

ESTIMATES OF THE POPULATION AGED 85 AND OVER, NORTHERN IRELAND 2002-2010 (REVISED 2002-2009) – STATISTICAL REPORT



Northern Ireland
Statistics &
Research
Agency

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Key Points from this release are:

- In June 2010, 29,700 people or around 1.7 per cent of the population were aged 85 years and over;
- the population aged 85 and over has increased by 6,100 people (+26 per cent) in the eight year period between June 2002 and June 2010. This is four times faster than the overall population growth of 6 per cent over this period;
- within the population aged 85 and over, women significantly outnumber men at 70 per cent of this population group;
- it is estimated that in June 2010 there were just over 200 centenarians (those aged 100 and over) living in Northern Ireland, with the number of centenarians living in Northern Ireland having increased by around 70 per cent since June 2002; and
- by 2021, the number of persons aged 85 and over in Northern Ireland is projected to increase by 61 per cent to 47,900 persons. Going further into the future, by 2033 the population aged 85 and over is projected to account for 4 per cent of the total population (or 1 person in every 25).

More detailed figures and analysis are attached.

1. Introduction

The population of Northern Ireland is becoming increasingly older. Improving survival coupled with falls in the number of births, has resulted in an ageing population. In 2010, 14 per cent of the population were of aged 65 and over, including 1.7 per cent aged 85 and over¹.

The ageing of the population has led to increased demand for more detailed population estimates of older people. Official mid-year or 30 June population estimates are produced annually by NISRA. These annual estimates give aggregate statistics for those aged 90 and over. Historically such people represented a smaller proportion of the overall population, and single year of age estimates for those aged 90 and over could be unreliable. To help bridge this gap, NISRA introduced detailed population estimates of those aged 90 and over in 2009, using an international recognised methodology (see Annex A).

The remainder of this report details new population estimates and detailed population projections of those aged 85 and over. In addition, specific reference is made to the number of people aged 100 and over.

Note, the survivorship rate methodology used in these estimates means that there are minor differences for the period 2002 to 2009 compared to previous years' estimates. This is inherent to the methodology (see Annex A).

2. Mid-year Population Estimates

(i) Population aged 85 and over - 2002-2010

At 30 June 2002 it is estimated that there were 23,600 people aged 85 and over living in Northern Ireland (17,100 females and 6,500 males). This figure had risen to 29,700 people by 30 June 2010 (20,500 females and 9,100 males).

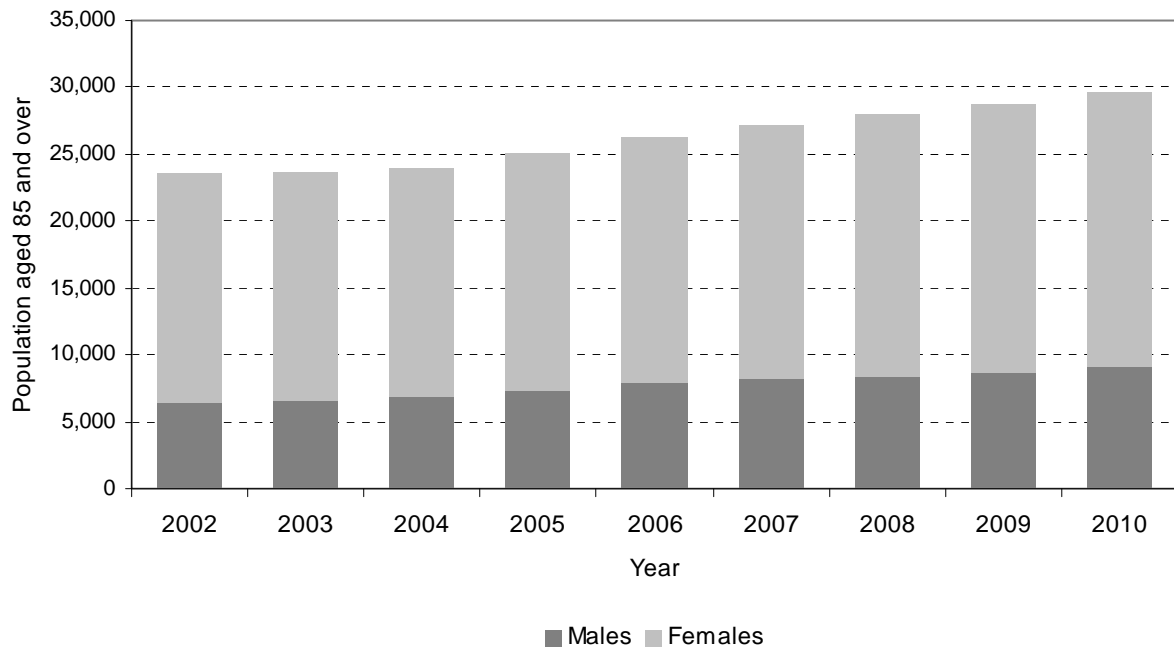
The population increase of 6,100 persons between 2002 and 2010 is the result of an average of 5,000 persons "ageing into" this age group each year and 4,300 deaths aged 85 and over each year. Importantly, the mortality rate for persons aged 85 and over has fallen from 172 deaths per 1,000 population in 2002 to 153 deaths per 1,000 population in 2010 (a fall of 11%). The impact of migration is relatively small, having added less than 200 persons to this age group over the entire period.

¹ Mid-2010 Population Estimates available from <http://www.nisra.gov.uk/demography/default.asp17.htm>

Table 1 Northern Ireland Population Estimates for those aged 85 and over, 2002-2010

Population at 30 June	Estimate of number of person aged 85 and over
2002	23,600
2003	23,600
2004	24,000
2005	25,200
2006	26,300
2007	27,300
2008	28,000
2009	28,700
2010	29,700

Figure 2 Northern Ireland Population Estimates for those aged 85 and over, 2002-2010



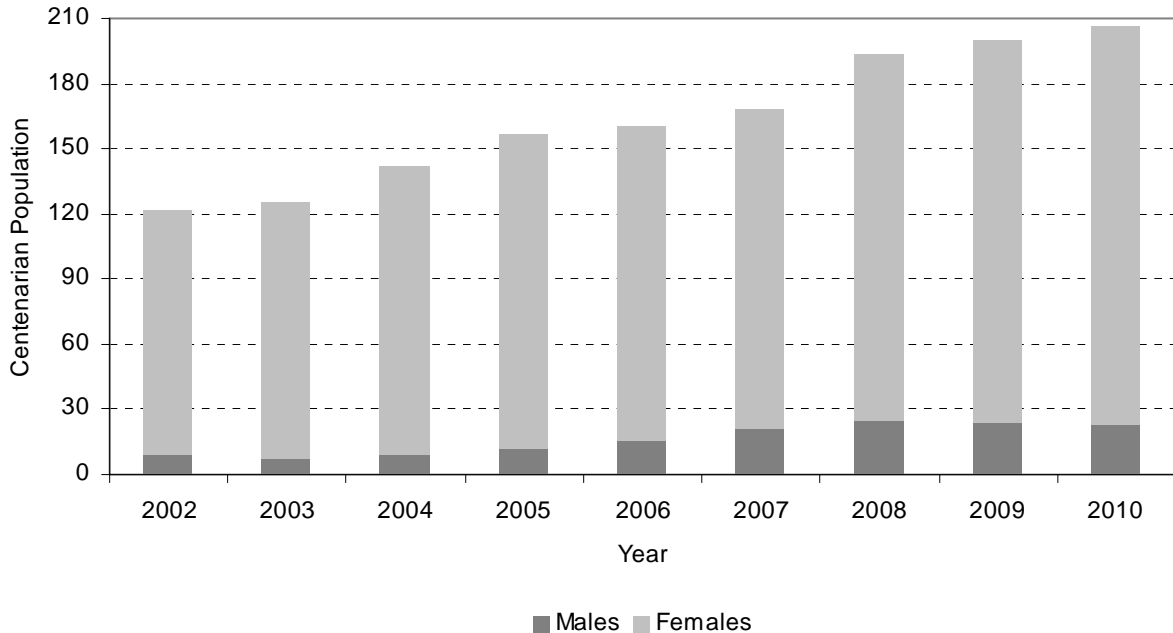
(ii) Persons aged 90-99 – 2002-2010

On 30 June 2010, around 9,300 persons were aged between 90 and 99 in Northern Ireland. This age group contains those babies born during World War I. In 2007 and 2008, there was a decrease in the number of people at the lower end of this age group. This can be traced back to the low number of births during the war years. By 2010, the number of persons aged between 90 and 99 started to increase, which reflects the increase in births in Northern Ireland in 1920.

(iii) Number of centenarians – persons aged 100 and over – 2002-2010

On 30 June 2010, NISRA estimates that there are just over 200 centenarians living in Northern Ireland (206 persons: 183 females and 23 males). Figure 3 shows the increasing number of centenarians since 2002.

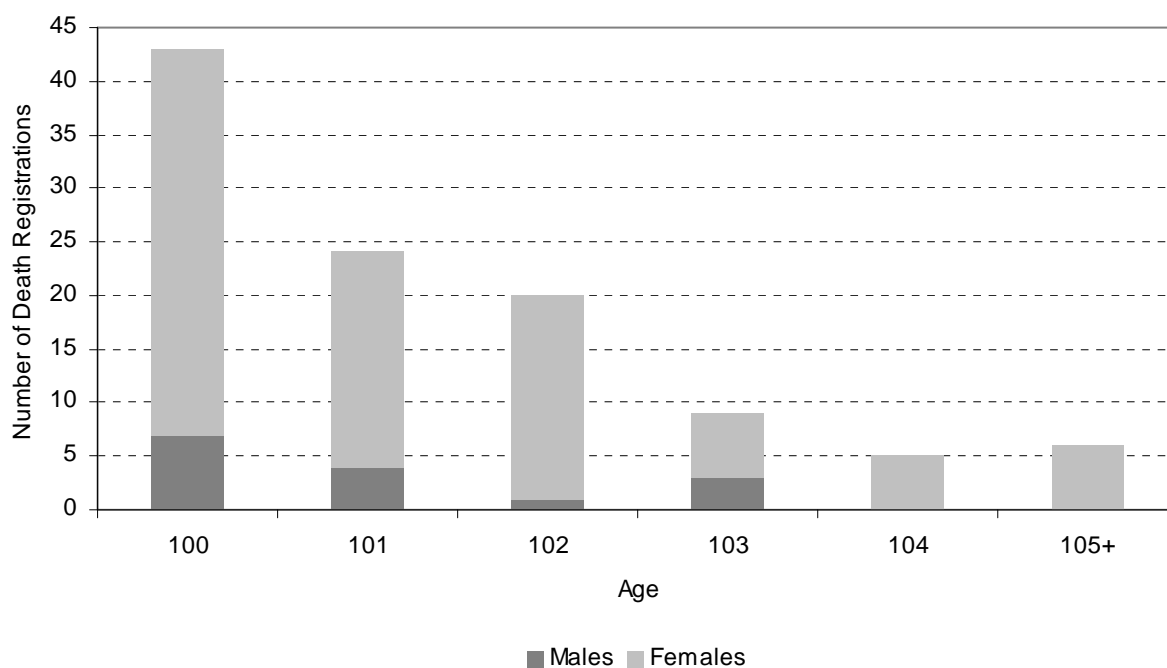
Figure 3 Northern Ireland Population Estimates for those aged 100 and over, 2002-2010



The 2001 Census recorded 149 centenarians living in Northern Ireland. However, the Census can be an unreliable count of the oldest people in the population. It can be difficult for the oldest old to report their own age accurately making it necessary to rely on the knowledge of others to fill in their census form. In contrast, the methodology used for these estimates relies on death registrations of centenarians, each verified by the General Register Office.

Another administrative data source for the oldest old is the health card registration system. For July 2010, it records 212 people registered aged 100 and over. In addition, in 2010, 107 deaths of persons aged 100 and over were registered, compared to 67 deaths of centenarians in 2002. Figure 4 shows the age distribution of the deaths of centenarians registered in Northern Ireland in 2010.

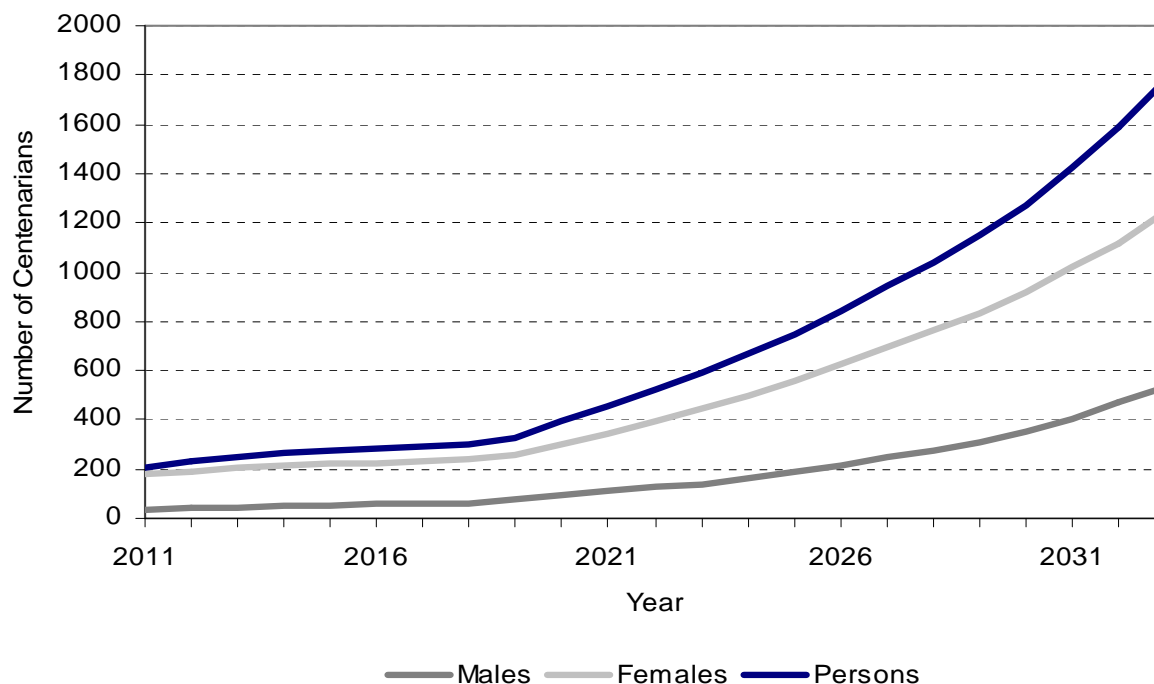
Figure 4 Death Registrations in Northern Ireland of Centenarians, 2010



3. Population Projections

The 2008-based population projection for Northern Ireland shows that population growth for those aged 85 and over continues unabated through the next 25 years. The population aged 85 and over is projected to grow to 82,800, 4% of the total population by 2033. This is directly related to an ongoing surplus of persons “ageing into” this age group over the number of deaths each year. There are projected to be around 1,800 centenarians in Northern Ireland by 2033.

Figure 5 Projected population of Centenarians in Northern Ireland, 2011-2033



More detail on population projections is available on the NISRA website:

<http://www.nisra.gov.uk/demography/default.asp20.htm>

The following table is attached:

Table A: Mid 2002 to mid 2010 population estimates of those aged 85 years and over, by sex and 5 year age bands

NISRA

September 2011

Table A: Mid 2002 to mid 2010 population estimates of those aged 85 years and over, by sex and 5 year age bands

Mid-year Population	Persons 85-89	Persons 90-94	Persons 95-99	Persons 100-104	Persons 105+	Persons 85+	Persons All Ages
2002	16,171	6,041	1,250	116	6	23,584	1,696,641
2003	16,023	6,116	1,296	119	6	23,560	1,702,628
2004	16,041	6,444	1,371	136	6	23,998	1,710,322
2005	16,885	6,683	1,448	148	9	25,173	1,724,408
2006	17,898	6,743	1,509	149	11	26,310	1,741,619
2007	18,922	6,639	1,548	158	11	27,278	1,759,148
2008	19,541	6,651	1,614	183	10	27,999	1,775,003
2009	20,036	6,771	1,673	190	10	28,680	1,788,896
2010	20,166	7,467	1,826	195	11	29,665	1,799,392

Mid-year Population	Males 85-89	Males 90-94	Males 95-99	Males 100-104	Males 105+	Males 85+	Males All Ages
2002	4,822	1,433	214	9	0	6,478	828,856
2003	4,836	1,453	229	7	0	6,525	832,822
2004	4,997	1,605	252	9	0	6,863	836,491
2005	5,431	1,682	269	12	0	7,394	844,260
2006	5,861	1,724	279	16	0	7,880	853,404
2007	6,188	1,696	281	21	0	8,186	862,000
2008	6,349	1,735	311	25	0	8,420	870,866
2009	6,572	1,789	332	24	0	8,717	878,609
2010	6,689	2,036	377	23	0	9,125	884,394

Mid-year Population	Females 85-89	Females 90-94	Females 95-99	Females 100-104	Females 105+	Females 85+	Females All Ages
2002	11,349	4,608	1,036	107	6	17,106	867,785
2003	11,187	4,663	1,067	112	6	17,035	869,806
2004	11,044	4,839	1,119	127	6	17,135	873,831
2005	11,454	5,001	1,179	136	9	17,779	880,148
2006	12,037	5,019	1,230	133	11	18,430	888,215
2007	12,734	4,943	1,267	137	11	19,092	897,148
2008	13,192	4,916	1,303	158	10	19,579	904,137
2009	13,464	4,982	1,341	166	10	19,963	910,287
2010	13,477	5,431	1,449	172	11	20,540	914,998

Source: NISRA

NOTES

1. The Northern Ireland mid-year population estimate relates to the usually resident population of Northern Ireland at 30 June each year. Mid year population estimates can be accessed at: <http://www.nisra.gov.uk/demography/default.asp17.htm>
2. Figures are controlled to mid year population estimates for the 90+ age group.
3. Population estimates of those aged 90 and over are provisional. The method used to estimate the size of the 90 and over population is an internationally recognised standard approach known as the Kannisto-Thatcher method. This method requires previous years' estimates to be revised when a new year of death registration data is added. A detailed description of the Kannisto-Thatcher method is available at: <http://www.demographic-research.org/Volumes/Vol6/1/>
4. 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 persons aged 85 and over represents a small proportion of the whole population of Northern Ireland.
5. The new 2010-based population projections for Northern Ireland will be published in October 2011.
6. This information can also be accessed on the Northern Ireland Statistics and Research Agency's website at: <http://www.nisra.gov.uk/demography/default.asp134.htm>
7. The Office for National Statistics and the National Records of Scotland have produced population estimates for those aged 90 and over in the UK, England & Wales and Scotland using the same methodology. UK wide statistics releases have been planned for publication prior to the United Nations International Day of Older Persons – 1 October.
8. Further statistical information can be obtained from NISRA Customer Services:

Telephone: 028 9034 8160

Fax: 028 9034 8161

E-mail: census.nisra@dfpni.gov.uk

Responsible Statistician: Dr David Marshall

Annex A - Methodology

The Northern Ireland Statistics and Research Agency have produced annual mid-year population estimates 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 estimate, people aged 90 and over are aggregated into one age-group.

To produce single year of age estimates of the population aged 90 and over, NISRA have adopted the Kannisto-Thatcher ² method, an internationally recognised method used to produce estimates of older persons.

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 method uses an average of the last 5 years death data to produce an estimate of the number of survivors. For earlier years, if someone dies aged 100 in 2010, this means that they were alive in 2009 aged 99 and in 2008 aged 98 and so on. This is used to produce age distribution profiles. The number of people aged 99 alive in 2009 is estimated from the number of people alive aged 100 in 2010, plus the number of deaths of people aged 100 in 2010. One consequence 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 is assumed that migration for the oldest old is negligible.

Estimates are then controlled to agree with the NISRA mid-year population estimates for those aged 90 and over.

² The Survivor Ratio Method for Estimating Numbers at High Ages, Thatcher R, Kannisto V, Andreev K, 2002 <http://www.demographic-research.org/Volumes/Vol6/1/>
The Demography of Centenarians in England and Wales, *Population Trends* 96 pp5-12, Thatcher R 1999