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Healthcare Quality Improvement Partnership

Suicide by Children and Young People

National Confidential Inquiry into Suicide and Homicide by People with Mental Illness

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The Healthcare Quality Improvement Partnership (HQIP) is led by a consortium of the Academy of Medical Royal Colleges, the Royal College of Nursing and National Voices. HQIP's aim is to promote quality improvement, and it hosts the contract to manage and develop the Clinical Outcome Review Programmes, one of which is the Mental Health Clinical Outcome Review Programme, funded by NHS England, NHS Wales, the Health and Social Care Division of the Scottish Government, the Northern Ireland Department of Health, and the States of Jersey and Guernsey. The programmes, which encompass confidential enquiries, are designed to help assess the quality of healthcare, and stimulate improvement in safety and effectiveness by systematically enabling clinicians, managers and policy makers to learn from adverse events and other relevant data. More details can be found at: www.hqip.org.uk/national-programmes/a-z-of-clinical-outcome-review-programmes/

The interpretation and conclusions contained in this report are those of the authors alone.

SUICIDE IN CHILDREN AND YOUNG PEOPLE: SUMMARY

THE STUDY

We carried out this study to find the common themes in the lives of young people who die by suicide. We wanted to identify possible sources of stress and to examine the role of support services.

We collected information on 922 suicides by people aged under 25 in England and Wales during 2014 and 2015. The information came from investigations by official bodies, mainly from coroners, who take evidence from families and professionals.

MAIN FINDINGS

The number of suicides at each age rose steadily in the late teens and early 20s. Most of those who died were **male** (76%), and the male to female difference was greater in those over 20.

Although under 20s and 20-24 year olds had many antecedents in common, there was a **changing pattern,** reflecting the stresses experienced at different ages. Academic pressures and bullying were more common before suicide in under 20s, while workplace, housing and financial problems occurred more often in 20-24 year olds.

We confirmed in this larger study our previous findings of **10 common themes** in suicide in under 20s (see Table 1, page 4).

We found **bereavement** to be common in both age groups, 25% of under 20s and 28% of 20 -24 year olds, equivalent to around 125 deaths per year. **Suicide bereavement**, i.e. the death of a family member or friend, was more common in the under 20s (11% v 6%).

21% of under 20s and 14% of 20-24 year olds were university or college **students** equivalent to around 75 deaths per year in this age group. Suicide in students under 20 occurred more often in April and May, conventionally exam months. Only 12% were reported to be seeing student counselling services.

9% of under 20s who died had been "**looked after children"**, 14 deaths per year in this age group. They had high rates of housing problems and suicidal ideas. Almost all had recent contact with at least one service but a third were not in recent contact with mental health care.

6% of under 20s and 3% of 20-24 year olds were reported to be lesbian, gay, bisexual, or transgender (**LGBT**) or uncertain of their sexuality, equivalent to 18 deaths per year. A quarter of LGBT under 20s had been **bullied**; most had previously self-harmed.

We found **suicide-related internet use** in 26% of deaths in under 20s, and 13% of deaths in 20-24 year olds, equivalent to 80 deaths per year. This was most often searching for information about suicide methods or posting messages with suicidal content.

Self-harm was reported in 52% of under 20s and 41% of 20-24 year olds who died, equivalent to around 200 deaths per year.

Families will sometimes say that a suicide occurred **"out of the blue"**. We confirmed that a proportion of the young people who died had not talked about suicide and had low rates of key stresses.

Around 60% in both age groups were **known to services**. Around 40% had been in recent contact—in only 26% this was mental health care. Interagency collaboration was variable and risk recognition appeared poor.

KEY MESSAGES

Suicide in young people is rarely caused by one thing; it usually follows a combination of previous vulnerability and recent events.

The stresses we have identified before suicide are common in young people; most come through them without serious harm.

Important themes for suicide prevention are support for or management of family factors (e.g. mental illness, physical illness, or substance misuse), childhood abuse, bullying, physical health, social isolation, mental ill-health and alcohol or drug misuse.

Specific actions are needed on groups we have highlighted: (1) support for young people who are bereaved, especially by suicide (2) greater priority for mental health in colleges and universities (3) housing and mental health care for looked after children (4) mental health support for LGBT young people.

Further efforts are needed to remove information on suicide methods from the internet; and to encourage online safety, especially for under 20s.

Suicide prevention in children and young people is a role shared by front-line agencies; they need to improve access, collaboration and risk management skills. A later, more flexible transition to adult services would be more consistent with our finding of antecedents across the age range.

Services which respond to self-harm are key to suicide prevention in children and young people, and should work with services for alcohol and drug misuse, factors that are linked to subsequent suicide.

BACKGROUND

Rates of suicide and self-harm in young people

Suicide is the second leading cause of death among 15-29 year olds worldwide accounting for 8% of all deaths[1].

In the UK, suicide is the leading cause of death in young people[2], accounting for 14% of deaths in 10-19 year olds and 21% of deaths in 20-34 year olds[3]. The UK has a relatively low rate of suicide by children and young people compared to other countries[1], but there has been a recent increase, reversing a decline over the previous 10 years. Rates also vary between UK countries, a previous NCISH report showing higher suicide rates in young people in Scotland and Northern Ireland[4].

Over half of young people who die by suicide have a history of self-harm[5]. Self-harm has risen in the last 15 years—in 2014, one in five young women reported having ever self-harmed, twice the rate in young men and three times higher than reported 15 years ago[6]. Recent self-harm has become more common as an antecedent of suicide in patients of mental health services over the last 20 years[4]. A report, to be published in 2018, on the patterns of contact between primary and secondary services by children and young people with mental health disorders, including self-harm, will focus on trends in service presentation, recognition and treatment[7].

Policy context

Improving the mental health and wellbeing of children and young people is a Government priority. In 2015 the Department of Health and NHS England published Future in Mind, with proposals on prevention, access to help and support, and mental health services[8].

In January 2017, the Prime Minister announced a number of pledges to help those, particularly young people, with mental health conditions. These included a revised national suicide prevention strategy, highlighting self-harm and the mental health of children and young people[9]. A Green Paper on child and adolescent mental health services is planned for later this year.

A national study to investigate suicide by children and young people

We have established a national study combining multiple sources of information to investigate antecedents of suicide in children and young people.

In phase one of our study we reported initial findings about suicide by people aged under 20[5]. In this phase we report on a two year sample of people aged up to 24 and explore the changing patterns of suicide risk in childhood, early and late adolescence, and early adulthood.

Key messages from phase one

Our previous report[5], examining suicides by children and young people aged under 20 in England, cited ten common themes (Table 1).

Table 1: Ten common themes in suicide by children and young people

Family factors such as mental illness
Abuse and neglect
Bereavement and experience of suicide
Bullying
Suicide-related internet use
Academic pressures, especially related to exams
Social isolation or withdrawal
Physical health conditions that may have social impact
Alcohol and illicit drugs
Mental ill health, self-harm and suicidal ideas

These experiences may combine over time to increase risk, until suicide occurs in a crisis triggered by, for example, the breakdown of a relationship or exam pressures.

Health and social care, and other agencies that work with young people, as well as families and young people themselves, can contribute to suicide prevention through greater awareness of the range of factors that may add to risk and of the "final straw" stresses that can lead to suicide.

Aims of the study

To examine the antecedents of suicide in children and young people aged up to 24.
To determine how frequently suicide is preceded by children and young person-specific factors of public concern (e.g. bullying, abuse, internet and social media use, and educational stressors).
To examine the role of support services.
To make recommendations to strengthen suicide prevention for children and young people.

HOW WE CARRIED OUT THE STUDY

Report coverage

This report covers the second phase of a national investigation into suicide in children and young people. The study has being undertaken in two phases:

1. The first year focused on people aged 10-19 years who died by suicide (includes undetermined deaths) in England. Findings from the first year of data collection were published in May 2016[5].

2. In the second year, data collection has been extended to include a sample of people aged up to 24, in England and Wales.

This report is based on deaths that occurred during a 24 month period (i.e. during the two years of data collection as described above). It describes the antecedents of suicide by people aged under 25 and includes recommendations for services.

Definitions

Suicides are defined as deaths that received a conclusion of suicide or undetermined (open) at coroner's inquest, as is conventional in research and national statistics[10].

Deaths coded with the following International Classification of Diseases, Tenth Revision (ICD-10)[11] codes were included in the study: X60-X84; Y10-Y34 (excluding Y33.9); Y87. This is in line with the Office for National Statistics (ONS) procedures for identifying deaths by suicide. Deaths receiving a narrative verdict at coroner inquest were included in the study if ONS procedures for identifying suicide deaths applied one of these ICD-10 codes.

Further definitions are provided in the appendix (page 26).

Notification of deaths by suicide of children and young people

In this report, findings are presented for England and Wales combined. National suicide data were obtained from ONS for individuals aged between 10 and 24. These deaths occurred between January 2014 and December 2015.

Data sampling

All deaths of people aged 10-19 were included in the sample. A random sample of 20% of deaths of people aged 20-24 was selected from all suicides in this age group in the two year study period (see the appendix, page 26, for further details).

Data sources

In total, there were 922 deaths by suicide in England and Wales in the two year time period. This included 316 deaths of people aged 10-19 and 606 deaths of people aged 20-24, from whom we selected 124 (20%) (Table 2).

These 440 people were the subjects of the main study. Information was received from one or more of the following data sources for 391 (89%).

Table 2: Available data sources

	Number (%)	
	Under 20	20-24
Deaths by suicide in children and young people (notified by ONS)	316	124*
Deaths on which at least 1 report has been obtained	285 (90%)	106 (85%)
Coroner inquest hearings	272 (86%)	103 (83%)
Child death investigations received (under 18s, England only)	74 (52% of deaths in under 18s)	n/a
NCISH data obtained	55 (17%)	16 (13%)
Single source of data received	177 (56%)	85 (69%)

* Note: Based on a 20% sample of all deaths in this age group

1. Coroner inquest hearings (375 cases)

Audio CDs of inquest hearings were requested in all cases. Coroners were sent the name(s) of individuals who died by suicide in their jurisdiction and asked to provide a CD recording of the inquest hearing (or where not available, copy statements or depositions submitted as evidence).

HOW WE CARRIED OUT THE STUDY

2. Child Death Overview Panel (CDOP) child death investigations (under 18 years, England only) (74 cases)

CDOP analysis proformas (Form C) were requested from Local Safeguarding Children's Boards (LSCB) in cases where the CDOP had reviewed the death of an individual by suicide or deliberate self-inflicted harm.

Twenty-eight (19%) LSCBs did not participate, usually due to concerns regarding the release of personal data (n=13) or due to non-response or pending decisions on participation (n=15). There were also LSCBs who had not reviewed, finalised, or provided the Form C to the study at the time of writing.

3. Case Reviews (14 cases)

There is different guidance for carrying out case reviews in England and Wales. However, central to each is that a case review should be carried out when a child (under the age of 18) dies or is seriously injured and abuse or neglect is thought to be involved. Case Reviews were sought from the National Society for the Prevention of Cruelty to Children (NSPCC) national case review repository[12] or from the relevant LSCB.

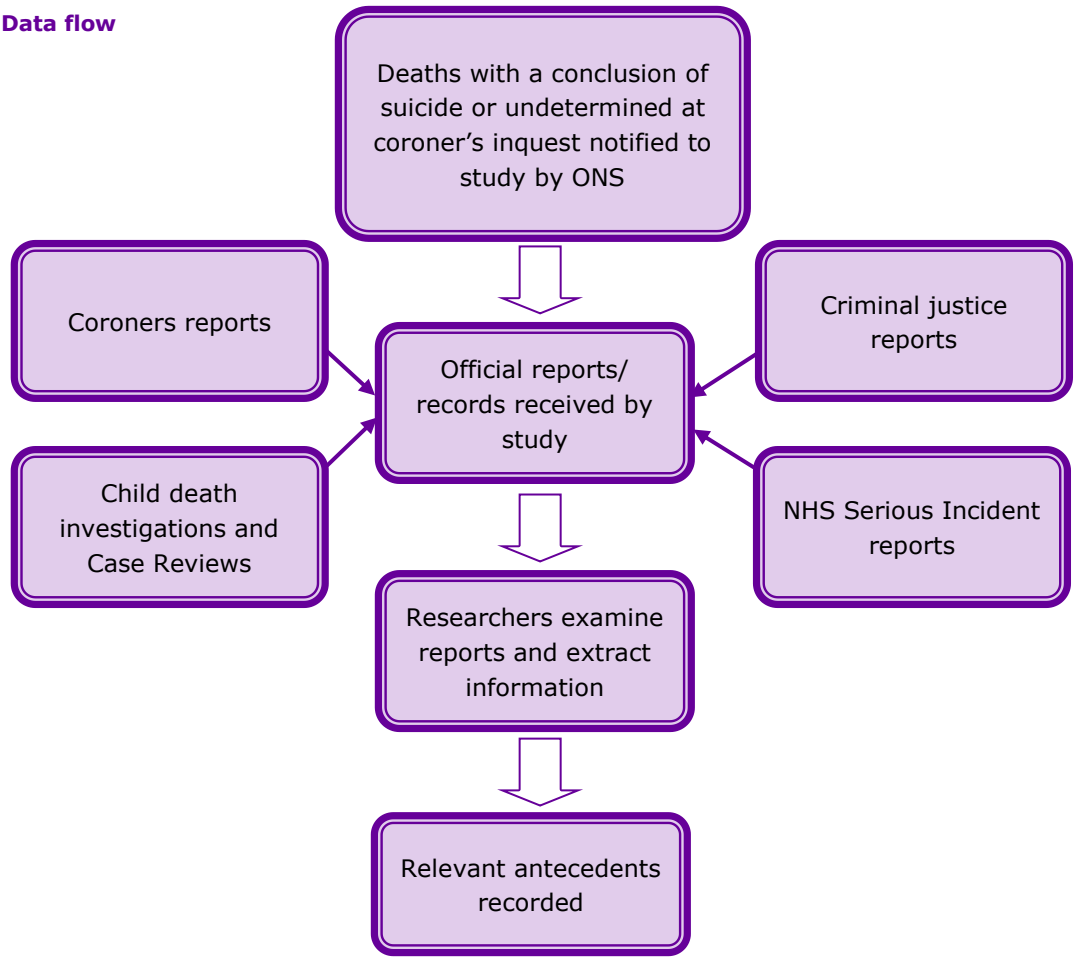
4. Criminal justice system reports (4 cases)

In England and Wales, the Prisons and Probation Ombudsman (PPO) have agreed to notify the study when any new reports meeting the study criteria were published and available to download on their website[13]. The Independent Police Complaints Commission (IPCC) have also agreed to notify the study when any investigations on an apparent suicide of a young person in or after release from custody were conducted.

5. National Confidential Inquiry into Suicide and Homicide by People with Mental Illness (NCISH) data (71 cases)

The NCISH method of data collection is similar across England and Wales. A full description is provided on our website[14] and in our previous national reports.[15,16]

Figure 1: Data flow



HOW WE CARRIED OUT THE STUDY

Briefly:

- patients (i.e. individuals in contact with mental health services within 12 months of suicide) were identified from mental health trust and health board records
- clinical data were obtained for these patients via a detailed questionnaire sent to the consultant psychiatrist responsible for the patient's care.

Seventy-one (16%) individuals were identified as patients from NCISH data. This is lower than the proportion of patient suicides seen in the UK general population as a whole (28%)[4] but higher than we reported in our first year of data collection (12%)[5]. The number of patient suicides is likely to be an under-estimate at this stage and is expected to increase as data collection continues—reflecting the time required to identify and process data on mental health patients who die by suicide.

6. NHS Serious Incident reports (72 cases)

For those individuals who were identified as patients from the NCISH database, the medical director at the NHS Trust or Health Board where the patient was treated was asked to provide a copy of the NHS Serious Incident report. These reports detail the findings from an internal investigation and identify the root causes and recommendations. Not all patient suicides are subject to Serious Incident review. Whether a review is conducted can depend on the timing and level of contact with services, as well as the individual Trusts' own policies on Serious Incident reporting.

Analysis

Information was taken from the sources listed above via a data extraction proforma on to a standardised database for aggregate analysis (Figure 1).

Descriptive figures are presented as numbers and percentages. The denominator in all estimates was the total number of cases on which information was received in each age group (i.e. 285 in the under 20s; 106 in 20-24 year olds) unless otherwise specified. If an item was not recorded in any data source then it was assumed to be absent or not relevant.

Significant differences between age groups and males and females ($p<0.05$) are highlighted in the figures. With this sample size, several differences were of borderline statistical significance. These are shown in the figures as $p<0.1$. Further details on data analysis are provided in the appendix (page 26).

WHAT WE FOUND

Deaths notified in the study period

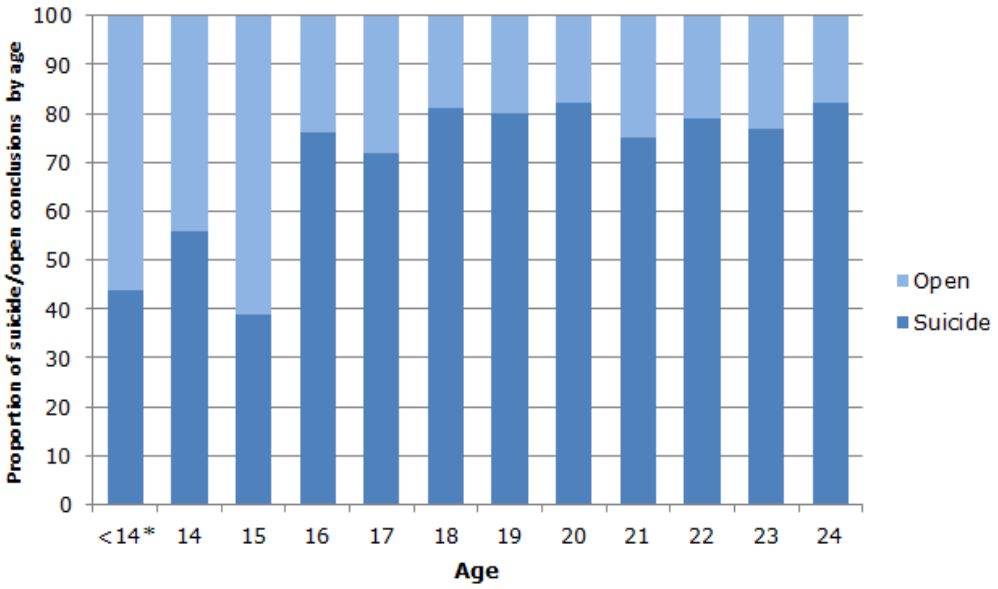
Numbers

We were notified of 922 deaths by suicide in people aged under 25 in the two year study period.

Conclusions

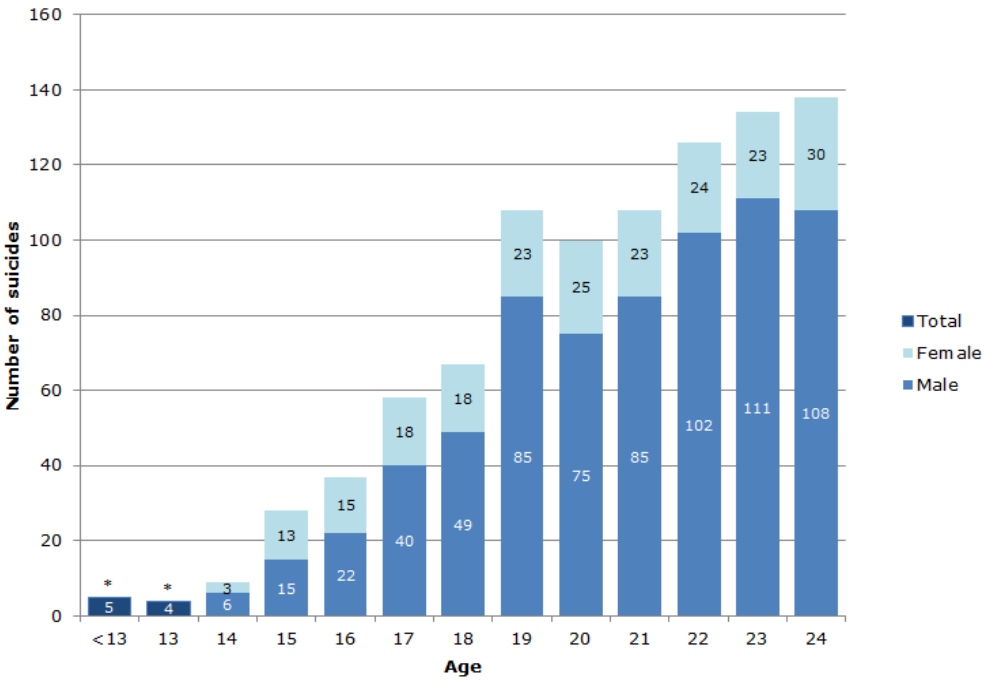
Of the 922 deaths, 708 (77%) received a suicide conclusion at coroner's inquest, and 214 (23%) an undetermined (open) conclusion. The likelihood of receiving an undetermined conclusion was the same in males and females but was higher in those under 16 (Figure 2).

Figure 2: Proportion of coroner conclusions, by age



*Note: Ages combined in Figure 2 because of low numbers

Figure 3: Number of suicides, by age and gender



*Note: males and females have been combined in Figure 3 because of low numbers

Age and gender

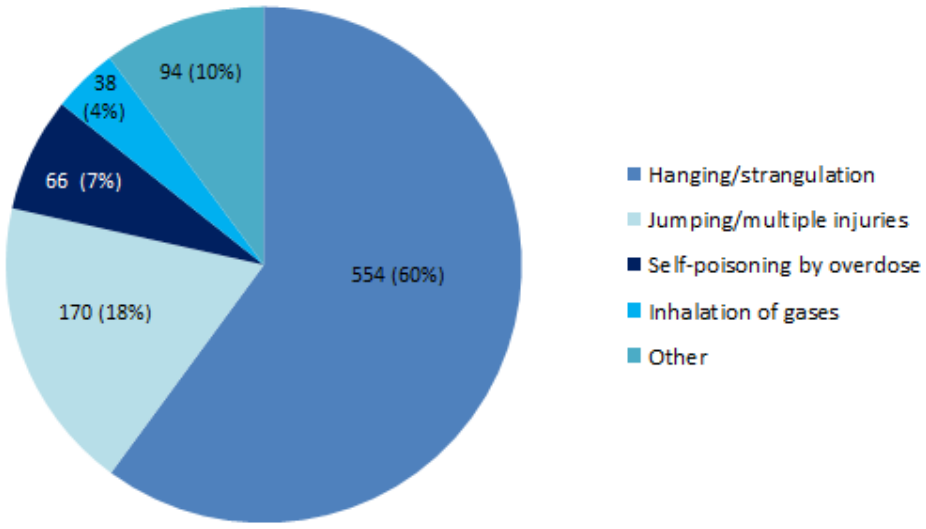
Figure 3 shows the number of suicides by age and gender. The number of suicides increased steadily with age, particularly in the mid to late teens. The number of male suicides was higher than females, especially in the late teens and early 20s, with a male to female ratio of 2.6:1 in those aged 15-19, and 3.7:1 in those aged 20 and over.

There were 316 deaths in people aged under 20 in the two year study period. Of the 606 suicide deaths in people aged 20-24, we included 124 in our sample (see page 5 and page 26 of the appendix).

WHAT WE FOUND

Method of suicide (Figure 4)

Figure 4: Method of suicide

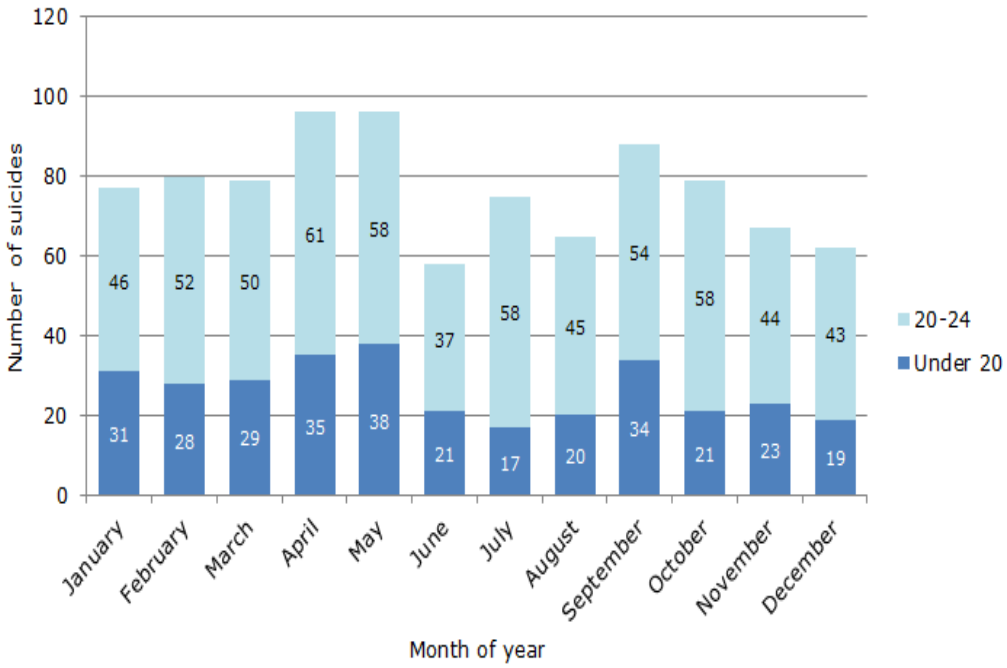


The most common method of suicide was hanging/ strangulation (554, 60%), followed by jumping/multiple injuries, i.e. jumping or lying in front of a train or other vehicle (89, 10%), jumping from a height (56, 6%), or other multiple injuries (25, 3%).

There were 66 (7%) deaths by self-poisoning (overdose). Opiates were the most commonly used substance taken, in 17 deaths; others included barbiturates (n=10), beta blockers (n=9), antidepressants (n=6), and paracetamol or paracetamol/ opiate compounds (n=5).

There were 38 (4%) deaths following gas inhalation. Four-hundred and twenty-two (60%) males died by hanging, similar to the proportion of females (132, 61%). Females died by self-poisoning significantly more often than males (27, 12% v 39, 6%).

Figure 5: Timing of suicides, by month of year



Timing of suicide

Figure 5 shows the number of suicides was higher in the first half of the year. Monthly figures for April (IRR 1.66), May (IRR 1.60), September (IRR 1.52) and February (IRR 1.48) were significantly higher than the baseline (i.e. June, see page 26 for an explanation of IRRs). The lowest numbers were in June and December.

There was a peak in the number of suicides in under 20s in May (IRR 1.75), and in April (IRR 1.65) in 20-24 year olds. The lowest figures for under 20s and 20-24 year olds occurred in July and June, respectively.

WHAT WE FOUND (UNDER 20 YEAR OLDS)

Antecedents of suicide

Of the 922 suicide deaths by young people in the two year study period, we sought to record information on all of the 316 deaths in people aged under 20, and on a 20% sample of all deaths in people aged 20-24 (n=124). In total, we recorded information on 391 (89%) of these 440 children and young people. Two hundred and eight-five (90% of all under 20s) were aged under 20; 106 (85%) were aged 20-24.

The remainder of the findings are based on these 391 individuals (see figures 6-10, tables 3-11). Findings are reported separately for the under 20 and 20-24 year old age groups (see Table 11 in the appendix).

Under 20 year olds

Two hundred and four (72%) were male. Thirty (14%) were from a black or minority ethnic group.

Family environment and relationships

One hundred and twenty-three (43%) lived with two parents (including a step-parent) at the time of death. Sixty-four (22%) lived with a single parent. There was evidence of possible disruption to the family environment by mental illness (45, 16%), physical illness (30, 11%), or substance misuse (30, 11%) in a parent, carer or sibling. Parental domestic violence had been witnessed by 26 (9%). In the 3 months prior to death, 8 (3%) had experienced parental separation or divorce. Sixty-three (22%) were in a relationship at the time of death.

Lesbian, gay, bisexual and transgender (LGBT) young people

Thirteen (5%) were LGBT young people and 4 (1%) were reported to be uncertain about their sexual orientation. Of these 17, 10 (59%) were male. Fifteen (88%) were recorded as experiencing conflict regarding their sexuality e.g. struggling with how they would tell family or friends they were gay or were experiencing internal turmoil regarding their sexuality.

Common antecedents of suicide in LGBT young people are shown in Table 3. Significantly higher proportions of LGBT young people had a history of abuse, were looked after children, and had used the internet in a way that was related to suicide.

Table 3: Antecedents of suicide in LGBT groups aged under 20

	Number (%)
Socially isolated	7 (41%)
Face-to-face bullying	4 (24%)
Abuse (emotional, physical, sexual)	5 (29%)
Looked after child	4 (24%)
Suicide-related internet use	10 (59%)
Previous self-harm	10 (59%)
Suicidal ideas	10 (59%)
Any diagnosis of mental illness	7 (41%)
No service contact	9 (53%)

Abuse

A history of abuse (physical, emotional or sexual) was recorded in 33 (12%). Physical and sexual abuse were the most commonly reported forms of abuse (17, 6% in both cases).

There was a history of child neglect in 14 (5%) cases. In total this gives 38 people with a history of abuse and/or neglect as 9 had experienced both abuse and neglect.

Twenty (7%) had been under a Child Protection Plan or had been subject to a statutory order.

Looked after children

At the time of death, 7 were 'looked after' children (i.e. in care) and a further 19 had previously been looked after children. Of these 26, 5 (19%) were living in a secure children's home or other local authority accommodation. Twelve (46%) were living with a parent(s) (including foster parents, n=3). Fourteen (54%) reported problems with housing or a recent change of accommodation, higher than other under 20s.

WHAT WE FOUND (UNDER 20 YEAR OLDS)

Seventeen (65%) had previously self-harmed—10 (38%) in the 3 months prior to death. Excessive alcohol use was reported in 10 (38%) and illicit drug use in 13 (50%). Fifteen (58%) were reported to have been bereaved—higher than other under 20s—5 by suicide.

Twenty-five (96%) had recent contact (i.e. in the 3 months prior to their death) with at least one agency (Table 4).

Table 4: Contact with services in looked after children aged under 20

	Number (%)
Service contact (at any time)	26 (100%)
Recent service contact	25 (96%)
Mental health services	16 (62%)
Youth justice/police	16 (62%)
Social care/local authority	17 (65%)
Recent contact with multiple agencies*	6 (23%)
Contact with multiple agencies (at any time)	17 (65%)

* Note: see appendix (pages 28-29) for definition

Bereavement

Seventy (25%) were reported to have been bereaved. Twenty (7%) had experienced more than one bereavement. Twenty-six (9%) had lost a parent, 31 (11%) a family member or partner, 22 (8%) a friend or acquaintance. Three (1%) had miscarried. In 44 (63%), the bereavement had occurred in the previous year, 14 (20%) in the 3 months prior to death. In 26 (37%), the bereavement occurred more than 12 months earlier.

Thirty-one (11%) had been bereaved by suicide. Fifteen (5%) had lost a friend or acquaintance to suicide, 10 (4%) a parent, and 5 (2%) a family member or partner. Suicide bereavement occurred within the previous year in 15 (5%), 4 (1%) in the 3 months prior to death. In 15 (5%), the suicide bereavement was more than 12 months earlier.

For many, bereavement added to existing problems (Table 5). A significantly higher proportion of bereaved young people had: experienced disruption to the family environment; a history of abuse or bullying; used the internet in a way that was related to suicide; and had previously self-harmed, expressed suicidal ideas, or used alcohol excessively.

Fifty-seven (81%) of the 70 reported to have been bereaved and 24 (77%) of the 31 bereaved by suicide, had contact with at least one agency—in the majority this was mental health services.

Table 5: Antecedents of suicide in bereaved under 20s

	Number (%)
Family (parent, carer, sibling) history:	
Mental illness	22 (31%)
Physical illness	16 (23%)
Substance misuse	16 (23%)
Witness to domestic violence	13 (19%)
Abuse (emotional, physical, sexual)	17 (24%)
Bullying	23 (33%)
Suicide-related internet use	26 (37%)
Physical health condition	23 (33%)
Excessive alcohol use	26 (37%)
Illicit drug use	24 (34%)
Previous self-harm	50 (71%)
Suicidal ideas (at any time)	49 (70%)
Any diagnosis of mental illness	43 (61%)

Bullying

Fifty-eight (20%) were known to have been a victim of bullying. Forty-eight (17%) were victims of face-to-face bullying and 21 (7%) were victims of online bullying. In 17 (6%) the bullying had occurred in the 3 months prior to death.

WHAT WE FOUND (UNDER 20 YEAR OLDS)

Suicide-related internet use

Seventy-four (26%) had used the internet in a way that was related to suicide. Thirty-seven (13%) searched the internet for information on suicide method and 10 died by a method they were known to have searched on.

Eleven (4%) visited websites that may have encouraged suicide. Twenty-nine (10%) had communicated suicidal ideas or intent online and 21 (7%) had been victims of online bullying—10 in the 3 months prior to death.

Academic pressures

One hundred and forty-five (51%) were in education (school, further or higher education) at the time of death. Sixty-three (43% of those in education) were experiencing academic pressures. In 46 (32% of those in education) these pressures were exam-related, i.e. current or impending exams, or exam results. Of these 46 individuals, 25 (54%) were known to be experiencing exam-related stress. The highest number of deaths in those experiencing academic pressures were in May (9, 14%), April (8, 13%), June (7, 11%) and September (7, 11%).

Sixty-nine (24%) were reported as experiencing problems related to being in education in the 3 months prior to death. In 46 (16%) these were academic pressures. Five died on the day of an exam or the following day.

Students in further or higher education

Sixty (21%) individuals aged 18-19 were students in further or higher education. Of these 60 students, the month with the highest number of deaths was April (11, 18%), followed by May (8, 13%). Twelve (20%) lived in university accommodation. Nineteen (32%) had moved away from their home address to attend college or university. Common antecedents of suicide in students are shown in Table 6 and contact with services in Table 7.

Twenty-two (37%) were experiencing academic pressures—for 9 these pressures were exam-related. Students reported fewer family (8, 13% v 27, 29%), workplace (6, 10% v 32, 35%) or financial problems (5, 8% v 23, 25%) in the 3 months prior to death, compared to other 18-19 year olds (n=92).

Table 6: Antecedents of suicide in students aged 18-19

	Number (%)
Socially isolated	16 (27%)
Suicide-related internet use	10 (17%)
Previous self-harm	25 (42%)
Suicidal ideas at any time	29 (48%)
Suicidal ideas within 1 week of death	12 (20%)
Any diagnosis of mental illness	28 (47%)
Affective disorder (bipolar affective disorder or depression)	13 (22%)
Excessive alcohol use	14 (23%)
Illicit drug use	14 (23%)

Table 7: Contact with services in students aged 18-19

	Number (%)
Service contact (at any time)	33 (55%)
Mental health services	23 (38%)
Youth justice/police	16 (27%)
Social care/local authority	4 (7%)
College/university support services	7 (12%)

Medical history

A physical health condition was recorded in 90 (32%) and in 54 (19%), the condition had lasted for more than 12 months. The most common conditions were respiratory disease (e.g. asthma, n=26, 9%) and dermatological problems (e.g. acne or eczema, n=26, 9%). We have not had access to information on specific treatments for these conditions.

Alcohol and drugs

Alcohol use was reported to be excessive in 64 (22%). Illicit drug use was reported in 98 (34%).

WHAT WE FOUND (UNDER 20 YEAR OLDS)

Toxicological analysis detected alcohol in the blood and/or urine in 57 (25%) cases. Twenty-three (8%) had an alcohol level above the drink driving limit (80 mgs per 100 ml of blood or 107 mgs per 100 ml of urine).

Illicit drugs were detected in 44 (15%) individuals. Prescribed and over the counter drugs were detected outside their therapeutic range in 15 (5%).

Self-harm and suicidal ideas

One hundred and forty-seven (52%) had a history of self-harm. Cutting and self-poisoning (overdose) were the most common methods. Under 20s who self -harmed had high rates of excessive alcohol (33%) and illicit drug use (42%).

One hundred and sixty-three (58%) had expressed thoughts of suicide or hopelessness, e.g. 'I can't do this anymore'. Most often these thoughts were expressed to a health professional (46, 28%) such as a GP or in Accident and Emergency (A&E), friends or peers (36, 22%), their current or former partner (31, 19%) or a family member (30, 18%). Twenty-nine (10%) had communicated suicidal thoughts online.

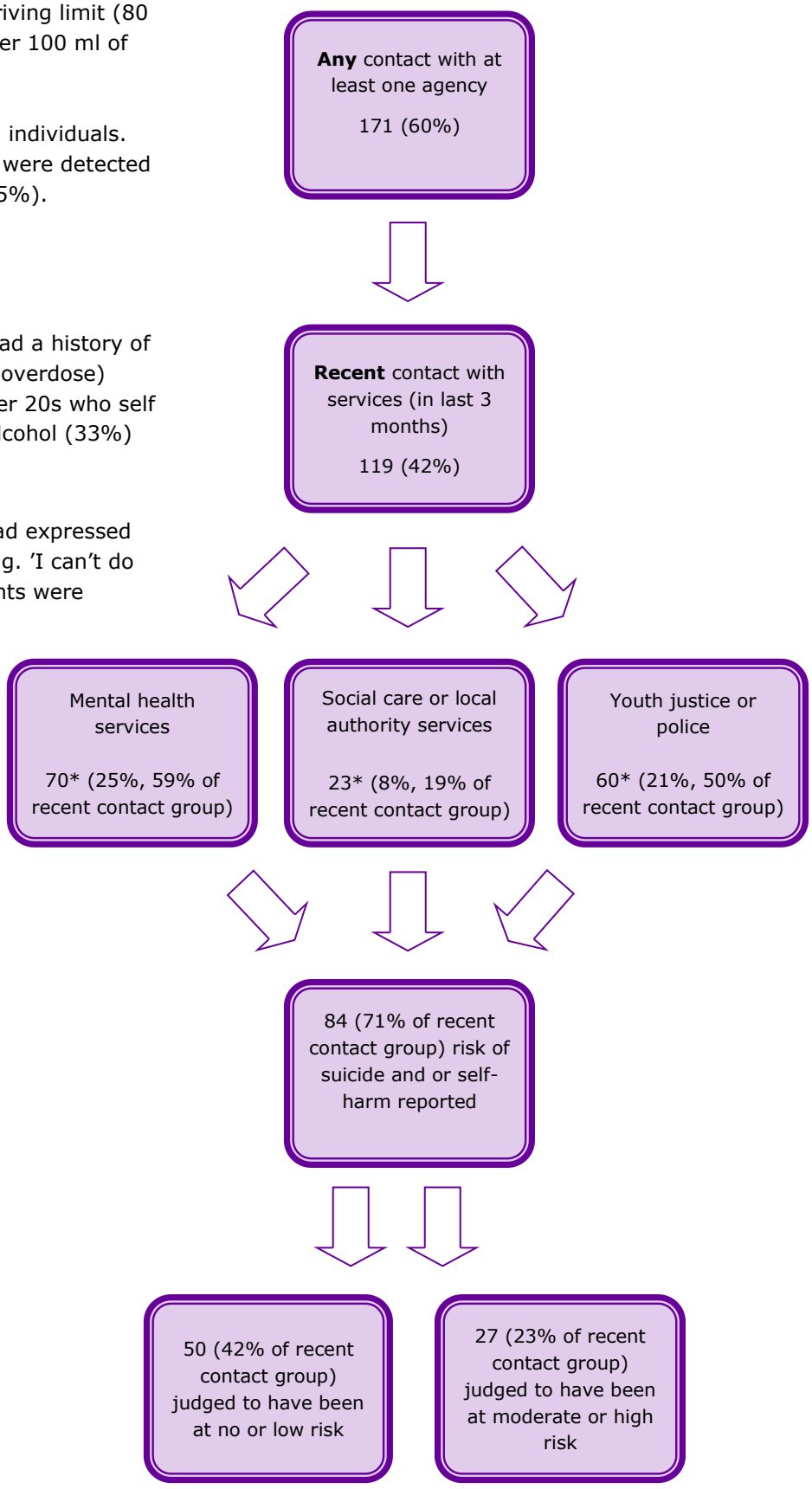
Twenty (7%) had an episode of self -harm in the week prior to death. Medical intervention at A&E was required in 5. Suicidal ideas were reported for 77 (27%) in the week prior to death—38 (14%) on the day of death.

One hundred and two (36%) left a suicide note. Despite this, 14 (14%) received an undetermined conclusion at inquest.

Psychiatric diagnosis

A diagnosis of mental illness was reported in 117 (41%). The most common diagnosis was affective disorder (bipolar or depression; 49, 17%). Forty-seven (16%) were

Figure 6: Contact with services, under 20s



* Note: figures do not tally with the total recent contact group (i.e. 119) as some young people will have recently been seen by more than one agency.

receiving antidepressants These were usually SSRI or SNRI drugs in 41 (14%).

Contact with services

Figure 6 shows the pattern of lifetime and recent contact with front-line services and their recognition of risk. Forty-two percent were in recent contact with any agency, and in 23% of these, risk was viewed as moderate or high—in the others it was unrecorded or seen as low.

Contact with multiple agencies

Thirty-two (11%) had contact with multiple agencies (mental health services *and* social care/ local authority services *and* youth justice/police). In 27 of these, the risk of suicide or self-harm had been considered when last seen by services. Seventeen were judged to be at no or low risk, 8 at moderate or high risk of suicide.

In 6, there was positive evidence of multi-agency working, i.e. good communication between agencies, multi-disciplinary meetings, and attempts at engagement. However, in 20 there was evidence of an absence of multi-agency working, i.e. a lack of information sharing, poor communication and record keeping, delayed or limited multi-agency care plans, or delayed referrals between agencies. In a further 6 cases there was not enough information recorded to make a judgement.

'Out of the blue' deaths

In 3 deaths the young person had had no contact with services, no history of self-harm, no suicidal thoughts, and no contact with a GP or at A&E for mental health problems. Eighty-four (29%) had never expressed suicidal thoughts nor previously self-harmed. In these 84 'out of the blue' deaths there was a general pattern of significantly fewer stresses and early life experiences (e.g. a family history of mental illness, bullying) compared to the under 20s sample as a whole (Table 8). Many (57, 68%) had no known contact with any agencies.

Table 8: Antecedents of suicide in 'out of the blue' deaths, aged under 20

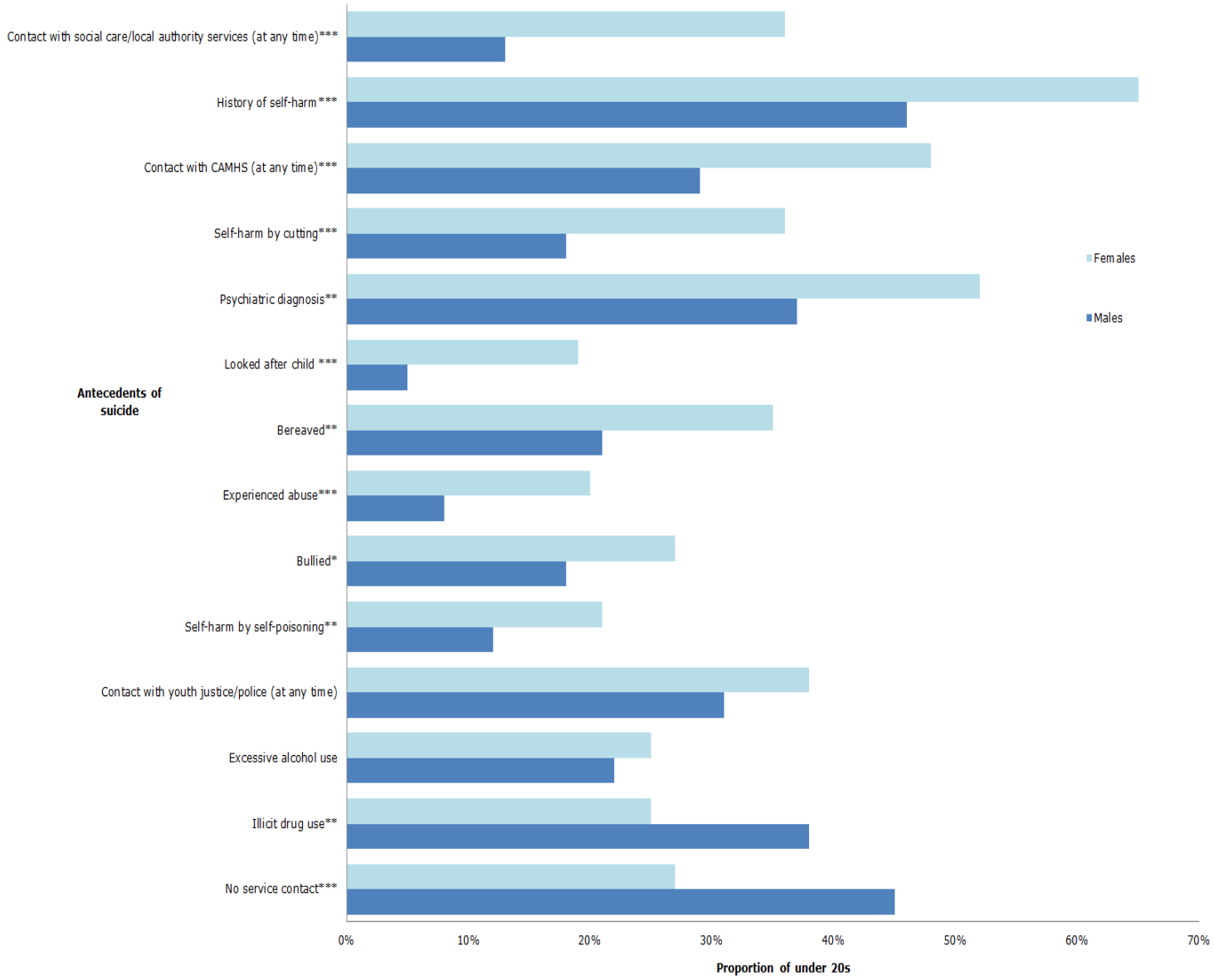
	Number (%)
Family (parent, carer, sibling) history:	
Mental illness	4 (5%)
Physical illness	5 (6%)
Witness to domestic violence	3 (4%)
Bereaved	10 (12%)
Bereaved by suicide	3 (4%)
Bullying	7 (8%)
Suicide-related internet use	10 (12%)
Physical health condition	23 (27%)
Excessive alcohol use	9 (11%)
Illicit drug use	19 (23%)
Any diagnosis of mental illness	17 (20%)

Males and females

Many of the reported antecedents of suicide were more commonly found in females than males (Figure 7). Females more often experienced abuse, bereavement and bullying. They more often had a history of self-harm especially by self-poisoning and cutting. Females were more often known to child and adolescent mental health (CAMHS) and social care or local authority services, and were more often a looked after child. Males, in contrast, more often had a history of illicit drug use and no known contact with agencies.

WHAT WE FOUND (UNDER 20 YEAR OLDS)

Figure 7: Antecedents of suicide in under 20s, in males and females



*Note: Differences between males and females significant at p<0.01 marked by ***; p<0.05 marked by **. With this sample size, several differences were of borderline statistical significance. Differences between males and females at p<0.1 are therefore marked by *.

Figure 7 shows the largest proportionate difference between females and males at the top and the largest proportionate differences between males and females at the bottom.

WHAT WE FOUND (20-24 YEAR OLDS)

20—24 year olds

Eighty-seven (82%) were male. Eight (13%) were from a black or minority ethnic group. Three were known to be LGBT young people—all were male. Being a looked after child was uncommon in this older age-group.

Family environment and relationships

Fifteen (14%) were living alone at the time of death. Twenty-four (23%) lived with two parents, 17 (16%) lived with a single parent. Evidence of possible disruption to the family environment was less common in this older age-group (see Figure 10 and Table 11). Twenty-seven (25%) were in a relationship at the time of death. Six were victims of domestic violence. Nineteen (18%) had a child or children of their own; 15 of these young parents were male.

Abuse

Eight (8%) had a history of abuse. Emotional abuse was the most commonly reported form of abuse (6, 6%).

Bereavement

Thirty (28%) were reported to have been bereaved—4 had experienced bereavement more than once. Fourteen (47%) had lost a parent, 14 (47%) a family member or partner and 3 (10%) a friend or acquaintance. In 14 (47%) the bereavement had occurred within 1 year; and in 16 (53%) more than 12 months prior to death. Six (6%) had been bereaved by suicide.

Similar to bereaved under 20s, a significantly higher proportion of bereaved young people aged 20-24 had: experienced disruption to the family environment; been abused; previously self-harmed; and used alcohol excessively (Table 9), compared to the sample of 20-24 year olds as a whole.

Of the 30 reported to have been bereaved, 20 (67%) had contact with at least one agency, mainly with mental health services or criminal justice agencies (mostly as perpetrators).

Table 9: Antecedents of suicide in bereaved 20-24 year olds

	Number (%)
Family (parent, carer, sibling) history:	
Mental illness	4 (13%)
Physical illness	5 (17%)
Substance misuse	4 (13%)
Abuse (emotional, physical, sexual)	5 (17%)
Bullying	3 (10%)
Suicide-related internet use	5 (17%)
Physical health condition	9 (30%)
Excessive alcohol use	17 (57%)
Illicit drug use	18 (60%)
Previous self-harm	17 (57%)
Suicidal ideas (at any time)	20 (67%)
Any diagnosis of mental illness	18 (60%)

Bullying

There were 9 (8%) victims of face-to-face bullying. There were no known cases of online bullying.

Suicide-related internet use

Fourteen (13%) had used the internet in a way that was related to suicide. Eight (8%) searched the internet for information on suicide method. Six (6%) had communicated suicidal ideas or intent online. Visiting websites that may have encouraged suicide and online bullying were uncommon.

Students in further or higher education

Fifteen (14%) were in further or higher education at the time of death. Seven (7%) were reported as experiencing problems related to being a student in the 3 months prior to death. In 5 these were academic pressures. Six had moved away from home to attend college or university. Antecedents of suicide in students are shown in Table 10. The number of students aged 20-24 with recent family, workplace, or financial problems were too infrequent to report.

WHAT WE FOUND (20-24 YEAR OLDS)

Table 10: Antecedents of suicide in students aged 20-24

	Number (%)
Previous self-harm	8 (53%)
Suicidal ideas at any time	10 (67%)
Any diagnosis of mental illness	10 (67%)
Affective disorder (bipolar or depression)	4 (27%)
Excessive alcohol use	6 (40%)
Illicit drug use	6 (40%)

Ten (67%) students had been in contact with at least one agency, 9 (60%) with mental health services, and 6 (40%) with criminal justice. Contact with social care or local authority services and college or university support services were too infrequent to report.

Medical history

A physical health condition was recorded in 24 (23%) and in 18 (17%), the condition had lasted for more than 12 months. Respiratory diseases were the most common (7, 7%), but there was a broad range—dermatological, gastro-intestinal (e.g. irritable bowel syndrome), musculoskeletal pain and nervous system (e.g. migraine).

Alcohol and drugs

Forty-four (42%) had a reported history of excessive alcohol use. Illicit drug use was reported in 54 (51%).

Toxicological analysis detected alcohol in the blood and/or urine in 42 (40%) cases. Twenty-nine (27%) had an alcohol level above the drink driving limit.

Illicit drugs were detected in 29 (27%) individuals. Prescribed and over the counter drugs were outside the therapeutic range in 8 (8%).

Employment problems

Forty-two (40%) were employed full-time or completing training. Thirty-two (30%) were unemployed. Thirty-two (30%) reported recent work-related problems, including: being unemployed, problems finding work, or job loss (16, 15%); work pressures (4, 4%); fear of losing job (3, 3%); job dissatisfaction (4, 4%); and sickness (3, 3%).

Financial problems

Twenty-one (20%) had experienced recent financial problems. These included debt (9, 8%) and gambling problems (4, 4%).

Housing instability

Thirteen (12%) reported accommodation problems (i.e. being asked to leave their home), and 17 (16%) had recently changed accommodation. Twenty-three (22%) had relocated to a new area, school, college or university in the last 2 years.

Self-harm and suicidal ideas

Forty-three (41%) had a history of self-harm. Cutting and self-poisoning (overdose) were the most common methods. They had high rates of excessive alcohol (63%) and illicit drug (70%) use.

Fifty-eight (55%) had expressed thoughts of suicide, most often these thoughts were expressed to a health professional (18, 33%) such as a GP or in A&E, their current or former partner (14, 25%), a family member (12, 22%), or friends or peers (9, 16%). Six (11%) had communicated suicidal ideas online. Suicidal ideas were reported for 33 (31%) in the week before death—19 (18%) on the day of death.

A suicide note was left by 35 (33%). Of these, 3 (9%) received an undetermined conclusion at inquest.

Psychiatric diagnosis

Fifty (47%) had a diagnosis of mental illness. The most common diagnosis was affective disorder (22, 21%). Twenty-eight (26%) were receiving antidepressants, and in most cases these were SSRI/SNRI drugs.

WHAT WE FOUND (20-24 YEAR OLDS)

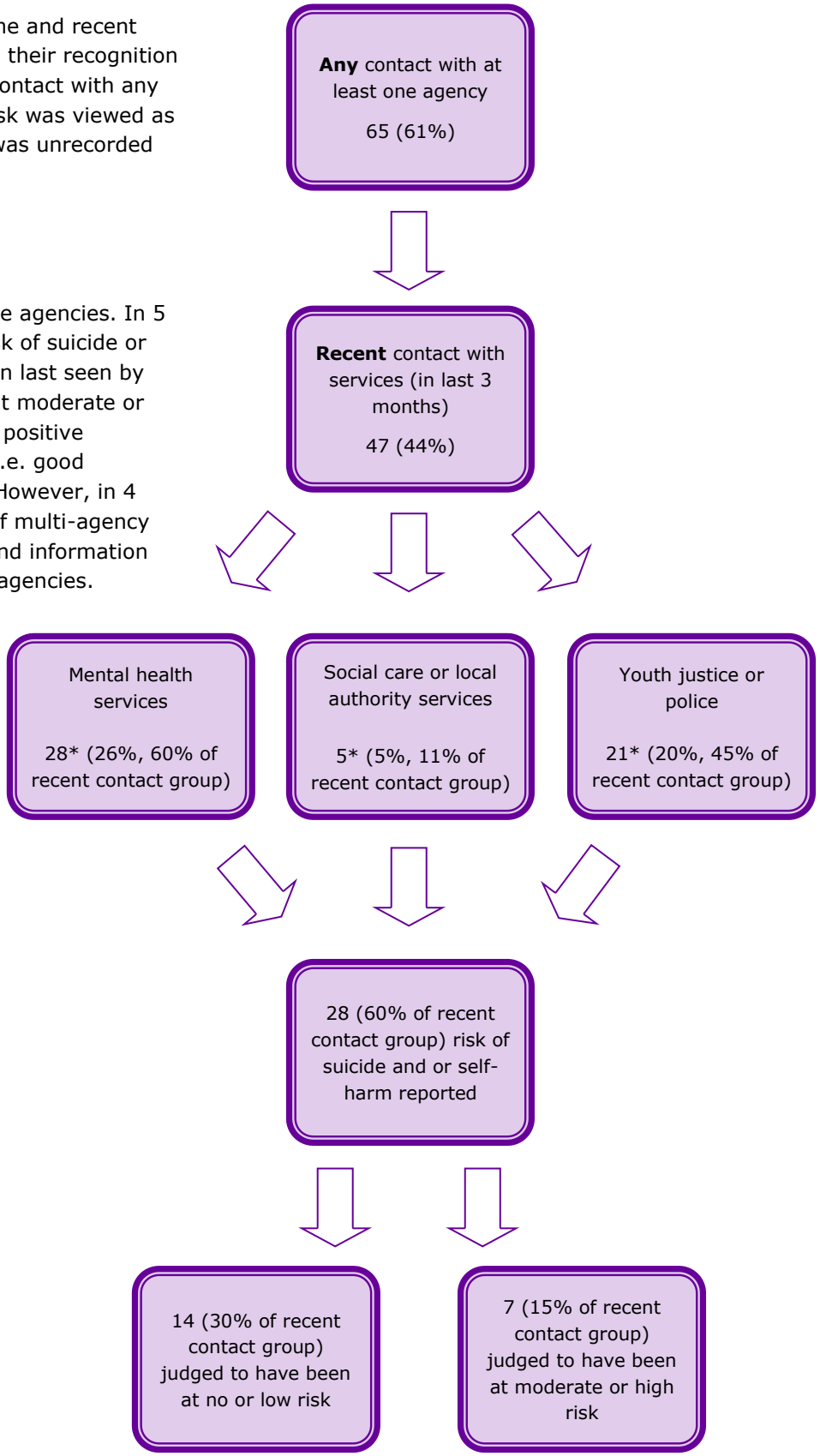
Contact with services

Figure 8 shows the pattern of lifetime and recent contact with front-line agencies and their recognition of risk. Forty-four percent were in contact with any agency but in only 15% of these, risk was viewed as moderate or high—in the others it was unrecorded or seen as low.

Contact with multiple agencies

Eight (8%) had contact with multiple agencies. In 5 of these there was evidence that risk of suicide or self-harm had been considered when last seen by services. Three were judged to be at moderate or high risk of suicide. In 4, there was positive evidence of multi-agency working, i.e. good communication between agencies. However, in 4 there was evidence of an absence of multi-agency working, i.e. poor communication and information sharing, delayed referrals between agencies.

Figure 8: Contact with services, 20-24 year olds



'Out of the blue' deaths

Thirty-seven (35%) 20-24 year olds had never expressed suicidal thoughts nor previously self-harmed.

In these 37 'out of the blue' deaths, fewer had reported bereavement (8, 22%); excessive alcohol (11, 30%) or illicit drug use (11, 30%); diagnoses of physical (4, 11%) or mental ill health (8, 22%); and suicide-related internet use (6, 16%) compared to the sample of 20-24 year olds as a whole. Twenty-six (70%) had no known contact with any agencies.

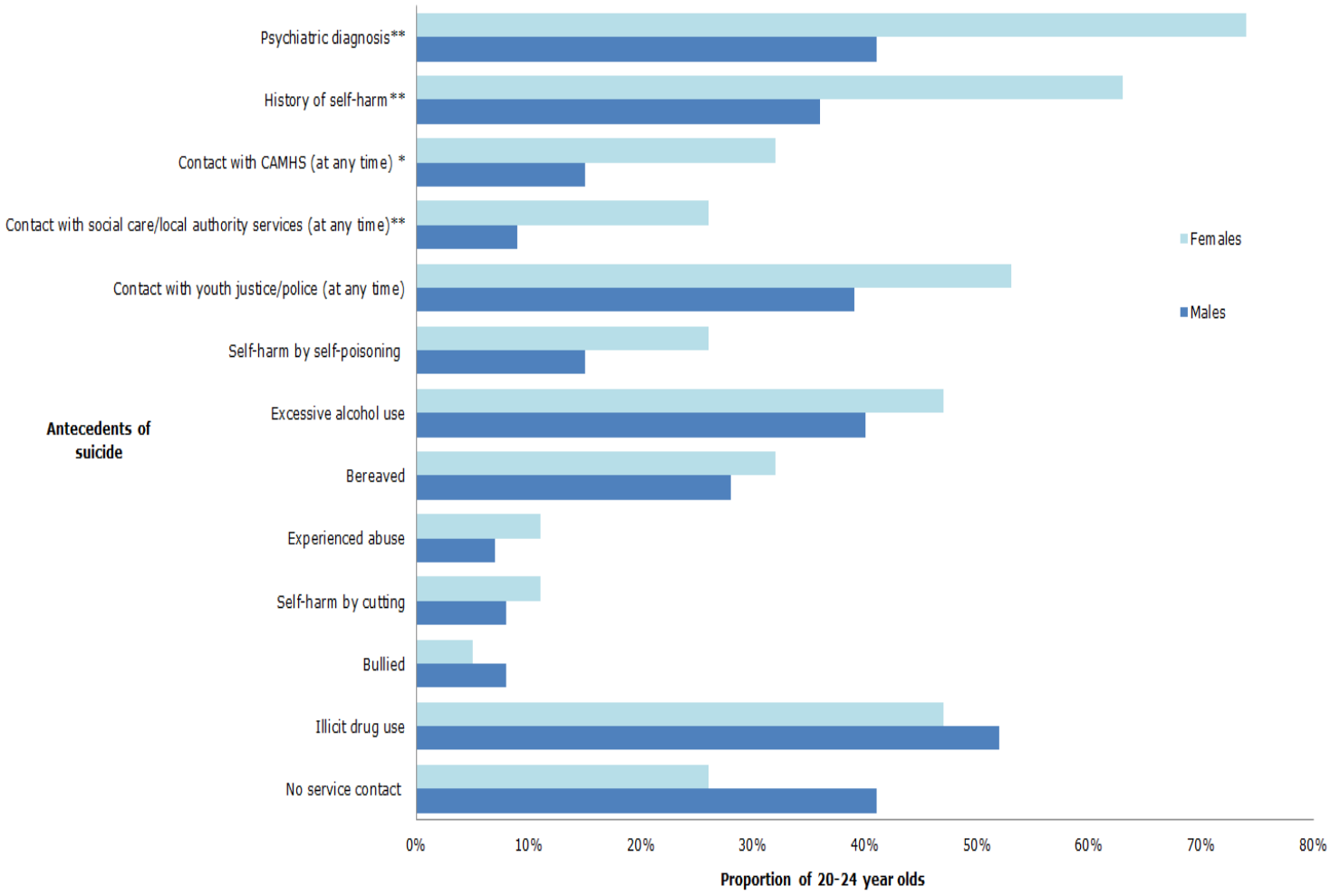
* Note: figures do not tally with the total recent contact group (i.e. 47) as some young people will have recently been seen by more than one agency.

WHAT WE FOUND (20-24 YEAR OLDS)

Males and females

There were few differences between males and females in the reported antecedents of suicide (Figure 9). Females more often had a history of self-harm, a diagnosis of mental illness and had contact with social care or local authority services. In the 3 months before death, fewer females had relationship problems (4, 21% v 23, 26%). They had more often experienced problems in the workplace (7, 37% v 25, 29%), in accommodation (6, 32% v 21, 24%) or in the family (5, 26% v 18, 21%) in the 3 months before death.

Figure 9: Antecedents of suicide in 20-24 year olds, in males and females



*Note: p<0.05 marked by **; p<0.1 marked by *, see footnote to Figure 7 for explanation of statistical significance.

Figure 9 shows the largest proportionate difference between females and males at the top and the largest proportionate differences between males and females at the bottom.

WHAT WE FOUND (20-24 YEAR OLDS)

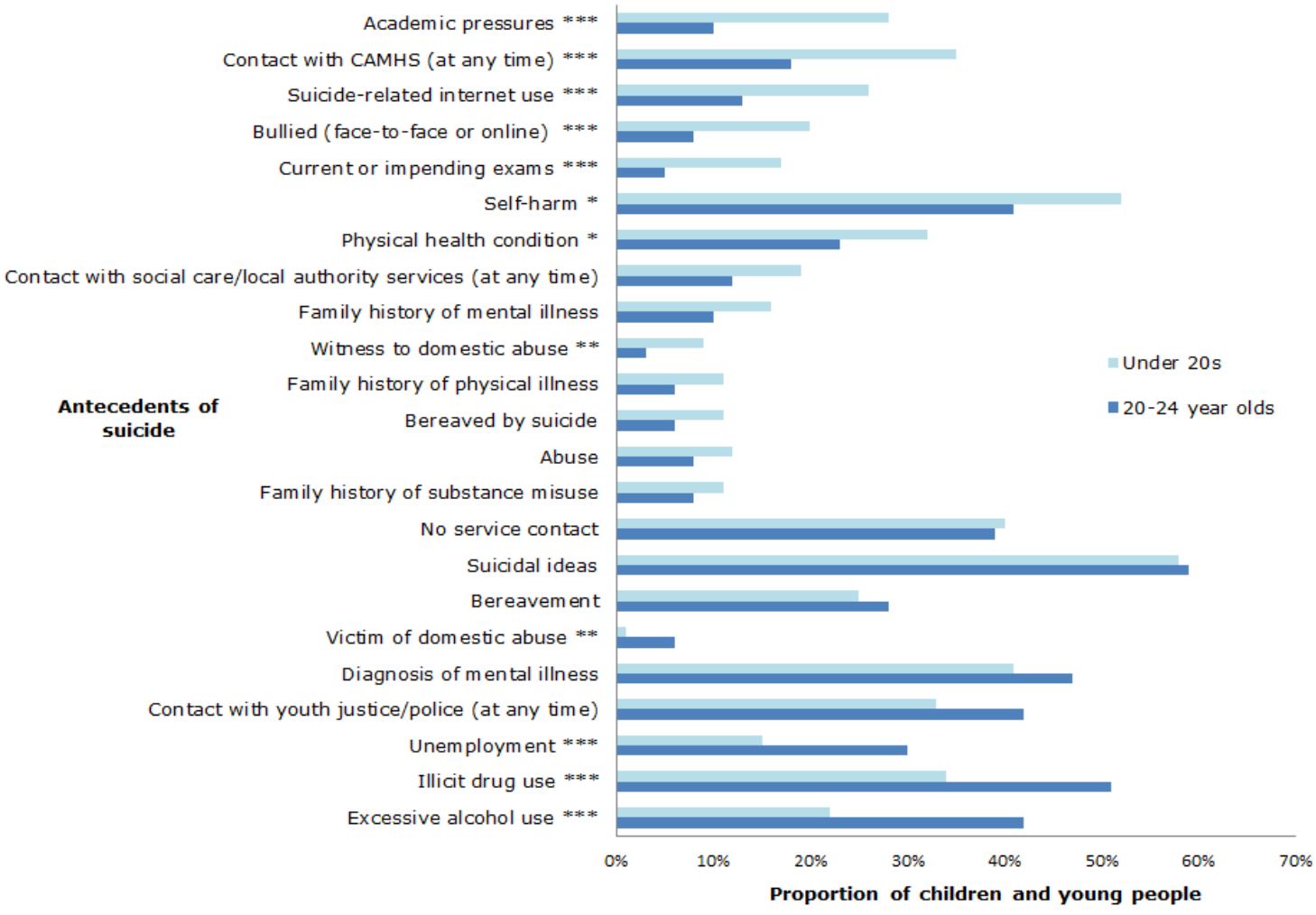
Under 20s compared to 20—24 year olds

Figure 10 and Table 11 show a changing pattern of antecedents between the under 20s and those aged 20-24, although most factors spanned the overall age range. Many antecedents reflected the life experiences of young people at different ages.

Under 20s were more likely to be in education at the time of death with exams and academic pressures more common in this age group. They more commonly had a history of being bullied, while unemployment and housing, financial and workplace problems were more common in the 20-24 year olds.

The younger age group had more often witnessed parental domestic violence whilst the older age group had more often been victims. Suicide-related internet use was a common feature of the under 20s. Excessive alcohol use and illicit drug use were more common in 20-24 year olds.

Figure 10: Antecedents of suicide in under 20s compared to 20-24 year olds



*Note: p<0.01 marked by ***; p<0.05 marked by **; p<0.1 marked by *, see footnote to Figure 7 for explanation of statistical significance.

Figure 10 shows the largest proportionate difference between under 20s and 20-24 year olds at the top and the largest proportionate differences between 20-24 year olds and under 20s at the bottom, with the smallest proportionate differences between the two age groups in the centre.

WHAT THE FINDINGS TELL US ABOUT PREVENTION

We have confirmed the main findings of the first phase of the study which focused on people under 20[5]. We presented these findings as 10 themes that were common to many suicides and that should be the target for prevention. The 10 themes are shown in Figure 11.

Figure 11: Ten common themes in suicide by children and young people

* family factors such as mental illness
* abuse and neglect
* bereavement and experience of suicide
* bullying
* suicide-related internet use
* academic pressures, especially related to exams
* social isolation or withdrawal
* physical health conditions that may have social impact
* alcohol and illicit drugs
* mental ill health, self-harm and suicidal ideas

Many of the stresses that contribute to suicide risk are common in young people, most of whom overcome them without too much difficulty. For a minority, however, the stresses are serious and the risks are real. For this reason, distress in young people should not be dismissed as transient or trivial.

The circumstances that lead to suicide in young people often appear to follow a pattern of cumulative risk, with traumatic experiences in early life, a build up of adversity and high risk behaviours in adolescence and early adulthood, and a "final straw" event (see Figure 12). This event may not seem severe to others, making it hard for professionals and families to recognise suicide risk unless the combination of past and present problems is taken into account. Each component of the model is open to prevention in different ways, for example:

(1) supporting vulnerable young children and their families

(2) promoting mental health in schools to address bullying and online safety

(3) services for self-harm and alcohol and drug misuse in young people

(4) healthy workplace and campus initiatives

(5) crisis services.

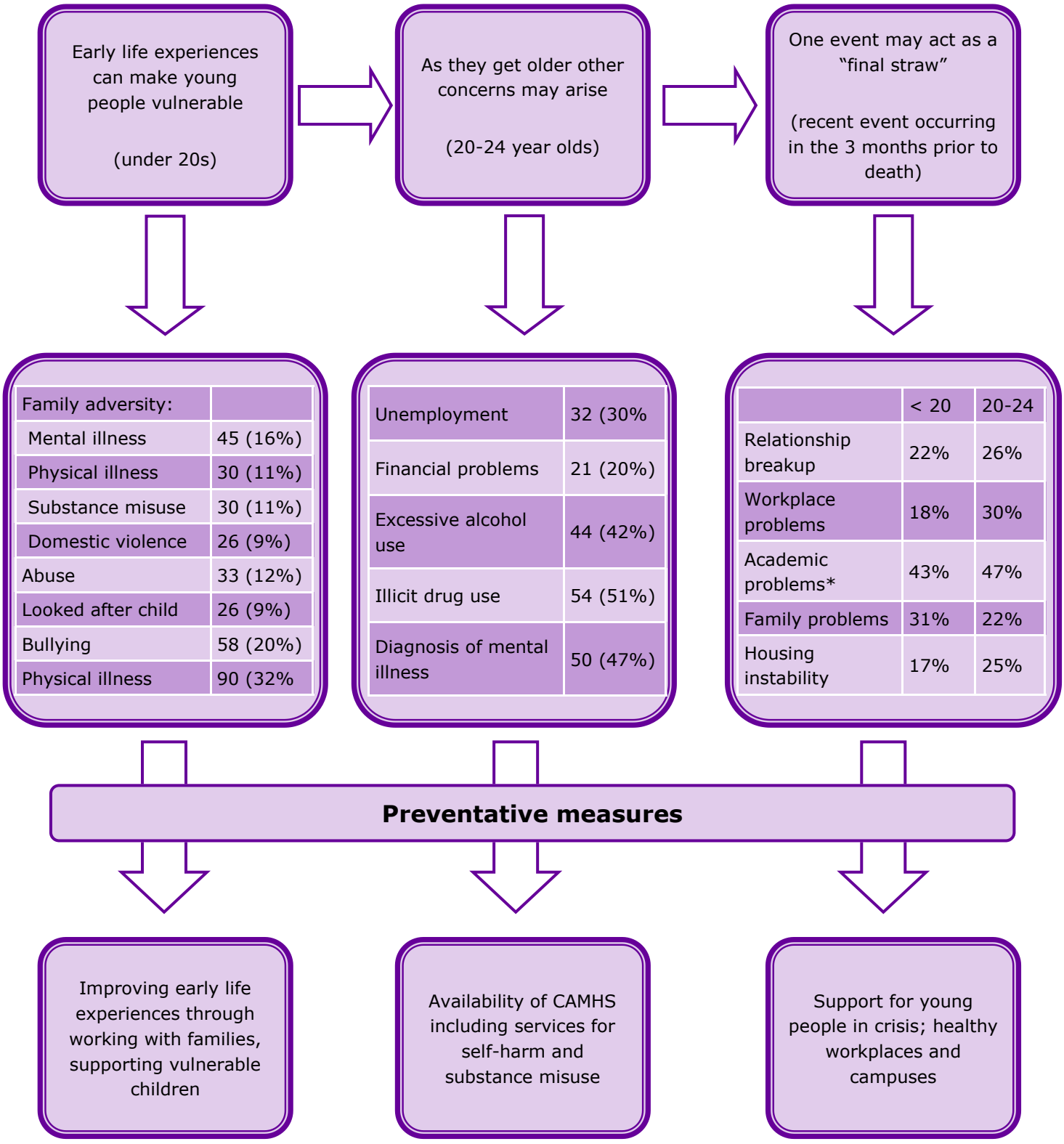
The antecedents of suicide at different ages reflect the changing circumstances of young people's lives but this change is gradual without any clear dividing line at any age. Many services, including mental health, expect young people to move to adult services at 18. The development of youth services with a later and more flexible transition point into adult services, would better reflect the pattern of needs and risk that we have identified.

WHAT THIS STUDY TELLS US

- The study tells us about the stresses that young people may be facing when they take their own lives.
- The findings are based on what was seen as relevant by the people taking part in an official investigation, including the families of the person who died.
- The antecedents of suicide in people under 20 identified in our first report are confirmed in this larger study.
- The study shows us to what extent the antecedents of suicide are similar in young people of different ages.
- The study tells us how often children and young people who died were in contact with services that could have helped them and whether risk was recognised.
- The findings allow us to make recommendations to a range of agencies that work with young people, especially in health, social care and education.

WHAT THE FINDINGS TELL US ABOUT PREVENTION

Figure 12: A model of cumulative risk



*Note: this is of the 145 under 20s, and 15 20-24 year olds who were reported to be in education at the time of death

WHAT THE FINDINGS TELL US ABOUT PREVENTION

We have examined a number of groups of young people who have specific risks. In this report we have highlighted:

- young people who are bereaved, especially by suicide, who need bereavement support services to be widely available;
- students in universities and colleges who would benefit from a greater focus on prevention, e.g. staff vigilance for warning signs, as well as access to counselling and primary care;
- looked after children, especially aged under 20, who need stable accommodation on leaving care, and access to mental health care;
- LGBT groups, especially aged under 20, who may have fears over disclosure of their gender identity and may face bullying.

The forthcoming Green Paper on children's mental health is an opportunity to improve prevention and support for these groups.

Internet safety is an important component of suicide prevention in young people, particularly in the under 20s. Further efforts are needed to remove online information about suicide methods and the detail of how they can be used, to increase online vigilance for people who are distressed or being bullied and to teach safe internet use in schools—as recommended for inclusion in personal, social, health and economic (PSHE) education by the Parliamentary Health Committee[17].

The wide range of antecedents that we have found highlights the shared role in suicide prevention among front-line services and agencies, including mental health, social care, youth justice, and education. However, our findings show that a majority of young people who die have not had recent contact with front-line services; when they have, suicide risk has not usually been recognised. Staff in these services need the skills to assess suicide risk as well as the multi-agency collaboration that we have found in too few cases.

Although there are many antecedents of suicide in young people, self-harm is a crucial indicator of risk and should always be taken seriously, even when the physical harm is minor. The development of self-harm services for young people, including young adolescents, in every area of the country is therefore the most important service development for suicide prevention in young people. Services that respond to self-harm should offer psychosocial assessment, prompt access to psychological therapies and services for co-occurring problems such as alcohol or drug misuse, which are linked to risk of subsequent suicide.

WHAT THIS STUDY CAN'T TELL US

- The study can't tell us the exact number of suicides by young people because coroners apply a high standard of evidence for a suicide conclusion and some suicide deaths will have received a different verdict such as accident.
- The design of the study has not allowed us to compare young people who died with others who did not die. We therefore cannot be certain of risk factors and we cannot establish cause and effect.
- The findings are for England and Wales combined because the number of cases from Wales alone is comparatively small. There are no figures specifically for either country in the report.
- These findings are for England and Wales, and may not apply to Northern Ireland and Scotland.
- The study may have under-estimated the true figure for some antecedents, especially in sensitive areas such as abuse or sexuality.
- However, families and investigations may "search for meaning" after a suicide, highlighting factors they see as most relevant. Therefore, figures for some antecedents may have been over-estimated.
- The antecedents are likely to have been relevant to suicide but several are common in young people and cannot be used to predict suicide risk.

APPENDIX

TABLE 11: ANTECEDENTS OF SUICIDE IN UNDER 20S AND 20-24 YEAR OLDS

	Under 20 (n=285)	20-24 (n=106)
Family environment		
Family (parent, carer, sibling) history of:		
Mental illness	45 (16%)	11 (10%)
Physical illness	30 (11%)	6 (6%)
Substance misuse	30 (11%)	8 (8%)
Witness to domestic violence	26 (9%)	3 (3%)
Abuse		
Abuse (emotional, physical, or sexual)	33 (12%)	8 (8%)
Experience of loss		
Bereaved	70 (25%)	30 (28%)
Bereaved by suicide	31 (11%)	6 (6%)
Bullying		
Bullying (any)	58 (20%)	9 (8%)
Social isolation		
Social isolation (i.e. few or no friends)	42 (15%)	12 (11%)
Suicide-related internet use		
Suicide-related internet use overall	74 (26%)	14 (13%)
Search for information on suicide methods	37 (13%)	8 (8%)
Communicated suicidal ideas online	29 (10%)	6 (6%)
Academic pressures*		
Academic pressures overall	63 (43%)	7 (47%)
Current exams, impending exams or exam results at time of death	46 (32%)	3 (20%)
Medical history		
Physical health condition	90 (32%)	24 (23%)
Excessive alcohol use	64 (22%)	44 (42%)
Illicit drug use	98 (34%)	54 (51%)
Self-harm and suicidal ideas		
Previous self-harm	147 (52%)	43 (41%)
Suicidal ideas (at any time)	163 (57%)	58 (55%)
Economic adversity		
Unemployment	44 (15%)	32 (30%)
Workplace problems	50 (18%)	32 (30%)
Financial problems	38 (13%)	21 (20%)
Housing instability	49 (17%)	27 (25%)

*Note: this is of the 145 under 20s and 15 20-24 years olds who were reported to be in education at the time of death

APPENDIX

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APPENDIX

ANALYSIS

As shown in figure 1, information was taken from the data sources (see pages 5 to 7) via a data extraction proforma on to a standardised database for aggregate analysis. Information was collected about demographic factors (sexual orientation, relationship status, living circumstances), education (academic pressures, exam stress), medical history (physical health conditions), psychiatric history (mental disorders, medication), social media and internet use, service contact (with GP, A&E department, mental health services, social care or local authority services, child protection services, youth justice), bullying, abuse, bereavement, and disturbance to the family environment (mental illness, physical ill health, or substance misuse in a parent or carer, domestic violence). Definitions are shown on pages 25 and 26. Findings from England and Wales are presented as aggregate figures.

Antecedents were recorded on the data extraction proforma when they were referred to in any of the data sources as having been present in the young person's life at some time and specifically in the 3 months prior to their death. Reference to an antecedent in an official investigation suggests that it was relevant to the death but not causal.

A random sample of 20% (n=124) of deaths of people aged 20-24 was selected from all suicides in this age group in the two year period—a total of 606 deaths. A 20% sample was chosen to allow a sufficient number of cases to be examined, whilst ensuring there was research capacity to extract and analyse the information. Sampling was based on the proportion of cases from each age group in the total 606 deaths in order to ensure cases were included from each age (20-24). For the two year study period overall data completeness was 89%, i.e. information was received from one or more data sources for 391 of the 440 young people in our sample. We have therefore uplifted the numbers provided in the summary (page 3) based on a complete sample.

The denominator in all estimates was the total number of cases on which at least one report was obtained in each age group (i.e. 285 in the under 20s and 106 in 20-24 year olds), unless otherwise specified. If an item was not recorded in any data source then it was assumed to be absent or not relevant to the case. Pearson's chi square tests or Fisher's exact test (when any subgroup had an expected frequency of less than 5) were used to examine associations between males and females, and between age groups (under 20s and 20-24 year olds). A two-sided p value of less than 0.05 was considered statistically significant. However, with this sample size, there were also several differences that were considered of borderline statistical significance ($p<0.1$).

A Poisson regression model was used to compare the suicide rate by month of the year using the incidence rate ratio (IRR). June was used as the baseline month as it had the lowest incidence of suicide. An IRR greater than 1.0 suggests an increased risk of suicide and 95% confidence intervals were calculated for the precision of the IRRs.

ETHICAL APPROVAL

Approvals were sought and received from the University of Manchester Research Governance and Ethics (12/02/2015); National Research Ethics Service (NRES) Committee North West (13/04/2015); Health Research Authority Confidential Advisory Group (HRA-CAG) (06/05/2015); Public Benefit and Privacy Panel for Health and Social Care (PBPP) (07/10/2016); and Research Management and Governance approvals from individual NHS Trusts and Health Boards.

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APPENDIX

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Helen Sumner	Association of Directors of Adult Social Services (ADASS)
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APPENDIX

DEFINITIONS

Variable	Definition
Family problems	Recent arguments, reported difficult relationships with family members, and problems affecting the stability of the family environment such as domestic violence, or mental and/or physical illness and substance misuse in a parent, carer, or sibling.
Relationship problems	Recent arguments with a current or ex-partner, being in an on/off relationship, or reported difficulties within the relationship. Relationship breakup was recorded as a separate antecedent.
Had children of their own	Primary carer for their own child or the natural parent of a child they did not have parental responsibility for.
A history of abuse	Physical, sexual and/or emotional abuse.
Looked after children	Children in the care of/being looked after by a local authority.
Social isolation	No or few friends.
Recent social withdrawal	Recently (within 3 months prior to death) demonstrated behaviour such as isolating themselves in their bedroom.
Suicide-related internet use	Suicide-related internet use was recorded as an antecedent if at least one of the following was reported: searching the internet for information on suicide method; visiting website(s) that may have encouraged suicide; communicating suicidal ideas online; or being a victim of online bullying.
Academic pressures	Difficulties with school work, (perceived) failure to meet own, teacher or parental expectations, current exams, impending exams or exam results, other non-exam academic related stresses (i.e. struggling with assignments, unhappy with course), and any other student-related problem.
Physical health conditions	Recorded from medical evidence heard during the coroner's inquest or from other sources of data available, e.g. a child death investigation.
Excessive alcohol use	Alcohol use was recorded as an antecedent in the official reports we used in different ways, e.g. at a level of misuse, persistent heavy drinking, or binge drinking, but with a common theme of excessive use.
Workplace and financial problems, and housing instability	Workplace and financial problems, and housing instability (accommodation problems and/or recent changes to accommodation) were recorded if they had occurred in the 3 months prior to death.

APPENDIX

DEFINITIONS (CONTINUED)

Variable	Definition
Serious recent episode of self-harm	The last episode of self-harm prior to death required medical treatment by either a GP or in hospital. Recorded from medical evidence heard during the coroner's inquest, an NHS Serious Incident report or NCISH data.
Presence of a mental disorder and medication	Recorded from medical evidence heard during the coroner's inquest (i.e. from a GP or consultant psychiatrist), an NHS Serious Incident report, or NCISH data.
Contact with mental health services (previous or current)	Contact with child and adolescent and/or mental health services, including drug and alcohol services.
Contact with social care or local authority services (previous or current)	Contact with child protection services, secure local authority care, or social services or being a previous or current looked after child.
Youth justice or police contact (previous or current)	Contact with a Youth Offending team, with the police either as an offender or a victim of crime, or with the probation service.
Mental health patients	Contact with psychiatric, drug and alcohol, child and adolescent or learning disability services (if they are within mental health services) within 12 months of their death, with their care usually under a consultant psychiatrist.
Multiple contact with services	Contact with each of the following services: child and adolescent or adult mental health services, and social care or local authority services, and youth justice or the police.
'Out of the blue' cases	No contact with any services or agencies, no history of self-harm, no indication of suicidal thoughts or intent, and never seen by a GP or at A&E for mental health problems or for self-harm.