PREMATURE MORTALITY 2014-2016

CONTENTS

Premature Deaths
(deaths before age 75)
2014-2016

Colorectal cancer
14 per 100,000

Liver disease
19 per 100,000

Cancer
146 per 100,000

Injury
12 per 100,000

Premature mortality
304 per 100,000 per year

Breast cancer (females)
17 per 100,000

Ischaemic heart disease
29 per 100,000

Strokes
10 per 100,000

Lung cancer (all ages)
72 per 100,000

Heart disease & stroke
60 per 100,000
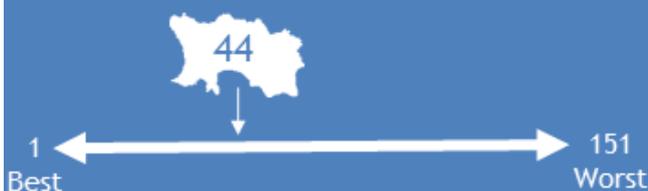
Lung disease
21 per 100,000

Significantly better than the England Average

Similar to the England Average

Significantly worse than the England Average

777
Deaths were premature (before age 75) over the three-year period

44

1
Best

151
Worst

Jersey ranks 44th out of 151 when compared to English regions

1/3 of all deaths were premature

MAIN FINDINGS

Over the period 2014-16 one out of every three deaths (34 per cent) was classed as premature, that is, the individual was under 75 years of age.[1,2]

In terms of age standardised mortality rates (ASMR) over the period 2014-2016:

- in Jersey, premature mortality was 304 per 100,000 population per year, a rate significantly better than the average for England and ranking Jersey amongst the best when compared to English regions[3]

- for premature deaths due to heart disease and stroke, Jersey would be categorised as among the best when compared to English regions, ranking 20th out of 151 regions

- premature mortality due to cancer in Jersey was similar to the English average. When compared to English regions, Jersey ranked 97th out of 151 regions. Almost half of all cancer deaths in Jersey occured in the under 75 age group

- for premature deaths from lung disease, Jersey would rank amongst the English regions with the lowest rates; 7th out of 150 regions[4]

- Jersey's premature mortality rate for diseases of the liver was similar to the average for England; compared to the English regions, Jersey ranked 79th out of 151 regions

- when deaths from lung cancer at all ages[5] is compared with the England average, Jersey was significantly worse. Compared to English regions, Jersey ranked 118th out of 151 regions

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[1] A premature death is defined as any death that occurs before the individual reaches 75 years of age.

[2] The measure of premature deaths used here considers early death in the broadest sense. Unlike the indicators contained in the recently published *Avoidable Mortality Report 2016* (published by the Statistics Jersey, March 2018), this definition is not liable to change in light of recent advances in medical technology or wider public health interventions, but provides a crude measure of early death for comparison over time and place.

[3] Data for England has been sourced from the Public Health England tool 'Longer Lives' (which can be found at healthierlives.phe.org.uk and is used for all data comparisons in this report). All comparisons were made using the data for 2014-2016 contained in this tool, accessed in January 2018.

[4] Rankings assume Jersey is added to the total number of regions ranked. For 'Strokes', Public Health England has excluded Rutland, from the analysis due to small numbers (fewer than 10 events in the period).

[5] All deaths from lung cancer are considered premature, not only those occurring before 75 years of age; this follows Public Health England practise.

Table 1: Premature ASMR

Information for England from Longer Lives Website (March 2018)

Definition of colour coding: green denotes rates that are statistically significantly better than the average and red denotes rates that are statistically significantly worse. Yellow denotes rates which are statistically similar but better than average, and orange denotes rates which are statistically similar but worse than average.

	Better (significant at 95% confidence level)		Worse than average (not significant)
	Better than average (not significant)		Worse (significant at 95% confidence level)

Premature Mortality Indicator	Jersey ASMR*	England ASMR*	Counties & unitary authorities min ASMR*	Counties & Unitary Authorities Max ASMR*	Jersey ranking**
Overall premature mortality	304	334	238 Rutland	546 Blackpool	44 / 151
Cancer	146	137	100 Rutland	195 Knowsley	97 / 151
Breast cancer (**females**)***	17	21	13 Peterborough	32 Rutland	20 / 151
Colorectal cancer	14	12	9 Hounslow	17 Dudley	128 / 151
Lung cancer (**all ages**)****	72	58	33 Rutland	110 Knowsley	118 / 151
Heart disease and stroke	60	73	46 K & C$^+$	141 Manchester	20 / 151
Ischaemic heart disease	29	39	21 K & C$^+$	85 Manchester	15 / 151
Strokes	10	13	7 West Berkshire	27 Manchester	12 / 150**
Lung disease	21	34	18 K & C$^+$	70 Manchester	7 / 151
Liver disease	19	18	10 Buckinghamshire	45 Blackpool	79 / 151
Injury	12	13	6 Thurrock	34 Blackpool	69 / 151

Source: Statistics Jersey and Public Health England (PHE)
* ASMR – Age Standardised Mortality Rate per 100,000 population aged under 75; per annum. Standardised using the 2013 European Standard Population for those aged under 75 years. For further information, see Background Notes.
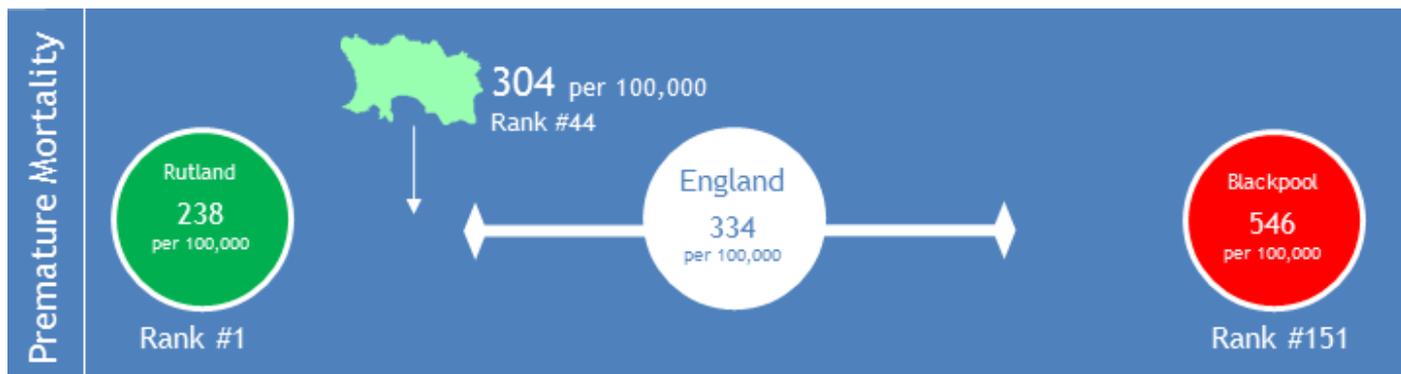*** Rankings assume Jersey is added to the total number of regions ranked; for 'Strokes', Public Health England has excluded Rutland from the analysis due to small numbers (fewer than 10 events in the period).*
*** For breast cancer, female only data is used (deaths for females under 75 and female population under 75).
****Lung cancer considers deaths at all ages, not only those occurring before 75 years of age.
$^+$ K & C – Kensington and Chelsea

OVERALL PREMATURE MORTALITY

Between 2014 and 2016, 777 people died in Jersey before reaching their 75th birthday. This represents an average of 259 premature deaths per year, accounting for more than a third (34 per cent) of all deaths over the period.
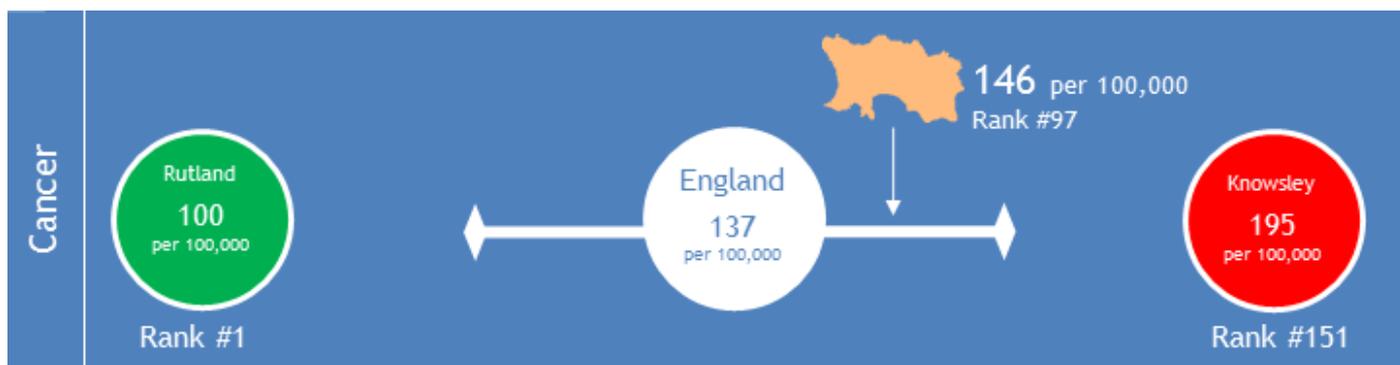
In Jersey, premature mortality between 2014 and 2016 was 304 per 100,000 population aged under 75 per year, a rate **significantly better than the England average**.

When comparing Jersey with the Public Health England rankings, Jersey would rank 44 out of 151 regions, as shown in Table 1.

The main cause of overall premature mortality in Jersey for women was cancer (particularly lung, breast, cervical, pancreatic and colonic cancer). For men, the main cause was lung cancer, followed by prostate cancer and heart disease[6].

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[6] For more information see Report on the Deaths of Jersey Residents, 2016, published by Statistics Jersey, March 2017.
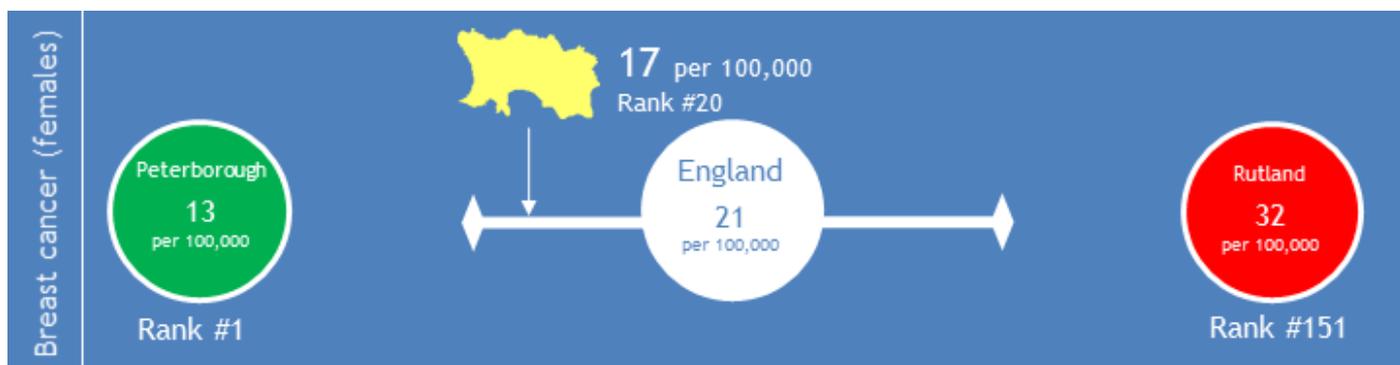
CANCER (ICD-10 CODES C00-C97)

In the three year period 2014-16, cancer was responsible for around 115-135 deaths each year in Jersey of people aged under 75. Premature deaths from cancer accounted for almost half (48 per cent) of the total deaths due to cancer each year in the Island. The main cancer causing death in this age group was cancer of respiratory organs (predominately lung cancer); over the period 2014-16, 22% of premature cancer deaths were due to lung cancer. Other major cancers causing premature death were cancers of the digestive organs (mainly colorectal, pancreatic and oesophageal), breast and prostate cancer.

Compared with the English regions, Jersey ranked 97 out of 151 regions for premature deaths due to cancer, with an age standardised rate of 146 per 100,000 population. For cancer, the premature death rate in Jersey was **similar to the average for England**.
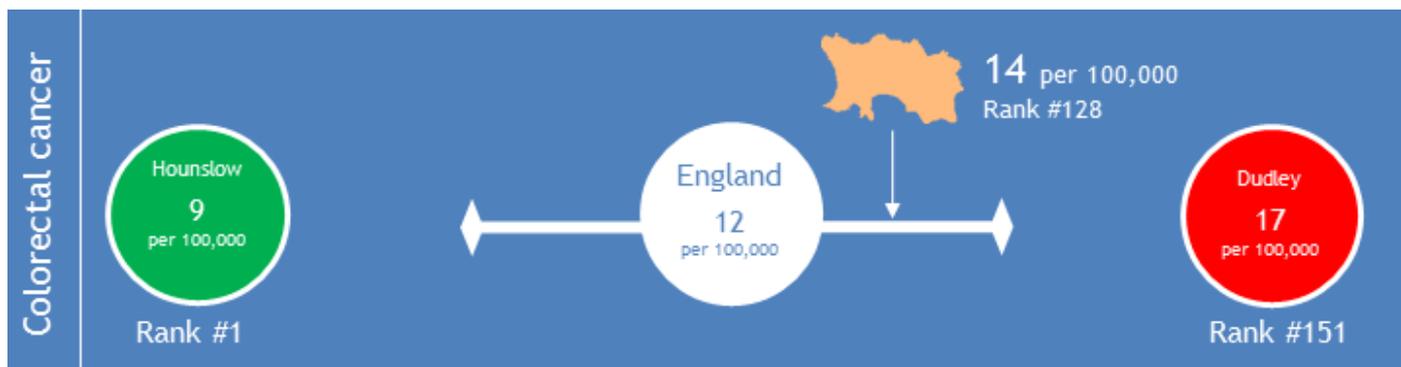
BREAST CANCER FEMALES ONLY (ICD-10 CODE C50)

Breast cancer was responsible for around 10 premature female deaths per year in Jersey and accounted for the potential loss of around 130 years[7] of female life annually.

The premature death rate in Jersey for females was **similar to the England average**.

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[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 assumptions that every individual could be expected to live until the age of 75 and that premature death before that age may be preventable.
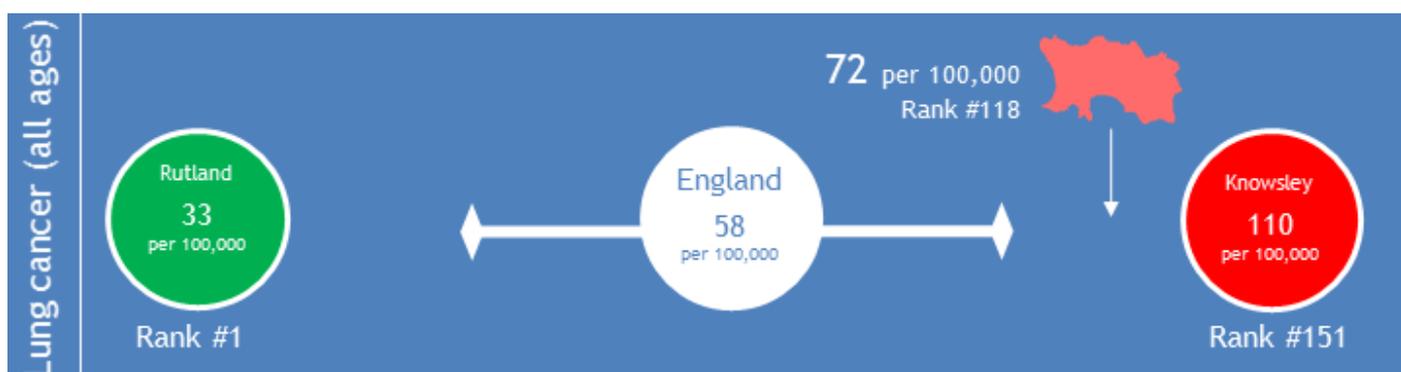
COLORECTAL CANCER (ICD-10 CODES C18-C20)

Colorectal cancer (bowel cancer), was responsible for around 10 premature deaths each year in Jersey, and caused the potential loss of around 130 years of life each year.

The Jersey rate for premature deaths for colorectal cancer was **similar to the average for England**, ranking 128 out of 151 regions.
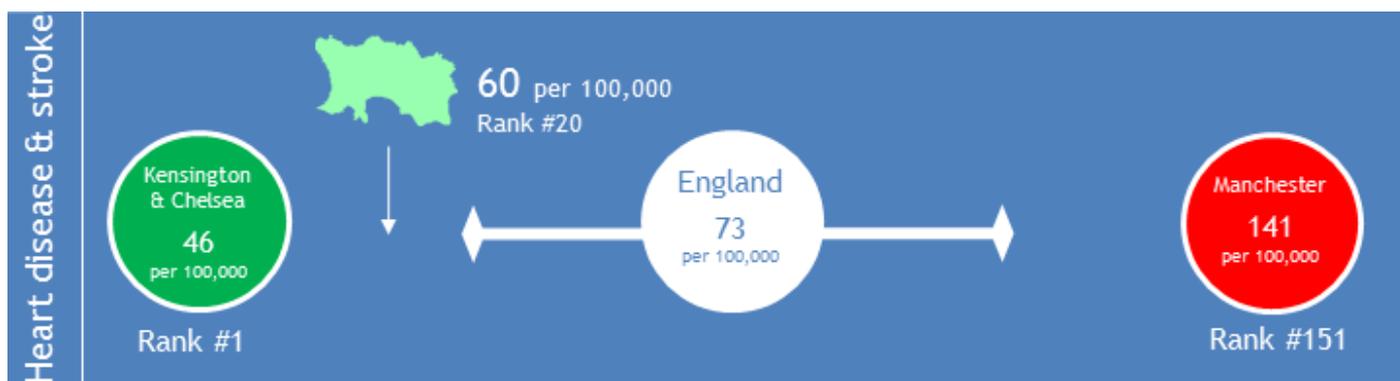
LUNG CANCER (ICD-10 CODES C33-C34) (**ALL AGES**)

Public Health England considers lung cancer deaths **at all ages** rather than only for individuals aged under 75 years. Comparing Jersey on a like for like basis, shows that Jersey was amongst the worst areas when compared to English regions, ranking 118 out of 151 areas. The Jersey age standardised rate was **significantly worse than the average rate for England** (72 per 100,000 population compared to 58 per 100,000, respectively).

In Jersey, lung cancer was responsible for over 50 deaths each year, causing almost 300 years of potential life to be lost annually. Similar numbers of males and females died from lung cancer during the period 2014 to 2016.
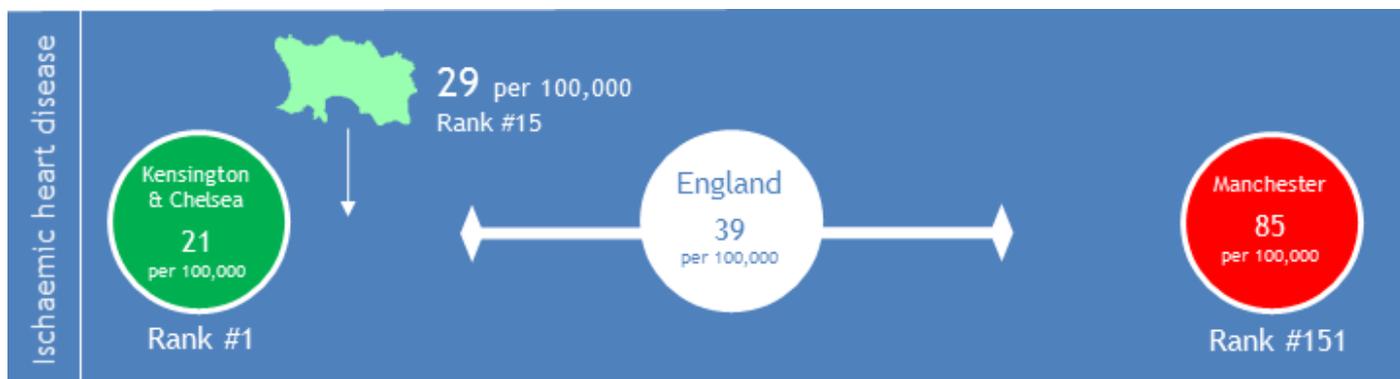
HEART DISEASE AND STROKE (ICD-10 CODES I00-I99)

Over the three year period 2014-16, around 50 people under 75 years of age died in Jersey each year as the result of heart disease and stroke, with approximately two-thirds of these being male. Ischaemic heart disease was the underlying cause for half of these annual premature deaths (both genders). On average, heart disease and stroke caused the potential loss of 600 years of life every year over the period.

Jersey was **significantly better than the average for England** for premature deaths from heart disease and stroke, ranking 20th out of 151 regions.

ISCHAEMIC HEART DISEASE (ICD-10 CODES I20-I25)

Within the group of cardiovascular diseases, heart disease can be separately analysed. There were more than 20 premature deaths a year in Jersey from heart disease, accounting for more than 900 potential years of life to be lost over the 3 years from 2014 to 2016 (over 300 years of life lost annually). A greater proportion of men died from heart disease (12 per cent of all male premature deaths) than woman (6 per cent of all female premature deaths).

Jersey ranked among the English regions with the lowest rates (ranked 15th out of 151) for premature deaths from heart disease, and was **significantly better than the England average**.

STROKES (ICD-10 CODES I60-I69)

From 2014-16, on average fewer than ten people died prematurely of stroke per year. Jersey ranked at 12 out of 150[9] English regions for premature deaths from heart disease. However, it was **similar to the England average**.

LUNG DISEASES (ICD-10 CODES J00-J99)

Around 20 people aged under 75 died from lung diseases in Jersey per year over the period 2014-16. Almost two-thirds of these deaths were due to chronic lower respiratory diseases. During the years 2014 to 2016, there were fewer than 10 premature deaths due to influenza or pneumonia.

Compared with the English regions Jersey ranked among the best. With a rate of 21 per 100,000 population, Jersey ranked 7 out of 151 regions. The age-standardised rate for Jersey was **significantly better than that for England**.

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[9] Longer Lives analysis have 149 English regions for strokes due to small numbers of deaths for Rutland, resulting in Rutland being excluded from the analysis for this disease category.
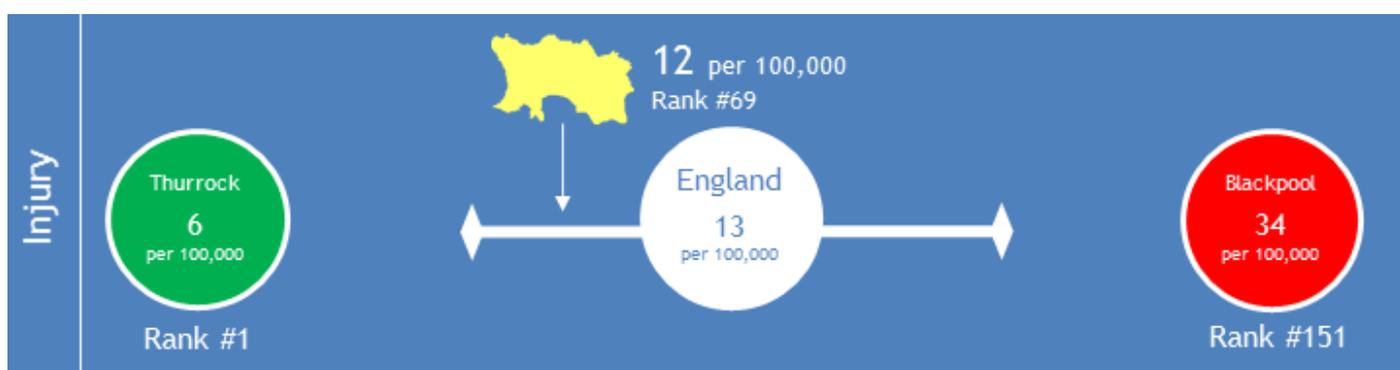
LIVER DISEASE (ICD-10 CODES B15-B19, C22, I81, I85, K70-K77, T86.4)

Liver disease accounted for around 20 deaths of Jersey residents under 75 per year in the three year period 2014-2016. These diseases included cancer of the liver, alcoholic liver disease, fibrosis and cirrhosis of the liver. Around 200 years of potential life were lost each year due to liver diseases. Half of these premature deaths were due to alcoholic liver disease.

Jersey's premature mortality rate from liver disease was **similar to the England average**, ranking 79 out of 151.

INJURY (ICD-10 CODES V01-X59)

Injuries include transport accidents, falls and other accidental external causes of mortality, such as drowning and poisoning due to drugs or alcohol. Over the three year period 2014-16, injuries caused almost 350 years of potential life to be lost each year in Jersey, three-quarters of which were male, and three-quarters linked to drugs.

The age-standardised mortality rate for premature deaths from injuries was 12 per 100,000 over the period 2014-2016, and was **similar to the average rate for England** (13 per 100,000). Jersey would rank 69 out of 151 English regions.

BACKGROUND NOTES

DATA SOURCES

Data are taken from the Deaths Database held by Statistics Jersey. Data in this database originate 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 five days of the date of death.

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

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

AGE-STANDARDISED RATES

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.

Jersey rates for annual data are calculated using the average of the two corresponding end-year population estimates as published by Statistics Jersey. This estimate of the mid-year population assumes that half of births, deaths and migration occurs in the first half of the calendar year.

When the observed total number of deaths is fewer than 10, rates are not calculated as there are too few deaths to calculate directly standardised rates reliably.

CONFIDENCE INTERVALS (CI'S) AND STATISTICAL SIGNIFICANCE

Confidence intervals are a measure of the statistical precision of an estimate and show the range of uncertainty around the estimated figure. 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. Confidence intervals should be considered when interpreting results.

Comparisons between rates or over time have been statistically tested to determine whether differences are likely to be genuine (i.e. statistically significant) or the result of natural random variation. Only those differences deemed as statistically significant have been described in this report using terms such as 'higher' or 'lower', 'best' or 'worst'.

DATA QUALITY AND COMPLETENESS

The numbers presented in this report should be treated as provisional due to:

- A small number of inquests still outstanding for deaths occurring in calendar year 2016.
- A number of deaths of Jersey residents that occured outside of the Island which can take up to 18 months to complete and register with the Superintendent Registrar.

CONTACT DETAILS

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