

Article

# Estimating suicide among higher education students, England and Wales: Experimental Statistics

Estimates of suicides among higher education students by sex, age and ethnicity. Analysis based on mortality records linked to Higher Education Statistics Agency (HESA) Student records.

Contact: Sarah Caul mortality@ons.gov.uk +44 (0)1633 456490 Release date: 25 June 2018

Next release: To be announced

# **Table of contents**

- 1. Main points
- 2. Statisticians comment
- 3. Things you need to know about this release
- 4. Analysis on higher education student suicides in England and Wales
- 5. Registration delays
- 6. Next steps
- 7. Acknowledgement
- 8. Annex: Linkage method

# 1. Main points

- The rate of suicide in the 12 months ending July 2017 for higher education students in England and Wales was 4.7 deaths per 100,000 students, which equates to 95 suicides; this is higher than in most of the earlier years studied, although the small numbers per year make it difficult to identify statistically significant differences.
- Between the 12 months ending July 2013 and the 12 months ending July 2016, higher education students in England and Wales had a significantly lower suicide rate compared with the general population of similar ages.
- Male higher education students had a significantly higher rate of suicide compared with female students.
- The number of suicides in the analysis is lower than previous Office for National Statistics (ONS) estimates of student suicides; this is likely to be because this analysis focuses on higher education students only, while the ONS previous estimates will cover other students, for example, those in further education.

### 2. Statisticians comment

Sarah Caul, Senior Research Officer for the ONS, said:

"To help provide insight into the issue of student suicides we have produced new analysis examining suicide trends among higher education students.

"The rate of suicide in 2016 to 2017 in higher education students was 4.7 deaths per 100,000 students. Although higher than in earlier years, the comparatively low numbers of suicides per year make it challenging to identify significant differences.

"Meanwhile, the rate for suicide in female students is significantly lower than the rate in males. This is also observed when looking at overall student suicides as well as the differences in studying patterns.

"Today's (25 June 2018) analysis will help to develop policies and initiatives for those at greatest risk of suicide."

# 3. Things you need to know about this release

#### Information for the media

If you are a journalist covering a suicide-related issue, please consider following the <u>Samaritans' media</u> <u>guidelines on the reporting of suicide (PDF, 1.7MB)</u>, due to the potentially damaging consequences of irresponsible reporting. In particular, the guidelines advise including links to sources of support for anyone affected by the themes in the article.

## Where to go for help

If you are struggling to cope, please call Samaritans on 116 123 (UK and Ireland), email <u>jo@samaritans.org</u>, or visit the <u>Samaritans website</u> to find details of the nearest branch. Samaritans is available round the clock, every single day of the year, providing a safe place for anyone struggling to cope, whoever they are, however they feel, whatever life has done to them.

Resources are also available online: <u>U can Cope</u> includes a film and resources that are designed for people in distress and those trying to support them, to instil hope, promote appropriate self-help and inform people regarding useful strategies and how they can access help and support; <u>Staying safe if you're not sure life's worth living</u> includes practical, compassionate advice and many useful links for people in distress.

#### Suicide definition

The National Statistics definition of suicide includes all deaths from intentional self-harm for persons aged 10 years and over, and deaths where the intent was undetermined for those aged 15 years and over. This definition was revised in January 2016 and further information on the impact can be found in the 2014 suicide registrations bulletin.

#### Student suicide definition

For the purposes of this analysis, a student is defined as a person registered at a higher education (HE) provider in the UK (which reports to the Higher Education Statistics Agency (HESA)) and who follows a course that leads to the award of a qualification or HE provider credit. Student suicide is defined as those who died by suicide or an event of undetermined intent before or on the end date of their studies and where the death was registered in England and Wales (Office for National Statistics (ONS) did not have access to deaths registered in Scotland or Northern Ireland for this study). For those cases without a study end date, the end date of the HESA year was used as an estimate (31 July).

#### What is HESA?

The Higher Education Statistics Agency (HESA) collects, processes, and publishes data about HE in the UK.

### What higher education providers are covered by HESA data?

HESA only collect information for UK publicly-funded higher education institutions plus one alternative provider, the University of Buckingham. In addition, for the 12 months ending July 2017, data are included for students enrolled on HE-level courses at further education (FE) colleges in Wales (of which there are 1,400 students registered at three FE colleges). All providers are fully subscribed members of HESA who supply the complete Student record. The data excludes HE provision at FE colleges in England, Scotland and Northern Ireland, and also excludes other alternative providers in the sector.

### Record specific detail

The Student record includes all students registered at HE providers who follow courses that lead to the award of a HE qualification or provider credit (largely a bachelor's degree (BA/BSc/MB/BDS and so on), a master's degree (MA, MSc) or higher degree (PhD). The Student record includes those who are (or were) actively following a course at some time during the HESA reporting period.

### **Data collection periods**

All HESA records are collected on the basis of the HESA reporting period. The reporting period is from 1 August to 31 July, for example, the 12 months ending July 2001 Student record was collected in respect of the activity that took place between 1 August 2000 and 31 July 2001.

More information on HESA can be found on their website.

### Interpreting the data

A note of caution in interpreting the data.

The term "student" can often be interpreted to mean anyone engaged in study, from those in school, for example, studying for GCSEs, to those engaged in apprenticeships, further education or other forms of study. In this analysis, the term student does not include:

- those registered as studying wholly overseas and postdoctoral students
- those students registered with an institution covered by the Education and Skills Funding Agency (ESFA), including:
- apprentices that are not linked to a HE provider
- those in further education colleges (except those studying a HE qualification in FE colleges in Wales in the 12 months ending July 2017)
- those in workplace learning, community learning, and education and training provision taken at general further education colleges, sixth form colleges, special colleges (agricultural and horticultural colleges, and art and design colleges) and specialist colleges
- students studying for a non-HE qualification (for example, GCSE or FE qualification)

Caution should therefore be exercised when comparing rates of student suicide contained within this report, which relate only to those in HE (as defined previously) and as such represent a proportion of all students; while other studies may define "student" more broadly. See the How does the analysis relate to previous estimates section for further information.

### Ages included

ONS performed the linkage for all suicides in those aged 17 years and over. As there were no deaths by suicide for those aged 17 years, the dataset represents those aged 18 years and over. Comparisons with suicide rates in the general population have been made based on those aged 18 years and over.

# 4 . Analysis on higher education student suicides in England and Wales

The following analysis has been produced from a dataset linking information from individual Higher Education Statistics Agency (HESA) student records to information from the death certificate. This produced a dataset of higher education (HE) student suicides at the person level, which has been aggregated into different characteristics in the following analysis. This analysis is preliminary and experimental. More information on how the estimates compare with previous Office for National Statistics (ONS) estimates on student suicides can be found in the How does the analysis compare to previous estimates section. Information on how the linkage was produced can be found in the Linkage method section.

Due to limits of the readily-available student population denominators and small numbers in some categories, the breakdowns of student suicide by sex, age and ethnicity are only available from the 12 months ending July 2013.

### How many higher education students have died by suicide?

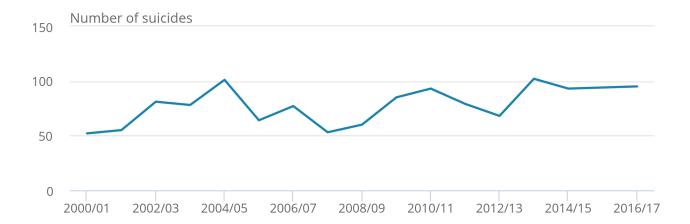
Figure 1 shows the number of HE student suicides between the 12 months ending July 2001 and the 12 months ending July 2017.

Figure 1: Number of higher education student suicides by year, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017 1,2,3,4

# Figure 1: Number of higher education student suicides by year, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017^1,2,3,4^



#### **Source: Office for National Statistics**

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. Figures are based on the last HESA year the deceased was registered in. HESA year is the period of 1 August to 31 July.

The number of suicides in HE students was at its lowest in the 12 months ending July 2001, when the series began. It is important to note that Figure 1 is based on low numbers, which leads to volatility in the time series. The number of suicides in the most recent period (the 12 months ending July 2017) is 95, although this may increase as more deaths are registered, see the section on Registration delays for more information.

We identified 1,330 students who died by suicide between the 12 months ending July 2001 and the 12 months ending July 2017 through linkage with the HESA data. Of these, 878 (66%) were males and 452 (34%) were females. Over the period, the median age at death has been 26 years, with some variation over time. Undergraduates accounted for 83% of the HE student suicides (1,109 deaths) and postgraduates accounted for 17% (221 deaths).

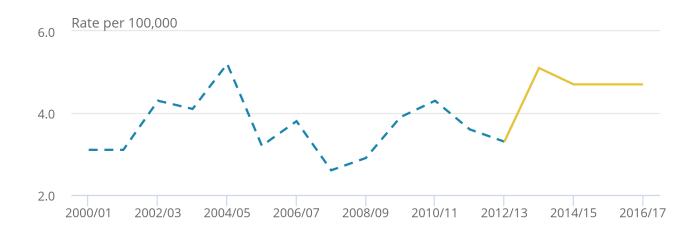
Figure 2 shows the rates of student suicide between the 12 months ending July 2001 to the 12 months ending July 2017.

Figure 2: Rate per 100,000 of higher education student suicides by year, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017 1,2,3,4,5

# Figure 2: Rate per 100,000 of higher education student suicides by year, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017^1,2,3,4,5^



- Rate calculated using adjusted population
- Rate calculated using England and Wales population

#### **Source: Office for National Statistics**

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 and over.
- 4. Figures are based on the last HESA year the deceased was registered in. HESA year is the period of 1 August to 31 July.
- 5. Crude rates per 100,000 students registered with HESA. UK populations prior to the 12 months ending July 2013 have been used and adjusted to create an England and Wales population. More information can be found in the "Creating rates for student suicides" section.

Looking at the rates of student suicide, which can be seen in Figure 2, the highest point of the series was in the 12 months ending July 2005 with a rate of 5.2 deaths per 100,000 students. This fell to 3.2 deaths per 100,000 students in the 12 months ending July 2006. The lowest rate of the series was 2.6 deaths per 100,000 students in the 12 months ending July 2008.

The rate has remained stable at 4.7 deaths per 100,000 students since the 12 months ending July 2015. This is higher than in most of the earlier years studied, although the small numbers per year make it difficult to identify statistically significant differences. More information on the adjusted population can be found in the Creating rates for student suicide section.

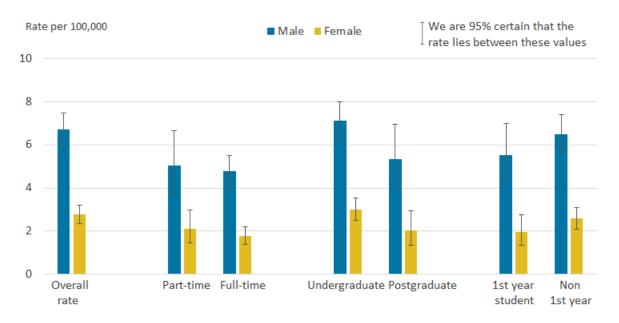
# How does the rate of higher education student suicide differ between sexes and by the type of study?

Due to availability of populations, the following section is based on the period 12 months ending July 2013 to 12 months ending July 2017. Annual numbers of linked deaths are small so we have aggregated these years to create a five-year combined rate to enhance robustness of the estimates.

Students who are classified as dormant (taking time away from their studies), sandwich students or those writingup are included in the number of suicides used to calculate the overall rate, as well as the level (undergraduate versus postgraduate) and year of study but they are not included in the part-time and full-time calculations.

Figure 3: Rate per 100,000 higher education student suicides by sex (part time/ full time; undergrad/post grad status and year of study), deaths registered in England and Wales,

between the 12 months ending July 2013 and the 12 months ending July 2017 combined <sup>1,2,3,4,5,6,7</sup>



Source: Office for National Statistics

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. Information on degree type, part/full-time and year of study are based on information provided in the student record.
- 5. Crude rates per 100,000 students registered with HESA.
- 6. Overall rate includes those who are classified dormant, sandwich students and writing up. These are not included in part-time/full-time.
- 7. Rates for first year are undergraduate first years. Non-first year are for undergraduates in other years and all postgraduate students.

As can be seen across Figure 3, the rate for suicide in female students is significantly lower than the rate in males. This is observed when looking at overall student suicides as well as looking at the difference in studying part- or full-time, an undergraduate or postgraduate degree and the undergraduate year of study.

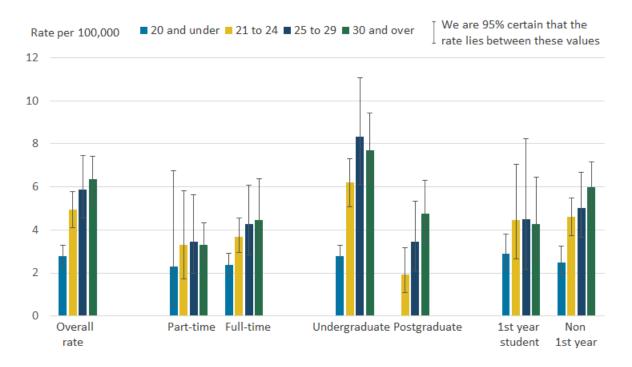
The rate for males was 6.7 deaths per 100,000 students. Looking between categories, for example, between those studying full-time and part-time, there were no significant differences for males. The highest rate was seen in those studying an undergraduate degree, with 7.1 deaths per 100,000 students.

For females, the rate of suicide was 2.8 deaths per 100,000 students, less than half that of males. Similar to males, there were no significant differences between categories.

# How does the rate of suicides differ between age groups and by the type of study?

Figure 4: Rate per 100,000 higher education student suicides by age group (part time/ full time; undergrad /post grad status and year of study), deaths registered in England and Wales,

between the 12 months ending July 2013 and the 12 months ending July 2017 combined 1,2,3,4,5,6,7,8



Source: Office for National Statistics

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. Information on degree type, part/full-time and year of study are based on information provided in the student record.
- 5. Crude rates per 100,000 students registered with HESA.
- 6. Overall rate includes those who are classified dormant, sandwich students and writing up. These are not included in part-time/full-time.
- 7. Rates for first year are undergraduate first years. Non-first year are for undergraduates in other years and all postgraduate students.
- 8. The rate for those aged 20 years and under studying a postgraduate degree could not be calculated as there were no deaths.

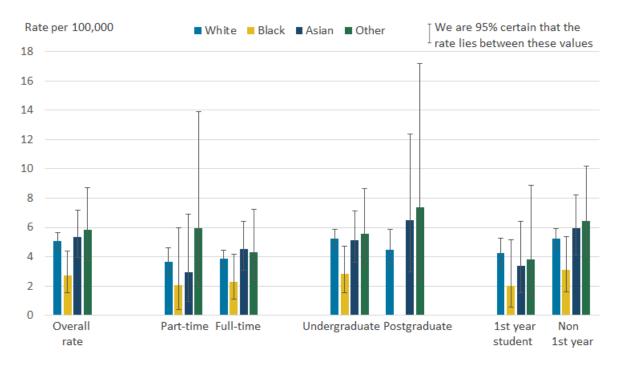
Figure 4 shows that overall, those aged 20 years and under had a significantly lower suicide rate than the other age groups. In keeping with patterns seen in the general population, the rate of suicide increased as age increased. Those aged 20 years and under had a rate of 2.8 per 100,000 students, followed by 5.0 in those aged 21 to 24 years, 5.9 in those aged 25 to 29 years and those aged 30 years and over had the highest rate of suicide with 6.4 deaths per 100,000 students.

When comparing between categories within age groups there are some significant differences. For those aged 21 to 24 years and 25 to 29 years the rate of death by suicide in those studying an undergraduate degree was significantly higher than that of postgraduates. In those not in their first year of study, students aged under 20 years had a significantly lower rate than the other age groups. The rate for those aged 20 years and under studying a postgraduate degree could not be calculated as there were no deaths; the population of students aged under 20 years studying a postgraduate degree was low at 11,465 for the period 12 months ending July 2013 to 12 months ending July 2017.

# How does the rate of higher education student suicides differ between ethnicities?

Figure 5: Rate of student suicides by ethnicity, deaths registered in England and Wales,

between the 12 months ending July 2013 and the 12 months ending July 2017 combined 1,2,3,4,5,6,7,8



Source: Office for National Statistics

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. Information on degree type, part/full-time and year of study are based on information provided in the student record.
- 5. Crude rates per 100,000 students registered with HESA.
- 6. Other (including mixed) includes mixed White and Black Caribbean, mixed White and Black African, mixed White and Asian, other mixed background, Arab, plus other ethnic background.
- 7. Rates for first year are undergraduate first years. Non-first year are for undergraduates in other years and all postgraduate students.
- 8. The number of suicides in individuals of Black ethnicity studying postgraduate degrees was too small to create a rate.

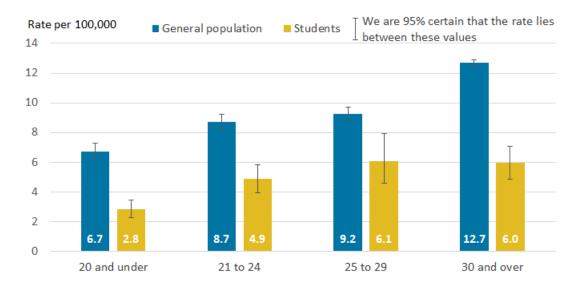
Figure 5 shows the difference in suicide rates between ethnicities for the period 12 months ending July 2013 to 12 months ending July 2017. The number of suicides was small in the groups "Black", "Asian" and "Other", with 16, 46 and 24 suicides respectively. When broken down by category the number of suicides is smaller again, as reflected in the wide confidence intervals surrounding the rate of death. For this reason caution should be used in the interpretation of these figures. The number of suicides in individuals of Black ethnicity studying postgraduate degrees was too small to create a rate. Number of deaths and populations in ethnic minorities are too small to detect any significant differences.

Overall, there was a significant difference in suicide rates between students recorded as White and students recorded as Black. Those of White ethnicity had a rate of 5.1 deaths per 100,000 compared with 2.7 deaths per 100,000 for those of Black ethnicity. The rate for Asian ethnicity was 5.4 deaths per 100,000 and the rate in those classified as Other was 5.9 deaths per 100,000.

# How does the rate of higher education student suicides compare with the rate of suicide in the general population?

Figure 6a: Rate of suicide by age group in the general population (including higher education students) and in higher education students, deaths registered in England and Wales,





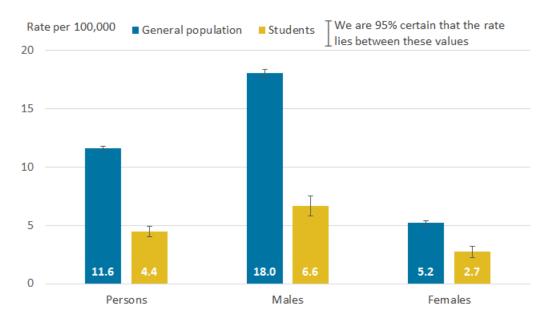
**Source: Office for National Statistics** 

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. For the general population, 30 years and over consists of those aged 30 to 64 years.
- 5. Crude rates per 100,000 students registered with HESA/General population.

Figure 6b: Rate of suicide by sex in general population (including higher education students) and in higher education students, deaths registered in England and Wales,

between the 12 months ending July 2013 and the 12 months ending July 2017 combined 1,2,3,4,5



Source: Office for National Statistics

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. For the general population, 30 years and over consists of those aged 30 to 64 years.
- 5. Crude rates per 100,000 students registered with HESA/General population.

Figure 6a shows the rate of suicide in HE students and suicides in the general population (which includes HE students) by age group. For the 12 months ending July 2013 to the 12 months ending July 2016, HE students made up approximately 37% of the population for those aged 20 years and under, 17% in those aged 21 to 24 years, 6% in those aged 25 to 29 years and 2% in those aged 30 years and over. For each age group, the suicide rate is significantly higher in the general population.

The rate in those aged 20 years and under shows the biggest difference, with the rate in the general population being 2.4 times higher than that in students. The smallest difference is in those aged 25 to 29 years, with the rate in the general population being 1.5 times higher than that in students.

Figure 6b shows the rate of suicide in the general population (which includes HE students) compared with HE students. The overall rate in students for the period 12 months ending July 2013 to 12 months ending July 2016 is 4.4 deaths per 100,000 students compared with 11.6 deaths per 100,000 general population.

Looking at sex, the rate in males shows the greatest difference, with a rate of 6.6 in the student population compared with 18.0 in the general population. In females, the rate in students (2.7 per 100,000 students) was almost half that of the general population (5.2 per 100,000 general population).

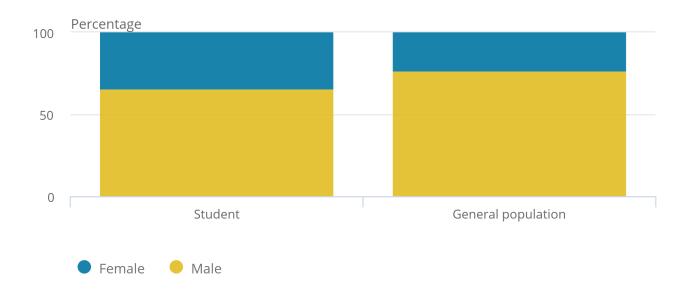
As in the general population, males account for the majority of HE student suicides. Looking over the registration period 2001 to 2017, HE students had a lower proportion of male suicides compared with the general population (which includes students) (Figure 7).

Figure 7: Proportion of suicides in general population (including students) and in HE students by sex, deaths registered in England and Wales,

2001 to 2017 registrations 1,2,3,4

Figure 7: Proportion of suicides in general population (including students) and in HE students by sex, deaths registered in England and Wales,

2001 to 2017 registrations 1, 2, 3, 4



#### **Source: Office for National Statistics**

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. The general population consists of those aged 18 to 64 years.

### How does the analysis compare with previous estimates?

ONS has previously produced estimates on the <u>number of student suicides in England and Wales</u> based on the occupation recorded on the death certificate by the informant. However, these statistics are limited as they do not distinguish the type of student, for example, those at university against those in further education (FE) (for example, colleges and sixth form schools).

Secondly, the estimates rely on the information provided by the informant on the death certificate, which may be unreliable, for example, it would likely under-report part-time students if they had another occupation, or over-report if the estimates include past students that are yet to enter the work force.

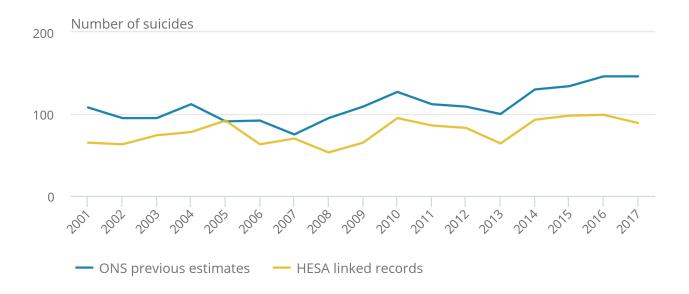
Furthermore, not all death records include occupation. ONS produced a report on <u>suicide by occupation</u>, which stated that between 2011 and 2015 there were 13,232 suicide records that had information on the deceased's occupation; of the remaining 5,766 records, the majority (4,323) contained no information on the deceased's occupation due to this not being provided at the time of death registration.

Figure 8: Number of student suicides, deaths registered in England and Wales,

deaths registered 2001 to 2017 1,2,3,4

Figure 8: Number of student suicides, deaths registered in England and Wales,

deaths registered 2001 to 2017^1,2,3,4^



#### Source: Office for National Statistics

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for 2017 are provisional.
- 3. Figures are for persons aged 18 years and over.
- 4. Based on death registrations rather than death occurrences.

Figure 8 shows the number of suicides that had a student code taken from the death certificate (ONS previous estimates) and the number of suicides that linked to a HE record (HESA-linked records as used in this analysis). We would expect the number of suicides to be higher in the previous ONS estimate as this encompassed all students, whereas the HESA-linked analysis is restricted to students studying in HE and for a HE qualification.

On average, the number of suicides identified from HESA-linked records is 28% lower than the previous ONS estimates.

It is important to note that the analysis in the report is based on HE students, which is a subset of all students. The ONS previous estimate focuses on students whose death was registered in England and Wales, but does not distinguish the type of student (for example, higher or further education) whereas the death records linked to HESA records only focuses on HE students whose death was registered in England and Wales. Table 1 provides some estimate as to the size of those populations based on latest annual counts reported.

HE students in England and Wales made up 87% of those studying in HE across the UK and 40% of those studying in FE or HE across the UK (see Table 1).

Table 1: Reported number of students in Further and Higher Education, 12 months ending July 2017

Type of study	Reported number of students
Higher Education in England and Wales	2,021,375
Higher Education in Scotland	241,935
Higher Education in Northern Ireland	54,570
Further Education in England	2,236,800
Further Education in Wales	172,470
Further Education in Scotland	235,737
Further Education in Northern Ireland	80,401
Students based in the UK but studying abroad <sup>1</sup>	No data available

#### Notes:

1. Data are only available from the country the student is studying in.

Table 2 shows that less than half (658 or 49%) of HESA records that linked to a suicide record had the occupation coded as a student; the occupations coded for the other 672 deaths are listed in Table 3.

There were 812 records that had an occupation coded as "student" on the death certificate that did not appear in the HESA linkage. This could be due to the fact they were studying in FE; such deaths would have been included in previous ONS analyses of student suicide. They are included as part of Figure 8.

Of the 812 records that did not link to a HE Student record, 74% (603) were male and 26% (209) were female. The median age was 21 years old at death, most of the deaths were in the age group 20 years and under (49%). Those aged 21 to 24 years counted for 21% of the records that did not match, 25 to 29 years counted for 15% and those aged 30 years and over accounted for 16%.

Table 2: Number of student suicides compared with Office for National Statistics, deaths registered in England and Wales, 2001 to 2017

	Number of records
HESA record linked to a suicide record with a student occupation code	658
HESA record linked to a suicide record without a student occupation code	672
Total linked records	1330
Former student HESA record linked to a suicide record with a student occupation code <sup>1</sup>	406
Suicide record with a student occupation code that did not link to a HESA record	812

Source: Office for National Statistics

Notes:

1. Former refers to records where the date of death is after the student's end date.

There were 406 records that linked a HE student record to an ONS suicide record with a student code that were not included in the main analysis as they were deemed a past student (their date of death occurred after they finished their course). Table 4 shows the reason given for leaving HE. The most common reason for leaving was death with 27%, followed by successful completion of course (23%) and reason unknown (22%).

The 406 records were not included in the analysis as their date of death was after the end date recorded on the HESA record. There are a number of possible reasons for this. It could be due to the fact that they had finished university and were yet to enter the labour market and therefore the informant classified them as student. Another reason could be because the end date provided was in fact the last date a person was seen to attend the HE institute, which would explain why some students had "death" as their reason for leaving. There were 99 suicides (22%) out of the 406 records where the date of death was within 28 days of their given end date of HE. Rates including these deaths have been created and can be seen in Figure 9.

Table 3: Reason for leaving higher education in past students who linked to an Office for National Statistics student suicide record, deaths registered in England and Wales, 2001 to 2017 registrations

Reason for leaving	Deaths	Percentage
Death	109	27%
Successful completion of course	93	23%
Unknown	89	22%
Academic failure/left in bad standing/not permitted to progress	28	7%
Other personal reasons & dropped out	26	6%
Health reasons	15	4%
Written off after lapse of time	15	4%
Other	11	3%
Transferred to another provider	8	2%
Financial reasons	5	1%
Gone into employment	3	1%
Completion of course - result unknown	2	0%
Exclusion	2	0%

Source: Higher Education Statistics Agency, Office for National Statistics

Table 4 shows the occupation recorded on the death certificate for the records that were linked to a HESA student record.

Table 4: Occupation as stated on the death certificate, deaths registered in England and Wales, 2001 to 2017 registrations

Occupation stated on the death certificate	Number of student suicides	Percentage of student suicides	
Students	658	49%	
Occupation not stated	134	10%	
Nurses	56	4%	
Secondary education teaching professionals	23	2%	
Medical practitioners	15	1%	
Primary and nursery education teaching professionals	15	1%	
Inadequately described occupations	13	1%	
Full-time care of the home and/or dependent relatives, voluntary workers	12	1%	
Care assistants and home carers	11	1%	
Civil Service administrative officers and assistants	9	1%	
Sales and retail assistants	9	1%	
Unemployed person with no other information	8	1%	
Social workers	7	1%	
Other stated occupation (172 individual occupations)	360	27%	

Source: Office for National Statistics

The most common occupation stated was "students" (49% of records), followed by "occupation not stated" (10%) and "nurses" (4%). The occupations stated could be part of the deceased's education – for example, they could have been a student nurse, or could have been working whilst studying, for example, medical practitioners studying for an MSc or PhD. There were 172 occupations (27% of the suicides) that individually contributed to less than 1% of the suicides; these have been grouped together.

Table 5 shows the percentage breakdown of the type of study and whether the record linked to a suicide with a student occupation code on the death certificate. For the HESA records that linked to a suicide record with an occupation code, 70% were full-time. When looking at records without an occupation code of "student" only 15% were full-time, the majority were part-time or dormant. Dormant refers to a student who takes a year out for HE for non-study related reasons and was not actively studying at any time during the reporting period.

Table 5: Number of student suicides compared with Office for National Statistics suicides by mode of study, deaths registered in England and Wales, 2001 to 2017

	ONS Student		ONS Not student	
	Number	Percentage	Number	Percentage
HESA Students	658		672	
Mode of study				
Full-time	462	70%	101	15%
Part-time	38	6%	304	45%
Sandwich	38	6%	6	1%
Dormant	110	17%	251	37%
Writing-up	10	2%	10	1%

Source: Office for National Statistics

# Analysis including higher education students where the reason for leaving higher education was death

Over the time period, there were 169 suicides that have not been included in the analysis where the reason for leaving university was given as "death". The reason for excluding these was because the date of death occurred after the end date recorded on the HESA record, meaning we classified them as a past student. The difference between date of death and end date on the record ranged from a day to over a year. Of these 169 records, 109 linked to an ONS record with "student" as the recorded occupation and 60 did not have "student" recorded as the occupation.

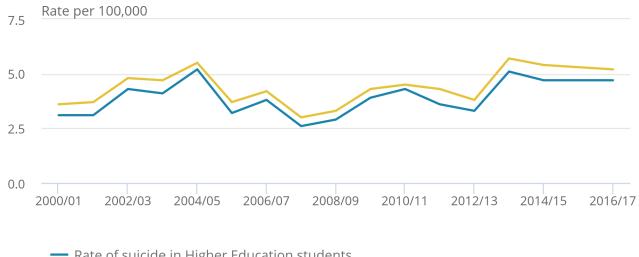
Figure 9 shows the suicide rate in HE students when including the 169 deaths.

Figure 9: Suicide rate in higher education students, including 169 students where reason for leaving university was death, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017 1,2,3,4,5

# Figure 9: Suicide rate in higher education students, including 169 students where reason for leaving university was death, deaths registered in England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017^1,2,3,4,5^



- Rate of suicide in Higher Education students
- Rate including the 169 students where death was the reason for leaving Higher Education

#### **Source: Office for National Statistics**

#### Notes:

- 1. The National Statistics definition of suicide is given in "Things you need to know about this release" section of the article.
- 2. Figures for the 12 months ending July 2017 are provisional. Deaths that occurred in 2017 may not be registered in 2017 due to the length of time it takes to complete a coroner's inquest, it can take months or even years for a suicide to be registered. More details can be found in the "Registration delays" section of the article.
- 3. Figures are for persons aged 18 years and over.
- 4. Figures are based on the last HESA year the deceased was registered in. HESA year is the period of 1 August to 31 July.
- 5. Crude rates per 100,000 students registered with HESA. UK populations prior to the 12 months ending July 2013 have been used and adjusted to create an England and Wales population. More information can be found in the 'Creating rates for student suicides' section.

On average, the suicide rate increased by 0.5 deaths per 100,000 HE students. The increase in rates was not statistically significant. Including these deaths increased the suicide rate in the 12 months ending July 2017 to 5.2 deaths per 100,000 HE students, from 4.7 deaths per 100,000 HE students.

The lowest rate of student suicides in HE is still in the 12 months ending July 2008 with 3.0 deaths per 100,000 HE students (compared with 2.6 deaths per 100,000 in the main analysis). The highest rate is 5.7 suicides per 100,000 HE students in the 12 months ending July 2014, in the main analysis this was 5.2 suicides per 100,000 students in the 12 months ending July 2005.

### Creating rates for student suicides

In order to create rates, ONS used student populations available from the HESA website.

The linkage was performed on all suicides registered in England and Wales to all students studying in the UK with a HESA record.

Student population figures for England and Wales are only available from the 12 months ending July 2013 on the HESA website, therefore the rates presented in Figures 4, 5 and 6 are calculated for the period 12 months ending July 2013 to 12 months ending July 2017 only. The population is broken down by sex and age group. For sex, there are a small number of records classified as "other", which have not been included in the sex breakdowns. For age group, there is a small number of records where the age is unknown, which we were unable to include in the age breakdown.

For Figure 2, the student population for England and Wales was used for the 12 months ending July 2013 onwards, the population for England and Wales was estimated for prior years. The estimated populations were calculated by using the proportion of UK students that were studying in England and Wales from the 12 months ending July 2013 to the 12 months ending July 2017. This showed that on average 87% of HE students are in England and Wales.

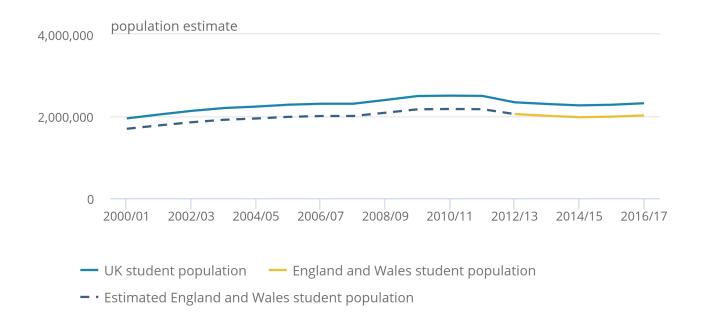
The average proportion was then applied against the UK HESA populations for the years 12 months ending July 2001 to 12 months ending July 2012 to create an estimated England and Wales population, that allows years to be comparable across the time series. Figure 10 shows the population estimates for the UK (12 months ending July 2001 to 12 months ending July 2017), England and Wales (12 months ending July 2013 to 12 months ending July 2017) and the estimated population for England and Wales (12 months ending July 2001 to 12 months ending July 2013).

Figure 10: Higher education student population estimate, UK and England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017

# Figure 10: Higher education student population estimate, UK and England and Wales,

between the 12 months ending July 2001 and the 12 months ending July 2017



Source: Office for National Statistics

#### Notes:

- 1. Figures are for persons aged 18 and over.
- 2. England and Wales population prior to the 12 months ending July 2013 was estimated as 87% of the UK population.

# 5. Registration delays

In common with most other UK mortality statistics, suicide figures are presented for deaths registered in a particular calendar year, which enables figures to be published in a timely manner. The alternative would be to publish statistics based on the year in which the death occurred, however, this would delay the publication, cause repeated revisions to historical data and be inconsistent with other published mortality figures.

In England and Wales, all suicides are certified by a coroner following an inquest. The death cannot be registered until the inquest is completed, which can take months or possibly years and we are not notified that a death has occurred until it is registered. The only exception to this is when someone will be charged with a criminal offence in relation to a death in this instance the coroner must adjourn the inquest and they may carry out an "accelerated registration". The full details of these deaths are not recorded until the inquest is completed, but the majority are eventually coded as assaults and therefore would not be included in the suicides data.

In 2016, the median delay in registering a suicide in England was 149 days (around five months) and in Wales this was 126 days (around four months) with some deaths having a delay of over a year. For this reason, the incidences of suicide in the 12 months ending July 2017 are likely to be an under-estimate.

More information can be found in the Registration delays section of the Suicide in the UK report.

# 6. Next steps

This analysis is preliminary and <u>experimental</u>. This first release of analysis based on the Office for National Statistics (ONS) data linked to Higher Education Statistics Agency records has been published due to an urgent need for estimates of higher education suicides. ONS will continue to improve these estimates. Future projects might be able to provide additional demographics such as course of study and considering social economic class effects. ONS will also look into the former student records that linked to a suicide record with a student occupation code.

# 7. Acknowledgement

We would like to thank Professor David Gunnell, Professor Keith Hawton, Professor Ann John and Professor Louis Appleby for their invaluable comments on this piece of work. In addition, we would like to thank Public Health England and the Samaritans for their support and guidance.

# 8. Annex: Linkage method

Office for National Statistics (ONS) was provided with annual files that contained individual Higher Education Statistics Agency (HESA) records from academic years ending 2001 to ending 2017 for the UK. This contained the records of any student studying in a higher education (HE) institute for a HE qualification. The data were processed securely and linkage was approved by the National Statistician's Data Ethics Advisory Committee.

Duplicates (for example, the same student appearing in each year they studied) were removed from the dataset so that each unique person only appeared once in the dataset.

ONS extracted suicides for the registration period 2001 to 2016 and provisional suicides for 2017 registrations. The codes were extracted for all intentional self-harm and injury or poisoning of undetermined intent, the National Statistics definition of suicide.

There was no unique identifier available on both datasets for linkage. The variables available to be used as our linkage key were limited to names (first names and surnames, and middle names where available) and date of birth. Information on post codes were available in both ONS deaths data and HESA student records but this could not be used as there was no consistency in recording, for example, the death certificate may have the person's family postcode or HE postcode and likewise the student record could have either their HE postcode or family postcode. Although the postcode was not used in the linkage, it was used as part of manual checks after the linkage.

The data linkage took account of a variety of different possible combinations of names, as:

- some people may record their middle names in one data source but not the other
- some people may go by their middle name in one data source and their first name in the other data source
- some people may record a shortened version of their name
- some people may have their maiden name on one data source and married name on the other

After the records were linked based on the multiple combinations, each record was manually checked to make sure the linkage had worked correctly.

More information on the linkage can be requested by emailing <a href="mailto:mortality@ons.gov.uk">mortality@ons.gov.uk</a>