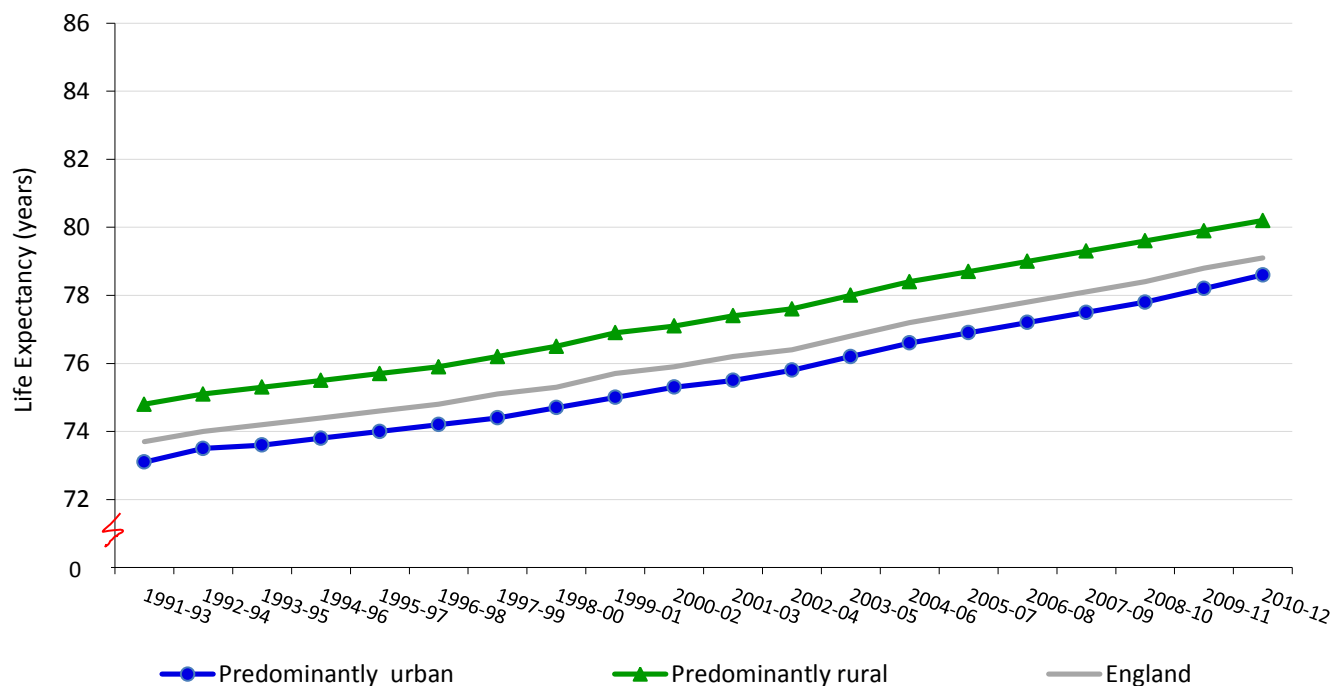


Health

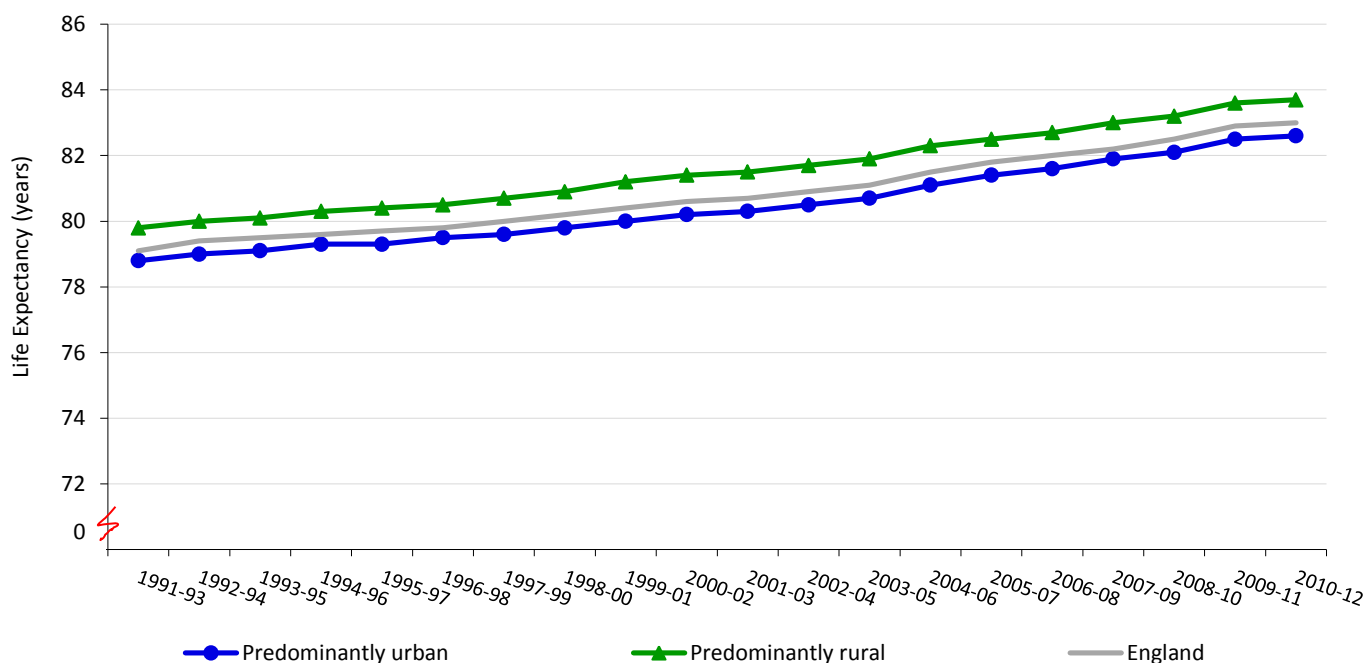
- **Overall health outcomes are more favourable in rural areas than urban areas:** life expectancy (the number of years of life a person is expected to live) is higher, infant mortality rate lower and potential years of life lost from common causes of premature death lower in rural areas than in urban areas.
- **Average life expectancy is highest in *Rural-80 areas*:** On average, males born in *Rural-80 areas* in 2010-12 are expected to live two years longer than males born in *major urban areas* and on average females born in *Rural-80 areas* in 2010-12 are expected to live one and a half years longer than females born in *large urban areas*.
- **Infant mortality is lower in rural areas than in England as a whole:** In 2012, the infant mortality rate in rural areas was 3.6 deaths per 1,000 live births, compared with the England average of 4.1 deaths per 1,000 live births.
- **Potential years of life lost (PYLL) from common causes of death such as cancers, Coronary Heart Disease (CHD) and stroke is lower in rural areas.** This means that fewer people living in rural areas are dying prematurely than those living in urban areas. For example PYLL from cancer in *predominantly rural areas* in 2010-12 was 128.7 years per 10,000 people - over fifteen years lower than the 144.5 years per 10,000 people in *predominantly urban areas*. PYLL from Coronary Heart Disease in *predominantly rural areas* in 2010-12 was 31.8 years per 10,000 people and lower than the 44.3 years per 10,000 people in *predominantly urban areas*. In 2010-12, PYLL from stroke or related diseases in *predominantly rural areas* was 11.0 years per 10,000 people and lower than the 14.6 PYLL per 10,000 people in *predominantly urban areas*.

Life expectancy

Male life expectancy at birth, by Local Authority Classification, in England, 1991-93 to 2010-12



Female life expectancy at birth, by Local Authority Classification, in England, 1991-93 to 2010-12



- Life expectancy has increased in all areas across England.
- In 2010-12 life expectancy for men was 79.1 years and 83.0 years for women. This means that a newborn baby boy born in England can expect to live to 79.1 years of age, if mortality rates stay the same throughout his lifetime. Likewise, for a newborn baby girl, they can expect to live to 83.0 years of age.
- Life expectancy was higher for people born in rural areas compared with urban areas. This means that if mortality rates do not change, people born in rural areas can expect to live longer than people born in urban areas.
- Life expectancy was highest in *Rural-80* areas with men born in these areas expected to live until 80.4 years of age and women expected to live until 84.0 years.
- Life expectancy was lowest in *major urban areas* for men and in *large urban* and *other urban areas* for women.
- Men born in *Rural-80* areas were expected to live two years longer than men in *major urban areas*.
- Women in *Rural-80* areas were expected to live almost one and a half years longer than women born in *large urban areas*.

Male life expectancy at birth in years, by Local Authority Classification, in England, 2000-02 to 2010-12

| | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 | 2010-12 |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Major urban | 75.0 | 75.2 | 75.6 | 76.0 | 76.4 | 76.7 | 77.0 | 77.4 | 77.8 | 78.2 | 78.5 |
| Large urban | 75.6 | 75.7 | 76.0 | 76.3 | 76.8 | 77.0 | 77.3 | 77.5 | 77.9 | 78.3 | 78.6 |
| Other urban | 75.6 | 75.9 | 76.1 | 76.5 | 76.8 | 77.1 | 77.4 | 77.6 | 77.9 | 78.3 | 78.6 |
| Significant rural | 76.8 | 77.1 | 77.2 | 77.5 | 77.9 | 78.3 | 78.6 | 78.9 | 79.2 | 79.6 | 79.9 |
| Rural-50 | 76.9 | 77.1 | 77.4 | 77.8 | 78.2 | 78.5 | 78.8 | 79.1 | 79.4 | 79.7 | 80.0 |
| Rural-80 | 77.4 | 77.7 | 77.9 | 78.3 | 78.6 | 79.0 | 79.2 | 79.5 | 79.9 | 80.2 | 80.4 |
| Predominantly urban | 75.3 | 75.5 | 75.8 | 76.2 | 76.6 | 76.9 | 77.2 | 77.5 | 77.8 | 78.2 | 78.6 |
| Predominantly rural | 77.1 | 77.4 | 77.6 | 78.0 | 78.4 | 78.7 | 79.0 | 79.3 | 79.6 | 79.9 | 80.2 |
| England | 75.9 | 76.2 | 76.4 | 76.8 | 77.2 | 77.5 | 77.8 | 78.1 | 78.4 | 78.8 | 79.1 |

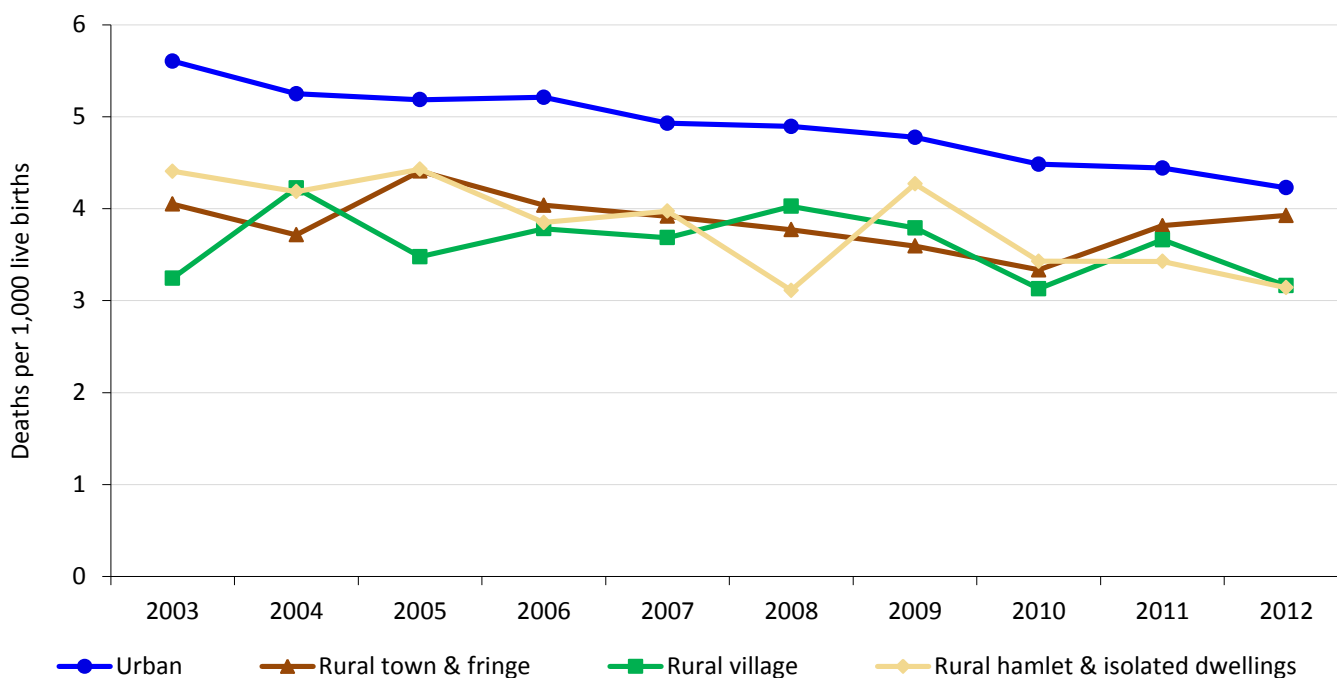
Female life expectancy at birth in years, by Local Authority Classification, in England, 2000-02 to 2010-12

| | 2000-02 | 2001-03 | 2002-04 | 2003-05 | 2004-06 | 2005-07 | 2006-08 | 2007-09 | 2008-10 | 2009-11 | 2010-12 |
|---------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Major urban | 80.1 | 80.2 | 80.4 | 80.6 | 81.0 | 81.3 | 81.5 | 81.9 | 82.1 | 82.5 | 82.6 |
| Large urban | 80.4 | 80.4 | 80.6 | 80.8 | 81.2 | 81.4 | 81.5 | 81.8 | 82.0 | 82.4 | 82.5 |
| Other urban | 80.3 | 80.4 | 80.6 | 80.8 | 81.2 | 81.4 | 81.6 | 81.9 | 82.1 | 82.5 | 82.5 |
| Significant rural | 81.2 | 81.3 | 81.4 | 81.6 | 82.0 | 82.2 | 82.4 | 82.7 | 82.9 | 83.3 | 83.5 |
| Rural-50 | 81.2 | 81.3 | 81.5 | 81.6 | 82.0 | 82.3 | 82.5 | 82.8 | 83.0 | 83.4 | 83.5 |
| Rural-80 | 81.8 | 81.8 | 81.9 | 82.2 | 82.6 | 82.9 | 83.0 | 83.2 | 83.5 | 83.9 | 84.0 |
| Predominantly urban | 80.2 | 80.3 | 80.5 | 80.7 | 81.1 | 81.4 | 81.6 | 81.9 | 82.1 | 82.5 | 82.6 |
| Predominantly rural | 81.4 | 81.5 | 81.7 | 81.9 | 82.3 | 82.5 | 82.7 | 83.0 | 83.2 | 83.6 | 83.7 |
| England | 80.6 | 80.7 | 80.9 | 81.1 | 81.5 | 81.8 | 82.0 | 82.2 | 82.5 | 82.9 | 83.0 |

Notes: Figures for 2000/02 – 2008/10 have been revised by ONS following publication of mid-year sub-national population estimates. Weighted average is calculated using Census 2001 population by Local Authority. The life expectancy calculation is based on the mortality rate, so if a life expectancy is high, the mortality rate is low for younger age groups.
Office for National Statistics (ONS): 'Life expectancy at birth and at age 65 for local areas in England and Wales, 2010 – 12', Available from: <http://www.ons.gov.uk/ons/publications/reference-tables.html?edition=tcm%3A77-326676>

Infant mortality rate

Infant mortality rate, by settlement type in England, 2004 to 2012



- The Infant Mortality Rate (IMR) is the number of infant (under one year old) deaths per 1,000 live births.
- In 2012, the IMR was lower in rural areas at 3.6 deaths per 1,000 live births than the England average of 4.1 per 1,000 live births.
- The IMR has been decreasing in England overall. However the IMR for rural areas fluctuates more than urban areas and there is no clear trend in the data shown owing to the smaller populations involved. There are many factors that are shown to influence the IMR, including birth weight, mothers' age, and socio-economic status.

Infant deaths (aged under 1 year) per 1,000 live births, by settlement type in England, 2003 to 2012

| | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 |
|-----------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Urban | 5.6 | 5.2 | 5.2 | 5.2 | 4.9 | 4.9 | 4.8 | 4.5 | 4.4 | 4.2 |
| Rural | 3.8 | 4.0 | 4.1 | 3.9 | 3.8 | 3.8 | 3.8 | 3.3 | 3.7 | 3.6 |
| Rural town & fringe | 4.1 | 3.7 | 4.4 | 4.0 | 3.9 | 3.8 | 3.6 | 3.3 | 3.8 | 3.9 |
| Rural village | 3.2 | 4.2 | 3.5 | 3.8 | 3.7 | 4.0 | 3.8 | 3.1 | 3.7 | 3.2 |
| Rural hamlet & isolated dwellings | 4.4 | 4.2 | 4.4 | 3.9 | 4.0 | 3.1 | 4.3 | 3.4 | 3.4 | 3.1 |
| England | 5.3 | 5.1 | 5.0 | 5.0 | 4.8 | 4.7 | 4.6 | 4.3 | 4.3 | 4.1 |

Notes: Infants are defined as less than one year old

Source: ONS, Mortality@ons.gsi.gov.uk

Potential years of life lost (PYLL)

Potential Years of Life Lost (PYLL) is the difference between the actual age of death due to a particular condition or disease and the expected age of death if that person had not suffered from that disease. If the PYLL is low, it means that there is a low degree of premature death due to that particular condition. This could be due to a number of reasons, including fewer people suffering from that condition or sufferers making a full recovery.

Coronary Heart Disease (CHD) is the most common cause of premature death in England; **Cancer** is the second and **Stroke** the third. Even though CHD is the most common, PYLL from cancer is substantially higher than PYLL in CHD. This is because more people suffer from cancer at a younger age than people who develop CHD. People typically suffer a stroke later in life.

Potential Years of Life Lost (PYLL) due to **suicide or undetermined injury** is the difference between the actual age of death due to suicide and the expected age of death if this incident had not occurred. PYLL from suicides is used as a measure of mental health.

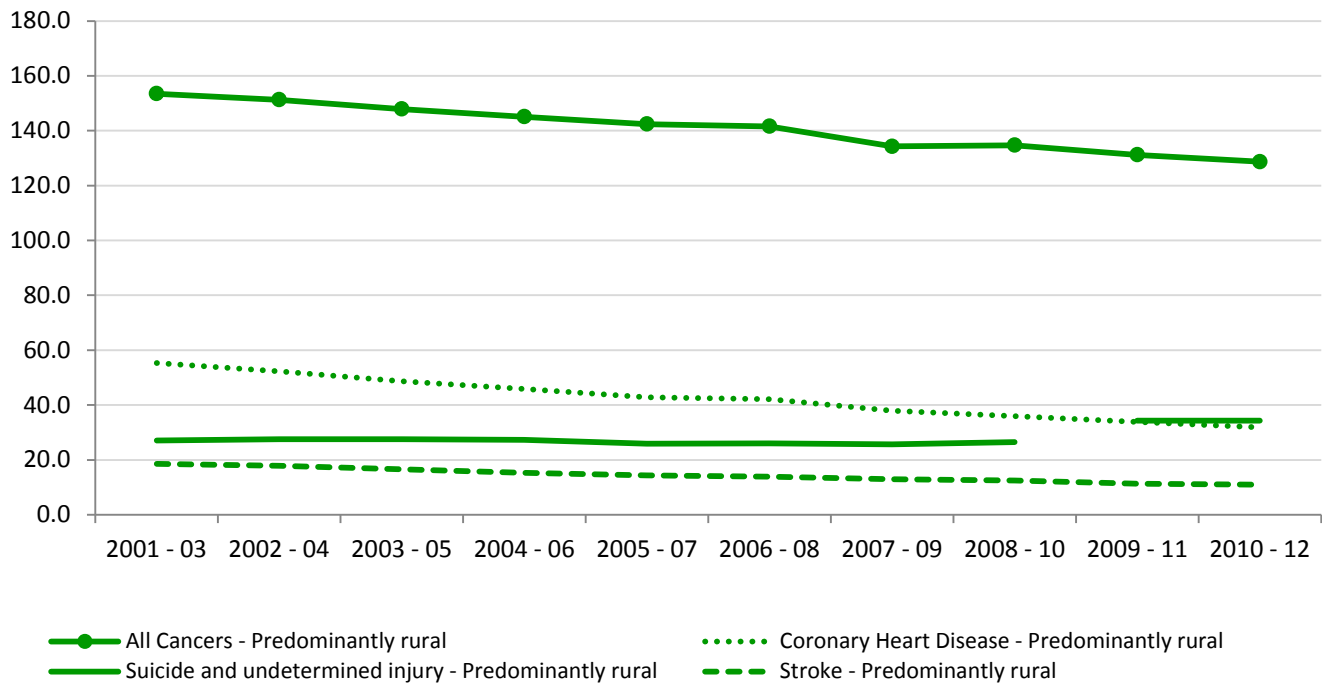
Potential years of life lost per 10,000 population by selected causes and Local Authority classification, in England, 2010-12

| | All Cancers | Coronary Heart Disease | Suicide and Undetermined Injuries | Stroke |
|---------------------|-------------|------------------------|-----------------------------------|--------|
| Major urban | 142.6 | 44.9 | 30.6 | 15.1 |
| Large urban | 146.8 | 43.0 | 32.9 | 13.7 |
| Other urban | 146.7 | 44.2 | 36.4 | 14.2 |
| Significant rural | 134.6 | 35.5 | 30.9 | 11.6 |
| Rural-50 | 129.5 | 33.2 | 35.2 | 11.3 |
| Rural-80 | 127.5 | 29.7 | 32.9 | 10.6 |
| Predominantly urban | 144.5 | 44.3 | 32.5 | 14.6 |
| Predominantly rural | 128.7 | 31.8 | 34.3 | 11.0 |
| England | 139.4 | 40.2 | 32.7 | 13.3 |

Notes: The average number of years a person would have lived had he or she not died prematurely (under age 75), per 10,000 European standard population. Uses Standardised years life lost rate (SYLL) as this is age standardised. Weighted by Census 2001 and Census 2011 population at Local Authority level.

Source: Health and Social Care Information Centre (HSCIC): <https://indicators.ic.nhs.uk/webview/>

Potential years of life lost per 10,000 population by selected causes in predominantly rural areas, in England, 2001-03 to 2010-12*



* PYLL from suicide and undetermined injury is not directly comparable between 2001/03 – 2008/10 and 2009/11 - 2010/12. This is because of the updates to the definition of mortality from suicide and injury undetermined from 2010 onwards. One of the changes is that in 2009/11 and 2010/12 the rate covered people aged 15-74 years whereas in previous years it also included registrations for under 15s.

- Between 2001-03 and 2010-12 PYLL from cancer, Coronary Heart Disease (CHD) and stroke has decreased in both *predominantly urban* and *predominantly rural* areas. PYLL from suicide and undetermined injuries is not directly comparable due to changes in methodology.
- PYLL from cancer, CHD and stroke has been lower in *predominantly rural* areas than in *predominantly urban* areas. In general, it decreases with a local authority's rurality. PYLL from suicide and undetermined injuries is only slightly different in *predominantly rural* and *predominantly urban* areas, which suggests that there is no clear relationship between deaths due to suicide and settlement types.
- In 2010-12, PYLL from **cancer** was lowest in *Rural-80 areas*: 127.5 years per 10,000 people. This means that 127.5 years of life was lost from people prematurely dying from cancer for every 10,000 people living in *Rural-80 areas*. The highest PYLL was in *large urban areas*: 146.8 per 10,000 population.
- PYLL from **Coronary Heart Disease (CHD)** was lowest in *Rural-80 areas* at 29.7 years per 10,000 people. This compares to 44.9 in *major urban areas*.
- PYLL due to **suicide or undetermined injuries** in 2010-12 was lowest in *major urban areas* at 30.6 and highest in *other urban areas* at 36.4 years per 10,000 population.
- The PYLL from **stroke and related diseases** was lowest for *Rural-80 areas* (10.6 years per 10,000 population) and highest in *major urban areas* (15.1 years).