

## ARCHIVES OF DISEASE IN CHILDHOOD

### UK death rate of pre-school kids almost double that of Sweden

*Prematurity, congenital abnormalities, and infections all taking toll on young children in UK*

The death rate among pre-school children in the UK is almost double that of Sweden, with prematurity, congenital abnormalities, and infections all taking a significant toll, finds research published online in ***Archives of Disease in Childhood***.

The findings prompt the researchers to call for a stronger focus on prevention to improve the UK's position on the European child mortality league table.

The researchers compared causes of death among children under the age of 5 in the UK and Sweden, using nationally collated data spanning the period 2006-2008 to tease out the reasons behind child death rates in the UK.

The child death rate is considered by UNICEF to be a barometer of children's health within any given country, say the researchers, but it is higher in the UK than in many other European countries.

The researchers chose Sweden as the comparator country as it has one of the lowest child death rates in Europe; it has comparable levels of economic and social development; like the UK, its healthcare is free at the point of access; and it spends the same proportion of its gross domestic product (about 8%) on healthcare.

During the study period, the total number of live births was 2, 295,964 in the UK and 315,884 in Sweden.

But the death rate among this age group was significantly higher in the UK—almost double—amounting to 614 per 100,000 of the pre-schooler population, compared with 328/100,000 in Sweden.

The primary causes of death in the UK were problems associated with premature birth, inborn (congenital) abnormalities, and infections, the respective rates of which per 100,000 of the pre-schooler population were 138.5, 112.1, and 63.9.

The equivalent figures for the same three conditions in Sweden were 10.1—representing a 13-fold difference— 88.6, and 34.8.

The three main causes of death for the under 5s in Sweden were inborn abnormalities, complications of pregnancy and labour, and infections.

But both newborns and young children were significantly more likely to die of treatable infections, such as pneumonia, meningitis, and systemic blood poisoning (septicaemia) in the UK than they were in Sweden.

Prematurity is recognised as a major cause of mortality in young children, explain the researchers, who point out that socioeconomic factors and health inequalities have a major influence on the rate of premature birth, which is higher in the UK than it is in Sweden. And while the premature birth rate has remained stable in Sweden, it has been rising in the UK.

“The high mortality rate from prematurity in the UK is not a reflection on the quality of neonatal intensive care,” emphasise the researchers. “It is, however, a reflection on the adverse social determinants of health in the UK that result in a large number of preterm births.”

And unlike in Sweden, many family doctors (GPs) in the UK don't have any training in paediatrics, they add.

“The differences in mortality rates for a wide variety of clinical conditions, including respiratory disorders in both young children and neonates, cardiovascular, gastrointestinal, and neurological disorders raise important questions about the organisation and delivery of services for young children in the UK,” write the researchers.

They go on to suggest that money would be better spent looking into why children don't get prompt care with existing treatments rather than evaluating new medicines.