

Data and analysis from Census 2021

Why have Black and South Asian people been hit hardest by COVID-19?

The coronavirus pandemic has hit some parts of society harder than others. When looking at social, economic and environmental factors there are differences, particularly for Black and South Asian ethnic groups.

14 December 2020

Coronavirus death rates are higher for some ethnic groups

COVID-19 mortality for people of Black African or Black Caribbean ethnicity in the first half of this year was two to two and a half times higher than for people of White ethnicity.

— [Updating ethnic contrasts in deaths involving the coronavirus \(COVID-19\)](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/deathsoccurring2marchto28july2020)
(<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/updatingethniccontrastsindeathsinvolvingthecoronaviruscovid19englandandwales/deathsoccurring2marchto28july2020>)

We have looked in detail at coronavirus deaths. We know COVID-19 mortality is higher for men than women, it is higher for older people than younger people, and people with certain health conditions such as cancer or heart disease are more at risk.

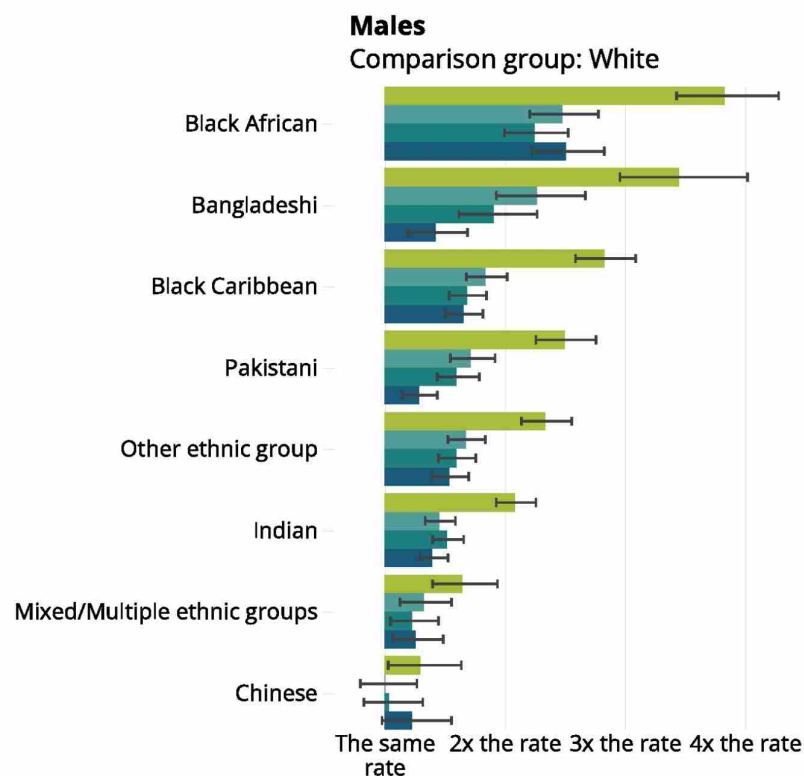
Analysis took into account other factors that could affect how exposed people are to the coronavirus, such as where people live and some social factors, like how many people live in a household.

We can see death rates for most ethnic minorities are higher compared to White ethnic groups. After accounting for where people live and social and economic factors (including people's jobs, education and housing conditions), the gap lessens but is still significant.

Most minority ethnicities have a higher COVID-19 mortality rate

Rate of death involving the coronavirus (COVID-19) by ethnic group and sex relative to the White population, England, 2 March to 28 July 2020

Adjusted for age + Geography + Socio-economics + Health status



Females



[Embed code](#)

Download the data

.xlsx (<https://www.ons.gov.uk/visualisations/dvc1011/4models/datadownload.xlsx>)

Notes:

1. Cox proportional hazards models adjusting for age, geography (local authority and population density), socio-economic factors (area deprivation, household composition, socio-economic position, highest qualification held, household tenure, multigenerational household flags and occupation indicators (including keyworkers and

exposure to others), and health (self-reported health and disability status in March 2011, and hospital-based comorbidities since April 2017).

2. ONS figures based on death registrations up to date that occurred between 2 March and 28 July and could be linked to the 2011 Census.
3. Deaths were defined using the International Classification of Diseases, 10th Revision (ICD-10). Deaths involving COVID-19 include those with an underlying cause, or any mention, of ICD-10 codes U07.1 (COVID-19, virus identified) or U07.2 (COVID-19, virus not identified).
4. Rate of death between 2 March and 28 July 2020.
5. Other ethnic group encompasses Asian other, Black other, Arab, and other ethnic group categories in the classification.
6. Error bars not crossing the x axis at value 1.0 denote a statistically significant difference in relative rates of death.

Although ethnicity data related to COVID-19 mortality can be quite detailed, small sample sizes in some groups (for example Chinese) make it difficult to be sure of any differences or trends.

Sometimes this means we use broader groupings, such as "Asian", to include Indian, Pakistani, Bangladeshi, Chinese and other Asian ethnicities. The larger sample size for "Asian" compared with Chinese means we can identify differences with more certainty. Similarly, "White" includes White British as well as White minority groups such as Gypsies and Irish Travellers and others.

When we talk about "ethnic minorities" as a group in this article, we are referring to Asian, Black, Mixed and Other ethnic groups compared to White ethnic groups, unless otherwise stated.

Some ethnic groups have more exposure to people at work

Black and Asian men are more likely to have a job associated with higher COVID-19 death rates.

— Coronavirus (COVID-19) related deaths by occupation

(<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathregisteredbetween9marchand25may2020>).

In the early stages of the pandemic, we looked at who could be more exposed to COVID-19 based on their work

(<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/articles/whichoccupationshavethehighestpotentialexposuretothecoronaviruscovid19/2020-05-11>). Healthcare professions involve regular contact with disease and other people.

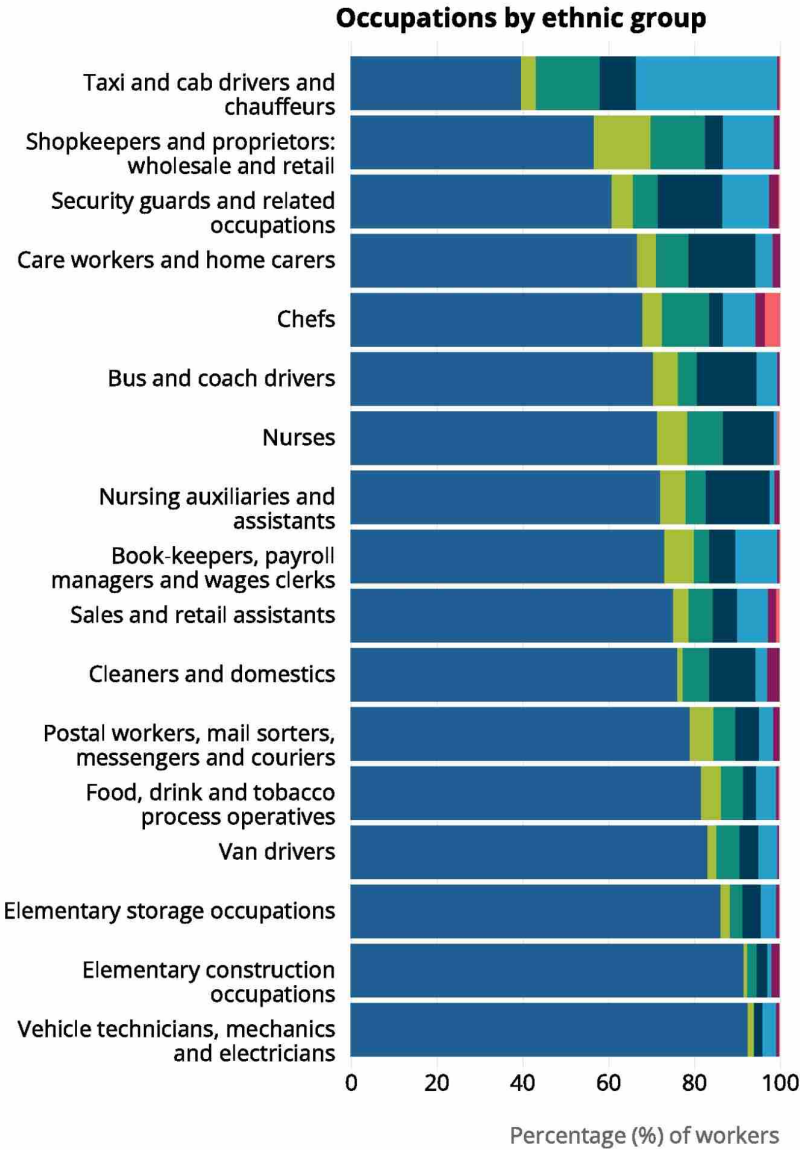
People of minority ethnic groups make up just over a quarter of dental practitioners, medical practitioners and opticians. They are also more likely to be nurses, medical radiographers, nursing auxiliaries and assistants and technicians.

We also found from deaths data that, of working men, Black and Asian men are more likely to work in occupations that have had a higher risk of death involving COVID-19 (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/causesofdeath/bulletins/coronaviruscovid19relateddeathsbyoccupationenglandandwales/deathsregisteredbetween9marchand25may2020>).

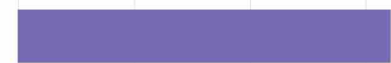
These occupations include transport: around a third of taxi drivers and chauffeurs are Bangladeshi or Pakistani men, and there are other services where ethnic minorities have a relatively high proportion of jobs, such as security and cleaning.

Some ethnic groups are more likely to work in jobs with higher COVID-19 death rates

Proportion of ethnic group within occupations and COVID-19 death rate, England and Wales, deaths involving COVID-19 registered between 9 March and 25 May 2020



Deaths involving COVID-19



[Embed code](#)

Download the data

.csv (<https://www.ons.gov.uk/visualisations/dvc1098/occupation/datadownload.csv>)

Notes:

1. Figures are for residents of England and Wales aged 20 to 64 years.
2. Age-standardised rates per 100,000 population, standardised to the 2013 European Standard Population. Age-standardised rates are used to allow comparison between populations which may contain different proportions of people of different ages.
3. Deaths were defined using the International Classification of Diseases, 10th Revision (ICD-10). Deaths involving COVID-19 include those with an underlying cause, or any mention, of ICD-10 codes U07.1 (COVID-19, virus identified) or U07.2 (COVID-19, virus not identified).
4. Figures are for the most recent death registrations available at the time of analysis, deaths involving COVID-19 registered between 9 March and 25 May.
5. Occupations defined using the Standard Occupation Classification (SOC 2010) (<https://www.ons.gov.uk/methodology/classificationsandstandards/standardoccupationalclassificationsoc/soc2010/soc2010volume1structureanddescriptionsofunitgroups>).

For working women, there were higher rates of death involving COVID-19 in four professions including nursing, and people working as care workers or home carers. Of women working as care workers and home carers, a relatively high proportion were from Black ethnic backgrounds (13.2%). There were also higher proportions of women in nursing from Indian, Black and Other ethnic backgrounds.

In England, people from ethnic minority groups (excluding White minorities) had the highest risk of testing positive in October and November (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19infectionsinthecommunityinengland/deceember2020>) compared to those in a white ethnic group if they worked in social care, personal services and the sector for arts, entertainment and recreation.

Some ethnic groups may be worse hit financially

Workers from Other White ethnic groups were more likely to report a loss of take-home pay than White British or Indian ethnicities

— [Coronavirus and the social impacts on different ethnic groups](#)

(<https://publishing.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/coronavirusandthesocialimpactsondifferentethnicgroupsintheuk/2020>)

Many people during the pandemic have had to cope with loss of income or financial difficulties.

Before the pandemic, 44% of individuals (average of all ethnicities) felt that they would not be able to make ends meet for longer than three months

(https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/bulletins/earlyindicatorestimatesfromthewealthandassetssurvey/attitudes_towards_financial_security_april_2018_to_september_2019) if they lost their main source of income. Data from 2016 to 2018

(<https://publishing.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/coronavirusandthesocialimpactsondifferentethnicgroupsintheuk/2020>) showed that respondents in the Black African or Other Black ethnic groups in particular, were significantly less likely to have enough savings to cover a 20% loss of employment income than those of all other ethnic groups, except for respondents from Black Caribbean and Chinese or Other Asian ethnic groups.

Survey results on experiences of different ethnic groups during the pandemic found that some ethnicities were worse hit by the financial impact of the virus

(<https://publishing.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/coronavirusandthesocialimpactsondifferentethnicgroupsintheuk/2020>).

Workers from Other White ethnic groups were more likely to say they had had a loss of take-home pay than White British or Indian ethnicities.

Those of Pakistani or Bangladeshi and Chinese or Other Asian ethnicities were more likely than those in the White British ethnic group to have negative perceptions of their future financial situation in April 2020.

People in large households have a higher COVID-19 risk

A person aged 70 years and older of South Asian ethnic background is more likely to live in a multi-generational household.

— [Multigenerational households, Coronavirus roundup, July 2020](#)

(<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19roundup13to17july2020/2020-07-17#multigenerational-households>)

During the first national lockdown, people in the more vulnerable, older age groups were asked to shield and minimise contact with other people to reduce their risk of infection.

Older people living in larger households may have found it more difficult to shield practically. [Multi-generational households](#)

(<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19roundup13to17july2020/2020-07-17#multigenerational-households>) are much more common among ethnic minority groups, particularly people of Pakistani or Bangladeshi ethnicity or people of Indian ethnicity.

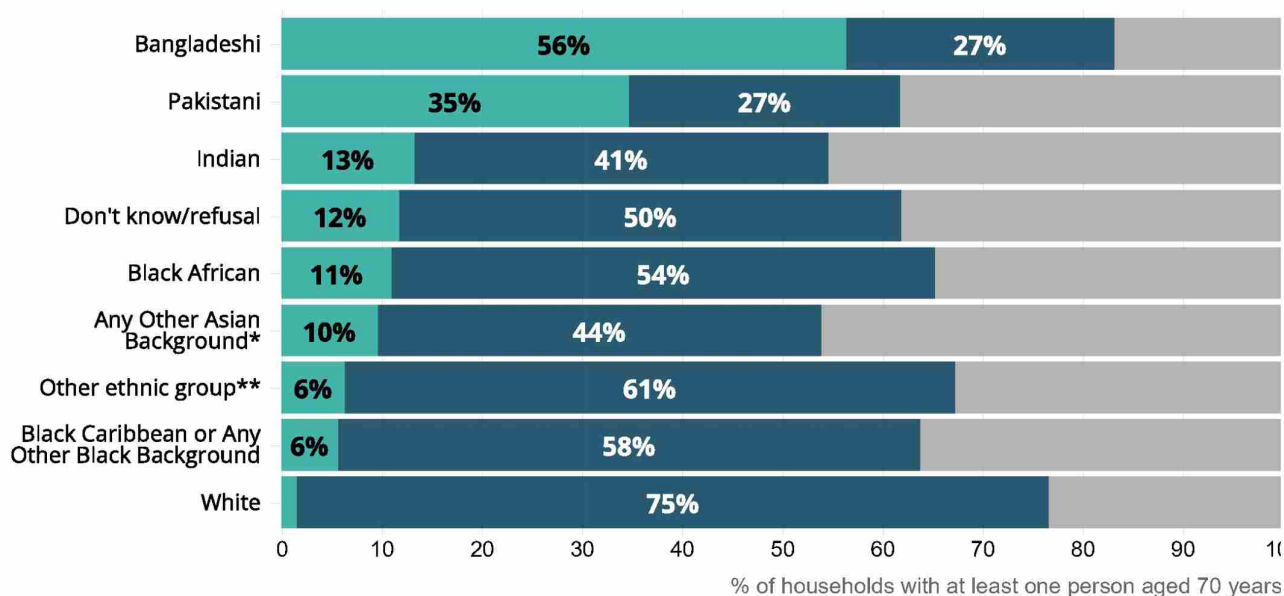
Multi-generational households with someone aged 70 years and older are more common for people of Bangladeshi or Pakistani ethnicity

Proportion of households with at least one person aged 70 years or older by ethnic group of that person, by mix of ages in the household, UK, 2018

Contains somebody aged 0 to 19, somebody aged 20 to 69 and somebody aged 70 and over

Contains only those aged 70 and over

Other combination



Notes:

1. * includes Chinese, and ** includes Mixed/Multiple ethnic groups, due to small sample sizes for these ethnic groups

Source: Office for National Statistics – Annual Population Survey Household dataset 2018

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Image .xlsx

[Embed code](#)

Analysis has found adults living with younger people have had a higher risk of dying with COVID-19 (<https://www.medrxiv.org/content/10.1101/2020.11.27.20238147v3>). That higher risk was particularly notable for older females who were of South Asian ethnicity.

There are also known differences in housing and overcrowding for ethnic groups. Data from the English Housing Survey (<https://www.ethnicity-facts-figures.service.gov.uk/housing/housing-conditions/overcrowded-households/latest>) found

that only 2% of White British households experienced overcrowding, compared to 24% of Bangladeshi households, 18% of Pakistani households and 16% of Black African households.

Living in more urban or deprived areas affects risk

Most ethnic minorities are more likely to live in urban or more deprived areas, where death rates from COVID-19 are higher.

Data on COVID-19 deaths shows that the more built up the area, the higher the death rate was from March to July.

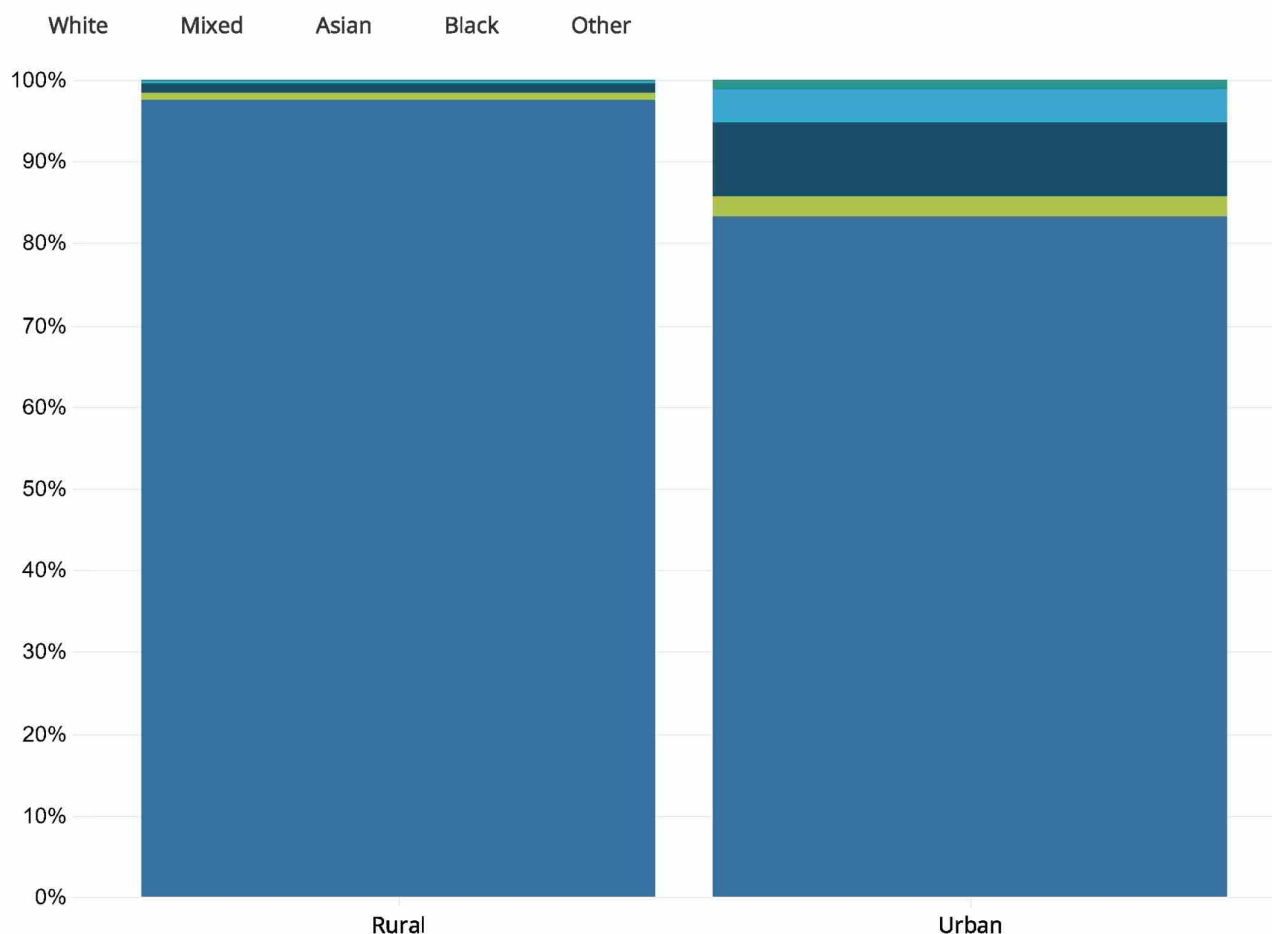
Estimated infection rates in Autumn 2020

(<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19infectionsinthecommunityinengland/october2020>)
have also been higher in urban areas than rural areas.

Most people of ethnic minorities lived in built-up areas, at the time of the last census. Where rural areas were comprised of 97.5% White and 2.5% of ethnic minority groups (excluding White minorities), urban areas were comprised of 83.3% White and 16.7% ethnic minority groups (excluding White minorities).

Ethnic minorities are more likely to live in urban areas

Percentages (%) of urban and rural populations by ethnic group



Source: Office for National Statistics - NOMIS

[Embed code](#)

.csv (<https://www.ons.gov.uk/visualisations/dvc1098/urban-rural/datadownload.csv>)

The most built-up areas, major urban conurbations, have seen the highest COVID-19 death rates and this was the type of area that ethnic minority people were most likely to live in. In 2011, 14.3% of people living in major urban conurbations were Asian, 7.5% were Black and 3.5% were from a Mixed ethnic group.

Of all ethnic groups, Black people were the most likely to live in a major urban conurbation. By contrast, only 0.1% of people in rural hamlets and isolated dwellings in a sparse setting were Black or Other ethnicities.

There is also a link between deprivation and higher COVID-19 death rates and a large proportion of deprived areas are urban.

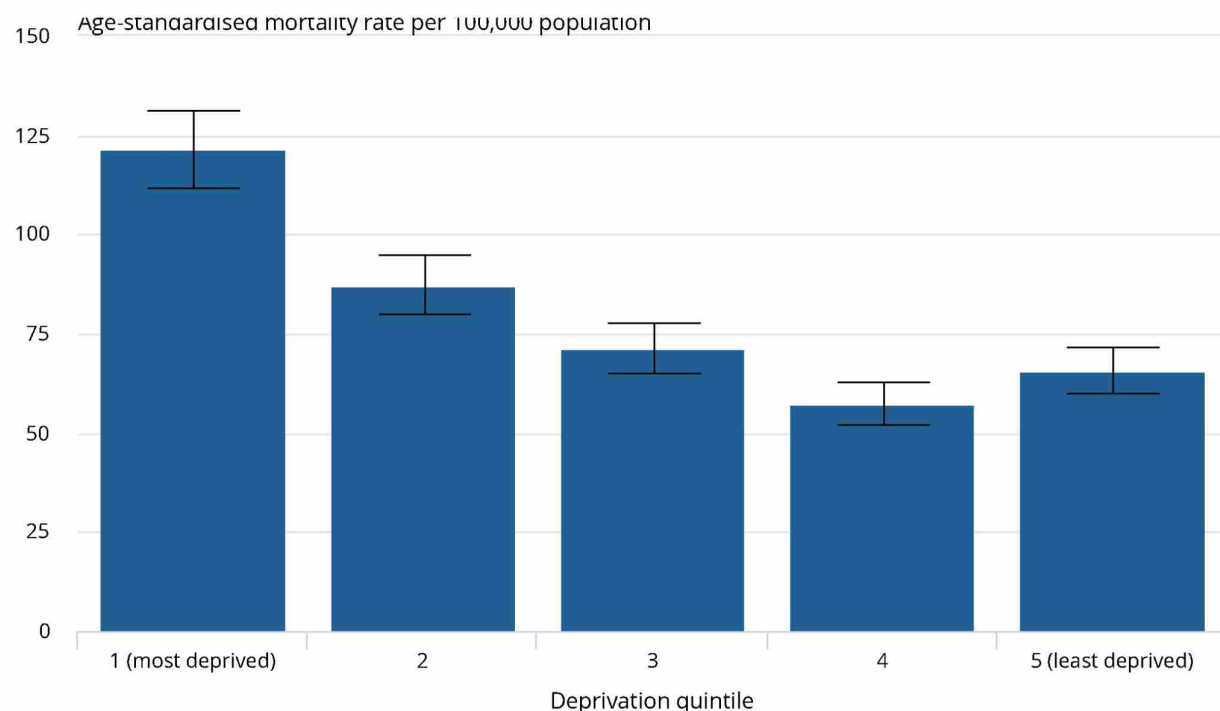
In England and Wales, the mortality rate of coronavirus (COVID-19) was around two times higher in the most deprived areas compared to the least deprived areas, up to July.

Those with Bangladeshi and Pakistani, and Black ethnic backgrounds have been the most likely to live in deprived neighbourhoods

(<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/deathsinvolvedcovid19bylocalareasanddeprivation/deathsoccurringbetween1marchand31july2020>)), according to the census.

The coronavirus (COVID-19) has had a proportionally higher impact on the most deprived areas of England

Age-standardised mortality rates, all deaths and deaths involving the coronavirus (COVID-19), Index of Multiple Deprivation, England, deaths occurring between 1 March and 31 July 2020



Source: Office for National Statistics – Deaths involving COVID-19 by local area and socioeconomic deprivation

Notes:

1. Age-standardised mortality rates are presented per 100,000 people and standardised to the 2013 European Standard Population. Age-standardised mortality rates allow for differences in the age structure of populations and therefore allow valid comparisons to be made between geographical areas, the sexes and over time.
2. The lower and upper 95% confidence limits have been provided. These form a confidence interval, which is a measure of the statistical precision of an estimate and shows the range of uncertainty around the estimated figure. Calculations based on small numbers of events are often subject to random fluctuations. As a general rule, if the confidence interval around one figure overlaps with the interval around another, we

cannot say with certainty that there is more than a chance difference between the two figures.

3. Rates have been calculated using 2018 mid-year population estimates as a base, the most up-to-date estimates when published. Rates have not been adjusted to take into account the period of interest and may differ from rates presented in other publications.
4. Coronavirus (COVID-19) as a causes of death was defined using the International Classification of Diseases, Tenth Revision (ICD-10) codes U07.1 and U07.2. Figures include deaths where coronavirus (COVID-19) was the underlying cause or was mentioned on the death certificate as a contributory factor. Figures do not include neonatal deaths (deaths under 28 days).
5. Figures for Wales exclude deaths of non-residents and are based on May 2020 boundaries.
6. Figures are based on the date of death occurrence in each month between 1 March and 31 July 2020 and registered up to (and including) 15 August 2020. The ONS has [more information on registration delays](https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/impactofregistrationdelaysonmortalitystatisticsinenglandandwales/2018) (<https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/articles/impactofregistrationdelaysonmortalitystatisticsinenglandandwales/2018>).

Having a garden is less likely for people of Black ethnicities

In England, Black people are nearly four times as likely as White people to have no access to outdoor space at home.

— One in eight British households has no garden

(<https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14>).

During lockdown, many people found solace in a garden or nearby park area but this also varied by ethnicity.

We found 1 in 8 people had no private garden space during lockdown

(<https://www.ons.gov.uk/economy/environmentalaccounts/articles/oneineightbritishhouseholdshasnogarden/2020-05-14>).

For people of a Black ethnic background in England, even after accounting for urban and rural living, the statistics were significantly different.

A survey by Natural England found people of Black ethnicity were nearly four times as likely as White people to have no outdoor space at home – that's no private or shared garden, a patio or even a balcony.

We had a look at those figures to see if the differences could be explained by age, (because younger adults are much less likely to have a garden), social class, where people lived or whether they had children. Those of Black ethnicity were still 2.4 times less likely than those of White ethnicity to have a private garden.

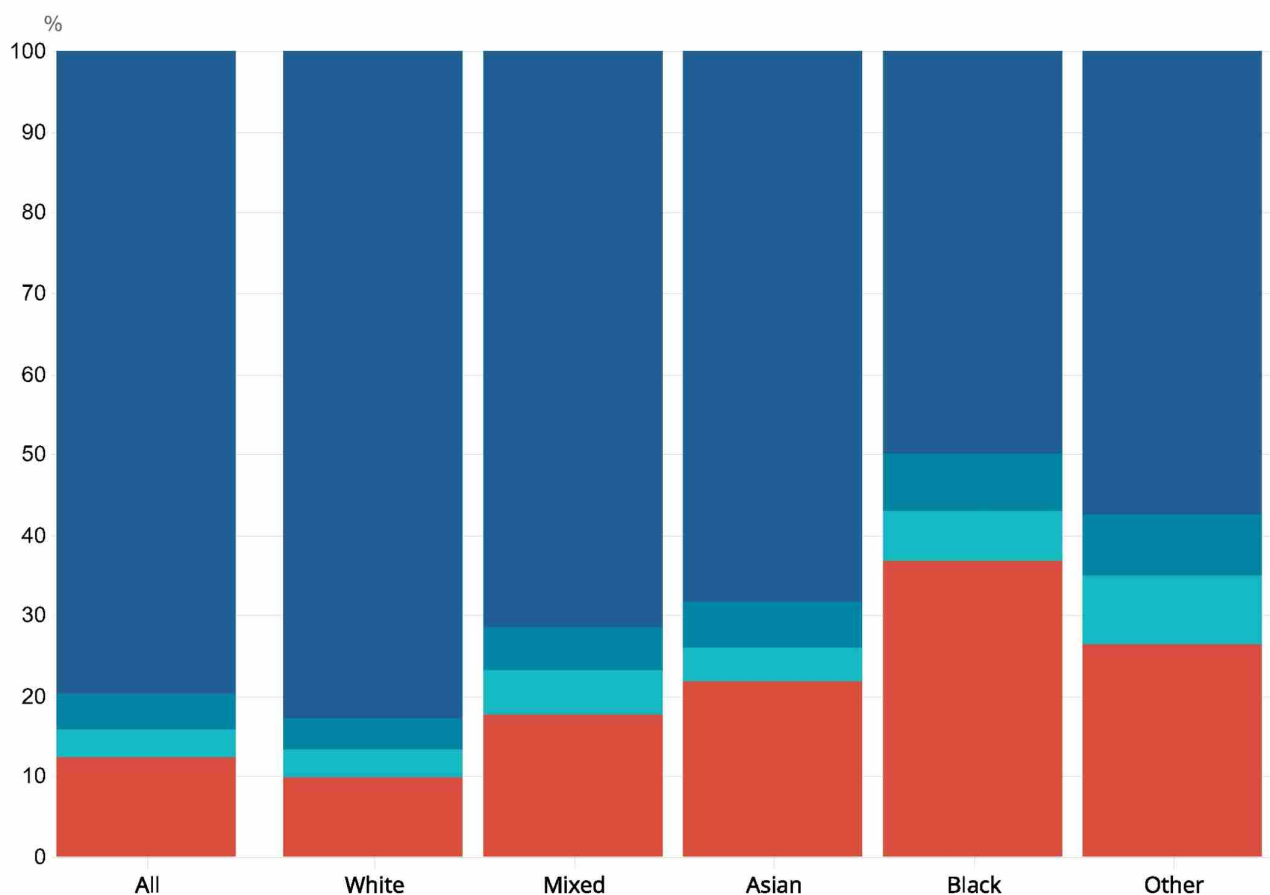
People from minority ethnic groups are less likely to have access to a private garden

Percentage of people with access to a private garden, by ethnic group, England, 2014 to 2019

I don't have access to a garden

I have access to a private outdoor space (balcony, yard, patio area) but not a garden

I have access to a private communal garden I have access to a private garden



Source: Natural England - Monitor of Engagement with Natural Environment survey

[Embed code](#)

Download the data

.csv (<https://www.ons.gov.uk/visualisations/dvc817/greenspace/data.csv>)

We did attempt to find out whether air pollution had anything to do with COVID-19 deaths (<https://www.ons.gov.uk/economy/environmentalaccounts/articles/doesexposuretoairpollutionincreasetheriskofdyingfromthecoronaviruscovid19/2020-08-13>), but couldn't make any clear conclusions. Air pollution is typically worse in cities and built-up areas so the study couldn't determine whether the death rate was due to more pollution or other factors.

Mental health impacts by ethnicity

Individuals of Indian ethnicity were more likely to have increased or persistent lost sleep from worry between April 2020 and 2019, compared to those of White British and Other White ethnicity.

— Coronavirus and the social impacts on different ethnic groups

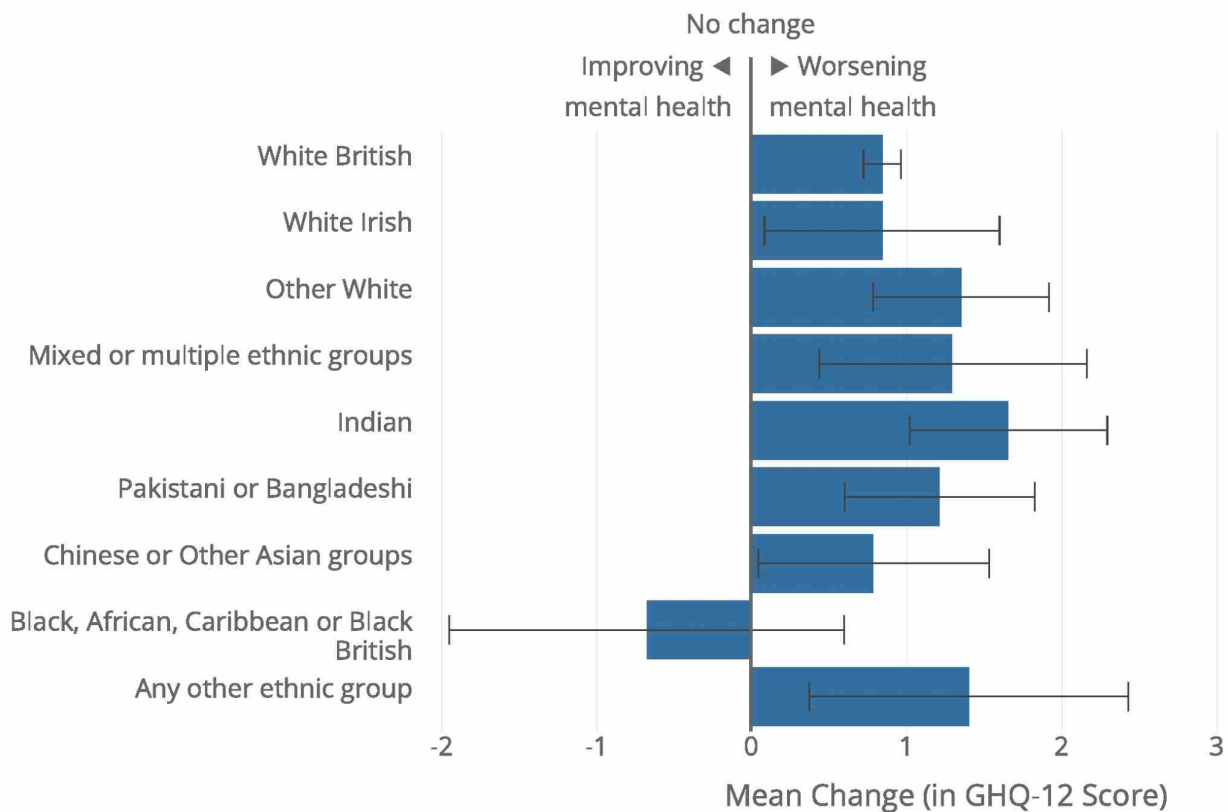
(<https://www.ons.gov.uk/peoplepopulationandcommunity/culturalidentity/ethnicity/articles/coronavirusandthesocialimpactsondifferentethnicgroupsintheuk/2020>)

Alongside the physical and financial effects of COVID-19, we have investigated the impact on people's mental health.

Nearly all ethnic groups reported a deterioration in mental health in April 2020 compared with 2019. Although, the direction of impact for people of Black, African, Caribbean or Black British ethnicities is more difficult to determine, the change in mental ill-health did not appear to be as marked for that group, compared with some other ethnic groups.

Most ethnicity groups reported worse mental health during the pandemic

Fully adjusted average change in GHQ-12 scores of those aged 16 years and over between 2019 and April 2020 by ethnic group, UK, 2019 and April 2020



Source: Understanding Society: COVID-19 Study, 2020

[Embed code](#)

Notes:

1. Factors controlled for in the fully adjusted analysis are age, sex, socio-economic classification (NS-SEC), change in help and support received since the outbreak of the Coronavirus pandemic and whether they have a health condition.
2. A positive increase in average GHQ-12 score indicates a worsening of mental health between the periods.
3. "Any other ethnic group" includes all ethnic groups that are not otherwise listed separately, other than the Gypsy or Irish Traveller group which have been excluded due to small sample sizes.
4. Due to the wide confidence intervals around some of these estimates, caution should be exercised when making comparisons between ethnic groups.

[Download the data \(https://www.ons.gov.uk/visualisations/dvc1085/fig2/datadownload.xlsx\)](https://www.ons.gov.uk/visualisations/dvc1085/fig2/datadownload.xlsx)

Over a third (36%) of those from the Indian ethnic group reported increased or persistent loss of sleep over worry, compared with less than a quarter (23%) of White British respondents and 18% of those in the Other White ethnic groups. Around a third of those from the Black, African, Caribbean or Black British ethnic group (35%) also reported this.

We also looked at how lonely people said they were, factoring in whether people lived alone and other reasons for people feeling lonelier. Around a quarter of people from the White Irish and Indian ethnic groups reported either continuing to feel lonely often or to experience an increase in feelings of loneliness between 2019 and April 2020.

Find out more:

The latest findings on ethnicity and coronavirus are published and updated on the [Coronavirus Latest Insights page](https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19/latestinsights) (<https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/conditionsanddiseases/articles/coronaviruscovid19/latestinsights>).

About this release

The analysis and insights in this report have been shared with and supported the work of the Race Disparity Unit.

The Race Disparity Unit is based in the Government's Cabinet Office. It presents statistics collected by government departments about the different experiences and outcomes of the UK's ethnic groups on the Ethnicity Facts and Figures (<https://www.ethnicity-facts-figures.service.gov.uk/>) website.

Following the publication of the Public Health England (PHE) report COVID-19: review of disparities in risks and outcomes (<https://www.gov.uk/government/publications/covid-19-review-of-disparities-in-risks-and-outcomes>), the Prime Minister and the Secretary of State for Health and Social Care asked the Minister for Equalities, Kemi Badenoch MP, to lead cross government work on next steps. The terms of reference (<https://www.gov.uk/government/news/next-steps-for-work-on-covid-19-disparities-announced>) for this work were announced on 4 June. The Race Disparity Unit has been working collaboratively across government, with the Office for National Statistics, universities and researchers, to get a better understanding of what is driving the COVID-19 risk disparities for ethnic minorities. Initial results from RDU's work on the relationship between ethnicity and COVID-19 were published in the first Quarterly report on progress to address COVID-19 health inequalities (<https://www.gov.uk/government/publications/quarterly-report-on-progress-to-address-covid-19-health-inequalities>) from the Minister for Equalities.

The UK Statistics Authority has a core principle of being inclusive. The Inclusive Data Task Force (<https://uksa.statisticsauthority.gov.uk/about-the-authority/inclusive-data-taskforce/>) was formed in October 2020, aiming to increase and improve the availability of data that can shed light on inequalities and reach out to populations that are traditionally difficult to capture and may have been missed out.

The ONS is also committed to the Inclusive Data Charter action plan for reporting the UK progress towards the global Sustainable Development Goals (SDGs). The SDGs are an ambitious project lead by the United Nations, aiming to improve the world by focusing on 17 global goals that measure various aspects, such as poverty, health, education, equality, sustainability, and the environment. One of the main SDG principles is to leave no one behind and make sure all aspects of society are well represented. This means finding ways to break the headline data into a more detailed picture, so we can see how different characteristics interact to create the world we experience. [Here is the annual report towards the UK progress for the Sustainable Development Goals](https://www.ons.gov.uk/economy/environmentalaccounts/articles/sustainabledevelopmentgoalstakingstockprogressandpossibilities/december2020%20%20Atanaska) (<https://www.ons.gov.uk/economy/environmentalaccounts/articles/sustainabledevelopmentgoalstakingstockprogressandpossibilities/december2020%20%20Atanaska>).

Related

Does exposure to air pollution increase the risk of dying from the coronavirus (COVID-19)?

Article | Released on 13 August 2020

Our analysis measures the link between long-term exposure to dirty air and COVID-19 deaths in England.

Updating ethnic and religious contrasts in deaths involving the coronavirus (COVID-19), England

Article | Released on 22 February 2023

Estimates of COVID-19 mortality rates by ethnic group and religion using linked data from the Office for National Statistics' Public Health Data Asset.

Which occupations have the highest potential exposure to the coronavirus (COVID-19)?

Article | Released on 11 May 2020

ONS has created an estimate of exposure to generic disease, and physical proximity to others, for UK occupations based on US analysis of these factors.

One in eight British households has no garden

Article | Released on 14 May 2020

The percentage of homes without a garden is higher among ethnic minorities, with Black people in England nearly four times as likely as White people to have no outdoor space at home.

Coronavirus (COVID-19) roundup, 13 to 17 July 2020

Article | Released on 17 July 2020

Data and analysis related to the coronavirus (COVID-19) pandemic and its impact on our economy and society.

Updating ethnic and religious contrasts in deaths involving the coronavirus (COVID-19), England

Article | Released on 22 February 2023

Estimates of COVID-19 mortality rates by ethnic group and religion using linked data from the Office for National Statistics' Public Health Data Asset.

Coronavirus and the social impacts on different ethnic groups in the UK

Article | Released on 14 December 2020

Estimates from the Understanding Society: COVID-19 Study, 2020, UK Household Longitudinal Study (UKHLS) and Wealth and Assets Survey (WAS) to explore the social impacts of the coronavirus (COVID-19) pandemic on people from different ethnic groups in the UK.

Coronavirus (COVID-19) related deaths by occupation, England and Wales

Statistical bulletin | Released on 25 January 2021

Provisional analysis of deaths involving the coronavirus (COVID-19), by different occupational groups, among men and women aged 20 to 64 years in England and Wales.

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