

# Report on the Deaths of Jersey Residents 2010

Health Intelligence Unit, August 2013

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M Clarke	Report compiled August 2013 using 2010 deaths data and applying revised population total and structure based on information published by the States of Jersey Statistics Unit on Population Update 2002-2011. This is an amendment to previously published 2010 deaths data which used previous population estimates produced by the Health Intelligence Unit which underestimated the Island population by some 10,000 persons.		
M Clarke	Clarification of which European standard population used and email address updated.		
Contact details	HealthIntelligence@health.gov.je		

Embargo/confidentiality Embargoed until 00:01 30<sup>th</sup> August 2013

## **Deaths of Jersey Residents in 2010**

#### Summary:

This report presents statistics on deaths of Jersey residents registered for 2010. Death statistics include counts of death by age and sex, and by selected cause of death.

Data presented in this report are based on records of deaths that occurred in calendar year 2010, which were received from the Superintendent Registrars office, along with data from the Viscount's Office, and processed by the Public Health Department. Detailed information on the nature, sources and data handling are given in the Background Notes section of this report.

### **Key findings:**

- In 2010, 801 Jersey residents died, comprised of 402 male and 399 female deaths;
- This latest total was some 3% higher than the total for the previous year, 2009, and 7% higher than that of two years previously in 2008<sup>1</sup>;
- The crude death rate was 829 deaths per 100,000 population per annum;
- The average (mean) age at death for Jersey residents in 2010 was 77, representing the second consecutive year this mean age of death has risen;
- Cancer, circulatory diseases and respiratory diseases were the three largest causes of death.
- Almost 250 deaths were due to cancer, with cancer of the digestive organs being the largest cause of all cancer deaths in 2010;
- A third (34%) of all deaths occurred in those below 75 years of age;
- There were 122 deaths to individuals of working age; three-quarters (76%) of these were male;
- More than 2,300 years of potential male life and around 1,200 years of potential female life were lost in 2010.

#### Introduction

The Health Intelligence Unit, part of the Public Health Department within Health and Social Services, provides information on the health of the population in order to inform health policy in Jersey.

Data previously published for deaths in 2010 used an estimate of the Island's population produced by the Health Intelligence Unit which was found to be an underestimate upon publication of the 2011 Census. This report presents figures which are calculated using the updated population for 2010 based on the findings of the 2011 Census<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> See Reports on the Deaths of Jersey Residents 2008 and 2009, published by the States of Jersey Health Intelligence Unit, August 2013.

<sup>&</sup>lt;sup>2</sup> For further information, please see 2011 Population Update Report, published by the States of Jersey Statistics Unit, June 2012.

Reports on annual deaths are a useful way of presenting information relevant to health policy, for instance to plan hospital services and to monitor mortality from particular causes of death such as suicide, drug and alcohol deaths or preventable causes. Mortality statistics also feed into planning pensions and the social welfare system. Organisations such as the European Union and the United Nations also use mortality statistics for making international comparisons.

## **Total Deaths**

In 2010, there were 801 deaths of Jersey residents; an increase of 3% on the total for the previous year, 2009, and 7% on that of two years previously, in 2008. There were a similar number of male deaths (402) as female deaths (399) in 2010, a change to the previously seen trend which saw greater numbers of male deaths<sup>3</sup>. Of the total number of deaths of residents, 19 males and 8 females died outside of the Island.

	Male	Female	All
Total Deaths	402	399	801
Deaths off-Island	19	8	27
Deaths on-Island	383	391	774
Crude Death Rate (per 100,000 population)	843	815	829
Age standardised death rate (per 100,000 population) <sup>4</sup>	679	442	548
Average age at death	74	81	77
Life expectancy at birth⁵	79	83	81

#### Table 1: 2010 Deaths of Jersey Residents

As in previous years, the average age of female deaths was some 7 years higher than the average age of death for males. Figure 1 shows the distribution of deaths in 2010 by age.

As can be seen in Figure 1, between the ages of 45 and 79 years of age, more men than women died in each age group. In contrast, there were a greater number of female deaths in those aged 80 and over.

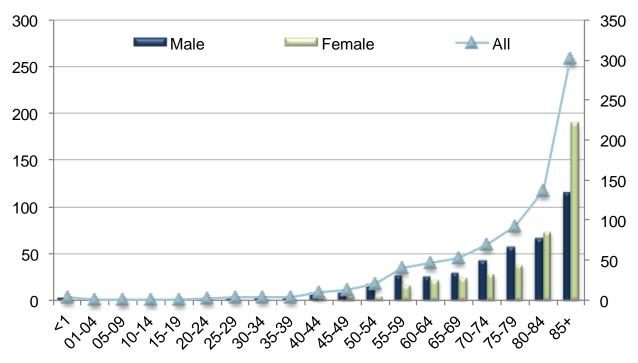
Life expectancy at birth was 79 for men and 83 for women.

<sup>&</sup>lt;sup>3</sup> This number may differ from previously published figures, due to the results of inquests being added into the figures once complete. This can take up to 18 months to occur.

<sup>&</sup>lt;sup>4</sup> Standardised using the 1976 European Population; this adjusts for differences in age and sex structures between populations and allows comparisons to be made.

<sup>&</sup>lt;sup>5</sup> Life expectancy is calculated using life tables, which generate the life expectancy of a hypothetical cohort experiencing the current age-specific mortality rates for each year of their life.

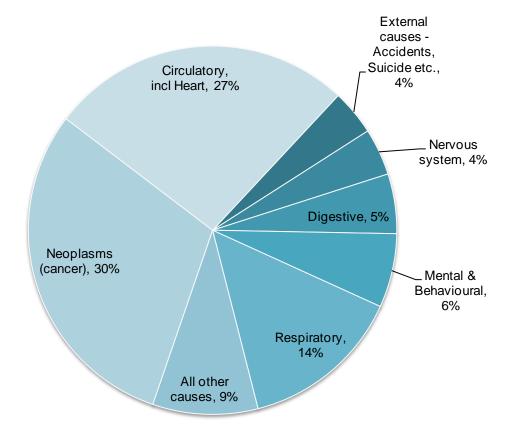
Figure 1: Total deaths in 2010 by age



## **Main Causes of Death**

In 2010 cancer, circulatory diseases and respiratory diseases were the three largest causes of death for Jersey residents and accounted for more than two-thirds (71%) of all deaths.

Figure 2: Main causes of deaths in 2010



Around one in four (27%) deaths in 2010 was the result of circulatory diseases, including Ischemic heart disease (11%) and Stroke (8%). Cancer was the cause for almost a third (30%) of deaths, whilst respiratory diseases, such as Influenza and pneumonia and Chronic Lower Respiratory Disease, were the underlying cause of one in eight (14%) deaths.

## Cancer (ICD-10 Codes C00-C97, D37-D48)

There were almost 250 deaths from cancer in 2010; the most common cancer site was the digestive organs, accounting for almost 70 deaths or 29% of all cancer deaths. In 2010, cancers of the digestive system comprised colorectal cancer (35%), pancreatic cancer (25%), liver cancer (14%), with cancers of the oesophagus, stomach and 'other digestive organs' (C26) making up the remainder.

More women died from cancer of the respiratory and intrathoracic organs (24%, mainly bronchus and lung) than breast cancer (18%) in 2010; whilst a fifth (20%) were the result of cancer in the digestive organs (mainly pancreatic and colorectal). Around one in ten (9%) of female cancer deaths were caused by cancer of the female genital organs.

One in five (20%) of male cancer deaths were the result of lung cancer (respiratory and intrathoracic cancer), whilst more than a third (36%) were caused by cancer of the digestive organs (mainly colorectal, pancreas and liver). One in seven (14%) male cancer deaths were due to prostate cancer.

Male			Female		
Cancer Site	ICD Code	Percentage of Cancer Deaths	Cancer Site	ICD Code	Percentage of Cancer Deaths
Digestive organs			Respiratory & Intrathoracic		
(mainly colorectal, pancreas and liver)	C15-C26	36%	(mainly lung cancer)	C30-C39	25%
Respiratory & Intracthoracic (mainly lung cancer)	C30-C39	20%	Digestive organs (mainly pancreas and colorectal)	C15-C26	20%
Male genital organs	C60-C63	14%	Breast	C50	18%
Urinary tract	C64-C68	7%	Female genital organs	C51-C58	9%
Lip, oral cavity and pharynx	C00-C14	6%	Malignant neoplasms of lymphoid, haematopoietic and related tissue	C81-C96	6%

Table 2: Top five causes of death from Cancer in Jersey Residents in 2010

#### Circulatory Diseases (ICD-10 Codes I00-I99)

In 2010, these diseases accounted for 213 deaths, around 10% less than in 2009, and accounting for over a quarter (27%) of all deaths. The crude death rate for Circulatory diseases being 220 deaths per 100,000 population in 2010, decreasing from 244 per 100,000 population in 2009.

Deaths due to the diseases of the circulatory system are mostly accounted for by ischemic heart disease (I20-I25) and cerebrovascular disease, commonly known as stroke (I60-I69), which accounted for 11% and 8%, respectively, of all deaths of Jersey residents in 2010. Like other jurisdictions, the number of

male deaths from ischemic heart disease exceeds the number of female deaths, while similar numbers of males and females died from a stroke.

#### Respiratory Diseases (ICD-10 Code J00-J99

Respiratory diseases were the cause of 114 deaths of Jersey residents in 2010, accounting for 14% of all deaths. The crude death rate for respiratory diseases being 118 deaths per 100,000 population per annum, a similar rate to that seen in the previous year (112 per 100,000 population).

Respiratory deaths included 55 as the result of Chronic Lower Respiratory Disease (J40-J47) and another 31 deaths due to Pneumonia and Influenza (J10-J18), accounting for 7% and 4% of all deaths respectively.

#### External Causes of Death (ICD-10 Code V01-Y98)

The number of deaths from external causes registered to Jersey Residents in 2010 was 32, accounting for one in every twenty-five deaths (4%). More than half of these were due to accidents, such as falls and transport accidents.

#### Suicide (ICD-10 Codes X60-X84 and Y10-Y34, Y87.0, Y87.2)

Deaths classified as 'events of undetermined intent' and 'intentional self-harm' are reported jointly as suicide. In 2010, there were 10 such deaths. All suicides are referred to the Viscount and take time to be fully investigated. Therefore there is a period of time between when a suicide occurs and when the death is registered.

#### **Infant Deaths**

In 2010, there were less than 5 deaths of those aged less than 1 year.

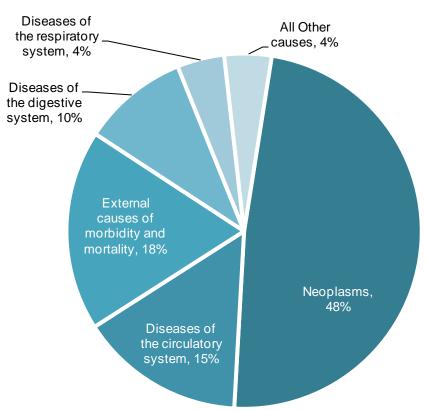
#### **Premature Deaths**

Around a third (34%) of all deaths in 2010 occurred in those under 75 years of age. The top causes of avoidable early deaths in men were cancer of the digestive organs (mainly colorectal and pancreatic cancers), ischemic heart disease, lung cancer (cancer of the intrathoracic and respiratory organs) and chronic lower respiratory diseases. For females, premature deaths were caused mainly by lung cancer, breast cancer, cancer of the digestive organs and liver disease.

Estimating the number of years of life lost by these premature deaths provides a measure of the impact of the avoidable mortality in a population. There were over 3,500 potential years of life lost in Jersey in 2010; male death contributed around 2,300 to this total.

## **Working Age Deaths**

In 2010, there were 122 deaths to individuals of working age<sup>6</sup>; around three-quarters (76%) of these were male. The main causes of working age male deaths are shown in Figure 3. There were around 30 deaths of working age females in 2010, more than two-fifths (44%) were the result of cancer.



#### Figure 3: Main causes of male working-age deaths in 2010

## **Old Age Deaths**

In 2010, around 300 registered deaths were to those aged 85 years and over. Three-fifths (62%) were female deaths; this is due to higher numbers of older women in the population and a comparatively lower life expectancy for men.

#### Seasonality

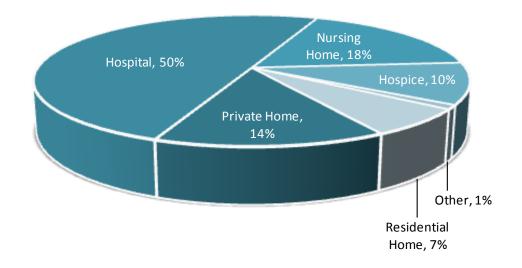
Typically more deaths occur in winter months; in 2010 this pattern was not as obvious as in previous years, with around 27% of deaths occurring in the winter months of January, February and December, whilst 24% occurred in the summer months (June, July and August). The greatest number of deaths occurred in January (90) whilst the fewest deaths (57) occurred in February.

<sup>&</sup>lt;sup>6</sup> Women aged 16-59 and mean aged 16-64 years

#### **Place of Death**

Of the 801 deaths of Jersey residents registered in 2010, half (50%) of those who died in Jersey did so in a hospital whilst around a sixth (18%) died in a nursing home. Around one in seven (14%) on-Island deaths occurred in a private home, whilst a tenth (10%) place at the Hospice as shown in Figure 4.

Of those resident who's deaths occurred outside of the Island, two-thirds (67%) died in a hospital. **Figure 4: Where deaths occurred in Jersey in 2010** 



## **Background Notes**

- 1. Death figures have been compiled from returns to the Registrars in each parish in Jersey. The Marriage and Civil Status (Jersey) Law 2001 requires all deaths to be registered within 5 days of the date of death.
- 2. The number of deaths may differ from previously published figures for 2010 due to the inclusion of data from inquests which can take up to 18 months to complete and register. This means that total deaths in a given year should be treated as provisional and used with caution.
- 3. The results are based on analysis of all deaths of Jersey residents registered as having occurred in calendar year 2010.
- 4. Cause of death is classified using the tenth revision of the International Statistical Classification of Diseases, Injuries and Causes of Death (ICD-10). As is convention, deaths classified under ICD-10 as 'events of undetermined intent' along with 'intentional self-harm' are jointly reported as 'suicide'.
- 5. Coding of Jersey deaths is undertaken by the Office for National Statistics on a quarterly basis.
- 6. A crude death rate refers to the number of deaths per 100,000 population.
- 7. Potential Years of Life lost 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 be expected to live until the age of 75 and premature death before that age may be preventable.
- 8. Percentages may not add up to 100% due to rounding.

- 9. This report provides statistics on a number of areas which have policy relevance. In particular, the number of deaths has implications for primary and secondary care in Jersey.
- 10. This report gives the number of deaths due to Cancer. Information is also available on the number of incidences of cancer in Jersey. Further information can be found in Channel Islands Cancer Registration Report, July 2012, available from www.gov.je
- 11. Jersey rates for 2010 data are calculated using the average of the 2009 and 2010 end-year population estimates as published by the States of Jersey Statistics Unit. This estimate of the mid-year population assumes that half of births, deaths and migration occurs in the first half of the calendar year.
- 12. Rates for Jersey have been revised for 2001-2011 using rebased end-year population estimates that take into account the 2011 Census. For further information see: <u>www.gov.je/census</u>.
- 13. All enquiries and feedback should be directed to:

Health Intelligence Unit Public Health Department Maison Le Pape The Parade St Helier JE2 3PU HealthIntelligence@health.gov.je.