Northern Ireland Statistics & Research Agency

# Registrar General Northern Ireland Annual Report 2006

December 2007

An Agency within the Department of Finance and Personnel

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NIA 41/07-08

## The Northern Ireland Statistics and Research Agency

The Northern Ireland Statistics and Research Agency (NISRA) was established as an Executive Agency within the Northern Ireland Department of Finance and Personnel on 1 April 1996. NISRA is the principal source of official information of socio-economic conditions in Northern Ireland. The Agency provides statistics and social research services, undertakes the Northern Ireland census of population and administers the civil registration of births, deaths, marriages and adoptions.

**The overall corporate aims of NISRA are to:**

- Provide a statistical and research service to support the decision making by Government in Northern Ireland and to inform Parliament and the wider community through the dissemination of reliable official statistics; and
- Administer the marriage laws and to provide a system for the civil registration of births, marriages, adoptions and deaths in Northern Ireland.

NISRA can be found on the internet at www.nisra.gov.uk

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# Eighty-Fifth Annual Report of the Registrar General 2006

Laid before the Northern Ireland Assembly under:

Section 34 of the Marriage (Northern Ireland) Order, 2003

Article 3(3) of the Births and Deaths Registration (Northern Ireland) Order 1976

Section 154 of the Civil Partnership Act 2004

by the

Department of Finance and Personnel

6 December 2007

This report has been prepared by the Demography and Methodology Branch of the Northern Ireland Statistics and Research Agency. All queries relating to its statistical or data content and requests for further information should be addressed to Customer Services. All of the data included in this report is available on the NISRA web site (www.nisra.gov.uk) or can be obtained in electronic format from Customer Services, NISRA.

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# Content

## Foreword

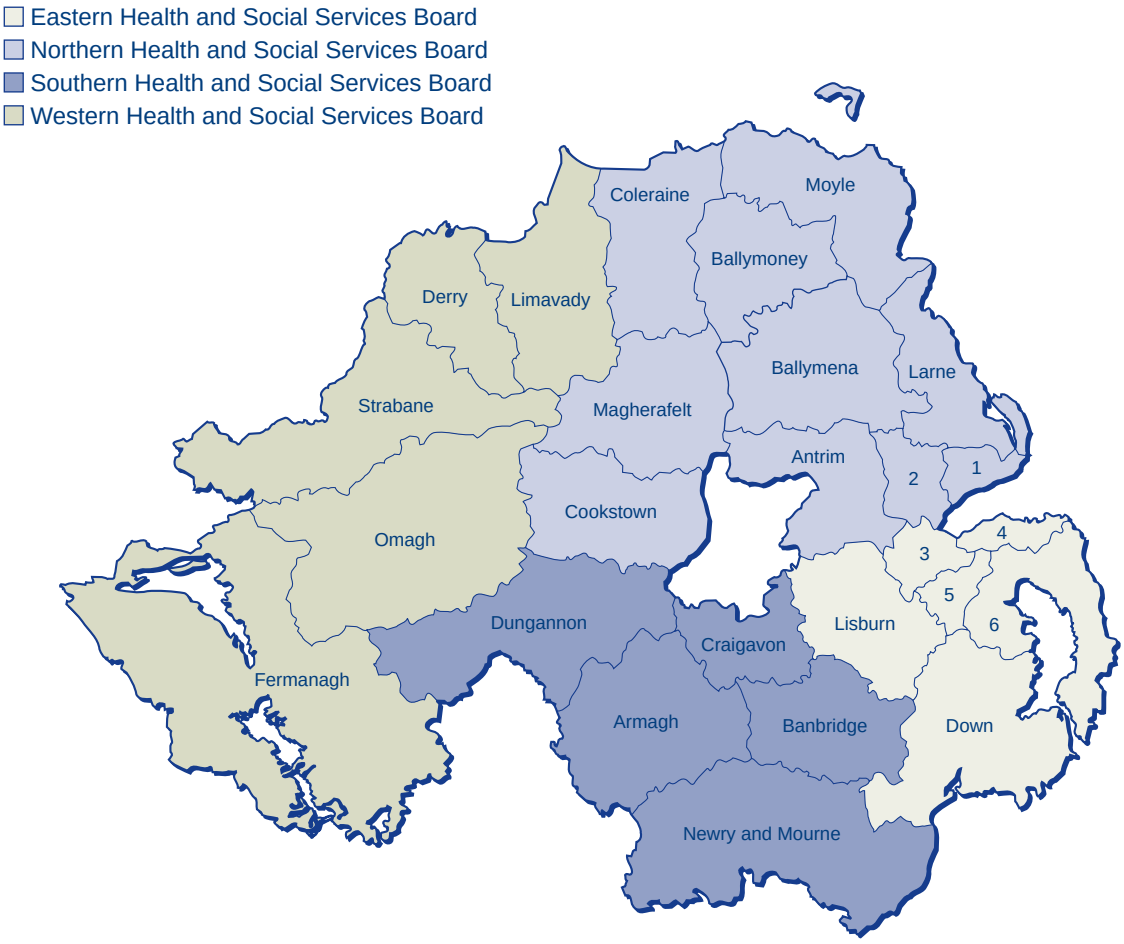
This is the 85th Annual Report of the Registrar General for Northern Ireland. The year saw further changes to the demography of Northern Ireland with the highest ever population growth from migration; the number of people coming to live in Northern Ireland in 2006 exceeded those leaving Northern Ireland by almost 10,000. For the first time ever, population growth from migration exceeded that from the natural excess of births over deaths. This is a dramatic change for Northern Ireland where migration resulted in a net loss of population of around one-third of a million people since 1945. The increased movement of people makes measuring these migration moves more challenging, at a time when the importance of migration to population change is increasing.

There is a wealth of demographic data available in Northern Ireland with which much can be achieved. It was thus particularly pleasing to see the launch of the Northern Ireland Longitudinal Study (NILS) in December 2006. Chapter two of this year's report describes the background to NILS and gives a brief overview of some potential policy questions that the study could inform. I hope that the study will add to the store of knowledge about Northern Ireland society and contribute to policy discussion. The report sets out the facts and describes trends that are central to a wide range of such policy considerations.

I would welcome comments on the format and content of the report and will consider all views in the planning of future reports. I hope you will find the report informative and useful.

**Norman Caven**
Register General for Northern Ireland
December 2007

# Northern Ireland's Health & Social Services Boards and Local Government Districts




1. Carrickfergus
2. Newtownabbey
3. Belfast
4. North Down
5. Castlereagh
6. Ards

# Chapter 1
# Demographic Overview of Northern Ireland

## 1.1 Introduction

1.1.1. The population of Northern Ireland continues to rise; the estimate of the population of Northern Ireland at 30 June 2006 was 1,741,600. This figure is an increase in population over the preceding twelve months of 17,200 people or 1.0 per cent of the population. The scale of the annual increase in population is the largest observed in recent times.

1.1.2. The increase in population between mid-2005 and mid-2006 is due to two factors. Firstly, there were more births than deaths giving a natural increase in population of 8,300 people. Secondly, it is estimated that the Northern Ireland population grew by 9,900 people as a result of civilian population migration, but this was partially counterbalanced by a reduction of 1,000 in Her Majesty's Forces.

1.1.3. The increase over the thirty-year period, mid-1976 to mid-2006, is estimated to be 218,100 people or 14.3 per cent of the mid-1976 population of 1,523,500. This increase is equivalent to an average annual rate of growth of 0.4 per cent.

1.1.4. In 2006, there were 23,272 births registered to Northern Ireland mothers, an increase of 4.2 per cent on the 2005 figure of 22,328 births. This increase is the fourth consecutive year of increases in the number of births registered. However, this recent increase should be set against the previous longer term decline in the number of births. For example, in 1976, there were 26,361 births registered in Northern Ireland.

1.1.5. In 2006 there were 14,532 deaths registered in Northern Ireland, an increase of just over 300 deaths or 2.2 per cent on the 14,224 deaths registered in 2005. However, the number of deaths registered in 2005 was the lowest number ever recorded. Over the last 30 years the death rate has fallen by around a quarter; from 11.2 deaths per 1,000 population in 1976, to 8.3 deaths per 1,000 population in 2006.

1.1.6. In 2006 there were 8,259 marriages celebrated, an increase of 119 marriages or 1.5 per cent on the 2005 figure of 8,140 marriages. Marriage law was reformed in 2004 introducing, among other things, less strict residency requirements for marriage. This allowed couples to marry in the area of their choice and made it easier for people from outside Northern Ireland to get married here. Another result of the new law is that around 1 in 3 civil marriages in 2006 (36 per cent) now take place in an approved venue rather than the Registrar's Office.

1.1.7. There were 2,565 divorces granted in 2006, this is an increase from the 2005 figure of 2,362 and is the largest number of divorces ever recorded in Northern Ireland.

1.1.8. On 5 December 2005 the Civil Partnership Act came into force across the United Kingdom. The new legislation enabled same-sex couples to obtain legal recognition of their relationship. During 2006 there were 116 civil partnerships registered in Northern Ireland.

### Key Points

#### Population and Migration

- The size of the Northern Ireland population rose in the year to 30 June 2006 by 17,200 people or 1.0 per cent to 1,741,600.
- Since 1996 the number of children in the population has fallen from 415,100 to 380,100 a fall of 8.4 per cent. In contrast, the number of pensioners has increased from 253,400 to 284,100 a rise of 12.1 per cent between 1996 and 2006. The working age population has increased by 8.5 per cent from 993,200 in 1996 to 1,077,400 in 2006. Since 1976, the number of children has fallen by 19.3 per cent, while the working age and pensioner populations have increased by 28.2 and 33.8 per cent respectively.
- There are more births than deaths in Northern Ireland leading to the population growing through natural change. In the year to 30 June 2006, births exceeded deaths by 8,300 - this was the highest level of natural change seen since the year mid-1997 to mid-1998.
- In the year to mid-2006 there was population gain for Northern Ireland of 9,900 people due to civilian migration. This was the highest level of net civilian migration ever recorded in Northern Ireland. This was partially counterbalanced with a net outward movement of 1,000 people from Her Majesty's Forces stationed in Northern Ireland.

### Projected Population

- The Northern Ireland population is projected to reach 1.8 million by 2011 and 1.9 million by 2019. Longer-term projections indicate the population will reach 2 million by the early 2030s.
- The number of children aged under 16 is projected to remain broadly constant at around 385,000. In 2006, there are 380,000 children with a projected 393,000 in 2021.
- The number of adults aged 16-64 is projected to increase from 1,122,000 in 2006 to 1,190,000 by 2021, an increase of 68,000 or 6.1 per cent.
- The number of people aged 65 and over is projected to increase from 239,000 in 2006 to 339,000 by 2021, an increase of 100,000 or 41.5 per cent.
- The number of older people is projected to increase markedly relative to the number of younger people; as a consequence the average (mean) age of the population is expected to rise from 37.3 years in 2006 to 40.0 years by 2021.

### Births

- There were 23,272 births registered in 2006, an increase of almost 1,000 (or 4.2 per cent) on the 2005 figure but over 3,000 fewer than the number of births registered in 1976.
- In 2006, the average age of women at childbirth was 30 years compared with 29 years in 1996, 28 years in 1986 and 27 years in 1976.
- In Northern Ireland, the total period fertility rate dropped below replacement level (2.1) for the first time in 1992. The total period fertility rate for 2006 was 1.94 children; a rise from the record low of 1.75 children in 2000.

### Deaths/Stillbirths

- In 2006 there were 14,532 deaths registered in Northern Ireland, an increase of just over 300 deaths or 2.2 per cent on the 14,224 deaths registered in 2005, which was the lowest figure ever recorded.
- The expectation of life at birth for males and females based on mortality rates of recent years was 76.1 and 81.0 years respectively, with corresponding figures for men and women based on the mortality rates of 1922 of 53.8 and 54.4 years respectively.
- In 2006, the two most common causes of death were cancer (3,848 deaths – 26.5 per cent of deaths) and ischaemic heart disease (2,556 deaths – 17.6 per cent of deaths).
- There were 3.8 stillbirths per 1,000 births (live and still) in 2006, a substantial reduction from 20.5 stillbirths per 1,000 births in the early 1960s.
- There was a similar fall in infant deaths from 26.5 infant deaths per 1,000 live births in the early 1960s to 5.1 infant deaths per 1,000 live births in 2006.

### Marriages/Divorces

- There were 8,259 marriages celebrated in 2006, an increase of 119 marriages on the 2005 figure of 8,140 marriages. This is in contrast to the early 1970s when around 12,000 marriages were celebrated each year.
- On 1 January 2004, new marriage legislation came into effect in Northern Ireland. The new law allows civil marriage ceremonies to be conducted outside Registrar's Offices in a number of approved venues. In 2006, 878 civil marriage ceremonies (35.9 per cent of all civil marriage ceremonies) were held in approved venues; this compares with 640 (28.7 per cent of all civil marriage ceremonies) such ceremonies in 2005.
- There were 2,565 divorces in 2006, this is an increase from the 2,362 in 2005 and is the largest number of divorces on record for Northern Ireland.

### Civil Partnerships

- On 5 December 2005, the Civil Partnership Act and Civil Partnership Regulations (Northern Ireland) came into force, enabling same-sex partners to obtain legal recognition of their relationship. During 2006, there were 116 civil partnerships registered.

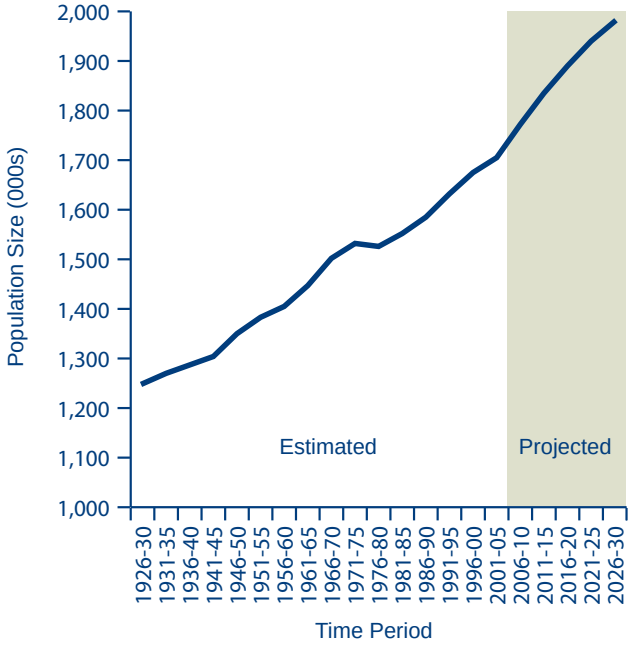
## 1.2 Population

1.2.1. The latest estimate of the size of the Northern Ireland population (30 June 2006) is 1,741,600 people. Twenty-two per cent of the population were aged under 16 years, 16 per cent were of pensionable age (60 years and over for women and 65 years and over for men), with the remaining 62 per cent of the population of working age.

1.2.2. In the 12 months to 30 June 2006, Northern Ireland's population is estimated to have risen by 17,200 persons. This is made up of an increase of 8,300 people attributable to natural growth (i.e. more births than deaths), and a net inward migration to Northern Ireland of 9,900 people. This level of migration is the highest ever observed, but is partially counterbalanced by a loss of 1,000 people in changes to Her Majesty's Forces stationed in Northern Ireland.

1.2.3. Figure 1.1 shows the trend of increasing population, although there was a slight decrease in population in the early 1970s as a result of high levels of net outward migration at that time. The 2006-based population projections for Northern Ireland show that the population will continue to increase.

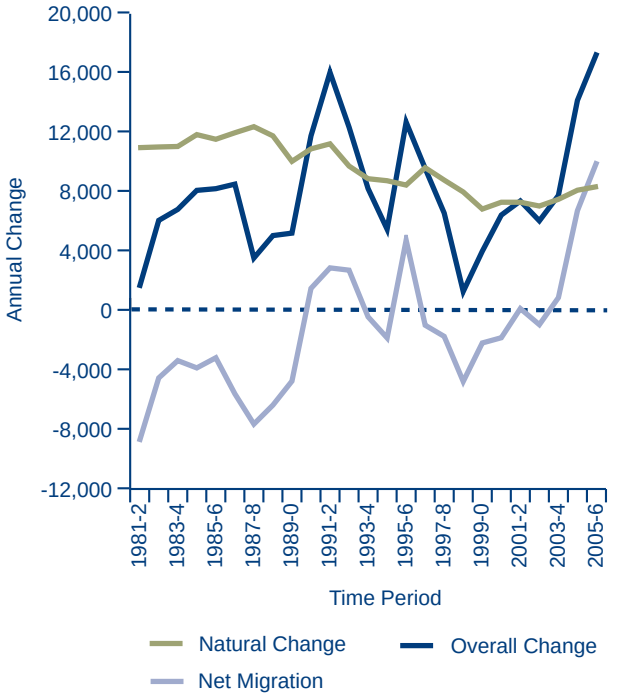
**Figure 1.1: Population of Northern Ireland (1926 to 2006 estimated – 2007 to 2030 projected) – non-zero y-axis**




1.2.4. It can be seen from the trends in natural change and net migration presented in Figure 1.2 that, prior to 2004, population increase was mostly due to natural change. However, in contrast, in 2004-5 the contributions to population increase from natural change and migration were of a similar magnitude and in 2005-6 the contribution from migration was larger than the contribution from natural change.

1.2.5. There has been a gradual reduction in natural change since the late 1980s, albeit with a slight increase in recent years. The trend in net migration has been more volatile with troughs of emigration in 1998-9, and peaks of immigration in 1995-6 and 2004-6.

**Figure 1.2: Components of Population Change (1981-2 to 2005-6)**




### Age and Sex Structure

1.2.6. The age structure of Northern Ireland's population continues to get older due to sustained below replacement levels of fertility (in western countries a total period fertility rate of about 2.1 births is required to maintain long-term population levels, assuming no migration) and increasing life expectancy. In mid-2006, there were more females (51 per cent) than males in Northern Ireland. The median age (the age at which half the population is older and half is younger) of the Northern Ireland population has increased from 28 to 36 years over the last three decades. Twenty-three per cent of males were under 16 years old compared with 21 per cent of females, while 65 per cent of males and 59 per cent of females were of working age. Figure 1.3 shows the age structure of the population in 2006.

**Figure 1.3: Northern Ireland Population by Sex and Age (2006)**

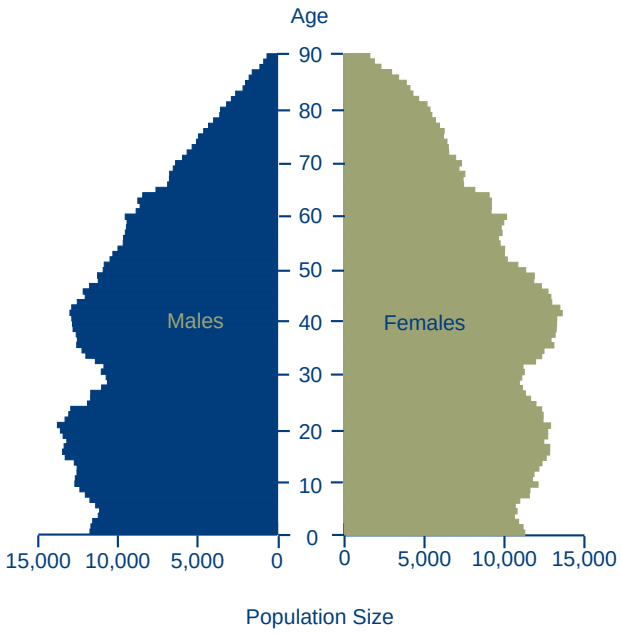
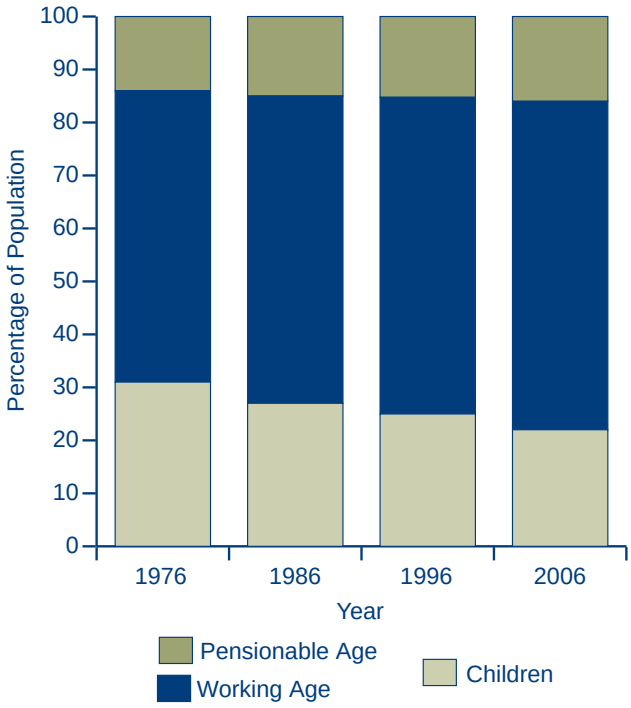



**Figure 1.4: Changing Age Structure of Northern Ireland Population (1976 to 2006)**




1.2.7. During the twelve months to June 2006, the number of children aged 0-15 years decreased by 0.3 per cent, the number of people of working age increased by 1.3 per cent while those of pensionable age increased by 1.6 per cent. In overall terms the Northern Ireland population increased by 1.0 per cent or 17,200 people. Over the last decade the average annual rate of population increase has been around 8,000 persons (equivalent to 0.4 per cent each year). The 2006 increase in population (1.0 per cent) is larger than the average annual increase experienced over recent years.

1.2.8. Over the past 30 years, low fertility levels have resulted in a decrease in the number of children aged 0-15 years (19.3 per cent decrease). In contrast, the number of people of working age has increased by 28.2 per cent; and those of pensionable age have increased by 33.8 per cent. The changing age structure of the population since 1976 is illustrated in Figure 1.4.

### Area Comparisons within Northern Ireland

1.2.9. The pattern of continuing population growth is evident within the majority of Northern Ireland's 26 Local Government Districts. Indeed, all Local Government Districts experienced a natural increase of population (more births than deaths) between mid-2005 and mid-2006. The largest natural increase of population was in Derry Local Government District, with a natural increase of almost 800 people.

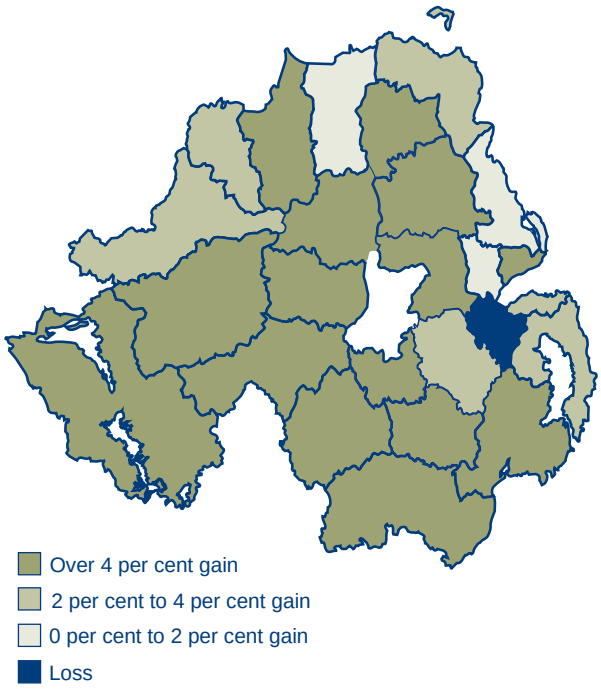
1.2.10. However, when one accounts for migration, including Armed Forces movement, the population of Belfast Local Government District fell between mid-2005 and mid-2006 by 0.2 per cent. Although Belfast Local Government District experienced a gain from international migration (+900 people), the overall fall was due to residents of Belfast moving to other parts of Northern Ireland (-2,100 people).

1.2.11. In contrast Dungannon Local Government District had the greatest proportionate increase in population (+3.1 per cent) – over three times the Northern Ireland percentage increase (+1.0 per cent). In addition, Cookstown (+2.0 per cent), Craigavon (+2.5 per cent) and Newry and Mourne (+2.0 per cent) all experienced population growth of 2.0 per cent or more between mid-2005 and mid-2006.

1.2.12. Newry and Mourne was the Local Government District with the highest proportion of children among its population (24.8 per cent), while North Down had the lowest proportion (18.7 per cent). In 2006, North Down Local Government District had the highest proportion of the population of pensionable age (20.0 per cent) and Derry Local Government District had the lowest proportion (12.9 per cent).

1.2.13. Figure 1.5 shows the percentage change in population between mid-2001 and mid-2006 for each Local Government District area. It is better to compare population change over a longer time frame, as population change tends to fluctuate from year to year, particularly for smaller areas. The areas with the fastest growing population (e.g. Ballymoney, Banbridge and Dungannon Local Government Districts) tend to experience both net in-migration and natural increase.

**Figure 1.5: Percentage Population change by Local Government District (2001 to 2006)**






## 1.3 Migration

1.3.1. Measures of population movement or migration are based on the United Nations definition of a *long-term international migrant*[1]. This definition is in use in population statistics for countries across the European Union. Unlike some other European countries, there is no comprehensive system which registers population movement in the United Kingdom. Therefore, estimates of population movement into, and out of, Northern Ireland are derived from proxy indicators. In Northern Ireland the primary source for estimating this is family doctor registrations. At the Northern Ireland level, the overall effect of population movement is derived from the difference in two "population flows": the number of people coming to live in Northern Ireland and the number of people leaving Northern Ireland to live elsewhere.

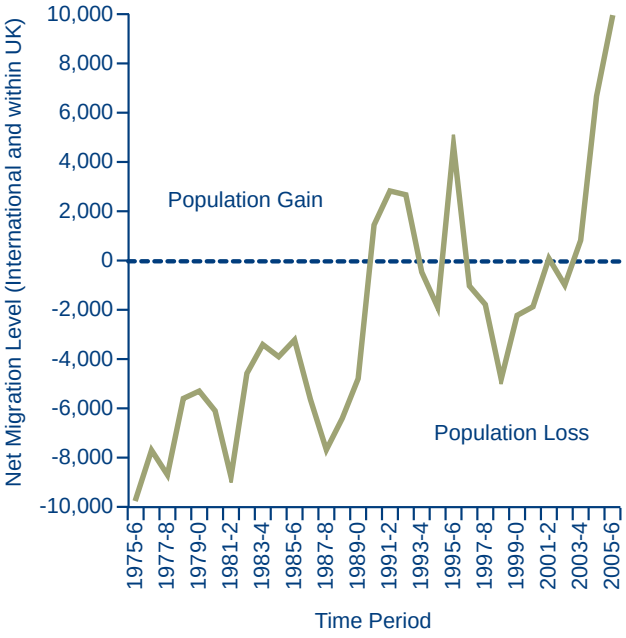
1.3.2. Between July 2005 and June 2006, just over 30,500 people came to live here and just over 20,600 people left Northern Ireland. This resulted in an overall gain in population (or net-migration) of 9,900 people. This is the highest figure ever recorded for net-migration to Northern Ireland in a single year. In contrast, since the Second World War it is estimated that around 300,000 more people have left Northern Ireland to live elsewhere than came here to live.

1.3.3. Estimates of net migration for Northern Ireland since the mid-1970s are shown in Figure 1.6. The graph can be viewed in terms of three distinct phases of migration. The first phase during the 1970s and 1980s was when Northern Ireland experienced consistently large net population loss due to population movement (or out-migration) approaching 10,000 people in some years. Clearly, the impact of "The Troubles" is significant here.

1.3.4. The second phase from the early 1990s until 2004 shows population movement has been in balance, with broadly the same number of people coming to Northern Ireland as leaving. Over this period it is estimated that each year around 20,000 people have come to live in Northern Ireland and 20,000 left. However in the last phase since 2004 the annual number of people estimated to have come here to live rose to 27,000 by mid-2005 and to over 30,000 by mid-2006. This is a marked increase and is related to the enlargement of the European Union in May 2004, when people from countries in Eastern Europe were allowed to come to work in the United Kingdom and Ireland.

1 "A person who moves to a country other than that of his or her usual residence for a period of at least a year, so that the country of destination effectively becomes his or her new country of usual residence." - Taken from "Recommendations on Statistics of International Migration. UN 1998" available at http://unstats.un.org/unsd/pubs/gesgrid.asp?ID=116

**Figure 1.6: Estimated Level of Net Migration (1975-6 to 2005-6)**




**Place of Origin/Destination of People coming to Northern Ireland (2005-6)**

1.3.5. Table 1.1 shows where people coming to Northern Ireland last lived. Of the 30,500 people who came to live here during 2005-6; around 60 per cent (18,100) came from outside the United Kingdom. Of this around half (9,700) came from the Eastern European accession countries that joined the European Union in May 2004.

**Table 1.1: Number of People coming to live in Northern Ireland by Country of last residence (Mid 2004 to Mid 2006)**

| | Number of people coming to live in Northern Ireland (Mid-2004 to Mid-2005) | | Number of people coming to live in Northern Ireland (Mid-2005 to Mid-2006) | |
|---|---|---|---|---|
| **Country of Last Residence** | **Number** | **Percentage** | **Number** | **Percentage** |
| England and Wales | 10,800 | 40% | 10,000 | 33% |
| Poland | 2,300 | 9% | 5,500 | 18% |
| Scotland | 2,400 | 9% | 2,300 | 8% |
| Lithuania | 1,500 | 5% | 2,100 | 7% |
| Republic of Ireland | 2,100 | 8% | 2,000 | 6% |
| Slovakia | 600 | 2% | 1,100 | 3% |
| India | 700 | 3% | 900 | 3% |
| Portugal | 700 | 3% | 600 | 2% |
| Philippines | 500 | 2% | 600 | 2% |
| USA | 500 | 2% | 600 | 2% |
| All other EU Accession Countries | 700 | 3% | 1,000 | 3% |
| All other countries | 4,200 | 15% | 3,800 | 13% |
| **Total Inflow** | **26,900** | **100%** | **30,500** | **100%** |

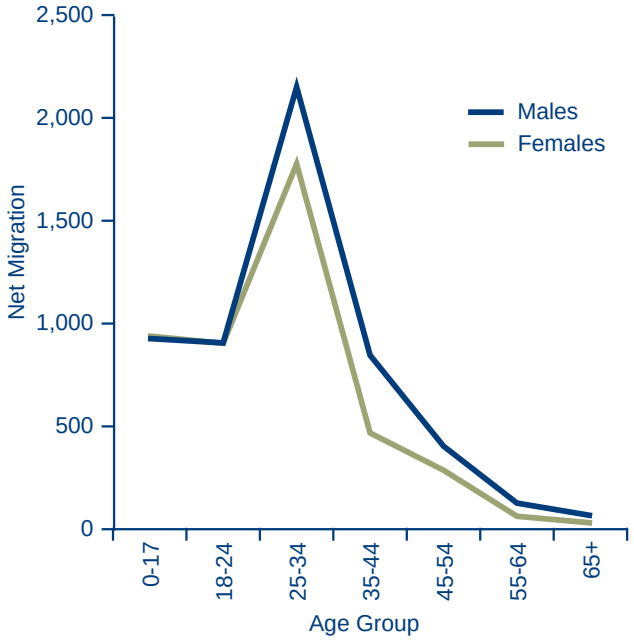
1.3.6. This table reflects where people coming to live here last lived *not* their nationality. Thus some people coming from Great Britain or Ireland will be non-British/ Irish nationals, and some people coming from outside the British Isles will be returning British/Irish nationals.

1.3.7. In contrast looking at the 20,600 people who left Northern Ireland to live elsewhere in 2005-6; over half, around 11,500 left for Great Britain and 9,100 left for outside the UK. Therefore, in total, it is estimated that just under 900 more people came to live here from Great Britain, than moved in the opposite direction, and 9,000 more people came to live here from outside the UK than moved in the opposite direction.

### Age-distribution of Migrants

1.3.8. Figure 1.7 shows the age distribution of net migration in Northern Ireland for 2005-6. Most net-migration gain for both males and females is in the 25-34 age groups.

**Figure 1.7: Net Total Migration by Age Group and Sex (2005-6)**




## 1.4 Projected population

1.4.1. The Northern Ireland population, 1.742 million in 2006, is projected to increase to 1.812 million in 2011. This is equivalent to an average annual rate of growth of 0.8 per cent. Over the longer term the population is projected to reach 1.922 million by 2021 an increase of 180,000 people.

1.4.2. The projected increase in population is due to both natural growth and inward migration. In the next five years (2006 to 2011) it is projected that there will be 51,000 more births than deaths and 19,000 more people coming to Northern Ireland to live than leaving.

1.4.3. Projections indicate a marked increase in the size of the population at older ages. The number of people of current pensionable age is projected to increase by around nine per cent in the next five years and by around 40 per cent over the 15 year period 2006-2021, while the number of children aged under 16 is projected to remain broadly constant over this period.

1.4.4. The population will gradually become older with the average age expected to rise from 37.3 years in 2006 to 40.0 years by 2021. In 2006 there were 141,000 more children aged under 16 than people aged 65 and over. The number of people aged 65 and over is projected to exceed the number of children from 2027 onwards. The number of children aged under 16 is projected to remain broadly constant at around 385,000. In 2006, there are 380,000 children with a projected 393,000 in 2021.

1.4.5. The number of males aged 16-64 and females aged 16-59 (the current definition of working age) is projected to increase from 1,077,000 in 2006 to 1,133,000 by 2021, an increase of about 56,000 (5.2 per cent).

1.4.6. Between 2010 and 2020, the pension age for females will be increased incrementally from 60 to 65. Taking this into account, the number of people of working age population in Northern Ireland is projected to rise by 10.5 per cent from 1,077,000 in 2006 to 1,190,000 in 2021. Table 1.2 shows the estimated and projected dependency ratios.

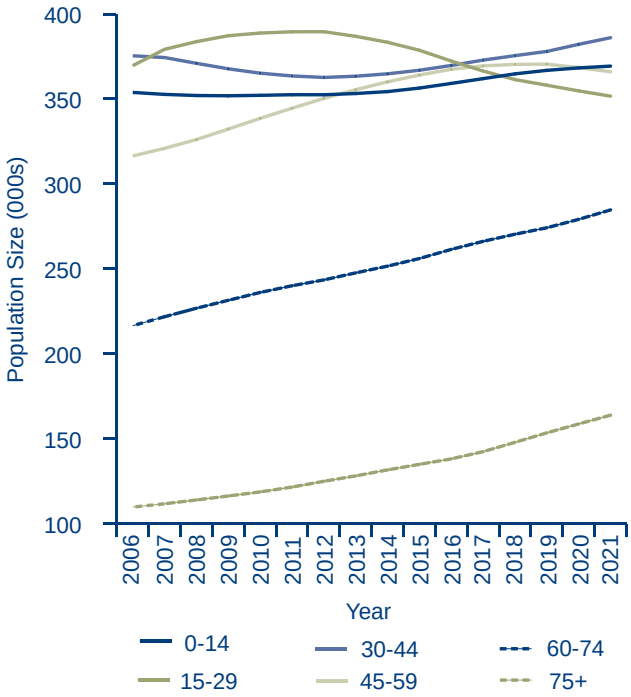
**Table 1.2: Estimated and Projected Dependency Ratios, 1976, 1986, 1996, 2006 and 2021**

| Mid-Year Population Estimates/Projections | Number of dependents per 100 persons of working age | | |
|---|---|---|---|
| | Children (Under 16 years) | Persons of State Pension Age | All Dependents |
| Mid-1976 | 56 | 25 | 81 |
| Mid-1986 | 46 | 26 | 72 |
| Mid-1996 | 42 | 26 | 67 |
| Mid-2006 | 35 | 26 | 62 |
| Mid-2021 (State pension age as at 2021) | 33 | 28 | 61 |
| Mid-2021 (State pension age as at 2006) | 35 | 35 | 70 |

1.4.7. The number of people of pensionable age (as currently defined, aged 60 and over for females, 65 and over for males) is projected to increase from 284,000 in 2006 to 396,000 by 2021, an increase of 39.4 per cent. In 2021, after allowing for the change in age at which females can claim retirement pension, the number of people of pensionable age is projected to be 339,000 (19.3 per cent higher than 2006).

1.4.8. The number of people aged 85 and over will also rise; it will almost double within the next 17 years. Figure 1.8 shows the changes different age groups are projected to experience over the next 15 years.

**Figure 1.8: Projected population by age group (2006 to 2021) – non-zero y-axis**

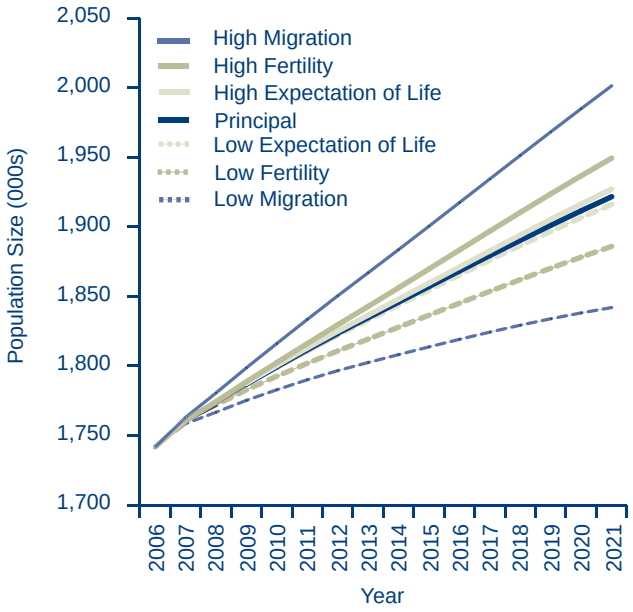



### Assumptions and variant projections

1.4.9. Population projections provide a consistent starting point for all Government planning. Projections are however based on assumptions and due to the inherent uncertainty of demographic behaviour, any set of projections will inevitably, to a greater or lesser extent, be proved wrong (see Appendix 3). Therefore, alternative variant assumptions of future fertility, mortality and migration are available for the population projections.

1.4.10. In these projection variants, different fertility, mortality and migration assumptions have been treated as separate and independent departures from the assumptions in the principal projection. Figure 1.9 shows that, for example, holding the fertility and mortality assumptions unchanged, an assumption of high migration (net in-migration of 5,000 per year) would lead to a population in 2021 of 2.00 million while an assumption of low migration (net out-migration of 4,000 per year) would lead to a population in 2021 of 1.84 million.

**Figure 1.9: Population Projections - Principal and Variant 2006-based Projections (2006 to 2021) – non-zero y-axis**



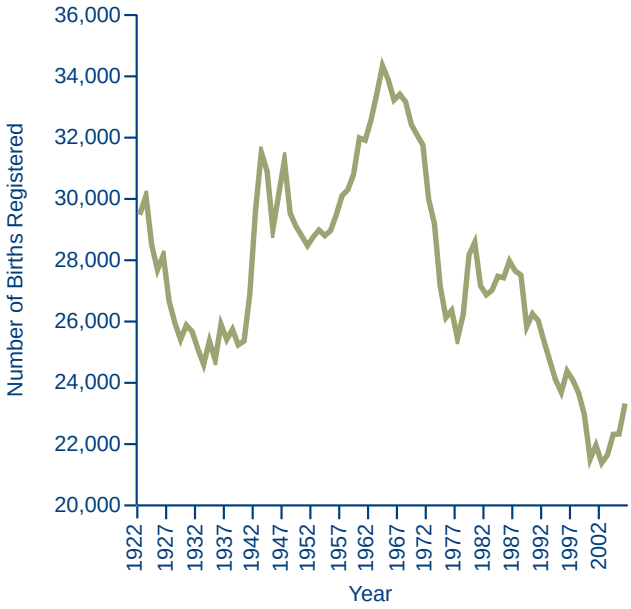

## 1.5 Births

### Numbers

1.5.1. In 2006, there were 23,272 births registered to Northern Ireland mothers, a 4.2 per cent increase on the 2005 figure of 22,328 births. Indeed, the number of births has recovered from an all-time low of 21,385 births registered in 2002. However, the number of births in 2006 is still well below corresponding levels of the mid-1970s, when just over 26,000 births were registered in 1976.

1.5.2. The number of births registered each year since 1922 is shown in Figure 1.10. This graph shows a noticeable peak after the Second World War. Like many western countries, Northern Ireland experienced a “baby boom” during the second half of the 1950s and early 1960s. Specifically in Northern Ireland, births peaked in 1964 at just over 34,000 live births and then fell dramatically in the early 1970s. The drop in the number of births levelled off in the 1980s at 27,000 births per annum. However, this was mainly a result of the larger number of women, who were born in the baby boom of the 1950s and 1960s, passing through their childbearing years. The decline in births resumed in the 1990s as these women started to complete their families. The increase in the number of births since 2002 arrests the recent decline.

**Figure 1.10: Number of Births Registered (1922 to 2006) – non-zero y-axis**

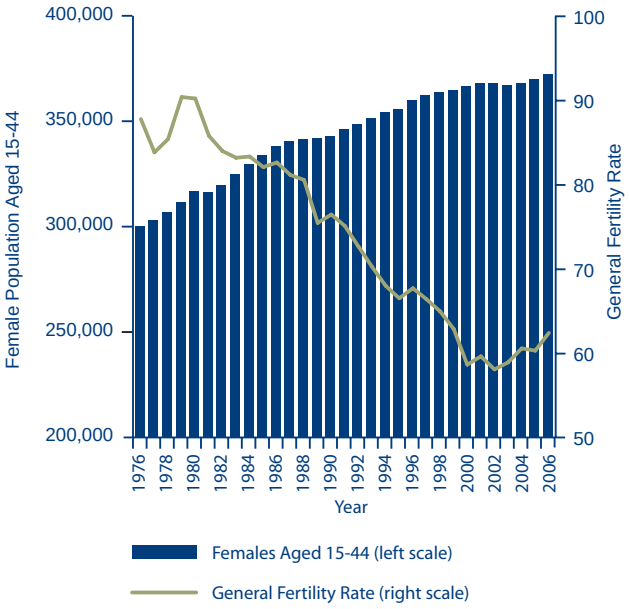


### Fertility Rates

1.5.3. The crude birth rate in 2006 was 13.4 births per 1,000 population, which is an increase on the 2005 figure of 12.9 births per 1,000 population. However, over the longer term the birth rate has fallen from its peak in the early 1960s when it was 23.0 births per 1,000 population.

1.5.4. Figure 1.11 shows the general fertility rate (births per 1,000 females aged 15-44), along with the number of women aged 15-44. The population of females aged 15-44 has increased since 1976, however, the general fertility rate has decreased. In 2006, the general fertility rate was 62.5 births per 1,000 females aged 15-44; this is an increase from the record low in 2002 of 58.1 births per 1,000 females aged 15-44, but still well below the general fertility rate in 1976 of 90.1 births per 1,000 females aged 15-44.

**Figure 1.11: Estimated Female Population Aged 15-44 and General Fertility Rate (1976-2006) - non-zero y-axes**




1.5.5. There has been a recent trend towards later childbearing by mothers. In 2006, for all live births, the average age of all mothers was 30 years, compared with 29 in 1996, 28 in 1986 and 27 in 1976. Almost half of all births registered in 2006 were to mothers aged 30 and over; this is a significant increase from 30 years ago when around 30 per cent of births were to mothers aged 30 and over. This indicates that women are delaying child-bearing; indeed, the average age of first time mothers was 27 in 2006 compared with 24 in 1976.

1.5.6. This trend to later childbearing is most apparent in the decline in fertility among 20-24 year old females. Over the past three decades fertility for this age group has more than halved, from 152 babies per 1,000 women in 1976 to 64 babies per 1,000 women in 2006.

1.5.7. In 2006, women aged 30-34 years experienced the highest age-specific fertility rate, with 119 babies per 1,000 women, while women aged 25-29 years experienced the second highest (112 babies per 1,000 women). Figure 1.12 shows the change in age-specific fertility rates by age group over the last 30 years.

**Figure 1.12: Live births per 1,000 Women by Age group of Mother (1976 to 2006)**

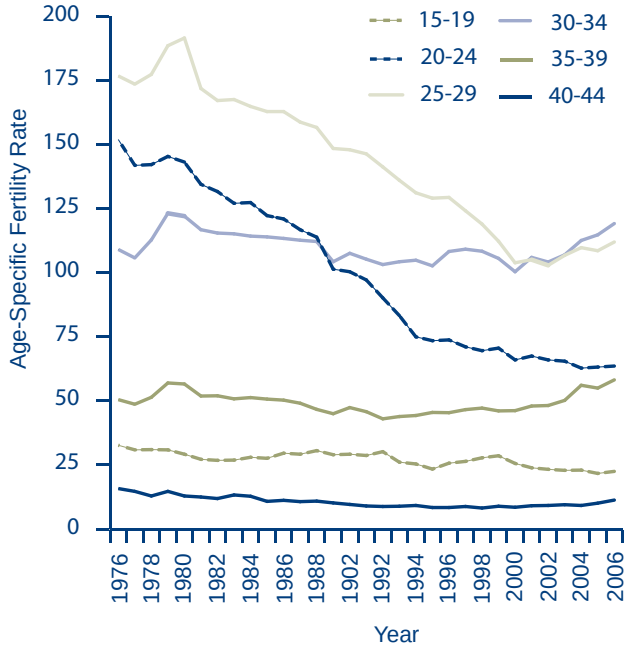
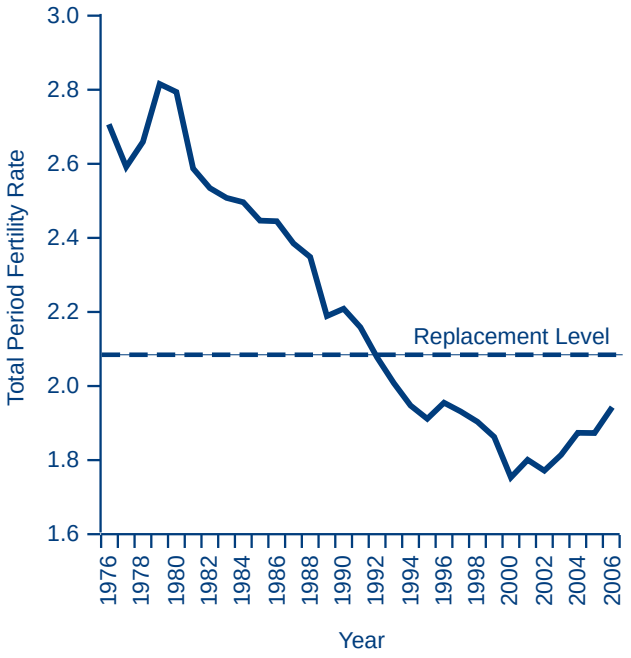



**Figure 1.13: Total Period Fertility Rate (1976 to 2006) – non-zero y-axis**




1.5.8. The total period fertility rate is derived from the sum of age-specific fertility rates. It gives the theoretical average number of children who would be born alive to a woman during her lifetime if she were to pass through her childbearing years conforming to the age-specific fertility rates of a given year. A value of 2.1 is generally taken to be the level at which a generation would replace itself in the long run, ignoring migration.

1.5.9. The total period fertility rate dropped below replacement level (2.1) in Northern Ireland for the first time in 1992**.** The total period fertility rate for 2006 was 1.94, which is a recovery from a record low of 1.75 in 2000, but still below the fertility rates in the 1980s and 1990s. The total period fertility rate for Northern Ireland since 1976 is shown in Figure 1.13.

1.5.10. Another measure of fertility is completed family size. Figure 1.14 shows the achieved family size (or cumulative cohort fertility) at specific ages for women born in particular years (or cohorts). Family size at age 45 is taken to represent completed family size. This enables easy comparison between selected cohorts as women pass through the child-bearing ages. Those born in 1961 had attained an average completed family size of 2.4 children by the time they reached 45. Figure 1.14 also permits the comparison of family size at selected ages for the various cohorts as they pass through the childbearing ages. For example, by age 30 the cumulative childbearing of the 1976 cohort is 0.6 children lower than that of the 1961 cohort.

**Figure 1.14: Cumulative Cohort Fertility Rate for selected Birth Cohorts**

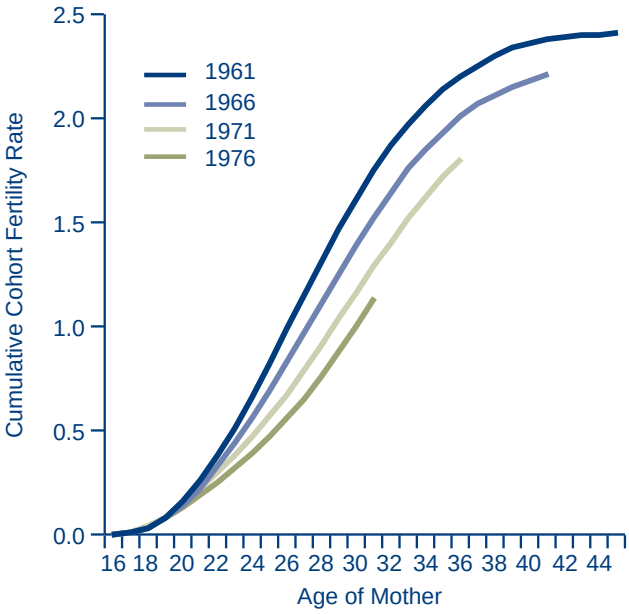
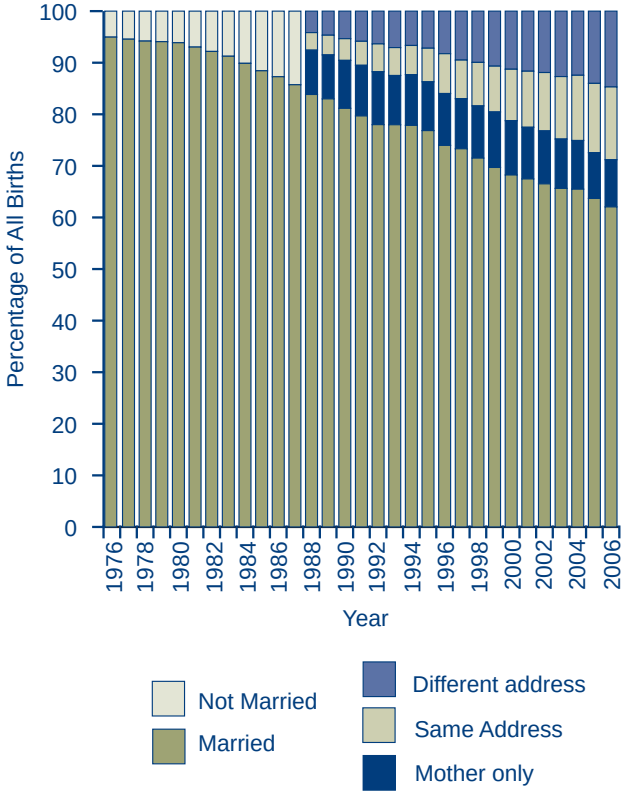



**Figure 1.15: Live Births by Registration Status (1976 to 2006)**




### Birth Order

1.5.11. A total of 9,945 births (43 per cent) were to first-time mothers in 2006. Second-time mothers had 7,555 babies (32 per cent) and third-time mothers had 3,654 babies (16 per cent). Only nine per cent of mothers, in 2006, already had three or more live born children reflecting the trend towards smaller family sizes.

### Births Outside Marriage

1.5.12. In 2006, 38.0 per cent of all live births occurred outside marriage. This proportion has been increasing steadily since the early 1960s when the proportion of children born outside marriage was about 2.5 per cent. Since 1988, information has been gathered that identifies births registered by married parents, unmarried parents (living at the same or at different addresses) or by the mother only. In 2006, 75.9 per cent of births outside marriage were jointly registered by both parents. Figure 1.15 shows the change in births by registration status since 1976.

1.5.13. In 2006, 97.0 per cent of births to mothers under the age of 20 were outside marriage, 78.4 per cent of births to mothers aged between 20 and 24 were outside marriage while for those aged 25 and over only 24.3 per cent of births were outside marriage.

### Multiple Births

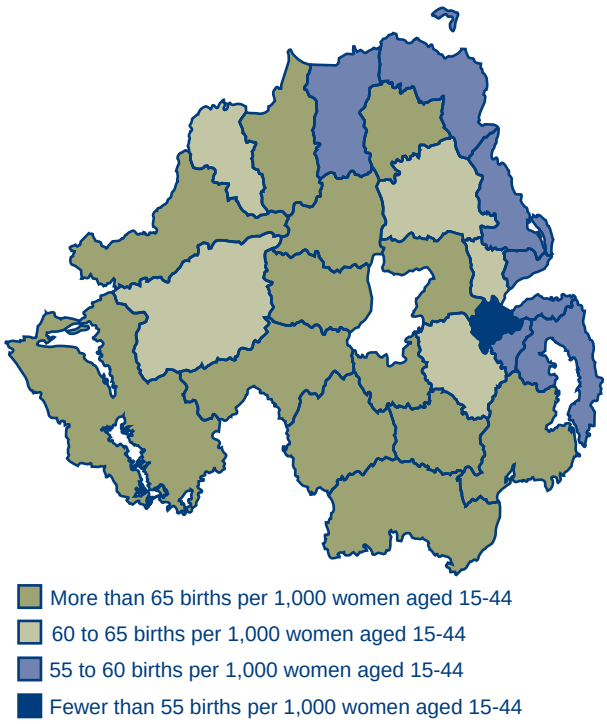
1.5.14. In 2006, the percentage of maternities resulting in a multiple birth was 1.4 per cent. There were 315 sets of twins and one set of triplets registered in 2006.

1.5.15. The percentage of maternities, resulting in multiple births has increased from 1.1 per cent in the 1970s to 1.4 per cent in 2006. The percentage of maternities that result in a multiple birth increases with the age of the mother. In 2006, less than one per cent of maternities to mothers aged under 25 resulted in multiple births, while 2.2 per cent of maternities to mothers aged between 35 and 39 resulted in multiple births.

### Births by Area

1.5.16. At Health Board level, crude birth rates ranged from 12.5 births per 1,000 population in the Eastern Board area to 15.0 births per 1,000 population in the Southern Board Area. The birth rates in the Western and Northern Boards were 13.9 and 13.0 respectively. Craigavon and Dungannon had the highest birth rate (15.3) of all the Local Government Districts in 2006 while the lowest birth rate (11.1) was in Moyle. Figure 1.16 shows the 2006 birth rates per 1,000 women of child-bearing age by Local Government District.

**Figure 1.16: Live births per 1,000 Women aged 15-44, by Local Government District (2006)**

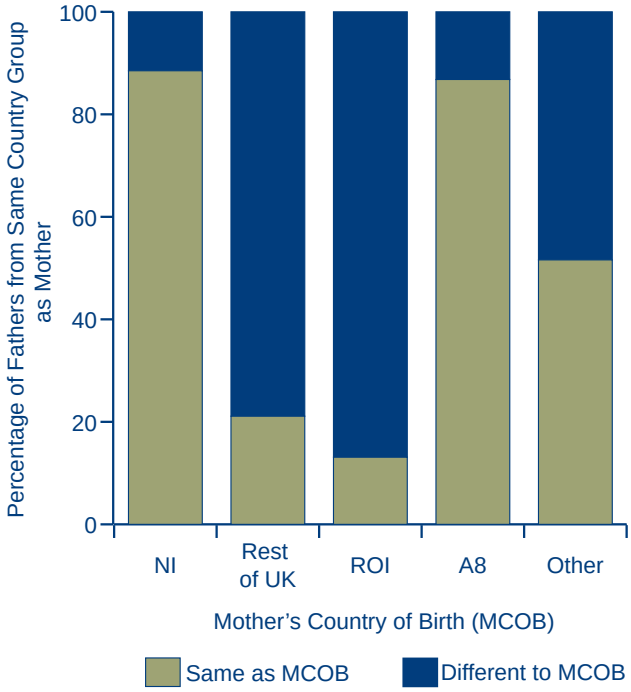





1.5.17. In 2006, the majority of women having babies were themselves born in Northern Ireland. Of the remaining mothers, most were born elsewhere in the UK or the Republic of Ireland. However, over six per cent of all births (1,450 births) were to mothers who themselves were born outside the UK and Ireland. This is a marked rise on previous years, for example, there were fewer than 600 such births in 1997 or two per cent of all births. Over recent years, the number of births to mothers born in the A8[2] countries has increased, especially since accession in May 2004. The number of births in 2001 to mothers born in one of the A8 countries was 12. Between 2005 and 2006 the number of such births increased from 110 to 390.

1.5.18. Figure 1.17 shows father's country of birth in relation to the mother's country of birth, where both parents were registered on the birth certificate. The majority of children born in Northern Ireland have both parents born in Northern Ireland. For births where the mother was born in the rest of the UK and the Republic of Ireland, the majority of fathers have been born in a different country to the mother, with the majority (69 per cent) from Northern Ireland. The trend is different for children whose mother was born in an A8 country, where around 87 per cent of these children have an A8 father as well.

**Figure 1.17: Live Births in Northern Ireland by Mother's and Father's Country of Birth (2006)**



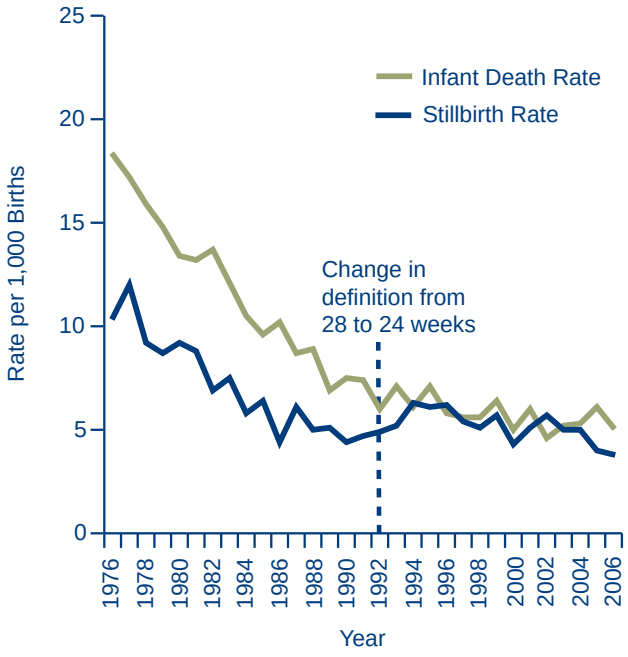

2 The A8 countries are the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, Slovakia and Slovenia. Malta and Cyprus also joined the EU on 1 May 2004 but are considered separately from the A8 countries as they have full free movement rights to work throughout the EU.

## 1.6 Stillbirths and Infant deaths

### Numbers

1.6.1. As can be seen in Figure 1.18, there have been significant reductions in stillbirth and infant death rates in the period since 1976. The stillbirth rate has reduced from 10.4 stillbirths per 1,000 births (live and still) in 1976 to 3.8 in 2006. This fall happened despite a change in the definition of stillbirths in 1992, which reduced the minimum period of gestation from 28 weeks to 24 weeks (thus increasing the number classified as stillbirths). The infant death rate (deaths of children aged under 1) has decreased by over 70 per cent from 18.3 infant deaths per 1,000 live births in 1976 to 5.1 in 2006.

**Figure 1.18: Stillbirth and Infant Death Rates (1976 to 2006)**




1.6.2. The numbers of stillbirths in 2006 was 89, the same figure as 2005, while the number of infant deaths decreased from 140 in 2005 to 121 in 2006. Deaths in the first week of life accounted for 60 per cent of all infant deaths. The number of infants dying on the first day of life accounted for 42 deaths in 2006 compared with 68 in 2005.

1.6.3. As with stillbirths and infant deaths, the numbers of perinatal, neonatal and postneonatal deaths have reduced greatly to around one tenth of their values several decades ago. In 2006, there was a decrease in the number of perinatal deaths (185 to 165) and in the number of neonatal deaths (111 to 90) and a slight increase in postneonatal deaths (29 to 31) from the numbers seen in 2005. Males accounted for more perinatal, neonatal and infant deaths than females, while females accounted for more stillbirths than males in 2006.

### Causes of Infant Deaths and Stillbirths

1.6.4. Congenital malformations, deformations and chromosomal abnormalities (ICD10 codes Q00-Q99) were the cause of 37 per cent of all infant deaths. A further 13 per cent of infant deaths were caused by disorders related to respiratory and cardiovascular disorders specific to the perinatal period (ICD10 codes P20-P29), and another 11 per cent were caused by disorders related to length of gestation and fetal growth (ICD10 codes P05-P08). Two infants died of external causes of injury (ICD10 code V01-Y98).

1.6.5. Fifty-one per cent of all stillbirths in 2006 were caused by 'other conditions and disorders originating in the perinatal period' (ICD10 codes P75-P96) while placental and cord conditions (ICD10 code P02) accounted for a further 19 per cent.

### Pregnancy, Childbirth and Puerperium

1.6.6. There were three maternal deaths in 2006, compared to one death in both 2004 and 2005, and there were eight maternal deaths in the period 1994-2003.

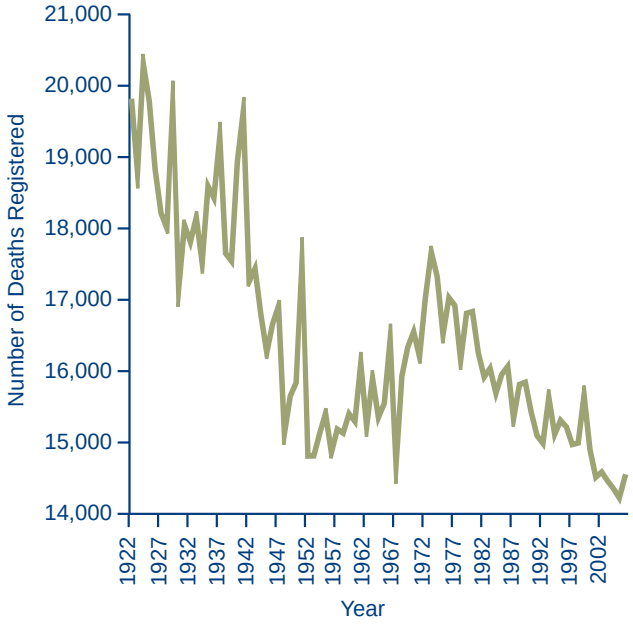
## 1.7 Deaths

### Numbers

1.7.1. In 2006, there were 14,532 deaths registered in Northern Ireland, an increase of just over 300 deaths or 2.2 per cent on the 14,224 deaths registered in 2005, which was the lowest figure ever recorded.

1.7.2. The reduction in the number of deaths in recent years has occurred despite the population increasing in size and containing a higher proportion of elderly people. The current population is 14 per cent larger than it was in 1976 and those aged 75 and over represent six per cent of the population now compared to only four per cent in 1976. Indeed, if the age-specific death rates of 1976 still applied today, the number of deaths registered in 2006 would have been over 26,000; almost 12,000 higher than the actual number registered. This reduction in the number of deaths reflects the continuing reduction in mortality rates across all age groups and the corresponding increase in life expectancy. Figure 1.19 shows the number of deaths registered from 1922 to 2006.

**Figure 1.19: Number of Deaths Registered (1922 to 2006) – non-zero y-axis**




### Mortality by Age

1.7.3. In 2006, 61 per cent of deaths were of people aged 75 and over, and a further 24 per cent were of people aged 60 to 74. Children aged under five accounted for one per cent of all deaths.

1.7.4. The average age at death in 2006 was 71 years for males and 78 years for females, an increase of six years on the average age at death for males in 1976 and seven years for females. This reflects the increased survival of males and females over the period and the consequential ageing of the population.

1.7.5. From the relatively high rates of death in infancy, death rates sharply decline through childhood. The lowest age-specific death rates (ASDRs) were experienced by males and females aged 5–9 years, with an ASDR of 0.1 per 1,000 population for both males and females. ASDRs begin to increase after age 15 years, for both males and females. Throughout the life span, ASDRs are higher for males. However, the difference between males and females becomes more prominent after the age of 60 years. Figures 1.20a and 1.20b show age-specific deaths rates for males and females by age group for 1976 and 2006.

**Figure 1.20a: Age-Specific Death Rates by Age Group and Sex (1976 and 2006)**

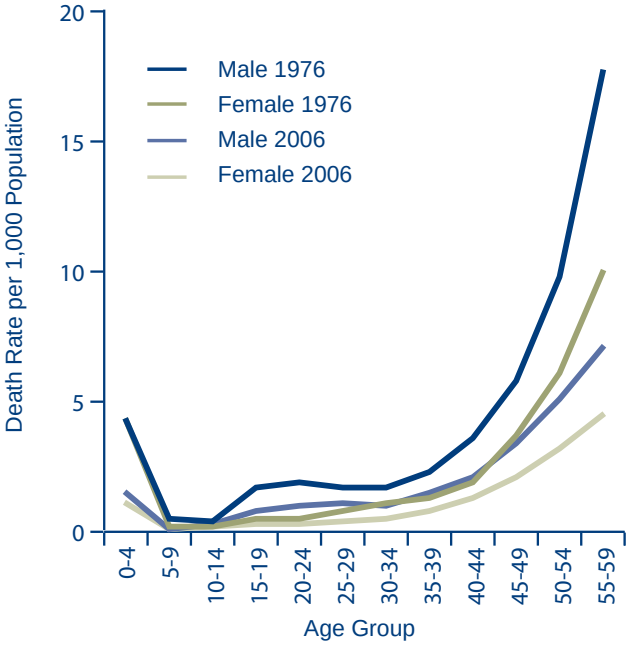
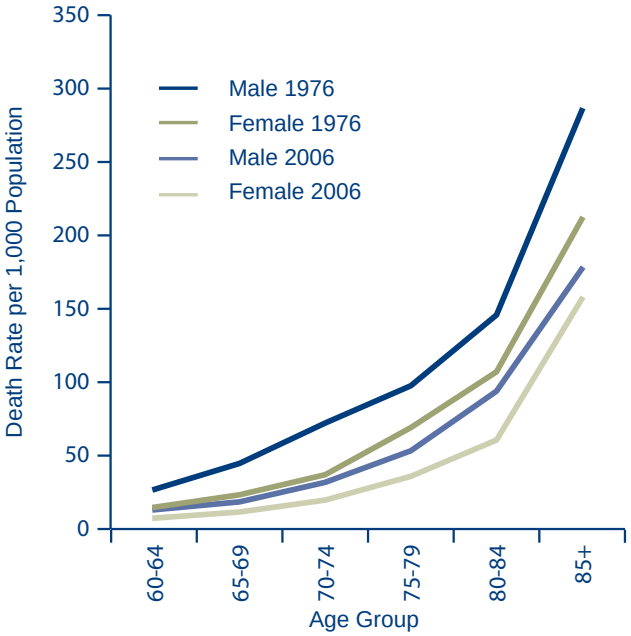


**Figure 1.20b: Age-Specific Death Rates by Age Group and Sex (1976 and 2006)**




1.7.6. In the past 30 years the annual risk of dying has declined for people of all ages with the exception of females aged 10-14. The largest declines in male age-specific death rates occurred in the 5-9 years age group (down 73 per cent), followed by those aged 0-4 years (down 66 per cent), and 65-69 years (down 59 per cent). Female age-specific death rates declined most substantially for 0-4 years (74 per cent), 5-9 years (down 62 per cent), followed by those aged 30-34 years (down 58 per cent).

### Mortality by Sex

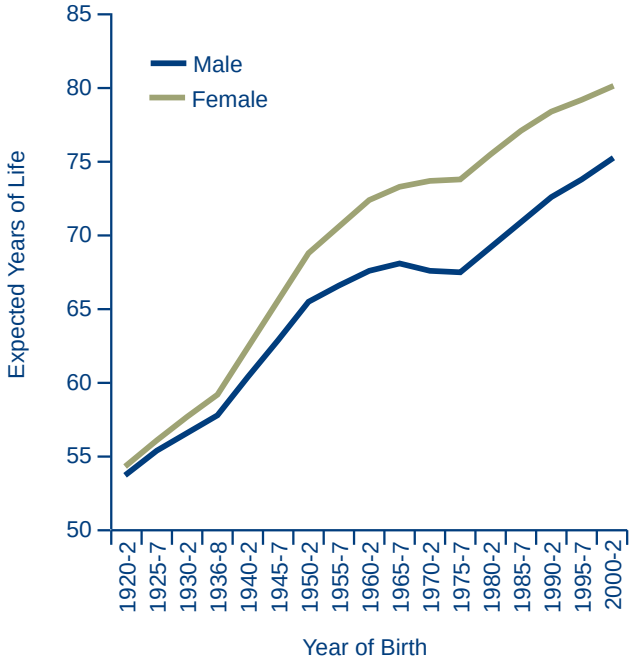
1.7.7. Female deaths (7,470) outnumbered male deaths (7,062) registered in 2006, giving a sex ratio of 106 female deaths for every 100 male deaths. The number of female deaths has outnumbered the number of male deaths for each of the last 17 years.

1.7.8. In 1976, males had a death rate of 11.8 deaths per 1,000 population compared to females with a death rate of 10.6 deaths per 1,000 population. By 2006, the male death rate was 8.3 deaths per 1,000 population and the female rate was slightly higher at 8.4 deaths per 1,000 population.

### Life Expectancy

1.7.9. Children born today can expect to have longer lives than children born in the past. Based on current death rates, males born in recent years could expect to live until they are 76.1 years and females could expect to live until they are 81.0 years, with corresponding figures for men and women born around 1920-22 of 53.8 and 54.4 years respectively. While women aged 65 today could expect to live another 19.5 years, their male counterparts could expect to live another 16.6 years. Figure 1.21 shows the change in the expectation of life at birth for males and females since 1920.

**Figure 1.21: Period Expectation of Life at Birth, by Sex (1920-2 to 2000-2) - non-zero y-axis**




1.7.10. Expectation of life statistics are a way of comparing over time the mortality rates of people living in Northern Ireland. Typically, these statistics are calculated using today's age-specific mortality rates - this is known as the 'period life expectancy' calculation. This enables the comparison of mortality rates over time, or for different areas, and allows one to readily compare the expectancy of life statistics of today with those of the past. Expectation of life statistics given in Figure 1.21 are an example of this. However, in practice period life expectancy is unlikely to be a true reflection of what is likely to happen. Throughout the twentieth century, mortality has improved significantly, with around a one per cent year on year improvement in mortality rates.

1.7.11. Expectation of life statistics can however be calculated another way. This alternative is known as a

'cohort life expectancy' calculation. Cohort expectation of life statistics are calculated using age-specific mortality rates over the lifetime of a group of people born in the same year (a cohort). The cohort method allows for projected improvements in mortality rates over time. As the cohort estimates incorporate population projections they inherently have more uncertainty than period estimates. Table 1.3 shows period and projected cohort expectations of life for 2006.

**Table 1.3: Period and Projected Cohort Expectations of Life - Males and Females, 2006**

| Expectation of Life (years) | Males | Females |
|---|---|---|
| At birth - Period | 76.2 | 81.1 |
| At birth - Projected Cohort | 87.6 | 91.3 |
| Percentage difference | 15% | 13% |
| Age 65 - Period | 16.8 | 19.7 |
| Age 65 - Projected Cohort | 20.3 | 23.0 |
| Percentage difference | 21% | 17% |

### Mortality by Marital Status

1.7.12. Of all men whose deaths were registered during 2006, 52 per cent were married at the time of death, while 23 per cent were widowed and 20 per cent were single. In contrast, of all women whose deaths were registered during 2006, 55 per cent were widows at the time of death, with a further 25 per cent married and 17 per cent single. This difference is a consequence of the greater longevity of women.

### Centenarians

1.7.13. There were 89 deaths of centenarians in 2006, which is the highest number on record. Only nine of these deaths were males, comprising of two aged 100, five aged 101 and two aged 102. There were 80 female deaths of centenarians, 26 aged 100, 23 aged 101, 17 aged 102, seven aged 103 and seven aged 104 and over. In contrast, there were six deaths of centenarians in 1976 of which one was male and five were females.

### Place of Death and Type of Death Certificate Issued

1.7.14. Of the 14,532 deaths registered in 2006, 53 per cent of these occurred in hospitals. A further 18 per cent of deaths occurred in nursing homes or psychiatric hospitals. The remaining 29 per cent occurred in all other places.

1.7.15. For 77 per cent of deaths registered in 2006, a medical certificate was issued while coroner's certificates were issued for the remaining 23 per cent of deaths. A death must be reported to a coroner if the person's doctor had not seen them in the 28 days before they died or immediately afterwards, a doctor had not looked after, seen or treated the person during their last illness (in other words, death was sudden), the cause of death is unknown or uncertain, the death was violent or unnatural (for example, suicide, accident or drug or alcohol overdose), the death was in any way suspicious, the death took place during surgery or recovery from an anaesthetic, the death took place in prison or police custody, or the death was caused by an industrial disease or accident.

### Deaths by Date of Registration and Date of Occurrence

1.7.16. All figures recorded in this report are based on the year that the death was registered and not the year in which the death occurred. While the vast majority of deaths are registered shortly after death, some can take time to be registered. Over the registration period 1996 to 2004, 92.4 per cent of all deaths were registered in the year the death occurred. However in more recent years a larger percentage of deaths are being registered a significant period after death. In 2005, 90.8 per cent of deaths were registered in the year they occurred and this increased slightly to 91.0 per cent for deaths occurring in the registration year 2006. Events such as infant death or suicide must be referred to a coroner and this legal process can take some time thus delaying final death registration.

### Deaths by Area

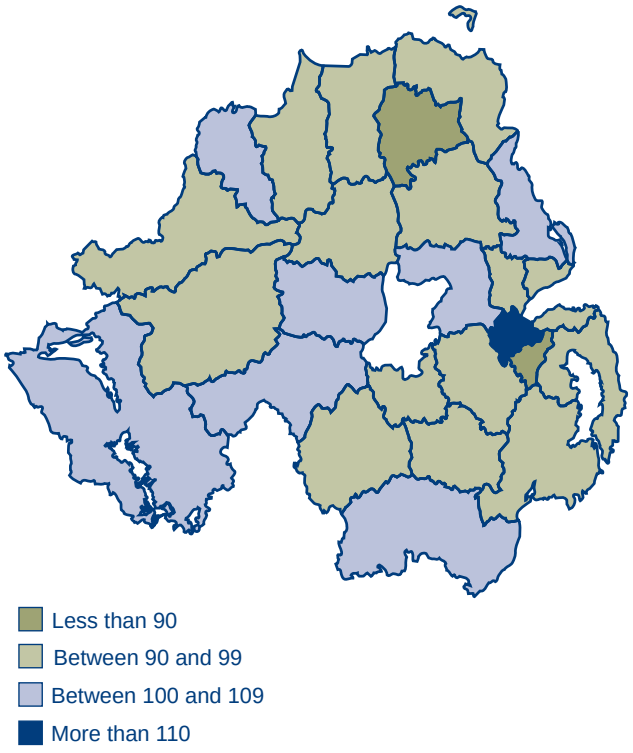
1.7.17. The standardised death rate, which allows for the age and sex structure of the population, was highest in the Western Health Board at 8.7 deaths per 1,000 population and lowest for the Northern Health Board at 8.0 deaths per 1,000 population. The death rates in the Eastern and Southern Boards were 8.4 and 8.6 respectively.

1.7.18. Standardised mortality ratios (SMRs), based on three years data (2004-2006), compare local death rates with death rates in Northern Ireland as a whole, taking account of the different population structure of each area. SMRs by Local Government District are presented in Figure 1.22. Five Local Government Districts, Belfast, Derry, Fermanagh, Larne and Newry and Mourne have a standardised mortality ratio significantly above the

Northern Ireland average of 100. The highest, Belfast, is 14 per cent higher than the Northern Ireland average.

1.7.19. At the other end of the scale, 10 Local Government Districts, Ballymena, Ballymoney, Banbridge, Castlereagh, Coleraine, Craigavon, Magherafelt, Newtownabbey, North Down and Omagh, have SMRs significantly below the Northern Ireland average of 100. The lowest, Ballymoney and Castlereagh are at least 10 per cent below the Northern Ireland average.

**Figure 1.22: Standardised Mortality Ratios by Local Government District (2004 to 2006)**






## 1.8 Cause of death

### Numbers

1.8.1. All deaths registered in 2006 have been coded using the tenth revision of the International Statistical Classification of Diseases, Injuries and Causes of Death (ICD10).

1.8.2. In total, circulatory diseases, malignant neoplasms (cancer) and respiratory diseases accounted for almost three-quarters of all deaths in 2006.

1.8.3. In 2006, 3,848 people died from cancer, a broadly similar number to recent years. However, cancer deaths (ICD10 codes C00-C97) represent 26 per cent of all deaths registered in 2006 compared to 17 per cent of all deaths in 1976. By contrast, in 2006, 2,556 people died from ischaemic heart disease (ICD10 codes I20-I25), a decrease of 47 per cent from the 1976 figure of 4,820 deaths.

1.8.4. Some of the principal causes of deaths are considered in the following sections.

### Diseases of the Circulatory System (ICD10 Codes I00-I99)

1.8.5. In 2006, these diseases accounted for 4,879 deaths; 34 per cent of all deaths in Northern Ireland. Between 1996 and 2006 the number of deaths due to diseases of the circulatory system, fell from 5,002 to 4,879 (3 per cent). Circulatory diseases account for the largest number of deaths attributable to a single group of causes.

1.8.6. Deaths due to the diseases of the circulatory system are mostly accounted for by ischaemic heart disease (ICD10 Codes I20-I25) and cerebrovascular disease (ICD10 Codes I60-I69), which accounted for, respectively, 18 per cent and nine per cent of all deaths in 2006. The number of male deaths from ischaemic heart disease exceeds the number of female deaths, whereas female deaths from cerebrovascular disease are more numerous than male deaths.

### Malignant Neoplasms (ICD10 Codes C00-C97)

1.8.7. Cancer accounted for 3,848 deaths in 2006, 26 per cent of all deaths. Prior to 2006 the number of deaths due to cancer had remained broadly stable over recent years at about 3,700 per year. The most common site for males and females was the trachea, bronchus or lung (ICD10 Codes C33-C34), which accounted for 26 per cent of male cancer deaths and 18 per cent of female cancer deaths in 2006. Deaths of females due to breast cancer

(ICD10 Code C50) accounted for 16 per cent of female cancer deaths in 2006.

### Respiratory Diseases (ICD10 Codes J00-J99)

1.8.8. Deaths from respiratory diseases numbered 1,982 in 2006; 14 per cent of all deaths in Northern Ireland. These included 895 deaths from pneumonia (ICD10 Codes J12-J18), 671 from chronic lower respiratory diseases (ICD10 Codes J40-J47) and 416 due to all other respiratory diseases. Between 1996 and 2006, the number of deaths due to diseases of the respiratory diseases fell from 2,749 to 1,982 (28 per cent). Part of this drop in the numbers is associated with a change in the coding rules for pneumonia that were implemented when ICD10 was introduced in 2001.

### External Causes of Death (ICD10 Codes V01-Y98)

1.8.9. The number of deaths from external causes registered in 2006 was 853, of which 574 were males and 279 were females with the corresponding figures for 2005 being 761 deaths - 511 male and 250 female. Most of this increase is due to an increase in suicides and events of undetermined intent. In the period 1996-2005, there were 600 deaths per year on average from external causes of death.

1.8.10. The number of deaths from transport accidents (ICD10 Codes V01-V99) in 2006 (187) has risen by seven per cent compared to 175 deaths in 2005. Within this figure, 73 per cent of transport accident deaths were of males.

### Deaths from Suicide and Events of Undetermined Intent (X60-X84, Y87.0, Y10-Y34, Y87.2)

1.8.11. In the United Kingdom, deaths classified as 'events of undetermined intent' along with 'intentional self-harm' are classified as suicide. In 2006, there were 291 such deaths registered in Northern Ireland, of which 227 were of males and 64 were of females. This is a 37 per cent rise in the number of registrations on the 2005 figure of 213 (167 males and 46 females).

1.8.12. All suicides are referred to the coroner. These deaths can take time to be fully investigated and there is often a period of time between when the suicide occurs and when it is registered. A significant number of suicides registered in 2006 occurred in earlier years. Of the 291 such deaths registered in 2006, 72 actually occurred in 2006, 130 occurred in 2005, 52 occurred in 2004, with the remaining 37 occurring in 2003 or earlier.

1.8.13. Prior to 2004, there were seven coroner's districts in Northern Ireland. Following a review of the coroner's service, the separate districts were amalgamated into one centralised coroner's service. This change may have affected the timing of the registration of deaths, with statistics from 2004 onwards being more timely and consistent.

1.8.14. Table 1.4 compares the number of suicide and undetermined deaths being registered each year with the number of deaths occurring in those years. Occurrence figures for 2004 to 2006 have been excluded as a significant number of deaths occurring in these years will as yet not have been registered. The occurrence figures show more accurately the upward trend in the number of suicide and undetermined deaths.

**Table 1.4: Number of Suicide and Undetermined Deaths Registered and Actual Number Occurring (1996-2006)**

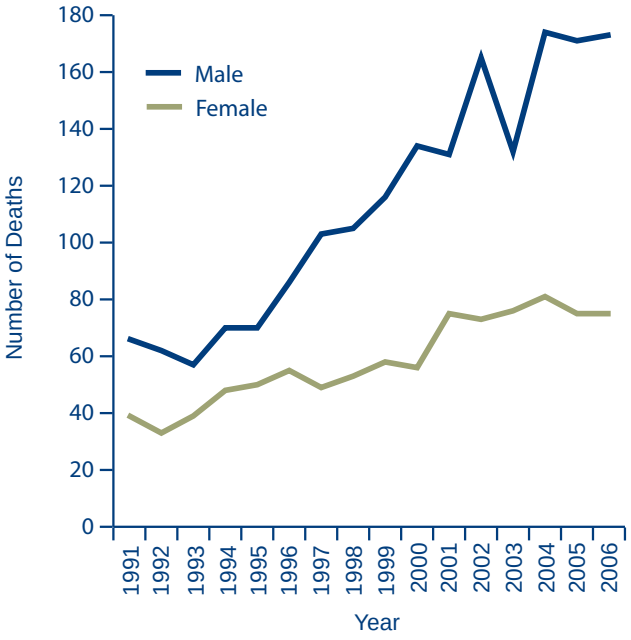
| Year | Suicide and Undetermined Deaths (Year Registered) | Suicide and Undetermined Deaths (Year Occurred) |
|---|---|---|
| 1996 | 143 | 161 |
| 1997 | 138 | 153 |
| 1998 | 150 | 180 |
| 1999 | 154 | 163 |
| 2000 | 185 | 186 |
| 2001 | 158 | 176 |
| 2002 | 183 | 193 |
| 2003 | 144 | 152 |
| 2004 | 146 | … |
| 2005 | 213 | … |
| 2006 | 291 | … |

### Alcohol Related Deaths

1.8.15. In 2005, the definition of alcohol related deaths was widened to include additional causes of death with a clear causal relationship to alcohol consumption. The main addition is 'mental and behavioural disorders due to use of alcohol' (see Appendix 3 for further details). In 2006, a total of 248 people died from alcohol related deaths using the new definition; 173 males and 75 females. While this is a slight increase from the equivalent

2005 figure of 246 deaths (171 males and 75 females), the number of alcohol related deaths in 2006 is over 75 per cent higher than the 141 deaths registered in 1996. Figure 1.23 shows the trend in the number of alcohol related deaths since 1991 using the new definition.

**Figure 1.23: Deaths from Alcohol-Related Diseases by Sex (1991-2006)**




## Main Causes of Death by Age and Sex

1.8.16. Mortality rates by cause of death vary with age and sex. A total of 121 deaths of children aged less than one year occurred in 2006, 74 per cent of whom died within the first four weeks of life. The majority of infant deaths were attributed to certain conditions originating in the perinatal period (ICD10 Codes P00-P96, 54 deaths) and congenital anomalies (ICD10 Codes Q00-Q99, 45 deaths).

1.8.17. A total of 70 children aged 1-14 died in 2006. External causes of death accounted for 29 of these deaths, while cancer and diseases of the nervous system (ICD10 Codes G00-G99) accounted for a further 10 deaths each.

1.8.18. A total of 321 people aged 15-34 died in 2006. As with children, external causes of death accounted for more deaths than any other cause (233 deaths, 73 per cent of deaths of persons aged 15 to 34). Thirty-eight per cent of all suicide and self-inflicted injury and events of undetermined intent (112 out of 291 suicides) and 43 per cent of deaths due to transport accidents (81 out of 187 transport accident deaths) involved people aged 15-34.

1.8.19. Of the 2,556 people who died between the ages of 35-64 (of which 62 per cent were male), cancer accounted for 39 per cent of deaths in 2006, while diseases of the circulatory system accounted for a further 24 per cent.

1.8.20. Deaths of people aged 65 and over accounted for 79 per cent of all deaths in 2006. Although the death rate from cancer continues to increase with age and accounted for 25 per cent of deaths in this age group, the death rates from diseases of the circulatory system increase more quickly with age and this accounted for 37 per cent of deaths to those aged 65 and over. For the most elderly (aged 85 or more), diseases of the circulatory system accounted for 40 per cent of deaths, cancer 13 per cent and diseases of the respiratory system 20 per cent. Figures 1.24 and 1.25 show the main causes of death by age group for male and female deaths respectively.

**Figure 1.24: Percentage of Male Deaths by Cause and Age Group (2006)**

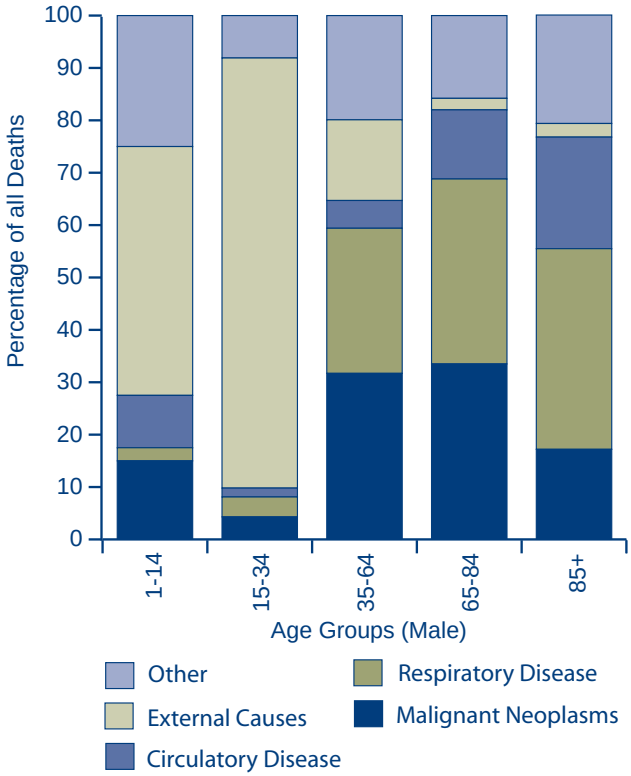
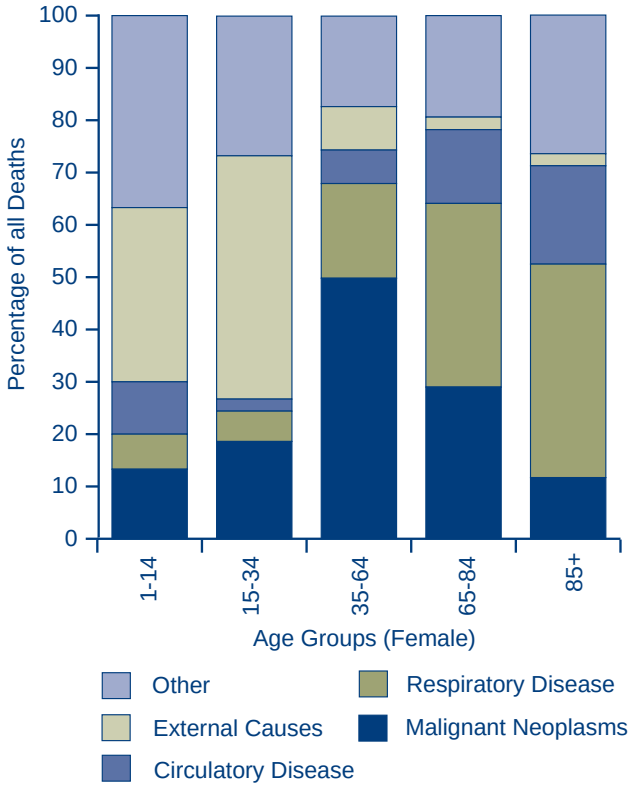


**Figure 1.25: Percentage of Female Deaths by Cause and Age Group (2006)**



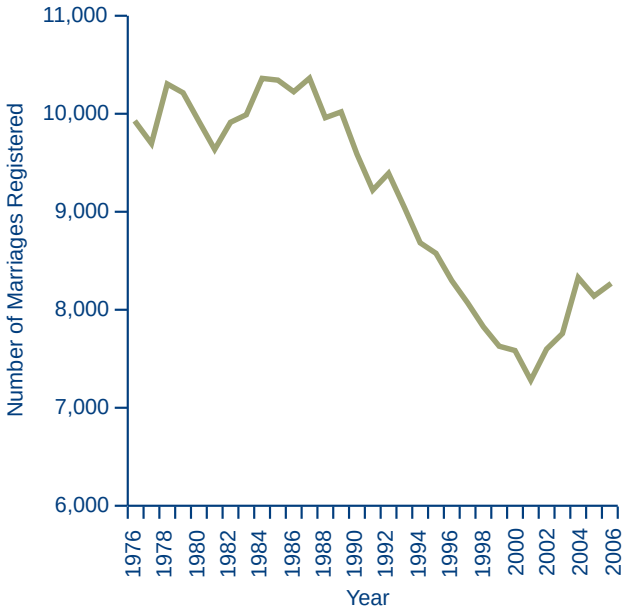

## 1.9 Marriages

### Numbers

1.9.1. Marriage legislation underwent major change in 2004 with the enactment of the Marriage (Northern Ireland) Order 2003 from 1 January 2004. Under the new law, there are less strict residency requirements for marriage; this allows couples to marry in the area of their choice and make it easier for people from outside Northern Ireland to get married here.

1.9.2. There were 8,259 marriages registered in 2006, an increase of 119 marriages or 1.5 per cent on the 2005 figure of 8,140 marriages. The number of marriages registered in 2006 is significantly higher than the lowest number recorded in 2001 of 7,281 marriages, but still below the levels seen 30 years ago of around 10,000 marriages a year. Figure 1.26 shows the number of marriages from 1976.

**Figure 1.26: Number of Marriages Registered (1976 to 2006) – non-zero y-axis**




### Age at Marriage

1.9.3. The average age at marriage has increased markedly in the last two decades. The average age at marriage for all brides in 2006 was 31 years of age. This compares to 28 years in 1996, 25 years in 1986 and 24 years in 1976. The average age for the groom was 33 years of age, an increase of two years from 1996 (31 years), six years from 1986 (27 years) and seven years from 1976 (26 years).

1.9.4. The average age for first marriages has also increased and is now 29 for single females and 31 for single males, both around six years older than their counterparts 30 years ago.

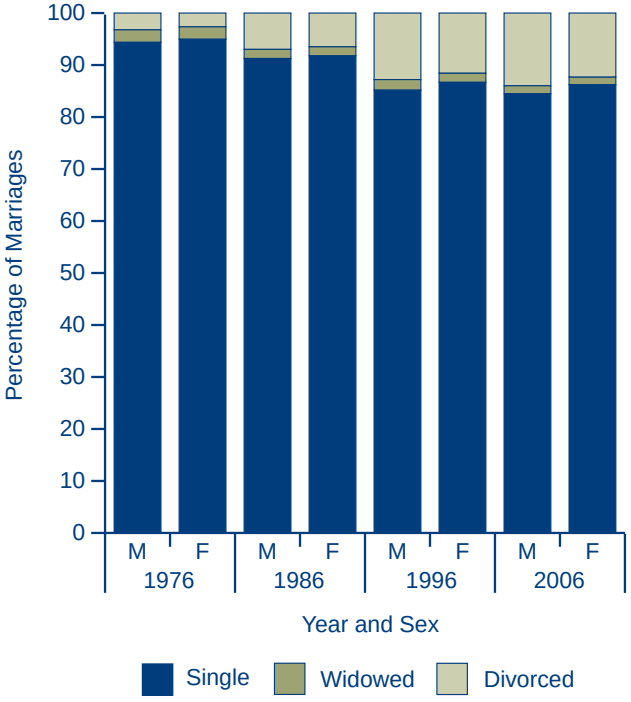
1.9.5. The age difference at first marriage is around three years. This has remained fairly constant over the last 30 years, while the age difference at second marriage is twice as big – around six years; again this has been a constant value since 1976.

### Marital Status at Marriage

1.9.6. Figure 1.27 gives the percentage of marriages by marital status at the time of marriage between 1976 and 2006. The percentage of people marrying who are divorcees rose from three per cent in 1976 to around 12 per cent during 1996 and has increased slightly to around 13 per cent in 2006. The proportion of those marrying who were widowed has remained stable over the past 30 years at around two per cent for both brides and grooms.

1.9.7. Half (50 per cent) of couples who married in 2006 lived at the same address before marriage.

**Figure 1.27: Percentage of Marriages by Sex and Marital Status (1976 to 2006)**

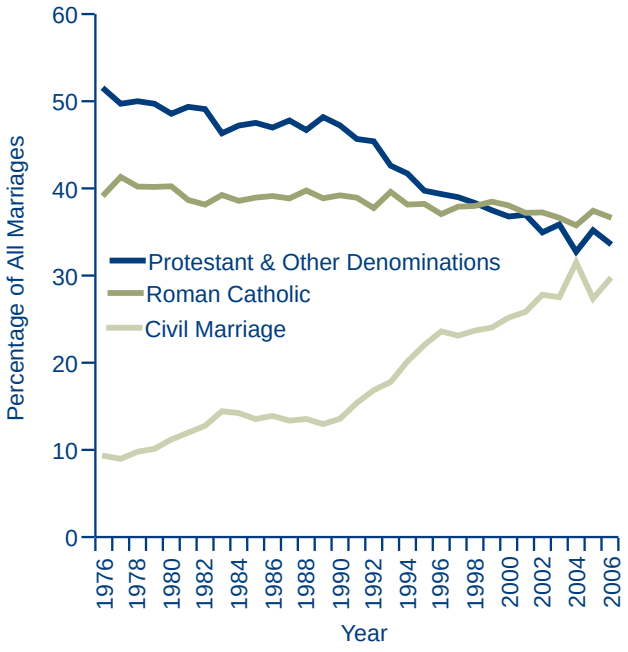



### Religious and Civil Marriages

1.9.8. Almost 30 per cent of all marriages (2,446) in 2006 were civil ceremonies compared to nine per cent in 1976.

1.9.9. Of the 5,813 religious marriages in 2006, 52 per cent were Roman Catholic ceremonies, 20 per cent Presbyterian, 16 per cent Church of Ireland, four per cent Methodist and eight per cent other denominations. Figure 1.28 shows the change in type of ceremony from 1976 to 2006.

**Figure 1.28: Percentage of Marriages by Method of Celebration (1976 to 2006)**




### Place of Ceremony

1.9.10. The Marriage (Northern Ireland) Order 2003 now allows civil marriage ceremonies to be conducted in a number of approved venues outside of Registrar's Offices. In 2006, 878 civil marriage ceremonies (36 per cent of all civil marriage ceremonies) were held in approved venues other than a Registrar's Office compared to 640 in 2005. The most popular location was Belfast Castle (79 civil weddings) followed by Crawfordsburn Inn (36 civil marriages).

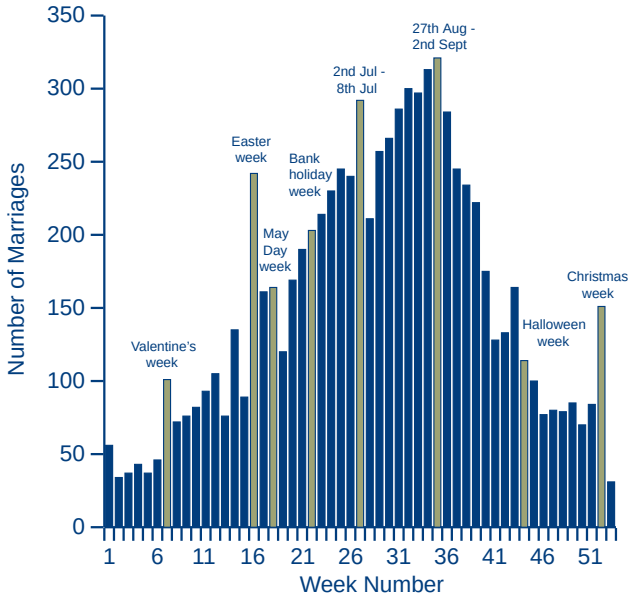
1.9.11. The ability to conduct religious marriage ceremonies other than in religious buildings varies by religion and denomination. In 2006, 285 religious marriage ceremonies (five per cent of all religious marriage ceremonies) were held outside of religious buildings.

### Marriage Day

1.9.12. The most common day of the week for all marriages was a Saturday (38 per cent). Friday was the most common day for civil marriages (35 per cent); and the most common month to get married was August (1,301 couples) followed by September (1,190 couples). Saturday 26th August 2006 was the most popular day in 2006 to get married, with 114 couples marrying on that date. Only 25 marriages took place on a Sunday in 2006, seven of which were civil marriages – the latter only becoming possible under the new legislation.

1.9.13. Figure 1.29 shows the number of marriages by week, with dates of selected weeks highlighted. The most popular week to get married was from Sunday 27th August to Saturday 2nd September (321 couples).

**Figure 1.29: Number of Marriages per Week (2006)**




### Marriages by Area

1.9.14. Almost 16 per cent of all marriages in 2006 occurred in Belfast, followed by just over six per cent in both Newry and Mourne and North Down Local Government Districts.

1.9.15. The average age of males and females at the time of marriage varies across Local Government Districts. Carrickfergus had the highest average ages at 33 for females and 35 for males compared to Dungannon with the lowest average ages at 29 for females and 31 for males.

1.9.16. Eighty per cent of religious ceremonies in Newry and Mourne and Derry Local Government Districts were Roman Catholic compared to seven per cent of religious ceremonies in Carrickfergus Local Government District, reflecting the community background of the populations in these Local Government Districts.

## 1.10 Divorces

### Numbers

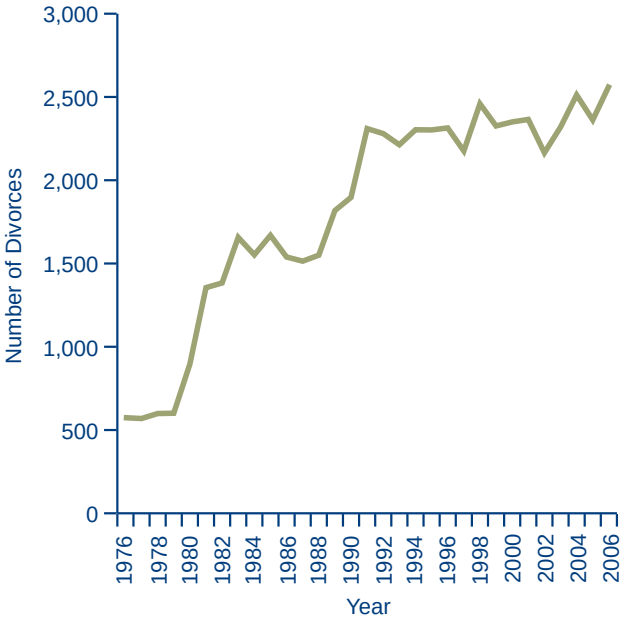
1.10.1. The divorce figures reported here are based on Decree Absolutes. Decree Nisi information can be obtained from the Northern Ireland Court Service. A Decree Nisi does not terminate the marriage; a couple remain married until the Decree Absolute has been granted.

1.10.2. The number of marriages dissolved in Northern Ireland in 2006 was 2,565. This is an increase from last year's figure of 2,362 and is the largest number of divorces on record for Northern Ireland. During the last decade the number of divorces had stabilised with an annual average of around 2,400 per year.

1.10.3. During the 1970s the number of divorces was around 500 per year, by the 1980s the figure had tripled to around 1,500 per year and in the 1990s and early 2000s there has been another increase in the number of divorces to around 2,400 per year. Last year, 2005 saw this number reduce to around 2,300, but the 2006 figure has increased to almost 2,600. Figure 1.30 shows the number of divorces from 1976 to 2006.

1.10.4. Of couples married in Northern Ireland in the mid-1980s it is estimated that just over 1 in 6 were divorced within 20 years of their marriage.

**Figure 1.30: Number of Divorces Registered (1976 to 2006)**




### Grounds for Divorce

1.10.5. Non-cohabitation remains the most frequently recorded reason for divorce (72 per cent), followed by behaviour (13 per cent) and combined grounds (11 per cent).

1.10.6. As in previous years, more women (65 per cent) than men (34 per cent) lodged applications for divorce in 2006. Just 17 (one per cent) divorces granted in 2006 were the result of joint applications.

### Duration of Marriage

1.10.7. The average duration of marriage ending in divorce is increasing over time. The average duration of marriage ending in divorce was 18 years in 2006; the comparable duration for 1986 was 15 years.

1.10.8. Of the divorcing couples in 2006, five per cent were married less than five years, 19 per cent between five and nine years and 76 per cent were married for 10 years or more. Around 23 per cent of divorces occurred to couples that had been married for 25 years or more.

### Marital Status at Time of Marriage

1.10.9. While the majority of people getting divorced in 2006 had been single at the time of marriage (91 per cent for males and females), the proportion of people getting divorced who had been divorced previously has been rising since the early 1980s and this group now accounts for eight per cent of all divorcees in 2006. One per cent of all divorcees were widows or widowers when they married.

### Age at Divorce

1.10.10. The average ages at divorce for men and women who got divorced in 2006 were 44 and 42 years respectively. More women get divorced at younger ages than men reflecting the difference in their ages at marriage with husbands generally being older than their wives.

### Age at Marriage of Divorcees

1.10.11. The average age at marriage of men and women who got divorced in 2006 was 27 years and 25 years respectively. In 2006, 49 per cent of men and 63 per cent of women who divorced were under 25 years when they married.

### Method of Celebration of Marriage

1.10.12. In 2006, 31 per cent of divorces were of marriages that had been celebrated in a Roman Catholic Church. Corresponding figures for Presbyterian, Church of Ireland,

Methodist and Civil marriages were 17 per cent, 14 per cent, four per cent and 24 per cent respectively. The ceremony type for the remaining 10 per cent was another religion or unknown. The average duration of marriage before divorce for marriages celebrated in a religious ceremony was 19 years compared to 14 years for those who celebrated marriage in a civil ceremony.

### Divorcees by Area of Residence

1.10.13. Over 16 per cent of all divorcees in 2006 were residing in Belfast followed by around six per cent in Lisburn and North Down Local Government Districts. Seven per cent of divorcees were residing outside Northern Ireland at the time of divorce, but this figure differed by gender – four per cent of female divorcees were living outside Northern Ireland compared to almost 10 per cent of male divorcees.

## 1.11 Civil Partnerships

1.11.1. The Civil Partnership Act 2004 came into force in late 2005, enabling same-sex couples to obtain legal recognition of their relationship. There were 12 civil partnerships registered in the last few weeks of 2005. During 2006, the first full year for which the Act was in force, 116 civil partnerships were registered in Northern Ireland. Of these 65 partnerships were of males and 51 of females.

### Marital Status and Age of Civil Partners

1.11.2. For 91 civil partnerships both partners were single, while in 25 civil partnerships at least one partner had previously been married. For 57 of the 65 male civil partnerships both partners were single, while for 8 civil partnerships at least one partner had previously been married. For 34 of the 51 female civil partnerships both partners were single; in the remaining 17 female civil partnerships at least one partner had previously been married.

1.11.3. For male civil partnerships the average age of partners was just over 42 years, this compares to 39 years for female civil partnerships.

### Place of ceremony

1.11.4. In 2006, 103 civil partnership ceremonies were held in Registrar's Offices. The remaining 13 ceremonies were held in an approved venue.

### Civil Partnerships by District

1.11.5. Civil partnerships celebrated in a particular district are not necessarily between residents of that district. In 2006, Belfast Local Government District was the most popular district for civil partnerships (69 civil partnerships), with Derry Local Government District the second most popular (11 civil partnerships).

## 1.12 Adoptions

1.12.1. Registers of children adopted under the provisions of the Adoption (NI) Order 1987 and Adoption (Hague Convention) Act (NI) 1969 and of previous adoption Acts of 1929, 1950 and 1967 are kept in the General Register Office, to which adoption orders made to the courts are transmitted.

1.12.2. A certified copy of an entry in the Adopted Children Register is evidence of adoption, and is also evidence of the date of birth of the adopted child.

1.12.3. The number of children recorded in the Adopted Children Register during 2006 was 141, an increase of one from the 2005 figure of 140. The number of adoptions had been falling steadily since 1970 when over 500 children were adopted; the 1998 figure of just 120 adoptions was the lowest recorded figure since the early 1930s.

## 1.13 Re-registrations of Births

1.13.1. In 2006, 794 births were re-registrations, 46 more than in 2005. The most common reason for a re-registration is to add the father's name to the birth entry.

## 1.14 Gender Recognition Registration

1.14.1. The Gender Recognition Act 2004 was passed on 1 July 2004 and established a Gender Recognition Panel that will issue Gender Recognition Certificates to those who have satisfactorily proved that they have been living in their new gender.

1.14.2. The Gender Recognition Regulations (Northern Ireland) 2005 that came into operation from 1 April 2005 will allow the Registrar General, on receipt of a Gender Recognition Certificate, to re-register a birth, showing the new gender, in the Gender Recognition Register.

1.14.3. During the period 1 April 2005 to 31 December 2005 there were 11 births re-registered in this way. In 2006 there were 21 births re-registered in this way.

# Chapter 2
# The Northern Ireland Longitudinal Study

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## 2.1 Introduction and Background

2.1.1. Demographic statistics generated from civil registration systems are a major source in monitoring changes in society. The development of the civil registration system in Britain and Ireland took place during the second half of the 1800s, and the basis of it still remains in place today. The current system is underpinned by a statutory framework, which helps to ensure that the quality of the information recorded is very high and the resultant vital statistics are of a high standard internationally.

2.1.2. In addition, the decennial Census of Population in Northern Ireland, which is also managed by the Registrar General, provides a benchmark for all demographic statistics every decade. The latest Census in Northern Ireland held, in 2001, was a significant success and planning for the next Census is already underway. This combination of a Census of Population and the civil registration system has been vital in understanding changes in society and planning for the future. Moreover, this model of a civil registration system alongside a Census is the conventional framework for demographic statistics across the developed world.

2.1.3. The latest Census provided us with an insight into a number of key demographic changes taking place in Northern Ireland [1]. Firstly, the population in 2001 is older than ever before and secondly, people are living in a wider variety of household structures with more single person households and more families living in less formal structures. Added to this, since 2001 there has been a significant rise in migration into Northern Ireland which has resulted in a more diverse society here.

2.1.4. These demographic trends are not unique to Northern Ireland, similar demographic changes are occurring across the developed world. However, demographic changes present challenges to the recording of and utility derived from standard official statistics. As an example, today the population is living longer and has a wider variety of occupations than ever before. This leads to some information being recorded at a specific point in time being correct for that person at that time, but not necessarily correct for the future or the past. This is obviously true of information recorded in the civil registration system (e.g. occupation of parents on birth certificates).

2.1.5. Issues created by demographic change are not new. Around 35 years ago in a ground-breaking research initiative the Office for Population Censuses and Surveys, in England and Wales, began to link a population sample from the 1971 Census with their subsequent vital event registrations. [2] This study has become known as the Longitudinal Study and is still running today.

2.1.6. In the early 1970s data linkage research was novel and required significant resources to maintain and support. However the resultant linked data have significant demographic statistics and research benefits. Much of the research on the Longitudinal Study in England and Wales has fed into government social policy, particularly on health inequalities. The Longitudinal Study in England and Wales has been at the centre of public policy research over the last 30 years.

2.1.7. The England and Wales Longitudinal Study (LS) has been used to look at a range of important questions including: occupational mortality, fertility changes, family reconstitution, women's occupations, geographical and social inequalities in health, social mobility, ethnic health etc. Types of analyses include:

- Prospective analysis of Census and event data: studies of associations between employment status and mortality, between economic status and cancer registrations, or between socio-economic factors and fertility or survival analysis by area deprivation.
- Prospective analysis of successive event data: studies of changes in birth spacing and associations between fertility and cancer survival.
- International comparisons: countries such as France, Denmark, Finland and the USA have similar programmes to the England and Wales LS.

2.1.8. Until recently the resources required to link such individual level data would have been very significant. However the increased power of computing equipment coupled with the benefits of such data linkages has meant that a Longitudinal Study has been identified as a major area for development in Northern Ireland.

2.1.9. After the 2001 Census, the Northern Ireland Statistics and Research Agency (NISRA) along with the Department of Health, Social Services and Public Safety (DHSS&PS) and the Health and Personal Social Services Research and Development Office (RDO) joined forces to develop a Longitudinal Study in Northern Ireland. In 2003, the three organisations agreed to fund and set-up the Northern Ireland Longitudinal Study or NILS [3]. Over the last three years the linking of vital event registration data and the 1991 and 2001 Census has been taken forward by officials of the Registrar General for Northern Ireland.

2.1.10. The remainder of this chapter describes the Northern Ireland Longitudinal Study, the data included in the Study and a few outline analyses of the type of demographic research issues it can help address.

## 2.2 What is the Northern Ireland Longitudinal Study?

2.2.1. The Northern Ireland Longitudinal Study (NILS) is a large-scale data linkage study which has been created by linking statistical and administrative data. Information is linked over time on individuals recorded in the 1991 and 2001 Censuses, birth and death registrations and demographic data derived from health registrations. The Study is designed for statistical and research uses only and is managed under Census and civil registration legislation.

2.2.2. The original England and Wales LS is similar and is designed with a live sample of around 500,000 people from the England and Wales population (one per cent of the population for England and Wales). The England and Wales LS has been running since the 1971 Census sample was extracted and also includes data from the 1981, 1991 and 2001 Censuses along with vital event, cancer registration and other data. Along with the 500,000 people in the England and Wales LS who are in the live sample, the LS also includes data on a further 500,000 people who have lived in England and Wales during the period 1971-2006.

2.2.3. A similar study, the Scottish Longitudinal Study (SLS), is also running in Scotland with a sample of nearly 300,000 people from the Scottish population (five per cent of the population of Scotland) starting from the 1991 Census. [4]

2.2.4. Members of the NILS are selected on 104 annual birth dates. In total around 500,000 people are included in the NILS. The NILS has been set up to collect data that is either required by law (Census, births and deaths registrations) or is a standard administrative function within the UK. As a result, no additional burden is put on sample members. In the England and Wales LS, it has been shown [2] that because data linkage rates are sufficiently high, detailed information can be built up.

2.2.5. Longitudinal studies have many advantages. With the ability to capture information on a sample at various time points, researchers can look at separating changes over time within individuals (ageing effects) from differences among people in their baseline levels (cohort effects).

2.2.6. The NILS includes a range of variables which can be explored, including; cultural, demographic, economic, health, housing and social issues. Using the example of health, the potential uses of longitudinal studies such as the NILS are considerable. The NILS facilitates the analysis of information on several of the equality groups such as ethnic group, religious belief, age, gender, with/without dependants, etc. The types of data included in the NILS are described in more detail below.

## 2.3 Data Included in the Northern Ireland Longitudinal Study

2.3.1. To date most of the data in the NILS comes from the 1991 and 2001 Censuses, the General Register Office (GRO) vital event registers and demographic data derived from health registrations.

2.3.2. Due to the inclusion of socio-demographic data from the Census, an added dimension can be brought to the analysis of health variations and inequalities. Social differentials in health and mortality can be explored using measures such as the social class from the registration system, deprivation measures, National Statistics Socio-Economic Classification, occupation and industry, housing tenure, etc. Change over time can also be looked at with reference to a person's later health or their cause of death because of the linkage of data from more than one Census. The effects of geography and migration can also be examined.

2.3.3. As noted above, NILS members are selected based on their birthday (day and month). In total 104 dates throughout the calendar year are included (100 unique to Northern Ireland and the four England and Wales LS dates). If someone has a date of birth coinciding with one of the 104 NILS dates, then they are included in the study.

2.3.4. The NILS database includes data relating to NILS members only. For each NILS member the 1991 and/or 2001 Censuses and vital events data relating to the member are included. In addition migration events relating to the NILS member are included; these are taken from the twice yearly data extracts from the health registration data in which changes in address information are recorded.

2.3.5. In addition contextual household information is collected for each NILS member from the Census. For many research studies the sample members are of most interest, however, with the inclusion of contextual household variables describing the household, the research scope of the NILS is greatly enhanced.

2.3.6. The datasets in the NILS include:

**1991 and 2001 Census data relating to NILS members on:**

- age, sex and marital status
- family, household or communal establishment type
- housing, including tenure, rooms and amenities
- country of birth
- ethnicity (2001 Census only)
- educational qualifications
- economic activity
- occupation and social class
- migration (address one year ago)
- limiting long-term illness
- self-reported health (2001 Census only)
- religion and/or community background
- care giving (2001 Census only)
- household information on the position of the NILS member in the household

**Vital Events Registration Data – General Register Office**

- New births of NILS members
  - Gender
  - Date of birth
  - Place of birth
  - Single or multiple birth
  - Parent(s) date(s) of birth
  - Parent(s) place(s) of birth
  - Parent(s) address(es)
  - Parent(s) occupation(s)
  - Parent(s) marital status, where and when they were married
  - Number of previous still or live births to the mother
- Data relating to births to NILS members
  - Parent(s) address(es)
  - Parent(s) occupation(s)
  - Number of previous still or live births to the mother

- Deaths of NILS members
  - Gender
  - Date of birth
  - Date of death
  - Usual address
  - Place of death address
  - Cause of death
  - Occupation
  - Marital status

**Migration Events (demographic data from the health registration system)**

- Immigrants into Northern Ireland
- Emigrants out of Northern Ireland
- Migration within Northern Ireland

2.3.7. A detailed description of the data available on the NILS and a copy of the 2001 Census form can be obtained from the NISRA website www.nisra.gov.uk.

## 2.4 How can the Northern Ireland Longitudinal Study be used?

2.4.1. Given the nature of the information held within the NILS, the study is based upon a detailed and individual level dataset. The NILS is processed and managed under Census legislation. The Census of Population has specific legislation which protects the confidentiality of individuals and therefore the NILS can only be used for statistics or research purposes and any data published must be in aggregate or statistical form only.

2.4.2. Given this, the information in the Study is held strictly and securely within NISRA's control. No individual level data from the Study is released by NISRA. The NILS is designed to provide "data in a safe setting". The database is constructed as a data repository on a stand-alone network from which data can be accessed by dedicated staff only. Further security protocols are in place taking best practice from the Census of Population and the Longitudinal Study in England and Wales.

2.4.3. There is a step by step guide on how to propose research on the NILS available on the NISRA website www.nisra.gov.uk/nils. Essentially, an application form should be completed which will be assessed by a formal NILS Research Approvals Group. The proposed research must meet a number of criteria, not least of which is that the NILS can actually help to provide information on the research question. If the research is approved then researchers may be able to access suitably anonymised data in the controlled environment or "safe setting" or obtain the relevant statistics from the NILS. All statistical information from the NILS is only released after being checked for issues of statistical disclosure to ensure that no information on individuals could be determined from the statistics. This is in line with similar policies in the England and Wales LS and the Northern Ireland Census of Population.

2.4.4. The Study is of interest to a wide variety of researchers, and information on the NILS along with the research currently being undertaken on the NILS is provided on the NISRA website www.nisra.gov.uk/nils. However, to give a flavour of the type of research that can be undertaken on the NILS the next four sections describe some outline analysis undertaken on the NILS.

## 2.5 Basic analyses of the Northern Ireland Longitudinal Study Dataset - Population - Employment Status

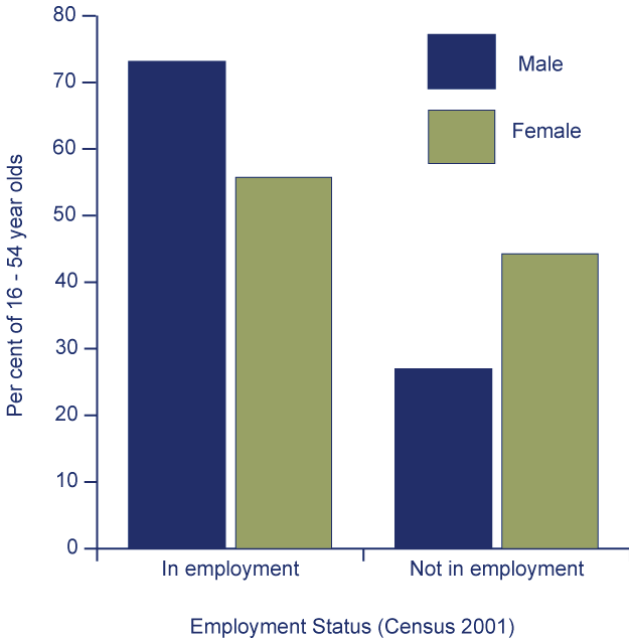
2.5.1. Each Census provides extremely valuable information on the population at a single point in time. This is useful in understanding the characteristics of the population in Northern Ireland and for the allocation of resources to areas and local communities. For many purposes the absolute change over time can be determined by comparing the results from successive Censuses.

2.5.2. However the linkage, at individual person level, of successive Census data enables a more complete investigation into the changes that have occurred between the two time points. A statistical comparison of the individual characteristics that have changed and those that have remained the same can be very informative. The inclusion of the major life events (birth, death, marriage, migration) can facilitate further research into how the events in our lives shape future outcomes.

2.5.3. The changing Census characteristics of the NILS members can be investigated by looking at what was recorded in the 1991 and 2001 Censuses for the same individual. As the NILS is a large-representative sample of the population the results can inform the formation of policy. To demonstrate this, this section looks at one specific analysis, namely changes in employment status between the 1991 and 2001 Censuses for individuals recorded on the NILS at both time points. A series of simple graphs of the changing employment status have been produced below to demonstrate the types of analysis that can be undertaken.

2.5.4. The first chart (Figure 2.1) shows the employment status as recorded in the 2001 Census of people who were aged 16 – 54 years in the 1991 Census and hence aged 26 – 64 years, and of working age, at the time of the 2001 Census. The chart shows that just under three-quarters of males and over half of females were in employment in 2001.

**Figure 2.1: 2001 Census employment status by gender of people aged 16 - 54 years old from the 1991 Census**




2.5.5. A more revealing picture can be obtained by looking at how the specific circumstances of the population vary in 2001 for sub-groups from the 1991 Census. The two charts (Figures 2.2 and 2.3) show how transitions in economic activity between 1991 and 2001 differ for those with or without a limiting long-term illness as recorded in the 2001 Census. The first chart (Figure 2.2) shows the outcome for those people who were in employment in 1991 broken down by their employment and limiting long-term illness statuses in 2001.

2.5.6. Of those who were in employment in 1991 and then recorded as having a limiting long-term illness in 2001, only around 20 per cent remained in employment in 2001. In contrast of those who were in employment in 1991 and were recorded as having no limiting long-term illness in 2001, over 60 per cent remained in employment in 2001. This shows the impact of having a limiting long-term illness on an individual's economic activity level.

**Figure 2.2: 2001 Census employment status of those aged 16 - 54 years 'In Employment' at the 1991 Census**

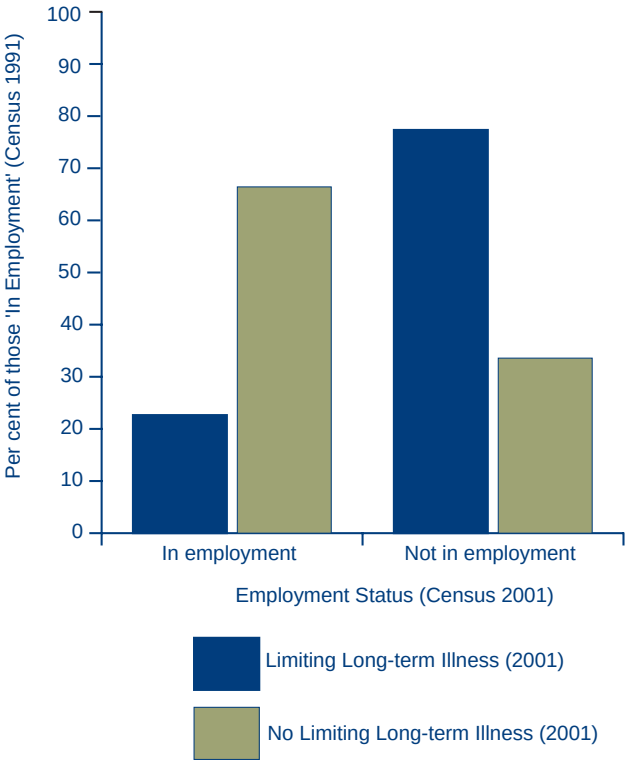
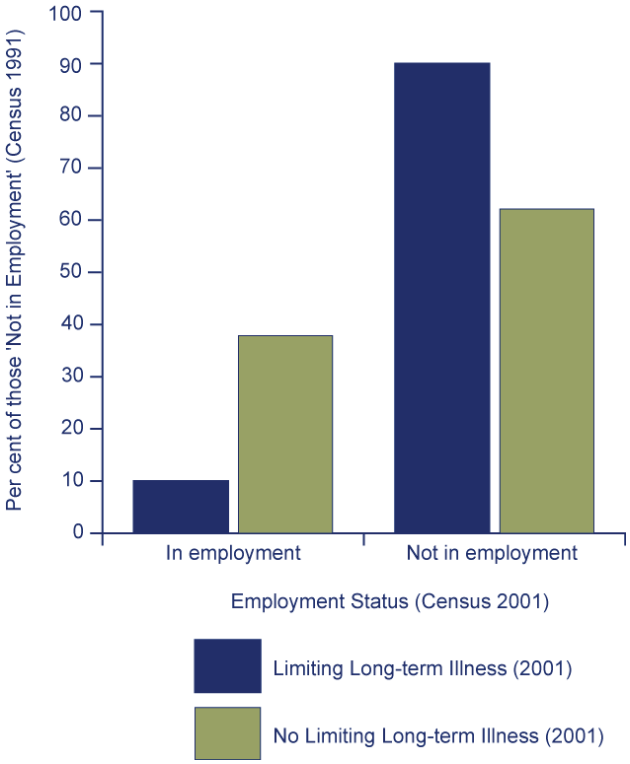



**Figure 2.3: 2001 Census employment status of those aged 16 - 54 years 'Not in Employment' at the 1991 Census**




2.5.7. In contrast the second chart (Figure 2.3) looks at those people who were recorded as not in employment in the 1991 Census broken down by their employment and limiting long-term illness status in 2001.

2.5.8. Of those who were not in employment in 1991 and then recorded as having a limiting long-term illness in 2001, only around 10 per cent had moved into employment in 2001. In contrast of those who were not in employment in 1991 and then recorded as having no limiting long-term illness in 2001 nearly 40 per cent had moved into employment in 2001.

2.5.9. The analysis presented here represents an initial exploratory analysis and it is acknowledged that there are several other factors that will affect these results, for example the different age-distribution and educational status of people with a limiting long-term illness. In addition people who were recorded as having a limiting long-term illness in 2001 and in employment may have different employment patterns than those who have no limiting long-term illness. However, the NILS dataset contains data on these additional factors and therefore could facilitate a much more detailed investigation providing more insight into changing employment status between Censuses.

2.5.10. The detailed analysis of changes in employment status for subpopulations within Northern Ireland is important to understand changes in the overall published data. The investigation of these changes for some of the equality groups could monitor the changing opportunities or circumstances between Censuses (e.g. by ethnic group, community background, gender etc). This will have obvious benefits for monitoring the impact of Equality legislation.

## 2.6 Basic analyses of the Northern Ireland Longitudinal Study Dataset – Fertility

2.6.1. The civil birth register provides a wealth of information on births registered in Northern Ireland. This information is vital in understanding trends and changes in the level of fertility in Northern Ireland. Fertility data feed into population estimates and thus are vital in understanding the composition of the population and allocating resources to and within Northern Ireland. One specific area where trends in fertility are vital is projecting the future number of young people in Northern Ireland; this in turn will help determine the number of schools and schoolteachers required in the future.

2.6.2. Although the civil birth register is important it is limited in certain aspects. The register primarily relates to births and while information on parents is collected it is not easy from the register alone to get a detailed picture of certain aspects of fertility relating to parents. The NILS can help to analyse fertility trends in more detail especially for sub-groups of the population. The NILS can help to investigate the changing pattern of fertility trends and, in particular, the recent upward trend in fertility. Specifically the NILS can help to investigate if this recent fertility change is a general population phenomenon or if there are certain sub-groups experiencing higher fertility rates and thus acting to increase the overall Northern Ireland fertility rate.

### Fertility Spacing

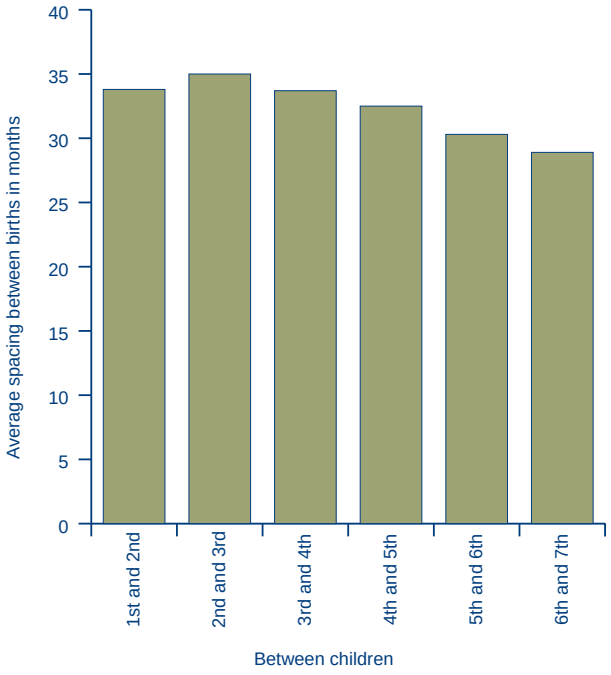
2.6.3. One specific area where the civil register of births does not include data is the timing of previous births of mothers. Therefore it is not possible to provide information on this issue directly from the civil registration system without using the linked data that the NILS provides. This specific fertility analysis can be undertaken on the NILS as it includes linked fertility events for the same mothers. Understanding fertility spacing or the gap between births is important. Research can help plan more efficiently and effectively for maternity and child health services and can help target health promotion messages in areas such as family planning and maternity services.

2.6.4. Over time using births information relating to NILS mothers will allow a full fertility history to be built up. This will allow the creation of completed family size information for women in Northern Ireland. The NILS analysis presented below only includes civil registration births data for the period 1997 to 2006 linked to the 2001 Census. In total there were 225,500 births registered in this period; as would be expected given the NILS sample size around 25 per cent or 60,000 births were to female NILS members. Of these 60,000 births, around 14,000 women had two or more babies born throughout this time-period enabling analysis of the spacing between births for this sample of women to be taken forward.

2.6.5. The average spacing between births was just under 3 years (34 months). However this differs by age of the mother, the number of children a woman had previously (parity of the child), and the mother's educational qualifications as recorded in the 2001 Census. A few of these differences are presented in the charts that follow.

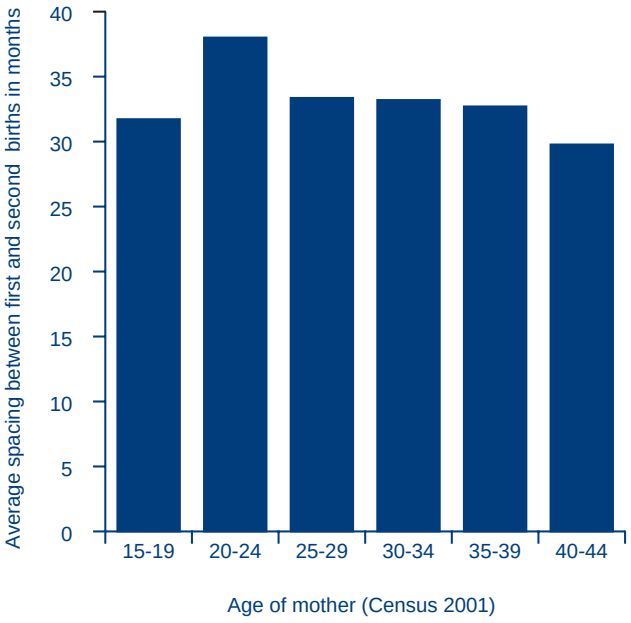
2.6.6. Figure 2.4 below shows that the spacing between births varies depending upon the number of children a mother has previously had. In particular the spacing between second and third births is longer on average, at 35 months, than the spacing between the first and second births (34 months). It is also noteworthy that fertility spacing decreases with subsequent children such that for those women who were having their seventh child in the period 1997 to 2006 they waited on average 29 months after the birth of their sixth child.

**Figure 2.4: Spacing, in months, between births (1997-2006) in relation to the number of previous children**



2.6.7. The second chart, Figure 2.5, shows that fertility spacing also varies by the age of the mother at childbirth. This chart is limited to the difference in spacing between first and second children only. The data shows that generally as mothers get older the time gap or spacing between their first and second child decreases. The gap between first and second children is shortest for mothers aged in their forties at around 30 months.

**Figure 2.5: Spacing, in months, between first and second births (1997- 2006) by age group of mother**




2.6.8. The final chart in this series, Figure 2.6, looks at fertility spacing by educational attainment of the mother as recorded in the 2001 Census. Again this chart only looks at the difference in spacing between the first and second children. The chart shows that shortest spacing is around 31 months for mothers with higher degree level educational qualifications[1].

1 Level 1: GCSE grades D – G, CSE grades 2 – 5, 1 – 4 CSEs grade 1, 1 – 4 GCSEs grades A – C, 1 – 4 'O' level passes, NVQ level 1, GNVQ Foundation or equivalent;

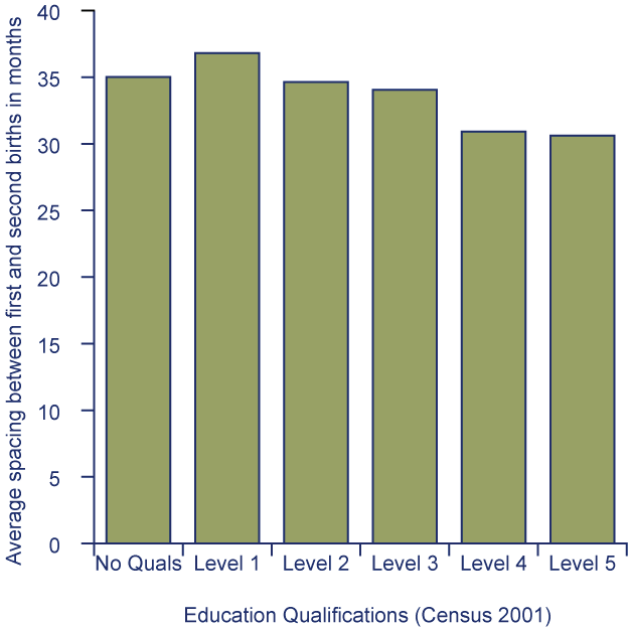
Level 2: 5+ CSEs Grade 1, 5+ GCSEs grade A – C, 5+ 'O' level passes, Senior Certificate, 1 'A' Level, 1 – 3 AS levels, Advanced Senior Certificate, NVQ level 2, GNVQ Intermediate or equivalent;

Level 3: 2+ 'A' levels, 4+ AS levels, NVQ level 3 or GNVQ Advanced or equivalent;

Level 4: First Degree, NVQ level 4, HNC, HND or equivalent; and

Level 5: Higher Degree, NVQ level 5 or equivalent.

**Figure 2.6: Spacing, in months, between first and second births (1997-2006) by educational qualifications of the mother from the 2001 Census**

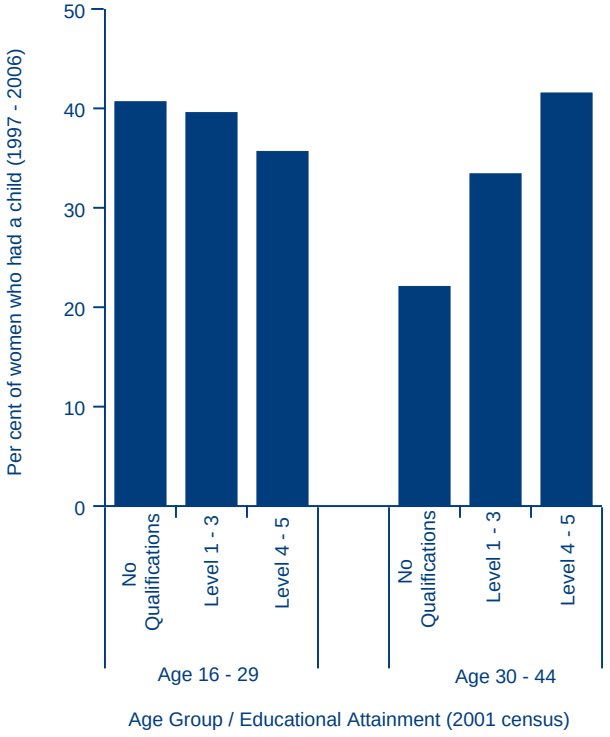



2.6.9. As with the previous section this analysis is very much an initial view. A more detailed research model could be generated from the NILS data to investigate the interactions between these major factors (i.e. the age of mother, parity, educational qualifications) and the identification of other possible factors that play a part in the spacing between children. As noted above any further and more detailed analysis will clearly play an important role in helping the planning of maternity services.

### Fertility by educational attainment

2.6.10. The detailed standard fertility rate statistics presented in this Annual Report of the Registrar General are for areas within Northern Ireland or for selected ages of the mother. Fertility rates and trends for other sub-groups of the population can assist in assessing the future size of the Northern Ireland population. An example of a basic analysis of fertility by socio-economic characteristics is given in Figure 2.7 and focuses on educational qualifications of the mother, as recorded on the 2001 Census. This analysis follows on from the analysis above which showed differences in terms of the spacing of births.

**Figure 2.7: Per cent of women who had a child between 1997 and 2006 by age group and educational attainment of the mother**




2.6.11. Just over one third (35 per cent) of female NILS members aged 16 to 44 had a child between 1997 and 2006. Investigating further shows that this proportion varies by the educational qualifications and age of the mother as recorded in the 2001 Census. Figure 2.7 shows the proportion of female NILS members of child-bearing age who had a child between 1997 and 2006 broken down by age-group and their highest level of educational qualification. The chart shows that for women aged under 30 the proportion who had a child in this time period falls with higher qualifications, while for those women aged 30 or over the proportion rises with educational attainment.

### Migration before or after birth event

2.6.12. Another issue where the NILS can be useful in undertaking analysis on is the relationship between certain types of event. In general a house move is a significant life event and can be related to another significant life event such as a birth or death. More specifically a specific combination is a house move in or around the time of having a child. This is an area of specific policy relevance as it can indicate why and what groups of people with young families move house and thus get a better understanding of the needs of these families.

2.6.13. In total around six per cent of NILS members move house each year. This contrasts with NILS mothers, when in the period 2001 to 2006 around 20 per cent moved house within one year (before or after) of having their child. This indicates that there is interaction between having a birth and moving house. Table 2.1 shows specifically that around 12 per cent of new mothers moved in the year after the birth of their child and eight per cent in the year before the birth of their child.

**Table 2.1: Percentage of mothers who move house before or after birth event, 2001-2006**

| Timing of migration in relation to birth | Per cent |
|---|---|
| Mother moves house within Northern Ireland 6-12 months before birth | 4% |
| Mother moves house within Northern Ireland up to 6 months before birth | 3% |
| Mother moves house within Northern Ireland up to 6 months after birth | 5% |
| Mother moves house within Northern Ireland 6-12 months after birth | 7% |
| Mother does not move house within 12 months of birth | 80% |
| **Total** | **100%** |

2.6.14. The NILS also includes information from the Census on the type of house that a person moves into, so information such as a move to a bigger house with more bedrooms could be investigated. Major factors in this analysis could be the family structure from the Census, the number of previous children and the size of the house. Again more analysis on the NILS will help to understand these issues and feed into policy development.

## 2.7 Basic analyses of the Northern Ireland Longitudinal Study Dataset – Mortality

2.7.1. The civil death register provides an extremely important and comprehensive picture of the mortality of the population of Northern Ireland. This information is vital in informing public policy and understanding the changes in mortality experience of the population. However, linking information from the Census to the civil death register allows factors such as household deprivation and socio-economic characteristics to be considered when looking at mortality statistics. This information helps to understand more fully the mortality experience of the population and thus better inform policy debate. This section details a number of NILS analyses, or research projects, which have been undertaken to build a better picture of the mortality experience of the Northern Ireland population.

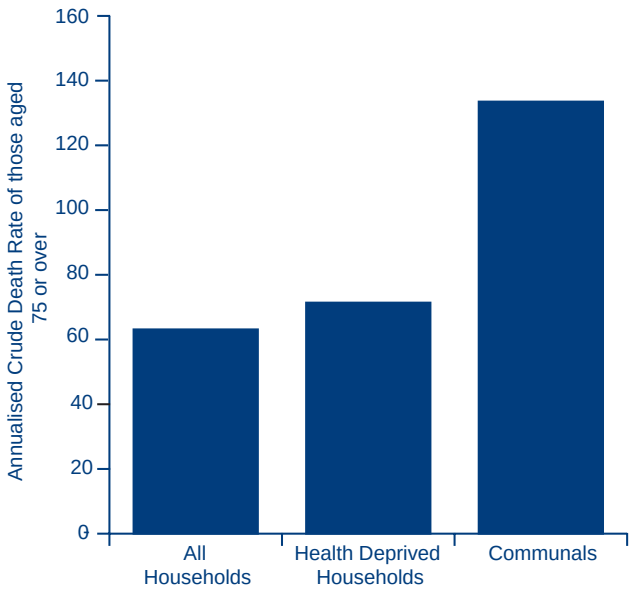
### Deaths within Households, Communal Establishments and Deprived Households

2.7.2. Between 2001 and 2006, the annual crude death rate in Northern Ireland is 8.4 deaths per 1,000 population per annum or around 14,500 deaths each year. Death rates increase with age and for those aged 75 and over for the same period the crude annual death rate is around 80 deaths per 1,000 population, or around 8,800 deaths per annum, which is 60 per cent of all deaths.

2.7.3. An initial piece of analysis undertaken on the NILS was to look at death rates by residency. This specifically looked at the mortality of people aged 75 or over as recorded in the 2001 Census. The chart below (Figure 2.8) shows the annual death rates per 1,000 population for the period 2001-2006 by place of residence in the 2001 Census.

2.7.4. The chart presents the elderly population as those living in all households, those living in private households where someone has a degree of poor health, and those living in communal establishments (mainly nursing and residential homes).

**Figure 2.8: Annual death rate per 1,000 population of those aged 75 years or over by place of residence (2001 Census)**




2.7.5. It is apparent that those people aged 75 or over living in communal establishments have a significantly higher death rate than those in all private households. Indeed the mortality rate is roughly doubled. Clearly, this is because elderly people living in a communal establishment are more likely to have poor levels of general health. However, those elderly people living in private households where someone has a degree of poor health also have higher death rates than elderly people living in all private households.

2.7.6. This is only an initial analysis; more detailed analyses are being undertaken. A detailed NILS research project using this information is currently underway headed by Dr Dermot O'Reilly from the Epidemiology Research Group, Queen's University Belfast. The research investigates the mortality rates of those living in nursing and residential homes across Northern Ireland. Results will be published on the NILS website in the near future. [5]

2.7.7. In addition to this, the movement of people into nursing and residential homes in Northern Ireland can be investigated using the NILS. As part of his research Dr O'Reilly is also undertaking a further project [6] using the NILS to examine the types of people who are admitted to nursing and residential homes and to explore the variations in this across Northern Ireland. These two projects will be useful in feeding into the policy debate on Nursing and Residential care.

### Temperature-related mortality and housing in Northern Ireland

2.7.8. Another related issue under investigation is that of temperature related mortality in Northern Ireland. Dr Chris Morris from the Department for Social Development (DSD) analysed detailed information on temperature-related mortality and housing from the NILS. DSD has produced a NISRA occasional research paper on this issue and the findings of the research are outlined below. [7]

2.7.9. The DSD temperature-related mortality research made use of mortality data from the NILS to help examine the impact of fuel poverty and climate on mortality for the period 2001-2006. For those people who died in that period, linked information in the NILS was used from the 1991 and 2001 Censuses of Population, the civil death register and information on housing from the 2001 Census and Valuation and Lands Agency. This combined information included cause of death, age and social group of the deceased and housing tenure, property type and property value.

2.7.10. The project also included aggregate geographical contextual information provided by DSD, which is not formally part of the NILS. This included aggregate data from the Northern Ireland Housing Executive's House Conditions Survey, and geographical data from Ordnance Survey Northern Ireland. This information included local housing characteristics, settlement and location data and local altitude and average temperature data by time of year.

2.7.11. The research produced some valuable findings. Firstly, all else being equal, the proportion of deaths caused by circulatory and respiratory diseases rises significantly with age, and with lower temperatures. Therefore parts of Northern Ireland which have an older population or where the climate is colder tend to have more circulatory and respiratory disease deaths. Accordingly, elderly people living in inland upland rural areas in winter are most at risk.

2.7.12. Secondly, mortality rates due to these factors in the East of Northern Ireland (broadly speaking Belfast and its catchment area) and the West of Northern Ireland are different. Although levels of circulatory and respiratory disease deaths were much the same, the controlling factors in these two areas were different.

2.7.13. In the East, urban location, local house quality and the presence central heating, as well as a person's age and local temperature, are statistically significant variables at explaining levels of circulatory and respiratory disease deaths. In contrast in the West a person's age alongside local temperature were statistically significant, with property value the only other statistically significant variable.

2.7.14. These results along with other data on fuel poverty are important in helping to drive forward debate and policy on issues such as how best to make improvements to the homes of the elderly population and other issues related to this (e.g. the Winter Fuels payment for the elderly). From a public health perspective, the appropriate allocation of resources is an important area, and further research on the NILS on factors related to this issue is already underway or being published. [7,8]

### Impact of Widow(er)hoods on mortality

2.7.15. Another important mortality question relates to the impact of the loss of a spouse. The linked data available on the NILS provides a mechanism to examine such events. It is possible to look at people who have lost their husband or wife and how this affects their subsequent life expectancy.

2.7.16. An initial analysis shows that of those people whose husband or wife died in 2001 or 2002, around one in seven had died themselves by the middle of 2006. However this differs significantly for men and women. Of those women whose husband died in 2001 or 2002, almost 90 per cent had survived by mid-2006. However, of those men whose wife had died in 2001 or 2002, only 79 per cent had survived by mid-2006.

2.7.17. For both widows and widowers who died since the death of their wife or husband, almost half had died before the second anniversary of their husband/wife's death. Much more analysis is required to understand how the loss of a partner affects the mortality of the surviving partner. However, this information is vital in helping to inform how best to plan for the care of a surviving spouse.

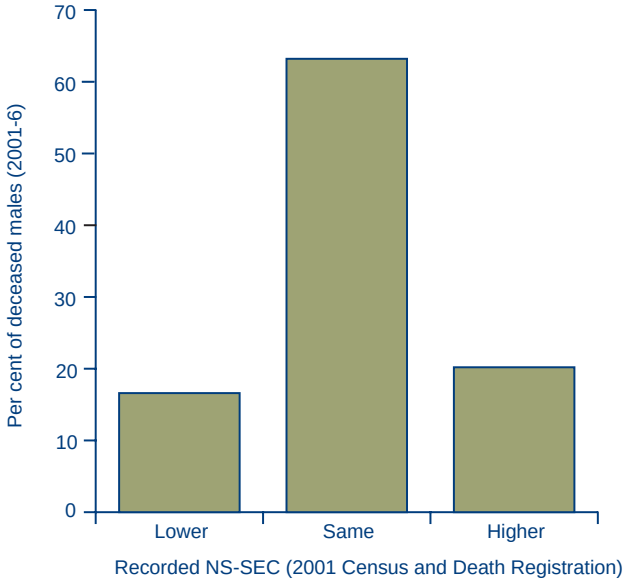
### Improved estimates of occupation mortality

2.7.18. One main reason for starting the England and Wales LS was to obtain an improved understanding of mortality rates for certain occupations [9]. Until the England and Wales LS was started such mortality statistics were based solely on the occupation recorded on the death certificate. As noted in the introduction, this information is becoming increasingly invalid, as people are living longer into retirement and can change their occupation throughout their working lives many times. These two factors led to inaccuracies in the recording of occupation on death certificates, as information for the death certificate can only be supplied by an informant. In contrast, the Census form is a self-completion questionnaire normally completed by the person themselves. Therefore, the occupation recorded in the Census is accepted as

more accurate and was used within the England and Wales LS to help produce more accurate occupational mortality rates. These statistics were used to produce many important results in assessing levels of health risk for different industries and to inform policy debate.

2.7.19. In Northern Ireland, the NILS can produce a simple occupational comparison of those people who died since the 2001 Census. A comparison can be made between the social class of the occupation of the person recorded in the 2001 Census and the social class of the occupation of the person as recorded on their death certificate. This comparison is shown in the following chart (Figure 2.9).

**Figure 2.9: Changes in the socio-economic classification for males recorded on their Death Certificate from the 2001 Census**




2.7.20. The chart shows that for males who died since the 2001 Census, just over 60 per cent had the same National Statistics Socio-Economic Classification (a classification of occupation) recorded on the death certificate and the 2001 Census. However almost equal proportions of men who died had a higher or lower National Statistics Socio-Economic Classification recorded on their death certificate.

2.7.21. There may be several reasons for this: firstly, a significant change in occupation may have occurred for the person since the 2001 Census or secondly, the Census is more accurate as it is a self-reported occupation while the death certificate is completed by an informant. Although not shown here, it should be noted that the level of over- and under-recording of occupation differs for men and women.

2.7.22. Further investigation will help understand the quality of occupation information recorded on death certificates in Northern Ireland. A more detailed analysis would also help to identify the level of over- and under-recording of occupation on death certificates and what subgroups of the population are more affected by this. This in turn will help to more clearly understand differences in mortality for certain occupations. As an example in the longer term better occupational mortality information may be available on the impact of the change in the law regarding smoking in public places.

## 2.8 Basic analyses of the Northern Ireland Longitudinal Study Dataset - Migration

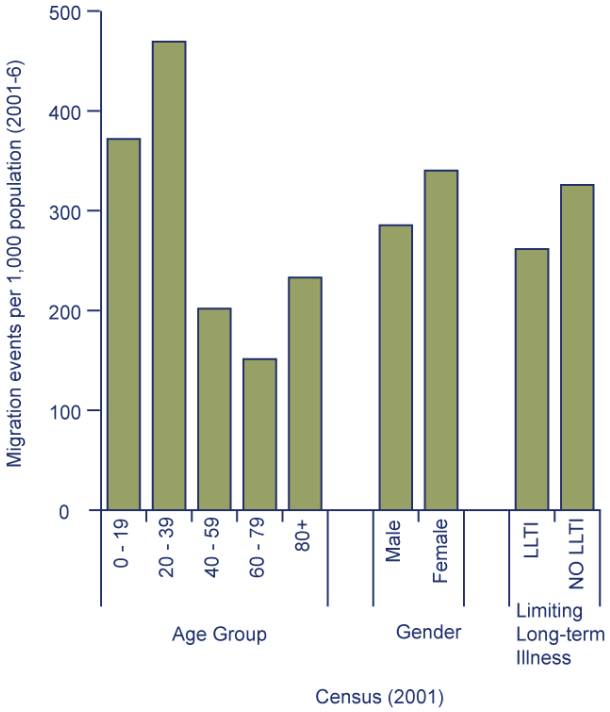
2.8.1. In the production of the mid-year population estimates, it is acknowledged that the base population from the Census and births and deaths information from the civil register are extremely reliable. However, no definitive source is available to measure migration; either immigration, emigration or internal (within Northern Ireland) migration. Thus statistical estimates of the migration element of population change must be made.

2.8.2. The investigation of migration into/out of Northern Ireland and within Northern Ireland is important in understanding the dynamics of the population. Information derived from the NILS, which links health service registration changes of address, can provide a more detailed understanding in this area.

2.8.3. In total, around 150,000 address changes occur each year on the health service registration system. Over the last five years (2001-2006) over 150,000 members of the NILS sample changed their Northern Ireland address within the health service registration system. Understanding more about the characteristics of the Northern Ireland population who move can help local communities understand why they have gained or lost population through migration.

2.8.4. Using health service registration changes of address, migration events within Northern Ireland can be identified. For those people who moved within Northern Ireland, those with highest rate of migration events per 1,000 population are persons aged 20-39 year olds, females and those with no limiting long-term illnesses.

**Figure 2.10: Cumulative migration events per 1,000 population by population sub-group (2001-2006)**




2.8.5. Table 2.2 shows that the majority of people in Northern Ireland who moved between 2001 and 2006 moved within or between urban areas (67 per cent), while a further significant proportion of people moved within or between rural areas (23 per cent). Interestingly table 2.2 also shows that four per cent of people moved from a rural area to an urban one, while six per cent of people moved from an urban area to a rural one.

2.8.6. Thus all other things being equal, rural areas are increasing in population due to internal or within Northern Ireland migration. Consequentially urban areas are decreasing in population due to within Northern Ireland migration. Clearly, other factors are at work, not least movement of people into Northern Ireland from Great Britain, the Republic of Ireland or the Rest of the World. However further analysis could determine the trend in internal migration since 2001. Differences in certain parts of the country may also be identified, therefore enabling a better assessment of the impact of population movement within Northern Ireland.

**Table 2.2: Migration within Northern Ireland by type of area (urban/rural), 2001-2006**

| | Move To | | |
|---|---|---|---|
| **Move From** | **Rural Area** | **Urban Area** | **Total** |
| Rural Area | 23% | 4% | **27%** |
| Urban Area | 6% | 67% | **73%** |
| **Total** | **29%** | **71%** | **100%** |

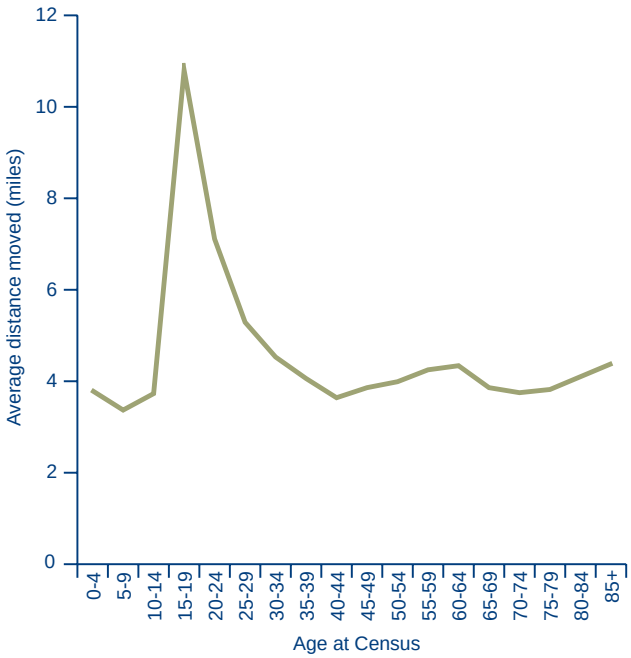
2.8.7. The NILS can also show that the average distance people move when changing address is around four miles. Table 2.3 shows that when moving to a similar type of area the distance moved is much reduced. On average the higher distances relate to people moving from urban to rural areas and vice-versa.

**Table 2.3: Average distance moved (miles) within Northern Ireland by type of area (urban/rural), 2001-2006**

| | Move To | |
|---|---|---|
| **Move From** | **Rural Area** | **Urban Area** |
| Rural Area | 2.3 | 16.4 |
| Urban Area | 15.1 | 2.9 |

2.8.8. The average distance in miles varies greatly by age, as shown in Figure 2.11, the largest distance moved is by young people, potentially moving large distances for study or moving into urban areas for work.

**Figure 2.11: Average distance moved within Northern Ireland by age at time of 2001 Census (2001-2006 moves)**

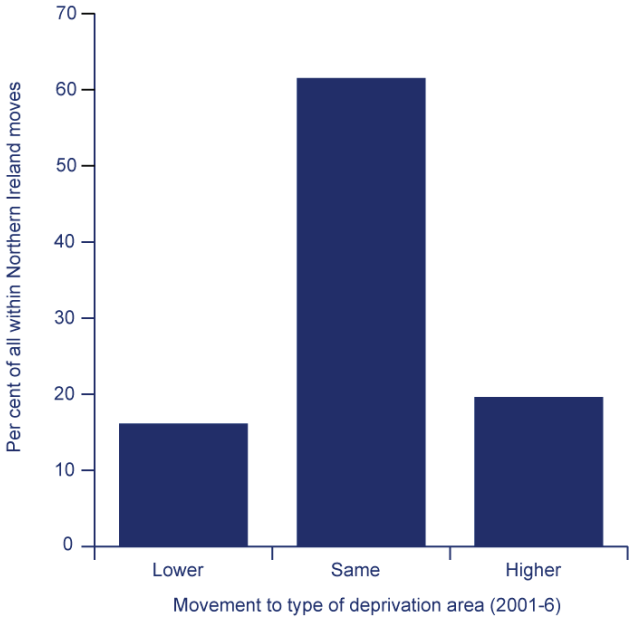



2.8.9. The NILS can also help give more information on internal moves within Northern Ireland. Within each Local Government District, there is a differing degree of migration within towns and villages. The detailed migration data held in the NILS can be analysed to see which towns and villages are gaining/losing population due to migration. As an example, between 2001 and 2006, areas such as Greysteel and Moira gained in population due to internal migration, i.e. more moves into these areas than moves out. In contrast, areas such as Castlewellan and Kircubbin experienced a loss in population due to internal migration with less moves into these areas than moves out.

2.8.10. Another type of analysis frequently used in Longitudinal Studies relates to movement within or between deprived areas. Analysis of this type of information can help to estimate social mobility. In Northern Ireland small areas are split into five deprivation types (most deprived 20 per cent to least deprived 20 per cent) based on the Northern Ireland Multiple Deprivation Measure 2005 [10].

2.8.11. Figure 2.12 shows the proportion of people who moved between or within a similarly deprived area, those moving into a more deprived area and those moving into a less deprived area. The graph shows that the majority of people, over 60 per cent, moved to an area within that same fifth or quintile.

**Figure 2.12: Migration within Northern Ireland between 2001 and 2006 by deprivation quintile**




2.8.12. The migration analysis shown here give an initial outline of the studies that can be taken forward using the NILS. In terms of public policy a better understanding of migration is vital in areas such as social mobility, resource allocation and spatial funding policies such as Neighbourhood Renewal.

## 2.9 Conclusion

2.9.1. Longitudinal studies gather a life history of linked information for a group of individuals. They, therefore provide a significant tool for analysis on many research questions. This is especially the case for questions relating to demographic or population change over time. Given the extent of demographic change in Northern Ireland there was evident value in setting up a Longitudinal Study here. This short summary report has outlined the reasons why NISRA along with DHSSPS and the Health and Personal Social Services Research and Development Office (RDO) have followed the example of the Office for National Statistics Longitudinal Study in England and Wales.

2.9.2. The information held within NILS is detailed and must be protected. This is a fundamental core principle of the NILS and the Census from which the NILS is sourced. The NILS is held strictly and securely within the control of the Registrar General and researchers can only obtain statistical data that has been safely aggregated with no risk of disclosing information on individuals.

2.9.3. The short research summaries presented in this report give an idea of the type of research that can be undertaken using NILS. Research using the NILS can and will be used in areas such as equality analyses, fertility research, the impact of new public health policies, the understanding of population migration and the planning of services. By using the NILS to research such issues, the utility of the decennial Census of Population is significantly enhanced. This is the case in England and Wales, where the LS has been at the forefront in supporting public policy research over the last thirty years.

2.9.4. An area for future benefit is the possibility of United Kingdom wide longitudinal analysis. NISRA along with colleagues in the Office for National Statistics and the General Register Office for Scotland are currently considering such a development and the associated benefits. It is hoped that with three United Kingdom Longitudinal Studies the England and Wales LS, the Scottish LS and the NILS, demographic differences across the UK can be explored in more detail.

2.9.5. Furthermore a number of other countries in the world have or run something equivalent to the Longitudinal Study. This may allow collaborative research to be undertaken comparing the policy interventions in different parts of the United Kingdom with different policy interventions in other parts of the world.

2.9.6. The value and utility of the NILS will be enhanced with the addition of the 2011 Census data and NISRA along with DHSSPS/ RDO are actively considering this as a part of the 2011 Census programme. Clearly the power and benefits of the NILS will grow substantially as time moves on and the NILS sample size will permit detailed research on the demography of Northern Ireland. With an increased time-period the NILS will facilitate more robust studies of particular groups in the Northern Ireland society. In time NILS will become a central part of the infra-structure of the public policy research community in Northern Ireland.

## 2.10 Contact Details for the Northern Ireland Longitudinal Study

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## References:

[1] Northern Ireland Statistics and Research Agency. Northern Ireland Census 2001 Population Report and Mid-Year Estimates. National Statistics: Belfast 2002.

[2] Fox, A J, Goldblatt, P O. 1971-1975 Longitudinal Study: Socio-demographic Mortality Differentials. LS Series No 1. 1982

[3] NI Longitudinal Study Pilot (2003-4 to 2005-6) Research Proposal , June 2003

[4] http://www.lscs.ac.uk/sls/ accessed November 2007

[5] O´ Reilly, D, McCann M, Rosato M. “Mortality amongst residents of nursing and residential homes in Northern Ireland”, www.nisra.gov.uk/nils

[6] O´ Reilly, D, McCann M, “The Variation and Determinants of the Admission of Older People to Residential and Nursing Homes in Northern Ireland” www.nisra.gov.uk/nils

[7] Morris C J. “Fuel Poverty, Climate and Mortality in Northern Ireland 1980-2006” NISRA Occasional Paper 25 Department for Social Development. 2007

[8] O´ Reilly, G, O´ Reilly, D, Rosato, M and Connolly, S. “Urban and rural variations in morbidity and mortality in Northern Ireland”. http://www.biomedcentral.com/1471-2458/7/123

[9] Fox, A J. 1971-1977 Longitudinal Study: Social Class and Occupational Mortality. LS Series No 2. 1982

[10] Northern Ireland Statistics and Research Agency. The Northern Ireland Multiple Deprivation Measure 2005.

# Appendices

# Appendix 1: Population and vital events, 1926-2006

| | Estimated population | | | Resident live births | | | | | | | Multiple births | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Year | Persons | Males | Females | All resident births[1] | Rate[2] | Males | Females | Males per 1,000 females | Outside marriage Number | %[3] | Twins | Triplets etc | % of maternities |
| 1926-30 | **1,249,000** | 604,000 | 645,000 | **26,418** | ***21.2*** | 13,587 | 12,831 | *1,059* | *1,249* | *4.7* | 308 | 4 | *1.2* |
| 1931-35 | **1,270,000** | 617,000 | 653,000 | **25,098** | ***19.8*** | 12,926 | 12,172 | *1,062* | *1,259* | *5.0* | 286 | 2 | *1.2* |
| 1936-40 | **1,286,800** | 626,100 | 660,700 | **25,533** | ***19.8*** | 13,110 | 12,423 | *1,055* | *1,178* | *4.6* | 300 | 4 | *1.2* |
| 1941-45 | **1,304,400** | 674,000 | 630,400 | **29,592** | ***22.7*** | 15,287 | 14,305 | *1,069* | *1,560* | *5.3* | 332 | 4 | *1.2* |
| 1946-50 | **1,350,400** | 695,800 | 654,600 | **29,764** | ***22.0*** | 15,336 | 14,428 | *1,063* | *1,124* | *3.8* | 367 | 5 | *1.3* |
| 1951-55 | **1,382,500** | 673,700 | 708,800 | **28,798** | ***20.8*** | 14,885 | 13,913 | *1,070* | *838* | *2.9* | 391 | 4 | *1.4* |
| 1956-60 | **1,405,000** | 684,700 | 720,300 | **30,539** | ***21.7*** | 15,755 | 14,784 | *1,066* | *758* | *2.5* | 414 | 3 | *1.4* |
| 1961-65 | **1,447,200** | 705,500 | 741,700 | **33,226** | ***23.0*** | 17,171 | 16,055 | *1,069* | *890* | *2.7* | 407 | 3 | *1.3* |
| 1966-70 | **1,501,500** | 732,500 | 769,000 | **32,866** | ***21.9*** | 16,958 | 15,908 | *1,066* | *1,180* | *3.6* | 355 | 3 | *1.1* |
| 1971-75 | **1,532,000** | 755,200 | 776,700 | **28,850** | ***18.8*** | 14,935 | 13,914 | *1,073* | *1,260* | *4.4* | 308 | 2 | *1.1* |
| 1976-80 | **1,526,200** | 754,300 | 771,900 | **26,959** | ***17.7*** | 13,807 | 13,152 | *1,050* | *1,531* | *5.7* | 271 | 4 | *1.0* |
| 1981-85 | **1,552,100** | 759,700 | 792,400 | **27,194** | ***17.5*** | 13,965 | 13,229 | *1,056* | *2,469* | *9.1* | 289 | 3 | *1.1* |
| 1986-90 | **1,585,400** | 773,800 | 811,600 | **27,045** | ***17.1*** | 13,914 | 13,130 | *1,060* | *4,266* | *15.8* | 286 | 4 | *1.1* |
| 1991-95 | **1,631,800** | 795,900 | 835,900 | **24,779** | ***15.2*** | 12,704 | 12,075 | *1,052* | *5,427* | *21.9* | 292 | 8 | *1.2* |
| 1996-2000 | **1,674,500** | 816,700 | 857,800 | **23,321** | ***13.9*** | 11,966 | 11,356 | *1,054* | *6,661* | *28.6* | 319 | 8 | *1.4* |
| 2001-2005 | **1,704,700** | 833,400 | 871,300 | **21,928** | ***12.9*** | 11,245 | 10,683 | *1,053* | *7,511* | *34.3* | 314 | 8 | *1.5* |
| 1971 | **1,540,400** | 754,600 | 785,800 | **31,765** | ***20.6*** | 16,504 | 15,261 | *1,081* | *1,207* | *3.8* | 342 | 4 | *1.1* |
| 1972 | **1,539,000** | 757,500 | 781,500 | **29,994** | ***19.5*** | 15,559 | 14,435 | *1,078* | *1,263* | *4.2* | 325 | 3 | *1.1* |
| 1973 | **1,530,000** | 755,700 | 774,200 | **29,200** | ***19.1*** | 15,152 | 14,048 | *1,079* | *1,195* | *4.1* | 290 | 1 | *1.0* |
| 1974 | **1,526,900** | 755,000 | 771,900 | **27,160** | ***17.8*** | 13,987 | 13,173 | *1,062* | *1,296* | *4.8* | 291 | 3 | *1.1* |
| 1975 | **1,523,500** | 753,300 | 770,200 | **26,130** | ***17.2*** | 13,475 | 12,655 | *1,065* | *1,338* | *5.1* | 294 | - | - |
| 1976 | **1,523,500** | 754,000 | 769,500 | **26,361** | ***17.3*** | 13,542 | 12,819 | *1,056* | *1,330* | *5.0* | 264 | 5 | *1.0* |
| 1977 | **1,523,300** | 753,900 | 769,400 | **25,437** | ***16.7*** | 13,154 | 12,283 | *1,071* | *1,383* | *5.4* | 266 | 3 | *1.1* |
| 1978 | **1,523,200** | 753,600 | 769,700 | **26,239** | ***17.2*** | 13,168 | 13,071 | *1,007* | *1,523* | *5.8* | 249 | 2 | *1.0* |
| 1979 | **1,528,300** | 755,200 | 773,100 | **28,178** | ***18.4*** | 14,485 | 13,693 | *1,058* | *1,668* | *5.9* | 276 | 5 | *1.0* |
| 1980 | **1,532,800** | 754,800 | 778,000 | **28,582** | ***18.6*** | 14,686 | 13,896 | *1,057* | *1,751* | *6.1* | 298 | 4 | *1.1* |
| 1981 | **1,543,000** | 756,600 | 786,300 | **27,166** | ***17.6*** | 13,847 | 13,319 | *1,040* | *1,894* | *7.0* | 304 | 4 | *1.1* |
| 1982 | **1,544,500** | 756,700 | 787,800 | **26,872** | ***17.4*** | 13,732 | 13,140 | *1,045* | *2,106* | *7.8* | 305 | 2 | *1.2* |
| 1983 | **1,550,600** | 759,000 | 791,500 | **27,026** | ***17.4*** | 13,972 | 13,054 | *1,070* | *2,370* | *8.8* | 263 | 4 | *1.0* |
| 1984 | **1,557,300** | 761,300 | 796,000 | **27,477** | ***17.6*** | 14,196 | 13,281 | *1,069* | *2,790* | *10.2* | 303 | 3 | *1.1* |
| 1985 | **1,565,400** | 764,900 | 800,400 | **27,427** | ***17.5*** | 14,076 | 13,351 | *1,054* | *3,185* | *11.6* | 269 | 3 | *1.0* |
| 1986 | **1,573,500** | 768,400 | 805,100 | **27,975** | ***17.8*** | 14,501 | 13,474 | *1,076* | *3,575* | *12.8* | 280 | 3 | *1.0* |
| 1987 | **1,582,000** | 772,900 | 809,100 | **27,653** | ***17.5*** | 14,196 | 13,457 | *1,055* | *3,967* | *14.3* | 320 | 7 | *1.2* |
| 1988 | **1,585,400** | 773,800 | 811,700 | **27,514** | ***17.4*** | 14,131 | 13,383 | *1,056* | *4,446* | *16.2* | 283 | 2 | *1.0* |
| 1989 | **1,590,400** | 775,900 | 814,500 | **25,831** | ***16.2*** | 13,307 | 12,524 | *1,063* | *4,394* | *17.0* | 281 | 2 | *1.1* |
| 1990 | **1,595,600** | 777,900 | 817,700 | **26,251** | ***16.5*** | 13,437 | 12,814 | *1,049* | *4,946* | *18.8* | 267 | 5 | *1.0* |
| 1991 | **1,607,300** | 783,200 | 824,100 | **26,028** | ***16.2*** | 13,427 | 12,601 | *1,066* | *5,288* | *20.3* | 311 | 7 | *1.2* |
| 1992 | **1,623,300** | 792,100 | 831,100 | **25,354** | ***15.6*** | 12,924 | 12,430 | *1,040* | *5,579* | *22.0* | 256 | 8 | *1.1* |
| 1993 | **1,635,600** | 798,200 | 837,300 | **24,722** | ***15.1*** | 12,515 | 12,207 | *1,025* | *5,445* | *22.0* | 283 | 9 | *1.2* |
| 1994 | **1,643,700** | 801,900 | 841,800 | **24,098** | ***14.7*** | 12,361 | 11,737 | *1,053* | *5,337* | *22.1* | 288 | 6 | *1.2* |
| 1995 | **1,649,100** | 804,000 | 845,100 | **23,693** | ***14.4*** | 12,293 | 11,400 | *1,078* | *5,487* | *23.2* | 324 | 9 | *1.4* |
| 1996 | **1,661,800** | 810,300 | 851,400 | **24,382** | ***14.7*** | 12,382 | 12,000 | *1,032* | *6,346* | *26.0* | 310 | 13 | *1.3* |
| 1997 | **1,671,300** | 815,500 | 855,700 | **24,087** | ***14.4*** | 12,325 | 11,762 | *1,048* | *6,427* | *26.7* | 330 | 7 | *1.4* |
| 1998 | **1,677,800** | 818,700 | 859,100 | **23,668** | ***14.1*** | 12,058 | 11,610 | *1,039* | *6,743* | *28.5* | 305 | 7 | *1.3* |
| 1999 | **1,679,000** | 818,500 | 860,500 | **22,957** | ***13.7*** | 11,943 | 11,014 | *1,084* | *6,957* | *30.3* | 334 | 6 | *1.5* |
| 2000 | **1,682,900** | 820,500 | 862,500 | **21,512** | ***12.8*** | 11,120 | 10,392 | *1,070* | *6,833* | *31.8* | 314 | 5 | *1.5* |
| 2001 | **1,689,300** | 824,400 | 864,900 | **21,962** | ***13.0*** | 11,288 | 10,674 | *1,058* | *7,144* | *32.5* | 330 | 10 | *1.6* |
| 2002 | **1,696,600** | 828,900 | 867,800 | **21,385** | ***12.6*** | 10,874 | 10,511 | *1,035* | *7,161* | *33.5* | 313 | 13 | *1.5* |
| 2003 | **1,702,600** | 832,800 | 869,800 | **21,648** | ***12.7*** | 11,244 | 10,404 | *1,081* | *7,439* | *34.4* | 304 | 5 | *1.4* |
| 2004 | **1,710,300** | 836,500 | 873,800 | **22,318** | ***13.0*** | 11,477 | 10,841 | *1,059* | *7,703* | *34.5* | 330 | 7 | *1.5* |
| 2005 | **1,724,400** | 844,300 | 880,100 | **22,328** | ***12.9*** | 11,341 | 10,987 | *1,032* | *8,108* | *36.3* | 294 | 6 | *1.4* |
| 2006 | **1,741,600** | 853,400 | 888,200 | **23,272** | ***13.4*** | 12,010 | 11,262 | *1,066* | *8,832* | *38.0* | 315 | 1 | *1.4* |

Note: See Appendix 3 - for notes on change in definition of stillbirths that took place in 1992

[1] All births prior to 1981
[2] Rate per 1,000 population
[3] Percentage of all live births
[4] Rate per 1,000 resident live and still births
[5] Rate per 1,000 live births (resident and non-resident)

| Stillbirths | | Infant deaths | | Deaths | | | | | | Marriages | | Divorces | Civil Partnerships | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | Persons | | Males | | Females | | | | | | |
| Number | Rate[4] | Number | Rate[5] | Number | Rate[2] | Number | Rate[2] | Number | Rate[2] | Number | Rate[2] | Number | Number | Year |
| .. | .. | 2,083 | *78.8* | **18,403** | ***14.7*** | 8,888 | *14.7* | 9,515 | *14.8* | 7,328 | *5.9* | .. | .. | 1926-30 |
| .. | .. | 1,966 | *78.4* | **18,026** | ***14.2*** | 8,869 | *14.4* | 9,157 | *14.0* | 7,806 | *6.1* | .. | .. | 1931-35 |
| .. | .. | 1,970 | *77.2* | **18,369** | ***14.3*** | 9,097 | *14.5* | 9,271 | *14.0* | 9,073 | *7.1* | .. | .. | 1936-40 |
| .. | .. | 2,169 | *73.3* | **17,478** | ***13.4*** | 8,778 | *13.0* | 8,700 | *13.8* | 10,751 | *8.2* | .. | .. | 1941-45 |
| .. | .. | 1,423 | *47.8* | **16,039** | ***11.9*** | 8,134 | *11.7* | 7,905 | *12.1* | 9,396 | *7.0* | .. | .. | 1946-50 |
| .. | .. | 1,054 | *36.6* | **15,557** | ***11.3*** | 7,966 | *11.8* | 7,590 | *10.7* | 9,359 | *6.8* | .. | .. | 1951-55 |
| .. | .. | 863 | *28.3* | **15,175** | ***10.8*** | 7,872 | *11.5* | 7,303 | *10.1* | 9,500 | *6.8* | .. | .. | 1956-60 |
| 695 | *20.5* | 879 | *26.5* | **15,628** | ***10.8*** | 8,185 | *11.6* | 7,443 | *10.0* | 10,185 | *7.0* | 124 | .. | 1961-65 |
| 530 | *15.9* | 791 | *24.1* | **15,987** | ***10.6*** | 8,399 | *11.5* | 7,588 | *9.9* | 11,357 | *7.6* | 225 | .. | 1966-70 |
| 407 | *13.9* | 610 | *21.1* | **16,948** | ***11.1*** | 8,954 | *11.9* | 7,994 | *10.3* | 11,384 | *7.4* | 381 | .. | 1971-75 |
| 269 | *9.9* | 427 | *15.9* | **16,750** | ***11.0*** | 8,770 | *11.6* | 7,980 | *10.3* | 10,010 | *6.6* | 648 | .. | 1976-80 |
| 194 | *7.1* | 323 | *11.8* | **15,972** | ***10.3*** | 8,146 | *10.7* | 7,826 | *9.9* | 10,049 | *6.5* | 1,523 | .. | 1981-85 |
| 136 | *5.0* | 231 | *8.5* | **15,696** | ***9.9*** | 7,879 | *10.2* | 7,818 | *9.6* | 10,031 | *6.3* | 1,664 | .. | 1986-90 |
| 135 | *5.4* | 168 | *6.7* | **15,228** | ***9.3*** | 7,515 | *9.4* | 7,713 | *9.2* | 8,983 | *5.5* | 2,282 | .. | 1991-95 |
| 126 | *5.4* | 134 | *5.7* | **15,150** | ***9.0*** | 7,315 | *9.0* | 7,835 | *9.1* | 7,881 | *4.7* | 2,325 | .. | 1996-2000 |
| 109 | *4.9* | 122 | *5.5* | **14,428** | ***8.5*** | 6,953 | *8.3* | 7,474 | *8.6* | 7,821 | *4.6* | 2,345 | .. | 2001-2005 |
| 462 | *14.3* | 722 | *22.7* | **16,202** | ***10.5*** | 8,593 | *11.4* | 7,609 | *9.7* | 12,152 | *7.9* | 339 | .. | 1971 |
| 434 | *14.3* | 616 | *20.5* | **17,032** | ***11.1*** | 9,001 | *11.9* | 8,031 | *10.3* | 11,905 | *7.7* | 355 | .. | 1972 |
| 389 | *13.1* | 610 | *20.9* | **17,669** | ***11.5*** | 9,288 | *12.3* | 8,381 | *10.8* | 11,212 | *7.3* | 393 | .. | 1973 |
| 374 | *13.6* | 567 | *20.9* | **17,327** | ***11.3*** | 9,226 | *12.2* | 8,101 | *10.5* | 10,783 | *7.1* | 382 | .. | 1974 |
| 375 | *14.1* | 534 | *20.4* | **16,511** | ***10.8*** | 8,664 | *11.5* | 7,847 | *10.2* | 10,867 | *7.1* | 437 | .. | 1975 |
| 278 | *10.4* | 483 | *18.3* | **17,030** | ***11.2*** | 8,869 | *11.8* | 8,161 | *10.6* | 9,914 | *6.5* | 574 | .. | 1976 |
| 310 | *12.0* | 438 | *17.2* | **16,921** | ***11.1*** | 8,871 | *11.8* | 8,050 | *10.5* | 9,696 | *6.4* | 569 | .. | 1977 |
| 243 | *9.2* | 417 | *15.9* | **16,153** | ***10.6*** | 8,458 | *11.2* | 7,695 | *10.0* | 10,304 | *6.8* | 599 | .. | 1978 |
| 246 | *8.7* | 417 | *14.8* | **16,811** | ***11.0*** | 8,822 | *11.7* | 7,989 | *10.3* | 10,214 | *6.7* | 601 | .. | 1979 |
| 266 | *9.2* | 382 | *13.4* | **16,835** | ***11.0*** | 8,832 | *11.7* | 8,003 | *10.3* | 9,923 | *6.5* | 896 | .. | 1980 |
| 240 | *8.8* | 360 | *13.2* | **16,256** | ***10.5*** | 8,423 | *11.1* | 7,833 | *10.0* | 9,636 | *6.2* | 1,355 | .. | 1981 |
| 187 | *6.9* | 369 | *13.7* | **15,918** | ***10.3*** | 8,004 | *10.6* | 7,914 | *10.0* | 9,913 | *6.4* | 1,383 | .. | 1982 |
| 204 | *7.5* | 329 | *12.1* | **16,039** | ***10.3*** | 8,209 | *10.8* | 7,830 | *9.9* | 9,990 | *6.4* | 1,657 | .. | 1983 |
| 161 | *5.8* | 291 | *10.5* | **15,692** | ***10.1*** | 8,007 | *10.5* | 7,685 | *9.7* | 10,361 | *6.7* | 1,552 | .. | 1984 |
| 178 | *6.4* | 265 | *9.6* | **15,955** | ***10.2*** | 8,088 | *10.6* | 7,867 | *9.8* | 10,343 | *6.6* | 1,669 | .. | 1985 |
| 125 | *4.4* | 286 | *10.2* | **16,065** | ***10.2*** | 8,154 | *10.6* | 7,911 | *9.8* | 10,225 | *6.5* | 1,539 | .. | 1986 |
| 170 | *6.1* | 242 | *8.7* | **15,334** | ***9.7*** | 7,721 | *10.0* | 7,613 | *9.4* | 10,363 | *6.6* | 1,514 | .. | 1987 |
| 137 | *5.0* | 248 | *8.9* | **15,813** | ***10.0*** | 7,993 | *10.3* | 7,820 | *9.6* | 9,960 | *6.3* | 1,550 | .. | 1988 |
| 133 | *5.1* | 180 | *6.9* | **15,844** | ***10.0*** | 7,878 | *10.2* | 7,966 | *9.8* | 10,019 | *6.3* | 1,818 | .. | 1989 |
| 115 | *4.4* | 198 | *7.5* | **15,426** | ***9.7*** | 7,648 | *9.8* | 7,778 | *9.5* | 9,588 | *6.0* | 1,897 | .. | 1990 |
| 123 | *4.7* | 194 | *7.4* | **15,096** | ***9.4*** | 7,533 | *9.6* | 7,563 | *9.2* | 9,221 | *5.7* | 2,310 | .. | 1991 |
| 124 | *4.9* | 153 | *6.0* | **14,988** | ***9.2*** | 7,469 | *9.4* | 7,519 | *9.0* | 9,392 | *5.8* | 2,280 | .. | 1992 |
| 128 | *5.2* | 176 | *7.1* | **15,633** | ***9.6*** | 7,731 | *9.7* | 7,902 | *9.4* | 9,045 | *5.5* | 2,213 | .. | 1993 |
| 153 | *6.3* | 147 | *6.1* | **15,114** | ***9.2*** | 7,362 | *9.2* | 7,752 | *9.2* | 8,683 | *5.3* | 2,303 | .. | 1994 |
| 145 | *6.1* | 169 | *7.1* | **15,310** | ***9.3*** | 7,482 | *9.3* | 7,828 | *9.3* | 8,576 | *5.2* | 2,302 | .. | 1995 |
| 153 | *6.2* | 142 | *5.8* | **15,218** | ***9.2*** | 7,418 | *9.2* | 7,800 | *9.2* | 8,297 | *5.0* | 2,314 | .. | 1996 |
| 131 | *5.4* | 137 | *5.6* | **14,971** | ***9.0*** | 7,244 | *8.9* | 7,727 | *9.0* | 8,071 | *4.8* | 2,176 | .. | 1997 |
| 122 | *5.1* | 134 | *5.6* | **14,993** | ***8.9*** | 7,321 | *8.9* | 7,672 | *8.9* | 7,826 | *4.7* | 2,459 | .. | 1998 |
| 132 | *5.7* | 148 | *6.4* | **15,663** | ***9.3*** | 7,464 | *9.1* | 8,199 | *9.5* | 7,628 | *4.5* | 2,326 | .. | 1999 |
| 93 | *4.3* | 109 | *5.0* | **14,903** | ***8.9*** | 7,128 | *8.7* | 7,775 | *9.0* | 7,584 | *4.5* | 2,350 | .. | 2000 |
| 112 | *5.1* | 134 | *6.0* | **14,513** | ***8.6*** | 7,007 | *8.5* | 7,506 | *8.7* | 7,281 | *4.3* | 2,365 | .. | 2001 |
| 122 | *5.7* | 100 | *4.6* | **14,586** | ***8.6*** | 6,948 | *8.4* | 7,638 | *8.8* | 7,599 | *4.5* | 2,165 | .. | 2002 |
| 108 | *5.0* | 115 | *5.2* | **14,462** | ***8.5*** | 6,920 | *8.3* | 7,542 | *8.7* | 7,757 | *4.6* | 2,319 | .. | 2003 |
| 113 | *5.0* | 122 | *5.3* | **14,354** | ***8.4*** | 6,935 | *8.3* | 7,419 | *8.5* | 8,328 | *4.9* | 2,512 | .. | 2004 |
| 89 | *4.0* | 140 | *6.1* | **14,224** | ***8.2*** | 6,957 | *8.2* | 7,267 | *8.3* | 8,140 | *4.7* | 2,362 | 12 | 2005 |
| 89 | *3.8* | 121 | *5.1* | **14,532** | ***8.3*** | 7,062 | *8.3* | 7,470 | *8.4* | 8,259 | *4.7* | 2,565 | 116 | 2006 |

# Appendix 2: Population and Vital Events by Administrative Area, 2006

| Area | Estimated population at 30 June 2006 | Resident live births | | Stillbirths | | Infant deaths | | Deaths | | Marriages | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | Number | Rate[1] | Number | Rate[2] | Number | Rate[3] | Number | Rate[1] | Number | Rate[1] |
| **Northern Ireland** | **1,741,600** | **23,272** | ***13.4*** | **89** | ***3.8*** | **121** | ***5.1*** | **14,532** | ***8.3*** | **8,259** | ***4.7*** |
| **Eastern Board** | **669,100** | **8,387** | ***12.5*** | **41** | ***4.9*** | **44** | ***5.2*** | **6,128** | ***9.2*** | **3,107** | ***4.6*** |
| Ards | **76,200** | 863 | *11.3* | 5 | *5.8* | 6 | *7.0* | 661 | *8.7* | 273 | *3.6* |
| Belfast | **267,400** | 3,396 | *12.7* | 15 | *4.4* | 14 | *4.1* | 2,803 | *10.5* | 1,320 | *4.9* |
| Castlereagh | **65,600** | 751 | *11.4* | 3 | *4.0* | 4 | *5.3* | 580 | *8.8* | 167 | *2.5* |
| Down | **68,300** | 950 | *13.9* | 4 | *4.2* | 8 | *8.4* | 548 | *8.0* | 331 | *4.8* |
| Lisburn | **112,900** | 1,535 | *13.6* | 7 | *4.5* | 5 | *3.3* | 828 | *7.3* | 477 | *4.2* |
| North Down | **78,700** | 892 | *11.3* | 7 | *7.8* | 7 | *7.8* | 708 | *9.0* | 539 | *6.9* |
| **Northern Board** | **444,700** | **5,781** | ***13.0*** | **14** | ***2.4*** | **27** | ***4.7*** | **3,607** | ***8.1*** | **2,080** | ***4.7*** |
| Antrim | **51,500** | 728 | *14.1* | 2 | *2.7* | 4 | *5.5* | 367 | *7.1* | 281 | *5.5* |
| Ballymena | **61,400** | 784 | *12.8* | 1 | *1.3* | 5 | *6.4* | 533 | *8.7* | 319 | *5.2* |
| Ballymoney | **29,200** | 404 | *13.8* | 1 | *2.5* | 2 | *5.0* | 227 | *7.8* | 132 | *4.5* |
| Carrickfergus | **39,700** | 471 | *11.9* | - | - | 1 | *2.1* | 340 | *8.6* | 166 | *4.2* |
| Coleraine | **56,700** | 646 | *11.4* | 2 | *3.1* | 2 | *3.1* | 456 | *8.0* | 279 | *4.9* |
| Cookstown | **34,800** | 498 | *14.3* | 1 | *2.0* | 6 | *12.0* | 284 | *8.2* | 238 | *6.8* |
| Larne | **31,300** | 358 | *11.5* | 2 | *5.6* | 2 | *5.6* | 305 | *9.8* | 134 | *4.3* |
| Magherafelt | **42,400** | 624 | *14.7* | 4 | *6.4* | - | - | 286 | *6.7* | 227 | *5.4* |
| Moyle | **16,500** | 183 | *11.1* | - | - | - | - | 161 | *9.7* | 91 | *5.5* |
| Newtownabbey | **81,200** | 1,085 | *13.4* | 1 | *0.9* | 5 | *4.6* | 648 | *8.0* | 213 | *2.6* |
| **Southern Board** | **334,800** | **5,038** | ***15.0*** | **18** | ***3.6*** | **28** | ***5.2*** | **2,587** | ***7.7*** | **1,596** | ***4.8*** |
| Armagh | **56,800** | 855 | *15.1* | 1 | *1.2* | 6 | *7.0* | 474 | *8.3* | 333 | *5.9* |
| Banbridge | **45,500** | 644 | *14.2* | 4 | *6.2* | 4 | *6.2* | 322 | *7.1* | 174 | *3.8* |
| Craigavon | **86,800** | 1,324 | *15.3* | 5 | *3.8* | 6 | *4.4* | 654 | *7.5* | 317 | *3.7* |
| Dungannon | **52,300** | 802 | *15.3* | 3 | *3.7* | 4 | *5.0* | 409 | *7.8* | 260 | *5.0* |
| Newry & Mourne | **93,400** | 1,413 | *15.1* | 5 | *3.5* | 8 | *4.7* | 728 | *7.8* | 512 | *5.5* |
| **Western Board** | **293,000** | **4,066** | ***13.9*** | **16** | ***3.9*** | **22** | ***5.2*** | **2,210** | ***7.5*** | **1,476** | ***5.0*** |
| Fermanagh | **60,600** | 823 | *13.6* | 2 | *2.4* | 6 | *7.1* | 540 | *8.9* | 374 | *6.2* |
| Limavady | **34,300** | 483 | *14.1* | 1 | *2.1* | - | - | 227 | *6.6* | 182 | *5.3* |
| Derry | **107,900** | 1,530 | *14.2* | 6 | *3.9* | 7 | *4.2* | 776 | *7.2* | 458 | *4.2* |
| Omagh | **51,000** | 687 | *13.5* | 3 | *4.3* | 7 | *10.2* | 369 | *7.2* | 274 | *5.4* |
| Strabane | **39,100** | 543 | *13.9* | 4 | *7.3* | 2 | *3.7* | 298 | *7.6* | 188 | *4.8* |

See Appendix 3 - for notes on change in definition of stillbirths that took place in 1992

[1] Rate per 1,000 population
[2] Rate per 1,000 resident live and still births
[3] Rate per 1,000 live births (resident and non-resident)

# Appendix 3: Notes and Definitions

### Population Data

All population figures refer to estimates as at the 30 of June of the year in question. Ages relate to age last birthday at the date shown.

### Natural increase

Natural increase is equal to total births minus total deaths.

### Marriages

Marriage rates relate to the number of marriages solemnised and not to the number of persons married. The number of marriages relates to those registered in Northern Ireland, thus it does not include Northern Ireland residents who get married outside Northern Ireland, but does include non Northern Ireland residents getting married in Northern Ireland.

### Divorces

Divorce statistics have been compiled from returns of 'Decrees made Absolute' supplied by the Northern Ireland Court Service and include nullities of marriage.

Information on the number of 'Decree Nisis' is published by the Northern Ireland Court Service. A Decree Nisi does not terminate the marriage; a couple are still married until the Decree Absolute has been granted.

### Date of registration and date of occurrence

All the data presented on births, stillbirths, marriages and deaths relate to the date of registration of the event and not to the date of occurrence. For events such as infant death or suicide, which are likely to be referred to the coroner, it can take some time for the event to be registered.

### Place of occurrence

Births, stillbirths and deaths have been allocated to the area of usual residence if it is in Northern Ireland, otherwise they have been allocated to the area of occurrence. Marriage figures relate to the area of occurrence.

### Marital status of parents

The following terms are used throughout the report:

Married parents: refers to parents who are married to each other at time of registration of birth.

Unmarried parents: refers to parents who are unmarried or married but not to each other at time of registration of birth.

### Births

The births presented in this report (since 1981) do not include births to non Northern Ireland resident mothers unless otherwise stated.

### Stillbirths

The **Stillbirth (Definition) Act 1992** redefined a stillbirth, from 1 October 1992, as a child which had issued forth from its mother after the 24th week of pregnancy and which did not breath or show any other sign of life. Prior to 1 October 1992 the statistics related to events occurring after the 28th week of pregnancy.

**A stillbirth rate** refers to the number of stillbirths per 1,000 live and still births.

The stillbirths presented in this report (since 1981) do not include stillbirths to non Northern Ireland resident mothers.

### Perinatal deaths

Perinatal deaths refer to stillbirths and deaths in the first week of life.

A **perinatal death rate** refers to the number of perinatal deaths per 1,000 live and still births (including non Northern Ireland residents).

Perinatal deaths presented in this report include stillbirths and infant deaths to non Northern Ireland residents.

### Neonatal deaths

Neonatal deaths refer to deaths in the first four weeks of life.

A **neonatal death rate** refers to the number of neonatal deaths per 1,000 live births (including non Northern Ireland residents).

### Postneonatal deaths

Postneonatal deaths refer to deaths after the first four weeks but before the end of the first year.

A **postneonatal death rate** refers to the number of postneonatal deaths per 1,000 live births (including non Northern Ireland residents).

### Infant deaths

Infant deaths refer to all deaths in the first year of life.

An **infant death rate** refers to the number of infant deaths per 1,000 live births (including non Northern Ireland residents).

### Deaths

The deaths represented in this report refer to all deaths which occurred in Northern Ireland. They include those which occurred in Northern Ireland to non Northern Ireland residents, but exclude those occurring to Northern Ireland residents outside of Northern Ireland.

### Suicide, Self-Inflicted Injury and Events of Undetermined Intent

In the UK, in considering suicide events it is conventional to include cases where the cause of death is classified as either 'Suicide and self-inflicted injury' or 'Undetermined injury'. The ICD10 codes used for 'Suicide and self-inflicted injury' are X60-X84 and Y87.0, and the ICD10 codes used for 'Undetermined injury' are Y10-Y34 and Y87.2. (Also see note on Registration and Occurrence).

Prior to 2004 there were seven coroner's districts in Northern Ireland, following a review of the coroner's service the separate districts were amalgamated into one centralised coroner's service. This change may affect the timing of registration of deaths with statistics from 2004 onwards being more timely and consistent.

### Alcohol-Related Deaths

The figures in this report are based on a new harmonised definition of alcohol-related deaths that has been recently agreed across the UK. The definition of alcohol-related deaths includes those causes regarded as most directly due to alcohol consumption. It does not include other diseases where alcohol has been shown to have some causal relationship, such as cancers of the mouth, oesophagus and liver. The definition includes all deaths from chronic liver disease and cirrhosis (excluding biliary cirrhosis), even when alcohol is not specifically mentioned on the death certificate.

Apart from deaths due to poisoning with alcohol (accidental, intentional or undetermined), this definition excludes any other external causes of death, such as road traffic deaths and other accidents.

Further details on the UK definition and a list of the ICD9 and ICD10 codes used to code alcohol related deaths can be found at:
http://www.statistics.gov.uk/statbase/Product.asp?vlnk=14496

### Crude birth and death rates

A **crude rate** refers to the number of occurrences of the event per 1,000 population.

### Age standardisation

A straight comparison of crude death rates between areas may present a misleading picture because of differences in the sex and age structure of the respective populations. The technique of standardisation is used to remedy this. In general, standardisation involves a comparison of the actual number of events occurring in an area with the aggregate number expected if the age/sex specific rates in the standard population were applied to the age/sex groups of the observed population. The results are expressed either as standardised rates or as standardised mortality ratios (SMRs) where the standard ratio (for Northern Ireland) equals 100.

In some areas the presentation of standardised rates for only one year's deaths may not provide a full picture of the underlying standardised death rates. It is therefore advisable to use the 3 years rates provided **(Figure 1.20)**.

### Significance of SMRs

The estimation of SMRs by LGD and Health Board invites the question of whether such SMRs are different from the Northern Ireland average (100). The statistical significance of the SMRs has been examined by estimating the probability that the difference between an observed SMR and 100 might have resulted from chance variation; where this probability is less than 0.05 (one in 20) the particular SMR has been classified as statistically significantly ($p<0.05$) different from 100. More details on the method can be obtained from Demography and Methodology Branch.

### Total period fertility rate (TPFR)

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

### TPFR replacement level

In western countries a TPFR of about 2.1 is required to maintain long-term population levels, assuming no migration.

### General fertility rate

The general fertility rate is the number of live births per 1,000 women aged 15-44.

### The gross reproduction rate

The gross reproduction rate is the average number of live daughters that would be born to a cohort of women who experienced, throughout their childbearing years, the fertility rates of the calendar year in question.

### The net reproduction rate

With reference to the gross reproduction rate, the net reproduction rate is the average number of these live daughters that, subject to the mortality rates of the calendar year in question, would survive to their mother's age at the time of birth.

### Completed Family Size

Average completed family size is calculated by summing over time the succeeding age specific fertility rates of women born in a particular year. (Such an approximation assumes that the effects of mortality and migration are negligible.) However this measure can only calculate a value for women who have reached the end of the main childbearing ages conventional 45 years of age, but there is some value in considering the historical data for cohorts that have reached this age and the partial series for those not yet 45.

### Maternities

Maternities refer to the number of pregnancies ending in stillbirths or live births with multiple births counting only once. The number of maternities presented in this report (since 1981) does not include births or stillbirths to non Northern Ireland residents.

### National Statistics Socio-economic Classification (NS-SeC)

This new social classification has replaced the previously published Registrar General's Social Class. It is principally based on the individual's occupation and employment status and has been introduced in order to reflect a modern view of social classification. It was introduced from 2001 onwards. Further information can be obtained from the Office for National Statistics at: http://www.statistics.gov.uk/methods_quality/ns_sec/default.asp.

NS-SeC is determined according to a person's occupation; for children of parents who are married to each other, according to the occupation of the father as stated at birth registration; for children of parents who are not married to each other but who jointly registered the birth, according to the occupation of the father; and for sole registrations, according to the occupation of the mother. The occupations are grouped into the following classes:

| | |
|---|---|
| NS-SeC I | Higher managerial & professional occupations |
| NS-SeC II | Lower managerial & professional occupations |
| NS-SeC III | Intermediate occupations |
| NS-SeC IV | Small employers & own account workers |
| NS-SeC V | Lower supervisory & technical occupations |
| NS-SeC VI | Semi-routine occupations |
| NS-SeC VII | Routine occupations |
| NS-SeC VIII | Never worked & long-term unemployed |

### Cause of death coding – ICD10

All deaths and stillbirths registered from the 1 January 2001 have been coded in accordance with the International Statistical Classification of Diseases, Injuries and Causes of Death, (ICD) (Tenth Revision), which has been in operation by international agreement from 1 January 1999.

Classification of the underlying cause of death is done by reference to the death certificate and additional information from the certifying doctor.

### Expectation of Life

Expectation of Life statistics, previously produced by the Government Actuary's Department (GAD), are now produced by the Office for National Statistics (ONS). Expectations of life can be calculated in two ways: period life expectancy or cohort life expectancy.

**Period life expectancies** are worked out using the age-specific mortality rates for a given period (either a single year, or a run of years), with no allowance for any later actual or projected changes in mortality.

**Cohort life expectancies** are worked out using age-specific mortality rates which allow for known or projected changes in mortality in later years.

All statistics for expectation of life in Chapter 1 are based on the period methodology and are produced for single year of age based on three year's deaths and population data with the exception of the cohort figures given in Table 2.1.

### Northern Ireland Population Projections

**Figure 1.1, 1.8 and 1.9** summarise the results of the latest population projections for Northern Ireland. The assumptions used in this projection are summarised below.

**Base population**: The projection was based on the Northern Ireland mid-2006 population estimate.

**Fertility**: The numbers of births for the projections are obtained by applying the appropriate fertility rate to the average number of women at each age during each year of the projection period. For Northern Ireland, long-term average completed family size is assumed to be 1.95 children per woman.

**Mortality**: The mortality rates for the first year of the projection, 2006-07, are based on the best estimates that could be made in September 2007 of the numbers of deaths at each age. Future improvements in mortality rates are based on the trend in mortality rates in the years up to 2006. In the long term rates of improvement in mortality rates are projected to be one per cent per annum.

**Migration**: It has been assumed that for each year of the projection period in the long-term there was a net inward migration of 500 from Northern Ireland.

Further information on population projections can be obtained from:

National Population Projections and Life Tables Branch
ONS Centre for Demography
Office for National Statistics
Room D3/05
1 Drummond Gate
LONDON
SW1V 2QQ

Tel: 020 7533 5222
Email: natpopproj@ons.gsi.gov.uk
lifetables@ons.gsi.gov.uk
Website: www.statistics.gov.uk

### Population Projections for areas within Northern Ireland

NISRA has produced 2002 based population projections for areas within Northern Ireland – Local Government Districts, Health and Social Services Boards, Education and Library Boards and NUTS III areas. These figures are constrained to the GAD Northern Ireland totals.

A new set of population projections for areas within Northern Ireland based on the 2006 mid-year population estimates are scheduled to be published in early 2008.

Further information on the population projections for areas within Northern Ireland can be obtained from:

Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 9034 8160
Fax: 028 9034 8161
Email: census.nisra@dfpni.gov.uk
Website: http://www.nisra.gov.uk/demography/

### UK Data

The Office for National Statistics (ONS) is responsible for producing a wide range of economic and social statistics. It also, for England and Wales, registers life events and holds the Census of Population. Contact details are as follows:

Customer Contact Centre
Room 1.015
Office for National Statistics
Cardiff Road,
NEWPORT
NP10 8XG

Tel: 0845 601 3034
Fax: 0163 365 2747
Email: info@statistics.gsi.gov.uk
Website: www.statistics.gov.uk

The General Register Office for Scotland (GROS) is responsible for the registration of births, marriages, deaths, divorces and adoptions in Scotland. They are also responsible for the Census of Population in Scotland which, with other sources of information, is used to produce population statistics. Contact details are as follows:

Customer Services
Dissemination and Census Analysis Branch
General Register Office for Scotland
Ladywell House
Ladywell Road
EDINBURGH
EH12 7TF

Tel: 0131 314 4243
Fax: 0131 314 4696
Email: customer@gro-scotland.gsi.gov.uk
Website: www.gro-scotland.gov.uk

# Appendix 4: Further Information

### Vital Statistics

A wide range of additional information at differing levels of geography (including postcode sector) and for years not included in this edition of the Registrar General's Annual Report is available on request from Customer Services.

### Population Statistics

Estimates of the resident population are available by sex and single year of age for each of the Local Government Districts, Health and Social Services Boards, Education and Library Boards, Parliamentary Constituencies and NUTS III areas of Northern Ireland. Population projections are available for the Local Government Districts, Health and Social Services Boards, Education and Library Boards and NUTS III areas by age and sex for a 15 year period after the base year. This information can be obtained from:

Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 9034 8160
Fax: 028 9034 8161
Email: census.nisra@dfpni.gov.uk
Website: http://www.nisra.gov.uk/demography/

### Migration Statistics

In July 2006 NISRA published a paper outlining analysis undertaken to develop measures of long-term international migration. The paper looks at a number of administrative/statistical sources including the Worker Registration Scheme, the Work Permit Scheme and National Insurance Number registrations, to help estimate long-term international migration.

A second paper was published in July 2007 which updates the first paper and where possible provides similar but more up to date statistics for the period 2005-6 and where possible 2006-7. Both publications can be found on the NISRA website at the following link:

http://www.nisra.gov.uk/demography/default.asp?cmsid=20_21_191&cms=demography_Population%20statistics_Migration+Statistics&release

### Historical Registrar General Annual Reports

Electronic copies of all Registrar General Annual Reports from 1922 to the present day are now available from the NISRA website. They can be accessed at the following link:

http://www.nisra.gov.uk/demography/default.asp?cmsid=20_45&cms=demography_Publications&release

### Census Office for Northern Ireland

#### 2001 Census Data

Detailed results from the 2001 Census include a wide range of demographic information available for different levels of geography. The headline outputs include:

- Northern Ireland Census 2001 Population Report and Mid-Year Estimates
- Northern Ireland Census 2001 Key Statistics
- Northern Ireland Census 2001 Standard Tables
- Northern Ireland Census 2001 Census Area Statistics
- Northern Ireland Census 2001 Theme Tables
- Northern Ireland Census 2001 Migration, Travel to Work and Workplace Population
- Northern Ireland Census 2001 Univariate Tables

More information on the 2001 Census and statistics available from it can be obtained from:

Census Customer Services
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 9034 8160
Fax: 028 9034 8161
Email: census.nisra@dfpni.gov.uk
Website: http://www.nisranew.nisra.gov.uk/census/start.html

#### 2011 Census

Preparations are underway for the next Census which is planned for 2011.

Three major phases of testing are planned as part of the 2011 Census development cycle, namely a Census test which took place on 13 May 2007, systems integration test in autumn 2008 and a dress rehearsal in 2009. Similar arrangements are in place across the rest of the UK.

More information on the 2011 Census, including details of the 2007 Census Test, can be obtained from:
http://www.nisranew.nisra.gov.uk/census/2011_census.html

### Northern Ireland Neighbourhood Information Service (NINIS)

NISRA has developed a statistical resource for Northern Ireland which includes detailed small area aggregate statistical information. The resource is titled Neighbourhood Statistics and includes a web-based dissemination system available at www.ninis.nisra.gov.uk. The web system includes 2001 Census data along with detailed aggregate statistical information from various administrative data systems. Further information can be obtained from:

Northern Ireland Neighbourhood Information Service
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 9034 8111
Fax: 028 9034 8134
Email: ninis.nisra@dfpni.gov.uk
Website: http://www.ninis.nisra.gov.uk

### Northern Ireland Longitudinal Study (NILS)

The Northern Ireland Longitudinal Study (NILS) is a large-scale data linkage study which has been created by linking administrative and statistical data. The Study is designed for statistical and research uses only and is managed under Census legislation. Information is linked over time on people from Census, vital events and health registration datasets. Data sources include 2001 Census data, birth and death registrations and demographic data derived from health registrations. Further information can be obtained from:

Northern Ireland Longitudinal Study
Northern Ireland Statistics and Research Agency
McAuley House
2-14 Castle Street
BELFAST
BT1 1SA

Tel: 028 90348131
Fax: 028 90348134
Email: nils.nisra@dfpni.gov.uk
Website: http://www.nisra.gov.uk/nils/

### Divorces – Decree Nisi information

The information on divorces in this report refers to Decree Absolutes. Information on Decree Nisi's can be obtained from:

The Northern Ireland Court Service
Resource Management Branch
18th Floor
Windsor House
Bedford Street
BELFAST
BT2 7LT

Tel: 028 9032 8594
Fax: 028 9023 8506

# Appendix 5: Report on the work of the General Register Office for Northern Ireland (2006)

### Introduction

The General Register Office for Northern Ireland (GRONI) is the part of the Northern Ireland Statistics and Research Agency (NISRA) that administers civil registration. The Registrar General for Northern Ireland, who is also Chief Executive of NISRA, heads GRONI. The registration functions of GRONI stem mainly from the statutory responsibilities placed on the Registrar General and include:

- administration of the registration of births, deaths, marriages and civil partnerships through District Registration Offices;
- formalities relating to marriage and conduct of civil marriages;
- formalities relating to civil partnership registration;
- maintenance of historic records of births, deaths, marriages, civil partnerships and adoptions and production of certified copies to applicants on request; and
- registration of adoptions.

The Registrar General has additional related statutory duties relating to the production and publication of vital statistics. Demography and Census Division within NISRA manage these duties in partnership with GRONI.

### Aims

The work of GRONI is wide ranging including policy development, oversight and regulation of registration work undertaken by the District Registration Offices, advice on marriage procedures, casework relating to change of name, procedures relating to legal adoptions, production of certified copies of vital events and maintenance and storage of archive records. This is reflected in the fundamental aims of GRONI, which are:

- to register all births, deaths, marriages, civil partnerships and adoptions;
- to ensure that all information collected is relevant, accurate, complete and updated in such a way as to maintain public confidence in the records;
- to support NISRA in the production of accurate vital statistics to assist policy development and research;
- to preserve birth, death, marriage, civil partnership and adoption records permanently and to store them securely; and
- to produce certified copies of records efficiently and promptly on demand.

The aims of GRONI staff are to carry out these statutory obligations, to give accurate and unbiased advice to the public, to act with integrity at all times and to respect the confidentiality of all information contained in registration records or given by the public in confidence. In carrying out these functions, GRONI seeks to act in a manner consistent with the National Statistics Code of Practice and the Citizen's Charter.

### Main Activities / Performance Against Key Targets during 2006

Almost 47,700 vital events (births, deaths, marriages, civil partnerships and adoptions) were registered in District Registration Offices and a corresponding number of certificates were issued. In addition, during 2006, GRONI:

- produced 90,680 certificates and 11,459 priority certificates;
- verified 6,833 births, deaths and marriages for government departments;
- provided all death notifications to the Central Services Agency, Electoral Office for Northern Ireland and Department for Work and Pensions; and
- dealt with 4,379 registrations related cases.

Each year the Minister for Finance and Personnel and the Registrar General set a number of key targets for GRONI. During 2006 these included:

(i) Process 98 per cent of postal and personal certificate applications within 8 and 3 working days respectively.

Achieved. 98 per cent of postal applications processed within 8 working days and 98 per cent of personal applications processed within 3 working days

(ii) A response time of 15 working days when replying to miscellaneous queries.

Achieved. 99.8% within 15 days

(iii) Process birth, death, marriage, civil partnership and adoption registration casework within 15 working days.

Achieved. 96.5% within 15 days

### Reform Developments in 2006

Each year a number of further measures are taken to improve customer services, value for money and develop policy. In 2006 the main developments included:

- further work on the review of the civil registration service;
- preparation for the digitisation of 8 million paper-based records;
- the introduction of new legislation relating to the Disclosure of Death Registration Information for the prevention of fraud; and
- the review of fees charged by GRONI.

Each of these is described in turn below.

#### (i) Review of Registration Service

Following on from the Consultation Document 'Civil Registration in the 21st Century', published in 2006, GRO has firmed up policy proposals aimed at bringing the service into the 21st century. In conjunction with Civil Law Reform Division, legislation is being drafted to take the modernisation programme forward. The proposals will provide for improved service delivery, better access to services and information and the much wider use of technology to improve customer service.

#### (ii) Digitisation of Registration Records

Following the successful implementation of the new Registration and Certificate System in 2005, which linked all 26 District Registration Offices with GRO and updated GRO internal systems for indexes and recent records, GRO is continuing the programme for the modernisation of all civil registration records dating back to the 19th century. Work is progressing on plans for the digitisation of 8 million paper-based records. In addition to using information technology to make improvements in meeting the needs of the public and contributing to government targets for electronic delivery, this project will protect important historic records and goes hand in hand with the proposed legislative changes.

#### (iii) Disclosure of Death Registration Information

As part of the ongoing exercise to combat fraud, GRO was included with GRO England & Wales, in the introduction of a clause to the UK wide Police & Justice Act 2006. This enables GRO to share death registration information with police and crime investigation agencies for the prevention, detection, investigation and prosecution of offences. The scheme, which will be operated through a joint working arrangement between the General Register Offices in Northern Ireland, Scotland and England & Wales, is aimed at stopping fraudsters from using the identities of the deceased. Work is now progressing on the application/compliance regime and the necessary subordinate legislation to enable the sharing of death registration data with other government departments and financial institutions for the same purposes.

#### (iv) Annual review of civil registration fees

Each year GRONI review the statutory fees charged for registration services against costs. No increase of fees was applied in 2006.

# Registrar General Northern Ireland Annual Report 2006 CD

This auto-run CD contains files to complement the printed report and is presented as a self contained website.

This CD contains:

- Report
- Additional tables
- Links to NISRA website

## System requirements

**PC**

Pentium 2 or better processor

64 Mb or RAM

Windows 95 or newer

Internet Explorer 5.01 or newer

**Mac**

System 8.1 or newer

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32MB of RAM



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ISBN 978-0-337-08963-3
9 780337 089633