## Measuring inequalities

# Trends in mortality and life expectancy in Merthyr Tydfil

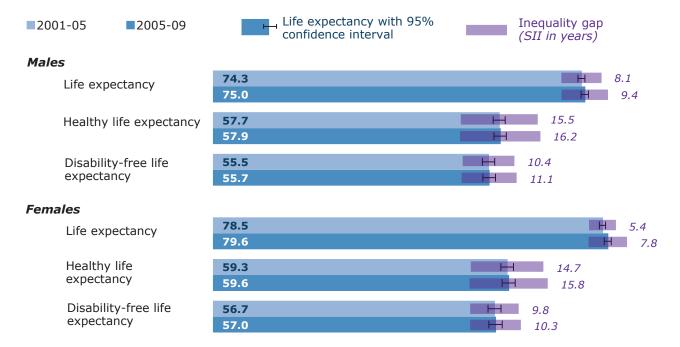


This is one of 22 profiles produced for each local authority in Wales comparing outcomes and their trends in the most and least deprived areas in the local authority. A Wales profile has also been produced and contains more detailed analysis and background information.

Life expectancy in Merthyr Tydfil, 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 16 years.

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





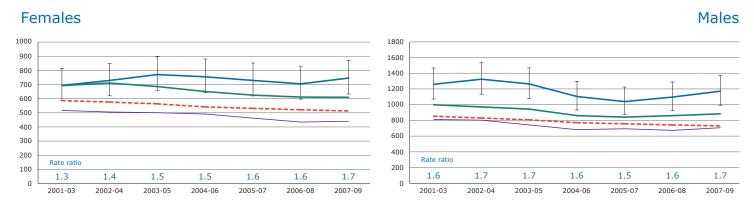
#### Mortality by cause of death

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.

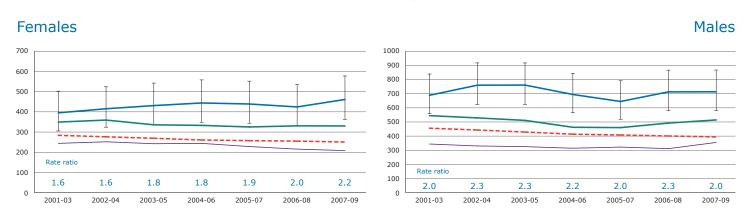
European age-standardised rate (EASR) per 100,000 population

- Most deprived within Merthyr Tydfil (95% CI)
- ---- Wales EASR
- Least deprived within Merthyr Tydfil
- Merthyr Tydfil overall

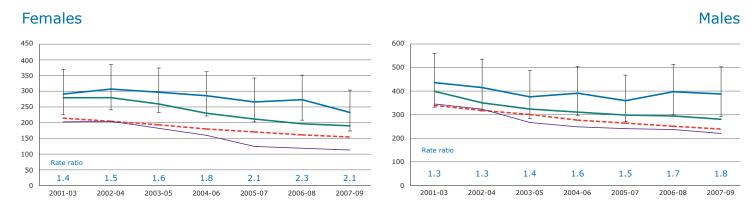
#### All-cause mortality, all ages



#### All-cause mortality under 75



#### Mortality from circulatory disease



#### Mortality by cause of death (continued)

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

— Most deprived within Merthyr Tydfil (95% CI)

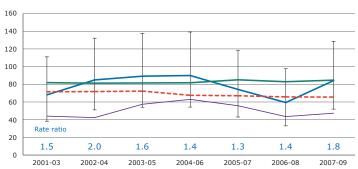
--- Wales EASR

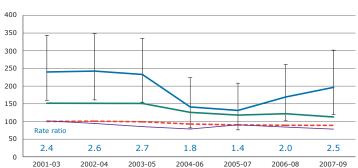
Least deprived within Merthyr Tydfil

— Merthyr Tydfil overall

#### Mortality from respiratory disease

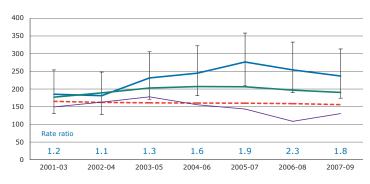


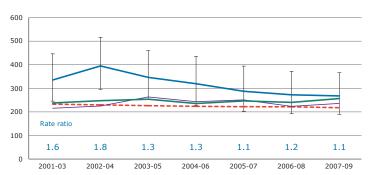




#### **Mortality from cancer**

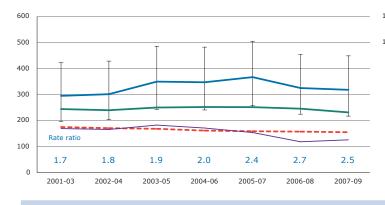
#### Females Males

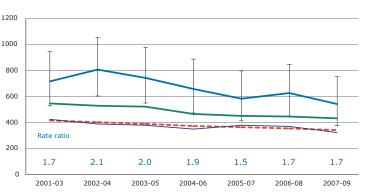




#### Smoking-attributable mortality aged 35 and over

#### Females Males





#### **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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#### **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 LSOAs in Merthyr Tydfil are concentrated towards the most deprived end of the national deprivation scale. All but the least deprived local authority fifth contain LSOAs drawn from the most deprived half of the national deprivation scale. The gap between the most and least deprived fifths *within* Merthyr Tydfil in this analysis is narrower than for Wales overall.

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

