Strategic Policy, Planning and Performance Report *Public Health Intelligence*



Subject:	Jersey Mortality Statistics 2022
Date of report:	28 September 2023

Introduction

The numbers of deaths occurring in calendar year 2022¹, and their distribution by age, sex, and cause of death are presented. Age-standardised mortality rates (ASMRs) have been calculated to enable comparisons across time and between jurisdictions. Information on premature, avoidable (treatable and preventable) and excess winter mortality estimates are also included.

Information on the data sources and processing are given in the notes section of this report.

Population estimates recently published by Statistics Jersey (June 2023)² are used to calculate rates in this report. As such, rates presented in this report may differ slightly to those presented in previous publications, which will have used older population estimates.

Summary

In 2022:

- there were 920 Jersey residents recorded as having died, comprising 450 deaths of males and 470 deaths of females³; this was 100 deaths higher than the number recorded 2021
- the age-standardised mortality rate (ASMR) for Jersey was 901 per 100,000 population, statistically similar to the rate in 2021, and significantly lower than the overall ASMR for England in 2021 (1,008 per 100,000)⁴
- the average (mean) age at death for Jersey residents was 79 years; an increase of 12 years since 1960 (67 years)
- neoplasms (cancers) and diseases of the circulatory system have remained as the prominent causes of death⁵ since 2007, and in 2022 these two causes accounted for 54% of all deaths
- deaths where COVID-19 was recorded as the underlying cause of death accounted for 4% of all deaths in Jersey; similar to in England where provisional data for 2022 suggests 4% of deaths were due to COVID-19⁶
- the proportion of deaths attributed to Dementia and Alzheimer's Disease was 10% in 2022, similar to the proportion recorded in 2021
- there were around 130 deaths of individuals of working age (aged 16-64 years), of whom around three-fifths (59%) were male
- there were 290 premature deaths (occurring before 75 years of age); accounting for 32% of deaths in 2022. 59% of these premature deaths were male
- Around one in five deaths in Jersey were from causes considered avoidable (170 deaths in total, 22% of male deaths and 15% of female deaths); the main causes of avoidable deaths were avoidable cancers, diseases of the circulatory system and diseases of the respiratory system

¹ See notes for definition of deaths included in this report.

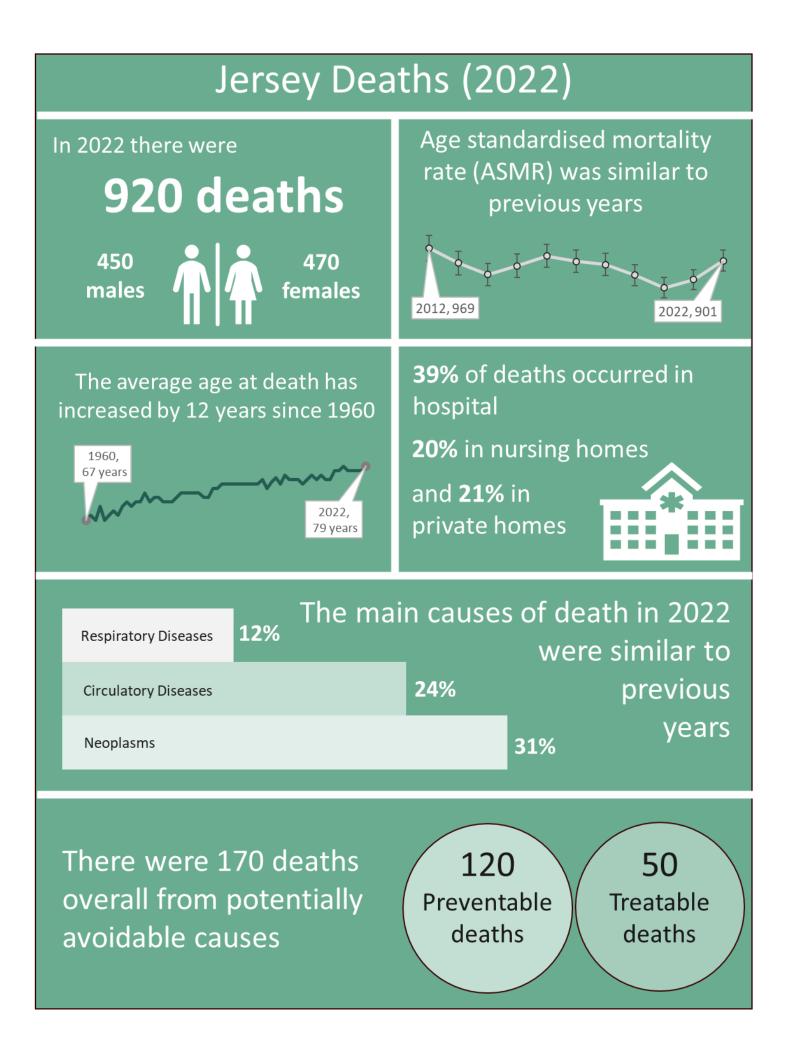
² <u>Population And Migration Statistics</u> – Statistics Jersey, June 2023

³ See notes section for details of how death counts are rounded.

⁴ Mortality profile commentary: March 2023 - GOV.UK (www.gov.uk)

⁵ See notes for full description of cause of death coding procedures and categorisations.

⁶Death registration summary statistics, England and Wales - Office for National Statistics.



Deaths

In 2022, there were a total of 920 deaths of Jersey residents, which was an increase of 12% compared with 2021 (820 deaths)⁷.

The number of deaths fluctuates from year to year. The number of deaths reached its lowest point since 2000 in 2014 (700 deaths) but numbers have increased since then.

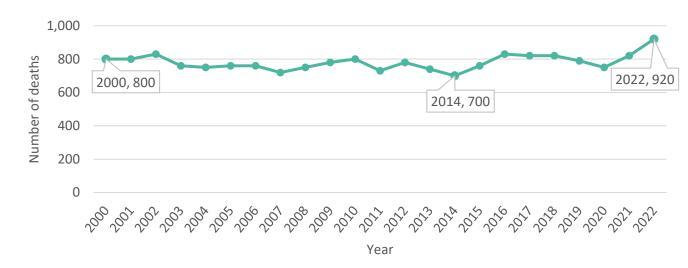
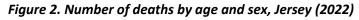


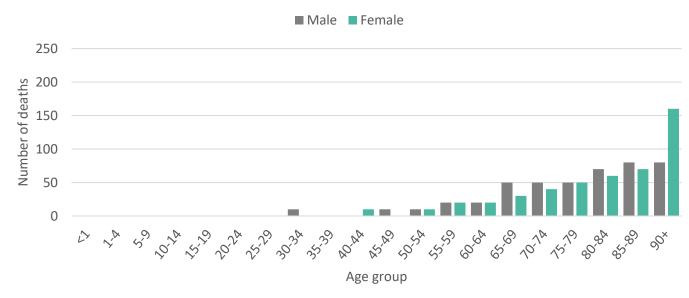
Figure 1. Annual number of deaths, Jersey (2000 to 2022)

Numbers of deaths by age and sex

In 2022, there were 450 deaths of males and 470 deaths of females. In 2022, there were around 50 more male deaths in 2022, and 50 more female deaths than in 2021.

The number of deaths of males was similar or greater than the number of deaths of females in each age group from 50-54, up to and including, 85-89 years of age; there were a greater number of deaths of females in the 90 years and over age group (Figure 2).⁸





 $^{^{\}rm 7}$ See notes for definition of deaths included in this report.

⁸ Caution is needed when looking at numbers of deaths across age groups and sex because of the different population sizes.

Infant and child deaths

- there have been fewer than 5 recorded deaths annually for children aged under 1 year of age⁹; this has been consistent since 2013
- as in the previous 10 years, in 2022 there had been fewer than 5 deaths annually in children aged between 1 and 15 years

Working age deaths (aged 16-64 years of age)

- in 2022, there were 130 deaths among individuals between the ages of 16 and 64, which comprised 14% of the total number of deaths, of these deaths, 59% were male.
- since 2007, the number of deaths amongst those of working age has ranged between a low of 110 (in 2019) and a high of 160 (in 2009 and 2012)

Premature deaths (under 75 years of age)

- there were 290 deaths of Jersey residents in 2022 before 75 years of age ('premature deaths'). Premature deaths accounted for 32% of deaths in 2022; 59% of these deaths were male
- cancer and heart disease were the leading causes of premature death

Deaths of people aged 75 or over

• there were 630 deaths of people aged 75 or over in 2022, accounting for 68% of all deaths; this proportion has risen from 62% of all deaths recorded in 2007

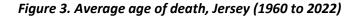
Deaths of people aged 85 or over (old age deaths)

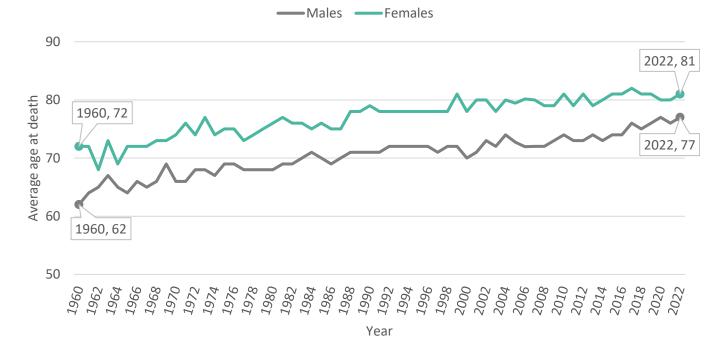
• there were 400 deaths of people aged 85 or over in 2022, accounting for 43% of all deaths; 58% of deaths in this age group were female, largely due to there being more females in this age category

Average age of deaths

- the average (mean) age at death for Jersey residents was 79 years; an increase of 12 years since 1960 (67 years)
- the average (mean) age at death for women in 2022 was 81 years; the mean for men was 77 years
- the mean age at death for women has increased by 9 years (Figure 3) between 1960 and 2022 (from 72 to 81 years), and has increased by 15 years for men over the same time-period (62 to 77 years)

⁹ Small numbers are not disclosed to ensure that information does not identify an individual.



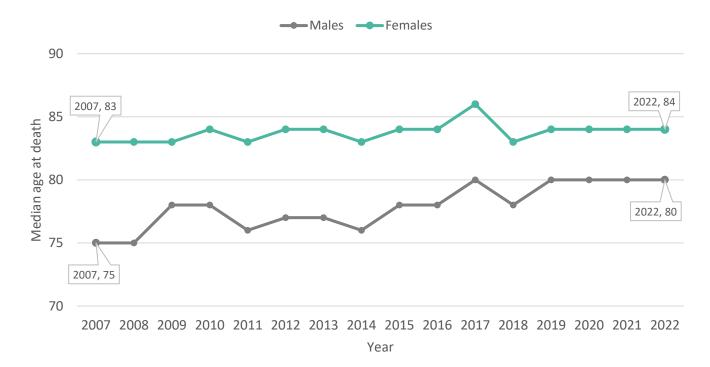


Median age of deaths

The median average age of death is the age at which half of deaths occurred below, and half occurred above.

- the median age of deaths in 2022 was 80 years for males, and has risen by around 4 years over the last decade
- the median age of deaths in 2022 was 84 years for females (Figure 4), and has changed very little over the last decade

Figure 4: Median age at death, Jersey (2010–2022)



Crude mortality rate

The crude mortality rate refers to the number of deaths during a particular year, expressed per 1,000 of the resident population¹⁰. Note that the crude mortality rate doesn't adjust for the differences in age structure of the population over time.

- the crude mortality rate in 2022 was 8.9 per 1,000 population
- crude mortality has generally decreased over time, from a peak of 14.1 per 1,000 in 1970

Figure 5. Crude mortality rate (per 1,000 per population), Jersey (1950 to 2022)



Age-standardised mortality rate

Age-standardised mortality rates (ASMR) allow comparisons to be made across jurisdictions and through time, without being affected by differences in the underlying age and sex structures of the population.

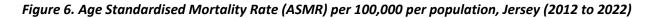
The ASMR is calculated as a weighted average of the age-specific mortality rates per 100,000 persons, where the weights are the proportions of persons in the corresponding age groups of the European standard population (see notes for further details).

In 2022:

- the ASMR for Jersey was 901 per 100,000 (Figure 6); the ASMR for males (1,050 per 100,000) was significantly higher than that for females (787, Figure 7)
- the ASMR in 2022 was statistically similar to every year since 2012, except 2020 when ASMR was slightly lower (754 per 100,000)
- comparison with the UK shows that Jersey had a lower overall ASMR rate to the latest available data¹¹ from England, Wales, Northern Ireland and Scotland (Table 1)
- both male and female ASMR were slightly lower than England overall, but were similar to some of the regions such as the South West (Table 1)

¹⁰ Population And Migration Statistics – Statistics Jersey, June 2023

¹¹ Deaths registered in England and Wales: 2021



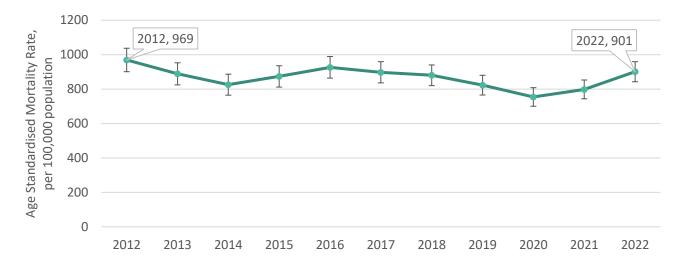
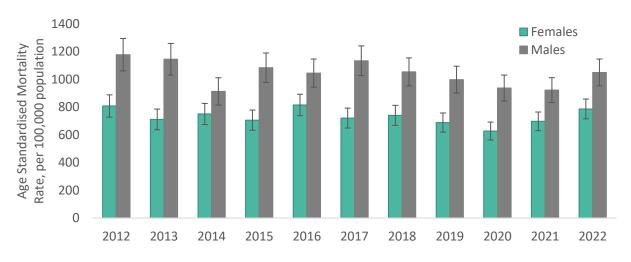


Table 1. Age-standardised mortality rates overall per 100,000 population, by sex, for Jersey (2022), England and regions (2021)¹²

	Males	Females	Persons
JERSEY	1,050	787	901
ENGLAND	1,190	860	1,008
NORTH EAST	1,301	971	1,121
NORTH WEST	1,314	954	1,116
YORKSHIRE AND THE HUMBER	1,229	908	1,053
EAST MIDLANDS	1,223	892	1,042
WEST MIDLANDS	1,249	895	1,055
EAST OF ENGLAND	1,137	831	968
LONDON	1,191	822	984
SOUTH EAST	1.107	792	932
SOUTH WEST	1,079	783	917
WALES	1,272	935	1,087
SCOTLAND	1,375	1,024	1,181
NORTHERN IRELAND	1,223	901	1,044

The ASMR for females is consistently lower than males in Jersey (Figure 7).





¹² Deaths registered by area of usual residence, UK - Office for National Statistics (ons.gov.uk)

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Place of death

Place of death is recorded when a death is registered.

Of the registered deaths in Jersey:

- in 2022, a little under four in ten (39%) occurred in a hospital; one in five died in a private home (21%); one in five died in a nursing home (20%), one in eight in Jersey Hospice (12%) and one in twelve in a placement for residential or personal care (7%) (Figure 8)
- Since 2007, the proportion of deaths in hospital has fallen over recent years, from 55% of all deaths in 2007 to 39% in the latest year (Figure 9). Deaths at home and in care homes have become more common, and deaths in hospices have become slightly more common

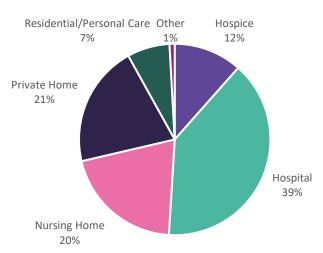
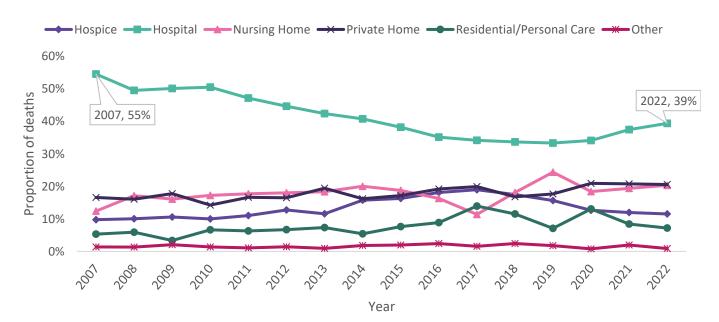


Figure 8. Location of Jersey resident deaths (2022)

Two-thirds (67%) of the people who died in care homes were females. Amongst people who died in hospices, there was a slightly higher proportion who were males (56%). In hospitals, there was a similar proportion of males (53%) and females (47%). Amongst people who died at home, around three-in five (59%) were women.

Figure 9: Location of on-Island deaths, Jersey (2007 to 2022)



Cause of death (by ICD Code Chapter)

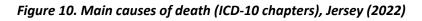
The International Statistical Classification of Diseases and Related Health Problems (ICD) is used by Public Health to classify causes of death. This international standard helps in maintaining comparability of statistics across different countries and over time.

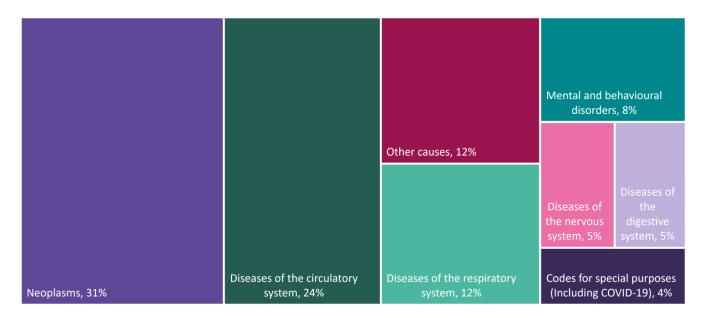
Classification based on ICD chapters is a popular grouping method as they are arranged into broad categories according to the type of disease, the body system affected by the disease or the circumstances causing death¹³.

Note that at time of publication, some deaths were awaiting a coroner's verdict or cause of death coding was incomplete; these uncoded deaths are not included in the cause of death analysis in this report.

For the coded deaths:

most deaths in 2022 were attributed to neoplasms (cancers), diseases of the circulatory system (cardiovascular diseases including stroke), respiratory disease (including pneumonia) and Mental and behavioural disorders (including dementia and Alzheimer's). Together these four causes accounted for four in five (74%) of all deaths in 2022 (Figure 10)





*(Percentages may not add up to 100% due to rounding)

- the main causes of death have remained the same since 2007, (neoplasms and diseases of the circulatory system). These two causes accounted for 54% of all deaths in 2022. Neoplasms (cancers) remain the main cause of death in Jersey (31%), having exceeded the number of deaths from circulatory diseases (24%) for the first time in 2010 (Figure 11)¹⁴
- diseases of the respiratory system (12%) were the third main cause of death in 2022¹⁵; mental and behavioural disorders (8%) were the fourth main cause of death in 2022¹⁶

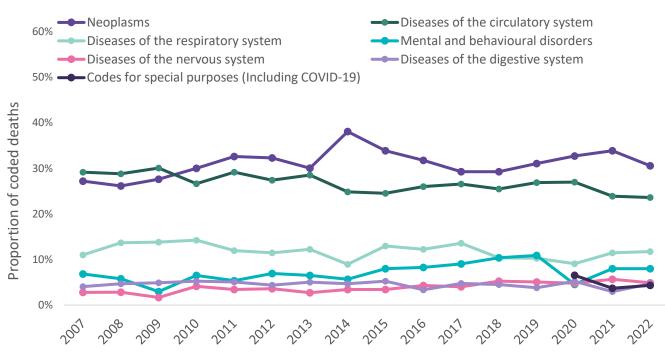
¹³ See notes section for a table of ICD-10 chapters, further details found at <u>icd.who.int</u>

¹⁴ Diseases of the circulatory system include Hypertensive, Ischemic and Pulmonary heart diseases, amongst others

¹⁵ Diseases of the Respiratory system include Acute upper respiratory infections, Influenza and pneumonia, amongst others

¹⁶ Mental and Behavioural disorders include deaths due to dementia and Alzheimer's, amongst others

Figure 11. Proportion of deaths caused by the four main disease groups, Jersey (2010-2022)



Causes of working age deaths (by ICD code chapter)

Working age deaths are those occurring aged between 16 and 64 years.

- the main cause of death at working age in Jersey was neoplasms (cancer), accounting for 44% of deaths; diseases of the circulatory system accounted for 18% of the age group (Table 2)
- •
- neoplasms formed a higher proportion of deaths for those of working age (44%) than for those aged 75 years or over (24%, Table 3)

Table 2. Main causes of working age deaths (aged 16-64 years), Jersey (2022)

Cause of death	Proportion (%)
Neoplasms	44
Diseases of the circulatory system	18
Diseases of the respiratory system	9
Diseases of the digestive system	8
External causes of morbidity and mortality	7
Other	15

Causes of deaths aged 75 and over (by ICD code chapter)

the main cause of death for people aged 75 and over was Diseases of the circulatory system (including Heart attack and stroke), accounting for 25% of deaths for this age group; Neoplasms (cancers), accounted for 24% (Table 3)

Cause of death	Proportion (%)
Diseases of the Circulatory system	25
Neoplasms	24
Diseases of the respiratory system	12
Mental and behavioural disorders	11
Diseases of the nervous system	6
Other	21

Table 3. Main causes of deaths (aged 75 years and over), Jersey (2022)

Leading causes of death - WHO definitions

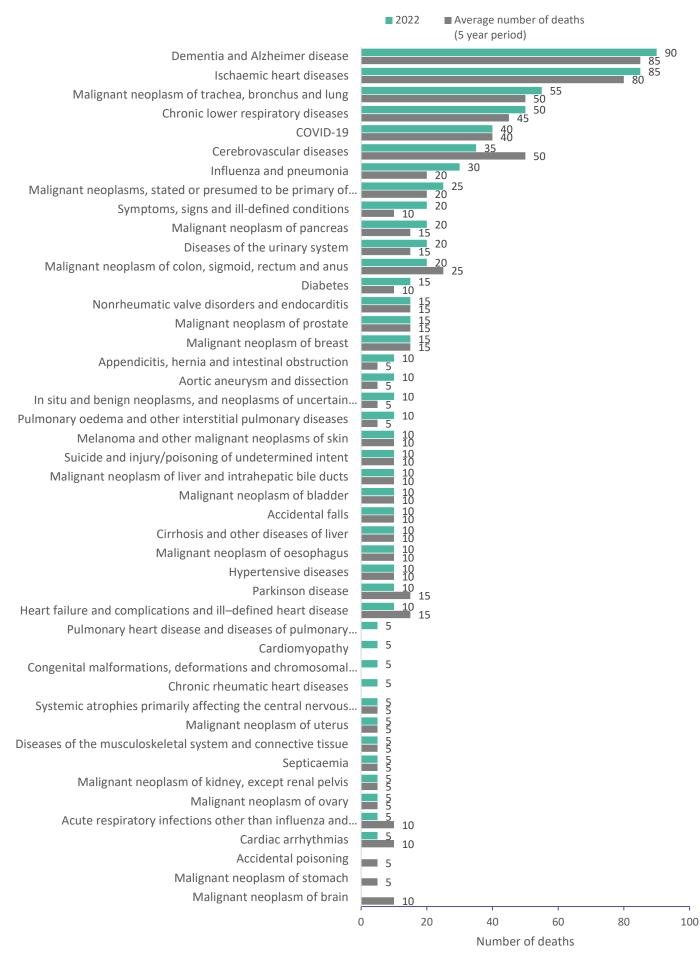
The "Leading cause of death" groupings¹⁷ are based on a list developed by the World Health Organisation (WHO). The groupings are more specific than the overall grouping by ICD code chapter (shown in Figures 10 and 11). For example, in the leading cause groupings; neoplasms are split into different types of cancer, such as lung cancer or breast cancer.

These more specific groupings can be more epidemiologically useful than the broad chapter code groupings; they allow Public Health to identify specific causes of death, to help understand the major health issues amongst the population, and understand where preventative efforts, interventions, or healthcare resources should be focussed.

- the top 4 leading causes of death accounted for nearly one in three of all deaths registered in Jersey in 2022 (31%, Figure 12)
- Dementia and Alzheimer's disease (90) and ischaemic heart disease (also known as coronary heart disease) (90) were the leading causes of deaths in 2022. While the number of deaths from these causes were higher when compared to the five-year average (2017-2021), the differences were not statistically significant
- The third leading cause of death was malignant neoplasm of trachea, bronchus and lung, with around 55 people dying from lung cancers in 2022
- Coronavirus (COVID-19) was in the top six leading causes of death, and was responsible for 4% of all deaths (more details in the "COVID-19 deaths" section)
- In 2007 more than twice the number of people died from Ischaemic heart disease than from dementia (80 and 40 deaths respectively). Over the 15 years, Ischaemic heart disease deaths have decreased from 12% of all deaths in 2007 to 9% of all deaths in 2022, while deaths due to dementia have increased from 6% of all deaths in 2007 to 10% of all deaths in 2022

¹⁷ Leading causes of death in England and Wales (revised 2016) - Office for National Statistics (ons.gov.uk)

Figure 12. Leading causes of death Jersey: 2022 and 5-year average number of deaths (2017 to 2021)



In England and Wales the leading cause of death in 2022 was dementia and Alzheimer's disease¹⁸, accounting for 11% of all deaths; this compares to 12% of deaths in Jersey.

The other leading causes that made up the top five causes of death in England and Wales were ischaemic heart diseases (10%), chronic lower respiratory diseases, cerebrovascular diseases and malignant neoplasms of trachea, bronchus and lung (all 5% respectively).

Provisionally, coronavirus (COVID-19) was the sixth leading cause of death England and Wales in 2022 (4% of all deaths), having been the leading cause of death in 2021 (12% of all deaths).

Leading causes of death by sex

- the leading cause of death among males in Jersey in 2022 was ischaemic heart diseases (50 deaths, 11% of all male deaths), and among females was dementia and Alzheimer's (60 deaths, 13% of all female deaths, Table 4)
- there has been an increase in the number of deaths due to dementia and Alzheimer's disease over the last 15 years, accounting for 4% of deaths in 2007 and 7% of deaths in 2022 overall (more detail in the "Dementia and Alzheimer's deaths" section)
- for females, cerebrovascular disease (including stroke) fell in between 2007 to 2022, whilst dementia and Alzheimer's disease climbed from third to first place; accounting for 8% of female deaths in 2007 compared to 13% in 2022

Table 4. Leading cause of deaths by sex, Jersey (2022)

Cause of death	Female%	Male%	Total%
Dementia and Alzheimer's disease	13	7	10
Ischaemic heart diseases	7	11	9
Malignant neoplasm of trachea, bronchus and lung	5	7	6
Chronic lower respiratory disease	5	6	6
Cerebrovascular diseases	4	4	4
COVID-19	6	3	4

 In England and Wales the leading cause of death amongst males in 2022 was also ischaemic heart diseases (13% of all male deaths registered), and among females was also dementia and Alzheimer's disease, 15% of all female deaths registered)¹⁸, similar to Jersey

Leading causes of death among individual age groups

The predominant causes of death vary by age:

- for people aged 50-64, the leading cause of death was malignant neoplasm of the trachea, bronchus and lung
- for people aged 65-74 the leading causes were ischaemic heart disease, malignant neoplasm of the trachea, bronchus and lung, and chronic lower respiratory disease. Cerebrovascular disease (including stroke) has fallen from third place in 2021 to tenth place in 2022
- Dementia and Alzheimer's disease and ischaemic heart disease were the leading cause of death for people aged 75-89; Dementia and Alzheimer's disease was also the leading cause for people aged 90 years and over

¹⁸ Death registration summary statistics, England and Wales - Office for National Statistics

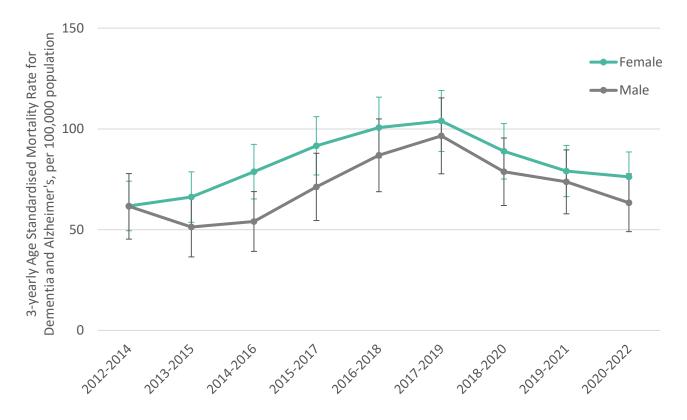
Dementia and Alzheimer's deaths

Dementia and Alzheimer's disease was the leading cause of death in 2022. Dementia remains the only major cause of death without a treatment to prevent, slow or stop disease progression¹⁹.

The latest figures also revealed that:

- there were around 90 deaths recorded with an underlying cause of dementia and Alzheimer's disease (all subtypes) in 2022; the proportion of deaths due to this cause have increased from 3% in 2009 to 13% in 2019; the proportion of deaths due to dementia and Alzheimer's in 2022 was 10%²⁰
- ischaemic heart disease, itself a risk factor for dementia¹⁹, was the second leading cause of death
- Dementia and Alzheimer's disease was the leading cause of death among females, 13% of all female deaths; a higher proportion of the deaths with underlying cause of dementia and Alzheimer's disease were female (68%) compared to male (32%)
- the 3-yearly age-standardised rate (ASMR) of deaths from Dementia and Alzheimer's disease in the 2020-2022 period was 72 per 100,000 persons. The ASMR for dementia amongst females compared to males are statistically similar (Figure 13), showing that the demographic composition of the elderly population (more females than males) may play a role in the overall higher proportion of females dying due to dementia compared to males





 in England and Wales, the leading cause of death in 2022 was dementia and Alzheimer's disease accounting for 11% of all deaths²¹; the age-standardised rate of deaths from Dementia and Alzheimer's was 106 per 100,000 persons in 2021²²

¹⁹ www.nhs.uk Alzheimer's disease Overview

²⁰ Updates to the coding framework used to code cause of death took place in 2011 and 2014, which may partially (but not fully) contribute to the increase in the number of deaths with an underlying cause of dementia.

²¹ Death registration summary statistics, England and Wales - Office for National Statistics

²² Public health profiles - OHID (phe.org.uk)

COVID-19 deaths

COVID-19 was mentioned on around 65 death certificates for deaths in Jersey in 2022 (deaths <u>involving</u> COVID-19), with around 40 being classified as COVID-19 being the underlying cause of death (deaths <u>due</u> to COVID-19).

In 2022, deaths where COVID-19 was recorded as the underlying cause of death accounted for 4% of all deaths in Jersey, similar to provisional data for England and Wales $(4\%)^{23}$.

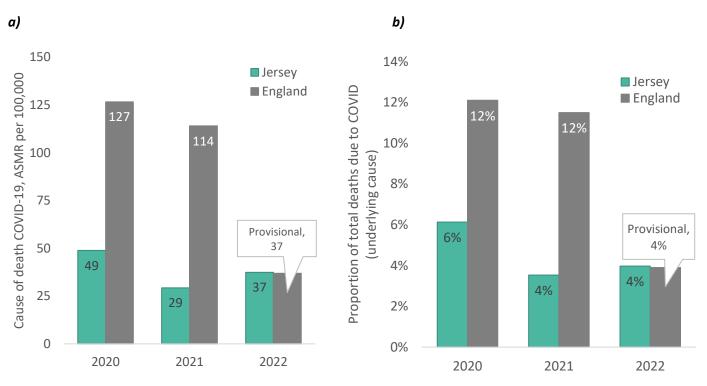
For deaths in Jersey with COVID-19 as the underlying cause of the death in 2022:

- the age-standardised mortality rate (ASMR) for COVID-19 in Jersey was 37 deaths per 100,000 people
- three quarters (76%) of COVID-19 deaths were among people aged 80 years and over
- two thirds (68%) of COVID-19 deaths were females and one third (32%) were males

During 2020 and 2021, both the age standardised mortality rate (ASMR) and the proportion of overall deaths due to COVID-19 were higher in England, than Jersey (Figure 14). Provisional data for 2022 suggests the age-standardised mortality rate (ASMR) in England in 2022 dropped from over 100 in 2020 and 2021 to 36.9 per 100,000 in 2022²⁴, similar to that for Jersey (37 per 100,000).

In England and Wales Coronavirus (COVID-19) was not in the top five leading causes of death for the first time since the beginning of the coronavirus pandemic²⁵.

Figure 14. Deaths due to COVID-19 as an underlying cause in Jersey and England, 2020-2022: a) Age standardised mortality rate (ASMR), b) Proportion of total deaths due to COVID-19



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²³ Death registration summary statistics, England and Wales - Office for National Statistics

²⁴ Monthly mortality analysis, England and Wales - Office for National Statistics (ons.gov.uk)

²⁵ Death registration summary statistics, England and Wales - Office for National Statistics

Deaths by suicide

Due to a number of outstanding inquests, comprehensive information on deaths by suicide is only available up to 2021. Deaths are included here where the cause of death was recorded as 'intentional self-harm' or 'undetermined intent'. Figure 18 gives the number of suicides by year in Jersey since 2007.

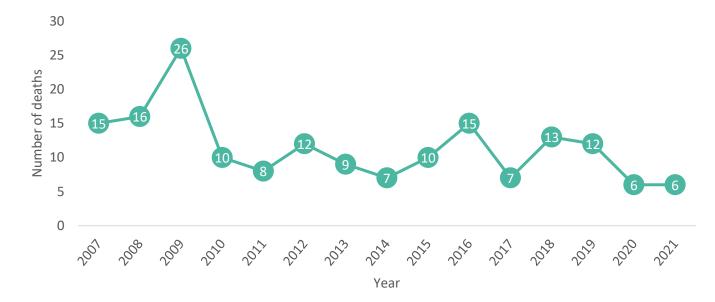
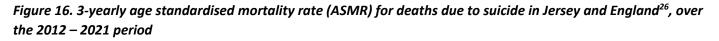
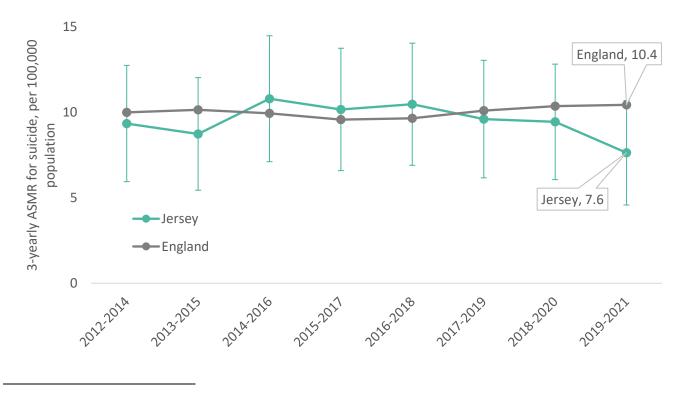


Figure 15. Number of deaths due to suicide in Jersey (2007 to 2021)

Over the 2019-2021 period, there was an age standardised suicide death rate of 7.6 deaths per 100,000 people in Jersey, statistically similar to the rate over the past decade (Figure 16).

In England over the 2019-2021 period the ASMR for suicide was 10.4 deaths per 100,000 people (Figure 16). Over the last decade, ASMR for suicide have been statistically similar in Jersey to England. Note the wide confidence intervals for Jersey rates, due to the small number of deaths used in the calculation compared to England.





²⁶ fingertips.phe.org.uk Suicide rate (persons)

Avoidable, Preventable and Treatable deaths

Avoidable mortality is an indicator based on the concept that premature deaths from certain conditions should be rare and ideally should not occur in the presence of appropriate public health interventions (preventable deaths) or timely and effective healthcare (treatable deaths).

While a particular condition may be considered avoidable, not every death from that condition could, in practice, 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 in the definition of avoidable mortality. Therefore, a degree of caution is recommended when interpreting the data.

Calculating avoidable mortality by the latest available definition²⁷ means our statistics are internationally comparable, as well as comparable between local administrations and over time at national and subnational level.

Definitions

The report presents figures for Jersey on the deaths of those under 75 years due to causes that are considered avoidable. The method used is that of the international avoidable mortality definition, created by an Organisation for Economic Co-operation and Development (OECD) working group²⁷. This methodology is updated regularly, hence the historic rates reported in this report may differ slightly from those in previous publications.

Avoidable mortality

Avoidable deaths include all deaths defined as **either preventable or treatable**, as described below.

In cases when there is both a treatable and preventable element to the death (e.g. ischaemic heart disease, stroke, diabetes), the deaths are counted as half preventable and half treatable, and hence only once in the overall avoidable total, to avoid double counting the same cause of death.

Treatable mortality:

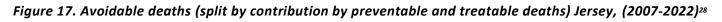
A death is considered treatable if the individual is aged under 75 years, and the cause of death could be mainly avoided through timely and effective health care interventions, including secondary prevention and treatment (i.e., after the onset of diseases, to reduce case-fatality). For example, deaths from asthma could be prevented by better management of the condition including personal asthma plans for patients, timely reviews of asthma care, and the prescription of more appropriate drugs.

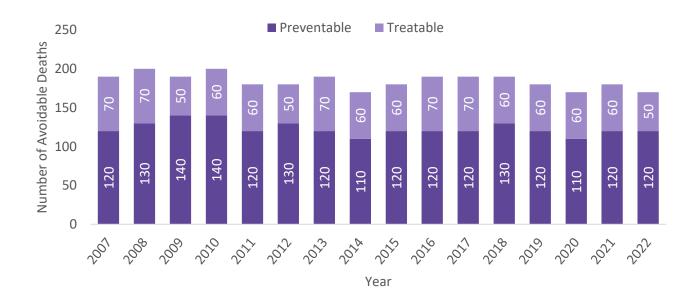
Preventable mortality:

A death is considered preventable if the individual is aged under 75 years, and 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 prevented by public health interventions in the broadest sense. For example, alcohol related deaths may be prevented by use of evidence-based prevention strategies to inhibit excessive alcohol use and related harms in a community.

²⁷ Avoidable mortality, OECD Eurostat List

In 2022, just under one in five (18%) deaths in Jersey were from causes considered avoidable (170 deaths overall, Figure 17). Male deaths comprised 59% of these deaths.

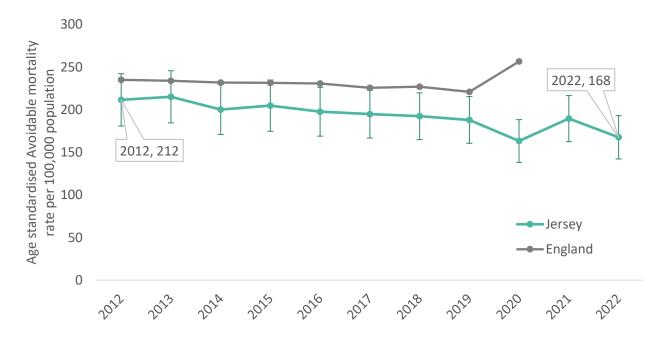




The age-standardised avoidable mortality rate (ASMR) per 100,000 population in Jersey was 168 in 2022. The rate has remained statistically similar since 2012 (Figure 18).

Since 2018, the avoidable mortality rate has typically been lower in Jersey than in England²⁹ (2020 is the latest data available for comparison at time of publication). Across the devolved nations of the UK, Scotland had the highest avoidable mortality rate at 336 deaths per 100,000 population whilst Wales and England had lower rates at 257 deaths per 100,000 population.

Figure 18. Age-standardised avoidable mortality rates by persons, Jersey (2012 to 2022)



²⁸ Numbers may not add to 100% because of rounding

²⁹ Avoidable mortality in Great Britain - Office for National Statistics (ons.gov.uk)

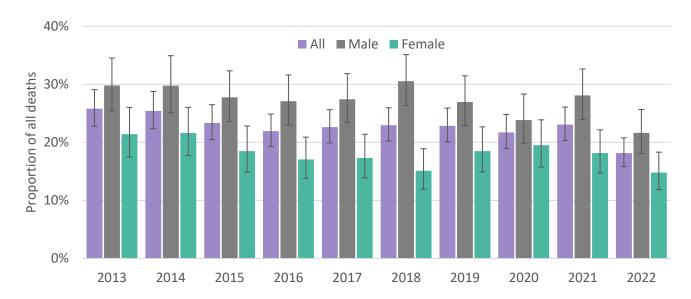
Jersey Mortality Statistics

Avoidable mortality by sex

In 2022:

- the age-standardised avoidable mortality rate (ASMR) of males was 198 deaths per 100,000, and the rate for females was 138 deaths per 100,000 population
- around one in five (22%) of male deaths were from avoidable causes (100 deaths) compared with around one in seven (15%) of female deaths (70 deaths, Figure 19)
- since 2013 the proportion of male deaths that were avoidable has been consistently higher than for females, although the difference is not always statistically significant (Figure 19)

Figure 19: Deaths considered avoidable as a proportion of all deaths, Jersey (2013-2022)

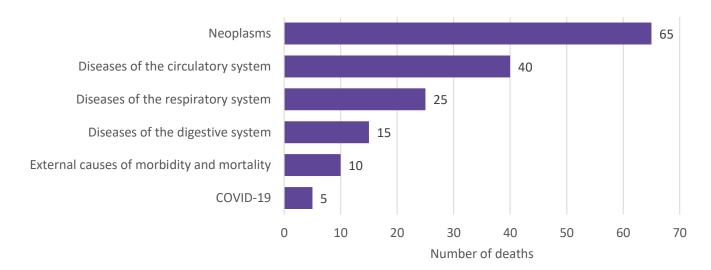


Main Causes of Avoidable Deaths

For broad cause groups³⁰, the main cause of avoidable deaths in Jersey in 2022 was neoplasms (cancers) with around 65 deaths (Figure 20), including cancers of the trachea, bronchus and lung, of breast, oesophagus, liver and colon.

Neoplasms were also the leading cause of avoidable death across the devolved nations³¹ (latest data for 2020).

Figure 20: Avoidable mortality deaths by cause (ICD-10 chapter), Jersey (2022)

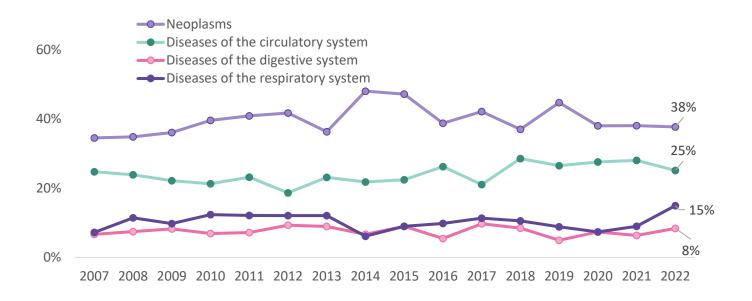


³⁰ Broad cause groups refer to grouping by ICD-10 code chapter for the underlying cause of death.

³¹ Avoidable mortality in Great Britain - Office for National Statistics (ons.gov.uk)

Jersey Mortality Statistics

Figure 21. Avoidable deaths by cause (ICD-10 code chapter), Jersey (2007 to 2022)



Causes of Preventable and Treatable Deaths

There were 120 deaths in 2022 from causes considered preventable in light of public health interventions, and there were 50 deaths from causes considered treatable to healthcare in 2022.

Neoplasms (cancers) are the predominant cause of **preventable** death, representing over two fifths (43%) of all preventable deaths in Jersey over the last 10 years (Figure 22). Lung cancer remains the largest individual cancer type causing preventable deaths, followed by oesophageal and bladder cancers. Neoplasms also contribute 37% of treatable deaths.

Diseases of the circulatory system were the most common cause of **treatable** deaths in Jersey (39% over the last 10 years), and the second major cause of preventable deaths (18% over the last 10 years, Figure 22).

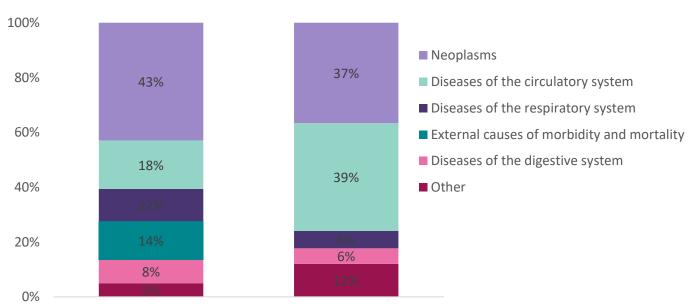


Figure 22: Proportions of Preventable and Treatable deaths by cause (ICD-10 code chapter), Jersey over the last 10year period (2013-2022)

Preventable Deaths (2013-2022) Treatable Deaths (2013-2022)

Burden of Avoidable Death (Standard Years of Life Lost)

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 2022 there were 4,939 years of life lost per 100,000 males who died from an avoidable cause, compared with 3,666 years per 100,000 female deaths. A comparison of the rates of years of life lost by sex, year and jurisdiction can be seen in Table 5.

In 2020, the SYLL for England³² was higher for both sexes, noting that COVID-19 deaths are included amongst avoidable causes.

Table 5. Standard years of life lost (SYLL) due to causes considered avoidable, by sex, Jersey (2020-2022) and England (2020, most recent data available³²)

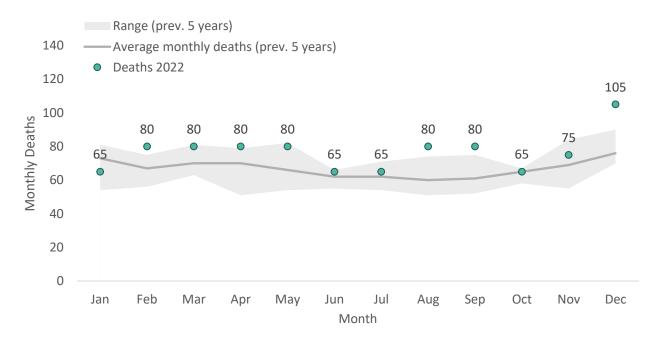
	JERSEY		ENGLAND	
	Males	Females	Males	Females
2020	4,801	3,888	7,039	4,641
2021	5,513	4,339	N/A	N/A
2022	4,939	3,666	N/A	N/A

Seasonality and Excess Mortality

In 2022, the average number of monthly deaths was 75. Figure 8 shows how the number of monthly deaths in 2022 compares to average monthly deaths over the preceding 5-year period (2017-2021).

- monthly deaths in 2022 ranged between 65 (in January, June, July and October) and 105 (December)
- across most months, the number of deaths in 2022 was slightly higher than the average over the previous 5year period

Figure 23. Monthly death numbers (2022), compared to the average and range over the previous 5-year period, Jersey (2017-2021)



³² Avoidable mortality in England and Wales – supplementary data tables - Office for National Statistics (ons.gov.uk)

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Excess Winter Deaths

Typically, a greater number of deaths occur during winter months (December to March). Over the past 15 years (since 2007) in Jersey, the average number of monthly deaths during winter was 72, compared to 62 in non-winter months.

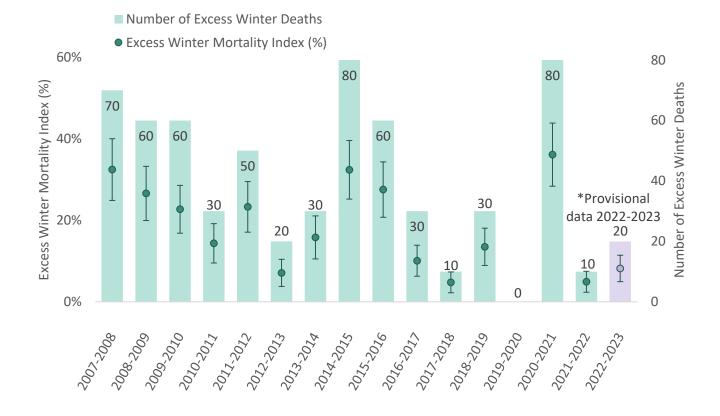
The number of excess winter deaths (EWD) and the Excess Winter Mortality Index (EWMI) are statistical measures of the increase in mortality during winter months, and allow the winter mortality burden to compared across years. To calculate EWD, winter deaths (December to March) are compared with non-winter months (the preceding August to November and following April to July)³³.

Note that during the COVID-19 pandemic, waves of infection affected the island in both winter and non-winter months; this could impact on the comparability of excess winter mortality during the pandemic to previous years. Interpretation should be cautious for results for 2019-20 and 2020-21 winters.

Please note that data presented for the 2022-2023 winter is provisional, as some deaths occurring in that winter, or the following summer (2023), will not yet have been registered.

- an estimated 10 excess winter deaths occurred in Jersey in winter 2021-2022; significantly lower than winter 2020 to 2021, but similar to that seen in previous winters such as in 2017-2018 (Figure 24)
- the excess winter mortality index (EWMI) in 2021-2022 showed that 5% more deaths occurred in the winter months compared with the non-winter months in Jersey; provisional data suggests 8% more deaths occurred in winter of 2022-2023 compared to summer (data subject to revision)

Figure 24. Numbers of excess winter deaths and the Excess Winter Mortality Index (EWMI) for Jersey between 2007 and 2022 (including provisional data for the 2022-2023 winter)

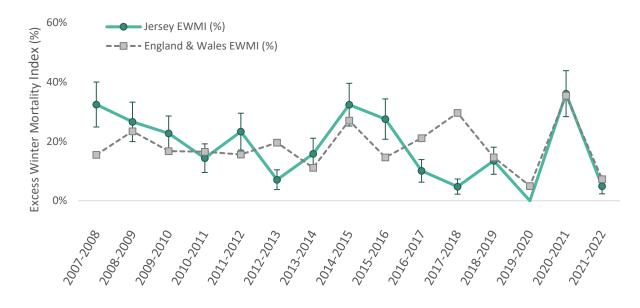


³³ further details of its calculation can be found in the Winter Mortality in England and Wales

Jersey Mortality Statistics Page 22 Excess Winter Mortality in Jersey is compared to that of England & Wales in Figure 25.

- the EWMI fluctuates between years in both Jersey and in England & Wales, with EWMI at times being higher in Jersey (e.g. 2015-2016) and others being higher in England & Wales (e.g. 2016-2017)
- in the recent winters since 2018-2019, EWMI has followed a similar pattern in Jersey as in England and Wales; the highest EWMI was recorded in 2020-2021 in both jurisdictions

Figure 25. Excess Winter Mortality Index (EWMI, %), Jersey and England & Wales (2007 – 2022)



Notes

Data sources

- the Marriage and Civil Status (Jersey) Law 2001 requires all deaths to be registered with the Superintendent Registrar within 5 days of the date of death, unless they have been referred to the Viscount. Data on deaths is compiled and clerically checked against other administrative sources to ensure that all deaths have been accurately detailed
- deaths data used in this report include those deaths that were registered in Jersey, plus deaths that occurred abroad to Jersey residents where the body was repatriated to Jersey
- cause of death is classified using the International Statistical Classification of Diseases, Injuries and Causes of Death (tenth revision, ICD-10). Coding of cause of death of Jersey registered deaths is undertaken by the Office for National Statistics on a quarterly basis
- Mid-year population estimates supplied by Statistics Jersey are the official source of population sizes in-between censuses (see "Population Estimates" below)

Methodology

Crude Rates

Crude rates were calculated as the number of deaths occurring in a year divided by the census population estimate for that year, multiplied by 1,000

Population Estimates

Population estimates recently published by Statistics Jersey (June 2023)³⁴ are used to calculate rates in this report. As such, rates presented in this report may differ slightly to those presented in previous publications, which will have used older population estimates.

Age standardisation

Age-standardised rates have been calculated using the 2013 European Standard Population, in line with methodology used by Public Health England. This allows comparisons of mortality rates across time and place excluding the impact of different underlying age and gender structures.

Briefly; numerator data for each age band are divided by the denominator population data for each age band respectively to give age specific death rates for Jersey these age specific rates are multiplied by the standard population for each age group respectively and aggregated across all the age groups to give the age adjusted count of deaths for Jersey. This age adjusted count of deaths is divided by the total standard population for the whole age range included in the indicator and multiplied by 100,000 to give the **age standardised mortality rate** for Jersey. When the observed total number of deaths was fewer than 25, mortality rates are typically not calculated, as there were too few deaths to calculate directly standardised rates reliably.

Delays

Due to the delays which can sometimes occur with registration of deaths, and the time it takes for death cause to be coded by the Office for National Statistics (UK). It is standard for mortality to be reported in arrears; therefore, numbers reported here should be treated as provisional

³⁴ <u>Population And Migration Statistics</u> – Statistics Jersey, June 2023

Rounding

All death numbers have been independently rounded to the nearest 10 (Leading cause of death rounded to nearest 5), as at time of publication there are a small number of outstanding inquests for 2022 deaths and deaths awaiting Viscount investigation.

Avoidable (treatable and Preventable) Mortality

In 2020, a new **avoidable mortality** definition was created by an OECD working group. The definition has been introduced for data years 2001 onwards, replacing the two definitions previously used. This revised definition of avoidable mortality uses a broader definition of preventable mortality, including causes of death that should be avoidable through public health and primary prevention interventions to reduce the onset of diseases or injuries. Alongside this, a narrower definition of amenable mortality, which is referred to as 'treatable' mortality, is used including causes of death that could be avoided through health care interventions including secondary preventive actions, for example screening programmes, and treatments to reduce fatality after the onset of diseases. The implementation of the new avoidable mortality definition means Jersey's statistics are internationally comparable, as well as comparable between local administrations and over time at national and subnational level.

Confidence Intervals and statistical significance

Confidence intervals have been used in this report to compare Jersey age standardised mortality rates. Calculations based on small numbers of events are often subject to random fluctuations. The confidence interval indicates the range within which the variation could be considered due to random fluctuations.

Excess Winter Mortality

Further details of the methods used to calculate Excess Winter Mortality can be found in the <u>Winter Mortality in</u> <u>England and Wales</u> methodology pages.

ICD-10 coding (chapters):

Table i: International Statistical Classification of Diseases and Related Health Problems 10th revision (ICD-10)chapters

ICD-10 codes	Chapter name
A00–B99	Certain infectious and parasitic diseases
C00-D48	Neoplasms
D50–D89	All diseases of the blood and blood-forming organs and certain disorders involving the immune mechanism
E00–E90	Endocrine, nutritional and metabolic diseases
F00-F99	Mental and behavioural disorders
G00–G99	Diseases of the nervous system
H00–H59	Diseases of the eye and adnexa

 Table i: International Statistical Classification of Diseases and Related Health Problems 10th revision (ICD-10)

 chapters

ICD-10 codes	Chapter name
H60–H95	Diseases of ear and mastoid process
100–199	Diseases of the circulatory system
100–199	Diseases of the respiratory system
КОО-К93	Diseases of the digestive system
L00-L99	Diseases of the skin and subcutaneous tissue
M00-M99	Diseases of the musculoskeletal system and connective tissue
N00-N99	Diseases of the genitourinary system
000–099	Pregnancy, childbirth and the puerperium
P00-P96	Certain conditions originating in the perinatal period
Q00–Q99	Congenital malformations, deformations and chromosomal abnormalities
R00-R99	Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified
S00-T98	Injury, poisoning and certain other consequences of external causes
V01-Y98	External causes of morbidity and mortality
Z00–Z99	Factors influencing health status and contact with health services
U00–U85	Codes for special purposes (including COVID-19)

Feedback

If you would like to provide feedback, then please contact us on the following address or email us at: <u>healthintelligence@gov.je</u>

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