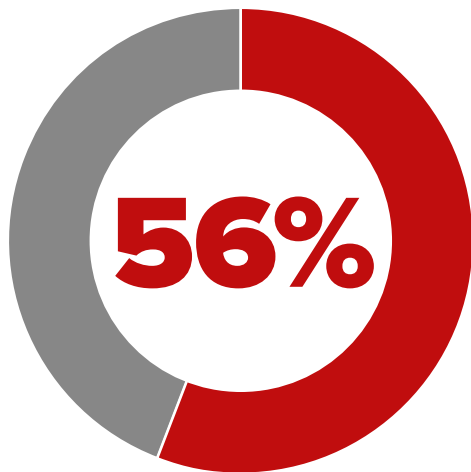
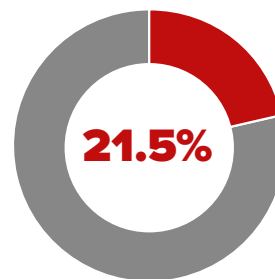


CHAPTER 2: Population and overall health

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



11.6m young people in the UK between 10 and 24



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



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...

ACCIDENTS

SELF-HARM

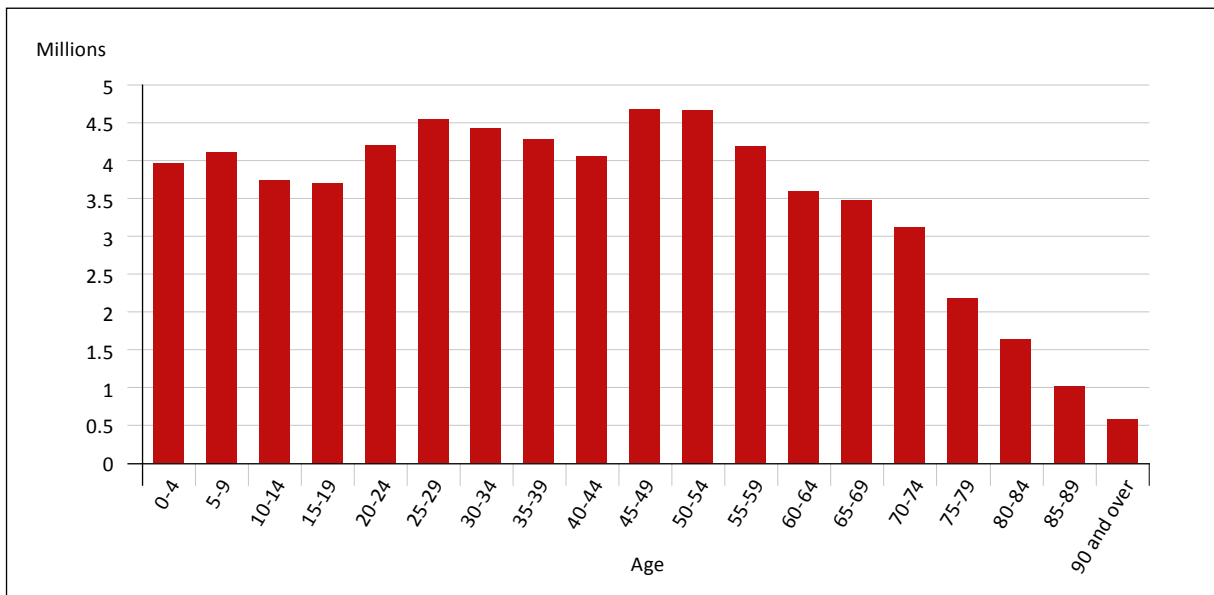
CANCER

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



Source: Office for National Statistics (2018) Annual mid-year population estimates: 2017 > [DOWNLOAD DATA](#)

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.

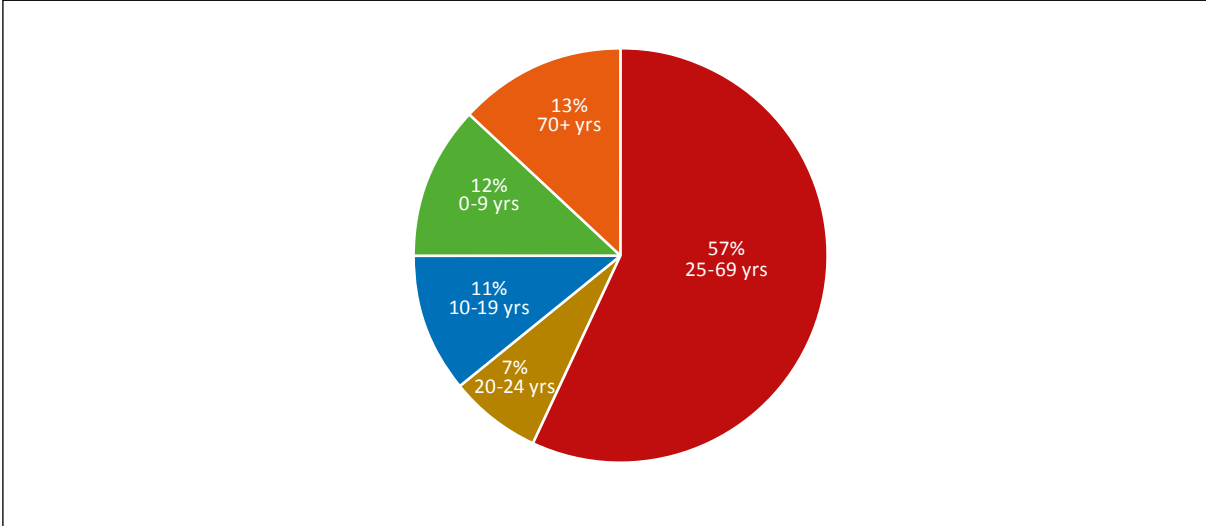
Chart 2.3 presents the recent historical trend in population of England and Wales, plotting the 2007 population figures against the current population pyramid from the 2017 population estimates.

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.

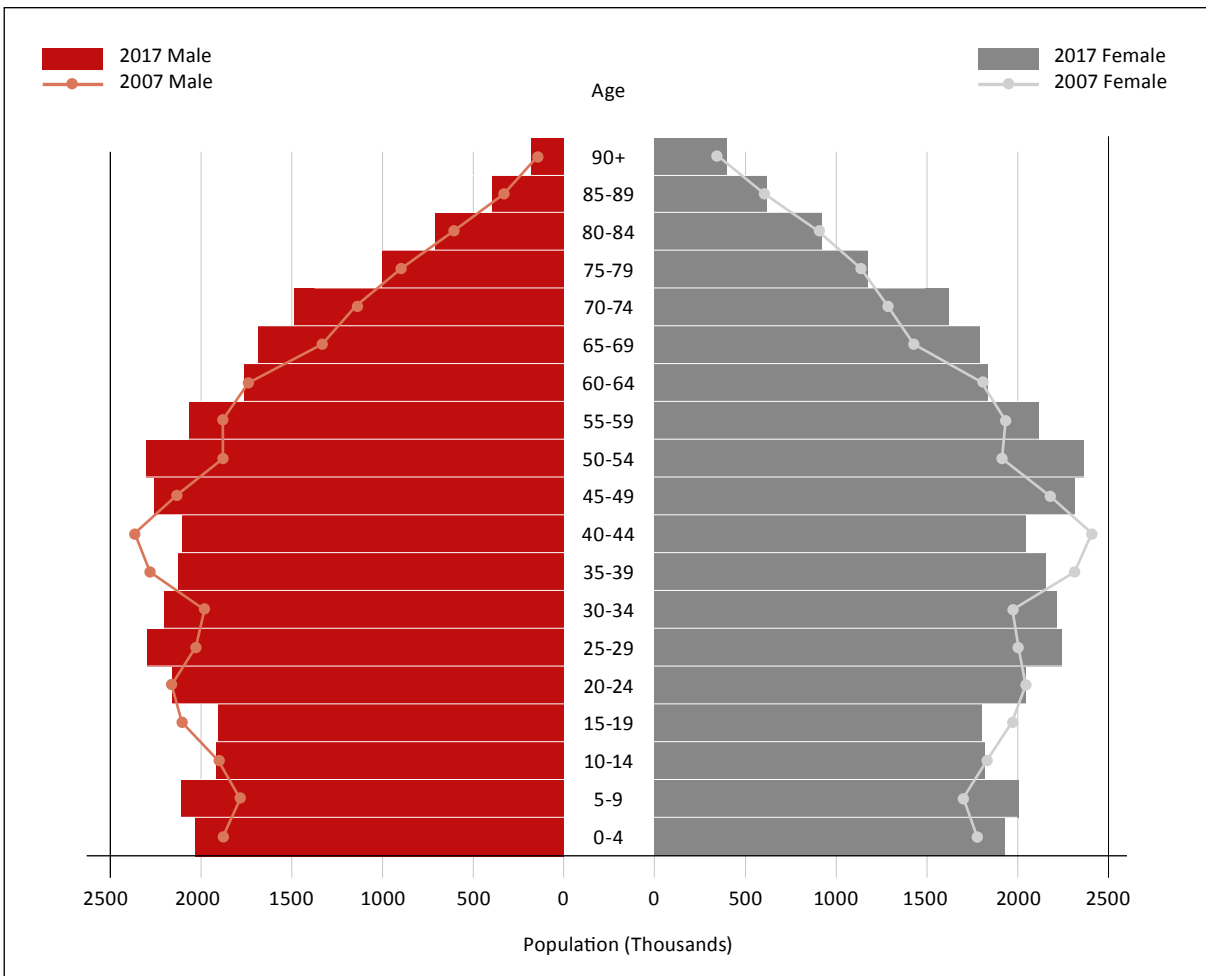
In the population as a whole more young people than older people fall into ethnic minority groups. Overall, in the 2011 census (the most recent data available), the proportion of the population of England and Wales who classified themselves in a group other than white British was 19.5% (Office for National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

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



Source: Office for National Statistics (2018). Annual mid-year population estimates: 2017 > [DOWNLOAD DATA](#)

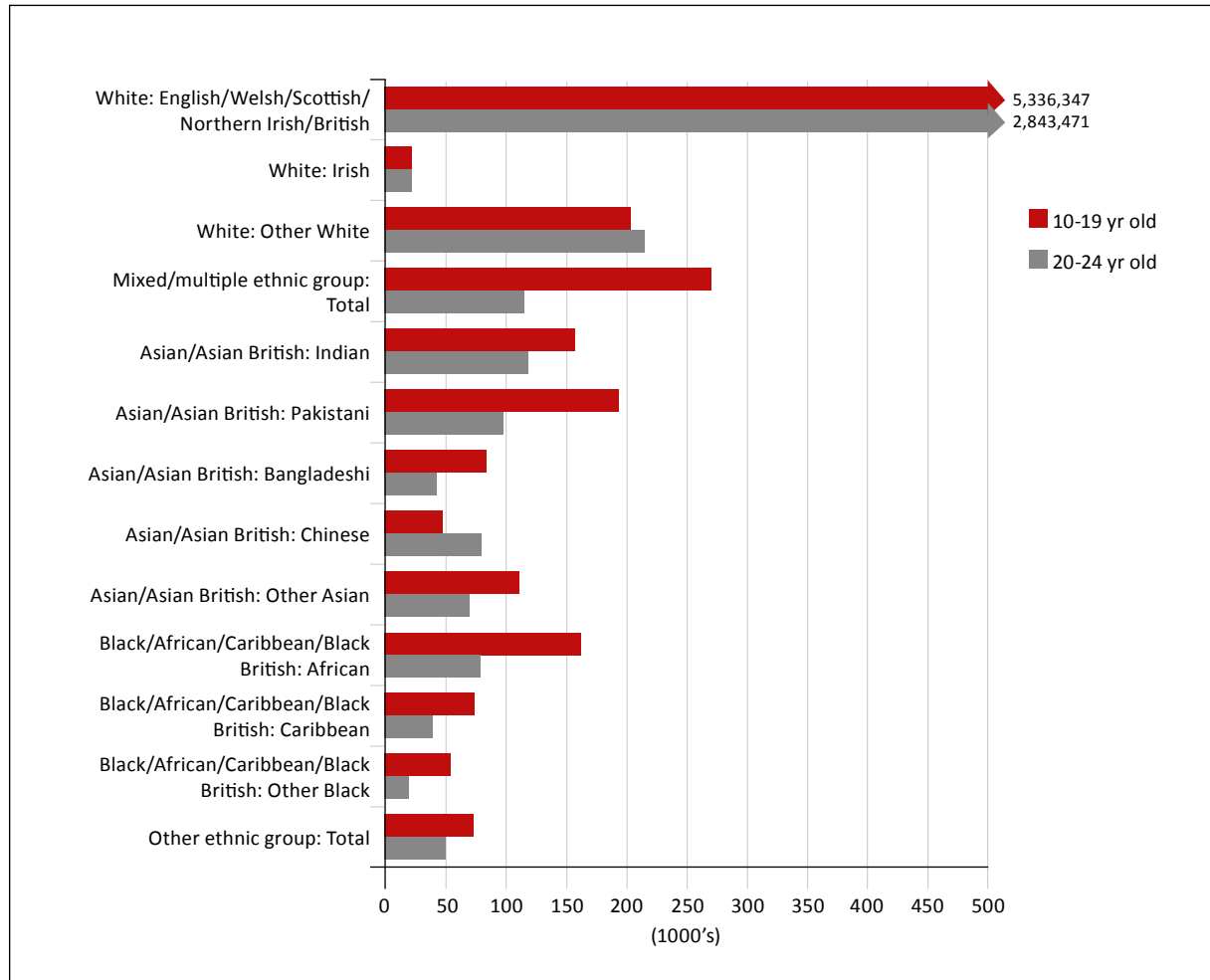
Chart 2.3: Population in the UK, by age and gender, 2007 and 2017



Source: Office for National Statistics (2018) Annual mid-year population estimates: 2017 > [DOWNLOAD DATA](#)

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%.

Chart 2.4: Ethnic group of those aged 10-19 years in England and Wales, 2011



Source: Office for National Statistics, census data 2011 > [DOWNLOAD DATA](#)

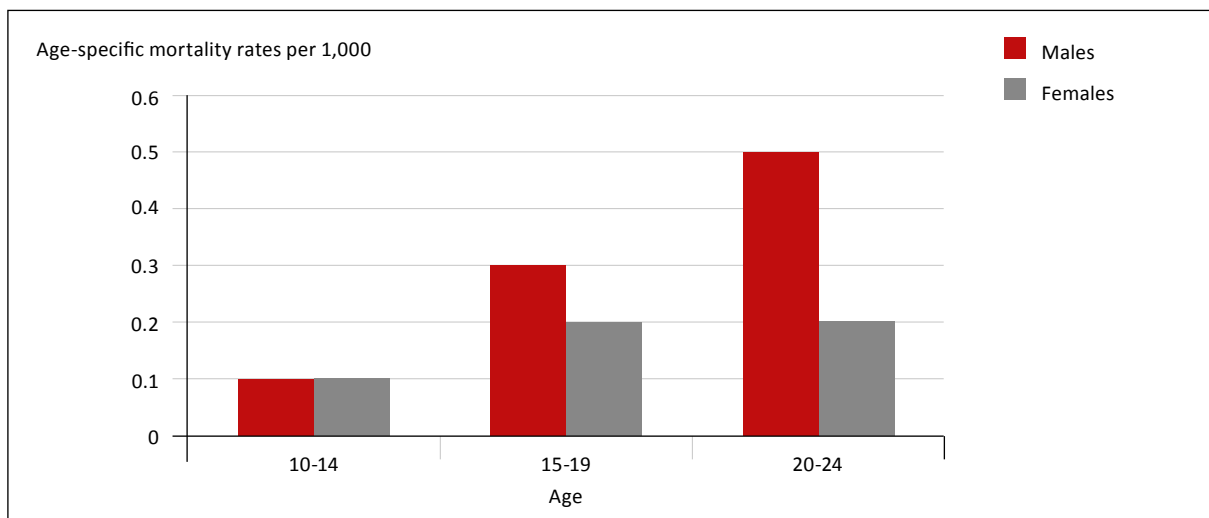
Life expectancy and mortality

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.

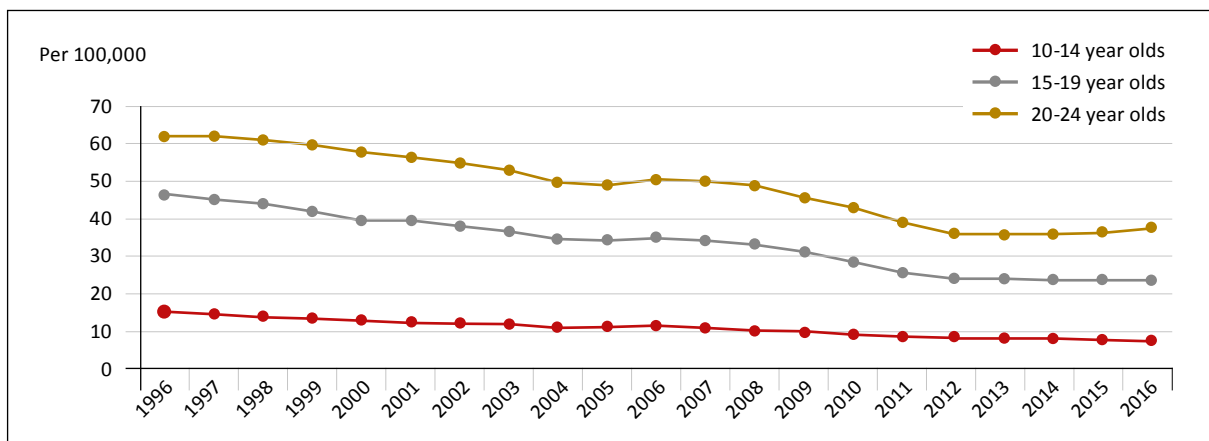
Chart 2.5: Age specific mortality per 1000 population age 10-24, England and Wales, 2017



Source: Office for National Statistics, Death Registration Summary Tables, England and Wales 2017 > [DOWNLOAD DATA](#)

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.

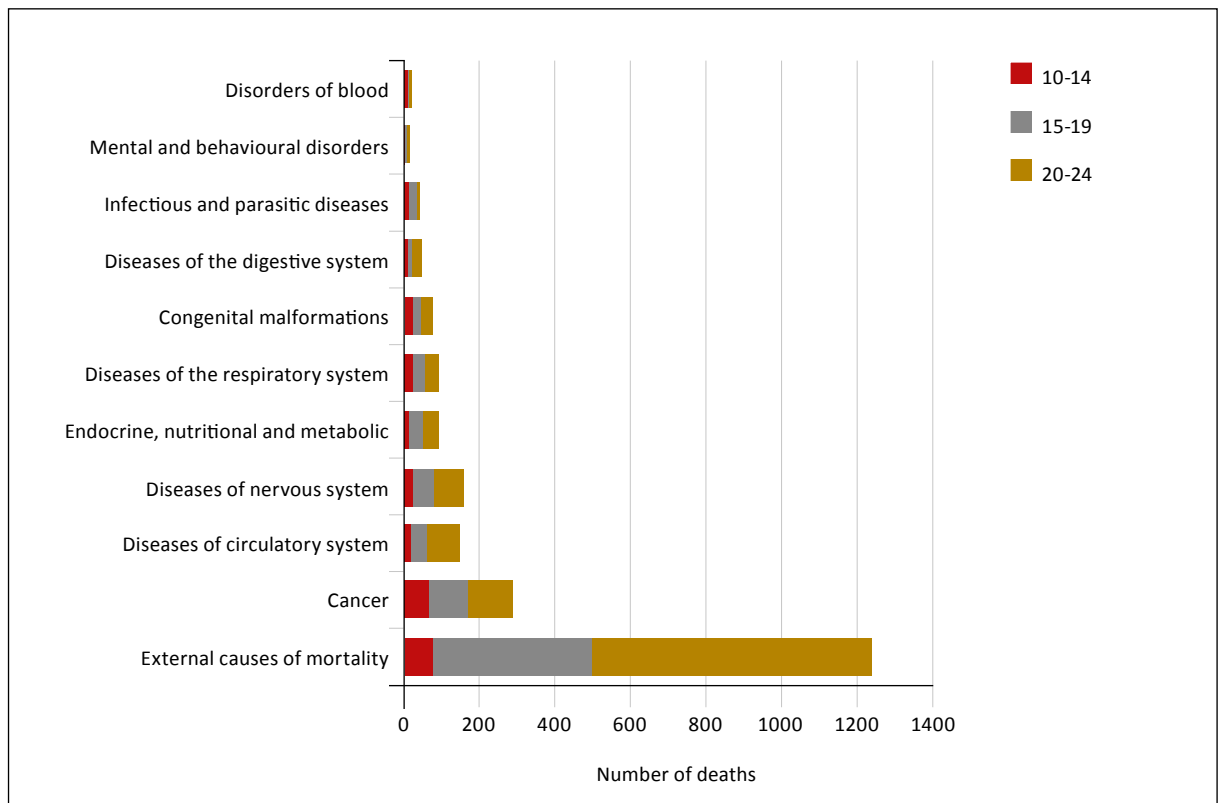
Chart 2.6: Trends in mortality rates for young people aged 10-24 per 100,000 age specific population, UK, 1996-2016



Source: Global Burden of Disease study, 2016 (accessed January 2019) > [DOWNLOAD DATA](#)

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.

Chart 2.7: Number of deaths by underlying cause and age, England and Wales, 2017

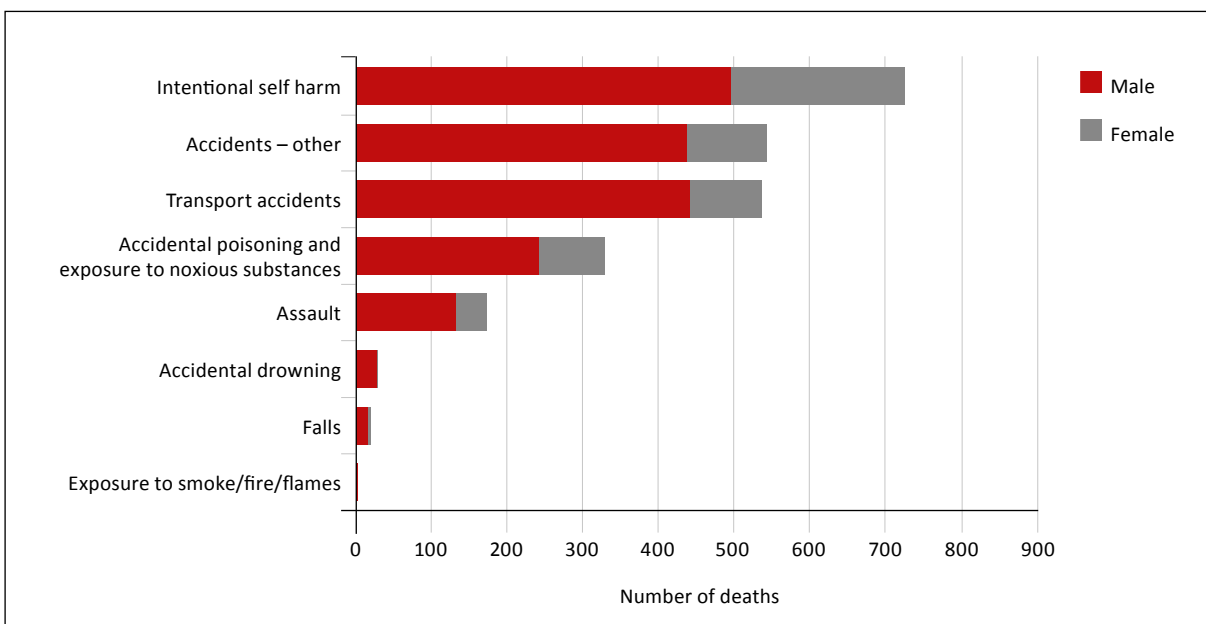


Source: Office for National Statistics (2016) Underlying cause of death by age group England and Wales 2015 Death Registrations
[> DOWNLOAD DATA](#)

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).

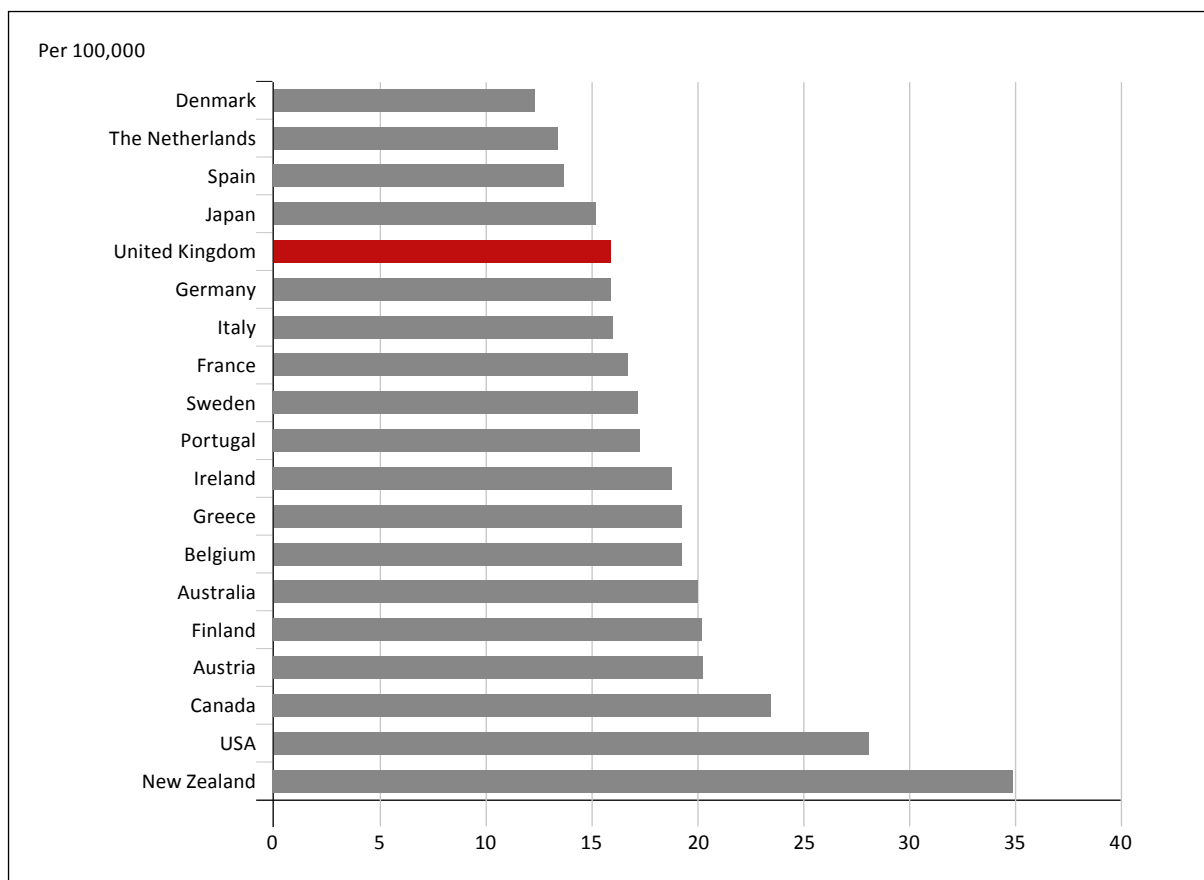
Chart 2.8: External causes of mortality, age 15-24, England and Wales, 2017



Source: Office for National Statistics (2018) Deaths by age, sex and underlying cause registrations 2017 for England and Wales
[> 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).

Chart 2.9: Comparison of adolescent (10-19 years) all-cause mortality rate per 100,000 population, 2015



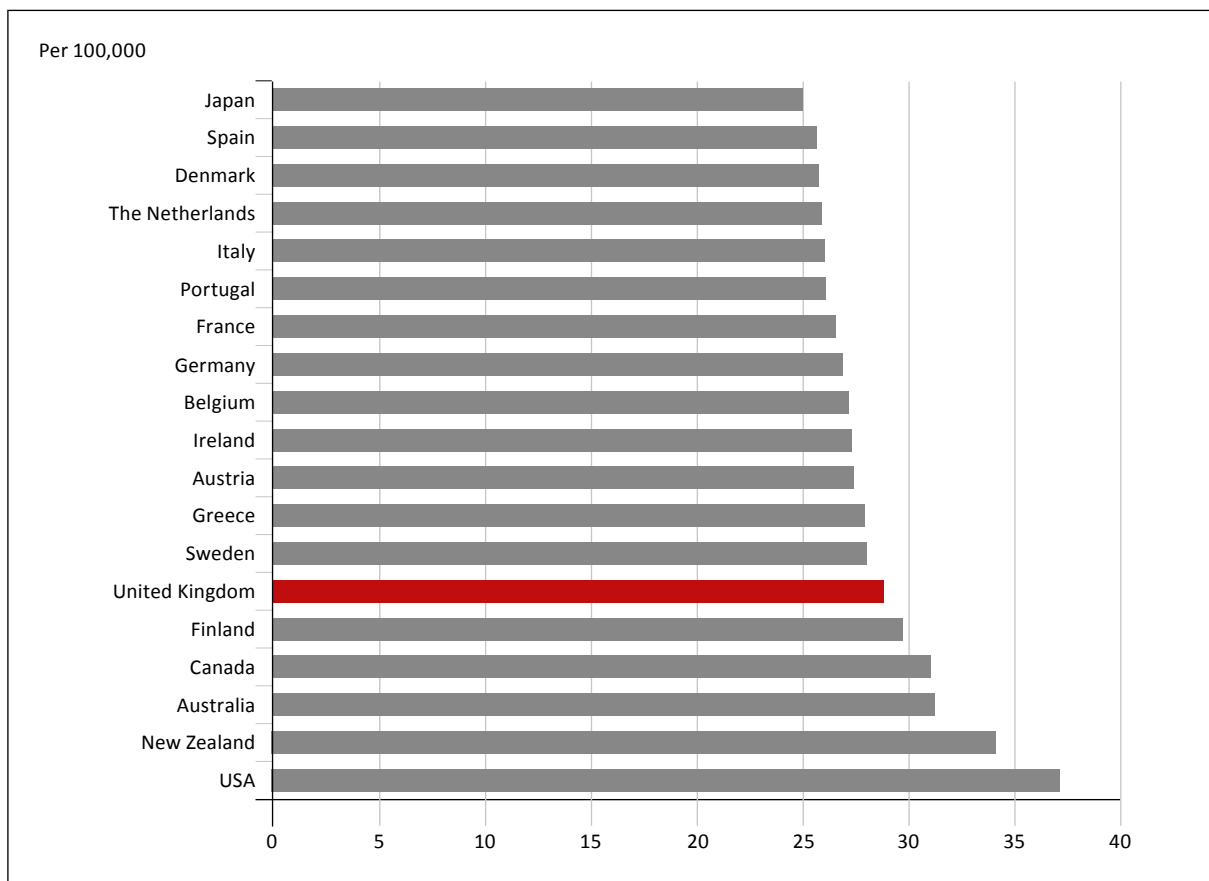
Source: Global Health Observatory data repository (last accessed January 2019) > [DOWNLOAD DATA](#)

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).

Chart 2.10: Comparison of all-cause disability-adjusted life years (DALYs) for young people aged 10-24 per 100,000 healthy life years, 2016



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

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