

Statistical bulletin

# National life tables, UK: 2010 to 2012

Trends in the average number of years people will live beyond their current age measured by period life expectancy, analysed by age and sex for the UK and its constituent countries.



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Release date:  
21 March 2014

Next release:  
25 September 2014

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# 1 . Key points

- A newborn baby boy could expect to live 78.7 years and a newborn baby girl 82.6 years if mortality rates remain the same as they were in the United Kingdom (UK) in 2010-2012 throughout their lives
- The gap between life expectancy at birth between boys and girls in the UK has narrowed from six years in 1980-1982 to under four years in 2010-2012
- Life expectancy at birth has increased by two and a half years per decade since 1980-1982 in the UK for males, and by two years per decade for females
- Life expectancy at age 65 in the UK increased by 40% to 18.2 years for men and for women by 23% to 20.7 years in the 30 years between 1980-1982 and 2010-2012
- In 2010-2012 a man in the UK aged 85 had an average further 5.8 years of life remaining and a woman 6.8 years

## 2 . Summary

ONS has released today national life tables for 2010-2012 for the United Kingdom (UK), Great Britain (GB), and Scotland; alongside these tables ONS has re-released the equivalent tables for Northern Ireland and for England and Wales so that there is a complete set of UK national life tables in a single location. The tables in this release have been previously known as the Interim Life Tables; this is the first release where they have been known as the National Life Tables. No changes have been made to the way the tables are calculated.

The tables provide period life expectancy for males and females by single year of age (0 to 100), for three-year rolling periods from 1980-1982 onwards. The tables for 2000-2002 to 2008-2010 have been revised to take account of the mid-year population estimates for 2002 to 2010 that have been revised in the light of the 2011 Census results. Therefore the figures in the life tables for 2000-2002 to 2008-2010 published in this release may differ from those in previous releases.

The 2010-2012 national life tables for [England and Wales](#) were first published on 24 October 2013. There have been no changes to these tables.

## 3 . Introduction

ONS produces national life tables which are for the UK and constituent countries and give statistics on period life expectancy by age and sex. National life tables are produced annually and are based on three consecutive years' worth of data to reduce the effect of annual fluctuations in the number of deaths caused by seasonal events such as flu. Fully graduated (smoothed) life tables have been prepared every ten years ([decennial life tables](#)), based on the three years of data around a census year.

National life tables are 'period' life tables and therefore all figures referred to in this bulletin are 'period' life expectancies. Period life expectancy is the average number of additional years a person would live if he or she experienced the age-specific mortality rates of the given area and time period for the rest of their life. Therefore it is not the number of years someone in the area in that time period is actually likely to live, because the death rates of the area are likely to change over time.

This statistical bulletin will focus on the UK as a whole and the constituent countries. The figures in this release have been calculated using mid-year estimates for 2011 and 2012, and the latest revised (following the 2011 Census) population estimates for 2002-2010 for the UK and constituent countries.

## 4 . Methods

The life table is a purely hypothetical calculation. The basic assumption is that the given number of births, an arbitrary number called the radix (ONS uses 100,000), are subject as survivors pass through each year of age, to the mortality rates prevailing for each age.

The national life tables are produced annually for the UK and its constituent countries. Each table is based on the population estimates and birth and death registration data for a period of three consecutive years. Period life tables are calculated using age-specific mortality rates for a given period, with no allowance for any actual or projected future changes in mortality. The notation required to calculate life tables is available in the [guide to calculating national life tables](#).

Life expectancy is the average number of years a person has before death. This is conventionally calculated from birth, but can also be calculated from any specified age. This gives the remaining further number of years a person on average can expect to live given the age they have attained. This means that period life expectancy at birth for a given time period and area is an estimate of the average number of years a newborn baby would survive if he/she experienced the particular area's age-specific mortality rates for that time period throughout his/her life.

Life expectancies that allow for actual or projected changes in mortality during a person's lifetime are known as 'cohort' life expectancies. ONS also produces [historic and projected period and cohort life expectancy tables](#) that are consistent with the [national population projections](#).

This release relates to the 1980-82 to 2010-12 national life tables for the UK and constituent countries. The national life tables for the UK, GB and Scotland are being published for the first time; this is because the availability of population data following the 2011 Census has been at a later date, December 2013, for Scotland and therefore the UK as a whole. The revised back series of population estimates for the years [2002 to 2010](#) has now been released for the UK and all constituent countries. To provide a full set of national life tables for the UK, life tables for England and Wales and Northern Ireland have been re-released. These [Life tables](#) for Northern Ireland have been published previously by the Northern Ireland Statistics and Research Agency (NISRA).

Today ONS has released the 2009-2011 and 2010-2012 national life tables for the UK and GB for the first time and also revised national life tables for the years 2000-2002 to 2008-2010 for the UK and GB. ONS has also released the 2010-2012 national life tables for Scotland for the first time today, and also revised national life tables for the years 2000-2002 to 2009-2011. The [national life table for 2009-2011](#) was previously published by National Records of Scotland (NRS) using data rolled forward from the 2001 Census.

Differences between previous national life tables and revised national life tables have been documented in the 2009-2011 release for [England and Wales](#). The differences in the tables for the UK as a whole will not be discussed further in this statistical bulletin as they are small and very similar to those seen for England and Wales.

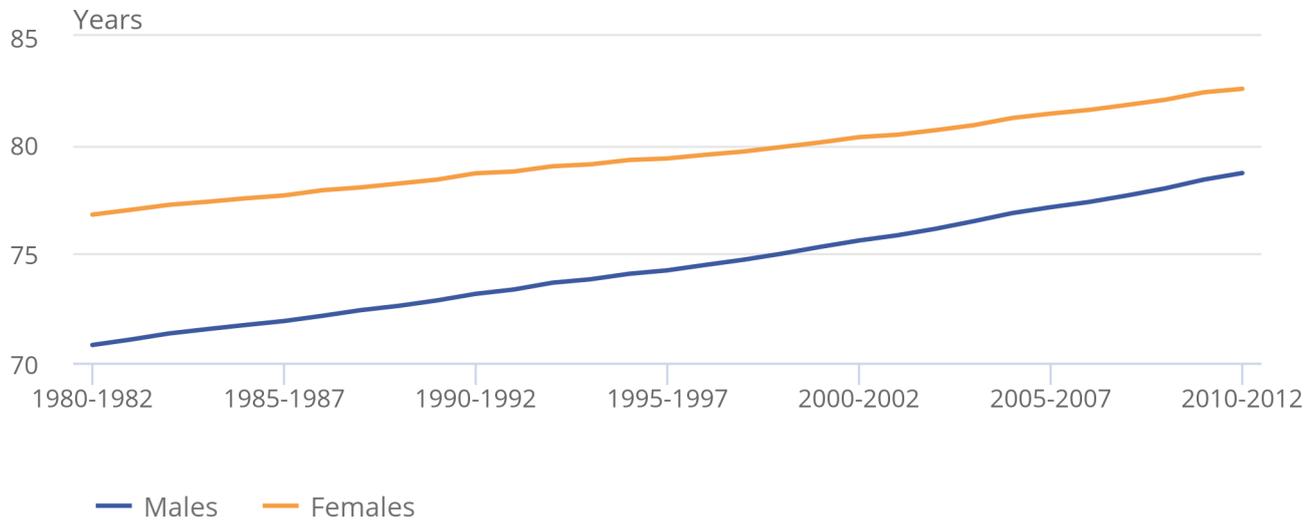
## 5 . Life expectancy at birth

### United Kingdom

Life expectancy at birth in the UK has reached its highest level on record for both males and females. A newborn baby boy could expect to live 78.7 years and a newborn baby girl 82.6 years if mortality rates remain the same as they were in 2010-2012 throughout their lives.

**Figure 1: Life expectancy at birth, United Kingdom, 1980-1982 to 2010-2012**

Figure 1: Life expectancy at birth, United Kingdom, 1980-1982 to 2010-2012



**Source: Office for National Statistics**

Figure 1 shows how life expectancy at birth in the UK has changed over time. It has consistently increased from 70.8 years for males and 76.8 years for females in 1980-1982 to 78.7 years for males and to 82.6 years for females in 2010-2012. These are increases of about two and a half years per decade for males and two years per decade for females.

Women continue to live longer than men, but the gap has been closing. Although both sexes have shown annual improvements in life expectancy at birth, over the past 30 years the gap has narrowed from 6.0 years to 3.9 years with males demonstrating faster improvements in mortality compared to females.

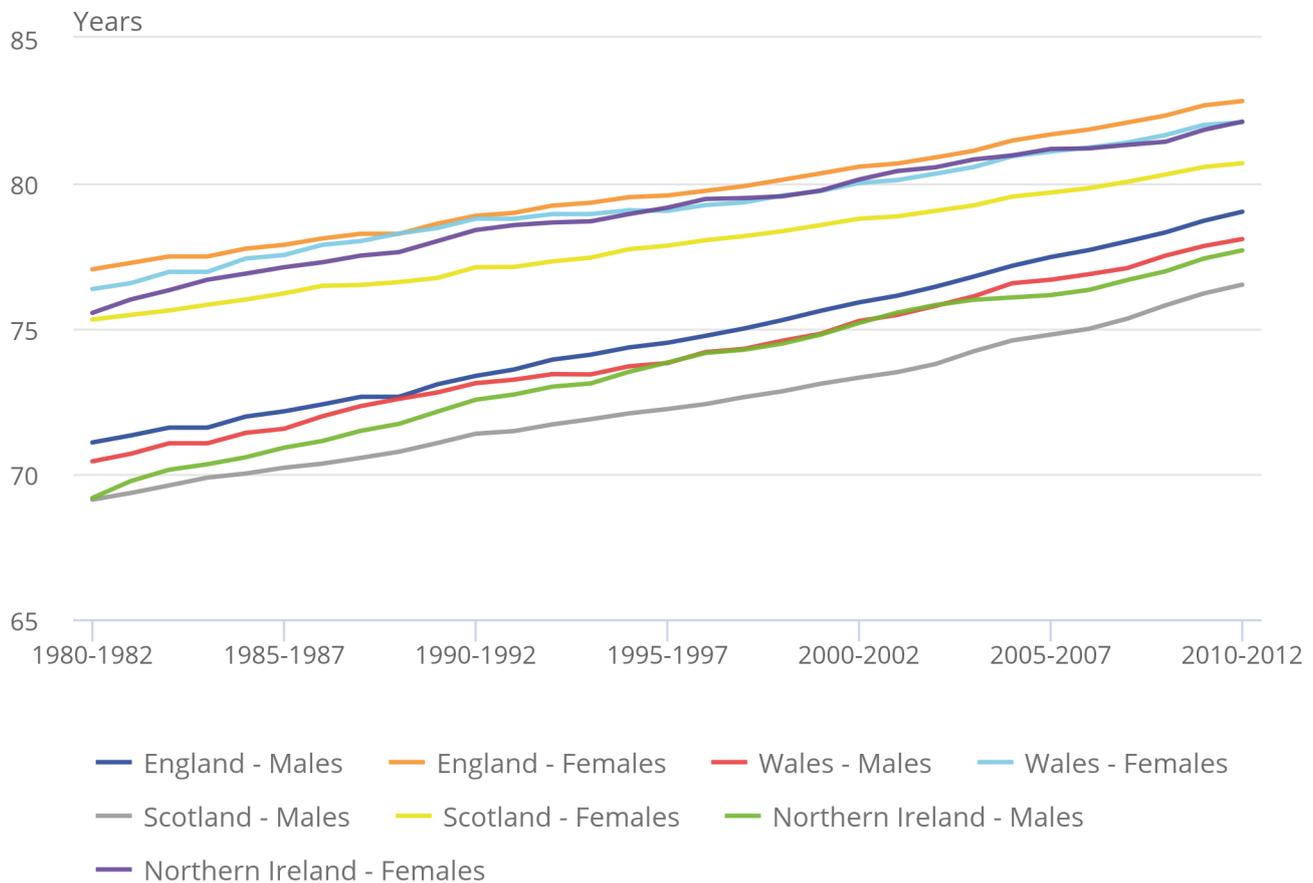
## Comparing the UK constituent countries

Life expectancy in all four countries has risen since 1980-1982. In England life expectancy at birth has risen to 79.0 years for males and 82.8 years for females, the highest of all constituent countries in 2010-2012. Life expectancy for 2010-2012 in Wales has reached 78.1 years for males and 82.1 years for females while in Northern Ireland it has reached 77.7 years for males and 82.1 years for females. Males in Scotland have a life expectancy at birth of 76.5 years and for females it is 80.7 years, the lowest of all constituent countries in 2010-2012.

In England and in Wales the increase in life expectancy at birth since 1980-1982 has been just under eight years for males and six years for females. The greatest gains have been seen in Northern Ireland where male life expectancy has increased by 8.5 years and female life expectancy by 6.6 years since 1980-1982. The lowest gains in life expectancy at birth have been seen in Scotland. Since 1980-1982 male life expectancy at birth has increased by 7.4 years and females have seen an increase of 5.4 years.

**Figure 2: Life expectancy at birth, England, Wales, Scotland and Northern Ireland 1980-1982 to 2010-2012**

Figure 2: Life expectancy at birth, England, Wales, Scotland and Northern Ireland 1980-1982 to 2010-2012



**Source: Office for National Statistics**

Figure 2 shows that life expectancy at birth in England has been consistently higher than life expectancy at birth in Wales, Scotland and Northern Ireland for both males and females throughout the time period 1980-1982 to 2010-2012. For both males and females life expectancy at birth in Northern Ireland was lower than in Wales until the mid 1990s, after which they have converged with each other. Both countries have seen some divergence from England in recent years.

Figure 2 shows that Scottish females have experienced the lowest life expectancy at birth throughout the time period, with increasing divergence from the other constituent countries. The largest difference between England (the country with the highest life expectancy) and Scotland was observed in 2010-2012 at 2.14 years; throughout the 1980s and 1990s the difference was less than two years.

For males the story is broadly similar. Scottish males had the lowest life expectancy at birth of all the constituent countries throughout the time period 1980-1982 to 2010-2012, while England had the highest. Male life expectancy at birth in Northern Ireland converged with Welsh life expectancy at birth in 1995-1997; they remain broadly similar and then diverge again with life expectancy at birth in Wales 0.4 years higher than life expectancy at birth in Northern Ireland in 2010-2012. The largest difference between male Scottish life expectancy and English male life expectancy was observed in 2006-2008 at just under three years. In 2010-2012 male life expectancy at birth was 2.5 years lower for Scotland than for England.

Scotland continues to have the lowest life expectancy at birth of all the constituent countries for both males and females. This could be associated with higher levels of alcohol consumption, a greater smoking prevalence and higher levels of cardio-vascular diseases in Scotland compared to the other constituent countries of the UK <sup>1</sup>.

The continued increases in life expectancy seen since the 1980s for both males and females in all of the UK constituent countries are due to the improvements in mortality at older ages. As mortality improves at older ages, larger numbers of people survive to the oldest ages and this contributes to the ageing populations of England, Wales, Scotland and Northern Ireland.

## Notes for life expectancy at birth

1. Scottish health survey- UK comparisons: The Scottish Government, 2010.

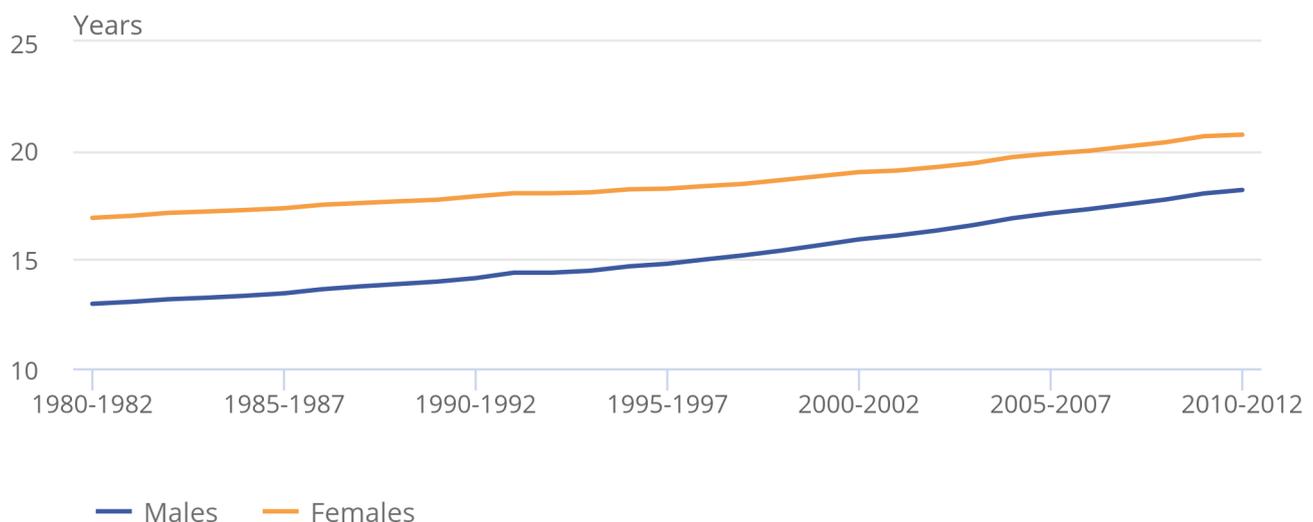
## 6 . Life expectancy at older ages

### Life expectancy at age 65

Life expectancy at age 65 for men in the UK has reached 18.2 years and for women it has reached 20.7 years in 2010-2012.

**Figure 3: Life expectancy at age 65, United Kingdom, 1980-1982 to 2010-2012**

Figure 3: Life expectancy at age 65, United Kingdom, 1980-1982 to 2010-2012



Source: Office for National Statistics

Figure 3 shows how life expectancy at age 65 in the UK has improved over time. For men it has risen by 5.2 years since 1980-1982 when it was 13.0 years. Women have seen a smaller increase of 3.8 years since 1980-1982 when it was 16.9 years.

The difference between male and female life expectancy at age 65 has decreased over the last 30 years from 4.0 years in 1980-1982 to 2.5 years in 2010-2012. Male life expectancy at age 65 has improved at a faster rate compared to females, but males have not yet reached the life expectancy we observe for females at age 65. Male life expectancy at age 65 in 2010-2012 is the same as female life expectancy at age 65 was in 1994-1996.

## Comparing the UK constituent countries

**Table 1: Life expectancy at age 65, England, Wales, Scotland and Northern Ireland, 1980-1982, 1995-1997 and 2010-2012**

Country	1980-1982		1995-1997		2010-2012	
	Males	Females	Males	Females	Males	Females
England	13.1	17	14.9	18.4	18.3	20.9
Wales	12.5	16.6	14.5	18	17.9	20.4
Scotland	12.3	16	13.9	17.3	17	19.4
Northern Ireland	12.5	16.3	14.6	18.1	17.8	20.5

Source: Office for National Statistics

In 2010-2012 life expectancy at age 65 in England reached 18.3 years for men and 20.9 years for women, the highest of all the constituent countries. England has consistently demonstrated the highest life expectancy at age 65 throughout the time period 1980-1982 to 2010-2012. Men and women in Wales and Northern Ireland have experienced similar life expectancy at age 65 to each other throughout the time period. In 2010-2012 men and women in Northern Ireland and Wales have a life expectancy at age 65, around 0.4 years lower than men and women in England.

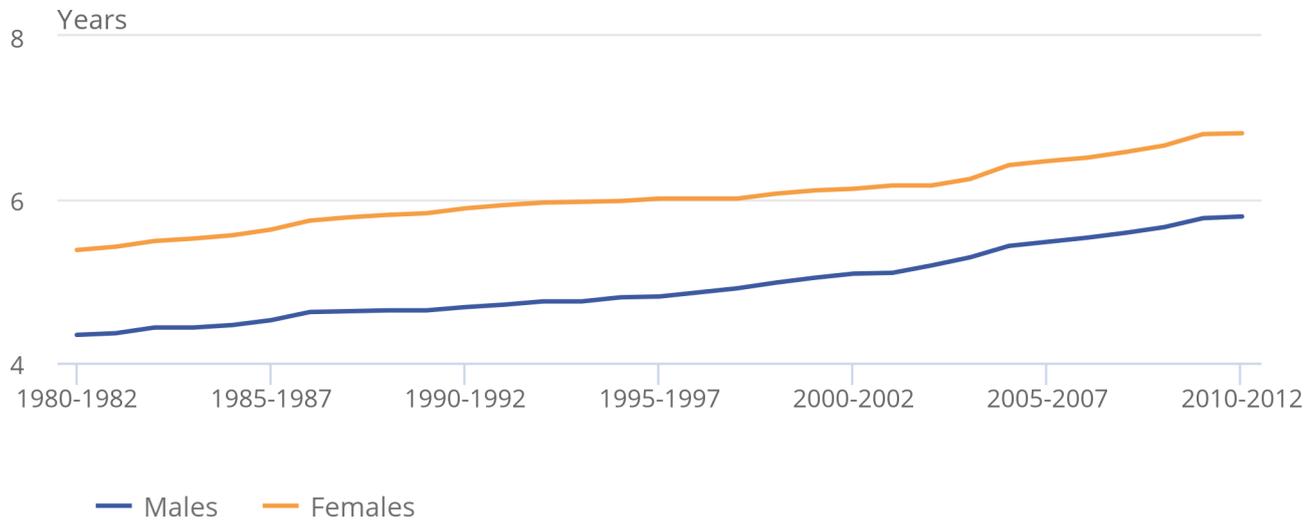
Table 1 shows that Scotland has the lowest life expectancy at age 65 for both men and women in 2010-2012 at 17.0 years and 19.4 years respectively. Scottish life expectancy has been consistently lower throughout the time period and has diverged away from the other constituent countries. In 1980-1982 female life expectancy at age 65 in Scotland was 0.3 years lower than the next lowest country (Northern Ireland), while in 2010-2012 the gap has grown to one year lower than the next lowest country (Wales).

## Life expectancy at age 85

A man in the UK aged 85 had a life expectancy of 5.8 years in 2010-2012. For women the equivalent figure was 6.8 years.

**Figure 4: Life expectancy at age 85, United Kingdom, 1980-1982 to 2010-2012**

Figure 4: Life expectancy at age 85, United Kingdom, 1980-1982 to 2010-2012



**Source: Office for National Statistics**

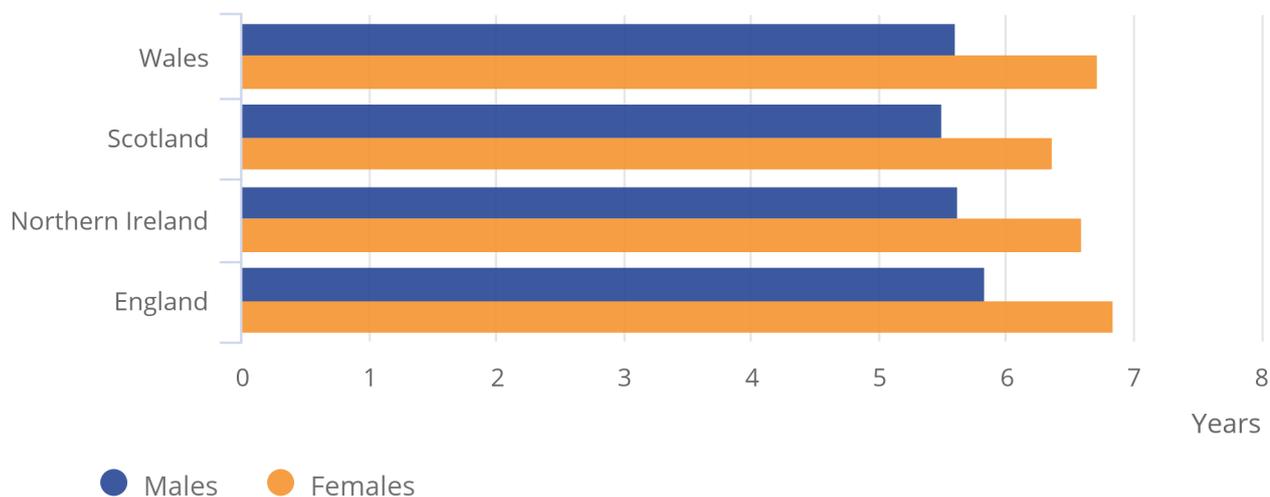
Life expectancy at age 85 has improved for both men and women in the UK. From 1980-1982 to 2010-2012 it has increased by 1.5 years for both sexes. The gap between life expectancy at age 85 for men and women has remained fairly consistent; in 1980-1982 the difference was one year, this increased to 1.2 years for most of the 1990s and has fallen to one year again in 2010-2012.

## Comparing the UK and constituent countries

Figure 5 shows that life expectancy at age 85 is the highest in England for both males and females in 2010-2012, at 5.8 years and 6.9 years respectively.

**Figure 5: Life expectancy at age 85, England, Wales, Scotland and Northern Ireland, 2010-2012**

Figure 5: Life expectancy at age 85, England, Wales, Scotland and Northern Ireland, 2010-2012



Source: Office for National Statistics

Scotland had the lowest life expectancy at age 85 for men in 2010-2012 at 5.5 years, closely followed by men in Northern Ireland and men in Wales at 5.6 years. Female life expectancy at age 85 in Scotland in 2010-2012 was 6.4 years, the lowest of the constituent countries. Women in Northern Ireland and in Wales had a life expectancy at age 85 of 6.6 years and 6.7 years respectively in 2010-2012.

## 7 . Surviving to and deaths at older ages

Table 2 gives the percentage increases in life expectancy at birth, at age 65 and at age 85, between 1980-1982 and 2010-2012 in the UK. It shows that the percentage change in life expectancy between 1980-1982 and 2010-2012 was greater at ages 65 and 85 than for life expectancy at birth for both males and females. For women the percentage increase in life expectancy at age 85 (26%) was greater than at age 65 and at birth (23% and 8%), but for men the greatest percentage increase in life expectancy was at age 65 (40%). Although life expectancy is lower for males than females, males have experienced larger improvements at all ages. The greater increases at older ages add to evidence that increasing life expectancy over the last few decades is mostly due to the improving mortality rates at older ages.

**Table 2: Percentage increase in life expectancy, United Kingdom, 1980-1982 to 2010-2012**

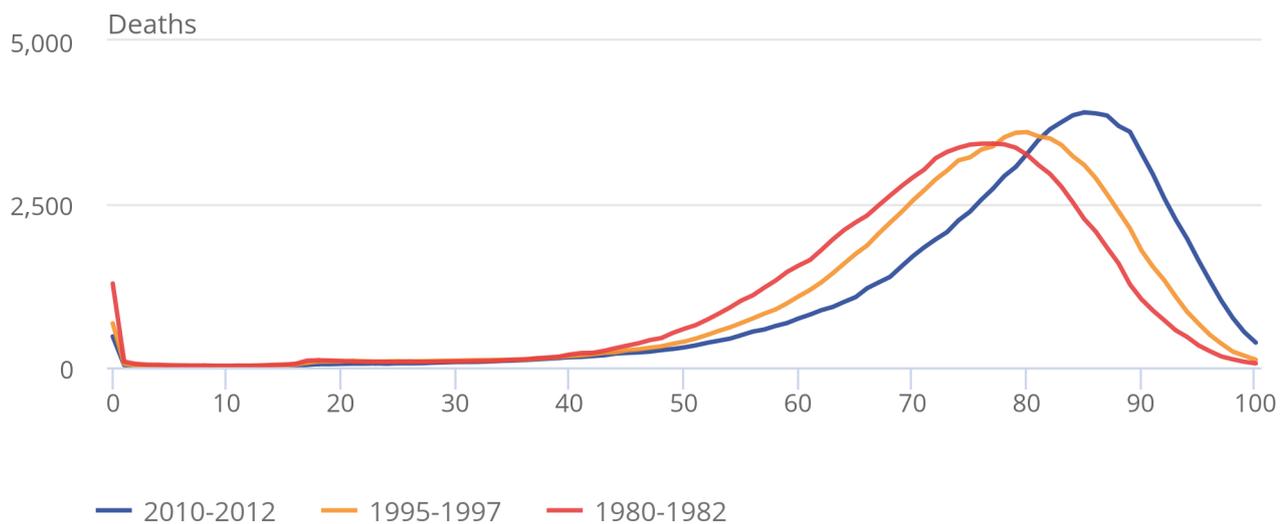
	Life expectancy at birth	Life expectancy at age 65	Life expectancy at age 85
Males	11%	40%	33%
Females	8%	23%	26%

Source: Office for National Statistics

Table 2 shows that as life expectancy improvements are happening at older ages, the proportion of deaths occurring at older ages is also increasing. As life expectancy improves we also see increases in the age where the most deaths occur.

**Figure 6: Number of deaths\* by age, males, United Kingdom, 1980-1982, 1995-1997 and 2010-2012**

Figure 6: Number of deaths\* by age, males, United Kingdom, 1980-1982, 1995-1997 and 2010-2012



Source: Office for National Statistics

**Notes:**

- \*Deaths are taken from the life table and are therefore age standardised; they do not represent the actual number of deaths registered in the United Kingdom in the selected years.
- Life expectancy at birth: 1980 to 1982 - 70.8, 1995 to 1997 - 74.2, 2010 to 2012 - 78.7.
- Age of most deaths: 1980 to 1982 - 77, 1995 to 1997 - 80, 2010 to 2012 - 85.

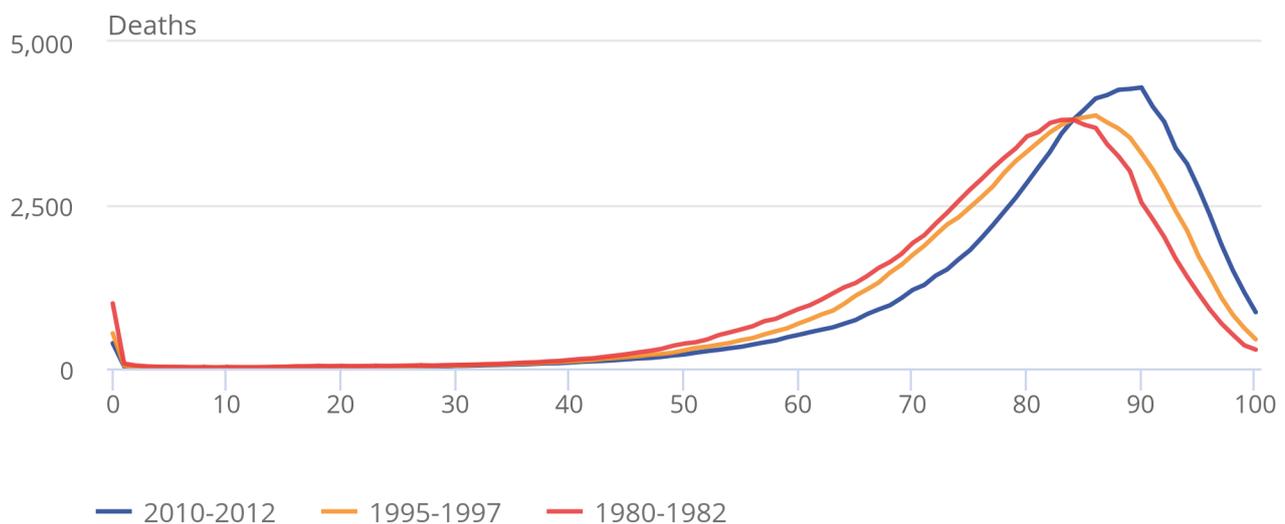
Figure 6 shows the age distribution of deaths (from the life table) for males in the UK. The age at which most deaths occur (the mode), has increased over time. This is shown by the peak of the data moving to the right in Figure 6, and is driven by mortality improvements at older ages.

The arrows show how life expectancy at birth has also improved for the selected years, but life expectancy remains lower than the modal age at death. The increasing height of the peak in the data shows that more deaths are happening at older ages relative to younger ages. The life table shows that, in 1980-1982, 74% of all male deaths in the UK happened at age 65 and above; in 1995-1997 this was 81% and by 2010-2012, 86% of all male deaths occurred at age 65 and above.

In 2010-2012 male deaths at age 85 and above accounted for 38% of all male deaths; in 1980-1982 this was just 14%, demonstrating that males in the UK are surviving to and dying at older ages in more recent years.

**Figure 7: Number of deaths\* by age, females, United Kingdom, 1980-1982, 1995-1997 and 2010-2012**

Figure 7: Number of deaths\* by age, females, United Kingdom, 1980-1982, 1995-1997 and 2010-2012



Source: Office for National Statistics

Notes:

- \*Deaths are taken from the life table and are therefore age standardised; they do not represent the actual number of deaths registered in the United Kingdom in the selected years.
- Life expectancy at birth: 1980 to 1982 - 76.8, 1995 to 1997 - 79.4, 2010 to 2012 - 82.6.
- Age of most deaths: 1980 to 1982 - 84, 1995 to 1997 - 86, 2010 to 2012 - 90.

Figure 7 shows the equivalent data for females in the UK. The pattern shown is very similar to what is seen for males although both the modal age at death and life expectancy at birth are at higher ages. Females have a higher number of deaths happening at the mode which is shown by the height of the peak in the data. The increasing height of the peak in the data over time shows that more deaths are happening at older ages particularly in more recent years. This is also demonstrated by the life table which shows that in 1980-1982 84% of all female deaths in the UK happened at age 65 and above; in 1995-1997 this was 88% and by 2010-2012 91% of all female deaths occurred at age 65 and above.

In 2010-2012 female deaths at age 85 and above accounted for 52% of all female deaths; in 1980-1982 this was just 31% demonstrating that females in the UK are increasingly surviving to and dying at older ages.

Mortality rates at older ages are thought to be improving because of a combination of factors. One major factor is the improvements in mortality from circulatory diseases, such as heart disease and stroke, partly driven by changing smoking habits<sup>1</sup> and medical and technological advances.

People born between 1926 and 1935, now aged in their late 70s and 80s, and in particular those born around 1930 are often referred to as the Golden Cohort. This group have experienced improvements in mortality throughout most of their lifetimes that no cohorts previously or since have experienced. The effect of their greater rates of improvement in mortality contributes to the overall improvements in life expectancy at older ages in the UK.

As the chance of surviving to older ages has improved over time, this has led to increases in the population aged 90 and over. See ONS [estimates of the very old \(including centenarians\)](#) which are also published today.

## Notes for surviving to and deaths at older ages

1. Murphy M, Di Cesare M, (2012) Use of an age-period-cohort model to reveal the impact of cigarette smoking in trends in twentieth century adult cohort mortality in England and Wales, *Population Studies*, Vol 66, issue 3.

## 8 . International comparison

### Comparison of life expectancy in the United Kingdom's constituent countries with other selected countries

Tables 3 and 4 show life expectancy at birth, at age 65 and at age 85 for males and females respectively, for a selection of countries, selected purely by the availability of the relevant data.

**Table 3: Life expectancy in selected countries, Males, 2010-2012**

	Life expectancy at birth	Life expectancy at age 65	Life expectancy at age 85
Iceland (2012)	80.8	19.2	5.9
Switzerland (2012)	80.5	19.1	..
Japan (2012)	79.9	18.9	6.0
Sweden (2012)	79.9	18.4	..
Australia (2009-2011)	79.7	19.1	6.2
Italy (2010)	79.4	18.3	5.7
Norway (2012)	79.4	18.2	5.5
Spain (2012)	79.4	18.5	5.9
New Zealand (2010-2012)	79.3	18.8	5.9
Netherlands (2012)	79.1	17.9	..
England (2010-2012)	79.0	18.3	5.8
France (2012)	78.4	18.1	..
Wales (2010-2012)	78.1	17.9	5.6
Denmark (2011-2012)	you	17.3	5.4
Germany (2009-2011)	77.7	17.5	5.5
Northern Ireland (2010-2012)	77.7	17.8	5.6
Scotland (2010-2012)	76.5	17.0	5.5
Poland (2012)	72.7	15.4	5.5
Estonia (2012)	71.1	14.4	5.2
Brazil (2011)	70.6	16.1	..
Latvia (2012)	69.1	13.5	4.4

Source: Swiss Federal Statistical Office, Statistics Iceland, Australian Bureau of Statistics, Statistics Bureau of Japan, The National Institute of Statistics Italy, Statistics Netherlands, National Statistics Institute of Spain, Statistics New Zealand, Statistics Norway, ONS, Federal Statistical Office of Germany, Statistics Denmark, Central Statistical Office of Poland, Brazilian Institute of Statistics and Geography, Statistical Office of Estonia, Central Statistical Bureau of Latvia, Statistics Sweden and National Institute of Statistics and Economic Studies-France

Notes:

1. Countries have been selected based on the availability of data for the selected years.
2. .. Indicates that the figure was not available at the time of publication of this report.

From the selected countries in Table 3, Iceland had the highest male life expectancy at birth of 80.8 years in 2012, while Latvia had the lowest at 69.1 years. Life expectancy at birth for males in England was 79.0 years in 2010-2012, higher than France at 78.4 and Germany at 77.7 years. Male life expectancy at birth in Wales was just below France at 78.1 years. Males in Northern Ireland and Scotland had life expectancies at birth of 77.7 years and 76.5 years respectively, which were considerably above Poland, Estonia, Brazil and Latvia.

Although men living in England had lower life expectancy at birth than 10 of the countries shown in Table 3, the difference between theirs and Iceland's is less than two years and shows the potential for further increases in future male life expectancy.

Compared to the countries in Table 3 Iceland also had the highest life expectancy at age 65 in 2012 at 19.2 years. Again Latvia was the lowest at 13.5 years. Men in England have on average 18.3 years of life remaining at age 65, which is above Norway at 18.2 years, despite Norway having a higher life expectancy at birth. Welsh males have a life expectancy at age 65 of 17.9 years which is the same as in the Netherlands. For males in Northern Ireland, life expectancy at age 65 is higher at 17.8 years than in Denmark and Germany. Life expectancy at age 65 in Scotland is around one year higher than Brazil at 17.0 years, although Scotland has a much higher life expectancy at birth compared to males in Brazil. The figure for England at age 65 has a difference of less than one year from the highest shown in Table 3.

At age 85 men in Australia had the highest life expectancy of 6.2 years. Men in England having reached aged 85 could expect, on average, to live a further 5.8 years. The remaining UK constituent countries all have similar male life expectancy at age 85 to the other selected countries in Table 3.

**Table 4: Life expectancy in selected countries, females, 2010-2012**

	Life expectancy at birth	Life expectancy at age 65	Life expectancy at age 85
Japan (2012)	86.4	23.8	8.1
Spain (2012)	85.1	22.5	7.0
France (2012)	84.8	22.6	..
Switzerland (2012)	84.7	22.1	..
Italy (2010)	84.4	21.9	6.9
Australia (2009-2011)	84.2	22.0	7.2
Iceland (2012)	83.9	21.1	6.7
Sweden (2012)	83.5	21.0	..
Norway (2012)	83.4	21.0	6.6
New Zealand (2010-2012)	83.0	21.2	6.8
England (2010-2012)	82.8	20.9	6.9
Netherlands (2012)	82.8	19.8	..
Germany (2009-2011)	82.7	20.7	6.3
Northern Ireland (2010-2012)	82.1	20.5	6.6
Wales (2010-2012)	82.1	20.4	6.7
Denmark (2011-2012)	81.9	20.0	6.6
Estonia (2012)	81.1	19.8	6.2
Poland (2012)	81.0	19.7	6.5
Scotland (2010-2012)	80.7	19.4	6.4
Latvia (2012)	78.9	18.4	5.3
Brazil (2011)	77.7	18.9	..

Source: Swiss Federal Statistical Office, Statistics Iceland, Australian Bureau of Statistics, Statistics Bureau of Japan, The National Institute of Statistics Italy, Statistics Netherlands, National Statistics Institute of Spain, Statistics New Zealand, Statistics Norway, ONS, Federal Statistical Office of Germany, Statistics Denmark, Central Statistical Office of Poland, Brazilian Institute of Statistics and Geography, Statistical Office of Estonia, Central Statistical Bureau of Latvia, Statistics Sweden and National Institute of Statistics and Economic Studies-France

Notes:

1. Countries have been selected based on the availability of data for the selected years.
2. .. Indicates that the figure was not available at the time of publication of this report.

Table 4 shows that out of the 21 selected countries Japanese females had the highest life expectancy at birth of 86.4 years in 2012. Females in Brazil had the lowest life expectancy at 77.7 years. Life expectancy at birth for females in England was 82.8 years, 3.6 years lower than Japan's. This shows the potential for further increases in female life expectancy. Life expectancy at birth for females in England is higher than in Germany and Denmark. Females in France appear to be doing better than their male counterparts when being compared with the other countries shown in Tables 3 and 4. French females had the third highest life expectancy at birth and males had the 12th highest compared with the other countries shown in Tables 3 and 4. A similar pattern seen in Table 3 is continued in Table 4; females in Northern Ireland and Wales have a life expectancy at birth below that of the Netherlands and Germany but above Denmark, both at 82.1 years. Females in Scotland have a life expectancy almost six years below Japan at 80.7 years. Scottish females rank lower in Table 4 compared to their male counterparts in Table 3.

Japanese women had the highest life expectancy at age 65, at 23.8 years in 2012. Of the 21 selected countries, women in Latvia had the lowest life expectancy at age 65 at 18.4 years. Scottish females in 2010-2012 had a life expectancy at age 65 one year longer than women in Latvia. Women in England having celebrated their 65th birthday had on average a further 20.9 years of life, more than women in Germany (20.7 years) and in Denmark (20.0 years).

Life expectancy at age 85 was the highest for women in Japan at 8.1 years. Australia had the second highest life expectancy at age 85 at 7.2 years, nearly one whole year lower than Japan. Next is Spain with 7.0 years of life expectancy at age 85, while all the other countries shown in Table 4 are below seven years. In England women aged 85 in 2010-2012 would expect to live on average a further 6.9 years. Females in Northern Ireland had the same life expectancy at age 85 as females in Norway and Denmark, at 6.6 years. Scottish female life expectancy at age 85 was higher than in Germany at 6.4 years and 6.3 years respectively. The lowest life expectancy at age 85 for females was in Latvia at 5.3 years in 2012.

## 9 . Use and users of life tables

The national life tables provide the user with life tables annually, therefore enabling up-to-date analysis of life expectancy which is important to track progress against health targets and pension analysis. Life expectancy figures provide users with an indicator of the health of the nation which can be used to inform policy, planning and research in both public and private sectors in areas such as health, population, pensions and insurance.

Key uses:

- to study the course of mortality throughout the life cycle
- as an indicator of the health of the nation
- to inform policy regarding state pension age
- to assess risk for life assurance and pension liability

Within ONS, national life tables are used in the methodologies used to calculate disability free life expectancy and healthy life expectancy and in the new methodology for calculating 'duration of working life'. They are also used to inform the assumptions of future mortality for the National Population Projections.

Users of life tables outside of ONS include:

Other government departments:

- Government Actuary's Department
- Department of Work and Pensions
- Department of Health and Health Authorities
- National Records of Scotland, Northern Ireland Statistics and Research Agency, and Welsh Assembly
- HM Treasury

Non-government organisations:

- universities – academics and students
- news media
- financial advisors/consultants
- insurance companies and actuarial professions
- the general public

## 10. Background notes

1. Figures in the tables in this bulletin and commentary are rounded to one decimal place.
2. Calculations in this bulletin have been done using unrounded figures.
3. The national life tables for the years 2000-2002 to 2010-2012 take into account the re-based population estimates following the 2011 Census.
4. National Life Tables for Scotland show a larger change for estimates between 2001 to 2002 for some ages than other years. This is due to the way in which the population estimates for Scotland were revised to include the 2011 Census results and because it is likely that the 2001 Census in Scotland estimated too many people at older ages. More information on how the population estimates were revised in Scotland can be found on the [NRS website](#).
5. These tables were formerly known as interim life tables as fully graduated life tables have been prepared every ten years (decennial life tables), based on the three years data around a census year. However as this product has been produced annually for more than 30 years, it has now become an established annual output rather than an interim measure.
6. Follow ONS on [Twitter](#) and [Facebook](#).
7. Details of the policy governing the release of new data are available by visiting [www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html](http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html) or from the Media Relations Office email: [media.relations@ons.gsi.gov.uk](mailto:media.relations@ons.gsi.gov.uk)

These National Statistics are produced to high professional standards and released according to the arrangements approved by the UK Statistics Authority.