

Millennium Cohort Study

CHILD HEALTH



Taken from Chapter 6¹ of *Millennium Cohort Study Second Survey: A User's Guide to Initial Findings*

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The Survey

The Millennium Cohort Study (MCS) offers groundbreaking large-scale information about children born into the new century and the families who are bringing them up in all four countries of the United Kingdom. It lays the foundation for a major new research resource.

For the first survey, conducted in 2001-2002, we interviewed the families of nearly 19,000 children aged nine months. A disproportionate number of these children came from families living in areas of high child poverty, and, in England, from areas with relatively high minority-ethnic populations². This survey looked at the circumstances of pregnancy and birth, as well as the social and economic background of the families into which these children were born.

The second survey marks the beginning of a series of follow-up surveys. Conducted in 2003-2005, it records how nearly 16,000 cohort children are developing at the age of three. For the first time, researchers have been able to chart the changing circumstances of families and relate children's outcomes at age three to earlier circumstances and experiences. This summary reveals some of the results from the second survey³.

Starting out

The majority of pre-school-aged children, in all four countries of the UK, are growing up healthily but there are important inequalities in health across different social, ethnic and income groups. The second survey of the MCS also identified some important differences in the health and development of boys relative to girls. Most of the findings draw on mothers' reports.

First steps to independence

- By age three, 99.6 per cent of children could walk without difficulty and 96.5 per cent could climb stairs like an adult, with one foot on each step.
- Children were mostly toilet-trained by this age; 83 per cent of children were reported as always dry or clean by day. More girls (88 per cent) than boys (78 per cent) were dry by day.
- A minority of mothers (13 per cent) were concerned about their child's level of speech or use of language – almost twice as often for boys (17 per cent) as girls (10 per cent).

Disability

Problems with vision and hearing in infancy may influence early social and cognitive development and affect access to education and later educational progress.

- Six per cent of mothers reported a problem with their child's eyes; this

was more common in disadvantaged communities in every UK country.

- A small number of children (around 0.2 per cent) were registered as partially sighted or blind.
- One in twenty (5 per cent) was reported to have hearing problems.

General health and wellbeing

- Mothers reported a long-term condition professionally diagnosed in 16 per cent of children (17 per cent of boys and 15 per cent of girls).
- About one in five children with a long-term condition was limited from activity normal for their age (about 3 per cent of children overall).
- Long-term conditions severe enough to limit play or normal activity were more commonly reported in children from disadvantaged communities.
- In England, long-term conditions were least common in areas with a high proportion of minority-ethnic residents. They were least common in Bangladeshi children (9 per cent) and most prevalent in Black Caribbean children (19 per cent).

Asthma and acute illness

- By age three, 10 per cent of children were reported to have had asthma, with boys (14 per cent) more affected than girls (10 per cent).
- 31 per cent of children had experienced wheezing or whistling in the chest in the preceding 12 months. This was more common in boys and children from

¹ The two other co-authors of Chapter 6 were Summer Sherburne Hawkins and Tim Cole.

² Percentages reported here have been re-weighted to be representative of the population as whole.

³ Twins and triplets not included in these analyses.

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disadvantaged communities.

- Black Caribbean children were more likely to have had asthma or wheezing by the age of three and those of Bangladeshi origin least likely.
- Asthma and wheezing were significantly more common among children whose mothers had smoked in pregnancy, as expected from previous research. Ten per cent of children whose mothers did not smoke in pregnancy suffered from asthma, compared to nearly 15 per cent where the mother had smoked.

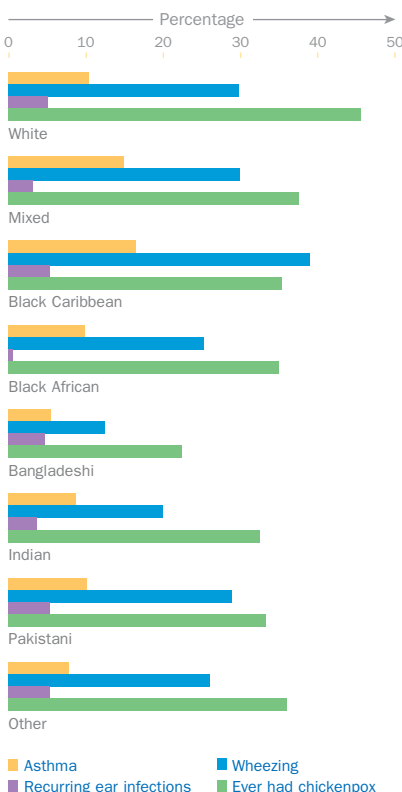
Infections

- Mothers reported that just under half of children had had chickenpox (47 per cent of girls and 44 per cent of boys). It was more commonly reported for White children and those in more advantaged communities but less common in areas with a high proportion of minority-ethnic residents.
- Roughly one in fifteen children (7 per cent) had recurrent ear infections; in Wales and Scotland this was most common in disadvantaged communities, while in England it was lowest in minority-ethnic areas.
- Children whose mothers had reported smoking during pregnancy experienced more recurrent ear infections (8 per cent) than those whose mothers had not smoked (6 per cent).

Injuries

- One in three children (35 per cent) was reported to have had at least one accident requiring admission to hospital, attendance at an accident and emergency department or a health centre.
- This was more common for boys (39 per cent) than girls (31 per cent), and for White children (28 per cent).
- Injury was strongly associated with family poverty; 39 per cent of children in families below an approximate poverty line had experienced at least one significant injury by age three, compared with 35 per cent of the rest.

Asthma, wheezing, recurrent ear infections and chickenpox by child's ethnic group



Immunisation

In the UK, children are offered the combined measles, mumps and rubella vaccine [MMR] at 13 months, with a second dose shortly before school entry.

- By age three, mothers reported that

6 per cent of children had not been immunised against MMR, with more boys (6.5 per cent) than girls (5.6 per cent) being completely unimmunised.

- The combined MMR vaccine was given to 88.3 per cent of children (87.5 per cent of boys and 89.1 per cent of girls). Six per cent of children were immunised separately for measles, mumps and rubella, using single rather than combined vaccines. This was more common in England than in other UK countries.
- Children in disadvantaged communities or areas with a high proportion of minority-ethnic groups in England were more likely to have received the combined MMR vaccine. Use of combined MMR was highest among those from ethnic groups of the Indian subcontinent and Black Africans.
- Use of single vaccines was highest in families from non-disadvantaged areas of England (8 per cent).
- The association with maternal education and use of single or combined MMR vaccines was not simple: mothers with no qualifications or those educated to A-level and above were more likely to have a completely unimmunised child, while mothers with higher educational qualifications were more likely to choose single vaccines.

Conclusion

Children in disadvantaged communities are more likely to experience disability and ill health, more problems with vision and hearing, as well as asthma, chronic infections and injuries. However, there is no systematic tendency for poor health among children starting out or living in minority-ethnic areas, perhaps reflecting ethnic diversity in health-related behaviours such as breastfeeding and smoking.

Furthermore, some important differences between boys and girls have been observed. Boys were more likely to be delayed in toilet training and

speech, to experience wheezing and asthma and to require medical attention for injuries. Girls were more likely to have had chickenpox and to have received the combined MMR vaccine. These variations may relate to different social expectations and early social experiences and may, in turn, influence access to early-years provision and later health. Further exploration of these gender differences is warranted.

Millennium Cohort Study Second Survey: A User's Guide to Initial Findings is available at www.cls.ioe.ac.uk