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The Association for Young People’s Health (AYPH)

AYPH is the leading independent voice for young people’s health in the UK. We bridge the worlds of policy, practice and evidence to promote better understanding of young people’s health needs, and to advocate for youth friendly health services.

One of our central aims is to promote evidence-based practice by making research findings more accessible. By sharing learning and best practice we can promote and provide better services to meet young people’s particular health needs. The publication of our Key Data series forms a major part of this work.

We also undertake projects that facilitate more effective communication between practitioners, raise the profile and understanding of young people’s health needs, test out new ways of working, and ensure that young people’s involvement is central to service development.

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Ann Hagell
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Young people aged 10-24 experience a range of behavioural, emotional and social changes as they make the transition to adulthood. As a result, they have different patterns of need from younger children and older adults. But the changes also mean that the 10-24 age group provides a unique window of opportunity to intervene and promote health. Pulling together age specific data about this age group can lead to a better understanding of their health needs, and can help us to provide more appropriate, youth-friendly health services.

In this comprehensive data review focusing specifically on the health of 10-24 year olds in the UK, we look at the population and overall health, living circumstances, education and employment, information about health behaviours and lifestyle, sexual health, mental health, physical health and longterm conditions, and use of health care services. We have a separate chapter that focuses on inequalities in health, highlighting groups of young people whose health may need extra resources and investment and in our final chapter we set out key messages and recommendations for practice.

**Population and overall health:** There are 11.6 million young people aged 10-24 in the UK; one in five of the population. More than 20% is from an ethnic minority. The mortality rate for young people aged 10-24 has fallen considerably since the 1990s, and is currently relatively low. However, more recently the general trend has stalled and there were slight increases in mortality for 20-24 year-olds between 2013 and 2016. The most common causes of death for young people aged 10-24 are accidents, suicide and cancer. The majority of these are preventable deaths and require a renewed policy focus.

**Living circumstances, education and employment:** Up to 18 the majority of young people are living in families. Increasing numbers of young adults now live at home. However, significant numbers of young people are registered homeless or are in the care of the local authority and some are asylum seekers. Overall 12.4% of secondary school pupils are claiming free school meals, and secondary school exclusions have risen in recent years. The majority of young people are in some kind of education until they are 18, with 6.3% of the 16-18 age group not in education, employment or training. Beyond 18 the variety of their experiences increases, with two in five continuing into education and others moving into training and employment. Official youth unemployment rates are low, but there is a concern that young people are disproportionately affected by working practices such as zero hour contracts.

**Health behaviours and lifestyle:** Adolescence and early adulthood is a time when life-long health behaviours are set in place. Physical activity declines across adolescence. One in four school pupils aged 11-15 are obese. Rates of smoking, drinking and drug use have generally been falling in recent years. Two thirds of young people aged 11-15 say they have never drunk alcohol, but 1 in 5 young people aged 16-24 are still smoking. The proportion of young people aged 14 sleeping for less than 8 hours a night has doubled between 2005 and 2015.

**Sexual health and identity:** In the UK 4.2% of 16-24 year olds identify as gay, lesbian or bisexual although this is likely to be an underestimate. The average age of first heterosexual intercourse is 16. In 2017, rates of conceptions in the under-18 age group were at their lowest level since 1969, but the UK still has a relatively high rate of births among 15-19 year olds compared with other similar high-income countries. More than 1 in 5 pregnant young women under the age of 25 reported being a smoker at their booking appointment and 25% of young women aged 18-24 are overweight or obese in early pregnancy. Two thirds of chlamydia diagnosis are made in young people under 25.
Physical health, longterm conditions and disability: Although the years 10-24 tend to be a time of good physical health, young people do experience a range of health problems. Nearly a quarter of 11-15 year olds report that they have a longterm illness or disability and 1 in 10 of 10-24 year olds have a disability that affects their ability to do normal daily activities. Young people aged 16-20 are the group most likely to be diagnosed with asthma and age 11-14 is the peak age for diagnosis of Type 1 diabetes. Health outcomes for young people with longterm conditions such as asthma and diabetes are worse during transition between child and adult services, highlighting the need to commission youth friendly transition services.

Wellbeing and mental health: On average, three quarters of young people age 13-15 rate their life satisfaction as ‘high’ or ‘very high’. Approximately 1 in 10 young people age 10-24 are often lonely, but this decreases with age. Estimates of the prevalence of bullying vary considerably but significant proportions of young people are affected. Violent injuries in young people are generally rare but there have been increasing episodes of assault using sharp objects since 2012/13. Approximately 1 in 7 young people between 11 and 19 meet the criteria for a mental disorder, rising to 1 in 4 of young women aged 17-19 (mostly emotional disorders). Among 16-24 year olds, common mental disorders are three times more frequent in young women than men. Youth suicide rates have generally fallen since the early 2000s but have recently slightly increased for young men aged 15-19. Prevalence of mental health problems in 11-15 year olds in England rose by 2% from 1999 to 2017.

Health promotion and use of health services: Young people are regular users of healthcare services. Half of year 10 pupils (aged 14-15) report that they have visited the GP in the last three months. Accident and emergency attendances for those aged 15-19 have risen by 10% since 2010. There is a particular shortage of CAMHS provision; despite at least 10% of the age group having mental health problems, only 18 in 1,000 will be seen by CAMHS. Universal youth services budgets have been cut in the past five years, which are linked to worse mental health, wellbeing and even violence. There is a need to invest in age appropriate health promotion, youth-friendly health services and universal youth services such as youth clubs in order to improve young people’s health outcomes.

Inequalities in health outcomes: Without equal access to resources and support, certain groups of young people are put at a disadvantage and have poorer health outcomes. A quarter of young people aged 11-19 live in households with the lowest incomes. Young people living in the most deprived areas are more likely to be killed or seriously injured on roads, more likely to be obese, and more likely to have worse physical, mental and sexual health outcomes. Inequalities in obesity for those aged 10-11 widened between 2006 and 2018. Marginalised groups of young people may have poorer health outcomes than their peers, including looked after children, young carers, those from ethnic minorities, those with learning disabilities, young people who identify as LGBT and those who have experienced adverse childhood experiences. Health inequalities can compound amongst these groups of young people making their health outcomes significantly worse.

Conclusions and recommendations: Broad policy recommendations to improve health outcomes for young people include developing policy initiatives that focus more specifically on 10-24 year olds, implementing age-appropriate health promotion and early interventions, commissioning services that meet the unique needs of young people particularly during transition, introducing new measures to reduce the number of young people’s deaths, collecting and sharing data and research on young people’s health specific to the age group 10-24 and taking specific actions to reduce health inequalities by addressing the social determinants of health in this age group.
CHAPTER 1: Introduction

Key Data On Young People 1997-2019

The Key Data on Young People series brings together robust and representative information to give a full picture of the health and wellbeing of young people in the UK. This is the 12th edition. More than two decades have passed since the first edition was published and there is still a need for up to date, youth-specific data to inform the development of appropriate services for this age group.
Introduction

The transition from childhood to adulthood is an important, fascinating period of life. Young people between the ages of 10 and 25 need particular support and special services, especially those who may be marginalised. They have different patterns of need from younger children and older adults. Yet the data on young people are often bundled up with other age groups. The data are also frequently compartmentalised into topics such as youth justice, obesity, or mental health, which may present information in different ways or relate to different age breakdowns. Drawing connections between the topics can therefore be challenging, yet we need to view young people holistically. This is the only way to obtain an overview of what young people need to reach their full potential and the services that need to be commissioned.

The Association for Young People’s Health’s biennial *Key Data on Young People* series brings together all the robust and representative information we can find to get a full impression of young people in the United Kingdom (UK). This is the 12th edition. More than two decades have passed since the first edition was published (by the Trust for the Study of Adolescence) and there is still an ongoing need for up to date, youth-specific data to inform the development of appropriate services for this age group. As well as data on health outcomes, health behaviour and health service use, we also include contextual information about young people’s lives and how these are changing.

Every new edition of *Key Data on Young People* is revised to reflect current issues and concerns about young people’s health. In this edition we have added sections on the recent policy context, more indicators of poverty and hardship, some information on the overall burden of disease faced by this age group more on health inequalities and some international comparisons in key health outcomes. Where possible we have focused on the relevant drivers in the Public Health Outcomes Framework and the NHS Outcomes Framework (Health and Social Care Information Centre, 2016; Public Health England, 2016). This edition has also been informed by provisions for young people in the new longterm plan for the NHS (NHS Providers, 2018).

This edition was funded by the Health Foundation. The Health Foundation is an independent charity committed to bringing about better health and health care for people in the UK.

Overview of data sources

The countries of the UK undertake repeated national surveys such as the census, the Health Survey for England, the Scottish Health Survey, the Labour Force Survey, and the Annual Population Survey. However there are few that focus specifically on the experiences of the young people. One of the main tasks for this publication is to extract what we can that is directly relevant to the 10 to 25 age group from a range of publically available resources.

The main sources we rely on have had to meet some quality criteria. They need to draw on a significant sample size, result in generalised results to a known population, use reliable and valid survey instruments, and they need to adhere to the standards of ethical research methods. Where there are gaps in published data we have occasionally drawn on research undertaken with smaller sample sizes or in limited geographical areas. The text makes clear reference to the sources in all cases and we say if we have reservations about generalising from the data.
Unfortunately, despite efforts to fill the gaps, the data on many aspects of young people’s health are inadequate. Statistics are frequently recorded in ways that make it impossible to draw sensible conclusions about our age group of interest by, for example, reporting data on those between the ages of 0-19 years, or from 16-59 years. Once again we wish to express our concern over this limitation and to emphasise that good commissioning depends on the availability of data relevant to the age group.

**Supporting resources**

An interactive version of this PDF document is available for free download from AYPH’s website, where users will find hyperlinks to resources, and the facility to download Excel spreadsheets containing the data on which the charts are based. A PowerPoint slide set of all the charts in the report is also available free to download and use in your own presentations.

The AYPH website also has links to a number of resources to help in promoting young people’s health, including toolkits for frontline practitioners, briefing papers, support for engaging young people and promoting their participation in designing youth-friendly services (www.youngpeopleshealth.org.uk/resources).

**Policy context**

There has been a welcome increase in policy activity around young people’s health in the UK in recent years. Mental health has received an increased amount of attention, including the publication of the Children and Young People’s Mental Health Taskforce report (‘Future in Mind’), and a Green Paper on ‘Transforming children and young people’s mental health provision’ (Department of Health and Social Care, 2015; Children and young people’s mental health taskforce, 2017).

Physical health has not been ignored either, and this edition of *Key Data on Young People* follows publication of the new NHS England longterm plan (NHS England 2019). This emphasised children and young people’s health as a priority with the introduction of a new transformation programme to oversee delivery of commitments for the next ten years, from bringing mental and physical care together to services for 0-25 years so that care is timely and continuous.
Reasons to invest in the health of 10-24 year olds

Good health for young people is central to their wellbeing, and forms the bedrock for good health in later life. There are a number of critical reasons for investing in young people’s health including:

- The first signs of many serious longterm conditions emerge at this age, including three quarters of lifetime mental health disorders
- Adolescence is a time when risk taking behaviours begin and life-long health behaviours are set in place
- Young people’s health is not improving enough compared to other age groups
- Young people are not getting the health services or information they require, and their accounts are often less positive than those of other age groups
- Health inequalities are widespread by the time of transition to adulthood, and some are widening
- Positive trends in young people’s health behaviour, such as falls in teenage pregnancy, must be supported in order to continue
- Ignoring chronic adolescent disease costs money, and investing in adolescent wellbeing has benefits beyond just health outcomes
- Effects of poor healthcare in adolescence can last a lifetime
- Investment in adolescence maintains and reinforces successful health interventions delivered in early childhood

Developmental milestones age 10-24

Young people experience huge physical, psychological and behavioural changes as they mature from children to adults. All of the data in the following pages should be viewed through the lens of human development. They represent a snapshot for a group of people who are constantly changing. Some have support to help them make these transitions with ease, whereas others are subject to social determinants of health that may hinder their progress. The data tell us important things about the experience of young people in the UK today and suggest ways in which we can improve outcomes.

The adolescent and young adult years (between the ages of 10 and 25) are a particularly fast time of change, including:

- **Physical development.** The three or four years of pubertal development include a growth spurt, maturing of the reproductive organs, development of secondary sex characteristics and menarche in girls. There is wide individual variation in the timing of the start and completion of puberty. Generally, evidence suggests a peak age of puberty in the UK of around 12-13 for girls, and 13-14 for boys (Patton and Viner, 2007). Muscle strength continues to develop in young men into their 20s (Haff and Triplett, 2016). Recent work has revealed that the brain undergoes a huge reorganisation and fine tuning in the adolescent years. Changes in anatomy and functioning seem to result in a brain that is more efficient and more adapted to the surrounding environment. There are important ongoing changes to the ‘social brain’, the part of the brain driving understanding and interacting with others (Blakemore, 2015). There is evidence from magnetic resonance imaging scans that brain development continues up to age 25 (Giedd, 2004).
- **Cognitive development.** During their second decade, young people become better at weighing up risk, learning from experience, and controlling impulses. They develop more complex and analytical thinking, start to question authority and society’s standards, debate ideas and opinions, form their own code of ethics, consider their future goals and plans and think more about the longer term (Steinberg, 2005; Coleman, 2011).

- **Emotional development.** Key tasks of adolescence and early adulthood include firming up a sense of personal identity and self-esteem, developing autonomy and learning coping strategies for dealing with life events and challenges (American Psychological Association, 2002). Young people seek more independence and responsibility. Supporting the development of emotional health and wellbeing is a task for everyone who lives or works with young people.

- **Social development.** Peer groups become of paramount importance and peer influences are powerful, although families remain very significant (Brown and Bakken, 2011). Young people start to develop a sexual identity and seek more relationships outside the family. The transition to adulthood is more elongated and varied now than in the past (Arnett, 2006). Many major social transitions occur in the early 20s (Office for National Statistics, 2019). Through their late teens and early 20s young people renegotiate their relationships with their parents and caregivers, build their peer network, and try to find ways to become financially self-supporting.

- **Behavioural development.** Brain changes mean that adolescents are more likely than other age groups to seek out novel experiences and take risks. This can present some challenges in terms of taking care of their health, but is an important part of learning. Many life-long health behaviours are set in train during adolescence and early adulthood.
References


One in five of the population is aged 10-24.

11.6 million young people in the UK between 10 and 24.

56% of deaths to 10-24 year olds are due to external (potentially preventable) causes.

21.5% of 10-24 year olds classify themselves as belonging to an ethnic minority.

Young people in the UK lose more years to death and ill health than in some other high income countries.

The most common causes of death for young people 10-24 are...
Population and overall health

Population of young people in the UK

We begin the data sequence in this report with an overview of the number of young people aged 10-24 in the UK. Young people form a significant proportion of the population. **Chart 2.1** shows that of the UK population in 2017, 7.4 million were 10-19 year olds, and 11.6 million were 10-24 year olds. There were slightly more aged 20-24 than aged 15-19 or 10-14.

**Chart 2.1**: Usual resident population in the UK, by five-year age groups, 2017


As **Chart 2.2** illustrates, young people aged 10-19 represent 11% of the total population of the UK. If we include those up to their 25th birthday, those aged 10-24 account for 18% of the population.

**Chart 2.3** presents the recent historical trend in population of England and Wales, plotting the 2007 population figures against the current population pyramid from the 2017 population estimates. Young people in their teens may represent a falling proportion of the whole population because of extended longevity in older groups. In fact, the numbers of 0-4 and 5-9 year olds have expanded in recent years and will push through into adolescent services within the next ten years. This has clear implications for service delivery needs.

**Chart 2.3** also shows the population distribution separately by gender. In the 10-19 age group there are 95 girls for every 100 boys. By the time the population is aged 70 and above, the rate is 122 women for every 100 men.

In the population as a whole more young people than older people fall into ethnic minority groups. Overall, in the 2011 census (the most recent data available), the proportion of the population of England and Wales who classified themselves in a group other than white British was 19.5% (Office for National Statistics, 2012).
CHAPTER 2: Population and overall health

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Chart 2.2: Proportion of population accounted for by different age groups in the UK, 2017


Chart 2.3: Population in the UK, by age and gender, 2007 and 2017

**Chart 2.4** shows the ethnic group of all those aged 10-19 in England and Wales, again not updated since the 2011 census. Overall the proportion of this age group who classified themselves as not being white British was 21.5%.

Life expectancy and mortality

Adolescence is a generally healthy age period and relatively few young people die between the ages of 10-24. The annual number of young people dying in this age group in the UK in recent years has generally fallen between 2,000 and 3,000 (Office for National Statistics, 2018). This represents a very small proportion (less than 1%) of all deaths each year.

Age specific mortality rates are adjusted for differences in the size of the population in different age groups. Age specific rates are expressed as the number of deaths per 1000 of population in the age group in question. **Chart 2.5** shows the age specific mortality rate for young people aged 10-14,
15-19 and 20-24 in England and Wales in 2017. The older group has higher rates of mortality than the younger age groups, which is almost entirely accounted for by a rise in male deaths in the older age group. Overall, males age 10-24 have higher mortality rates than females. However, mortality rates for young people in these age groups did not exceed 0.5 per 1000 population.

Chart 2.5: Age specific mortality per 1000 population age 10-24, England and Wales, 2017

![Chart 2.5](source)

Until recently there had been a longterm trend of falling age specific mortality rates for all age groups under 24 years. Chart 2.6 shows these trends separately for young people aged 10-14, 15-19 and 20-24 in the UK, from 1996-2016, from the Global Burden of Disease Study (Global Health Data Exchange, 2018; Shah, Hagell and Cheung, 2019). Here the mortality rates are expressed per 100,000 young people in each age group. Mortality for all three age groups has fallen considerably since the 1990s, by nearly half. However, more recently the general trend has stalled and there were slight rises in mortality rates for 20-24 year olds between 2013 and 2016.

Chart 2.6: Trends in mortality rates for young people aged 10-24 per 100,000 age specific population, UK, 1996-2016

![Chart 2.6](source)
Chart 2.7 presents the main causes of death for young people in these three age brackets (10-14, 15-19 and 20-24). The most common causes of death for all young people 10-24 are those described as external (including accidents, self-harm and assault) and cancer. As young people get older, the number of deaths from external causes increases. Altogether, 56% of the deaths to 10-24 year olds in 2017 were due to external causes, a significant proportion of which could be considered preventable through good quality health care and wider public health interventions.

Breaking down these external causes of mortality just for young people aged 15-24, Chart 2.8 shows that intentional self-harm is the largest single category. However, all types of accidents (including both road traffic and other types) are the largest external cause of mortality overall. Other external causes include accidental poisoning, exposure to noxious substances, assault, drowning and falls. The pattern is similar for males and females although rates of death are higher in young men. Young men aged 15-24 are three times more likely to die of accidents and almost four times more likely to die of intentional self-harm than young women.
Legislation and effective implementation may help to reduce deaths caused by accidents in young people (Wolfe et al., 2014; Patton et al., 2016). Consideration of how to reduce preventable deaths caused by self-harm is also important in the face of emerging evidence of possible rises in mental health problems in the 16-24 age group (see Chapter 7).

Chart 2.8: External causes of mortality, age 15-24, England and Wales, 2017


> DOWNLOAD DATA
Chart 2.9 shows the adolescent (10-19 year) mortality rate per 100,000 population in 19 high income countries in 2015, from the Global Health Observatory data (Shah, Hagell and Cheung, 2019). The average across all 19 countries was a rate of 18.8 deaths per 100,000 adolescents. The UK’s mortality rate of 15.9 makes it the joint fifth lowest. However, concern has been expressed that the UK has relatively high rates of death among certain subgroups including, for example, young people with chronic conditions (Wolfe et al., 2014).

Overall burden of disease

‘Burden of disease’ was a construct developed in the 1990s to summarise how populations suffer from death and poor quality of life caused by ill health. It is widely used by the World Health Organisation to describe the overall impact of various diseases on human life. It is usually represented by a Disability Adjusted Life Years (DALY) score, which combines the years lost by 100,000 people to death and disability. DALY scores indicate the difference between a situation where everyone lives to a good age in perfect health, and what happens in reality. DALYs can be used to illustrate the impact on a population of one disease, such as cancer, or all diseases combined (Hagell and Cheung, 2019).
Chart 2.10 presents a comparison of all-cause DALY scores for young people aged 10-24 per 100,000 healthy life years, as estimated in 2016 in the Global Burden of Disease study (Global Health Data Exchange, 2018). The chart presents an average across the three age groups 10-14, 15-19 and 20-24. Separate charts for each can be found in the on-line version of this chart. The pattern is consistent across the age groups. On average young people in the UK lost more years to death and ill health than in other similar high income countries. It should be noted that there is not huge variation. However, the pattern is consistent across ages 10-14, 15-19 and 20-24. As few young people die, the results suggest that this is caused by less-than-optimal management of longterm conditions (Hagell and Shah, 2019).

Source: Global Burden of Disease Study, 2016 (Last accessed January 2019) > DOWNLOAD DATA
References

(Accessed: 17 December 2018)

(Accessed 21 June 2019)


https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/datasets/deathregistrationssummarytablesenlandandwalesdeathsbysingleyearofagetables
(Accessed 9 April 2019)


71% of 10-19 year olds live with married or cohabiting parents.

Half of 23 year olds are still living at home 48.6%.

One in 8 secondary school children have free school meals.

The average GCSE ‘Attainment 8’ Score for pupils in England in 2017 44.6.

In England two thirds of pupils achieved grade 4(C) or above in GCSE English and Maths 2016/17.

Between 2013/14 and 2016/17, secondary school exclusions in England increased by 64%.

The official unemployment rate for young people aged 18-24 in the UK has been decreasing since 2012.

The majority of 16-24 year olds are working.

After age 18, approximately one third of the age group now progress to higher education.

36% of people on zero hours contracts are aged 16-24.
Living circumstances, education and employment

The UK’s young people between the ages of 10 and 25 experience a range of different living circumstances and economic challenges. Up to age 18 the majority are living in families and are engaged in some form of education, but this does not apply to everyone of this age, and some are in different situations. Beyond 18 the variety of their experiences increases, with some continuing in education, and others moving into training and employment, with a significant proportion spending some time unemployed.

Family situation and living circumstances

There are approximately 27 million households in the UK, of which nearly five million (19%) contain at least one person aged 10-19 (Office for National Statistics, 2017a). The majority of young people of this age are living in families. Chart 3.1 shows that in 2017 the majority (62%) of 10-19 year olds were living with their married parents. An additional 9% were living with cohabiting parents, and 23% were with lone parents. However, 6% live in other situations, including halls of residence (2%) or in their own newly constructed families (1% living as part of a cohabiting couple). The remaining 3% labelled ‘none of these’ were living in local authority care, hospitals, prisons, or as lodgers, in house shares or with other family members such as siblings or cousins.

Chart 3.1: Living circumstances of young people in the UK aged 10-19, 2017

Source: Office for National Statistics, 2017 Labour Force Survey (LFS) > DOWNLOAD DATA

* Only people whose parents live in the UK are included
** Could be living as a lodger, in houseshare, or with other family members (not parents or children) eg. siblings
Increasing proportions of young people continue to live at home with their families into their early 20s. Chart 3.2 shows that the numbers of young people aged 18 to 34 living at home with their parents in the UK has increased over the last two decades. In 2017 the age by which 50% or more of the age group had left home was 23 years, compared to 21 years in 2007. Overall, young men are more likely still to be at home at any age. Of men aged 18-34, 37% lived with their parents compared with 26% of women in the same age group. Living with parents is now the most common living arrangement for young adults (Office for National Statistics, 2019a).

Chart 3.2: Percentage of young people aged 18-34 living with parents by age, UK, 1997 and 2017

![Graph showing percentage of young people living with parents by age]

Source: Office for National Statistics, 2017 Young adults living with their parents > DOWNLOAD DATA

Family can mean a wide range of arrangements, including couples with children, lone parents, intergenerational co-living, and unrelated adults living together. Although there was a rise in families headed by lone parents in the 1990s, there has not been an increase in the last two decades, with the proportion of children under 18 living with a lone parent remaining at around a quarter (Office for National Statistics, 2016). There has been a general decrease in divorce rates since 2003. Alongside the trends for marriage and divorce, it is important to note that the numbers of cohabiting couples continues to rise, and there are no data on how many young people experience the separation of cohabiting parents.

A small proportion of young people establish their own family units before they are 25. The average age of moving in with a partner is between 26 and 27, and in 2017 the average age for women to have their first child was 30 (Office for National Statistics, 2019a). In 2016, of all babies born in England and Wales, 17.9% had mothers who were 24 or under (Office for National Statistics, 2017b).
Significant numbers of young people are living with families who are registered homeless, and a small number are registered homeless in their own right. The UK government reported that there were 82,310 households in temporary accommodation in England at the end of June 2018, which is a 71% increase since December 2010 (House of Commons Library, 2019). These included 123,630 children. They will have been accommodated in a mix of self-contained premises and bed and breakfast accommodation. There are significant variations in approaches to homelessness in the countries of the UK, but figures for Scotland show that 14,075 children were in households assessed as homeless or threatened with homelessness in 2017-18 (Shelter Scotland, 2018).

**Chart 3.3** shows that the official statistics on the numbers of 16-24 year olds who were accepted as homeless in their own right has decreased in recent years. In total 12,940 households were accepted as homeless in 2016/17 where the main applicant was aged 16-24 compared with 36,770 in 2005/06.

However this is likely to be an underestimate of youth homelessness, as there are significant numbers who stay temporarily with friends or sleep rough. Centrepoint’s Youth Homelessness Databank provides data on young people accepted as statutorily homeless, and also on those to whom councils offered prevention and relief but did not house. According to these data there were 13,495 young people aged 16-24 who were accepted as statutorily homeless in England, Northern Ireland and Wales in 2018, with a further 28,438 who received prevention and relief. Not all local councils provided data so these will be underestimates. No comparable data were available for
Scotland. Local authority rough sleeping statistics for England have shown that on a single night in the autumn of 2018 there were 296 rough sleepers of 25 or under (Ministry of Housing Communities and Local Government, 2019).

In some cases responsibility for young people’s welfare is taken from families, and given instead to the local authority. The local authority may then arrange for the young person to live somewhere other than at home. Reasons for being ‘looked after’ in this way most commonly include neglect or other kinds of abuse, family dysfunction, acute family stress, parental illness or disability, and absent parenting. Chart 3.4 shows the numbers of looked after children in England, Scotland, Wales and Northern Ireland on 31 March 2018, including all under 18s. The figures for looked after children are based on a snapshot over a census week and do not reflect the numbers in care during an entire year. Looked after children are a subset of a broader group of ‘children in need’ and we present more detail on this in the section on vulnerable groups in Chapter 9.

<table>
<thead>
<tr>
<th>Country</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>75420</td>
</tr>
<tr>
<td>Scotland</td>
<td>14897</td>
</tr>
<tr>
<td>Wales</td>
<td>6405</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>2325</td>
</tr>
</tbody>
</table>


A significant proportion of children who are looked after by the Local Authority are teenagers and the proportion of older children in care has risen over the past four years. In England in 2018, 29,710 young people aged 10-15 and 17,330 young people aged 16 and over were in the looked after category at the time of the census. Overall 62% of looked after children are aged 10 or above in England (Department for Education, 2018b).
There had been a steady rise in the numbers of children in care in the 1990s. Chart 3.5 shows that there have been recent increases both in the numbers of 10-15 year olds and those aged 16+ in recent years.

Chart 3.5: Looked after children in England age 10-15 years and 16+, 2000-2018

Asylum seekers are another group potentially made vulnerable by their living circumstances. Chart 3.6 illustrates the rise in unaccompanied asylum seeking children up to age 18 in England between 2014 and 2017, and a fall since then. In 2018 unaccompanied asylum seeking children (up to 18 years) represented 6% of the total looked after child population in England.

Chart 3.6: Unaccompanied asylum seeking children (up to 18 years) in England 2012–2018

The majority of asylum seeking children are young men aged 16-17, as Chart 3.7 demonstrates. In 2017 there were 1,390 young men and 171 young women of this age seeking asylum.

![Chart 3.7: Unaccompanied asylum seeking children under 18, applications received by age and gender, UK, 2017](image)


A small group of children under 18 are held in secure accommodation, either on welfare grounds or as a result of being detained by the youth justice system. The number of children accommodated in secure children’s homes was 204 in England and Wales on 31 March 2018, essentially the same as the previous year (203) (Department for Education, 2018a). There are a further 90 places in secure children’s homes in Scotland (Gough, 2016), and Northern Ireland has just one children’s home that is registered to provide secure accommodation.
Chart 3.8 illustrates that the numbers in youth custody (11-18 years) in the prison estate in England and Wales rose in the early 2000s, reaching a peak of 3235 in 2007, but they have recently been at lower levels, with 940 young people under 18 in custody in April 2018. Again this is a snapshot of the situation during one month. As the average custodial sentence served by young people is much less than one year, many more young people will pass through custody over the course of a year. However, the general trend for lower custody numbers for this age group is to be welcomed.

Chart 3.8: Secure estate custody population (under 18) in England and Wales, April 2000-April 2018

Larger numbers of 18-24 year olds are also in the prison estate. In the middle of 2018, for example, there were 13,870 young people in this age range in custody (Prison Reform Trust, 2018). Many young people in custody are very vulnerable: there were ten deaths due to self-harm among young people aged 18-24 in prisons and youth offender institutions in 2017 in England and Wales (Inquest, 2019).

Family income and indicators of poverty and hardship
The root causes of health inequality are bound up with economic factors such as low income. Chart 3.9 shows that, according to the Department for Work and Pension’s measure of income inequality, approximately one in ten of those aged 0-19 years in the UK in 2016/17 were living in households classified as low income and materially deprived. This measure reflects a lack of resources to meet daily needs. Four per cent were living in an even more constrained situation of severe low income and material deprivation, where household income had dropped below 50% of median income. The proportion in low income and materially deprived households has not changed substantially in recent years.
Another measure of income inequality is provided by receipt of free school meals. Overall, 12.4% of secondary school children age 11-16 are eligible and claiming free school meals (Department for Education, 2018g). **Chart 3.10** compares the rates for different kinds of educational provision. The average for state funded secondary schools is 13.3%. In state funded special secondary schools, the rate is a third of those in the 11-19 age group. Rates are also high in Pupil Referral Units, particularly for 11-15 year olds.

**Chart 3.10** School pupils in England claiming free school meals 2018

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Source: Department for Education (2018) School, pupils and their characteristics > DOWNLOAD DATA
Education and training

Education and health are closely linked in a number of different ways. There are links between higher levels of educational achievement and better health outcomes. There are also facets of the education system that can contribute to poor emotional health, such as examination pressures. In addition, schools are an important site for health education, which becomes statutory in English secondary schools in 2020.

The Organisation for Economic Cooperation and Development (OECD) provides regular international comparisons of age 15 academic attainment for 36 high-income countries through the Programme for Student Assessment (PISA). The 2015 data showed that the UK’s 15 year olds scored slightly above the average for reading (498 compared to 493) and maths (492 compared to 490), and better than average in science (509 compared to 493) (Organisation for Economic Cooperation and Development, 2019).

Almost all young people in the UK start on a programme of study at 14-16 (sometimes referred to as Key Stage 4) that is expected to lead to qualifications. For the majority of those in England, Wales and Northern Ireland, these will be from the General Certificate of Secondary Education (GCSE) series. In Scotland pupils sit ‘Standard grade’ or ‘Intermediate’ exams at the age of 15-16, as part of the Scottish Credit and Qualifications Framework (SCQF). This covers eight subjects including English and maths, a language and sciences.

A new secondary school accountability system with different overall summary measures (‘headline’ measures) was implemented in England in 2016. In addition, from 2017 the GCSE grading system changed. In England, GCSEs are now graded 9–1, rather than A*–G, with Grade 9 the highest grade, set above the current A*.

As part of these GCSE scoring revisions, a new summary measure has been introduced in England called ‘Attainment 8’, which reports the average achievement of pupils in up to eight qualifications including English, maths, and further options from a specified list. Pupils’ GCSE results are allocated to four ‘buckets’ that together combine to give their overall Attainment 8 score. Both maths and English have a ‘bucket’ of their own and are double scored. The third bucket consists of three approved ‘English Baccalaureate’ subjects, and the last bucket consists of three ‘other’ subjects. The overall maximum Attainment 8 score is 90 (18+18+27+27).

In 2017 the average Attainment 8 score for all pupils in England was 44.6. As in previous measurement systems girls do better than boys, achieving an average Attainment 8 score of 47.6, compared with 41.8 for boys (Department for Education, 2018c).

As well as gender, attainment tends to vary by other factors, including ethnic group and measures of poverty. One way of exploring variations is to look at the attainment of a key threshold that allows pupils to carry on with more education should they wish to. Before adoption of the Attainment 8 measure, a key educational outcome...
measure was whether young people attained the equivalent of five GCSEs at grades A*-C including English and maths. Although it is still possible to calculate this in some places in the UK, this is not the case in England. In addition, the old GCSE grade C is equivalent to both a grade 4 (low C) and grade 5 (high C). Both are used as a threshold for differing purposes or by different further and higher education institutions. For example, at the moment some sixth form colleges ask for 4s and other ask for 5s in their selection processes onto A levels.

Although it is not clear yet which will be the most widely used or meaningful threshold, whether or not young people achieve the English and maths components is still an important measure, as it is likely to be related to educational options at age 16-18 and beyond. Chart 3.11 presents the proportion of young people in England achieving both grade 4 and 5 in English and maths, presented separately by gender, ethnicity and receipt of free school meals. Achievement varies by each of these characteristics. A greater proportion of girls than boys achieve higher scores. On average, young people from Asian and Chinese groups do better than other groups. Those on free school meals do least well of all these groupings.

Chart 3.11: Percentage of pupils achieving grade 4 or 5 or above in English and maths GCSEs, England 2016/17
Due to differences in the qualifications across the UK, the Department for Education advises that direct comparisons between countries should not be made, and cannot be taken as a measure of comparative pupil achievement or system quality (Department for Education, 2018c). With this proviso in mind, Chart 3.12 presents the academic attainment of the populations of England, Wales, Scotland and Northern Ireland at the end of Year 11/Age 16 or the equivalent educational stage.

### Chart 3.12: Attainment by age 16 or equivalent educational stage across the UK, 2016/17

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>In England 66% of pupils (typically age 16) achieved grade 4 (C) or above at GCSE in English &amp; Maths</td>
</tr>
<tr>
<td>Wales</td>
<td>In Wales 54.6% of pupils (typically age 16) achieved 5 or more GCSE or equivalent passes at grade A*-C inc English &amp; maths</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>In Northern Ireland, 70.3% of pupils (typically age 16) achieved 5 or more GCSE or equivalent passes at grade A*-C incl English &amp; maths</td>
</tr>
<tr>
<td>Scotland</td>
<td>In Scotland, 61.7% of school leavers (between 16 and 18) obtained 1 or more qualifications at SCQF Level 6 or better</td>
</tr>
</tbody>
</table>

**Source:** Department for Education (2018) Education and Training Statistics for the UK 2018 > DOWNLOAD DATA

Being excluded from school clearly impacts on educational attainment and acts as a marker for a range of problems (Timpson, 2019). Over the years, successive governments have made strenuous attempts to keep down the numbers permanently excluded. Chart 3.13 shows the trends since 2000/1, reflecting a slight rise to the middle of the 2000s and then a fall. However, the latest available figures show that the numbers are rising again. By 2016/17 they had increased by 64% since 2012/13, although they are not yet back at the levels of the early 2000s. The most common age for exclusion is age 14, and many more boys than girls are excluded across the whole of secondary school (Department for Education, 2018f).

### Chart 3.13: Permanent exclusions from secondary schools in England, 2000/1 to 2016/17

**Source:** Department for Education (2018) Permanent and fixed period exclusions by type of school > DOWNLOAD DATA
After formal examinations at age 16, there is now a legal requirement on young people in England and Wales to continue with some form of education or training until they are 18. In Scotland the school leaving age remains at 16 although most stay on. A number of choices are open to 16 year olds in the UK at this age, depending on their examination achievements. The majority remain in full time education, usually pursuing academic qualifications, but others move into flexible pathways including various combinations of education, training and employment. By the end of 2017, nearly nine out of ten of young people aged 16-18 in England were staying on in education and training. Overall, only 7.7% were in employment at the end of 2017 (Department for Education, 2018d).

Chart 3.14 shows the time trends for participation in education and training at age 16-18 in England, from 1994 until 2017, demonstrating the rise in the proportion of young people in full time education.

Scottish statistics show where their school leavers (16-18) are a year after leaving. In 2017/18, 94.4% of Scottish school leavers were in a positive follow-up destination, consisting of education, employment or training. Two thirds of young people were staying on until the year they turned 18 (Scottish Education Statistics, 2019).
Again, comparing qualifications achieved at age 18 across the UK is not possible given the different systems, but Chart 3.15 presents a summary of attainment at this age by country for information.

**Chart 3.15: Attainment by age 18 or equivalent educational stage across the UK, 2016/17**

<table>
<thead>
<tr>
<th>Country</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>England</td>
<td>In 2016/17, <strong>56.9%</strong> of the population aged 17 in England achieved at least two substantial level 3 passes</td>
</tr>
<tr>
<td>Wales</td>
<td>In 2016/17, <strong>27.4%</strong> of the population aged 17 in Wales passed two or more A levels (or equivalent)</td>
</tr>
<tr>
<td>Northern Ireland</td>
<td>In 2016/17, <strong>52.2%</strong> of the 17-year-old population in Northern Ireland passed two or more A levels (or equivalent) at grades A*-E</td>
</tr>
<tr>
<td>Scotland</td>
<td>In 2016/17, <strong>61.2%</strong> of school leavers in Scotland obtained one or more qualifications at SCQF level 6 or better</td>
</tr>
</tbody>
</table>


After age 18 approximately one third of the age group now progress on to higher education, particularly to study a degree at university. In England 2016/17 the initial participation rate in higher education for 18 year olds was 28% (Department for Education, 2018e). This does not include those who take a gap year.

The number of full time undergraduate students in higher education (mostly universities) in the UK has increased over the last few years, and stood at 2,343,095 in 2017/18, an increase of 1% on the previous year. The numbers of full time students aged 20 and under have increased year on year since 2013/14, but the number of part time students has fallen (Higher Education Statistics Authority, 2019).

Clearly not everyone goes on to further or higher education or training. Evidence from Eurostat makes it possible to compare rates of early leavers from education and training across the European Union (EU). Early leavers are those who have, at most, lower secondary education, and who are not in further education or training. Chart 3.16 shows that the UK has the fourth highest percentage (10.6%) of early leavers aged 18-24 in the EU by this definition.
Chart 3.16: Early leavers from education and training in the EU: % population 18-24 years with, at most, lower secondary education and not in further education or training, 2017

Source: Eurostat > DOWNLOAD DATA
Youth employment

Recent official statistics suggest that the majority of 16-24 year olds are working (3.87 million), with over half a million formally unemployed, and 2.6 million economically inactive (including full time students) (Office for National Statistics, 2019b).

For those young people who are in employment, there is a concern that some may be disadvantaged by working practices such as lower rates of the minimum wage and zero hour contracts. For those on the minimum wage, current hourly rates are £4.35 for those under 18, £6.15 for those 18-20, £7.70 for those 21-24 and £8.21 for everyone over 25. Young people on zero hour contracts receive a lower weekly pay compared to those who are not and work fewer hours on average. The prevalence of such contracts is higher among young people than any other age group. Over a third (36%) of people on zero hours contracts are aged 16-24 (Office for National Statistics, 2018).

Chart 3.17 portrays the percentage of 16-18 year olds who are not in education, employment or training (NEET) in the UK from 1995 to 2017. The rate of being NEET among 16-18 year olds has slowly been decreasing since 2009 in the UK and stood at 6.3% in 2017.

Chart 3.17: 16-18 year olds not in education, training or employment (NEET) in England, 1995-2017
Welsh statistics report a 2017 NEET rate of 9.5% for 16-18 year olds (Welsh Government, 2019). Other UK countries present the data in various ways. Scotland now publishes the Annual Participation Measure relating to the 15-19 cohort. This showed that in 2018 3.4% of this age group were not participating in education or training, and 4.7% had an unconfirmed status (Skills Development Scotland, 2018). The rate of NEET for 19-24 year olds is generally higher: 13.8% in 2017 in England, for example (Office for National Statistics, 2019c).

Chart 3.18 demonstrates that the official unemployment rate amongst 18-24 year olds in the UK has been decreasing since 2012. Data from April-June 2017 show an unemployment rate of 10.7%, down from 19.3% at its peak in 2012.
Eurostat data enables us to compare youth unemployment amongst 15-24 year olds across the EU. **Chart 3.19** shows that in 2015 the UK had the fifth lowest unemployment rate amongst 15-24 year olds among the European Countries included in the comparison, with rate of 14.6% in this age group.

As Youth Employment UK has recently pointed out, official statistics provide only a partial picture of the labour market experiences of young adults. Unemployment statistics do not, for example, include details of the number of young people who are unemployed and not claiming benefits (Youth Employment UK, 2018).

Recent analyses by Impetus UK and the National Institute of Economic and Social Research have demonstrated that disadvantaged young people are twice as likely to not be in employment, education or training, as 26% of disadvantaged young people were NEET, compared to 13% of their better-off peers (Impetus UK, 2019).

**Chart 3.19**: Percentage of young people age 15-24 unemployed, OECD comparisons, 2015

References


Office for National Statistics (2018) *Contracts that do not guarantee a minimum number of hours: April 2018.* London: ONS


https://www.gov.uk/government/consultations/school-exclusions-review-call-for-evidence

https://gov.wales/young-people-not-education-employment-or-training-neet-2018

CHAPTER 4: Health behaviours

In 2017 a quarter of 11-15 year olds in England were obese (23% male, 24% female)

1 in 5 young adults aged 16-24 are current smokers

21% FEMALE
17% MALE

8% of young men

4% of young women aged 16-24 use e-cigarettes

Surveys consistently show physical activity declining across adolescence and lower levels of activity particularly for young women

1 in 12 young people aged 11-18 in the UK eats five portions of fruit and vegetables every day

By age 14-16, only 16% of boys and 10% of girls meet the daily recommendations for physical exercise

79% of young people aged 11-18 in the UK own a smartphone

Nearly all 16-24 year olds in the UK own a smartphone

14% of young people age 11-16 say they have spent their own money on gambling in the last week

Among 16-24 year olds, one in five say they have used an illegal drug in the past year

In England in 2016 66% of young people aged 11-15 said they had never drunk alcohol

A quarter (23%) of 15 year olds who admitted drinking reported being drunk in the last four weeks

31% of 14-15 year old females say they don’t get enough sleep to stay alert and concentrate.

The proportion of 14 year olds sleeping for less than 8 hours a night doubled between 2005 and 2015
Promoting healthy behaviours is very important in adolescence and early adulthood. This is a time when life-long health behaviours are set in place. Health behaviours can directly affect health outcomes. In the longterm these may include cancer, heart disease and Type 2 diabetes. Prevention and early intervention are not just relevant for young children; they are equally possible and important in adolescence (Hagell and Rigby, 2015). Understanding patterns of young people’s health behaviour informs health promotion activity and commissioning and can prevent longterm health problems from arising or escalating. It is also important to note that health behaviours are shaped by wider determinants. In this chapter we focus on physical activity, nutrition and obesity, smoking, drinking and drug use, media and communication activities, and sleep. Sexual health is the subject of the next chapter.

Physical activity
Young people’s physical activity levels are critical to their overall health (Public Health England, 2018a). Current UK guidelines for children and young people recommend at least one hour of moderate to vigorous physical activity every day, including activity to strengthen muscles and bones on three days per week (Department of Health, 2011).

Data from the 2017/18 Active Lives Survey show activity rates for primary and secondary school aged children. In terms of the proportions meeting physical exercise guidelines of a full hour a day, Chart 4.1 present the overall pattern for young people at school in England in 2017/18, illustrating a decline in exercise levels during secondary school. By Years 9-11, when they are age 14-16, relatively few young people are meeting the daily recommendations. By this age the rates were 16% for boys and 10% for girls. Generally surveys consistently show physical activity declining across adolescence and lower levels of activity particularly for young women.

Chart 4.1: Proportion of pupils meeting physical activity recommendations of 60+ minutes per day by school year and gender, England, 2017/18

Source: Sport England Active Lives Survey 2017/18, England > DOWNLOAD DATA
The physical activity module of the Health Survey for England gives more details on what kinds of exercise young people are doing, but the module has not been repeated since 2015 and the data are now a little out of date. At that time they showed that while rates of walking and informal activity were broadly comparable for boys and girls, girls had lower rates of formal physical activity, particularly among the older age group (NHS Digital, 2016).

The walking that young people undertake is usually generated by the journey to school or college. Drawing on data from the Department of Transport’s National Travel Survey, Chart 4.2 shows that 35% of trips to school in England by young people aged 11-16 are made on foot, with bus and car transport making up most of the remainder. Only a very small proportion travel to school by rail (2%) or on bicycles (2%). The proportion of this age group walking to school is 10% lower than it was in 2002 (Department for Transport, 2018).
Nutrition and obesity

Adolescent nutrition is an area of increasing concern, partly but not only because of the relationship to obesity. As they get older and begin to move to more independence from their families, young people have more control over what they consume. Again, habits of a lifetime can be formed at this stage and poor nutrition has many implications for both current and future health status. Improving diet is a key indicator in the Public Health Outcomes Framework 2016-2019 (Public Health England, 2016).

Consumption of five portions a day of fruit and vegetables has become a marker for good diet. As we can see in Chart 4.3, average daily consumption of ‘five a day’ for males and females aged 11-18 years was reported to be 2.7 portions per day in the UK-wide National Diet and Nutrition Survey (averaged across surveys from 2014/15 and 2015/16). Adults ate an average of 4.2 portions per day.

The most recent National Diet and Nutrition Survey also reported that only one in 12 young people aged 11-18 in the UK ate five portions of fruit and vegetables every day. The survey also uses dietary diaries and other methods to estimate the proportion of young people aged 11-18 years with low levels of daily intake of various minerals. High proportions of young men and young women do not appear to be consuming enough minerals. This is particularly the case for young women, of whom nearly half are estimated to be deficient in iron, selenium (an essential trace mineral) and magnesium (Public Health England, 2018b). These estimates are indicative only, as the data are difficult to collect and commonly reliant on self-reporting. However, they do alert us to the need to consider adolescent nutrition as a whole and they raise a particular concern about the nutrition of young women.
A industry levy on sugar sweetened soft drinks in England was introduced in April 2018. It is too early to tell whether not this is having an impact on sugar consumption. In the meantime, the most recent UK National Diet and Nutrition Survey (Chart 4.4) showed the extent to which 11-18 year olds in particular currently exceeded the daily recommended limits for sugar consumption (30 grams) in the years just before the ban. Although there had been a reduction in sugar consumption among young people under 19 in the years to 2016, the data indicate that considerable improvements still need to be made to get the level down to the recommended limit. Rates for 11-18 year olds remain considerably higher than for other age groups. In the 2015 Health Behaviour in School-Aged Children survey, one in eight young people in England aged 11-15 (13%) reported daily consumption of sugary carbonated drinks, and 7% were consuming energy drinks at least five times a week (Brooks et al, 2015).

Chart 4.4: Sugar consumption from soft drinks, grams per day by age group, UK, 2008-2016

One of the consequences of poor nutrition is, of course, obesity. Reducing excess weight in 4-5 year olds, 10-11 year olds and adults are health improvement indicators in the English Public Health Outcomes Framework (Public Health England, 2016), and improving weight is one of the Scottish Government’s six public health priority areas (Scottish Government, 2018a). Chart 4.5 provides an overview of trends in obesity prevalence in 11-15 year olds since 1995, drawing on data from the Health Survey for England. This measurement of obesity is based on the UK national body mass index (BMI) percentiles classification. BMI measurements that fall into or above the 95th percentile of the 1990 reference population are classified as obese. This is the recommended method for calculating obesity in children, rather than using a BMI cut-off of 30, which is the usual method for its calculation in adults. However this makes direct comparison between child and adult rates difficult.

According to these data, obesity in England peaked for boys in 2016 at 26%, and for girls in 2004 at 26.7%. By 2017 the respective rates were 23% and 24%. Overall the underlying trend is not clear. Although there was a general rise in the decade to 2004, since then rates have gone up and down. In 2017 they were relatively high, looking back at the previous 20 years.
Separate estimates for obesity in England at age 10-11 (Year 6 of school) are provided by the National Child Measurement Programme (NCMP). The latest data from the programme showed that one in five children age 10-11 years (20.1%) were obese (NHS Digital, 2018b); similar rates to those found in the Health Survey for England. Chart 9.2 in Chapter 9 presents obesity at age 10-11 by area deprivation, using the NCMP measurements; obesity prevalence was over twice as high in the most deprived areas (26.8%) than the least deprived areas (11.7%). This gap has gone up by 59% since 2006/07, from 8.5% to 13.5% (NHS Digital, 2018b).

Estimates of obesity in children for Wales and Scotland are available from Country specific health surveys, including the Scottish Health Survey and the Public Health Wales Measurement Programme. The latest Scottish Health Survey 2017 reported that 16% of young people aged 12-15 were obese (Scottish Government, 2018b). The Welsh child measurement programme only includes children aged 4-5 years and comparable data for older children are not available. However, the Welsh report from the Health Behaviour of School-Aged Children (HBSC) survey in 2015 concluded that 18% of children aged 11-16 were obese (Ipsos Mori, 2015). In Northern Ireland, government statistics on childhood obesity are only given for all children aged 2-15 collectively, again reducing comparability. Estimates across the countries of the UK for children at secondary school thus range from 15-24%, but direct comparisons are not possible because of the variation in the age group covered in the measurements. There are also differences in how the estimates are calculated in surveys which may also contribute to variation in estimates (for example, by self-report in the HBSC or direct measurement in others).
Obesity is the extreme end of the weight distribution. There is also a group of young people who are overweight but not obese, as Chart 4.6 demonstrates, using English data. Once again obesity is a BMI that falls at or above the 95th percentile of the distribution and overweight is a BMI at or above the 85th percentile. Including both those who are overweight and those who are obese, 36% of boys and 29% of girls aged 11-12, and 36% of boys and 44% of girls aged 13-15 met these criteria. This is a substantial proportion of the adolescent population and is a continuing cause for concern due to the longterm health consequences of obesity.

### Chart 4.6: Body mass index (BMI) prevalence of overweight and obesity, 11-15 year olds by gender, England, 2017

Obesity in 16-24 year olds is measured using BMI rates themselves, rather than their position on percentile charts. A BMI of more than 25 is considered a measure of overweight, and a BMI of 30 or more is considered a measure of obesity. Chart 4.7 presents the proportions of 16-24 year olds who were obese, by gender, in England from 2003 to 2017. Again the trends are not entirely clear, and it is

### Chart 4.7: Proportions of 16-24 year olds who were obese, by gender, England 2003-2017
too soon to tell whether the rises from 2016-2017 are longterm. In 2017, 11% of young men and 20% of young women in this age group were obese. Rates reported in the Scottish Health Survey 2017 for this age group were very similar, at 11% for young men and 24% for women (Scottish Government, 2018b).

The English Hospital Episode Statistics (HES data) provide information on incidents of inpatient care under a consultant, where the primary or secondary diagnosis was obesity. **Chart 4.8** shows a substantial increase in the recorded number of these kinds of admissions between 2004 and 2017. However, HES data only reflect the information that has been submitted by services. The coverage of HES data has improved over time, so more hospitals will now be returning the information and the quality of the information has improved. Thus the increased rate may reflect these factors, rather than an increase in prevalence.

**Chart 4.8:** Finished hospital admission episodes with a primary or secondary diagnosis of obesity, young people age 16-24, England, 2004/5 to 2016/17

Hospital admissions specifically for bariatric surgery provide another index of trends and severity of obesity in this age group. **Chart 4.9** shows these admissions for young people in England aged under 16 and 16-24 over the last 10 years. The absolute numbers are small – never more than 225 in any one year, and they have been steady for the last 10 years or even falling slightly. Given what we know about rates of obesity in the general population, this may indicate unmet need rather than a fall in demand, or use of different clinical treatments other than surgery.
Tobacco kills up to half of its users (World Health Organisation, 2019). Tobacco use contributed to around 20% of deaths in men and 12% of deaths in women aged over 35 in England in 2017 (NHS Digital, 2018a). It is the primary cause of preventable illness and premature death, and the biggest contributor to health inequalities (NHS Digital, 2018a). Concern about levels of smoking among young people arises from awareness about the longterm outcomes such as cancer, but also the shortterm negative effects such as respiratory illness and impact on physical fitness.

The 2016 Smoking, Drinking and Drug Use Survey in England (SDDU) showed that approximately one in five (19%) of young people age 11-15 try smoking at some point (NHS Digital, 2017). Regular smoking in this age group is less common (3%). Other surveys that also provide estimates of regular smoking in secondary school aged children arrive at similar estimates (NHS Digital, 2014; Brooks et al, 2015).
Different smoking measures are presented in other surveys such as the Welsh and Scottish Health Behaviour in School Aged Children reports, so it is difficult to compare. In Wales, 4% of young people aged 11-15 smoked once in the last week in 2014, rising to 9% of 15 year olds (Ipsos Mori, 2015). In Scotland, 6% of 11-15 year olds reported that they currently smoked, rising to 14% of 15 year olds (Currie et al, 2015). However current smoking is potentially a different measure from weekly smoking.

Whichever measure is used, it is clear that youth smoking has been in long term decline as in the overall population. Drawing on the 2016 SDDU data, Chart 4.10 portrays a positive picture of the long term trends for smoking behaviour in England, a pattern mirrored elsewhere in similar high income countries (Shah et al). The proportion who reported regular smoking in 2016 (under 3% overall for all pupils 11-15) was the lowest recorded. The introduction of a smoking ban in public places came into force in England in July 2007 and may have had some impact on the figures, but other facts may be changes to packaging, increased pricing and public health messaging. Tobacco displays at the point of sale have been prohibited in supermarkets and large shops in England since April 2012 and in small shops from April 2015.

There is an increase in smoking prevalence as young people head into their late teens and early 20s. Data from adult surveys suggest that two out of three smokers will have started by age 18, and 95% by age 25 (Health and Social Care Information Centre, 2015). The Health Survey for England suggests that 1 in 5 young adults aged 16-24 are current smokers (17% of young men, 21% of young women), a considerable increase on the younger age group. The survey also reported that nearly half of these smokers would like to give up.
The overall downward trend seen in the younger age group is also apparent in the older age groups of 16-24 year olds, demonstrated in Chart 4.11. The gender patterns in these older age groups are not consistent; sometimes more young women smoke, sometimes more young men, but the overall direction of travel is positive. However, the fact that approximately a fifth of those aged 16-24 are current smokers is still a serious concern. It is too early to tell whether the slight recent rise in young female smokers is going to be become a new trend.


![Chart 4.11](image)

Routine data on use of e-cigarettes are now being collected in several surveys. New legislation came into force in England and Wales in 2015, introducing a minimum age of sale of 18 for e-cigarettes and prohibiting the purchase of these products on behalf of someone under the age of 18. The SDDU survey of 2016 reported that 6% of 11-15 year olds were regular users of e-cigarettes, with 2% saying they were current users (NHS Digital, 2017). For the older age group, the latest Health Survey for England reported that the prevalence of e-cigarette use among young men was almost double that among young women (8% of men compared to 4% of women in the 16 to 24 age group). These rates are similar to those for current use from a separate ‘Opinions and Lifestyle Survey’ undertaken with the same age group in the same year (7.6% of young men and 3.1% of young women) (Office for National Statistics, 2018a). Chart 4.12 presents data for 16-24 year olds in e-cigarette use from 2014 to 2017. It is too early to predict whether this represents a stabilising of the rate of current use, or a continuing increase.

Chart 4.12 presents data for 16-24 year olds in e-cigarette use from 2014 to 2017. It is too early to predict whether this represents a stabilising of the rate of current use, or a continuing increase.

![Chart 4.12](image)
Adolescent alcohol consumption patterns have been a concern for many years but recent trend data have been encouraging, generally showing a decline. The international Health Behaviour of School Aged Children study has shown, for example, that many of the European countries involved have seen a decline in alcohol use in parallel with an increase in the number of adolescents who abstain from alcohol use altogether (Inchley et al., 2018).

In 2016 the English Smoking, Drinking and Drug Use survey reported that 66% of secondary school pupils aged 11-15 said they have never drunk alcohol. The majority had tried it by the time they were 15 (68%), but only 24% of 15 year olds had drunk it in the previous week (NHS Digital, 2017).

Estimates of alcohol consumption by 11-15 year olds from around the UK are also available from studies such as the HBSC study and the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS), although the data relate to slightly different years and sometimes different questions are asked. Despite this, reports tend to be generally comparable, with low rates of regular drinking in single digits for 11 and 13 year olds, and higher rates for 15 year olds. In the SDDU study in England, rates went up from 6% for 11 year olds to 24% for 15 year olds. The 2014 HBSC Wales survey reported that 6% of 11 year olds had drunk alcohol at least once a week, compared to 14% of 15 year olds. HBSC Scotland also reported 14% of 15 year olds consumed alcohol. Also in Scotland the SALSUS study reported that 4% of 13 year olds and 17% of 15 year olds had drunk alcohol in the seven days prior to being surveyed.

Chart 4.13 shows that although rates of drinking among secondary school aged children as reported in the English SDDU are still historically very low, there appeared to be a slight rise in prevalence rates between 2014 and 2016. However, the question on alcohol consumption was changed in 2016, as it
appeared there may have been some underreporting previously due to a misunderstanding around what a ‘proper’ or ‘low alcohol’ drink was (both elements included in the original question). The authors suggest that “Whilst this means the survey now gives an improved picture of the proportion of young people who have drunk alcohol, comparisons with previous years are not possible.” (NHS Digital, 2017, p35).

Chart 4.13 also confirms that rates of drinking increase with age. The rise in reports of drinking at age 13/14 may make Year 9 a potentially important group to target with alcohol related health promotion interventions.

Being drunk is a key indicator of alcohol misuse. The SDDU survey suggested that nearly a quarter (23%) of 15 year olds who admitted drinking reported being drunk in the last four weeks. The SDDU also reports some interesting statistics on where young people get alcohol. In terms of framing interventions, it is useful to know that 61% of current drinkers aged 11-15 said they never buy alcohol themselves. The most common sources are being given it by parents or friends, or taking it from home. Pupils who lived with people who drank alcohol were more likely to drink alcohol themselves (NHS Digital, 2017).

Turning to older teenagers and young adults, higher proportions drink compared with the younger group. The latest Health Survey for England reported that the proportion of young people aged 16-25 who had not drunk in the last year was around one in five (22%), although the questions are not directly comparable to those used in surveys with the younger age group. A significant minority of young people (20% of young men and 13% of young women age 16-25) reported drinking in the risk categories (NHS Digital, 2018a).
The trend has been for a decline in drinking in this older age group aged 16+, mirroring the pattern for secondary school pupils. The Health Survey for England 2016 survey showed that the pattern for heavier drinkers (more than 14 units per week) between 2011 and 2017 is less clear, as is shown in Chart 4.14.

Chart 4.14: Alcohol consumption (more than 14 units per week) trends in 16-24 year olds by gender, England, 2011-2017

Although drinking in young people is a serious concern because of the longterm health consequences and development of lifetime health habits, they are rarely hospitalised for alcohol related reasons when compared with other age groups. Chart 4.15 presents Hospital Episode Statistics (HES) for alcohol related admissions, illustrating the admissions pattern across the full population age range. Young people under 25 represent a very small proportion of all these admissions. By using data relating to the primary and secondary reason for admission, this ensures the data capture all admissions that are alcohol related including, for example, accidents.

Chart 4.15: Alcohol-related NHS hospital admissions by age, England, 2017/18, including primary and secondary cause of admission


Although rates of hospitalisation of young people for alcohol related conditions are low in absolute terms, the trends are not straightforward. Chart 4.16 compares the longterm trends for 10-17 year olds and 18-24 year olds. While rates have gone down for males aged 18-24 and for 10-17 year olds of both genders, young women aged 18-24 have not shown a decline.

Chart 4.16: Hospital admissions for alcohol-related conditions per 100,000 population, 10-17 and 18-24 year olds, England, 2006/7 to 2015/16

There is a considerable amount of data relating to substance and illegal drug use among young people. However, not all findings are consistent as this is a challenging area to research and self-report studies have obvious potential limitations. Changes in popularity and availability of drugs influences trends, and inevitably survey questions have to change to account for these, making it hard to establish underlying trends.

For example, estimates of ‘ever’ use vary for the secondary school age group. The 2014 WAY survey, for example, reported that 11% of young people aged 15 in England had tried cannabis (NHS Digital, 2015). At around the same date, estimates were 20% for 15 year olds in the HBSC England survey (Brooks et al, 2015), 15.8% for 15 year olds in the English SDDU survey of that year (HSCIC, 2015a), and 18% for 15 year olds in the HBSC Scotland survey (Currie et al, 2015). In the 2016 SDDU survey, a quarter (24%) of pupils aged 11-15 reported having ever tried drugs (rising to 37% of 15 year olds), with 18% saying they did so in the last year. But the question in the 2016 version of the survey included the addition of nitrous oxide and new psychoactive substances, which may have partly (although not entirely) resulted in the higher rates in comparison to other surveys. Cannabis is consistently reported as the most common drug used by this age group.
Chart 4.17 reports on the proportion of illegal drug use reported by the school population aged 11 and 15 in England over the years from 2001 to 2016, as reported in the Smoking, Drinking and Drug Use surveys. Overall, the proportion of the school aged population who had reported using illegal substances in the last year has seen a downward trend since 2001, but that trend has been bucked in the most recent sweeps. The SDDU authors note “As there is no substantial evidence from other data sources that is consistent with the increase seen in this survey then an estimate from the next survey in 2018 is needed before we can be confident that these survey results reflect a genuine trend in the wider population. In the meantime the results for drug taking from this survey should be treated with caution.” (NHS Digital, 2017, p65).

Chart 4.17: Proportion of pupils who had used illegal drugs in the last year, by age and gender, England, 2001-2016

Cannabis is the drug that pupils are most likely to have taken in the last year, with 8% saying they had done so in 2016; similar to 2014 but well below the 13% reported in 2001.


Note: Drugs include amphetamines, anabolic steroids, cannabis, cocaine, crack, ecstasy, heroin, ketamine, LSD, magic mushrooms, methadone, poppers (eg, amyl nitrite), tranquilisers, volatile substances such as gas, glue, aerosols and other solvents, and other non-prescription drugs.
Among the older age group of 16-24 year olds, the Home Office 2018 misuse of drugs survey reported that one in five had used an illicit drug in the last year. Chart 4.18 shows the proportions using Class A drugs in the last year from 2001/02 to 2017/18, which has also shown evidence of a recent rise.

Chart 4.18: Proportion of 16-24 year olds reporting use of Class A drugs in the last year, 2001/02 to 2017/18

Note: Any Class A drug comprises powder cocaine, crack cocaine, ecstasy, LSD, magic mushrooms, heroin and methadone plus methamphetamine since 2008/9. Any stimulant drug comprises powder cocaine, crack cocaine, ecstasy, amphetamines and amyl nitrite plus methamphetamine and methedrone.

1.2% of 16 to 24 year olds used new psychoactive substances in the last year


Finally, a note about new psychoactive substances (NPSs), previously known as legal highs. These are drugs that are designed to copy the effect of illegal drugs but are chemically different. The term covers a range of substances including stimulants and sedatives, long and short acting, digested in a variety of ways. The main risk to young people comes not necessarily from addiction but from toxicity. The Psychoactive Substances Act 2016 restricted the production and sale and supply of NPSs. The SDDU estimated that 4% of 11-15 year olds had tried nitrous oxide, and 2% NPSs in the last year.

Home Office drug misuse statistics published in 2018 suggested that new psychoactive substance use was uncommon amongst young people aged 16-24, with a reported use of 1.2% in the last year amongst this age groups.
Gambling

Gambling related harm is defined as “adverse impacts from gambling on the health and wellbeing of individuals, families, communities and society. These harms are diverse, affecting resources, relationships and health, and may reflect an interplay between individual, family and community processes. The harmful effects from gambling may be short-lived but can persist, having longer term and endurance consequences that can exacerbate existing inequalities” (Wardle et al, 2018, p4). Increasingly, addressing gambling related harm is being considered a public health issue and the Gambling Act 2005 specifically singles out children as a vulnerable group who should be protected from being harmed or exploited by gambling. Young people in the UK are growing up with ready access to online environments and because a lot of gambling activity occurs online, they may be more easily targeted. Most gambling is legal from age 18. The National Lottery and football pools have a minimum age of 16 years, and low stakes gambling machines (such as fruit machines) can be played at any age. Informal private gambling (such as between friends) is unregulated.

Rates of problem gambling across 10-24 year vary by survey. Different surveys use different questions and scales. Data on gambling among 11-16 year olds are provided by regular Ipsos Mori surveys undertaken for the Gambling Commission (Gambling Commission, 2018c). Drawing on a representative sample of approximately 3,000 young people in England, Scotland and Wales, this survey has been administered since 2011. The most recent data show that 14% of young people in this age group spent their own money on gambling in the last week, a rate that has been reasonably stable for the last five years. This has included making private bets, buying scratch cards, playing fruit/slot machines and playing cards. Overall 3.9% of the age group were classified as problem or at risk gamblers. Over half of past-week gamblers engaged in an activity that was illegal for their age, including online gambling.

Secondary analysis of longitudinal data from the Avon Longitudinal Study of Parents and Children (ALSPAC) has shown that the prevalence of moderate harm/problem gambling more than tripled between the ages of 17-20 in this sample (to 4.6%), although the base rate at 17 was lower than that reported in the Gambling Commission study (Forrest and McHale, 2018).

Data on gambling in 16-24 year olds are provided by the Health Survey for England. In the 2016 survey, 44% of this age group had engaged in some kind of gambling activity over the last 12 months, the majority of which was National Lottery draws. A smaller proportion (14%) had engaged in online gambling. According to a standard problem gambling scale, 2.1% of the age group were classified as moderate risk and problem gamblers (Gambling Commission, 2018b).

Although rates of problem gambling are relatively low across the 10-24 age group, at around 1 in 20, participation in some form of gambling is quite common. Reducing gambling related harm among young people may require different approaches as their needs are different and primary prevention efforts need to be targeted at the 10-24 age group before they have gambled, with a focus on preventing the initiation of online gambling (Gambling Commission, 2018a).
Media and communication activities

Perhaps the biggest shifts in young people’s behaviour over recent decades relate to the use of information and communication technologies. Traditional broadcast television viewing has been in decline among young people for some time, and the latest broadcasting statistics continue to confirm that they watch less scheduled television than other age groups (British Audience Research Board, 2018). Much teenage viewing behaviour now centres around streamed and downloaded programmes from providers such as YouTube and Netflix. It is difficult to obtain accurate data about these behaviours.

Nearly all 16-24 year olds in the UK (95%) own a smartphone (Statista, 2019). New technologies bring both challenges and opportunities. The risks are widely discussed; the opportunities less so. However, there is growing recognition that new media and communications devices offer platforms for health interventions that may be particularly suitable for young people (Reid Chassiakos et al, 2016; Royal Society of Public Health, 2017; House of Commons Science and Technology Committee, 2019).

Much screen time for young people is now occupied accessing the internet. The Office for National Statistics 2018 internet access survey shows the most common internet activities for 16-24 year olds compared with those aged 25-34 (Chart 4.19). Younger people are more likely to be engaged in social networking and finding information (Office for National Statistics, 2018b). The most common reasons for using the internet in the 16-24 age group were for emails, social networking, watching videos and listening to music.

Chart 4.19: Internet activities for 16-24 and 25-34 year olds, Great Britain, 2018
Sleep

In adolescence one of the physiological changes that occurs is a natural shift in the timing of the body clock, usually by an hour or two. We see this in the timing of melatonin release, the ‘sleep hormone’, with adolescents’ levels rising, and peaking, later than adults (Onaolapo and Onaolapo, 2017). This means that young people in their teenage years feel sleepy later in the evening and are less awake in the mornings compared to adults.

There is no ‘set’ amount of sleep required by a young person but it is thought that the average recommended number of hours of sleep required by young people aged 14-17 is between 8-10 hours a night (National Sleep Foundation, 2015). Chart 4.20 shows the percentage of young people in years 6 (age 10-11), 8 (age 12-13) and 10 (age 14-15) who report getting 8-9 hours or 10+ hours, based on surveys by the Exeter Schools Health Unit. The total proportions who have 10 or more hours sleep drops quite considerably by year 10, particularly for girls.

Chart 4.20: Percentage of students in Years 6, 8 and 10 (10-11 years to 14-15 years) sleeping for 8-9 hours or 10+ hours in the last night, 2018

There is increasing evidence that adequate sleep is one of the key contributors to adolescent wellbeing (Gireesh, Das and Viner, 2018). Insufficient sleep and poor quality sleep may be both the cause and the result of health problems. Sleep deprivation in adolescence has been linked to increased psychosocial problems, poor school performance, increased risk-taking behaviour, excess food intake, poor diet and obesity (Chaput and Dutil, 2016; Medic, Wille and Hemels, 2017). Overuse or particularly late evening use of smart phones, tablets and computers have been linked to sleep disturbances in this age group (Lemola et al, 2015). The Schools Health Education Unit also asked young people if they felt they were getting enough sleep for their health, and their responses shown in Chart 4.21 reflect the reduction in sleep across the teen years shown in Chart 4.20 above.
Similarly the Health Behaviour in School Aged Children study asked 11-15 year olds whether they got enough sleep, and 22% reported that they did not. Reported rate of adequate sleep decreased as age increased (Brooks et al., 2015). Nearly a third of 14-15 year old girls who responded to the 2018 Schools Health Education Unit surveys said that they did not get enough sleep to stay alert and concentrate (Balding and Regis, 2018).

Reports that exist suggest the prevalence of inadequate sleep may be increasing over time. Secondary analysis of two British population cohorts has shown an increase in the proportion of 14 year olds sleeping less than the recommended eight hours a night (Patalay and Gage, 2019).
References

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CHAPTER 5: Sexual health and identity

- **Average age of first heterosexual intercourse is 16 years**
- **502 young people aged 15-24 in the UK were diagnosed with HIV in 2017, down by 40% since 2007**
- **6.9% of young people aged 16-24 say they have been pressurised into sex**
- **Average age for child sexual exploitation concerns to be identified is 15-17**
- **4.2% of young people aged 16-24 identify as gay, lesbian or bisexual**

In England, Wales and Scotland the under 18 conception rate has continued to fall since the 1990s.

In 2017, the rate of under 18 pregnancies in England and Wales was the lowest since 1969, at 17.9 per 1,000 young women.

The number of live births to teenagers in Northern Ireland has fallen from 2,107 in 1984 to 692 in 2017.

- **In 2015 the UK birth rate among women aged 15-19 was the third highest among economically similar countries**
- **More than 1 in 5 pregnant young women under the age of 25 reported being a smoker at their booking appointment**
- **11% of young pregnant women under 18 are underweight at their booking appointment**
- **25% of young women aged 18-24 are overweight or obese in early pregnancy**

In 2017, the rate of under 18 pregnancies in England and Wales was the lowest since 1969, at 17.9 per 1,000 young women.
Developing a sense of sexual identity is a key task of the transition to adulthood. Staying safe, healthy and happy through the process is important. As a result, the sexual health and behaviour of young people is a huge topic in adolescent public health, with important ramifications for wellbeing, education and service provision. There is a lot that we know, but this is also a topic where there are many challenges in collecting regular and robust information.

**Sexual identity**

Overall in 2017, 2% of the UK population identified themselves as lesbian, gay or bisexual. Chart 5.1 shows that among the 16-24 population this rose to 4.2%, the largest rate in any age group. This is likely to be an underestimate, as some respondents chose to respond “other” or “don’t know”, or did not give an answer.

![Chart 5.1: Identification as gay, lesbian or bisexual, by age, UK 2017](source)

Sexual identity and gender identity are distinct, and data on gender identity in the UK are currently limited. There are no data, for example, on the proportion of young people who would identify themselves as transgender. The Office for National Statistics (ONS) is researching whether and how to develop a population estimate. The tentative estimate is currently that there are approximately 200,000-500,000 trans people in the UK, but a breakdown by age has not been attempted (Government Equalities Office, 2018).
Sexual activity

The third National Survey of Sexual Attitudes and Lifestyle (Natsal-3) reported in 2013, providing a raft of information about sexual behaviour of adults aged 16-74 (ie, over the age of consent) in Great Britain in 2012. These data will not be updated for some time now. The youngest age group in the published data was 16-24 year olds. Among the sexually active, vaginal and oral sex remained the most common practices reported in the past year. Overall, three quarters of sexually active respondents had heterosexual vaginal sex in the last year (Geary et al., 2016). Chart 5.2 summarises the main findings about the sexual experiences of this age group as reported in 2012. The results confirm the fairly consistent finding that the average age of first heterosexual intercourse is 16 years, and that nearly one third of both men and women reported that they first had heterosexual intercourse before they turned 16. This still means that the majority do not have sex until they are 16 or older. This is an interesting finding especially as parents and young people often overestimate levels of young people’s sexual activity.

The patterns of sexual activity in Chart 5.2 are notably similar for men and women, although the men aged 16-24 reported an average of 6.5 sexual partners compared to the women, who reported 5.2, and men were more likely to report a new sexual partner in the last year. A significant proportion of both genders reported new partners in the last year and this is important when we consider how best to ensure they have the sexual health advice that they need.

For information about young people under 16, one of the main sources of data is the Health Behaviour in School-Aged Children (HBSC), which collected data for England, Scotland and Wales in 2014. These data are also becoming outdated, but in summary they showed that a quarter of 15 year old boys and one fifth of 15 year old girls reported having had sexual intercourse by this age (Brooks et al, 2015). It is interesting to compare the HBSC trends and those reported in Natsal-3. HBSC trends indicate a declining trend in 15 year old sex from 2002 onwards. However, Natsal-3 found that the proportion reporting first heterosexual intercourse before age 16 years increased in successive birth
cohorts (Mercer et al, 2013). It is not clear how we account for the trends seen in the HSBC survey, nor the different picture suggested in Natsal-3, although it is worth noting the survey methods are not identical.

**Use of contraception**

Use of contraception is important both for preventing conception and also for protecting against sexually transmitted infections (STIs). The English Sexual Health Framework (Public Health England, 2013) specifically aimed to increase knowledge and awareness of all methods of contraception for all ages. The majority of young people use contraception during heterosexual sexual intercourse. Again, answering the question of how many poses methodological challenges. The Natsal-3 survey reported that of the 75% of young people aged 16-24 who were sexually active, 86% reported that they had obtained contraceptives in the last year (Geary et al, 2016). This cannot tell us if they used them on any given occasion, of course. Data on contraceptive use by those aged 15 is available from the Health Behaviour in School-Aged Children study. Of those who had had sexual intercourse, the majority (85%) reported using some kind of contraception. Use of condoms at last intercourse was the most common method in this younger age group, used by 61% of the boys and 57% of the girls. The contraceptive pill was the second most common method, followed by the morning after pill (emergency contraception) or another method (Brooks et al, 2015).

**Chart 5.3** presents data from Natsal-3 showing that young people aged 16-24 who had vaginal sex in the last year reported that they were most likely to obtain contraceptives from general practice (young women), and retail outlets (young men), but both genders used a range of sources (Geary et al, 2016). The chart also illustrates that community clinics are important sources of contraception for young people who are sexually active.

**Chart 5.3: Source of contraceptive supplies, 16-24 year olds by gender, Great Britain, 2012**

![Chart 5.3: Source of contraceptive supplies, 16-24 year olds by gender, Great Britain, 2012](https://example.com/charts/chart5_3.png)

Overall, young people are the age group most likely to visit community contraceptive clinics. Chart 5.4 shows Public Health England service data on the proportion of young women of different ages who have been in contact with reproductive health services in the last year, in comparison with the whole population of women aged 13-54. Females aged 18 to 19 were most likely to use a sexual and reproductive health service, with 17% of the age group having at least one contact. Men rarely visit community contraceptive clinics according to these service level data.

Chart 5.4: Likelihood of contact with a sexual and reproductive health service, by age and gender, England, 2017/18

It can be seen from the data illustrated in Chart 5.5 that the most common reason for visiting sexual health clinics is contraception, followed by general sexual health advice. Other reasons include pregnancy related issues, emergency contraception and advice on sexually transmitted infections.

Chart 5.5: All activity at sexual and reproductive health services, by age and activity type, England, 2017/18
According to official statistics, use of emergency contraception is not common in young women. **Chart 5.6** shows that rates in 2017/18 for women aged 13-54 in England were generally low (7 per 1000 population of that age), but the highest rate was among 18-19 year olds (22 per 1000 of that age). However, it should be noted that this is likely to be an underestimate. Some young people, for example, will ask others to purchase it for them. It is clear that inequalities exist, with girls aged 13-15 provided emergency contraception at a rate three times higher if they are in the most deprived decile when compared to the least deprived decile (Chart 9.6).

**Chart 5.6: Young women provided emergency contraceptives by sexual and reproductive health services, by age, England, 2017/18**

[Graph showing rates of emergency contraception use by age group]


Research has shown that young people receiving good quality relationships and sex education at school are more likely to use condoms and other forms of contraception when they first have sex (Kirby and Lepore, 2007). New legislation has recently introduced compulsory relationships, sex and health education in all state secondary schools in England and Wales, effective from September 2020. Relationships and sex education is already compulsory in Northern Ireland. Schools in Scotland do not have to provide relationships and sex education, but most do. This is an important part of helping young people to understand their sexual health needs, and to direct them to appropriate services. Natsal analysis has suggested that those who reported that their main source of information had been in lessons at school were less likely to have an unplanned pregnancy, and that school was the preferred source of information about sex when growing up (Wellings et al, 2013).

**Conception and birth**

Over the last two decades there has been a significant fall in teenage pregnancy. In England, the Teenage Pregnancy Strategy ran from 1999-2010, over which time there was a reduction of 24% in the under 18 conception rate. Reductions have continued in the intervening years since the strategy ended, and continuing to reduce teenage pregnancy remains a priority for public health across the UK (Scottish Government, 2016; Public Health England, 2018a; Public Health Wales, 2016). Although teenage pregnancy rates continue to fall, finding ways to supporting local efforts to maintain the downward trajectory is critical.
By 2017 the reported number of conceptions in the under 18 age group in England and Wales was the lowest since 1969, at a figure of 17.9 per 1000 girls of that age (Office for National Statistics, 2019b). However, there is still considerable variation across the regions in England. **Charts 5.7 and 5.8** illustrate how this rate (per 1,000 females aged 15-17) has fallen since the late 1990s, both in England and Wales and in Scotland. In addition, in England and Wales, the proportion of under 18 conceptions that result in an abortion has remained fairly stable since the mid-2000s and in 2017 stood at 51.7% (Office for National Statistics, 2019b).

**Chart 5.7: Under 18 conception rate in England and Wales, 1998-2017**

![Chart 5.7: Under 18 conception rate in England and Wales, 1998-2017](Source: ONS, Conception Statistics, England and Wales, 2019 Conceptions outside marriage/civil partnership data)

**Chart 5.8: Under 18 conception rate in Scotland, 1998-2016**

![Chart 5.8: Under 18 conception rate in Scotland, 1998-2016](Source: ISD Scotland: Teenage Pregnancy Year of Conception Ending 31st December 2016)
As far as Northern Ireland is concerned, conception rates are not available, but we can look at the number of live births. In 2017 there were 692 live births to mothers under 20 (Northern Ireland Research & Statistics Agency, 2019).

Looking at international rates, comparable conception data are not available for all countries, but comparisons can be made for birth rates per 1,000 women aged 15-19 drawing on World Health Organisation Global Health Observatory Data. Chart 5.9 plots the births per 1,000 young women aged 15-19 in the UK in 2015 and for a selection of other high-income countries. The data are collected at the age the mother gives birth, not adjusted for age of conception, so these data are not directly comparable to the under 18 conception data published annually by ONS. The UK birth rate among women aged 15-19 was one of the three highest among economically similar countries.

Chart 5.9: International comparisons of birth rates to women aged 15-19 per 1000 live births to women of that age, 2015

Source: Global Health Observatory Data (Last accessed January 2019) > DOWNLOAD DATA
Among those young people who do go on to give birth, pre-conception health is important both for them and their child. In England data are available from Public Health England analysis of the Maternity Services Dataset (Public Health England, 2018c). These show that younger women were more likely than other ages to be underweight at their booking appointment, with more than one in nine (10.7%) young women aged under 18 years underweight at their booking appointment.

Around 35% of young women aged 18 to 24 years were overweight or obese in early pregnancy and this rises slowly to just over 40% in pregnant women aged 40 and over. Being overweight or obese at the booking appointment is more prevalent in areas of higher deprivation.

The data also showed that more young pregnant women aged 18 to 24 attended antenatal care at a later stage than older women, although those under 18 did not seem to book late at a higher rate than women in their 30s (Public Health England, 2018c).

**Sexually transmitted infections**

As well as pregnancy, sexual behaviour carries the possibility of sexually transmitted infections (STIs). Public Health England data on the number of STI diagnoses in England make it clear that the highest rates of infection in heterosexuals are among those aged 15-24. Indeed it is estimated that those under 25 accounted for 62.8% of all new chlamydia cases in 2016 (Public Health England, 2018b), as well as significant proportions of other STIs as well.
Chart 5.10 demonstrates that the 20-24 age group is most at risk of STIs for both genders. Among women, the second age group at risk is 15-19 but in males it is the 25-34s. Under the age of 24, rates are higher in young women than young men. Helping all young people to protect themselves is a major public health issue, but the higher rates in young women indicate that particular attention needs to be paid to health promotion strategies targeted directly at them.

Chart 5.10: Rates of new STI diagnoses by age group and gender, England, 2017


Chart 5.11 presents the rates of selected STI diagnoses, per 100,000 population, for young people in England in 2017 by gender and age. Chlamydia is clearly the most frequent STI diagnosis, followed by genital warts and gonorrhoea. Cases of syphilis are rare.

Improvements in screening and diagnosis have meant that more STI cases are identified now than previously, so untangling the underlying trend is complicated. England’s National Chlamydia Screening Programme, launched in 2003, has diagnosed well over half a million infections in 15-24 year olds, increasing its visibility in the statistics. On the other hand, rates of anogenital wart diagnoses in 15-24 year olds have been in decline over the last five years (Public Health England, 2018b).

The introduction of the HPV (human papilloma virus) vaccination in adolescent girls through the National HPV Vaccination programme may potentially have had an impact on recent trends in new diagnoses of genital warts which have gone down. From September 2019, boys will be offered the HPV vaccine free in schools from age 11 to 13 in Scotland, and age 12 to 13 in the rest of UK.
Most of the data in this section have related to England, but sexually transmitted infections in young people in other countries of the UK show a similar pattern, although Scotland and Wales do not have organised screening programmes. In Scotland in 2018, available data suggest that two thirds of all chlamydia diagnoses were made in people under 25 (54% of male and 74% of female diagnoses in this age group respectively). The majority of these diagnoses were in those aged 20-24 (Health Protection Scotland, 2018).

Finally, in 2017 there were 502 new HIV diagnoses among those aged 15-24 years in the UK, which represents a fall of 40% over the previous 10 years since 2007. In addition, 356 children under-15 were receiving care for diagnosed HIV infection, together with 2,349 young people aged 15-24 (Public Health England, 2018d).

Source: Public Health England Human Papillomavirus (HPV) vaccination coverage in adolescent females in England: 2017/18
Sexual abuse

It is not possible to establish the number of sexual offences against children in the UK, as the age of the victim of the sex offence is often not given. Only a very small minority of sexual offences against children will get as far as a prosecution, and most sexual abuse is not reported. Interviewing children about sexual abuse is a very skilled area of research and requires particular ethical scrutiny. This is an area where estimating prevalence is extremely difficult.

However, some studies have suggested that a significant proportion of young people aged 10-24 will have experienced sexual abuse. In 2011 the NSPCC undertook a major piece of research interviewing 1,761 young adults aged 18-24 years, 2,275 children aged 11-17 years and 2,160 parents of children aged under 11 (Radford et al, 2011). The authors estimated that 1 in 20 young people will have experienced contact sexual abuse in the UK. Rates were higher (up to 1 in 6) for all kinds of sexual abuse.

The Natsal-3 survey provided important data on rates of non-volitional sex in the 2013 survey. Respondents answered questions about whether anyone had made them have sex against their will. In the 16-24 year old group (of whom there were 1,700), 16.4% reported that someone had attempted to have non-volitional sex with them, and 6.9% reported that they had experienced non-volitional sex. In one quarter of the cases, the young people had told the police (Macdowall et al, 2013). The median age for the whole sample (aged 16-74) to report non-volitional sex was 18 in women and 16 in men. The majority of the perpetrators were reported to be family, friends or current intimate partners. The Natsal-3 researchers concluded that this kind of sexual experience is mainly one that happens at a young age, and is strongly associated with poor health (physical and mental), risk behaviour such as binge drinking, and abortion and pregnancy before age 18. Natsal-3 also showed that young women who cited school as the main source of sex and relationship education were less likely to report having non-volitional sex, although this did not apply to young men.

Finally, official estimates of the numbers of young people who are trafficked or are victims of sexual exploitation are very low, because so few cases become subject to official proceedings. However, high profile cases in recent years have shed light on the number of cases that may be implicated. The English Children’s Commissioner at the time estimated that at least 16,500 children in England were at risk of child sexual exploitation between April 2010 and March 2011, and 2,409 children were victims of CSE in gangs and groups between August 2010 and October 2011 (Berelowitz et al, 2012). In the Rotherham case, 1,400 children are thought to have been sexually exploited over a 16 year period (Jay, 2014). Between November 2014 and October 2015, around 9,000 children at risk of child sexual exploitation were identified by police forces across England and Wales (NSPCC, 2017). The average age when concerns are first identified has been suggested to be 12-15 years (Beckett, Holmes and Walker, 2017), and the majority of victims are girls (NSPCC, 2017).
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CHAPTER 6: Physical health, longterm conditions and disability

The leading causes of disability in young people in the UK are...

- **Social/Behavioural**
- **Learning Difficulties**
- **Stamina/Breathing/Fatigue**
- **Mental Health**

**1 in 4 (23%)** of 11-15 year olds report that they have a longterm illness or disability

**Approximately 34,000 young people under 18 have a diagnosis of epilepsy and are taking antiepileptic drugs in England**

Those aged 16-20 are the group most likely to be diagnosed with asthma

**Approximately 36,000 children and young people under 19 have diabetes in the UK**

The peak age for diagnosis of Type 1 diabetes is between 9 and 14

**PEAK AGE FOR DIAGNOSIS OF TYPE 1 DIABETES IS BETWEEN 9 AND 14**

**36,000**

Approximately 2,400 young people age 15-24 are diagnosed with cancer every year in the UK

**Approximately 34,000 young people under 18 have a diagnosis of epilepsy and are taking antiepileptic drugs in England**

**Over a Quarter** of children and young people with Type 1 diabetes need additional psychological support

**THREE QUARTERS OF RARE DISEASES HAVE THEIR ONSET IN CHILDHOOD**
Physical health, longterm conditions and disability

Although the years 10-24 tend to be a time of good physical health, many young people will experience a range of short term physical health problems. A significant minority will have longterm chronic conditions or some kind of disability.

Common physical health problems

Headaches, abdominal pain, muscular skeletal disorders, allergies, skin disorders and acne, coughs and respiratory infections are some of the common physical health problems for which young people seek medical advice. Young people are more frequent users of primary care services than is often thought (see Chapter 8). However there are no up to date robust prevalence data on the regular short term health problems of this age group. The topic has not been covered in the Health Survey for England (HSE) since 2002, and there have been no large scale studies of why young people in particular present at general practice since Churchill et al (2000).

Research on individual topics such as headaches (Abu-Arafeh et al, 2010) and skin conditions (Scholfield et al, 2009; Scholfield et al, 2011) suggest these may be very common in this age group. For example, it has been estimated that over half of children and adolescents have suffered headaches (Abu-Arafeh et al, 2010). Prevalence of acne, which usually starts in puberty, has been estimated at between 50% of 14-16 year olds (Smithard et al, 2001) to 80% of all those aged 12-24 (Lynn et al, 2016). A systematic review of epidemiological studies concluded that moderate-to-severe acne affects around 20% of young people, and that acne persists into the 20s in around two thirds of individuals (Bhate and Williams, 2012). The Global Burden of Disease Study 2010 suggested that lifetime prevalence of eczema in children and young people is between 15-30% in industrialised countries, a rate that has increased three fold in the last 30 years (Pawankar et al, 2013). More UK data on young people’s routine health concerns (other than longterm conditions such as diabetes) are urgently required for planning services and training GPs and other primary care professionals.

Experience of chronic pain (usually defined as lasting for approximately 3 months or more, or recurring in episodes over months and years) has been reported to be prevalent in significant proportions of adolescents, although estimates vary widely from 20% to 60% (Howard, 2011). Adolescent pain includes chronic headaches or migraines, fibromyalgia, regional pain syndromes, and irritable bowel syndrome. The 2017 Health Survey for England reported that among 16-24 year olds, 20% of young women and 11% of young men reported chronic pain, and also noted that chronic pain was more prevalent among lower income groups (NHS Digital, 2018).

The 2013 Health Survey for England covered the use of prescribed medicines and revealed that in the 16-24 age group, 14% of young men and 25% of young women had taken at least one prescribed medicine in the last week. These were largely medicines for respiratory conditions, or antidepressants, antibiotics, analgesics or non-steroidal anti-inflammatory drugs (HSCIC, 2013).

Longer term conditions – where more data are available – include asthma, diabetes, epilepsy, arthritis, cancer and physical and mental health. Overall, results for England from the Health Behaviour in School-aged Children study (HBSC) in 2014 found that 23% of young people aged 11-15...
reported that they had a longterm illness, disability or medical condition. The question was broad and left the definition of longterm illness to young people, but did indicate that it needed to have been diagnosed by a doctor. Of those who said yes, half reported their condition was asthma. Of those with a disability, 59% said they were taking medication (Brooks et al, 2015).

Asthma, diabetes, epilepsy and arthritis

Asthma is a chronic inflammatory disorder of the airways affecting many young people. It is a complex and episodic disorder. Drawing together data from a number of different national datasets, the British Lung Foundation’s ‘Respiratory Health of the UK’ project estimated that 8 million people – over 12% of the population – have been diagnosed with asthma at some point (Mukherjee et al 2016; Snell et al, 2016). Since 2008, young people aged 16-20 have been the group most likely to be diagnosed. Overall, Asthma UK (2019) estimates that 1 in 11 children and young people have asthma.

Taken together, these statistics suggest that something in the region of a million young people between the ages of 10 and 24 are likely to have asthma.

There has been much debate about whether rates of asthma have increased in recent years, but time trend data from the Respiratory Health of the UK project, from 2004 to 2012 suggested that lifetime prevalence of asthma had declined in children and increased in adults over that period. It is worth noting that a smoking ban in public places was introduced in Scotland in 2006 and in England and Wales in 2007. In addition, as we saw in Chapter 4, smoking by young people had fallen over recent decades before the ban, which may have played a role.

More recent data on time trends in prevalence are not available, but statistics on asthma mortality rates for the UK from 1998 to 2016 are available from the Global Burden of Diseases study. Chart 6.1 shows that for 10-14 year olds, 15-19 year olds and 20-24 year olds in the UK there was a decline in asthma mortality from 1998 to 2011, but the decline appeared to have plateaued since 2011 (Shah and Hagell, 2019).
International comparisons of asthma mortality rates, again using the Global Burden of Disease study, have shown that the UK has some of the highest rates compared with other similar high-income countries. Comparisons for rates for 10-14 year olds, 15-19 year olds and 20-24 year olds are shown in Chart 6.2.

**Chart 6.2:** Comparison of asthma mortality rates for young people aged 10-24 per 100,000 age-specific population, 2016
Chart 6.2 Continued

Age 15-19, rate per 100,000

Source: Global Burden of Disease Study, 2016 (last accessed January 2019) > DOWNLOAD DATA
Research has shown that there are a number of barriers to the successful management of asthma in this age group which need addressing in order to improve young people’s outcomes, including concerns related to side effects (such as weight gain), social stigma and feelings of embarrassment and exclusion (Simoni et al, 2017). Poor management can result in hospital admissions. Chart 6.3 shows that hospital admissions for 10-18 year olds rose in England from 2010/11 to 2016/17.

Chart 6.3: Hospital admissions of 10-18 year olds for asthma, England, 2010/11 to 2016/17

Diabetes also represents a key concern for this age group. Diabetes is a serious life-long health condition, where the amount of glucose in the blood is too high because the body cannot use it properly. It may cause longterm complications and needs to be well managed. Reducing recorded diabetes is an outcome indicator in the Public Health Outcomes Framework (Public Health England, 2016). Drawing on surveys from England, Wales and Scotland, the charity Diabetes UK has estimated that there are approximately 36,000 children and young people under the age of 19 who have diabetes. Of these, the great majority have Type 1 diabetes (90%). The remainder have Type 2 and other rare forms (Diabetes UK, 2019). They also note that the first children with Type 2 diabetes were diagnosed in the UK in the year 2000. Although still very uncommon, the number of cases of Type 2 diabetes in children and young people in the UK continues to rise, particularly among girls and South–Asian children (Candler et al, 2018).

Similar estimates of prevalence are provided in an annual national paediatric audit undertaken by the Royal College of Paediatrics and Child Health (RCPCH, 2019). The audit aims to monitor the incidence and prevalence of all types of diabetes among children and young people receiving care from a paediatric diabetic unit in England and Wales, of which there are 172. The 2017/18 audit included all the paediatric diabetic units in England and Wales and collected data on 29,752 children and young people up to the age of 24 years under the care of a paediatric consultant (all young people with diabetes should be under the care of a consultant but some may not be). In 2017/18, the prevalence
of Type 1 diabetes in children and young people aged 0 to 15 years old in England and Wales was 196.0 per 100,000 of the general population; it was slightly higher among boys (198.1 per 100,000) compared to girls (193.2 per 100,000). Rates were very similar over the last three years.

Surveys also show that the peak age for diagnosis of Type 1 diabetes is between 9 and 14 years of age, and while most children and young people with diabetes are white, children and young people of non-white ethnicity have a disproportionately higher prevalence of diabetes (RCPCH, 2019; Diabetes UK, 2019). Type 1 diabetes is not related to obesity, but a rise in obesity among young people may result in more Type 2 diagnoses in the longterm. Drawing on the paediatric audit for 2016/17, Diabetes UK has calculated that 6,825 young people 10-24 were treated for Type 2 diabetes in GP practices in England and Wales that year (Diabetes UK, 2018)

Management of diabetes in young people can present challenges. All those over 12 years should have certain checks that are required to screen for various complications arising from the disease. Since 2004/05, there has been consistent improvement in the percentages of children and young people recorded as receiving essential health checks (RCPCH, 2019). In the 2017/18 audit, over three quarters of young people aged 12 and above had the required foot and eye checks, a distinct improvement on previous years. Diabetic control was worse for young people if they lived in a deprived area, were of a non-white ethnicity, or were female (RCPCH, 2019). Diabetic control also varies by age. It is usually measured by a blood test showing the average blood glucose (sugar) levels for the last two or three months (HbA1c). A low HbA1c measure is better than a high one. Chart 6.4 shows that diabetic control as measured by the National Diabetes Audit in 2017/18 was better at young ages than for older teenagers.

Chart 6.4: HbA1c outcomes by age for children and young people age 10-19 with Type 1 diabetes, England, 2017/18

Source: National Paediatric Diabetes Audit 2017/18 (2019) RCPCH and Health Quality Improvement Partnership > DOWNLOAD DATA
Looking at the rate of hospital admissions for diabetes per 100,000 population for 10-24 year olds in England from 2007/08 to 2017/18, Chart 6.5 suggests that emergency admissions for Type 1 diabetes have been fairly stable for those aged 10-19, however there has been a striking increase in emergency admissions for diabetes in young adults aged 20-24. This is the time when young people with diabetes transition from paediatric to adult services. One explanation for the worsening trend could be the fragmented and variable service quality during the transition that can put young people at risk of poor control of diabetes and its symptoms.

Chart 6.5: Emergency hospital admissions for Type 1 diabetes, 10-24 year olds, England 2008/09 to 2017/18

The National Diabetes Audit also reported that over a quarter of (28.2%) of children and young people with Type 1 diabetes were assessed as requiring additional psychological or CAMHS support. There was a higher proportion of adolescent girls with diabetes recorded as requiring additional psychological support compared to adolescent boys (RCPCH 2019).

Epilepsy is another important longterm condition affecting teenagers. Epilepsy is a neurological condition resulting in a tendency to have recurrent seizures. One in 50 people will have epilepsy at some time in their lives, with around 500,000 (1 in 100) with the condition at any given time (Epilepsy Society, 2017). The National Institute for Clinical Excellence (NICE) has estimated that there were approximately 34,000 young people under 18 with a diagnosis of epilepsy and taking antiepileptic drugs in England (NICE, 2013). For 12-17 year olds, the incidence of new diagnoses was 0.3% for the age group as a whole, similar to other age groups.

Chart 6.6 shows that the rate of emergency hospital admissions for epilepsy per 100,000 of the population aged 10-19 in England has remained fairly level since 2010/11.
There is evidence that epilepsy levels are higher in urban areas, areas of social deprivation and areas without specialist services (Thomas et al, 2012), suggesting that social determinants of health play a part in its development. There is also evidence of co-morbidity between epilepsy and mental health problems (Aaberg et al, 2016).

Arthritis, an inflammatory joint disease, is rare in young people. It covers several related conditions occurring before the age of 16, including juvenile rheumatoid arthritis and juvenile idiopathic arthritis (definitions of which overlap). Despite being rare, it is estimated that juvenile idiopathic arthritis affects 15,000 children in the UK with more than 2,500 developing the condition every year (Arthritis Research UK, 2014). There are no UK prevalence data and this is an obvious evidence gap.

Cancer is also relatively rare in young people, but is one of the leading causes of death for those in their teens and early 20s. Drawing on data from the cancer registries, Cancer Research UK estimates that around 2,400 young people aged 15-24 years are diagnosed with cancer every year in the UK and approximately 280 of this age group die from cancer each year (Cancer Research UK, 2017).

Chart 6.7 shows the incidence of cancer diagnoses in young people aged 15-24 is similar in the four countries of the UK. The rate for females appears higher in Wales but the absolute numbers are very small. Rates do not differ significantly among the other countries for either gender (Cancer Research UK, 2017).
Chapter 6: Physical health, longterm conditions and disability

Chart 6.8 shows the most common cancers for this age group are lymphomas, including cancer of the lymph system, Hodgkin Disease and non-Hodgkin Lymphoma, followed by carcinomas (malignant tumours on the surface or lining of a body organ). Cancers show different distributions by gender; there are more lymphomas, germ cell tumours (in cells producing sperm and eggs) and leukaemias (cancer of the white blood cells) among young men and more carcinomas and malignant melanoma among young women (Cancer Research UK, 2017). The rates balance out, however, and overall it is estimated that the male:female ratio for cancer in this age group is equal.

Chart 6.8: Average number of teenage and young people’s cancers by diagnostic group, age 15-24, UK, 2012-2014

Source: Cancer Research UK (2017) Teenagers’ and young adults’ cancer incidence statistics > DOWNLOAD DATA
The cancer registry data compiled by Cancer Research UK suggests an increase of one fifth in cancer diagnoses among 15-24 year olds in the UK since the 1990s. Mortality, however, has fallen, almost halving since the 1970s (Cancer Research UK, 2017). Overall, over 84% of those diagnosed survive five years or longer. Chart 6.9 shows that the average age-standardised rate for cancer incidence in 15-24 year olds in the UK has been on a steady rise for many years.

**Chart 6.9: Average per year age-standardised cancer incidence rates per 100,000 population, age 15-24, UK, 1993/95 to 2014/16**

Disability

The UK Equality Act 2010 defines disability as a physical or mental impairment that has a substantial and longterm (usually one year) negative effect on a person’s ability to do normal daily activities. Disability might include some of the conditions covered above such as arthritis and cancer, or other conditions including HIV, chromosomal and gene problems (for example, Down’s Syndrome, cystic fibrosis, haemophilia and spina bifida), or loss of physiological and psychological functions such as mobility, sight, hearing and learning capacity. Disability can result in social, economic or environmental barriers restricting full and equal participation in society.

**Chart 6.10** shows the rates of disability by this definition, by five year age bands up to age 24, drawing on data from the most recent national Family Resources Survey. Between the ages of 10 and 24, 9% of 10-14 year olds, 10% of 15-19 year olds and 10% of 20-24 year olds meet the definition. For children and young people, the most common types of impairment reported were social/behavioural, learning, stamina/breathing/fatigue, and mental health (Department for Work and Pensions, 2019).
Estimates vary in different surveys depending on the definition of disability used and the age bandings employed in the study. The 2015 English HBSC survey (of 11-15 year olds) arrived at a slightly higher estimate than the Family Resources Survey (1 in 8), although this was a broader construct including longterm illness and disability (Brooks et al, 2015). A learning disability is defined by the Department of Health and Social Care as “a significant reduced ability to understand new or complex information, to learn new skills (impaired intelligence), with a reduced ability to cope independently (impaired social functioning), which started before adulthood” (Department of Health, 2001). There is an overlap between learning disability and autism spectrum disorder, but not all young people with autism will have learning disabilities or vice versa. Incidence of learning disabilities is more common in boys than girls, and it has been estimated that there are 286,000 children and young people aged 0-17 in the UK with a learning disability (Mental Health Foundation, 2017).

The definition of special educational needs (SEN) is broader than that for learning disability, and in 2016 the Department for Education estimated that 1,228,785 school pupils (primary and secondary) had special educational needs in England. Nearly a million children (11.6% of the total pupil population) received SEN support at school. Fewer (236,805) had an Education, Health and Care (EHC) plan. Autistic spectrum disorder is the most common primary type of need for pupils with a statement or EHC plan, accounting for more than one quarter of all those with a statement or plan (Department for Education, 2017). Chart 6.11 presents the rates for young people age 10-19 in England in 2018.
Finally, we have not included a separate section on young people with rare diseases, but it is worth noting that they are an important part of the landscape when considering young people’s physical health, longterm conditions and disability. It is estimated that there are approximately 6,000 rare diseases, of which three quarters have their onset in childhood. In the general population as a whole, approximately 1 in 17 people have a rare disease (Rare Diseases UK, 2019).

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CHAPTER 7: Wellbeing and mental health

Overall approximately 1 in 10 young people age 10-24 are often lonely, but this decreases with age.

On average, three quarters of young people age 13-15 rate their life satisfaction as ‘HIGH’ OR ‘VERY HIGH’.

One third of young people aged 16-25 report their wellbeing as ‘VERY HIGH’.

Nearly 1 in 4 young women aged 17-19 meet the criteria for having a mental disorder, and in the majority of cases this includes an emotional disorder.

Among boys the likelihood of a disorder is highest at age 11-16. Among girls, it is 17-19.

Approximately 1 in 100 young people aged 10-24 have autism spectrum disorder.

Mental health problems in young people in England from 1999 to 2017 rose proportionally by 13% for 5-10 year olds and 19% for 11-15 year olds.

5% of all 17-19 year olds in England were on psychotropic medicine in 2017, most commonly selective serotonin reuptake inhibitor antidepressants.

1 in 7 16-24 year olds screen positive for ADHD.

Three quarters of mental health problems start before the early 20s.

Overall 14.4% of 11-16 year olds and 16.9% of 17-19 year olds in England met the criteria for having a mental disorder at the time of the 2017 Mental Health of Children and Young People survey.

Suicide rates are higher for young men than women.

Since 2007 both self-reported and hospital recorded self harm show increases.
Wellbeing and mental health

Many young people will experience mental health problems at some point between age 10 and 24. Those most frequent in the teenage years include anxiety and depression, eating disorders, conduct disorder (serious antisocial behaviour), attention deficit and hyperactivity disorder (ADHD) and self-harm. This age period also witnesses the early emergence of rarer psychotic disorders such as schizophrenia. In fact, one half of all lifetime cases of psychiatric disorders start by age 14 and three quarters by age 24 (Kessler et al, 2005). Other estimates suggest that most of these problems start before the age of 18 (Kim-Cohen et al, 2003).

Mental health problems have important implications for every aspect of young people’s lives including their ability to engage with education, make and keep friends, engage in constructive family relationships and find their own way in the world. Thinking more upstream, the importance of prevention and maintenance of good mental health is influenced by several factors beyond just health services, such as education, access to high quality work and financial stress. However, detection, treatment and support for young people with mental health problems are all important parts of the services provided to this age group (Department of Health, 2015). Mental health problems are also a major contributor to the global burden of disease (Global Health Data Exchange, 2018) and untreated problems are likely to be very expensive for health services as young people grow into adulthood. We will return to mental health services in Chapter 8, but it is worth noting that the issue of young people’s mental health is currently subject to considerable policy and public debate.

Young people’s reports of their own wellbeing

Before exploring symptoms of mental ill health, it is worth noting that young people usually rate their own overall wellbeing as fairly high. Wellbeing is not the opposite of poor mental health (you can have a mental health problem and high wellbeing) but it is a part of general mental state. Low wellbeing may be a contributing factor to the development of later mental health problems, or it may arise as a result of them. In recent years the Office for National Statistics has done a considerable amount of work on the measurement of wellbeing, with the result that several large surveys use the same measures with different age groups (ONS, 2014). This usually consists of self-reported ratings for questions including ‘How satisfied are you with your life nowadays?’, ‘To what extent do you feel the things you do in your life are worthwhile?’, and ‘How happy did you feel yesterday?’. Chart 7.1 presents recent ONS wellbeing results for 10-15 year olds in Great Britain, showing the average proportion of young people of this age who gave high or very high ratings to these questions. Generally the ratings are positive, ranging from 70.6% to 81% depending on question and gender. A similar question on life satisfaction was also included in the ‘What About YOUth’ (WAY) survey of 15 year olds, where 75% of boys and 55% of girls gave high or very high ratings (HSCIC, 2015).
The life satisfaction and wellbeing questions are also asked of 16-24 year olds in the ONS annual population survey, although results in the main publications are not broken down by gender. Chart 7.2 shows their responses to the same three questions, rating their level of life satisfaction, how worthwhile they think their life is, and how happy they were on the previous day. However, the responses for this age group are only given for those who rated ‘very high’, rather than the combined categories of ‘high’ and ‘very high’, so the results are not comparable with those for the 10-15 year olds. As with the younger age group, the majority of 16-24 year olds reflect high levels of wellbeing according to these questions. On average a third of the age group rate their wellbeing as ‘very high’ across these measures.
Loneliness can be considered a part of wellbeing, as when people feel lonely most or all of the time it can have a serious impact on their wellbeing, and their ability to function in society (Office for National Statistics, 2018a). For this reason, as an index of wellbeing, loneliness is of increasing interest to policymakers at local and national levels as well as internationally. Chart 7.3 presents ratings of loneliness for young people aged 10-15, showing that approximately one in 10 of them report feeling lonely often, although the 10-12 year olds report this more (14%) than the 13-15 year olds (9%).

Chart 7.3: Reported frequency of loneliness, age 10-15, GB, 2018

![Chart 7.3: Reported frequency of loneliness, age 10-15, GB, 2018](chart_7_3.png)

Source: Children’s Society (2018) Good Childhood Index Survey > DOWNLOAD DATA

Chart 7.4 presents answers to the same questions by 16-24 year olds in England, taken from a different survey, and compared with all people in the survey aged 16-75+. Proportions of those who are always lonely are similar for all groups.

Chart 7.4: Reported frequency of loneliness, age 16-24, by gender, England, 2017/18

![Chart 7.4: Reported frequency of loneliness, age 16-24, by gender, England, 2017/18](chart_7_4.png)

Source: Dept for Culture, Digital, Media & Sport, Community Life Survey, 2017/18 > DOWNLOAD DATA
Finally, young people aged 16-24 seem to give slightly less positive satisfaction ratings in relation to their health, compared with their general life satisfaction responses. In the British Understanding Society survey, 56.2% were mostly or completely satisfied with their health. More than one in five (21.4%) said they were dissatisfied (Office for National Statistics, 2017).

Victimisation and violence

Experiences of victimisation and violence have significant impacts on wellbeing. This includes bullying, the repeated physical, verbal or symbolic aggression intentionally expressed by one or more peers towards a less powerful victim (Livingstone et al, 2016). Young people who report being bullied in the last couple of months tend to give lower ratings to their wellbeing. However, estimates of bullying vary hugely. In the ‘What About YOUth’ survey 2014, two thirds of 15 year old girls and nearly half of 15 year old boys said they were bullied in the last couple of months (HSCIC/NHS Digital, 2015).

In the Annual Bullying Survey 2018, including 9,150 young people at secondary schools and colleges, the majority of whom were 12-15 year olds, a much lower proportion (22%) of young people reported that they had experienced bullying in the last 12 months (Ditch the Label, 2018).

Bullying includes cyberbullying, the deliberate aggression expressed by peers through digital (online or mobile) technologies (Livingstone et al, 2016). Again, estimating prevalence is challenging. In the same ‘What About YOUth’ survey in 2014, 10% of 15 year old boys and 19% of 15 year old girls reported experience of cyberbullying in the previous couple of months. In the Annual Bullying survey, for those who said they had experienced bullying in the last 12 months the majority had experienced some verbal bullying, and approximately half had experienced physical or cyberbullying (Ditch the Label, 2018). Research has shown a large overlap between on-line and off-line bullying, with most victims experiencing both, and the most common form of bullying is still in person, face-to-face (Haddon and Livingstone, 2014).

Whether or not young people feel generally safe in their local environment is also sometimes used as an index of wellbeing. In the Exeter Schools Health Unit’s most recent survey, 1 in five young people aged 8-15 said that safety after dark in their area was ‘poor’ or ‘very poor’ (Balding and Regis, 2018).
Violent injuries in young people are generally rare, but they are increasing in recent years in England and are a significant public health concern (World Health Organisation, 2015). **Chart 7.5** shows the numbers of finished hospital consultant episodes in England that were coded as ‘assault by sharp object’, among 13-24 year olds, for the years from 2012/13 to 2016/17, showing an overall rise for males.

**Chart 7.5:** Count of finished consultant episodes coded ‘assault by a sharp object’, by age and gender, England, Quarter 4 (Jan-March) 2012/13 to 2016/17

Prevalence of mental health problems among young people

New prevalence data on mental disorders in children and young people in England were published by NHS Digital in 2018 (Sadler et al, 2018). The survey follows two previous versions undertaken in 1999 and 2004. Information was collected from 9,117 children and young people between January and October 2017. Approximately 4,000 of these were aged 11-19. Young people and their parents completed standardised tools that measured disorder as specified in the International Classification of Disease (ICD-10) diagnostic criteria. This is important as it is a robust and internationally recognised list of diagnosable mental health problems, not simply of symptoms.

Overall 14.4% of 11-16 year olds and 16.9% of 17-19 year olds met the criteria for having a mental disorder at the time of the survey. Within these headline figures there was quite considerable variation by gender and age. **Chart 7.6** shows the prevalence rates for all three age groups (5-10, 11-16 and 17-9), clearly showing the developmental trend for these disorders to increase in the early teens for both genders, and then to continue increasing into the late teens for young women. Nearly 1 in 4 young women aged 17-19 met the criteria for having a mental disorder.

**Nearly one in four** young women aged 17-19 meet the criteria for having a mental disorder, and in the majority of cases this is an emotional disorder

**Source:** NHS Digital: Mental Health of Children and Young People in England, 2017
The types of disorders experienced also varied by age and gender. **Chart 7.7** shows that behaviour problems (largely oppositional defiant and conduct disorders) were more common in boys up to the mid-teens, while emotional problems (largely anxiety and depression) were more common for girls, particularly in the older age groups. **Chart 7.8** shows that by age 17-19, emotional disorders are the most common type in both genders. Of the quarter of young women age 17-19 with a mental disorder, 22.4% had an emotional problem.

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**Chart 7.6: Prevalence of mental health disorders in children and young people by age and gender, England 2017**


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**Chart 7.7: Prevalence of types of mental health disorders in 11-16 year olds, by gender, England, 2017**

It is also important to note that the survey reported that a quarter (25.9%) of 11-19 year olds with a mental disorder also had a life limiting longterm illness, compared to 4.2% of those without a mental disorder (Sadler et al, 2018).

Similar prevalence studies are not undertaken in other UK countries, but the Scottish Schools Adolescent Lifestyle and Substance Use Survey (SALSUS) reports regularly on emotional and behavioural problems in Scottish schoolchildren aged 13 and 15. The most recent survey was undertaken in 2015 and problems were measured using the Strengths and Difficulties Questionnaire. The proportion with an ‘abnormal’ score was 15%, with a further 16% with ‘borderline’ scores. 15 year old girls were considerably more likely than any other sub-group to have a borderline or abnormal emotional problems score (Scottish Government, 2017a).

In the 2014 English adult psychiatric morbidity survey which included 16-24 year olds, the overall rate of common mental health problems for people over 16 was one in six (McManus et al, 2016). In the 16-24 age group the prevalence of common mental disorders in this age group were about three times higher in women (26.0%) than men (9.1%). Chart 7.9 shows the rates of various different common mental health disorders in this age group.

The Scottish Health Survey presents results for 16-24 year olds on a set of wellbeing and mental health measures, including the General Health Questionnaire, a widely used standard measure of mental distress and mental ill-health consisting of 12 questions on concentration abilities, sleeping patterns, self-esteem, stress, despair, depression, and confidence in the previous few weeks. A score of four or is used to indicate the presence of a possible psychiatric disorder. Over 1 in 5 (22%) of those aged 16-24 had a GHQ-12 score of four or more, the highest amongst all adult age groups in the survey. There were very similar overall scores for young men and young women, but young women were more likely to have symptoms of anxiety than young men (Scottish Government, 2017b).
Emotional disorders, low mood and anxiety

ONS does not routinely collect data on clinically diagnosed cases of depression or anxiety, although it does collect them on symptoms of depression, self-reported anxiety and other indicators. In England, psychiatric prevalence data on 11-19 year olds are available in the ONS survey on children’s mental health (Sadler et al, 2018), and some psychiatric data for common mental disorders in those over age 16 are available from the 2014 Adult Psychiatric Morbidity Survey (McManus et al, 2016). Again, SALSUS and the Scottish Health Survey provide some Scottish data on similar age groups (Scottish Government, 2017a and 2017b), although these were not based on clinical diagnoses. Some other population surveys also include measures that indicate symptoms of depression or anxiety for this younger age group even if they do not provide a diagnosis.

Pulling together information from these sources, it seems that a significant proportion of young people 10-24 will have symptoms of depression or anxiety at some point through these years, and that young women are more likely to suffer (or to report) than young men. However, estimates of the levels of emotional problems vary by the age of the sample, and by the types of measurements used.
CHAPTER 7: Wellbeing and Mental Health

AYPH | Key Data on Young People 2019

Chart 7.10 shows the results from the English 2017 population survey of young people relating to the proportions of girls and boys experiencing any emotional disorders in the age groups 5-10, 11-16 and 17-19. This clearly shows the developmental trend for anxiety to increase across the teens in young women, but not among young men.

In the Adult Psychiatric Morbidity survey undertaken in 2014/15, 24.6% of young women aged 16-24 and 14.7% of young men showed signs of depression or anxiety. The authors concluded that young women were a high-risk group in the population (McManus et al, 2016).

Self-harm

Self-harm (usually deliberate cutting or scratching, but which can also include intentional overdose, often coded as ‘self-poisoning’) is a key part of the picture of mental health problems for young people as the majority of people who self-harm are aged between 11 and 25 years (Mental Health Foundation, 2006; Association for Young People’s Health, 2013).

Self-harm is not a psychiatric disorder in its own right, but it is indicative of major mental distress (McManus et al, 2016). However, self-harm is a very private behaviour and a very sensitive topic, which means that there is a shortage of reliable information about young people who do not make use of accident and emergency or other services.

There have been several attempts to estimate prevalence of self-harm among young people in recent years. In the English Health Behaviour in School-aged Children study (Brooks et al, 2015), 22% of the 15 year olds in the study reported that they had self-harmed. These rates were three times as high...
for girls (32% of girls compared with 11% of boys). The majority of those self-harming said they were doing so once a month or more. One in four (25.7%) of the young women aged 16-24 in the Adult Psychiatric Morbidity Survey reported that they had self-harmed, compared to one in ten (9.7%) of the young men. In this age group self-harm was predominantly self-cutting (McManus et al, 2016).

The Child and Adolescent Self-Harm in Europe (CASE) study included a self-report survey of adolescents aged 13-18 in England. In total 15.5% reported ever having self-harmed, with a median age of onset of 13 years. Over half (54.9%) of young women aged 13-15 reported self-harm in the last year (Morey et al, 2016).

Time trends in self-harm were estimated from face-to-face interviews in the Adult Psychiatric Morbidity Survey. Overall, less self-harm was reported face-to-face than in the self-completion part of the study. However, rates did increase across time. Chart 7.11 shows the increase in reporting for men and women from 2000 to 2014. The percentage of young men aged 16-24 who reported self-harm nearly doubled from 4.2% in 2000 to 7.9% in 2014. The increase for young women of this age was even greater; three times higher in 2014 compared to in 2000. Once again these figures highlight that, young women aged 16-24 appear to be a particularly high-risk group. These increases may also be a function of reduced stigma, or increased categorisation of the behaviour as self-harm.

Chart 7.11: Self-harm ever (reported face to face) age 16-24, by gender, England and Wales, 2000, 2007 and 2014


32% of 15 year old girls and 11% of 15 year old boys report self-harming
A minority of people who are self-harming will end up in hospital, but these cases provide important information about this behaviour. Reducing hospital admissions caused by self-harm in under 18s is a key public health outcome indicator (NICE, 2012). Chart 7.12 shows the age distribution for young people age 10-24 admitted to hospital after an episode of self-poisoning in England, 2017/18. The majority of these episodes would have been drug overdoses but some will include methods such as swallowing bleach. Although the peak age for admissions is 15, with a total of 3,861 admissions, there are steady rates of admissions into the early 20s. In total there were 34,271 admissions of 10-24 year olds for self-poisoning in 2017/18. These numbers do not necessarily reflect the numbers of individuals admitted, as some young people will be admitted several times over the course of a year. In addition, some incidents will be accidents and may have been miscoded as self-harm. Nonetheless, this figure represents a huge number of young people in extreme distress, particularly if we consider this to be the tip of a much larger iceberg including those who do not go to hospital. Self-poisoning is one of the most common acute medical presentations in the UK (Camidge, Wood and Bateman, 2003).


Time trends in hospital admissions for self-harm follow similar trends to the self-report data in the community. Chart 7.13 shows the rate of hospital admissions for all kinds of self-harm per 100,000 population aged 10-24. This allows us to compare year on year controlling for changes to the numbers of 10-24 year olds in the population, so it is a more accurate way of reporting trends than absolute numbers of admissions. Results are broken down by five year age groupings (10-14, 15-19 and 20-24), which illustrates that the rise is in the younger two groups rather than those in their early 20s.
Suicide

Suicide is rare among young people but it remains a key public health target. Reducing numbers who commit suicide is a Public Health England outcome indicator and reducing suicide by 20% has been a recent target of the Scottish Government. Chart 7.14 shows the age-specific suicide rates in the UK for young men and women aged 15-19 and 20-24, drawing on Office for National Statistics data. Rates are higher in the older age group, and higher among young men than young women; a quite different pattern to that seen above with self-harm. In addition, the chart shows a peak in suicide in the mid 1990s, but a decline in rates from then until around 2005. After this, rates seem to have been fairly stable, although there is a slight rise in both young men and women in the 15-19 age group in the last five years. In 2017 the rates for young women were 3.5 per 100,000 for 15-19 year olds and 3.9 for 20-24 year olds, and for young men were 7.1 for 15-19 year olds and 11.4 for 20-24 year olds.
More information on suicidal behaviour among the older age group is found in the Adult Psychiatric Morbidity Survey. Overall, 1 in 15 people reported that they had made a suicide attempt at some point (6.7% of the population), with more women (8%) than men (5.4%) having done so. Rates for young men aged 16-24 were roughly similar to those for men as a whole. However, rates for young women were notably high, at just under 13%.

Suicide rates among higher education students have been of concern recently. Office for National Statistics data suggest that the rate of suicide per 100,000 undergraduate students between 2012/13 and 2016/17 rose from 5.5 to 6.7 for male students, and from 2.4 to 3.4 for female students (Chart 7.15). However it is important to note that between the 12 months ending July 2013 and the 12 months ending July 2016, higher education students in England and Wales had a significantly lower suicide rate compared with the general population of similar ages (Office for National Statistics, 2018b).

Chart 7.15: Suicide rate per 100,000 undergraduate students, by gender, England and Wales, 2012/13-2016/17

Chart 7.16 shows the suicide rate for young people aged 10-24 in the UK in 2016 compared with 18 other similar high income countries, based on Global Burden of Disease Study data. The UK had one of the lowest suicide rates for those aged 10-14 when compared with other countries, and the seventh-lowest and eighth-lowest for those aged 15-19 and 20-24 respectively.
Chart 7.16: Comparison of suicide rates per 100,000 age-specific population among young people aged 10–24, 2016

Age 10-14, rate per 100,000

- Greece
- Italy
- United Kingdom
- Spain
- Portugal
- Denmark
- The Netherlands
- Germany
- France
- Sweden
- Austria
- Finland
- Ireland
- Belgium
- Australia
- Japan
- New Zealand
- USA
- Canada

Age 15-19, rate per 100,000

- Greece
- Spain
- Italy
- Denmark
- Portugal
- The Netherlands
- United Kingdom
- Germany
- France
- Belgium
- Japan
- Austria
- Sweden
- Australia
- Finland
- USA
- Ireland
- Canada
- New Zealand

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Eating disorders

In Western countries, the prevalence of eating disorders in adolescents and young adults has been estimated to be approximately 3% for females and 0.1% for males. A larger proportion will have ‘subthreshold’ symptoms (Nagl et al, 2016). A study of the incidence of eating disorders in the UK 2000-2009 using a primary care register reported an age-standardised annual incidence rate of 164.5 per 100,000 for girls aged 15-19 years, more than double the rate for other ages (Micali et al, 2015). About 90% of eating disorder cases are female (National Institute for Clinical Excellence, 2017). By mid-life, around 15% of women will have met the criteria for eating disorders (Micali et al, 2017).

There can be extensive physical and psychiatric consequences of a longterm eating disorder. Anorexia nervosa in particular has the highest mortality rate of any psychiatric disorder (Arcelus et al, 2011). The average age for the start of eating disorders is in the mid-teens and understanding these complex and distressing disorders is important when thinking about this age group. However, like self-harm, eating disorders may be underestimated in the general population. Significant proportions will not seek help and good representative community surveys are rare.
On the basis of routine Hospital Episode Statistics, the Health and Social Care Information Centre has reported that young people aged 10 to 19 years account for more than half of hospital admissions for eating disorders (HSCIC, 2014). Looking at the age range 10-24 Chart 7.17 shows, as usual, the largest number of admissions in 2017/18 was for 15 year old girls. Although bulimia is more common, anorexia accounts for a larger proportion of the hospital admissions.

Chart 7.17: Hospital admissions for eating disorders, 10-24 year olds by age and gender, England 2017/18

Chart 7.18: Numbers of hospital admissions for eating disorders by age and gender, England, 2013/14 and 2017/18

Comparing the hospital episode statistics between 2013/14 and 2017/18 for admissions for eating disorders shows that there has been a rise in admissions for young women age 10-14 and 20-24, but the trends are less clear for young men (for whom the numbers are very small) or 15-19 year old young women. (Chart 7.18).
Attention Deficit and Hyperactivity Disorder (ADHD and hyperkinetic disorders)

ADHD is a neurobiological disorder. Key symptoms of ADHD are inattention, impulsiveness and hyperactivity. It can affect educational attainment, peer relationships, self-esteem and can contribute to youth offending. It has been estimated that it affects around two to four percent of teenagers in the UK, with rates consistently higher in boys than girls (Association for Young People’s Health, 2012). In the Sadler et al (2018) epidemiological survey of children and young people in England, the overall rate for all 5-19 year olds was 1.5%, but this varied substantially by age and gender. Of those aged 11-16, 3.2% of boys and 0.7% of girls met the criteria. Of those aged 17-19, 1.5% of boys, and 0% of girls met the criteria.

The picture seems rather different for the older age group. For those aged 16-24, the Adult Psychiatric Morbidity Survey estimated that 14.6% of this age group screened positive for ADHD in 2014 (which will produce a larger group than those actually meeting the criteria for diagnosis). In this age group, rates were broadly similar for young women and young men (McManus et al, 2016).

Autistic spectrum disorder

The majority of young people become increasingly focused on their peer groups and social interaction during adolescence so this can be a very difficult time for young people who find it hard to manage their relationships with others. Those with autistic spectrum disorders (such as Asperger’s) may find this a particularly challenging life stage. The most recent Diagnostic and Statistical Manual was published in 2013, drawing together the various diagnoses of autism, autistic spectrum disorder and Asperger’s under one umbrella diagnosis of ‘autistic spectrum disorder’. This has three levels of severity and there is also a related diagnosis of social communication disorder (American Psychiatric Association, 2013). The defining characteristics of autistic spectrum disorders are impairments of social interaction, communication and imagination and often a reliance on repetitive, habitual activities and behaviours. However, as a spectrum, a very wide range of functioning is included under the overall heading and people may vary considerably in their experiences.

Rates for autism spectrum disorder in the Sadler et al (2018) epidemiological survey show that it was identified in 1.2% of 5 to 19 year olds and was more common in boys (1.9%) than girls (0.4%). The rates were highest for children under 10. Of those aged 11-16, 1.8% of boys and 0.4% of girls met the criteria. Of those aged 17-19, 1% of boys, and 0.7% of girls met the criteria.

As well as the gender differential, with around five times as many boys as girls meeting the criteria, on average half of the children diagnosed with autistic spectrum disorders have learning disabilities (Fombonne et al, 2011).
The Adult Psychiatric Morbidity Survey provided estimates for adults meeting the criteria for autism spectrum disorder, but because of low prevalence rates the data were presented for 16-34 year olds, rather than 16-24 year olds. Rates were 1.7% for men and 0.2% for women (McManus et al, 2016).

### Behaviour problems

‘Conduct disorder’ is the official, psychiatric term for serious antisocial behaviour (for example, American Psychiatric Association, 2013), including the extremes of aggressive behaviour (fighting, being cruel to others or animals), destructive behaviour (arson or vandalism), deceitful behaviour (lying, stealing) and violation of rules (running away, truanting). Estimates for conduct disorder from the 2017 ONS epidemiological survey suggested a rate in 11-16 year olds of 7.4% for boys and 5% for girls. Rates dropped substantially for 17-19 year olds, to 1% for boys and 0.5% for girls.

Another index of levels of behaviour problems in the population of young people is the rate of first time entrants to the youth justice system. This is not a completely objective rating of behaviour problems as it is affected by processing by the police and courts, which are themselves affected by policy changes. The number of young people aged 10-17 receiving their first substantive outcome (reprimand, final warning or court disposal) in 2017/18 was lower than for any of the previous five years, representing a halving of the 2012/13 rates (down from 533 per 100,000, to 276 per 100,000).

### Time trends in prevalence of mental health disorders

We have already presented some trend data for individual disorders in the sections above, but the new English prevalence data also allow analysis of time trends in overall prevalence of mental health disorders in young people from 1999 to 2017 (Sadler et al, 2018). Time trends are only available for the younger age groups up to 15, as this was the age range covered by the earlier surveys. The most striking prevalence statistics relate to the 17-19 year olds, but this is the first time they have been included in this survey, so there is nothing to compare them to in the past. Chart 7.19 compares the time trend for 5-10 year olds and 11-15 year olds from 1999 to 2017, for comparison. The absolute rise in 11-15 year olds is small; a couple of percentage points. Expressed as a proportion increase over the 1999 rates, however, the rise is 19% for 11-15 year olds compared with 13% for the younger children.
The increase was mostly in rates of anxiety and depression, from 4.5% to 7.1% from 1999 to 2017 in 11-15 year olds (Sadler et al, 2018). Behaviour problems fell across this time period for this age group. This concurs with earlier studies that have also shown an increasing burden of emotional problems, particularly for girls, and an indication of a decrease in overall difficulties for boys (Fink et al, 2015).

Scottish data for schoolchildren aged 13 and 15 from SALSUS from 2006 to 2015 also showed that trends in emotional and behavioural problems over time had been mixed, depending both on the type of problem encountered and on the age and gender of pupils. Similar to the English data, the proportion of pupils with a borderline or abnormal score on the conduct scale decreased between 2006 and 2015. In contrast, the proportion of pupils with a borderline or abnormal score on the emotional problems scale increased between 2006 and 2015 (Scottish Government, 2017a).

Recent trend data for the 16-24 year age group from 2009/10 to 2014/15 in England are available from the Adult Psychiatric Morbidity Survey (McManus et al, 2016). These are shown in Chart 7.20. There was an increase of nearly 3% in the prevalence of disorders in women in this age group across these five years, but no increase for men.
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CHAPTER 8: Health promotion and use of health services

OVER 80% of secondary school pupils in the UK receive teenage vaccinations including MMR, MenACWY and HPV

46% of 15 year olds have decay in their permanent teeth

The number of referrals to specialist children’s mental health services has increased by 26% over the last five years.

SCHOOLS, PARENTS, PEERS AND THE VOLUNTARY SECTOR ALL PLAY A MAJOR PART IN HEALTH PROMOTION FOR YOUNG PEOPLE

For every 1000 people under 18, although approximately 140 will have mental health problems, only 18 will be on the formal child and adolescent mental health services caseload

52% OF BOYS AND 57% OF GIRLS in Year 10 (aged 14-15) have visited their GP in the past 3 months

A third (32%) of those age 16-25 who could not get to see the GP when they wanted then went to Accident and Emergency

A&E attendances for 15-19 year olds have risen by 10% since 2010/11
CHAPTER 8: Health promotion and use of health services

Health promotion and use of health services

Good outcomes for young people rely on an interaction between their needs and how well services can meet them. In this chapter we look at young people’s views on and use of health services, from community based health promotion through to NHS inpatient care.

Health promotion

One of the key challenges for young people is the transition to independence that takes place across the second decade of life. Learning how to recognise health issues and manage the process of getting help is very important at this time. Supporting young people through this process means empowering them to take control of their health and giving them the information they need to seek appropriate services.

Health promotion for this age group tends to focus on sexual health, physical activity, smoking, drinking and drug use, and diet and nutrition. Interventions to promote health can address individual behaviour and can also target wider social and environmental factors. Interventions aimed at changing individual behaviour include stopping smoking programmes, promotion of dental check-ups, or school based relationship and sex education. Wider population interventions might include media information campaigns or policy such as advertising bans, tax incentives and pricing structures (for example, in relation to alcohol sales) and clearer food labelling. There are very few representative data on how these wider population interventions might impact on young people, mainly because undertaking the studies that would answer the question is methodologically complex and expensive, and the effect sizes are probably small at the individual level. However, we do have more information on the effectiveness of health promotion as delivered through schools, vaccination programmes, access to helplines and individual level support and advice.

Chart 8.1: Sources of helpful information about drug use, school pupils in England, 2013

Source: HSCIC (2014), Smoking, Drinking and Drug Use Among Young People in England > DOWNLOAD DATA
* Department of Health ‘Talk to FRANK service’
When asked about sources of helpful information, for example about drug use, young people report that they use a wide range of sources. Questions asked in the 2013 HSCIC Smoking, Drinking and Drug Use Survey (SDDU) showed teachers and parents came top of the list. **Chart 8.1** ranks the sources that young people mentioned in the survey. The findings were similar to those in the 2012 National Survey on Sexual Attitudes and Lifestyle (Natsal-3), showing schools, parents and health professionals were the preferred sources for information about sex and relationships for 16-24 year olds (Tanton et al, 2016).

**Chart 8.2** draws on data from the Exeter Schools Health Education Unit to show peers feature strongly as sources of information and support among 12-15 year olds. However, many young people often report turning first to their family for information, help and advice, with the exception of sex and relationships and parental conflict. These findings illustrate the value of providing support to parents in communicating with their teenage children. Importantly, primary care services also feature as a source of advice and help for a wide range of issues, highlighting the value of helping GPs and others to understand and prioritise young people’s health.

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**Chart 8.2**: Where 12-15 year olds first go for help or information about emotional and physical health issues, England, 2014

Source: Balding and Regis (2014), Young People into 2014 > DOWNLOAD DATA
As these surveys show, schools clearly play a major role in health promotion through the provision of personal, social, health and economic education (PSHE). The wider aim of PSHE is “…to equip pupils with a sound understanding of risk and with the knowledge and skills necessary to make safe and informed decisions” (Department for Education, 2013). The 2017 Child and Social Work Act made sex, relationships and health education statutory in all secondary schools in England from September 2020 (Department for Education, 2017). It will be important to watch how this is applied in practice, and to measure what young people think about the information they are given. There is also increasing evidence for modifying the whole school environment as an intervention to reduce bullying victimisation in schools, and to address closely related risk and health outcomes in young people (Bonell et al., 2017). Whole school approaches or interventions are multi-faceted and encourage the active participation of parents, students, teachers and the wider school community, to plan, implement and evaluate school policies, procedures, teaching and learning and professional development (Cross et al, 2003).

An important part of the landscape of health promotion and early intervention relates to youth service provision. This includes community based universal and early intervention, some school based early interventions, support for vulnerable young people, and other services. A number of local authorities no longer provide some or all of these services (Education Policy Institute, 2018). **Chart 8.3** presents the trends in local authority universal and targeted youth services funding in England over the last three years, clearly showing the decline.

**Chart 8.3: Trends in local authority universal and targeted youth services funding, England, 2014/15-2017/18**

![Net planned expenditure £](source: Department for Education (2017) Planned LA and school expenditure: 2017 to 2018 financial year > DOWNLOAD DATA)
Immunisation

In the UK the human papillomavirus (HPV) vaccine has been routinely offered to girls aged 12-13 since 2008, and this is due to be extended to boys from September 2019. It helps protect against cancers caused by HPV, including cervical cancer, some mouth and throat cancers, some cancers of the anal and genital areas, and genital warts. Recent analysis from Scotland has concluded that the programme has led to an 89% reduction in preinvasive cervical disease (Palmer et al, 2019).

In 2017/18, 83.4% of Year 9 females in England completed the two-dose HPV vaccination course (Public Health England, 2019a). The uptake is similar in other UK countries, at 83% in Wales in 2018, for example (Public Health Wales, 2018). Data from England have shown that the prevalence of high-risk HPV has reduced with the increasing number of young women who receive the vaccine (Mesher et al, 2018).

Secondary school age children are also due a teenage booster of the measles, mumps and rubella (MMR) vaccination, and a dose of the MenACWY vaccine, which protects against serious infections including meningitis and septicaemia. The MenACWY vaccine was added to the national immunisation programme in August 2015, and can be requested from the GP up until the young person’s 25th birthday. It is advised that students going to university for the first time ensure that they have had their dose. The average coverage for the school based MenACWY adolescent vaccination programme in England in 2018 was 84.6% (Public Health England 2019b).

Dental health

In 2016 Public Health England launched the Children’s Oral Health Improvement Programme Board, with the aim of reductions in the number of children with tooth decay and a reduction in the oral health gap for disadvantaged families (Public Health England, 2016).

However there has not been a Children’s Dental Health Survey since 2013 (HSCIC, 2015). At that time a third of 12 year olds (24%) and nearly half of 15 year olds (46%) had decay in their permanent teeth. More than a quarter of 15 year olds reported being embarrassed to smile or laugh due to the condition of their teeth. Young people who were eligible for free school meals were twice as likely to have severe or extensive tooth decay.

The most recent Adult Dental Health survey was undertaken even longer ago, in 2009, covering England, Wales and Northern Ireland. At that time only 23% of 16-24 year olds achieved ‘excellent oral health’, which included criteria such as having 21 or more natural teeth, 18 or more sound and untreated teeth and roots and no decay detected at any site. In 1978 16 to 24 year olds had 27.4 teeth on average compared with 28.6 in 2009 (HSCIC, 2011).
Use of primary care and community clinics

Young people access their GPs regularly for a wide range of health issues. Generally it is estimated that young people visit the GP several times a year. In their teens this averages out at approximately twice a year for young men and more than four times for young women (HSCIC, 2009), although we note that these data are now 10 years old. Both the Exeter Schools Health Unit ‘Young People into 2018’ study and the Health Behaviour in School aged Children (HBSC) study provide more up to date estimates of the time since last visit to the doctor. Chart 8.4 shows the data from the ‘Young people into 2018’ study where over half of Year 10 pupils (aged 14-15) reported that they visited within the previous three months (52% boys, 57% girls).

Chart 8.4: Last visit to the doctor by Year 10 pupils (aged 14-15), England, 2018

Slightly different rates of consultation were reported by the 11-15 age group in the last HBSC survey in 2015, where overall 78% of boys and 82% of girls said they had visited the GP in the last year (Brooks et al, 2015). Chart 8.5 shows that there was little variation in the rates by gender or age across the ages of 11, 13 and 15. Although estimates of attendance vary depending on age group and survey, it is evident young people are frequent users of primary health care, particularly young women.

The most recent ‘Young people into 2018’ survey (Balding and Regis, 2018) explored time trends in attendances at GPs for secondary school age children from 1999 to 2014. As Chart 8.6 shows, there was no clear trend. On average, across all the years, genders and ages, 28% of secondary school pupils in the survey reported visiting the GP in the last month.
Chart 8.5: Proportion of young people 11, 13 and 15 visiting the GP in the last year, England, 2014


Chart 8.6: Time trend in young people’s visits to the GP in the past month, England, 1999-2014

Source: Balding and Regis 2018, Young People into 2018 > DOWNLOAD DATA
The ‘Young people into 2018’ survey also regularly reports on teenagers’ experience of talking to their GP, with Chart 8.7 showing one quarter of girls (26% of Year 8 and 30% of Year 10) reported feeling ‘quite uneasy’ or ‘very uneasy’ with their doctor on their last visit, while boys reported more ease. In comparison, in the last HBSC survey 89% of young people reported that their GP treated them with respect, and 52% reported that they were able to talk about personal things with their doctor (Brooks et al, 2015). Overall the findings highlight the importance of supporting GPs to provide youth friendly services. Secondary analysis of the HBSC data has shown that poor experience on any of the measures was associated with increased risk of self-harm and sleeping problems (Yassaee et al, 2017).

Chart 8.7: Extent to which young people at secondary school felt at ease with their GP at their last visit, by age and gender, England, 2018

Experiences of young people aged 16-24 are assessed in NHS patient surveys, and Chart 8.8 shows that ratings of confidence, trust and being listened to were generally high. However, experiences relating to practicalities and the convenience of visiting general practices were rated as lower. A third (32%) of those who could not get to see the GP at the time they wanted then went to Accident and Emergency, and nearly two thirds (60%) made use of NHS telephone services (presumably mostly by ringing 111).
We have previously noted the dearth of more up to date and detailed information about young people’s usage of primary health care services and further research is still needed. Fifteen years ago, Churchill et al (2000) undertook a survey identifying the range of conditions that prompted young people to seek a primary health care consultation. The most common were respiratory, dermatological and musculoskeletal conditions and problems associated with ears, nose and throat. New data on this topic are now needed urgently. Data on young people’s experiences with the wider range of professionals involved in primary health care – such as practice nurses – are also lacking.

<table>
<thead>
<tr>
<th>Experience</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence and trust in the healthcare professional you saw</td>
<td>94%</td>
</tr>
<tr>
<td>Involved as much as you wanted in decisions about care &amp; treatment</td>
<td>92%</td>
</tr>
<tr>
<td>Needs met at last general practice appointment</td>
<td>92%</td>
</tr>
<tr>
<td>Healthcare professional good at listening to you</td>
<td>86%</td>
</tr>
<tr>
<td>Overall, good experience of GP practice</td>
<td>78%</td>
</tr>
<tr>
<td>Satisfied with the type of appointments offered</td>
<td>72%</td>
</tr>
<tr>
<td>Easy to get through to someone at the GP practice on the phone</td>
<td>68%</td>
</tr>
<tr>
<td>Overall good experience of making an appointment</td>
<td>65%</td>
</tr>
<tr>
<td>Satisfied with general practice appointment times</td>
<td>60%</td>
</tr>
</tbody>
</table>

If you wanted to see a GP but GP was closed, which other service did you use?

<table>
<thead>
<tr>
<th>Service</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacted NHS service by telephone</td>
<td>60%</td>
</tr>
<tr>
<td>I went to A&amp;E</td>
<td>32%</td>
</tr>
<tr>
<td>A healthcare professional called me back</td>
<td>18%</td>
</tr>
<tr>
<td>I went to another NHS service</td>
<td>16%</td>
</tr>
<tr>
<td>I saw a pharmacist</td>
<td>14%</td>
</tr>
<tr>
<td>Can’t remember</td>
<td>11%</td>
</tr>
<tr>
<td>I went to another GP service</td>
<td>9%</td>
</tr>
<tr>
<td>A healthcare professional visited me at home</td>
<td>2%</td>
</tr>
</tbody>
</table>

Source: NHS England 2018 GP Patient Survey > DOWNLOAD DATA
Child and adolescent mental health services (CAMHS)

Child and adolescent mental health services (CAMHS) are delivered through a network of providers offering universal, targeted and specialist services. These are organised in four ‘tiers’. Tier 1 consists of universal services provided through early year services and primary care. Tiers 2 and 3 provide targeted services through youth offending teams, school and youth counselling, and specialist community based psychiatric and psychological services. Tier 4 consists of inpatient and very specialised outpatient services.

Useful information about the structure and provision for CAMHS in England are provided in NHS England’s CAMHS benchmarking reports. The 2018 report estimated only 18 in 1000 children and young people under 18 were on the community mental health services caseload (NHS England, 2018). This figure relates to referrals to Tiers 2 and 3, not including inpatient services. In a survey of 3,750 young people aged 12-16 in UK secondary schools, only 5% of those at high risk of depression or self-harm had seen specialist CAMHS in the previous six months. Amongst those with probable depression, 79% had seen their GP (Sayal et al, 2014).

It is difficult to estimate the size of the ‘treatment gap’ between those who meet the threshold for intervention and those who receive treatment. As the estimate of the level of diagnosable mental health problems in young people is approximately one in 8 of the population of this age (Chapter 7), these benchmarking figures suggest that a very small proportion of those with difficulties are referred and accepted for treatment. After referral there is a further treatment gap, as some are not accepted for treatment, and others experience a long wait. The English Children’s Commissioner has estimated that of those referred to CAMHS in 2017, less than a third received treatment within the year (Children’s Commissioner, 2018). The average waiting time to the start of treatment is three months (NHS Benchmarking Network, 2018).

It is also worth noting that the benchmarking statistics also show there are only 75 full-time working equivalent people in the community CAMHS workforce per 100,000 population (age 0-18). Community CAMHS teams are made up of community psychiatric nurses, therapists, family support workers, specialist practitioners, peer support workers, psychologists, non-medical prescribers and psychiatrists. Despite relatively low numbers of people in the CAMHS workforce in relation to the size of the population, there is evidence of increases in CAMHS referrals over the last five years (Education Policy Institute, 2018).

In addition to limitations in capacity to respond at the community CAMHS level, specialised inpatient beds (Tier 4) are also very restricted with approximately 1,600 across the whole of England. The average length of stay in a specialist bed is 146 days for an eating disorder and 255 days for secure CAMHS (NHS Benchmarking Network, 2018). With respect to the case of eating disorders, recent data suggest that the proportion of children and young people who are receiving timely access to treatment has gradually improved over the last two years (Chart 8.9).
However, it seems that the issues with access particularly relate to routine problems (perhaps in the early stages of disease), as Chart 8.10 shows. Delays for routine appointments for eating disorders are far longer than for urgent cases.

Chart 8.10: How long do children and young people (age 19 or under) with an eating disorder wait to start treatment? England, 2018/19

Source: NHS England, Children and Young People with an Eating Disorder Waiting Times > DOWNLOAD DATA
Note: NHS England, Children and Young People with an Eating Disorder Waiting Times > DOWNLOAD DATA
Information on CAMHS from these sources does not record provision from the voluntary and independent sectors, who often provide services to fill the treatment gap. Voluntary organisations in particular have a key role in providing prevention, early intervention services and support for the significant proportion of young people who do not meet the threshold for CAMHS (Care Quality Commission, 2017a). Many voluntary organisations run helplines and websites as well as face-to-face interventions, often providing services that no other agencies offer for children and young people and their families.

It is difficult to find similar data on young adults who have transitioned from CAMHS into adult services, or who are referred to services for the first time between 18 and 25 years. Analysis of the Adult Psychiatric Morbidity Survey has provided estimates of the proportions of people aged 16-34 who report receiving treatment after a suicide attempt. Chart 8.11 shows that rates for receiving treatment are lower for this age group than for older adults, with 67% of those aged 16-34 receiving no intervention at all, compared with 47% of those over 55 years (McManus et al, 2016). This may be as much about help seeking behaviour as about availability of treatment options, but available statistics raise the possibility of a shortfall of services for young adults as well as those under 18.


**Hospital admissions and secondary care**

Young people have lower overall morbidity than older age groups and this fact can result in their health needs being overlooked within service design and commissioning. Nationally there are very few hospital facilities specifically for teenagers. Yet many young people have hospital admissions, particularly those with a longterm or chronic condition. Age appropriate services can make an important difference for young people.

Many hospital admissions take place through accident and emergency (A & E) departments. The Care Quality Commission (CQC) estimates place this at 47% of admissions for those aged 12-15 (CQC, 2015). A study of 10,455 attendances by 8,303 young people aged 13-17 showed that reasons for attending...
A & E included injuries (72%), abdominal pain (16%), self-harm (11%), fits, faints and funny turns (10%), breathing difficulties (7%) and intoxication (6%) (Shanmugavadivel et al, 2014). It is also worth noting that around one quarter of teenagers and young adults with cancer are diagnosed at A & E, having presented as emergencies (National Cancer Intelligence Network, 2013). Children with longterm conditions such as asthma, diabetes or epilepsy have increased risk of emergency admissions, and this is reduced for children who are seen more frequently in primary care (Cecil et al, 2018).

The NHS England Hospital Episode Statistics in **Chart 8.12** show that rates of attendances at A & E departments for those aged 15-19 rose by approximately 10% between 2010/11 and 2016/17. However, larger rises have been seen in recent years for those aged under 0-4 in comparison to teenagers (Keeble and Kossarova, 2017).

**Chart 8.12: Accident and emergency hospital attendances 15-19 years, England, 2010/11 to 2016/17**

![Chart 8.12](source)

Other than A & E attendances, young people are also admitted to hospital as non-emergencies. **Chart 8.13** shows that rates of elective admission for this age group have risen by approximately 30% since 2010/11.


![Chart 8.13](source)
The Care Quality Commission regularly surveys large samples of under-16s about their experience of being in hospital. **Chart 8.14** presents results from the last survey, which show that while the majority of under-16s felt things were clearly explained and that they were involved in decisions about their care and treatment, a significant minority did not. The CQC also reported that 90% of young people aged 12-15 in hospital reported that they were able to speak to a doctor or nurse without their parent of carer being there, which is an important part of youth appropriate healthcare (Care Quality Commission, 2017b).

**90% of young people aged 12-15 in hospital reported that they were able to speak to a doctor or nurse without their parent of carer being there.**

Source: Care Quality Commission (2017b)

<table>
<thead>
<tr>
<th>Did the member of staff treating you give you information about your care in a way that you could understand? (12-15y)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes, definitely</td>
</tr>
<tr>
<td>Yes, to some extent</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>When the hospital staff spoke with you, did you understand what they said? (8-15yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Yes, sometimes</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Were you involved in decisions about your care and treatment? (8-15yr)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes a bit</td>
</tr>
<tr>
<td>Yes a little</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Before the operations or procedures, did hospital staff explain to you what would be done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yes</td>
</tr>
<tr>
<td>Sort of</td>
</tr>
<tr>
<td>No</td>
</tr>
</tbody>
</table>

Source: Care Quality Commission (2017) Children and young people’s inpatient and day case survey 2016 > DOWNLOAD DATA

Finally, hospital episode statistics have suggested children and young people from more deprived areas account for a greater proportion of inpatient care than those from more affluent areas (Hargreaves et al, 2012). For more on health inequalities, see Chapter 9.
Transition from children’s to adult services

Increasing numbers of children with longterm conditions are surviving into adulthood because of improved healthcare, and research has demonstrated a steady increase in the number of children living with a life-limiting condition, particularly in the 16-19 age group (Fraser et al, 2012).

Adolescence is a time of moving to independent use of healthcare. Successful management of ongoing conditions can reduce the need for emergency care and improve outcomes. Young people with longterm conditions spend a lot of their lives interacting with the health service, including investigations, monitoring, treatment and rehabilitation. Continuity of care is vital in longterm conditions such as diabetes, kidney disease and epilepsy as well as mental health (Royal College of Nursing, 2004; Singh, 2009; Allen et al, 2010; Brodie et al, 2011; Joint Commissioning Panel for Mental Health, 2012; Hepburn et al, 2015). Good transition programmes have been shown to result in statistically significant improvements in young people’s health outcomes (Crowley et al, 2011).

However, there are very few data on young people’s journeys through the transition from child services to adult services. A CQC report on children’s transition to adult health services reported that only 50% of young people and parents said they had received support from a lead professional in the process leading up to transition (Care Quality Commission, 2014). In one of the few studies to follow a systematically identified cohort of young people Singh et al (2010) reported one third were not referred on to adult services and one fifth of those referred on were never seen. Fewer than four per cent were reported to have experienced optimal transition. Guidelines from the National Institute for Health and Care Excellence (NICE, 2016) aim to improve the planning and delivery of care for this age group as they move from child to adult services.

Evidence is growing that elements of successful transition programmes are patient education and specific transition clinics (Crowley et al, 2011). Northumbria Healthcare NHS Foundation Trust and Newcastle University recently completed a five year programme of research on transition (Colver et al, 2019). The team concluded that key elements of good transition programmes included commitment from senior providers and commissioners, trust-wide approaches to transitional health care, joint work between adults’ clinicians, children’s clinicians and general practitioners in planning transition procedures, appropriate parental involvement, specific promotion of young people’s confidence in managing their own health, and opportunities to meet the adult team before transfer.
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https://bmjopen.bmj.com/content/5/3/e007834

CHAPTER 9: Inequalities in health outcomes

One in 7 secondary school children claim free school meals

10-14 year old pedestrians living in deprived areas are 2.6 times more likely to be killed or seriously injured on the roads

The under-18 conception rate in the most deprived areas is double that in the least deprived

Young people living in socially deprived areas were more likely than other young people to be admitted to hospital with asthma

Severe obesity rates for 10/11 year olds in the most deprived areas are 4 times those in the least deprived

The gap between obesity levels of 10/11 year olds in the most and least deprived areas widened between 2006/07 and 2017/18

44% of LGBT+ young people aged 16-24 say they have had suicidal thoughts

11 year olds from the lowest income families are 4.5 times more likely to experience severe mental health problems than those from the highest income families

The proportion of children living in low and material deprivation rose from 11% to 12% in the year to 2017/18

15 year olds in the most deprived areas are twice as likely to report that they smoked regularly than those in the least deprived areas

Young adults with four+ adverse childhood experiences are more frequent users of health services than their peers
Inequalities in health outcomes

Social inequalities can lead to health inequalities (Marmot et al, 2012; Pearce et al, 2019). Although health is clearly influenced by genetics and health care, the wider social determinants of health, such as poverty, play a huge part. Estimates of the relative contribution of different factors to health outcomes suggest that the proportion determined by social factors is the largest, accounting for approximately half of the variation (Buck and Maguire, 2015).

Health inequalities happen across the whole life course, but there has been less attention looking specifically at the evidence on the social determinants of health for adolescents and young people as distinct from other age groups. Without equal access to resources and support, some young people are put at a disadvantage (Viner et al, 2012). Significant proportions of today’s young people are experiencing disadvantage that is likely to be associated with longterm health outcomes (Hagell et al, 2018). This may set in motion inequalities that continue to play out across the rest of the life course. Understanding what those inequalities are helps to shape practice and policy interventions to improve health outcomes for the age group, both now and in their futures.

Inequalities related to deprivation

Low income is the most salient social disadvantage. There is evidence that childhood poverty leads to premature mortality and poor health outcomes for adults (Marmot 2010). Government population surveys consistently show that compared to the overall population, children are more likely to be in low income households (Department for Work and Pensions, 2019). In 2017/18, a quarter of children were living in low income households, using a measure of absolute low income that takes housing costs into account. The proportion of children living in low and material deprivation (a more severe measure) rose from 11% to 12% in the year to 2017/18, a proportional increase of 9% (Department for Work and Pensions, 2019). In January 2018, for all school types, 13.6% of pupils were eligible for and claiming free school meals (Department for Education, 2018a).

The quality of the local environment is also an important social determinant of health. The latest English Index of Multiple Deprivation (IMD) indicated that over five million people lived in the most deprived areas of England. In these areas, 44% of the children were income deprived. Overall, the authors estimated that almost two in five children up to age 16 were living in families that were income deprived (Department for Communities and Local Government, 2015).

Death and accidents: There are very few data looking specifically at variations in different kinds of adolescent and young adult mortality in the UK in relation to deprivation. It is a difficult task due to the very low number of deaths in this age group. In addition, as Viner et al (2012) pointed out, most adolescent mortality is caused by social and environmental causes (such as self-harm, road traffic accidents and drowning) rather than by directly income related causes, although income may play a part in this list.

There would be around 810 fewer serious or fatal injuries to pedestrians annually if all children and young people had a risk of injury as low as those in the least deprived areas

Source: PHE (2018) Reducing unintentional injuries on the road among children and young people under 25 years
**Chart 9.1** shows the variation in mortality for all children and young people up to age 16, by area deprivation. Child and adolescent mortality is higher in deprived areas. It has been estimated that there would be around 810 fewer serious or fatal injuries to pedestrians annually if all children and young people had a risk of injury as low as those in the least deprived areas (Public Health England, 2018).

More detailed analyses by Public Health England have shown that among 10 to 14 year old pedestrians, those living in the 20% most deprived areas were 2.6 times more likely to be killed or seriously injured on the roads than those from the least deprived areas. Those aged 15-19 from the most deprived areas were twice as likely to be killed or seriously injured (Public Health England, 2018).

**Obesity:** There is good evidence that rates of obesity (a body mass index at or above the 95th percentile of weight distribution) in young people are higher for those living in deprived areas. This has been consistently demonstrated in the English National Child Measurement Programme (NCMP) for secondary pupils in Year 6 (age 10/11). Those living in the most deprived areas had a rate of obesity of 26.7%, double that of those in the least deprived areas (13.3% (NHS Digital, 2018). NCMP now includes a measurement of ‘severe obesity’, which is a body mass index at or above the 99.6% percentile of weight distribution. As **Chart 9.2** shows, rates of severe obesity are approximately four times as high in the most deprived areas as in the least deprived.
Over time, the gap between obesity levels of Year 6 children in the most and least deprived areas has widened. Chart 9.3 shows the trends from 2006/07 to 2017/18, when the difference increased by 5%, largely due to obesity prevalence increasing in the most deprived areas.

Smoking and drinking: Regular smoking by 15 year olds is related to whether young people live in an area of multiple deprivation as Chart 9.4 illustrates, using data from the 2014 ‘What About YOUth’ study. Those in the most deprived areas were more than twice as likely to report that they smoked regularly as those in the least deprived areas.
The relationship of deprivation to teenage drinking is less clear, as Chart 9.5 shows. There is no discernible relationship between the proportion of 15 year olds who have been drunk in the last four weeks by whether they live in an area of deprivation or not.

**Chart 9.5:** Percentage of 15 year olds who have been drunk in the last four weeks by Index of Multiple Deprivation quintiles, England, 2014

Conceptions, pregnancy and sexual health: Young women in deprived areas are more likely to be provided with emergency contraception (Chart 9.6), and to become pregnant (Chart 9.7 for England, and Chart 9.8 for Scotland).

Chart 9.6: Girls aged 13-15 provided with emergency contraceptives by Index of Multiple Deprivation, England, 2017/18


Chart 9.7: Under 18 conception rate by area deprivation deciles, England, 2017

Source: Public Health England Fingertips 2017 > DOWNLOAD DATA
Longterm conditions: The National Paediatric Diabetes Audit undertaken by the Royal College of Paediatrics and Child Health has provided data on the management of Type 1 diabetes in young people and its association with area deprivation. HbA1c is the average blood glucose (sugar) level, and is a widely used index of diabetic management. A high HbA1c suggests poorer health outcomes. The HbA1c levels of young patients in more deprived areas are higher than those in less deprived areas (RCPCH, 2019).
There are also relationships with deprivation for indices of asthma. Chart 9.10 presents hospital episode statistics on admission to hospital for asthma among those aged 10-18 in England in 2016/17, demonstrating a clear association. Young people living in socially deprived areas were more likely than other young people to be admitted to hospital with asthma. Whether this is because there was a higher prevalence of asthma in the first place, more passive smoking, or poorer treatment in those areas is not clear.

Mental health: The 2017 Mental Health of Children and Young People Survey did not break down mental health by age and levels of household income, instead presenting the association for the whole age group from 5-19. However, the majority of disorders are in the older age groups, and these are unusual data for their robustness and representativeness, so they are presented in Chart 9.11. This shows that prevalence of mental health disorders generally increases with deprivation in children and young people.

The Millennium Cohort Study is a longitudinal study, following a sample of children born in the United Kingdom between September 2000 and January 2002. The age 11 sweep of the study was carried out in 2012 and included 13,287 parent interviews and cognitive assessments of cohort members. This showed that the 11 year olds from the lowest income families were more than 4 times as likely to experience severe mental health problems when compared to those from the highest income families (Gutman et al, 2015).

11 year olds from the lowest income families are **4.5 times** more likely to experience **severe mental health problems** when compared to those from the highest income families.

**Source:** Gutman et al (2015) Millennium Cohort Study 2012
The 2015 Adult Psychiatric Morbidity Survey looked at social determinants of mental health problems but did not separate these out for those aged 16-24. Generally it was reported that mental health disorders were more common in people living alone, those in poor physical health and those unemployed. The pattern for socioeconomic inequalities in treatment provision was less clear, although it was noted that adults living in the lowest income households were more likely to have sought help for mental health problems but not have received treatment (McManus et al, 2016).

**Serious youth violence:** Serious youth violence has devastating consequences for the victims, perpetrators and broader communities at large, and is a public health issue. The government produced a Serious Violence Strategy in 2018, which analysed a number of factors that influenced whether young people are likely to be perpetrators of serious violence (HM Government, 2018). This concluded that there are strong links between deprivation and serious youth violence. Data from a review of the gangs matrix in London provided evidence that young people living in the top 10% most deprived areas in London were six times more likely to become victims of knife crime than the 10% of young people living in the least deprived and vulnerable areas (Mayor’s Office for Policing and Crime, 2018).
Targeting particularly vulnerable groups

As well as health inequalities that are directly associated with deprivation, some groups of young people experience health inequalities as a result of other social circumstances and the environment in which they live.

**Looked after children**: Children who are under the care of the Local Authority face a number of inequalities that may have consequences for their health. In England all looked after children should complete a Strengths and Difficulties Questionnaire (SDQ) once a year, to keep track of rates of emotional difficulties. A higher score on the SDQ indicates more emotional difficulties. A score of 0-13 is considered the norm, a score of 14-16 indicates cause for concern, as a score of 17 and over is likely to indicate mental health problems.

Department for Education statistics on looked after children show that, on average, throughout their teens looked after children score above the norm on the SDQ, indicating higher rates of mental health problems in the looked after population. More than a third of looked after young people aged between 10 and 16 meet the criteria for concern (a score of 14 or more) (Department for Education, 2018b). This compared with 8% of the general population aged 11-15.

Looked after children are also likely to have different special educational needs than their peers. **Chart 9.12** shows the special educational needs of looked after children compared with their peers at secondary school in England in 2018. Looked after children of this age tend to have more social, emotional and mental health problems. Their peers are more usually experiencing problems associated with autism and speech and language.
**Young carers**: Young people with caring responsibilities for others are often hidden, falling under the radar with respect to additional support. Young carers are at increased risk of missing out on education and social opportunities, and may be carrying a significant emotional burden. The Office for National Statistics concluded from the 2011 census that there were 177,918 children and young people under 18 helping to look after someone in their family who was ill, disabled or misusing drugs or alcohol (Office for National Statistics, 2013), although estimates can go up to 700,000 (Carers’ Trust, 2017a). The Carers’ Trust has estimated that this may represent as many as 1 in 12 secondary school aged pupils (Carers’ Trust, 2017b). Many miss school due to caring duties, and as many as half of young carers 10-15 (46%) report being bullied at school (Carers’ Trust, 2017a). Evidence suggests they may have higher levels of education need or disability (Hounsell, 2013), and mental health problems (Sempik and Becker, 2013).

Young unpaid carers in English regions and Wales who were providing care for 50 or more hours a week have been found to be between 4.4 (in Wales) and 5.9 times (in the South East of England) more likely than those providing no care to report their general health as ‘not good’ (Office for National Statistics, 2013).

**Chart 9.13** compares a range of health behaviours as reported by young carers and all Year 10 children (11/12 year olds) in one local authority. This demonstrates the elevated risk of reporting certain health behaviours in the young carers’ group. Clearly this is not representative of young carers in the country as a whole, but in the absence of more data, it is an indicator that this is a group at risk of significant health inequalities as they go through their teens and into early adulthood.

**Source**: Office for National Statistics (2013)

Young carers under 18 in South East England were **5.9 times** more likely to report their general health as ‘not good’ than those who were not carers

**Chart 9.13: Comparison of health behaviours between young carers and all Year 10 pupils (aged 14-15) in one local authority, 2016**

Source: Balding and Regis (2016) Young people into 2016 > DOWNLOAD DATA
**Ethnicity:** Analyses of the National Child Measurement Programme (NCMP) data have demonstrated that the obesity prevalence of 10 to 11 year olds in England varies by ethnic group. The prevalence for different groups is presented in **Chart 9.14**. In Public Health England’s analyses of these data, ethnicity had a statistically significant independent effect on obesity prevalence after pupil age in months, area deprivation, height and region were taken into account. Ethnic disparities in obesity prevalence were in general greater in Year 6 than in Reception (Public Health England, 2019). Other data show that Black and Asian children have a higher incidence of Type 2 diabetes and worse glycaemic control in Type 1 and Type 2 diabetes (RCPCH, 2019).

**Chart 9.14:** Prevalence of obesity by ethnic category, Year 6 (10/11 years), England, 2016/17

![Chart 9.14](image-url)


Inequalities based on ethnicity are also seen in the data on prevalence of mental health in young people. Again the 2017 Mental Health of Children and Young People Survey does not break down mental health by age and ethnicity, instead presenting the patterns for the whole age group from 5-19. **Chart 9.15** shows that rates of mental health problems were higher in white British groups than other ethnic groups of this age.

**Chart 9.15:** Percentage with any mental disorders by ethnic group and sex, 5-19 year olds, England, 2017

![Chart 9.15](image-url)

There is also evidence that young people from Black and ethnic minority groups are over represented both as victims and perpetrators of serious youth violence (GLA Strategic Crime Analysis Team, 2019). Inequalities may be further compounded by other factors. For example, young carers are 1.5 times more likely to be from ethnic minority backgrounds and more likely to speak English as a second language (Hounsell, 2013) than their peers. Black and ethnic minority young people who identify as lesbian, gay, bisexual or transgender (LBGT) are another minority within a minority. They report worse mental health and sexual health outcomes when compared to white LGBT young people (Public Health England, 2016).

**Young people with learning disabilities:** Having learning disabilities may also contribute to health inequalities for young people. Drawing on GP data, evidence suggests that young patients with learning disabilities are more likely than other young patients to have a higher body mass index (BMI) than their peers (Chart 9.16), to be on drug medication for epilepsy (Chart 9.17) and to have asthma (Chart 9.18).
Lesbian, gay, bisexual, transgender and other groups (LGBT+): Over recent years there has been a growing body of evidence that LGBT+ young people face significant social and health inequalities. This can start at school; many children begin to identify as LGBT+ in school and there is evidence that nearly half of LGBT+ pupils are bullied because of their sexual or gender identity, and many report missing school because of this (Stonewall, 2017). The numbers of recorded transgender young people in schools is very low, and obtaining reliable statistics on their experiences is difficult, but a 2013 Ofsted report concluded that one in four had experienced physical abuse by other pupils (Ofsted, 2013).

LGBT+ young people may also face mental health inequalities. The Metro Charity’s Youth Chances survey in 2016 included over 6,000 young people who self-classified as LGBT+. Chart 9.19 shows the rates of self-reported symptoms of anxiety and depression in this group compared with their peers, demonstrating elevated levels of seeking help for anxiety, self-harming, or having suicidal thoughts.
Rates of mental health problems may be particularly high in transgender young people. The charity Stonewall has reported very high rates of self-harm (84%) and suicide attempts (45%) amongst transgender students (Stonewall, 2017). Rates were still high, but not as high, for lesbian, gay and bisexual young people who were not transgender; three in five (61%) reported self-harming and one in five (22%) reported that they had attempted to take their own life. Similarly high estimates of mental health problems are found other surveys (National LGB&T Partnership, 2017).

LGBT+ young people are also more likely to perform risk-taking behaviours such as smoking and recreational drug use. In a longitudinal study of young adults in England carried out by Hagger-Johnson et al (2013) lesbian, gay and bisexual young adults were twice as likely to have a history of cigarette smoking as those reporting a heterosexual identity at age 18/19. Lesbian, gay and bisexual young people aged 16-24 are also more likely to report recreational drug use when compared to the general population of the same age (Buffin et al, 2011).

LGBT+ young people may also experience inequalities related to sexual health and screening. In one survey only 20% of LGBT+ pupils reported that they had learned about safe sex in relation to same sex relationships at school (Stonewall, 2017). A systematic review carried out by the Royal College of Obstetricians and Gynaecologists found that the rates of teenage pregnancy and terminations were slightly higher in lesbian and bisexual adolescents when compared to the general population (Hodson et al, 2017). However more data are needed in this area, including in relation to sexually transmitted infections and cervical cancer screening in LGBT+ groups.

Adverse childhood experiences

Adverse childhood experiences (ACEs) are stressful events that occur in childhood and that may contribute to later health outcomes (Bellis et al, 2014). They include being a victim of abuse and/or living with adults with serious problems of their own. In their review of the impact of ACEs on health, Hughes et al (2017) found the ACEs that had been most studied included childhood physical abuse, household substance abuse, childhood sexual abuse, household mental illness, exposure to domestic violence, or emotional, psychological or verbal abuse.

The longterm effects of adverse childhood experiences such as these have been studied for some time, and there is growing evidence to show impacts on both physical and mental health as an adult. Individuals with at least four ACEs in childhood have been shown to be at particular risk of later sexual risk taking, mental ill health, problematic alcohol use, and suicide (Hughes et al, 2017). In a study undertaken with 7,414 adults in England and Wales, Bellis et al (2017) reported that for those now aged 18-29, people with four or more ACEs in childhood were three times more likely to have seen the GP recently, and more than twice as likely to have been to the accident and emergency department or had an overnight stay in hospital.
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CHAPTER 9: Inequalities in health outcomes


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Chapter 10: Conclusions and recommendations

Young people aged 10 to 24 have historically attracted less policy interest than younger children and older adults, and therefore have received less investment in terms of specifically tailored health services or measurement of outcomes (Sheehan et al., 2017). It is a common misconception that adolescence and early adulthood are the healthiest periods of life and this may partly explain the lack of investment in this age group. Yet young people in this age group have distinct health needs to those of younger children. We have highlighted in our report that young people aged 10-24 experience a range of behavioural, emotional and social changes as they make the transition into adulthood, providing a unique window of opportunity to intervene and promote health.

It is vital that health policy and practice do recognise these distinct needs and ensure that services are tailored to meet the changing needs of young people (Sawyer et al., 2012). Investing in adolescent health has benefits that extend well beyond health. It has been estimated that investment in this age group will yield a 10-fold economic benefit for later adulthood (Sheehan et al., 2017).

Summary of key findings

One of the key aims of the Key Data series is to collate descriptive data for the 10 to 24 age group from publicly available sources, in order to promote better understanding about the age group as a whole. To this end the report provides a unique collection of statistics describing the population, living circumstances and overall health of young people in the UK in 2019.

By so doing the report highlights a number of important trends. These include areas of improvement in young people’s health outcomes, areas where prior improvement has stalled or where young people’s health outcomes are worsening, and other emerging trends that have implications for health policy and commissioning of services.

Some of the key areas that have shown improvement include young people’s health risk-taking behaviour. Young people’s rates of smoking, alcohol consumptions and teenage pregnancy rates have been on the decline over the past decade.

An area where previous progress has stalled is in young people’s mortality rates in the UK, which appear to have plateaued since 2012. The two most common causes of death among young people are accidents and self-harm, both potentially preventable, which calls for a renewed policy focus.

Areas in which young people’s health outcomes are poor or worsening include rising obesity rates, a decrease in adequate sleep, poor pre-conception health for young women reinforcing health inequalities experienced throughout the life course, poor outcomes for young people with chronic conditions such as asthma and diabetes, increasing rates of mental health problems and self-harm and some rising health inequalities for this age group. Health inequalities are a strong feature among several indicators of young people’s outcomes in the 10-24 age range, driven in part by economic disadvantage, but also including inequalities relating to other social determinants such as ethnicity.

Emerging trends that have a significant impact on young people’s health include an increase in the number of young people over the age of 16 going into care, a significant rise in secondary school exclusions in England, high rates of loneliness and – despite falling unemployment rates – the fact that young people are increasingly engaged in precarious employment such as zero hour contracts.
Recommendations for action

To improve the state of young people’s health in the UK, actions need to be taken across the following broad categories;

1 **Developing policy initiatives that focus more specifically on 10-24 year olds**

   Unlike many other similar high income countries, the UK does not have a dedicated youth health policy or strategy. There are very few specific health outcome indicators relating to the 10-24 age group in the various outcomes frameworks that shape the work of the health system. Those that do exist relate mainly to reproductive health and risky health behaviours such as smoking, whereas this report demonstrates how many other areas of young people’s health need to be considered beyond this if outcomes are to improve.

   Alongside evidence that young people are among the least satisfied with the health services they receive, they have suffered from funding cuts to youth services in the local community, and to public health funding cuts. In England, children and young people’s services do not feature in many Sustainability and Transformation Plans. The focus in the new NHS longterm plan on the 0-25 age group is to be welcomed (Department of Health and Social Care, 2019), but the overarching aims of this need to be translated into clear strategies for delivery. This includes:

   - Ensure that aspirations in the new NHS longterm plan are translated into specific guidance relating to the 10-24 age group as distinct from younger children or older adults.
   - Adopt a ‘health in all policies’ approach, assessing the likely impact of all policy initiatives on young people’s health, recognising the wider determinants affecting outcomes for this age group.

2 **Targeting health promotion and early intervention at 10-24 year olds**

   Emphasis on securing the ‘best start in life’ is often thought to mean younger children but is also critical for young people aged 10-24, as this is the age when life-long behaviours are established, with huge potential impact on future health. Actions include:

   - Ensure that health promotion and protection campaigns consider young people and how to message them most effectively. Different messages are relevant for young people in relation to issues such as physical activity and obesity compared with younger children or older adults. Targeting young people directly is important, as they begin to access information and services independently.
   - Ensure that best use is made of the opportunity presented by the introduction of statutory relationships, sex and health education into secondary schools in September 2020.
3 Commissioning services that meet the unique needs of young people

Despite being regular users of health services, surveys show that young people are not always satisfied with the health services or information they are given, and their accounts are often less positive than those of other age groups. In addition, young people with longterm conditions can struggle with the transition between children’s and adult services. Actions include:

- Ensure that those who commission and deliver services for young people are involving them in co-designing youth friendly options.
- Encourage organisations that commission health services to have a representative with expertise in young people’s health.
- Support better partnership working between formal health services and the voluntary, community and social enterprise sectors to provide a coordinated offer that delivers continuity of care for young people.
- Incentivise investment in young people’s health through, for example, Public Health England, NHS and primary care quality outcomes frameworks.
- Recommend initiatives such as the Department of Health and Social Care’s ‘You’re Welcome’ quality criteria for youth-friendly health services, which is a systematic framework to help commissioners and service providers to improve the suitability, accessibility, quality and safety of health services for young people (Department of Health, 2011; British Youth Council, Association for Young People’s Health and Youth Focus North West, 2017). It is important that these standards are applied not just to paediatric services but also to general practice and to adult services that frequently encounter 18 to 24 year olds.
- Invest in co-ordinated transition services particularly for young people with longterm conditions, mental health problems and care leavers.

4 Introducing new measures to reduce the number of young people’s deaths

Reducing premature and preventable deaths is the prime objective of any health service. Accidents are the most common cause of death and serious injury in young people aged 10-24, but suicide is a particular issue for young men. Actions include:

- Encourage more uptake of 20mph zones, with priority given to deprived areas, where young people are at greatest risk of traffic-related injury.
- Consider introducing graduated driving licencing and restrictions on motorbikes above 50cc for young people.
- Evaluate what type of suicide prevention interventions work with young men and ensure services and programmes are planned with young men in mind.
5 Collecting and sharing data and research on young people’s health specific to the age group 10-24

Young people between the ages of 10-24 have different patterns of need from younger children or older adults, but data on these young people are often bundled up with other age groups. Both national and local data are important. The former can provide critical benchmarking and a framework to help to develop the latter. Healthcare professionals need to be aware of the needs of their local population of this age group, in terms of the mix of gender, ethnicity and deprivation, so as to provide and fund care according to local healthcare needs.

- Support the collection of high quality, robust, national data that shed light on the experiences and outcomes for this age group, distinct from those under 10 and over 25.

- Encourage the development of more representative survey data on a broad range of health issues faced by young people. More data particularly on young people’s use of primary care and prevalence of disability among young people are urgently required, as are mental health prevalence data for young people that are representative of the whole of the UK.

6 Taking specific actions to reduce health inequalities before early adulthood

Health inequalities are present in a number indicators of young people’s health outcomes and in some cases such as obesity the gap between the richest and the poorest is widening. We need:

- More data on health inequalities specific to adolescence and early adulthood.

- Recognition of the role of social determinants of health in all policies affecting the age group.

- Trials of new models of care for vulnerable young people that encourage integrated working with the voluntary sector and social care to address the social determinants of health.

- Increased investment in public services such as youth work particularly in areas of high deprivation.

In health terms there is a danger that young people between the ages of 10 and 24 are an invisible generation. The data we have presented in this report urge us to invest more in their health, in order to improve their lives now, and to give them the best chance of healthy adulthood in the future.
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"Key Data on Young People pulls together data from many sources, saving so much legwork. I wish every country had a report like it."

Joel Budd
Social Affairs Editor, Economist.