

NISRA STATISTICAL BULLETIN

Frequency: Annual

Coverage: Northern Ireland

Date: 24 September 2020 (9.30am)

Geographical Area: Northern Ireland

Theme: Population

Time period: mid-2019

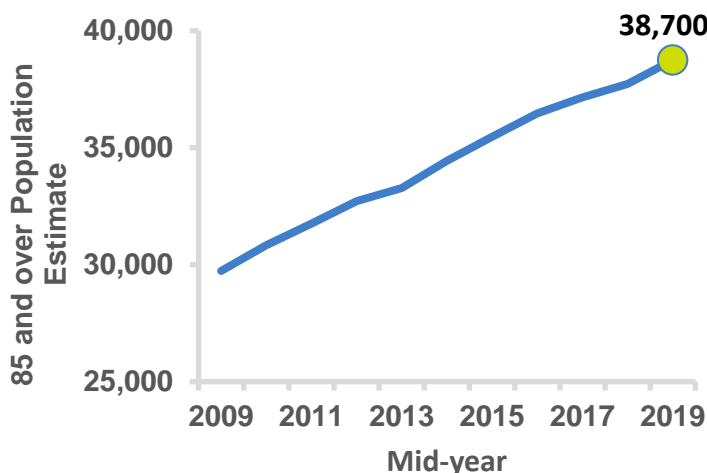
**Estimates of the population aged 85 and over, Northern Ireland, 2019
(and revised 2001 to 2018)**



This statistical report provides estimates for those aged 85 and over in Northern Ireland, by sex and age.

These statistics relate to a period pre-Covid-19 pandemic and as such any impact of the pandemic will not be included.

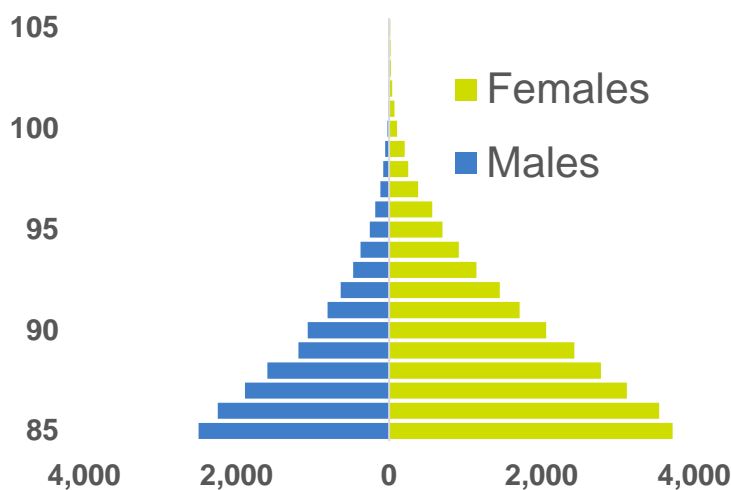
These statistics relate to a period pre-Covid-19 pandemic and as such any impact of the pandemic will not be included



Northern Ireland’s 85 and over population grows to 38,700

The number of people aged 85 and over in Northern Ireland was estimated to be 38,700 in mid-2019, an increase of 1,000 people (2.7 per cent) since mid-2018.

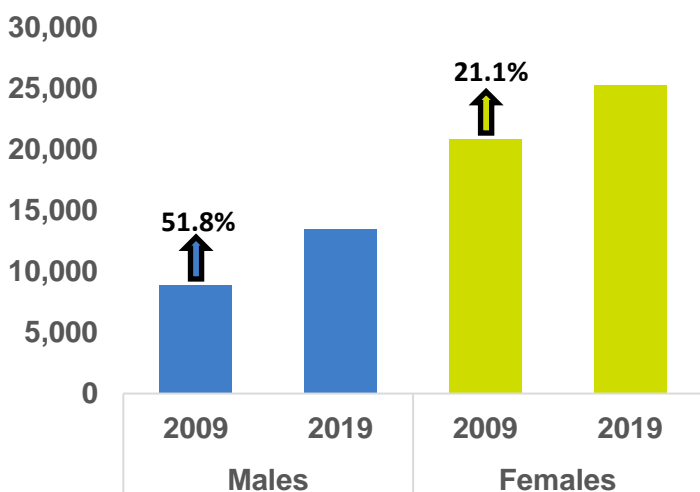
Over the decade the population aged 85 and over has grown by 9,000 people (30.3 per cent).



Females made up most of the 85 and over population in mid-2019

There were 25,200 females aged 85 and over in mid-2019, with males aged 85 and over totalling 13,500.

Females represent 65.1 per cent of the 85 and over population, with males making up the remaining 34.9 per cent.



Males aged 85 and over have grown at a faster rate than females from mid-2009

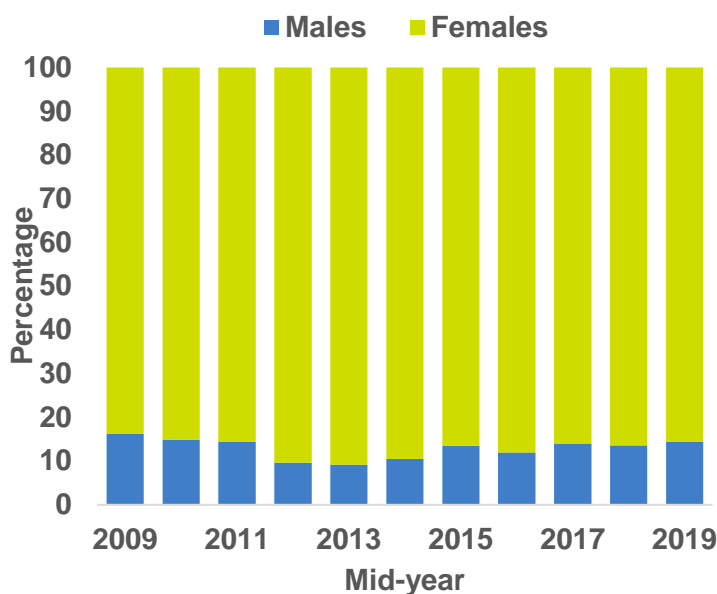
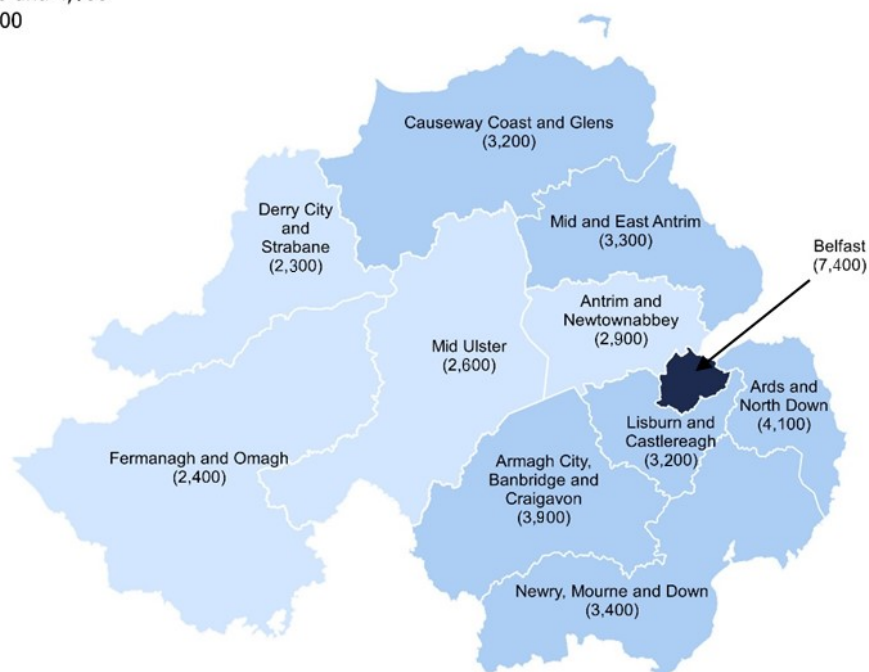
The population of males aged 85 and over has grown by 51.8 per cent (4,600) since mid-2009.

In contrast, the population of females aged 85 and over has grown by 21.1 per cent (4,400) since mid-2009.

Belfast Local Government District had the largest estimated population aged 85 and over in mid-2019

The largest number of people aged 85 and over were in Belfast LGD (7,400), or 19.2 per cent of the total 85 and over population. The LGD with the smallest 85 and over population was Derry City and Strabane (2,300), or 6.0 per cent of the total 85 and over population in mid-2019.

- Between 2,000 and 3,000
- Between 3,000 and 4,500
- More than 4,500



Northern Ireland’s Centenarians

There were an estimated 320 centenarians (i.e. those aged 100 and over) in mid-2019.

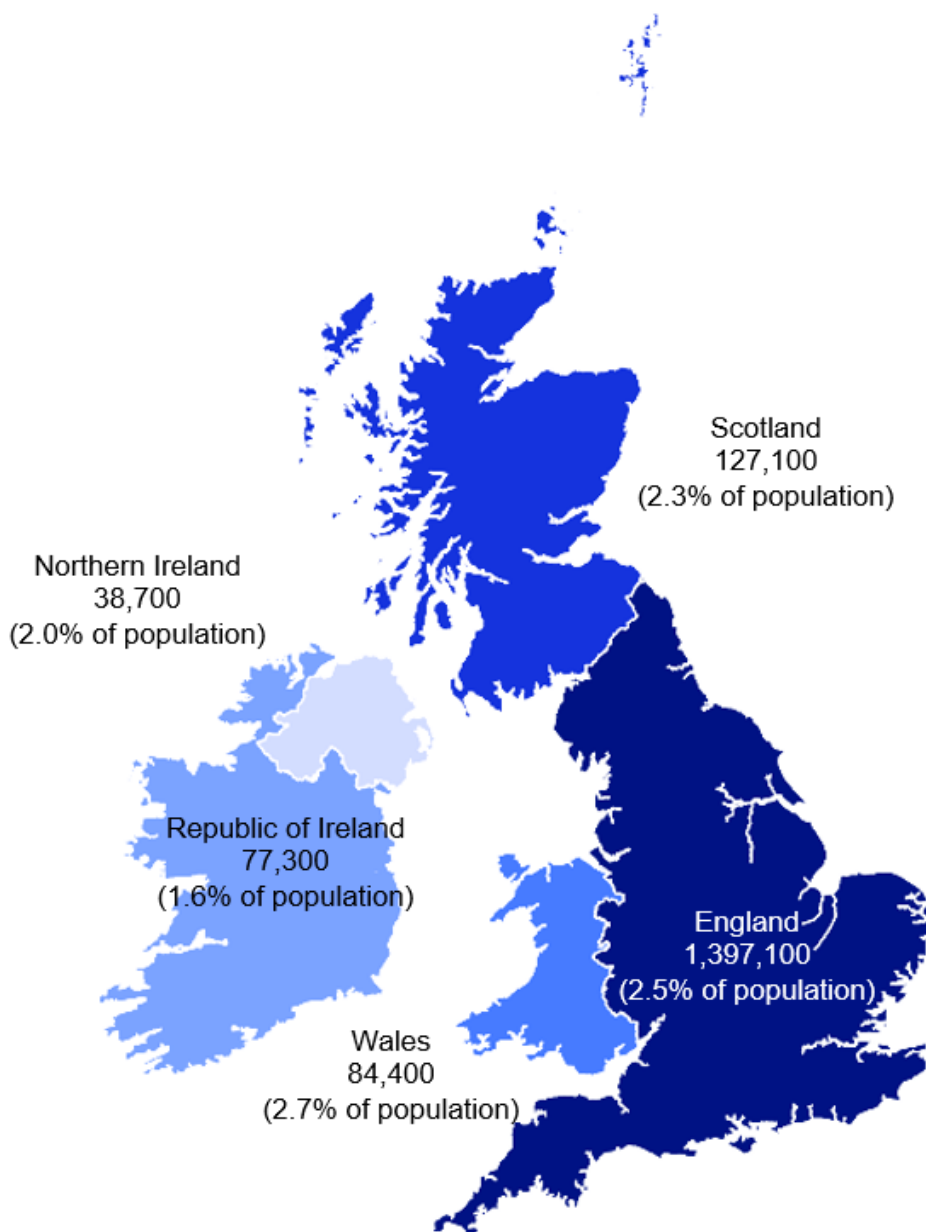
The majority of centenarians were female (274 or 85.6 per cent). The number of male centenarians in mid-2019 was 46 (14.4 per cent).

The number of female centenarians has consistently outnumbered males over the decade.

Northern Ireland had the Smallest proportion of population aged 85 and over across the UK

The population aged 85 and over in the UK reached 1.65 million in mid-2019. Northern Ireland made up the smallest proportion of those aged 85 and over in the UK (38,700, 2.4 per cent). England made up the largest proportion of those aged 85 and over (1.40 million, 84.8 per cent in mid-2019).

The population aged 85 and over makes up 2.0 per cent of the Northern Ireland population – this is lower than that for the other UK countries. However, the Republic of Ireland has an even lower proportion of its population aged 85 and over, 1.6 per cent (year to April 2019).



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Note: To ease readability throughout the bulletin, population figures have been presented to the nearest 100, with the exception of the population aged 100 and over as these are relatively smaller numbers where rounding would cause a loss of accuracy and knowledge for the reader. In all cases, percentage changes have been presented to one decimal place. However, all calculations have been undertaken on the basis of unrounded numbers which will, in some instances, give rise to apparent discrepancies.

1. Introduction

This bulletin presents information on how the overall number and gender composition of those aged 85 and over has changed during the decade mid-2009 to mid-2019, and presents analyses and commentary for those aged 90 to 99, and centenarians (i.e. those aged 100 and over).

This bulletin follows on from the [2019 mid-year population estimates](#) published on 06 May 2020, where population estimates at single years of age were provided up to 89 years, and for the age-group of those aged 90 and over. The estimates of the population aged 85 and over in this bulletin provide a further breakdown of those aged 90 and over, by single year of age up to 104 years, and collectively for those aged 105 and over.

Similar information relating to England & Wales and Scotland was also released on 24 September 2020 by the Office for National Statistics (ONS) and National Records of Scotland (NRS) respectively. While the titles for the releases for the separate UK countries differ slightly, the methodology used by all three statistical organisations to create these statistics are very similar, producing comparable results.

The information in this bulletin contributes to the production of population projections and life expectancy statistics for Northern Ireland, all of which are of policy interest because of the implications for pensions and the delivery of front line services for the older population such as housing, transport and health care. The single year estimates for those aged 90 and over for Northern Ireland also feed into the [Estimates of the Very Old for the United Kingdom](#), produced by ONS.

2. Background to publication

NISRA produces mid-year population estimates on an annual basis using the components of change method (see [Section 8](#)). Historically, these included estimates on a single year of age basis up to, and including, age 84. For those aged 85 and over aggregate statistics were produced as single year of age estimates were considered to be less reliable for this age group due to the small number of people involved.

In 2010, NISRA responded to an increased demand for more detailed population estimates for those aged over 85, producing single year of age mid-2009 estimates for those aged 85-104 using an internationally recognised methodology called the Kannisto-Thatcher Survivor Ratio Method (see [Section 8](#)). Similar arrangements were introduced by the other statistical offices across the UK.

Following the release of 2011 Census figures, mid-year population estimates for the years 2001 to 2011 were revised. One outcome of this revision was to extend the age range of population estimates to provide single year of age estimates, up to age 89, with aggregate statistics for ages 90 and over. The Kannisto-Thatcher Survivor Ratio Method was then subsequently used to distribute the population estimates for the highest age group (90 and over) into single year of age, up to and including 104, and a group aged 105 and over.

After the revision of the mid-year estimates and the increase of single year of ages from 0-84 to 0-89, a decision was made to keep the title of this publication as “Estimates of the population aged **85 and over**”, rather than changing it to the “...population aged **90 and over**”. As the bulletin still contains information on the age group 85 to 89, and 85 and over, this decision was taken so that it would be clear to users that the publication being released continues to provide the same information as in previous years, and that both the methodology and figures within it are consistent and comparable with previous publications.

It should be noted that the Kannisto-Thatcher Survivor Ratio Method gives rise to minor revisions to the age distribution within the aged 90 and over category as new information on actual deaths becomes available. Accordingly, slightly revised estimates for the 90 and over category are provided for the period mid-2001 to mid-2018. More information on these revisions and their impact on the estimates are provided in the Quality Assurance section (see [Section 9](#)) of this bulletin.

3. The population of Northern Ireland continues to increase¹

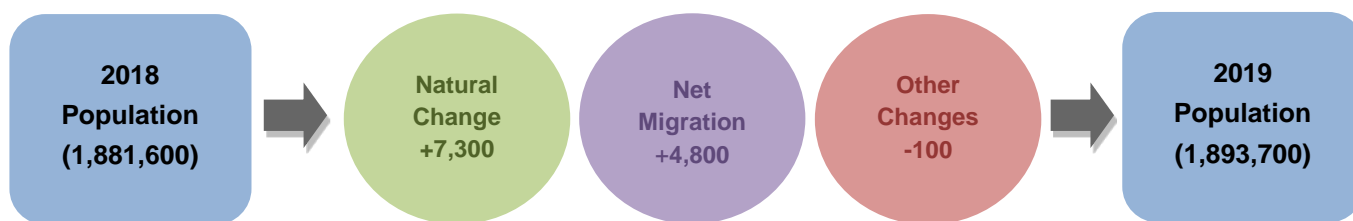
The size of the resident population in Northern Ireland at 30 June 2019 is estimated to be 1.89 million people. Slightly more than half (50.7 per cent) of the population were female, with 961,000 females compared to 932,700 males.

Over the period mid-2018 to mid-2019 the number of people living in Northern Ireland is estimated to have increased by 12,000 people (0.6 per cent). This population increase (see Figure 1) was a result of:

1. Positive natural change of 7,300 people (22,600 births minus 15,300 deaths);
2. An estimated growth of 4,800 people due to net migration (25,600 people came to live in Northern Ireland and 20,800 people left).
3. A slight reduction of 100 people due to other changes.

¹ [Mid-2019 Population Estimates](#) were published on 6 May 2020.

Figure 1: Contribution of components of change to population increase, mid-2018 to mid-2019



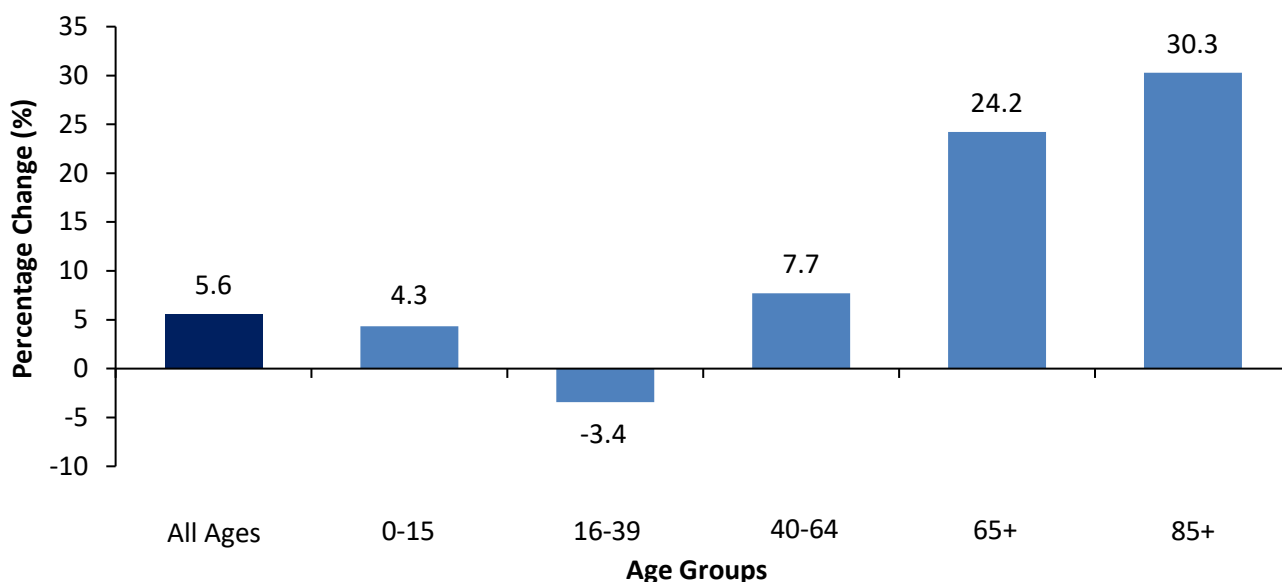
The population of Northern Ireland is becoming increasingly older. Improving survival, coupled with a general downward trend in the number of births, has resulted in an ageing population. Between mid-2018 and mid-2019, the population aged under 65 increased at a moderate rate (0.3 per cent) reaching 1,578,900. In contrast, the population aged 65 and over increased by 2.1 per cent over the same period, and has been growing by an average of 2.2 per cent per annum for the last ten years, increasing from 253,400 in mid-2009 to reach 314,700 in mid-2019.

These estimates cover a period before the coronavirus (Covid-19) pandemic. The impact of Covid-19 on the components of population change (births, deaths and migration) will be seen in future population estimates. However, the extent of the impact is as yet unknown.

The population aged 16 to 39 (i.e. the younger working age population) decreased by 3.4 per cent, mid-2009 to mid-2019

The progressive ageing of the Northern Ireland population is evident in the relative percentage changes among those in different broad age groups over the decade mid-2009 to mid-2019 (see Figure 2). The population increase of those aged 65 and over (24.2 per cent) and 85 and over (30.3 per cent) is higher than any other age group between mid-2009 and mid-2019.

Figure 2: Population change by age group (mid-2009 to mid-2019)



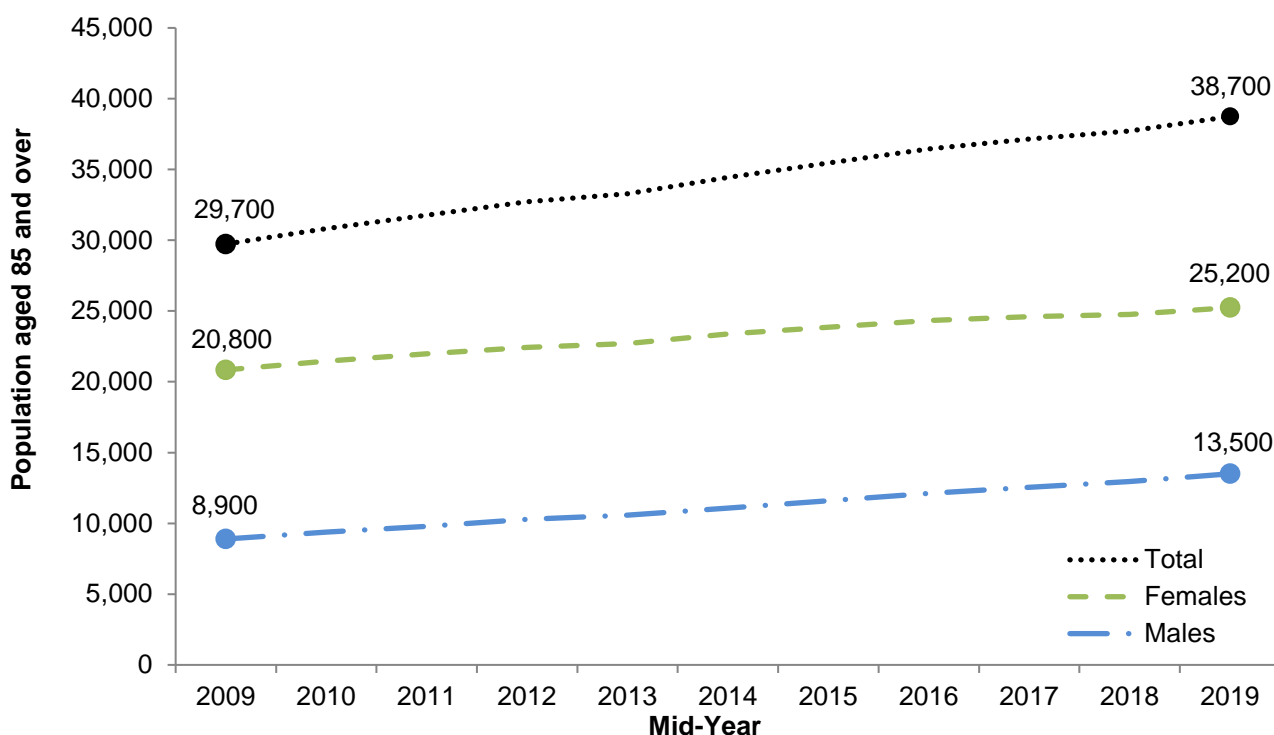
[Download Chart](#) (XLSX Format – 89 KB)

4. Population aged 85 and over

The aged 85 and over population increased by 30.3 per cent in the decade since mid-2009, a rate five times higher than the increase in population aged under 85 (5.2 per cent).

It is estimated that there were 38,700 people aged 85 and over living in Northern Ireland at 30 June 2019, an increase of 1,000 people (2.7 per cent) since mid-2018. Figure 3 illustrates the population aged 85 and over, from Mid-2009 to Mid-2019.

Figure 3: Population aged 85 and over by sex (mid-2009 to mid-2019)



[Download Chart](#) (XLSX Format – 143 KB)

Between mid-2018 and mid-2019, net migration of people aged 85 and over, to and from Northern Ireland, was negligible. In the same period more people aged into this group (6,700) than those leaving through mortality (5,700). This resulted in an overall increase of 1,000 people aged 85 and over from mid-2018 to mid-2019. This pattern of marginal migration effects is consistent with estimated population changes in previous years.

Table 1, which presents the changing size and sex composition of the population aged 85 and over from mid-2009 to mid-2019, illustrates that the proportion of males in this age group has been gradually increasing.

Between mid-2009 and mid-2019, the percentage increase in the number of males aged 85 and over (51.8 per cent) has been noticeably higher than that among females (21.1 per cent). Over

the past decade, numbers of males aged 85 and over increased on average by 4.3 per cent each year, while females aged 85 and over increased on average by 1.9 per cent each year.

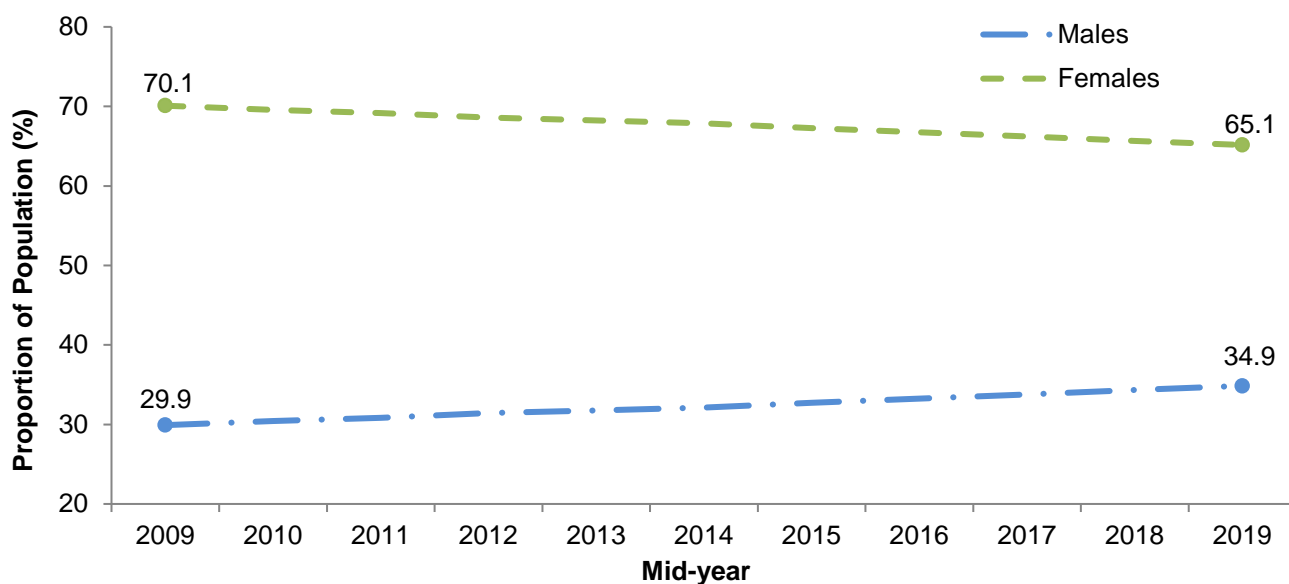
Table 1: Estimates of the population aged 85 and over by sex (mid-2009 to mid-2019)

| Mid-Year | All Persons aged 85 and over | % Change since 2009 | Males aged 85 and over | Proportion of all persons aged 85 and over | % Change since 2009 | Females aged 85 and over | Proportion of all persons aged 85 and over | % Change since 2009 |
|----------|------------------------------|---------------------|------------------------|--|---------------------|--------------------------|--|---------------------|
| 2009 | 29,700 | - | 8,900 | 29.9 | - | 20,800 | 70.1 | - |
| 2010 | 30,800 | 3.7 | 9,400 | 30.4 | 5.5 | 21,400 | 69.6 | 2.9 |
| 2011 | 31,800 | 6.8 | 9,800 | 30.8 | 10.1 | 22,000 | 69.2 | 5.4 |
| 2012 | 32,700 | 10.0 | 10,300 | 31.4 | 15.6 | 22,400 | 68.6 | 7.7 |
| 2013 | 33,300 | 11.9 | 10,600 | 31.8 | 18.9 | 22,700 | 68.2 | 9.0 |
| 2014 | 34,400 | 15.8 | 11,100 | 32.1 | 24.4 | 23,400 | 67.9 | 12.2 |
| 2015 | 35,500 | 19.3 | 11,600 | 32.7 | 30.4 | 23,900 | 67.3 | 14.5 |
| 2016 | 36,500 | 22.6 | 12,100 | 33.2 | 36.3 | 24,300 | 66.8 | 16.8 |
| 2017 | 37,200 | 25.0 | 12,500 | 33.8 | 41.1 | 24,600 | 66.2 | 18.1 |
| 2018 | 37,700 | 26.9 | 13,000 | 34.4 | 45.7 | 24,800 | 65.6 | 18.8 |
| 2019 | 38,700 | 30.3 | 13,500 | 34.9 | 51.8 | 25,200 | 65.1 | 21.1 |

[Download Table](#) (XLSX Format – 490 KB)

In mid-2019, males accounted for 34.9 per cent of those aged 85 and over and females for 65.1 per cent, whereas 10 years previously, in mid-2009, the figures were 29.9 per cent and 70.1 per cent respectively. This compositional change, which is illustrated in Figure 4, is indicative of higher improvement in survival rates among males than females at older ages in recent years.

Figure 4: Proportion of population aged 85 and over by sex (mid-2009 to mid-2019) (non-zero axis)



[Download Chart](#) (XLSX Format – 143 KB)

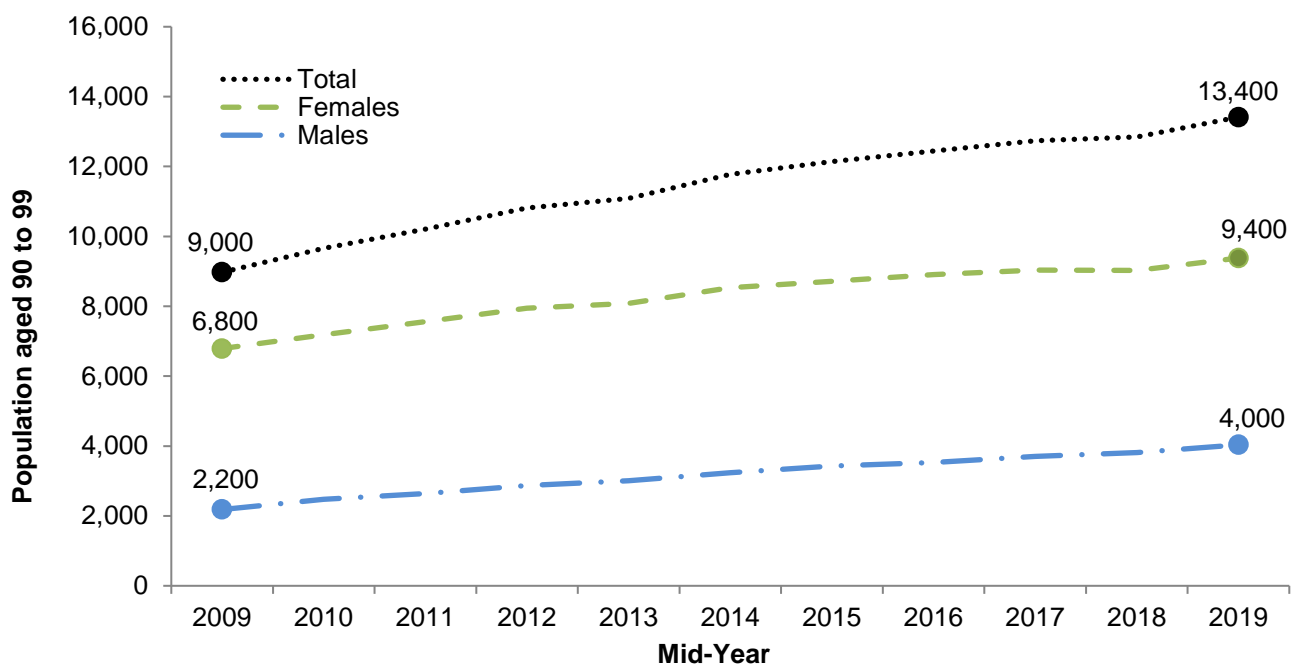
5. Population aged 90-99

In the period mid-2009 to mid-2019, the Northern Ireland population aged 90 to 99 increased by 49.5 per cent

It is estimated that there were 13,400 people aged between 90 and 99 in Northern Ireland at 30 June 2019, this represents an increase of 571 people (4.4 per cent) since mid-2018.

Figure 5 shows there has consistently been more females aged 90 to 99 than males since mid-2009. In mid-2019, 69.9 per cent of those aged 90 to 99 were females (9,400) and 30.1 per cent were males (4,000). Ten years previously in mid-2009, females accounted for 75.7 per cent of those aged 90 to 99 and males accounted for 24.3 per cent.

Figure 5: Population aged 90 to 99 by sex (mid-2009 to mid-2019)



[Download Chart](#) (XLSX Format – 143 KB)

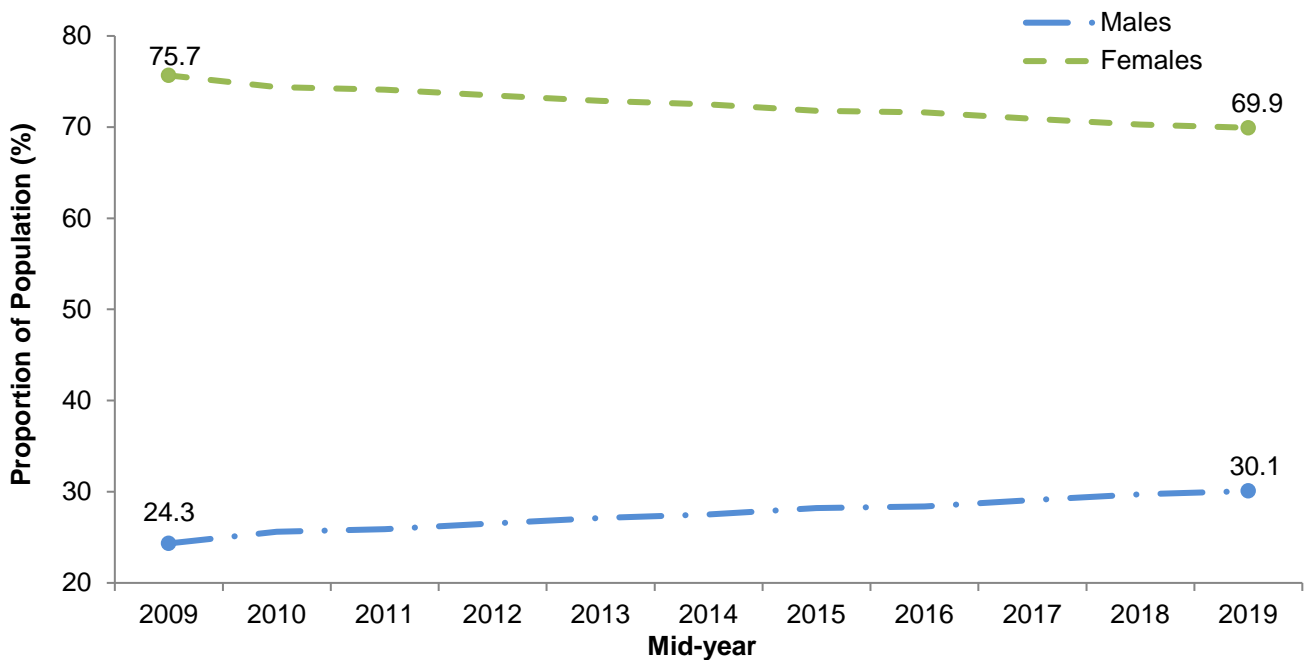
However, looking at percentage growth shown in Table 2, the increase in the number of males aged 90 to 99 (84.8 per cent) was noticeably higher than that of females (38.1 per cent) over the decade in question. This compositional change, which is illustrated in Figure 6, is indicative of higher improvement in survival rates among males than females in the population aged 90 to 99 in recent years.

Table 2: Estimates of the population aged 90-99 by sex (mid-2009 to mid-2019)

| Mid-Year | All Persons aged 90-99 | % Change since 2009 | Males aged 90-99 | Proportion of all persons aged 90-99 | % Change since 2009 | Females aged 90-99 | Proportion of all persons aged 90-99 | % Change since 2009 |
|----------|------------------------|---------------------|------------------|--------------------------------------|---------------------|--------------------|--------------------------------------|---------------------|
| 2009 | 9,000 | 0.5 | 2,200 | 24.3 | - | 6,800 | 75.7 | - |
| 2010 | 9,700 | 0.5 | 2,500 | 25.6 | 13.3 | 7,200 | 74.4 | 5.8 |
| 2011 | 10,200 | 0.6 | 2,600 | 25.9 | 21.1 | 7,600 | 74.1 | 11.4 |
| 2012 | 10,800 | 0.6 | 2,900 | 26.5 | 31.4 | 7,900 | 73.5 | 17.0 |
| 2013 | 11,100 | 0.6 | 3,000 | 27.1 | 37.7 | 8,100 | 72.9 | 19.0 |
| 2014 | 11,800 | 0.6 | 3,200 | 27.5 | 48.4 | 8,500 | 72.5 | 25.7 |
| 2015 | 12,100 | 0.7 | 3,400 | 28.2 | 56.9 | 8,700 | 71.8 | 28.4 |
| 2016 | 12,400 | 0.7 | 3,500 | 28.4 | 61.7 | 8,900 | 71.6 | 31.2 |
| 2017 | 12,700 | 0.7 | 3,700 | 29.1 | 69.7 | 9,000 | 70.9 | 33.0 |
| 2018 | 12,800 | 0.7 | 3,800 | 29.7 | 74.9 | 9,000 | 70.3 | 32.9 |
| 2019 | 13,400 | 0.7 | 4,000 | 30.1 | 84.8 | 9,400 | 69.9 | 38.1 |

[Download Table](#) (XLSX Format – 490 KB)

Figure 6: Proportion of population aged 90-99 by sex (mid-2009 to mid-2019) (non-zero axis)

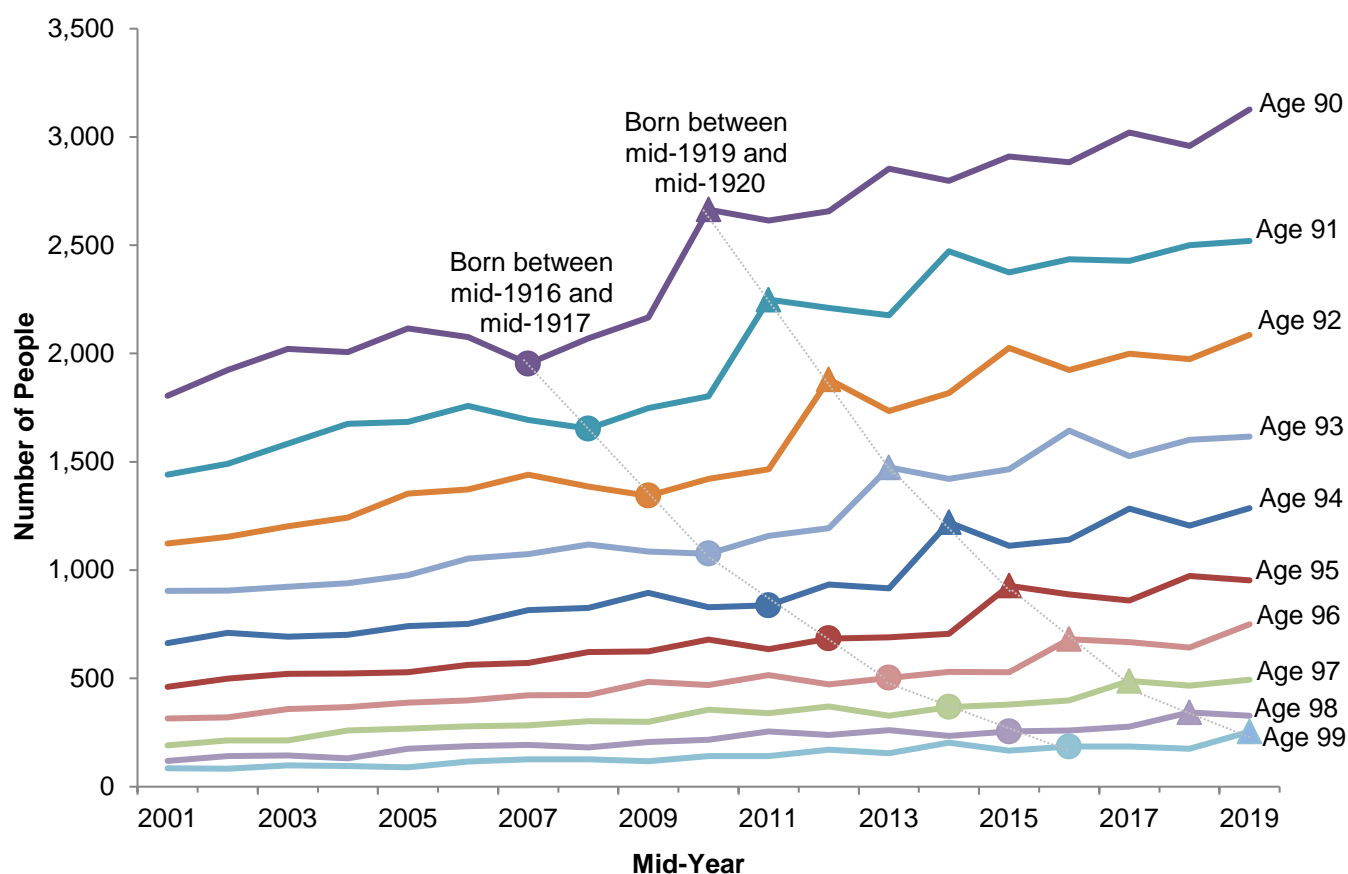


[Download Chart](#) (XLSX Format - 143 KB)

Previous reports demonstrated the impact which the First World War had on births occurring at that time, and how that has had knock-on effects on the number of persons aged 90 and over in recent years². Figure 7 shows the population aged 90 to 99 from mid-2001 to mid-2019, and highlights those born in the years ending mid-1917 and mid-1920.

The peak in the number of births in 1920 is still visible in the population estimates for those aged 90 in mid-2010, those aged 91 in mid-2011, and so on right through to those aged 99 in mid-2019. The low number of births in 1917 can still be observed in the dips in population estimates for those aged 90 in mid-2007 through to those aged 92 in mid-2009, albeit to a lesser extent. Beyond this the impact of low births in 1917 on the population estimates becomes less evident.

Figure 7: Population aged 90-99, Northern Ireland (mid-2001 to mid-2019)



[Download Chart](#) (XLSX Format – 147 KB)

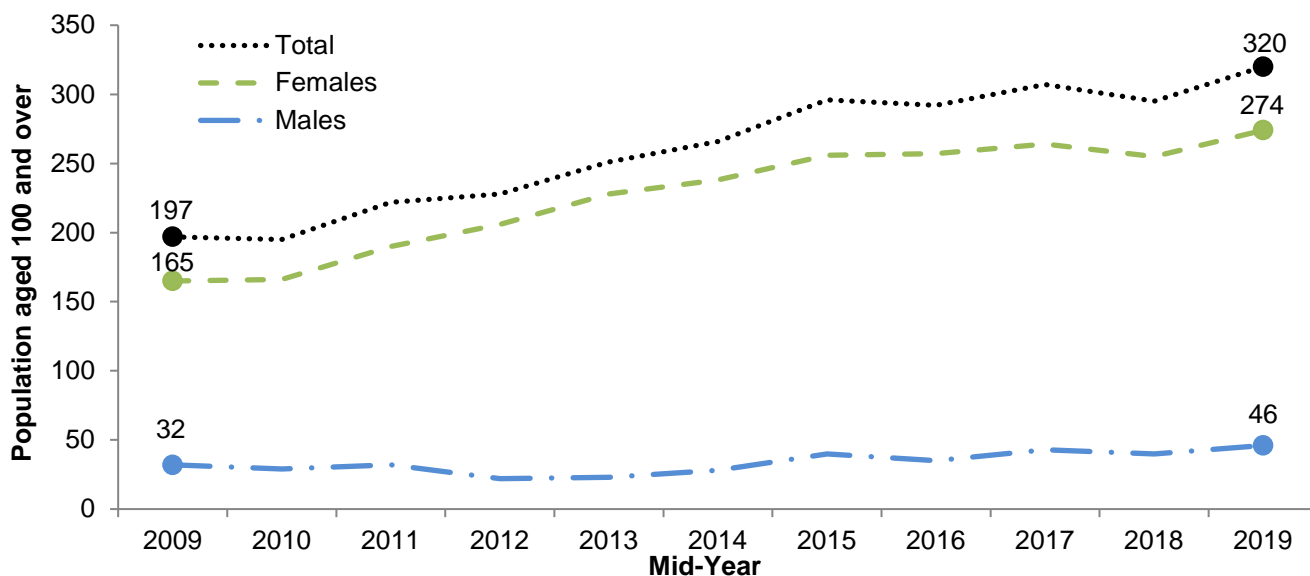
² Historical births data are available from the [Vital Statistics](#) section of the NISRA website.

6. Number of centenarians (aged 100 and over)

The vast majority of centenarians are female (85.6 per cent) in mid-2019

It is estimated that there were 320 centenarians living in Northern Ireland on 30 June 2019. Figure 8 shows how the size and gender composition of the relatively small centenarian group has changed over the ten year period mid-2009 to mid-2019. The centenarian group has increased in size from 197 centenarians in mid-2009 to 320 centenarians in mid-2019, with the number of females consistently, and notably, exceeding the number of males.

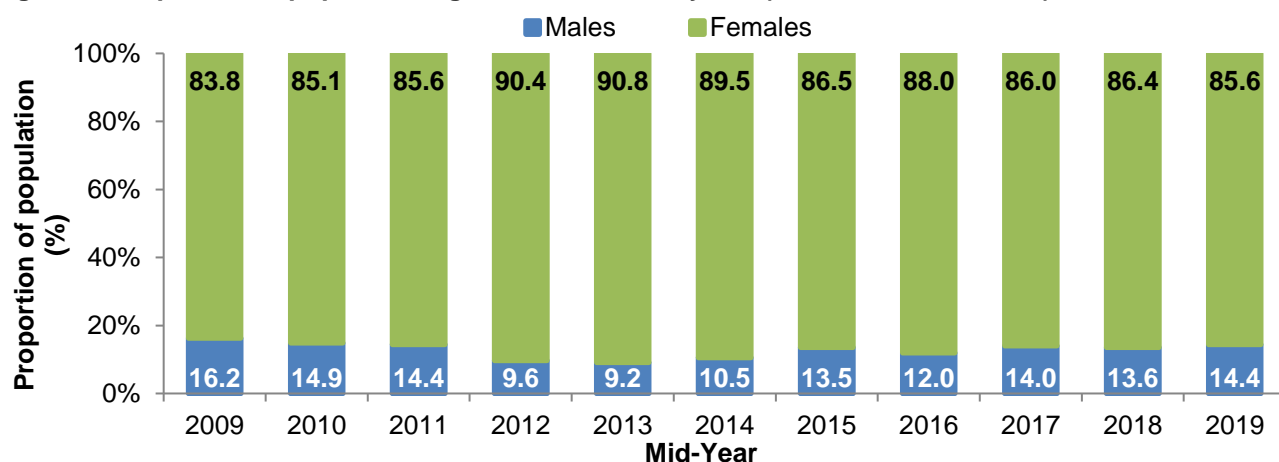
Figure 8: Population aged 100 and over by sex (mid-2009 to mid-2019)



[Download Chart](#) (XLSX Format – 142 KB)

As a result of the relatively small number of people in the centenarian age group, small changes in the number of males and females can result in large changes in the proportional representation of males and females (see Figure 9).

Figure 9: Proportion of population aged 100 and over by sex (mid-2009 to mid-2019)



[Download Chart](#) (XLSX Format – 143 KB)

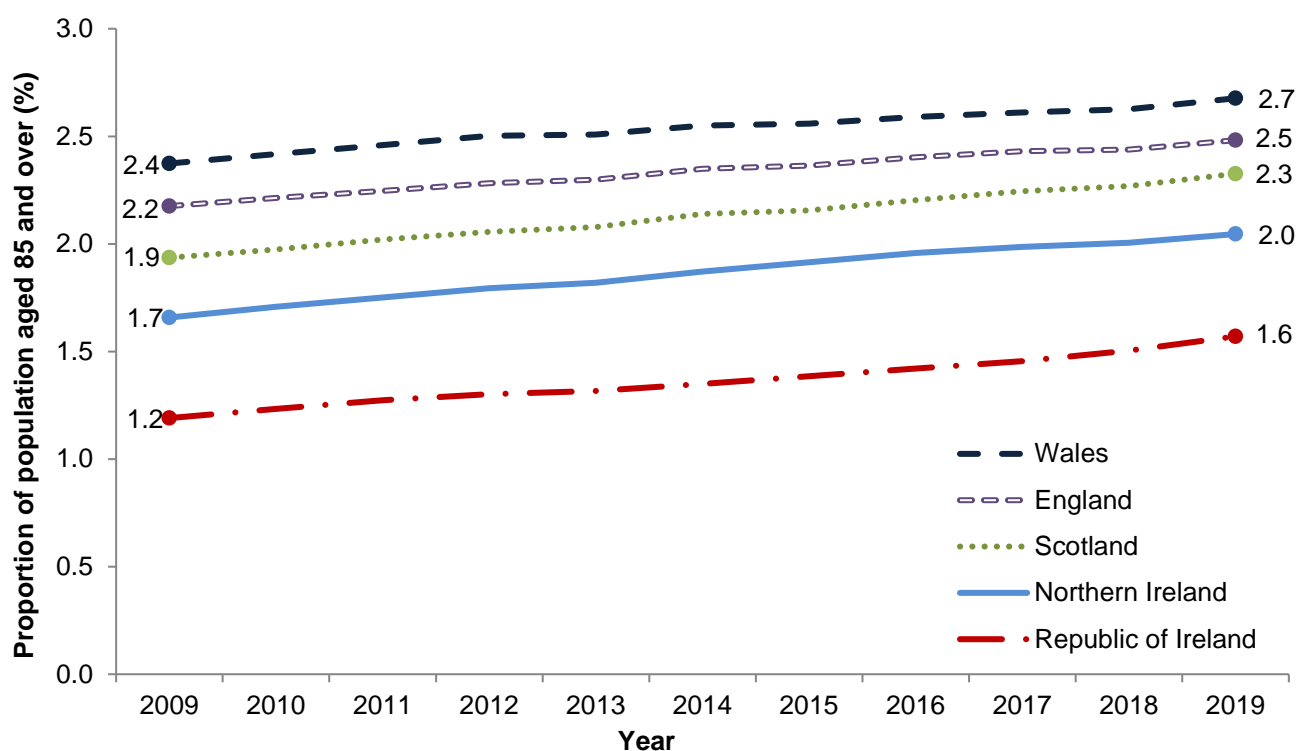
7. Comparison of Population aged 85 and over across the UK and Ireland

Of the UK countries, Northern Ireland had the lowest proportion of its population aged 85 and over (2.0 per cent) in mid-2019

Population estimates by age are available for each UK country and the Republic of Ireland. Of the UK countries Figure 10 shows that over the last decade Northern Ireland had the lowest proportion of its population aged 85 and over (1.7 per cent in mid-2009 to 2.0 per cent in mid-2019), whereas Wales had the highest (2.4 per cent, mid-2009 to 2.7 per cent in mid-2019).

However, the Republic of Ireland had an even lower rate: its proportion of the population aged 85 and over in 2019 (1.6 per cent) was similar to that for Northern Ireland a decade ago (1.7 per cent).

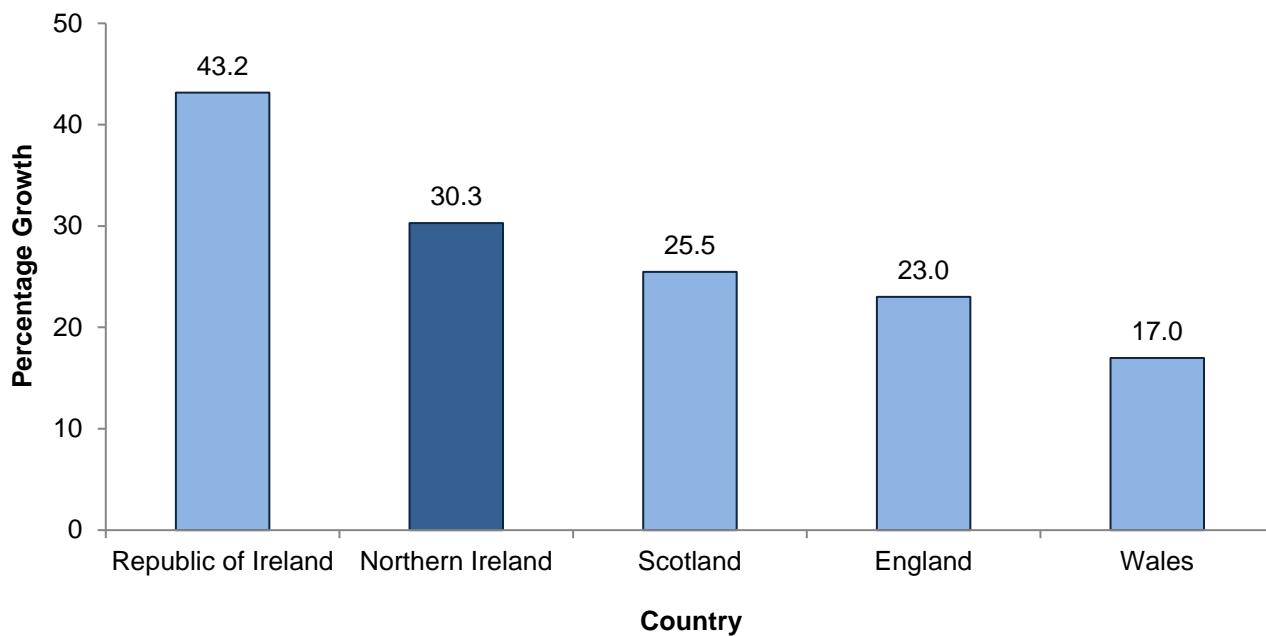
Figure 10: Proportion of population aged 85 and over by country (2009 to 2019)



[Download Chart](#) (XLSX Format – 148 KB)

In contrast, Figure 11 shows that the percentage growth of this age group over the decade mid-2009 to mid-2019 has been noticeably higher in Northern Ireland (30.3 per cent) than in the other countries of the UK, but still lower than in the Republic of Ireland (43.2 per cent). This is the result of a combination of (i) differences in age distribution within this age group, (ii) age specific mortality rates, and (iii) cohort effects of those aging into this age group.

Figure 11: Growth of population aged 85 and over by country (2009 to 2019)



[Download Chart](#) (XLSX Format – 144 KB)

8. Methodology

8.1. Mid-Year Population Estimates

The Northern Ireland Statistics and Research Agency (NISRA) produces annual [mid-year population estimates](#) at Northern Ireland level by single year of age from 0 to 89 using the 'cohort component' method. Using the most recent census as the baseline, each year the population is aged on by one year, births are added, deaths subtracted and estimates of migration are used for those moving in or out of Northern Ireland. For the official 30 June population estimates, ages 90 and over are aggregated into one age-group.

8.2. Estimates of the population aged 90 and over

To produce single year of age estimates of the population aged 90 and over, NISRA has adopted the Kannisto-Thatcher Survivor Ratio Method³, an internationally recognised method used to provide a more detailed breakdown of the older population by age.

Using death registration data, an estimate is produced of the number of people at a given age alive in a particular year. For the most recent year, the Kannisto-Thatcher Survivor Ratio Method uses an average of the last five years death data to produce an estimate of the number of survivors.

For earlier years, if someone died aged 100 in 2019, this means that they were alive in 2018 aged 99, and aged 98 in 2017 and so on. This is used to produce age distribution profiles. The number of people aged 99 alive in 2018 is recalibrated from the estimated number of people alive aged 100 in 2019, plus the number of registered deaths of people aged 100 in 2019. One outcome of this method is that each year the estimates for earlier years become more accurate as more death data become available to inform age profiles. It also assumes that migration for those aged 85 and over is negligible. Estimates are then controlled to agree with the NISRA mid-year population estimates for those aged 90 and over.

³ The Survivor Ratio Method for Estimating Numbers at High Ages, Thatcher R, Kannisto V, Andreev K, 2002. [Link to paper - http://www.demographic-research.org/Volumes/Vol6/1/](http://www.demographic-research.org/Volumes/Vol6/1/). The Demography of Centenarians in England and Wales, *Population Trends* 96 pp5-12, Thatcher R, 1999.

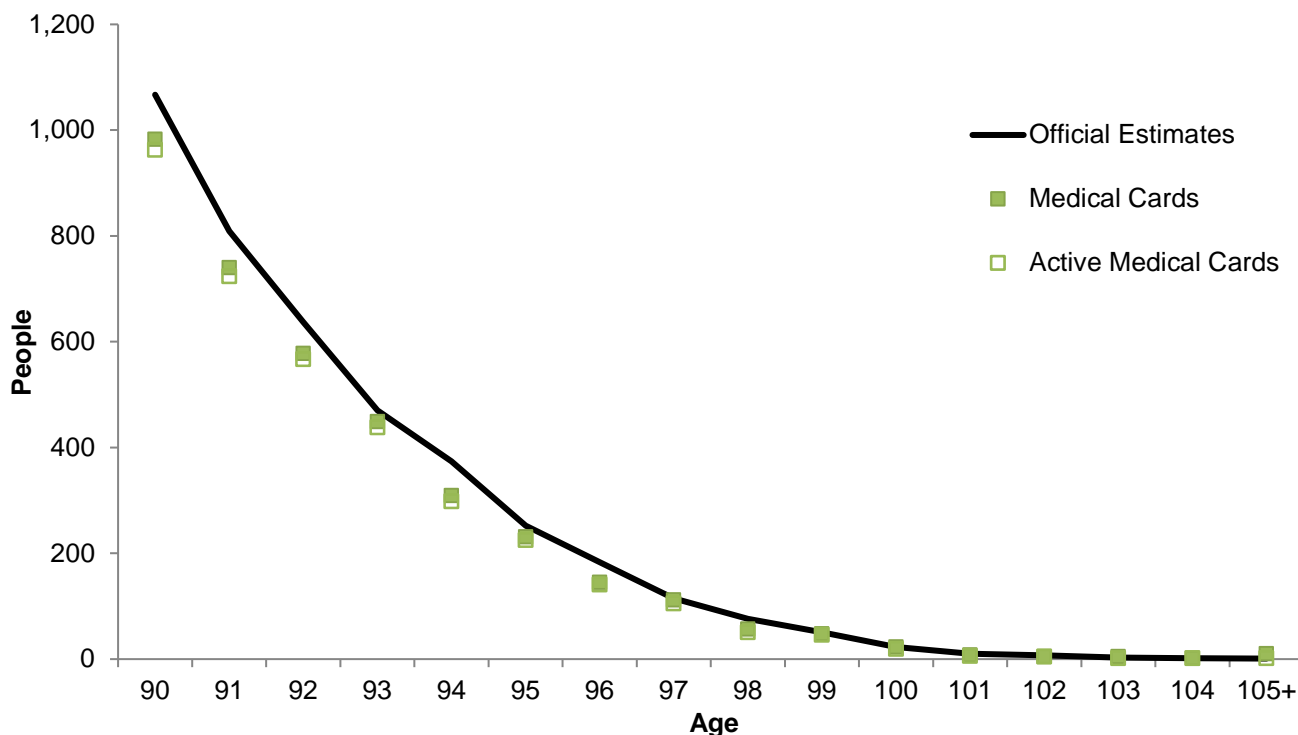
9. Quality Assurance

9.1. Quality Assurance of the Population aged 90 and over – mid-2019

Estimates of the population aged 90 and over in Northern Ireland are produced by the Northern Ireland Statistics and Research Agency (NISRA) using the Kannisto-Thatcher Survivor Ratio Method, which uses an average of the last five years death data to produce an estimate of the number of survivors and applies this to the mid-year estimates.

Figures 12a and 12b show these estimates compared with administrative data sources which collect data for males and females aged 90 and over, namely Medical Card Registration Data, and Active Medical Card data⁴. These graphs show a good degree of comparability between the 90 and over estimates and the Medical Card data.

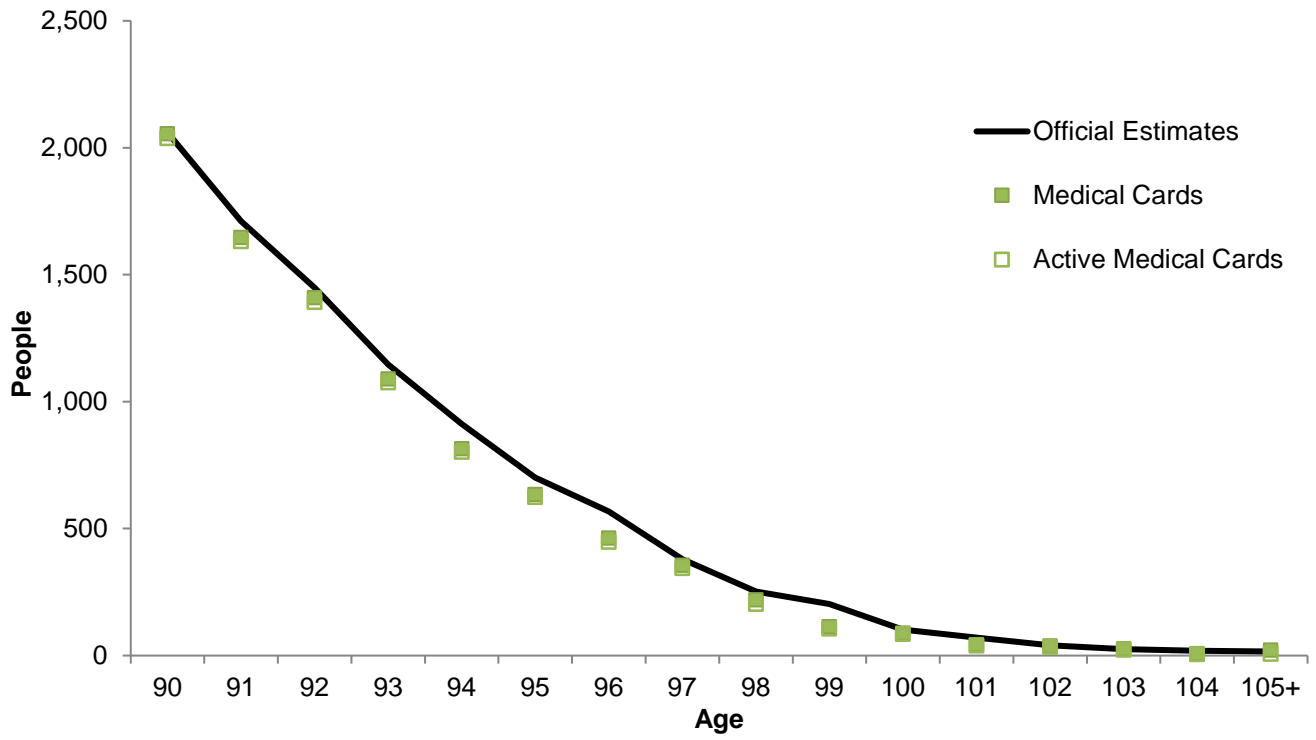
Figure 12a: Mid-2019 population aged 90 and over in comparison with Medical Card administrative data by age (males)



[Download Chart](#) (XLSX Format - 161 KB)

⁴ Active Medical Card data is Medical Card Registration data that has been used in recent years.

Figure 12b: Mid-2019 population aged 90 and over in comparison with Medical Card administrative data by age (females)

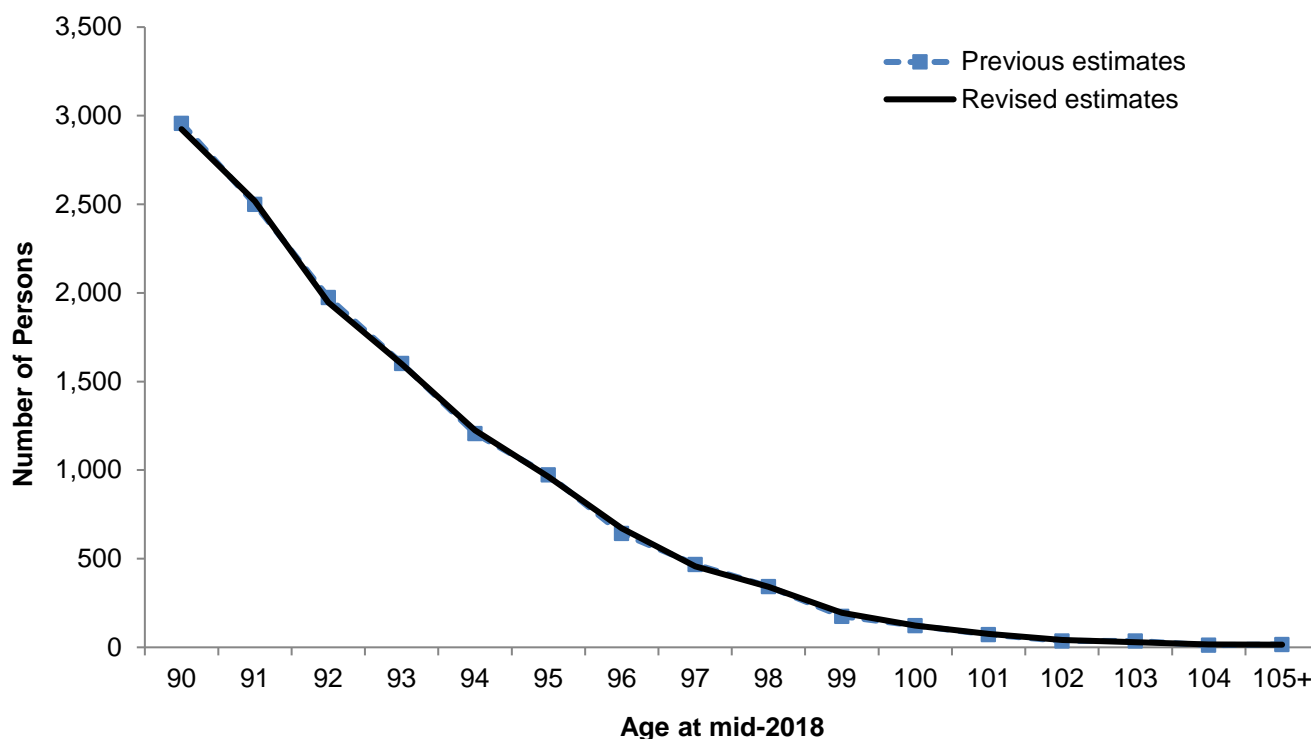


[Download Chart](#) (XLSX Format - 161 KB)

9.2. Quality Assurance of the Population aged 90 and over – revised⁵ mid-2001 to mid-2018

The Kannisto-Thatcher Survivor Ratio Method does not revise the total estimates of the age-group 90 and over which are already-published. However, there could be changes in the age distribution within this age group over the years. As such, it is classified as a scheduled revision⁶. Figure 13 plots the previous estimates for mid-2018 alongside the revised mid-2018 estimates.

Figure 13: Previous and revised estimates of the population aged 90 and over by age (mid- 2018)



[Download Chart](#) (XLSX Format – 143 KB)

Most differences are relatively small: the revised population estimate for those aged 90 to 94 in mid-2018 was 0.3 per cent higher than the previously published estimate (i.e. the estimated number of people aged 90 to 94 in mid-2018 increased by 30 people in the revised estimate). The revised population estimate for those aged 95 to 99 in mid-2018 was 1.0 per cent lower than the previously published estimate (i.e. the estimated number of people aged 95 to 99 in mid-2018 decreased by 25 people in the revised estimate).

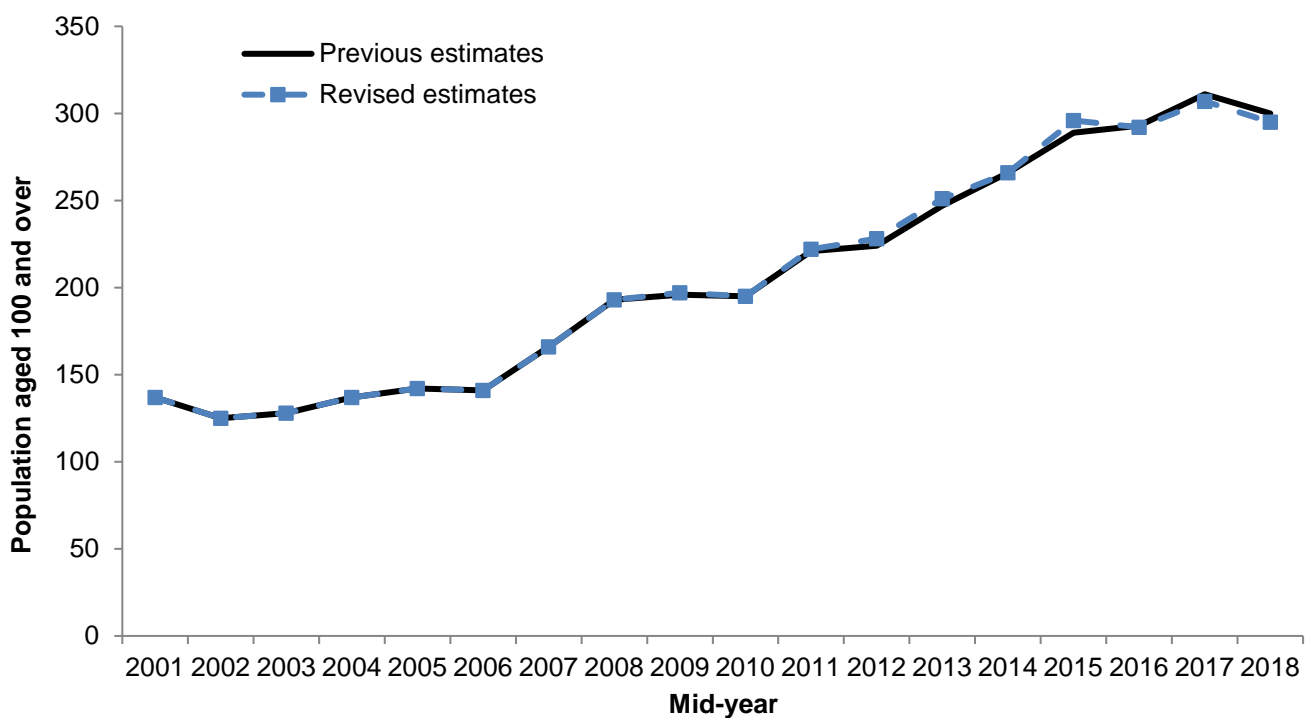
⁵ “Revised” estimates refer to the estimates of those aged 90 and over at single year of age from mid-2001 to mid-2018 that have been updated with the release of the mid-2019 population estimates at the same ages.

⁶ [Population statistics revision policy - https://www.nisra.gov.uk/publications/population-statistics-revisions-policy](https://www.nisra.gov.uk/publications/population-statistics-revisions-policy)

The estimated number of centenarians in mid-2018 has been revised downwards by 1.7 per cent. This revision in the estimated number of centenarians for mid-2018 relates to a decrease of 5 people aged 100 and over, from 300 in the previous estimates to 295 in the revised estimates.

Figure 14 shows the previous and current estimates of the number of centenarians over the period mid-2001 to mid-2018. It is evident that the difference between the two series becomes smaller when going further back in time, with negligible differences or identical figures prior to 2012.

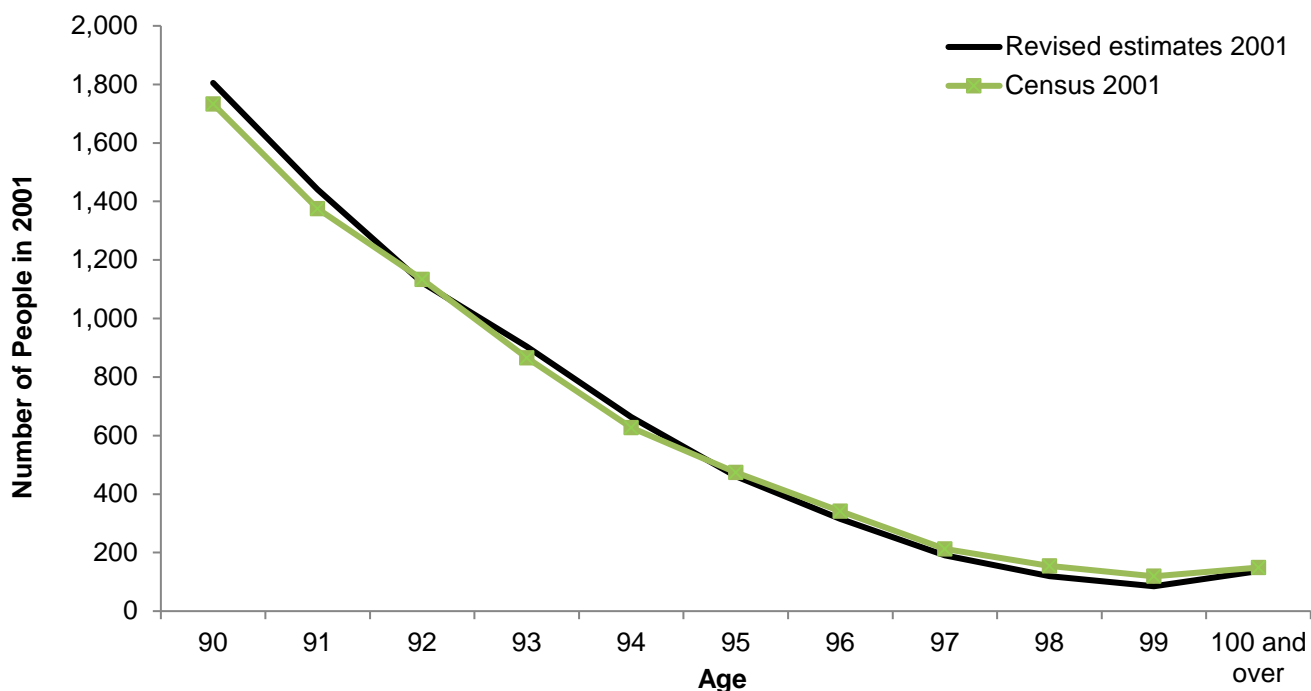
Figure 14: Previous and revised estimates of centenarians (mid-2001 to mid-2018)



[Download Chart](#) (XLSX Format – 143 KB)

The revised estimates are also quality assured against 2001 and 2011 Census data, and as can be seen in Figures 15a and 15b, the estimates are again broadly in line with both the 2001 and 2011 Census figures.

Figure 15a: Revised estimates of the population aged 90 and over by age (mid-2001 compared to the 2001 Census)



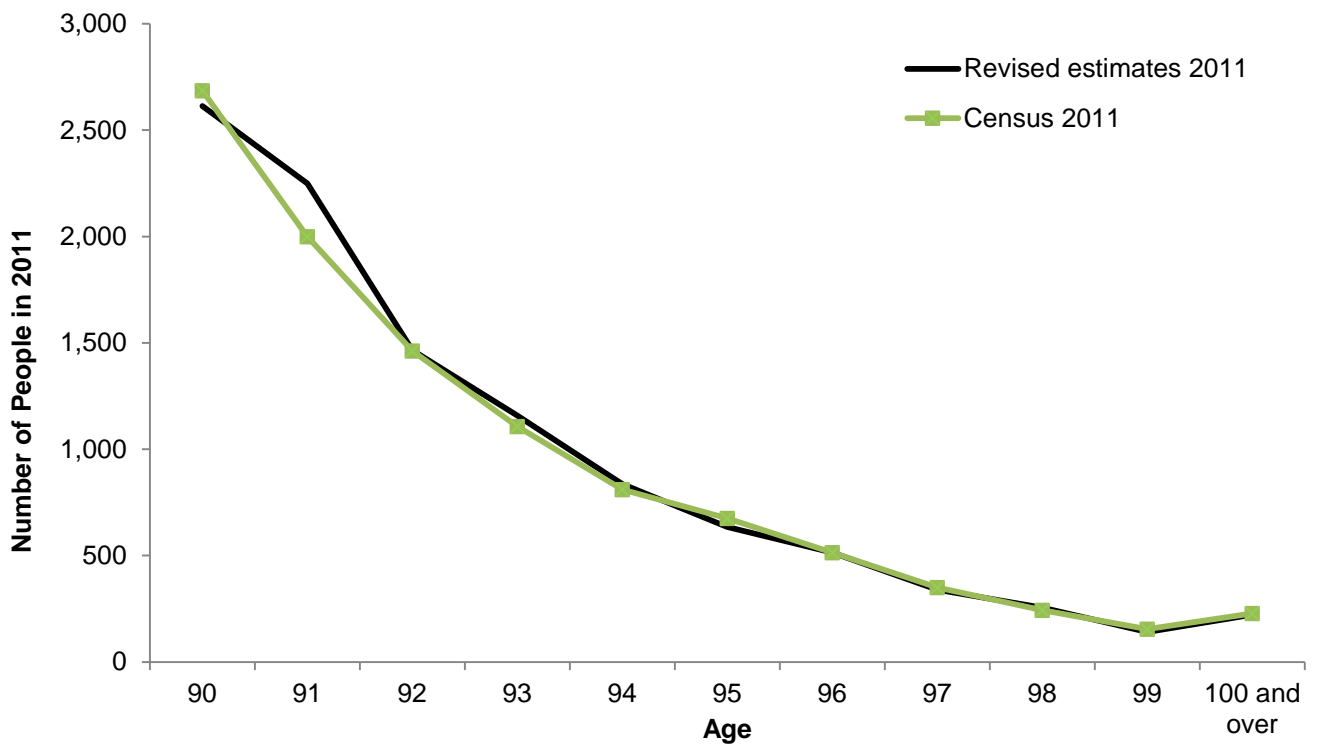
[Download Chart](#) (XLSX Format – 147 KB)

In 2001, the greatest percentage difference by five year age-bands is for male centenarians, where the revised estimates for males aged 100 and over in mid-2001 are 38.9 per cent smaller than the 2001 Census figures for the same age-sex band. This is understandable as the number of males aged 100 and over is very small (females make up the majority of people aged 100 and over).

This means that small changes in the numbers can equate to sizeable changes in percentage terms. In this instance the 38.9 per cent change relates to a difference of seven males aged 100 and over between the 2001 Census (18 males) and the revised estimates (11 males). Furthermore, as the 2001 Census refers to the population at 29 April 2001 and the mid-year estimates refer to the population at 30 June 2001, this may account for some of the difference in the number of people.

Males aged 100 and over again had the greatest percentage change in 2011, with the revised estimates of male centenarians in mid-2011 being 20.0 per cent smaller than the 2011 census figure of the same age-sex group (32 males and 40 males respectively). As with the 2001 Census figures, the 2011 figures do not refer to the population at mid-year, but instead to the population at 27 March 2011. This may account for some of the difference between the revised estimates for mid-2011 and the 2011 census figures.

Figure 15b: Revised estimates of the population aged 90 and over by age (mid-2011 compared to the 2011 Census)



[Download Chart](#) (XLSX Format – 147 KB)

10. Data Quality

10.1. Mid-Year Population Estimates

Mid-year population estimates are created using a variety of administrative data sources. A brief outline of these sources, and how quality is assured for each one, is detailed in the latest [mid-year population estimates statistical bulletin](#). A more comprehensive outline of these sources, including details of the quality management actions undertaken to ensure that the data is suitable for population estimates, is detailed within the [Administrative Data Quality Document](#).

10.2. Death Data Used in Kannisto-Thatcher Survivor Ratio Method

Information supplied at death registration is generally believed to be correct since wilfully supplying false information may render the informant liable to prosecution for perjury. Death figures by sex and single year of age are obtained from registrations with the General Register Office (GRO) and all that occurred over the 12 month period from 1 July to 30 June are included.

During registrations, information provided is first checked by the informant before being finalised on the GRO's electronic Northern Ireland Registration Office System (NIROS). Appropriate validation checks are embedded within the NIROS to help the Registrar with this process. Statistics are extracted directly from NIROS and are subjected to further checks by the Vital Statistics team in NISRA's Demography & Methodology Branch, and again by the Population and Migration team when the relevant data are supplied to them.

Quality Assessment Reports are available online and contain further details on the quality of [death](#) statistics.

Further checks are made on deaths registrations of people aged 100 and over. Such registrations are flagged by the Vital Statistics and sent back to the GRO in order to manually check their validity.

10.3. Quality Analysis by the Office for National Statistics

Northern Ireland estimates are sent to the Office for National Statistics (ONS) for further checks on the calculations and formula used at all stages of the process, in order to ensure the quality is of compatible standards with their own data (see the [ONS Quality and Methodology Information Paper](#) for more information). When these are completed, the population aged 90 to 104 at single year of age and 105 and over aggregated are fed into the UK Estimates of the Very Old, produced by ONS.

11. Links to related statistics

Statistics for the population aged 85 and over are available on the [NISRA Website](#). An [infographic](#) highlighting the important figures and trends in the data has also been released.

Estimates of the population aged 85 and over for mid-2020, as well as a revised series for mid-2001 to mid-2019, are expected to be published in September 2021.

[Estimates of the Very Old for the United Kingdom](#) and its constituent countries are available from the Office for National Statistics (ONS), and National Records Scotland (NRS) release [Population Estimates for Scottish Centenarians](#) also on 24 September 2020. A [UK comparison paper](#) analysing the comparability between the four UK countries is also available.

[Mid-year population estimates for Northern Ireland](#) are available on the NISRA website. The estimates refer to the size of the usually resident population at 30 June and are therefore often referred to as the mid-year estimates. The most recent estimates, published in June 2020, relate to the population at mid-2019.

[Population projections for Northern Ireland](#) and [Population Projections for Areas within Northern Ireland](#) are available from the NISRA website. The most recent projections are 2018-based and were published in October 2019 and April 2020, respectively.

[Population estimates for small areas in Northern Ireland](#) are available on the NISRA website and are released in November following the mid-year population estimates in June. Mid-2019 based population estimates will be released in November 2020.

How to find data

What are you looking for?

The tables and figures used throughout this publication in Excel format.

Population estimates in Open Data format (3* CSV).

Interactive data to engage with population estimates and compare geographies within Northern Ireland

Where is it?

[Tables and figures](#)

[Open Data NI](#)

Interactive data visualisations

1. [Components of Change](#)
2. [Population Totals](#)
3. [Population by age bands](#)
4. [Population Pyramid](#)

12. National Statistics

National Statistics status means that our statistics meet the highest standards of trustworthiness, quality and public value, and it is our responsibility to maintain compliance with these standards.

Population Estimates for Northern Ireland last underwent a full assessment by the Statistics Authority against the [Code of Practice](#) in July 2015. The assessment report can be found [here](#). Following the Statistics Authority assessment the continued designation of these statistics as National Statistics was confirmed in [August 2016](#).

National Statistics status was confirmed subject to NISRA implementing six specific requirements. An action plan outlining how and when NISRA addressed each of these requirements can be found [here](#).

An action plan checklist with supporting documentation can also be found on the [NISRA website](#).

Since the assessment by the UK Statistics Authority, we have continued to comply with the code of Practice for Statistics, and have made the following improvements:

- Improved clarity and insight by redesigning the statistical bulletin to include a key point's summary for users. In addition, key point headlines have been included throughout the commentary so users are alerted to key messages.
- The associated data tables for the 85 and over population estimates are disseminated in a more innovative way by including a flat file and tabular format which users can interact with.
- We have improved the accessibility of the 85 and over population estimates by publishing data in 3* open data format on Open Data NI. We have also included a new 'Links to related statistics' section within the bulletin so users can explore the whole population statistics package, including mid-year estimates, population projections, small area population estimates and a range of other material.

13. Limitations

Whilst this report concentrates on the significant increase in the population aged 85 and over, it is still important to recognise that the number of people aged 85 and over represents a small proportion of the total population (i.e. 2.0 per cent in mid-2019).

When considering change over time, it is important to note that the number of centenarians is relatively small when compared with other population age groups and, as such, small changes in the numbers can equate to sizeable changes in percentage terms.

Estimates of the Population Aged 85 and Over are not produced for areas within Northern Ireland due to the fact that:

- the Kannisto-Thatcher Survivor Ratio Method does not take into account migration;
- the small numbers of people aged 85 and over would be unreliable if split into geographies lower than Northern Ireland as a whole.

Estimates of the population aged 90 and over at single year of age are constrained to the aggregated number of males and females aged 90 and over produced in the mid-year population estimates, thus making them consistent. However, due to the different approaches used (i.e. cohort component method for mid-year estimates and Kannisto-Thatcher Survival Ratio method for estimates of the population aged 85 and over), the transition between the number of people aged 89 to 90 may not be as smooth as at other ages.

As the Kannisto-Thatcher Survival Ratio Method uses the most recent deaths data, this can include some late registrations of deaths occurring in previous years (for example, deaths referred to a coroner can mean the date of occurrence of a death is not available until several months after the registration of that death). This means that, in order to allow these statistics to be available on an annual basis, previous years' estimates are revised with each publication. While these means there may be minor changes in previous years' figures, it also means the numbers are continuously improving and becoming more accurate.

14. Enquires and suggestions

- The revisions policy for population statistics is available [here](#).
- We welcome feedback from users on the content, format and relevance of this release. Users can send feedback directly to census@nisra.gov.uk.
- Follow NISRA on [Twitter](#) and [Facebook](#).
- All media inquiries should be directed to the DoF Communications Office:
Telephone: 028 9081 6724
Email: dof.pressoffice@finance-ni.gov.uk
- Further statistical information can be obtained from NISRA Customer Services:
Telephone: 028 9025 5156
E-mail: census@nisra.gov.uk
Responsible Statistician: Jonathan Harvey