

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



9.30am – Thursday 30 September 2010

Key Points from this release are:

- in June 2009, 28,700 people or around 1.6 per cent of the population were aged 85 years and over;
- the population aged 85 and over has increased by 5,100 people (+22 per cent) in the seven year period between June 2002 and June 2009;
- in this period, the population aged 85 and over has grown four times faster than the overall population (22 per cent growth for those aged 85 and over, against 5 per cent growth for the whole population);
- 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 2009 there were just under 200 centenarians (those aged 100 and over) living in Northern Ireland, with the number of centenarians living in Northern Ireland having increased by around 50 per cent since June 2002; and
- by 2021, the number of persons aged 85 and over in Northern Ireland is projected to increase by 67 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 2009, 17 per cent of the population were of pensionable age, including 1.6 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 have used an international recognised methodology (see Annex A) to produce detailed estimates of the numbers of people aged 90 to 104 and the number of people aged 105 and over in Northern Ireland, yearly, from mid-2002 to mid-2009.

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.

¹ Mid-2009 Population Estimates available from <http://www.nisra.gov.uk/demography/default.asp17.htm>

2. Mid-year Population Estimates

(i) Population Aged 85 and Over - 2002-2009

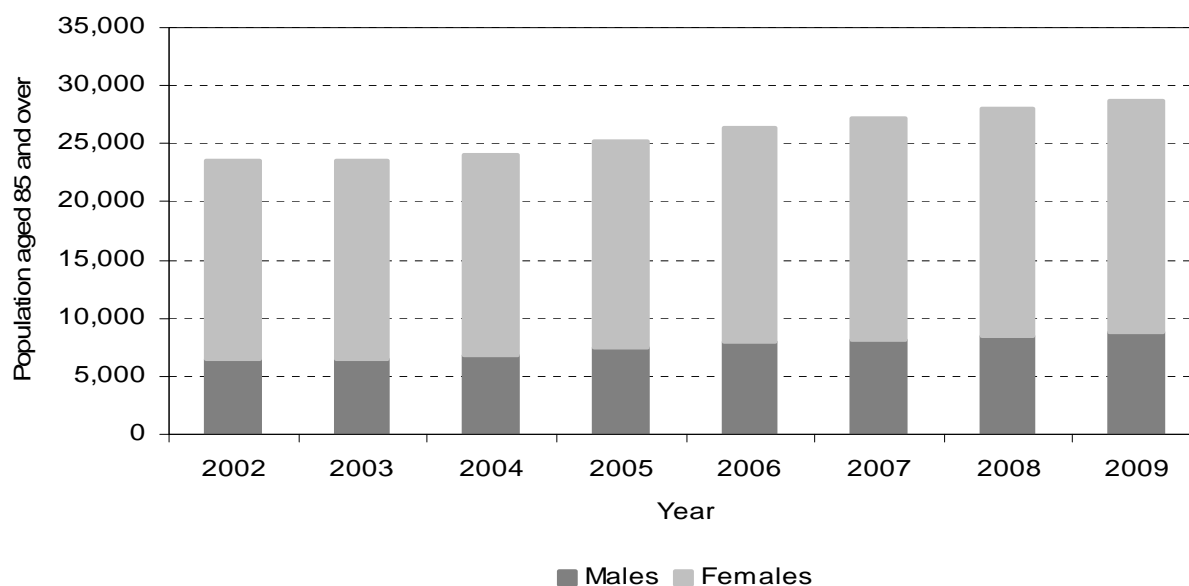
At 30 June 2002 it is estimated that there were 23,600 people aged 85 and over living in Northern Ireland (17,100 females and 6,500 males). This figure had risen to 28,700 people by 30 June 2009 (20,000 females and 8,700 males).

Table 1 Northern Ireland Population Estimates for those aged 85 and over, 2002-2009

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

In contrast, the 1937 Census recorded 4,200 persons aged 85 and over; thus showing that this population has increased seven-fold in the last seventy years. Indeed, as late as the 1961 Census, there were significantly less than 10,000 persons aged 85 and over.

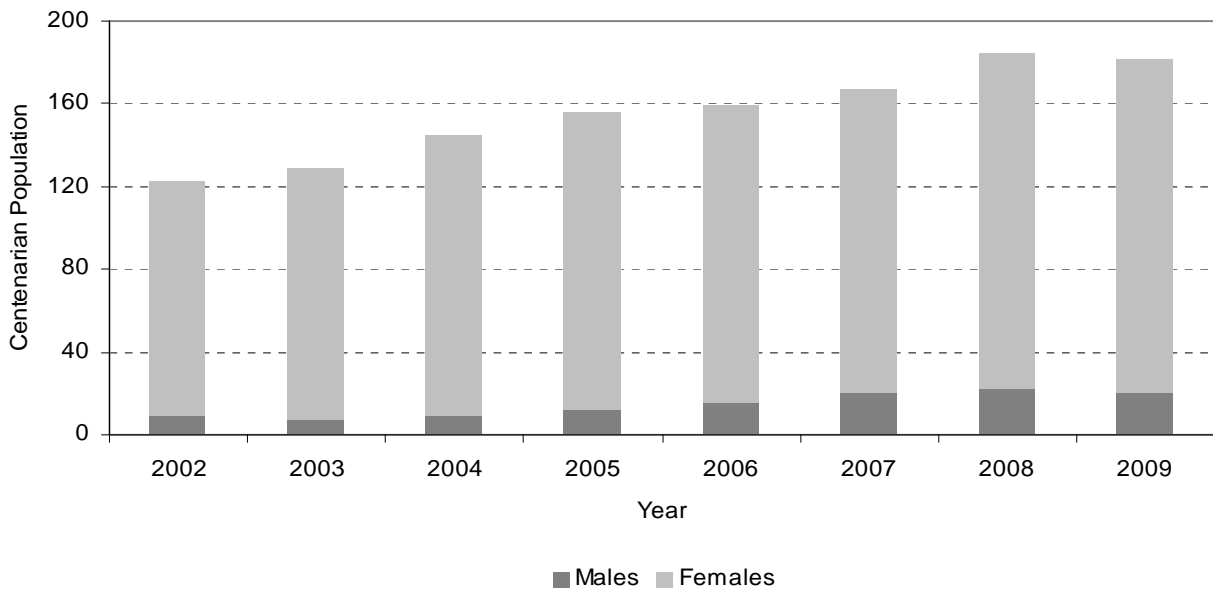
Figure 2 Northern Ireland Population Estimates for those aged 85 and over, 2002-2009.



(ii) Number of Centenarians– Persons Aged 100 and Over- 2002-2009

On 30 June 2009, NISRA estimates that there are just under 200 centenarians living in Northern Ireland (182 persons: 162 females and 20 males). Figure 3 shows the increasing number of centenarians since 2002.

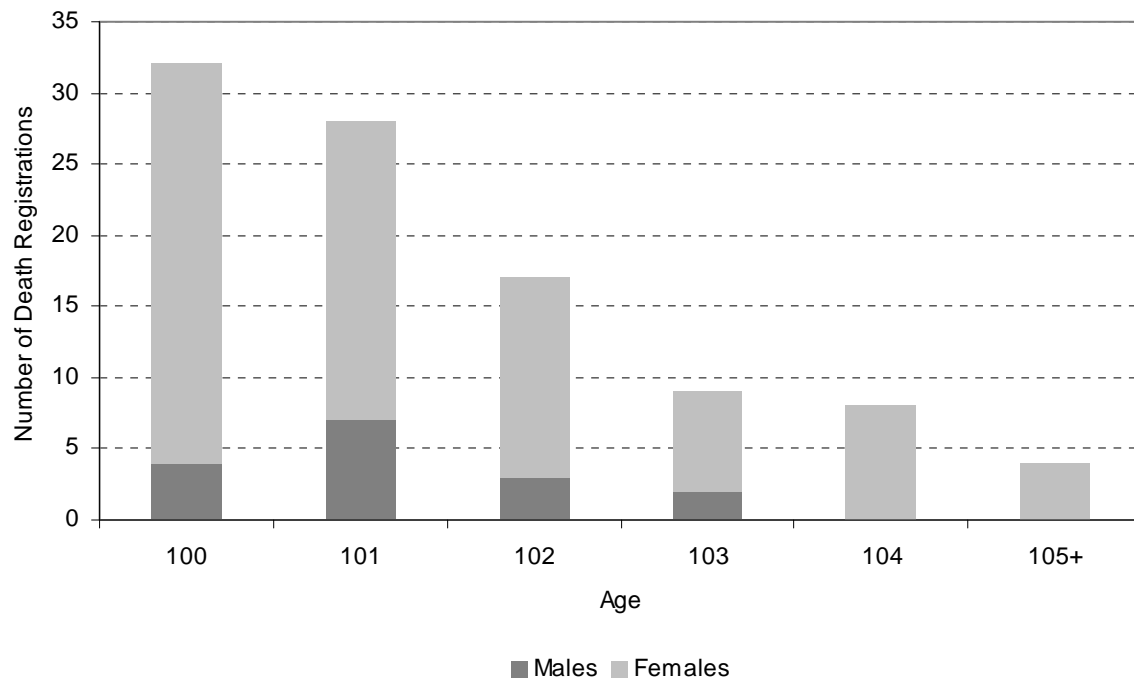
Figure 3 Northern Ireland Population Estimates for those aged 100 and over, 2002 - 2009.



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 2009, it records 211 people registered aged 100 and over. In addition, in 2009, 98 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 2009.

Figure 4 Death Registrations in Northern Ireland of Centenarians, 2009.



3. Population Projections

(i) Population Projections of Those Aged 85 and Over – 2011-2031

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. Table 2 details the trend in these statistics.

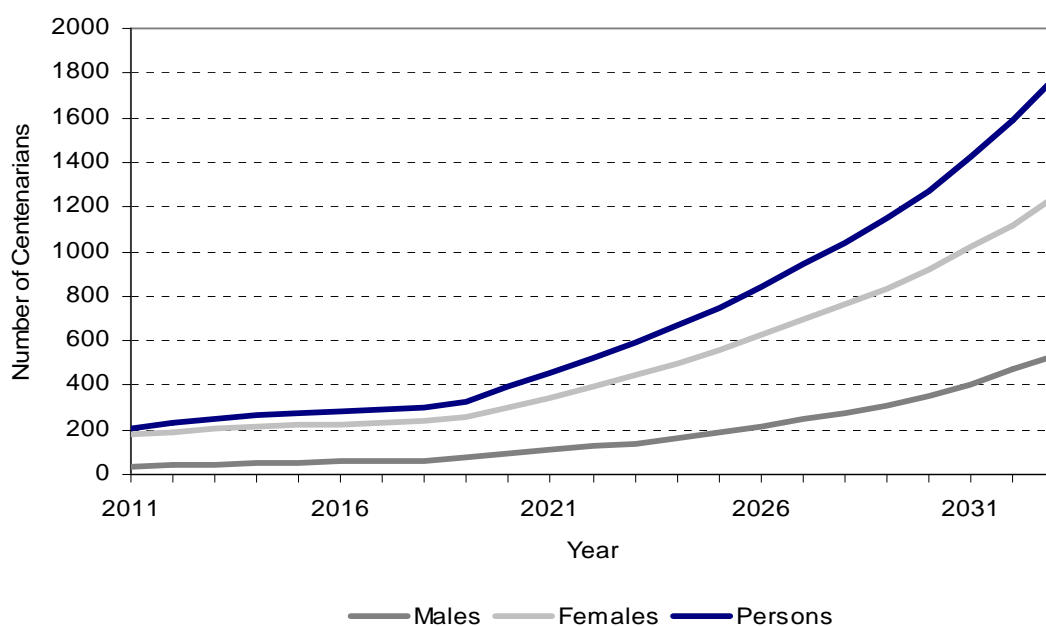
Table 2 Northern Ireland Population Projections for those aged 85 and over, 2011-2031

Projected Population at 30 June	Projected number of persons aged 85 and over
2011	31,700
2016	39,100
2021	47,900
2026	59,700
2031	75,800

(ii) Population Projections of Those Aged 100 and Over – 2011-2031

By 2033, there are projected to be around 1,800 centenarians in Northern Ireland, ten times the number in 2009. Figure 5 shows the projected increase in the number of persons aged 100 and over, from 2011 to 2033.

Figure 5 Projected population aged 100 and over, 2011 – 2033



The following tables are attached:

Table 1: Mid 2002 to mid 2009 population estimates of those aged 85 years and over, by gender and 5 year age bands

Table 2: Population projections of those aged 85 years and over, by gender and 5 year age bands, 2011 - 2031

NISRA

September 2010

Table 1: Mid 2002 to mid 2009 population estimates of those aged 85 years and over, by gender 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	6,045	1,245	117	6	23,584	1,696,641
2003	16,023	6,122	1,286	123	6	23,560	1,702,628
2004	16,041	6,451	1,361	138	7	23,998	1,710,322
2005	16,885	6,684	1,448	146	10	25,173	1,724,408
2006	17,898	6,739	1,514	147	12	26,310	1,741,619
2007	18,922	6,635	1,554	154	13	27,278	1,759,148
2008	19,541	6,656	1,618	172	12	27,999	1,775,003
2009	20,036	6,785	1,677	174	8	28,680	1,788,896
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	1,432	215	9	0	6,478	828,856
2003	4,836	1,452	230	7	0	6,525	832,822
2004	4,997	1,604	253	9	0	6,863	836,491
2005	5,431	1,680	271	12	0	7,394	844,260
2006	5,861	1,725	278	16	0	7,880	853,404
2007	6,188	1,708	270	20	0	8,186	862,000
2008	6,349	1,757	292	22	0	8,420	870,866
2009	6,572	1,819	306	20	0	8,717	878,609
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	4,613	1,030	108	6	17,106	867,785
2003	11,187	4,670	1,056	116	6	17,035	869,806
2004	11,044	4,847	1,108	129	7	17,135	873,831
2005	11,454	5,004	1,177	134	10	17,779	880,148
2006	12,037	5,014	1,236	131	12	18,430	888,215
2007	12,734	4,927	1,284	134	13	19,092	897,148
2008	13,192	4,899	1,326	150	12	19,579	904,137
2009	13,464	4,966	1,371	154	8	19,963	910,287

Source: NISRA

Table 2: Population projections of those aged 85 years and over, by gender and 5 year age bands, 2011 – 2031

Mid-year Population	Persons 85-89	Persons 90-94	Persons 95-99	Persons 100-104	Persons 105+	Persons 85+	Persons All Ages
2011	21,851	7,889	1,768	200	9	31,717	1,815,093
2016	25,416	10,985	2,377	268	14	39,060	1,873,524
2021	29,823	13,862	3,757	436	19	47,897	1,926,868
2026	35,714	17,761	5,330	806	39	59,650	1,971,094
2031	44,201	22,398	7,724	1,339	88	75,750	2,004,743

Mid-year Population	Males 85-89	Males 90-94	Males 95-99	Males 100-104	Males 105+	Males 85+	Males All Ages
2011	7,247	2,292	403	32	1	9,975	892,333
2016	9,108	3,334	640	55	2	13,139	923,778
2021	11,778	4,632	1,067	107	4	17,588	952,136
2026	14,767	6,612	1,681	206	9	23,275	975,192
2031	18,760	8,729	2,716	386	20	30,611	992,326

Mid-year Population	Females 85-89	Females 90-94	Females 95-99	Females 100-104	Females 105+	Females 85+	Females All Ages
2011	14,604	5,597	1,365	168	8	21,742	922,760
2016	16,308	7,651	1,737	213	12	25,921	949,746
2021	18,045	9,230	2,690	329	15	30,309	974,732
2026	20,947	11,149	3,649	600	30	36,375	995,902
2031	25,441	13,669	5,008	953	68	45,139	1,012,417

**Source: NISRA
2008-based Projections**

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 for mid 2002 to mid 2009, 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. 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>
6. The Office for National Statistics and the General Register Office for 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.
7. 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 Jos Ijpelaar

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 2009, this means that they were alive in 2008 aged 99 and in 2007 aged 98 and so on. This is used to produce age distribution profiles. The number of people aged 99 alive in 2008 is estimated from the number of people alive aged 100 in 2009, plus the number of deaths of people aged 100 in 2009. 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