



Mortality Report 2021

Public Health Directorate

Cabinet Office



Executive Summary

2021

887 registered deaths **470** males and **417** females

Average age at death was **76 years** for males and **81 years** for females

Age-standardised mortality rate (ASMR) for the Isle of Man was **934.1 per 100,000** population. This was lower than the rate for England (984.7), and higher than the rate for Jersey (759)

Cancer and diseases of the circulatory system were the most common causes of death, and combined accounted for **53%** of all deaths registered during 2021

49.9% of deaths registered had died in their usual place of residence (including nursing, residential and care homes)

Number of deaths **decreased by 3%** compared to the previous year (917 in 2020)

Average age of death for males has increased from **75 years** (2016) to **76 years** (2021)

Average age of death for females has increased from **80 years** (2020) to **81 years** (2021)

ASMR trend has remained largely stable since 2006

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Introduction

The aim of this report is to provide an overview of mortality rates from 2006-2021, with analysis of top causes of death and their trends for residents of the Isle of Man.

Although we look at data from individual years it is important to remember that our relatively small numbers may cause annual fluctuations. Therefore, any annual changes should be considered in the context of wider mortality trends. Due to this, some of the data are represented as 3-year averages.

It is worthy of note that, whilst included within the data, COVID-19 related deaths do not feature as one of the main causes of death, and are not statistically significant enough to have affected our overall mortality rates. Further information on COVID-19 related deaths can be found in the Public Health Surveillance of Seasonal Respiratory Illnesses Report.¹

2. Life expectancy

Please note that data for Life Expectancy has not yet been updated beyond the Mortality Report 2020 data. This is due to England reference values having not been released as at the time of publication of this report. An update of the Mortality Report 2021 to include Life Expectancy data will be released subsequently to data for England becoming available.

2.1 Life expectancy at birth

Life expectancy at birth for men in the Isle of Man is **79.7** years, and for women it is **83.7** years. This is assuming that mortality rates remain the same as they were in 2019-2021.

This compares to, and is statistically similar to, the England life expectancy at birth of **79.4** years for men and **83.1** years for women (2018-2020).² **Figure 1** shows that life expectancy at birth for men in the Isle of Man has generally been statistically similar to that of men in England. Similarly **Figure 2** shows that the life expectancy at birth for women in the Isle of Man has consistently been statistically similar to the life expectancy at birth for women in England. This is shown by the fact that the blue trend line for the England rate falls between the blue confidence interval markers.

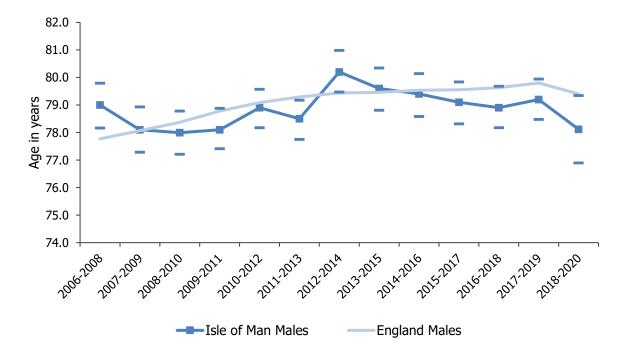


Figure 1: 3-year rolling life expectancy at birth, males, IOM/England comparison, 2006-2020

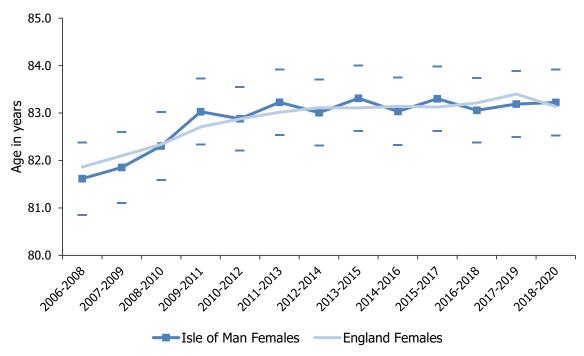


Figure 2: 3-year rolling life expectancy at birth, females, IOM/England comparison, 2006-2020

2.2 Life expectancy at older ages

Life expectancy at age 65 for men in the Isle of Man is **19.0** years, and for women it is **21.7** years. This means that a man aged 65 could expect to live to approximately age 84, and a woman to approximately age 87.

This compares to, and is statistically similar to, the England life expectancy at age 65 of 18.7 years for men (living to age 83) and 21.1 years for women (living to age 86).²

It should be noted that life expectancy at age 65 is not equal to that of life expectancy at birth as these calculations account for different age-sex population structures, that being those aged 65 and over, and all persons, respectively.

3. Total deaths

In 2021 there were a total of 887 deaths registered on the Isle of Man. This total represents a decrease of 3.4% compared to the previous year (917 in 2020). This highlights the fluctuation in death registrations by year and supports the use of 3-year rolling rates for the calculation of mortality statistics for a smaller population.

Figure 3 shows the total annual deaths since 2006.

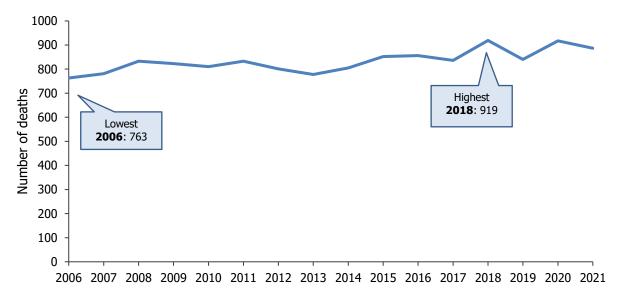


Figure 3: Annual number of deaths registered on the Isle of Man, 2006 - 2021

The number of deaths is affected by the size and age structure of the population. As people are generally living longer, the population is increasing both in size and age over time, as such the number of deaths per year is expected to continue to rise.

Death registrations in England and Wales consistently show that more female deaths are registered per year than male deaths, with the exception of 2020 and 2021.³ However, on the Isle of Man, and as shown by **Figure 4**, this fluctuates, with 2007 having 85 more registrations of female deaths than males, to 2011 having 57 more male registrations than females. In recent years (2020 and 2021) the Isle of Man has experienced the same trend as England and Wales, with the number of male death registrations being higher than female death registrations.

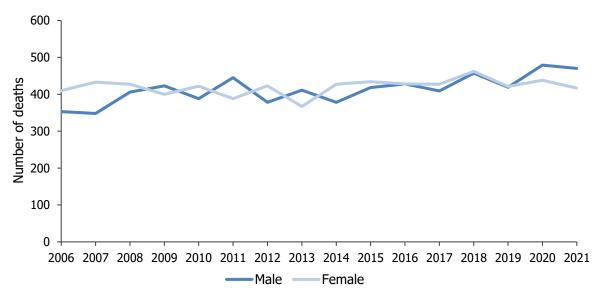


Figure 4: Annual number of deaths registered on the Isle of Man by sex, 2006 - 2021

The age and sex breakdown of the 2021 deaths is presented in **Figure 5**.

In 2021, the general trend in each age group up to 74 years of age is that the number of male and female deaths is roughly the same. There were a greater number of deaths in males between 75 and 89 years of age. In contrast there were a greater number of deaths in females in the over 90 age groups, due to there being more females aged over 90 (driven by greater life expectancy).

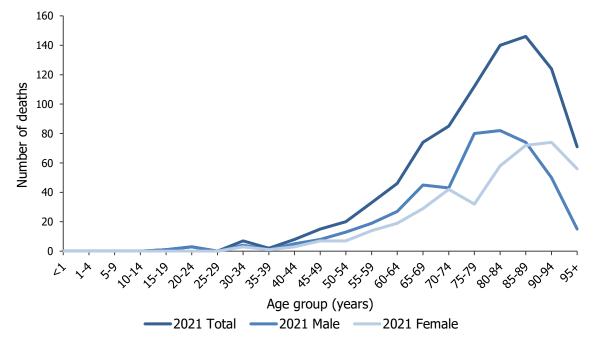


Figure 5: Registered deaths on the Isle of Man by age and sex, 2021

4. Average age at death

In 2021, the average age at death of males was 76 years, 5 years below that of females, which was 81 years. **Figure 6** shows that over the past 5 years, the average age at death for males has been increasing from 75 years in 2016 to 76 years in 2021. For females, the average age at death has increased to 81 years after falling to 80 years in 2020.

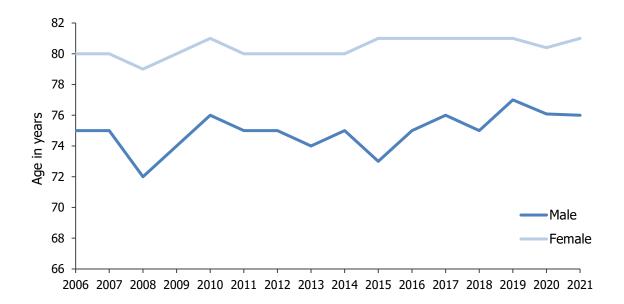


Figure 6: Average age of deaths registered on the Isle of Man by sex, 2006 - 2021

Figure 7 shows that over the last 10 years, the proportion of those dying over the age of 90 years has remained unchanged in males, and has increased in females, as would be expected with the trend of increasing life expectancy.

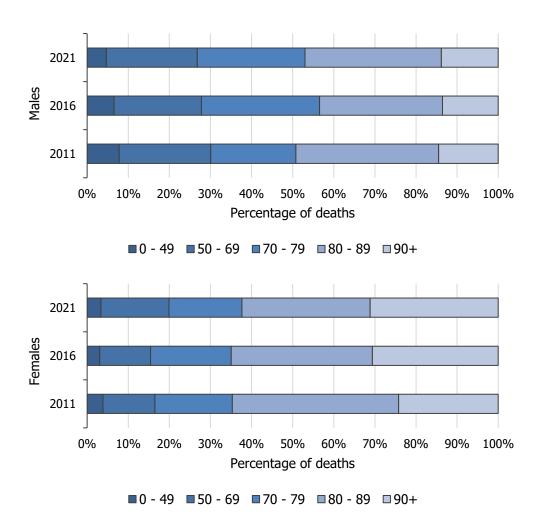


Figure 7: Proportion of deaths by age over the last 10 years

Of the 887 total recorded deaths in 2021, 66.9% were aged 75 and over. Of the total deaths of those aged 75 and over, 301 (50.8%) were male and 292 (49.2%) were female. This is shown in **Figure 8**.

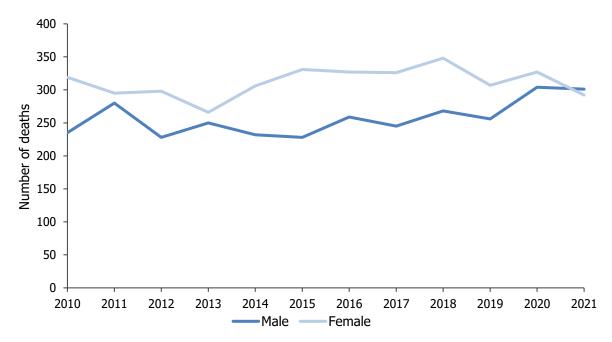


Figure 8: Registered deaths on the Isle of Man aged 75 and over by sex, 2010 – 2021

When we look at deaths aged 75 and over, over time we can see that, despite the expected annual fluctuations, the rate on-Island has not significantly changed over time. This similar rate over time is also seen when looking at deaths aged 75 and over by male and female. This is detailed in **Table 1**.

Table 1: Deaths of those aged 75 and over, comparisons, 2010 - 2021

	_		
Year	Male	Female	Total
2010	235	319	554
2011	280	295	575
2012	228	298	526
2013	250	266	516
2014	232	306	538
2015	228	331	559
2016	259	327	586
2017	245	326	571
2018	268	348	616
2019	256	307	563
2020	304	327	631
2021	301	292	593

Additionally, of the 887 total recorded deaths in 2021, 38.4% were aged 85 and over. Of the total deaths of those aged 85 and over, 139 (40.8%) were male and 202 (59.2%) were female.

5. Age-standardised mortality rates

Age-standardised mortality rates (ASMRs) account for population size and age structure. As such they are a more reliable measure for tracking trends in mortality than looking at the numbers of deaths per year. In 2021, the all-cause ASMR for males was 1132.7 deaths per 100,000 population and 761.5 per 100,000 per population for females (**Figure 10, Table 2**). For males, this is similar to that of England (1152.7). For females, the Isle of Man is significantly lower than England (844.1), in 2021. In 2021, Jersey had lower rates for both males (871.0) and females (667.0).⁴

Table 2: Age-standardised mortality rate, comparisons, 2021

Area	Male	Female
Isle of Man	1,132.7	761.5
England	1,152.7	844.1
Jersey	871.0	667.0

Fluctuations in deaths in individual years explain the fluctuation in ASMRs per year. Therefore it is better to look at 3-year rolling ASMRs to get a better idea of developing trends in mortality rates.

Figure 9 shows that since 2006, all-cause mortality has largely remained stable, with a slight decrease seen in 2019-2021. The greatest fluctuations in rates are seen in males.

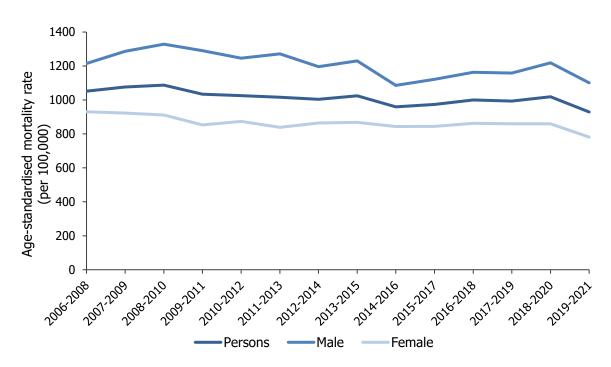


Figure 9: 3-year rolling all-cause age-standardised mortality rates, 2006 - 2021

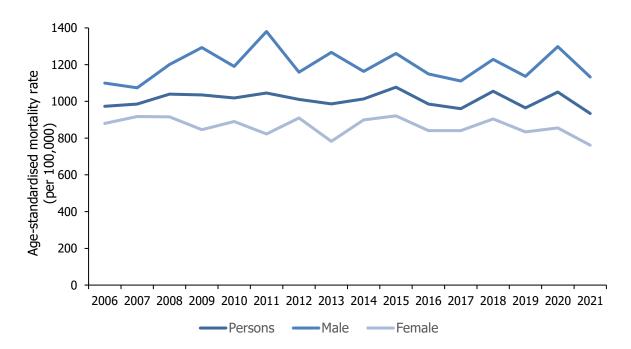


Figure 10: Single-year all-cause age-standardised mortality rates, 2006 – 2021

When we look at ASMR for males and females over time we see that for the Island, our rates are not significantly changing (**Tables 3 and 4, Figures 10, 11, and 12**).

Table 3: Age standardised mortality rate, males, 2011-2021

Von	Data	95% Confidence Interval		
Year	Rate	Lower Limit	Upper Limit	
2011	1,380.6	1,252.3	1,508.8	
2016	1,149.1	1,040.2	1,258.0	
2021	1,132.7	1,030.3	1,235.2	

1600 | 1400 | 1200 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 10

Figure 11: Age-standardised mortality rates per 100,000, males, 2011 - 2021

Table 4: Age standardised mortality rate, females, 2011-2021

Voor	Rate —	95% Confidence Interval		
Year		Lower Limit	Upper Limit	
2011	822.6	740.7	904.4	
2016	840.8	761.1	920.4	
2021	761.5	688.4	834.6	

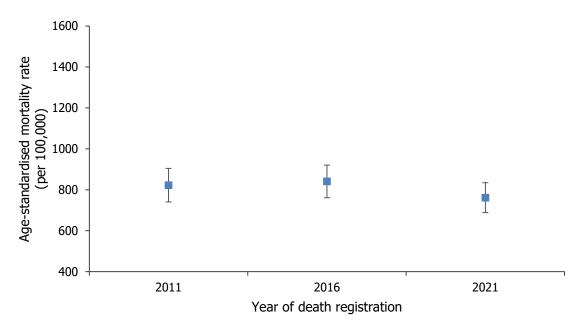


Figure 12: Age-standardised mortality rates per 100,000, females, 2011 – 2021

5.1 Comparison to England

The Office for National Statistics (ONS) produce tables of ASMRs for all English regions. Using this alongside our rates and confidence intervals we can see which areas we most 'look' like. When we also add in the ONS Area Description for each of the areas, we can see that similar areas to the Island, in 2021, are of a diverse Area Description, and are across a number of regions of the United Kingdom.⁵ **Table 5** shows some of these areas in more detail.

Table 5: Age-standardised mortality rate, area comparisons, 2021

Area		Persons	Male	Female
Isle of Man		934.1	1,132.7	761.5
England		984.7	1,152.7	844.1
Jersey		759.0	871.0	667.0
Town	Area Description			
Maidstone	Rural Growth Areas	939.7	1,164.7	773.7
Warwick	Larger Towns and Cities	937.9	1,084.6	820.4
Melton	Country Living	937.3	1,163.5	762.9
Lambeth	London Cosmopolitan	937.0	1,069.8	826.4
Redbridge	Ethnically Diverse Metropolitan Living	936.7	1,078.3	808.0
West Somerset	Ageing Coastal Living	932.1	1,095.9	795.3
Stockport	Town Living	931.5	1,085.5	797.6
Conwy	Ageing Coastal Living	931.2	1,082.4	808.9
West Devon	Older Farming Communities	928.4	1,088.9	787.7
Breckland	English and Welsh Countryside	927.6	1,101.7	785.1

6. Main causes of death

Deaths in this section have been grouped into International Statistical Classification of Diseases and Related Health Problems 10th revision (ICD10) 'Chapters', also known as broad cause of death groups. There are five main broad cause groups:

- Cancer (Neoplasms)
- Mental and behavioural disorders
- Diseases of the nervous system
- Diseases of the circulatory system
- Diseases of the respiratory system

Three-year rolling averages have been used to even out some of the fluctuations the Island's small numbers might produce. Looking at the five main broad causes of death we can see that cancer, and mental and behavioural disorders seem to be decreasing slightly. Diseases of the nervous system and diseases of the circulatory system have remained stable. Diseases of the respiratory system have decreased (**Figure 13, Table 6**).

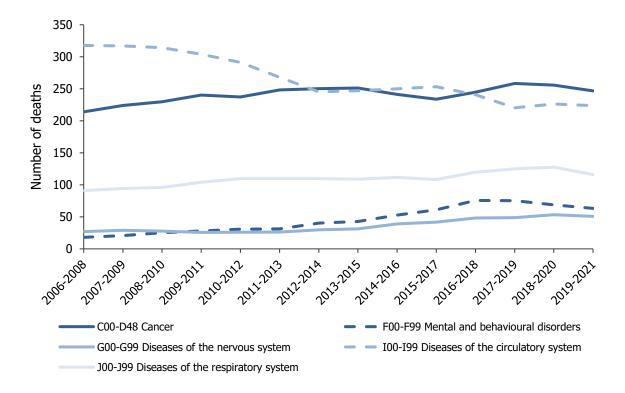


Figure 13: Broad causes of death by 3-year rolling average, persons

Table 6: Broad causes of death by 3-year rolling average, persons

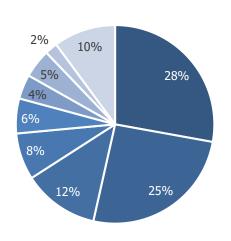
3-Year period	Cancer (Neoplasms)	Mental & behavioural disorders	Diseases of the nervous system	Diseases of the circulatory system	Diseases of the respiratory system
2006-2008	214	18	27	318	91
2007-2009	224	21	29	317	94
2008-2010	230	25	28	314	96
2009-2011	240	28	26	304	104
2010-2012	237	31	26	291	110
2011-2013	248	31	26	268	110
2012-2014	250	40	30	245	110
2013-2015	251	43	31	247	109
2014-2016	241	53	39	250	112
2015-2017	234	61	42	253	108
2016-2018	245	76	48	241	120
2017-2019	258	75	49	220	125
2018-2020	256	69	53	226	128
2019-2021	247	63	51	224	116

In 2021, the Island's top two causes of deaths were similar to that of Jersey in all ages. The Island had a lower proportion of deaths due to neoplasms (cancer) than Jersey in all age groups. Whereas, Jersey had a lower proportion of working age deaths due to external causes of morbidity and mortality than the Island (5% compared to 15%), although Jersey had a higher proportion of working age deaths due to other causes than the Isle of Man (21% compared to 16%). This is detailed in **Table 7**.

Table 7: Broad causes of death area comparison, persons, 2021

Cause of death	All ages		Working age (16-64 years)		Aged 75 and over	
Cause of death	Isle of Man	Jersey	Isle of Man	Jersey	Isle of Man	Jersey
Cancer (Neoplasms)	28%	34%	31%	47%	22%	34%
Diseases of the circulatory system	25%	24%	21%	20%	27%	22%
Diseases of the respiratory system	12%	12%	6%	5%	14%	10%
Mental and behavioural disorders	8%	8%	0%	-	11%	6%
Diseases of the nervous system	6%	6%	4%	-	7%	-
Diseases of the digestive system	5%	3%	7%	6%	5%	8%
External causes of morbidity and mortality	4%	3%	15%	5%	2%	6%
Other causes	13%	11%	16%	21%	13%	-

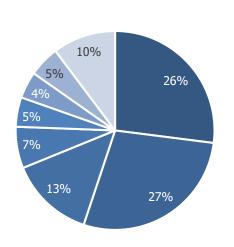
In 2021, the most frequent causes of death for the Island were cancer, circulatory, and respiratory diseases, which in total were responsible for 65% of all deaths (**Figure 14**). This is similar to what has been seen for Jersey, England and Wales.



- C00-D48 Neoplasms (Cancer)
- I00-I99 Diseases of the circulatory system
- J00-J99 Diseases of the respiratory system
- F00-F99 Mental and behavioural disorders
- G00-G99 Diseases of the nervous system
- V01-Y98 External causes of morbidity and mortality
- K00-K93 Diseases of the digestive system
- N00-N99 Diseases of the genitourinary system
- A00-B99 Certain infectious an parasitic diseases
- Other Causes of Death

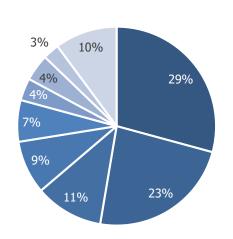
Figure 14: Top causes of death on the Isle of Man by ICD Chapter, 2021

In 2021, cancer, diseases of the circulatory system and diseases of the respiratory system remain the top three causes of death when we look at males and females separately. **Figures 15 and 16** show this in more detail.



- C00-D48 Neoplasms (Cancer)
- I00-I99 Diseases of the circulatory system
- J00-J99 Diseases of the respiratory system
- F00-F99 Mental and behavioural disorders
- G00-G99 Diseases of the nervous system
- V01-Y98 External causes of morbidity and mortality
- K00-K93 Diseases of the digestive system
- N00-N99 Diseases of the genitourinary system
- A00-B99 Certain infectious an parasitic diseases
- Other Causes of Death

Figure 15: Top causes of death in males on the Isle of Man by ICD Chapter, 2021



- C00-D48 Neoplasms (Cancer)
- I00-I99 Diseases of the circulatory system
- J00-J99 Diseases of the respiratory system
- F00-F99 Mental and behavioural disorders
- G00-G99 Diseases of the nervous system
- V01-Y98 External causes of morbidity and mortality
- K00-K93 Diseases of the digestive system
- A00-B99 Certain infectious an parasitic diseases
- Other Causes of Death

Figure 16: Top causes of death in females on the Isle of Man by ICD Chapter, 2021

As can be seen in Figure 14 and Figure 15, in 2021, male deaths attributed to neoplasms (cancer) and circulatory disease, were roughly equal to females at around a half of deaths. In 2021, a slightly greater number of females died from mental and behavioural disorders than males (9% compared to 7%). Although a greater number of males died from respiratory disease than females (13% compared to 11%), it was, again, not a statistically significant difference.

Please note that percentages may not add up to 100% due to small number suppression.

6.1 Cancer

There were 245 deaths from cancer in 2021 representing 27.6% of all deaths; the most common cancer sites were the digestive organs (77 deaths representing 31.4% of all cancer deaths) and cancers of the respiratory and intrathoracic organs (47 deaths representing 19.2% of all cancer deaths). For males and females the proportion of deaths from these two cancer sites reflects the overall totals. **Figures 17 and 18** show this in more detail.

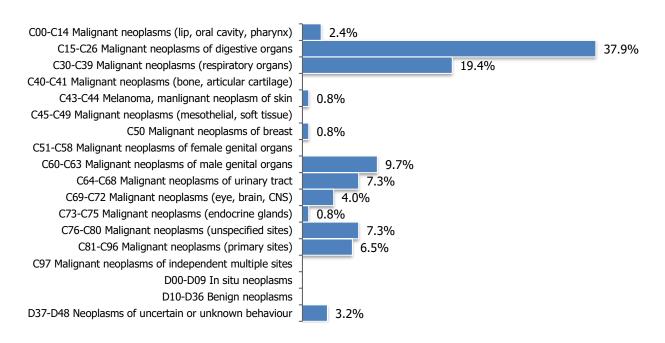


Figure 17: Deaths by cancer site, males, 2021

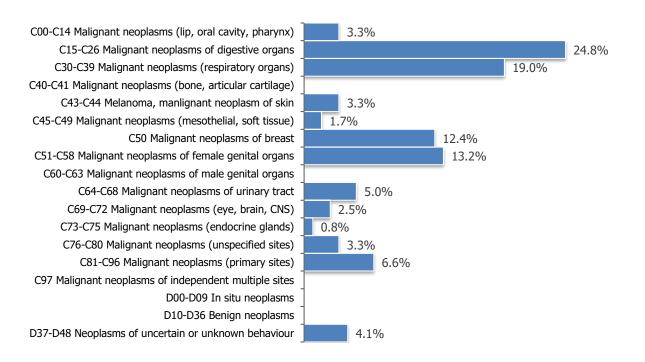


Figure 18: Deaths by cancer site, females, 2021

Most deaths (73%) with a cause of cancer during 2021 occurred in those aged between 65 and 89 years old. Although there was slightly greater numbers of male deaths due to cancer (50.6%) compared to females (49.4%), this was not a statistically significant difference.

6.2 Circulatory disease

In 2021, diseases of the circulatory system accounted for 226 deaths representing 25.5% of all deaths. Almost half (44%) of these deaths were due to Ischaemic Heart Disease. Most deaths (70%) with a cause of circulatory disease during 2021 occurred in those aged between 70 and 94 years old. There were a greater number of male deaths due to circulatory disease (57%) compared to females (43%) in 2021.

6.3 Respiratory disease

In 2021 diseases of the respiratory system were the cause of death for 109 people representing 12.3% of all deaths registered. Chronic lower respiratory disease was accountable for 39% of these deaths, followed by Influenza and Pneumonia (representing 32%).

6.4 Mental and behavioural disorders

In 2021, there were 67 deaths attributed to mental and behavioural disorders registered, representing around 7.6% of all deaths.

Almost all of these deaths (99%) can be attributed to a cause of dementia and Alzheimer's Disease. For deaths with a cause of dementia and Alzheimer's disease, 55% of these were in females, slightly more than males (45%), though as most occur in the over 80 year olds there are fewer males alive at this age than females.

6.5 Working age deaths (aged 16 - 64)

In 2021, neoplasms were the top cause of working age death, accounting for 31% of working age deaths registered. Diseases of the circulatory system accounted for 21% of working age deaths, whilst other causes of death accounted for 16%. The percentage of deaths caused by neoplasms was significantly higher in females than in males (43% compared to 23%). This is detailed in **Table 8**.

Table 8: Top causes of death, working age, 2021

Cause of death	Persons	Male	Female
C00-D48 Neoplasms	31%	23%	43%
I00-I99 Diseases of the circulatory system	21%	28%	11%
Other Causes of Death	16%	15%	17%

6.6 Deaths aged 75 and over

In 2021, diseases of the circulatory system were the top cause of death in those aged 75 and over, accounting for 27% of deaths registered. Neoplasms accounted for 22% of deaths aged 75 and over, whilst diseases of the respiratory system accounted for 14%. This is detailed in **Table 9**.

Table 9: Top cause of death, aged 75 and over, 2021

Cause of death	Persons	Male	Female
I00-I99 Diseases of the circulatory system	27%	28%	26%
C00-D48 Neoplasms	22%	23%	21%
J00-J99 Diseases of the respiratory system	14%	14%	13%

7. Place of death

Of the 887 deaths registered on the island in 2021, 39.3% were in the hospital and 9.6% were in hospice (including Southlands). Additionally, 49.9% were in the usual place of residence (including nursing, residential, and care homes), which is significantly higher than the current published rate for England of 28.7%.³

7.1 Working age

Of the 130 working age deaths registered in 2021, 36.2% were in hospital and 13.8% were in hospice, with 48.5% in the usual place of residence. This is detailed in **Table 10**.

Table 10: Place of death, working age, 2021

Place of death	Percentage of deaths
Hospital	36.2%
Hospice (including Southlands)	13.8%
Usual place of residence (including nursing, residential, and care homes)	48.5%
Other	1.5%

7.2 Aged 75 and over

Of the 593 deaths aged 75 and over registered in 2021, 39.3% were in hospital and 8.1% were in hospice, with 52.3% being in the usual place of residence. This is detailed in **Table 11**.

Table 11: Place of death, aged 75 and over, 2021

Place of death	Percentage of deaths
Hospital	37.2%
Hospice (including Southlands)	3.0%
Usual place of residence (including nursing, residential and care homes)	59.3%
Other	0.5%

8. About the data

8.1 Background notes

All analyses are based on data provided by the Civil Registry. They represent deaths registered in a particular calendar year. This is not the same as date of death. In some cases where an inquest is involved deaths may not be registered until the following year or later.

The figures represented in this report represent deaths that occurred on the Isle of Man so will include those who are not normally resident on-Island. This therefore does not include those residents who died off-Island and were not repatriated.

Mortality rates are calculated using population figures from the 2021 Census.⁶

The data are compiled from weekly returns, cleaned and submitted to the Office for National Statistics (ONS) for cause coding. Cause of death is classified using the International Statistical Classification of Diseases and Related Health Problems (10th revision, ICD-10).⁷

8.2 Comparisons

Where possible, other jurisdictions have been used to benchmark Isle of Man data against, to identify if trends here are broadly similar or not;

- England and Wales³
- Jersey⁴

8.3 Methods

Age-standardised rates were calculated as the number of deaths occurring in a year divided by the census population figures and multiplied by 100,000. The rates have been standardised using the 2013 European Standard Population. Age-standardised mortality rates (ASMRs) are used to allow for comparisons to be made between populations that may contain different overall population sizes and proportions of people of different ages. The 2013 European Standard Population is used to standardise age-specific rates to a consistent population.

8.4 Data quality and accuracy

When the observed number of deaths is fewer than 10, mortality rates have not been calculated as the numbers are too low to calculate with sufficient accuracy.

Confidence intervals have been used in this report to compare mortality rates. Confidence intervals are used to measure the imprecision of an estimate, specifically the random variation that would naturally occur in a mortality rate for a small population. The confidence interval gives the range of values within which the true value lies, and therefore enables benchmarking to other jurisdictions with more accuracy.

8.5 Strengths and limitations

The main strengths of the Mortality Report publications include:

- The data collected to inform the report includes all deaths registered on the Isle of Man within the calendar year, giving a full and true picture of annual mortality.
- Where appropriate, confidence intervals have been used throughout the report. These give
 users an indication of the reliability of the calculations with which confidence intervals are
 presented.
- Causes of death listed on each death certificate are coded to the ICD-10 Codes by the ONS, and in accordance with the standard methodology. This means that ICD-10 coded deaths are comparable to other ICD-10 coded death data worldwide, allowing for robust comparability across geographies and time.

The main limitations of this report include:

- As this report analyses all deaths registered on the Isle of Man within the respective calendar year, the data includes deaths of non-residents who's deaths have been registered on Island, and likewise, does not include deaths of Isle of Man residents who have died elsewhere and have had their deaths registered in another country.
- This is not an exhaustive report of all causes of death which occurred during the relevant calendar year on the Isle of Man, as there are a number of confidentiality and statistical robustness issues associated with small number calculations. This report focuses on the main causes of death occurring on the Isle of Man within the calendar year, and provides a broad statistical overview of mortality trends.

9. Report quality

The quality of a statistical product can be defined as the 'fitness for purpose' of the product, with regards to the European Statistical System dimensions of quality.^{8,9} This section will discuss this report in the context of these dimensions of quality.

9.1 Relevance

(The degree to which the statistical outputs meet users' needs.)

Whilst this report has no defined user, and thus it cannot be stated definitively whether this report meets users' needs, this report is produced to provide information on trends of mortality on the Isle of Man to both policy makers and members of the public. To these users' needs, this report provides valuable information to inform decision making for those involved in Isle of Man policy, and informs the public of observed trends. Any specific requests for information to be included within this report will be taken on a case-by-case basis.

9.2 Accuracy and reliability

(The degree of closeness between an estimate and the true value.)

This report benefits from using the complete dataset of all deaths registered on the Isle of Man within each calendar year. Therefore, the analyses provided here are not subject to sampling variability or other errors associated with estimates. The data here represent the 'true value' of deaths registered on the Isle of Man within the respective calendar year.

9.3 Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

The data described and analysed in this report contains the annual data of death registrations on the Isle of Man, by calendar year. This report is updated and published annually, and pertains to the period specified in the title of the report. The report is released within two years of the end of the data period. This is due to time delays between data collection, data analysis, and report production, and also delays in reporting of comparisons data, such as that from the United Kingdom and Jersey.

9.4 Accessibility and clarity

(Accessibility is the ease with which users can access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

Data has been analysed and presented in accordance with the ICD-10 International Statistical Classification of Diseases and Related Health Problems, so as to provide a standardised and consistent measure of causes of mortality. The five broad causes of death have been separately presented to allow for ease of use.

9.5 Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain, for example, geographic level.)

The coherence of this report is challenging to measure, as there are no data sources other than the death registrations collected by the General Registry that provide data on number of, and causes of death on the Isle of Man. However, due to this, and as detailed in section 9.2 Accuracy and Reliability, there is a high level of internal coherence between report publications.

Likewise, the comparability is difficult to fully ascertain, for the reasons discussed above. However, the internal comparability, being the comparability of this report to previous reports in the same series, is high, owing to the continued use of the same data sources and analysis methods. As deaths are coded by the ONS to the ICD-10 Codes, the comparability of data in this report to other data using ICD-10 codes is robust and highly comparable.

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Glossary of terms

Age-standardised mortality rate: A rate that allows for differences in the age

structure of populations to be taken into account and therefore allows valid comparisons to be made between geographical areas and through time.

Confidence Interval: Confidence intervals are a measure of degree of

uncertainty. They refer to the probability that a population parameter will fall between a set of values for a certain proportion of times. This

report uses a 95% confidence level.

European Standard Population: An artificial population structure which is used in

the weighting of mortality or incidence data to produce age standardised rates (ASRs). It is a hypothetical population and assumes that the age structure is the same in both sexes, therefore allowing comparisons to be made between the sexes as well as between geographical areas.

Working Age: Individuals between the ages of 16 and 64.

Acronyms and abbreviations

ASMR Age-standardised mortality rate

ICD / ICD-10 International Statistical Classification of Diseases and Related Health

Problems 10th revision

ONS Office for National Statistics



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Cabinet Office, Public Health Directorate
Cronk Coar, Nobles Hospital
Strang, Douglas,
Isle of Man IM4 4RJ.

Tel: +44 1624 642639 www.gov.im/publichealth @publichealthiom