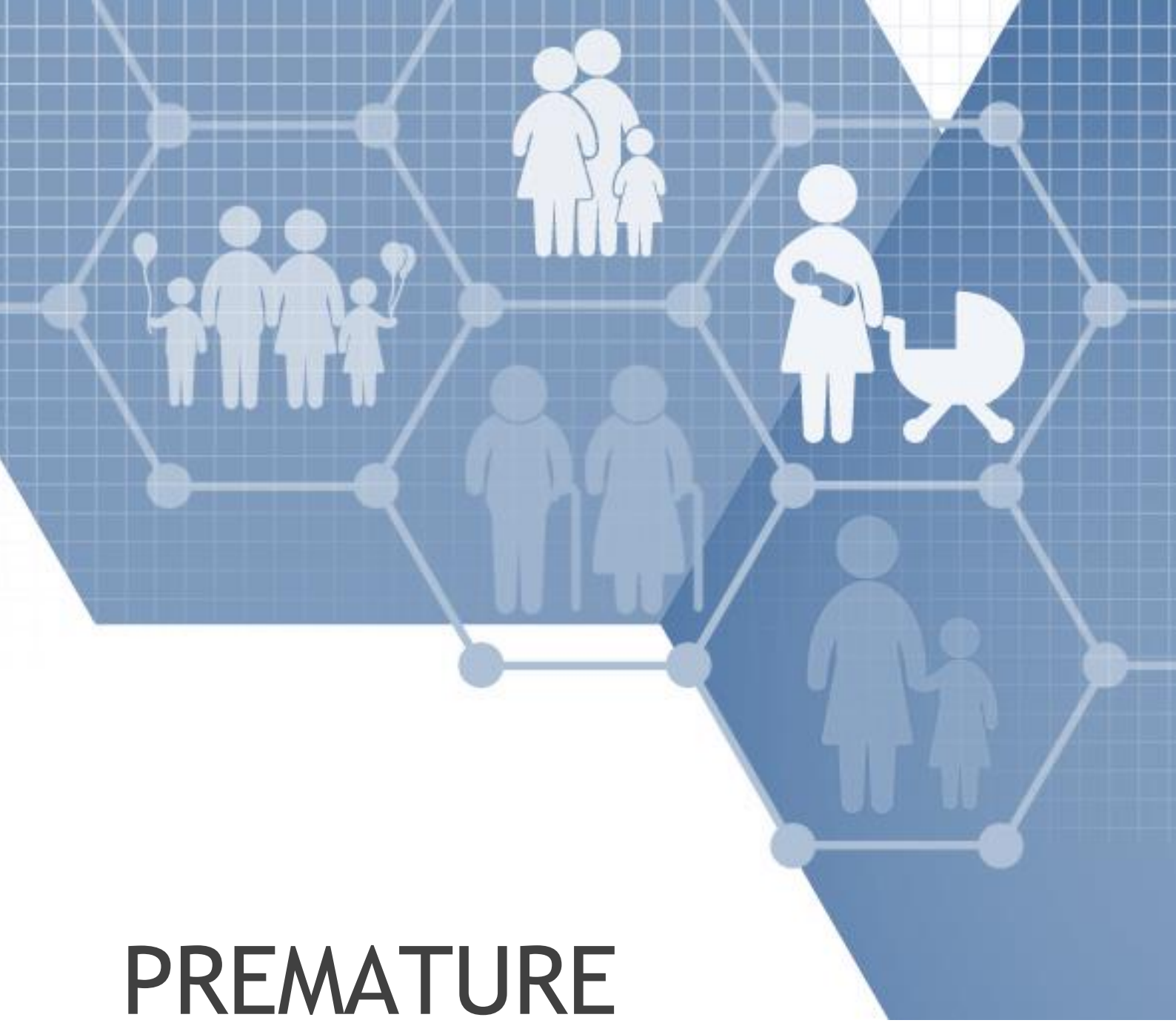


PREMATURE MORTALITY 2013-2015

Public Health Statistics Unit

States of Jersey

HIU INFORMATION READER

Document purpose	Report on the premature deaths of Jersey residents 2013-2015

Title	Report on the premature deaths of Jersey residents 2013-2015
Author	Public Health Statistics Unit
Publication date	28 March 2017
Target audience	Public
Pre-circulation list	HSSD staff, CMEX, Statistics Unit, Viscounts Office, Superintendent Registrar
Description	Annual report on premature deaths in Jersey for 2013-2015 and comparison to England.
Data Sources	Public Health Statistics Unit Deaths Database using details of deaths supplied by parish registrars
Date that data are acquired	Data extracted 12-18 months after the period being analysed, this is because there is a delay in death registration, with deaths referred to inquest taking up to 18 months to be investigated. Data for England released by Public Health England is also subject to a similar delay. Contemporaneous data is presented here for comparison.
Frequency	Annual
Relevance and key uses of the statistics	Making information publically available for planning, epidemiology, provision of services and to provide comparative information. To respond to information requests for a variety of customers e.g. researchers, charities, public companies, Freedom of Information requests. To provide information to support answers to Ministerial Questions.
Accuracy	Information received by Public Health is clerically checked, with additional validation on data entry. Data is also compared to previous year's figures and data providers are asked to confirm reported figures are correct prior to publication.
Completeness	Death figures reported are based on deaths occurring in calendar years 2013-2015; since inquests can take up to 18 months to complete, there may be a small number of deaths that occurred in 2015 which have not been registered pending the conclusion of an inquest at time of publication. This number is known to be less than 5 and should be considered small.
Value Type	Age-standardised rates are presented.
Amendment history	
Officer	Amendment date and detail
M Clarke K Jervis	Analysis conducted and report compiled March 2017 Data checking and editing
Contact details	PublicHealthStatistics@gov.je

Embargo/confidentiality	Embargoed until 12:30 28 March 2017

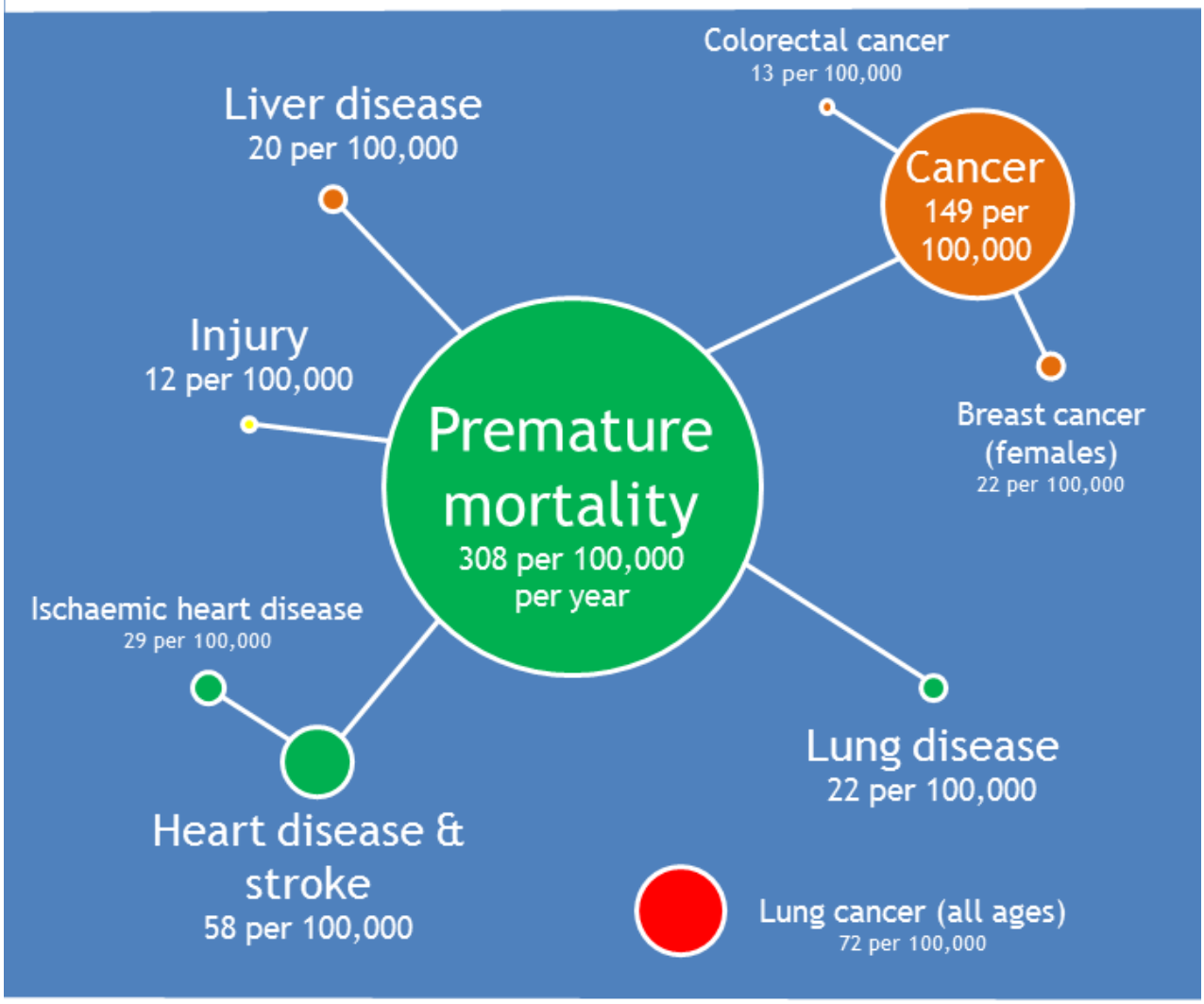
CONTENTS

Summary 3
Main Findings 4
Overall Premature Mortality 6
Cancer (ICD-10 Codes C00-C97) 7
Breast Cancer (ICD-10 Code C50) **Females Only** 7
Colorectal Cancer (ICD-10 Codes C18-C20) 8
Lung Cancer (ICD-10 codes C33-C34) (**All Ages**) 8
Heart Disease and Stroke (ICD-10 Codes I00-I99) 9
Ischaemic Heart Disease (ICD-10 Codes I20-I25) 9
Lung Diseases (ICD-10 Codes J00-J99) 10
Liver Disease (ICD-10 Codes B15-B19, C22, I81, I85, K70-K77, T86.4) 10
Injury (ICD-10 Codes V01-X59) 11
Background Notes 12
Data Sources 12
Comparisons 12
Timeliness 12
Methods 13
Confidence Intervals (CI's) and Statistical Significance 13
Accuracy and reliability 13
Data quality and completeness 13
Contact details 14

Premature Deaths

(deaths before age 75)

2013-2015



Significantly better than the England Average

Similar to the England Average

Significantly worse than the England Average

1/3 of all deaths were premature

Jersey ranks 46 out of 151 when compared to English regions

774

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

SUMMARY

A child born in Jersey today can, on average, expect to live a longer, healthier life than ever before; yet, they still have a one in three chance of dying prematurely (before reaching 75 years of age).[1,2]

This report by the Public Health Statistics Unit presents statistics on the premature deaths of Jersey residents between 2013 and 2015. Jersey data presented in this report are based on records of deaths that occurred in calendar years 2013 to 2015, which were received from the Superintendent Registrar's 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 focus of this report is to compare the rates in Jersey to those for England and the English counties and unitary authorities ("regions"). To enable accurate comparisons, directly age standardised rates (ASMR) are used; such rates provide a measure of mortality which makes allowance for the fact that death rates are higher in older populations by adjusting for differences in the age distributions of different areas.

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 2013-2015 contained in this tool as of March 2017.

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 2015* (published by the Public Health Statistics Unit, March 2017), 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.

MAIN FINDINGS

- approximately 250 people a year die in Jersey before their 75th birthday, accounting for more than a third (34 per cent to 36 per cent) of all deaths each year
- in Jersey, premature mortality was 308 per 100,000 population per year between 2013 and 2015, a rate significantly better than the average for England and ranking Jersey amongst the best areas when compared to English regions
- for premature deaths due to heart disease and stroke, Jersey would be categorised as among the best when compared with England, ranking at 14 out of 151 regions
- premature mortality due to cancer in Jersey is worse than the English average,[3] ranking Jersey 93 out of 151 regions. Half of all cancer deaths in Jersey occur in the under 75 age group
- for lung disease, Jersey would be categorised amongst the best regions when compared with England, at 9 out of 150[4] regions
- Jersey's premature mortality rate for diseases of the liver is worse than the average[3] for England, and ranking 92 out of 149[5] regions
- when lung cancer at all ages is compared with the England average, Jersey is significantly worse, and ranking 115 out of 151 regions

3 Not a statistically significant difference – this is due to the confidence intervals for Jersey overlapping with the confidence intervals for the English average.
4 Longer Lives analysis have 149 regions for lung diseases due to small numbers of deaths for Rutland, resulting in Rutland being excluded from the analysis for this disease category.
5 Longer Lives analysis have 148 regions for liver diseases due to small numbers of deaths for Rutland and Bracknell Forest, resulting in both areas being excluded from the analysis for this disease category.

Table 1: Premature ASMR – information from Longer Lives Website (March 2017)

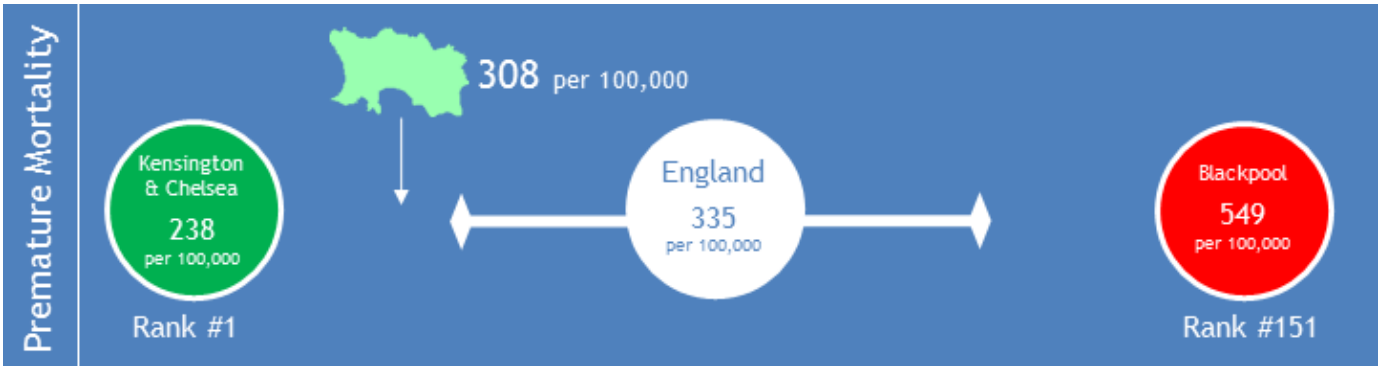
Definition of colour coding: green denotes rates that are statistically significantly better than the average and red denotes rates that are statistically significantly worse. Yellow denotes rates that are within expected limits but better than average, and orange denotes rates within expected limits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

Best (significant at 95% confidence level)
Better than average (not significant)
Worse than average (not significant)
Worst (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 mortality	308	335	238 K & C+	549 Blackpool	46 / 151
Cancer	149	139	106 Barnet	195 Manchester	93 / 151
Breast cancer (**females**)***	22	21	13 Plymouth	33 Darlington	88 / 149**
Colorectal cancer	13	12	9 Portsmouth	18 Salford	96 / 149**
Lung cancer **(all ages)****	72	59	33 Rutland	111 Manchester	115 / 151
Heart disease and stroke	58	75	45 K & C+	138 Manchester	14 / 151
Ischaemic heart disease	29	41	24 K & C+	80 Manchester	11 / 151
Lung disease	22	33	17 K & C+	68 Manchester	9 / 150
Liver disease	20	18	10 Buckinghamshire	44 Blackpool	92 / 149**
Injury	12	12	6 Harrow	32 Blackpool	66 / 150

Source: PHSU and PHE
** 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.*
*** Rankings assume Jersey is added to the total number of regions ranked, for some indicators Public Health England has excluded Rutland, Bracknell Forest or Hartlepool from the analysis due to small numbers (less than 25 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



Approximately 250 people die each year in Jersey before reaching their 75th birthday, accounting for more than a third (34 per cent to 36 per cent) of all deaths each year.

In Jersey, premature mortality between 2013 and 2015 was 308 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 be 46 out of 151 regions, as shown in Table 1.

The main causes of overall premature mortality in Jersey are: cancer of the digestive organs (mainly colorectal, pancreatic and oesophageal cancers); lung cancer (cancer of the intrathoracic and respiratory organs); ischaemic heart disease; chronic lower respiratory disease; and liver disease.[6]

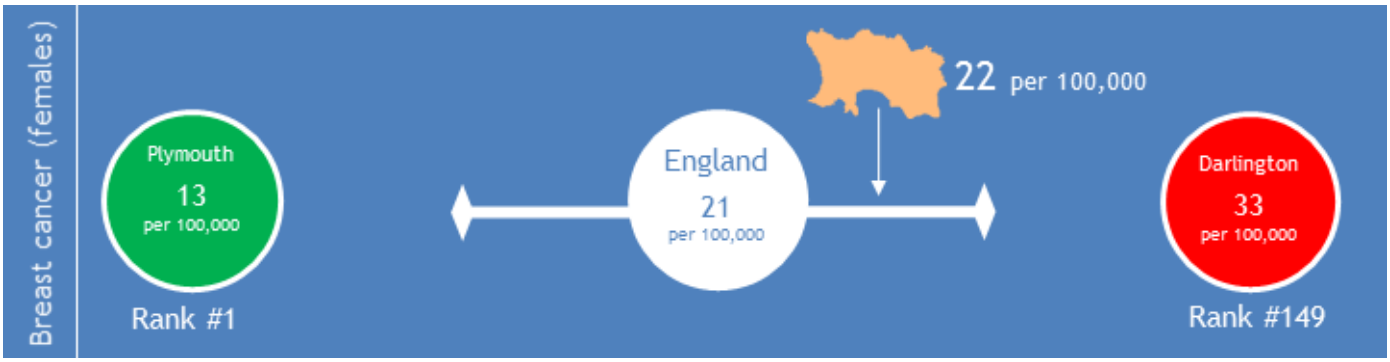
6 For more information, see Report on the Deaths of Jersey Residents, 2013, 2014 and 2015, published by the States of Jersey Public Health Statistics Unit, August 2014, October 2015 and September 2016.

CANCER (ICD-10 CODES C00-C97)

Cancer is responsible for around 110-130 deaths each year in Jersey of people aged under 75. Premature deaths from cancer account for half (50 per cent) of the total deaths due to cancer each year in the Island. The main cancers affecting this age group include: cancer of respiratory organs (predominately lung cancer); cancers of the digestive organs (mainly colorectal, pancreatic and oesophageal); and breast cancer.

Compared with the English regions, Jersey ranks 93 out of 151 regions for premature deaths due to cancer, with an age standardised rate of 149 per 100,000 population. For cancer, Jersey is **worse than the English average** (but not significantly).

BREAST CANCER (ICD-10 CODE C50) **FEMALES ONLY**



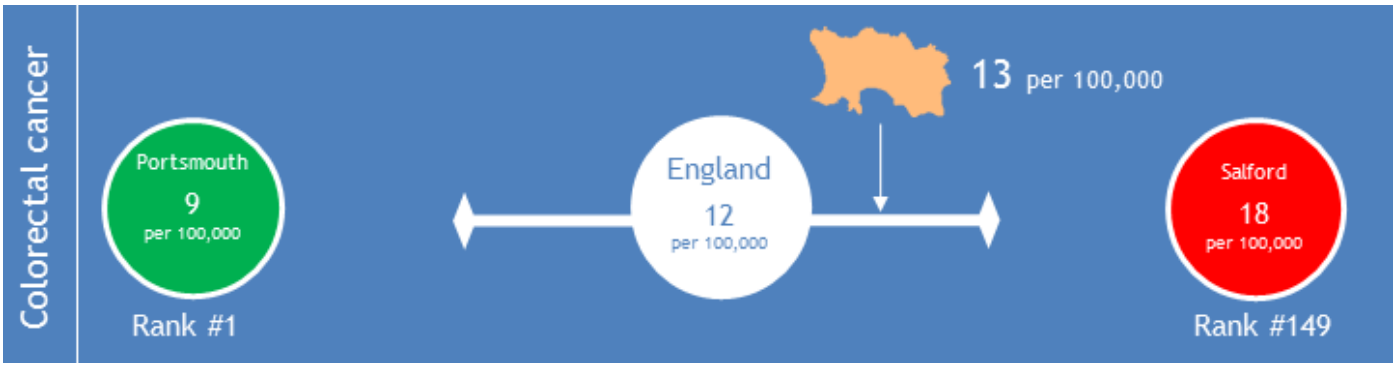
Breast cancer is responsible for around 10 premature female deaths every year in Jersey and accounts for the potential loss of around 150 years[7] of female life annually. Breast cancer also represents the second highest number of incidences of female malignant cancers each year (after lung cancer).

The premature death rate in Jersey for females was **worse than the English average** (but not significantly).

---

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.

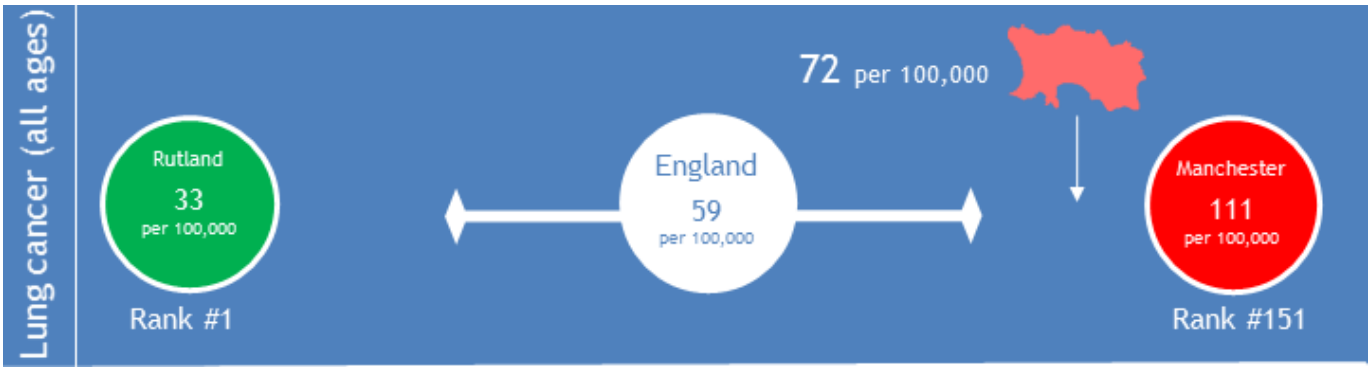
COLORECTAL CANCER (ICD-10 CODES C18-C20)



Colorectal cancer, otherwise known as bowel cancer, is responsible for around 10 premature deaths each year in Jersey, and caused the potential loss of around 100 years of life each year.

The Jersey rate for premature deaths for colorectal cancer is **worse than the England average** (but not significantly), ranking 96 out of 149[8] regions.

LUNG CANCER (ICD-10 CODES C33-C34) (**ALL AGES**)



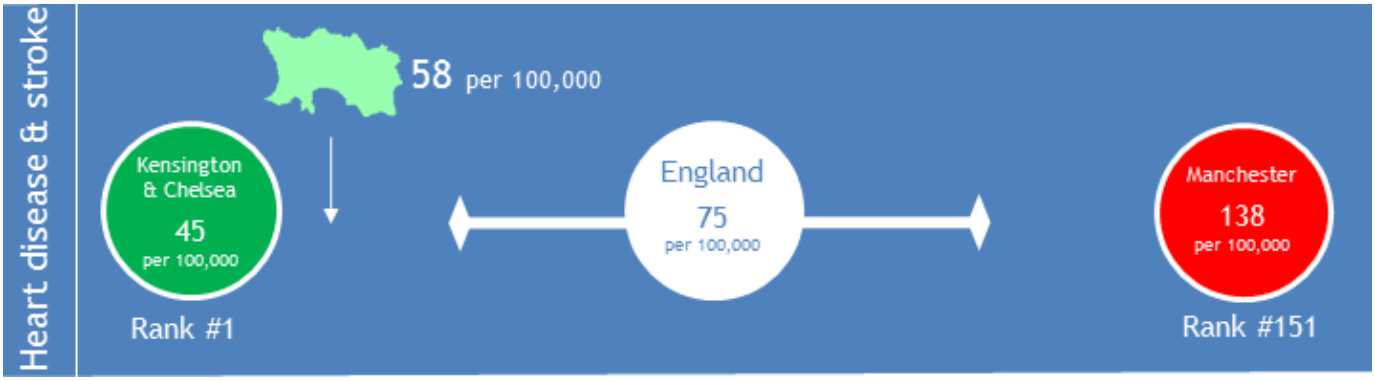
Public Health England includes a measure of lung cancer deaths **at all ages** within their longer lives tool rather than only for individuals aged under 75 years. Comparing Jersey on a like for like basis, shows that Jersey is **amongst the worst** areas when compared to English regions, ranking 115 out of 151 areas. The Jersey age standardised rate is significantly worse than the average rate for England (72 per 100,000 population compared to 59 per 100,000, respectively).

In Jersey, lung cancer is responsible for over 50 deaths each year, causing over 300 years of potential life to be lost annually. Similar numbers of males and females died from lung cancer during the period 2013 to 2015.

---

8 Public Health England's Longer Lives analysis has 148 regions for colorectal cancers due to small numbers of deaths for Rutland and Hartlepool, resulting in both areas being excluded from the analysis for this disease category.

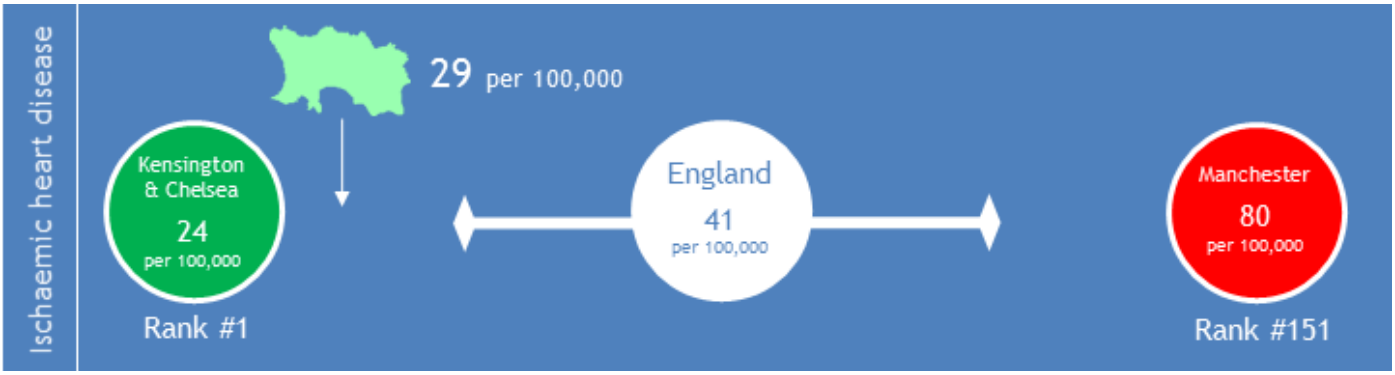
HEART DISEASE AND STROKE (ICD-10 CODES I00-I99)



Around 50 people under 75 years of age die in Jersey each year as the result of heart disease and stroke, with approximately two-thirds of these being male. Ischaemic heart disease is the underlying cause for half of these annual premature deaths (both genders). Heart disease and stroke cause the potential loss of between 500 and 700 years of life every year.

Jersey is significantly better than the average for England and ranks **among the best** for premature deaths from heart disease and stroke at 14 out of 151 regions.

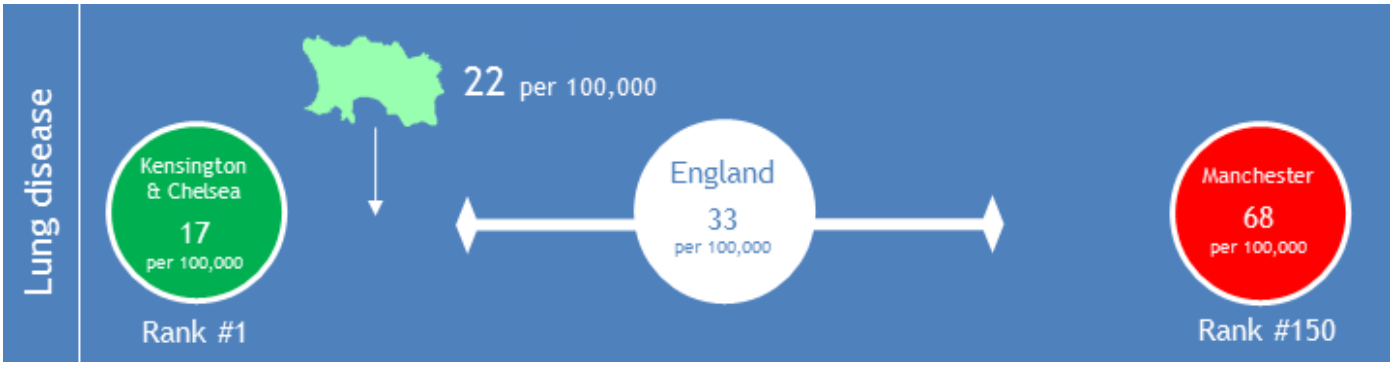
ISCHAEMIC HEART DISEASE (ICD-10 CODES I20-I25)



Within this disease grouping of cardiovascular diseases, heart disease can be separately analysed. There are more than 20 premature deaths a year in Jersey from heart disease, accounting for more than 800 potential years of life to be lost over the 3-year period 2013 to 2015 (around 250 years of life lost annually). A greater proportion of men die from heart disease (11 per cent of all male premature deaths) than woman (7 per cent of all female premature deaths).

Jersey also ranks **amongst the best** of the English regions (at 11 out of 151) for premature deaths from heart disease, and is significantly better than the English average.

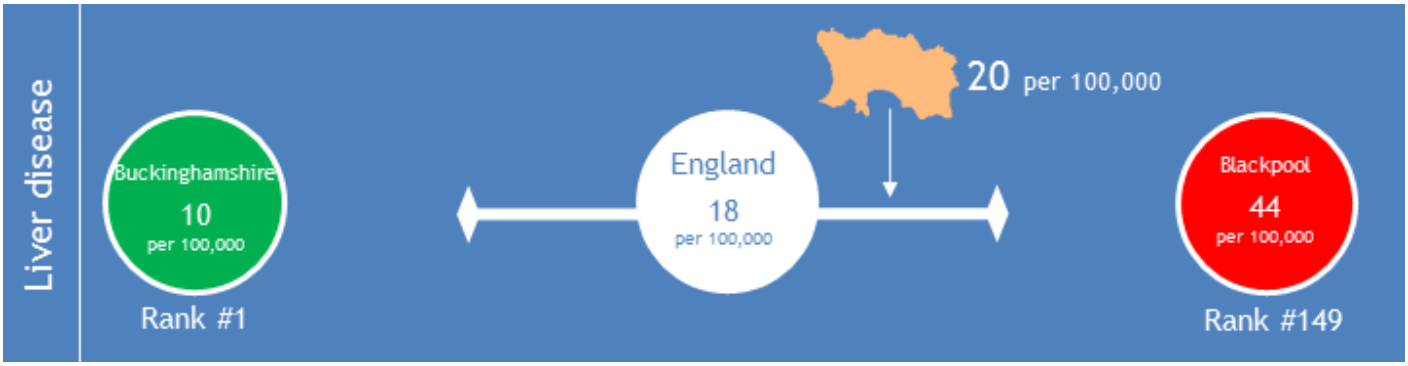
LUNG DISEASES (ICD-10 CODES J00-J99)



Around 20 people aged 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 2013 to 2015, there were fewer than 5 premature deaths each year due to influenza and pneumonia.

Compared with the English regions Jersey ranks as **among the best,** with a rate of 22 per 100,000 population, ranking 9 out of 150[4] regions. The age-standardised rate for Jersey is significantly better than that for England.

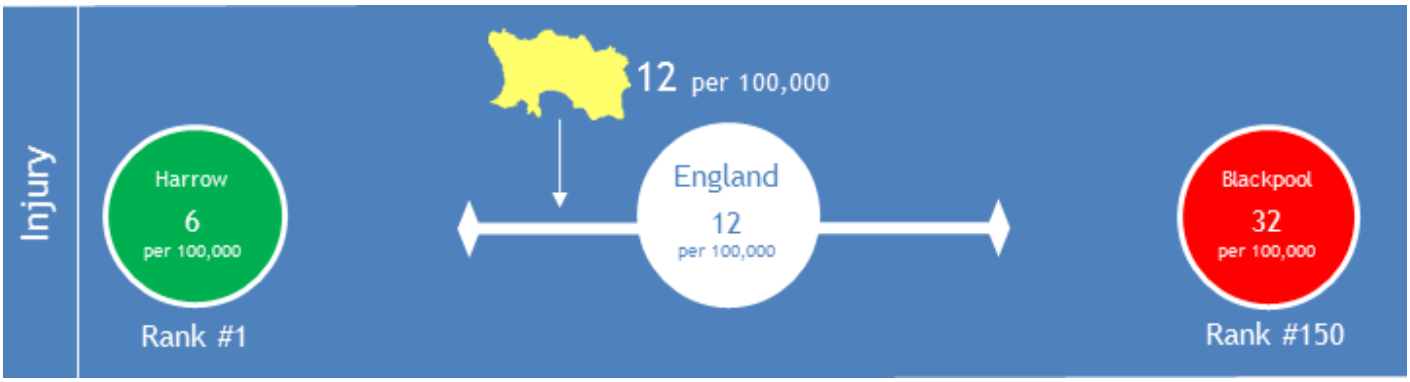
LIVER DISEASE (ICD-10 CODES B15-B19, C22, I81, I85, K70-K77, T86.4)



Liver disease accounts for around 20 deaths of Jersey residents under 75 each year. These diseases include cancer of the liver, hepatitis, alcoholic liver disease, fibrosis and cirrhosis of the liver. Two-thirds of these Jersey deaths are due to alcoholic liver disease. Around 250 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** (but not significantly), ranking 92 out of 149.[5]

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 over 300 years of potential life to be lost every year in Jersey, three-quarters of which are male.

The age-standardised mortality rate for premature deaths from injuries was 12 per 100,000 over the period 2013-2015, and was similar to the average rate for England (12 per 100,000). Jersey would rank 66 out of 150 English regions.

BACKGROUND NOTES

DATA SOURCES

Data are taken from the Deaths Database held by the Public Health Statistics Unit. 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 5 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 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.

All Jersey figures are compared with those published by Public Health England in their longer lives toolkit: healthierlives.phe.org.uk. There is no comparison for premature deaths due to stroke in this report as there were fewer than 25 deaths from this cause over the period 2013-2015, which means reliable standardised mortality rates cannot be calculated, as per Public Health England recommendations.

Comparative data for Guernsey was not available at time of publication.

TIMELINESS

Data is extracted 12-18 months after the period being analysed; this is because there is a delay in death registration, with deaths referred to inquest taking up to 18 months to be investigated. Data for England released by Public Health England is subject to a similar delay. Contemporaneous data is presented here for comparison.

The results are based on analysis of all deaths of Jersey residents registered as having occurred in calendar years 2013, 2014 and 2015.

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.

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.

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. 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. 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'.

ACCURACY AND RELIABILITY

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

A small number of inquests may still be outstanding for deaths occurring in calendar year 2015; therefore, numbers here should be treated as provisional.

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.

CONTACT DETAILS

All enquiries and feedback should be directed to:

Public Health Statistics Unit
Chief Ministers Department
Cyril Le Marquand House
St Helier
JE4 8QT
PublicHealthStatistics@gov.je