



Developing The Public Health Observatory For Wales
Datblygu Arsyllfa Iechyd y Cyhoedd i Gymru

Cardiff & Vale University

Local Health Board

> Demography Profile



Cardiff & Vale University Local Health Board (LHB) area is the smallest and most densely populated LHB area in Wales, primarily due to Wales' capital city: Cardiff. 72.1 and 27.9 percent of the LHB area population live within Cardiff and the more rural Vale of Glamorgan respectively.

The LHB area includes 14.9% of Wales' population, yet has an **age and sex profile** with marked differences to that of Wales (Fig. 1). There are substantially higher percentages of people in Cardiff aged 20 to 34, likely to be the result of high numbers of students and young professionals living within the city or commuting from the Vale of Glamorgan. Also there are comparatively lower percentages of people aged 50 and over. Although the 2001 Census reported that 6.7 percent of the population came from black and ethnic minority background⁴, the effect of migration since the time is more difficult to quantify.

Across Wales and the UK, the **general fertility rate**, the number of births per 1,000 women of child bearing age, had been falling until 2001/2002. However, it has been rising since (Fig. 2). The Cardiff & Vale University LHB general fertility rate is lower than the

Key Statistics	Wales	Cardiff & Vale University LHB
Area size ^[1]	20,779 km ²	471 km ²
Total population ^[2]	2,980,000	445,000
Life expectancy at birth - males ^[3]	76.8 years	76.9 years
Life expectancy at birth - females ^[3]	81.2 years	81.6 years
Persons per km ² ^[1, 2]	143.4	944.8
% population from ethnic minority background (2001) ^[4]	2.1%	6.7%
Total number of births ^[5]	34,572	5,888
Number of deaths ^[6]	32,148	4,073
% lower super output areas (LSOAs) in most deprived 5th of Wales ^[7]	20%	21%

> Fig 1: Population Pyramid Cardiff & Vale University LHB and Wales
Data source: Office for National Statistics, mid year estimates 2007

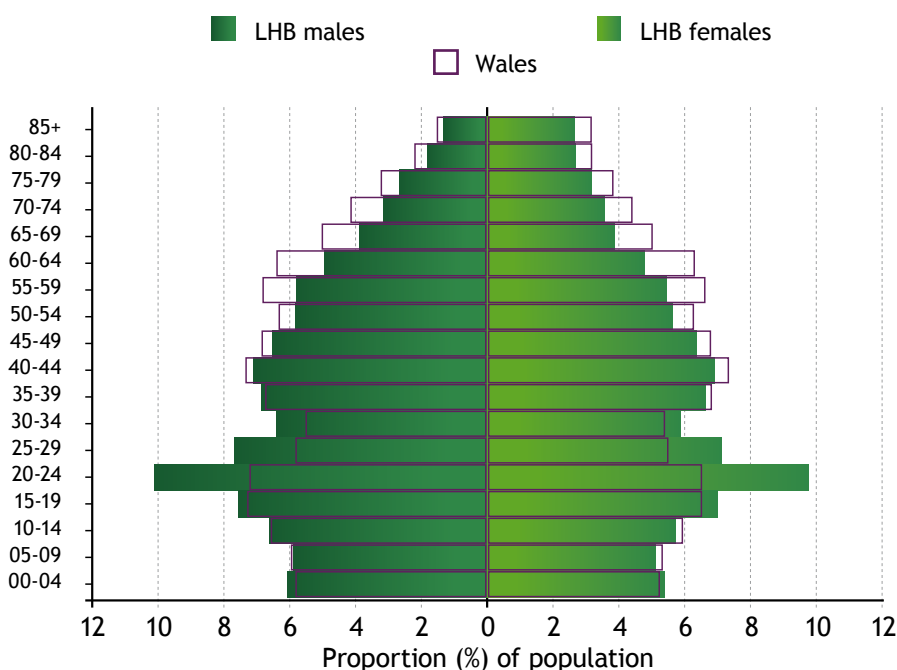


Fig 2: General Fertility Rate trend, Cardiff & Vale University LHB and Wales, 1998 - 2007

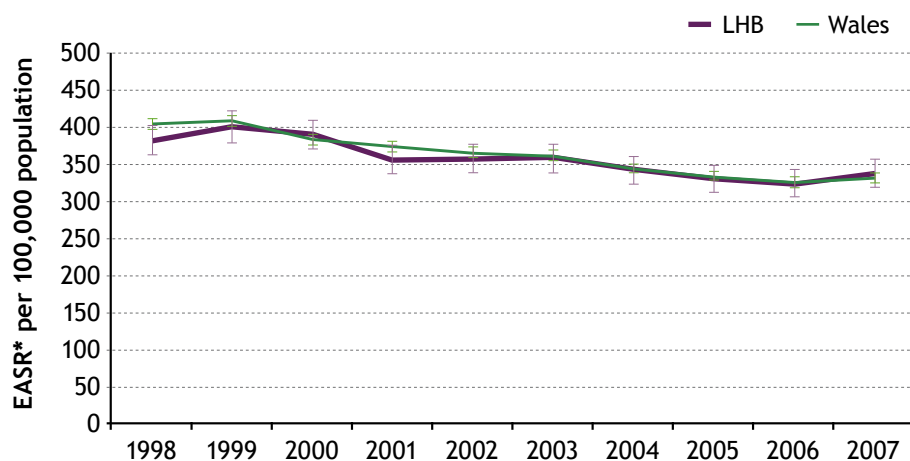
Data source: Office for National Statistics, Annual District Births Extract, mid year estimates



Error bars represent 95% confidence intervals. These reflect how random variation might influence the rate shown. This variation is greater in smaller populations, giving rise to wider intervals (for further details see website).

Fig 3: Under 75 mortality rate trend, Cardiff & Vale University LHB and Wales 1998 -2007

Data source: Office for National Statistics, Annual District Deaths Extract, mid year estimates



*EASR: European age standardised rate. Age standardisation allows comparison of rates across populations or time periods even when the age structures in these populations/time periods are different.

1. Office for National Statistics, 2007 geography.

2. Office for National Statistics, 2007 mid year estimates (rounded to the nearest 100).

3. Office for National Statistics, 2005-07 deaths registration and mid-year population estimates data.

4. Office for National Statistics, 2001 Census.

5. Office for National Statistics, Annual District Births Extract.

6. Office for National Statistics, Annual District Deaths Extract.

7. Welsh Assembly Government (Welsh Index of Multiple Deprivation domains: income employment, health, education, access to service, housing, physical environment, community safety).

8. Cardiff Research Centre. Population trends and projections for post retirement age groups in Cardiff from 1989 to 2019. Cardiff: Cardiff Council; 2006.

Wales rate but closely reflects the Welsh pattern⁵.

In the Cardiff & Vale University LHB area, the under 75 age standardised mortality rate dropped by 12 percent between 1998 and 2007 (Fig. 3). It has remained consistent with the Wales rate for the majority of the period. This fall is likely to reflect not only the activities of health services, but also improvements in living standards in the Cardiff & Vale University LHB area in the latter part of the 20th century.

The greatest causes of death in people aged under 75 among Cardiff & Vale University LHB residents are cancer, circulatory disease and respiratory disease, accounting for 38%, 22% and 8% of approximately 1,400 deaths respectively during 2007⁶.

Geographically based deprivation measures can be used to show inequalities in health and suggest areas likely to most need measures to improve health and manage ill-health. The Welsh Index of Multiple Deprivation 2008 is produced at small area level called Lower Super Output Areas (LSOA) and is derived from a broad range of factors⁷.

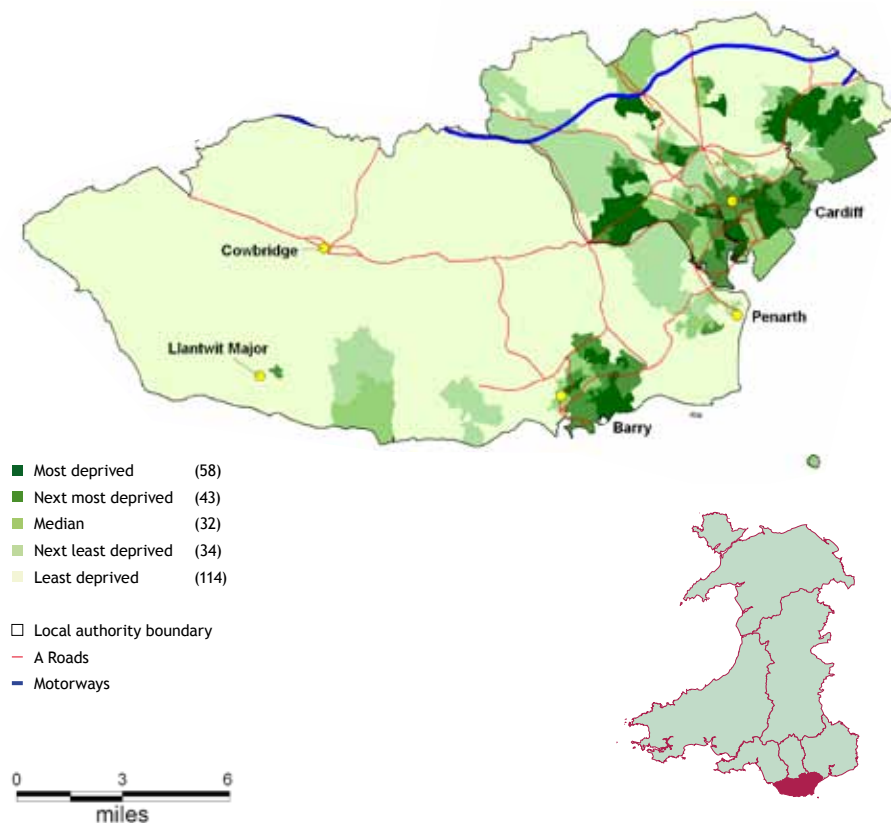
Within the LHB there are areas of deprivation, particularly in the southern part of Cardiff City and Barry (Fig. 4). 58 out of the 281 LSOAs in the LHB (21 percent) are among the most deprived fifth in Wales with 114 (40 percent) in the least deprived fifth. However, within less deprived areas there are often pockets of hidden deprivation.

Current projections see a rise in the older population (75 years and over) of Cardiff & Vale University LHB residents from 33,000 (7% of the total population) in 2006 to 52,000 (10% of the total population)

> Fig 4: Overall Welsh Index of Multiple Deprivation 2008

Fifths of deprivation, Lower Super Output Areas.

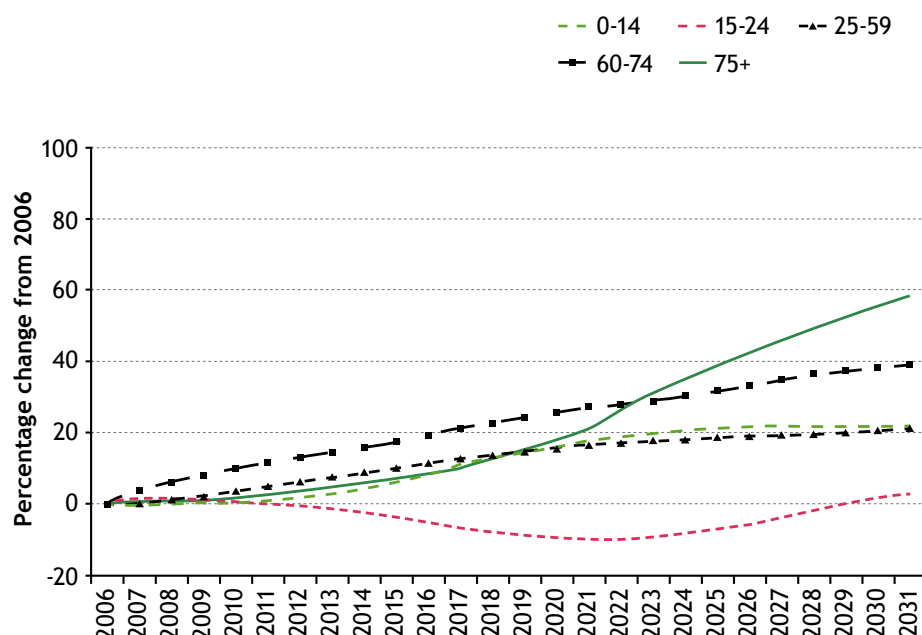
Data source: Welsh Assembly Government



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> Fig 5: Population projections, Cardiff & Vale University LHB

Data source: Derived from LA Population Projections (2006-based)
Welsh Assembly Government



in 2031 (Fig. 5). These figures are from local authority projections based on assumptions about births, deaths and migration undertaken by the Welsh Assembly Government. This percentage rise in the elderly is less than that expected for Wales as a whole; other work has put the rise in the elderly population of Cardiff as less again⁸. The increase in the number of older people is likely to cause a rise in chronic conditions such as circulatory and respiratory diseases and cancers. Meeting the needs of these individuals will be a key challenge for the Local Health Board. In the current economic climate, the relative (and absolute) increase in economically dependent and, in some cases, care-dependent populations will pose particular challenges to communities.

> Further Information:

More detail on the demography of the residents of Cardiff & Vale University LHB and Wales to accompany this profile is available at www.wch.wales.nhs.uk. This includes information at small area level, local variations in mortality and further resources to support LHB work.

This profile presents information for use by the newly formed Local Health Boards of Wales. It has been produced as the first of a series of information products made available by the newly created Public Health Observatory for Wales, a collaboration between the Wales Centre for Health and the National Public Health Service for Wales. LHB requirements will direct future profile development.

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