

# Premature Deaths of Jersey Residents 2011-2013

Health Intelligence Unit, April 2015

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# **Premature Deaths of Jersey Residents**

# **Summary:**

This report presents statistics on the premature deaths of Jersey residents between 2011 and 2013. Premature mortality data is based on directly standardised rates, a measure of mortality which makes allowances for the fact that death rates are higher in older populations and adjusts for differences in the age make up of different areas, enabling accurate comparison.

This report focuses on the four most common causes of premature death (under 75 years of age) in the UK, namely heart disease and stroke, lung disease, liver disease and cancer. This report also considers premature mortality from specific cancers, injury and separates heart disease and stroke for the first time.

The Public Health England tool 'Healthier Lives' can be found at <a href="healthierlives.phe.org.uk">healthierlives.phe.org.uk</a> and is used for all data comparisons in this report. All comparisons were made during February 2015.

Jersey data presented in this report are based on records of deaths that occurred in calendar years 2011 to 2013, which were received from the Superintendent Registrars Office, along with data from the Viscount's Office, and processed by Public Health. Detailed information on the nature, sources and data handling are given in the Background Notes section of this report.

The new European Standard Population (2013) is used in the calculations to produce standardised rates. This new standard population replaces the previous version (1976) to reflect the aging population of many European countries.

# **Key findings:**

- In Jersey, premature mortality was 322 per 100,000 population per year between 2011 and 2013, this was better than the England average<sup>1</sup>;
- For premature deaths due to heart disease and stroke, Jersey would be categorised as among the best when compared with the English average, coming 8 out of 151 regions;
- Premature mortality due to cancer in Jersey is worse than the English average<sup>1</sup>, ranking Jersey 76 out of 151 regions. Around half of all cancer deaths occur in the under 75 age group;
- For Lung disease, Jersey ranks worse than the overall average<sup>1</sup> for England; at 73 out of 150<sup>2</sup> regions;
- Jersey's premature mortality rate for diseases of the liver is worse than the average<sup>1</sup> for England, ranking 87 out of 150<sup>2</sup>.

<sup>&</sup>lt;sup>1</sup> Not a statistically significant difference – this is due to the confidence intervals for Jersey overlapping with the confidence intervals for the English average.

<sup>&</sup>lt;sup>2</sup> Healthier Lives analysis have 149 regions for Lung and Liver diseases due to small numbers of deaths for Rutland, resulting in Rutland being excluded from the analysis for these two disease categories.

#### Introduction

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

Public Health England's Healthier Lives initiative shows the range of premature mortality affecting different areas of England, with Rutland ranking the best for overall premature mortality (with 254 deaths per 100,000 population) and Manchester ranking the worst (with 550 deaths per 100,000 population). The healthier lives tool is designed to be an enabler for change, making mortality data accessible to everyone and providing evidence to facilitate debate on improving health and living longer lives.

Like England, a child born in Jersey today can expect to live a longer, healthier life than ever before, yet, they still have a one in three chance of dying before they reach 75.

Table 1 shows the age standardised mortality rates (ASMR) for Jersey for overall premature mortality and for premature mortality from cancer, heart disease and stroke, lung disease and liver disease. The table also shows comparison with the Healthier Lives website rankings for England and English regions.

Table 1: Premature ASMR - information from Healthier Lives Website (February 2015)



Premature Mortality Indicator	Jersey ASMR*	England ASMR*	English Region Min	English Region Max	Jersey Ranking**
Overall mortality	322	343	Rutland 254	Manchester 550	52 / 151
Cancer	147	144	Harrow 104	Manchester 199	76 / 151
Breast cancer (females)***	24	23	Kirklees 16	Redcar & Cleveland 30	103 / 148
Heart disease and stroke		78	Dorset 52	Manchester 137	8 / 151
Ischaemic Heart Disease	28	43	Kensington & Chelsea 26	Tameside 81	5 / 151
Stroke	11	14	Dorset 9	Manchester 28	15 / 150
Lung disease	34	33	Buckinghamshire 20	Blackpool 78	73 / 150
Liver disease	20	18	Buckinghamshire 11	Blackpool 43	87 / 150
Injury	10	11	Barkingham & Dagenham 6	Blackpool 24	60 / 150

<sup>\*</sup> ASMR – Age Standardised Mortality Rate per 100,000 population under 75 per annum. Standardised using the 2013 European Standard Population for those aged under 75 years. For further information see the Background Notes section of this report.

<sup>\*\*</sup> Rankings assume Jersey is added to the total number of regions ranked, for some indicators Public Health England has excluded Rutland from the analysis due to small numbers (less than 25 events in the period)

<sup>\*\*\*</sup> For Breast Cancer, female only data is used (deaths for females under 75 and female population under 75)

#### Overall premature mortality

More than 250 people a year die in Jersey before their 75th birthday, accounting for more than a third (34%-37%) of all deaths each year.

In Jersey, premature mortality between 2011 and 2013 was 322 per 100,000 population per year, this was better than the UK average<sup>1</sup>.

When comparing Jersey with the Public Health England rankings, Jersey would be 52 out of 151, as shown in Table 1.

The main causes of overall premature mortality in Jersey are lung cancer (cancer of the intrathoracic and respiratory organs), cancer of the digestive organs (mainly colorectal, pancreatic and liver cancers), ischaemic heart disease, chronic lower respiratory disease and liver disease<sup>3</sup>.

## Cancer (ICD-10 Codes C00-C97)

Cancer is responsible for around 110-120 deaths each year for those under 75. Premature deaths from cancer account for around half (50%-54%) of the total deaths due to cancer each year. The main cancers affecting this age group include, cancer of respiratory organs (predominately lung cancer), cancers of the digestive organs (mainly colorectal, pancreatic and liver) and breast cancer.

Compared with the English regions, Jersey ranks 76 out of 151 regions for premature deaths due to cancer, with an age standardised rate of 147 per 100,000 population. For cancer, Jersey is **worse than the English average**<sup>1</sup>.

### Breast Cancer (ICD-10 Code C50) Females Only

Breast cancer is responsible for around 20 female deaths every year in Jersey and causes the highest number of female malignant cancer incidences each year. Breast cancer causes the potential loss of around 150 years<sup>4</sup> of female life annually.

#### Heart Disease and Stroke (ICD-10 Codes 100-199)

Around 50 people under 75 years of age die in Jersey each year as the result of heart disease and stroke; with around two-thirds of these being male. Ischaemic heart disease is the underlying cause for half of these premature deaths each year. Heart disease and stroke cause the potential loss of between 500 and 700 years of life annually.

Jersey ranks **among the best** for premature deaths from heart disease and stroke, 8 out of 151 when compared with England.

### Ischaemic Heart Disease (ICD-10 Codes I20-I25)

Within the disease grouping of cardiovascular diseases (represented above), heart disease can be separately ranked. There are more than 20 premature deaths a year from heart disease, which caused

<sup>&</sup>lt;sup>3</sup> For more information, see Report on the Deaths of Jersey Residents, 2011, 2012 and 2013, published by the States of Jersey Health Intelligence Unit, September 2013, April 2014 and August 2014.

<sup>&</sup>lt;sup>4</sup> 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.

more than 800 potential years of life to be lost over the period 2011-2013. A much greater proportion of men die from heart disease than woman.

## Stroke (ICD-10 Codes I60-I69)

On average there are 10 premature deaths from strokes every year in Jersey, causing around 360 years of potential life to be lost over the three-year period 2011-2013. As with heart disease, Jersey ranks high in comparison with other areas in England for stroke.

#### Lung Diseases (ICD-10 Codes J00-J99)

Around 25 people under 75 die from lung diseases in Jersey every year. Two-thirds of these deaths are due to chronic lower respiratory diseases. During the years 2011-2013, there were less than 5 deaths each year due to influenza and pneumonia.

Jersey ranks as **worse than the average for England**<sup>1</sup> with a rate of 34 per 100,000 population. Buckinghamshire has the best premature mortality rate for lung diseases, with 20 per 100,000 population. Jersey ranks 73 out of 150<sup>2</sup> regions.

#### Liver Disease (ICD-10 Codes B15-B19, C22, I81, I85, K70-K77, T86.4)

Liver disease accounts for around 20 deaths in Jersey residents under 75 each year. These diseases include cancer of the liver, hepatitis, alcoholic liver disease, fibrosis and cirrhosis of the liver. Around three-fifths of these Jersey deaths are due to alcoholic liver disease. More than 300 years of potential life are lost each year due to liver diseases.

Jersey's premature mortality rate from liver disease is **worse than the England average**<sup>1</sup>, ranking 87 out of 150<sup>3</sup>.

### Injury (ICD-10 Codes V01-X59)

Injuries include transport accidents, falls and other accidental external causes of mortality, such as drowning and electrocution. Injuries cause around 300 years of potential life to be lost every year in Jersey; two thirds of which are male.

## **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 notified within 5 days of the date of death.
- 2. 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.
- 3. The results are based on analysis of all deaths of Jersey residents registered as having occurred in calendar year 2011, 2012 and 2013.
- 4. Cause of death is classified using the tenth revision of the International Statistical Classification of Diseases, Injuries and Causes of Death (ICD-10).

- 5. Coding of Deaths is undertaken by the Office for National Statistics on a quarterly basis.
- Directly age standardised mortality rates use age specific mortality rates for a population which are applied to the 2013 European standard population to adjust for differences in age and sex structures between populations to allow comparisons across time and place.
- 7. All Jersey figures are compared with those published by Public Health England in their healthier lives toolkit <a href="healthierlives.phe.org.uk">healthierlives.phe.org.uk</a>. The latest iteration of this tool includes new indicators for specific cancers, heart diseases and injuries. There is no comparison for colorectal cancers in this report, as there were less than 25 deaths over the period 2011-2013 which means reliable standardised mortality rates cannot be calculated, as per Public Health England recommendations.
- 8. The Public Health England Healthier Lives tool also included, for the first time, an indicator for Lung Cancer mortality using data from the Tobacco Control Profiles. This data covered deaths at all ages (not just those under 75 years of age). If Jersey were compared with this data on a like for like basis (i.e. all age deaths), Jersey would rank 62 out of 151 regions, with an ASMR of 62 per 100,000 population. The England average is 60 per 100,000, with Rutland having the smallest ASMR (32 per 100,000) and Middlesbrough the worst (112 per 100,000). Jersey would be worse than the England average (although not significantly different). Lung cancer is the biggest cause of cancer deaths each year in Jersey, causing around 50 deaths annually.
- 9. Comparative data for Guernsey was not available at time of publication.
- 10. Jersey rates for annual data are calculated using the average of the two corresponding 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.
- 11. 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, January 2014, available from <a href="https://www.gov.je">www.gov.je</a>
- 12. The Health Profile for Jersey 2014 report published by the Health Intelligence Unit, April 2014, contains a number of indicators exploring premature deaths in the Island: including Years of Life Lost, Years of Working Life Lost, as well as measures of preventable deaths, smoking related deaths and lifestyle factors. For further information see Health Profile for Jersey 2014, published April 2014, available from <a href="https://www.gov.je">www.gov.je</a>
- 13. 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: www.gov.je/census.
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