



Scotland's Population

The Registrar General's Annual
Review of Demographic Trends

2018



164th Edition



Annual Report of the Registrar General of Births, Deaths and Marriages for Scotland 2018

164th Edition

To Scottish Ministers

I am pleased to present to you my Annual Report for the year 2018, which will be laid before the Scottish Parliament pursuant to Section 1(4) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965.

Paul Lowe

Registrar General for Scotland

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Foreword

It gives me great pleasure to present the 164th Registrar General's Annual Review, my first annual report since taking up the position of Registrar General and Chief Executive of National Records of Scotland.

The report provides an overview of Scotland in 2018 looking at key demographic trends for population, migration, and households, as well as analysis of key life events including births, deaths, marriages and civil partnerships.

We have delivered over thirty high quality statistical publications over the past year, and we continue to strive to improve the accessibility of our data to reach a wider range of users. I'm pleased that our statistics continue to shape and inform public policy and debate.

Over the last few years, we have seen an increase in demand for our statistics, analysis and advice. For example, users are keen to understand population trends and how these may be impacted by changes in migration which might result from the UK's decision to leave the EU. There is also significant interest in exploring the changing trends in mortality and life expectancy, and the possible causes.

Scotland's overall population increased again in 2018, to a record high of 5.44 million people, with migration continuing to be the main driver of that growth. However, the rate of this population growth has slowed, as a result of a reduction in net migration and more deaths than births in the last year. At local level we have seen a more mixed picture, with 14 of Scotland's council areas (mostly rural, island and in the west of Scotland) experiencing depopulation, three more than the previous year.

Against a backdrop of a falling birth rate, Scotland's population is ageing, with a shift in population from the west to east and declining population in rural areas. Scotland is similar to the rest of the UK and many countries around the world, in enjoying the positive benefits associated with people living longer. Nevertheless, this has implications for future decision making around the allocation of funding and resources, for tax revenues, pensions, education, health and social care provision. With the recent formation of a new Ministerial task group to consider Scotland's future population challenges, I'm pleased to say that NRS will fulfil a significant role in providing evidence and analysis to help inform the development of new solutions to address demographic and population change.

Over the course of the year, our statisticians have been collaborating with other organisations. We are working with NHS Health Scotland, to help inform debate on the reasons for stalling life expectancy in Scotland. Knowing which causes of death (and at what ages) lead to shorter life expectancy, will help shape understanding

about how this trend might be reversed. These analyses help inform future policy development – to ultimately support people in Scotland to live longer and healthier lives.

We also published healthy life expectancy estimates for Scotland for the first time, as part of an effort to harmonise life expectancy statistics within Scotland and across the UK. The new estimation method used means that consistent cross-national comparisons can now be made between Scotland and the rest of the UK, and local estimates for Scotland will be available on a more regular basis.

Our drive to increase the reach and impact of our statistics has received some notable recognition this year. Two of our projects reached the finals of the Scottish Government 2018 Communicating Analysis awards. The first was our Council Area Profiles, which bring together a wealth of NRS data and make it easier for users to understand figures for their area. We were also recognised for our work to share our knowledge and expertise with other public sector organisations through workshops, forums and one-to-one support. We were also short-listed for the Royal Statistical Society Champion Award for Official Statistics for this work. The Office of Statistics Regulation, in their report for the UK Government Statistical Service, used the NRS population projections publication as an excellent example of statistical coherence. It is good to reflect on a year where there has been external recognition of the quality of the work we do and the innovation we have introduced.

We have also been exploring the potential of using existing administrative data sources to further enhance our data and analysis. NRS are working alongside other Government Statistical Service partners to support an ambitious programme of work, led by the Office for National Statistics, to transform migration statistics by making greater use of administrative data held across government.

We continue to play a central role developing our data linkage service, working with our partners across government, health and academia to further research using Scotland's rich source of administrative data. We have renewed our commitment to the Scottish Longitudinal Study (SLS) and have continued to provide a data indexing service on behalf of the Scottish Informatics and Linkage Collaboration (SILC).

Through the NHS Central Register (NHSCR), we continue to support our partners in Health, local government and the third sector, on administration and provision of services to the public. Our ongoing services to medical researchers also resulted in the NHSCR supporting over fifty studies in the last year.

Finally, I would also like to acknowledge the vital work undertaken by the Registration Services located across Scotland. The production of this report simply wouldn't have been possible without their collective commitment and

professionalism. This information plays a pivotal role in supporting evidence based decision making and the delivery of public services. It informs both regional and international comparisons and underpins our population estimates and projections, which are integral to the policy development and evaluation work undertaken by both central and local government.

In what has been an exciting and productive year, we continue to provide high quality and trustworthy information, innovate and improve, and play a significant role in informing the important decisions that affect the people of Scotland.



A handwritten signature in black ink, appearing to read 'Paul Lowe', with a small dot at the end.

Paul Lowe

Registrar General and Chief Executive
National Records of Scotland



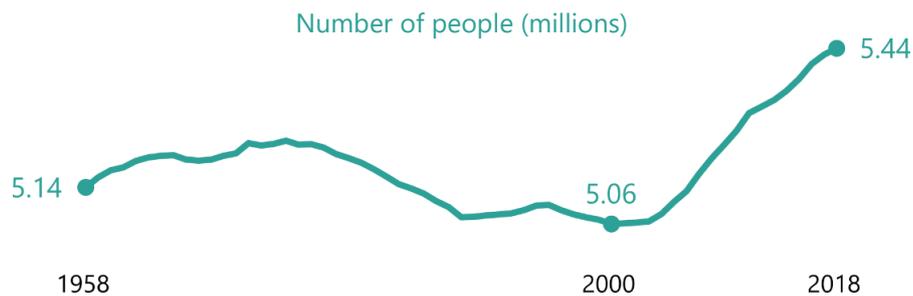
Headline messages



Population

Scotland's population is at a record high, but population growth has slowed

The estimated population of Scotland as at mid-2018 was 5,438,100. This was the ninth consecutive year where the population reached a new high.

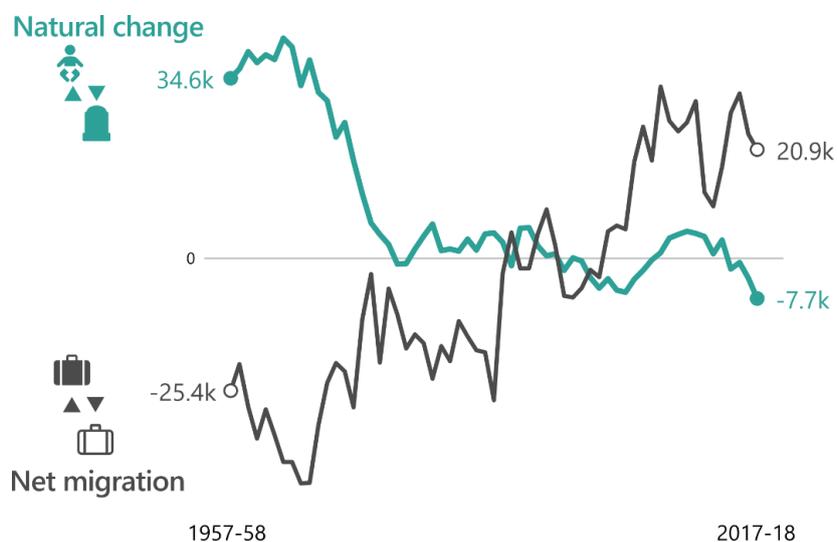


Population growth has slowed in the past two years from 0.59% in the year to mid-2016 to 0.25% in the year to mid-2018. While growth has slowed in recent years, it remains higher than any year between mid-1972 and mid-2003.

Migration has driven Scotland's recent population growth

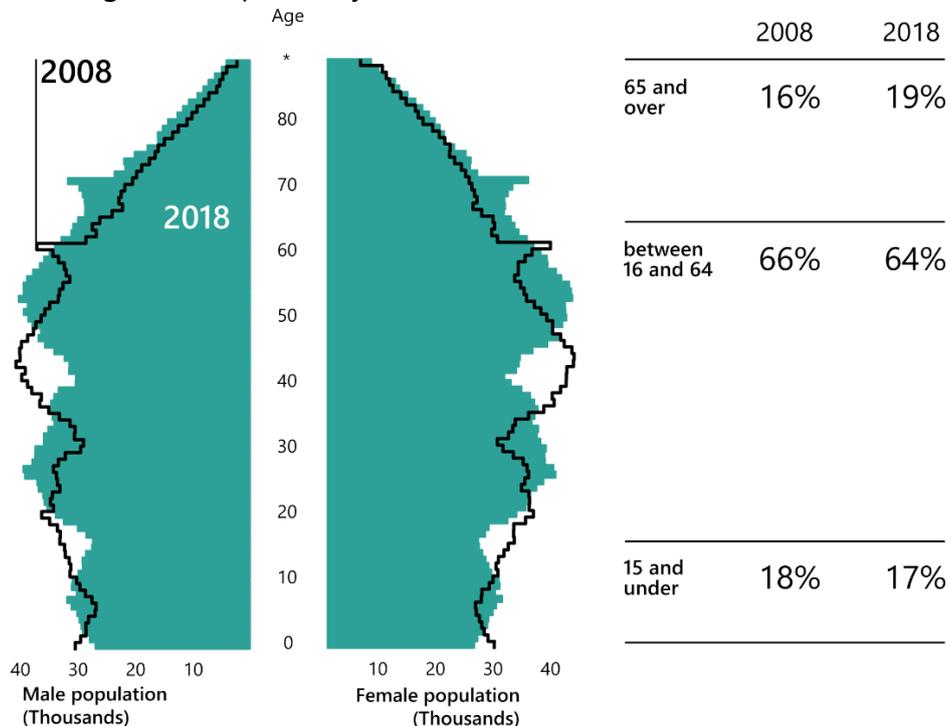
Migration continues to add to Scotland's population with 20,900 more people coming to Scotland than leaving in the latest year to mid-2018. Although net migration has decreased over the past two years, it remains positive.

In contrast, natural change (births minus deaths) has not contributed to Scotland's recent population growth, as there were 7,700 more deaths than births in the latest year. This is the largest natural decrease on record.



Scotland's population is ageing

In mid-2018, just under one in five people (19%) in Scotland were aged 65 and over, compared with 16% in mid-2008. The population aged 16 to 64 has decreased from 66% to 64% over the last 10 years. The higher number of females at older ages reflects their longer life expectancy.



*Only people aged 89 and under are shown for illustration purposes.

Some areas of Scotland experienced depopulation in the last year

Over the latest year to mid-2018, Scotland's population increased by just over 0.2%. However, the level of population change varies across Scotland; 10 councils had population growth above the Scottish average, 8 councils increased in population but at a slower rate than the Scottish average, and 14 councils decreased in population.

Most of Scotland's population growth has come from migration

Scotland had the lowest population growth from natural change (0.2%) of all the UK countries over the 10 year period between 2008 and 2018, and was the most reliant on net migration (and other changes) for population growth.

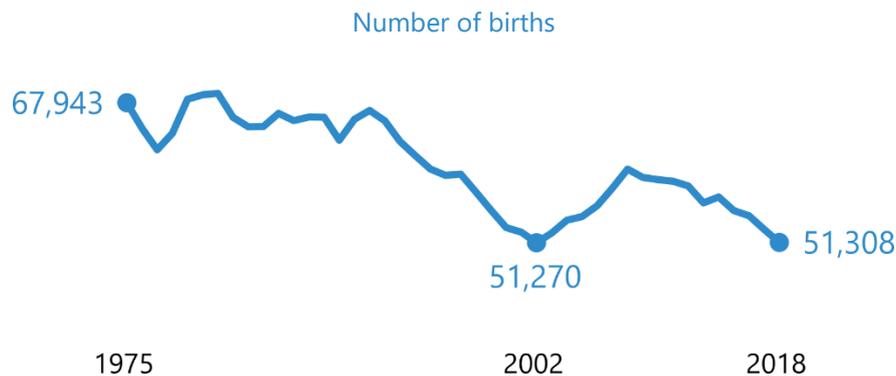
Scotland's population growth from net migration and other changes (4.4%) was similar to England's (4.3%), but England's total population growth was much larger than Scotland's due to its higher natural change (more births than deaths).



Births

The number of births continued to fall in 2018

There were 51,308 live births registered in 2018, the lowest annual total since 2002 and the second lowest annual total since records began in 1855.



The average age of mothers was 30.6 in 2018, compared to 26.0 in 1975. Similarly, the average age of fathers has increased to 33.1 in 2018, compared to 28.4 in 1975.

Scotland's total fertility rate is the lowest in the UK

In 2018, the total fertility rate for Scotland was 1.42. For a population to replace itself, the total fertility rate needs to be around 2.1. The last time Scotland met the replacement total fertility rate was in 1973, with a total fertility rate of 2.13.

At the beginning of the 1970s, Scotland's total fertility rate (TFR) was slightly higher than that for England and Wales, but since the early 1980s Scotland's TFR has dropped steadily and is now the lowest of the UK countries.

Four out of five births in Scotland are to UK-born mothers

In 2018, 83% of births were to mothers who were born in the UK, including 74% who were born in Scotland.

Mothers born elsewhere in the European Union (EU) represented 8% of births, including 6% who were born in countries which joined the EU in 2004 or later.

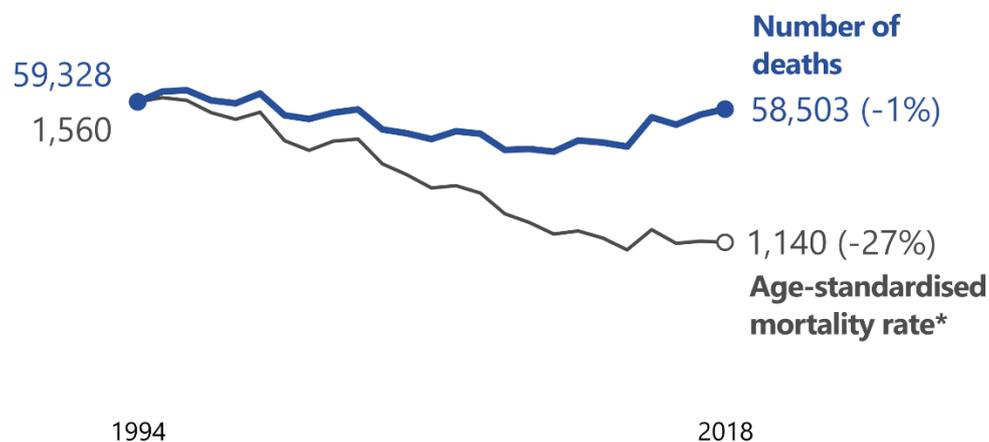


Deaths

The number of deaths has increased and the death rate has been largely stable since 2012

The number of deaths increased by 1.1% to 58,503 in 2018 and is now only 1% lower than it was in 1994.

The age-standardised mortality rate offers a more accurate picture of the trend as it takes account of changes in the population structure and shows what the trend would be if the population structure had remained the same over time. It has decreased by 27% since 1994 but it has been largely stable since 2012 and there was virtually no change in the rate over the last year (-0.3%).



* European Age-standardised rate (EASR) per 100,000 population using the 2013 European Standard Population. For comparison, the two lines start at the same point.

Leading causes of death in Scotland in 2018

The leading cause of death in 2018 was ischaemic heart disease, which accounted for 11.3% of all deaths. This was closely followed by dementia and Alzheimer's disease which accounted for 11.1% of deaths.

The leading cause differed by sex with females being most likely to die from dementia and Alzheimer's disease (14.4% of female deaths) and males most likely to die from ischaemic heart disease (13.9% of male deaths).

Ischaemic heart disease remains the leading cause of death despite a large decrease

Ischaemic heart disease was the leading cause of death in 2000 and 2018 but numbers have almost halved.

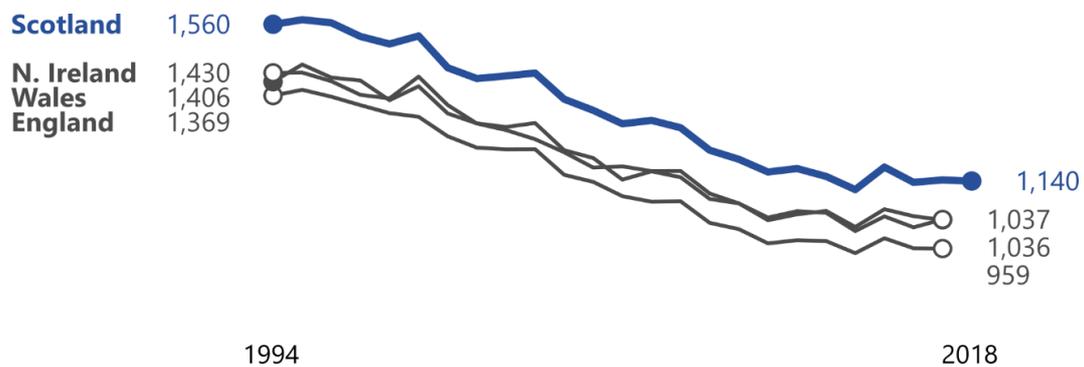
Dementia and Alzheimer's deaths were three times greater in 2018 than in 2000, making them the second most common cause of death in 2018.

Cerebrovascular disease deaths have also fallen. Lung cancer has overtaken this and is now the third most common cause. Influenza and pneumonia was fifth in 2000 but dropped to sixth by 2018.

Scotland has the highest age-standardised mortality rate of all UK countries

The Scottish age-standardised mortality rate has consistently been the highest of all UK countries over time.

The current rate of 1,140 deaths per 100,000 population is 27% lower than in 1994 but there has been no improvement in recent years.



Infant deaths and stillbirths have reduced significantly since the 1970s

There were 190 stillbirths in 2018, a rate of 3.7 for every thousand live and still births. This was the lowest stillbirth rate ever recorded.

There were 163 infant deaths (during the first year of life) in 2018, a rate of 3.2 for every thousand live births. This equalled the previous lowest infant death rate ever which was recorded in 2015.

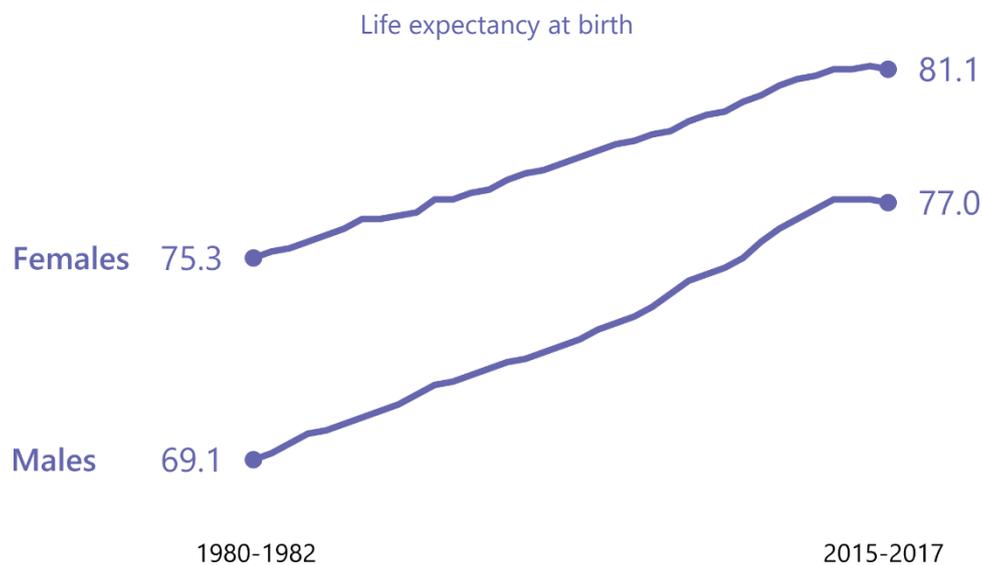


Life expectancy

Life expectancy has increased but improvements have stalled in recent years

Since 1980-1982, life expectancy in Scotland has increased by 7.9 years for males and 5.8 years for females. Between 2012-2014 and 2015-2017, life expectancy has stopped improving. It has fallen slightly for both males and females in the most recent estimate in 2015-2017.

The gap between males and females has also changed over time, from 6.2 years in 1980-1982 to 4.1 years in 2015-2017. This is a result of life expectancy increasing faster for males than for females.



Deprivation has a strong effect on life expectancy

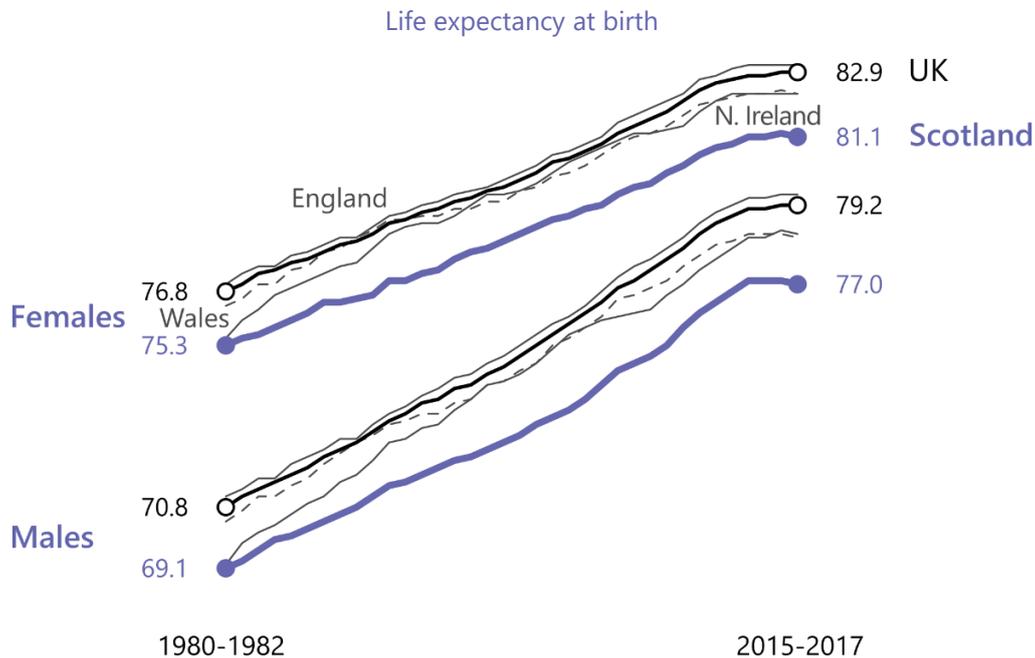
People who live in more deprived areas of Scotland can expect to lead shorter lives than those in less deprived areas.

Females born in 2015-2017 in the 10% most deprived areas of Scotland can expect to live 9.6 years fewer than those who live in the 10% least deprived areas. For males, the difference in life expectancy between the 10% most deprived and 10% least deprived areas is 13.0 years.

Scotland has the lowest life expectancy of all UK countries

Since 1980-1982, life expectancy in Scotland has been lower than the UK average and also lower than any other UK country. The gap between Scottish life expectancy and the UK average was 1.8 years for females and 2.2 years for males in 2015-2017.

The recent slowing in improvement to life expectancy can be seen across all UK countries.



People in less deprived areas can expect to live longer and healthier lives

Deprivation has an even greater effect on healthy life expectancy than on life expectancy.

Females living in the 10% least deprived areas can expect to spend 23.0 more years in good health than those in the 10% most deprived areas. For males, the difference in healthy life expectancy between the 10% least deprived areas and the 10% most deprived areas is 22.5 years.

People in Scotland spend a greater proportion of their lives in good health compared to the rest of the UK

Females born in Scotland in 2015-2017 could expect to spend 62.6 years of their lives in good health followed by 18.4 years in poor health. Males could expect to spend 62.3 years in good health and then 14.7 years in poor health. This means females spend 77.3% of their life in good health and males spend 80.9% of their life in good health, a greater proportion than in any other UK country.

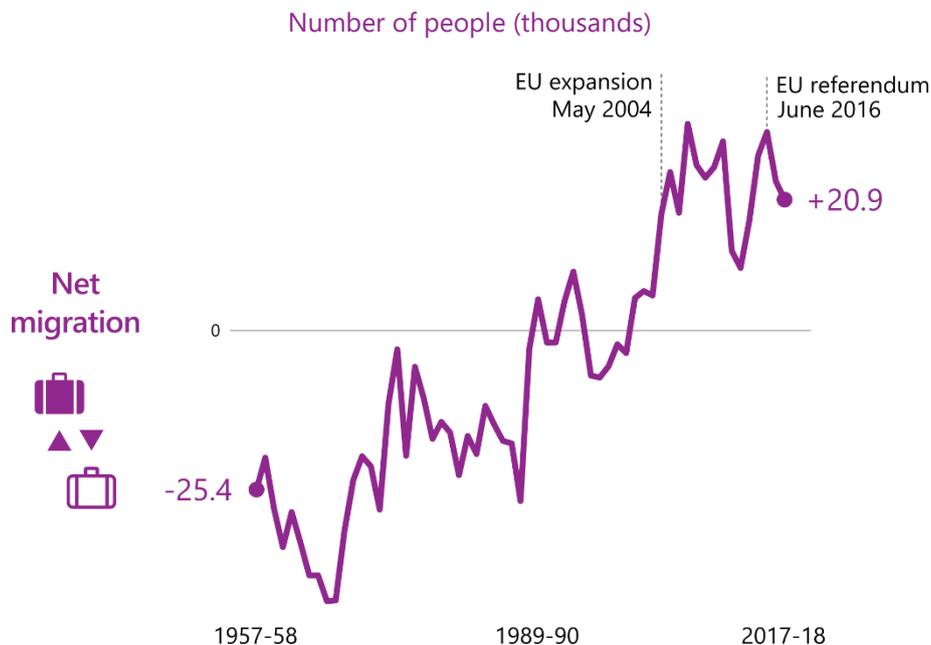


Migration

Nowadays more people come to Scotland than leave although the difference has narrowed in recent years

Over the latest year to mid-2018, 20,900 more people came to Scotland than left. This is a reduction from +23,900 people in the year to mid-2017 and +31,700 people in the year to mid-2016, and coincides with the period after the UK's decision to leave the EU.

Prior to the 1990s, Scotland was mainly a country of negative net migration, with more people leaving than arriving. However, during the 2000s net migration became consistently positive, peaking in the year to mid-2007 when net migration was +33,000 people.



The recent decrease in net migration was driven by fewer people moving to Scotland from overseas and more people leaving to go overseas

The number of people moving to Scotland from overseas (inflows) decreased between mid-2016 and mid-2017 and remained stable over the most recent year to mid-2018.

The number of people moving away from Scotland to overseas (outflows) increased each year between mid-2016 and mid-2018.

The number of people moving from the rest of the UK has been broadly stable recently, and continues to be the highest inflow to Scotland.

More than half of all people moving to Scotland were aged 16 to 34 years

Over the latest year to mid-2018, the most common age group for people moving to Scotland from the rest of the UK or from overseas was 16 to 24 years. The most common age group for moves from Scotland to the rest of the UK or overseas was 25 to 34 years.

In 2018, there were 352,000 non-British nationals living in Scotland

Overall, 7% of the resident population of Scotland have non-British nationality. Of all non-British nationals living in Scotland, 221,000 (63%) were EU nationals and 131,000 (37%) were non-EU nationals. Over half of EU nationals living in Scotland were from EU8 countries.



Note:

EU8: Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

EU14: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain and Sweden.

EU2: Bulgaria and Romania.

EU Other: Croatia, Cyprus and Malta.

Polish is the most common non-British nationality in Scotland

In 2018, there were 87,000 Polish nationals living in Scotland, representing a quarter of the non-British population and 1.6% of the resident population of Scotland.

The most common non-EU nationality was Pakistan with 15,000 people living in Scotland in 2018.



Marriages and civil partnerships

The number of marriages in Scotland continued to fall in 2018

The number of marriages in Scotland fell to 27,525 in 2018, continuing the long-term downward trend.



The average age at first marriage has increased by more than 10 years since the mid-1970s, from 24.3 to 34.3 for males and from 22.4 to 32.6 for females.

Civil partnerships have decreased since same-sex marriage was introduced

Before 2005 same-sex couples could not form legally recognised unions. In the first full year after civil partnerships were introduced, over 1,000 couples registered civil partnerships. This number then stabilised at around 500 a year until Scotland legalised same-sex marriage in December 2014.

In 2015, over 1,600 same-sex couples married or changed their civil partnership to marriage. Since then, the number of same-sex marriages stabilised at just under 1,000 a year and the number of civil partnerships reduced to around 60 to 70 a year.

Humanist ceremonies accounted for almost a quarter of all marriages in 2018

Of all marriages conducted in Scotland in 2018, almost half were civil ceremonies compared to 35% in 1975.

The number of marriages conducted by the Church of Scotland and the Roman Catholic Church have declined over time. These now represent 10% and 4% of all marriages in 2018 respectively.

Since 2005 the number of humanist marriages has increased considerably with a range of organisations conducting humanist ceremonies. These now account for 23% of all marriages in 2018.

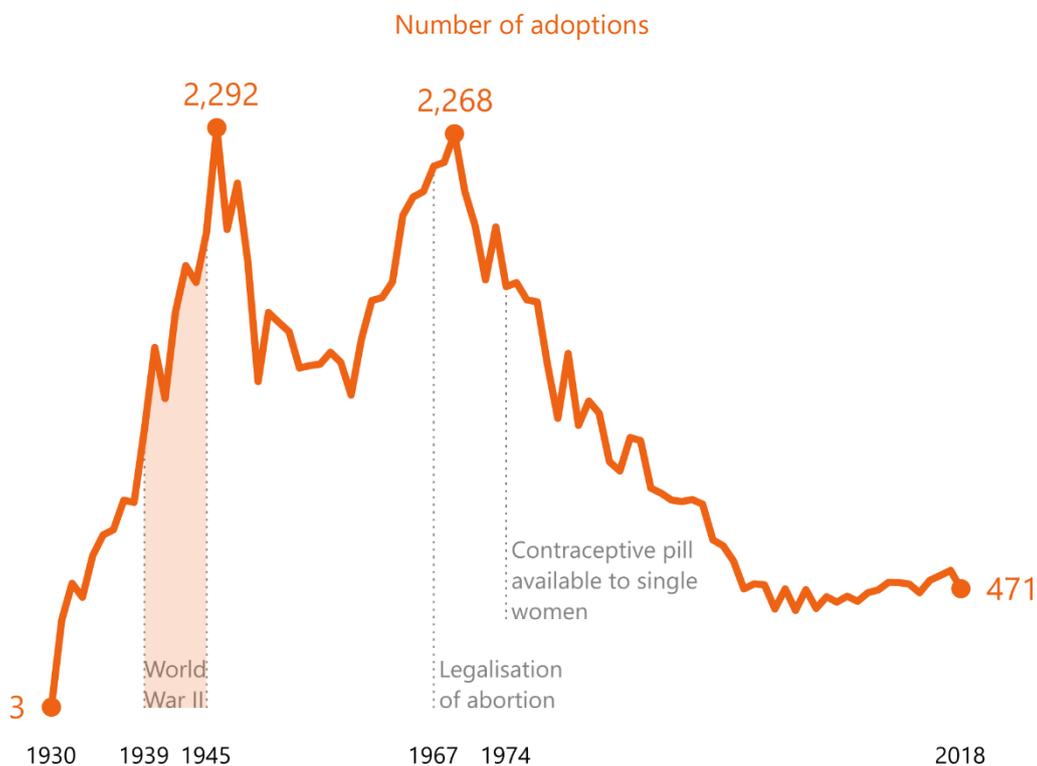


Adoptions

Adoptions decreased to 471 in 2018

Adoptions of children have been registered by law in Scotland since 1930. Following a steady rise to a post-war peak in 1946, the total number of adoptions fell before peaking again in 1969. Increased access to birth control and changing public attitudes towards single or unmarried parents led to a decrease in the number of children available for adoption.

There were 471 adoptions recorded in 2018. This was 13% fewer than in 2017, around half the number recorded per year in the mid-1980s, and less than a quarter of the number recorded in the late 1960s.





Households and housing

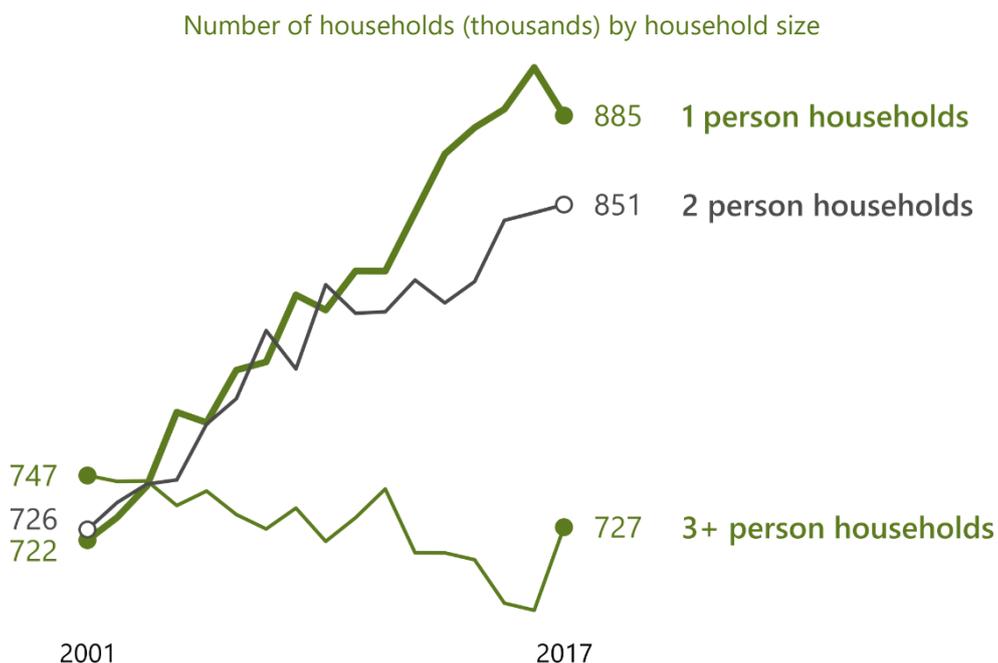
The number of households in Scotland is projected to increase

In mid-2018, there were 2.48 million households in Scotland, which is an increase of around 139,000 over the past 10 years.

The number of households is projected to increase to 2.76 million by 2041, an average annual increase of approximately 12,200 households.

People are increasingly living alone or in smaller households in Scotland

One person households are the most common type of household in Scotland. In 2017, around 885,000 people lived alone. They represented over one third of households. This is partly because Scotland's population is ageing, as older people are more likely to live alone or in smaller households.



Note: Two or more person households could contain adults, or both adults and children.

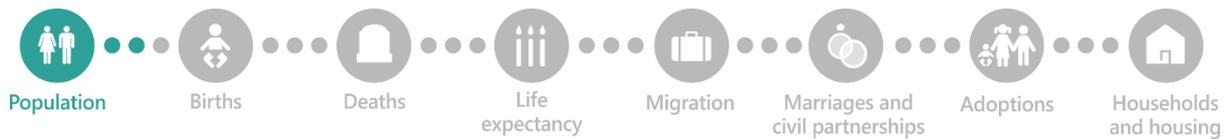
96% of homes in Scotland were occupied in 2018

Overall in Scotland in 2018, 3% of homes were empty and 1% were second homes, though there were wide differences across the country. Remote rural areas had the highest percentage of homes that were empty or second homes.



Population

"Scotland's population continues to grow, but the rate of increase is slowing."

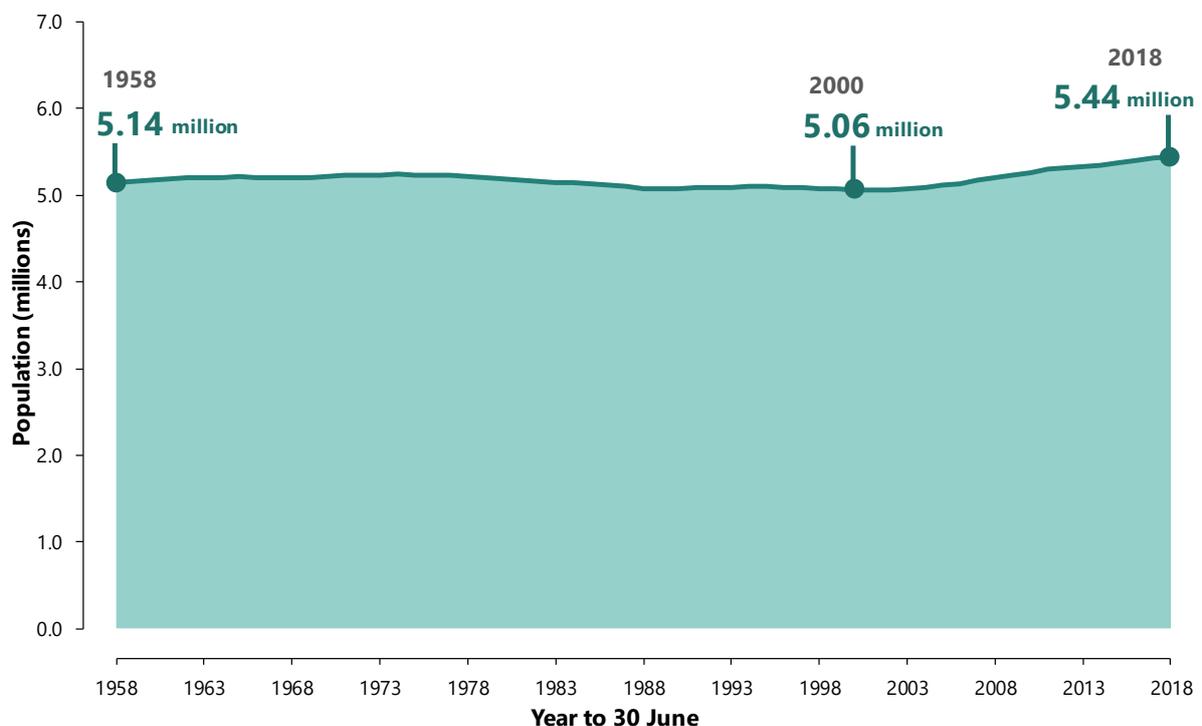


Scotland's population: past, present and future

Scotland's population has been growing since 2000 and is at a record high. The most recent estimate of Scotland's population is 5,438,100 as at 30 June 2018 (commonly referred to as mid-2018). This was an increase of 0.2% (13,300 people) on the previous year. [Figure 1.1](#) below shows how Scotland's population has changed since 1958.

Scotland's population reached its **highest ever level** in 2018. This was the ninth consecutive year where the population reached a new high.

Figure 1.1: Population of Scotland, mid-1958 to mid-2018



Over the last 60 years, the rate of annual population change in Scotland has fluctuated between -0.4% and 0.7%, as shown in [Figure 1.2](#). Between 2008 and 2018, the population of Scotland increased by a total of 235,200 people with an average year-on-year increase of 0.4%.

Population growth has slowed in the past two years from 0.6% in the year to mid-2016 to 0.2% in the year to mid-2018. Despite this, population growth remains higher than any year between mid-1972 and mid-2003 (where it fluctuated between -0.4% and 0.2%).

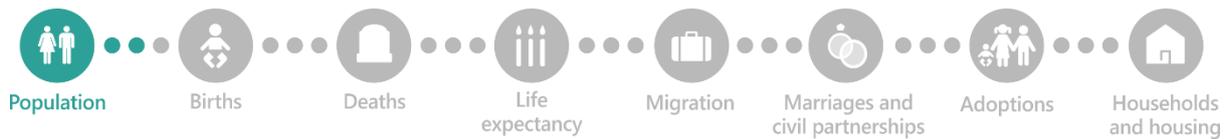
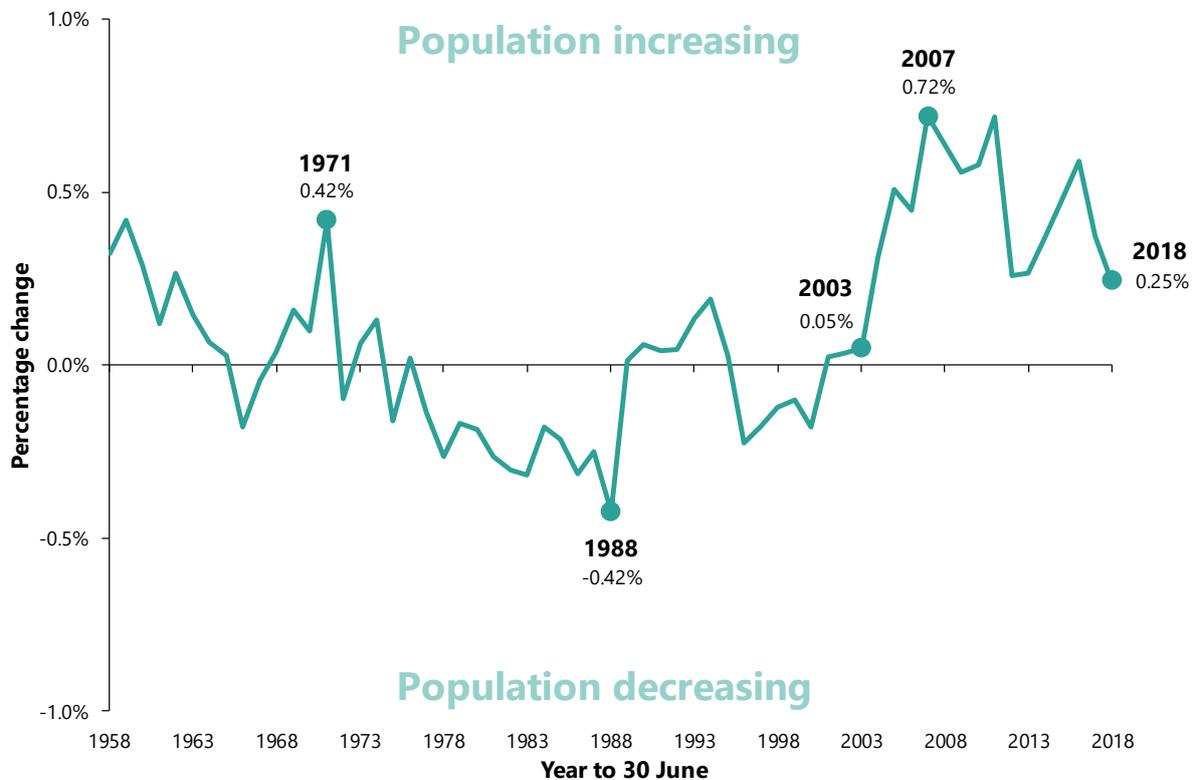


Figure 1.2: Annual population change for Scotland, mid-1958 to mid-2018

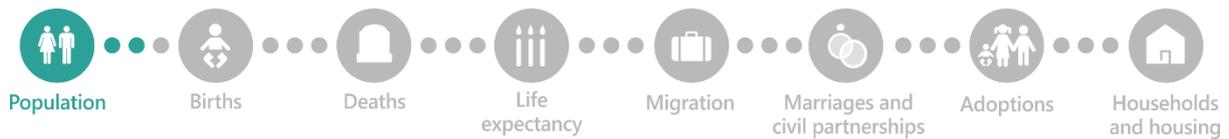


Why is the population changing?

Migration is currently the driver of Scotland's population growth.

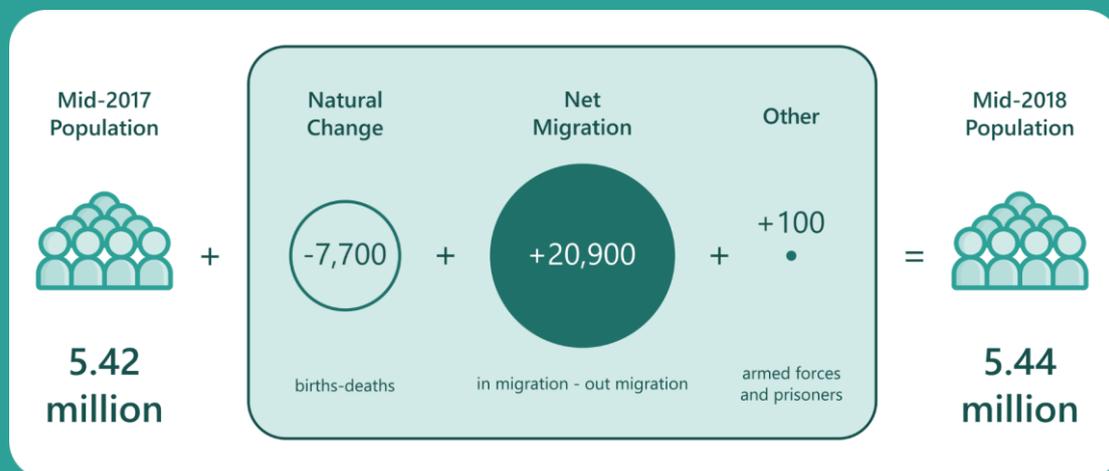
Population change is driven by two main components, natural change and net migration. Natural change is the difference between the number of births and deaths and net migration is the difference between the number of people entering and leaving the country.

The latest increase in Scotland's population was driven by positive net migration, with 20,900 more people arriving than leaving in the year to mid-2018 (from both overseas and the rest of the UK). In contrast, Scotland had negative natural change with 7,700 more deaths than births over the same period. This is the largest natural decrease on record.



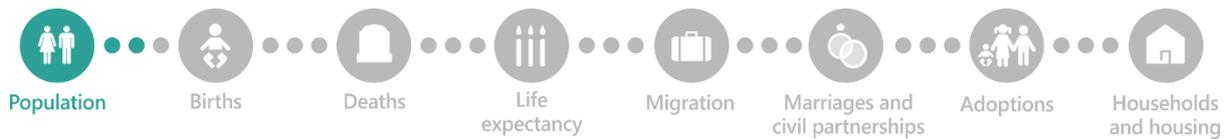
How are population estimates and projections calculated?

Population estimates are based on the census (taken every ten years) and are updated annually to account for population change due to births, deaths and migration. Other changes, such as changes to the armed forces and prison populations in Scotland, are also accounted for. The latest mid-year population estimates relate to the population as at 30 June 2018 (mid-2018). A summary of how Scotland's population has changed over the latest year is shown below.



Population projections are based on the mid-year population estimates and a set of underlying assumptions about future levels of fertility, mortality and migration. These assumptions are based on past trends and expert advice. They are not forecasts and do not attempt to predict the impact of future policy initiatives, political or economic change. The next set of projections will be based on the mid-2018 estimates, and will be published in October 2019.

As shown in [Figure 1.3](#), natural change has not contributed to Scotland's recent population growth. Natural change was positive (with more births than deaths) during the 1960s, and declined throughout the 1970s, with the first recorded negative natural change occurring in the year to mid-1977. Since then, it has fluctuated between being positive and negative. Over the past four years, natural change has been negative with more deaths than births in each of these years. More detailed information about trends in births and deaths statistics can be found in [Chapter 2 – Births](#) and [Chapter 3 - Deaths](#).



Migration continues to add to the population with more people coming to Scotland than leaving, but the difference between in-migration and out-migration (known as 'net migration') is getting smaller. In the year to mid-2018, 80,600 people came to Scotland and 59,700 people left, meaning net migration stood at +20,900. More information about the latest migration trends can be found in [Chapter 5 – Migration](#).

Figure 1.3: Natural change and net migration, mid-1958 to mid-2018



How is the population changing across Scotland's councils?

In the year to mid-2018, eighteen of Scotland's thirty-two council areas increased in population, with the remaining fourteen areas experiencing depopulation, as shown in [Figure 1.4](#). For all areas that increased, the driver was positive net migration (as shown by the green bars). This takes into account people moving to Scotland from overseas, from the rest of the UK, and between council areas.

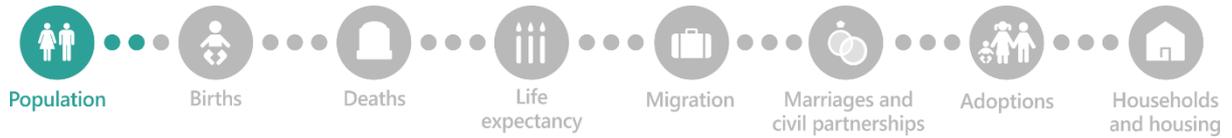
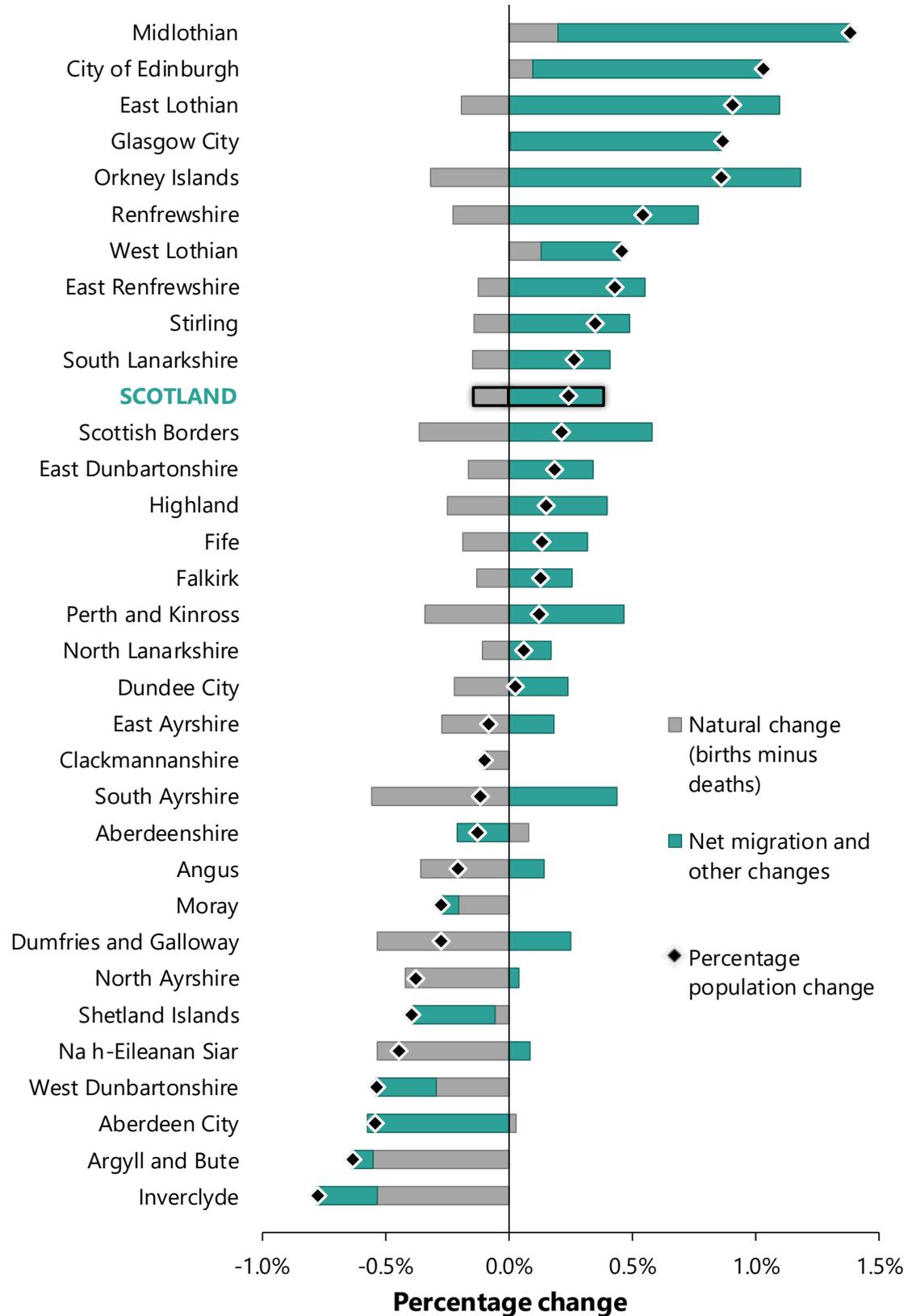
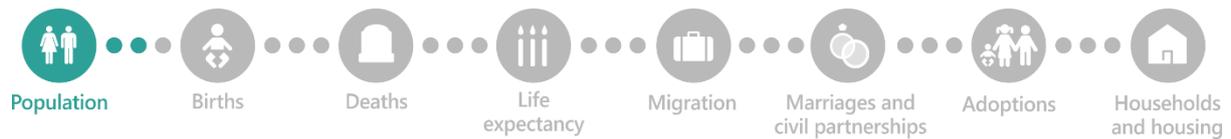


Figure 1.4: Components of population change, council areas, year to mid-2018





Twenty-six council areas in Scotland had more deaths than births (negative natural change) in the year to mid-2018, but fourteen of these areas still increased in population due to positive net migration. There were only six areas in Scotland that had more births than deaths (positive natural change) - these were Midlothian, City of Edinburgh, Glasgow City, West Lothian, Aberdeenshire and Aberdeen City.

The area that increased by the highest percentage was Midlothian, which saw an increase of 1.4% to its population in the year to mid-2018. The area that experienced the highest rate of depopulation in the year to mid-2018 was Inverclyde, which had 0.8% fewer people than it did in the year to mid-2017.

How are population statistics used?

Population statistics are widely used by the Scottish Government, as well as being used by local authorities and health bodies, other public bodies, commercial companies and individuals in the private and academic sector.

They **underpin a range of other statistics**, for example being used to calculate rates per population and to weight surveys to ensure they are representative of the population.

They **inform a range of decisions**, for example determining funding allocations, informing local and national policy, and planning of services such as schools, hospitals and care homes.

How is the population changing across the UK?

Similar to the regional differences we see across Scotland, there are also differences across the different constituent countries of the UK. Scotland had the lowest growth from natural change (0.2%) of all constituent countries between 2008 and 2018, and was the most reliant on net migration (and other changes) for population growth. Scotland's population growth from migration and other changes (4.4%) was similar to England's (4.3%), but England's total population growth was much larger than Scotland's due to its higher natural change (more births than deaths). Northern Ireland is different in that most of its population growth comes from natural change, with only 0.4% coming from net migration and other changes.

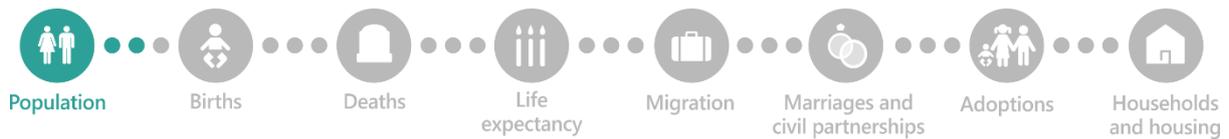
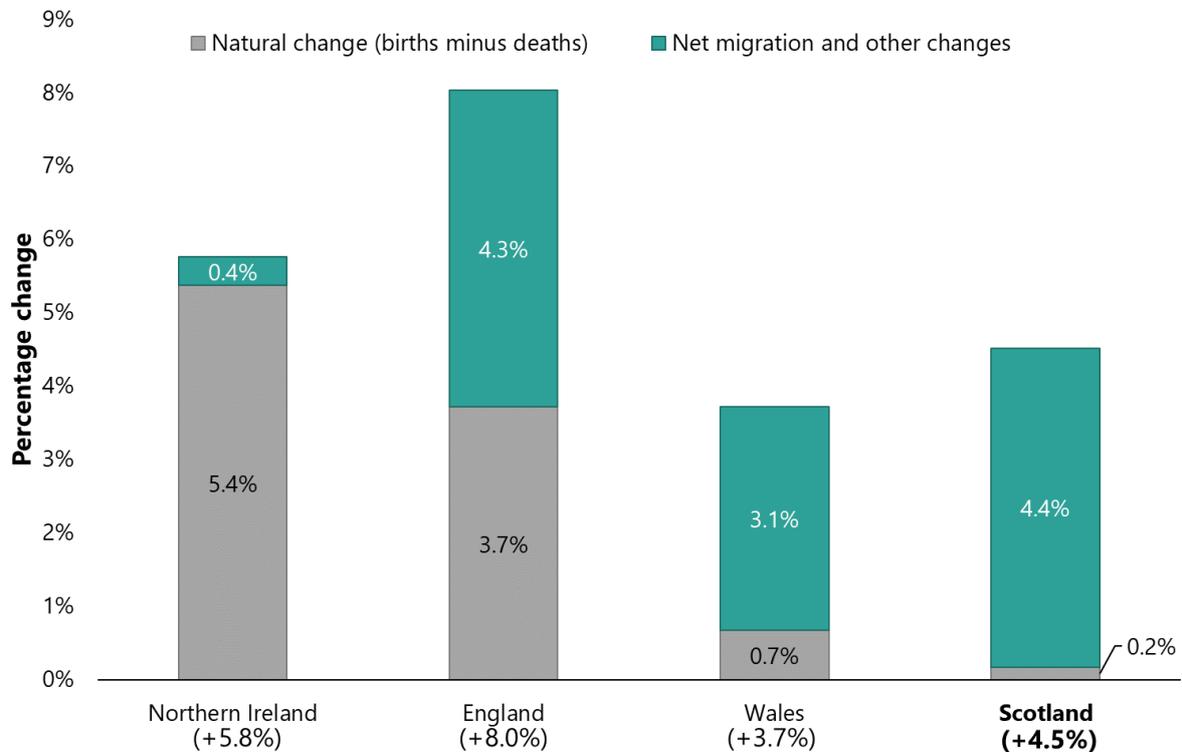


Figure 1.5: Components of population change in UK constituent countries, mid-2008 to mid-2018



Note: Sum of components may be different from the stated total due to rounding.

Population ageing in Scotland

People in Scotland are living longer than they were in the past. This, combined with the fact that fertility rates are much lower than they were, means that older people make up a growing proportion of the population. Age composition is one of the most important aspects of the population since changes in different age groups will have varied social and economic impacts. For example, increases in the elderly population are likely to place a greater demand on health and social services.

[Figure 1.6](#) shows the makeup of the population in 2008 and 2018 by age and sex. The effects of ageing in the past ten years can be seen with more people in the older ages in 2018 compared to 2008. It is also notable that the older ages contain a higher number of females compared to males; this is due to females having a longer [life expectancy](#).

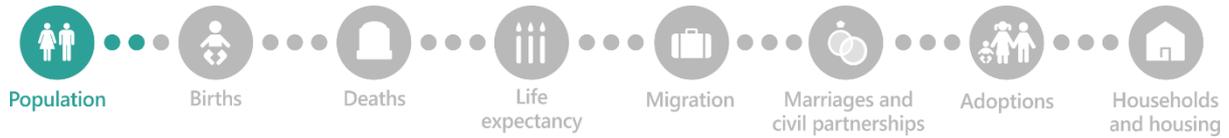
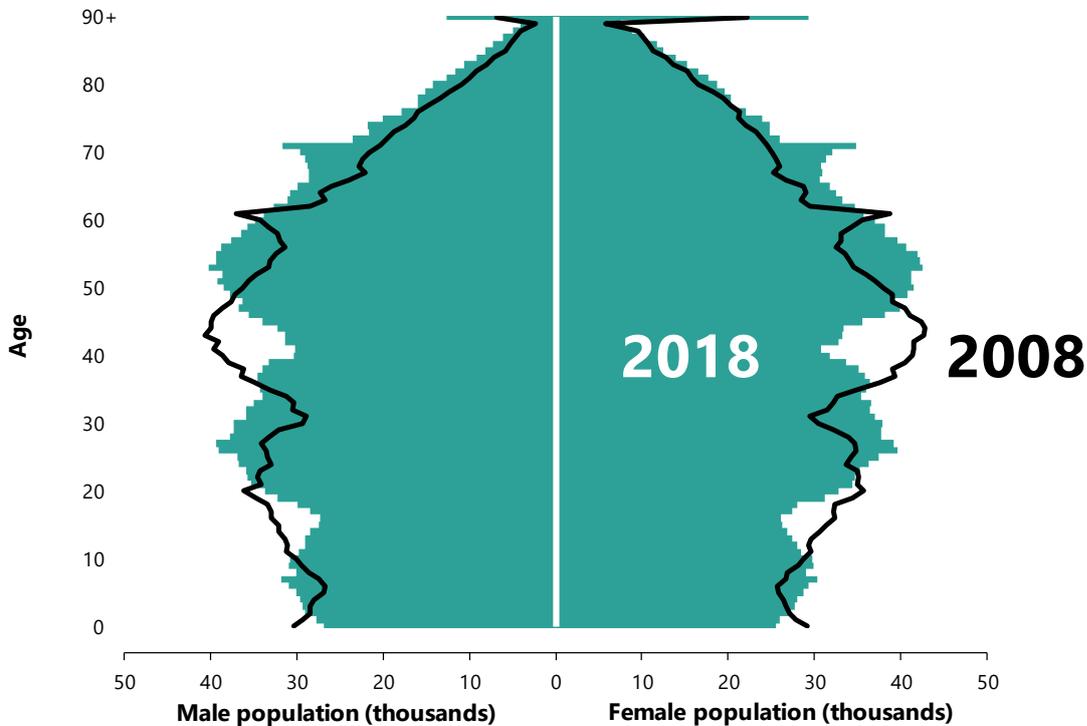


Figure 1.6: Population by age and sex, mid-2008 and mid-2018



The age structure of the population has been changing in recent years, and is projected to continue doing so. The proportion of the population aged 16 to 64 years, which consists of those most likely to be of working age, increased slightly (from 64% to 66%) between 1983 and 2008, but decreased back to its 1983 level in the ten years from 2008 to 2018. Using the 2016-based population projections to look forward, the proportion of the population who are 16 to 64 years is projected to decrease to 59% by 2038.

The percentage of the population who are 65 and over increased from 14% to 19% between 1983 and 2018, and is projected to reach one quarter of the population by 2038. The projected growth in the share of the population who are 65 and over is reflective of life expectancy being higher than it had been in the past, and the fact that the 0 to 15 age group is getting smaller due to the low birth rate.

The proportion of the population who are children has decreased in recent years, from 22% in 1983 to 17% in 2018. It is projected to decrease slightly in the future, to 16% by 2038. As mentioned above, this is a result of the low birth rate in Scotland.

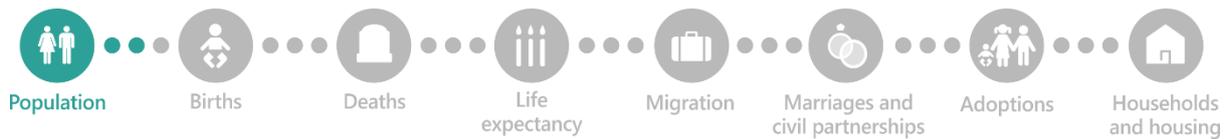
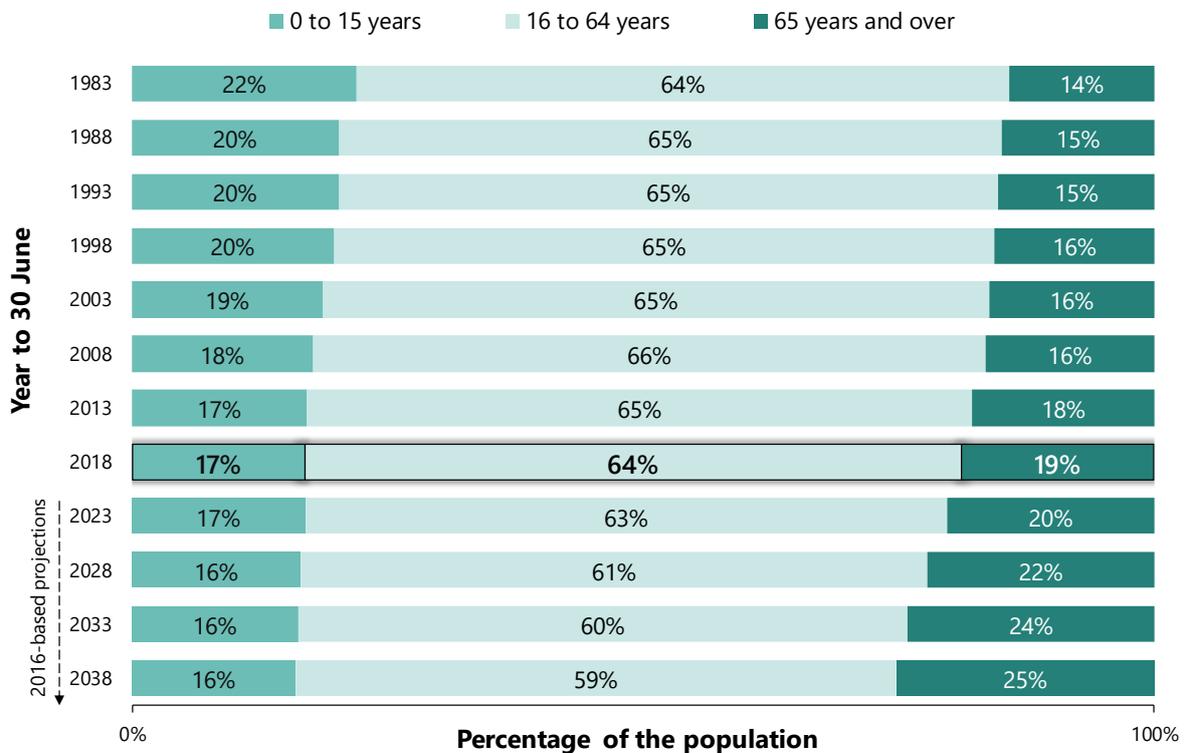


Figure 1.7: Age structure, mid-1983 to mid-2038



Note: Rounded figures are used and may not add up to 100%.

By taking each age band as a proportion of the population as a whole, the age structure of Scotland's population can be compared to that of the UK, as shown in [Figure 1.8](#).

The proportion of Scotland's population who are in the youngest age bands is lower than it is for the UK as a whole. This illustrates the effect on the population that the lower birth rate has in Scotland. There is also a slightly larger proportion of the population in Scotland who are in the older working ages (from 49 to 69 years old), showing the effects of population ageing in Scotland.

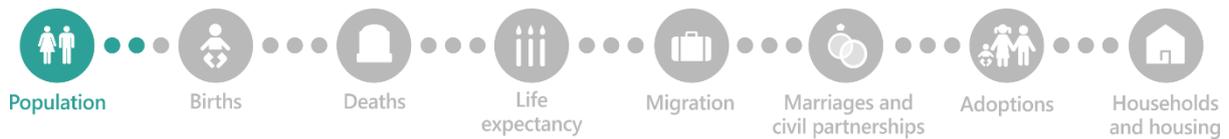
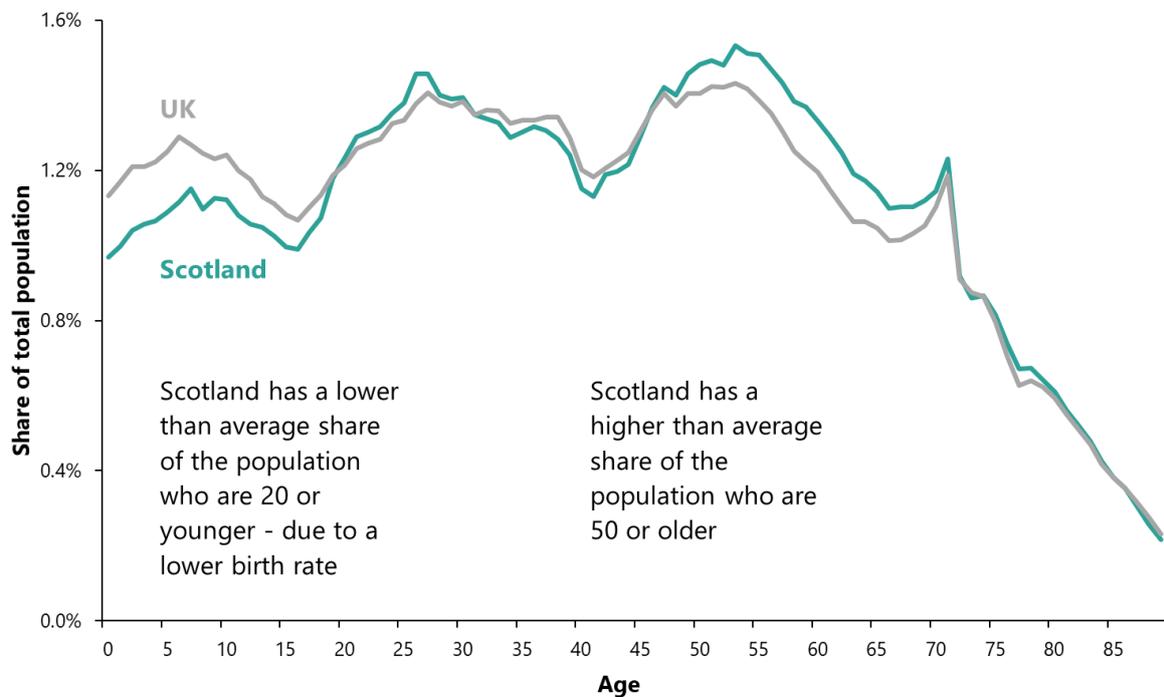


Figure 1.8: Age structure of the population, Scotland and the UK, year to mid-2018



Note: Ages 90 and over have been left out for illustration purposes.

In the past ten years, all council areas have seen an increase in the number of people aged 65 and over. [Figure 1.9](#) is a map showing the percentage change in the population aged 65 and over for council areas between 2008 and 2018. The largest increases were in West Lothian (+35.1%), Orkney Islands (+34.1%) and Clackmannanshire (+33.2%). The lowest increases were in Glasgow City (+1.2%), Dundee City (+3.6%) and Aberdeen City (+10.7%).

There are a number of factors which may influence these changes. City areas tend to see lower rates of increase for the older population as many older people will move out of the cities to retire elsewhere, or to be closer to family. Most of the population increase in city areas comes from younger age groups, particularly students. Another factor is the variations in life expectancy seen in Scotland. Many of the areas with lower increases in the 65 and over population are seen in Glasgow and the west, which have tended to have lower life expectancy than other areas of Scotland. More information about life expectancy can be found in [Chapter 4 – Life expectancy](#).

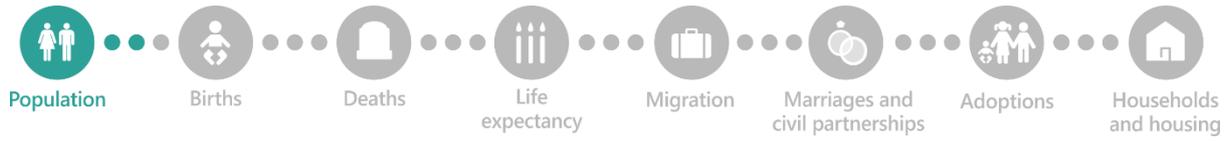
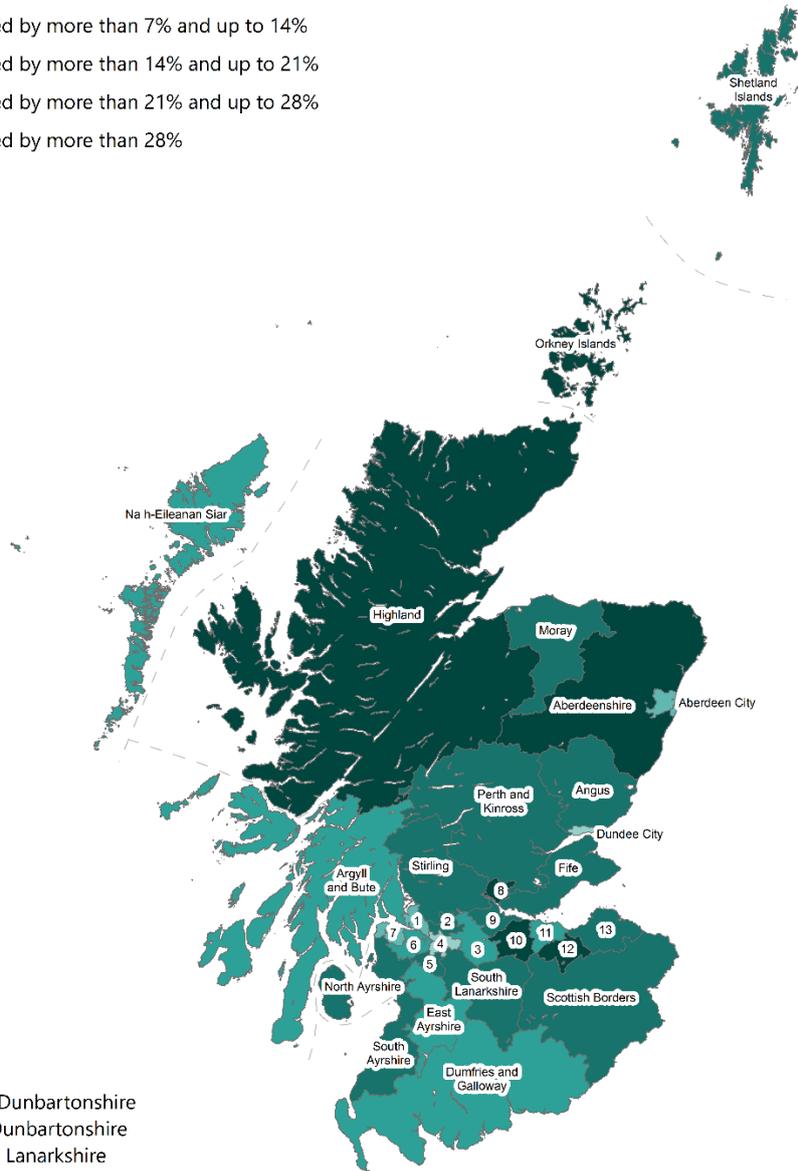


Figure 1.9: Change in population aged 65 or over, council areas, mid-2008 to mid-2018

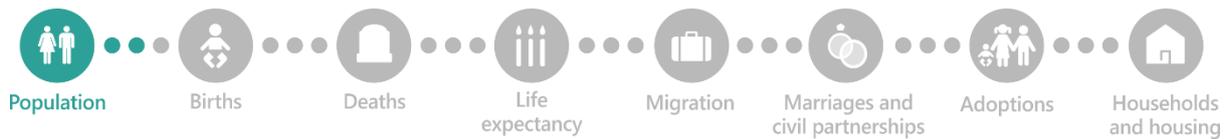
- Increased by up to 7%
- Increased by more than 7% and up to 14%
- Increased by more than 14% and up to 21%
- Increased by more than 21% and up to 28%
- Increased by more than 28%



1. West Dunbartonshire
2. East Dunbartonshire
3. North Lanarkshire
4. Glasgow City
5. East Renfrewshire
6. Renfrewshire
7. Inverclyde
8. Clackmannanshire
9. Falkirk
10. West Lothian
11. City of Edinburgh
12. Midlothian
13. East Lothian

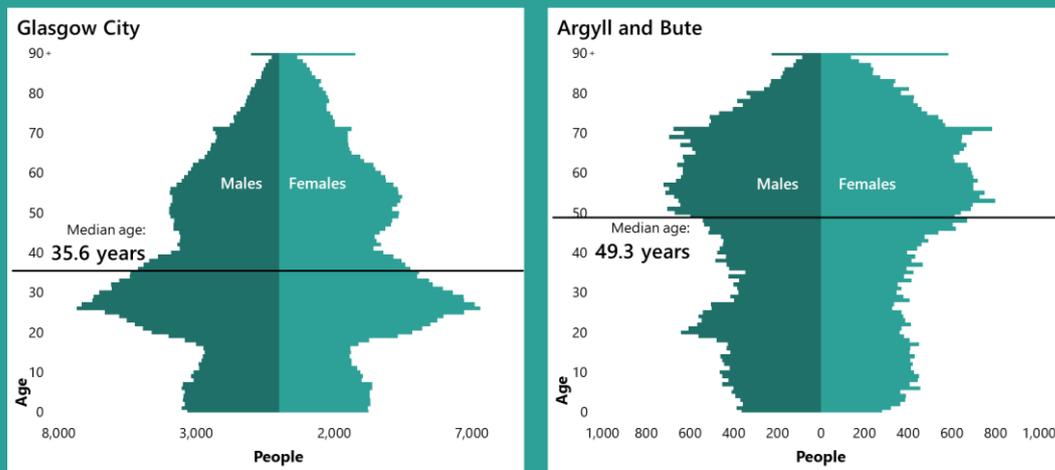


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Another way of measuring ageing is to look at the median age of the population. Median age is defined as the age at which the population can be split into an older half and a younger half. The higher the median age, the higher the proportion of older people compared to younger people.

What do a high median age and low median age look like?



Glasgow City had the youngest median age (35.6 years) of all council areas at mid-2018, with large numbers of people in their twenties and a lower proportion of the population in the older ages.

In contrast, Argyll and Bute had one of the oldest median ages of 49.3 years with more people in the older ages (as shown in the above chart - more top heavy).

In the ten years to mid-2018, the only council areas that did not see an increase in their median age were Dundee City, Glasgow City, Aberdeen City and City of Edinburgh, as shown in [Figure 1.10](#). The average for Scotland as a whole increased from 40.7 years in 2008 to 42.1 years in 2018, and of the twenty-eight councils experiencing an increase, the largest were for Scottish Borders, Clackmannanshire and North Ayrshire (all increasing by 4.1 years). These figures show where Scotland's population is ageing the most.

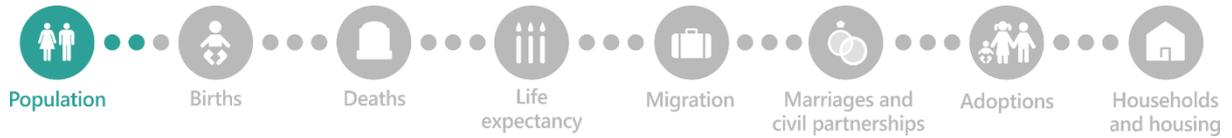
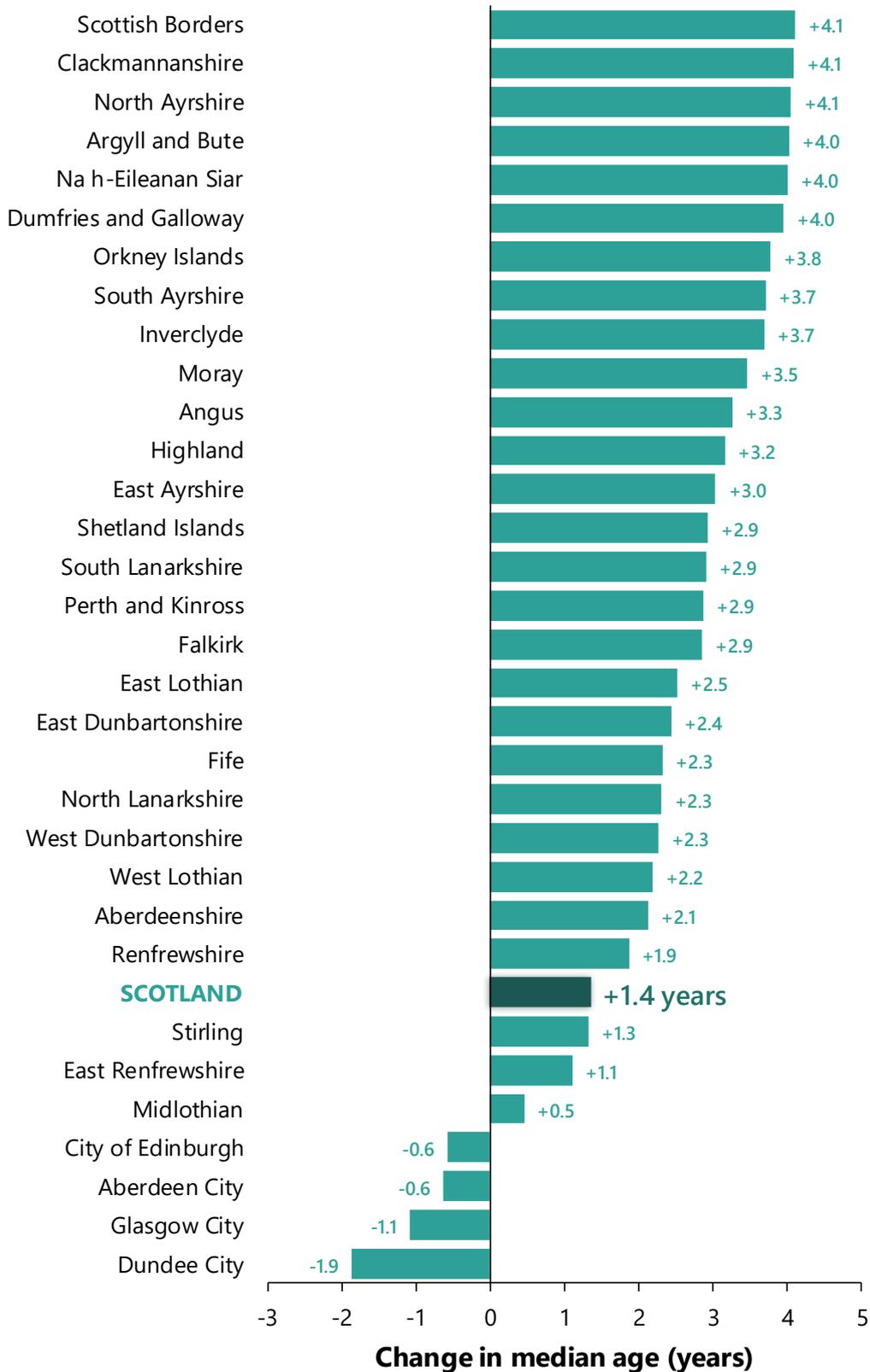


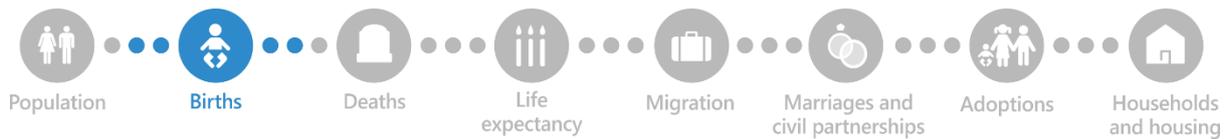
Figure 1.10: Change in median age, council areas, mid-2008 to mid-2018





Births

"Birth rates in Scotland are lower than the rest of the UK, and have been lower since the 1980s."



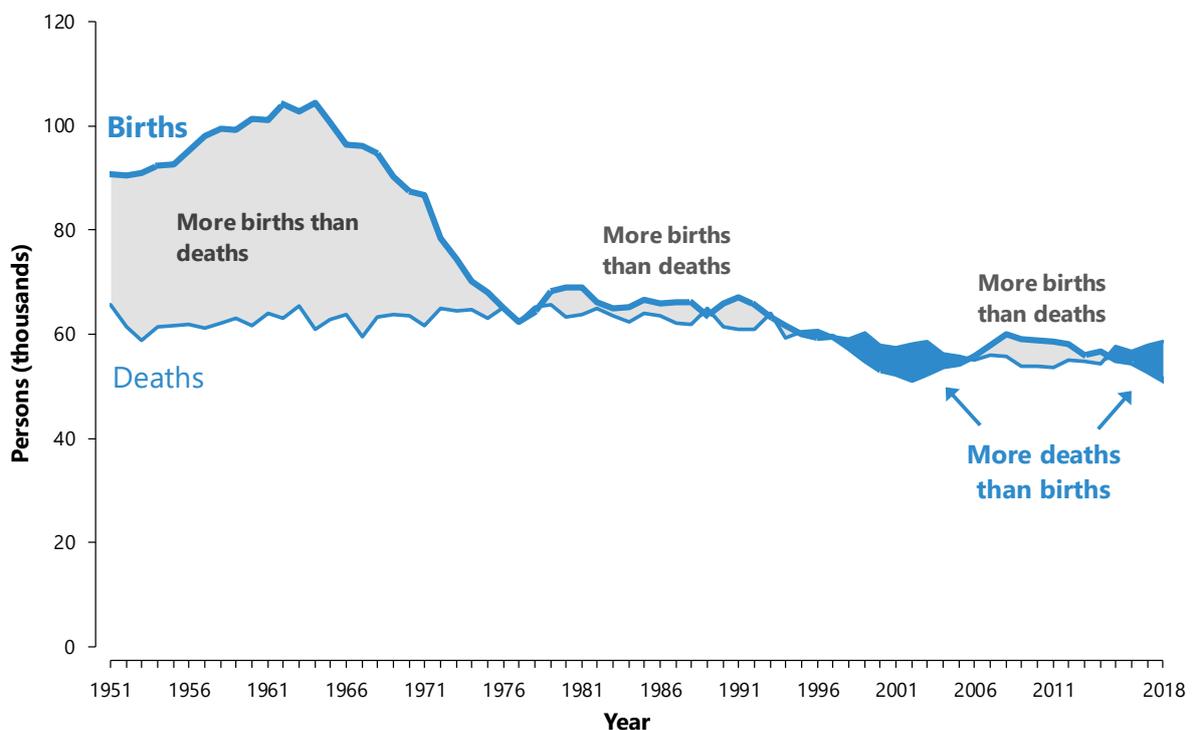
Births

In 2018, 51,308 births were registered in Scotland, 1,553 (3%) fewer than in 2017. The number of births in 2018 is the second lowest figure recorded. In the last decade there was a peak of 60,041 births in 2008 followed by a mainly downward trend since then. The latest figures are 8,733 (15%) lower than the 2008 peak, and well below the peak of over 100,000 births per year in the early 1960s, as [Figure 2.1](#) shows.

In 2018, there were **51,308** births registered in Scotland, **3% fewer** than in 2017. This number of births is equivalent to around **1%** of Scotland's population.

In the 1950s, 1960s and the first half of the 1970s there were considerably more births each year than deaths. This had been the case every year since records began (with the introduction of civil registration in 1855). Since the mid-1970s the gap between births and deaths has been much closer, and has switched from positive to negative a few times. Since 2015 there have been more deaths than births (also known as negative natural change) with around 2,500 more deaths than births. This has continued each year since, with the gap widening to 7,195 in 2018.

Figure 2.1: Births and deaths, Scotland, 1951-2018





The proportion of births to unmarried parents (including births registered solely in the mother's name) was 51.0% in 2018. There have been more births to unmarried parents than married parents in each year since 2008, around 50% to 51%. However, the proportion of births registered solely in the mother's name - around 6% to 7% in the 1980s and 1990s - has generally fallen in more recent years and was 4% in 2018, suggesting that the increase in births to unmarried parents has been in babies born to unmarried partners who are in a relationship.

Fertility Rates

There are different ways of measuring the number of births. The Total Fertility Rate (TFR) is the most commonly used and we use this for comparisons with the rest of UK and internationally. However, it does have limitations, as explained in the [Total Fertility Rate](#) section.

Crude birth rate

The simplest fertility rate is the crude birth rate, which is defined as the number of live births per 1,000 total population. [Appendix 1, Table 1](#) shows that in 2018 the crude birth rate for Scotland stood at 9.4, its lowest recorded level, compared to an average of 17.9 per year in the late 1960s. [Appendix 1, Table 2](#) and [Appendix 1, Table 3](#) show crude birth rates for administrative areas in Scotland and selected European countries. Because it takes no account of the age/sex structure of the population, the crude birth rate has only limited value (for example giving rough comparisons between areas with broadly similar age/sex structures).

Standardised birth rate

[Appendix 1, Table 2](#) also gives standardised birth rates for the administrative areas of Scotland; these adjusted birth rates take account of the population structures in the different areas. The overall rate

Fertility rates

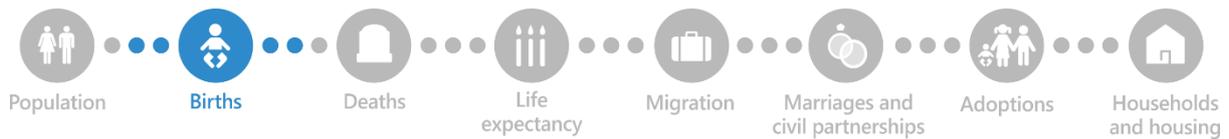
Crude birth rate - number of live births per 1,000 total population.

Standardised birth rate - these adjusted birth rates take account of the population structures in the different areas.

General Fertility Rate (GFR) - number of live births per 1,000 female population of childbearing age (ages 15 to 44).

Age Specific Fertility Rates (ASFRs) - number of live births per 1,000 females, by age or age group of mother.

Total Fertility Rate (TFR) - average number of children per female that a group of females would expect to have if they experienced the observed ASFRs of the current year in each of their childbearing years.



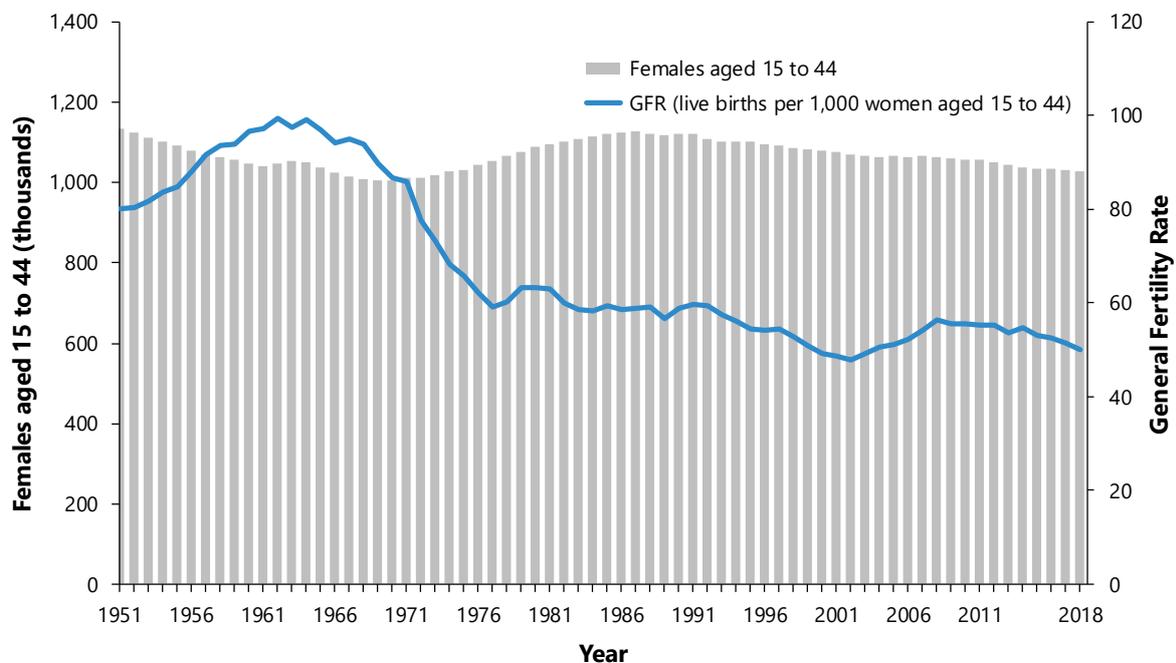
for Scotland, 9.4 births per 1,000 population, can be compared with a low 6.9 in City of Edinburgh, and a high of 12.2 in Aberdeenshire and Midlothian.

General Fertility Rate (GFR)

Another approach is to consider the General Fertility Rate (GFR) which is based on the numbers of females of childbearing age. [Figure 2.2](#) shows the general fertility rate (births per 1,000 females aged 15 to 44), along with the number of females aged 15 to 44. During the 'baby boom' of the 1960s, the General Fertility Rate reached 99.5 (in 1962). It then fell sharply to around 60, before falling at a much slower rate to , eventually dip below 50 at the start of the 21st century. It then rose slightly to 56.4 in 2008, before decreasing again to stand at 50.0 for 2018.

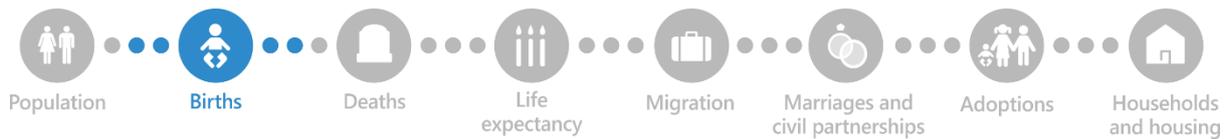
Interestingly, the female population aged 15 to 44 was relatively low during the baby boom of the 1960s. Moreover, in the 1980s the relatively large number of females born in the 1950s and 1960s were passing through what were their peak childbearing years. However, fertility rates at those ages were falling during that period, resulting in a levelling off of the number of births rather than the increase that may have been expected.

Figure 2.2: Estimated female population aged 15 to 44 and general fertility rate (GFR), Scotland, 1951-2018



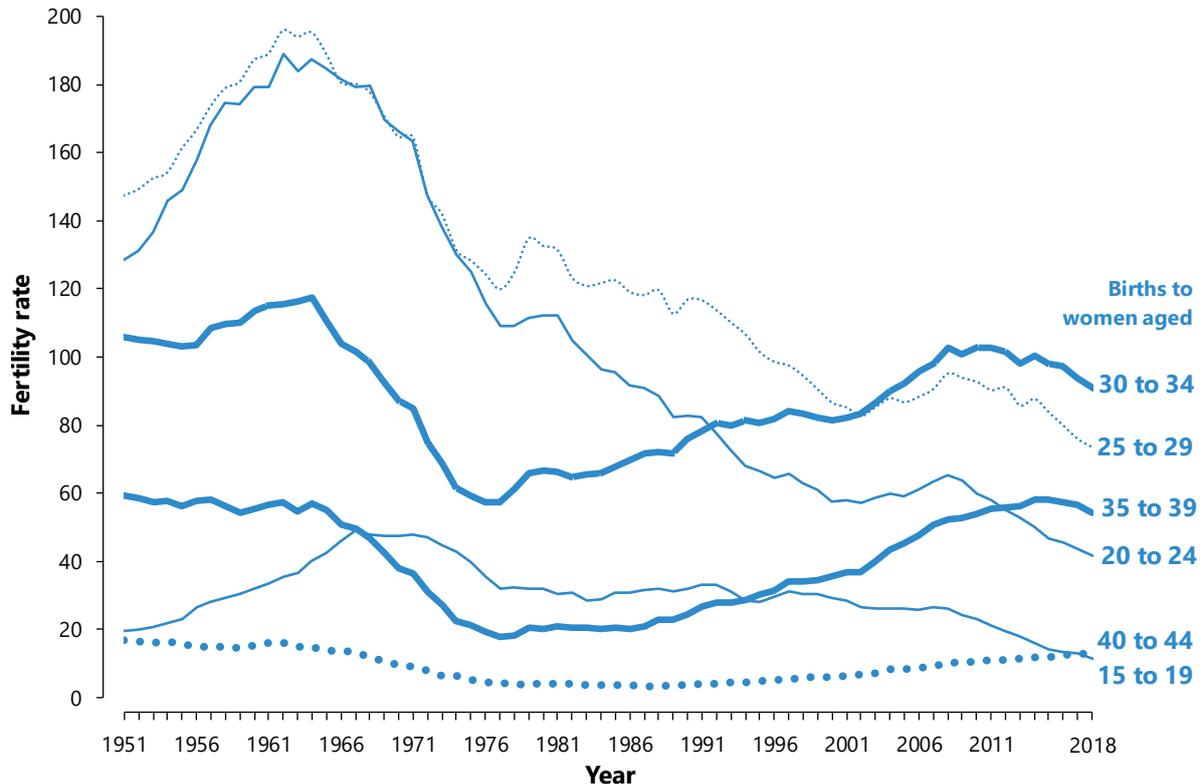
Age Specific Fertility Rates (ASFRs)

A more detailed picture is given by the Age Specific Fertility Rates (ASFRs) by mother's age, in five-year age groups, in [Figure 2.3](#). This shows many significant age-



related features of the pattern of childbearing over the last sixty years. As well as having fewer babies, females are also having them later in life.

Figure 2.3: Live births per 1,000 women, by age of mother, Scotland, 1951-2018



Looking back over the last 65 years:

- The 'baby boom' of the 1960s was mostly due to increased birth rates of females in their twenties.
- Since the early 1960s, females in their twenties have experienced a dramatic fall in fertility. For females aged 20 to 24 the fertility rate has fallen by around three-quarters, and for those aged 25 to 29 it has fallen by nearly two thirds.
- The rate for 15 to 19 year olds fell by around one-third during the 1970s and remained around 30 births per 1,000 females for the following 20 years, before falling by more than half since the turn of the century, to 12 births per 1,000 females.
- Fertility rates for females aged 30 and above have gradually increased over the last 40 years. The rate for 30 to 34 year olds overtook that of 25 to 29 year olds in 2002, rising to a peak of 103 births per 1,000 females in 2010 and 2011. It has generally fallen since then and now stands at 91. In the same period the rate for 25 to 29 year olds fell from 93 to 73 births per 1,000 females. The rate for females aged 35 to 39 (54 births per 1,000 females) has doubled since the early-1990s and since 2012 has been higher than that for those aged 20 to 24.



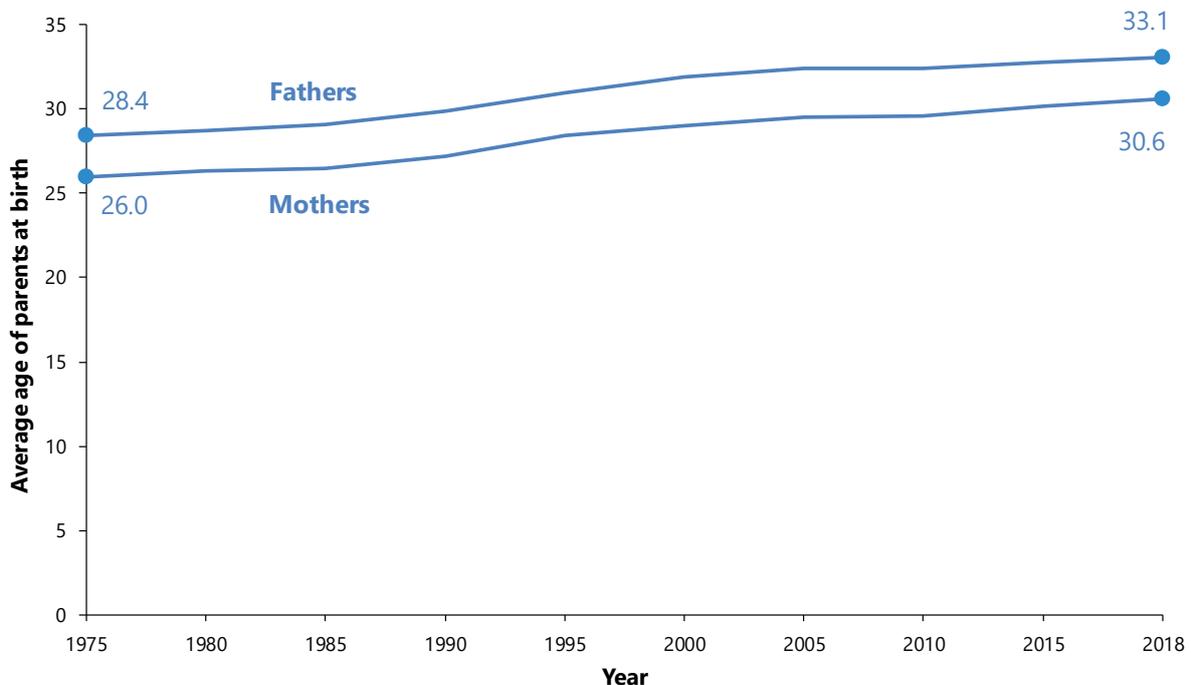
- The 15 to 19 and 20 to 24 age-groups had the greatest reductions in birth rates between 2008 and 2018, falling by 56% and 36% respectively.

Females are tending to have children at older ages

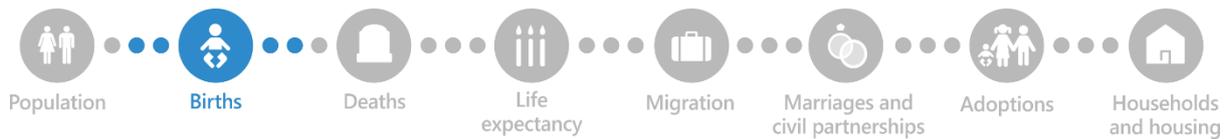
Since the mid-1970s, there has been a trend towards having children at older ages. The percentage of births to mothers aged under 20 fell from an average of about 11% between 1976 and 1980 to 3% in 2018. Mothers aged 20 to 24 accounted for roughly a third of all births in 1976 to 1980, falling to 14% in 2018. The percentage of births to mothers aged 25 to 29 has fallen from around 35% in 1976 to 1980, to around 27% in 2018. As a result, females aged 30 and over accounted for over half of all births in 2018.

[Figure 2.4](#) shows that the average age of mothers rose from 26.0 in 1975 to 30.6 in 2018. Similarly, the average age of fathers (excluding births registered in the mother's name only, where the father's details were not provided) rose from 28.4 in 1975 to 33.1 in 2018.

Figure 2.4: Average age of parents at birth, Scotland, 1975-2018

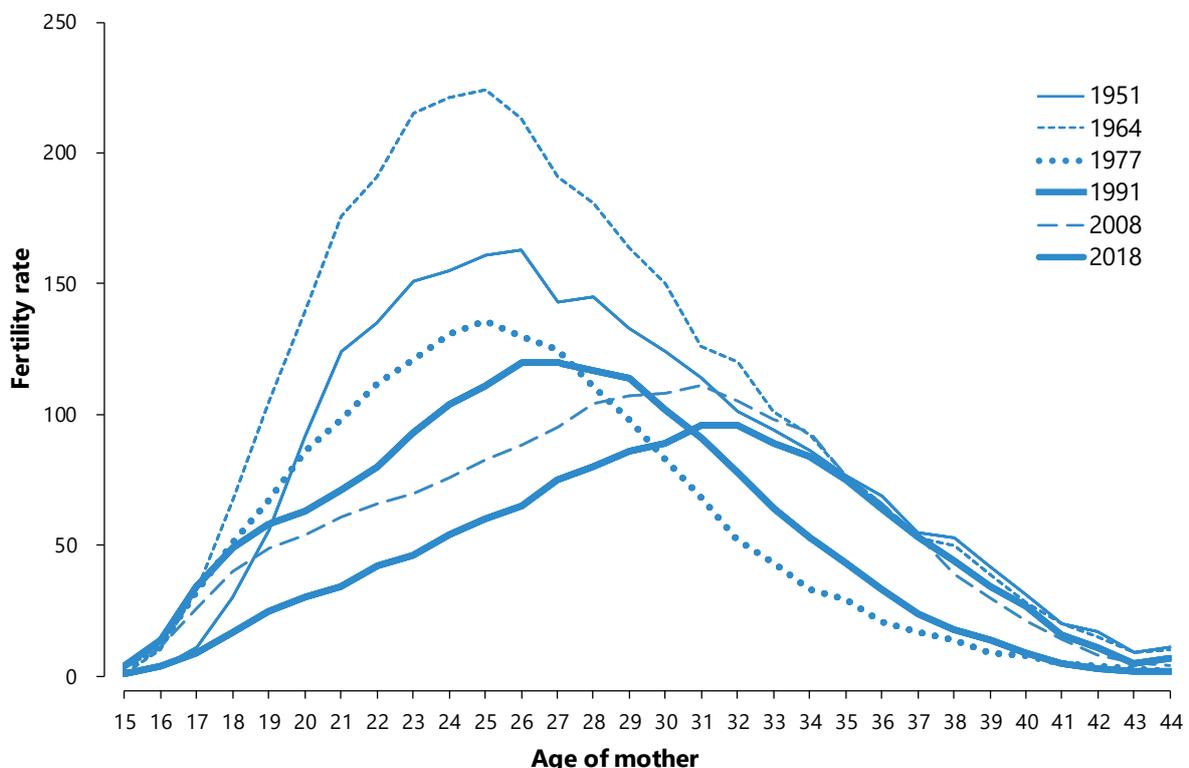


[Figure 2.5](#) further illustrates the ageing pattern of fertility by showing detailed Age Specific Fertility Rates ASFRs for selected years: 1951, 1964 (peak number of births),



1977 (end of steep decline), 1991 and 2008 (recent peaks) and 2018. Though the levels differed considerably, the age patterns of fertility for 1951, 1964 and 1977 were roughly the same. However, the age distributions for 1991 onwards show distinctly older peaks and that for 2018 reveals a further reduction in fertility of females in their twenties, mirrored by an increase for females in their thirties, compared with 1977 and 1991. Compared with 2008 however, 2018 shows a further reduction for females in their twenties and only a slight increase in their late thirties and early forties, contributing to the overall low level of births.

Figure 2.5: Live births per 1,000 women, by age, selected years

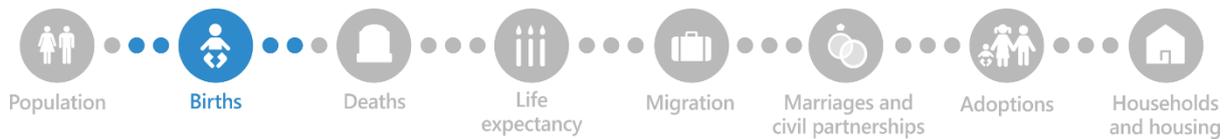


Note: The rate for age 15 includes births at younger ages and for age 44 includes births at older ages.

Total Fertility Rate

The Total Fertility Rate (TFR) is a commonly used summary measure of fertility levels calculated by summing the age specific rates for a single year. It gives the average number of children per female, that a group of females would expect to have if they experienced the observed Age

In 2018, the Total Fertility Rate (TFR) for Scotland was **1.42**. For a population to replace itself, the TFR needs to be around **2.1**. The last time Scotland was at the replacement TFR was in **1973**, with a TFR of 2.13.



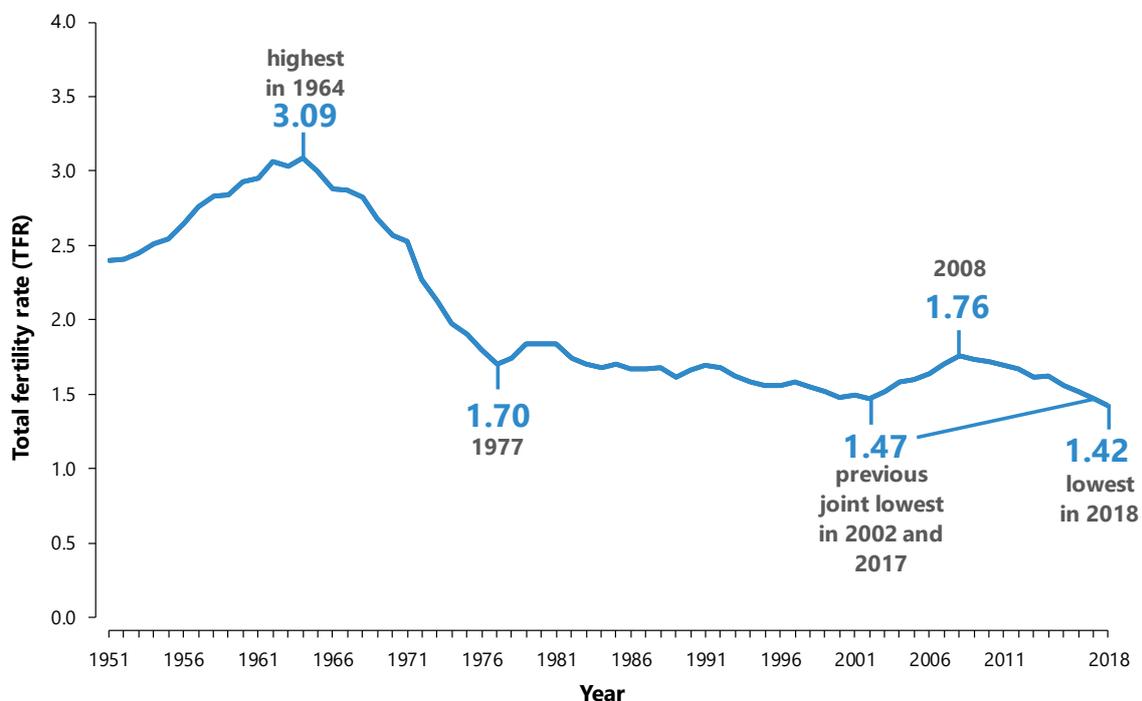
Specific Fertility Rates in each of their childbearing years.

The Total Fertility Rate for Scotland since 1951 is plotted in [Figure 2.6](#). Not surprisingly, it follows the same general pattern as the General Fertility Rate described above. It rose to 3.09 in 1964 before dropping sharply to 1.70 in 1977. Since then, with a few minor fluctuations, it fell more slowly to the 2002 rate of 1.47 before increasing to 1.76 in 2008 – its highest level for 26 years. Since then it has generally declined, reaching a low of 1.42 in 2018.

How useful is the Total Fertility Rate (TFR)?

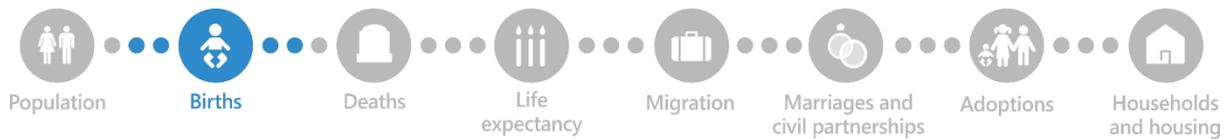
Though widely used, in part because it is relatively easy to calculate, the TFR has serious deficiencies as it is based on only one year's observations. For example, when females are delaying childbearing, as there is evidence for in Scotland (given the trend towards later childbearing), the TFR is likely to underestimate the number of children females will eventually have.

Figure 2.6: Total fertility rate, Scotland, 1951-2018



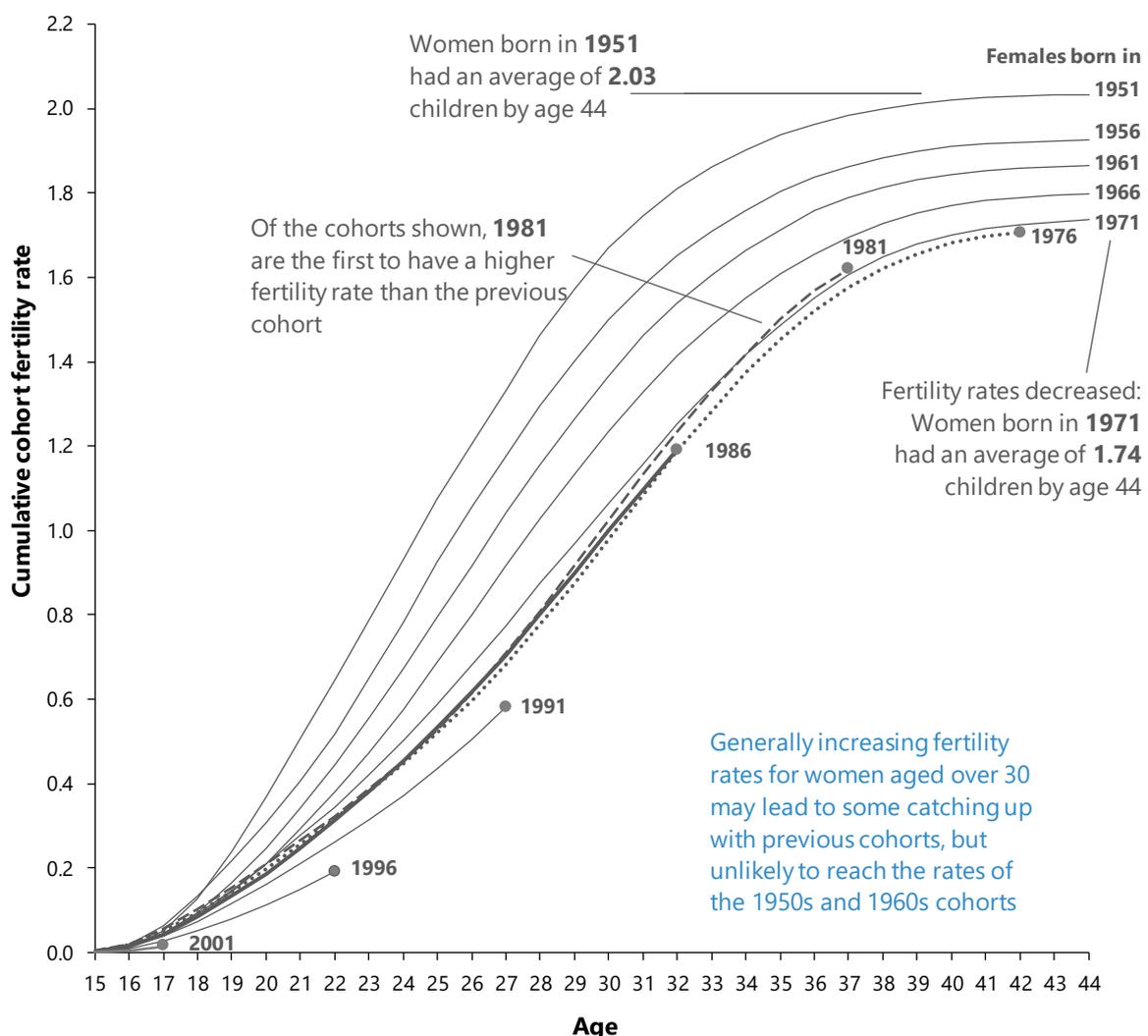
Average Completed Family Size

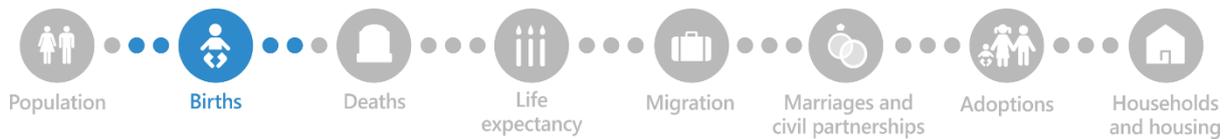
A more satisfactory measure is average completed family size. [Figure 2.7](#) shows the completed family size (or cumulative cohort fertility) by age for females born in



selected years. Those born in 1951 had attained an average completed family size of 2.03 by the time they reached age 44, whereas for those born in 1971, this had fallen to 1.74. The figure also permits the comparison of family size at selected ages for the various cohorts as they pass through the childbearing ages. Of crucial importance is the extent to which people are having children later. For example, by age 30 the cumulative childbearing of females born in 1976 was about 0.5 lower than that of the 1956 cohort. Of the cohorts shown, the 1981 cohort is the first to show a higher fertility rate than the previous cohort. However, the fertility rates of more recent cohorts have fallen again. Whilst the generally increasing fertility rates of those aged over 30 may lead to some catching-up in terms of completed family size, it is unlikely that this will increase the average completed family size to the levels attained as recently as the cohorts of females born in the 1960s.

Figure 2.7: Average Completed Family Size (Cumulative cohort fertility rate) for selected birth cohorts, Scotland

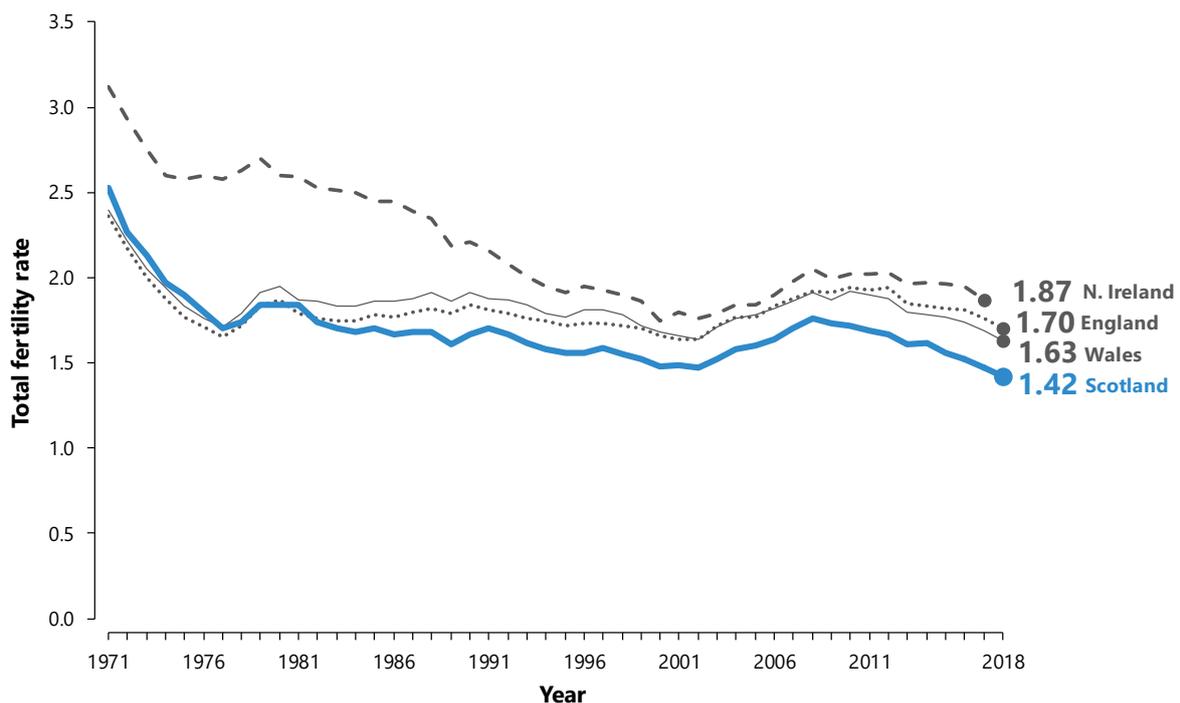




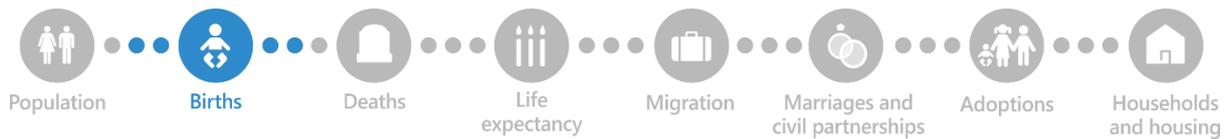
Comparison with other UK countries

Since the early 1980s, Scotland's fertility has been lower than fertility in the other parts of the UK. [Figure 2.8](#) compares the Total Fertility Rates (TFRs) for England, Wales and Northern Ireland since 1971 with those for Scotland. Until the late 1970s, Scotland's TFR was slightly higher than that for England and Wales. However, since the early 1980s, Scotland's TFR has dropped steadily below the levels for England and Wales. In 1971, the TFR for Northern Ireland was markedly higher than for the other three countries but since then the gap has narrowed. The rise in fertility levels in Scotland between 2002 and 2008 was broadly paralleled elsewhere in the UK. Fertility rates for all UK countries have fallen since 2008 with Scotland falling at a faster rate than the other countries.

Figure 2.8: Total fertility rates, UK countries, 1971-2018

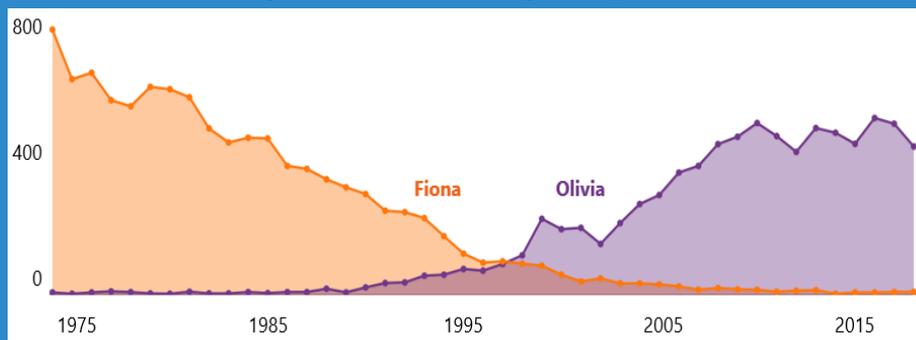


Note: The label for Northern Ireland quotes the 2017 total fertility rate because at the time of writing the 2018 figure was not available.



What are the most popular baby names in Scotland?

National Records of Scotland (NRS) releases an annual [Babies' First Names](#) publication. On the NRS website, our [interactive visualisation](#) allows you to enter up to two names and see how their popularity has changed over the years and how they compare.



Country of birth of parents

Country of birth of mothers

- 74% born in Scotland
- 9% born in the rest of the UK
- 8% born in the rest of the EU
- 9% born outside the EU

In 2018, 74% of mothers had been born in Scotland. 9% were born in the rest of the UK and a further 8% elsewhere in the European Union (EU), including 6% from the countries which joined the EU in 2004 or later (the largest number were to mothers born in Poland). Commonwealth countries were the birthplace of 5% of mothers, including 2% from the Indian sub-continent. In the cases where the father's country of birth was known, 83% had been born in the UK, including 73% who were born in Scotland.

Considering only births for which both the mother's and the father's countries of birth were known (49,106), in 17% (8,327) of births in 2018 neither parent was born in Scotland, including 12% (6,024) of births where neither parent was born in the UK. These figures compare to 13% and 8% respectively in 2008.

More information about birth statistics

More detailed information about Scotland's births can be found in the [Vital Events – Births section](#) or in the [Births section](#) of the Vital Events Reference Tables on the National Records of Scotland website.



Registration

Overview

Within National Records of Scotland (NRS), Registration business area is responsible for overseeing the registration of births, deaths, marriages, civil partnerships and other life events.

Scotland's population in June 2018 was around 5.44 million. In that year, around 140,000 'events' were registered (51,308 births, 190 stillbirths, 58,503 deaths, 27,525 marriages and 65 civil partnerships).

Organisation

Responsibility for registration is divided between the Registrar General and 32 local councils who employ around 700 registrars, including marriage officers who solemnise marriages but do not perform other registration duties. Registrars maintain current registers of births, stillbirths, deaths, marriages and civil partnerships. They also conduct all civil marriage and civil partnership registrations. Each year since 2007, around 97% of records have been created without errors by registrars across the 32 councils.

More than 98% of all events are created digitally using a secure network (the Forward Electronic Register – FER). Remaining events are recorded by registrars manually, and then transcribed into FER. Every entry, and associated data, is examined individually by District Examiners. After that, register pages are sent to NRS, where they are digitally imaged and subsequently made available to family history researchers in New Register House and more widely to computerised registration offices. The original records are stored permanently in NRS.

Uses of registration data

- To benefit society through input into public health, justice and medical research, and to prevent social ills such as forced marriage and fraud.
- As a key data source for NRS demographic statistics.
- As the base for family history research.
- To underpin the NHS Central Register (NHSCR) and it is shared widely with a range of other government departments, such as the Department for Work and Pensions and HMRC.
- By members of the public.



Developments

- **Promotion of civil marriage, Registrar training**

NRS Registration continues to operate a working group with the Association of Registrars of Scotland, to improve public understanding of civil marriage in Scotland. This includes activity to promote civil marriage, dedicated registrar-led training sessions, as well as supporting a recent series of seminars on immigration marriage referrals.

- **Qualifications**

In November 2018, we held the first ever electronic sitting for the examination for The Certificate of Proficiency in the Law and Practice of Registration, recognised since 1937 as the professional qualification for registration staff. Subsequent local electronic sittings have also gone well.

- **Policy and process developments**

We continue to engage with policy colleagues in Scottish Government on a wide range of developing issues, from the gender recognition process and recognition of non-binary people to reviews of legislation affecting children (and registration issues within this), to the future of civil partnerships.

- **Digital**

We are also taking forward a review of the future of Registration in a digital context, examining all aspects of registration, including any potential eRegistration component. We seek to ensure that the service is put on a sustainable footing for the long term.

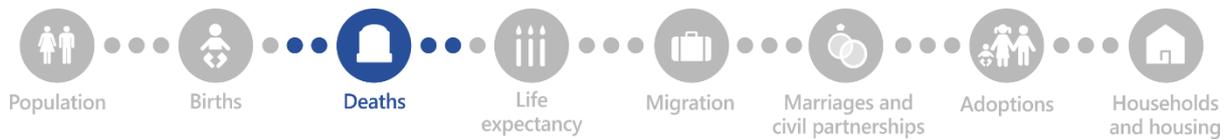
Scotland's Population – The Registrar General's Annual Review of Demographic Trends





Deaths

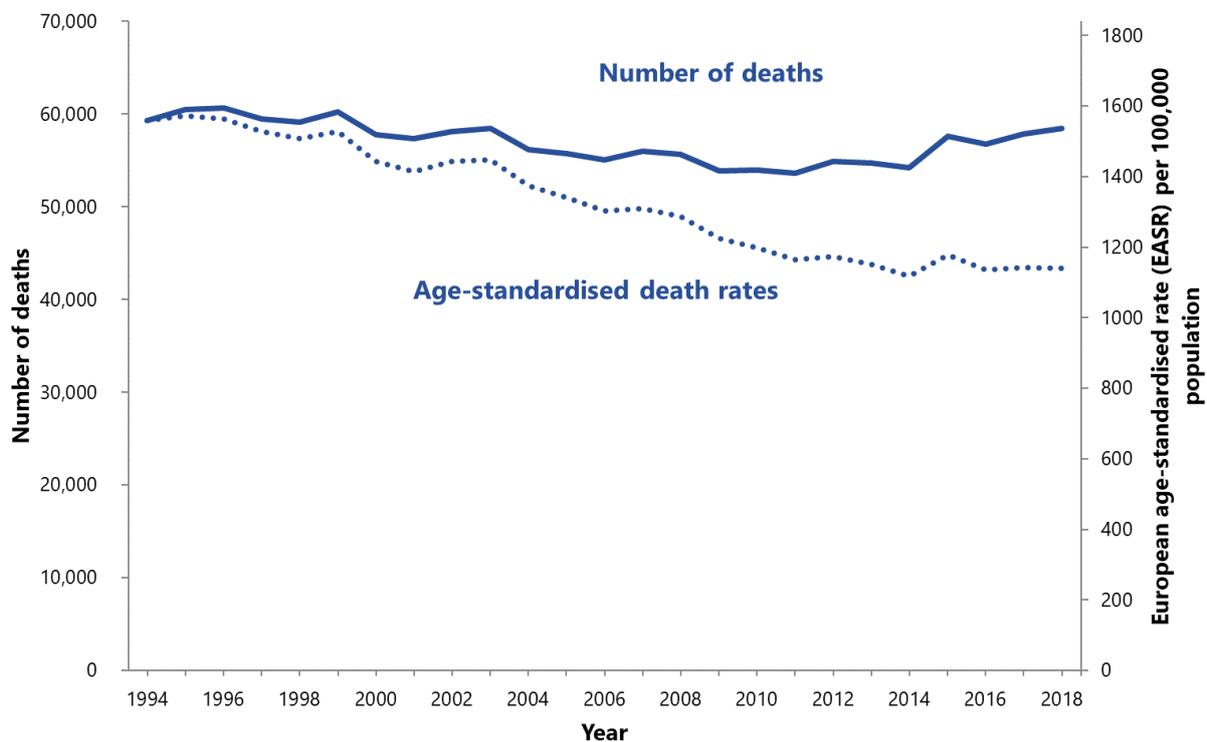
"There were 58,503 deaths registered in 2018, 1% more than in 2017 and the highest annual total since 1999."



The number of deaths registered in 2018 was 58,503, an increase of 1.1% on the number in 2017. This represented the highest annual total since 1999. Since the early 1990s (when there were around 60,000 deaths each year), the number of deaths declined fairly steadily to reach its lowest ever level of 53,661 in 2011. Since then, numbers have risen and the 2018 figure is now 9% higher than in 2011. This might be expected, given our ageing population, but the age-standardised death rate (which accounts for this) has not decreased since around 2012, suggesting the decreasing mortality trend observed over recent decades has begun to change.

After decreasing steadily over recent decades, there has been little change in the age-standardised death rate since around 2012, indicating a change in direction of the mortality trend.

Figure 3.1: Deaths in Scotland, 1994-2018, numbers and age-standardised death rates



More information about Registration is available in [Chapter 2 – Births](#).

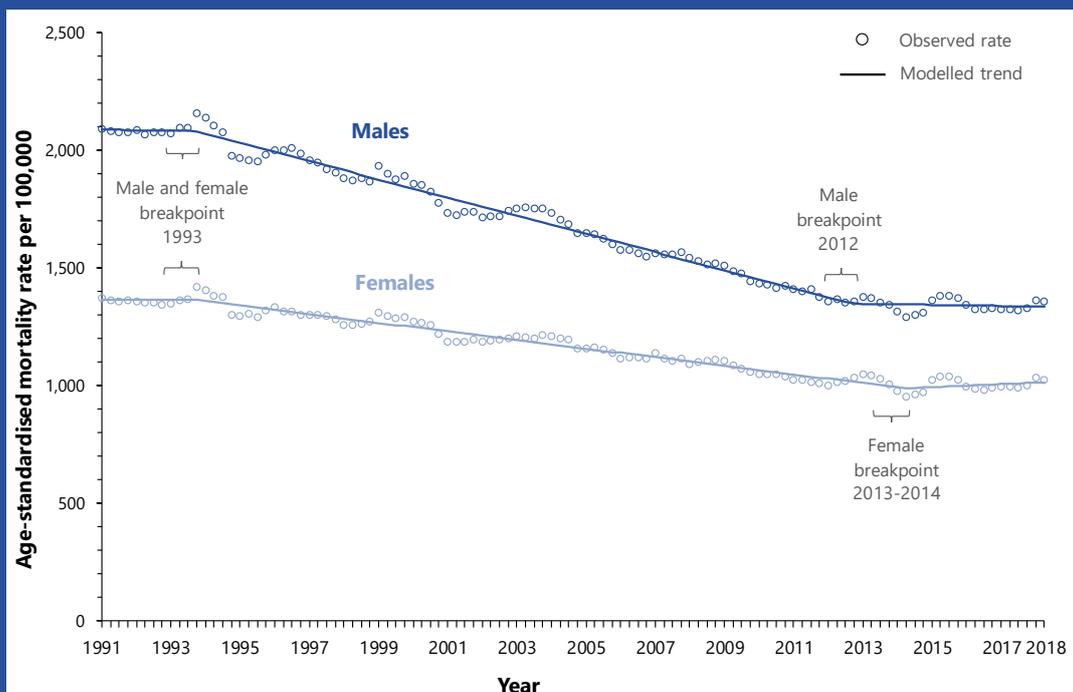


Why are age-standardised rates better than numbers for measuring mortality trends?

The population has been growing and ageing in recent years, and this will have an effect on the number of deaths. A larger population with a greater proportion of older people is likely to lead to more deaths each year. To account for this, we calculate age-standardised death rates which adjust for changes in the age structure of the population and show what the trend would be if the population had remained stable. We use the 2013 European Standard Population to calculate our rates. More information on how this is done is available in our web section on [age-standardised mortality rates](#).

When did the mortality trend change?

NRS worked with colleagues in the NHS to carry out analysis on the mortality trend with a view to identifying whether the trend has changed. This analysis involved applying segmented regression models to the age-standardised mortality rates to identify turning points in the trend between 1990 and 2018. The results showed a statistically significant break in the mortality trend during the period 2012-2014. More detail is available in the article [Recent adverse mortality trends in Scotland: comparison with other high income countries](#).





Leading causes of death

The leading causes of death in 2018 remained the same as in 2017, with ischaemic heart disease accounting for most deaths (11.3%), closely followed by dementia and Alzheimer's disease which accounted for 11.1% of deaths. The leading cause differed by sex with males being most likely to die from ischaemic heart disease (13.9% of male deaths) and females most likely to die from dementia and Alzheimer's disease (14.4% of female deaths).

Leading causes of death 2018

- 1 – Ischaemic heart disease (11.3%)
- 2 – Dementia and Alzheimer's disease (11.1%)
- 3 – Malignant neoplasm of trachea, bronchus and lung (6.8%)
- 4 – Cerebrovascular disease (6.5%)
- 5 – Chronic lower respiratory disease (5.9%)

The leading cause also differed greatly by age group, with accidental poisoning being the leading cause for people who died between the ages of 20 and 49, ischaemic heart disease for 50 to 79 year olds and dementia and Alzheimer's disease for those aged 80 and over.

The leading cause of death analysis is based on a list of causes developed by the World Health Organisation (WHO). There are around 60 categories in total and cancers are grouped separately according to the type of cancer. For example, lung, breast and prostate cancer are all counted as separate causes. If all cancers were grouped together, cancer would be the leading cause of death.

Cancers

There were 16,256 deaths from all types of cancer in 2018. Of these, lung cancer (trachea, bronchus and lung) was the most common type – accounting for 1 in 4 of all cancer deaths – with 3,980 deaths (1,981 males and 1,999 females). For males, the second most common was bowel cancer (colon, rectum and anus) with 971 deaths, followed by prostate cancer (923 deaths). For females the second most common was breast cancer (993 deaths) followed by bowel cancer (836 deaths). Blood cancers (lymphoid, haematopoietic and related tissue) caused 1,091 deaths (612 males and 479 females).



The number of cancer deaths has increased steadily over time – from 13,172 in 1974 to 16,256 in 2018 – an increase of 23%. This increase has mostly occurred in the older age groups. The average age at death from cancer has risen from 67.4 in 1974 to 74.1 in 2018. The age-standardised death rate for cancer has decreased by 18% from 1994 to 2018 for all people, and by 32% for under-75s over this time period.

Table 3.1: Cancer deaths¹, numbers, age-standardised rates and average age at death, 1974-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1974	13,172			67.4
1984	14,299			69.1
1994	15,164	378.3	231.4	70.9
2004	15,047	350.5	195.9	72.3
2014	15,840	318.6	165.8	73.8
2018	16,256	308.4	156.6	74.1

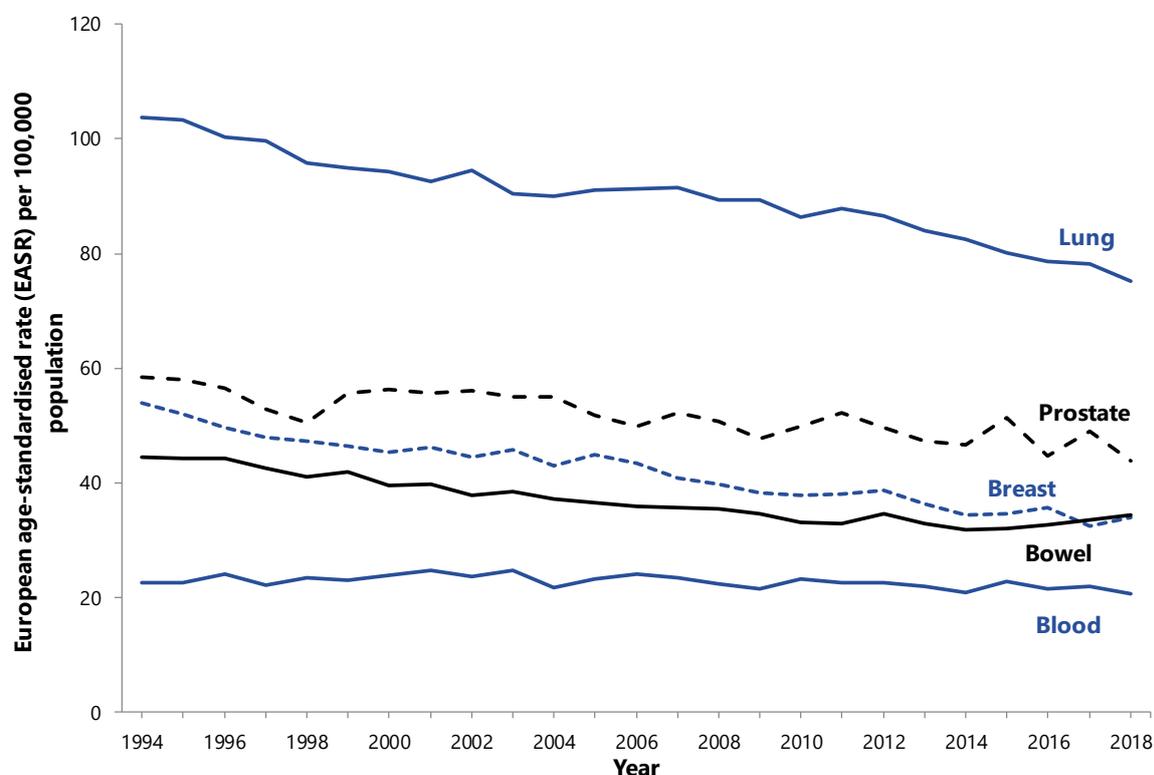
¹ Cancer deaths classified as follows: 1974 – ICD-8 codes 140-209; 1984-1994 – ICD-9 codes 140-208; 2004 onwards – ICD-10 codes C00-C97.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.

Looking at specific cancer sites ([Figure 3.2a](#)), there has been a decrease of 28% in lung cancer death rates since 1994 and a 37% decrease in breast cancer death rates (females only). Prostate cancer and bowel cancer death rates have fallen by around a quarter (25% and 23% respectively) over the same period. Blood cancer death rates have fallen by 8%.



Figure 3.2a: Age-standardised death rates in Scotland, by selected cancers, 1994-2018



Circulatory diseases (ischaemic heart disease and cerebrovascular disease)

Table 3.2: Ischaemic heart disease deaths¹, numbers, age-standardised rates and average age at death, 1974-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1974	19,028			71.6
1984	18,107			72.5
1994	15,234	398.5	183.9	75.0
2004	10,778	263.9	98.9	77.0
2014	6,872	141.5	52.5	77.5
2018	6,615	127.8	49.5	77.4

¹ Ischaemic heart disease deaths classified as follows: 1974 – ICD-8 codes 410-414; 1984-1994 – ICD-9 codes 410-414; 2004 onwards – ICD-10 codes I20-I25.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.



Circulatory disease mortality improvements have been proportionately greater for under 75s. The under 75 age-standardised death rate for cerebrovascular disease fell by 70% since 1994 compared to 64% for all ages. There was also a greater decrease in age-standardised death rates for ischaemic heart disease for under 75s (73%) than for all ages (68%). Between 1974 and 2018, the average age at death rose from 71.6 to 77.4 for ischaemic heart disease and from 75.5 to 82.0 for cerebrovascular disease.

Deaths from circulatory diseases have reduced greatly over the last four decades. They have continued to reduce in recent years but the rate of improvement has slowed.

Table 3.3: Cerebrovascular disease deaths¹, numbers, age-standardised rates and average age at death, 1974-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1974	10,197			75.5
1984	8,378			77.4
1994	7,684	214.9	56.7	79.4
2004	6,155	160.4	32.0	81.5
2014	4,123	87.4	17.4	82.4
2018	3,831	76.5	16.8	82.0

¹ Cerebrovascular disease deaths classified as follows: 1974 – ICD-8 codes 430-438; 1984-1994 – ICD-9 codes 430-438; 2004 onwards – ICD-10 codes I60-I69.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.

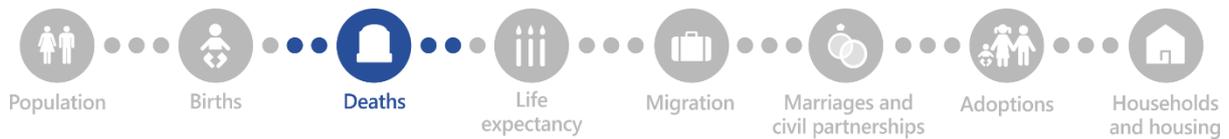
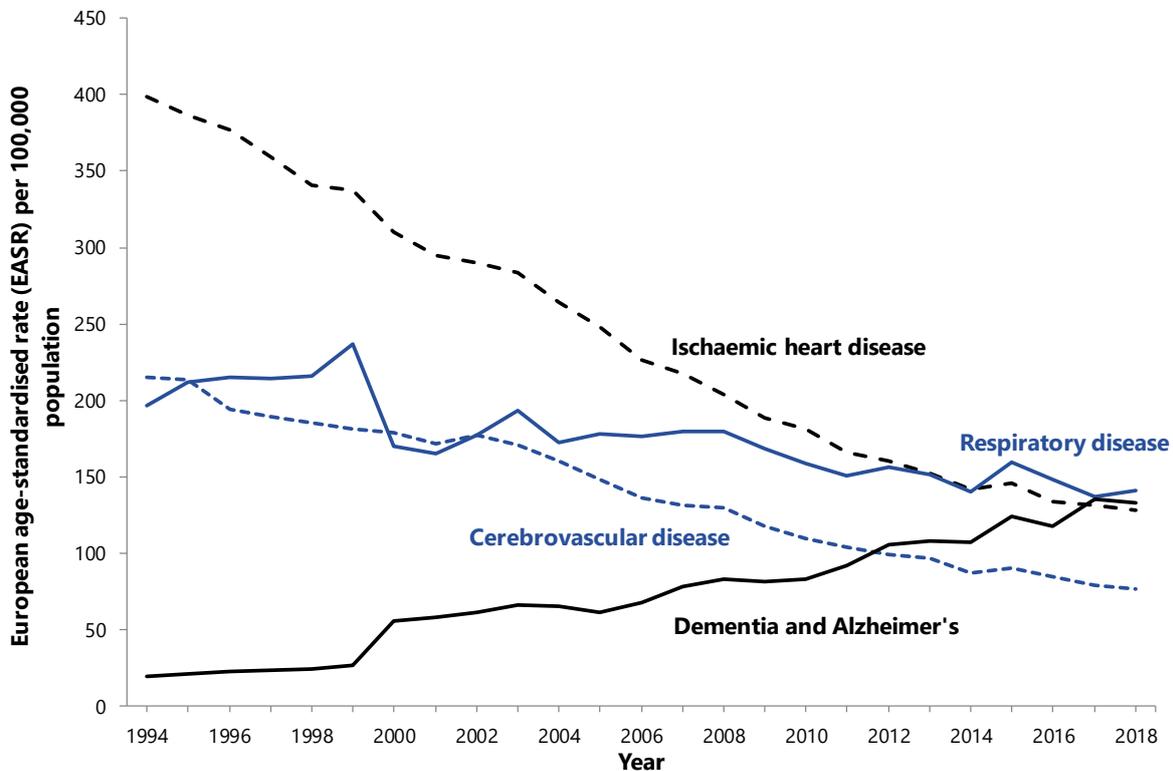


Figure 3.2b: Age-standardised death rates in Scotland, by selected cause, 1994-2018



Respiratory diseases

The number of respiratory deaths has not changed dramatically in the last few decades with an increase of only 2% in the number of deaths between 1994 and 2018. However, there was a fall of 28% in the age-standardised death rate for all ages and a 32% fall in the rate for under-75s. The average age at death has risen from 71.9 in 1974 to 80.7 in 2018.



Table 3.4: Respiratory deaths¹, numbers, age-standardised rates and average age at death, 1974-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1974	6,285			71.9
1984	7,099			76.6
1994	6,981	197.0	55.3	79.0
2004	6,743	172.7	47.0	79.8
2014	6,706	140.4	40.0	80.3
2018	7,128	141.0	37.6	80.7

¹ Respiratory disease deaths classified as follows: 1974 – ICD-8 codes 460-519; 1984-1994 – ICD-9 codes 460-519; 2004 onwards – ICD-10 codes J00-J99.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.

Dementia and Alzheimer's disease

Dementia and Alzheimer's deaths have increased considerably over time. As figures before and after 2000 are not strictly comparable due to changes in death coding practices, it is better to focus on changes after this time. Since 2000, age-standardised death rates have more than doubled and in 2018 the age-standardised death rate for dementia and Alzheimer's is now greater than that for ischaemic heart disease. The average age at death has risen slightly over time – from 83.3 in 1984 to 86.9 in 2018.

Table 3.5: Dementia and Alzheimer's deaths¹, numbers, age-standardised rates and average age at death, 1984-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1984	389			83.3
1994	629	19.4	1.6	84.8
2004	2,354	65.6	5.3	85.7
2014	4,915	107.3	5.8	86.9
2018	6,484	132.7	7.4	86.9

¹ Dementia and Alzheimer's disease deaths classified as follows: 1984-1994 – ICD-9 codes 290, 331.0; 2004 onwards – ICD-10 codes F01, F03, G30.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.



Other causes

The number of accidental deaths, alcohol-specific deaths and suicides are much lower than the number of deaths from the causes discussed above, but because these deaths tend to occur at younger ages, their impact on overall mortality rates and life expectancy is higher.

Figure 3.2c: Age-standardised death rates in Scotland, by selected cause, 1994-2018

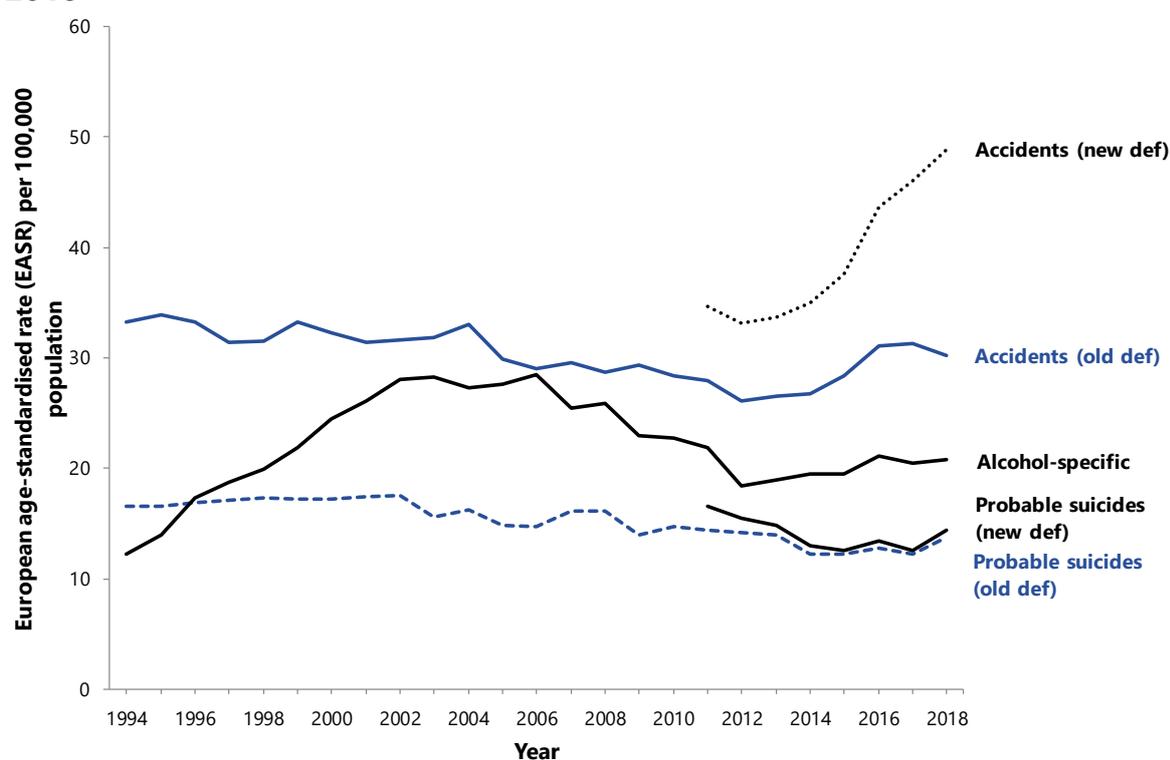


Table 3.6: Alcohol-specific deaths¹, numbers, age-standardised rates and average age at death, 1984-2018

Year	Number of deaths	Age-standardised death rate (all ages) ²	Age-standardised death rate (under 75s) ²	Average age at death
1984	369			54.7
1994	550	12.2	12.9	54.9
2004	1,331	27.3	28.4	55.3
2014	1,036	19.5	19.7	57.3
2018	1,136	20.8	20.7	59.3

¹ For details of ICD codes used and for comparable figures based on the old alcohol-related definition refer to the [NRS website](#).

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.



Alcohol-specific deaths increased steeply until the mid-2000s, after which they fell steadily until 2012 but have begun to rise again since then. The average age at death has increased from 54.7 in 1984 to 59.3 in 2018. For more detail, refer to the [alcohol deaths](#) section of the NRS website.

Accidental deaths have declined over time, falling to a low point in 2012 before increasing again. The increase since 2012 has been steeper using the new definition, which is likely to be due to an increase in accidental poisonings (which are included in the new definition but not the old). The average age at death has increased from 56.1 to 73.8 based on the old definition and is 61.3 based on the new definition. For more detail, refer to the [accidental deaths](#) section of the NRS website.

Table 3.7: Accidental deaths¹ (old and new definitions), numbers, age-standardised rates and average age at death, 1984-2018

Year	Number of deaths		Age-standardised death rate (all ages) ²		Age-standardised death rate (under 75s) ²		Average age at death	
	old	new	old	new	old	new	old	new
1984	1,997						56.1	
1994	1,362		33.3		17.6		60.9	
2004	1,390		33.0		15.7		65.9	
2014	1,320	1,750	26.8	35.0	11.9	20.8	70.1	62.9
2018	1,536	2,512	30.2	48.8	12.0	32.4	73.8	61.3

¹ For details of ICD codes used refer to the [accidental deaths methodology paper](#) on the NRS website.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.

The number of probable suicides has fallen over the long term with the age-standardised rate 17% lower in 2018 than in 1994 (old definition). However, there has been little change since 2014 and the 2018 figure increased. The average age at death is similar using both the old (44.8 years) and new (44.5 years) definitions. For more detail, refer to the [probable suicides](#) section of the NRS website.



Table 3.8: Probable suicides¹ (old and new definitions), numbers, age-standardised rates and average age at death, 1974-2018

Year	Number of deaths		Age-standardised death rate (all ages) ²		Age-standardised death rate (under 75s) ²		Average age at death	
	old	new	old	new	old	new	old	new
1974	642						48.1	
1984	688						47.7	
1994	834		16.6		16.6		43.2	
2004	835		16.3		16.5		44.3	
2014	659	696	12.3	13.0	12.8	13.5	46.2	45.9
2018	753	784	13.8	14.4	14.6	15.3	44.8	44.5

¹ For details of ICD codes used refer to the [probable suicides methodology paper](#) on the NRS website.

² Age-standardised death rates are per 100,000 population and are based on the European Standard Population 2013. They are not available (using the current methodology) prior to 1994.

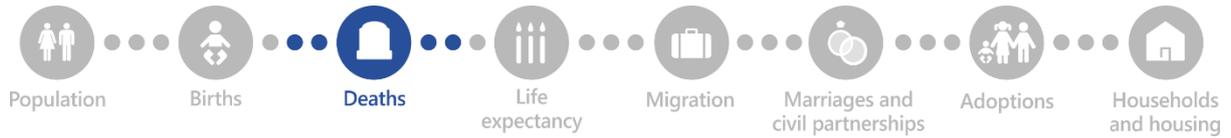
Other NRS published statistics on causes of death:

- Drug-related deaths
- Volatile substance abuse and helium deaths
- Deaths involving healthcare associated infections (Clostridium difficile and MRSA)
- Hypothermia
- Winter mortality
- Avoidable mortality
- Vital Events Reference Tables

Mortality by age

[Figures 3.3a](#) and [3.3b](#) show, for males and females, selected age-specific mortality rates over the last 37 years relative to the 1981 rates.

The greatest percentage reductions have occurred in the 0 to 14 age group with a decrease of 75% for males and 67% for females since 1981, although proportionately the number of deaths in this age group is very small.

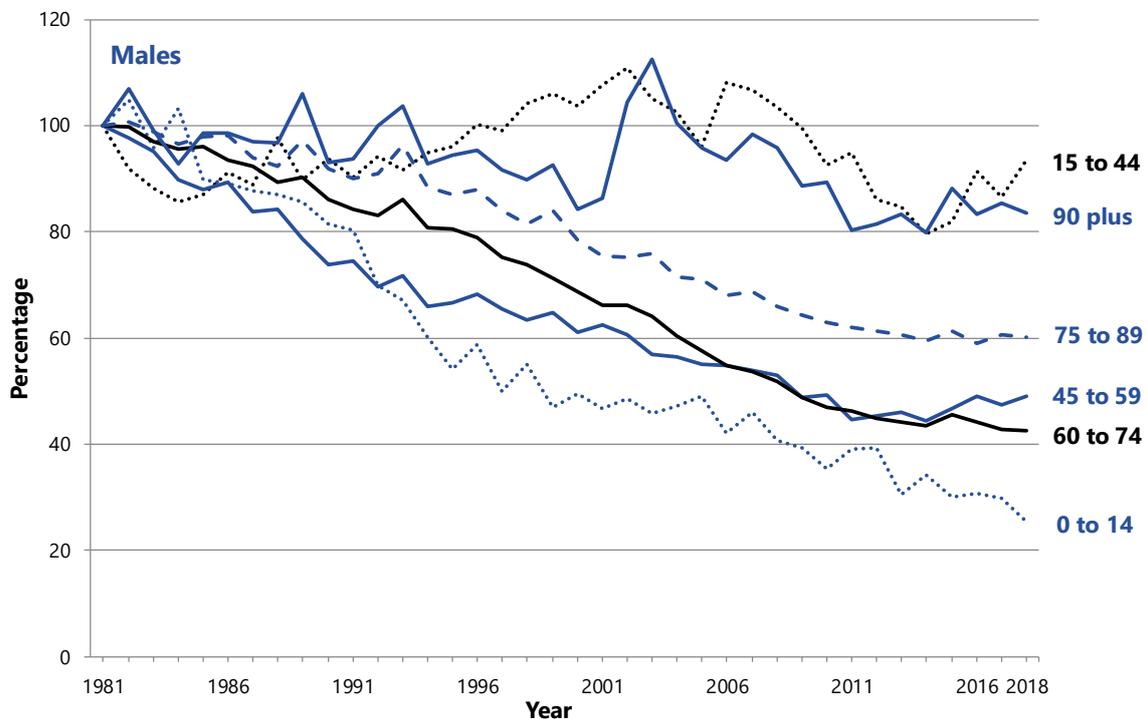


Excluding the youngest age group, the greatest reductions have been in the 45 to 59 and 60 to 74 age groups which have seen decreases of 51% and 58% respectively for males and 44% and 48% for females. However, since 2011 mortality among 45 to 59 year old males has increased and there has been very little change for females. Mortality among 60 to 74 year old males has continued to decrease since 2011 but there has been little change for females.

Mortality rates among 15 to 44 year olds have been volatile over time due to the relatively low numbers of deaths in this age group. There are signs of increases in recent years (since 2014 for males and 2013 for females) but these should be interpreted with caution due to the small numbers.

Death rates in the 90 plus age group have reduced at a greater rate for males (by 17%) than for females (5%).

Figure 3.3a: Age specific mortality rates as a proportion of 1981 rate, 1981-2018, males



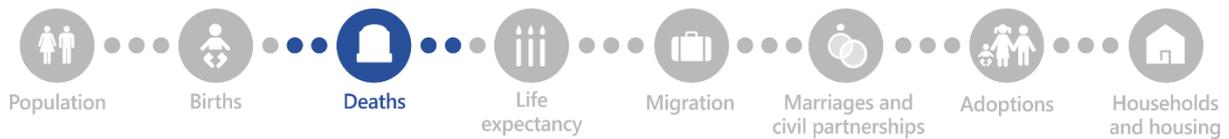
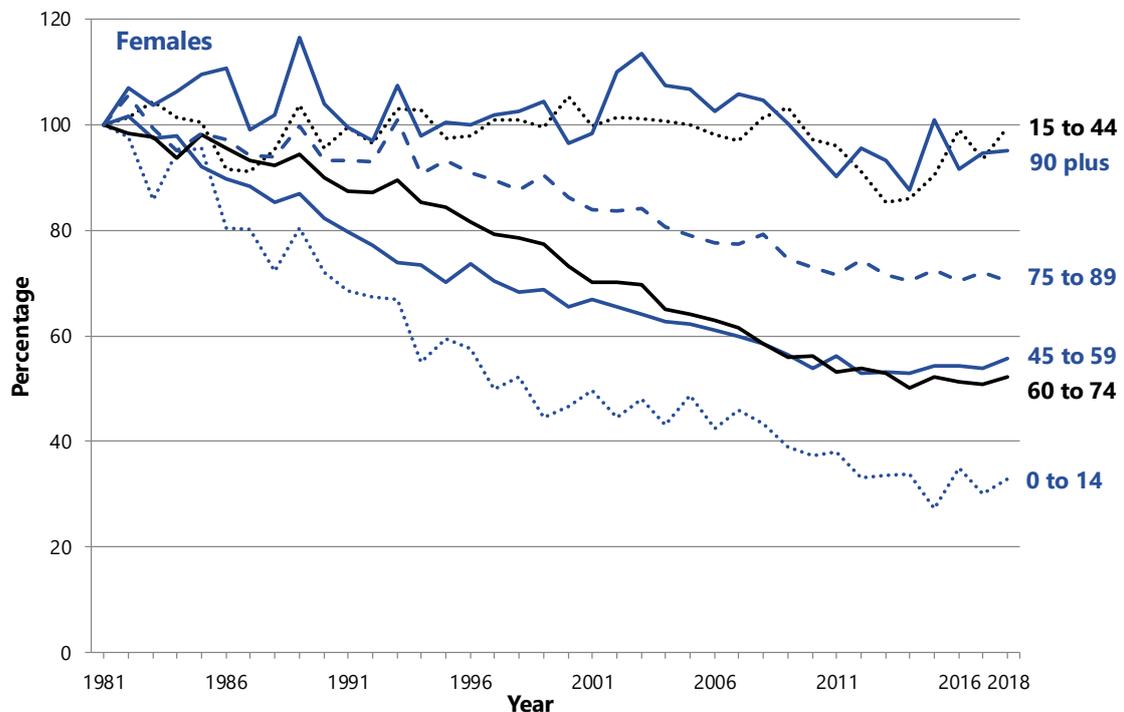


Figure 3.3b: Age specific mortality rates as a proportion of 1981 rate, 1981-2018, females



Geographical variations in mortality

Using 2017 data, the latest available for other parts of the UK, [Figure 3.4](#) compares the age-standardised death rates for the constituent countries of the UK for selected causes after adjusting for differences in age structure.

The Scottish rates for cancer, ischaemic heart disease and cerebrovascular diseases are well above the rates for the other countries for both males and females. Death rates for dementia and Alzheimer's are closer although Scotland still has the highest rates out of the four countries. For respiratory diseases, Scotland has the lowest rate for males (only marginally below England) and the second highest rate for females (after Wales).

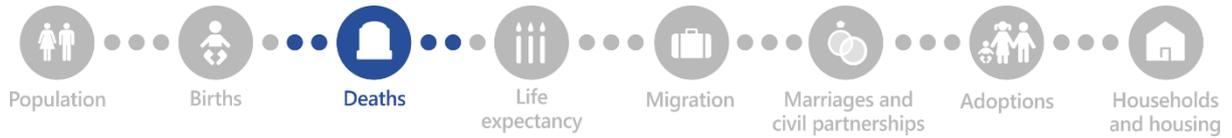
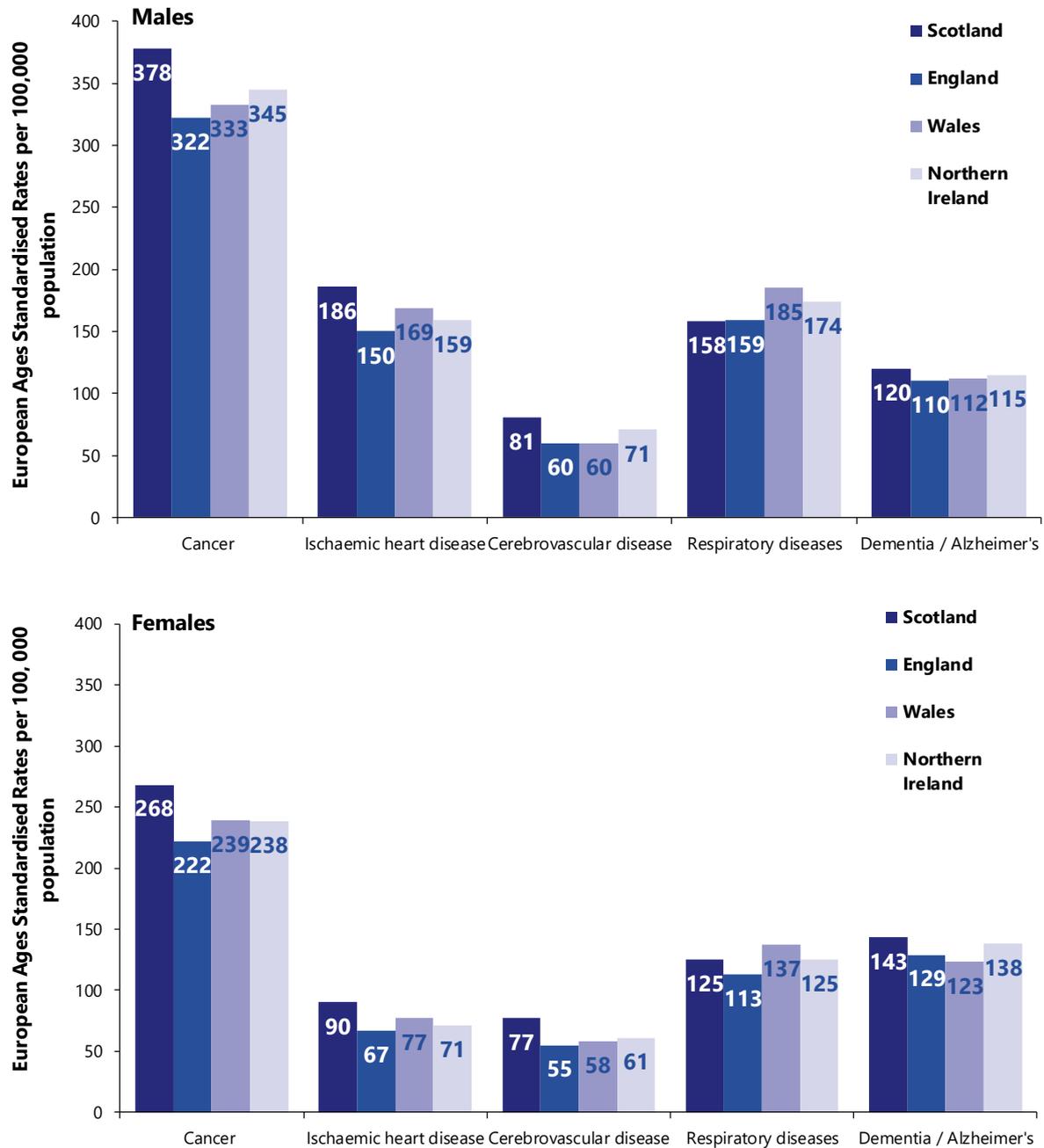


Figure 3.4: Age standardised mortality rates, by selected cause and sex, 2017



Note: European Age-standardised Rates (EASRs). These age-standardised mortality rates are based on the 2013 version of the European Standard Population.



How does Scotland compare to other European countries?

[Appendix 1 – Table 3](#) shows the death rate for each of the EU member states, and for some other countries in Europe. These are crude death rates.

They are calculated by expressing the number of deaths per 1,000 population. They do not take account of differences in the age structures of the countries' populations. All else being equal, a country with an unusually high proportion of its population in the younger age groups could have unusually low crude death rates. So, although the figure for Scotland is higher than those for most of the countries that are shown, this could to some extent be due to the structure of the Scottish population. A better way to compare Scotland's mortality with other countries' is to use the estimates of life expectancy for each country (please refer to [Chapter 4 – Life expectancy](#)) or to consider age-standardised death rates.

Stillbirths, perinatal deaths and infant deaths

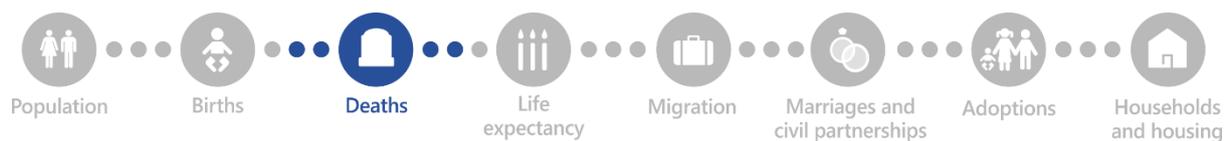
There were 190 stillbirths registered in Scotland in 2018. Stillbirths (where a child born after the 24th week of pregnancy does not breathe or show any other sign of life) are registered separately from live births and from deaths, and so are not included in either of those figures.

Perinatal deaths include stillbirths plus deaths in the first week of life (the latter are registered as live births and deaths). There were 74 deaths of children who were aged under one week old, so there was a total of 264 perinatal deaths.

Infant deaths are deaths in the first year of life, all of which are registered as live births and as deaths. In total, 163 infant deaths were registered in 2018 (including those who died in the first week of life).

[Appendix 1 – Table 1](#) shows that in 2018 the stillbirth rate (3.7 per 1,000 live and still births) was the lowest rate ever recorded. The infant death rate (3.2 per 1,000 live births) equalled the previous lowest ever rate which was recorded in 2015. Both rates have fallen greatly since the Second World War. The stillbirth rate has fallen slowly in

Scotland's Population – The Registrar General's Annual Review of Demographic Trends



the past 30 years but the infant death rate has continued a steeper decline over the same period.

[Appendix 1 – Table 3](#) shows that the stillbirth rate for Scotland in 2018 (3.7 per 1,000 live and still births) was lower than that for the UK as a whole (4.2) but higher than those of 19 of the 28 EU countries. The infant death rate for Scotland in 2018 (3.2) was below the UK rate (3.9) but higher than those of 12 of the 28 EU countries.

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Life expectancy

“While life expectancy in Scotland has increased over the last few decades, improvements have stalled in recent years.”



Life expectancy at birth in Scotland

The most recent statistics published by NRS show that a baby boy born in Scotland between 2015 and 2017 could expect to live until he was 77.0 years old. A baby girl born at the same time could expect to live for 81.1 years. Life expectancy in Scotland has increased for both males and females since the early 1980s when a boy born between 1980 and 1982 could expect to live for 69.1 years and a girl born at the same time could expect to live for 75.3 years. Despite this longer term increase, life expectancy decreased by about 0.1 years for both males and females between 2014-2016 and 2015-2017. From here on, 'life expectancy' is taken to mean life expectancy at birth unless another age group is stated.

Why do we report life expectancy for three year periods?

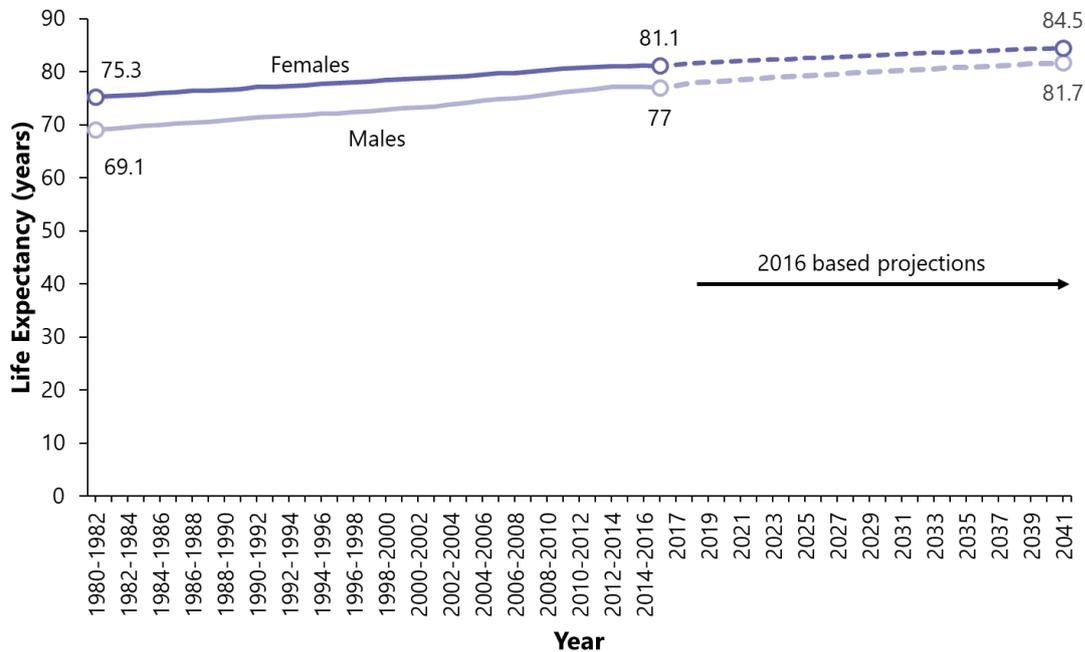
Official life expectancy statistics for Scotland are calculated by aggregating the latest three years of deaths and population estimates. This is to increase the sample size and improve the reliability of the results. It also reduces the effect of more 'extreme' years on the data.

After 2015-2017, NRS use population projections to estimate how life expectancy will change in the future. The latest projections are based on the year 2016 and show life expectancy for Scotland increasing to 81.7 years for males and 84.5 years for females by 2041. [Figure 4.1](#) shows how life expectancy has changed since the estimate in 1980-1982 and how it is expected to change up to 2041.

Although female life expectancy has always been greater than male life expectancy in Scotland (and globally), the gap between sexes has become smaller as life expectancy has increased. For babies born in 1980-1982, there was a gap of 6.2 years between males and females. In 2015-2017, this gap has decreased to 4.1 years and the projections show that is expected to decrease further to 2.8 years by 2041.



Figure 4.1: Life expectancy at birth, Scotland, 1981-2041



Source: Figures to 2015-2017 are three year life expectancies from the National Life tables for Scotland (NRS). Figures from 2017 onward are projected single year life expectancies from the 2016 based population projections (ONS).

Life expectancy at older ages in Scotland

Although life expectancy at birth is the most commonly reported figure, we can also look at life expectancy at older ages. In 2015-2017 life expectancy at age 65 was 17.4 years for men and 19.7 years for women. This means that a man aged 65 in 2015-2017 could expect to live for 17.4 more years until he was 82.4 years old and a 65 year old woman could expect to live 19.7 more years until she was 84.7 years old. This is an increase of 5.1 years for men and 3.7 years for women since 1980-1982 when life expectancy at age 65 was 12.3 years and 16.0 years respectively.

What is 'period' life expectancy?

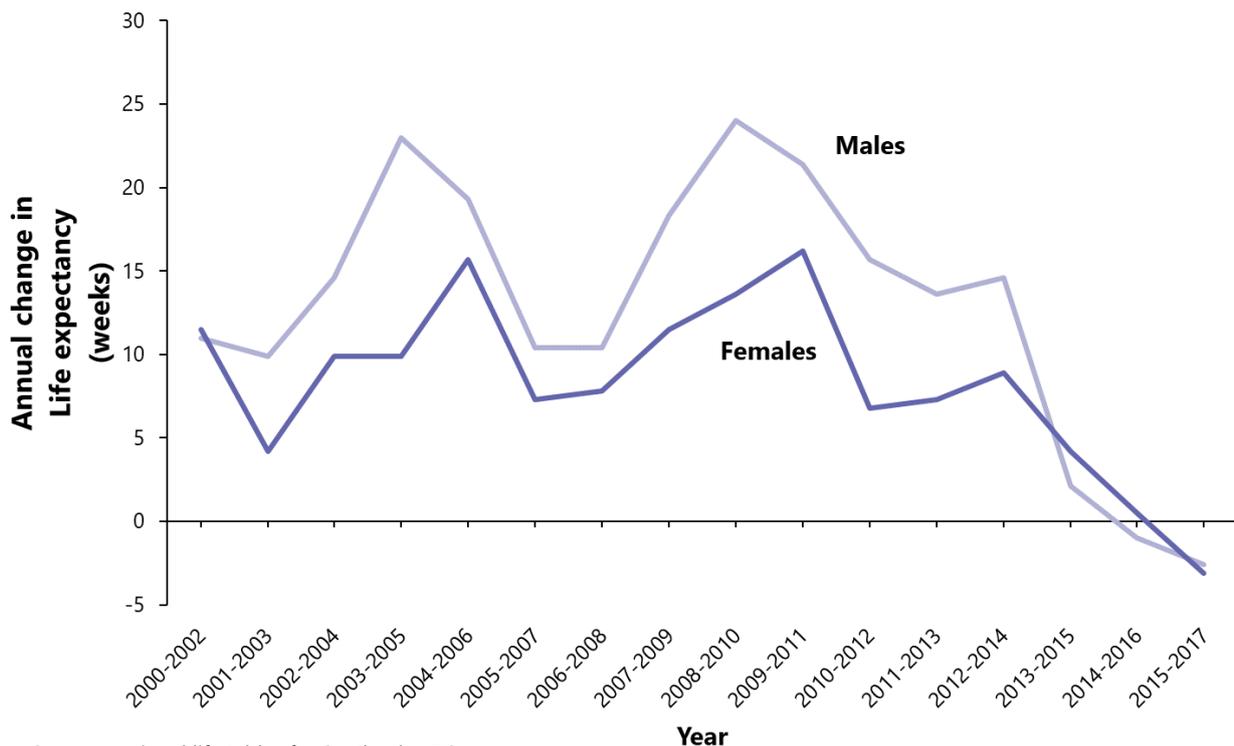
All of the estimates presented in this chapter are 'period' life expectancy estimates. They are calculated assuming that mortality rates for each age group in the time period (here 2015-2017) are constant throughout a person's life. This means that future changes in things such as medicine and legislation are not taken into consideration. While this means that period life expectancy is not an accurate prediction of how long a person will actually live, it is a useful measure of population health.



Recent changes in Scottish life expectancy

In the long term, life expectancy has increased since the 1980s, however, over the last few years, life expectancy growth in Scotland has started to slow. Since the estimate for 2012-2014 (77.1 years for males and 81.1 years for females), life expectancy has effectively stalled in Scotland and even fallen slightly in the latest estimate. [Figure 4.2](#) shows that between 2000-2002 and 2012-2014 life expectancy increased every year by at least 4.2 weeks (females in 2001-2003) and sometimes by as much as 24 weeks (males in 2008-2010). After 2012-2014 however, the amount life expectancy increased by has fallen for each estimate until between 2014-2016 and 2015-2017, when it decreased by 2.6 weeks for males and 3.1 weeks for females.

Figure 4.2: Annual change in life expectancy at birth in Scotland, 2000-2002 to 2015-2017, males and females

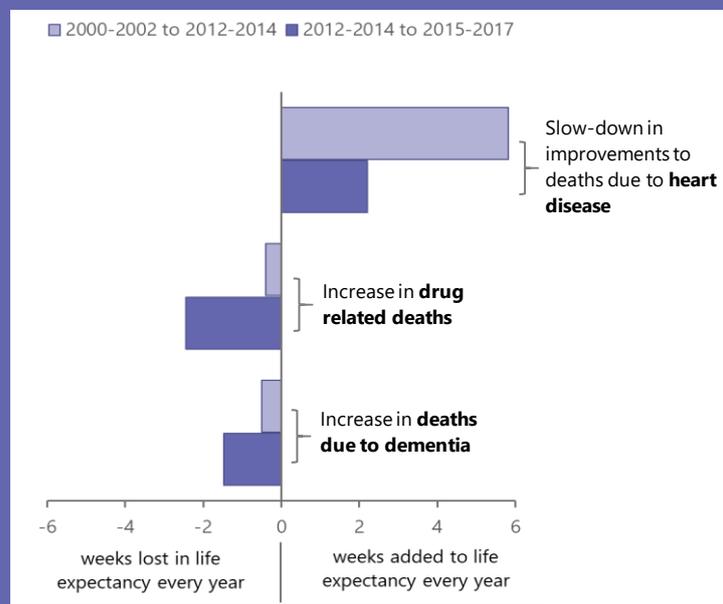


Source: National life tables for Scotland (NRS).



Why is life expectancy in Scotland falling?

Recently, NRS have been involved in a collaborative project with a range of health organisations to investigate why life expectancy has stopped increasing. We found that since 2012-2014, there has been a slowdown in the rate of improvement of deaths from heart disease, especially in people aged between 55 and 74. There has also been an increase in the number of younger people aged 35-54 dying from drugs and in people over 75 dying from dementia. We have written these results and other findings in a more detailed [blog](#) post which you can read on the NRS website.



Life expectancy across Europe

There is a great deal of variation in life expectancy at birth amongst European countries. Of all countries in the EU, male life expectancy is highest in Italy (81.0 years) and lowest in Lithuania (69.5 years) while female life expectancy is highest in Spain (86.3 years) and lowest in Bulgaria (78.5 years). [Figure 4.3](#) shows how life expectancy in Scotland and the UK compares with EU countries since 1980-1982. For both males and females, Scottish life expectancy is lower than the majority of EU countries and lower than all countries in the 'EU 15' (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the UK).

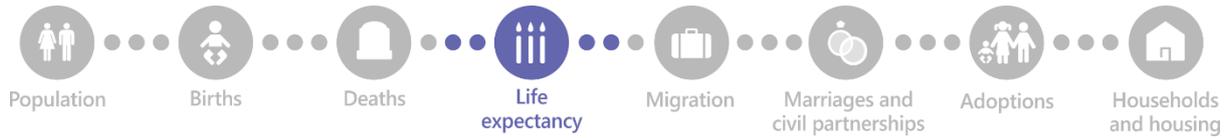
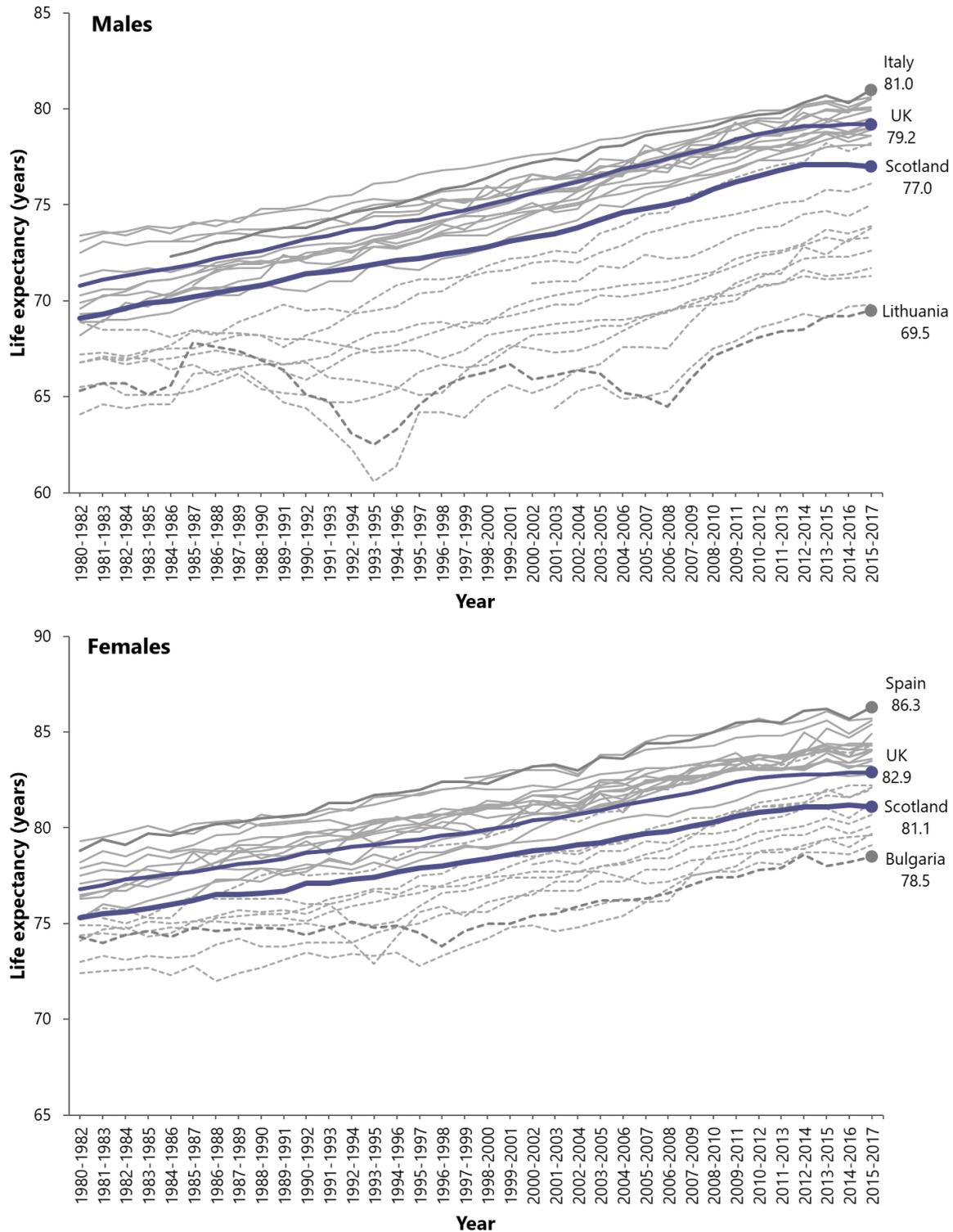


Figure 4.3: Life expectancy at birth in Scotland and the UK compared with countries in the EU by sex, 1980-1982 to 2015-2017



Source: National life tables for Scotland (NRS), National life tables for the UK (ONS), Eurostat (tps00025). Dashed lines represent Eastern European countries, which have historically lower life expectancy.



The slowdown in life expectancy improvement evident in Scotland is also happening for the UK as a whole as well as in a number of other European countries, for example, France and Spain. This slowdown is not universal though, and many countries have maintained or even increased the rate of life expectancy improvements, for example, Poland and Belgium.

Healthy life expectancy in Scotland and the UK

In addition to how long a person can be expected to live, it is often useful to look at how much of their life someone can expect to spend in good health; this is known as 'healthy life expectancy'. The most recent data show that a boy born in Scotland in 2015-2017 has a healthy life expectancy of 62.3 years. This means that he could expect to live for 62.3 years in 'good health' (80.9% of his life). After this he could expect to live for a further 14.7 years in poor health until he reached 77.0 years old

(total life expectancy for males). Similarly, healthy life expectancy for females was 62.6 years, so a baby girl born in 2015-2017 would spend 62.6 years in good health (77.3% of her life) followed by 18.4 years in poor health.

Healthy life expectancy

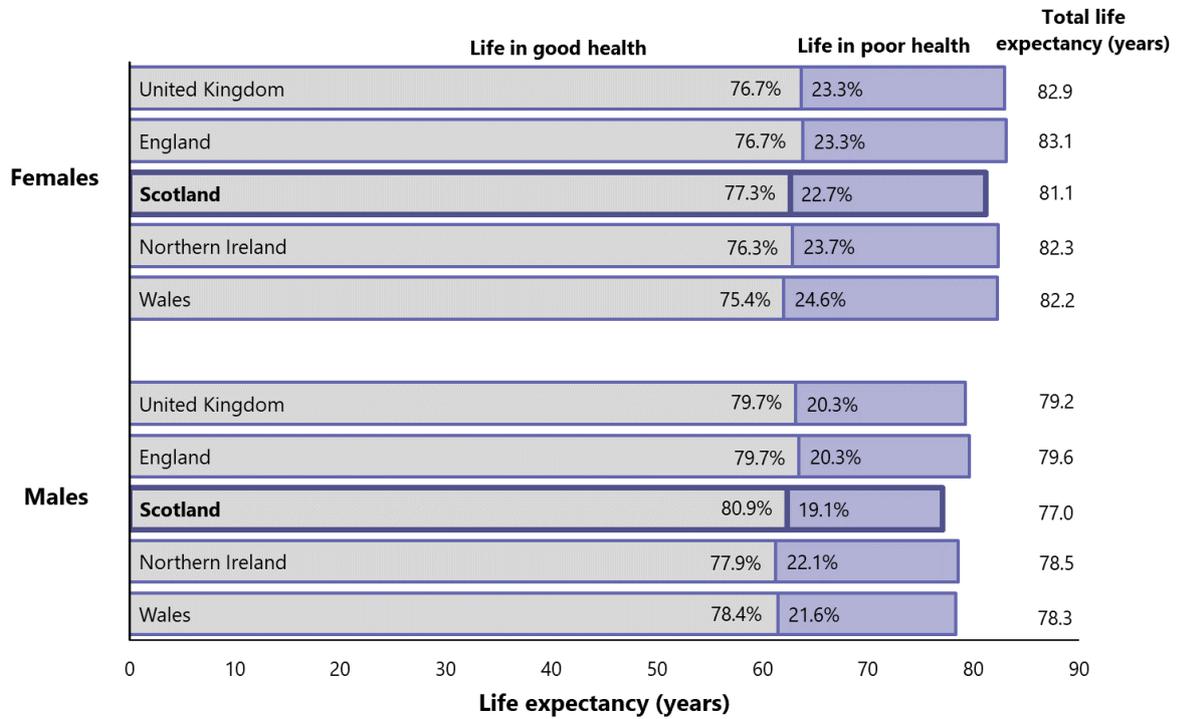
NRS calculate healthy life expectancy using data from the Annual Population Survey (APS).

People who participate in the survey have to rate their health as 'very good', 'good', 'fair', 'bad', or 'very bad'. We look at the proportion of people of each age who answered 'good' or 'very good' and use this to estimate how long people spend in good health. This year is the first time that NRS have produced our own healthy life expectancy estimates as they were previously published by the Scottish Public Health Observatory (ScotPHO).

[Figure 4.4](#) shows life expectancy and healthy life expectancy in the UK constituent countries. While Scotland has the lowest life expectancy of all UK countries, it has the second highest healthy life expectancy for males (behind England) and the third highest healthy life expectancy for females (behind England and Northern Ireland). For both males and females, people in Scotland spend a greater proportion of their lives in good health than all other UK countries. England has the highest life expectancy and healthy life expectancy for both males and females.



Figure 4.4: Life expectancy and healthy life expectancy at birth in the UK and constituent countries, 2015-2017



Source: Healthy life expectancy in Scottish areas 2015-2017 (NRS).



Life expectancy and healthy life expectancy in council areas

For both males and females born in 2015-2017, those living in East Renfrewshire had the highest life expectancy at birth (80.5 ± 0.7 years for males, 83.7 ± 0.6 years for females). Meanwhile, Glasgow City had the lowest life expectancy for both sexes (73.3 ± 0.2 years for males and 78.7 ± 0.3 years for females.) East Dunbartonshire had the highest male healthy life expectancy (68.9 ± 1.6 years) and Orkney Islands had the highest female healthy life expectancy (75.0 ± 3.9 years). healthy life expectancy was lowest for both males and females in North Ayrshire (56.0 ± 2.0 and 57.1 ± 2.1 years respectively). [Figure 4.5](#) shows life expectancy and healthy life expectancy for all council areas with 95% confidence intervals.

How reliable are the life expectancy estimates?

NRS publish 95% confidence intervals around life expectancy and healthy life expectancy estimates in smaller areas - this helps us to understand how accurate the estimates are.

For example, males in Aberdeen City have a life expectancy of 76.9 and the confidence intervals are 76.4 and 77.4. This means that there is a 95% chance that the 'true' value lies between 76.4 and 77.4 and the most likely value is 76.9. This is often written as the value plus or minus the confidence intervals:

76.9 ± 0.5 years.

Life expectancy figures for **smaller** populations have **larger** confidence intervals.

For example, Orkney Islands, which has a relatively small population, has quite large confidence intervals of 79.5 ± 1.5 years.

In contrast, Glasgow City, which has a much larger population, has smaller confidence intervals of 73.3 ± 0.2 years, as the figures will be more precise for a bigger populations.

We say that two values are statistically different if their confidence intervals do not overlap with each other.

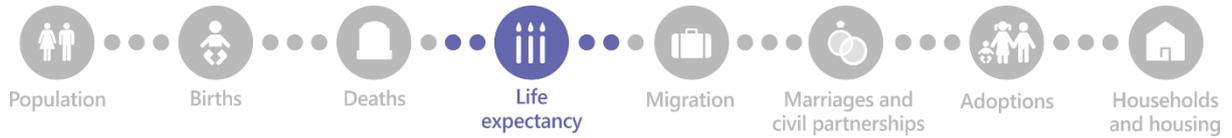
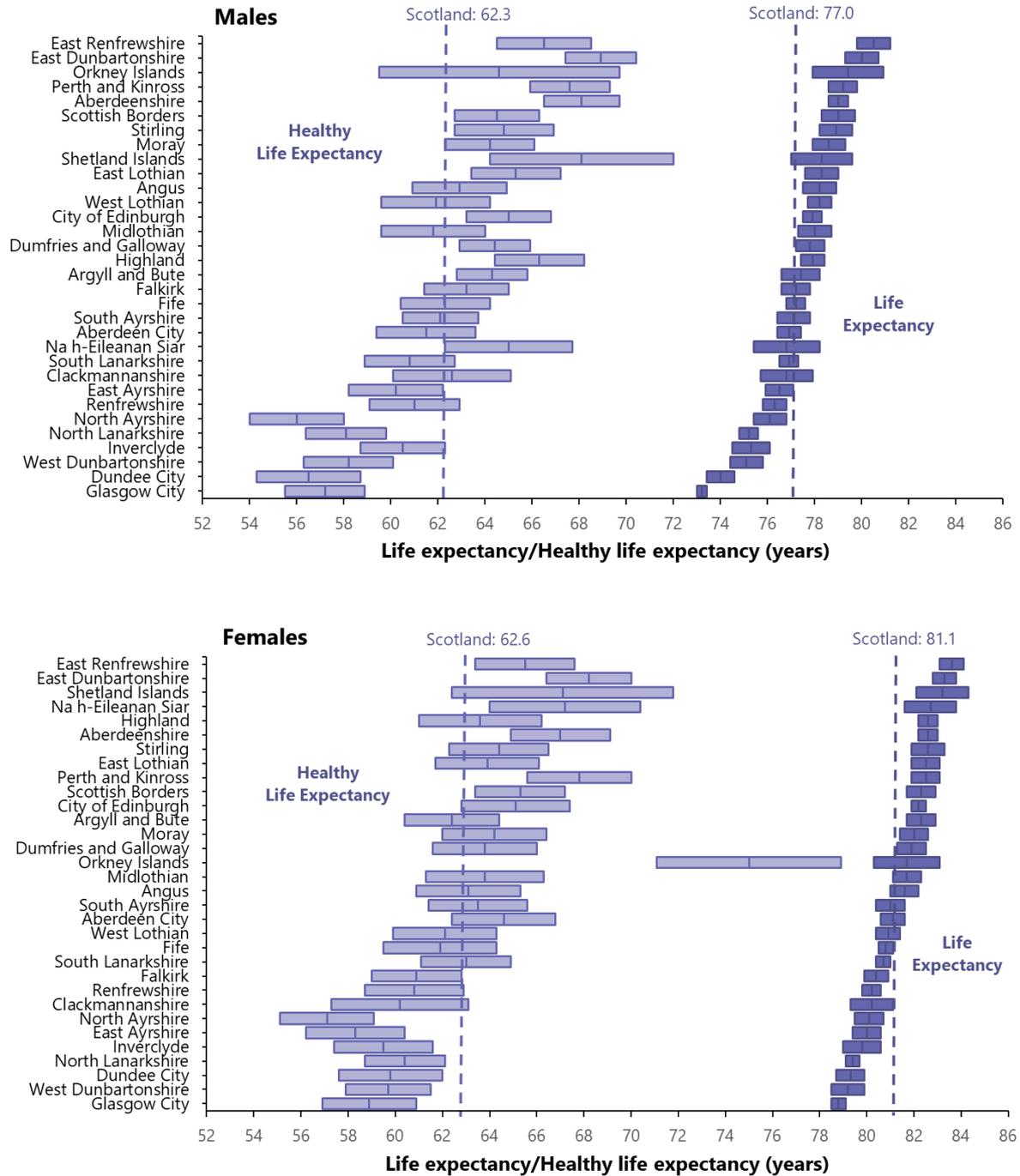


Figure 4.5: Life expectancy and healthy life expectancy at birth in Scotland's council areas with 95% confidence intervals by sex, 2015-2017



Note: The Scotland level life expectancy estimate is for use only as a comparator for the corresponding sub-Scotland level figures. The definitive Scotland level estimate is published in the National Life tables for Scotland. The size of the bars indicate 95% confidence intervals around the estimate. For more explanation see the earlier [text box](#).
 Source: Healthy life expectancy in Scottish areas 2015-2017 (NRS).



What is the relationship between life expectancy and healthy life expectancy?

Figure 4.6 shows that people in council areas which have greater life expectancy also tend to have greater healthy life expectancy. It also shows that there is more variation in healthy life expectancy across councils than in life expectancy. For males there was a gap of 12.9 years of healthy life expectancy between the council areas with the highest and lowest healthy life expectancy compared to a gap of 7.2 years for life expectancy. For females, the life expectancy gap was 5.0 years compared with 17.9 years for healthy life expectancy (although this gap would be 11.1 years is Orkney Islands was excluded). For some of the smaller council areas, healthy life expectancy can vary a lot year on year as there are less available data. This partially explains the exceptionally high female healthy life expectancy seen for Orkney Islands (although Orkney tends to have good health and life expectancy anyway.)

Figure 4.6: Correlations of life expectancy and healthy life expectancy at birth in Scottish Council areas, 2015-2017, males and females



Note: Life expectancy and healthy life expectancy can vary by large amounts between years in small populations such as those found in the island council areas.

Source: Healthy life expectancy in Scottish areas 2015-2017 (NRS).

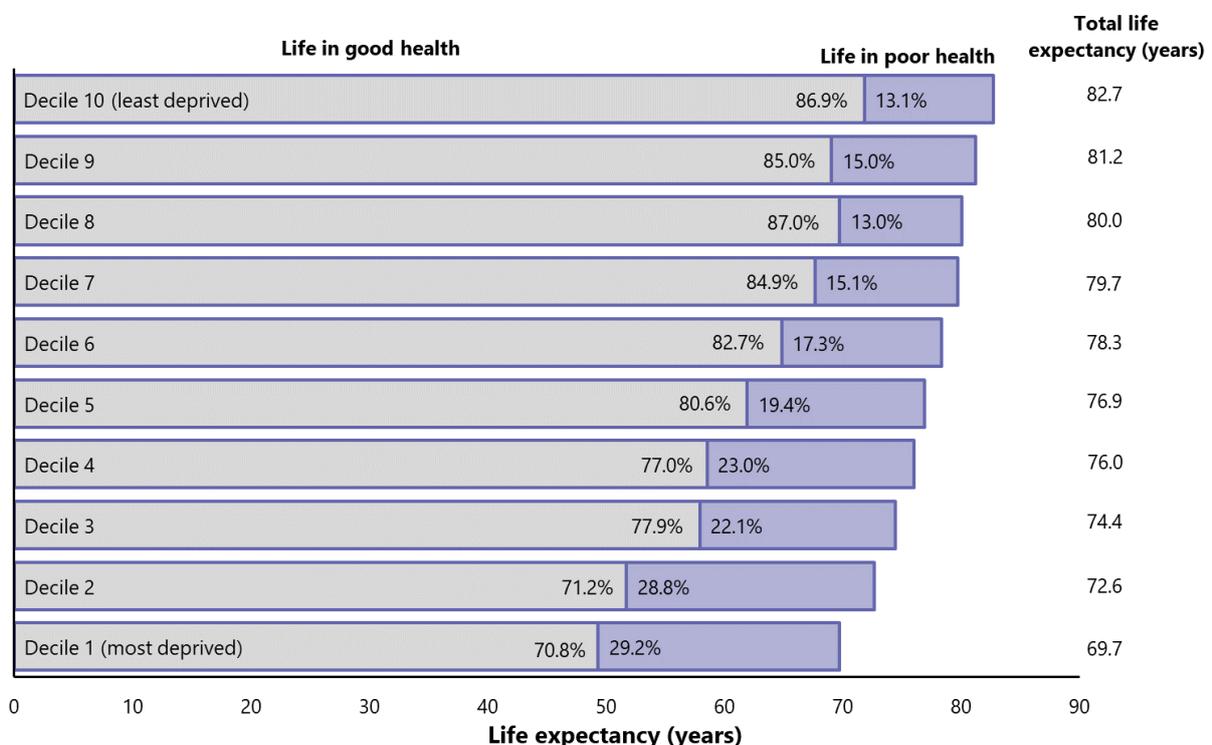


Life expectancy and healthy life expectancy in deprivation deciles

Deprivation and health are closely linked, with people in less deprived areas expected to live longer and healthier lives than those in more deprived areas. [Figures 4.7a](#) and [4.7b](#) show life expectancy and healthy life expectancy for Scotland's population split by Scottish Index of Multiple Deprivation (SIMD) deciles. There was a 13.0 year difference in life expectancy for males living in decile one (the most deprived 10% of Scotland) and decile ten (the least deprived 10%). Males living in decile ten could also expect to spend 22.5 years longer in good health than males in decile one. For females, the difference between decile one and decile ten was 9.6 years for life expectancy and 23.0 years for healthy life expectancy.

[Figures 4.7a](#) and [4.7b](#) also show that in decile ten, both males and females can expect to spend more than 85% of their lives in good health. In decile one, this drops to 70.8% for males and 65.5% for females. This suggests that deprivation has an even greater effect on healthy life expectancy than it does on life expectancy.

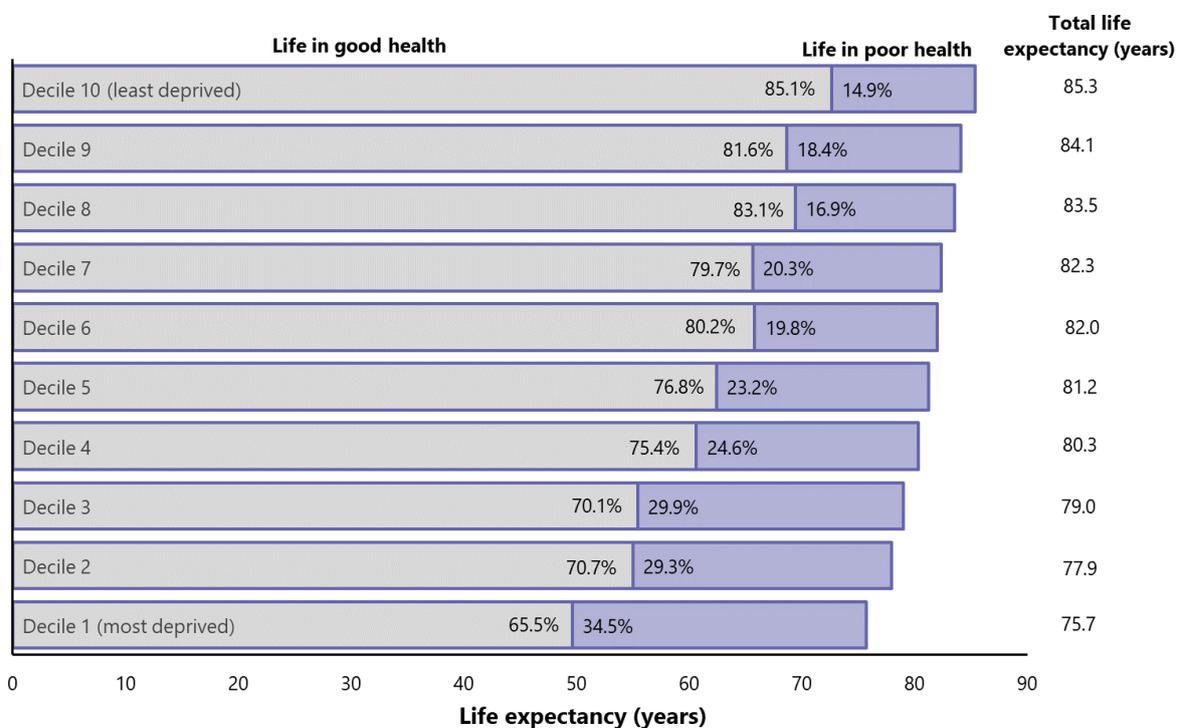
Figure 4.7a: Life expectancy and healthy life expectancy in SIMD deciles, 2015-2017, males



Note: Based on Scottish Index of Multiple Deprivation (SIMD) 2016.
Source: Healthy life expectancy in Scottish areas 2015-2017 (NRS).



Figure 4.7b: Life expectancy and healthy life expectancy in SIMD deciles, 2015-2017, females



Note: Based on Scottish Index of Multiple Deprivation (SIMD) 2016.
Source: Healthy life expectancy in Scottish areas 2015-2017 (NRS).



How are life expectancy statistics used?

Statistics on life expectancy and healthy life expectancy are key indicators for monitoring health inequalities. They are used for providing comparisons within Scotland and internationally.

Healthy life expectancy is one of the 81 national indicators included in Scotland's [National Performance Framework](#).

The Scottish Government and COSLA have jointly published [public health priorities for Scotland](#), with the aim of organisations and communities working better together to focus on prevention, to reduce health inequality and increase healthy life expectancy.

The [Fairer Scotland Duty](#), Part 1 of the Equality Act 2010, came into force in Scotland from April 2018. It places a legal responsibility on particular public bodies in Scotland to actively consider how they can reduce inequalities of outcome caused by socio-economic disadvantage, when making strategic decisions. This includes any measurable differences between those who have experienced socio-economic disadvantage and the rest of the population – for example, in relation to health and life expectancy or educational attainment.

These statistics are used for academic research into understanding differences and changes in life expectancy, such as a report on '[Glasgow: Health in a changing city](#)' by Bruce Whyte from the Glasgow Centre for Population Health.

The United Nation's [Human Development Index](#) (HDI) is measured using life expectancy, educational attainment, and income.

"This is one of the few indicators that allows us to give international context to the health challenges we face in Scotland."



Migration

"Migration continues to add to the population of Scotland."

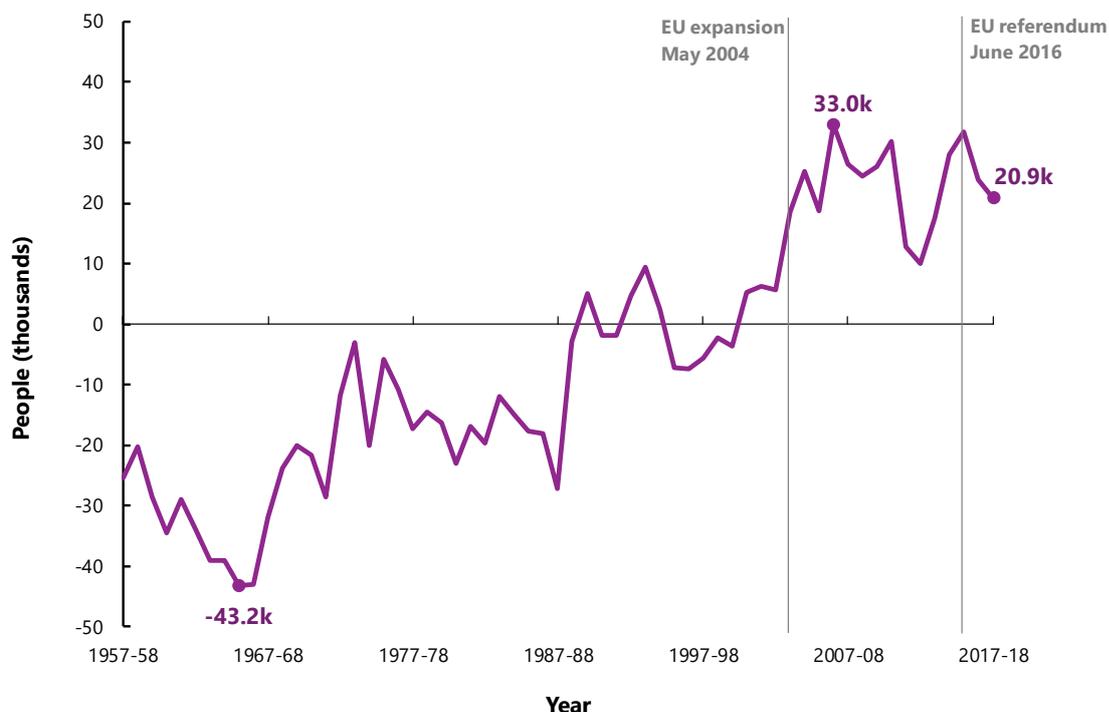


There remains considerable interest in understanding the latest migration trends following the UK's decision to leave the European Union (EU). This chapter presents the latest trends in migration for Scotland, looking at how migration flows are changing. It also covers the age and sex of migrants, and migration movements to and from each of Scotland's councils.

Scotland's migration trends

Prior to the early 1990s, net migration to Scotland (the difference between immigration and emigration) was consistently negative meaning more people left Scotland than arrived. This peaked during the year to mid-1966 when 43,200 more individuals left Scotland than arrived. From 2000 onward, net migration turned positive and increased over that decade, peaking in the year to mid-2007 when 33,000 more people entered the country than left. Most recently, net migration decreased over the past two years coinciding with the period after the UK's decision to leave the EU. However, there are still more people coming to Scotland than leaving. Over the latest year to mid-2018, 20,900 more people arrived than left, meaning that migration continued to add to the population of Scotland. These changes are shown in [Figure 5.1](#), below.

Figure 5.1: Net migration, Scotland, mid-1958 to mid-2018



Note: The EU has expanded a number of times throughout its history. The 2004 enlargement was the largest single expansion of the EU. More details of which countries are part of the EU can be found in [Appendix 3](#).



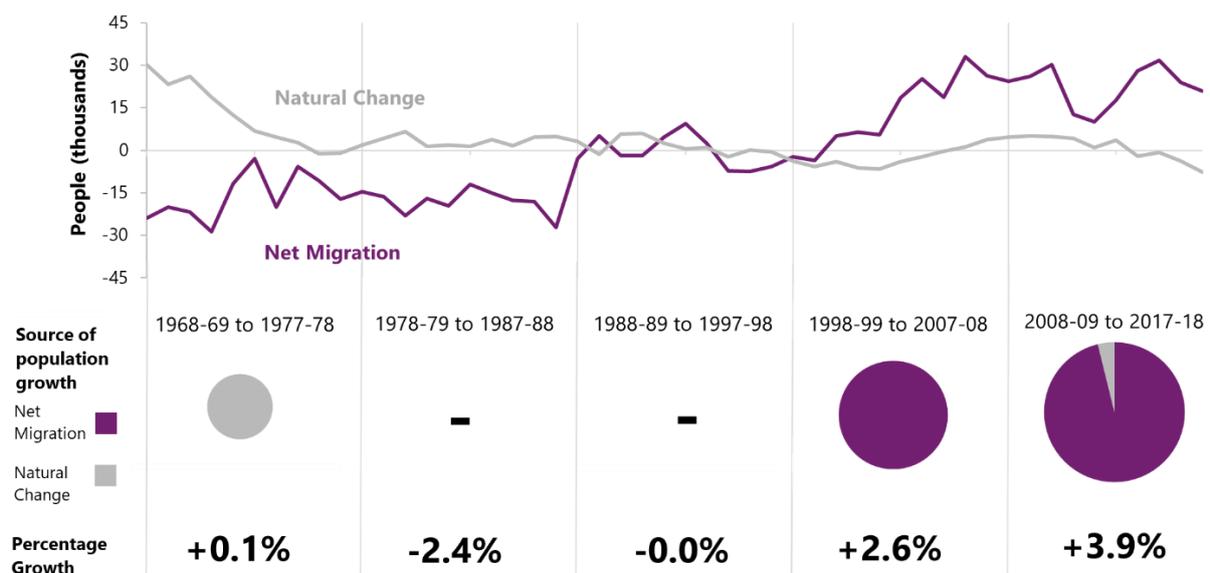
Net migration is the difference between the number of long-term migrants entering Scotland and the number of long-term emigrants leaving the country.

A **long-term migrant** is defined as someone who changes their usual country of residence for a period of 12 months or longer.

The impact of migration on Scotland's population growth

Migration is one of the main components, along with natural change (births minus deaths), that impacts population change. [Figure 5.2](#) shows the increasing importance of migration in growing Scotland's population over the past two decades, given the low levels of natural change during this period. In contrast, in the earlier period between 1968-69 to 1977-78, natural change was the only driver of Scotland's population growth as net migration was negative each year with more people leaving than moving to Scotland. In the decade following this, 1978-79 to 1987-88, there was a reduction in natural change which, combined with negative net migration, resulted in Scotland's population declining during this period. This was followed by a period of no growth over the decade between 1988-89 to 1997-98.

Figure 5.2: Natural change and net migration, Scotland, mid-1969 to mid-2018





How are migration statistics used?

Migration is a key component of population change – these statistics feed into the headline population estimates and projections, and allow us to understand the latest trends in migration and the potential impact of migration on Scotland's population, economy and society. They regularly **inform public debate and decisions**, as shown by recent analysis in publications such as:

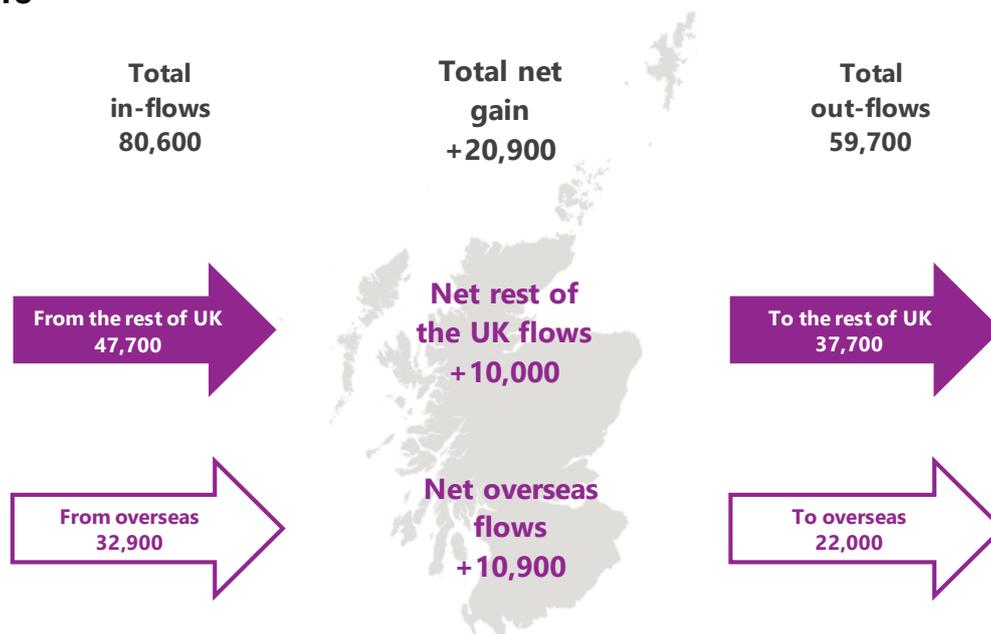
[Discussion paper on evidence, policy and powers for the Scottish Parliament in relation to migration](#)

[UK immigration policy after leaving the EU: impacts on Scotland's economy, population and society](#)

Where are people coming from and going to?

As well as understanding trends in overall net migration, it is also helpful to consider where people are coming from and going to, as illustrated in [Figure 5.3](#). The data sources that we use allow us to identify migration from overseas and the rest of the UK, but not the individual country.

Figure 5.3: Migration between Scotland, rest of the UK and overseas, year to mid-2018





Looking at change over the latest year, there were small increases in both the number of people moving to Scotland from the rest of the UK and the number of people moving out of Scotland to the rest of the UK. Over the latest year to mid-2018:

- 47,700 people came to Scotland from the rest of the UK; 100 more than in 2017.
- 37,700 people left Scotland for the rest of the UK; 600 more than in 2017.
- This resulted in positive net migration of 10,000 people from the rest of the UK; 500 fewer than the comparable figure in 2017.

In contrast, over the latest year, the number of people moving to Scotland from overseas was unchanged but there was an increase in the number of people moving out of Scotland to overseas. Over the year to mid-2018:

- 32,900 people came to Scotland from overseas; a similar number as in 2017.
- 22,000 people left Scotland for overseas; 2,500 more than in 2017.
- This resulted in positive net migration of 10,900 people from overseas.

Whilst this is still positive net migration, it is lower than in mid-2017 when 13,400 more people arrived from overseas than left.

How are migration patterns changing?

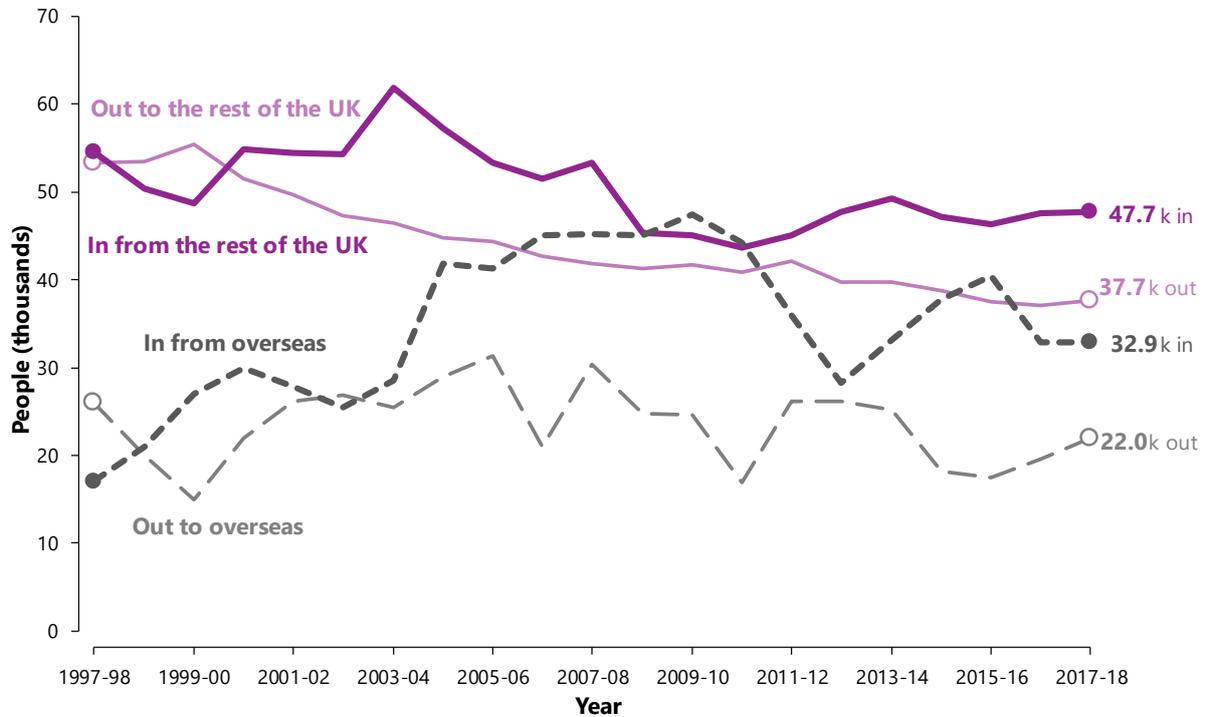
[Figure 5.4](#) shows how migration flows between Scotland and the rest of the UK and overseas have changed over time. By looking separately at inflows and outflows we can understand what's driving the recent decrease in net migration over the past two years. Over the last few years between mid-2016 and mid-2017, the in migration from overseas has decreased however over the latest year to mid-2018, this remained stable. There was also an increase in the number of people moving out of Scotland to overseas each year between mid-2016 and mid-2018.

For each of the five years prior to mid-2018, there were decreases in the number of people moving out of Scotland to the rest of the UK; 2018 is the first year since 2012 that has seen an increased outflow to the rest of the UK.

The result of the 2016 EU Referendum may be a factor in people's decision to move to or from Scotland, but decisions to migrate are complex and other factors may be influencing the figures.



Figure 5.4: Migration between Scotland, rest of the UK and overseas, mid-1998 to mid-2018



How do we measure migration?

- **International migration** is the most difficult aspect of population change to estimate as it is based primarily on the International Passenger Survey (IPS). This is a sample survey conducted at the channel tunnel, main ports and airports across the UK, and the sample size for Scotland is very small.
- **Migration within the UK** is calculated using patient records from the NHS Central Register (in Scotland), the Personal Demographic Service (in England and Wales) and the Medical Card register (in Northern Ireland).

More detailed information can be found in the [mid-year population estimates methodology guide](#).



The age and sex of people coming to and leaving Scotland

Over the latest year to mid-2018, slightly more males than females moved to Scotland from overseas; 52% of all moves from overseas to Scotland were male and the other 48% were female. In contrast, slightly more females moved from the rest of the UK to Scotland; 52% of moves from the rest of the UK were female and 48% were male.

[Figures 5.5](#) and [5.6](#) show the age of people moving to and from Scotland. Overall, two thirds of all people moving to Scotland from overseas were aged 16 to 34 years. This reflects the fact that many young people come to Scotland to work or study.

Over the latest year to mid-2018, the most common age group for people moving to Scotland from the rest of the UK was 16 to 24 years. Whereas the most common age group for moves from Scotland to the rest of the UK was 25 to 34 years. The peak age for moves to Scotland from the rest of the UK was 19 years, whereas the peak age for moves from Scotland was 23. This is largely due to students from the rest of the UK starting higher education in Scotland, followed by students leaving after they graduate.

For overseas moves, the most common age group for people moving to Scotland was 16 to 24 years, with a peak at age 23 years. Whereas, for moves from Scotland to overseas the most common age group was 25 to 34 years, with a peak at age 25 years.



Figure 5.5: Movements between Scotland and the rest of the UK by age group, year to mid-2018

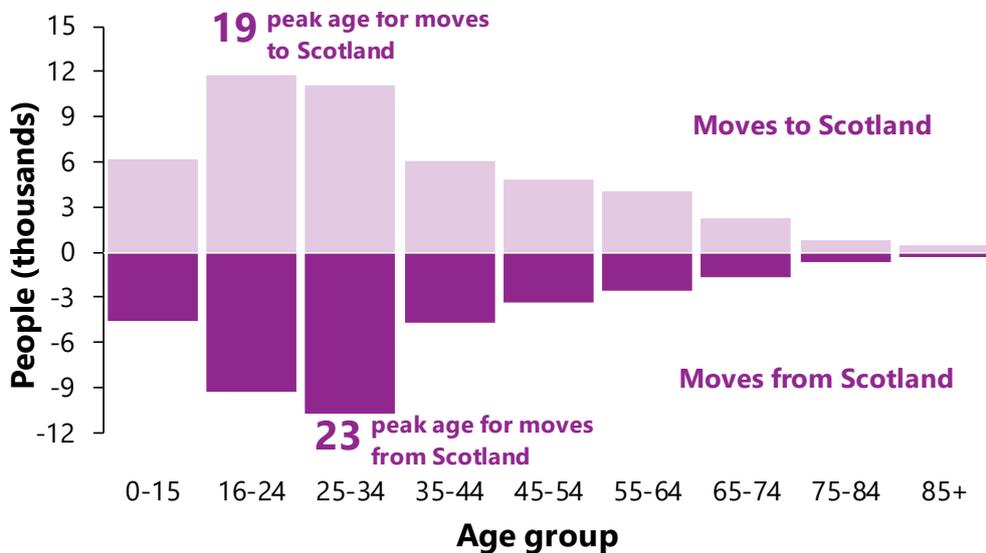
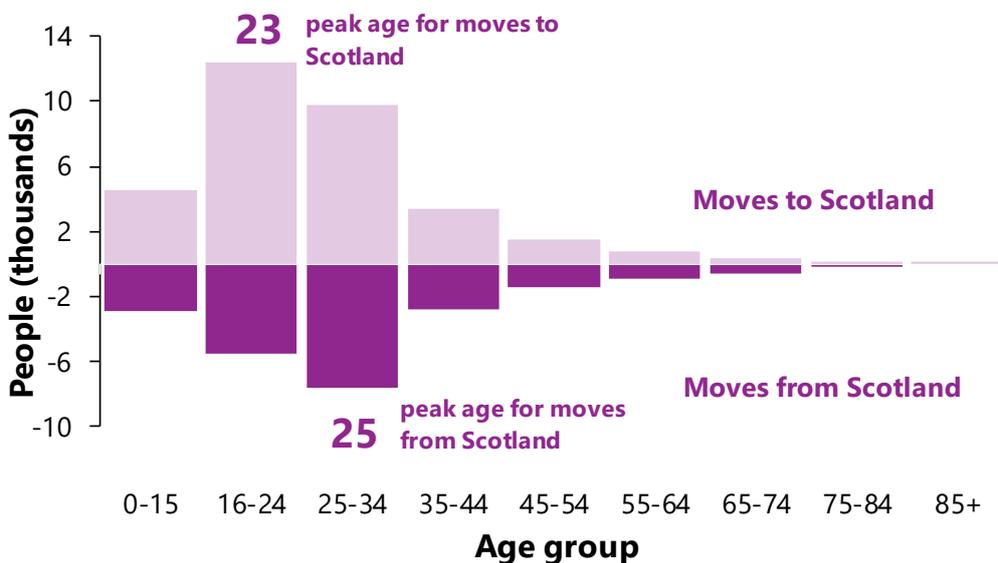


Figure 5.6: Movements between Scotland and overseas areas by age-group, year to mid-2018



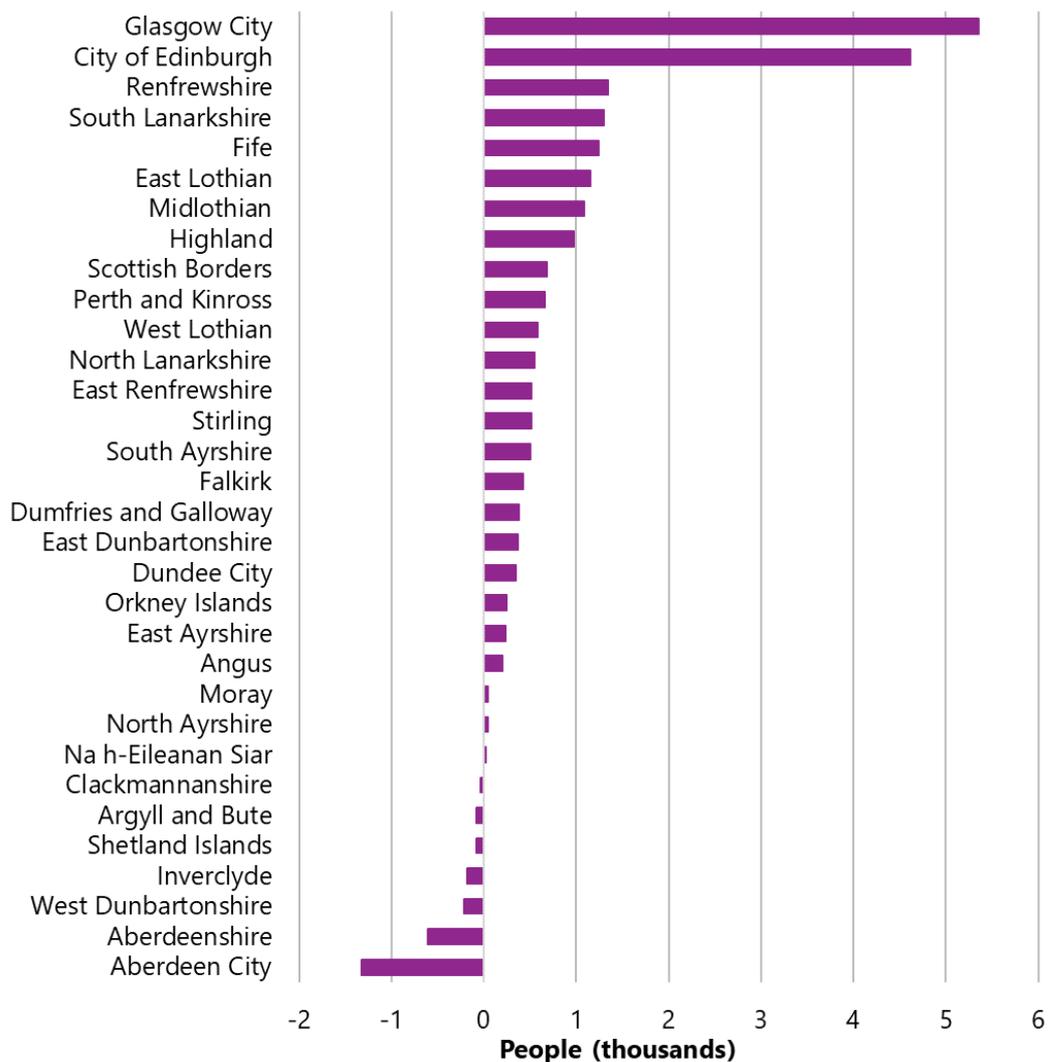
How does migration vary across Scotland?

Many council areas in Scotland experienced positive net migration over the latest year to mid-2018, with more individuals moving to the area than leaving, as shown in [Figure 5.7](#). However, areas in the north east of Scotland such as Aberdeen City and



Aberdeenshire experienced the highest levels of negative net migration, with more people leaving those areas than arriving over the most recent year.

Figure 5.7: Total net migration, council areas, year to mid-2018



Where do an area's migrants come from and go to?

Figure 5.8 shows the breakdown of in-migration within each council area in percentages. It is therefore easy to see which council areas have the highest proportion of in-migrants from overseas (relative to their total in-migration). The major cities in Scotland, Glasgow City, City of Edinburgh, Aberdeen City and Dundee City have the highest percentage of in-migrants from overseas relative to their overall intake of migrants compared to other council areas in Scotland. For example, the City of Edinburgh receives a similar amount of migrants from within Scotland, the



rest of the UK and overseas, whilst East Renfrewshire receives a large percentage of their migrants from within Scotland and only 3% from overseas.

Did you know?

Dumfries and Galloway attracts more individuals from the rest of the UK than they do from within Scotland. In the year to mid-2018, Dumfries and Galloway, which is adjacent to Cumbria in the north of England welcomed 2,120 individuals from other areas of the UK, compared with 1,640 individuals from other councils in Scotland.

[Figure 5.8](#) also shows that in relation to moves from within Scotland, areas surrounding large cities, such as East Renfrewshire, East Dunbartonshire and Midlothian, had the highest percentage of people moving from within Scotland. In terms of out-migration, [Figure 5.9](#) shows that for each of the 32 council areas in Scotland, migration to overseas areas accounted for the smallest percentage of total out-migration. The areas with the largest percentage of people moving to the rest of the UK, were Dumfries and Galloway and Scottish Borders, both of which border the north of England.

In the year to mid-2018, the five most common moves between council areas in Scotland were to neighbouring council areas. With the exception of Aberdeenshire to Aberdeen City, all were from cities to neighbouring council areas.

Most common moves within Scotland	Number of moves
Aberdeen City to Aberdeenshire	3,100
Glasgow City to South Lanarkshire	2,880
Aberdeenshire to Aberdeen City	2,320
City of Edinburgh to Midlothian	1,990
Glasgow City to North Lanarkshire	1,980

Explore the latest internal migration trends for Scottish areas in our [interactive data visualisation](#).

Scotland's Population – The Registrar General's Annual Review of Demographic Trends



Figure 5.8: Origin of in-migrants by council area, year to mid-2018

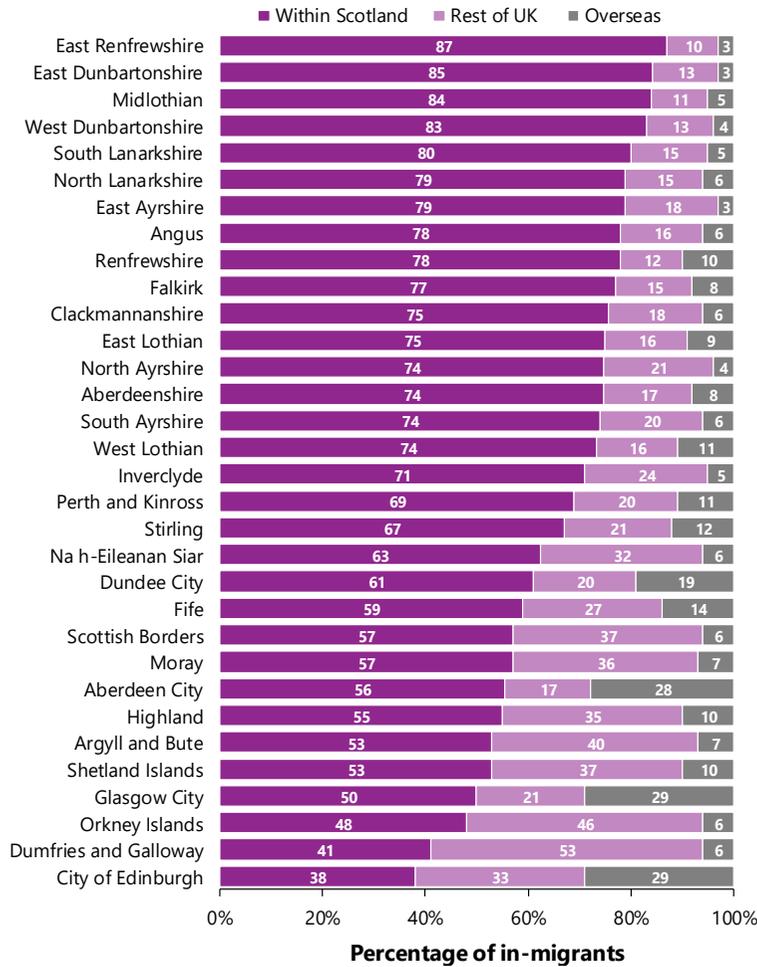
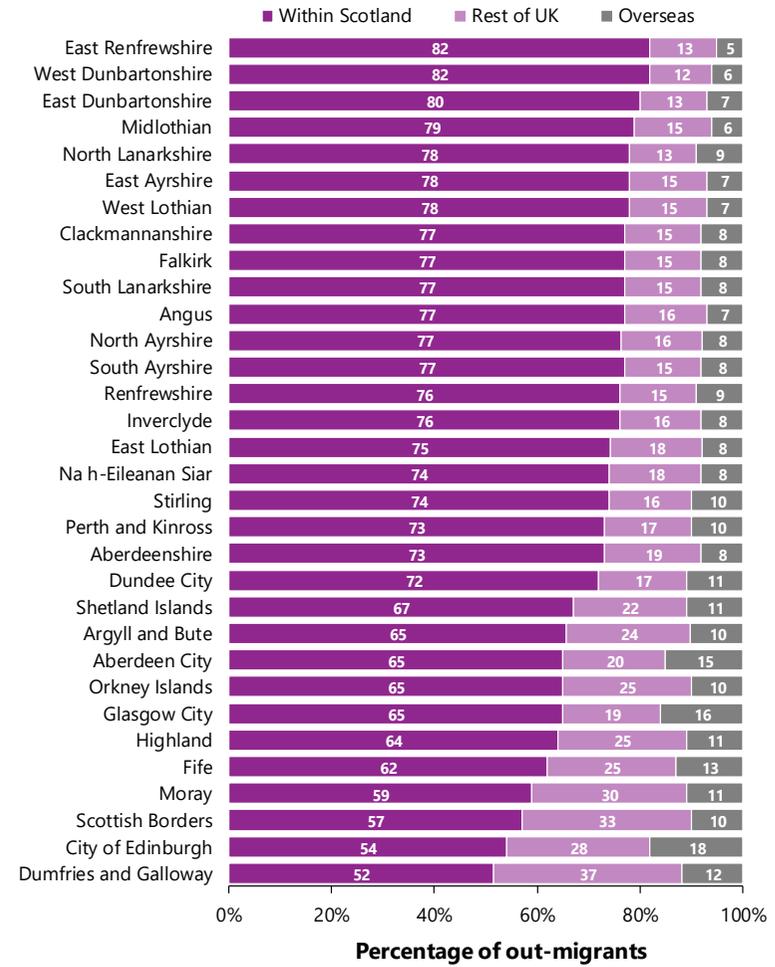


Figure 5.9: Destination of out-migrants by council area, year to mid-2018



Note: Figures for the rest of the UK exclude armed forces moves. Figures for overseas include asylum seekers and refugees. Rounded figures are used and may not add up to 100%.



Where do we get our data from?

One of the ways in which we collect data for our internal migration statistics is through the National Health Service Central Register (NHSCR).

The NHSCR was established in the 1950s to help the new NHS manage patient registrations. The NHSCR is now used to ensure that the movement of patients between GP practices and NHS Health Boards are properly recorded – a key way of monitoring internal migration in Great Britain. The National Health Service Central Register does not contain medical records, it contains a limited set of demographic information to allow it to carry out its purpose, as detailed on the [NRS website](#).

Operating the NHSCR and its uses:

The Registrar General creates and maintains the register under Section 57 of the Local Electoral Administration and Registration (Scotland) Act 2006 (LEARS) and may add additional information under Schedule 1 of the Act. The Registrar General may share information from the register in ways specified under Schedule 2 of the Act. The NHSCR is primarily maintained by changes to GP records in Scotland and birth and death records from the civil registration system. The NHSCR has a variety of uses:

- Quality assuring NHS patient registration.
- Triggering patient medical records to be sent between health boards when a patient moves.
- Online access for citizens to public services through the 'myaccount' service.
- Tracing individuals for organisations including solicitors, the police and charities. The NHSCR may only disclose the fact the individual is on the register and date of death.
- Supporting important medical research.
- Contributing to NRS population statistics, internal migration statistics, and census planning, since it is the most complete source of information on the size of the population between censuses.
- Supporting research by linking together multiple administrative datasets. This preserves privacy. Research using linked data follows an established [Data Linkage Framework](#) using the [Guiding Principles for Data Linkage](#).

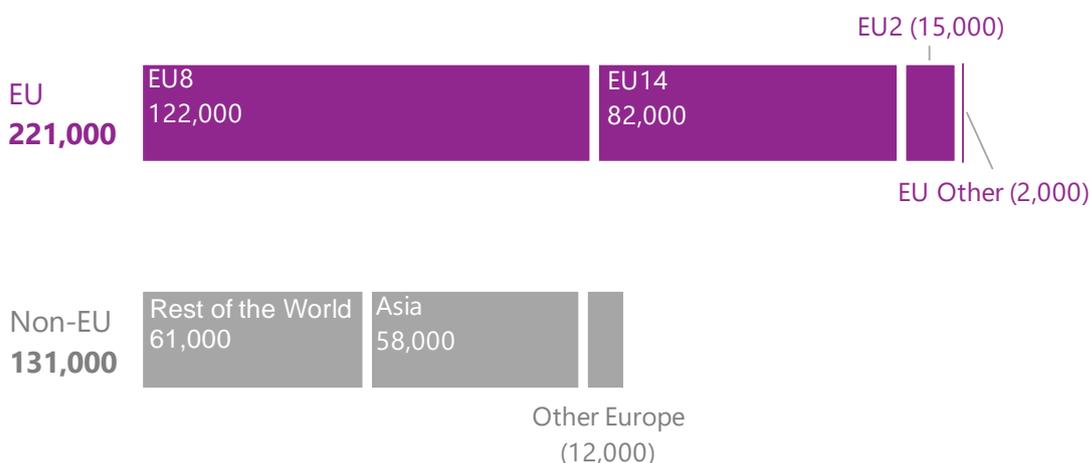


Who is living in Scotland?

As well as understanding the flows of people entering and leaving Scotland over a period of time, it is also helpful to understand the number of people currently living in Scotland who are non-British nationals. For the latter, many of these people may have moved to Scotland many years ago.

In 2018, there were 352,000 non-British nationals living in Scotland, which represented 7% of the resident population of Scotland. [Figure 5.10](#) shows how many EU and non-EU nationals are currently living in Scotland.

Figure 5.10: Number of EU and Non-EU nationals living in Scotland, 2018



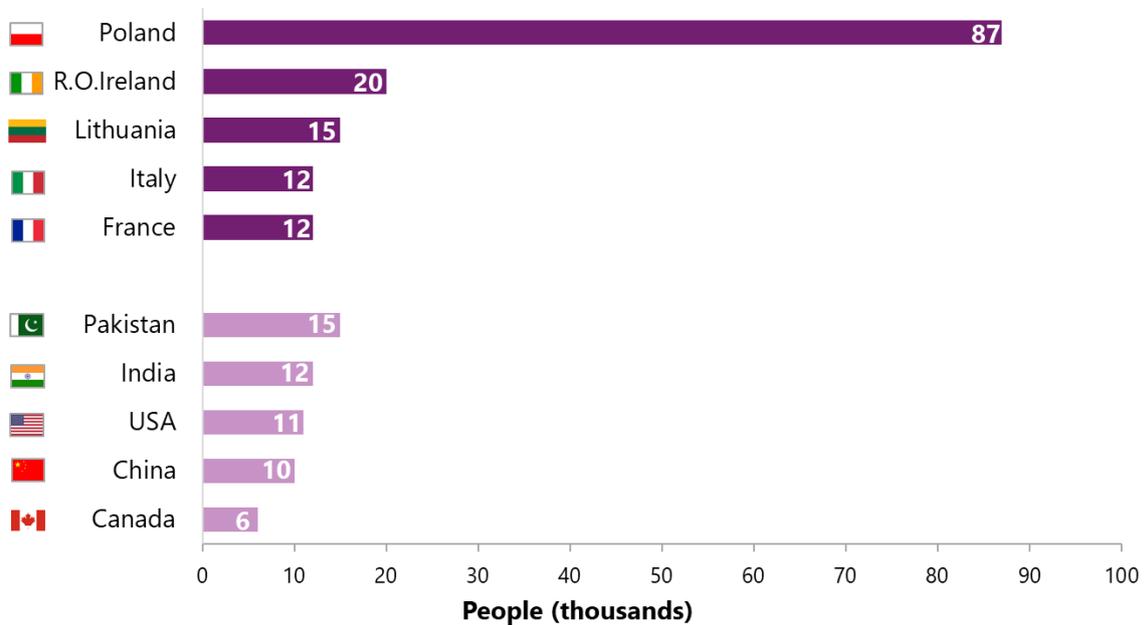
Source: Annual Population Survey, January to December 2018, ONS.

Of all non-British nationals living in Scotland, 221,000 (63%) were EU nationals and 131,000 (37%) were non-EU nationals. Over half of EU nationals living in Scotland were from EU8 countries, including Polish nationals. For more information on the countries contained within each section, please see [Appendix 3](#).

Polish nationals accounted for one quarter (87,000) of all non-British nationals living in Scotland in 2018, and remain the most common non-British nationality. [Figure 5.11](#) also shows that the most common non-EU nationality was Pakistan, with 15,000 individuals with that nationality living in Scotland.



Figure 5.11: Most common EU and Non-EU nationalities, Scotland, 2018



Source: Annual Population Survey, January to December 2018, ONS.

Did you know?

The Scottish Government (SG) produces a range of **labour market statistics on EU and non-EU nationals**. This includes information on employment rates and skill levels. These are available on the [SG website](#).

The Office for National Statistics (ONS) are undertaking an **ambitious programme of work to improve migration statistics**. This involves working with other departments across the Government Statistical Service, including NRS and SG, to make better use of administrative data to provide greater insights into how the population is changing. More information is available on the [ONS website](#).

[Figure 5.12](#) shows the size of the non-British national population in each council area in Scotland. The council areas where non-British nationals made up the largest proportion of the population were in Aberdeen City (17%), City of Edinburgh (16%) and Glasgow City (13%).



Figure 5.12: Population who are non-British nationals (percentage), 2018



Source: Annual Population Survey, January to December 2018, ONS.

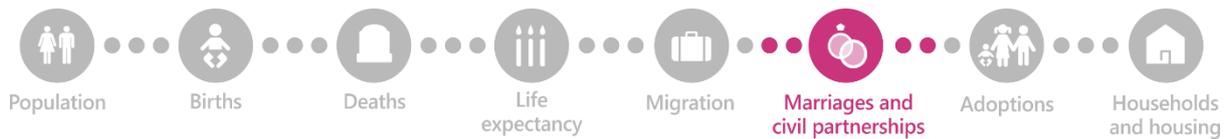
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Marriages and civil partnerships

*"The number of marriages taking place
in Scotland has decreased by around
one third in the last 50 years."*



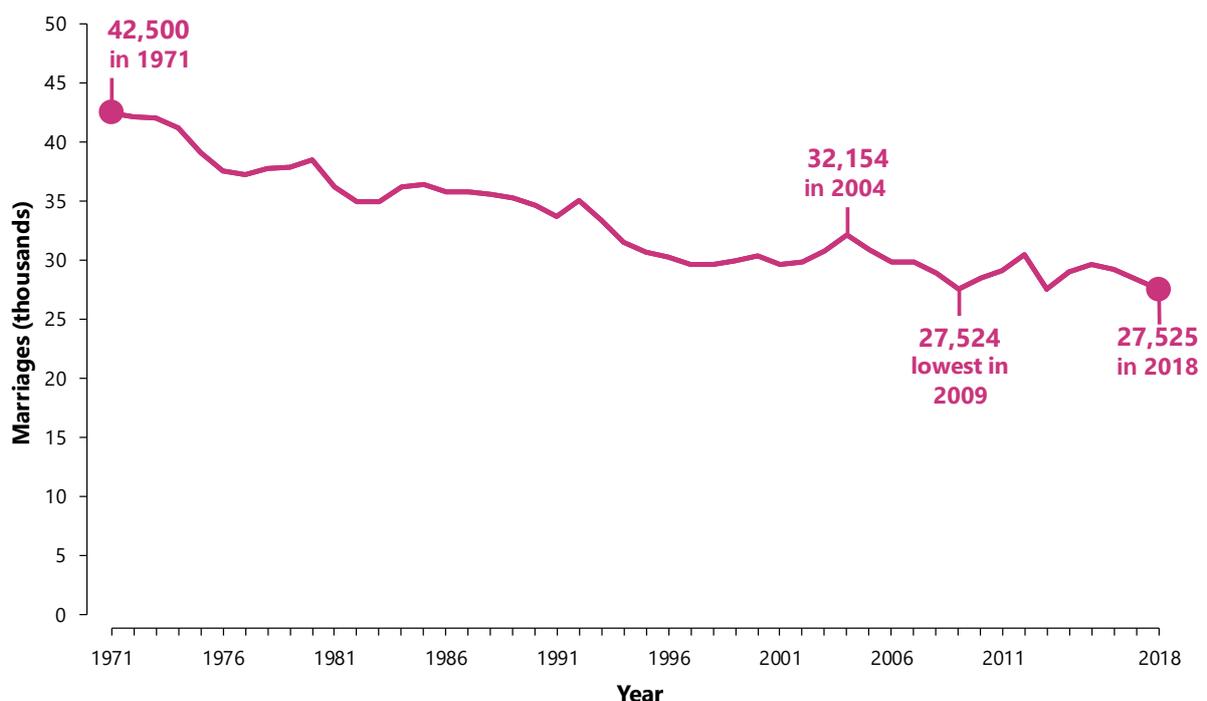
Marriages

There were 27,525 marriages in Scotland in 2018, 915 (3%) fewer than in 2017. Of these, 979 were same-sex marriages involving 399 male couples and 580 female couples. The Marriage and Civil Partnership (Scotland) Act 2014 came into force on 16 December 2014.

[Figure 6.1](#) shows that, following a decline from over 40,000 marriages a year in the early 1970s, the annual total levelled out at around 30,000 in the mid-1990s. The highest total recorded in recent years was 32,154 in 2004 (the highest total since 1993), whilst the highest ever recorded was 53,522 in 1940. The 2018 figure (27,525) is only one higher than the lowest figure recorded in recent years, which was for 2009. The lowest ever recorded was 19,655 in 1858.

9% of same sex marriages in 2018 were of couples who **changed their existing civil partnership to a marriage** (88 marriages). This is an expected fall from 13% in 2017, 17% in 2016 and 56% of same sex marriages in 2015, following the passing of the Marriage and Civil Partnership (Scotland) Act 2014.

Figure 6.1: Marriages, Scotland, 1971-2018





The information in this section covers all marriages registered in Scotland, regardless of where the couple lived. In 2018, there were 5,907 'tourism' marriages (21% of all marriages) where neither partner was resident in Scotland. This represents a slight fall in number from 6,159 (22% of all marriages) in 2017.

Marriages at Gretna

[Figure 6.2](#) shows the number of marriages at Gretna, by the country of residence of couple getting married, between 1974 and 2018.

As marriage was outlawed in England without paternal consent before the age of 21, some young couples chose to elope to Scotland, where they could still marry at 16 years of age. Gretna was located on an old coaching route between London and Edinburgh, and was the first village reached on entering Scotland, so became a common place for English couples to marry.

Gretna continues to be a popular venue for marriages, but the 3,232 registered in 2018 (12% of all marriages) was nearly 7% lower than the 3,461 registered in 2017. The 2018 figure is the lowest number of marriages in Gretna since 1992 and is 42% lower than the record total of 5,555 in 2004 (17% of all marriages in Scotland in 2004). Over the longer term, the number of marriages at Gretna increased from only 79 in 1974 to a peak of 5,555 in 2004. In 2018, 85% (2,736) of the marriages at Gretna did not involve a resident of Scotland. For the vast majority of these marriages, one or both of the parties were resident in another part of the UK.

12% of all marriages in Scotland in 2018 were registered at Gretna.

Nearly half (2,736) of 'tourism' marriages (where neither partner was resident in Scotland) in 2018 were at Gretna.

Of course, many couples who live in Scotland go abroad to be married. These marriages are not included, and only some come to the attention of the Registrar General through notification to British consular authorities.

More information about Registration is available in [Chapter 2 – Births](#).

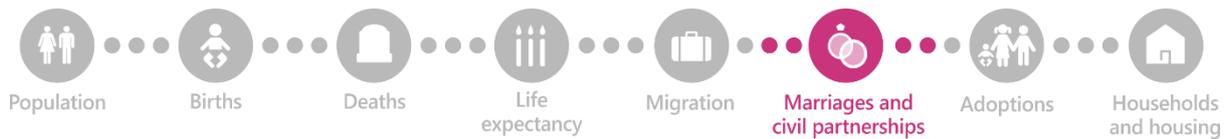
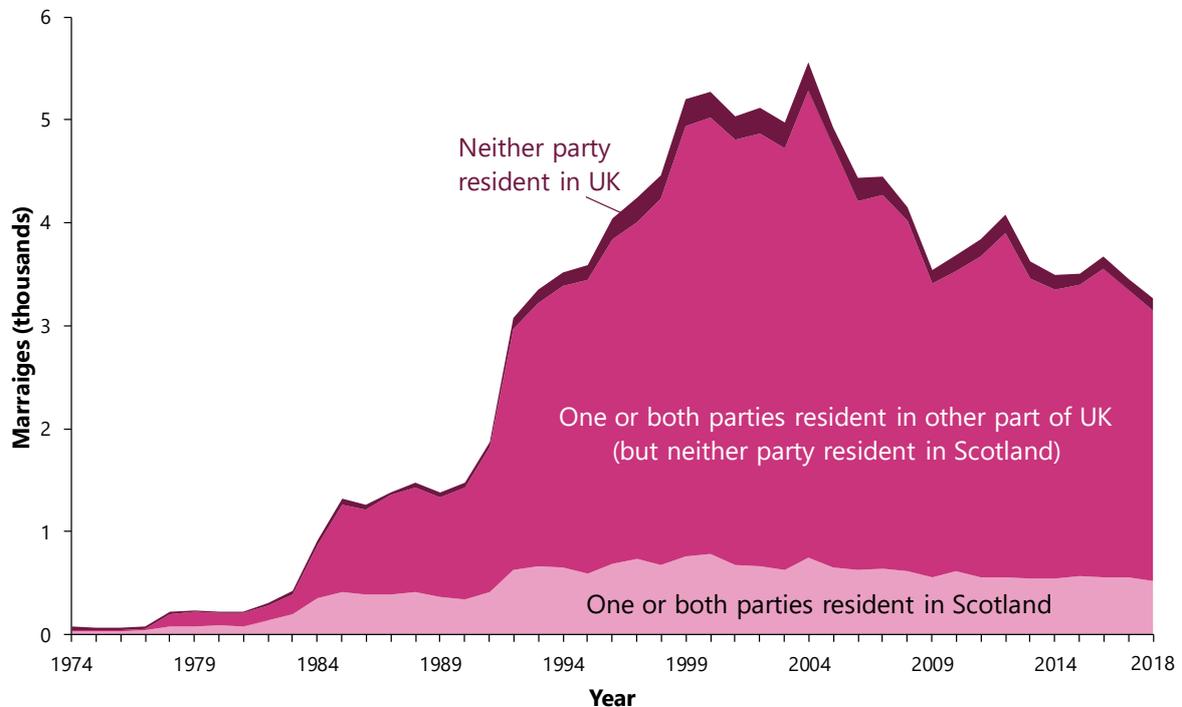


Figure 6.2: Marriages at Gretna, by country of residence of parties, 1974-2018



Marital status at marriage

[Figure 6.3](#) shows the percentage of marriages by marital status at the time of marriage between 1971 and 2018. The proportion of those marrying who were divorced was 23% in 2018 (23% for males and 22% for females). The proportion of those marrying who were widowed (2% in 2018) has hardly changed since 2001. Following the introduction of same-sex marriage, the additional marital status of civil partner is now included in [Figure 6.3](#). From 16 December 2014, couples in a civil partnership which was registered in Scotland were able to change their civil partnership to a marriage. From 31 October 2015, couples in a civil partnership registered outside Scotland were also able to change their civil partnership to a marriage. Of the 979 same sex marriages which were registered in 2018, 9% involved couples changing their civil partnership to a marriage.

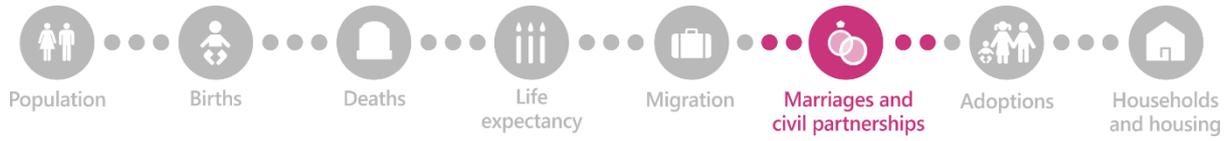
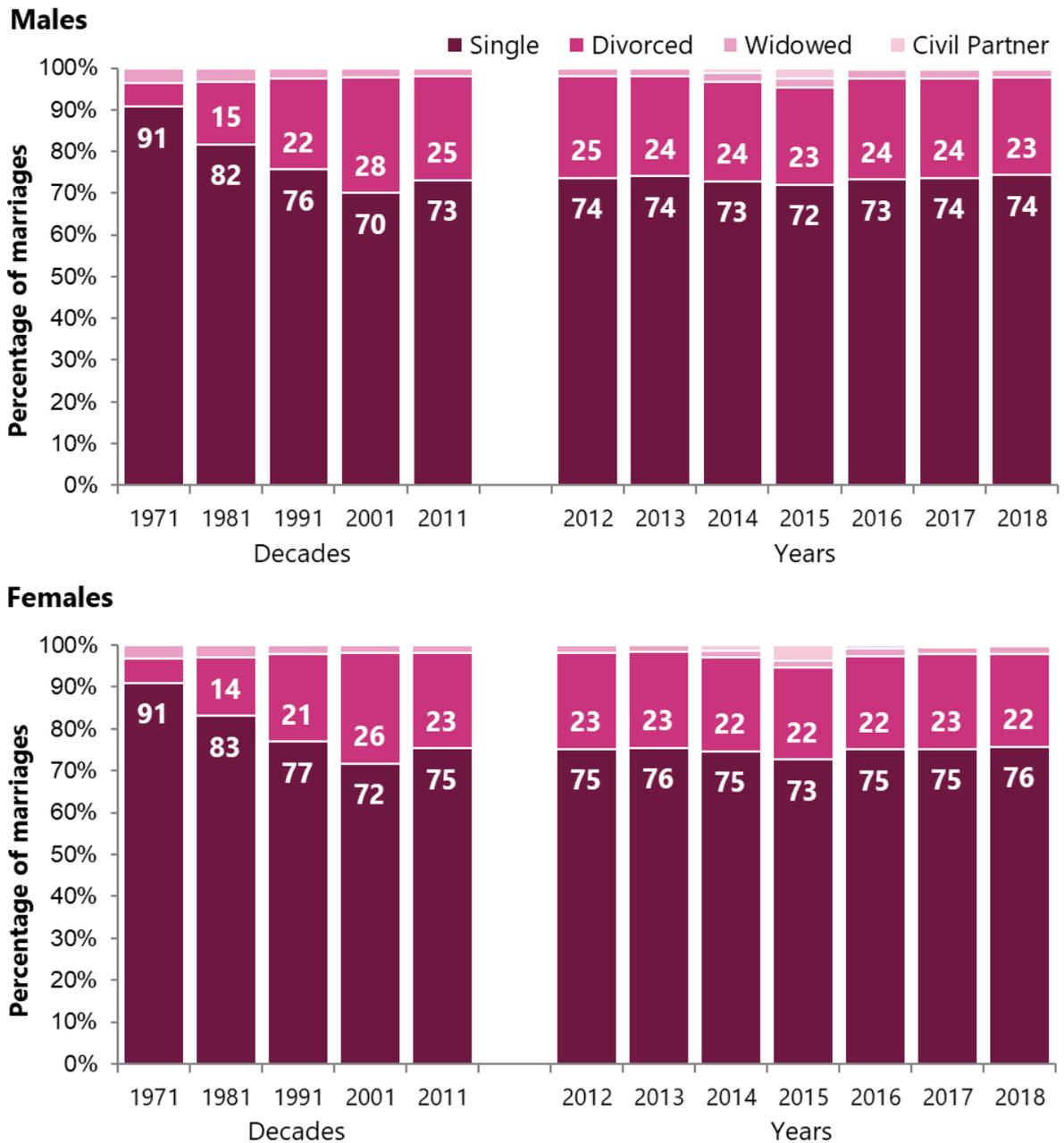


Figure 6.3: Marriages, by marital status and sex of persons marrying, 1971-2018



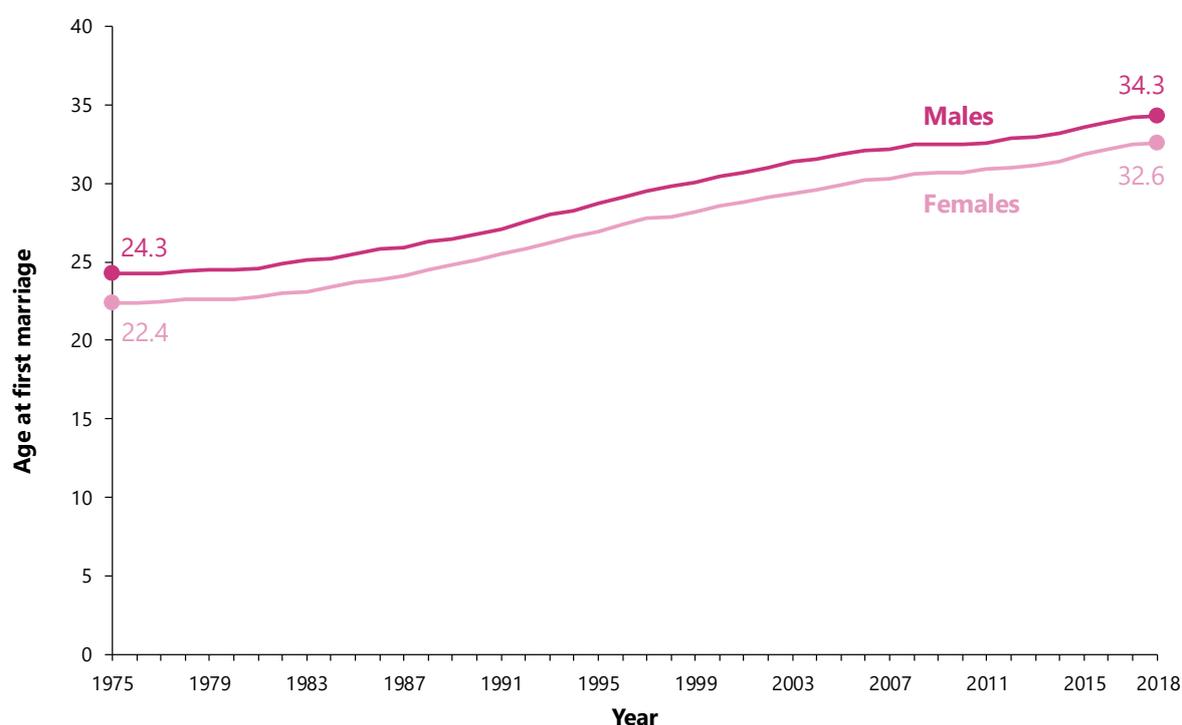
Note: There is a break here between two time series. 1971 to 2011 are shown for census years, and each year from 2012 is then shown. Only percentages greater than ten are shown on the bars.



Age at marriage

The average age at marriage has risen for both males and females. For first marriages, the average age of males has risen from 24.3 in the mid-1970s to 34.3 in 2018; the comparable figures for females are 22.4 in the mid-1970s and 32.6 in 2018.

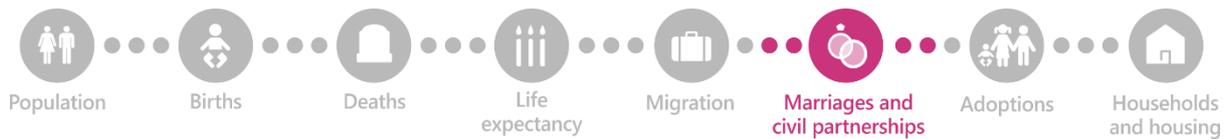
Figure 6.4: Age at first marriage, 1975-2018



Marriages by type of ceremony

Civil marriages are conducted by registrars, and they have wide discretion over the form of the ceremony, to meet couples' wishes. There were 13,596 civil marriages in 2018, accounting for just under half (49%) of all marriages compared to just under one-third (31%) in 1971, [Figure 6.5](#) shows the numbers of marriages by type of ceremony over recent decades.

The trend in civil marriages mainly reflects a decline in the number of religious ceremonies during the past 40 years. The small increase in religious marriages during the period 1997 to 2002 was largely associated with the increase of 'tourism' marriages, of which a significant proportion were carried out at Gretna. Since then, there was a decrease in the number of religious and other belief marriages, from



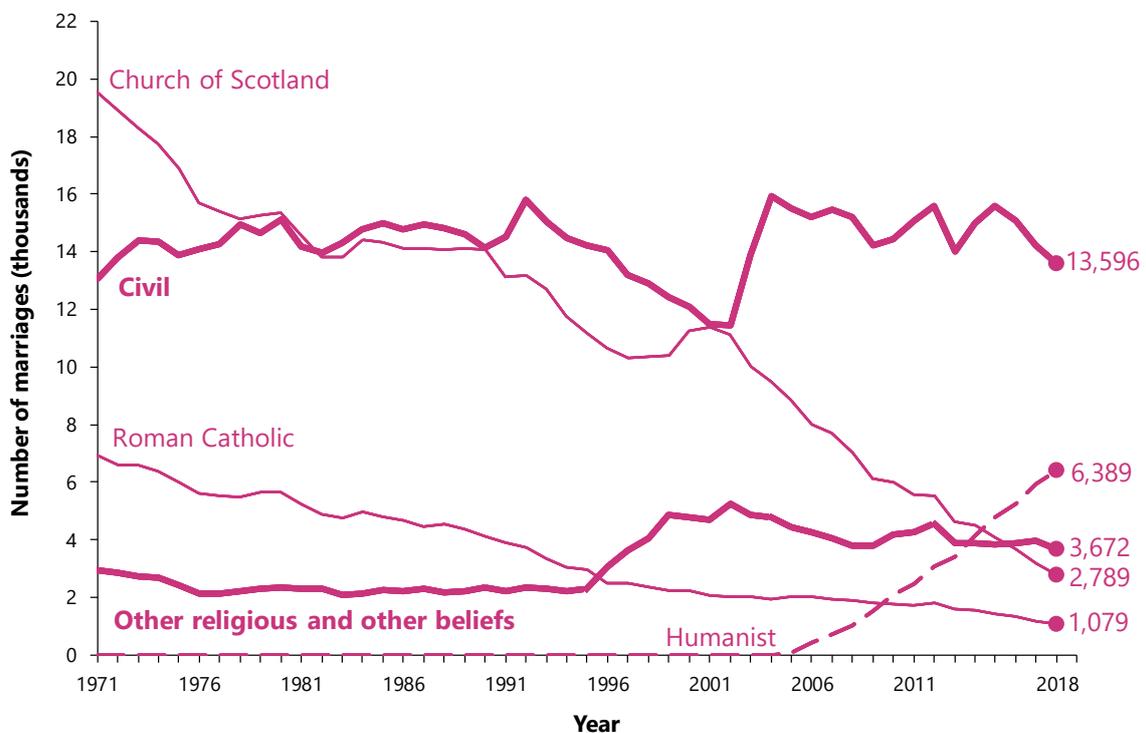
16,890 in 2003 to 13,285 in 2009 although numbers have risen since then, to 13,929 in 2018 – largely due to the increase in humanist marriages.

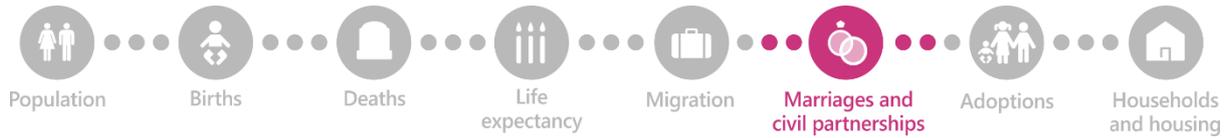
Humanist celebrants have been authorised to conduct marriages in Scotland since 2005. In 2018 there were a wide range of humanist organisations conducting marriages. Humanist celebrants officiated at 6,389 marriages compared with 2,486 in 2011, and 434 in 2006.

Religious marriages are conducted by a wide range of celebrants. The largest numbers of religious marriages were carried out by ministers of the Church of Scotland, who conducted 2,789 marriages in 2018, followed by clergy of the Roman Catholic Church, who conducted 1,079.

Of the 6,389 marriages conducted by Humanist celebrants, the Humanist Society of Scotland conducted 3,320 marriages; more than the Church of Scotland for the second consecutive year. The other religious and other belief bodies conducting more than 500 marriages in 2018 were Independent Humanist Ceremonies (1,322), Assemblies of God (617) and The Fuze Foundation (533).

Figure 6.5: Marriages, by type of ceremony, 1971-2018



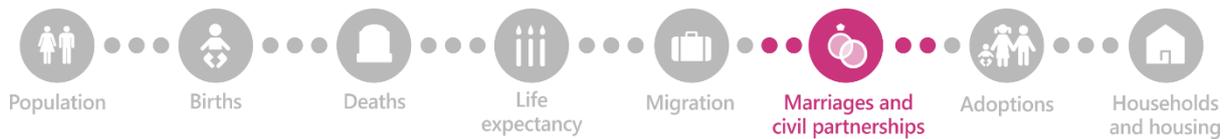


Where can civil marriages take place?

Until 2002, civil marriages could only be held in registration offices. The Marriage (Scotland) Act 2002 allowed registrars to conduct ceremonies in other approved places, from June 2002. In 2003, the first full year of these arrangements, 3,465 ceremonies were carried out at these approved places. Changes in The Marriage and Civil Partnership (Scotland) Act 2014 removed the approved place status. From 1 September 2014, civil marriage may be solemnised at a place agreed between the couple and the local registration authority, other than religious premises. This flexibility already exists in relation to civil partnership ceremonies. In addition, a religious marriage ceremony may take place anywhere agreed between the couple and the celebrant.

Figure 6.6: Civil marriages, 1974-2018



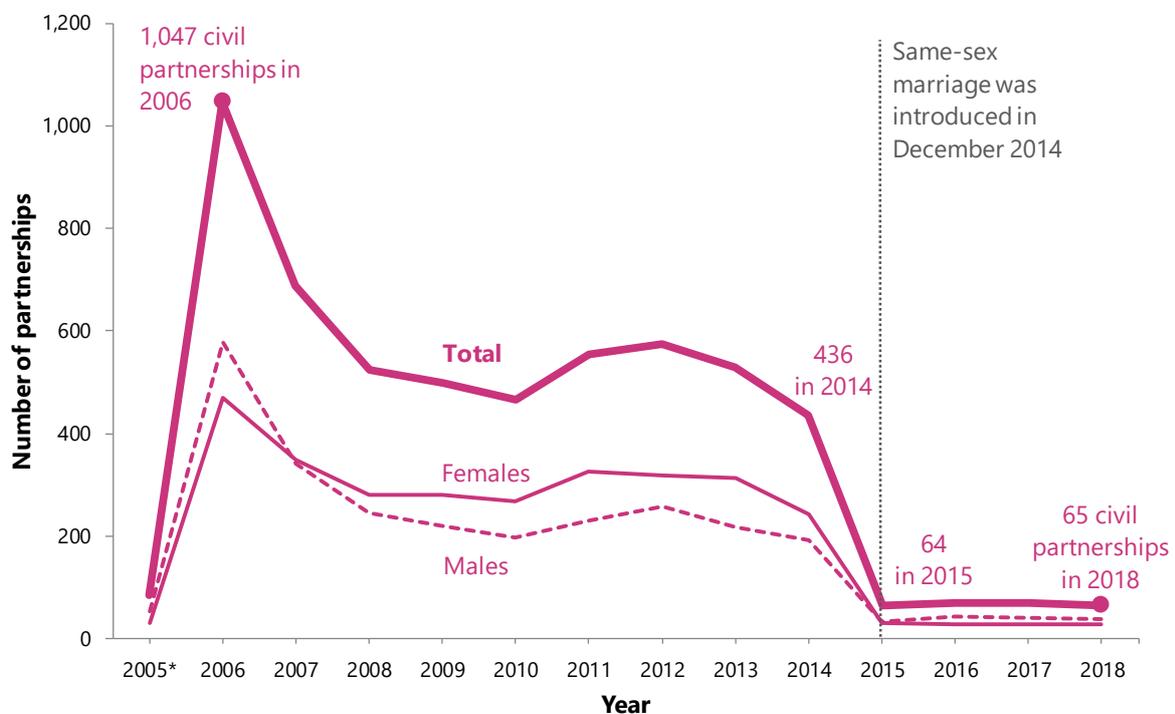


Civil partnerships

There were 65 civil partnerships registered in Scotland in 2018, 5 fewer than in 2017. The Civil Partnership Act 2004, which applies throughout the UK and came into force on 5 December 2005, allows same-sex couples to register their partnership.

During 2006, the first full year of registration, 1,047 partnerships were registered in Scotland. In 2007, 688 partnerships were registered. This decrease was expected, because many long-standing relationships would have been registered as civil partnerships in the first full year of registration. The number of partnerships formed continued to fall to 465 in 2010, before rising for a few years and then falling again. This was followed in 2015 by a much larger fall to just 33 male partnerships and 31 female partnerships registered, as shown in [Figure 6.7](#). This fall was expected following the introduction of same-sex marriages by the Marriage and Civil Partnership (Scotland) Act 2014 which came into force on 16 December 2014. Since then, the number has remained very low with 70 partnerships formed in 2016 and 2017 and 65 (38 male partnerships and 27 female partnerships) in 2018.

Figure 6.7: Civil partnerships, 2005-2018



* The Civil Partnership Act came into force on 5 December 2005.



A bill being introduced to the Scottish Parliament in the autumn will **extend civil partnerships to mixed sex couples**. Between 28 September and 21 December 2018 the Scottish Government ran a [consultation on the future of civil partnership in Scotland](#). Following consideration of the comments made by consultees, the Scottish Government has decided that civil partnerships should be available to both same sex and mixed sex couples. This will be introduced into registration practice and reflected in our statistics on civil partnerships in future publications.

There are no figures for divorces and dissolutions of civil partnerships in this publication, because the Scottish Government is now the only publisher of new [statistics of divorces and dissolutions for Scotland](#) (section 2.2.3).

More detailed information can be found in the [Vital Events – Marriages and civil partnerships section](#) or in the [Marriages and civil partnerships section](#) of the Vital Events Reference Tables on the National Records of Scotland website.

Our statistics are used by a wide range of users. For example, they have fed into Scottish Government policy on marriage and civil partnership and they are used by religious and other belief organisations to monitor trends and plan their services.



Adoptions

*"There were 471 adoptions in 2018-
half the number of the mid-1980s, and
less than a quarter of the number of the
late 1960s."*



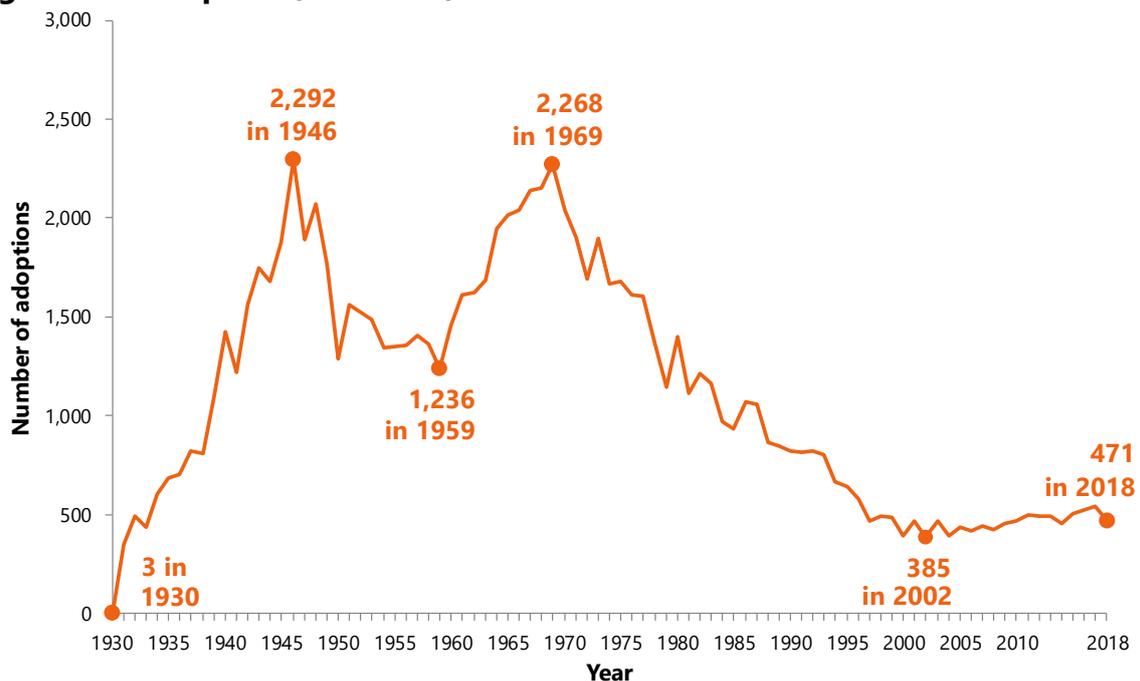
The Registrar General recorded 471 adoptions during 2018, which is 72 (13%) fewer than in 2017. This is around half the number recorded per year in the mid-1980s, and less than a quarter of the number recorded in the late 1960s.

Adoptions of children have been registered by law in Scotland since 1930. Today the Registrar General for Scotland registers them under the Adoption and Children (Scotland) Act 2007. More information about Registration is available in [Chapter 2 – Births](#).

Adoptions include cases of step-parents adopting their spouse's or partner's children, and relatives adopting children of other family members, as well as people adopting children who are not related in any way to them. The figures include small numbers of foreign adoptions registered in Scotland, and parental orders granted following a birth by a surrogate mother.

[Figure 7.1](#) shows that following a steady rise to a post-war peak of 2,292 in 1946, the total number of adoptions fell back to 1,236 in 1959 before peaking again at 2,268 in 1969. After this time, increased access to birth control and changing public attitudes towards single or unmarried parents led to a decrease in the number of children available for adoption. The annual number of adoptions declined fairly steadily to around 400 in 2000. There has been a gradual increase in adoptions since then, up to 543 in 2017, before falling again to 471 adoptions in 2018.

Figure 7.1: Adoptions, Scotland, 1930-2018



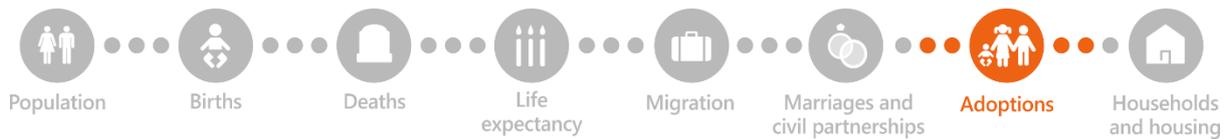


Figure 7.2 shows the children's ages. Only 13% of children adopted in 2018 were aged under two, and from age three onwards the numbers tend to fall with age. Eight per cent were aged 15 or over.

Figure 7.2: Age at adoption, Scotland, 2018

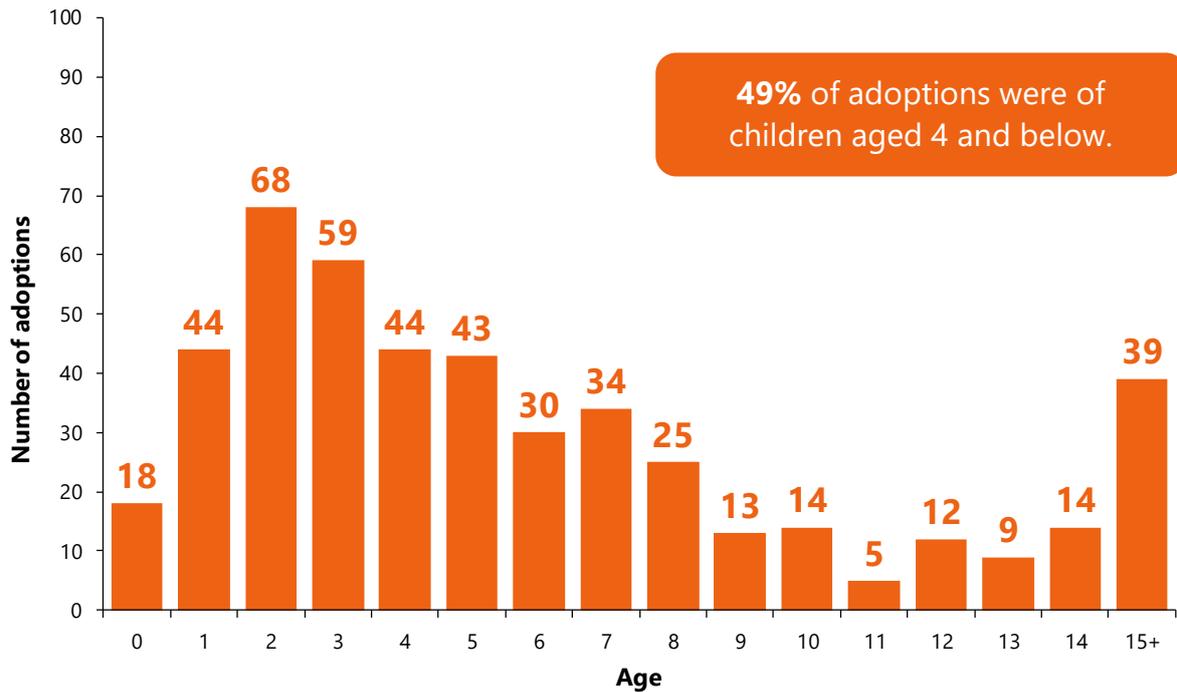


Figure 7.3 shows the age of the child and the relationship to the adopter(s). Of the 62 children aged under two, 77% were adopted by non-relatives. In contrast, only 10% of the 93 children aged 10 or over were adopted by non-relatives.

Of the 471 children adopted in 2018, 32% were adopted by a step-parent and 64% were adopted by non-relatives of the child.

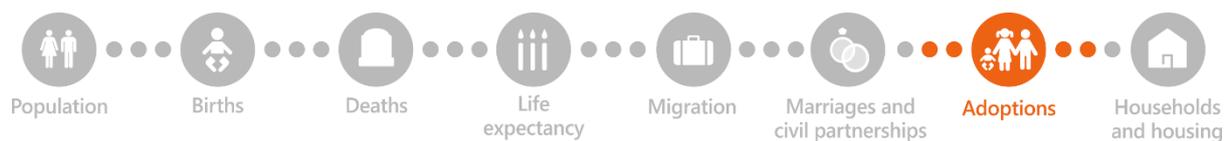
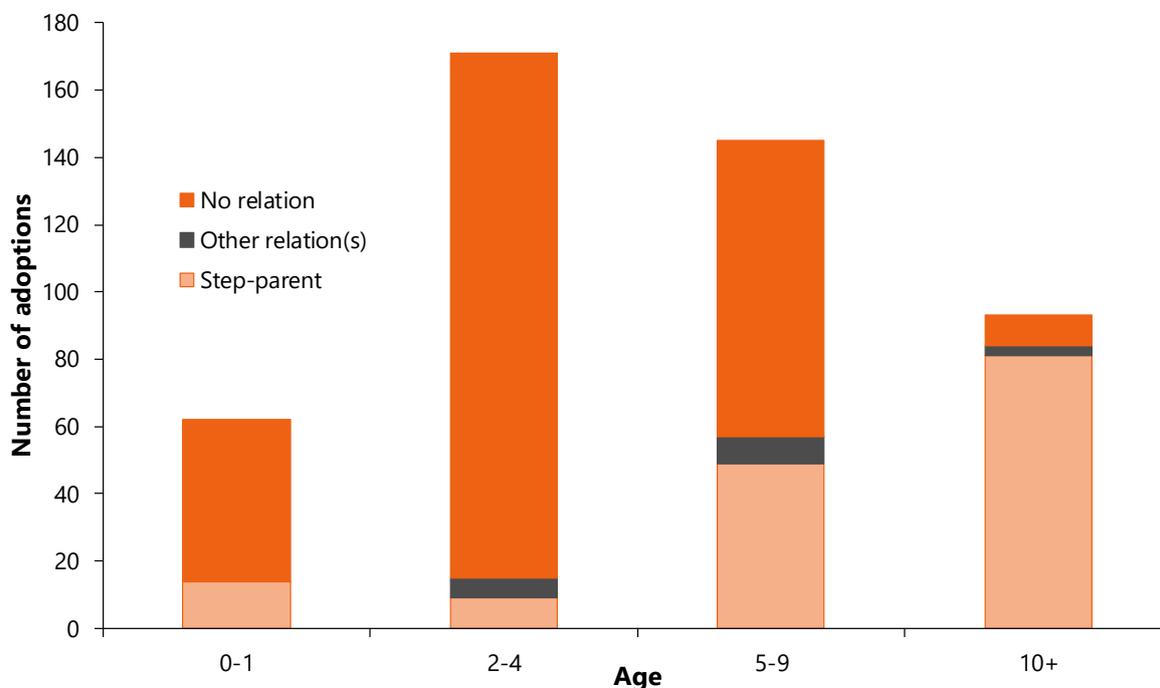


Figure 7.3: Adoptions by age of child and relationship of the adopter(s), 2018



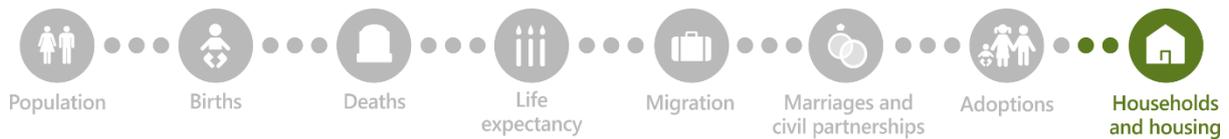
Note: Other relations(s) include grandparent(s).

More detailed information about Scotland's Adoptions can be found in the [Vital Events - Adoptions section](#) and the [Adoptions section](#) of the Vital Events Reference Tables on the National Records of Scotland website.



Households and housing

"In 2018 there were 2.48 million households in Scotland, 6% more than in 2008."



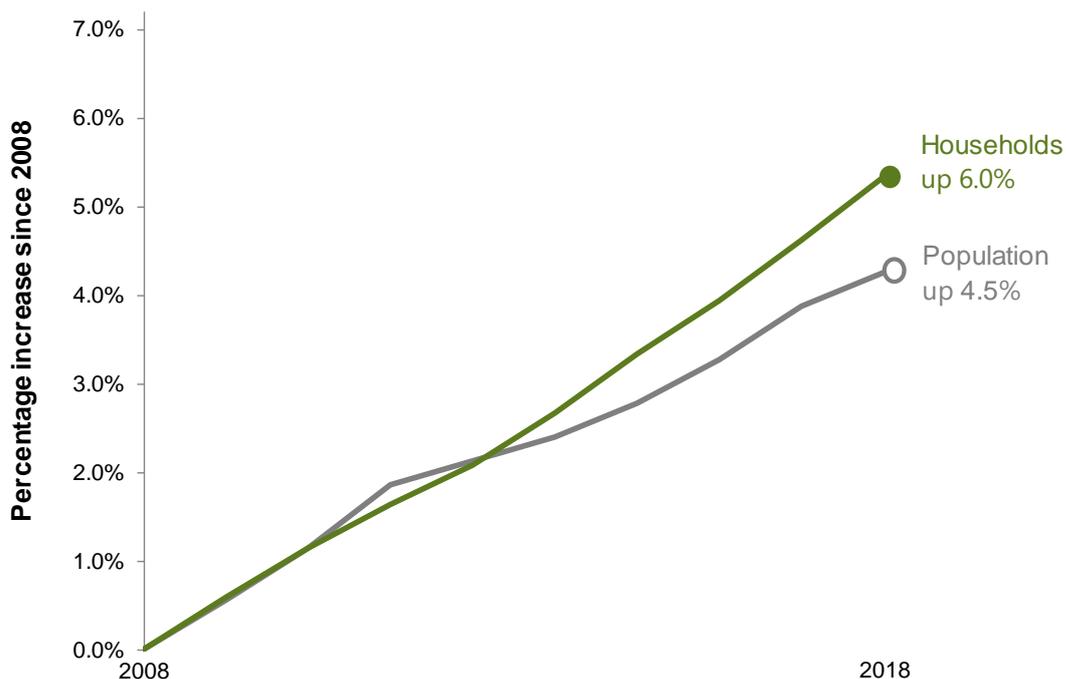
Scotland's households: past, present and future

There were 2.48 million households and 2.62 million dwellings in Scotland in 2018. Over the last 10 years the number of households in Scotland has grown by around 139,000 (6%), and it is projected to continue growing to 2.76 million by 2041.

A **'household'** refers to a group of people living together in a dwelling. This could be one person living alone, or a group of people who may or may not be related to each other.

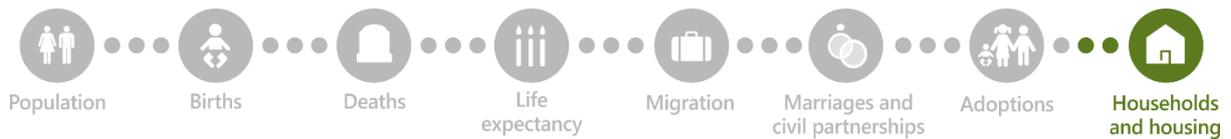
[Figure 8.1](#) illustrates that over the last decade the number of households increased faster than the population (6.0% compared to 4.5%).

Figure 8.1: Trends in households and population, mid-2008 to mid-2018



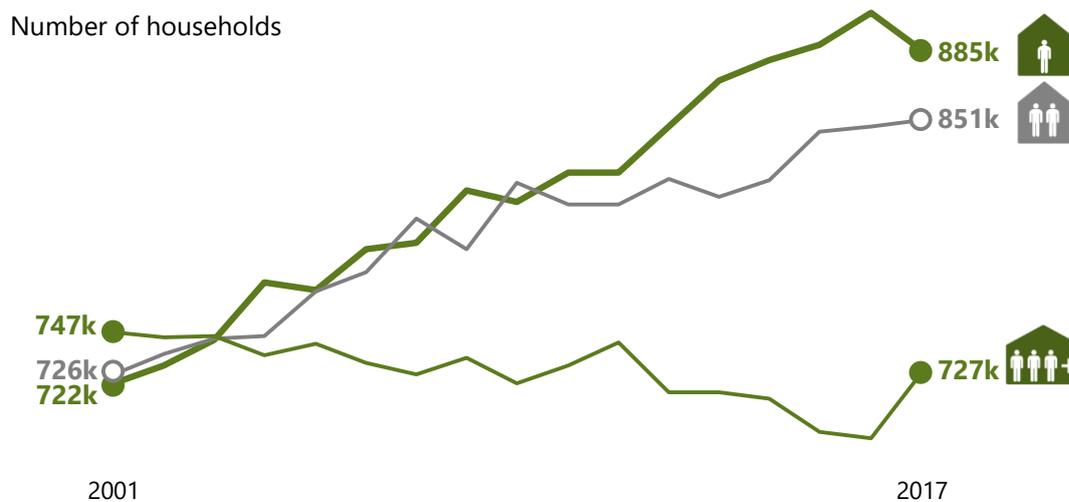
Source for population: National Records of Scotland Mid-Year Population Estimates.

The growth in households has been faster than the population growth because people are increasingly living alone or in smaller households. One person households have become the most common type in recent years, as shown in [Figure 8.2](#). Average household size has been on a downward trend for many years, though at a slower rate in more recent years. Over the last decade, the average household size (number of people per household) fell from 2.18 people per household in 2008 to 2.15 people



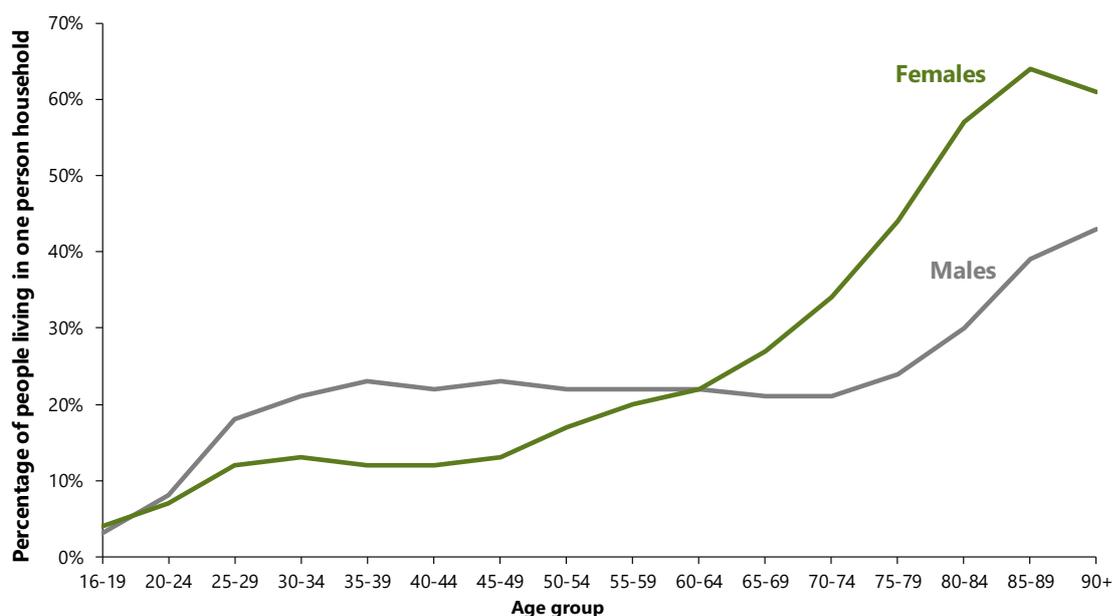
per household in 2018. These changes are partly due to the ageing population, as elderly people are more likely than younger people to live alone or with just one other person. The number of single person households comprised of males aged 30 to 64 has also increased relative to the population in this group ([Figure 8.3](#)).

Figure 8.2: Change in household types in Scotland, mid-2001 to mid-2017

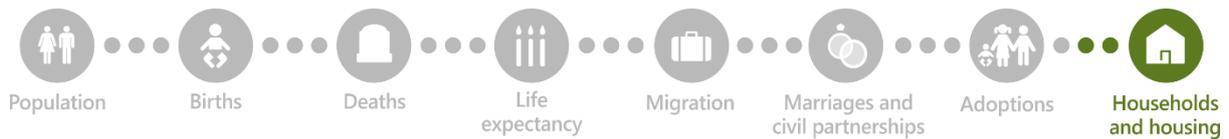


Note: Two or more person households could contain adults, or both adults and children.
Source: National Records of Scotland ([NRS](#)), Scottish Household Survey ([SHS](#)) 2017.

Figure 8.3: Percentage of people living alone in Scotland by age and sex, mid-2018



Note: Numbers are given as a percentage of adults in age group, not as a percentage of households.
Source: National Records of Scotland (NRS): Household projections, 2016-based.



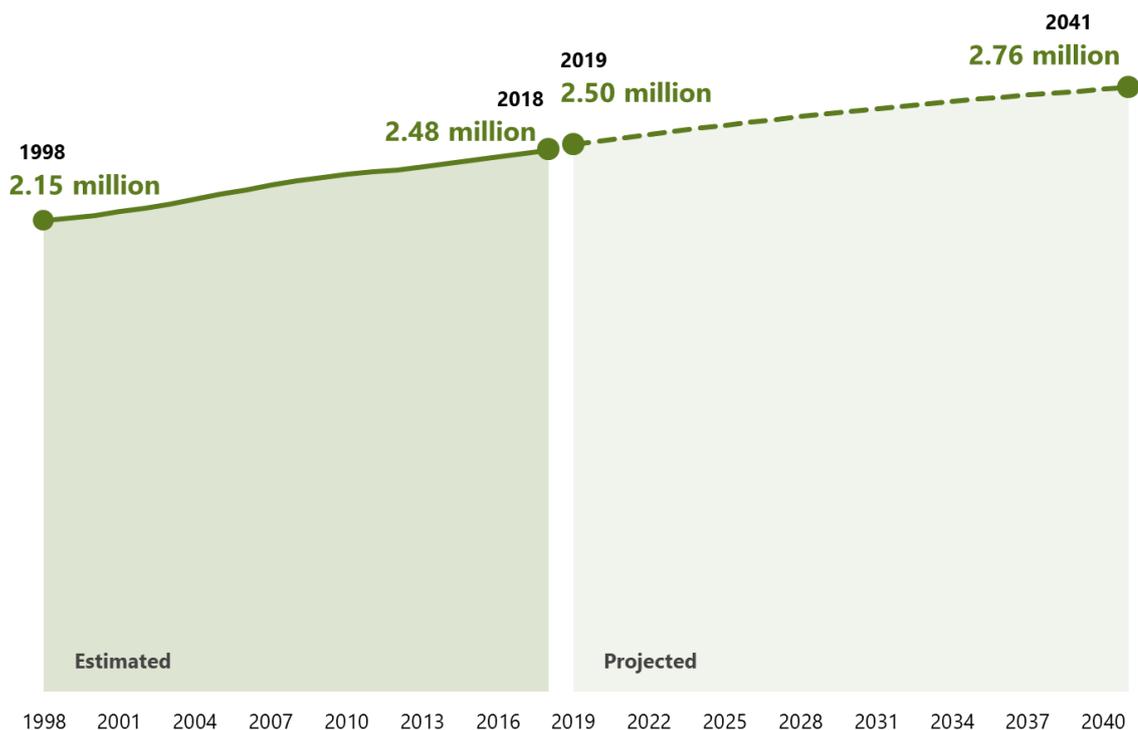
Projected changes in household numbers

Looking to the future, Scotland's population is projected to increase, and the greatest increase is projected to occur in the older age groups. Household size is projected to fall further to 2.02 people per household by 2041.

Consequently, the household projections (which are based on past trends) project the number of households in Scotland increasing further, to 2.76 million by 2041, an average annual increase of around 12,200 between 2018 and 2041 ([Figure 8.4](#)).

The number of households in Scotland is projected to increase to **2.76 million** by 2041.

Figure 8.4: Number of households in Scotland, mid-1998 to mid-2041



Source: National Records of Scotland (NRS) Household Estimates (mid-1998 to mid-2018), Household Projections 2016-based (mid-2019 to mid-2041).

The trend seen in Scotland for an increasing number of households and dwellings is also occurring in England, Wales and Northern Ireland. The number of households in Scotland is projected to increase by 11% between 2018 and 2041. The corresponding percentage increase is 16% in England, 9% in Wales and 11% in Northern Ireland.

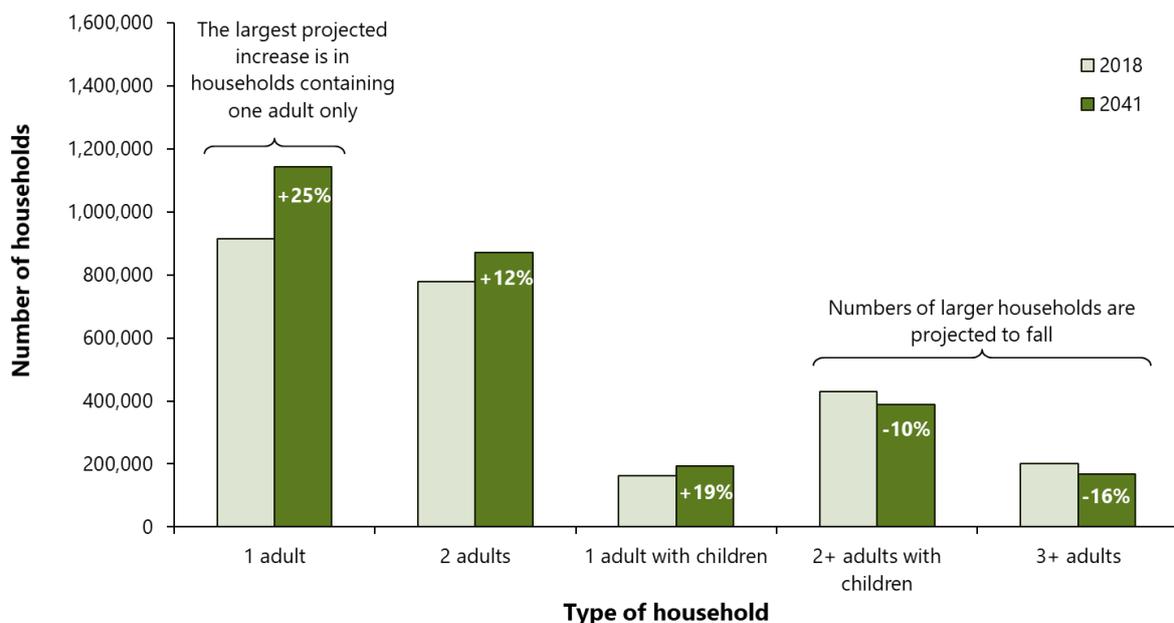


Projected changes in household type

The numbers of some household types are projected to increase more than others by 2041, as illustrated in [Figure 8.5](#), which compares the projected number of households of each type in 2018 and 2041.

The largest projected increase in households (in both number and percentage terms) is for those which contain one person only. As a proportion of all households, single person households are projected to increase from 37% in 2018 to 41% in 2041. The numbers of households containing two adults only and one adult with children are also projected to rise. In contrast, numbers for larger households are projected to fall.

Figure 8.5: Households in Scotland by household type, mid-2018 and mid-2041

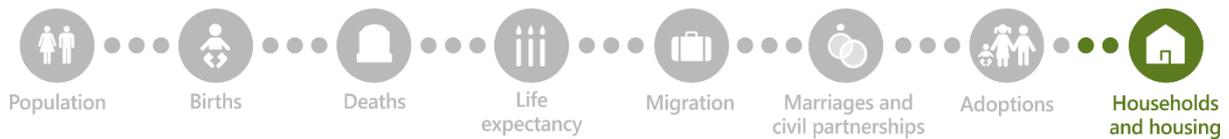


Note: Estimated values from 2016-based projections.

Projected changes in age group

The 'head of household' is the first person included on the census form, unless that person was aged under 16 or was not usually resident in the household. [Figure 8.6](#) shows the projected number of households in 2018 and 2041, by the age of the head of household.

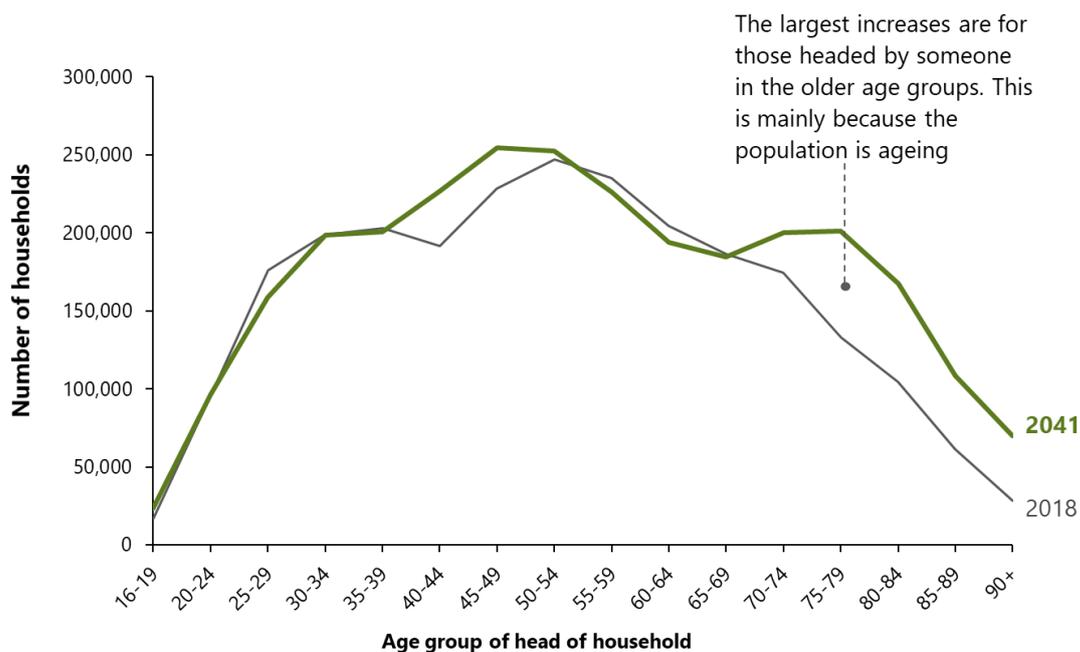
The number of households headed by older people is projected to rise, reflecting the ageing population in Scotland. The number of households headed by someone aged



65 or over is projected to increase by 35% between 2018 and 2041, to 931,200 households. The increases are particularly large in the oldest age groups, with the number of households headed by someone aged 85 or over projected to double from 89,500 to 178,500. In contrast, households headed by someone aged under 65 are projected to increase by just 2%, to around 1.83 million.

By 2041 there are projected to be 464,500 people aged 65 and over living alone, an increase of 34% from 346,900 in 2018. This is mainly due to the growth in the **number** of older people, rather than because the **proportion** of older people living alone is changing. Increases are particularly large in the oldest age groups (85 or over) where the number of people living alone is projected to be twice as high by 2041 (an increase from 68,000 to 136,100).

Figure 8.6: Households in Scotland by age of head of household, mid-2018 and mid-2041



Note: Estimated values from 2016-based projections.



Variation in trends in household numbers within Scotland

The number of households has grown in every council area over the 10 years to 2018. The areas with the greatest increase in households in percentage terms have been Midlothian (an increase of 15.7%, 5,300 households) and Orkney Islands (an increase of 12.5%, 1,200 households). City of Edinburgh has seen the largest increase in terms of absolute numbers (16,700 households, an increase of 7.6%).

Most council areas also saw a reduction in average household size over the last decade. However, in City of Edinburgh and Glasgow City, average household size was initially falling but then started to increase after the economic downturn began in 2007/08. This pattern was also observed in Aberdeen City until 2015 since when average household size fell markedly, from 2.10 in 2015 to 2.03 in 2018.

The number of households is projected to increase in almost every council area between 2018 and 2041, as shown in [Figure 8.7](#). The largest percentage increases are in Midlothian, City of Edinburgh and East Lothian (32%, 24% and 23% respectively). In contrast, household numbers are projected to fall in Inverclyde), Na h-Eileanan Siar, Argyll and Bute and North Ayrshire (decreases of 5%, 5%, 4% and 1% respectively). These figures are based on projections of past trends.

More detailed information about Scotland's households can be found in the [Households section](#) on the National Records of Scotland website. Statistics on housing in Scotland are available from the [Housing and Regeneration Statistics page](#) of the Scottish Government website.

A cross-government working group on housing statistics exists to provide an improved coherent picture of the UK housing landscape for users of statistics on this topic. Further information on the work of this group is available on the [Government Statistical Service website](#).

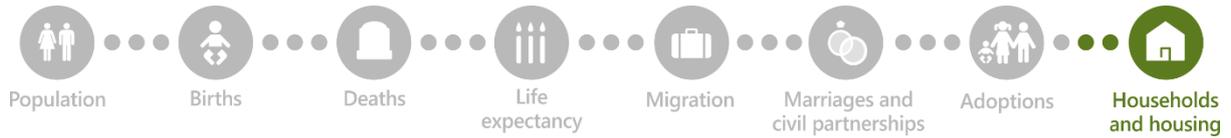
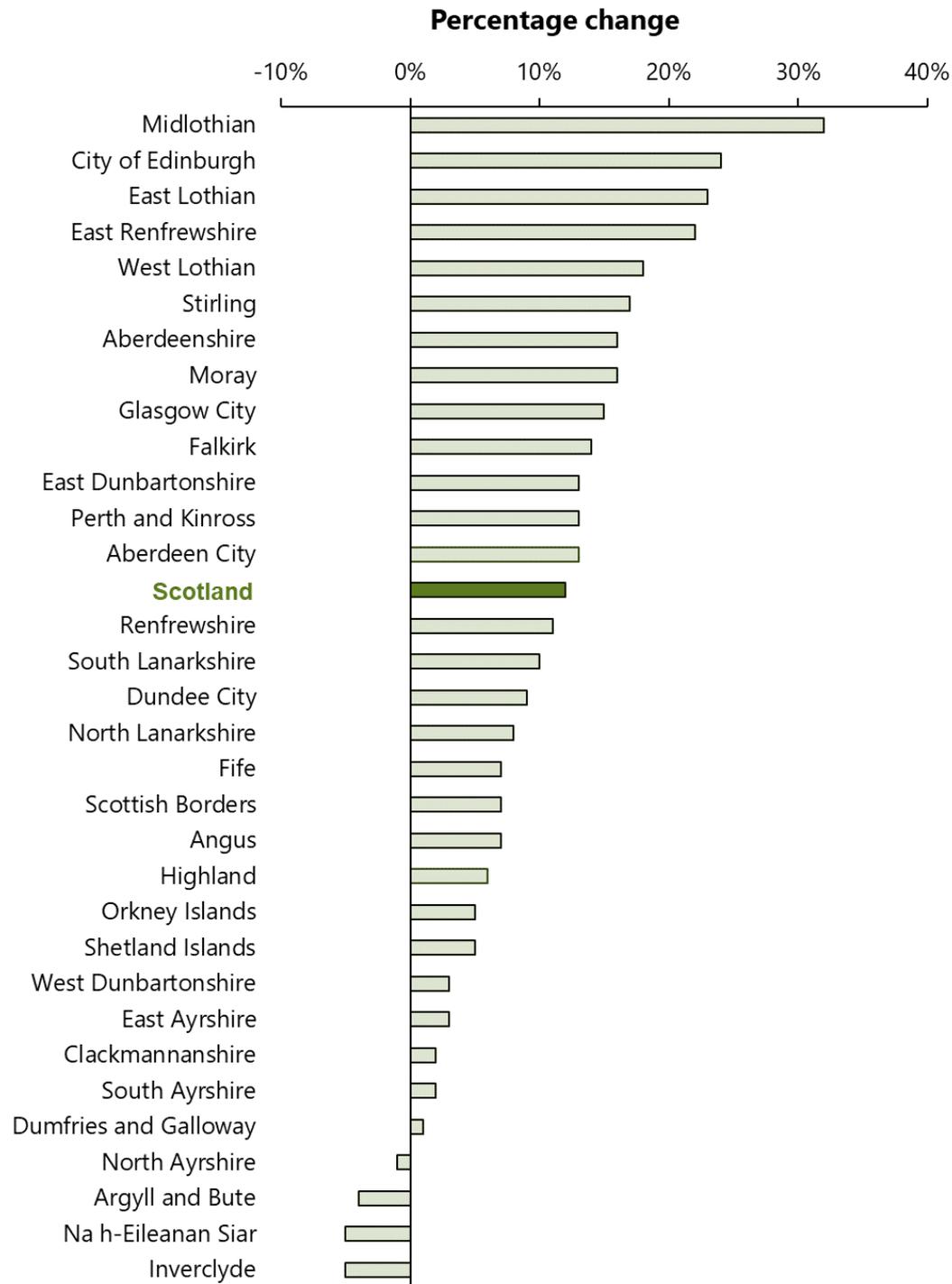


Figure 8.7: Projected percentage change in the number of households by council area, mid-2018 to mid-2041



Note: The 2018 household estimates are compared to the 2041 projected values.



Vacant dwellings and second homes

Households vs. dwellings – what's the difference?

- A 'dwelling' refers to the accommodation itself, for example a flat or house.
- A 'household' refers to a group of people living together in a dwelling.
- The number of dwellings in an area includes second homes and vacant dwellings; some dwellings may contain more than one household.

Across Scotland, just under 96% of dwellings were occupied in 2018, while 3.2% of dwellings were vacant and 1.0% were second homes. Remote rural areas had the highest percentage of dwellings that were vacant and second homes (5.5% and 6.5% respectively, compared to 2.9% and 0.4% in large urban areas).

Over the past three years, the number of vacant dwellings has increased very slightly, from 78,500 (3.1% of total dwellings) in 2015 to 83,400 (3.2%) in 2018. Over the same period the number of second homes has been steadily decreasing, from 27,300 (1.1% of total dwellings) in 2015 to 25,000 (1.0%) in 2018.

How are household statistics used?

Household estimates and projections are used by central government, councils and others for a variety of purposes, including:

- informing councils about housing need and provision of services (including housing, waste collection and community care)
- land use allocation and planning
- assessing demand for water and sewerage services
- risk analysis by Fire and Rescue Services

Appendix 1 – Summary tables

Table 1: Population and vital events, Scotland, 1855 to 2018

Year	Estimated population (000s)	Live births ¹		Stillbirths ^{1,2}		Infant deaths		Deaths		Marriages ³	Civil Partnerships ⁴	
		Number	Rate ⁵	Number	Rate ⁶	Number	Rate ⁷	Number	Rate ⁵		Male	Female
1855-60	3018.4	102,462	34.1	-	-	12,250	119.6	62,644	20.8	20,645	-	-
1861-65	3127.1	109,764	35.1	-	-	13,166	119.9	69,265	22.1	22,013	-	-
1866-70	3275.6	114,394	34.9	-	-	13,971	122.1	71,974	22.0	22,832	-	-
1871-75	3441.4	120,376	35.0	-	-	15,314	127.2	77,988	22.7	25,754	-	-
1876-80	3628.7	126,086	34.8	-	-	14,921	118.3	74,801	20.6	24,956	-	-
1881-85	3799.2	126,409	33.3	-	-	14,864	117.6	74,396	19.6	26,176	-	-
1886-90	3943.9	123,977	31.4	-	-	14,943	120.5	74,320	18.8	25,702	-	-
1891-95	4122.5	125,800	30.5	-	-	15,895	126.4	78,350	19.0	27,962	-	-
1896-1900	4345.1	130,209	30.0	-	-	16,857	129.5	78,021	17.9	31,771	-	-
1901-05	4535.7	132,399	29.2	-	-	15,881	119.9	77,313	17.1	31,838	-	-
1906-10	4679.9	128,987	27.6	-	-	14,501	112.4	75,534	16.1	31,811	-	-
1911-15	4748.3	120,654	25.4	-	-	13,604	112.8	74,466	15.7	33,857	-	-
1916-20	4823.8	109,750	22.8	-	-	10,869	99.0	72,365	15.0	37,437	-	-
1921-25	4879.6	112,245	23.0	-	-	10,299	91.8	67,652	13.9	34,720	-	-
1926-30	4845.1	96,674	20.0	-	-	8,260	85.4	66,017	13.6	32,605	-	-
1931-35	4905.1	89,306	18.2	-	-	7,212	80.8	64,839	13.2	34,986	-	-
1936-40	4956.8	87,734	17.6	-	-	6,650	75.8	67,166	13.5	42,941	-	-
1941-45	4711.9	91,593	19.4	3,393	35.7	6,202	67.7	66,302	13.8	43,772	-	-
1946-50	5054.3	101,222	20.0	3,047	29.2	4,789	47.3	63,854	12.6	43,206	-	-
1951-55	5103.6	91,366	17.9	2,390	25.5	3,009	32.9	61,838	12.1	41,718	-	-
1956-60	5145.2	98,663	19.2	2,307	22.9	2,755	27.9	61,965	12.0	41,671	-	-
1961-65	5201.0	102,642	19.7	2,000	19.1	2,568	25.0	63,309	12.2	40,235	-	-
1966-70	5204.3	93,033	17.9	1,415	15.0	1,970	21.2	62,797	12.1	42,832	-	-
1971-75	5234.7	75,541	14.4	939	12.3	1,421	18.8	63,808	12.2	41,404	-	-
1976-80	5213.9	65,758	12.6	529	8.0	900	13.7	64,343	12.3	37,801	-	-
1981-85	5151.9	66,422	12.9	389	5.8	695	10.5	63,723	12.4	35,756	-	-
1986-90	5089.5	65,544	12.9	350	5.3	550	8.4	62,796	12.3	35,440	-	-
1991-95	5093.5	63,571	12.5	382	6.0	418	6.6	61,171	12.0	32,866	-	-
1996-2000	5077.5	56,856	11.2	327	5.7	316	5.6	59,478	11.7	29,965	-	-
2001-2005	5078.6	52,914	10.4	297	5.6	275	5.2	57,178	11.3	30,648	-	-
2006-2010	5200.0	58,270	11.2	311	5.3	245	4.2	54,920	10.6	28,934	316	329
2011-2015	5332.4	56,891	10.7	249	4.4	205	3.6	55,023	10.3	29,195	186	246
1991	5083.3	67,024	13.1	369	5.5	473	7.1	61,041	12.0	33,762	-	-
1992	5085.6	65,789	12.9	356	5.4	449	6.8	60,937	11.9	35,057	-	-
1993	5092.5	63,337	12.4	409	6.4	412	6.5	64,049	12.5	33,366	-	-
1994	5102.2	61,656	12.0	381	6.1	382	6.2	59,328	11.6	31,480	-	-
1995	5103.7	60,051	11.7	397	6.6	375	6.2	60,500	11.8	30,663	-	-
1996	5092.2	59,296	11.6	381	6.4	365	6.2	60,654	11.8	30,242	-	-
1997	5083.3	59,440	11.6	319	5.3	316	5.3	59,494	11.6	29,611	-	-
1998	5077.1	57,319	11.2	351	6.1	320	5.6	59,164	11.6	29,668	-	-
1999	5072.0	55,147	10.8	286	5.2	276	5.0	60,281	11.8	29,940	-	-
2000	5062.9	53,076	10.4	298	5.6	305	5.7	57,799	11.3	30,367	-	-
2001	5064.2	52,527	10.4	301	5.7	290	5.5	57,382	11.3	29,621	-	-
2002	5066.0	51,270	10.1	278	5.4	270	5.3	58,103	11.5	29,826	-	-
2003	5068.5	52,432	10.3	296	5.6	265	5.1	58,472	11.5	30,757	-	-
2004	5084.3	53,957	10.6	317	5.8	266	4.9	56,187	11.1	32,154	-	-
2005	5110.2	54,386	10.6	292	5.3	284	5.2	55,747	10.9	30,881	53	31
2006	5133.1	55,690	10.8	296	5.3	248	4.5	55,093	10.7	29,898	578	469
2007	5170.0	57,781	11.2	327	5.6	272	4.7	55,986	10.8	29,866	340	348
2008	5202.9	60,041	11.5	325	5.4	253	4.2	55,700	10.7	28,903	245	280
2009	5231.9	59,046	11.3	317	5.3	235	4.0	53,856	10.3	27,524	219	279
2010	5262.2	58,791	11.2	291	4.9	218	3.7	53,967	10.3	28,480	197	268
2011	5299.9	58,590	11.1	299	5.1	238	4.1	53,661	10.1	29,135	229	325
2012	5313.6	58,027	10.9	274	4.7	217	3.7	54,937	10.3	30,534	257	317
2013	5327.7	56,014	10.5	234	4.2	186	3.3	54,700	10.3	27,547	217	313
2014	5347.6	56,725	10.6	228	4.0	207	3.6	54,239	10.1	29,069	193	243
2015	5373.0	55,098	10.3	211	3.8	175	3.2	57,579	10.7	29,691	33	31
2016	5404.7	54,488	10.1	236	4.3	181	3.3	56,728	10.5	29,229	42	28
2017	5424.8	52,861	9.7	225	4.2	176	3.3	57,883	10.7	28,440	41	29
2018	5438.1	51,308	9.4	190	3.7	163	3.2	58,503	10.8	27,525	38	27

Footnotes

- 1) Live births only, prior to 1939.
- 2) Refer to Notes, definitions and quality of statistics.
- 3) Figures for 2014 onwards include opposite-sex and same-sex marriages.
- 4) The Civil Partnership Act 2004 came into effect in December 2005.
- 5) Rate per 1,000 population.
- 6) Rate per 1,000 live and still births.
- 7) Rate per 1,000 live births.

Table 2: Estimated population, births, stillbirths, deaths, marriages and civil partnerships, numbers and rates, by council area, Scotland, 2018

Area	Estimated population at 30 Jun	Live births			Stillbirths		Infant deaths		Deaths			Marriages ⁴	Civil Partnerships
		Number	Rate ¹	Standardised Rate	Number	Rate ²	Number	Rate ³	Number	Rate ¹	Standardised Rate		
SCOTLAND	5,438,100	51,308	9.4	9.4	190	3.7	163	3.2	58,503	10.8	10.8	27,525	65
Council areas													
Aberdeen City	227,560	2,337	10.3	8.2	8	3.4	8	3.4	2,170	9.5	10.9	709	2
Aberdeenshire	261,470	2,697	10.3	12.2	11	4.1	2	0.7	2,462	9.4	9.5	1,249	1
Angus	116,040	964	8.3	10.2	2	2.1	4	4.1	1,367	11.8	9.6	434	-
Argyll & Bute	86,260	648	7.5	11.1	1	1.5	2	3.1	1,121	13.0	10.2	1078	1
City of Edinburgh	518,500	4899	9.4	6.9	25	5.1	20	4.1	4,467	8.6	10.0	2804	22
Clackmannanshire	51,400	465	9.0	10.6	1	2.1	1	2.2	526	10.2	10.4	180	-
Dumfries & Galloway	148,790	1,198	8.1	10.5	4	3.3	3	2.5	1,950	13.1	10.1	4054	8
Dundee City	148,750	1,488	10.0	8.3	8	5.3	11	7.4	1,721	11.6	11.9	512	3
East Ayrshire	121,840	1,176	9.7	10.7	5	4.2	2	1.7	1,504	12.3	12.1	549	-
East Dunbartonshire	108,330	950	8.8	11.5	6	6.3	1	1.1	1066	9.8	8.2	222	2
East Lothian	105,790	1,020	9.6	11.0	4	3.9	5	4.9	1,065	10.1	9.5	567	-
East Renfrewshire	95,170	854	9.0	11.3	2	2.3	3	3.5	909	9.6	8.6	283	2
Falkirk	160,340	1,493	9.3	10.0	4	2.7	4	2.7	1,761	11.0	11.3	715	-
Fife	371,910	3,479	9.4	10.2	14	4.0	12	3.4	4,028	10.8	10.3	1475	1
Glasgow City	626,410	6,548	10.5	7.8	25	3.8	29	4.4	6,413	10.2	13.3	2469	11
Highland	235,540	2,005	8.5	10.3	8	4.0	6	3.0	2,666	11.3	10.0	1,510	1
Inverclyde	78,150	689	8.8	10.1	3	4.3	-	-	1,074	13.7	12.3	168	-
Midlothian	91,340	1075	11.8	12.2	4	3.7	4	3.7	884	9.7	10.3	426	2
Moray	95,520	825	8.6	10.2	3	3.6	3	3.6	1078	11.3	10.0	348	-
Na h-Eileanan Siar	26,830	206	7.7	10.7	-	-	-	-	356	13.3	9.9	111	-
North Ayrshire	135,280	1,125	8.3	9.8	1	0.9	3	2.7	1,735	12.8	11.5	664	-
North Lanarkshire	340,180	3,387	10.0	10.3	7	2.1	8	2.4	3,644	10.7	12.3	870	1
Orkney Islands	22,190	186	8.4	10.3	-	-	-	-	226	10.2	8.5	95	-
Perth & Kinross	151,290	1,217	8.0	9.9	6	4.9	1	0.8	1,701	11.2	9.0	1059	4
Renfrewshire	177,790	1,697	9.5	10.0	3	1.8	6	3.5	2,015	11.3	11.4	671	1
Scottish Borders	115,270	984	8.5	11.6	5	5.1	4	4.1	1,472	12.8	10.4	643	1
Shetland Islands	22,990	215	9.4	11.1	-	-	-	-	217	9.4	9.3	66	-
South Ayrshire	112,550	932	8.3	10.6	3	3.2	1	1.1	1,514	13.5	10.4	859	-
South Lanarkshire	319,020	3,153	9.9	10.9	18	5.7	11	3.5	3,603	11.3	11.2	1045	1
Stirling	94,330	757	8.0	8.2	-	-	2	2.6	946	10.0	10.0	679	-
West Dunbartonshire	89,130	885	9.9	10.4	4	4.5	-	-	1,170	13.1	13.6	267	1
West Lothian	182,140	1,754	9.6	10.0	5	2.8	7	4.0	1,672	9.2	10.9	744	-

Footnotes

- 1) Rate per 1,000 population.
- 2) Rate per 1,000 live and still births.
- 3) Rate per 1,000 live births.
- 4) Includes opposite-sex and same-sex marriages.

Table 3: International populations and vital statistics rates, selected countries, latest available figures

Country	Estimated population 2017 ('000s)	Live births		Stillbirths ¹		Infant deaths		Deaths		Marriages	
		Year	Rate ²	Year	Rate ³	Year	Rate ⁴	Year	Rate ²	Year	Rate ²
Scotland	5,438	2018	9.4	2018	3.7	2018	3.2	2018	10.8	2018	5.1
European Union											
Austria	8,822	2017	10.0	2017	3.3	2017	2.9	2017	9.5	2016	5.1
Belgium	11,399	2017	10.5	2014	3.2	2017	3.6	2017	9.6	2016	3.9
Bulgaria	7,050	2017	9.0	2017	6.3	2017	6.4	2017	15.5	2016	3.8
Croatia	4,105	2017	8.9	2017	4.1	2017	4.0	2017	12.9	2016	4.9
Cyprus	864	2017	10.7	2007	3.1	2017	1.3	2017	7.0	2016	7.5
Czech Republic	10,610	2017	10.8	2017	2.6	2017	2.7	2017	10.5	2016	4.8
Denmark	5,781	2017	10.6	2017	4.0	2017	3.8	2017	9.2	2016	5.4
Estonia	1,319	2017	10.5	2016	2.7	2017	2.3	2017	11.8	2016	4.8
Finland	5,513	2017	9.1	2017	1.9	2017	2.0	2017	9.8	2016	4.5
France	66,926	2017	11.5	2010	10.4	2017	3.9	2017	9.1	2016	3.5
Germany	82,792	2017	9.5	2015	3.8	2017	3.3	2017	11.3	2016	5.0
Greece	10,741	2017	8.2	2017	3.6	2017	3.5	2017	11.6	2016	4.6
Hungary	9,778	2017	9.7	2017	4.6	2017	3.5	2017	13.5	2016	5.3
Irish Republic	4,830	2017	12.9	2014	2.4	2017	3.0	2017	6.3	2016	4.8
Italy	60,484	2017	7.6	2012	2.7	2017	2.7	2017	10.7	2016	3.4
Latvia	1,934	2017	10.7	2017	3.3	2017	4.1	2017	14.8	2016	6.6
Lithuania	2,809	2017	10.1	2017	3.5	2017	3.0	2017	14.2	2016	7.4
Luxembourg	602	2017	10.4	2017	6.0	2017	3.2	2017	7.1	2016	3.2
Malta	476	2017	9.2	2011	4.3	2017	6.7	2017	7.6	2016	6.7
Netherlands	17,181	2017	9.9	2017	2.8	2017	3.6	2017	8.8	2016	3.8
Poland	37,977	2017	10.6	2014	2.5	2017	4.0	2017	10.6	2016	5.1
Portugal	10,291	2017	8.4	2017	2.1	2017	2.7	2017	10.7	2016	3.1
Romania	19,531	2017	10.3	2017	3.4	2017	6.7	2017	13.3	2016	6.8
Slovakia	5,443	2017	10.7	2017	2.7	2017	4.5	2017	9.9	2016	5.5
Slovenia	2,067	2017	9.8	2017	2.7	2017	2.1	2017	9.9	2016	3.2
Spain	46,658	2017	8.4	2017	3.2	2017	2.7	2017	9.1	2016	3.7
Sweden	10,120	2017	11.5	2017	3.4	2017	2.4	2017	9.1	2016	5.4
United Kingdom	66,274	2017	11.4	2017	4.2	2017	3.9	2017	9.2	2016	4.5
Other Europe											
North Macedonia	2,075	2017	10.5	2016	8.5	2017	9.2	2017	9.8	2016	6.4
Norway	5,296	2017	10.7	2017	2.4	2017	2.3	2017	7.7	2016	4.5
Switzerland	8,484	2017	10.3	2017	4.1	2017	3.5	2017	7.9	2016	5.0
Turkey	80,811	2017	16.1	2010	8.8	2017	9.2	2017	5.3	2016	7.5

Footnotes

- 1) The definition of a stillbirth varies from country to country and over time. The position in the UK is described in Appendix 2 - Notes, definitions and quality of statistics.
- 2) Rate per 1,000 population.
- 3) Rate per 1,000 live and still births.
- 4) Rate per 1,000 live births.

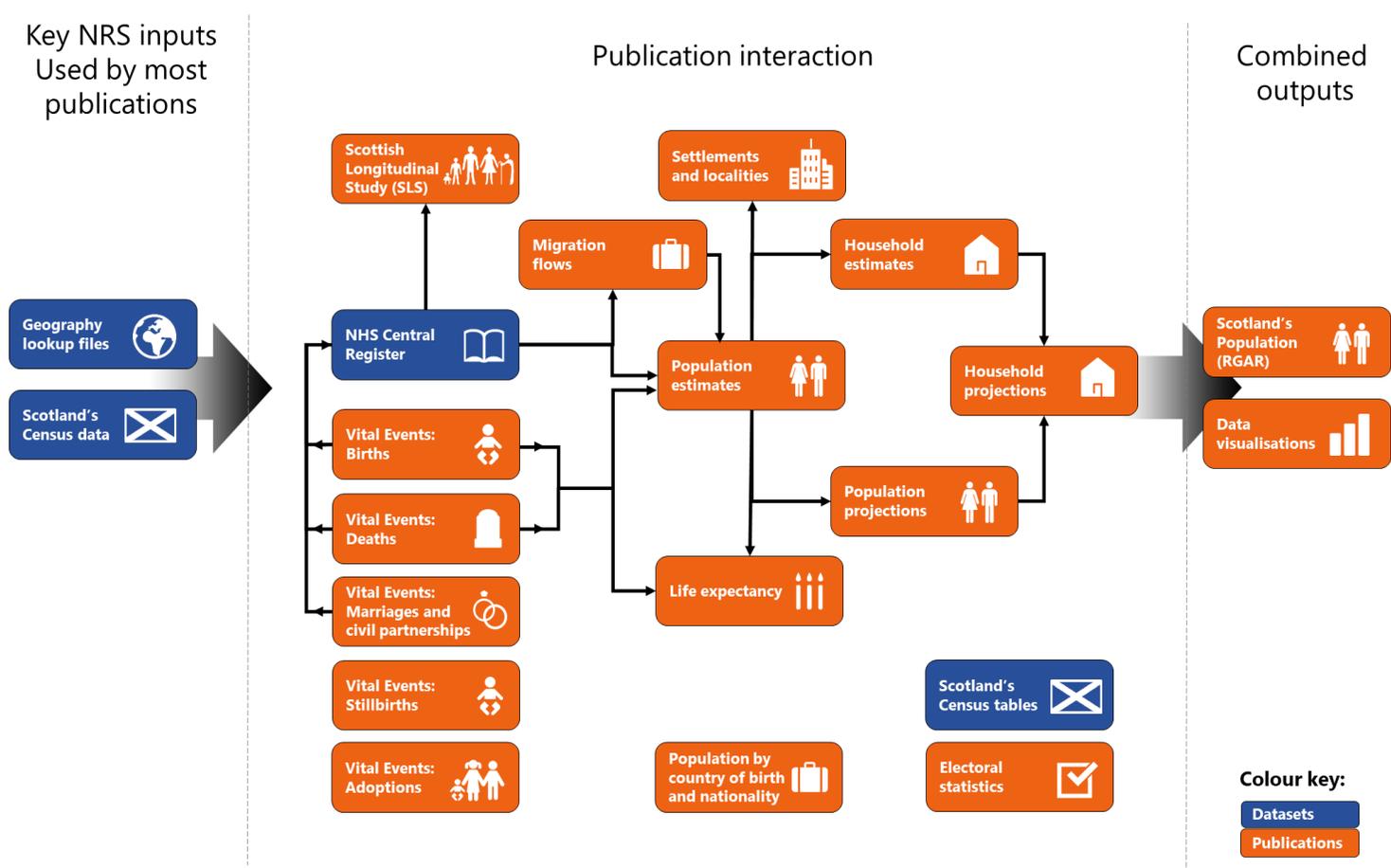
Sources: Eurostat, Office for National Statistics, Northern Ireland Statistics and Research Agency.

Appendix 2 – NRS Statistics flowchart

This year, we have developed a flowchart that maps out all the demographic statistics produced by NRS and shows how information is passed between our key publications.

Each box represents a publication topic (orange) or dataset (blue). The arrows represent the flow of data between publications and datasets.

The chart only shows how information is used within NRS; each publication also depends on data sharing with many vital external organisations.



Appendix 3 – Notes, definitions and quality of statistics

This appendix gives general notes on some of the information and conventions used in this report, and defines some of the terms.

General

Rounding

Figures are calculated using unrounded data.

Conventions for tables

Where a range of years is listed in a table (for example, '2017-18'), the information we have given will be an average for that length of time or in the case of non-census migration it will refer to migration between 1 July (2017) to 30 June (2018).

In all tables 'year' means 'calendar year' unless we tell you otherwise.

The date events happen and the date of registration

The statistics about births and deaths in the Population chapter are for mid-year periods (from 1 July of one year to 30 June of the next) and relate to the date the event happened and not to the date the event was registered. For example, a birth on 29 June 2018 which was registered on 4 July 2018 would be included in the mid-2018 figures, which relate to the period from 1 July 2017 to 30 June 2018.

All the other statistics about births and deaths, as well as the statistics about stillbirths, marriages and civil partnerships, are for calendar years and relate to the date the event was registered, not the date the event actually happened. For example, a birth on 31 December 2017 which was registered on 4 January 2018 would be included in the 2018 figures. By law, births and stillbirths should be registered within 21 days, marriages and civil partnerships should be registered within three days, and deaths should be registered within eight days. Almost all births, stillbirths, marriages, civil partnerships and deaths are registered on time.

The place the relevant person usually lives and the place the event happens

Births, stillbirths, and deaths are generally allocated to the area in Scotland where the relevant person (the mother for births and stillbirths, and the person who has died for deaths) usually lives. If the relevant person does not usually live in Scotland, the event is allocated to the area in which it happened. However, a death may be allocated to the area where the person used to live if the area is in Scotland and the person had lived away from that area for less than 12 months.

Marriage and civil partnership figures relate to the area where the event took place.

Age

Ages relate to the person's age on their last birthday.

When working out average ages (such as the average age at death and the average age of mothers at childbirth) we have added half a year to people's age at their last birthday. For example, to work out the overall average age at death, we have assumed that the average age of 77-year-olds who died was 77 years and six months.

Age standardisation

A straight comparison of rates between areas may give a misleading picture because of differences in sex and age between the different populations. For example, it would be unreasonable to expect a high birth rate in an area with a high proportion of elderly people. Because of this, we have standardised information in certain tables and charts. Standardisation allows areas with different age and sex structures to be easily compared, comparing the actual number of events that happen in an area with the total number of events that would be expected if the area had the rates of the standard population. Various standard populations can be used for age standardisation. We use both the Scottish population (for the year in question) and the European Standard Population 2013 to calculate age-standardised rates.

Lists of groups of countries

EU-2 refers to the countries that became member states of the European Union on 1 January 2007, which were Bulgaria and Romania.

EU-8 refers to the countries that became member states of the European Union on 1 May 2004, which were Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia.

EU-15 refers to the countries that were member states of the European Union before 1 May 2004, which were Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.

EU-25 refers to the EU-15, plus the countries that became member states of the European Union between 1 May 2004 and 31 December 2006, which were Cyprus, Czech Republic, Estonia, Hungary, Latvia, Lithuania, Malta, Poland, Slovenia and Slovakia.

EU-28 refers to the EU-25, plus the countries that became member states of the European Union on 1 January 2007 (Bulgaria and Romania) and on 1 July 2013 (Croatia).

Urban and rural classifications

'Large urban areas' are settlements of over 125,000 people.

'Other urban areas' are settlements of 10,000 to 124,999 people.

'Accessible small towns' are settlements of 3,000 to 9,999 people that are within a 30-minute drive of a settlement of 10,000 people or more.

'Remote small towns' are settlements of 3,000 to 9,999 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

'Accessible rural' settlements are areas of fewer than 3,000 people that are within a 30-minute drive of a settlement of 10,000 people or more.

'Remote rural' settlements are areas of fewer than 3,000 people that are not within a 30-minute drive of a settlement of 10,000 people or more.

You can get more information about the [Scottish Government Urban Rural Classification](#) in the Methodology section of the Scottish Government (SG) website.

Deprivation

The Scottish Government produces the Scottish Index of Multiple Deprivation to define small-area concentrations of deprivation across all of Scotland. The index is based on 38 indicators in seven fields – income, employment, health, education, skills and training, housing, geographic access and crime.

You can get more information about the [Scottish Index of Multiple Deprivation](#) on the SG website.

Chapter 1 - Population

All population figures refer to estimates at 30 June of the relevant year.

Population covered

The estimated population of an area includes all those who usually live there, whatever their nationality. Students are treated as living at their term-time address. Members of UK and non-UK armed forces stationed in Scotland are included, but UK forces stationed outside Scotland are not. Short-term international migrants (people who move to Scotland for less than 12 months) are also not included.

Population projections

Population projections are estimates for future years largely based on past trends. The Registrar General asks the Office for National Statistics (ONS) to prepare population projections with input from his own experts. The latest national projections were published in October 2017, and were based on 2016 population estimates. Sub-national population projections were published in March 2018 and cover council areas, health boards, national parks and Strategic Development Plan Areas. The next release of national population projections will be in October 2019, and will be based on the 2018 population estimates.

Sources and quality of statistics – population

Population estimates are based on the 2011 Census and are updated each year by adding one year to the age of everyone in the population and including information on births, deaths and migration (people moving to or away from an area). Births and deaths are estimated using information from the civil registration system, which is virtually complete. Migration is more difficult to estimate because there is no complete migration registration system in the UK. Further information about the sources used to estimate migration is included in Chapter 5.

There is more information about the quality of population statistics in the [Mid-Year Population Estimates for Scotland: Methodology Guide](#) and [About this Publication](#) paper for the Mid-Year Population Estimates for Scotland, available on the NRS website.

Sources and quality of statistics – population projections

More information about the quality of population projections can be found in the [Uses and Limitations of Population Projections](#) section on the NRS website.

Chapter 2 - Births

Cohort

A cohort is a well-defined group of people who have had a common experience and are observed through time. For example, 'the birth cohort of 1976' refers to the people born in that year.

General fertility rate (GFR)

The number of births per 1,000 women of childbearing age (15 to 44).

Total fertility rate (TFR)

The average number of children who would be born, per woman, to a cohort of women who experienced, throughout their childbearing years, the fertility rates for the calendar year in question.

Age specific fertility rate (ASFR)

The number of births per woman for a specific age during a set time.

Marital status of parents

'Married parents' means parents who are married to each other. 'Unmarried parents' refers to parents who are not married, or who are married but not to each other.

Sources and quality of statistics – births

Statistics about births in Scotland are produced from information collected when the births are registered. The information should be very accurate as it is almost always provided by one or both of the baby's parents, and the parent (or parents) and the registrar should check the details that will appear on the child's birth certificate before the certificate is produced. Also, each record of a birth is checked by one of our district examiners.

The statistics will cover almost 100% of all births in Scotland – because of the importance of a person's birth certificate, there will be very few births that are not registered, and they are likely to be the result of extremely unusual circumstances (for example, if a pregnancy was hidden, the baby killed and the body disposed of).

You can get more information about statistics on births from the Vital Events [Births – Background](#) section on the National Records of Scotland (NRS) website.

For general information on all vital events statistics please go to the Vital Events - [General Background](#) Information section of the NRS website.

Chapter 3 – Deaths

Cause-of-death coding

Since 1 January 2000, deaths in Scotland have been coded in line with the International Statistical Classification of Diseases and Related Health Problems (Tenth Revision), also known as ICD10. We put the underlying causes of death into classes based on information collected from the medical certificate of cause of death, together with any extra information the certifying doctor provides later. We also take account of changes that Procurators Fiscal tell us about.

You can get more detailed information about [death certificates and coding the causes of death](#), and how we produce statistics of deaths from certain causes from the Vital Events Deaths - Background Information section of the NRS website.

Stillbirth

Section 56(1) of the Registration of Births, Deaths and Marriages (Scotland) Act 1965 (as amended by the Still-Birth (Definition) Act 1992) defines a stillbirth as a child born after the 24th week of pregnancy which does not breathe or show any other sign of life.

Perinatal deaths

This refers to stillbirths and deaths in the first week of life.

Infant deaths

This refers to all deaths in the first year of life.

Sources and quality of statistics – deaths

Statistics about deaths in Scotland are produced from information which is collected when the deaths are registered. Details of the causes of death come from the Medical Certificate of the Cause of Death (MCCD), and so represent the results of a doctor's clinical judgment. In some cases, the doctor, a Procurator Fiscal or a pathologist provides extra information about the cause of death later, for example following further investigations.

Other information about the person who has died will be provided by the person who registers the death (who is usually a son or daughter, sometimes a husband, wife or partner, another relative or a friend, or occasionally, someone like a police officer or a care-home manager) or the registrar can get the information from existing registration records (if the person who has died was born or married in Scotland). In a small percentage of cases, some of the information about the person who has died may not be complete or accurate (for example, if the person registering the death did not know the person very well, and the registrar could not get details from previous registration records). The person registering the death and the registrar should check the details before the certificate is produced. Also, each record of a death is checked by one of our district examiners.

The statistics will cover almost 100% of all deaths in Scotland, as a cemetery or a crematorium will not accept a body unless the death has been registered. However, occasionally a death may not be recorded (for example, because the authorities do not know that someone who is missing has died).

You can get more information about statistics on deaths from the Vital Events [Deaths – Background Information](#) section of the NRS website.

You can also get some general information on all vital events statistics from the [Vital Events – General Background Information](#) section of the NRS website.

Chapter 4 - Life expectancy

Period Life expectancy

The average number of further years a person can expect to survive if he/she experienced the particular area's age specific mortality rates for that time period throughout his/her life. Life expectancy can be calculated at all ages but is most commonly referred to in relation to life expectancy at birth.

Healthy Life expectancy

The average number of further years that a person could be expected to remain in 'good health'. The age specific prevalence of good health is estimated from survey data and assumed to remain constant throughout the person's life.

Sources and quality of statistics – life expectancy

The life expectancy estimates are based on the likely trends in the number of deaths indicated by the death records for the three years before the year the records are published. For example, the estimates based on the figures for 2015-2017 for administrative areas were published in December 2018. Population data is drawn from the mid-year population estimates and population estimates in small areas. Self-assessed health data comes from the health question in the annual population survey.

You can get more information about the quality of statistics on life expectancy in the [Life Expectancy for Scotland: Methodology Guide](#) (PDF document) and on the [Life Expectancy at Scotland Level Methodology](#) page both available on the NRS website.

Chapter 5 – Migration

Net migration

The difference between the number of long-term migrants entering Scotland and the number of long-term emigrants leaving the country.

Long-term migrant

Someone who changes their usual country of residence for a period of 12 months or longer.

Sources and quality of statistics – migration

Estimates of internal migration (that is, people moving between Scotland and the rest of the UK) are based on General Practitioners (GP) registrations and are considered reasonably accurate for most groups. They may be less accurate for young men, as they tend not to register with a GP immediately after moving.

The National Health Service Central Register (NHSCR) system records the movements of patients between NHS Board areas in Scotland. Anonymised extracts from the National Health Service Central Register (NHSCR), linked with Community Health Index (CHI) postcodes that are shared by NHS National Services Scotland with NRS NHSCR are used to calculate moves between NHS Board areas within Scotland.

The CHI holds records of people registered with an NHS doctor in Scotland. Unlike the NHSCR, these records contain the postcode of the patient's address. Migration at council area level and below is estimated using anonymised data from the CHI supplied with the permission of the Scottish Directors of Public Health.

Cross-border migration estimates (that is, people moving from one constituent country of the UK to another) are also based on patient records. The NHSCR system records the movements of patients between NHS Board areas in Scotland, whereas the movements for patients in England and Wales are recorded in the Personal Demographic Service (PDS). The PDS holds the master demographics database for the NHS in England and Wales. Each time a patient transfers to a new NHS doctor in a different NHS Board area, the NHSCR and PDS are notified and then the patient is considered to have made a migrant move. Counts of these re-registrations are used as a proxy indicator for moves between Scotland and the rest of the UK. Estimates from the country receiving the migrants are said to be more accurate, due to the fact that someone is more likely to register with a new GP than de-register with their old GP. For this reason, estimates from the PDS are used to measure migration flows from Scotland to England and Wales, and health card data from the Health and Social Care Northern Ireland (HSCNI) database is used for moves to Northern Ireland.

International migration estimates (that is, people moving between Scotland and countries outside the UK) are based largely on the International Passenger Survey (IPS), which is a small sample survey so the estimates are subject to a degree of uncertainty.

The population estimates of non-British nationals living in Scotland are sourced from the Annual Population Survey (APS). These figures differ from the official mid-year population (MYE) estimates as the APS is a household survey, so does not include most communal establishments, so will exclude students in halls of residence who do not have a parent resident in the UK. The nationality reported refers to that stated by the respondent during the APS interview (self-reported). As the APS is a sample survey these estimates are subject to a degree of uncertainty.

You can get more information about the quality of statistics on migration from the [Migration - Methodology](#) page and [Migration Statistics - About this Publication](#) (PDF document) on the NRS website.

Chapter 6 - Marriages and civil partnerships

Civil marriages were introduced by the Marriage (Scotland) Act 1939, which came into force on 1 July 1940.

The Civil Partnership Act 2004, which applies throughout the UK, came into force on 5 December 2005. The act allows same-sex couples aged 16 and over to get legal recognition of their relationship. In Scotland, the first civil partnership was registered on 20 December 2005.

The Marriage and Civil Partnership (Scotland) Act 2014 came into force on 16 December 2014, allowing same-sex couples to marry.

Sources and quality of statistics – marriages and civil partnerships

Statistics about marriages and civil partnerships in Scotland are produced from information which is collected when the marriages and civil partnerships are registered. The information should be very accurate as it will be provided by both parties to the marriage or civil partnership, and the couple and the registrar will check the details that will appear on the certificate before the certificate is produced. Also, each record of a marriage or a civil partnership is checked by one of our district examiners.

The statistics cover 100% of all marriages and civil partnerships in Scotland as a marriage or civil partnership is not legally formed unless a district registrar has carried out all the legal requirements.

You can get more information about statistics on marriages and civil partnerships from the Vital Events [Marriage and Civil Partnerships – Background Information](#) section of the NRS website.

You can also get some general information on all vital events statistics from the [Vital Events – General Background Information](#) section of the NRS website.

Chapter 7 – Adoptions

The Registrar General for Scotland registers adoptions under the Adoption of Children (Scotland) Act 1930.

Sources and quality of statistics – adoptions

Statistics about adoptions in Scotland are produced from information which is received from Scottish Courts in order to register adoptions.

You can get some more information about these statistics from the [Vital Events Adoptions – Background Information](#) section on the NRS website.

Chapter 8 - Households and housing

Household estimates

Household estimates are produced every year from information on occupied and empty homes taken from council tax billing systems. An occupied home is roughly equivalent to a household. The estimates are used for a range of purposes including informing local authority decisions about housing need and providing services (including housing, planning waste collection and community care). Information on types of housing is taken from the [Scottish Assessors' Portal](#). The latest household estimates are for 2018.

Household projections

We produce household projections (estimates for future years largely based on past trends) every two years. These are mainly used for informing decisions about future housing need and providing services. The latest household projections, covering the period 2016 to 2041, take account of the results of the population projections. They use information from the last three censuses, along with recent survey data, to help project trends in how households are structured by type of household and by the age of the head of household. The head of household is defined in the census as the first person on the census form who is aged 16 or over and usually lives at the address in question. The projections give an indication of what would happen if past trends continue. They do not take account of policy initiatives, or other factors that may affect future populations. Projections for small groups are likely to be less reliable than those for larger groups.

Sources and quality of statistics – households and housing

Information on occupied and empty homes and on housing type comes from council tax billing systems and from the Scottish Assessors' Association, and then goes through a thorough process of quality assurance. It is possible that not all of the information held on the billing systems is up to date. There can also be small differences in the definitions used for various categories in the billing systems. The details can change over time as a result of reviews of council tax discounts and exemptions and year-on-year differences in the way second homes and empty homes are classed by some local authorities. This can have a small effect on the percentages of homes which are classed as empty or second homes.

You can get more information from 'Background Information' (section 8) of the [Estimates of Households and Dwellings, 2018](#) publication which is available on the NRS website.

Notes on statistical publications

National Statistics

The UK Statistics Authority has designated these statistics as National Statistics, in line with the Statistics and Registration Service Act 2007 and signifying compliance with the [Code of Practice for Statistics](#) (available on the UK Statistics Authority website).

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the Code of Practice for Official Statistics. They are awarded National Statistics status following an assessment by the Authority's regulatory arm. The Authority considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

It is National Records of Scotland's responsibility to maintain compliance with the standards expected of National Statistics. If we become concerned about whether these statistics are still meeting the appropriate standards, we will discuss any concerns with the Authority promptly. National Statistics status can be removed at any point when the highest standards are not maintained, and reinstated when standards are restored.

National Records of Scotland

We, the National Records of Scotland, are a non-ministerial department of the devolved Scottish Administration. Our purpose is to collect, preserve and produce information about Scotland's people and history and make it available to inform current and future generations. We do this as follows:

Preserving the past – We look after Scotland's national archives so that they are available for current and future generations, and we make available important information for family history.

Recording the present – At our network of local offices, we register births, marriages, civil partnerships, deaths, divorces and adoptions in Scotland.

Informing the future – We are responsible for the Census of Population in Scotland which we use, with other sources of information, to produce statistics on the population and households.

You can get other detailed statistics that we have produced from the [Statistics](#) section of our website. Scottish Census statistics are available on the [Scotland's Census](#) website.

We also provide information about [future and recent publications](#) on our website. If you would like us to tell you about future statistical publications, you can register your interest on the Scottish Government [ScotStat website](#).

You can also follow us on twitter [@NatRecordsScot](#)

Enquiries and suggestions

Please contact our Statistics Customer Services if you need any further information. Email: statisticscustomerservices@nrscotland.gov.uk

If you have comments or suggestions that would help us improve our standards of service, please contact:

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