Chapter 1: Mortality

1.1 Infants (under one year)

Number of infant deaths per 1,000 live births

Key messages

- There were 2,517 deaths among infants in England and Wales in 2014. Most deaths during childhood occur during the first year of life, particularly the first month of life.

- Infant mortality rates across all UK countries have declined markedly over the past 40 years. However, progress has slowed over the past 20 years, particularly compared to other European nations.

- Conditions related to preterm birth are the most common causes of death in infancy.

- Socioeconomic status is strongly associated with infant mortality, with increasing risk associated with higher levels of maternal deprivation.

What is this indicator showing us?

This indicator shows number of deaths under one year of age per 1,000 live births in the UK each year, also known as the infant mortality rate (IMR).

Data availability and comparability

Infant mortality can be split into neonatal mortality (deaths 0–27 days) and post-neonatal mortality (28–365 days). Births without signs of life (stillbirths if after 24 weeks of pregnancy) do not contribute to infant mortality but are also an important indicator of maternal and child health.

Comparable data for infant, neonatal and postnatal mortality rates are available for all four nations of the UK from the Office for National Statistics (ONS), Vital Statistics: Population and Health Reference Tables. Stillborn data for the UK are available from the Childhood Mortality Tables produced by the ONS.

All countries of the UK use the same definitions for stillbirth and infant mortality. However, some international comparisons can be more difficult if definitions of live birth differ between countries.

Infant mortality rates for the United Kingdom, England and Wales, Northern Ireland, and Scotland

![Graph showing infant mortality rates per 1,000 live births, United Kingdom and constituent countries, 1971 to 2014](http://www.rcpch.ac.uk/state-of-child-health)

Latest data: In 2014 the IMR across the UK was 3.9 deaths per 1,000 live births: 3.9 in England and Wales, 3.6 in Scotland, and 4.8 in Northern Ireland.

Trend: The IMR across the UK has been declining. Data for Scotland and Northern Ireland are based on a smaller number of births and deaths and have been fluctuating from year to year.

Figure 1.1.2: Leading causes of death, percentage of total and numbers, among infants in the UK, 2013⁹

Figure 1.1.3: Neonatal mortality rate (deaths from 0 to 27 days of age) per 1,000 live births, United Kingdom and constituent countries, 1971 to 2014⁸

Figure 1.1.4: Post-neonatal mortality rate (deaths from 28 to 365 days of age) per 1,000 live births, United Kingdom and constituent countries, 1971 to 2014⁸

Figure 1.1.5: Stillbirth rate (births without any signs of life after 24 completed weeks of pregnancy) per 1,000 total births, United Kingdom and constituent countries, 2008 to 2014¹⁰

http://www.rcpch.ac.uk/state-of-child-health
**Why is this indicator important?**

Around 60% of deaths during childhood occur under one year of age. The IMR is a commonly used basic indicator of population health and the quality of healthcare services. It is a key international indicator used in the United Nation’s Sustainable Development Goals and in UNICEF international comparisons. Neonatal mortality accounts for between 70% and 80% of infant deaths. The great majority of neonatal deaths are due to perinatal causes, particularly preterm birth, and are strongly related to maternal health, as well as congenital malformations. The remainder of infant deaths are post-neonatal, due to a broad range of causes, including sudden infant death syndrome (SIDS).

Stillbirths (defined in the UK as a baby born without signs of life after 24 completed weeks of pregnancy) account for half of all deaths during the perinatal period (the period surrounding birth, from about 24 weeks of pregnancy up to either seven or 28 days of age).

**Where are we now in the UK?**

In 2014, the IMR across the UK was 3.9 deaths per 1,000 live births, ranging from 3.6 in Scotland to 3.9 in England and Wales and 4.8 in Northern Ireland. There has been an overall decline in the IMR across the UK over the past 45 years, with fluctuations seen in Scotland and Northern Ireland due to the smaller number of births and deaths (see Figure 1.1.1).

The two constituents of IMR, neonatal and post-neonatal mortality, both showed similar marked declines across the past four decades. However, in each there has been a slowing of progress since the mid-1990s. The development of excellent neonatal critical care services within regional networks has made a major contribution to reductions in neonatal mortality during this period. It is thought that the notable fall in post-neonatal mortality seen in the late 1980s and early 1990s may reflect a significant decline in SIDS.

In 2014, the stillbirth rate in the UK was 4.6 deaths per 1,000 births, with little change observed in rates since 2008.

**Spotlight on inequalities**

Social inequalities play a role in almost all the leading causes of infant death. The risk of infant death increases with greater levels of maternal deprivation, as demonstrated in Figure 1.1.6. The mechanisms underlying this social gradient are related to increased risk of preterm delivery in more deprived groups, as well as to maternal health during pregnancy (for example, smoking, poor nutrition, substance abuse) and uptake of recommended practices such as breastfeeding and safe infant sleeping positions.

Maternal age is also associated with infant mortality. Children of very young mothers have a substantially higher IMR; the IMR for mothers aged under 20 years is 6.1 deaths per 1,000 live births compared with 3.4 deaths per 1,000 live births in mothers aged 25 to 29 years in England and Wales. It is likely that some of this age effect in fact represents the influence of deprivation, as mothers from more deprived groups give birth at younger ages.

**Figure 1.1.6: Infant mortality rates by National Statistics Socioeconomic Classification (NS-SEC) for England and Wales, 2014**

**Trend:** The infant mortality rate in mothers giving birth to live babies collectively in NS-SEC groups 5 to 7 is more than twice that of live babies born to mothers from groups 1.1, 1.2 and 2.

**Source:** Childhood Mortality in England and Wales
What does good look like?

Despite historical progress, the reduction in infant mortality in the UK has not equalled the gains observed in comparable countries over the past 20 years.

An international study of mortality in the UK compared with similar wealthy countries in Europe and elsewhere (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Australia, Canada and Norway) showed the UK to have IMR in 1970 similar to the average of the group, but that the UK had become among the worst performing 10% by 2008\(^1\).

International variations in still/live-birth definitions have led some to question the validity of comparisons of the UK’s IMR with other European countries. However, the same comparative trends are seen for post-neonatal mortality as for neonatal or overall infant mortality\(^1\), suggesting strongly that the UK’s poor infant mortality performance is not only due to differences in definitions relating to viability.

The UK’s position in Europe is shown in Figure 1.1.7; in 2014 the UK had a higher IMR than nearly all comparable Western European countries\(^2\).

How can we improve?

Many of the causes of infant mortality are preventable. Infant survival can be improved by taking action to reduce risk factors and enhance factors that protect against mortality. Effective action must target policy and practice at the population level as well as the individual level.

Reducing poverty and inequalities and promoting social health: Deaths during infancy are strongly associated with preterm birth, fetal growth restriction and congenital abnormalities, which disproportionately affect the most disadvantaged families in society\(^2\). Government efforts to reduce child poverty remain crucial to improving infant survival\(^2\). Other protective factors, such as social protection policies (for example, benefits, child care, and housing) and economically redistributive policies, should be implemented to improve and maximise infant survival.

Improving maternal health and education: Maximising the health and wellbeing of women before conception and during pregnancy is central to efforts to reduce the IMR.

Smoking during pregnancy is one of the most important risk factors linked to adverse pregnancy outcomes, associated with impaired fetal growth and development and subsequent increased risk of stillbirth, preterm birth, low birth weight, and the development of some congenital abnormalities. Reducing smoking during pregnancy is therefore vital to reducing infant mortality (see Indicator 2.1 for further detail).

Poor maternal nutrition before and during pregnancy is associated with adverse outcomes in both underweight and overweight women. Folate supplementation to prevent birth defects is a key part of quality peri-conceptual care. Obesity before and during pregnancy and gestational diabetes are associated with an increased risk of stillbirth and fetal and infant deaths, with even a modest increase in a mother’s BMI associated with higher risk\(^2\,22\).

Improving preconception nutrition and preventing maternal obesity are important for reducing infant mortality.

Infant feeding and care: Breastfeeding is a protective factor for infant survival, particularly for infants born preterm; therefore it is vital that women are supported to breastfeed\(^2\) (see Indicator 2.2 for further detail).
Promoting safe sleeping positions is key to prevention of SIDS. Maternal mental health is an important risk factor for poor child health outcomes. Universal midwifery and health visiting services are one of the key ways in which new mothers receive education and support in managing their new baby, including supporting breastfeeding and safe sleeping positions.

Other protective factors such as social protection policies (for example, benefits, child care and housing) and economically redistributive policies should be implemented to improve and maximise infant survival.

**Supporting young mothers:** Each of the above issues is particularly important for young and first-time parents. Increased efforts to reduce unplanned pregnancy during adolescence and providing additional support for younger mothers antenatally and postnataally are likely to contribute to reducing infant mortality. Providing high-quality, evidence-based sex, relationships and reproductive health education in schools is a key part of improving outcomes.

**Knowledge and practice:** Greater focus on research and its application to practice is an essential prerequisite for improving outcomes from before birth, through the first year of life. For example, tremendous progress has been made in reducing SIDS through public health research translated into changes in practice and health education campaigns.

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**Key actions**

- Reduce child poverty and social inequalities in the UK.
- Maximise health during pre-conception and pregnancy, including smoking cessation programmes, promotion of breastfeeding and promoting healthy weight in women of childbearing age.
- Protect and support health promotion and early intervention services such as universal midwifery and health visiting services for new mothers, and expand provision of targeted support for younger mothers.
- Ensure provision of high-quality, evidence-based sex, relationships and reproductive health education in schools.
- Establish a UK-wide system for systematic collection, analysis, and interpretation of infant mortality and maternal health data which can be used for accurate international comparison.
- Promote and support research into maternal and infant health and translate findings into improved practice and policy.
- Ensure that policy strategies to improve maternal and child health are joined up.

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**Additional data note**

Comparability of IMR amongst countries is challenging as the denominator of live births may be defined differently, even within Europe. The World Health Organisation (WHO) definition of live birth is any infant born demonstrating independent signs of life, including breathing, heartbeat, umbilical cord pulsation or definite movement of voluntary muscles, irrespective of gestation.
Chapter 1: Mortality

1.2 Children (one to nine years)

Annual deaths of children aged one to nine years per 100,000 population

Key messages

- 838 children aged one to nine years died in 2014 across the UK: 761 in England and Wales, 28 in Northern Ireland and 49 in Scotland.

- Mortality rates amongst 1- to 9-year-olds have declined across the UK in the last four decades, although progress has slowed in the past 20 years.

- The leading causes of death in this age group are cancer, injuries and poisonings, congenital conditions and neurological and development disorders. Preterm birth also contributes to mortality for up to 10 years after birth.

- There is a strong association between deprivation and the risk of death throughout childhood, with children in deprived areas more likely to die.

What is this indicator showing us?

This indicator shows the mortality rate of children aged one to nine years per 100,000 population of that age.

Data availability and comparability

The number of registered deaths by age-group and year for England and Wales was obtained from the Office for National Statistics (ONS)\(^ {25}\). Comparable data for Scotland and Northern Ireland were obtained from National Records of Scotland\(^ {26}\) and Northern Ireland Statistics and Research Agency\(^ {27}\) respectively. Numbers were converted into age-specific rates by using the Population Estimates for the UK, England and Wales, Scotland and Northern Ireland\(^ {28}\) produced by the ONS.

Child mortality rates (one to nine years) for the United Kingdom, England and Wales, Northern Ireland, and Scotland

![Figure 1.2.1: Mortality rate amongst 1- to 9-year-olds per 100,000 population by country and sex, 2001 to 2014](image)

Latest data: The mortality rate per 100,000 population for children aged one to nine years in 2013/2014 was 12.1 in the UK overall and 12.2 in England and Wales, 11.8 in Northern Ireland and 11.1 in Scotland.

Trend: Mortality rates in all countries have declined since 2001, by 5.1 per 100,000 across the UK from 2001 to 2014. Note that fluctuations in rates in Northern Ireland and Scotland reflect small numbers in each year.

Source: 21st Deaths Registered in England and Wales (ONS), Vital Events (National Records of Scotland), Deaths by Ten Year Age-band (Northern Ireland Statistics & Research agency), and Population Estimates (ONS)\(^ {25-28}\).
Figure 1.2.2: Leading causes of death, percentage of total and number of deaths, among 1- to 9-year-olds in the UK, 2013

Why is this indicator important?

Over 800 children aged one to nine years die each year in the UK despite great improvements in children's health over the past 30 years. Every child's death is a tragedy for the family and for society. Many of these deaths are preventable, and monitoring causes and patterns of death can drive changes to reduce avoidable deaths during childhood.

Factors that contribute to death during childhood can be different to those which contribute to death during infancy or adolescence. The main causes of death amongst 1- to 9-year-olds are cancer, injuries and poisonings, congenital conditions and neurological and developmental disorders.

Injuries and poisonings from external causes are the leading cause of death in boys aged one to four years, whilst cancer is the leading cause of death in girls of the same age.

For both girls and boys five to nine years of age, cancer is the leading cause of death. However, injuries continue to cause more deaths in this age group in boys than girls.

Very early life also still has an impact on mortality in later childhood; children who were born preterm remain more likely to die before age 10 years compared with children born on time.

Where are we now in the UK?

The one to nine years mortality rate per 100,000 population was 12.1, 12.2, 11.8 and 11.1 for the UK, England and Wales, Northern Ireland and Scotland respectively when recalculated for the average of 2012–2014.

Mortality has declined across the UK since the 1970s and declined in most UK countries in the past two decades, as shown in Figure 1.2.1. Trends are unclear in Northern Ireland due to the smaller number of deaths. The overall decline in the UK mortality rate for 1- to 9-year-olds was 5.1 per 100,000 population from 2001 to 2014. However, improvement has slowed over the past 20 years compared with previous decades, and the UK’s recent progress has been significantly lower than in other wealthy European countries.

What does good look like?

The child mortality rate in the UK compares unfavourably with similar wealthy countries. A study comparing the UK with 17 countries (Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, Australia, Canada and Norway) showed that in 1970 the UK was among the best 25% of countries, in terms of child mortality, but by 2008 the UK had fallen to the bottom quartile. The scale of difference between the UK child mortality rate and the average suggests there are around 130 excess deaths of 1- to 9-year-olds each year in the UK.

Many childhood deaths are preventable. A recent study of deaths in under 19-year-olds in England found that 24% were due to potentially modifiable causes.
Spotlight on inequalities

There is a strong association between deprivation and mortality during childhood, with social inequalities found to affect many of the leading causes of death among young children\(^6,31\). This association can be illustrated using data from the Wales Child Death Review programme which showed that between 2009 and 2013 the rate of death in children aged under 18 years living in the most deprived quintile (fifth) of the population in Wales was 70% higher than that in the least deprived quintile\(^29\).

![Bar chart showing deaths from all causes amongst <18-year-olds by deprivation quintile, Wales, 2009–2013\(^29\)](chart.png)

How can we improve?

Understanding the reasons why children die remains challenging, and requires an analysis of both the immediate cause of death and the multitude of factors which led up to the death of a child\(^32\). Causes amenable to intervention include environmental and social factors as well as health service factors\(^31\).

A full set of policy recommendations to reduce child mortality is set out in the RCPCH 2015 report *Why Children Die*\(^33\).

**A healthy society:** Across all age groups children who live in poverty and deprivation are less likely to survive than their richer peers; hence government efforts to reduce child poverty remain crucial to child survival\(^20\).

Ensuring that children have the best start in life is central to improving child health outcomes. This means working to ensure that expectant mothers and their infants are as healthy as possible and supported pre-conception, during the antenatal period, during labour and birth, and postnataally.

Maternal age plays an important role, with both early and late childbearing associated with higher rates of death\(^12\). An increased risk of death has been shown for children of mothers aged under 30 years of age compared to mothers aged between 30 and 34 years in the UK, which is closely linked to social disadvantage\(^34\). Safe play, home, and outdoor environments are vital, as injuries still account for a large proportion of the mortality burden, particularly in boys\(^31,33\).

**Knowledge and practice:** High-quality data and research are crucial to better understanding the reasons why children die, and efforts need to be made to strengthen child death review processes to inform policy and practice nationally and locally\(^33,35\). Knowledge needs to be translated into better practice and policy to improve health.

More knowledge and better practice are required for both common and rare long-term conditions in childhood. For example, the progress in childhood cancer survival in the past four decades has been driven by very high involvement of children with cancer in clinical trials, and the changes in practice that followed discovery. Non-communicable disease (NCD)
research for children is urgently required. The incidence of death during childhood due to NCDs (for example, asthma and diabetes) is higher in the UK than similar wealthy countries, although it remains unclear whether this reflects differences in population or in healthcare.

Children with long-term or pre-existing medical conditions must have access to high-quality healthcare and national outcome data collection should be expanded to enable quality improvement. Many conditions remain life-limiting, despite advances in medical care. There should be services and appropriate support in place to ensure that children with life-limiting conditions receive high-quality palliative care, at home or in a hospice.

Key actions

- Reduce child poverty and social inequalities in the UK.
- Establish a UK-wide system for the analysis and interpretation of child mortality data which can be used for accurate international comparison.
- Expand routine outcome data collection in long-term conditions in children.
- Increase involvement of children with rare and common long-term conditions in developing guidelines, measuring outcomes, service design and research trials.
- Maximise health during pre-conception and pregnancy, including smoking cessation programmes, promotion of breastfeeding, and promoting healthy weight in women of childbearing age.
- Protect and support early intervention services and strategies.
- Create safe environments, including access to information and safety equipment schemes to promote safety in the home.
- Reduce road speed limits in built-up areas to 20mph.
- Ensure that clinical teams looking after children with known medical conditions make maximum use of tools to support improved communication, management and self-care. These might include the utilisation of epilepsy passports or asthma management plans where appropriate. There should be better cross-sector working to ensure adequate support in schools for children and young people to manage their long-term conditions.
- Increase provision of high-quality end-of-life care and access to appropriate palliative care.
1.3 Young people (10 to 19 years)

Annual deaths of young people aged 10 to 19 years per 100,000 population

Key messages

- Nearly 1,300 young people aged 10 to 19 years died across the UK in 2014: 1,121 in England and Wales, 57 in Northern Ireland and 113 in Scotland. The majority of these deaths are among 15- to 19-year-olds; the risk of dying for young men is notably higher than for young women.

- There has been a decrease in mortality among adolescents in all UK nations in recent years. However, the UK has not matched the reductions in adolescent mortality seen in comparable wealthy countries, largely due to higher rates of death from non-communicable diseases.

- The most common causes of death in this age group are injuries, violence and suicide, followed by cancer, substance misuse disorders and nervous system and developmental disorders.

- Deprivation and mental health problems increase the risk of death throughout adolescence.

What is this indicator showing us?

This indicator shows the mortality rate of young people aged 10 to 19 years per 100,000 population of that age.

Data availability and comparability

The numbers of registered deaths by age-group and year for England and Wales were obtained from the Office for National Statistics (ONS)\textsuperscript{25}. Comparable data for Scotland and Northern Ireland were obtained from National Records of Scotland\textsuperscript{26} and Northern Ireland Statistics and Research Agency\textsuperscript{27} respectively. Numbers were converted into age-specific rates by using the Population Estimates for UK, England and Wales, Scotland and Northern Ireland\textsuperscript{28} produced by the ONS.

Child mortality rates (10 to 19 years) for the United Kingdom, England and Wales, Northern Ireland, and Scotland

![Mortality rate amongst 10- to 19-year-olds per 100,000 population by country and sex, 2001 to 2014](image)

**Figure 1.3.1: Mortality rate amongst 10- to 19-year-olds per 100,000 population by country and sex, 2001 to 2014**

**Latest data:** The rate of mortality per 100,000 population for children aged 10 to 19 years in 2014 was 17.3 in the UK and 16.7 in England and Wales, 26.2 in Northern Ireland and 21.0 in Scotland.

**Trend:** Since 2001 there has been a decrease in the mortality rate of young people aged 10 to 19 years in all four nations, although the rate for Northern Ireland has fluctuated considerably due to much smaller numbers.

**Source:** 21st Deaths Registered in England and Wales (ONS), Vital Events (National Records of Scotland), Deaths by Ten Year Age-band (Northern Ireland Statistics & Research agency) and Population Estimates (ONS)\textsuperscript{25-28}.
Why is this indicator important?

Nearly 1,300 young people die each year across the UK, despite improvements in young people’s health over the past 30 years. The majority of deaths are preventable. Knowledge about the causes, patterns, and trends of death is important to direct efforts towards changes in practice and policy to reduce avoidable deaths.

After the first year of life, adolescence is the life stage when children are most likely to die. The factors leading to death in adolescence are different to those in earlier childhood, and causes can differ between males and females. Therefore, it is important to examine adolescent mortality patterns separately from younger children and separately by sex.

Adolescence is when injury mortality peaks and non-communicable diseases (NCD) risks begin to emerge as young people experiment with their growing independence and physical capacity. Adolescents may initiate behaviours including smoking, alcohol use, sexual risk and a range of diet and nutrition behaviours linked with NCDs and health problems.

The death of a child or young person is a personal and family tragedy. For the nation, adolescents are the productive citizens of the next decade and the parents of the next generation. The annual loss of nearly 1,300 productive citizens of the future is an economic disaster.

Where are we now in the UK?

Mortality has decreased among young people across the UK since the 1970s, with a decline from 2001 to 2014 of 10.5 per 100,000 population. This decline can be seen across all four UK nations, although the rate for Northern Ireland has fluctuated considerably due to small numbers.

However, progress in the UK has been poorer than that seen in other wealthy countries over the same period. This has meant that the UK has moved from having among the lowest adolescent mortality in Europe in 1970 to having mortality in the middle of the group of comparable countries by 2008.

The main category causes of death in adolescence are injury deaths and deaths due to NCD, although deaths specifically due to road traffic injuries and suicide cause the majority of deaths among older adolescents of both sexes (see Figure 1.3.2). Other common causes of death among this age group include cancer, substance use problems and nervous system and developmental disorders, in particular epilepsy and neurodevelopmental disorders.

The UK’s ‘average’ adolescent overall mortality today hides a combination of excellent low UK injury mortality, amongst the lowest in Europe, but also a higher rate of deaths due to NCDs than in other wealthy countries. It remains uncertain whether this alarmingly high NCD mortality reflects higher NCD risks in the UK – for example, smoking, alcohol use and obesity – or represents issues with healthcare for long-term conditions. Either way, many deaths from NCDs are preventable, either with changes in traffic safety policies or through practice changes such as better care for adolescents with asthma.
Spotlight on inequalities

Social inequalities are associated with nearly all the leading causes of deaths in young people aged 15 to 19 years, especially injuries. Injury deaths in young people are linked with living in poor housing conditions, increased housing density and availability of off-street parking, proximity to high volumes of traffic, increased exposure to hazardous and illegal driving as well as parental mental health, employment, education, relationship status and income\(^{16}\).

![Figure 1.3.3: Deaths from all causes amongst <18-year-olds by deprivation quintile, Wales 2009–2013\(^{29}\)](image)

What does good look like?

The commonest cause of deaths among adolescents, such as injuries and suicide, are largely preventable. We have low injury mortality among adolescents in the UK, particularly for road traffic deaths. This must not breed complacency, as any deaths of young people on roads are too many and there is much that can still be done to reduce these further.

A full set of policy recommendations to reduce mortality amongst young people is set out in the RCPCH 2015 report *Why Children Die*\(^{33}\).

**A healthy society:** Poverty and deprivation remain central to most of the causes of death amongst young people, since injuries, suicide and NCD risks are higher in more deprived families and communities. Government efforts to reduce child and family poverty remain crucial for efforts to improve adolescent survival\(^{20}\).

**A strong health system:** Poor adolescent mental health is part of the pathway for many causes of death in adolescence, most obviously suicide but also for many injuries and conditions, including substance use. Efforts to improve resilience and mental health amongst young people are central to improving survival in this age group.

**Road traffic injuries** (discussed fully at Indicator 4.4) are a leading cause of death in this age group, suggesting that giving young drivers more experience in conditions of low risk – as in graduated licencing schemes – could have positive benefits.

How can we improve?

Understanding the reasons why young people die remains challenging, and requires an analysis of not only the immediate cause of death, but the multitude of factors which led up to the death of a young person\(^{32}\). There is a range of possible improvement actions across environmental and social issues as well as health service factors\(^{31}\).
Suicide (discussed fully at Indicator 4.5) requires action through promoting and fostering positive mental health, and providing early intervention when young people encounter problems.

Long-term conditions: Young people with long-term conditions have traditionally fallen into the gaps between paediatric and adult health services, and experienced poor outcomes as a result. Teenagers with cancer have experienced a much lower improvement in survival over the past 40 years than younger children or older adults. Further development of self-management programmes and dedicated services for teenagers are needed as well as improving transition to adult care. Units for teenage cancer, adolescent and young adult cystic fibrosis and ‘grown-up’ congenital heart disease and their linked transition programmes have led the way in improving services for this age group.

Knowledge and practice: Data and research are crucial to better understanding the reasons why young people die, and efforts need to be made to strengthen child death review processes nationally and locally, and ensure they focus on young people as well as younger children. Knowledge needs to be translated into improved practice and policy to improve health.

Key actions

- Reduce child poverty and social inequalities.
- Reduce deaths from traffic injuries through the introduction of a graduated licensing scheme (see Indicator 4.4).
- Improve adolescent mental health and wellbeing in the UK.
- Protect and support early intervention services and strategies.
- Promote healthy physical, mental and social health through statutory, comprehensive, evidence-based personal health and social education in all schools.
- Improve quality of physical and mental healthcare for young people with long-term conditions, including developing dedicated services for young people and transition programmes to adult care (see Indicators 4.5, 6.2 and 6.4).
- Provide high-quality end-of-life care and access to appropriate palliative care.
- Establish a UK-wide system for systematic collection, analysis and interpretation of child and adolescent mortality data which can be used for accurate international comparison.
- Increase involvement of young people with rare and common long-term conditions in developing guidelines, measuring outcomes, service design and research trials.
- Promote and support research into adolescent health and translate findings into improved practice and policy.