



Infant mortality, low birth weight and teenage motherhood in Birmingham

Aims

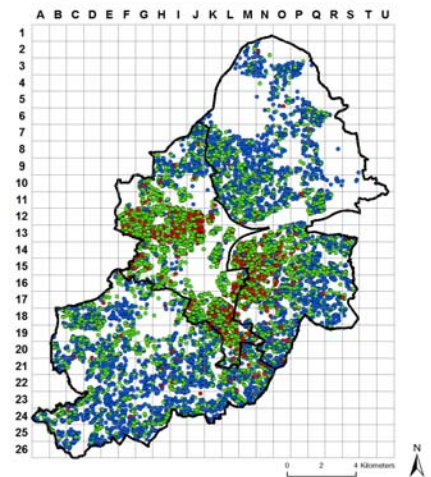
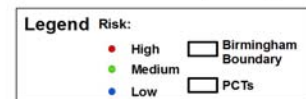
The aims of the project, undertaken for the Birmingham Health and Wellbeing Partnership (BHWP), were to provide analyses of infant mortality, low birth weight and teenage motherhood in Birmingham and to identify any systematic patterns across the area based on housing wealth and tenure, income deprivation, ethnicity, age of mother, gender and geography.

What we did

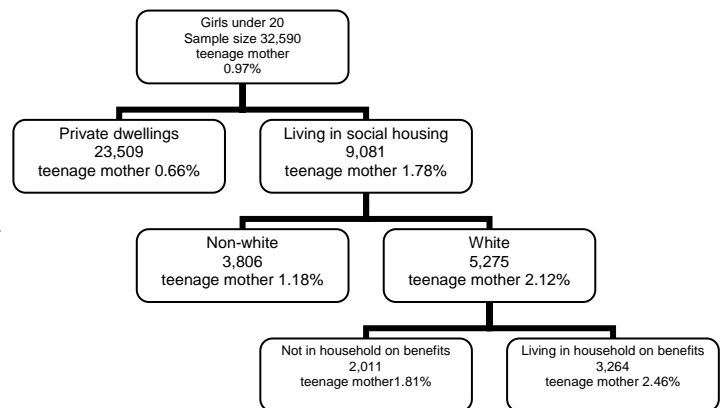
The Public Health mortality file for all deaths in Birmingham for the three years 2004 to 2006 inclusive was used to establish the annualised number of deaths under 1 year. This was then divided by the total number of children (<1 and with a Unique Property Reference Number) on the Neighbourhood Knowledge Management (nkm) population database for Birmingham to give a value for infant mortality. For the low birth weight and teenage motherhood analyses we used the most recent 12 months data from the Birmingham PCTs inpatient file (April 06 to March 07).

Outputs

The overall infant rate was calculated to be 7.7 per thousand infants <1 resident in Birmingham and the category of infants at greatest risk is male and lives in social housing with Council Tax band A. The two categories at most risk of low birth weight are non-white teenage mothers living in households on benefits. When these two factors occur together there is an increased odds of 96% of having low birth weight. Concentrations of medium to high risk occurrences of low birth weight are in central areas of the region (Heart of Birmingham and Birmingham East) as can be seen from the distribution map. The three factors that dominate the higher risk categories for teenage motherhood are ethnicity (white), social housing, and being on benefits. The risk tree for teenage motherhood emphasizes this. When these factors are combined there is between a 5-fold and 8-fold increase in the odds of teenage motherhood (<20) rising to a 13-fold increase in the odds for teenage girls aged less than 18 years.



Distribution of the risk of low weight births across Birmingham based on given risk factors



Risk tree for teenage motherhood (<20) in Birmingham

Tailoring services to local needs

NEIGHBOURHOOD KNOWLEDGE MANAGEMENT

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