



AVOIDABLE MORTALITY 2015

Public Health Statistics Unit

States 
of Jersey

PHSU INFORMATION READER

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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	Figures are compared to previous years' figures and expected trends by the Public Health Statistics Unit.
Completeness	Death figures reported are based on deaths occurring in calendar year 2015; as inquests can take up to 18 months to complete, there may be a small number of deaths that occurred in 2015 that 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.
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Table of Contents

Introduction	4
Definitions	5
Main Points	5
Avoidable Deaths	6
Main Causes	7
Amenable Deaths.....	8
Preventable Deaths	9
Comparisons to England and Wales.....	10
Comparisons to English Regions	12
Children and Young People	13
Burden of Avoidable deaths	13
Background notes	14
Data Sources	14
Comparisons	14
Timeliness	14
Methods	14
Confidence Intervals (CIs) and Statistical Significance.....	15
Accuracy and reliability	15
Data quality and completeness.....	15
Contact details.....	16

Avoidable Mortality 2015



180

Deaths were due to avoidable causes

1 in 4 of all deaths in 2015



The majority of these deaths were among males

Neoplasms

(Cancers and other non-cancerous tissue growths)

were the leading cause of avoidable deaths

23

Years of potential life lost per avoidable death



Jersey avoidable mortality rates were similar to those for England

86 deaths

were from causes considered amenable to healthcare



Deaths were preventable through public health interventions

Introduction

This is the first report by the Public Health Statistics Unit to present figures for Jersey on death due to causes that are considered avoidable in the presence of timely and effective healthcare or public health interventions.

Data for 2014 and 2015 are presented in this report, the latest years for which data is available in Jersey. Comparisons are made to the most recently published avoidable mortality data for England and Wales and the English regions (2014 data).

Avoidable mortality is based on the concept that premature deaths from certain conditions should be rare, and ideally should not occur in the presence of timely and effective health care. This indicator is not intended to serve as a definitive source of evidence of differences in the effectiveness of healthcare systems between areas. While a particular condition may be considered avoidable, not every death from that condition could be prevented. This is because factors such as lifestyle, age, extent of disease progression and the potential existence of other medical conditions are not taken into account when developing definitions of avoidable mortality. Therefore, a degree of caution is recommended when interpreting the data presented in this report.

The avoidable deaths presented in this report are based on a definition of avoidable mortality developed and recently updated by the Office for National Statistics. A public consultation ran in the UK in 2015 to review and update the definitions used; as a result, this latest definition takes into account advances in medical technology and wider public health interventions. Therefore, it is not appropriate to use this definition on data for deaths before 2014 (as advised by the ONS).

For further details on the definitions used here, see [Revised definition of avoidable mortality and new definition for Children and Young People](#).

Definitions

Amenable mortality:

- a death is amenable (treatable) if, in the light of medical knowledge and technology at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided through good quality healthcare

Preventable mortality:

- a death is preventable if, in the light of understanding of the determinants of health at the time of death, all or most deaths from that cause (subject to age limits if appropriate) could be avoided by public health interventions in the broadest sense

Avoidable mortality

- avoidable deaths are all those defined as preventable, amenable (treatable) or both, where each death is counted only once; where a cause of death is both preventable and amenable, all deaths from that cause are counted in both categories when they are presented separately

Main Points

- In 2015, nearly a quarter of all deaths (24 per cent, 180 out of 760) in Jersey were from causes considered potentially avoidable through timely and effective healthcare or public health interventions
- males were more likely to die from avoidable causes than females in 2015. More than a quarter (28 per cent) of male deaths were from avoidable causes (113 out of 399 deaths) compared with less than a fifth (19 per cent) of female deaths (67 of 361 deaths)
- the leading cause of avoidable deaths in Jersey was neoplasms (cancers and other non-cancerous tissue growths)
- there was no difference in the amenable mortality rate between males and females, however the preventable mortality rate was significantly higher for males in Jersey than females
- in 2015, there were fewer than five deaths of children and young people in Jersey considered avoidable (according to ONS definitions) through good quality healthcare and wider public health interventions

Comparison with England and Wales:

- the comparable avoidable mortality rate for Jersey was similar statistically to the rate for England but significantly lower than that for Wales in 2014 (the latest year available)
- the amenable mortality rate for Jersey was statistically lower than that for both England and Wales, whereas the preventable mortality rate was similar to the rates for both jurisdictions in 2014

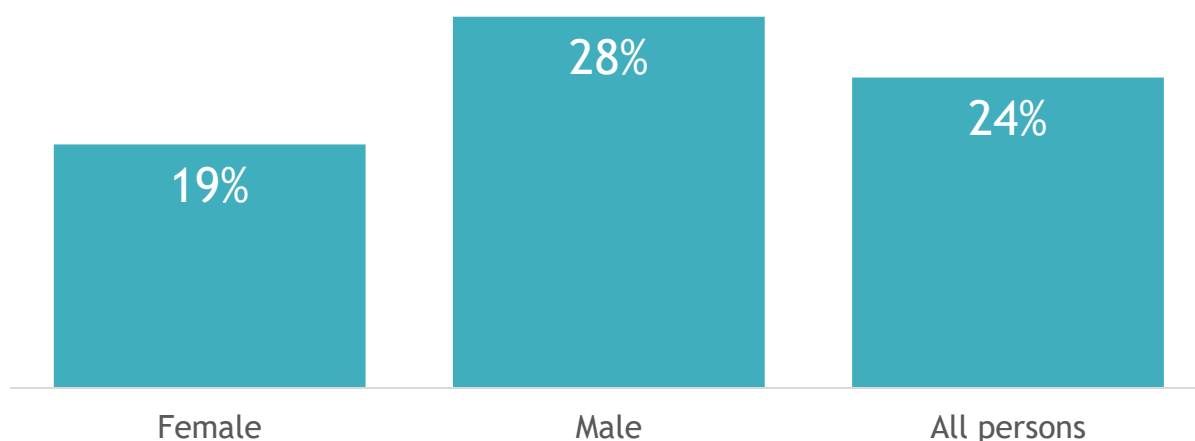
Avoidable Deaths

In 2015, almost a quarter (24 per cent) of deaths in Jersey were from causes considered avoidable (180 out of 760 deaths). The majority of these deaths were among males (63 per cent).

The age-standardised avoidable mortality rate for all persons in Jersey was 198 per 100,000 persons in 2015. This was similar to the rate for the previous year, 2014, of 197 per 100,000 persons.

Males were more likely to die from avoidable causes than females in 2015. More than a quarter (28 per cent) of male deaths were from avoidable causes (113 out of 399 deaths) compared with less than a fifth (19 per cent) of female deaths (67 of 361 deaths), as shown in Figure 1. A similar pattern was seen in the previous year, in 2014, with 30 per cent of males and 22 per cent of female deaths being due to avoidable causes.

Figure 1: Deaths considered avoidable as a proportion of all deaths registered, 2015



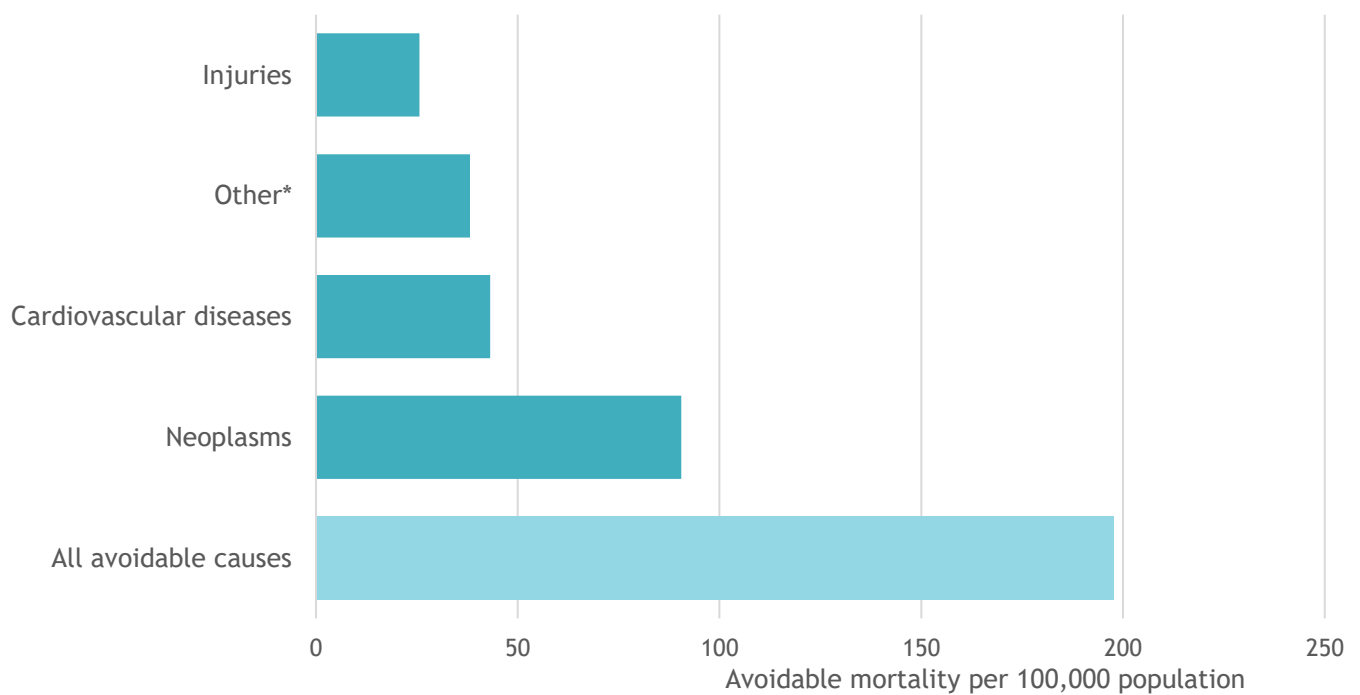
Source: PHSU

The age-standardised mortality rate of males was significantly higher than that of females (257 deaths per 100,000 males compared with 144 per 100,000 females).

Main Causes

For broad cause groups,¹ the leading cause of avoidable deaths was neoplasms (cancers and other non-cancerous tissue growths), with an age-standardised rate of 91 per 100,000 population.

Figure 2: Avoidable mortality rates by broad cause group



Source: PHSU

*The 'other' cause group consists of infections, nutritional, endocrine and metabolic disorders, drug use disorders, neurological disorders, respiratory diseases, digestive disorders, genitourinary disorders and maternal and infant conditions

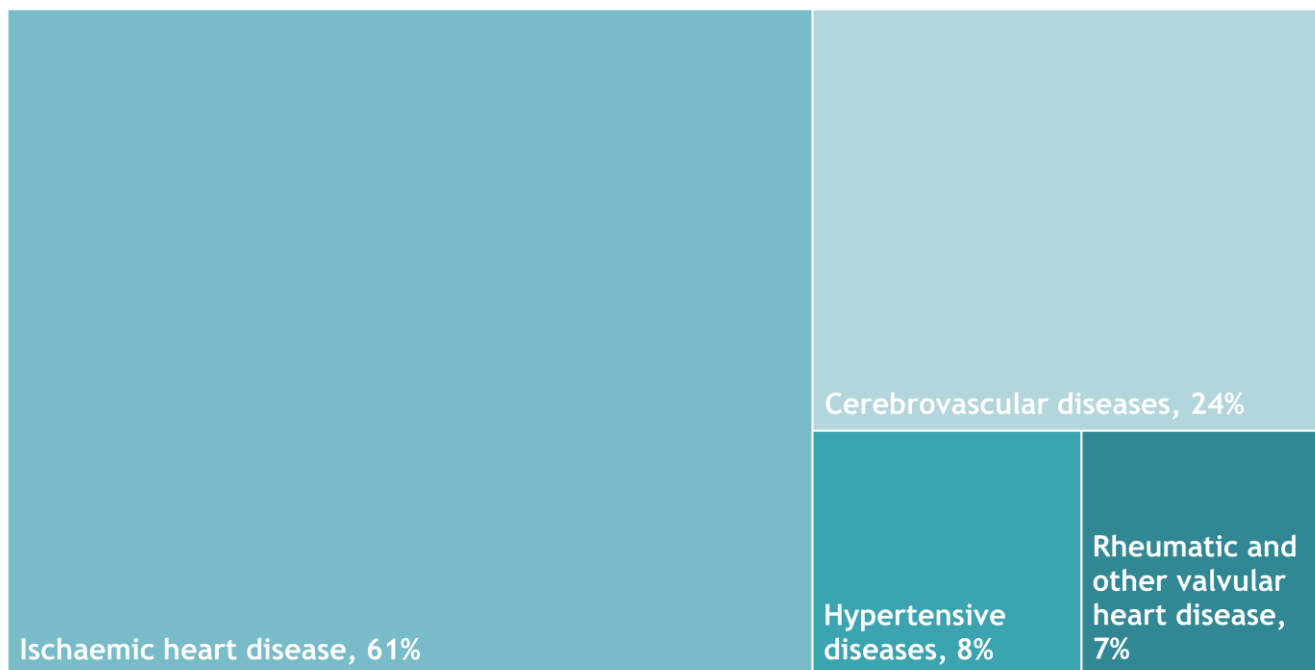
¹ Broad cause groups refer to the highest level of coding within the International Statistical Classification of Diseases, Injuries and Causes of Death (tenth revision, ICD-10) used to code the underlying cause of death.

Amenable Deaths

There were 86 deaths from causes considered amenable to healthcare in 2015 in Jersey, representing an age-standardised mortality rate of 95 per 100,000 population. This was similar to the rate seen in the previous year, 2014, in which 81 deaths were attributed to amenable causes, an age standardised mortality rate of 90 per 100,000 population.

Cardiovascular diseases were responsible for over a third (38 per cent) of deaths due to amenable causes, corresponding to an age standardised rate of 36 per 100,000 population. Breaking this down further, ischaemic heart disease was the main cause of deaths from cardiovascular diseases (Figure 3).

Figure 3: Specific cardiovascular diseases responsible for amenable deaths, 2015



Source: PHSU

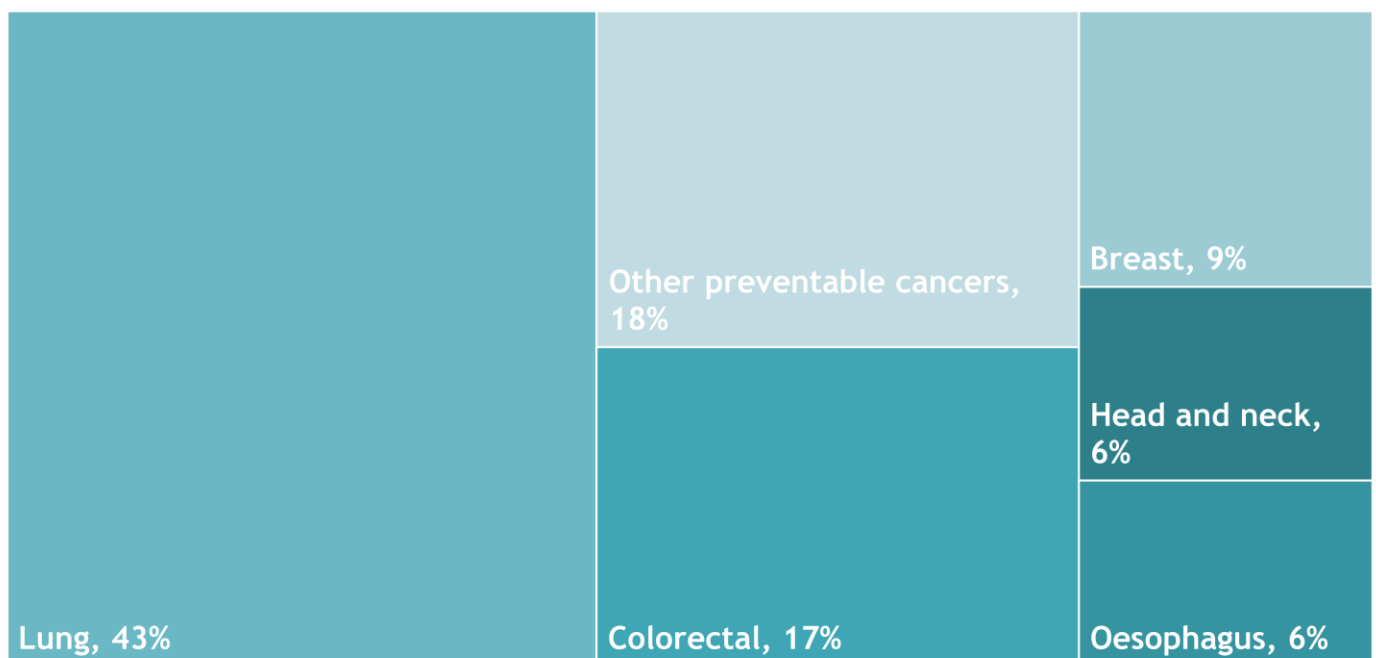
The age-standardised rates for males and females were not significantly different for deaths from causes amenable to healthcare.

Preventable Deaths

There were 155 deaths in 2015 from causes considered preventable in light of wider public health interventions, corresponding to an age-standardised rate of 170 per 100,000 population.

Over half (51 per cent) of deaths from preventable causes were due to neoplasms, corresponding to an age-standardised rate of 89 per 100,000 population.

Figure 4: Specific neoplasms responsible for preventable deaths, 2015



Source: PHSU

Other preventable cancers include cancers of the stomach, liver, skin, cervix and mesothelioma

The age standardised rate for preventable male deaths was significantly higher than that for female deaths (226 per 100,000 male population compared to 119 per 100,000 female population). Rates for males were higher (although not significantly) for neoplasms, respiratory diseases and cardiovascular diseases, whilst the rate for unintentional injuries was significantly higher for males than females.

The number of deaths considered preventable in the previous year, 2014, was 159, giving an age-standardised rate (171 per 100,000) similar to that for 2015.

Comparisons to England and Wales

The latest available data for England and Wales considers those deaths registered in 2014. In order to compare on a like for like basis, deaths occurring in Jersey in 2014 were used for comparisons.

The avoidable mortality rate in Jersey in 2014 was 197 per 100,000 population, a similar rate statistically to that for England (219 per 100,000), but significantly lower than that for Wales (240 per 100,000 population).

A consistent pattern of higher mortality rates for males was seen in all three jurisdictions, as shown in Table 1.

Table 1: Age standardised rates of avoidable mortality, 2014

	Male	Female	All persons
<i>England</i>	273	168	219
<i>Wales</i>	300	184	240
<i>Jersey</i>	216	176	197

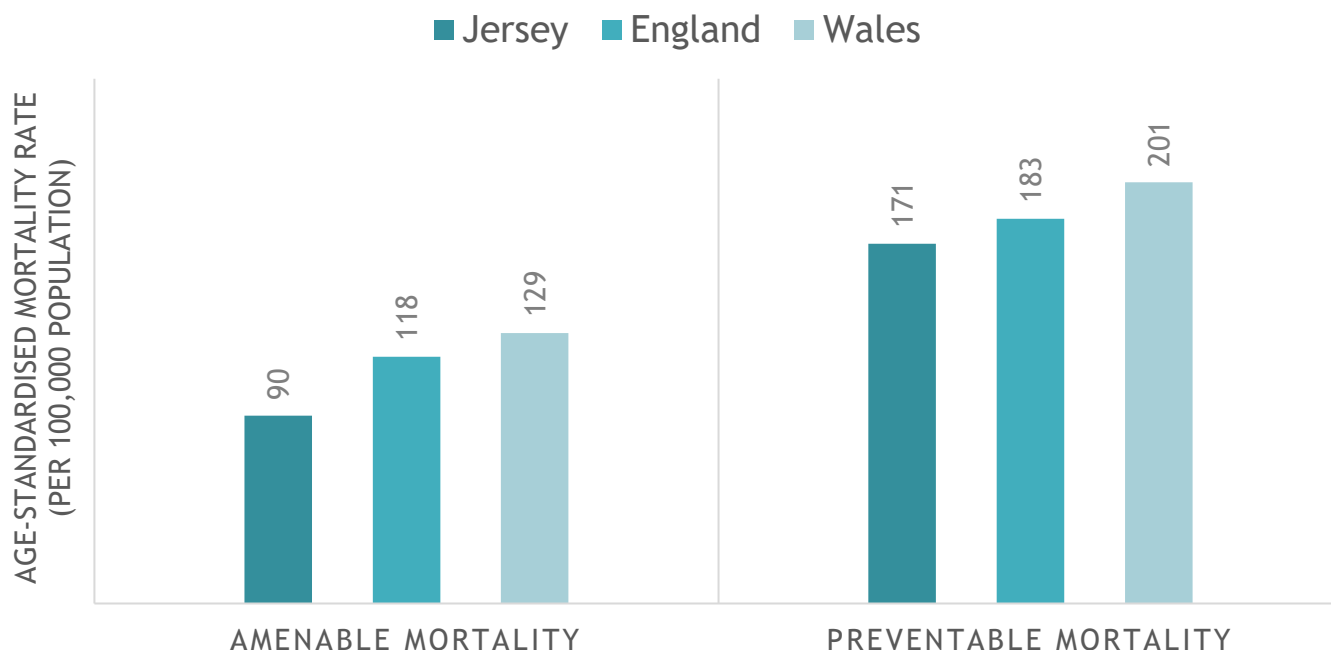
Source: PHSU and ONS

The rate of male avoidable mortality in Jersey was significantly lower than the rates for males in England and Wales. Conversely, the female rate of avoidable mortality in Jersey was similar to the rate in England and Wales in 2014.

Neoplasms were the leading contributor to avoidable deaths, causing 35 per cent of avoidable deaths in England, 36 per cent in Wales and 44 per cent of deaths in Jersey in 2014. The avoidable mortality rate for neoplasms was found to be similar in Jersey to those for England and Wales (87 in Jersey, 78 in England and 85 in Wales, per 100,000 population).

Figure 5 shows the rates for amenable and preventable mortality for Jersey, England and Wales in 2014.

Figure 5: Amenable and preventable mortality rates per 100,000 population 2014, by jurisdiction



Source: PHSU and ONS

The amenable mortality rate in Jersey was significantly lower than that for England and Wales. The main cause of amenable deaths in all areas was cardiovascular disease; the Jersey rate (38 per 100,000) was statistically similar to that for England (52 per 100,000) but significantly lower than that for Wales in 2014 (59 per 100,000).

Unlike amenable mortality, preventable mortality rates were found to be statistically similar in Jersey to those for England and Wales in 2014 (see Figure 5). Neoplasms were the leading cause of preventable deaths in all areas in 2014. This cause group was responsible for two fifths of all deaths in England (40 per cent) and Wales (41 per cent), whereas in Jersey it was responsible for almost half (48 per cent) of preventable deaths. The preventable mortality rate for neoplasms was similar in Jersey to the other jurisdictions (82 deaths per 100,000 population compared with 81 per 100,000 in Wales and 73 per 100,000 in England). Proportions of deaths for cardiovascular diseases and respiratory diseases were lower in Jersey than in England and Wales, whilst a similar proportion of deaths due to injuries were seen in both jurisdictions.

Comparisons to English Regions

The avoidable mortality rate in Jersey was similar to rates in the South of England, the East of England, London and the East Midlands. The rate for Jersey was significantly lower than those in Wales and the North of England (Figure 6).

Figure 6: Age-standardised avoidable mortality rates for all persons, 2014



Source: PHSU and ONS

Children and Young People

In 2015, there were fewer than five deaths of children and young people in Jersey considered avoidable (applying the ONS definitions) through good quality healthcare and wider public health interventions. This latest figure was similar to that seen for 2014, where fewer than five deaths occurred.

Burden of Avoidable deaths

Analysis of avoidable mortality by considering standardised years of life lost (SYLL) provides a measure of the potential number of years lost when a person dies prematurely from any cause.

The latest data for Jersey shows that in 2015 there were 5,902 years of life lost per 100,000 males who died from an avoidable cause, compared with 3,016 years per 100,000 female deaths in 2015. To put these figures into context, on average, each person who died from an avoidable cause lost 23 potential years of life. On average, male deaths lost 25 years of potential life, while female deaths lost 22 years of life due to avoidable causes.

Comparing this latest data to the previous year, 2014, shows the rate of male years of life lost was similar, at 6,063 years per 100,000 males who died from avoidable causes, while the latest figure for females was significantly less than the 2014 rate (3,938 per 100,000 female deaths).

Using 2014 data to compare to England and Wales, rates for male and female years of life lost in Jersey were similar to those in England and Wales (Table 2).

Table 2: Standardised years of life lost due to causes considered avoidable, 2014, per 100,000 population

	Male	Female
<i>England & Wales</i>	5,977	3,951
<i>Jersey</i>	6,063	3,938

Source: PHSU and ONS

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. 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

This is the first time this report has been published by the Public Health Statistics Unit; as such there has been a short delay between the data becoming available for 2015 and the reporting of the data.

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

Methods

Statistics on avoidable mortality follow the methodology used by the Office for National Statistics.² A consultation was conducted in 2015 in order to update and revise the methodology. As a result, the list of conditions considered to be avoidable has been updated and a new indicator of avoidable mortality in children and young people was created. Previously published data have not been rebased according to these new definitions, however, as not all causes may have been previously considered preventable.

Age-standardised rates have been calculated using the number of potentially avoidable 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.

² Office for National Statistics, [Revised definition of avoidable mortality and new definition for Children and Young People](#), May 2016, available from www.ons.gov.uk

Potential years of life lost (PYLL) is a measure of the potential number of years lost when people die prematurely from any cause. The basic concept underpinning PYLL is that deaths at younger ages are weighted more heavily than those at older ages. To enhance comparability between areas and the sexes, the PYLLs have been standardised using the 2013 European Standard Population. It is therefore referred to as standardised years of life lost (SYLL) for clarity. SYLL rates represent the potential years of life lost if the population of Jersey had the same population structure as the 2013 European standard population. The rates are presented as years of life lost per 100,000 population.

The average years of life lost (AYLL) has been calculated by summing up the number of deaths in each age group, weighted by the corresponding remaining life expectancy and then dividing the result by the total number of deaths across all age groups. This gives a measure of the potential number of years lost when an individual dies prematurely from any cause.

Both the PYLL and AYLL have used the age-specific life expectancy calculated using life tables for the corresponding calendar year. This approach is a change to methodology used previously by the Public Health Statistics Unit, where an arbitrary age of 75 years was used to estimate the number of years lost due to premature deaths.

Confidence Intervals (CIs) 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 'increase', 'decrease', 'higher' or 'lower'.

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 and used with caution.

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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