

Statistical bulletin

# Likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales: April 2020 to March 2021

Exploration of the socio-demographic characteristics of people who were economically inactive because of long-term ill-health at Census 2021, classified by whether they were receiving social security benefits.

Contact:  
Health Research Group  
Health.Data@ons.gov.uk  
+44 1329 444110

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## Table of contents

1. [Main points](#)
2. [Socio-demographic characteristics of people who are economically inactive because of long-term ill-health by benefit receipt status](#)
3. [Differences in the odds of receiving benefits among people who are economically inactive because of long-term ill-health](#)
4. [Data on the likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales](#)
5. [Glossary](#)
6. [Data sources and quality](#)
7. [Related links](#)
8. [Cite this statistical bulletin](#)

# 1 . Main points

- Among working-age people in England and Wales who reported being economically inactive because of long-term ill-health at Census 2021 and had not recently immigrated to the UK, 97.4% received social security benefits at any time in the preceding 12 months.
- Among people who were economically inactive because of ill-health, 72.5% were in receipt of disability-related benefits and 89.9% were in receipt of other working-age benefits.
- Personal Independence Payment (67.1%), Employment and Support Allowance (62.7%) and Housing Benefit (41.3%) were the most common benefits received by people who were economically inactive because of ill-health.
- There were differences in the socio-demographic characteristics of benefit recipients and non-recipients among people who were economically inactive because of ill-health; most notably, people receiving benefits were more likely to be living in rented accommodation, to have never had a paid job, and to be a lone parent or living alone.
- People who were economically inactive because of ill-health were less likely to be receiving benefits if they were aged 18 to 24 years, male, of Black or Mixed ethnicity, born outside the UK, and not a native English speaker; this is after accounting for factors likely related to benefits eligibility.

## 2 . Socio-demographic characteristics of people who are economically inactive because of long-term ill-health by benefit receipt status

For this analysis, we focussed on people aged 18 to 64 years in England and Wales who reported being economically inactive because of long-term ill-health at Census 2021 and had not immigrated to the UK in the preceding 12 months.

Among these individuals, 97.4% received any type of social security benefits at any time during the 12-month period April 2020 to March 2021. Considering different benefit types, 72.5% received disability-related benefits and 89.9% received other working-age benefits. Personal Independence Payment (67.1%), Employment and Support Allowance (62.7%) and Housing Benefit (41.3%) were the most common benefits received.

The percentage of benefit recipients among people who were economically inactive because of long-term ill-health classified by socio-demographic characteristics and individual benefit types can be found in our [Likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales dataset](#).

Compared with people who were economically inactive because of long-term ill-health and who were not receiving benefits (2.6%), those who were receiving benefits (97.4%) had a greater share of individuals:

- living in the North East of England (representing 6.3% of individuals receiving benefits compared with 4.0% of those not receiving benefits) or the North West of England (15.7% compared with 11.4%)
- of White ethnicity (87.1% compared with 82.3%)
- who were native English speakers (94.2% compared with 90.9%)
- born in the UK (89.4% compared with 81.7%)
- who reported being in very bad health (16.1% compared with 10.0%)
- who reported being disabled (93.9% compared with 83.6%)
- who had never worked (37.4% compared with 18.8%)
- without any qualifications (39.7% compared with 21.6%)
- living with household members with no employee income during the past 12 months (66.5% compared with 38.1%)
- living in the most deprived 20% of areas of the country (37.3% compared with 21.7%)
- renting their home privately (16.2% compared with 12.3%) or through a local authority, housing authority, charity or cooperative (51.5% compared with 14.3%)
- who were divorced (17.4% compared with 10.8%), separated (5.0% compared with 2.6%) or never married (51.5% compared with 41.1%)
- who were a lone parent (17.3% compared with 10.9%) or lived alone (32.8% compared with 12.5%)

Detailed data on the socio-demographic profile of people who were economically inactive because of long-term ill-health classified by benefit receipt status can be found in our [dataset](#) and Figure 1.

**Figure 1: There were differences in the socio-demographic characteristics of benefit recipients and non-recipients among people who were economically inactive because of ill-health**

Socio-demographic characteristics of people aged 18 to 64 years who were economically inactive because of long-term ill-health, classified by benefit receipt status over the past 12 months, England and Wales

**Notes:**

1. Analysis excludes people who had immigrated to the UK in the 12-month period preceding Census 2021.

**Download the data**

### 3 . Differences in the odds of receiving benefits among people who are economically inactive because of long-term ill-health

We used logistic regression modelling to explore demographic differences in the likelihood of receiving social security benefits at any time in the 12 months prior to Census 2021 among working-age people in England and Wales who were economically inactive because of long-term ill-health, and who had not recently immigrated to the UK.

The model accounts for factors that are likely related to benefits eligibility: self-reported health and disability statuses; household income; measures of individual and area socio-economic circumstances; and familial and household arrangements. A full list of the variables included in the model can be found in [Section 6: Data sources and quality](#).

Our estimates of the relationships between demographic characteristics and the likelihood of receiving benefits represent statistical associations. We cannot say whether belonging to a certain demographic group is a causal determinant for whether someone receives benefits.

People who were economically inactive because of long-term ill-health were less likely to be receiving benefits if they were:

- aged 18 to 24 years compared with 25 to 34 years (74% higher odds), 35 to 44 years (61% higher odds), 45 to 54 years (50% higher odds) or 55 to 64 years (30% higher odds)
- male (20% lower odds) compared with female
- of Black ethnicity (12% lower odds) or Mixed ethnicity (18% lower odds) compared with White ethnicity
- born outside the UK (39% lower odds) compared with born in the UK
- able to speak the English language very well (11% lower odds), not well (11% lower odds) or not at all (39% lower odds) compared with native English speakers; see Figure 2

When considering these relative differences in the odds of benefit receipt, it should be noted that the absolute percentage of people in our study population who were not receiving benefits is low: just 2.6% overall, and not higher than 6.2% in any of the demographic groups mentioned. See our [Likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales dataset](#).

#### **Figure 2: People who were economically inactive because of long-term ill-health were less likely to receive benefits if they were not native English speakers**

Adjusted odds ratios for receiving any social security benefit in the past 12 months by how well someone speaks English among people aged 18 to 64 years who were economically inactive because of long-term ill-health, England and Wales

#### **Notes**

1. Estimates are adjusted for a range of demographic and geographic characteristics, self-reported health and disability statuses, factors related to individual, household and area socio-economic circumstances, and familial and household arrangements; see [Section 6: Data sources and quality](#).
2. Analysis excludes people who had immigrated to the UK in the 12-month period preceding Census 2021.
3. Error bars are 95% [confidence intervals](#).

**Download the data**

These results suggest that people in some demographic groups may be less likely to receive benefits for reasons other than the factors related to eligibility included in our model. These overall differences in the likelihood of receiving benefits may reflect differences in the likelihood of applying for benefits; the likelihood of a benefits application being successful; both of these factors; or other factors not considered in our statistical models.

The accompanying [dataset](#) includes:

- separate results for people who received disability-related benefits and other working-age benefits (each compared with people who did not receive any benefits); these results are generally similar to the overall results
- results from a sensitivity analysis based on individuals who were economically inactive with (but not necessarily because of) long-term ill-health possibly in addition to other reasons, such as being retired, studying or looking after family members; these results are similar to the main results
- results for individuals who were economically inactive for reasons others than long-term ill-health; these show different trends for characteristics such as ethnicity and English language proficiency, suggesting that the main results are specific to people who are economically inactive because of long-term ill-health, rather than people who are economically inactive more generally

## 4 . Data on the likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales

[Likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales](#)

Dataset | Released 26 February 2025

Exploration of the socio-demographic characteristics of people who were economically inactive because of long-term ill-health at Census 2021, classified by whether they were receiving social security benefits.

## 5 . Glossary

### 95% confidence interval

A confidence interval (CI) is a measure of the uncertainty around a specific estimate. If a CI is calculated at the 95% level, it is expected that the interval will contain the true value on 95 occasions, if repeated 100 times. The level of uncertainty about where the true value lies increases as intervals around estimates widen. More information is available in [Uncertainty and how we measure it for our surveys](#).

### Absolute standardised difference

The standardised difference is a measure of the extent to which the prevalence of an attribute (for example, being female) differs between two groups (for example, people who are receiving social security benefits and those who are not). The absolute difference between the two prevalence values is expressed as a percentage of the pooled standard deviation of the attribute across the two groups. Absolute standardised differences exceeding 10% are conventionally taken to indicate noteworthy differences between the prevalence estimates.

### Disability-related benefits

For this analysis, we defined disability-related benefits as comprising Disability Living Allowance and Personal Independence Payment.

## Other working-age benefits

For this analysis, we defined working-age benefits other than Disability Living Allowance and Personal Independence Payment as comprising Employment and Support Allowance, Incapacity Benefit, Income Support, Jobseeker's Allowance and Universal Credit.

## Logistic regression model

Logistic regression is a statistical modelling technique for quantifying the strength of association between a binary outcome, such as whether an individual is receiving social security benefits, and a set of characteristics. The model can be used to understand the independent relationship between the outcome and a particular characteristic of interest, such as English language proficiency. This is while “adjusting”, “controlling” or “accounting” for other characteristics which may also be related to the outcome and the characteristic of interest, such as age, family composition or household income.

## Odds

Odds quantify the absolute likelihood of experiencing an outcome (for example, whether an individual is receiving social security benefits), and are calculated as the probability of experiencing the outcome divided by the probability of not experiencing the outcome.

## Odds ratio

An odds ratio (OR) for a particular group (for example, people who do not speak English) describes the relative difference in the odds of the outcome in that group compared with a reference group (for example, native English speakers). An OR higher than 1 indicates a greater likelihood of experiencing the outcome, while an OR less than 1 indicates a lower likelihood.

# 6 . Data sources and quality

## Linked dataset

The de-identified, linked dataset used for this analysis comprises:

- Census 2021 for England and Wales
- Benefits and Income Dataset (BIDs) from the Department for Work and Pensions (DWP)
- Pay-As-You-Earn (PAYE) Real Time Information (RTI) records from His Majesty's Revenue and Customs (HMRC)

All the datasets used for this analysis have been de-identified so no individual's attribute information can ever be directly identified from the data held by the Office for National Statistics (ONS). This is because information that can be used to directly identify individuals such as names and addresses have been removed in a secure virtual environment before the datasets are combined and analysed. In line with the [Code of Practice for Statistics](#), the de-identified linked data will only be used for statistical production and research; it cannot be used for operational purposes, such as making decisions over individuals' access to benefits or how much tax they should pay.

More information on the use of data at the ONS can be found in our [Using the power of linked data to understand factors preventing people from working blog post](#) and [Sources of data article](#). Ethical approval for this work was provided by the [National Statistician's Data Ethics Advisory Committee](#).

Census identity (ID) was linked to DWP and HMRC records through the [Demographic Index \(PDF, 550KB\)](#). We have published a report detailing the quality of this linkage in our [2021 Census linkage to DWP master key and encrypted National Insurance number \(NINo\) methodology](#).

We used BIDs to identify people who received social security benefits during the 12-month period April 2020 to March 2021. BIDs contains information on the following benefit types:

- Attendance Allowance
- Bereavement Support Payment
- Carer's Allowance
- Disability Living Allowance
- Employment and Support Allowance
- Housing Benefit
- Incapacity Benefit
- Income Support
- Jobseeker's Allowance
- Pension Credit
- Personal Independence Payment
- Retirement (State) Pension
- Severe Disablement Allowance
- Universal Credit
- Widow's Benefit

For some benefits such as Universal Credit, applications can cover two partners living in the same household. In these instances, both partners were assigned as benefit recipients in our analysis.

## **Data inclusion criteria**

The dataset used for this analysis comprised Census 2021 respondents who:

- could be linked to a DWP master key and an encrypted NINO
- did not have an imputed Census 2021 record
- were usual residents of England or Wales
- had not immigrated to the UK in the past 12 months

This group represents 89.4% of all Census 2021 respondents. The study population comprised 1.5 million of these individuals who were aged 18 to 64 years and reported being economically inactive because of long-term ill-health on Census Day (21 March 2021). The number of people excluded from the full Census 2021 population is classified by reason for exclusion in the [dataset](#).

## **Economic inactivity because of, or with, long-term ill-health**

Census 2021 respondents were defined as being economically inactive if they reported:

- in the past seven days, not being in paid work
- in the past four weeks, not actively seeking paid work
- in the next two weeks, not being able to start work
- in the past seven days, not waiting to start a job they had already accepted

Of Census 2021 respondents who were economically inactive, we defined those who were economically inactive because of ill-health as those individuals who reported “long-term sickness or disability” as their sole reason for not being paid in paid work in the past seven days.

Individuals who reported not being in paid work because of “long-term sickness or disability” in addition to other reasons (for example, “retired”, “studying” or “looking after home or family”), any of which could have been the main reason for inactivity, were not included in our definition of economic inactivity because of long-term ill-health. However, these individuals were included in our definition of economic inactivity with long-term ill-health, which was used for the sensitivity analysis reported in the [Likelihood of benefit receipt among people who are economically inactive because of long-term ill health, England and Wales dataset](#).

## Analytical methods

We used [absolute standardised differences](#) to compare the socio-demographic profiles of people who were economically inactive people because of ill-health according to whether they were or were not receiving benefits between April 2020 and March 2021.

Adjusted [odds ratios](#) (ORs) for receiving benefits were estimated using [logistic regression models](#) that included the following variables:



- age group (18 to 24 years; 25 to 34 years; 35 to 44 years; 45 to 54 years; 55 to 64 years)
- sex (female; male)
- region or country (the nine former [Government Offices for the Regions](#) of England; Wales)
- rural-urban classification (urban major conurbation; urban minor conurbation; urban city and town; urban city and town in a sparse setting; rural town and fringe; rural town and fringe in a sparse setting; rural village and dispersed; rural village and dispersed in a sparse setting)
- ethnic group (Asian; Black; Mixed; White; Other)
- English language proficiency (native English speaker; very well; well; not well; not at all)
- country of birth (UK; non-UK)
- self-reported general health status (very good; good; fair; bad; very bad)
- self-reported disability status (disabled; non-disabled)
- when the person last did paid work (in the last 12 months; not in the last 12 months; never worked)
- highest qualification (no qualifications; apprenticeship; Level 1; Level 2; Level 3; Level 4 and above; other)
- employee earnings of other household members (£0; then decile groups for earnings above £0)
- relative area deprivation (decile groups based on the [English indices of deprivation 2019](#))
- housing tenure (own; rent privately; rent through a local authority, housing authority, charity or cooperative; other rental; living rent-free)
- marital status (married or in a registered civil partnership; divorced or civil partnership dissolved; separated but still legally married or still legally in a civil partnership; widowed or surviving civil partnership partner; never married and never registered a civil partnership)
- family composition (single family household comprising a couple family; single family household comprising a lone parent; one person household; other household type)
- number of dependent children (none; one; two; three or more)

All variables included in the models were derived from Census 2021 data, apart from employee earnings of other household members. This was derived from HMRC PAYE records over the 12-month period April 2020 to March 2021 by summing gross employee pay for household members (identified from Census 2021) other than the individual of interest.

## Odds and odds ratios

We expressed the ORs as percentage differences in the odds as compared with a reference group in [Section 3: Differences in the odds of receiving benefits among people who are economically inactive because of long-term ill-health](#). This was done by subtracting 1 from the odds ratio (OR) and multiplying by 100. For example, the odds of receiving benefits were 74% higher for people aged 25 to 34 years compared with those aged 18 to 24 years; this is the same as saying the odds were 1.74 times greater, or the OR was equal to 1.74.

## Strengths and limitations

The linked dataset used for this analysis covers nearly the entire population of England and Wales. The estimated response rate for Census 2021 was estimated to be 97% of the population; and of those who responded, 97% could be linked to DWP and HMRC information.

We did not have data on all possible determinants of benefit receipt among people who are economically inactive because of long-term ill-health. Therefore, the observed differences in the likelihood of receiving benefits between different demographic groups may be partly explained by factors not accounted for in our model, for example individuals' personal circumstances (such as financial savings and family support), their eligibility to receive benefits, and their knowledge of the social security system. For this reason, our estimates of the relationships between demographic characteristics and the likelihood of receiving benefits represent statistical associations; we cannot say whether belonging to a certain demographic group is a causal determinant for whether someone receives benefits.

Census 2021 took place nearly four years ago, on 21 March 2021, hence the results of this analysis are not necessarily generalisable to the current situation. In addition, Census 2021 took place during the coronavirus (COVID-19) pandemic, when the Coronavirus Job Retention Scheme, also known as "furlough", was in operation. This may have affected how some people reported their employment status on the Census, as described in our article [Comparing Census 2021 and Labour Force Survey estimates of the labour market, England and Wales: 13 March 2023](#). Our results may also have been affected by [pandemic-related delays to entitlement decisions for new applications for benefits](#) such as Employment and Support Allowance, Personal Independence Payment and Universal Credit.

Not all benefits are within the coverage of the Benefits and Income Dataset (BIDs) extract. For example, Child Benefit is not included. Therefore, the percentage of people receiving any benefit in this analysis will be slightly lower than the true value.

## Acknowledgements

This analysis was produced in collaboration with the Department of Health and Social Care and Department for Work and Pensions Joint Work and Health Directorate. The project was funded by His Majesty's Treasury's [Shared Outcomes Fund](#).

## 7 . Related links

[Using the power of linked data to understand factors preventing people from working](#)

Blog | Released 5 December 2023

Emma Rourke explains how linked, population-level data can improve our understanding of the interplay between health and work, with the goal of improving the wellbeing of individuals and the economy.

[Benefit recipients during the coronavirus \(COVID-19\) pandemic, England: November 2019 to March 2021](#)

Statistical bulletin | Released 6 December 2023

Age-standardised percentages of people who received a social security benefit by health conditions and sociodemographic characteristics, using linked 2011 Census, primary care and benefits data. Official statistics in development.

[2021 Census linkage to DWP master key and encrypted NINo](#)

Methodology | Released 6 December 2024

Linkage methodology and quality information for 2021 Census linkage to Department for Work and Pensions (DWP) master key and encrypted National Insurance number (NINo).

[DWP benefits statistics](#)

GOV.UK article | Last updated 18 February 2025

Accredited official statistics and official statistics on the main benefits administered by the Department for Work and Pensions (DWP).

## 8 . Cite this statistical bulletin

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