

Birth trends in the North West 2000 – 2005

NWPHO Monthly - February 2007B

Dataset Facts

- Data items in the birth register include:
 - Date of birth
 - Place of birth
 - Sex of the child
 - Mother and father's place of birth / occupation
 - Mother's usual residence
- Other confidential details, such as childbirth history and parents' dates of birth, are also collected
- Details of birthweight for live births are notified to the local health authority by hospitals, midwives or GPs
- Birth data are held by the Office for National Statistics (ONS) and NWPHO receive annual North West and national extracts

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Key Messages

- General fertility rates increased in the North West between 2002 and 2005.
- In 2005, general fertility rates varied across the region, with the highest local authority rate (Blackburn with Darwen) being 1.7 times greater than the lowest (Ribble Valley).
- The most deprived Lower Super Output Areas (LSOAs) have higher fertility rates and a higher incidence of low birthweight (2000-2005) than the more affluent areas.
- Over the same period, the lowest general fertility rates were seen among the geodemographic classification 'New Starters' and highest in 'Multicultural Centres', who also had the highest incidence of low birthweight babies.
- This analysis supports the targeting of interventions to specific localised populations in order to help to improve expectant mothers' and their children's health.

Introduction

Civil registration of births in England & Wales dates back to the 1836 Births and Deaths Registration Act and official registration of live births began on 1 July 1837. Since then, various legislation has been passed affecting information collection during birth registration.

Birth statistics are crucial for demographic profiling. Combined with death, migration and the latest Census data, birth data are used to derive population estimates and projections. Common indicators used to measure births and birth trends include the crude birth rate (number of live births per 1,000 population) and the general fertility rate (number of live births per 1,000 women aged 15–44). The North West Public Health Observatory (NWPHO) obtains an extract of the births dataset from ONS annually to support wider public health intelligence within the region.

Trends in births

In 2005 there were 645,835 live births in England & Wales (an increase of 1.0% from 2004), with 82,173 births to North West resident mothers. Crude birth and general fertility rates show similar trends to each other and in England & Wales both rates decreased from 1990 to 2002, but increased from 2002 onwards. Rates for the North West also increased from 2002 to 2005, but are currently just behind the national averages (Figs 1 & 2).

Figure 1: General fertility rates in the North West and England & Wales, 2000 - 2005.

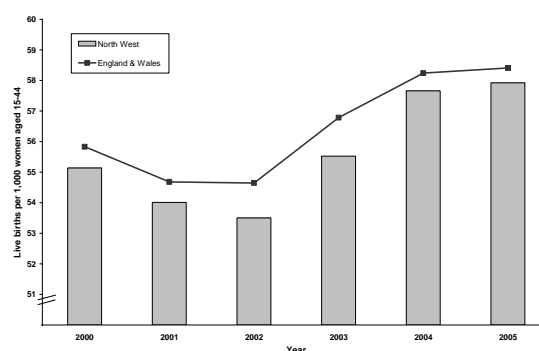
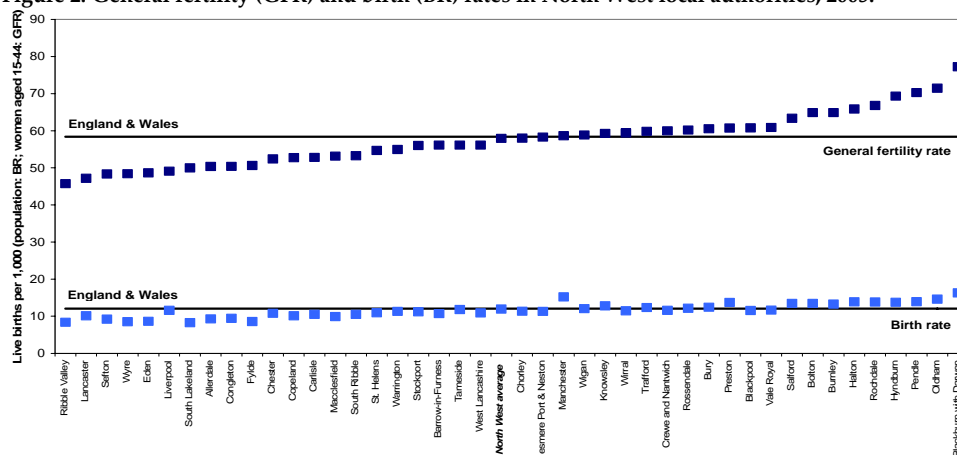


Figure 2: General fertility (GFR) and birth (BR) rates in North West local authorities, 2005.



Variation in birth and fertility rates across the North West

In 2005, general fertility rates in the North West varied greatly by local authority (Fig 2). Rates were highest in Blackburn with Darwen (77.2 live births per 1,000 women aged 15-44, nearly one-third higher than the North West and England & Wales rates), Oldham (71.5) and Pendle (70.3). General fertility rates were lowest in Ribble Valley (45.7, over one-fifth lower than the North West and England & Wales rates), Lancaster (47.2) and Sefton (48.3).

There were also variations in the differences between the crude birth and general fertility rates in different local authority areas. These are due to differences in population structures, notably the proportion of women aged 15-44. For example, Manchester had the second highest birth rate in the North West in 2005, but only the twentieth highest fertility rate.

Trends in fertility rates in the North West (see data supplement link below)

Between 2000 and 2005, general fertility rates increased the most in Crewe and Nantwich (+19.0%), Burnley (+18.9%) and Halton (+17.1%) and decreased the most in Ribble Valley (-17.1%), Wyre (-7.7%) and Eden (-7.4%). Between 2002 and 2005, when general fertility rates grew in the North West and England & Wales (Fig 1), only two local authorities experienced a decrease in general fertility rates: Ribble Valley (-4.4%) and Warrington (-0.9%).

Deprivation, fertility rates and low birthweight

Birth information at LSOA level can be analysed in conjunction with the Index of Multiple Deprivation 2004^a (IMD 2004). Over the 2000 and 2005 period, there is little difference in fertility rates between the least deprived four quintiles of North West LSOAs (ranging between 48.9 and 51.5 live births per 1,000 women aged 15-44), but the most deprived quintile of LSOAs has a far higher fertility rate of 66.7 (Fig 3). In addition, the incidence of low birthweight (<2,500g) is significantly higher in the most deprived quintile of North West LSOAs (101.6 per 1,000 live births) than the average of 82.6 (Fig 4). This emphasises the importance of targeted interventions to improve expectant mothers' health, including smoking cessation and good nutrition.

Geodemographic classifications, fertility rates and low birthweight

P² People & Places^b geodemographic classifications have been used to analyse birth data, where each P² Tree is ranked by the income domain of IMD 2004. With an increase in fertility rate as deprivation increases from left to right ('Mature Oaks' being the most affluent and 'Urban Challenge' the most deprived), 'Multicultural Centres' stand out as having a general fertility rate (90.6) nearly three times higher than 'New Starters' (31.2) (Fig 5). Low birthweight is also more common in the more deprived areas than the less deprived, but 'Multicultural Centres' have the highest incidence of low birthweight (123.8 per 1,000 live births) (Fig 6), reflecting national evidence^c of a high incidence of low birthweight among some minority ethnic groups.

Figure 3: NW fertility rates by IMD 2004 quintile, 2000-2005.

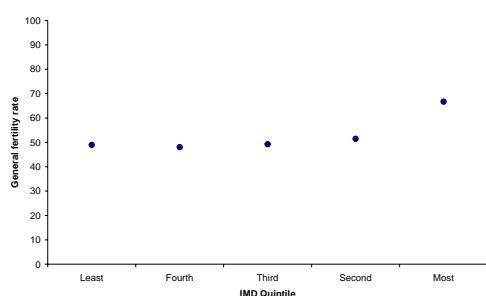


Figure 4: Low birthweight by IMD 2004 quintile, 2000-2005.

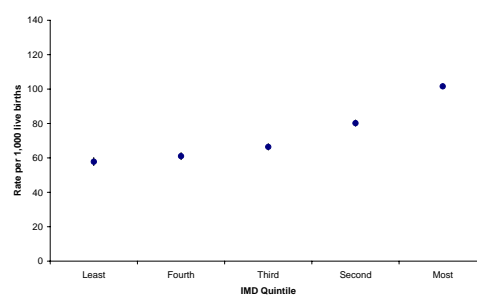


Figure 5: NW fertility rates by P² People & Places, 2000-2005.

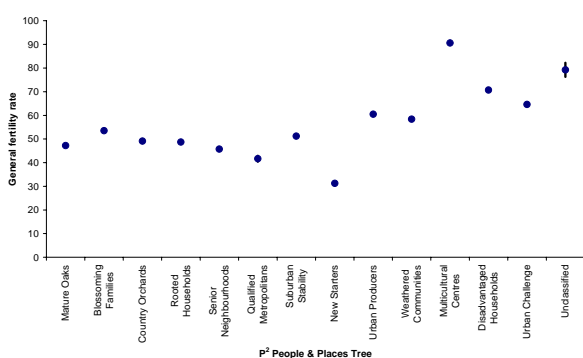
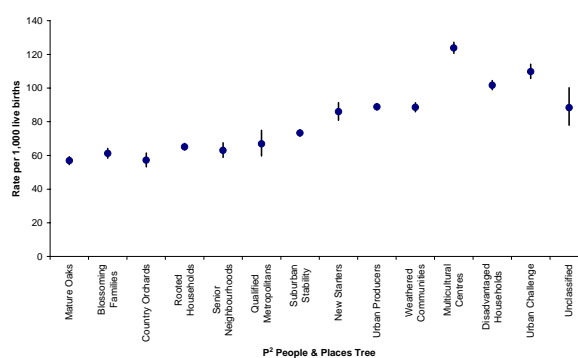


Figure 6: Low birthweight by P² People & Places, 2000-2005



^a Available at: www.communities.gov.uk/index.asp?id=1128440

^b P² People & Places © Beacon Dodsworth: www.p2peopleandplaces.co.uk

^c Births and population data source: National Statistics. Crown copyright material is reproduced with the permission of the Controller of HMSO