



# Healthy Life Expectancy and Life Expectancy around the 2011 Census

## Marmot Indicators for Local Authorities in England, 2015 - Bolton

The chart below shows indicators of healthy life expectancy and life expectancy, and indicators of inequality in both of these key health outcomes.

These indicators are all based on data around the 2011 Census: mortality data for the period 2009-13, self-reported health from the census and 2011 mid-year population estimates.

As these indicators cannot be updated annually, they have not been included in the annual set of Marmot Indicators but are presented in this additional supplement.



### Males

	Period	Local value	Regional value	England value	England worst	Range	England best
Healthy life expectancy at birth - (years)	2009 - 13	60.5	61.1	63.5	55.8		70.0
Life expectancy at birth - (years)	2009 - 13	77.4	77.7	79.1	74.0		82.1
Inequality in healthy life expectancy at birth (years)	2009 - 13	19.8	-	12.8	24.6		3.8
Inequality in life expectancy at birth (years)	2009 - 13	11.8	-	6.6	12.6		2.5

### Females

Healthy life expectancy at birth - (years)	2009 - 13	61.7	62.7	64.8	56.0		71.0
Life expectancy at birth - (years)	2009 - 13	81.3	81.6	83.0	79.6		86.2
Inequality in healthy life expectancy at birth (years)	2009 - 13	19.2	-	12.5	22.1		2.8
Inequality in life expectancy at birth (years)	2009 - 13	9.1	-	5.0	10.0		0.3

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## Indicator Descriptions

### **Healthy life expectancy at birth – males and females**

The average number of years a male or female would expect to live in good health based on contemporary mortality rates and prevalence of self-reported good health. For a particular area and time period, it is an estimate of the average number of years a newborn would live in good general health if he or she experienced the age-specific mortality rates and prevalence of good health for that area and time period through their life.

### **Life expectancy at birth – males and females**

The average number of years a male or female would expect to live based on contemporary mortality rates. For a particular area and time period, it is an estimate of the average number of years a newborn would survive if he or she experienced the age-specific mortality rates for that area and time period through their life.

### **Inequality in healthy life expectancy at birth – males and females**

This indicator measures inequality in healthy life expectancy (HLE) within English local authorities using the slope index of inequality (SII). The SII provides a measure of the level of inequality in HLE across the whole population of a local authority, from most to least deprived. An SII of 10 years, for example, indicates that those living in the least deprived parts of a local authority will have 10 more years of life lived in good health, compared with those in the most deprived parts of the local authority. The higher the SII, the greater the inequality within the area.

### **Inequality in life expectancy at birth – males and females**

This indicator measures inequalities in life expectancy, calculated in the same way as the indicator of inequality in healthy life expectancy.

### **Indicator source**

The data for these indicators were released by the Office for National Statistics, and were commissioned by, and produced in conjunction with, Public Health England. The ONS report which accompanies the data provides further analysis and additional detail on the methods used. The data released include figures for life expectancy, healthy life expectancy and disability-free life expectancy for every English middle upper output area (MSOA) based on mortality data for 2009-13, self-reported health status from the 2011 Census and 2011 population estimates. The release also contains the SII in these three indicators within English local authorities, regions and England as a whole.

Note that the SII figures for life expectancy and HLE reported by ONS for England as a whole, are based on the ranked distribution of MSOAs by their level of deprivation within England. They therefore differ from the values reported here, where the England inequality figures are the median values of the SII results for all upper tier local authorities. The median value is used here to provide a benchmark against which the local authority SII figures can be compared.

The ONS report and data are available here: <http://www.ons.gov.uk/ons/rel/disability-and-health-measurement/health-expectancies-at-birth-by-middle-layer-super-output-areas--england/inequality-in-health-expectancies-using-imd-2015-small-area-deprivation-scores--2009-13/stb-he.html>

### **Comparison with annual Marmot Indicators 2015**

These indicators, based on decennial census data, are provided as a supplementary resource to the annual release of Marmot Indicators, available here:

[http://www.lho.org.uk/LHO\\_Topics/National\\_Lead\\_Areas/Marmot/MarmotIndicators2015.aspx](http://www.lho.org.uk/LHO_Topics/National_Lead_Areas/Marmot/MarmotIndicators2015.aspx)

The annual release also includes indicators of healthy life expectancy, life expectancy and inequality in life expectancy. Those figures differ from the ones presented here for a number of reasons:

- The annual indicators are based on mortality data for 2011-13, while the indicators presented here are based on deaths in 2009-13.
- The healthy life expectancy indicator in the annual release uses data on self-rated health status from the Annual Population Survey, while the indicators here are based self-rated health data from the 2011 Census.
- The measure of inequality in life expectancy in the annual indicators is based on data for lower layer super output areas which have been grouped into ten deprivation deciles, based on their scores in the Index of Multiple Deprivation 2010. The indicators of inequality in life expectancy and healthy life expectancy presented here, are based on middle layer super output areas, which have been ranked by deprivation (not grouped into deciles) based on scores from the Index of Multiple Deprivation 2015.

The ONS report, linked above, provides further detail on how the indicators presented here were calculated.