

# DEMOGRAPHY AND DEMOGRAPHIC TRENDS IN NORTHERN IRELAND

In recent years Northern Ireland has had the fastest growing and youngest population of all UK countries. Population increase has been a general trend since the inception of the state, due primarily to natural change with births exceeding deaths. Historically, this increase has been tempered by significant population loss due to out-migration but more recently a different pattern has emerged with Northern Ireland experiencing significant in-migration which has resulted in a larger increase in population. Northern Ireland's population growth in recent decades has continued despite a fall in both the number of births and the birth rate. This fall in birth rate is tempered with a recent recovery in the number of births recorded. In 2008 the fertility rate in Northern Ireland rose above the replacement level of 2.1 births per woman. This recent fertility increase has in part been driven by in-migration.

Northern Ireland has the lowest crude death rate of all UK countries - related to having the youngest age structure. Since the mid-1970s, Northern Ireland has experienced a general decrease in the annual number of deaths recorded. This decrease has occurred despite the population increasing in size and the increasing proportion of the population who are elderly. As in other European countries, there has been a significant change in the age-structure of the population. This chapter summarises the trends in population, births and deaths from 1922 and offers some comparisons with the rest of the UK.

## Northern Ireland Population

The population has risen from around 1.28 million in 1922 to 1.75 million in 2007. There was an initial period of population loss from 1922 to the early 1930s due to significant out-migration from Northern Ireland. Following this, a rise occurred throughout the twentieth century, with the main exception to this period of growth being in the early 1970s when the size of the population again decreased. This decrease was at the start of the period of civil unrest in Northern Ireland known as 'the Troubles' and was due to particularly high levels of net out-migration. The 2006-based population projections indicate that the population in Northern Ireland is projected to continue to increase beyond 2030. Over the last five years population growth has been driven by both natural change and net migration. Net in-migration has been significant in Northern Ireland since the accession of the eight Central and Eastern European, or A8, countries to the European Union in May 2004. In 2007 population gain in Northern Ireland due to migration was half a per cent of the population or 10,000 people. The Northern Ireland Statistics and Research Agency (NISRA) carried out research based on administrative data sources to estimate the stock of people of A8 origin living in Northern Ireland. In 2007 it estimated the size of this population at 30,000 people. This represents almost 2% of the Northern Ireland population of just over 1.75 million. While all parts of the UK have experienced recent increases in population, in 2007 Northern Ireland had the fastest growing population of all UK countries with a 2006/07 increase of

1.0% (17,500 people), compared to 0.6% in England, 0.5% in Scotland and 0.5% in Wales. In addition to having the fastest growing population, Northern Ireland also has the youngest population in the UK. In 2007, 22% of the Northern Ireland population were children and 16% were of pensionable age, while for England it was 19% and 19% respectively. In Scotland 18% were children and 19% were of pensionable age, and in Wales 19% and 21% respectively.

### Long-term Trends in Births

In Northern Ireland there was a significant growth in the number of births in the decades following the Second World War. A peak in 1964 at 34,300 births was followed by a marked fall in the number of births registered in the early 1970s. In the 1980s the number of births levelled off. The decline in the number of births in Northern Ireland resumed in the 1990s with the figure hitting an all-time low of 21,400 births in 2002. Since then there has been a marked recovery in numbers with 25,600 births registered in 2008. This increase restores birth numbers to the 1992 figure. Northern Ireland has consistently had higher overall birth rates than those seen in Great Britain. All countries of the UK have experienced a similar upturn of greater than 10 per cent in birth rates since the lows of 2001/02. However, Northern Ireland is the only country within the UK which has had fertility levels above replacement level since 1978. It was not until 1992 that Northern Ireland's fertility rate first fell below this level. This compares to 1973 in both England and Wales and 1974 in Scotland.

Across the UK an increasing number of women are waiting until later in life to have children. This has had an effect on the overall period fertility rate. In Northern Ireland over the past 30 years the most striking change has been the decline in the number of women in their twenties having children. In 2008, just under half (49%) of births were to mothers aged 30 and over compared to under a third (31%) in 1978. The average age of a mother at first birth in 1978 was 24.5 years which increased to 27.4 years in 2008. Whilst the overall fertility rate in Northern Ireland is higher than that of the rest of the UK, there is a variation in fertility rates with respect to age. Northern Ireland has lower fertility rates for teenage women but significantly higher rates for those aged over 25, with a peak at around 29 years.

In recent years there has been an increase in the number of births outside marriage. In 2008 in Northern Ireland, 39% of births were outside marriage, an increase from 6% in 1978. Similar trends are observed in the rest of the UK. In 2007, 38% of births occurred outside marriage in Northern Ireland, compared to 44% in England, 49% in Scotland and 54% in Wales.

Over the past thirty years there has been a significant change in family size. Prior to 1997 birth order statistics were not collected for unmarried mothers. Therefore this analysis relates to births within marriage only. In 1978, 18% of all births within marriage were to mothers who already had at least three other children. This percentage has steadily fallen to 10% of all births within marriage in 2008.

### Long-term Trends in Deaths

Over the last century the picture has been one of falling mortality albeit with an increase during the conflict of the 1970s. The figures also show that female deaths exceeded male deaths from the early 1920s until the mid-1940s. After this the number of male deaths were higher until the end of the 1980s. Female mortality improved at a faster rate from the 1930s to the 1970s. Since the 1980s, male mortality rates have improved, resulting in a narrowing of the 'gender gap'. Although female deaths have exceeded male deaths since 1989, male mortality rates still remain higher than those for females. Northern Ireland had higher crude death rates than Great Britain until the late 1930s when the rate began to fall more sharply. Since the early 1950s Northern Ireland has had consistently lower death rates than Great Britain, a consequence of it having a younger population than the other parts of the UK. As with births, there is a similar fluctuating pattern in death rates for each of the four UK countries. In recent years all UK countries have seen a general downward trend in death rates. Death rates for Scotland and Wales have become almost identical and have remained higher than England and Northern Ireland.

Although the number of deaths in Northern Ireland increased in 2008 to 14,900 from 14,600 in 2007, the long-term trend is one of falling death rates. The reduction in the number of deaths in recent years has occurred despite the population increasing in size and containing a greater proportion of elderly people. In 2008, 62% of deaths were to people aged 75 and over compared to 44% in 1978. Improvements in health care contributed to this reduction in the death rate.

Over the thirty year period from 1978 to 2008, mortality rates have improved across all age groups. Male mortality rates remained higher than female mortality rates throughout the period although there has been a gradual narrowing of the 'gender gap'. The largest declines in male age-specific death rates occurred in the 0–4 age group (down 68%) and for those aged 55–59 (down 62%). Female age-specific death rates declined most substantially for those aged 10–14 (down 75%) and for ages 0–4 (down 66%). If the age-specific death rates of thirty years ago still applied today, the number of deaths registered in Northern Ireland in 2008 would have been almost 11,000 higher (25,500) than the actual number registered. Thus, in overall terms, the weight of mortality has nearly halved in the last thirty years.

### Cause of Death

Over the last century there have been changes in the most common causes of death. In Northern Ireland at the beginning of the 20th Century a large number of deaths (on average 19% of all deaths registered) were due to infectious diseases such as diphtheria, influenza and tuberculosis. In more recent years infectious diseases have only accounted for, on average, 1% of all deaths registered. Conversely, deaths from diseases such as malignant neoplasms (cancer) have increased over the period. In 1922, 6% of all deaths registered were a result of

malignant neoplasms. In 2008 cancer accounted for 27% of all deaths registered. In 2007 the three most common causes of death in Northern Ireland were malignant neoplasms (26% of all deaths), ischaemic heart disease (17% of all deaths) and respiratory diseases (14% of all deaths). Similarly, in Scotland 27% of all deaths were due to malignant neoplasms, 17% due to ischaemic heart disease and 13% to respiratory diseases. Equivalent figures for England were 27% of all deaths due to malignant neoplasms, 16% due to ischaemic heart disease and 14% to respiratory diseases; for Wales these were 27%, 17% and 14% respectively.

### **Conclusion**

Changes in the demographic structure of the population, such as the recent increase in the number of migrants entering the UK, have public policy implications. Mortality trends have implications for health policies such as residential care planning and care for the elderly in hospitals, while a change in the birth trend will affect maternity services and school planning. The latest Northern Ireland trends show an increasing number of children born and more diversification in the family backgrounds of children. Data from the 2008/9 School Census in Northern Ireland show that around 3 per cent of the primary school population has English as an additional language. This figure has more than doubled over the last three years.

Northern Ireland has the lowest all age mortality rate within the UK. This is driven by the population in Northern Ireland having the youngest age structure of the UK countries. It is clear that over the last 30 years there has been a marked improvement in mortality, with the weight of mortality in the late 1970s being almost double that observed today.