounding

**Publications and reports on health expectancies for Sweden**

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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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 indifferent 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).


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- Prevalence of activity limitation in the country of interest and in the European Union (EU27) based on the GALI question by sex and age group;
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- Trends in total life expectancy (LE) and life expectancy without activity limitation (HLY) at age 65 in the European Union (EU25), distinguishing between Western Europe (EU15) and new members (EU10).

References


* 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.
**Key points:**

UK life expectancy (LE) at age 65 has increased by 1.3 years for women and 1.8 years for men over the period 2004-2012. In 2012 LE was slightly above the EU25 average of 8.0 for men and below the EU25 average of 21.4 for women.

The new HLY series, initiated in 2005 with the SILC data, shows values for the UK being in 2012 above the EU25 average (8.7 for women and 8.6 for men) by 1.8 years for women and 1.9 year for men. Women and men at age 65 can expect to spend 50% and 57% of their life without self-reported long-term activity limitations respectively. HLY increased for men in the UK between 2005 and 2009, stabilized between 2009 and 2010, increased in 2011 but decreased in 2012. For women HLY remained almost stable between 2005 and 2010 with small yearly fluctuations with a trend to increase between 2009 and 2011, but in 2012 HLY strongly decreased for women. The wording of the GALI question was not revised in UK in 2008, but the data source and questions did change; the survey source changed from the General Lifestyle Survey to the Family Resources Survey from April 2012. The EU-SILC data for 2012 was based only on data collected between April 2012 and September 2012 and therefore the available sample for the UK was reduced compared with previous years. These factors in combination may be responsible for the change detected.

The FRS data collection in the UK is used to estimate the population prevalence of disability and it additionally collects data on benefits. There may be a greater propensity to report activity limitations in this source for that reason. Question changes can be seen at: [http://www.eurohex.eu/pdf/Reports_2014/2014_TR4%206_SILC%20questions_Backtranslation.pdf](http://www.eurohex.eu/pdf/Reports_2014/2014_TR4%206_SILC%20questions_Backtranslation.pdf)

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

**Prevalence of activity limitation in United Kingdom 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, United Kingdom tends to display a lower prevalence rate of activity limitation after the age of 40 years for men and women, reaching almost EU27 at age 85 for men.

These results should be interpreted with caution as samples sizes in the SILC survey vary markedly; for instance in 2012 they ranged from 5,342 in Denmark to 40,287 in Italy. In 2012, the sample size for United Kingdom comprised 9,689 women and 8,650 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 United Kingdom (Health data from SILC 2012)

Key points:

In 2012, LE at age 65 in United Kingdom was 20.9 years for women and 18.5 years for men.

Based on the SILC 2012 at age 65, women spent 10.5 years (50% of their remaining life) without activity limitation (corresponding to Healthy Life Years, HLY), 4.6 years (22%) with moderate and 5.8 years (28%) with severe activity limitation.*

Men of the same age spent 10.5 years (57% of their remaining life) without activity limitation, 4.0 years (22%) with moderate and 3.9 years (21%) with severe activity limitation.*

For all the health expectancies the years of life spent in positive health were greater for women than men; however, because women have longer life expectancies than men, they experience a slightly higher proportion of their lives in unfavourable health states than men.

These results should be interpreted cautiously given the lack of the institutional population, such as people living in residential and nursing homes, which constitute a higher proportion of those aged 65 years.

*These may not sum to Life Expectancy due to rounding

Publications and reports on health expectancies for United Kingdom

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 (LE65) 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 favorable. The number of HLY did not change from 2005 to 2012. Actually the life expectancy without any reported activity limitation at age 65 (HLY65), 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.

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