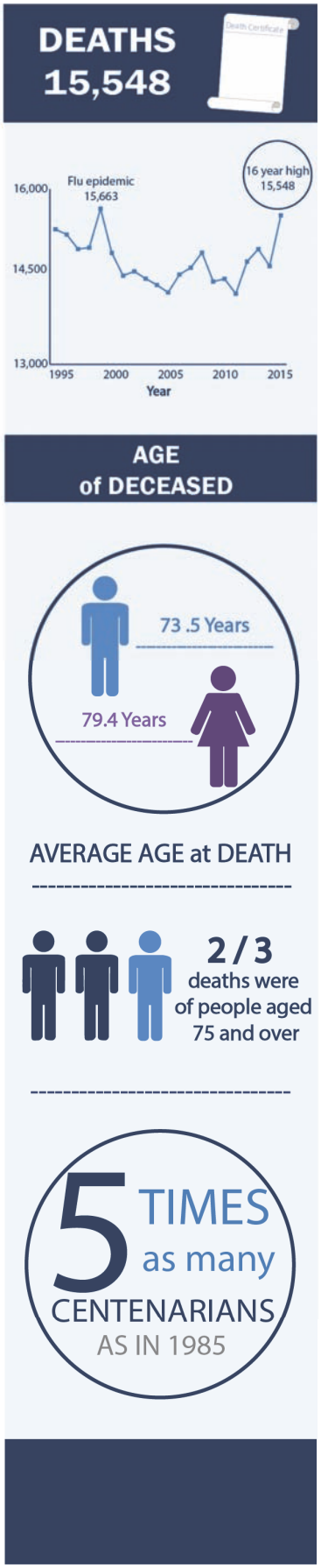
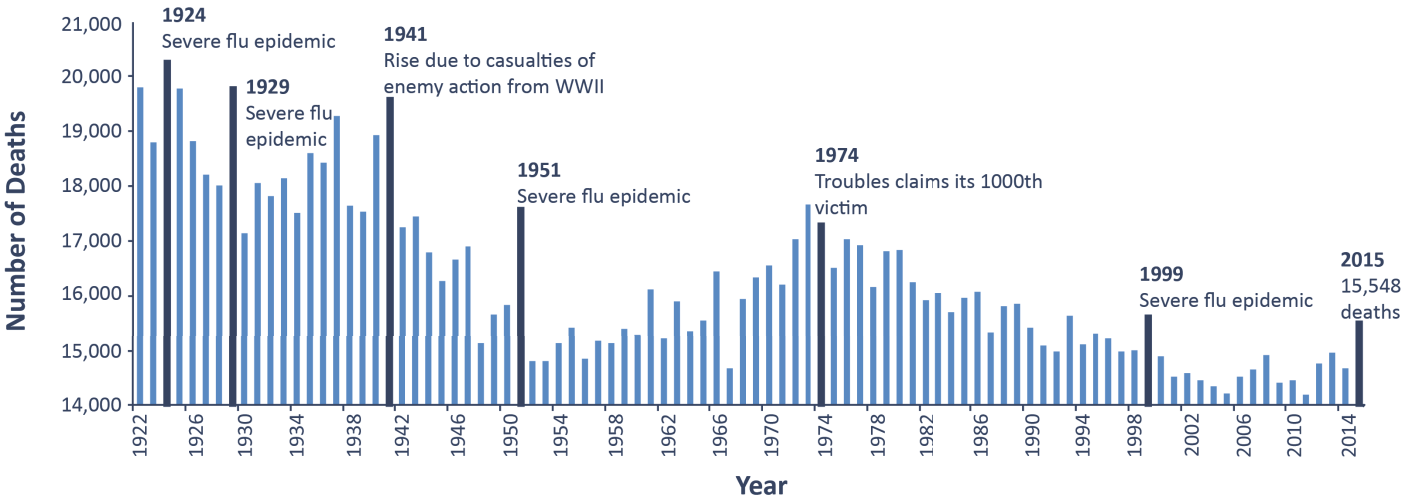


Deaths

In 2015:

- 15,548 deaths were registered – the highest number recorded since the severe flu epidemic of 1999 (15,663).
- There were 104 female deaths for every 100 male deaths, exceeding the female to male ratio in the population as a whole (103 females: 100 males).
- Average age at death for men was 73.5 years compared with 79.4 for women.
- Almost 2 out of every 3 deaths were of people aged 75 or over.
- Women born today in Northern Ireland are expected to live to 82.3, 4 years longer than men (78.3).
- 48 per cent of deaths occurred in NHS hospitals, with a further 20 per cent occurring in other hospitals or nursing homes.
- There were 149 deaths of people aged 100 or more, almost 5 times the number of 30 years previously (31 in 1985).

Figure 1.26: Number of deaths registered (1922 to 2015) – non-zero y-axis



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There were 15,548 deaths registered in 2015, an increase of 5.9 per cent on 2014 and the highest number recorded since the severe flu epidemic of 1999 (15,663). This equates to an average of 42 deaths registered per day in 2015. A discussion on factors contributing to the increase in deaths in 2015 can be found in the next section.

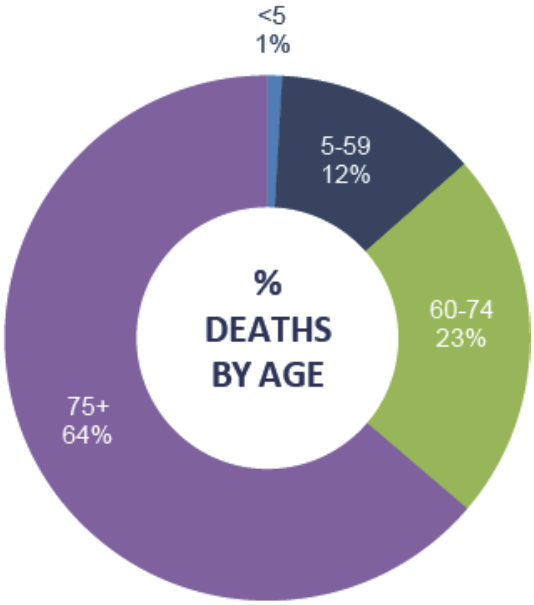
Despite the increase in deaths in 2015, there has been an overall reduction in the number of deaths during the past 30 years despite the population increasing in size and containing a higher proportion of elderly people. For example, the size of the current population is 18 per cent larger than it was in 1985[17] and those aged 75 and over represent 7.0 per cent of the population now compared to only 5.0 per cent in 1985. Indeed, if the age-specific death rates of 1985 still applied today, the number of deaths registered in 2015 would have been more than 25,000; over 10,000 higher than the actual number registered. This decrease is reflected in the continuing reduction in mortality rates across all age groups and the corresponding increase in life expectancy.

42 deaths on average per day

Deaths by Date of Registration and Date of Occurrence

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, for example events such as an infant death or suicide must be referred to a coroner for investigation[18]. The vast majority of deaths (95 per cent) that were registered in 2015 also occurred in 2015.

Figure 1.27: Percentage of Deaths by Age (2015)



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Mortality by Age

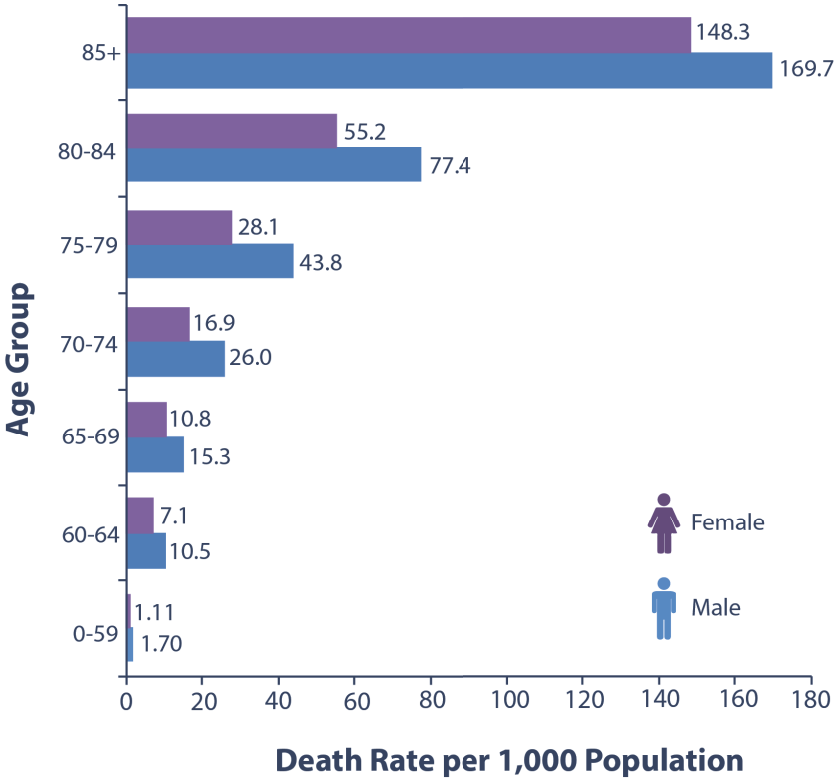
The majority of deaths were of people aged 75 or over (64 per cent), with a further 23 per cent aged 60 to 74. Children under the age of 5 accounted for less than 1 per cent of all deaths.

The average age at death was 73.5 years for males and 79.4 years for females, an increase of more than 5 years for both males (68.0 years) and females (74.2 years) since 1985. This reflects the increased survival of males and females over the period and the consequential ageing of the population.

From the relatively high rates of death in children aged under 1 year (5.6 and 4.6 per 1,000 population of males and females respectively), death rates sharply decline through childhood. The lowest age-specific death rates (ASDRs) were experienced by males and females aged between 1 and 14 years old (between <0.1 and 0.2 per 1,000 population). ASDRs gradually begin to increase from 15 years of age for both males and females. Throughout the life span ASDRs are generally higher for males, however the difference becomes more prominent after the age of 70 years.

Throughout life, age specific death rates are higher for males than females

Figure 1.28: Age-specific death rates by age group and sex (2015)



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Compared to 3 decades previously, the annual risk of dying has declined for people of all ages, with the exception of 30-34 year old males (whose risk has increased by 11 per cent). The largest decline in the age-specific death rates occurred in the 10 to 14 years age group (down 73 per cent for males and 91 per cent for females).

Table 3: Age-specific death rates by age group and sex (2015)

2015	Age Specific Mortality Rates	
Age	Male	Female
<1	5.6	4.6
1-4	0.2	0.1
5-9	0.1	0.1
10-14	0.1	0.0
15-24	0.6	0.2
25-34	1.1	0.4
35-44	1.7	0.9
45-54	3.3	2.4
55-64	7.9	5.5
65-69	15.3	10.8
70-74	26.0	16.9
75-79	43.8	28.1
80-84	77.4	55.2
85+	169.7	148.3

Mortality by Sex

The number of female deaths continues to outnumber that of males, as it has done for the last 25 years. Some 7,953 females and 7,595 males died, giving a sex ratio of 104 female deaths for every 100 male deaths. This contrasts with the population ratio which is currently lower, with 103 females for every 100 males.

104 female deaths for every 100 male deaths

In 1985, the death rate among males was higher than that of females (10.6 deaths per 1,000 population compared to females with a death rate of 9.9). Thirty years on the death rate has lowered for both sexes, and males and females now have the same death rate (8.4).

Life Expectancy

Life expectancy is the most commonly used measure to describe the health of the population and reflects the overall mortality level of a population. Improvements in public health, nutrition and vaccinations have been the main factors influencing increased life expectancies across the world over the last century[19].

Similar to fertility rates, life expectancy estimates can be measured using both "period" and "cohort" measures and have a degree of uncertainty irrespective of how they are calculated. Period life expectancy statistics are calculated using today's age-specific mortality rates enabling the comparison of mortality rates over time and for different areas. However, this is unlikely to be a true reflection of what could actually happen because mortality rates continue to decrease over time.

Cohort life expectancy, on the other hand, uses age-specific mortality rates over the lifetime of a group of people (a cohort) born in the same year. While this approach takes account of possible improvements in mortality rates over time, it incorporates population projections and therefore is inherently more uncertain than period estimates.

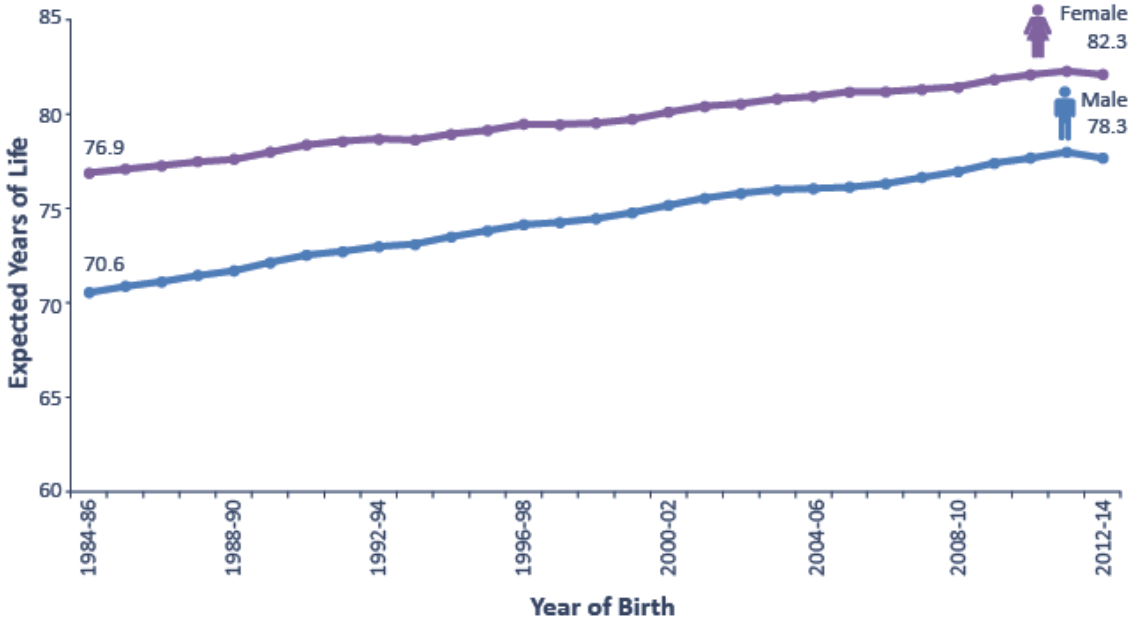
Table 4: Period (2012 to 2014) and projected cohort (2014) expectations of life - males and females

Expectation of Life (years)	Males	Females
At birth - Period	78.3	82.3
At birth - Projected Cohort	89.5	92.8
Difference in years	11.2	10.5
Age 65 - Period	18.1	20.5
Age 65 - Projected Cohort	20.8	23.1
Difference in years	2.7	2.6

For example, a man aged 65 today by his period life expectancy could expect to live another 18.1 years whereas the same man by cohort life expectancy, could expect to live another 20.8 years.

Using the period measure, boys and girls born in Northern Ireland between 2012 and 2014 can expect to live until they are 78.3 years and 82.3 years respectively. This is an increase on 30 years ago as boys and girls born between 1985 and 1987 would have expected to live until they were 70.9 and 77.1 years respectively. A woman aged 65 today can expect to live another 20.5 years, whereas their male counterpart can expect to live another 18.1 years.

Figure 1.29: Period expectation of life at birth, by sex (1984-86 to 2012-14) - non-zero y-axis



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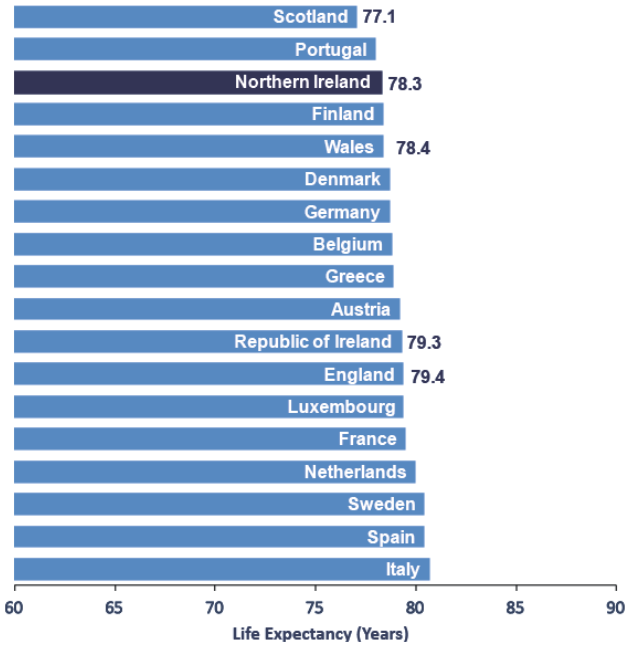
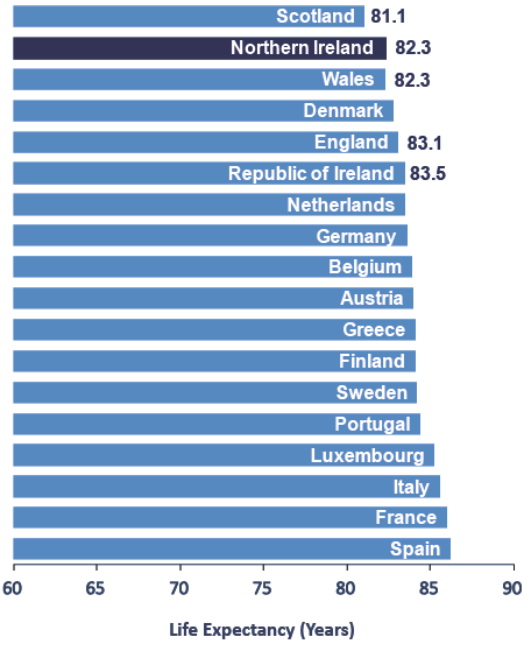
Compared to the vast majority of other European (EU15) countries, Northern Ireland has generally a lower life expectancy at birth for both males and females. At the UK level, males and females born in Scotland have the lowest life expectancy at birth. The most recent data available for all countries is for 2014.

Figure 1.30: Male life expectancy at birth, EU15 and constituent countries of the UK, 2014 – non-zero y-axis



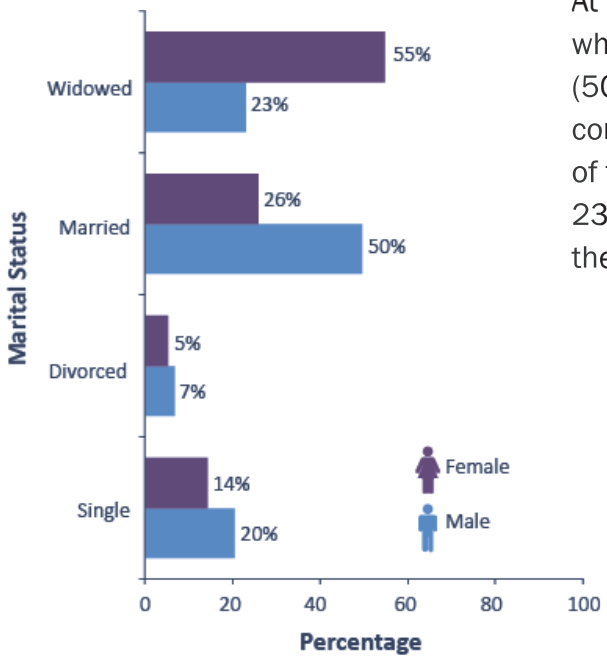
Source: Eurostat[20] **Download Chart** (XLS Format – 31Kb)

Figure 1.31: Female life expectancy at birth, EU15 and constituent countries of the UK, 2014 – non-zero y-axis



Source: Eurostat[20] **Download Chart** (XLS Format – 32Kb)

Figure 1.32: Percentage of deaths by Marital Status, 2015



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Mortality by Marital Status

At the time of death, males were more likely to be married whereas females were more likely to be widowed. Half (50 per cent) of males were married at the time of death compared to 26 per cent of females. In contrast, 55 per cent of females were widowed at the time of death compared to 23 per cent of males. This difference is a consequence of the greater longevity of women.

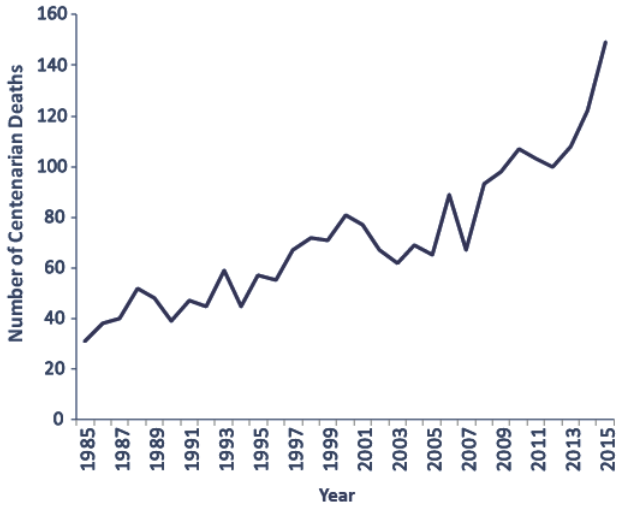
149 deaths of people aged 100 or more, the majority of whom were women

Centenarians

There were 149 deaths of persons aged 100 or more compared to 31 in 1985. The aging population in Northern Ireland, coupled with improvements in life expectancy have led to the numbers of centenarians increasing. In the last 10 years, this number has more than doubled rendering 2015 the highest number of deaths to centenarians on record.

The vast majority (129) of deaths of centenarians were women in 2015, which has consistently been the case over time. The oldest age reached was 107 for women and 106 for men. As of the date of this publication, the oldest age any human has been known to live to is 122 years, the age reached by Jeanne Calment from France[21]. If improvements in life expectancy continue, we can expect to see the number of people reaching 100 to increase.

Figure 1.33: Number of Deaths of Centenarians 1985-2015



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Place of Death and Type of Death Certificate Issued

Just under half (48 per cent) of all deaths occurred in NHS hospitals with a further 20 per cent occurring in other hospitals or nursing homes. The remaining 32 per cent occurred in all other places which includes places such as their home or in a hospice.

When a death occurs in Northern Ireland, either a medical certificate is issued by a doctor or the death is referred to the Coroner and a Coroner's certificate is issued upon completion of the Coroner's investigation. A death must be reported to a Coroner where a person has died from any cause other than natural illness for which they have been seen or treated by a registered medical practitioner within 28 days prior to the death. The number of deaths referred to the coroner has remained relatively stable over time, with approximately one fifth of all deaths (21 per cent) being treated in this way. For the remaining deaths registered in 2015 a medical certificate was issued.

14% more deaths in Belfast LGD than the NI average

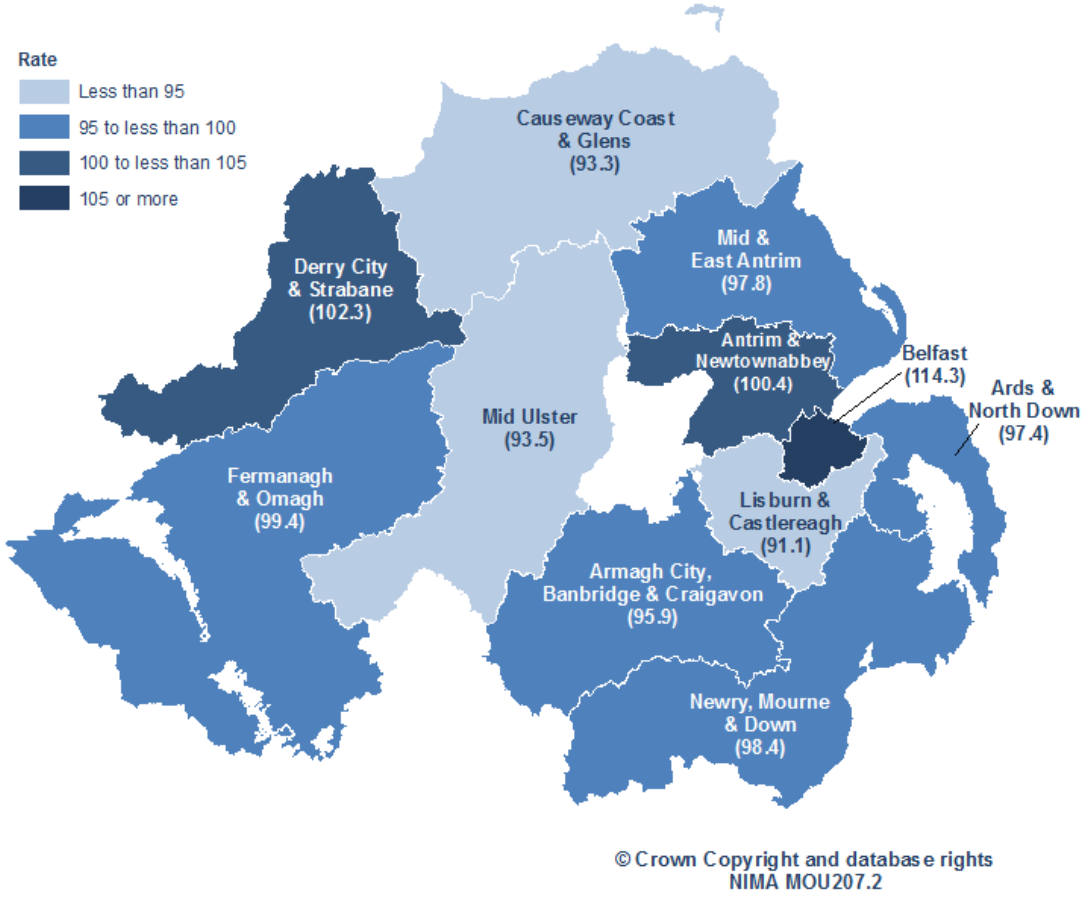
8.9% fewer deaths in Lisburn & Castlereagh LGD than the NI average

Deaths by Area

Populations across areas of Northern Ireland differ in terms of their age and sex structure which has an impact on the death rate for each area. The standardised mortality ratio (SMR) takes account of the age and sex structure of the local population and compares mortality in that local area with the Northern Ireland average (100). SMRs are often used as an indicator of the level of illness among a population and tend to relate to deprivation[22].

Even when controlling for age and sex differences in the local population, 14 per cent more deaths occurred in the Belfast Local Government District than the Northern Ireland average whereas in contrast, 8.9 per cent fewer deaths occurred in the Lisburn & Castlereagh Local Government District than the Northern Ireland average.

Figure 1.34: Standardised mortality ratios by Local Government District (2012 to 2015)



Download Chart (XLS Format – 26Kb)

1 in every 9 deaths were of people born outside Northern Ireland

Deaths by Country of Birth

The majority of deaths registered in Northern Ireland (88 per cent) were of people who were born in Northern Ireland. A further 9.7 per cent of deaths were of people who were born in the rest of the United Kingdom or the Republic of Ireland. The remainder were people born in other countries of the world or were of unknown origin.