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Deaths of Jersey residents 2016

Total deaths: 820

- Circulatory diseases: 220
- Cancer: 270
- Respiratory diseases: 100
- Other circulatory diseases: 80
- Mental & behavioural disorders: 70
- Digestive system: 30
- Nervous system: 40
- External causes: 30
- Other causes: 80

The total number of deaths in 2016 was higher than the previous year, 2015 (+8%)

Average age at death:
- 74 years for males
- 81 years for females

1 in 3 deaths in 2016 were of people aged under 75 years (premature death)

130 people of working age (16-64 years) died in 2016

1 in 3 deaths occur in a hospital

Cancer was the most frequent cause of death in 2016 (32%)

Reduced from around half of deaths 6 years ago.
Summary
This report presents statistics on deaths of Jersey residents occurring in calendar year 2016. Mortality statistics include counts of deaths by age and sex and by selected causes of death. Age-standardised rates (ASRs) are also included to enable comparisons across time and between jurisdictions.

Data presented in this report are based on records of deaths that occurred in calendar year 2016. Detailed information on the data sources and processing are given in the Background Notes section of this report.

Main points
In 2016:

- 820 Jersey residents died, comprising 400 deaths of males and 430 deaths of females
- this total represents an increase of 8 per cent compared to the previous year (760 in 2015) and is the highest number of annual deaths since 2002
- the average (mean) age at death for Jersey residents was 78 years
- cancer remains the most frequent cause of death, with almost one in three (32 per cent) of all deaths being due to cancer
- almost a third (32 per cent) of all deaths were of people below 75 years of age
- there were 130 deaths of individuals of working age (aged 16-64 years), of whom three-fifths (62 per cent) were male
- in total, around 2,300 years of potential male life and around 1,200 years of potential female life were lost

Introduction
The States of Jersey Statistics Unit now provides population level health statistics. Figures presented in this report are for Jersey residents, defined as individuals whose normal place of residence is in the Island. This report presents mortality rates calculated using the population estimate and projections provided by the Statistics Unit.

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1 Death figures reported are based on those deaths registered as occurring in 2016. Since inquests can take up to 18 months to complete, there may be a small number of deaths that occurred in 2016 that have not been registered pending the conclusion of an inquest at time of publication; this number is known to be less than 20.
2 All numbers of deaths in this report have been independently rounded to the nearest 10.
3 The analytical function of the Public Health Directorate’s Health Intelligence Unit moved to the Statistics Unit in May 2017.
Total deaths

In 2016, there were a total of 820 deaths of Jersey residents. This total represents an increase of 8 per cent compared to the previous year (760 in 2015) and is the highest number of annual deaths since 2002 (Figure 1).

Figure 1: Annual number of deaths of Jersey residents, 2000 - 2016

Table 1 shows that a greater number of deaths of females occurred in 2016 than deaths of males. Compared to the previous year, similar numbers of males died in 2016 as in 2015 (400) while the number of deaths of females increased by 70, from 360 in 2015 to 430 in the latest year.

In 2016, the average (mean) age at death of males (74 years) was 7 years below that of females (81 years). The greater difference between average age of death and life expectancy at birth for males is reflected in the higher age-standardised mortality rate for males compared to the crude death rate, as shown in Table 1.

The age-standardised rate for males was significantly higher than that for females in 2016.

The age and gender breakdown of the 2016 deaths is presented in Figure 2. In each age group up to 85 years of age, the number of deaths of males was greater than the number of deaths of females. In contrast, there were a greater number of deaths of females in the over 85 age group, due to there being more females aged 85 or over (driven by greater life expectancy).
### Table 1: 2016 Deaths of Jersey residents

<table>
<thead>
<tr>
<th></th>
<th>Male</th>
<th>Female</th>
<th>All</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total deaths</strong></td>
<td>400</td>
<td>430</td>
<td>820</td>
</tr>
<tr>
<td><strong>Deaths off-Island</strong></td>
<td>10</td>
<td>&lt;10</td>
<td>20</td>
</tr>
<tr>
<td><strong>Deaths on-Island</strong></td>
<td>380</td>
<td>420</td>
<td>810</td>
</tr>
<tr>
<td><strong>Crude death rate (per 100,000 population)</strong></td>
<td>771</td>
<td>815</td>
<td>794</td>
</tr>
<tr>
<td><strong>Age-standardised mortality rate (per 100,000 population)</strong></td>
<td>981</td>
<td>792</td>
<td>885</td>
</tr>
<tr>
<td><strong>Average age at death (mean)</strong></td>
<td>74</td>
<td>81</td>
<td>78</td>
</tr>
<tr>
<td><strong>Life expectancy at birth</strong></td>
<td>81</td>
<td>84</td>
<td>83</td>
</tr>
</tbody>
</table>

*Death numbers independently rounded to the nearest 10*

### Figure 2: Deaths by age, 2016

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5 Using the 2013 European Standard Population: standardisation adjusts for differences in age and sex structures between populations enabling comparisons to be made. For more information, see Background Notes

6 Life expectancy at birth is derived from Jersey specific life tables.
Main causes of death

As in previous years, the three most frequent causes of death of Jersey residents were cancer, circulatory and respiratory diseases (Figure 3). These three causes represented almost three-quarters (71 per cent) of all deaths in 2016.

Figure 3: Main causes of death, 2016

Cancer remains the main cause of death in Jersey, having exceeded the number of deaths from circulatory diseases at the end of the last decade (Figure 4). A similar pattern has occurred more recently in England and Wales, with cancer exceeding deaths from circulatory disease in 2011.7

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Figure 4: Proportion of deaths caused by the three main disease groups, 2008-2016

Figure 5 presents the number of deaths attributable to each of the main causes of death in more detail.

Figure 5: Main causes of death, 2016

- **Total deaths**: 820
- **Cancer**: 270
- **Circulatory diseases**: 220
- **Respiratory diseases**: 100
- **All other causes**: 80
- **Mental & behavioural**: 70
- **Ischaemic heart disease**: 90
- **Cerebrovascular disease**: 60
- **External Causes**: 30
- **Digestive system**: 30
- **Nervous System**: 40
- **Lung cancer**: 50
- **Other cancers**: 70
- **Digestive organ cancers**: 70
- **Breast cancer**: 20
- **Male genital organ cancer**: 30
- **Lymph & blood cancers**: 30
Infant deaths

In 2016, there were fewer than five deaths of residents aged less than 1 year.

Premature deaths (under 75 years of age)

There were 260 premature deaths of Jersey residents in 2016. Figure 6 provides more details on the causes and associated years of life lost (YOLL)\(^8\) associated with these deaths.

Figure: 6: Premature deaths, 2016

Working age deaths

There were 130 deaths in 2016 of people of working age (16-64 years); three-fifths (62 per cent) of whom were male. The main causes of working age deaths of each gender are shown in Figure 7.

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\(^8\) Years of Life Lost (YOLL) is a measure of premature mortality that quantifies the years not lived by individuals who die under 75 years of age (an arbitrary cut-off used to enable comparisons). For more information, see background notes.
Old age deaths

In 2016, there were 320 deaths of people aged 85 or over. Around two-thirds (65 per cent) of deaths in this age group were female deaths, due to there being more females in this age category.

Seasonality

In 2016, the greatest number of deaths occurred in March (90) whilst the fewest deaths (50) occurred in May (Figure 8). The monthly variation in the number of deaths was not statistically significant in 2016.
Place of death

Of the 820 deaths of Jersey residents in 2016, around one in three (34 per cent) of those dying in Jersey were in a hospital, whilst a fifth (20 per cent) died in a private home and a further fifth (19 per cent) died in the Jersey Hospice (Figure 9).

Figure 9: Location of on-Island deaths, 2016

![Location of on-Island deaths, 2016](image)

Figure 10 shows that the proportion of deaths on-Island occurring in a hospital has decreased in recent years, from half of all deaths in 2009 and 2010 to a third (34 per cent) in the latest year. Deaths in private homes and the hospice have seen a complementary increase over the same period.

Figure 10: Location of on-Island deaths, 2008 - 2016

![Location of on-Island deaths, 2008 - 2016](image)
Comparison to England and Wales and English regions

The Office for National Statistics have reported a 0.9 per cent decrease in the annual numbers of deaths registered in England and Wales in 2016 compared to 2015.\textsuperscript{9} This compares to an 8 per cent increase in the number of deaths of Jersey residents occurring in 2016 compared to the previous year, 2015.

The Jersey mortality rate is similar to those in the south of England but lower than the north of England (see Table 2).

Table 2: Age-standardised mortality rates overall and by gender, 2016\textsuperscript{10}, for Jersey, England and regions

<table>
<thead>
<tr>
<th>Males</th>
<th>Females</th>
<th>Persons</th>
</tr>
</thead>
<tbody>
<tr>
<td>\textit{England}</td>
<td>1,120</td>
<td>833</td>
</tr>
<tr>
<td>\textit{North East}</td>
<td>1,273</td>
<td>963</td>
</tr>
<tr>
<td>\textit{North West}</td>
<td>1,233</td>
<td>938</td>
</tr>
<tr>
<td>\textit{Yorkshire and the Humber}</td>
<td>1,209</td>
<td>891</td>
</tr>
<tr>
<td>\textit{East Midlands}</td>
<td>1,143</td>
<td>851</td>
</tr>
<tr>
<td>\textit{West Midlands}</td>
<td>1,172</td>
<td>845</td>
</tr>
<tr>
<td>\textit{East}</td>
<td>1,059</td>
<td>795</td>
</tr>
<tr>
<td>\textit{London}</td>
<td>1,013</td>
<td>735</td>
</tr>
<tr>
<td>\textit{South East}</td>
<td>1,034</td>
<td>774</td>
</tr>
<tr>
<td>\textit{South West}</td>
<td>1,082</td>
<td>803</td>
</tr>
<tr>
<td>\textit{Wales}</td>
<td>1,227</td>
<td>899</td>
</tr>
<tr>
<td>\textit{Jersey}\textsuperscript{10}</td>
<td>981</td>
<td>792</td>
</tr>
</tbody>
</table>

Source: Statistics Unit and ONS


\textsuperscript{10} Jersey figures are calculated for all deaths recorded as occurring in calendar year 2016; whilst figures for England and Wales are for deaths registered in 2016, (i.e. some deaths will have occurred in 2015 but were not registered until 2016).
Background Notes

Data Sources

The Marriage and Civil Status (Jersey) Law 2001 requires all deaths to be notified within 5 days of the date of death. Each parish Registrar in Jersey reports these notifications and registrations to the Superintendent Registrar and updates the population register. Data on deaths is compiled by the Statistics Unit from these sources into a database and clerically checked against other States of Jersey administrative sources to ensure that all deaths have been accurately detailed.

Cause of death is classified using the International Statistical Classification of Diseases, Injuries and Causes of Death (tenth revision, ICD-10).

Coding of deaths of Jersey residents is undertaken by the Office for National Statistics on a quarterly basis.

Comparisons

Comparisons to other jurisdictions are presented in this report to enable benchmarking and to explore where similar trends are being seen elsewhere. Data are extracted from published reports from the Office for National Statistics. All data are referenced and the time periods are noted in the report sections.

Timeliness

The results are based on analysis of all deaths of Jersey residents registered as having occurred in calendar year 2016. The Statistics Unit extracts data in August of the following year in order to enable comparisons to the Office for National Statistics report on deaths registered in England and Wales, which is published in July each year.

Methods

Age-standardised rates have been calculated using the number of deaths occurring each year as the numerator and the mid-year population estimate for that year as the denominator. The rates have been standardised using the 2013 European Standard Population. The directly age-standardised rates adjust for differences in age and sex structures between populations to allow comparisons across time and place.

Annual mortality rates for Jersey are calculated using the average of the two corresponding end-year population estimates as published by the States of Jersey Statistics Unit. The resulting estimate of the mid-year population assumes that half of births, deaths and migration occurs in the first half of the calendar year.

Potential years of life lost (YOLL) estimates the number of years a person would have lived had they not died prematurely. It is based on the assumption that every individual could expect to live until the age of 75 and premature death before that age may be preventable.
Accuracy and reliability

The data covers all deaths of residents living in Jersey on- and off-Island. A small number of inquests may still be outstanding for deaths occurring in calendar year 2016; therefore, numbers here should be treated as provisional. All death numbers have been independently rounded to the nearest 10, to reflect the provisional nature of these statistics at time of publication.

When the observed total number of deaths is fewer than 25, mortality rates are not calculated, as there are too few deaths to calculate directly standardised rates reliably.

Confidence Intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey mortality rates with those of England, Wales and the English regions. Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. Calculations based on small numbers of events are often subject to random fluctuations. The confidence interval indicates the range within which the true value for the population as a whole can be expected to lie, taking natural random variation into account.

Comparisons between rates or over time have been statistically tested to determine whether differences are likely to be statistically significant or the result of natural random variation. For instance, a chi-square test was used to determine whether the pattern of deaths occurring each month was statistically significant or not. Only those differences deemed as statistically significant have been described in this report using terms such as ‘increase’, ‘decrease’, ‘higher’ or ‘lower’.

Data quality and completeness

The number of deaths may differ from previously published figures due to the inclusion of data from inquests which can take up to 18 months to complete and register. Data on deaths of Jersey residents that occur outside of the Island may also result in a delay in registering the death with the Superintendent Registrar. This means that total deaths in a given year should be treated as provisional and used with caution.

Contact details

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