

Statistical bulletin

# Deaths of homeless people in England and Wales: 2021 registrations

The number of deaths of homeless people in England and Wales. Figures are given for deaths registered in the years 2013 to 2021. Experimental Statistics.

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Release date:  
23 November 2022

Next release:  
To be announced

## Table of contents

1. [Main points](#)
2. [Deaths among homeless people in England and Wales](#)
3. [Regional analysis](#)
4. [Causes of death among homeless people](#)
5. [Registration delays and comparability with other statistics](#)
6. [Deaths of homeless people data](#)
7. [Glossary](#)
8. [Measuring the data](#)
9. [Strengths and limitations](#)
10. [Related links](#)
11. [Cite this statistical bulletin](#)

# 1 . Main points

- There were an estimated 741 deaths of homeless people in England and Wales registered in 2021, with a 95% confidence interval of 658 to 824 estimated deaths.
- This was statistically similar to the estimate for 2020, when there were 688 estimated deaths, with a 95% confidence interval of 624 to 752.
- Almost two in five deaths of homeless people were related to drug poisoning in 2021 (259 estimated deaths; 35.0% of the total number), consistent with previous years.
- There were an estimated 99 suicide deaths and 71 alcohol-specific deaths, accounting for 13.4% and 9.6% of deaths respectively.
- There was estimated to have been 26 deaths (3.5% of the total) of homeless people involving coronavirus (COVID-19) registered in 2021; this was twice the number estimated in 2020 (13 deaths).
- Most homeless deaths registered in 2021 were among men (647 estimated deaths; 87.3% of the total), consistent with previous years.
- London and the North West had the highest numbers of deaths registered in 2021, with 154 (20.8% of the total number) and 114 (15.4% of the total number) estimated deaths of homeless people respectively.

## Statistician's comment

"The deaths of 741 homeless people in England and Wales registered in 2021 represents an increase of 7.7% (or 53 deaths) from 2020. The latest figure is more in line with pre-pandemic levels following a notable fall in 2020, although it's too early to say whether this is a resumption of an upward trend in homeless deaths.

Any death in these circumstances is a tragedy and our estimates are designed to help inform the work of everyone seeking to protect this highly vulnerable section of our community."

James Tucker, Data and Analysis for Social Care and Health Division, Office for National Statistics Follow James Tucker on Twitter @ONSJames

Deaths of homeless people include people sleeping rough or using emergency or temporary accommodation at or around the time of death. See [Glossary](#) for further information.

# 2 . Deaths among homeless people in England and Wales

Homelessness can be defined in a number of different ways. The definition used here relies on information provided on death certificates and does not align with official statistics on homelessness produced by public bodies. For example, these statistics do not use the same definition of homelessness as rough sleeper counts or statutory homelessness. These are [Experimental Statistics](#) and the methods used will be developed and improved over time. For more information on the methodology used in this bulletin please see the [Deaths of homeless people in England and Wales QMI](#).

Figures in this bulletin are estimated (unless otherwise specified) using a statistical modelling method called capture-recapture. There is a degree of [uncertainty](#) around these figures and we would advise caution in their interpretation.

## Numbers of homeless deaths

There were an estimated 741 deaths of homeless people registered in England and Wales in 2021, with 95% confidence intervals of 658 to 824 deaths. This was statistically similar to the previous year, when there were 688 estimated deaths (95% confidence interval of 624 to 752).

There has been no statistically significant change in the estimated number of homeless deaths during the years 2018 to 2021, however, the estimate in 2021 is significantly higher than our estimates for the period 2013 to 2017. The estimate for 2021 was 53.7% higher than our first estimate in 2013, representing 259 extra deaths (Figure 1).

Statistics are based on the year of death registration – because of death registration delays, around half of these deaths occurred in previous years.

Deaths of homeless people were identified from the death registration records held by the Office for National Statistics (ONS), and a statistical method called capture-recapture modelling was applied to estimate the most likely number of additional registrations not identified as homeless people.

The figures reported here are the total estimated numbers, except where described as being based on identified records only. The method used provides a robust but conservative estimate, so the real numbers may still be higher.

The estimated number of deaths of homeless people in 2021 is based on 480 identified deaths, a 2.0% decrease from the previous year (490 identified deaths).

### **Figure 1: The estimated number of deaths among homeless people has increased by 53.7% since the data time series began in 2013**

**Deaths of homeless people (estimated deaths), deaths registered between 2013 and 2021, England and Wales**

#### **Notes:**

1. Estimated numbers show error bars indicating 95% confidence interval of the estimate.
2. Figures are for deaths registered, rather than deaths occurring in each calendar year.
3. Figures for England and Wales may include deaths of non-residents.
4. The total estimated includes the identified deaths plus the additional modelled deaths.

#### **Download the data**

[.xlsx](#)

## Deaths by sex and age

Sex and age breakdowns of estimated deaths of homeless people registered in 2021 are shown in Figure 2. Males accounted for the larger proportion of deaths: 647 (87.3%) male deaths compared with 94 (12.7%) female deaths. This ratio is consistent with previous years.

An upper age limit of 74 years was applied to avoid accidental inclusion of elderly people in some institutional settings. See [Measuring the data](#) for further information.

Among men, the highest number of estimated deaths were seen in those aged 45 to 49 years (117 deaths; 18.1% of all male deaths), and the mean age at death was 45.4 years.

Among women, the 40 to 44 years age group had the highest number of estimated deaths (25 deaths; 26.6% of all female deaths), and the mean age at death for women was 43.2 years. The age breakdown of those who died while homeless was consistent with previous years for both men and women.

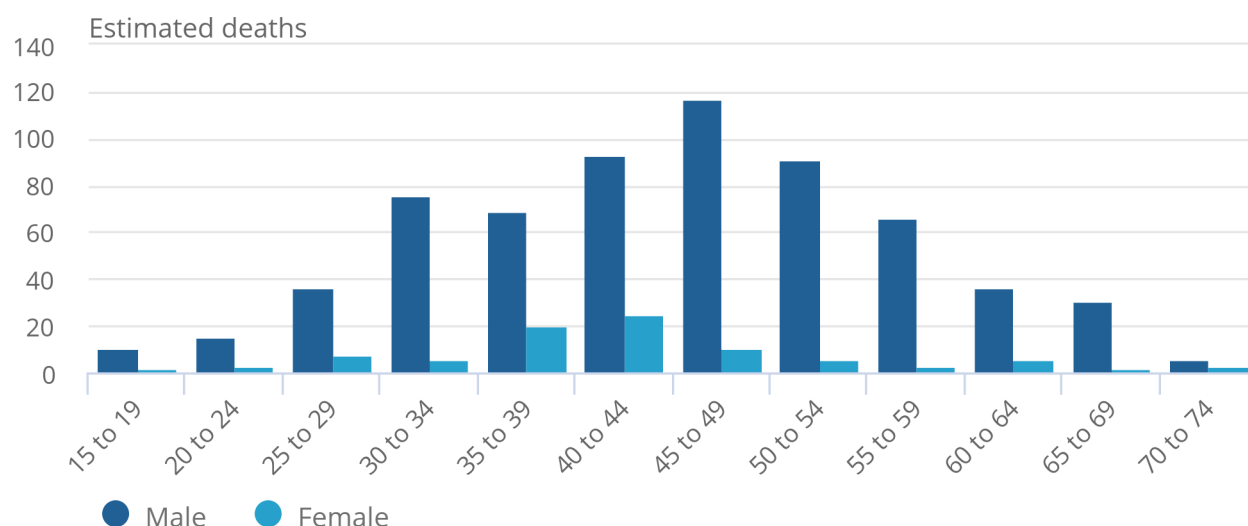
Mean age at death is not the same as life expectancy. Differences in mean age at death are likely a reflection of differences in the average age of different groups. Further information on the mean age at death calculation can be found in Section 15 of the [User guide to mortality statistics](#).

**Figure 2: There were seven times as many male deaths compared with females in 2021**

Deaths of homeless people (estimated), by sex and age group, deaths registered in 2021, England and Wales

## Figure 2: There were seven times as many male deaths compared with females in 2021

Deaths of homeless people (estimated), by sex and age group, deaths registered in 2021, England and Wales



Source: Office for National Statistics – Deaths of homeless people in England and Wales

**Notes:**

1. Figures are for deaths registered, rather than deaths occurring in the calendar year.
2. Figures for England and Wales may include deaths of non-residents.
3. No deaths were included below the age of 15 years, while an upper age cut-off of 75 years was applied to avoid accidental inclusion of elderly people in some institutional settings.

### 3 . Regional analysis

The capture-recapture modelling is calculated at the England and Wales (combined) level. This modelling method cannot be used to produce reliable estimates at lower geographies because of the low number of deaths. For all breakdowns below the England and Wales level we assume the same ratio of identified deaths to estimated deaths as was calculated for England and Wales. Caution is advised in the interpretation of these figures.

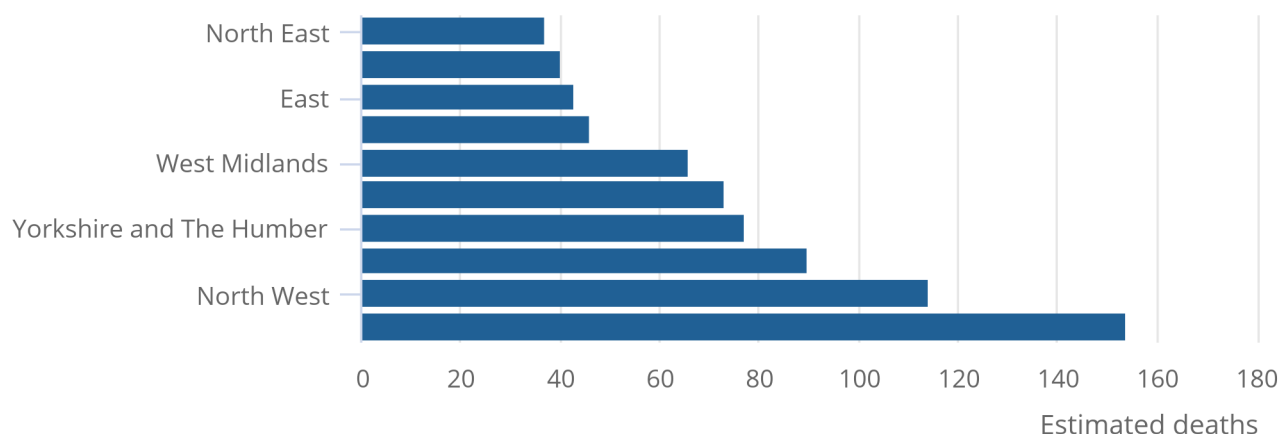
London and the North West had the highest numbers of deaths registered in 2021, with 154 (20.8% of the total number) and 114 (15.4% of the total number) estimated deaths of homeless people respectively. The North East (37 deaths) and Wales (40 deaths) had the lowest numbers of estimated deaths registered in 2021 (Figure 3). The regional distribution of deaths was consistent with previous years.

**Figure 3: London and the North West had the highest number of homeless deaths in 2021**

Numbers of deaths of homeless people (estimated) by English region and Wales, deaths registered in 2021

Figure 3: London and the North West had the highest number of homeless deaths in 2021

Numbers of deaths of homeless people (estimated) by English region and Wales, deaths registered in 2021



Source: Office for National Statistics – Deaths of homeless people in England and Wales

**Notes:**

1. Figures are for deaths registered, rather than deaths occurring in the calendar year.
2. Figures are based on the deceased's place of death and not area of usual residence.

When comparing the number of deaths with the size of the general population, the pattern is similar. London has the highest rate, with 22.5 homeless deaths per million general population. The area with the next highest rate was the North West, with 21.0 deaths per million general population. The lowest rates were found in the East of England (9.4 deaths per million) and in the East Midlands (12.7 deaths per million) (Figure 4).

Since the beginning of our data time series in 2013, the [crude death rate](#) has increased in every region.

## Figure 4: The death rate has increased in every region since 2013

Rates of deaths of homeless people (estimated) by English region and Wales, registered in 2021

### Notes:

1. Figures are for deaths registered, rather than deaths occurring in the calendar year.
2. Please note that these figures per million are not related to the number of homeless people in an area and are not age-standardised: they should not be compared with published mortality rates.
3. Figures are based on the deceased's place of death and not area of usual residence.

### Download the data

[.xlsx](#)

## 4 . Causes of death among homeless people

An estimated 259 deaths of homeless people registered in 2021 were related to drug poisoning, accounting for 35.0% of all estimated deaths (Figure 5). Alcohol-specific causes and suicide accounted for 9.6% (71 deaths) and 13.4% (99 deaths) of estimated deaths of homeless people registered in 2021 respectively. Together these three causes accounted for an estimated 57.9% of homeless deaths registered in 2021, a proportion that is consistent with previous years.

Because of an overlap in definitions, some deaths classified as suicide are also counted in our definitions of drug-related deaths and alcohol-specific deaths.

Finding higher numbers of deaths among homeless people for these causes is consistent with academic studies of the health and mortality of homeless individuals. In comparison, the [leading causes of death](#) in the general population for all those aged 20 to 49 years were accidental poisoning (11.2% of deaths) and intentional self-harm and event of undetermined intent (11.8% of deaths); in those aged 50 to 64 years, the leading causes of deaths were ischaemic heart diseases (12.9%) and coronavirus (COVID-19) (12.4%).

There were an estimated 26 deaths (3.5%) of homeless people involving COVID-19 registered in 2021.

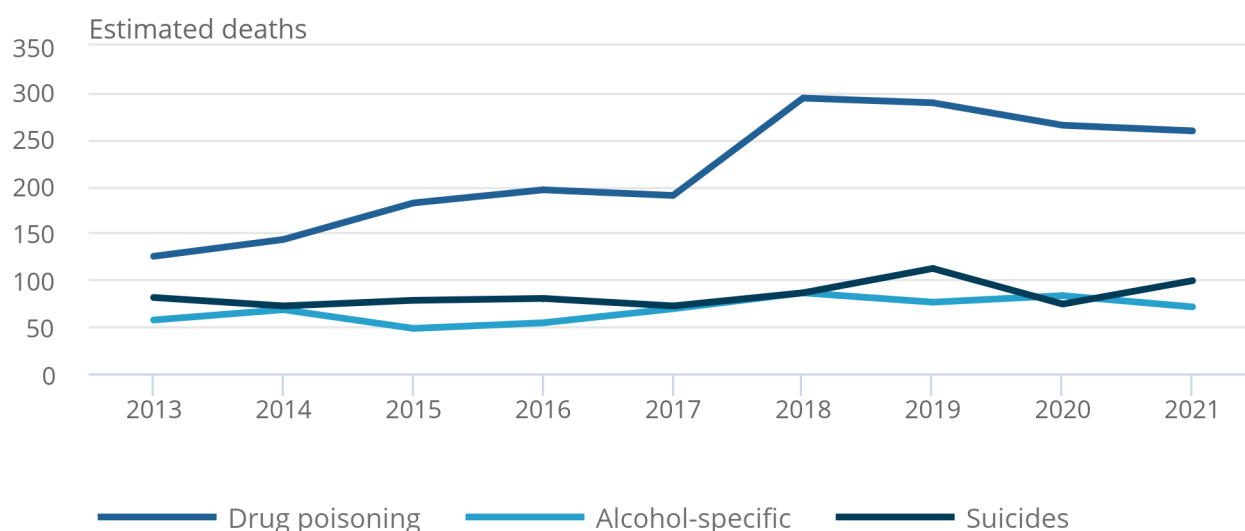
Data on numbers of homeless people who died from other causes can be found in our [accompanying dataset](#).

## Figure 5: Drug poisoning, suicide and alcohol-specific causes accounted for over half of deaths of homeless people in 2021

Deaths of homeless people (estimated) by selected causes of death category, persons, deaths registered between 2013 and 2021, England and Wales

### Figure 5: Drug poisoning, suicide and alcohol-specific causes accounted for over half of deaths of homeless people in 2021

Deaths of homeless people (estimated) by selected causes of death category, persons, deaths registered between 2013 and 2021, England and Wales



Source: Office for National Statistics – Deaths of homeless people in England and Wales

#### Notes:

1. Underlying cause of death is allocated using the International Classification of Diseases 10th Revision (ICD-10). The codes used for each of the listed causes are shown in the accompanying [dataset](#).
2. Figures are for deaths registered, rather than deaths occurring in the calendar year.
3. Figures for England and Wales may include deaths of non-residents.
4. Because of an overlap in definitions, some suicides are also included in our definitions of drug poisoning and alcohol-specific deaths.

## 5 . Registration delays and comparability with other statistics

## Death registration delays

Deaths of homeless people are often from causes that require an investigation by a coroner, including drug poisoning and suicide. The length of time it takes to hold an inquest results in a delay between the date a death occurred and the date of registration, known as a registration delay. This means that around half of the deaths reported in this bulletin will have occurred in previous years.

For identified homeless deaths registered in 2021, 85.2% were certified by a coroner and 54.8% actually occurred in 2021. The median delay between the date a death occurred and the date of registration was 160 days.

## Impact of housing policy

Our ability to detect deaths of homeless people in death registration records can be impacted by changes in housing policy. Policies such as [Everyone In](#) and the [Rough Sleeping Initiative](#) in England, as well as [Housing First \(PDF, 122KB\)](#) in Wales, may result in a greater proportion of homeless people being housed in accommodation that cannot be identified as homeless accommodation from publicly available information. Capture-recapture modelling is designed to compensate for this and could explain why the ratio of identified deaths to estimated deaths has increased over time.

## Comparability with other statistics

National Records of Scotland also publish estimated [deaths of homeless people for Scotland](#), and the Northern Ireland Statistical Research Agency is working towards publishing their own estimates. While the methodology is similar, headline figures for all UK countries should not be compared because of legislative and data collection differences. For more detailed information on the issues with comparability please see [The comparability and coherence of UK homeless deaths statistics](#).

## 6 . Deaths of homeless people data

### [Deaths of homeless people in England and Wales](#)

Dataset | Released 23 November 2022

Experimental Statistics showing the number of deaths of homeless people in England and Wales, by sex, five-year age group and underlying cause of death.

## 7 . Glossary

### Homelessness

The definition of homelessness used in this release follows from what is available in death registrations data to identify affected individuals. Our statistics mainly include people sleeping rough or using emergency accommodation such as homeless shelters and direct access hostels, at or around the time of death. Where detectable, it would also include hidden homelessness, which is not included in official statistics such as statutory homelessness.

An upper age limit of 74 years is applied to avoid accidental inclusion of elderly people who died in some institutional settings. This means that a small number of genuine deaths of homeless people aged 75 years or over might have been excluded.

Further information on the methods used to identify deaths of homeless people is available in the [Deaths of homeless people in England and Wales QMI](#).

Definitions of homelessness exist for different purposes and there are variations across the UK. This [interactive tool](#) allows users to compare different homeless definitions used, and official statistics produced across the four countries of the UK.

## Confidence intervals

A [confidence interval](#) gives an indication of the degree of uncertainty of an estimate and helps to decide how precise a sample estimate is. It specifies a range of values likely to contain the unknown population value. These values are defined by lower and upper limits.

## Statistical significance

A result is said to be [statistically significant](#) if it is likely not caused by chance or the variable nature of the samples. A defined threshold can help us test for change. If the test of statistical significance calculated from the estimates at different points in time is larger than the threshold, the change is said to be “statistically significant”.

A 5% standard is often used when testing for statistical significance. The observed change is statistically significant at the 5% level if there is less than a 1 in 20 chance of the observed change being calculated by chance if there is actually no underlying change.

Within the commentary of our statistical bulletins we will avoid using the term “significant” to describe trends in our statistics and will always use “statistically significant” to avoid any confusion for our users. A change that is “not statistically significant” may also be described as being “statistically similar”.

## Drug poisoning, alcohol-specific and suicide

Deaths classified in one or more of these categories must have an applicable International Classification of Diseases (ICD) code assigned as the underlying cause of death; this is determined by international coding rules from the condition or conditions reported by the certifier, as recorded on the death certificate. For further information on the definition, please see the [drug poisoning release](#), the [alcohol-specific deaths release](#) and the [suicide release](#).

## Crude death rate

The crude death rate is defined as total deaths per one million people or: (total deaths divided by total population) multiplied by 1,000,000.

# 8 . Measuring the data

## Quality

The figures in this release were produced following a two-stage process. First, the complete death registration records held by the Office for National Statistics (ONS), for deaths registered in the calendar years 2013 to 2021, were analysed using multiple search strategies to identify all those deaths where there was evidence that the deceased was homeless at or around the time of death. Then, the results of the searches were used in a statistical modelling technique known as capture-recapture to estimate a total figure, which allows for the likelihood of more deaths of homeless people being present in the data but not identified.

Based on the nature of the data and the diagnostic and goodness-of-fit statistics produced by the package, the Chao model was selected out of several alternatives. This is a robust but conservative (lower bound) model, so that the figures produced should be taken as the lowest probable estimates.

More quality and methodology information on strengths, limitations, appropriate uses, and how the data were created is available in the [Deaths of homeless people in England and Wales QMI](#).

## Further developing these Experimental Statistics

We are committed to improve this Experimental Statistic with the help of users, including local authorities and charities, academics, and the General Register Office. However, improvement work has been delayed by the impact of coronavirus (COVID-19)-related work priorities.

We will resume this work early next year and really welcome your comments and suggestions by email at [health.data@ons.gov.uk](mailto:health.data@ons.gov.uk).

## 9 . Strengths and limitations

### Strengths

- The cross-referencing of different mentions of homelessness in death certificates provides a strong dataset of identified homelessness.
- These data provide users with valuable insight into the changing patterns of deaths while homeless in England and Wales.
- Deaths while homeless provide data produced using the same methods for all local authorities in England and Wales, so that data for one local authority are comparable with data for other local authorities.

### Limitations

For local authorities it is important to be aware of their limitations. In particular, the method did not allow any estimated deaths to be allocated to local authorities where there were no actually identified deaths of homeless people in the relevant year. This means that a small number of deaths may have occurred in areas that are shown as having no deaths in these figures.

## 10 . Related links

### [Deaths related to drug poisoning in England and Wales: 2021 registrations](#)

Bulletin | Released 3 August 2022

Deaths related to drug poisoning in England and Wales from 1993 to 2021, by cause of death, sex, age and substances involved in the death.

### [Alcohol-specific deaths in the UK: registered in 2020](#)

Bulletin | Released 7 December 2021

Deaths caused by diseases known to be a direct consequence of alcohol misuse by sex, age and region.

### [Suicides in England and Wales: 2021 registrations](#)

Bulletin | Released 6 September 2022

Registered deaths in England and Wales from suicide analysed by sex, age, area of usual residence of the deceased and suicide method.

### [Deaths registered in England and Wales: 2021](#)

Bulletin | Released 1 July 2022

Registered deaths by age, sex, selected underlying causes of death and the leading causes of death. Contains death rates and death registrations by area of residence and single year of age.

## 11 . Cite this statistical bulletin

Office for National Statistics (ONS), released 23 November 2022, ONS website, statistical bulletin, [Deaths of homeless people in England and Wales: 2021 registrations](#)