# Measuring inequalities

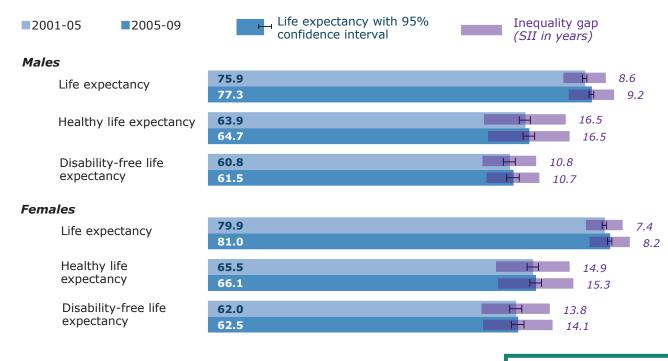
# Trends in mortality and life expectancy in Wrexham



This is one of 22 profiles produced for each local authority in Wales comparing outcomes and their trends in the most and least deprived areas in the local authority. A Wales profile has also been produced and contains more detailed analysis and background information.

Life expectancy in Wrexham, as in Wales in general, is increasing. However, this improvement is not experienced equally across all areas. There are in many cases substantial national and local inequality gaps between the most and least deprived areas in both life expectancy and deaths from different causes. There are also inequalities in the quality of life in terms of healthy life expectancy and disability-free life expectancy. The Slope Index of Inequality (SII) measures the absolute gap in years of life expectancy between the most and least deprived, taking into account the pattern across all fifths of deprivation within the Local Authority. The SII shows, for example, that the gap in life expectancy in males between the most and least deprived fifth is about 9 years. When considering healthy life expectancy the gap is even greater at around 17 years.

# Comparison of life expectancy, healthy life expectancy and disability-free life expectancy at birth, Wrexham 2001-05 and 2005-09





**Measuring inequalities** 

## Mortality by cause of death

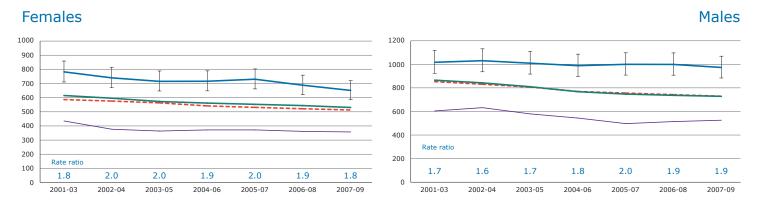
Death rates for all and specific major causes are compared between the most and least deprived using a rate ratio, thereby measuring the relative gap. The following charts show the rates for the fifths, the local authority overall and Wales. A rate ratio of two, for example, means that the rate in the most deprived fifth is twice the rate in the least deprived fifth.

European age-standardised rate (EASR) per 100,000 population

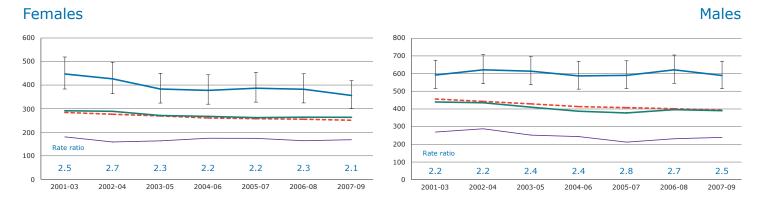
— Most deprived within Wrexham (95% CI) ---- Wales EASR

— Least deprived within Wrexham — Wrexham overall

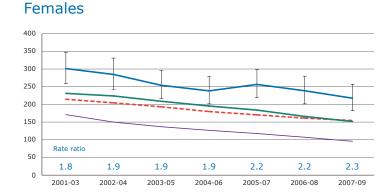
#### All-cause mortality, all ages

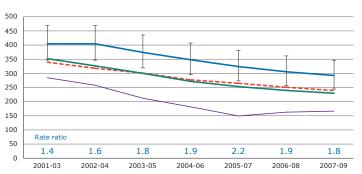


#### All-cause mortality under 75



### Mortality from circulatory disease





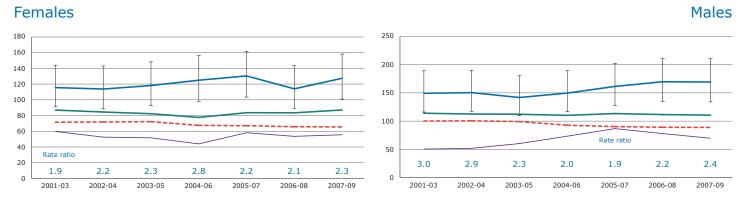
Males

## Mortality by cause of death (continued)

#### European age-standardised rate (EASR) per 100,000 population

- ----- Wales EASR ----- Wales EASR
- Least deprived within Wrexham Wrexham overall

#### Mortality from respiratory disease

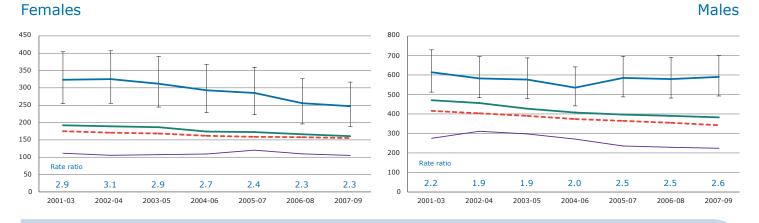


#### **Mortality from cancer**

#### **Females** 300 250 200 150 100 Rate ratio 50 1.5 1.8 2.0 1.9 1.7 1.4 1.1 0 2001-03 2002-04 2003-05 2004-06 2005-07 2006-08 2007-09

#### 400 350 300 250 200 150 100 Rate ratio 50 1.4 1.2 1.5 1.6 1.7 1.6 1.5 0 2001-03 2002-04 2003-05 2004-06 2005-07 2006-08 2007-09

#### Smoking-attributable mortality aged 35 and over



#### Notes and contact:

This publication consists of individual profiles for each of the 22 local authorities, a more detailed Wales profile, selected data files and a technical guide to support the profiles. These are all available on our website at **www.publichealthwalesobservatory.wales.nhs.uk/inequalities**. For further details please contact us on publichealthwalesobservatory@wales.nhs.uk. All analyses, charts and the map have been produced by the Public Health Wales Observatory using the following data sources: Annual District Death Extract and Mid-Year Population Estimates (Office for National Statistics), Welsh Index of Multiple Deprivation and Welsh Health Survey (Welsh Government).

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#### Males

## **Deprivation fifths**

Deprivation fifths for each local authority were produced by ranking all Lower Super Output areas (LSOAs) *within* the local authority and grouping them into fifths, based on the Welsh Index of Multiple Deprivation (WIMD). The relationship between local and national fifths is illustrated in the chart. The position of each local authority fifth shows the range of ranks it contains relative to the Wales fifths.

Overall, it shows that Wrexham covers the whole range of the national deprivation scale, although there is a slight shift towards the least deprived end of the scale. For example, the 17 LSOAs in the most deprived local authority fifth contain some LSOAs from the next most deprived national fifth. The gap between the most and least deprived fifths *within* Wrexham in this analysis is likely to be similar to Wales as a whole.

Further details on deprivation fifths can be found in the technical guide.

# Range of deprivation within local authority fifths on a scale relative to Wales fifths

