Isle of Wight JSNA Briefing Note: Mortality (Deaths)

Mortality (Deaths)

Background

Information about mortality (deaths) provides an insight into the health of the Island population in that, in very general terms, the healthier people are, the longer they are likely to live, and the lower (better) an area's mortality rate.

Mortality rates are affected by the age at which people die and are increased (worsened) by early (premature) deaths. Nationally, deaths before the age of 75 are regarded as 'premature'.

See also separate briefing note on **Life Expectancy** – life expectancy and mortality rates are calculated using the same data about deaths and population.

Contents and Key Points

The data and charts below show, for the Isle of Wight:

- **Number of deaths by year.** There are approximately 1,680 deaths of IW residents each year (2005-09 annual average). The trend has been downwards over time: longer-term trends will be affected by improving population health and projected population increases.
- **Number of deaths by gender and age.** 28% of IW deaths are in the under-75 age group, 72% are in the 75+ age group. Each year there are more deaths of females compared with males.
- Main causes of death. Nearly 75% of IW deaths are from the 3 main causes of Cardiovascular Disease, Cancer and Respiratory Disease, mirroring the national profile.
- Mortality rate from All Causes
 - o **All Ages.** The IW mortality rate has decreased (improved) steadily, though the downward trend has slowed since 2004-06. The most recent IW rate is lower (better) than England's and similar to the South East's. Mortality is higher among males compared with females.
 - Age Under-75. While the IW rate has decreased (improved) steadily over time, the rate increased (worsened) in recent years, though it improved again in 2009. The most recent IW rate is lower (better) than England's and similar to the South East's. Mortality is higher among males compared with females.
- Mortality Rates from the 3 Main Causes of Death:
 - All Ages. Cancer, followed closely by CVD, have the highest mortality rates. Mortality rates from respiratory disease is considerably lower.
 - **Age Under-75.** Cancer is the major cause of mortality in the under-75 age group, and is considerably higher than the CVD mortality rate. Respiratory disease makes a relatively smaller contribution to mortality in this age group.

Number of Deaths by Year

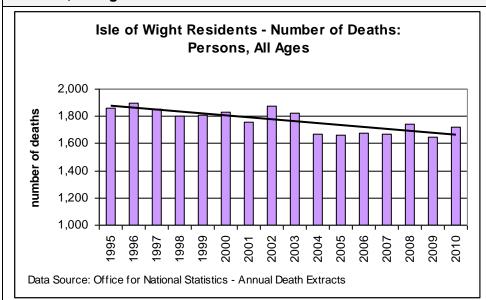
The charts below show trends in the number of deaths each year for Persons, All Ages and aged under-75 (the threshold below which deaths are defined nationally as 'premature').

In the last 5 years for which data is available (2006-10), there have been on average each year:

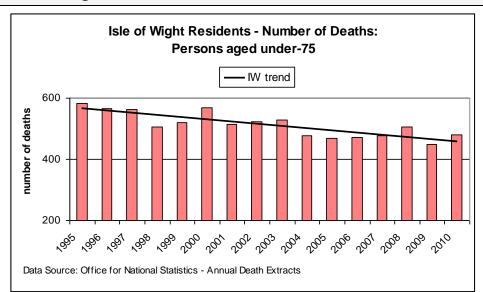
- 1,691 deaths of IW residents of All Ages, of which on average:
- 477 were among people aged under-75 (28% of all deaths).
- 1,214 were among people aged over-75 (72% of all deaths).

Both charts below show downward trends. Future trends in numbers of deaths will be affected both by improving health (exerting a downward pressure) and projected population increases (exerting an upward pressure).

Persons, All Ages



Persons, aged under-75



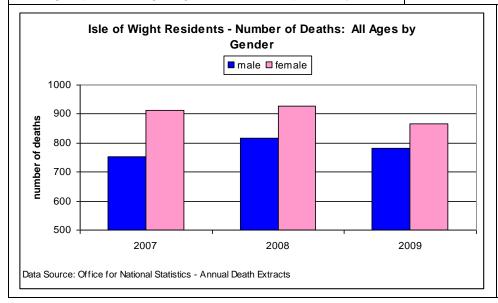
Number of Deaths by Gender and Age

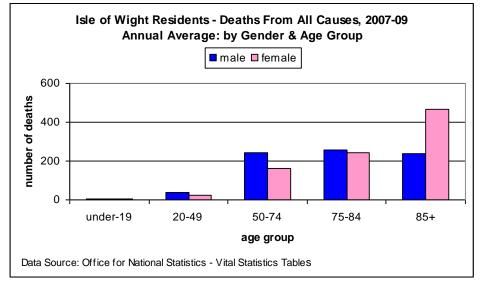
The table and charts show a breakdown of deaths by gender for the last 3 available years.

Key Points:

- 28% of deaths are in the under-75 age group, 72% are in the 75+ age group.
- There are more deaths among females than among males: the annual breakdown is on average 47% males: 53% females.
- More males die in each of the under-85 age groups, but considerably more females die in the 85+ age group, reflecting longer female life expectancy.

Number of Deaths by Gender and Age Group							
2007-09 annual average	under-19	20-49	50-74	75-84	85+	Total	% of Total
male	6	36	243	259	240	785	47%
female	5	25	162	245	464	901	53%
persons	11	61	406	504	705	1,686	100%
% of total	1%	4%	24%	30%	42%	100%	





Main Causes of Death

Nearly 75% of all deaths on the IW are caused by 3 main conditions:

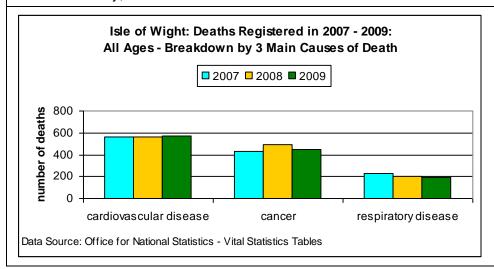
- cardiovascular disease (including heart disease and stroke);
- cancer;
- respiratory disease (including bronchitis, chronic obstructive pulmonary disease and pneumonia).

Data Source: Office for National Statistics – NHS Vital Statistics Tables

IW - Number of Deaths by Cause

The chart below shows the number of deaths of IW residents from these three main causes for each of the last 3 years.

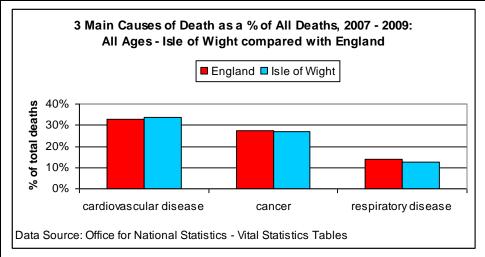
For each condition the number of deaths has been broadly similar in each of the 3 years except for cancer, where the number of deaths increased by 13% between 2007-2008. It is not yet clear whether this was an anomaly, and the trend will be monitored.



Main Causes of Death - Comparative Breakdown

The chart below shows the percentage of deaths accounted for by each of these three main causes, compared with England, for the period 2006-08.

Among IW residents these 3 causes accounted for 73% of all deaths, a similar percentage to England (75%), with each of the 3 main causes making up a very similar % of the total.



Mortality Rates from All Causes, All Ages

Mortality (death) rates for a specific area are calculated using data on the number of deaths in that area, and its population, by gender and age. The same data is used to calculate Life Expectancy at Birth (see separate briefing).

The mortality rates shown below are 'directly age-standardised', which means that they take account of the gender and age structure of the population. This enables direct comparisons between areas with, for example, larger or smaller proportions of older people in their populations.

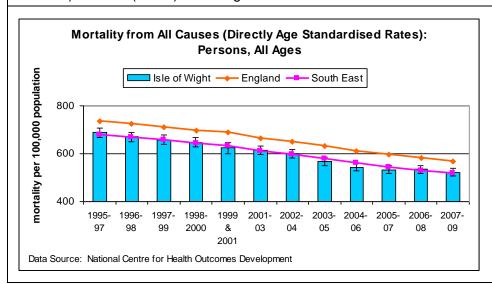
Data Source: National Centre for Health Outcomes Development (NCHOD)

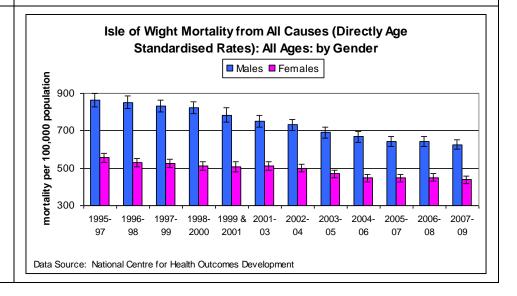
Comparative Mortality Trends – All Ages

The chart below shows the trends in the IW all-cause mortality rate compared with England and the South East. The pattern is similar to that for life expectancy, with a steady reduction (improvement) over time, which has however slowed since 2004-06. The most recent IW rate (for 2007-09) is lower (better) than England's and similar to the South East's.

IW Mortality Trends by Gender – All Ages

The chart below shows trends in IW all-cause mortality rates by gender. Mortality for males has been consistently higher than for females, however it has fallen slightly faster.





Mortality Rates from All Causes, Age under-75

Mortality rates in the **under-75 age group** are considered nationally to be a measure of <u>premature</u> mortality. The charts below show mortality rates from all causes of death among this age group. Mortality rates from the 3 main causes of death are then shown to indicate what contribution each is making to overall trends in under-75 mortality rates.

Comparative Mortality Trends – age under-75

The chart below shows the trends in IW all-cause mortality among people aged under-75 compared with England and the South East. Annual rates are shown.

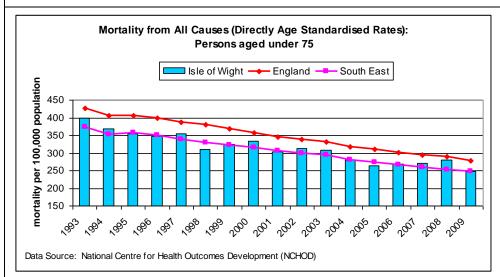
While the IW rate decreased (improved) steadily over most of the period shown, between 2004 – 2008 the rate increased (worsened), though it improved again in 2009.

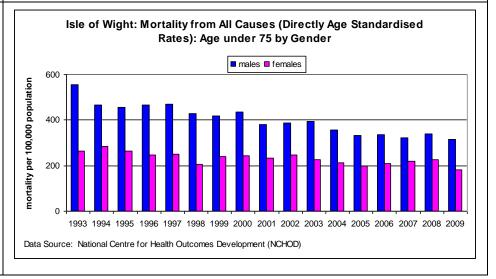
The most recent IW rate (2009) is lower than the England rate but similar to the South East rate.

IW Mortality Trends by Gender – age under-75

The chart below shows the trends in IW all-cause mortality among people aged under-75 by gender. Annual rates are shown.

Mortality among males has been consistently higher than among females. However both rates have decreased (improved) by 31% since 1995, and the gap between the 2 rates has closed.





Mortality Rates from the 3 Main Causes of Death - Persons by Age Group

The charts below compare Isle of Wight directly age-standardised mortality rates for Persons by age group, for the 3 main causes of death:

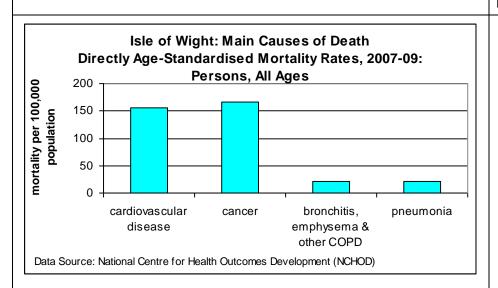
- Cardiovascular Disease (CVD);
- All cancers.

- Respiratory disease:
 - o pneumonia
 - bronchitis, emphysema and other chronic obstructive pulmonary disease (COPD),
 (These 2 sets of conditions account for more than 80% of deaths from respiratory disease.)

Data Source: National Compendium for Health Outcome Indicators (NCHOD)

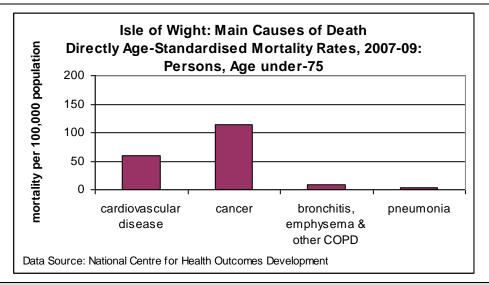
All Ages (Persons)

Cancer, followed closely by CVD, have the highest mortality rates. The 2 respiratory conditions have considerably lower mortality rates.



Under-75 (Persons)

Cancer is the major cause of mortality in the under-75 age group, and is considerably higher than the CVD mortality rate. The respiratory conditions make a relatively smaller contribution to mortality in this age group.



See also separate briefing notes on Cancer, Cardiovascular Disease and Respiratory Disease.