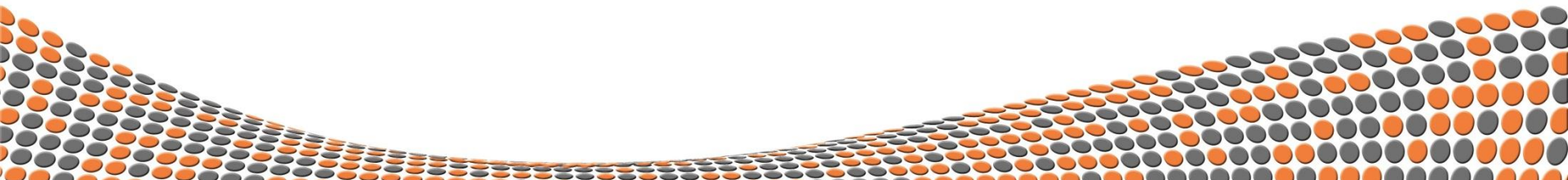


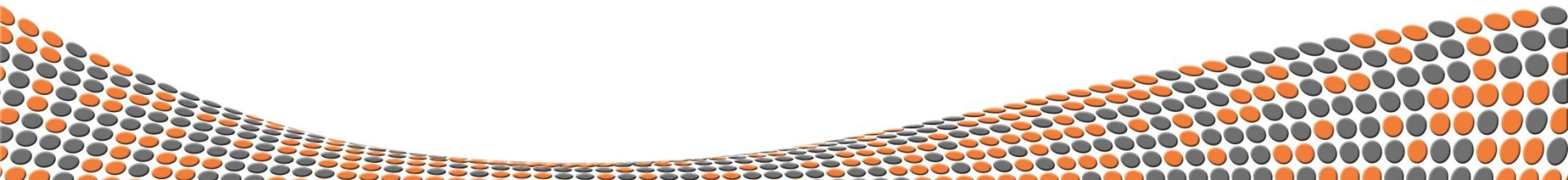
# 2008-2010 HLY figures

**Jean-Marie Robine for the EHLEIS Group**



# Healthy Life Years (HLY)

- Summary measure (health expectancy)
- Selected as part of the Lisbon Strategy (2000-2010) to assess the quality of life and functional health status of Europeans
- Part of the European Community Health Indicators (ECHI)
- Set as the overarching target of the first partnership of Innovation Union: **an increase in HLY of two years by 2020**

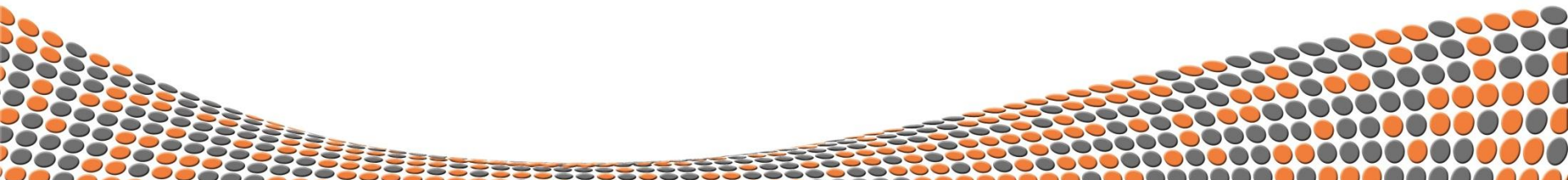


# Many concepts of health

- **HLY is a Disability-free life expectancy (DFLE)**

$$(HLY/LE)*100$$

- **is the proportion of the remaining years free of disability**

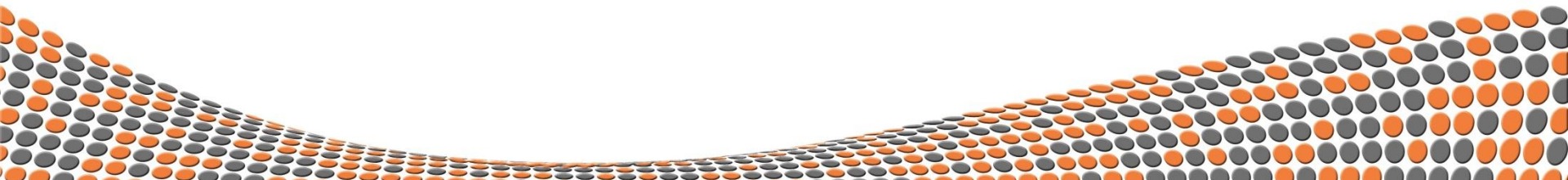


# Global activity limitation (GALI)

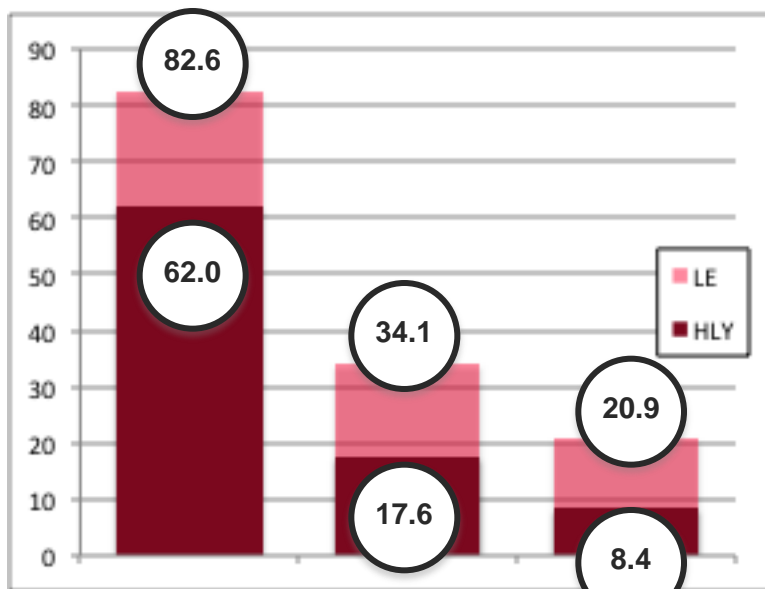
*For at least the past 6 months, to what extent have you been limited because of a health problem in activities people usually do?*

**Would you say you have been...**

- 1.severely limited**
- 2.limited but not severely, or**
- 3.not limited at all**



## Life expectancy (LE) and the number of Healthy Life Years (HLY) in the European Union (EU27) in 2009

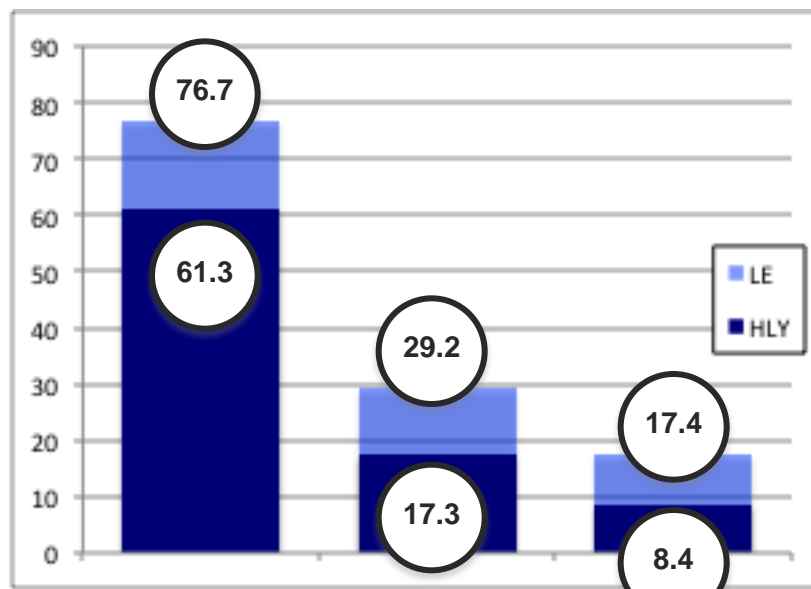


At birth

At age 50

At age 65

**Women**



At birth

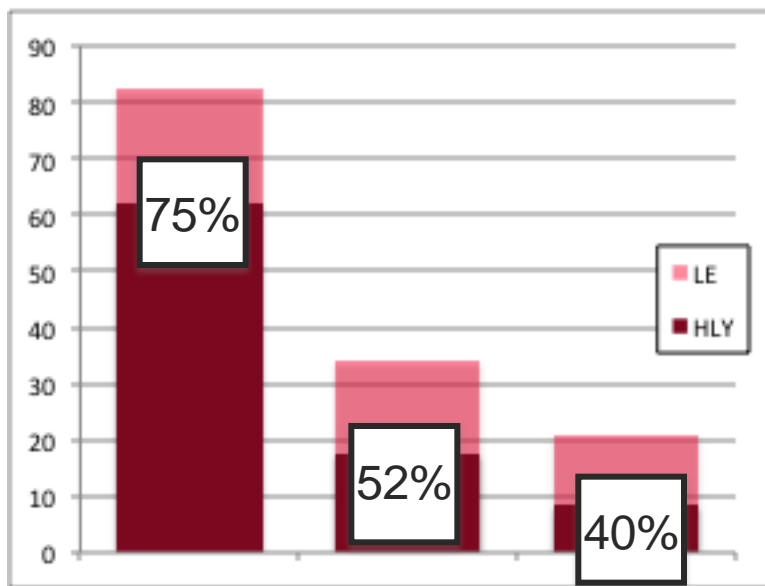
At age 50

At age 65

**Men**

**The key figures**

## Life expectancy (LE) and the number of Healthy Life Years (HLY) in the European Union (EU27) in 2009

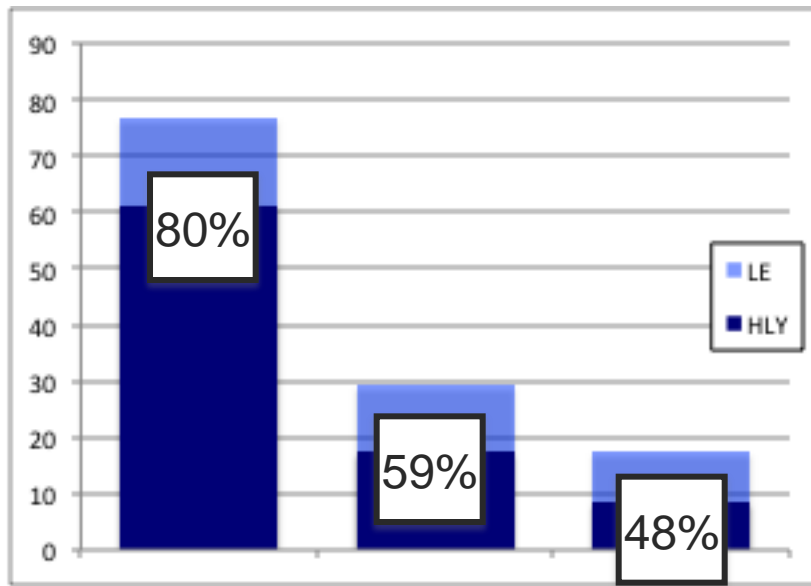


At birth

At age 50

At age 65

**Women**



At birth

At age 50

At age 65

**Men**

**The key figures**

# Healthy Life Years (HLY) in the European Union - Men - EHLEIS Release April 19, 2012 (www.eurohex.eu)

COUNTRY/ /YEAR	Life expectancy (years)			Healthy Life Years (HLY)			Proportion HLY/LE (%)			Mean HLY 2008-2010	Gap HLY 2010-2008
	2008	2009	2010	2008	2009	2010	2008	2009	2010		
Austria	77.8	77.6	77.9	58.3	59.5	59.3	75.0	76.7	76.1	59.0	1.0
Belgium	76.9	77.3	:	63.3	64.0	:	82.3	82.8	:	:	:
Bulgaria	69.8	70.1	70.2	62.1	62.1	63.0	89.0	88.6	89.7	62.4	0.9
Cyprus	78.5	78.7	:	64.5	65.3	:	82.1	83.0	:	:	:
Czech Republic	74.1	74.2	74.5	61.2	61.1	62.2	82.7	82.3	83.5	61.5	1.0
Denmark	76.5	76.9	77.2	62.1	61.3	62.3	81.1	79.7	80.7	61.9	0.2
Estonia	68.7	69.8	70.7	53.0	55.2	54.0	77.2	79.1	76.4	54.1	1.0
Finland	76.5	76.6	76.9	58.6	58.1	58.5	76.7	75.8	76.0	58.4	-0.1
France	77.8	78.0	78.2	62.7	62.7	61.9	80.6	80.4	79.1	62.4	-0.8
Germany	77.6	77.8	78.0	56.3	57.1	57.9	72.6	73.4	74.3	57.1	1.6
Greece	77.7	77.8	78.4	65.8	66.0	66.4	84.7	84.9	84.7	66.1	0.6
Hungary	70.0	70.3	70.7	54.8	55.8	56.4	78.4	79.4	79.7	55.7	1.6
Ireland	77.8	77.4	78.7	63.5	63.6	65.9	81.6	82.2	83.8	64.3	2.4
Italy	79.1	79.4	:	63.0	63.4	:	79.6	79.9	:	:	:
Latvia	67.0	68.1	68.6	51.8	52.8	53.5	77.3	77.5	78.0	52.7	1.7
Lithuania	66.3	67.5	68.0	54.8	57.3	57.7	82.7	84.9	85.0	56.6	2.9
Luxembourg	78.1	78.1	77.9	64.8	65.5	64.5	83.0	83.9	82.8	64.9	-0.3
Malta	76.9	77.8	79.1	68.9	69.6	70.2	89.6	89.4	88.6	69.6	1.3
Netherlands	78.4	78.7	78.9	62.4	61.7	61.1	79.6	78.5	77.4	61.7	-1.3
Poland	71.3	71.5	72.1	58.5	58.3	58.5	82.2	81.5	81.1	58.4	0.0
Portugal	76.2	76.5	76.7	59.1	58.2	59.2	77.6	76.0	77.1	58.8	0.1
Romania	69.7	69.8	:	60.2	59.8	:	86.3	85.6	:	:	:
Slovak Republic	70.8	71.4	71.7	52.1	52.4	52.3	73.5	73.4	73.0	52.3	0.2
Slovenia	75.5	75.9	76.4	59.5	60.5	b	78.7	79.7	b	b	b
Spain	78.2	78.7	79.0	64.1	62.8	64.3	81.9	79.8	81.3	63.7	0.2
Sweden	79.2	79.4	79.6	69.4	70.7	71.7	87.6	89.0	90.0	70.6	2.3
United Kingdom	77.8	78.3	:	65.0	65.1	:	83.5	83.1	:	:	:
<b>EU27</b>	<b>76.4</b>	<b>76.7</b>	:	<b>61.1</b>	<b>61.3</b>	:	<b>80.0</b>	<b>79.9</b>	:	:	:
<b>Maximun</b> (country)	79.2 (Sweden)	79.4 (Sweden)	79.6 (Sweden)	69.4 (Sweden)	70.7 (Sweden)	71.7 (Sweden)	89.6 (Malta)	89.4 (Malta)	90.0 (Sweden)	70.6 (Sweden)	2.9 (Lithuania)
<b>Minimum</b> (country)	66.3 (Lthuania)	67.5 (Lthuania)	68.0 (Lthuania)	51.8 (Latvia)	52.4 (Slovakia)	52.3 (Slovakia)	72.6 (Germany)	73.4 (Ger/Slovakia)	73.0 (Slovakia)	52.3 (Slovakia)	-1.3 (Netherlands)
<b>Gap Min-Max</b>	12.9	11.9	11.6	17.6	18.3	19.4	17.0	16.0	17.0	18.3	4.2
<b>COUNTRY/ /YEAR</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>2008-2010</b>	<b>2010-2008</b>
	<b>Life expectancy (years)</b>			<b>Healthy Life Years (HLY)</b>			<b>Proportion HLY/LE (%)</b>			<b>Mean HLY</b>	<b>Gap HLY</b>

## Healthy Life Years (HLY) in the European Union - Women - EHLEIS Release April 19, 2012 (www.eurohex.eu)

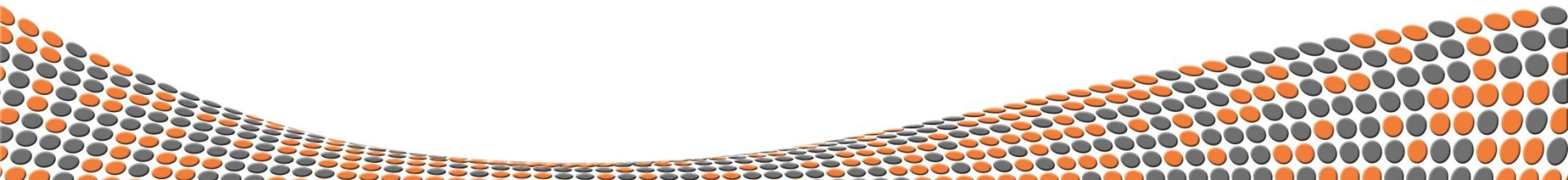
COUNTRY/ /YEAR	Life expectancy (years)			Healthy Life Years (HLY)			Proportion HLY/LE (%)			Mean HLY 2008-2010	Gap HLY 2010-2008
	2008	2009	2010	2008	2009	2010	2008	2009	2010		
Austria	83.3	83.2	83.5	59.7	60.8	60.7	71.6	73.0	72.6	60.4	1.0
Belgium	82.6	82.8	:	64.2	63.7	:	77.8	76.9	:	:	:
Bulgaria	77.0	77.4	77.4	65.7	65.9	67.2	85.2	85.1	86.9	66.3	1.5
Cyprus	83.1	83.7	:	65.5	66.4	:	78.8	79.4	:	:	:
Czech Republic	80.5	80.5	80.9	63.4	62.7	64.6	78.8	77.8	79.8	63.6	1.2
Denmark	81.0	81.1	81.4	61.0	60.3	61.9	75.3	74.4	76.0	61.1	0.9
Estonia	79.5	80.2	80.8	57.5	59.2	58.1	72.3	73.8	72.0	58.3	0.6
Finland	83.3	83.5	83.5	59.5	58.3	57.8	71.4	69.9	69.2	58.5	-1.7
France	84.8	85.0	85.3	64.6	63.3	63.5	76.1	74.4	74.4	63.8	-1.1
Germany	82.7	82.8	83.0	57.7	58.0	58.6	69.8	70.1	70.6	58.1	0.9
Greece	82.3	82.7	82.8	66.1	66.7	67.6	80.3	80.7	81.7	66.8	1.5
Hungary	78.3	78.4	78.6	58.3	58.3	58.6	74.5	74.3	74.6	58.4	0.3
Ireland	82.4	82.5	83.2	65.0	65.1	66.9	78.8	79.0	80.4	65.7	1.9
Italy	84.5	84.6	:	61.9	62.5	:	73.2	73.9	:	:	:
Latvia	77.8	78.0	78.4	54.6	56.1	56.5	70.2	71.8	72.1	55.7	1.9
Lithuania	77.6	78.7	78.9	59.9	61.1	62.3	77.2	77.7	79.0	61.1	2.4
Luxembourg	83.1	83.3	83.5	64.4	66.2	66.0	77.5	79.4	79.0	65.5	1.6
Malta	81.9	82.7	83.6	72.1	71.0	71.6	88.0	85.8	85.7	71.6	-0.5
Netherlands	82.5	82.9	83.0	59.9	60.0	60.2	72.7	72.4	72.6	60.0	0.3
Poland	80.0	80.1	80.7	63.0	62.5	62.2	78.7	77.9	77.1	62.6	-0.8
Portugal	82.4	82.6	82.8	57.6	56.2	56.6	69.9	68.0	68.4	56.8	-1.0
Romania	77.2	77.4	:	62.8	61.7	:	81.4	79.7	:	:	:
Slovak Republic	79.0	79.1	79.3	52.6	52.6	52.1	66.6	66.5	65.7	52.4	-0.5
Slovenia	82.6	82.7	83.1	60.8	61.3	b	73.7	74.2	b	b	b
Spain	84.5	84.9	85.3	63.6	62.3	63.7	75.3	73.4	74.7	63.2	0.1
Sweden	83.3	83.5	83.6	69.0	69.6	71.0	82.9	83.3	84.9	69.9	2.0
United Kingdom	81.9	82.5	:	66.3	66.0	:	81.0	80.1	:	:	:
<b>EU27</b>	<b>82.4</b>	<b>82.6</b>	:	<b>62.2</b>	<b>62.0</b>	:	<b>75.5</b>	<b>75.0</b>	:	:	:
<b>Maximum</b>	84.8	85.0	85.3	72.1	71.0	71.6	88.0	85.8	86.9	71.6	2.4
	(France)	(France)	(France)	(Malta)	(Malta)	(Malta)	(Malta)	(Malta)	(Bugaria)	(Malta)	(Lithuania)
<b>Minimum</b>	77.0	77.4	77.4	52.6	52.6	52.1	66.6	66.5	65.7	52.4	-1.7
	(Bulgaria)	(Bulgaria)	(Bulgaria)	(Slovakia)	(Slovakia)	(Slovakia)	(Slovakia)	(Slovakia)	(Slovakia)	(Slovakia)	(Finland)
<b>Gap Min-Max</b>	7.8	7.6	7.9	19.5	18.4	19.5	21.4	19.3	21.2	19.1	4.1
/YEAR	2008	2009	2010	2008	2009	2010	2008	2009	2010	2008-2010	2010-2008
COUNTRY/	Life expectancy (years)			Healthy Life Years (HLY)			Proportion HLY/LE (%)			Mean HLY	Gap HLY



Healthy Life Years (HLY) -Gaps between Men and Women - EHLEIS Release April 19, 2012 (www.eurohex.eu)

COUNTRY/ /YEAR	Life expectancy (years)			Healthy Life Years (HLY)			Proportion HLY/LE (%)			Mean HLY 2008-2010
	2008	2009	2010	2008	2009	2010	2008	2009	2010	
Austria	5.5	5.6	5.6	1.4	1.3	1.4	-3.4	-3.7	-3.5	1.4
Belgium	5.7	5.5	:	0.9	-0.3	:	-4.5	-5.9	:	:
Bulgaria	7.2	7.3	7.2	3.6	3.8	4.2	-3.8	-3.5	-2.8	3.9
Cyprus	4.6	5.0	:	1.0	1.1	:	-3.3	-3.6	:	:
Czech Republic	6.4	6.3	6.4	2.2	1.6	2.4	-3.9	-4.5	-3.7	2.1
Denmark	4.5	4.2	4.2	-1.1	-1.0	-0.4	-5.8	-5.3	-4.7	-0.8
Estonia	10.8	10.4	10.1	4.5	4.0	4.1	-4.9	-5.3	-4.4	4.2
Finland	6.8	6.9	6.6	0.9	0.2	-0.7	-5.3	-5.9	-6.8	0.1
France	7.0	7.0	7.1	1.9	0.6	1.6	-4.5	-6.0	-4.7	1.4
Germany	5.1	5.0	5.0	1.4	0.9	0.7	-2.8	-3.3	-3.7	1.0
Greece	4.6	4.9	4.4	0.3	0.7	1.2	-4.4	-4.2	-3.0	0.7
Hungary	8.3	8.1	7.9	3.5	2.5	2.2	-3.9	-5.1	-5.1	2.7
Ireland	4.6	5.1	4.5	1.5	1.5	1.0	-2.8	-3.2	-3.4	1.3
Italy	5.4	5.2	:	-1.1	-0.9	:	-6.4	-6.0	:	:
Latvia	10.8	9.9	9.8	2.8	3.3	3.0	-7.1	-5.7	-5.9	3.0
Lithuania	11.3	11.2	10.9	5.1	3.8	4.6	-5.5	-7.2	-6.0	4.5
Luxembourg	5.0	5.2	5.6	-0.4	0.7	1.5	-5.5	-4.5	-3.8	0.6
Malta	5.0	4.9	4.5	3.2	1.4	1.4	-1.6	-3.6	-2.9	2.0
Netherlands	4.1	4.2	4.1	-2.5	-1.7	-0.9	-6.9	-6.1	-4.8	-1.7
Poland	8.7	8.6	8.6	4.5	4.2	3.7	-3.5	-3.6	-4.0	4.1
Portugal	6.2	6.1	6.1	-1.5	-2.0	-2.6	-7.7	-8.0	-8.7	-2.0
Romania	7.5	7.6	:	2.6	1.9	:	-4.9	-5.9	:	:
Slovak Republic	8.2	7.7	7.6	0.5	0.2	-0.2	-6.9	-6.9	-7.3	0.2
Slovenia	7.1	6.8	6.7	1.3	0.8	:	-5.0	-5.5	:	b
Spain	6.3	6.2	6.3	-0.5	-0.5	-0.6	-6.6	-6.4	-6.6	-0.5
Sweden	4.1	4.1	4.0	-0.4	-1.1	-0.7	-4.7	-5.7	-5.1	-0.7
United Kingdom	4.1	4.2	:	1.3	0.9	:	-2.5	-3.0	:	:
<b>EU27</b>	<b>6.0</b>	<b>5.9</b>	:	<b>1.1</b>	<b>0.7</b>	:	<b>-4.5</b>	<b>-4.9</b>	:	:
<b>Maximun</b>	11.3 (Lithuania)	11.2 (Lithuania)	10.9 (Lithuania)	5.1 (Lithuania)	4.2 (Poland)	4.6 (Lithuania)	-7.7 (Portugal)	-8.0 (Portugal)	-8.7 (Portugal)	4.5 (Lituania)
<b>Minimum</b>	4.1 (Sw/UK,/NI)	4.1 Sweden	4.0 Sweden	0.3 (Greece)	0.2 (Fin/Slovekia)	0.2 (Slovekia)	-1.6 (Malta)	-3.0 (U. Kingdom)	-2.8 (Bulgaria)	0.1 (Finland)
<b>Gap Min-Max</b>	:	:	:	:	:	:	:	:	:	:
COUNTRY/ /YEAR	2008	2009	2010	2008	2009	2010	2008	2009	2010	Mean HLY 2008-2010
	Life expectancy (years)			Healthy Life Years (HLY)			Proportion HLY/LE (%)			

# SELF-PERCEIVED HEALTH



*How is your health in general? Is it...*

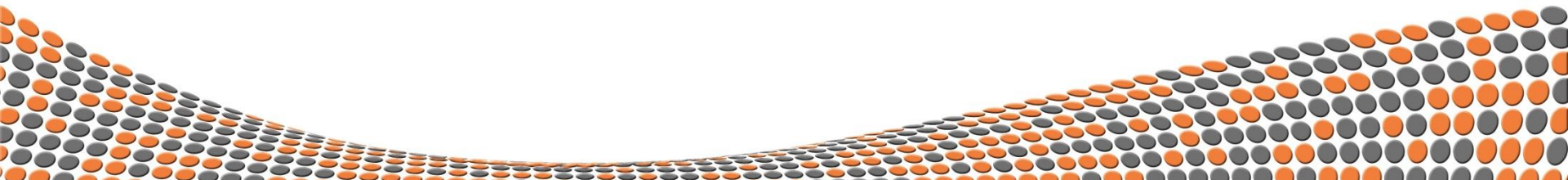
**1. Very good**

**2. Good**

**3. Fair**

**4. Bad**

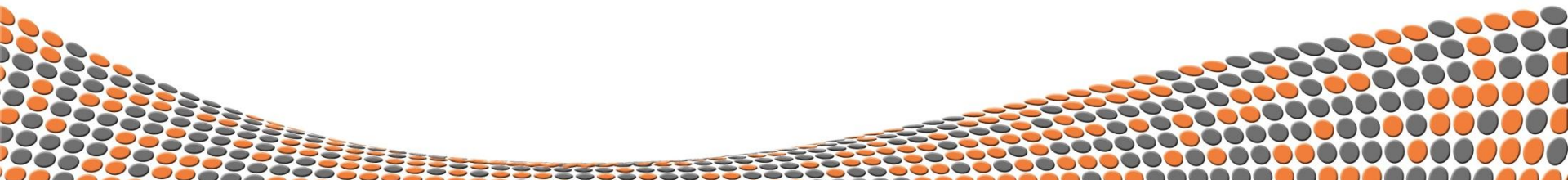
**5. Very bad**



LEI good perceived health (LEGPH) in the European Union - Men at age 55 - EH - EIS Release April 19, 2012 (www.eurohex.eu)

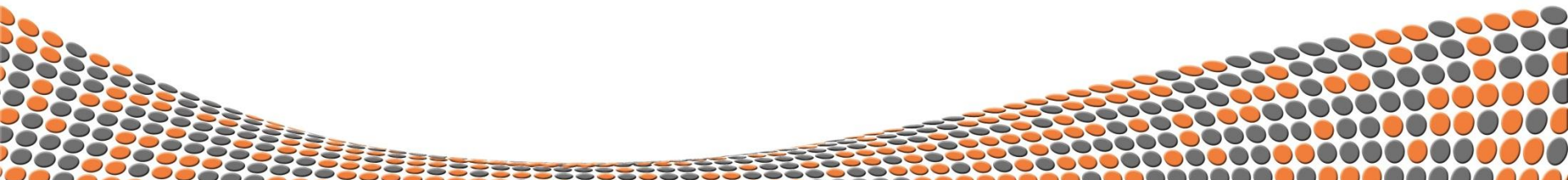
COUNTRY/ /YEAR	Life expectancy (years)			LEI good perceived health (YGPH)			Proportion YGPH/LEI (%)			Mean YGPH 2008-2010	Gap YGPH 2010-2008
	2008	2009	2010	2008	2009	2010	2008	2009	2010		
Austria	17.7	17.7	17.9	7.0	7.9	7.4	39.5	44.5	41.3	7.4	0.4
Belgium	17.3	17.5	:	9.1	9.4	:	52.5	54.1	:	6.2	:
Bulgaria	13.5	13.8	13.6	2.8	2.9	3.2	20.4	21.1	23.2	3.0	0.4
Cyprus	18.0	18.1	:	6.8	7.0	:	37.8	38.4	:	4.6	:
Czech Republic	15.3	15.2	15.5	3.0	3.2	3.2	19.4	20.7	20.9	3.1	0.2
Denmark	16.6	16.8	17.0	10.4	9.7	10.0	62.5	57.7	58.9	10.0	-0.4
Estonia	13.6	14.0	14.2	1.9	2.0	2.7	13.9	14.4	19.1	2.2	0.8
Finland	17.5	17.3	17.5	6.9	6.1	6.1	39.3	35.5	34.9	6.4	-0.8
France	18.5	18.7	18.9	6.8	7.1	7.0	36.6	37.7	36.8	7.0	0.2
Germany	17.5	17.6	17.8	6.1	6.4	6.3	35.0	36.4	35.3	6.3	0.2
Greece	17.8	18.1	18.5	7.4	7.0	7.1	41.5	38.5	38.5	7.2	-0.3
Hungary	13.9	14.0	14.1	2.3	2.3	1.8	16.6	16.7	12.6	2.1	-0.5
Ireland	16.8	17.2	18.1	10.4	10.7	11.6	62.0	62.0	63.9	10.9	1.2
Italy	18.2	18.3	:	5.1	5.1	:	27.9	28.0	:	3.4	:
Latvia	13.0	13.4	13.3	1.5	1.9	1.8	11.3	14.2	13.5	1.7	0.3
Lithuania	13.4	13.4	13.5	1.2	1.4	1.1	9.0	10.8	8.0	1.2	-0.1
Luxembourg	17.4	17.6	17.3	7.7	8.0	8.4	44.1	45.7	48.5	8.0	0.7
Malta	16.8	16.8	18.4	5.0	5.4	5.5	29.9	32.4	29.8	5.3	0.5
Netherlands	17.4	17.6	17.7	10.8	10.4	10.6	62.0	59.0	59.7	10.6	-0.2
Poland	14.8	14.8	15.1	1.9	2.1	2.3	12.8	14.0	14.9	2.1	0.4
Portugal	16.9	17.1	17.1	2.1	2.5	2.6	12.7	14.8	15.1	2.4	0.5
Romania	14.0	14.0	:	3.8	3.8	:	26.8	27.0	:	2.5	:
Slovak Republic	13.8	14.1	14.0	2.2	2.1	2.4	16.2	15.1	17.5	2.2	0.2
Slovenia	16.4	16.4	16.8	4.9	4.5	4.6	30.1	27.3	27.3	4.7	-0.3
Spain	18.1	18.3	18.5	7.9	7.7	7.5	43.4	41.9	40.2	7.7	-0.4
Sweden	18.0	18.2	18.3	11.3	11.3	11.7	62.6	62.2	63.7	11.4	0.4
United Kingdom	17.7	18.1	:	10.6	10.7	:	59.6	58.9	:	7.1	:
EU27	17.2	17.4	:	6.4	6.5	:	37.3	37.7	:	4.3	:
Maximum (country)	18.5	18.7	18.9	11.3	11.3	11.7	62.6	62.2	63.9	11.4	1.2
Minimum (country)	13.0	13.4	13.3	1.2	1.4	1.1	9.0	10.8	8.0	1.2	-0.8
Gap Min-Max	5.5	5.3	5.6	10.1	9.9	10.6	53.6	51.4	55.9	10.2	2.0
COUNTRY/ /YEAR	Life expectancy (years)			LEI good perceived health (YGPH)			Proportion YGPH/LEI (%)			Mean YGPH 2008-2010	Gap YGPH 2010-2008
	2008	2009	2010	2008	2009	2010	2008	2009	2010		

# CHRONIC MORBIDITY



*Do you have any chronic illness or condition?*

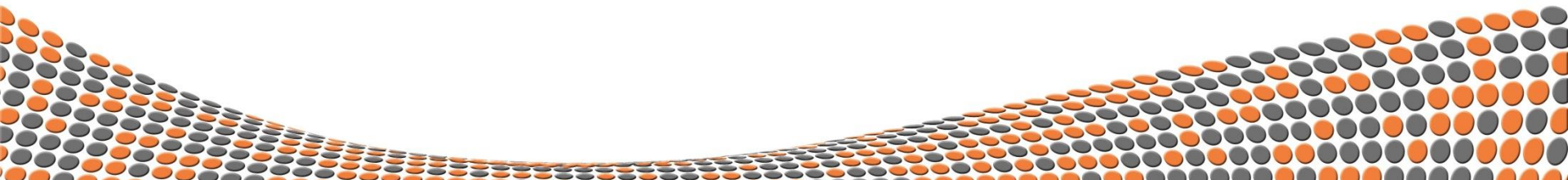
1. Yes
2. No



**HLY Release April 19, 2012**

**FOR EACH OF THE 27 MEMBER STATES**

**Annual country report**



## Health Expectancy in Belgium

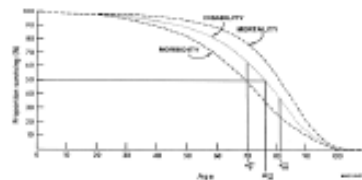
### What is health expectancy?

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

### How is the effect of longer life measured?

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

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



\*The "mortality" curve is the number of years of continuous life expected at birth and at age 50 respectively.  
 \*\*The "disability" curve is the number of years of disability-free survival expected at birth and at age 50 respectively.

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

### How do we compare health expectancies?

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

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

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

Further details on the MEHM, the European surveys and health expectancy calculation and interpretation can be found on [www.eurohex.eu](http://www.eurohex.eu).

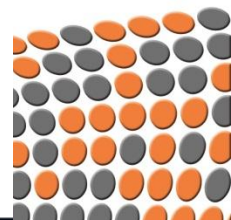
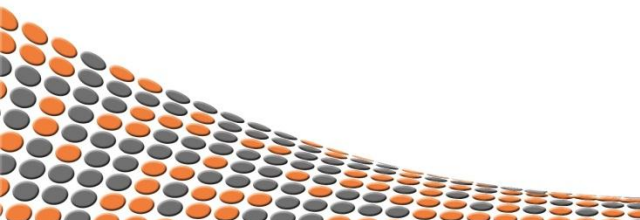
### What is in this report?

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

- Life expectancies and Healthy Life Years (HLY) at age 65 for the country of interest and for the overall 25 (27 after 2007) European Union member states (EU25 then EU27), using the SILC question on long term health related disability, known as the GALI (Global Activity Limitation Indicator), from 2004 to 2009. The wording of the question has been revised in 2008. When available, we provide previous HLY series based on the disability question of the 1995-2001 European Community Household Panel (ECHP);
- Health expectancies based on the two additional dimensions of health (chronic morbidity and self-perceived health) for the country of interest, based on SILC 2009;
- The correlation between life expectancies and HLY at age 50 in 2005 (EU25) and 2009 (EU27) for the member states.

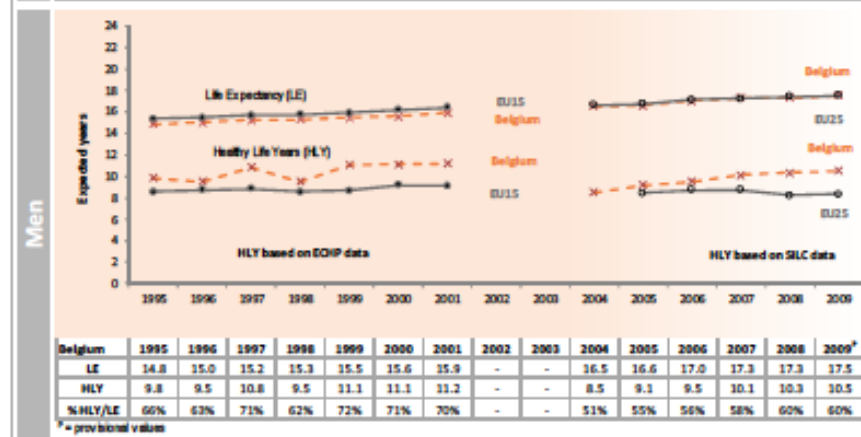
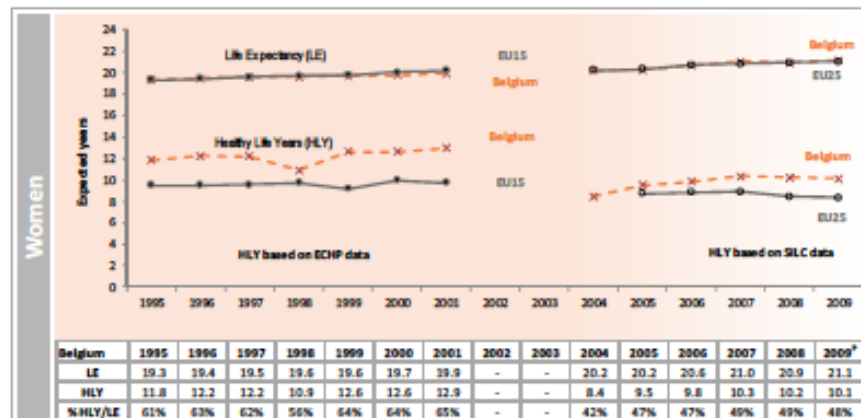
#### References

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





Life expectancy (LE) and Healthy Life Years (HLY) at age 65 for Belgium and the European Union (EU15 and EU25) based on ECHP (1995-2001) and SILC (2004-2009)



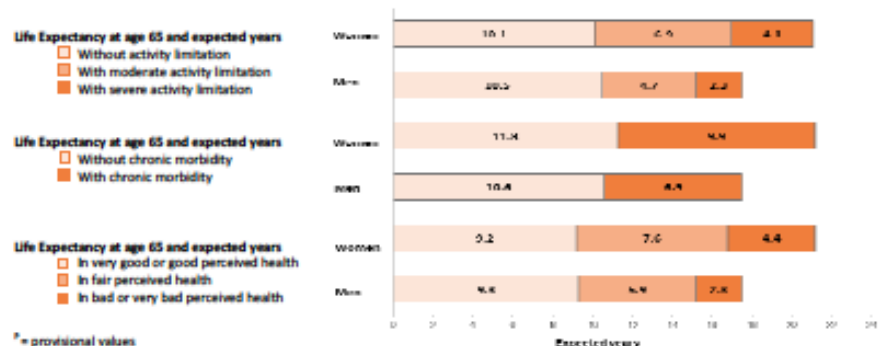
**Key points:**

Belgian life expectancy (LE) at age 65 has increased by 1.5 years for women and 2.0 years for men over the 1999-2009 period: LE for men between 1995-2001 was slightly below the EU15 average. By 2009 LE for both sexes was close to the EU27 average (20.7 for women and 17.2 for men).

Over the 1995-2001 period, health expectancy based on activity limitation (HLY) at age 65 from the ECHP data increased in Belgium. The proportion of HLY (or years without self-reported limitations due to health condition or disability), within the total expected years, slightly increased for both sexes between 1995 and 2001, being close to 65% for women and 70% for men in 2001. Between 1995 and 2001 HLY in Belgium was above the EU15 average.

The new HLY series, initiated in 2004 with the SILC data, shows values for Belgium being in 2009 about 2 years above the EU27 average (8.2 for women and men). In 2009 women and men at age 65 can expect to spend 48% and 60% of their life without self-reported long-term activity limitations respectively. HLY continually increased for men in Belgium between 2004 and 2009. For women HLY increased until 2007 but tends to stagnate/decrease since that year. The wording of the GALI question has not needed to be changed in Belgium since the new HLY series was initiated.

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 2009<sup>a</sup>)



<sup>a</sup> = provisional values

**Key points:**

In 2009, LE at age 65 in Belgium was 21.1 years for women and 17.5 years for men.

Based on the SILC 2009, at age 65, women spent 10.1 years (48% of their remaining life) without activity limitation (corresponding to Healthy Life Years (HLY)), 6.9 years (33%) with moderate activity limitation and 4.1 years (19%) with severe activity limitation.\*

Men of the same age spent 10.5 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.\*

Although the total years lived by men were less than those for women, the number of years lived in very good or good perceived health and the years lived without activity limitation were almost similar. 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 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, and in some countries the small sample size. The sample size for Belgium comprised 1168 women and 1023 men aged 65+ years in 2009.

\* These may not sum to Life Expectancy due to rounding

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

- Van Oyen H., Charafeddine R., Deboosere P., Cox B., Lorant V., Nusselder W., & Demarest S. Contribution of mortality and disability to the secular trend in health inequality at the turn of century in Belgium. *Eur J of Public Health*. 2011, 21(6):781-787.
- Charafeddine R., Gdeyne S., Deboosere P., Berger N., Demarest S., Van Oyen H. Social inequalities in Healthy Life Expectancy. Alternative methods of estimation in the absence of the national census. *WV-ISP, Direction Opérationnelle Santé Publique et Surveillance*, 2011: Bruxelles, N° de depot legal:0/2011/2505/41.
- Van Oyen H., Charafeddine R., Deboosere P., Cox B., Lorant V., Demarest S. The evolution of social inequality in health expectancy. In: Van Oyen H., Deboosere P., Lorant V., Charafeddine R (Eds). *Social inequality in health in Belgium. Series Society and Future* (In Dutch: Samenleving en Toekomst). Federaal Wetenschapsbeleid. Academia Press, Chapter 3: 27-43, Gent, 2011.
- Van Oyen H., Cox B., Demarest S., Deboosere P., Lorant V. Trends in health expectancy indicators in the older adult population in Belgium between 1997 and 2004. *Eur J Ageing*. 2008 Jun;5(2):137-146.
- Cox B., Van Oyen H., Cambois E., Jagger C., Le Roy S., Robine JM, Romieu I. The reliability of the Minimal European Health Module. *Int J Public Health*. 2009 (54): 55-60.
- Van Oyen H., Deboosere P. Tendances dans la sante de la population en Belgique entre 1997 et 2004 / Tendensen in de volkgezondheid in België tussen 1997 en 2004. *Revue Belge de Sécurité Sociale, 2008* :245-283 / *Belgisch Tijdschrift voor Sociale Zekerheid*, 2008:249-287.
- Abatih E., Van Oyen H., Bossuyt N., & Bruckers L. Variance estimation methods for health expectancy by relative socio-economic status. *Eur J of Epidemiology*. 2008 (23): 243-249.

## Life and health expectancies at age 65 in the European Union in 2009

### Life Expectancy at age 65 and expected years

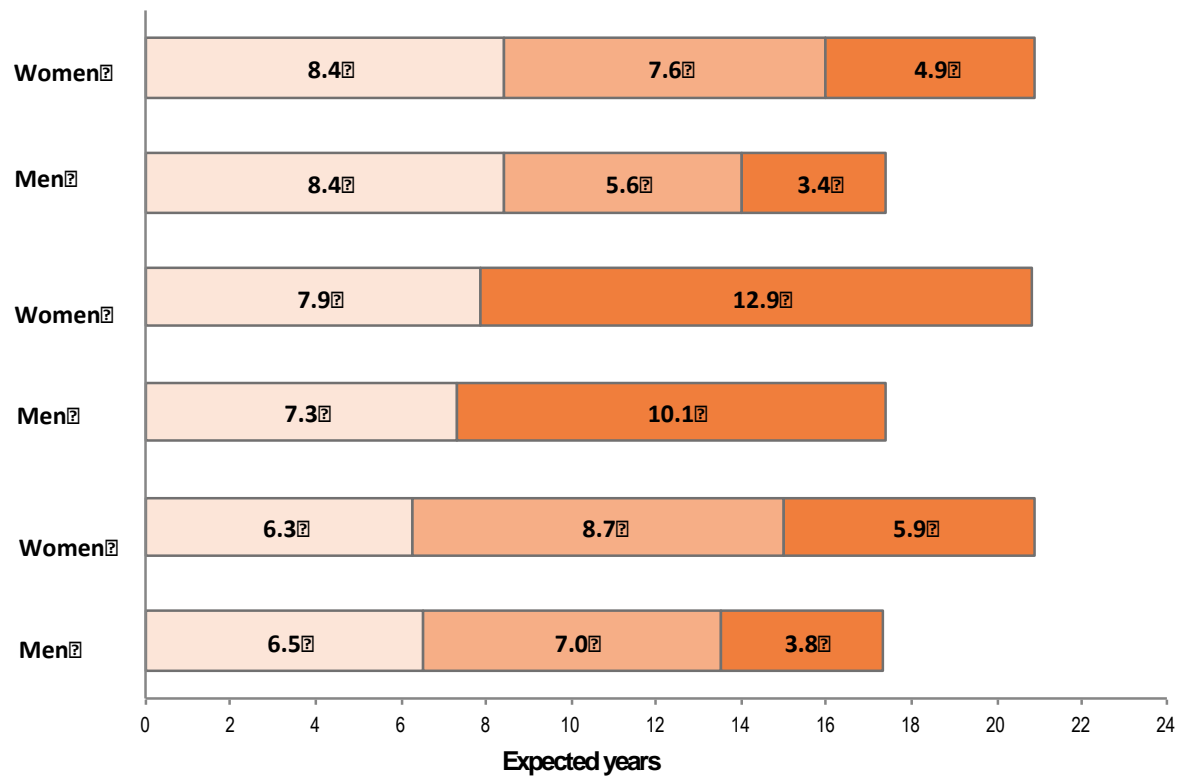
- Without activity limitation
- With moderate activity limitation
- With severe activity limitation

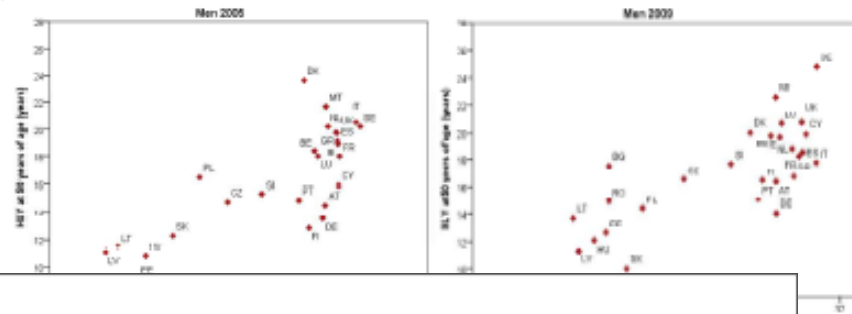
### Life Expectancy at age 65 and expected years

- Without chronic morbidity
- With chronic morbidity

### Life Expectancy at age 65 and expected years

- In very good or good perceived health
- In fair perceived health
- In bad or very bad perceived health





Articles

www.thelancet.com Vol 372 December 20/27, 2008

➔ **Inequalities in healthy life years in the 25 countries of the European Union in 2005: a cross-national meta-regression analysis**

*Carol Jagger, Clare Gillies, Francesco Moscone, Emmanuelle Cambois, Herman Van Oyen, Wilma Nusselder, Jean-Marie Robine, and the EHLEIS team*

**Summary**

**Background** Although life expectancy in the European Union (EU) is increasing, whether most of these extra years are spent in good health is unclear. This information would be crucial to both contain health-care costs and increase labour-force participation for older people. We investigated inequalities in life expectancies and healthy life years (HLYs) at 50 years of age for the 25 countries in the EU in 2005 and the potential for increasing the proportion of older people in the labour force.

**Methods** We calculated life expectancies and HLYs at 50 years of age by sex and country by the Sullivan method, which was applied to Eurostat life tables and age-specific prevalence of activity limitation from the 2005 statistics of living and income conditions survey. We investigated differences between countries through meta-regression techniques, with structural and sustainable indicators for every country.

**Findings** In 2005, an average 50-year-old man in the 25 EU countries could expect to live until 67.3 years free of activity limitation, and a woman to 68.1 years. HLYs at 50 years for both men and women varied more between countries than did life expectancy (HLY range for men: from 9.1 years in Estonia to 23.6 years in Denmark; for women: from 10.4 years in Estonia to 24.1 years in Denmark). Gross domestic product and expenditure on elderly care were both positively associated with HLYs at 50 years in men and women ( $p < 0.039$  for both indicators and sexes); however, in men alone, long-term unemployment was negatively associated ( $p = 0.023$ ) and life-long learning positively associated ( $p = 0.021$ ) with HLYs at 50 years of age.

Lancet 2008; 372: 2124-31

Published Online

November 17, 2008

DOI:10.1016/S0140-

6736(08)61594-9

See Editorial page 2088

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See Department of Error

page 2114

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Medical Center Rotterdam,

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**Joint Action EHLEIS - Paris, April 19th, 2012**

**First annual meeting**



## Advanced research on European health expectancies

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Site contents

### WELCOME

EurOhex is a website which provides access to research on **health expectancies** in Europe.

It includes a database on health indicators comprising life expectancies and **Healthy Life Years (HLY)** for 27 European countries.

From 2011 onwards projects on health expectancies are conducted in the framework of a **Joint Action** between the European Commission and the Member-States:



The JA:EHLEIS contributes to the **European Innovation Partnership (EIP) on Active and Healthy Ageing** as well as to the European Year for Active Ageing.



European Year for **Active Ageing**  
and **Solidarity between Generations 2012**

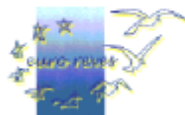


Healthy Life Years  
Links

JA:EHLEIS Network login

The JA:EHLEIS follows:

Euro-REVES (1994-2002)



Ehemu (2004-2007)



Ehleis (2007-2010)



We hope that you find this site to be a useful online resource, and welcome any **comments** or questions that you may have about it or the Joint Action.

EurOhex is part of the international network on health expectancies



g of the European Joint Action EHLEIS - Paris, April 19th, 2012



# Advanced research on European health

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## WELCOME

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EUROPEAN HEALTH & LIFE EXPECTANCIES  
**JA:EHLEIS**  
INFORMATION SYSTEM

The JA:EHLEIS contributes to the **European Innovation Partnership (EIP) on Active Ageing**, as well as to the European Year for Active Ageing.

# INTERPRETING HEALTH EXPECTANCIES

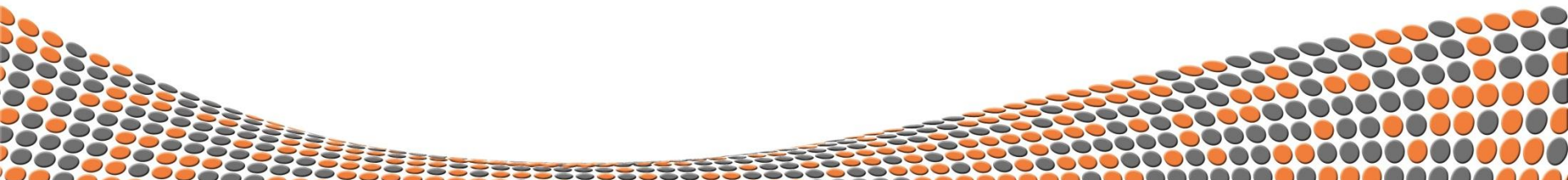
**Most countries in the world are ageing rapidly with longer and longer life expectancies. Whether these extra years are healthy or with increasing disability and dependence is important for governments, health services and individuals. Health expectancies were first developed to answer this question. The European Health Expectancy Monitoring Unit (EHEMU) has developed this guide to aid the understanding and interpreting health expectancies and to accompany the more technical guide on how to calculate health expectancies<sup>1</sup>.**

## **What are health expectancies?**

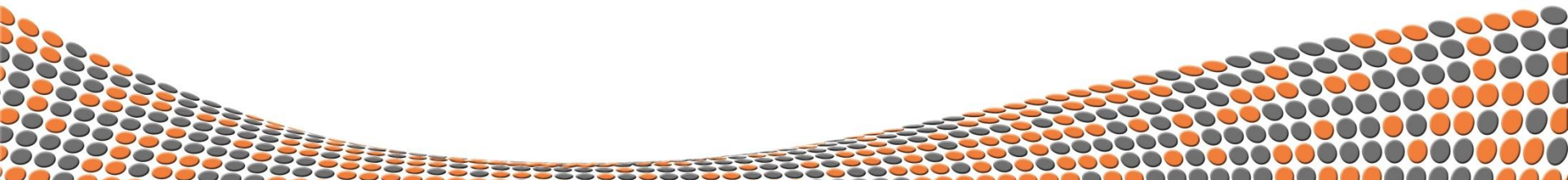
Health expectancies are a natural extension of the well known indicators of life expectancies. Life expectancies measure the number of remaining years to be lived at a particular age, considering the current mortality level of the country. For example in 2004 the female life expectancy at birth in Belgium was 81.4 years, so a baby girl born in 2004 could expect to live to age 81 years, assuming the conditions of 2004 prevailed over her whole life. By considering not only mortality but also ill-health at particular ages we can divide this remaining number of years into years spent in good and bad health – these are then health expectancies. Health expectancies add a quality dimension to the quantity of life lived.

As there are many dimensions of health, there are many health expectancies. The proposed new EU structural indicator **Healthy Life Years (HLY)** is based on limitations in daily activities and is therefore a **disability-free life expectancy**, one of the most common health expectancies reported. Others include **healthy life expectancy** (based

**Thank you for your attention!**



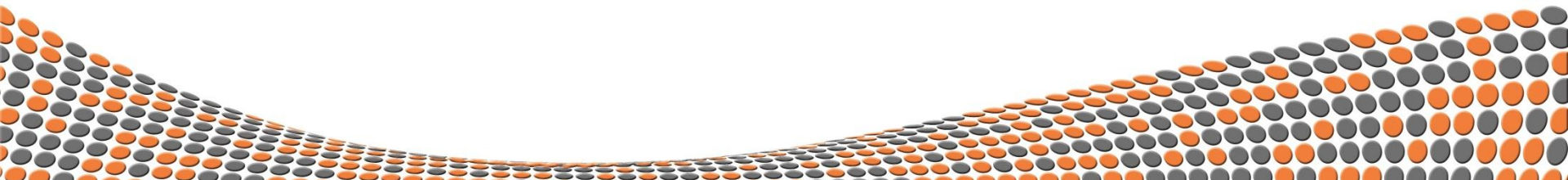
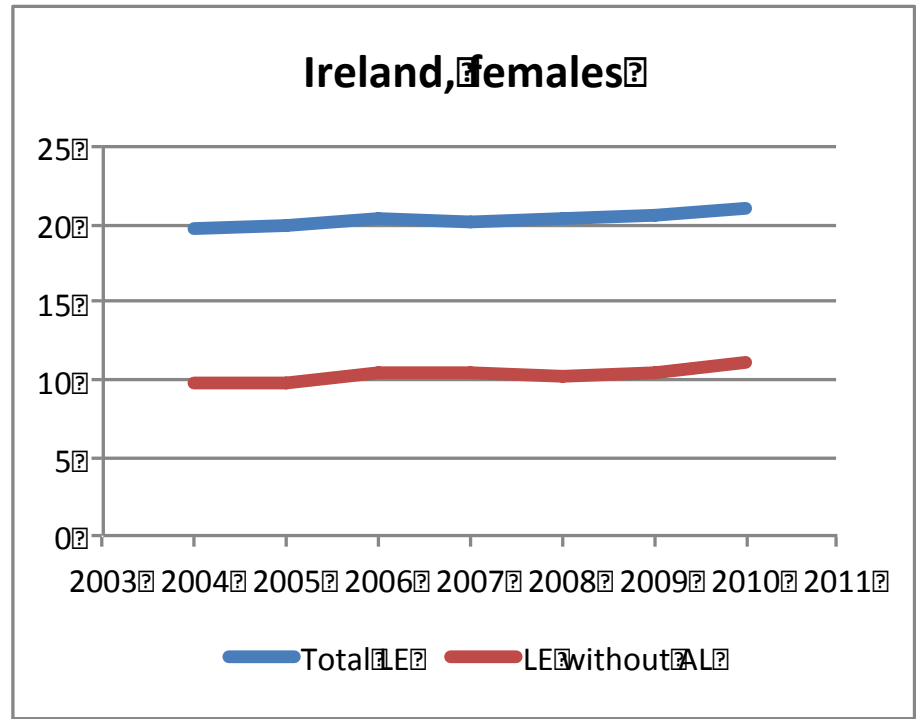
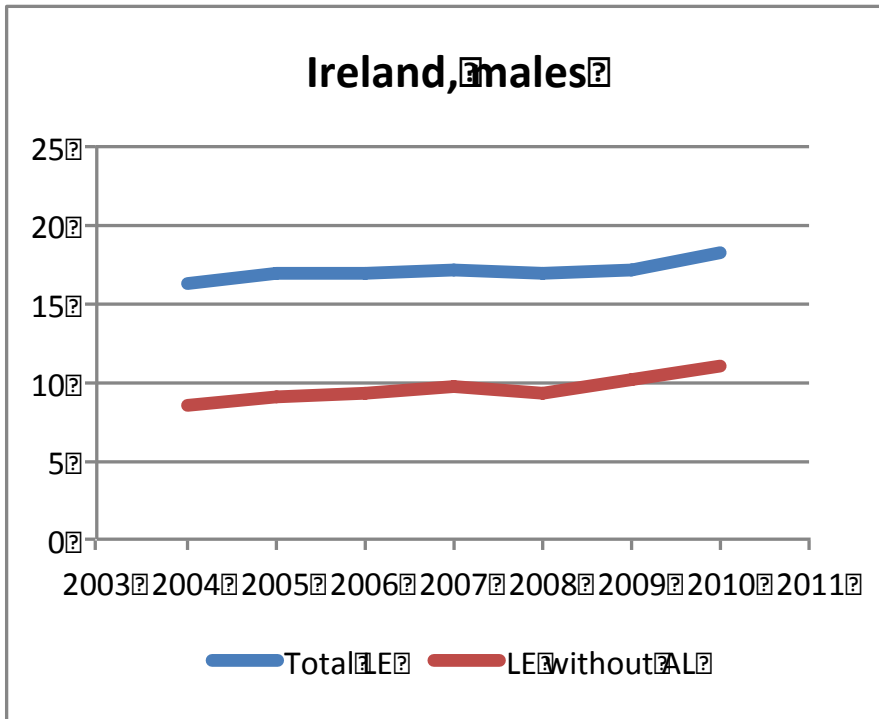
[www.eurohex.eu](http://www.eurohex.eu)



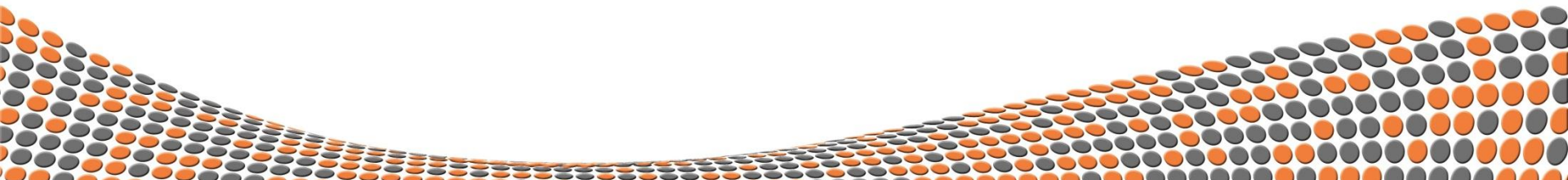
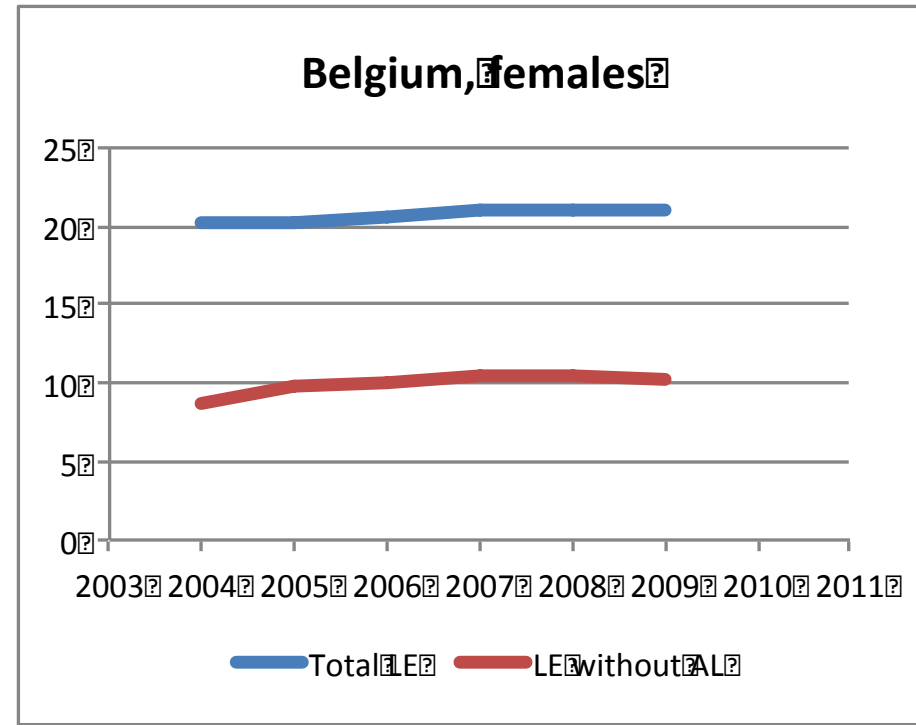
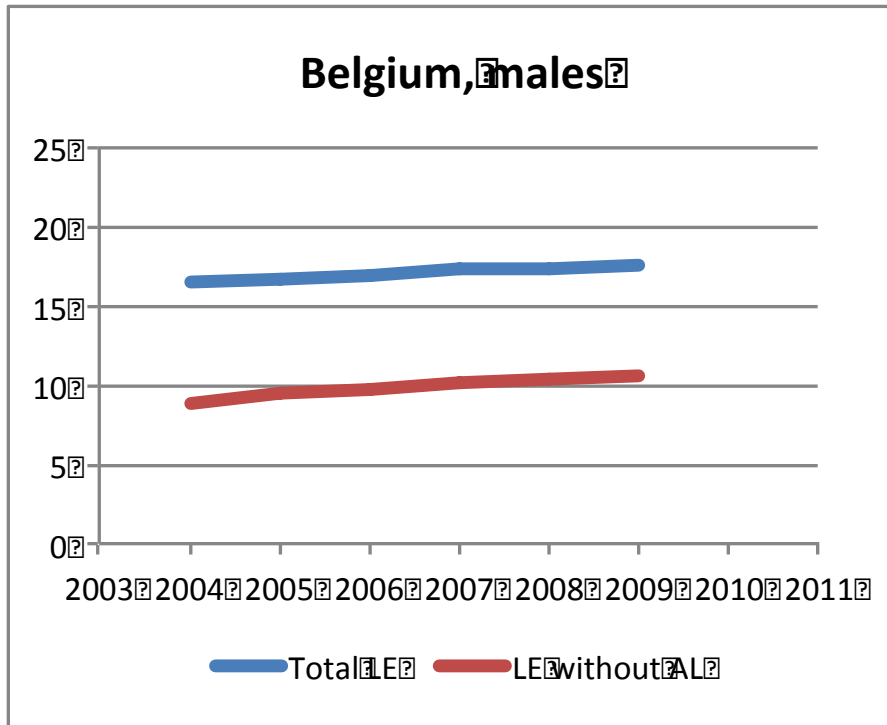




# Trends in life and disability-free life expectancy (HLY) at age 65



# Trends in life and disability-free life expectancy (HLY) at age 65

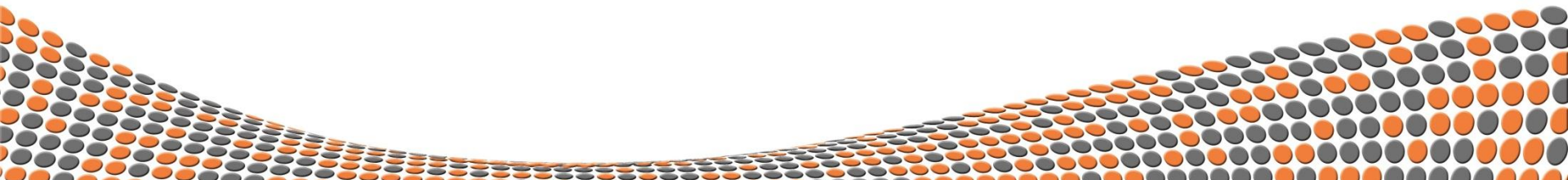
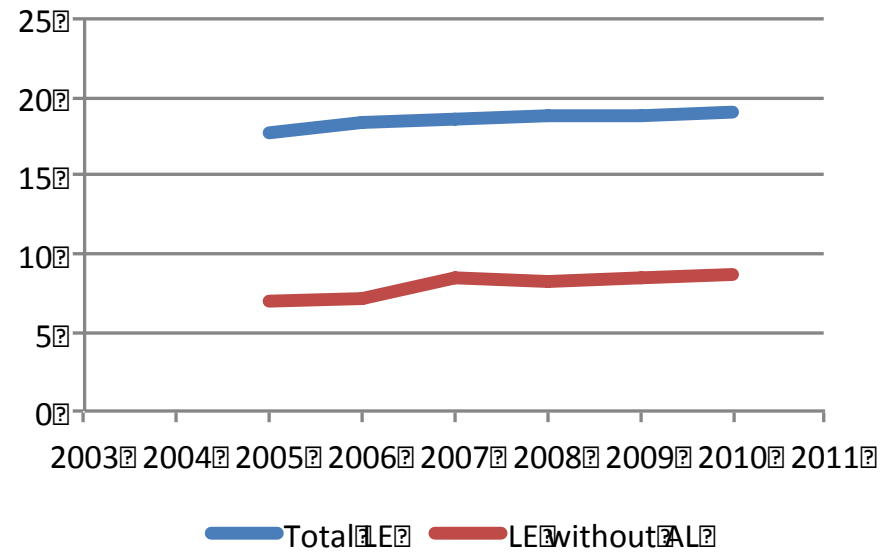


# Trends in life and disability-free life expectancy (HLY) at age 65

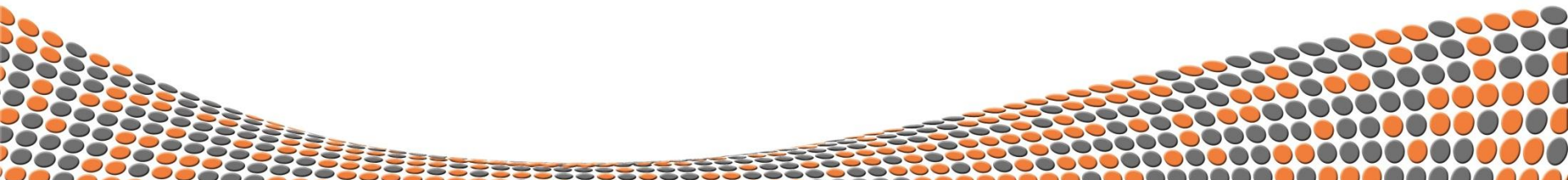
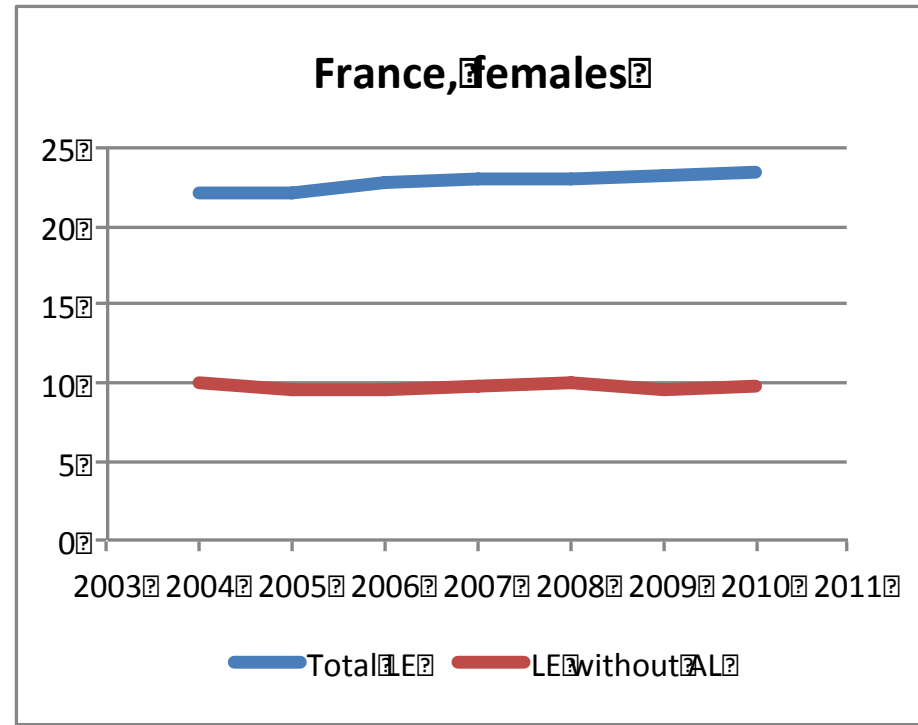
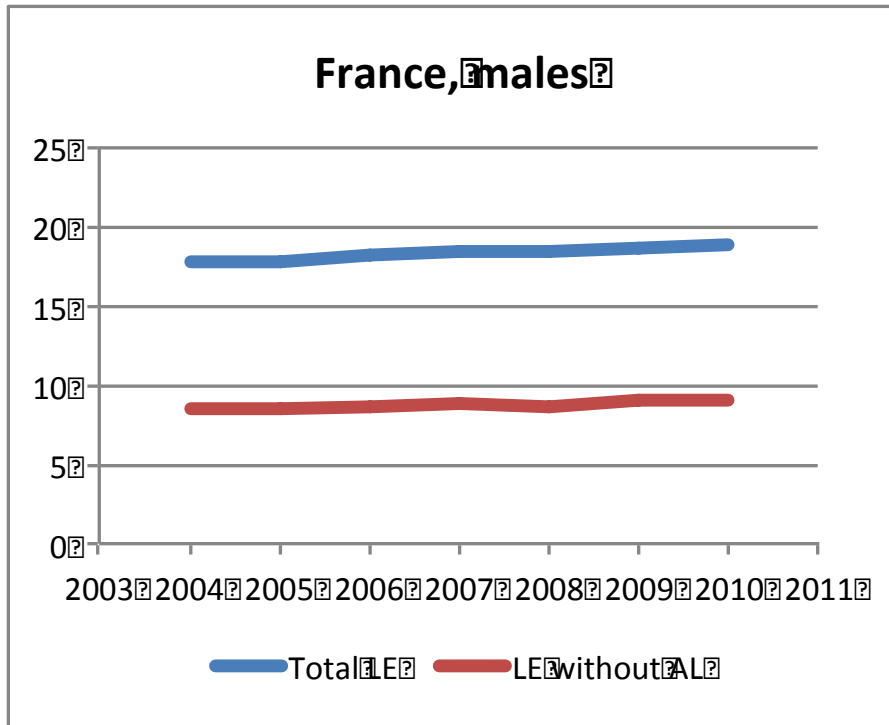
### Czech Republic, males



### Czech Republic, females

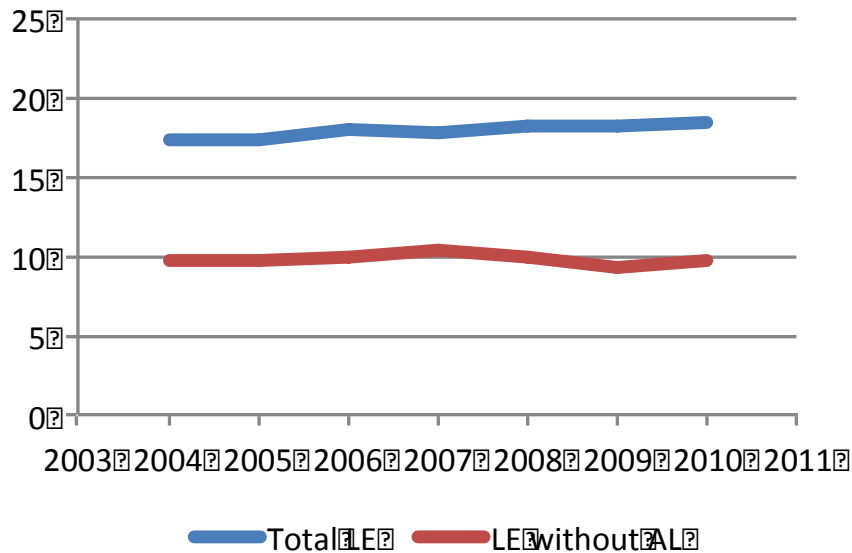


# Trends in life and disability-free life expectancy (HLY) at age 65

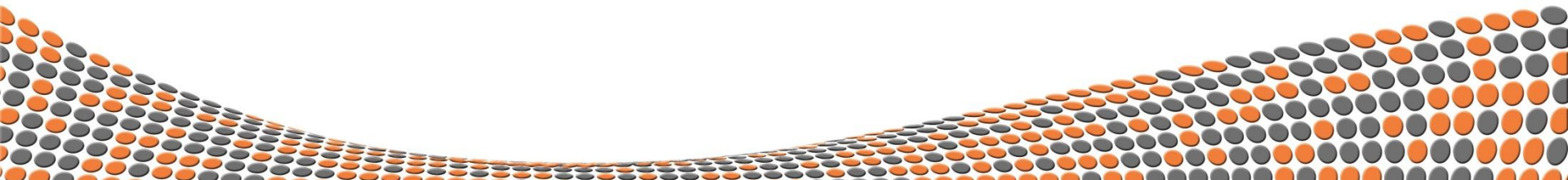
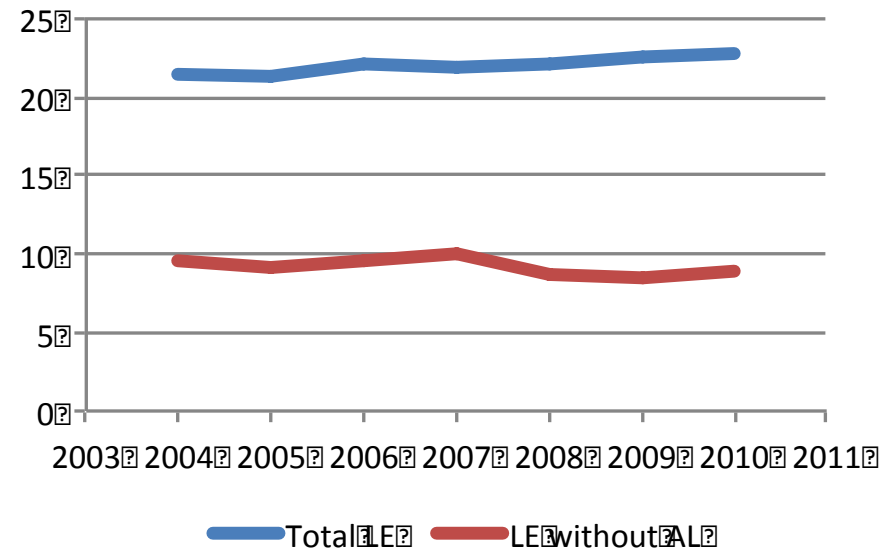


# Trends in life and disability-free life expectancy (HLY) at age 65

Spain, males

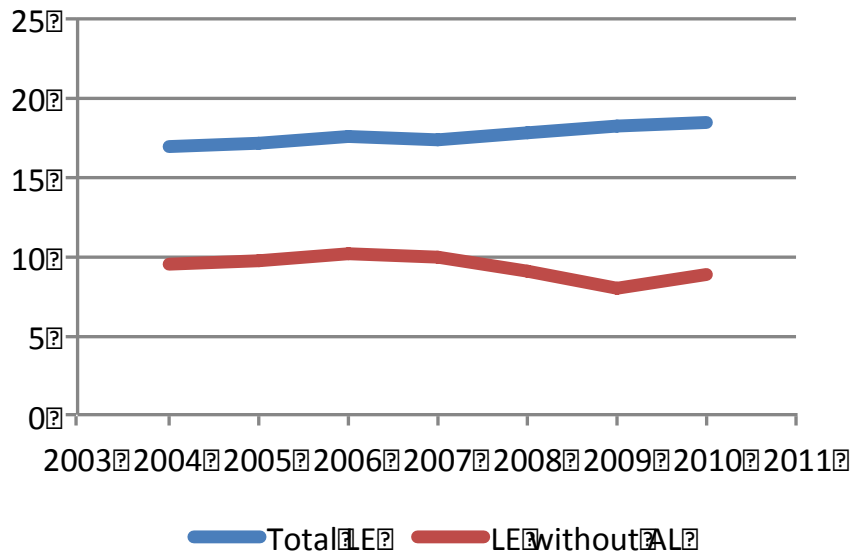


Spain, females

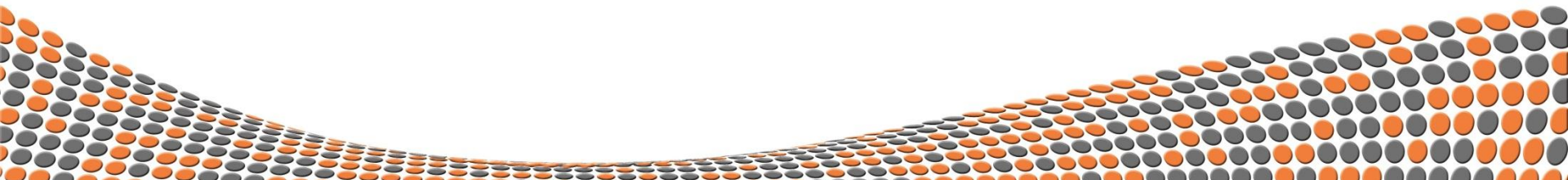
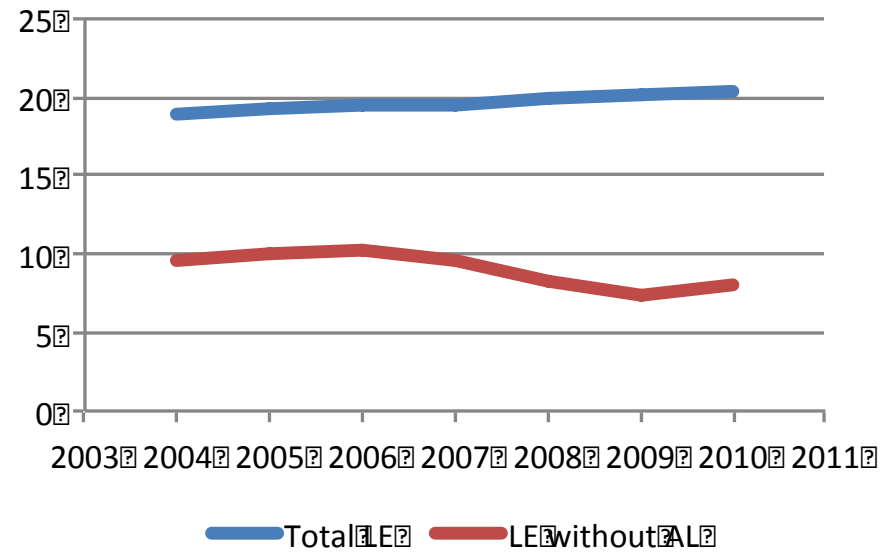


# Trends in life and disability-free life expectancy (HLY) at age 65

Greece, males

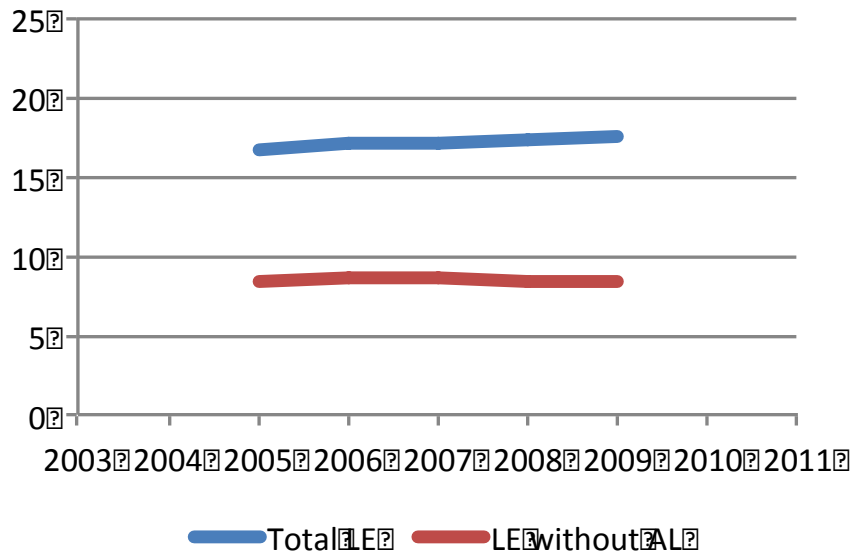


Greece, females

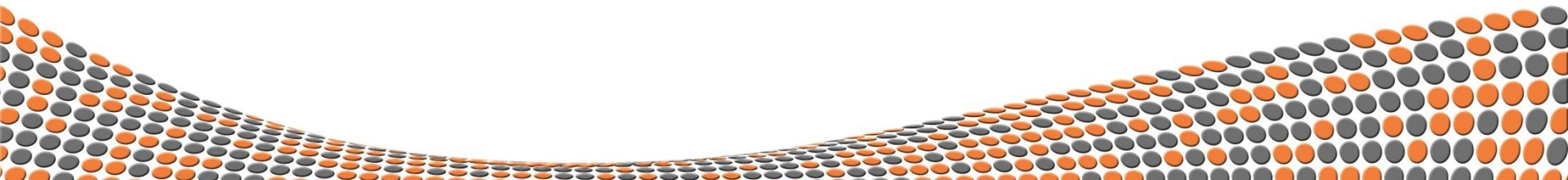
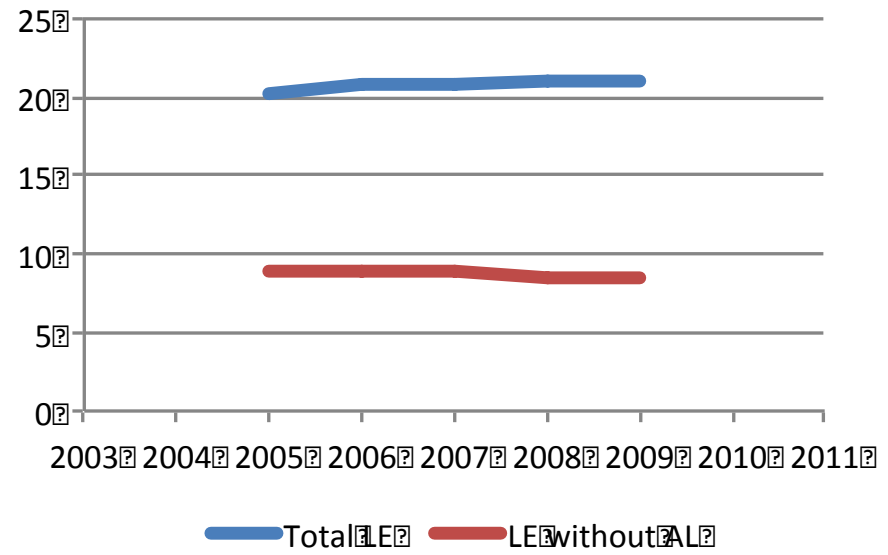


# Trends in life and disability-free life expectancy (HLY) at age 65

### EU25, males



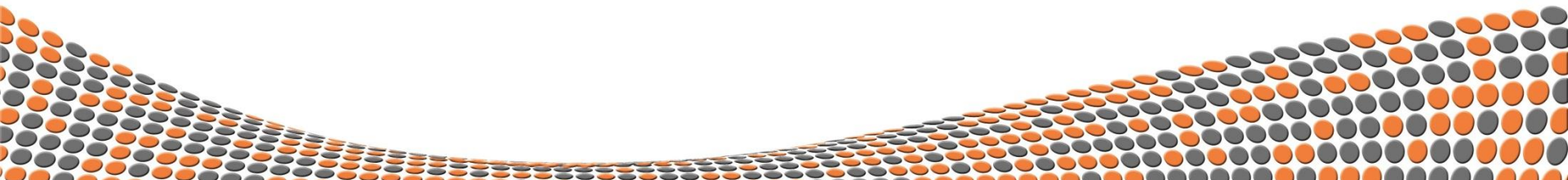
### EU25, females





# Release of the new LE and HLY figures 2008-2010 values

**Jean-Marie Robine for the EHLEIS Group**

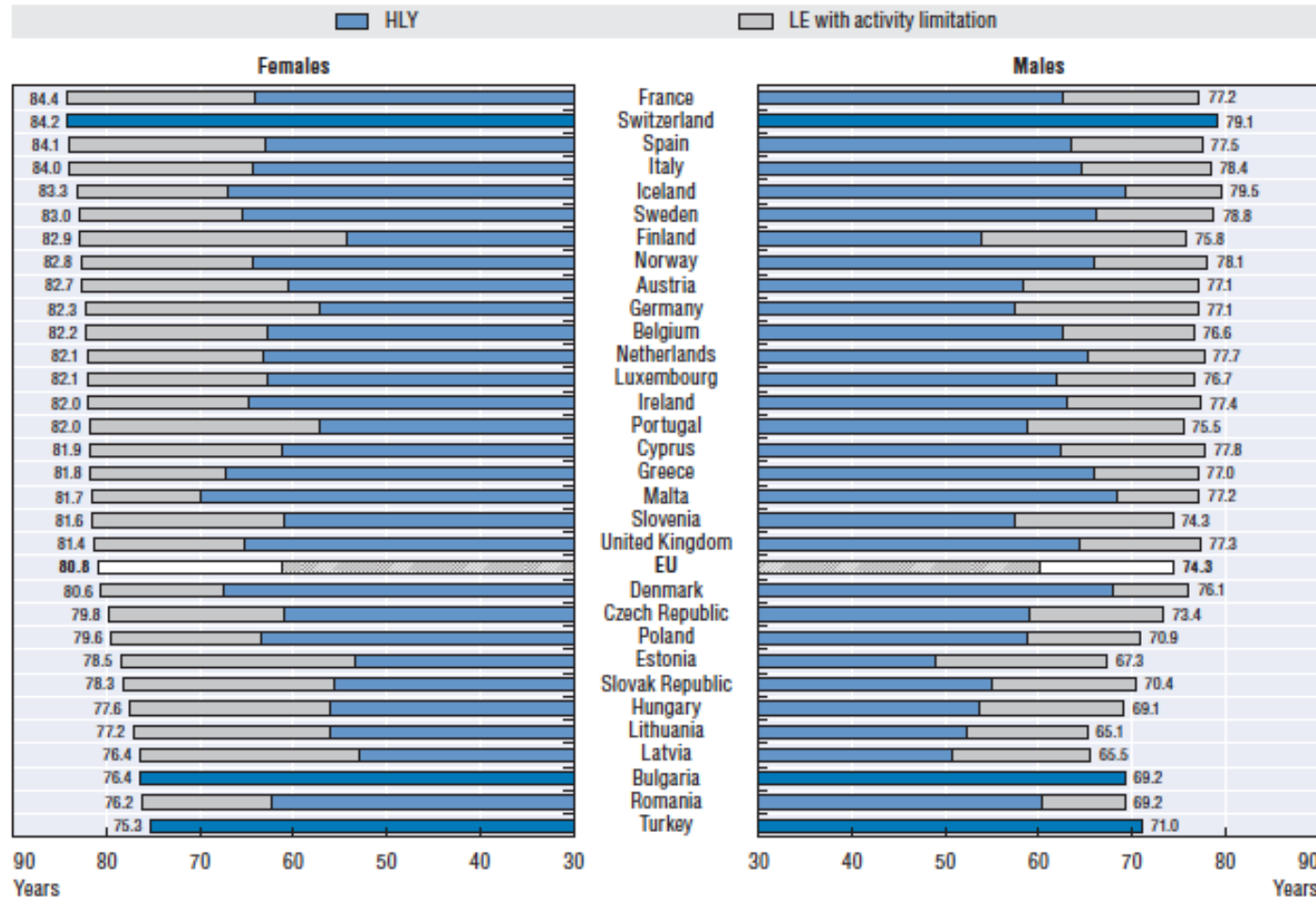




# Health at a Glance Europe 2010



1.1.1. Life expectancy and healthy life years (HLY) at birth, by gender, 2005-07



Source: European Health and Life Expectancy Information System (EHLEIS); OECD Health Data 2010; Eurostat Statistics Database.

StatLink <http://dx.doi.org/10.1787/888932335400>

1.1.2. Healthy life years (HLY) at birth, 2005-07 and GDP per capita, 2007

1.1.3. Healthy life years (HLY) at birth, 2005-07 and health spending per capita, 2007