

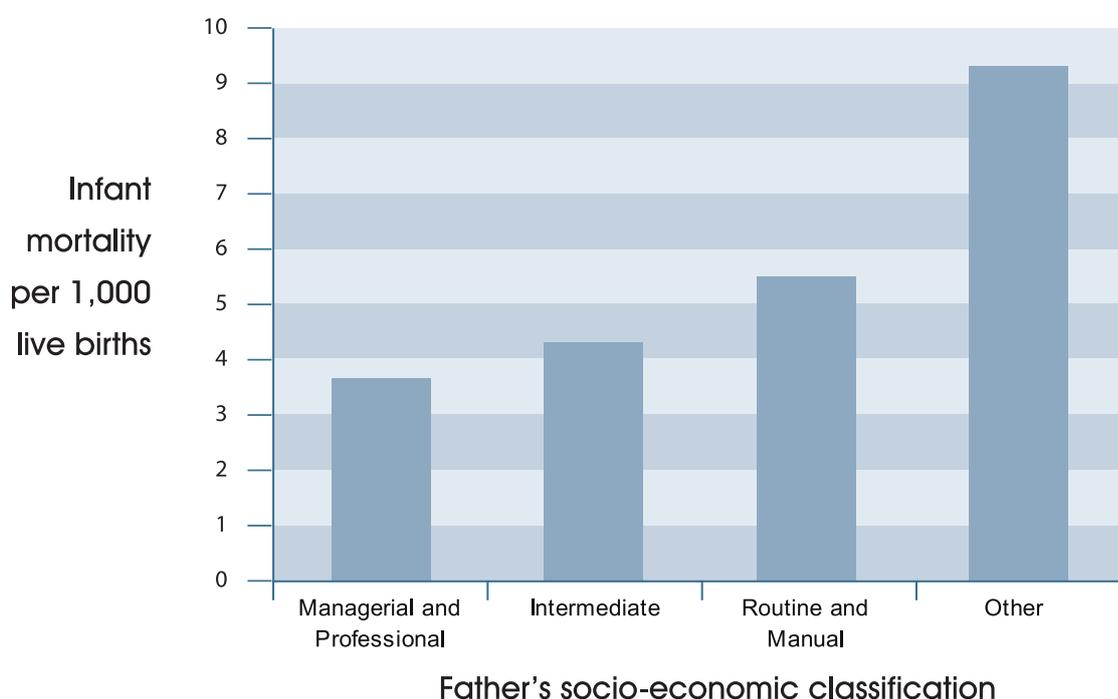


Patterns and Causes of Child Death

Each year in the UK some 5,000 children under the age of 15 die (Office for National Statistics, 2007a). This represents a dramatic fall from the 200,000 children who died annually 100 years ago. In part this has been due to improvements in public health, including proper sanitation and immunisation

and overall improvements in housing and living, and to improved health services. However disparities still exist, with wide variations across the UK, largely reflecting a prominent North-South divide and persisting socio-economic differences (Figure 1).

Figure 1: Infant mortality by father's socio-economic classification (Office for National Statistics, 2007b)

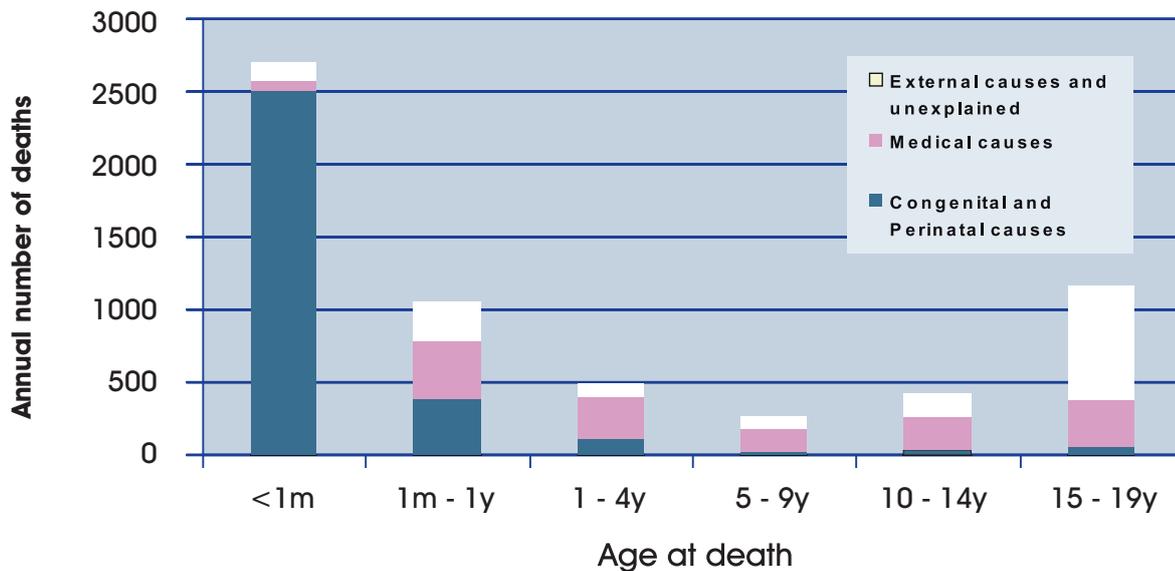


Mortality risks are highest in the youngest age groups: out of all childhood deaths, approximately 3/4 will be aged less than 1 year, 1/2 less than a month, and 1/3 less than a week (Office for National Statistics, 2007a). However, whilst the highest rates are found in infancy, there is a second rise in adolescence, with a further 1,000 young people dying between the ages of 15 and 19 (Office for National Statistics, 2007c). At all ages, mortality is higher in boys than in girls.

Many deaths in childhood are the expected consequence of natural disease processes, for example in a child dying of cancer where treatment has been unavailable or unsuccessful, or in a child with a progressive neurodegenerative disorder. Other deaths occur in an unexpected manner. The main causes of death vary throughout childhood reflecting different risks and different developmental stages (Figure 2). For neonatal deaths, most deaths are related to congenital malformations, prematurity and low birthweight or complications of pregnancy, labour or delivery.

During later infancy, congenital malformations and perinatal conditions remain important causes alongside infections and other medical conditions. A quarter of infant deaths however are due to Sudden Infant Death Syndrome (SIDS) and various external causes. During the middle childhood years, natural causes of death predominate, with infections, cancers and other medical causes accounting for 80% of deaths. However, during the adolescent years (15-19), the pattern is strikingly different: death rates rise again, and in contrast to early childhood, over 50% are from external causes, including accidental deaths, homicide and suicide. Overall, unexpected deaths, including those due to a previously unrecognised identifiable cause and those that remain unexplained, together with both accidental and non-accidental trauma account for between 30 and 50% of all childhood deaths.

Figure 2: Annual number of deaths
(Office for National Statistics, 2007a; Office for National Statistics, 2007d)



Sudden unexpected deaths in infancy (SUDI) make up a particular group of deaths encompassing at least 25% of all infant deaths. Within this group of deaths, the commonest identified causes include deaths from infections, previously unrecognised congenital malformations and metabolic disorders, with smaller numbers being due to accidents (including accidental overlaying) and child abuse. Between 50 and 75% of these SUDI deaths however remain unexplained after a thorough investigation and as such are labelled as Sudden Infant Death Syndrome (SIDS). SIDS probably reflects a number of different underlying pathways relating to particularly vulnerable infants being exposed to various environmental stresses at a specific developmental stage. Whilst our understanding of SIDS remains incomplete, various environmental risk factors, including parental smoking and placing babies to sleep on their fronts, have been identified which are amenable to change. Indeed the introduction of Reduce the Risk campaigns in the early 1990s led to a dramatic fall in the overall incidence of SIDS.

Those who work within the child protection field in the UK will be familiar with the three domains of the Assessment Framework (Department of Health, 2000): the child's developmental needs, parenting capacity and the wider family and environmental context. These same domains, along with a fourth domain of service provision and need,

can be used to understand the interplay of factors relating to a child's death.

Figure 3: Factors affecting risk of childhood death

Factors intrinsic to the child

- Age and developmental stage
- Extra needs, e.g. chronic illness or disability
- Behaviour difficulties
- Prematurity/ low birthweight

Factors around parental care

- Basic care of the child
- Responding to health needs
- Ensuring safety
- Emotional warmth
- Guidance and boundaries

Wider family and environmental factors

- Parental age, marital status
- Parental health including mental health
- Learning disabilities
- Smoking, substance misuse
- Social class
- Social isolation
- Family violence

Service need and provision

- Unmet medical needs
- Previous involvement of child protection services
- Inadequate antenatal care
- Lack of support services

