



# Adolescent mental health evidence brief 1: Prevalence of disorders

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## What this briefing tells us

- More than one in seven young people (15.3%) aged 11–19 in England had at least one mental disorder in 2017.
- A follow-up survey carried out during the Covid-19 lockdown (July 2020) indicates that one in six young people (17.6%) aged 11–16 years were identified as having a probable mental disorder. This figure increases to one in five (20.0%) among young adults aged 17–22.
- Emotional disorders such as anxiety and depression are the most common mental disorders experienced by young people.
- The rate of mental disorders among 11–15-year-olds in England seems to be increasing, having risen from 11.4% in 1999 to 13.6% in 2017. The latest data from 2020 suggest that young people's mental health has further deteriorated.
- In younger adolescents (aged 11–16), the prevalence of mental disorders is similar among boys and girls. However, among older adolescents (17–19), mental disorders are more common in girls, with almost one in four girls (23.9%) experiencing a mental disorder, compared with one in 10 boys (10.3%).
- Self-harm and attempted suicide are around six times more common among adolescents (aged 11–19) with a mental disorder (32.8%) than those without (5.1%). Similar to mental disorders, rates of self-harm and attempted suicide among the adolescent population are increasing, with reported self-harm having increased from 5.3% in 2000 to 13.7% in 2014 (11–16-year-olds).
- While these increases over the last two decades may reflect more accurate reporting – potentially due to increased awareness and help-seeking behaviours, reduced stigma and improved screening – they may also represent an increase in prevalence rates. Further research is required to understand these trends.
- The increasing concern around young people's mental health, particularly in relation to the Covid-19 pandemic, highlight the need for immediate action to support young people most at risk. It is essential that this action is underpinned by a strong evidence base.
- Early intervention, including promotion and prevention strategies, has the potential to produce the greatest impact on young people's mental health and wellbeing by taking action before mental health problems worsen and preventing the onset of mental disorders.

## About this evidence brief

This is the first in a series of EIF evidence briefs focusing on adolescent mental health.

Alongside our evidence briefs, we are conducting a systematic review on the effectiveness of secondary school-based interventions aimed at supporting young people's mental health and wellbeing, for publication in spring 2021. As part of this review, we will seek to determine what works, for whom and under what circumstances.

## Introduction

This evidence brief presents data on the prevalence of mental disorders among adolescents, aged 11–19 years, in England. Adolescence is a period of rapid physical, social and psychological development. Mental disorders commonly emerge during this period with many persisting into adulthood with consequences for mental health, social adjustment and economic productivity across the life course. As we continue to grapple with Covid-19 and its impact on physical health, research is emerging on the impact of the pandemic and lockdown on young people's mental health. As part of this brief we present the latest data on adolescent mental health in England during lockdown.

Accurate information about the prevalence of mental disorders in young people is important to inform programmes and policies designed to improve adolescent mental health.

### What is mental health?

The World Health Organization defines mental health as a 'state of complete physical, mental, and social well-being and not merely the absence of disease or injury' (WHO, 1986).

Mental health is determined by multiple biological, psychological, social, cultural and environmental factors that interact in complex ways (Mrazek & Haggerty, 1994). These factors are commonly referred to as risk and protective factors that influence the mental health of individuals and populations.

Mental disorders refer to diagnosable conditions characterised by some combination of abnormal thoughts, emotions and behaviour that reflects a dysfunction in the psychological, biological or developmental process underlying mental functioning (APA, 2013). Some of the most common adolescent mental disorders include anxiety disorders, mood disorders, behavioural disorders, eating disorders and developmental disorders.

### Measuring the mental health of young people in England

While there are many community and regional studies examining the prevalence of mental disorders in young people in England, this evidence brief focuses on data from studies using national samples and formal assessment techniques including standardised scales or intervention schedules.

The majority of data in this evidence brief is obtained from the Mental Health of Children and Young People (MHCYP) survey, which provides mental health prevalence data from a stratified probability sample of children and young people living in England. Although the MHCYP reports on a broader age range covering childhood and adolescence, this evidence brief focuses on the prevalence of mental disorders among young people aged 11–19 years.

Data is available from this survey across four waves: 2020, 2017, 2004 and 1999. Three of the waves (2017, 2004 and 1999) collected comprehensive data to determine the rate of children and young people with a mental disorder. In 2020, a different set of questions was used to understand the mental health of young people aged 5–22 living through the Covid-19 pandemic in England. This 2020 survey estimates the number of children and young people who have a probable mental disorder, a possible one, or are unlikely to have one.

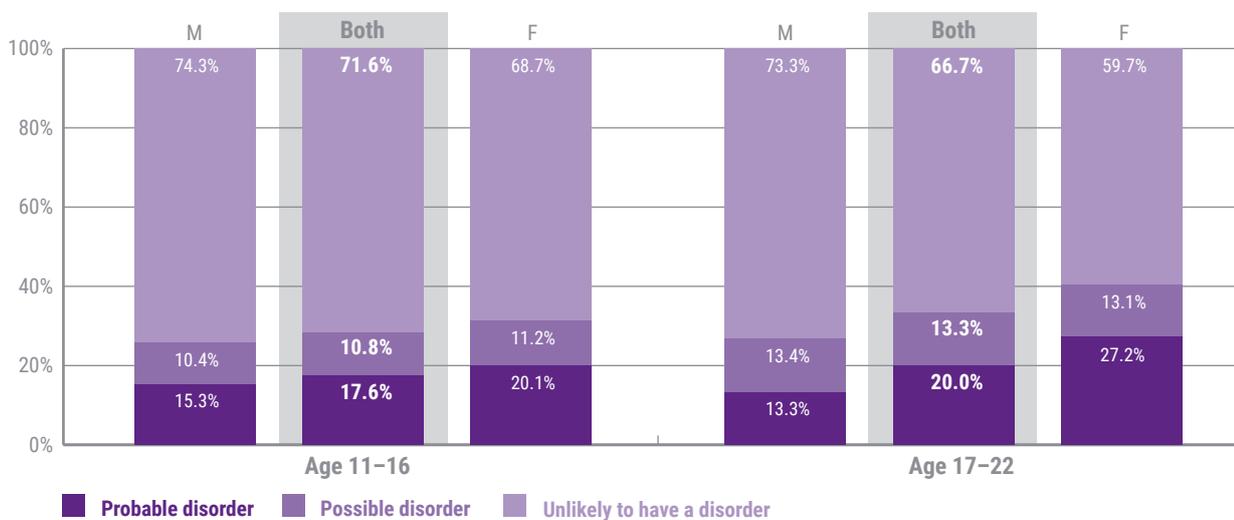
Data on suicide and self-harm among 11–19-year-olds in England is drawn predominantly from the 2017 MHCYP survey (NHS Digital, 2018). To complement this data, we have referred to two other sources of information: the 2014 Adult Psychiatric Morbidity Survey (APMS) which reports on self-harm and attempted suicide among 16–24-year-olds in the UK (NHS Digital, 2016), and ONS data on the number of completed suicides in 2019 in the UK (ONS, 2020).

## The scale of mental health problems among adolescents in England

In July 2020, **one in six young people (17.6%)** aged 11–16 were identified as having a probable mental disorder. **This figure rose to one in five (20.0%)** for young adults aged 17–22 (NHS, 2020).

Looking at how mental health differs according to sex, females were more likely to have a probable mental disorder than males.

Figure 1  
**Young people's mental health, 2020 estimates, by age and sex (England)**



Source: Data from the MHCYP (NHS Digital, 2020)

Data from the 2017 MHCYP survey in England indicates that **15.3% of young people aged 11–19 had at least one mental health disorder**, while 6.3% of young people met the criteria for two or more mental disorders.

While there was little variation in prevalence rates between the 11–16 and 17–19 age groups in 2017, there were differences in prevalence rates when both sex and age were considered together. Mental disorders were more common among 17–19-year-old females (23.9%) than males (10.3%). The 2020 data confirms this difference (figure 1), with probable **mental disorders being most common in older adolescent females** (27.2% among 17–22-year-old females, 13.3% among males).

Data from the 2020 sample indicates that mental health problems during the lockdown period varied by socio-economic status, ethnicity, and family context. Among 11–16-year-olds, prevalence of probable mental disorders was higher in those who:

- self-identify as white or female
- experience parental distress or problems with family functioning (as reported by parents)
- live in the most deprived neighbourhoods in England (measured using Index of Multiple Deprivation (IMD) 2015 quintiles).

Results from the MHCYP 2017 sample appeared to show a similar association. Mental disorders were more common in children and young people who:

- had experienced certain types of adversity in their lives, such as parental separation or financial crisis
- had poor general health
- lived in lower-income households.

## Overview of prevalence by disorder type

### Emotional disorders

Emotional disorders refer to 'anxiety disorders (characterised by fear and worry), depressive disorders (characterised by sadness, loss of interest and energy, and low self-esteem), and mania and bipolar affective disorder'.

NHS DIGITAL, 2018

**Emotional disorders are the most common disorder among adolescents, experienced by 11% of those aged 11–19 years.**

Data from the MHCYP survey shows that rates of emotional disorders increase with age:

- 1.0% among 2–4-year-olds
- 4.1% among 5–10-year-olds
- 9% among 11–16-year-olds
- 14.9% among 17–19-year-olds

During adolescence, anxiety disorders are more common (9.7%) than depressive disorders (3.4%). Mania and bipolar affective disorders are uncommon (0.003%).

Both anxiety and depressive disorders are more common in girls than boys.

### Behavioural disorders

Behavioural (or conduct) disorders are defined as 'disorders characterised by repetitive and persistent patterns of disruptive and violent behaviour in which the rights of others, and social norms or rules, are violated'.

NHS DIGITAL, 2018

**Among 11–19-year-olds, behavioural disorders (4.3%) are the second most common disorder, after emotional disorders.**

Behavioural disorders increase with age up to 16 years of age, and are least common among 17–19-year-olds:

- 2.5% among 2–4-year-olds
- 5% among 5–10-year-olds
- 6.2% among 11–16-year-olds
- 0.8% among 17–19-year-olds

For boys aged 11–16 years, behavioural disorders are the most common mental disorder.

Among 11–16-year-olds, having any behavioural disorder is more common in boys (7.4%) than girls (5%).

### Hyperactivity disorders & Other mental disorders

Hyperactivity disorders are defined as 'disorders characterised by inattention, impulsivity, and hyperactivity'.

Other less common disorders that the MHCYP survey collects data on include, autism spectrum disorders (ASD), eating disorders, and tic disorders, among others.

NHS DIGITAL, 2018

**Among 11–19-year-olds, 1.6% of young people were diagnosed with a hyperactivity disorder and 2.1% were diagnosed with an 'Other' mental disorder.**

As with behavioural disorders, hyperactivity disorders increase with age up to 16 years:

- 0.5% among 2–4-year-olds
- 1.7% among 5–10-year-olds
- 2% among 11–16-year-olds
- 0.8% among 17–19-year-olds

'Other' disorders decrease with age: they are least common among 17–19-year-olds, and most common among 2–4-year-olds:

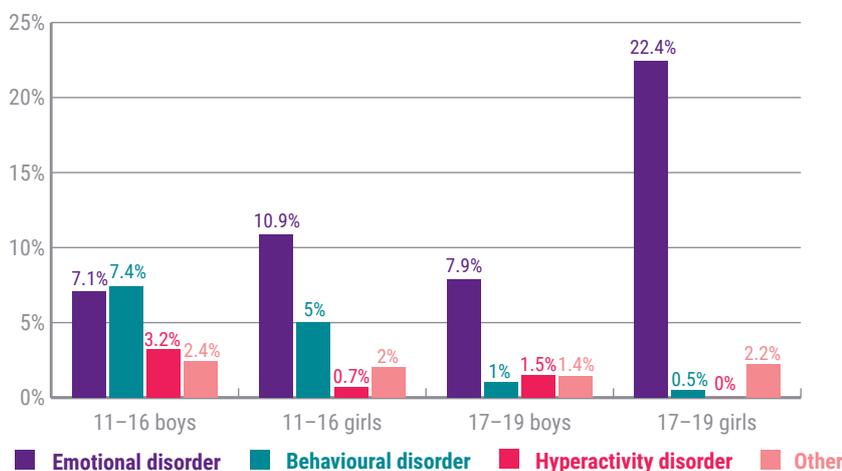
- 2.8% among 2–4-year-olds
- 2.2% among 5–10-year-olds
- 2.2% among 11–16-year-olds
- 1.8% among 17–19-year-olds

Among 11–16-year-olds, hyperactivity disorders are almost five times more common in boys (3.2%) than girls (0.7%).

For adolescent boys, autistic spectrum disorder is the most common 'Other' disorder: 1.8% for 11–16s, 1.0% for 17–19s.

For adolescent girls, eating disorders are the most common 'Other' disorder: 1.0% for 11–16s, 1.6% for 17–19s.

Figure 2  
**Prevalence of mental disorder types, by age and sex (England)**



Source: Data from the MHCYP (NHS Digital, 2018)

## Trends by disorder type, 11–15-year-olds

Data on the mental health of 11–15-year olds in England has been collected in previous waves of the MHCYP surveys, in 1999 and 2004. We report 11–15-year-old data as 16-year-olds were only added to the sample in 2004 and 17–19-year-olds in 2017.

Figure 3 illustrates the trends by disorder type across the three waves of data. Results indicate a **consistent increase in young people’s mental disorders across the three time periods**.

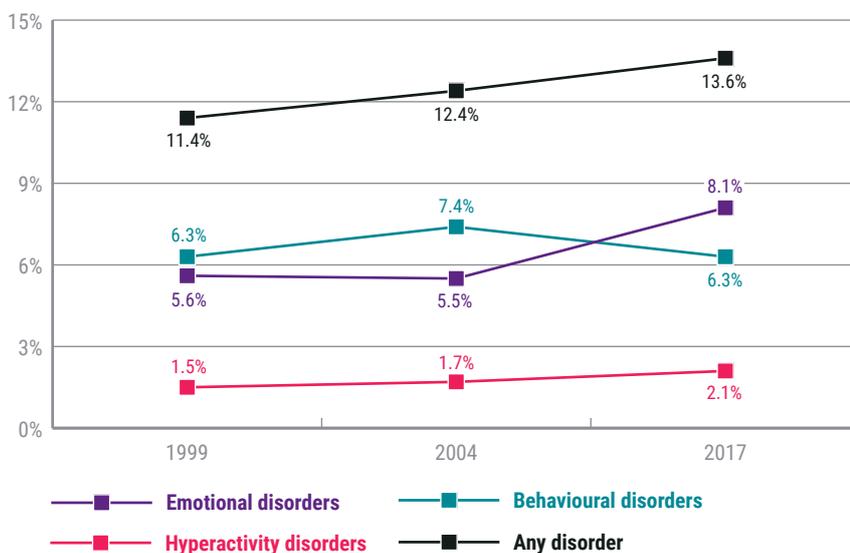
The rate of emotional disorders rose substantially between 2004 and 2017, rising from 5.5% to 8.1%. This increase was similar across boys (+2.5 percentage points) and girls (+2.8 percentage points).

The rate of behavioural disorders decreased slightly between 2004 and 2017, returning to the same rate that was reported in 1999 (6.3%).

There has been a slight increase in hyperactivity disorders across the three time points rising from 1.5% in 1999 to 2.1% in 2017.

Overall, these results are in line with an upward trend in mental disorders across European countries (Choi, 2018; Potrebny et al., 2017).

Figure 3  
**Prevalence of mental disorder types, all 11–15-year-olds (England)**



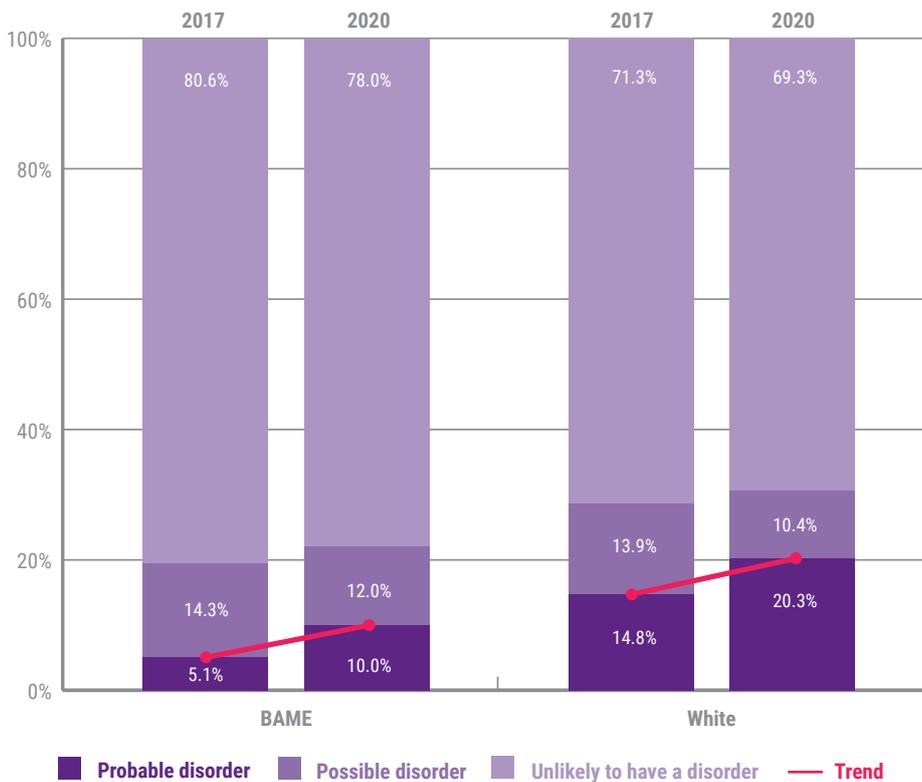
Source: Data from the MHCYP (NHS Digital, 2018)

While the most recent data from MHCYP only provides an indication of the number of young people identified as having a probable mental disorder, it does suggest that in comparison to previous waves, young people’s mental health has deteriorated (among 11–16-year-olds, an increase of 5.0 percentage points in probable mental disorders from 2017 to 2020).

While it is unclear whether the increase in prevalence over the last two decades is, in part, due to more robust screening tools and reduced stigmatisation, the latest increase might be linked to the Covid-19 pandemic. Additional findings from the 2020 survey indicate that **those with a probable mental disorder scored highest on the Pandemic Anxiety Scale**, and those who are unlikely to have a mental disorder scored the lowest.

The 2020 MHCYP data also suggests that the prevalence of probable mental disorders has increased by around five percentage points across ethnicities since 2017. **Prevalence of probable mental health disorders has nearly doubled in BAME adolescents** and increased by a third in adolescents who identify as white (figure 4).

Figure 4  
**Young people’s mental health, by ethnicity (2017 & 2020, England)**



Source: Data from the MHCYP (NHS Digital, 2018, 2020)

## Self-harm and suicide among adolescents

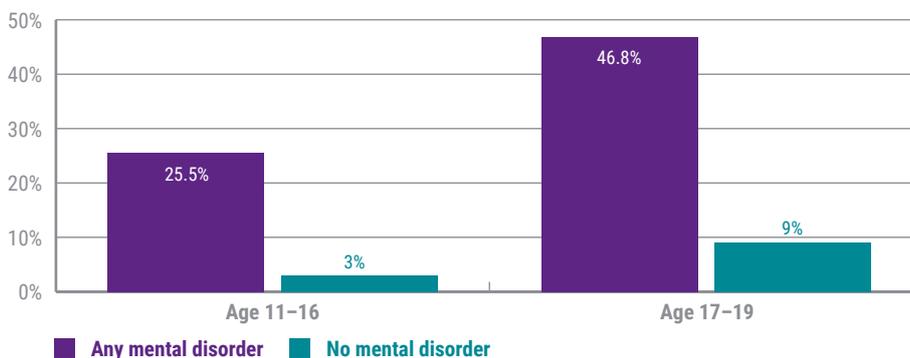
### Self-harm and attempted suicide

Data from the 2017 MHCYP survey in England indicates that **self-harm and attempted suicide is considerably more common among adolescents with a mental disorder, as opposed to those without a disorder** (figure 5). Across the 11–19 age range as a whole, 32.8% of young people with a mental disorder reported having ever self-harmed or attempted suicide, in comparison to 5.1% of those without a disorder. The rate is significantly higher among 17–19-year-olds, with 46.8% of young people with a mental disorder having ever self-harmed or attempted suicide.

Self-harm and attempted suicide is more common for females, with **females at least twice as likely to self-harm or attempt suicide in comparison to males** (the odds ratio is 2.1 for 11–16-year-olds, and 2.5 for 17–19-year-olds), irrespective of whether they have a mental disorder or not.

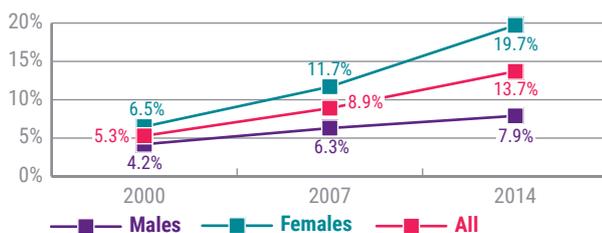
Examining the APMS data on suicidal behaviour and self-harm across three waves – 2000, 2007 and 2014 (figures 6 & 7) – there is an upward trend in reported self-harming and attempted suicide among young people in England aged 16–24 years (NHS Digital, 2016). Rates of self-harm rose from 5.3% among this age group in 2000 to 13.7% in 2014. This upward trend is consistent across males and females.

Figure 5  
**Self-harm and attempted suicide (ever) among 11–19-year-olds (England)**



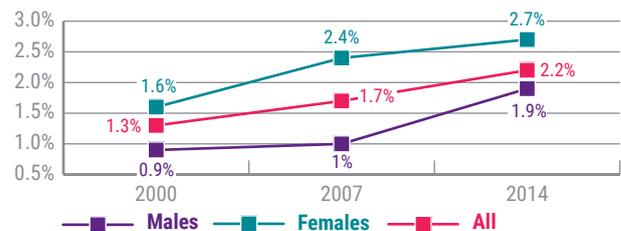
Source: Data from the MHCYP (NHS Digital, 2018)

Figure 6  
**Self-harming among 16–24-year-olds (England)**



Source: Data from the APMS collected in 2000, 2007 and 2014 (NHS Digital, 2016)

Figure 7  
**Suicide attempts among 16–24-year-olds (England)**



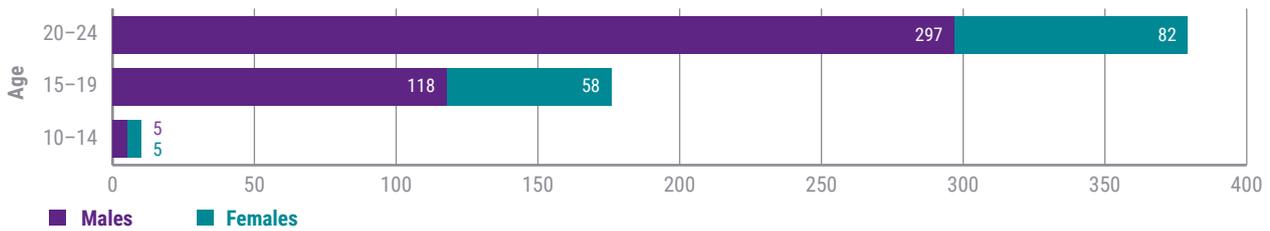
Source: Data from the APMS collected in 2000, 2007 and 2014 (NHS Digital, 2016)

## Completed suicides

Despite the higher prevalence of female self-harm and attempted suicide, according to 2019 data collected in England by the Office of National Statistics, **the absolute number of completed suicides was higher among adolescent males than females**, irrespective of age (figure 8; ONS, 2020). According to this data, the number of registered completed suicides also increases with age. Among those under 25, the rate is highest for those in the 20–24 age group.

Figure 8

### Number of registered suicides, by age and sex (2019, England)



Source: Data from the ONS collected in 2019 (ONS, 2020)

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