Income Dynamics: Income movements and the persistence of low incomes

Data for 2010-2015

The Income Dynamics (ID) report presents information on changes in income over time. The main results relate to the persistence of relative low incomes. Individuals are described as being in persistent low income if they are in relative low income in at least three out of four consecutive annual interviews.

Working-age adults had the lowest rate of persistent low income Before Housing Costs, and pensioners had the highest rate. Pensioners had the lowest rate After Housing Costs and children had the highest rate.

- This is broadly in line with single-year relative low income estimates.
- Overall, 9 per cent of individuals Before Housing Costs (BHC) and 11 per cent of individuals After Housing Costs (AHC) were in persistent low income in 2011-2015.
- 11 per cent of children BHC and 16 per cent of children AHC were in persistent low income in 2011-2015
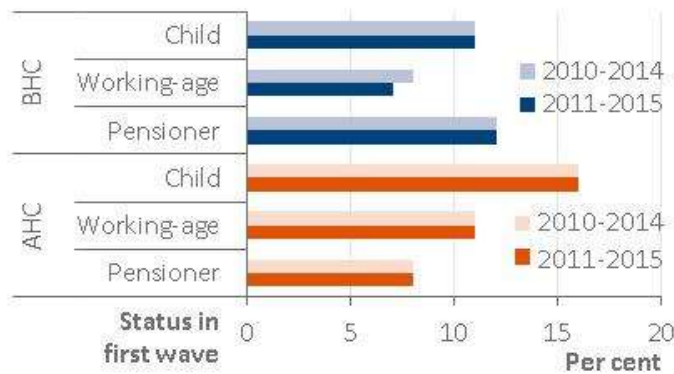
Persistence
Similar in 2010-2014 and 2011-2015
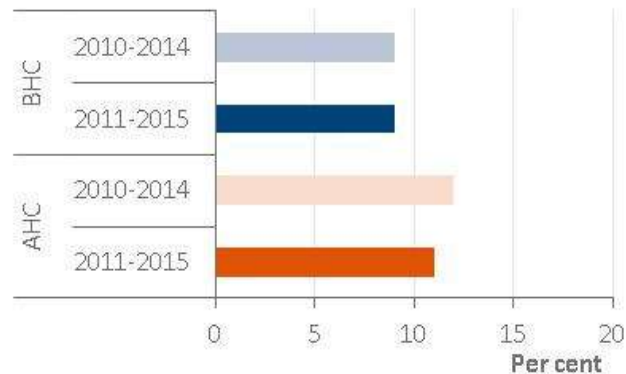
Similarly to single year low-income results, rates of persistent low income were generally higher AHC…
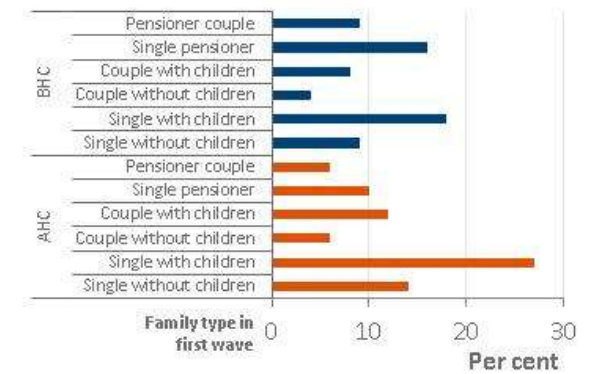
By population group
Similar in 2010-2014 and 2011-2015

…but again like single year low-income results, rates AHC were lower for pensioners.

By family type
Large variations by family type

Singles with children had high rates of persistent low income, while couples without children had low rates.

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At a glance

What you need to know

This is a new annual experimental statistics publication on income dynamics. It provides data on changes in household incomes in the UK including a measure of the extent to which people experience persistently low income. This meets DWP's statutory obligation to publish a measure of persistent low income for children under section 4 of the Welfare Reform and Work Act 2016.

Income measures

ID uses disposable household income adjusted for household size and composition as a proxy for living standards, estimated on both a before and after housing costs basis (BHC and AHC). A household is said to be in relative low income if their equivalised incomes is below 60 per cent of median income.

In line with international best practice, the income measures used in ID are subject to several statistical adjustments and, as such, are not always directly relatable to income amounts as they might be understood by individuals on a day-to-day basis. These adjustments are necessary, however, to allow us to compare measures over time and across households of different sizes and compositions on a consistent basis. These adjustments are discussed in more detail on page 10, with further information available in the ID Background information and methodology report.

These adjustments are similar to those used in Households Below Average Income (HBAI), which provides estimates of the prevalence of low incomes for a single year.

Survey data

ID estimates are based on the Understanding Society survey. In 2014-2015 it consisted of a longitudinal sample of over 40,000 individuals in the UK. It has a two-year survey period and follows the sample individuals over time. Each survey period is termed a wave. Individuals are interviewed once a year. Use of survey data means that results in this report are subject to a margin of error which can affect how changes should be interpreted, especially in the short term.

Figures are rounded to the nearest percentage point independently and as a result, may not sum exactly due to rounding.

Classifications are based on the relevant characteristics **in the first survey period**.

Additional tables and data

A number of additional reference tables are also available online, breaking down the headline results presented in this report for different demographics and characteristics (including work status, ethnicity, region, and tenure type amongst others), as well as presenting detailed information for 2010-2014 as well as 2011-2015. See https://www.gov.uk/government/statistics/income-dynamics-experimental..

Planned developments

These are experimental statistics. We plan to improve the derivation of key variables such as income and housing costs, and to extend the range of analysis produced (see Background information and methodology for further details). If there is further analysis you wish to see included, please contact us.

Overall persistent low incomes

Persistent low income varies a lot by region / country and is highest in the social rented sector

UK, 2011-2015
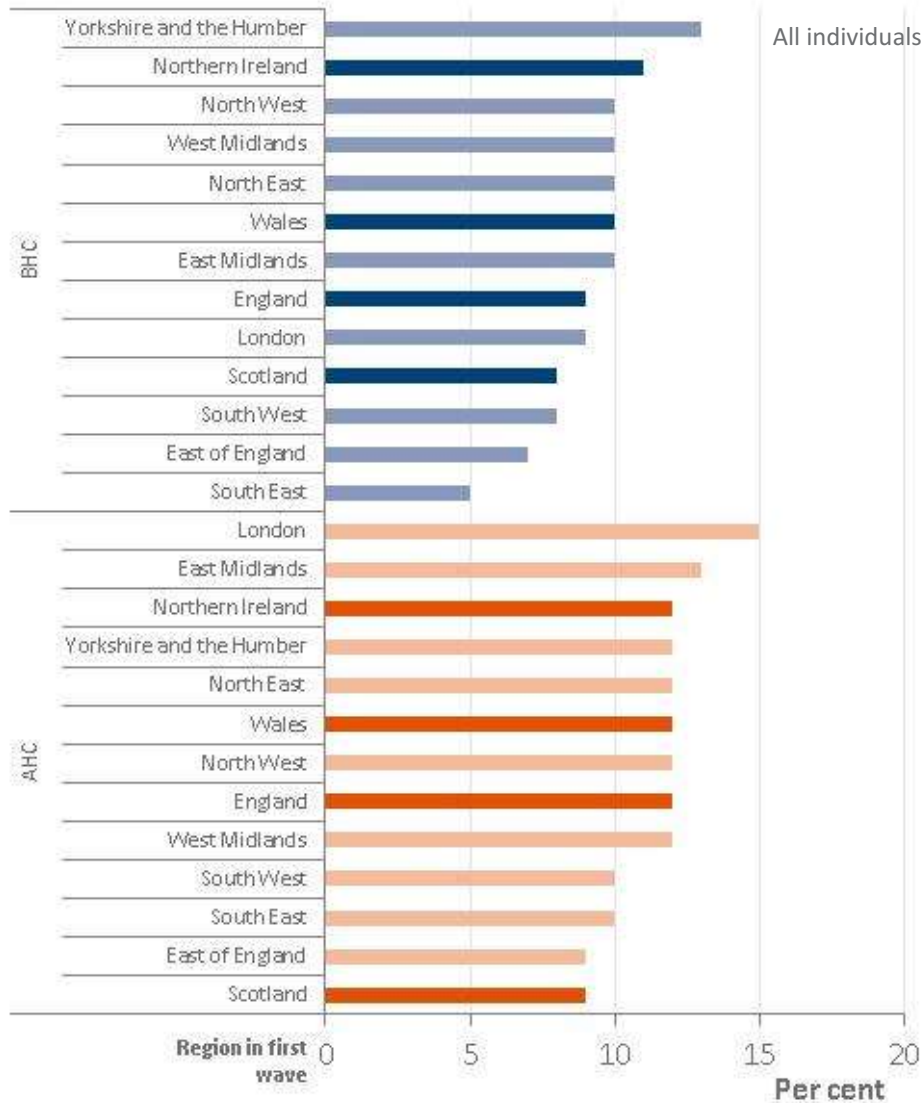
In 2011-2015, Yorkshire and the Humber had the highest percentage of the population in persistent low income BHC (13 per cent). The lowest rate of persistent low income was in the South East (5 per cent).

The highest rate of persistent low income AHC was in London (15 per cent), reflecting high housing costs. The lowest rates were in Scotland and the East of England (9 per cent).

Looking at tenure types, both BHC and AHC the highest rates of persistent low incomes were in the social rented sector (17 per cent per cent BHC, 29 per cent AHC), while the lowest rate was for those buying with a mortgage BHC or owning outright AHC.
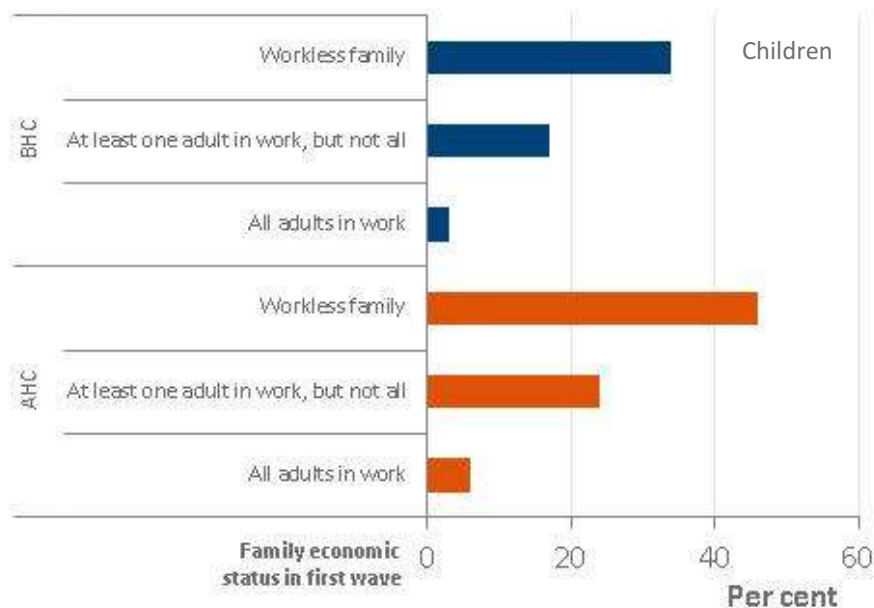
See **Tables 2.1** to **2.4** for full data.

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Child persistent low incomes by economic status and family type

## Lower rates of persistent low income for children in working families and in couple families

UK, 2011-2015

Reporting on the percentage of children in the United Kingdom who live in households whose income has been less than 60 per cent of median equivalised net household income in at least three of the last four survey periods is required under section 4 of the Welfare Reform and Work Act 2016. Eleven per cent of children BHC and 16 per cent AHC were in households with persistent low income in 2011-2015.

Children were much more likely to be in persistent low income where they were in a workless family. In 2011-2015, around a third of children in workless families in the first wave were in persistent low income BHC. AHC the figures were even higher at over 40 per cent for both groups.

Where all resident parents work, the rates were much lower, at 3 per cent BHC and 6 per cent AHC.
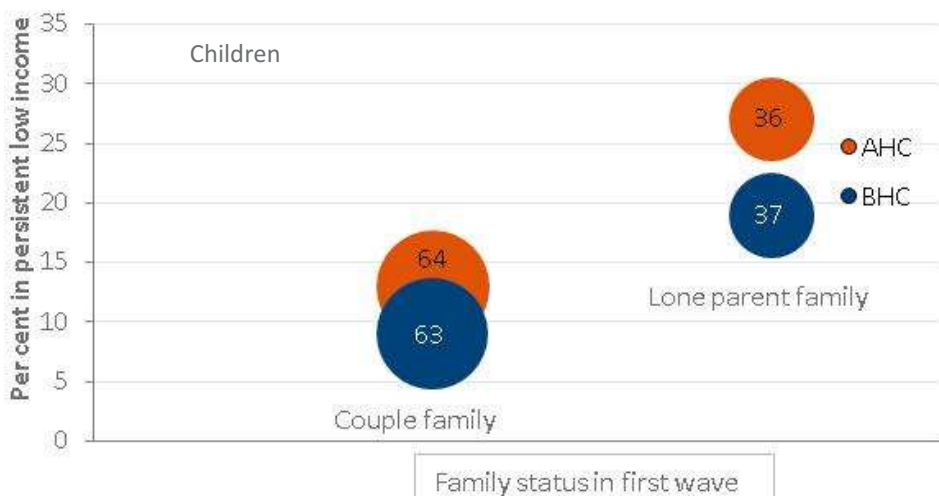
This chart shows the percentage of each group in persistent low income, with the size of the bubble the share of those in low income in each group. For instance, looking the lowest BHC bubble shows that 9 per cent of children in couple families were in persistent low income BHC (shown by the level of the centre of the bubble) however of all children in persistent low income, 63 per cent were in a couple family (shown by the size of the bubble).

The bubbles corresponding to children in lone parents are higher than those for children in couple families, showing that a higher percentage of children in lone parent were in persistent low income. However, the bubbles are bigger for children in couple families, reflecting that two thirds of children in persistent low income lived in couple families, because the population of children in couple families is greater.

Child persistent low incomes by region / country and size of family

Persistent low income for children also varies a lot by region / country and is highest in larger families
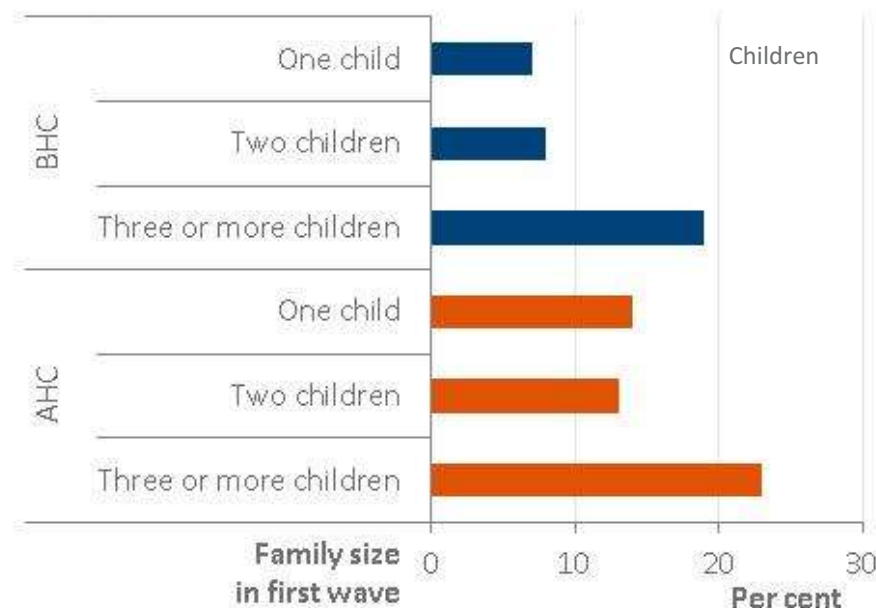
UK, 2011-2015
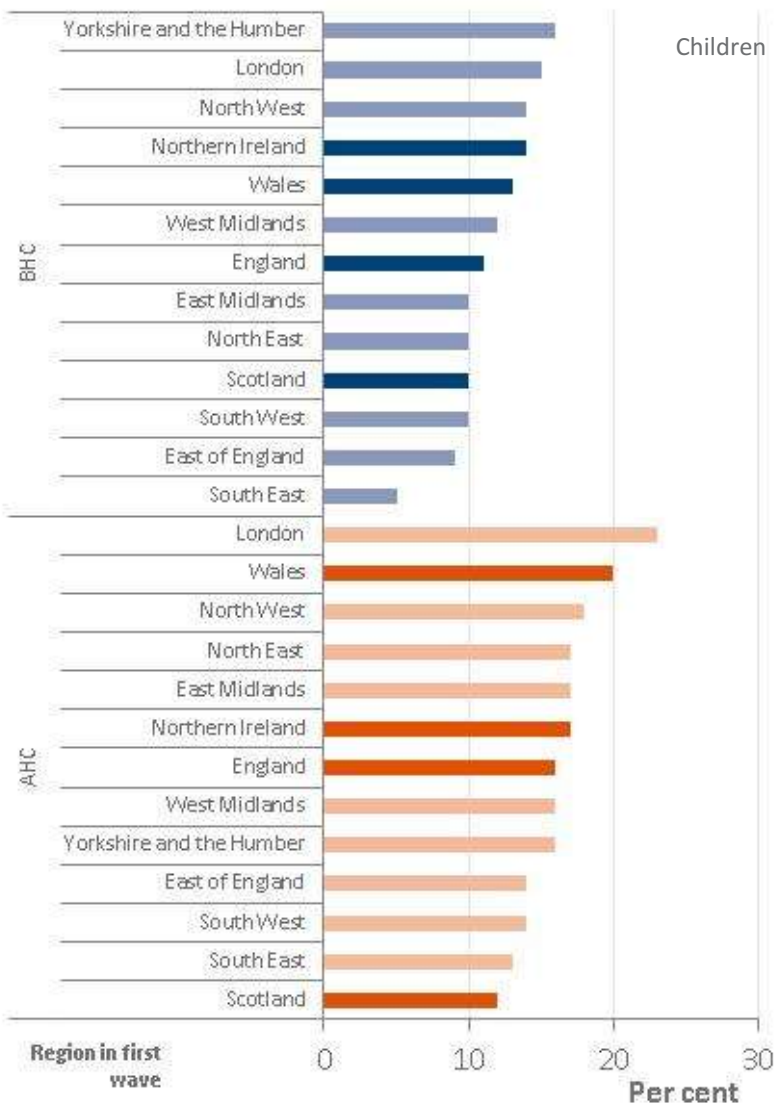
Children in Yorkshire and the Humber were most likely to be in households with a persistent low income BHC, while London had the highest rate AHC, due to high housing costs.

Children in the South East of England were least likely to be in households with a persistent low income BHC, while Scotland had the lowest rate AHC.

Children in large families with three or more children were more likely to be in persistent low income than smaller families, both BHC and AHC. There was less variation in persistent low income rates for children in smaller families.

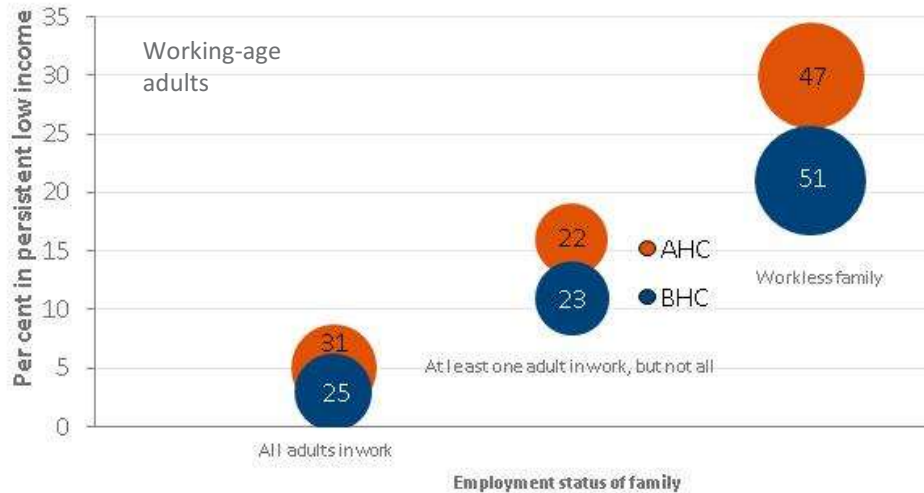See **Table 3.1** to **3.4** for full data.

Working-age persistent low incomes by economic status, qualifications and ethnicity

Persistent low income higher in workless families, for adults with no qualifications and in non-white households
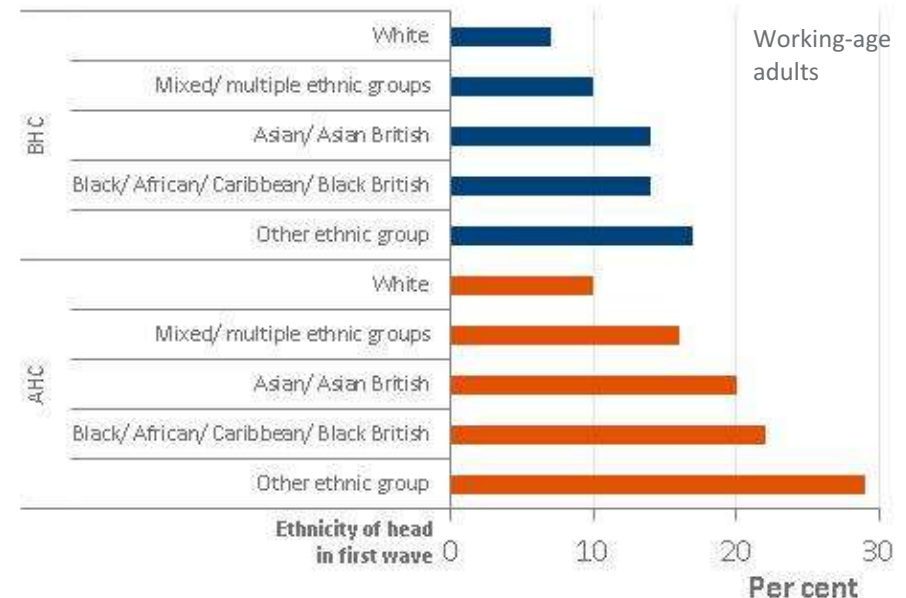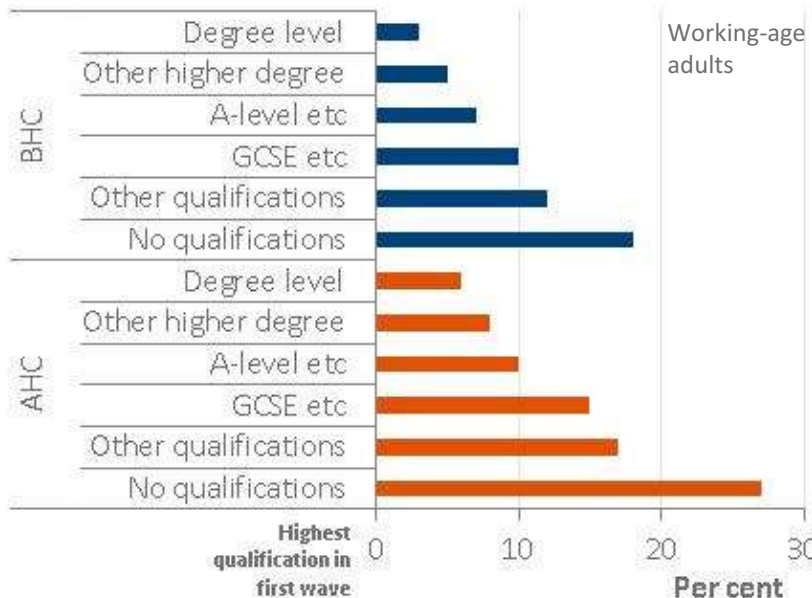
UK, 2011-2015

Again, families with more household members in work had lower rates of persistent low income. A working-age adult starting in a workless family was around seven times (BHC) and six times (AHC) more likely to be in persistent low income than a family where all members were in work. However, because of the larger overall population of working-age adults in families with someone in work, around half of working-age adults in persistent low income both BHC and AHC were in families where someone was working.

The higher the level of qualifications, the lower the rate of persistent low income, with persistent low income being more common amongst groups with lower formal qualifications, rising to 18 per cent BHC amongst those with no formal qualifications (27 per cent AHC).

Looking at the ethnicity of the household reference person, working-age adults in households headed by someone of white ethnicity had lower rates of persistent low incomes than working-age adults in households headed by someone of non-white ethnicity.
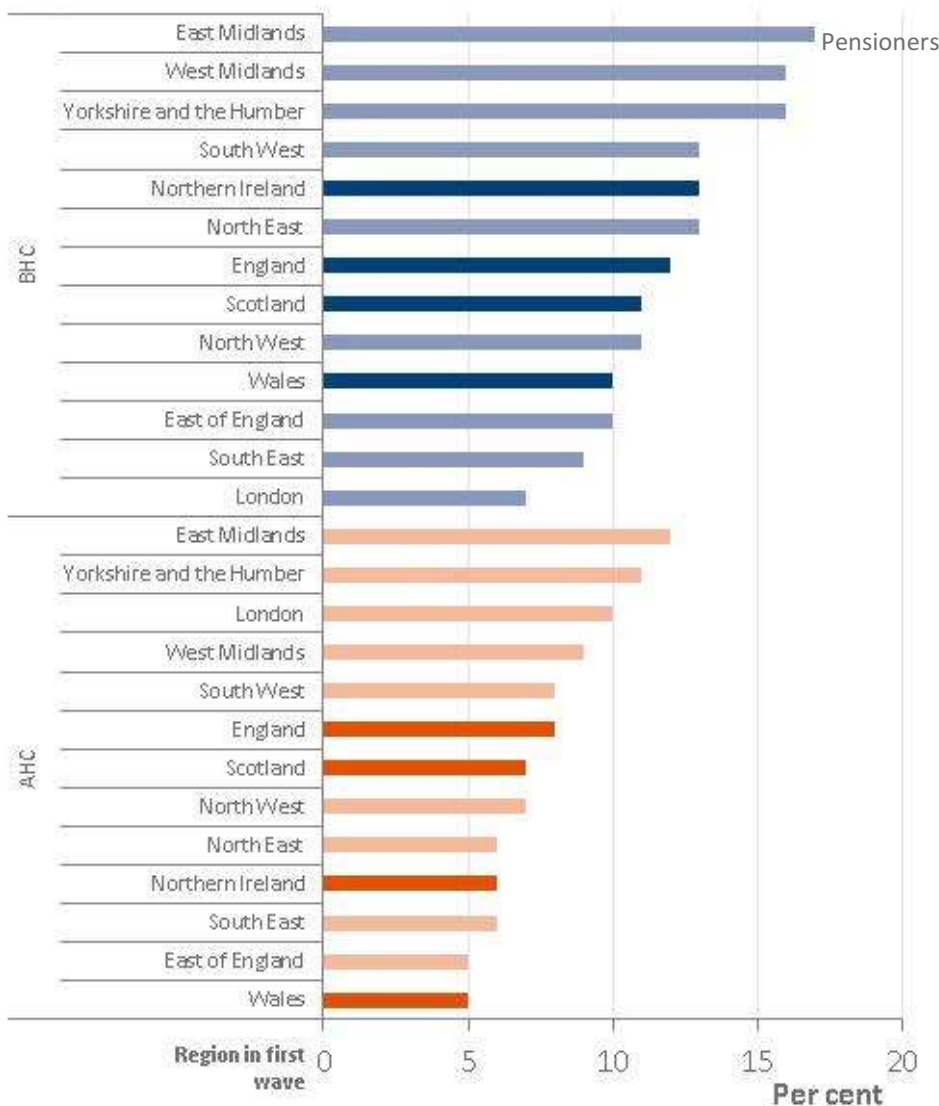
See **Table 4.1** to **4.4** for full data.

Pensioner persistent low incomes by region and tenure

Persistent low income for pensioners varies a lot by region / country and tenure

UK, 2011-2015

The East Midlands had the highest rate of pensioner persistent low income BHC and London had the lowest rate. AHC, the East Midlands also had the highest rate and Wales had the lowest rate.

Pensioners are relatively likely to own their own home outright and have low or no housing costs (70 per cent of pensioners in Understanding Society owned outright in 2011-2015). This means that typically a pensioner's household income is reduced by a smaller amount than other households when housing costs are deducted. They were therefore less likely to be in persistent low income After Housing Costs.

Those who own outright were more likely to be in persistent low income BHC than those who own with mortgages, but less likely to be in persistent low income AHC because of low housing costs. Pensioners who rent either socially or privately had much higher rates of persistent low income, AHC.
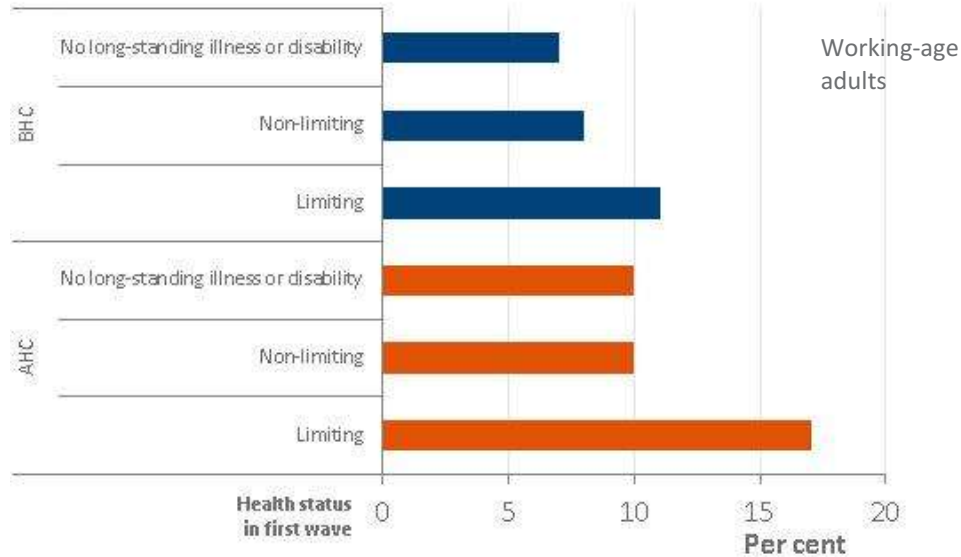
See **Table 5.1** to **5.4** for full data.

Adults in persistent low incomes by health status and age

Persistent low income higher for working-age adults with long-standing limiting illness

UK, 2011-2015

On Understanding Society, questions on health status are only asked of adults. There is an initial question to determine whether a respondent has any long-standing physical or mental impairment, illness or disability which has lasted for a year or is likely to last a year. If a respondent answers yes to this, they are then asked if the health problems or disabilities mean that they have substantial difficulties with any of 12 areas of their life. If they answer yes to this, we consider the disability to be limiting. This is broadly in line with Equality Act definition.

Having a long-standing illness or disability that limits your activities is associated with a higher likelihood of being in persistent low income for working-age adults.

In contrast with working-age adults, pensioners who report limiting longstanding illness or disability have similar rates of persistent low income to those with no longstanding illness or disability. This may reflect the onset of age-related ill-health or disability after making provision for retirement during their working life. Fifty-six per cent of pensioners on Understanding Society report a limiting illness or disability compared to 30 per cent of working-age adults.

See **Table 4.1, 4.3, 5.1** and **5.3** for full data.
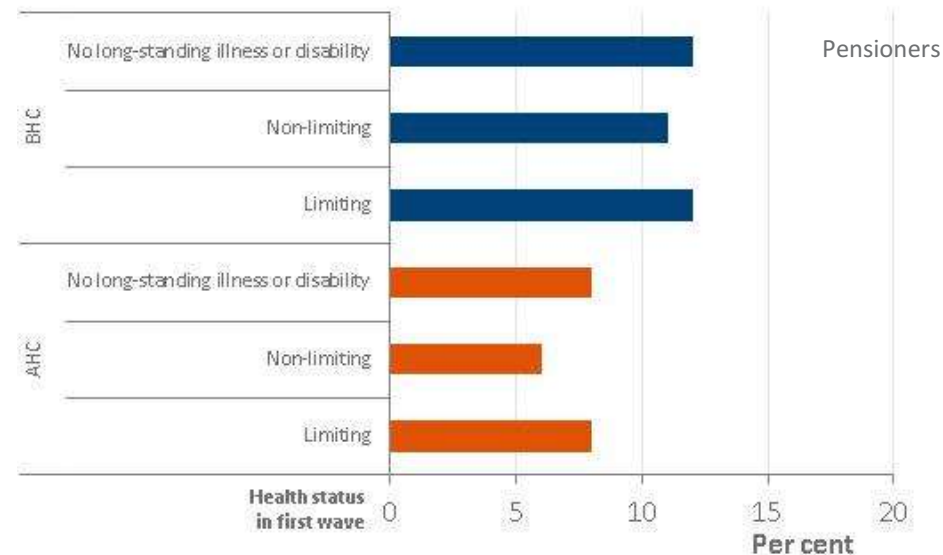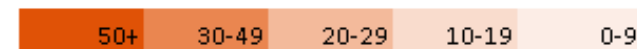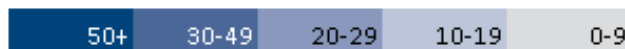
Movement between income quintiles over four years

Most movements between quintiles are short range

UK, 2010-2015

BHC Quintile (per cent)		2014-2015 position in income distribution				
		Q1 (lowest fifth)	Q2	Q3	Q4	Q5 (highest fifth)
2010-2011 position in income distribution	Q1 (lowest fifth)	51	25	14	7	4
	Q2	26	37	22	11	5
	Q3	13	23	32	22	10
	Q4	6	10	22	38	23
	Q5 (highest fifth)	4	5	10	21	59
	Total	100	100	100	100	100

AHC Quintile (per cent)		2014-2015 position in income distribution				
		Q1 (lowest fifth)	Q2	Q3	Q4	Q5 (highest fifth)
2010-2011 position in income distribution	Q1 (lowest fifth)	48	26	13	8	5
	Q2	27	34	23	12	5
	Q3	14	23	33	21	9
	Q4	6	11	22	36	23
	Q5 (highest fifth)	5	6	9	23	57
	Total	100	100	100	100	100

Key: 50+ | 30-49 | 20-29 | 10-19 | 0-9

The information underlying these statistics allows us to follow individuals over time. This table shows where an individual was in the last wave (2014-2015) compared to where they were in the first wave (2010-2011) by quintile. Quintiles divide the population, when ranked by household income, into five equal sized groups. Quintile 1, for example, is the fifth of the population with the lowest household incomes.

The percentage of individuals in 2014-2015 who were in the same quintile in 2010-2011 is lowest in the middle of the distribution, at 32 per cent in quintile 3 (BHC), rising to at least half in the lowest and top quintiles. Across all quintiles, at most a quarter of individuals in each quintile in 2014-2015 had moved up or down by more than one quintile. A similar picture is seen AHC. This shows there are limited, mostly short-range movements in income over this period.

See **Table 6.1** to **6.2** for full data.

Measuring incomes and persistence in Income Dynamics

ID uses data from Understanding Society to derive a measure of disposable household income. Adjustments are made to take into account the size and composition of households to make figures comparable.

Understanding Society Survey Understanding Society is a longitudinal sample of over 40,000 individuals in the United Kingdom in 2014-2015 led by the University of Essex. Those not in private households at the start of the survey will not be included.

Sampling Error Results from surveys are estimates and not precise figures - in general terms the smaller the sample size, the larger the uncertainty. We are unable to calculate sampling uncertainties for these statistics, but please note that small changes are unlikely to be statistically significant.

Non-Sampling Error Survey data represents the best data from respondents to the survey. If people give inaccurate responses or certain groups of people are less likely to respond this can introduces biases and errors. This non-sampling error can be minimised through effective and accurate sample and questionnaire design and extensive quality assurance of the data. However, it is not possible to eliminate it completely, nor can it be quantified.

Income This includes:
- Labour income – usual pay and self-employment earnings. Includes income from second jobs.
- Miscellaneous income – educational grants, payments from family members and any other regular payment
- Private benefit income – includes trade union/friendly society payments, maintenance or alimony and sickness or accident insurance
- Investment income – private pensions/annuities, rents received, income from savings and investments
- Pension income – occupational pensions income
- State support – tax credits and all state benefits including State Pension

BHC income is often used for non-pensioner analysis and is net of the following:
- income tax payments and National Insurance contributions
- council tax

AHC income is derived by deducting housing costs calculated from mortgage and rent amounts from the BHC income measure. It is often used for pensioner analysis

A household income measure implicitly assumes that all members of the household benefit equally from the household's income and so appear at the same position in the income distribution.

Equivalisation An adjustment is made to income to make it comparable across households of different size and composition. For example, this process of equivalisation would adjust the income of a single person upwards, so their income can be compared directly to the standard of living for a couple.
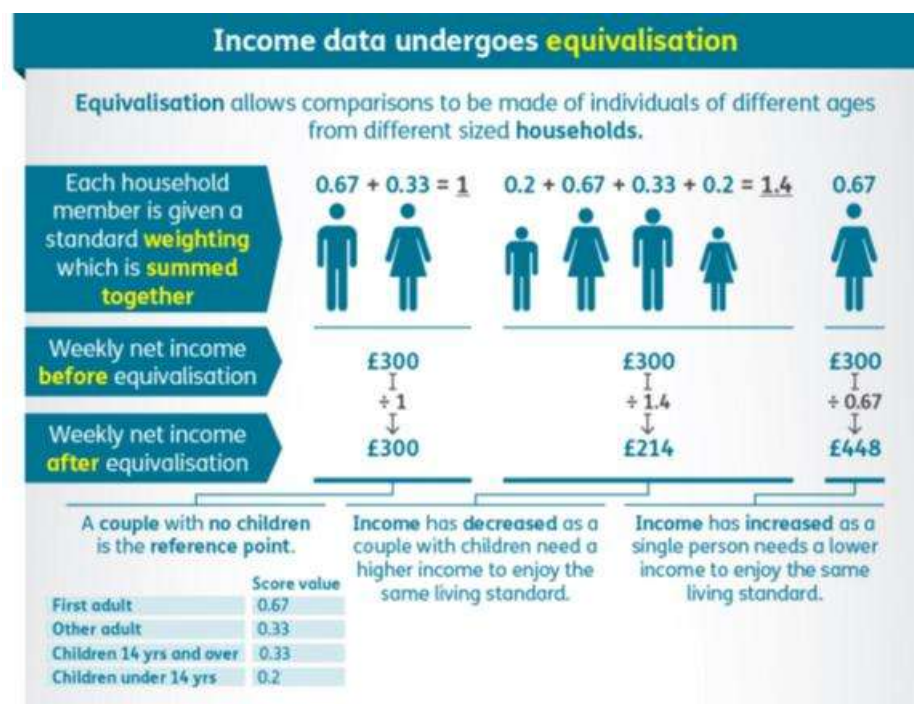
Low income This is defined for this publication as an individual in a household with an equivalised household income of less than 60 per cent of median income. A household in is **persistent low income** if they are in low income for at least three of the last four survey periods.

Inflation is the speed at which the prices of goods and services rise or fall. ID uses a CPI-based adjustment, also used in Households Below Average Income, to compensate for the effects of inflation over time.

About these statistics

NATIONAL STATISTICS STATUS

National Statistics status means that official statistics meet the highest standards of trustworthiness, quality and public value.

All official statistics should comply with all aspects of the *Code of Practice for Official Statistics*. They are awarded National Statistics status following an assessment by the Office for Statistics Regulation. The Office for Statistics Regulation considers whether the statistics meet the highest standards of Code compliance, including the value they add to public decisions and debate.

Income Dynamics is currently an experimental statistical series, which means it is not currently assessed as a National Statistic, as it is in the testing phase and not yet fully developed.

Statistics in this publication are considered by DWP as "Fully Comparable at level A*" of the UK Countries Comparability Scale across countries.

Where to find out more

Further outputs and reference tables from Income Dynamics analysis, alongside our ID Background information and methodology, giving further detail on how we estimate the measures reported here are available via the following link

https://www.gov.uk/government/statistics/income-dynamics-experimental

Estimates of numbers in low income in a single year from Households Below Average Income can be found at

https://www.gov.uk/government/collections/households-below-average-income-hbai--2

ONS produce a National Statistics series on persistent low income based on EU-SILC data. This is based on a different data source (the Survey of Living Conditions) and has a different definition of persistent low income. See Background information and methodology for further details:

https://www.ons.gov.uk/peoplepopulationandcommunity/personalandhouseholdfinances/incomeandwealth/articles/persistentpovertyintheukandeu/2014

ONS guidance on alternative sources of data on earnings and income is available at the following link and provides useful information to contextualise the ID statistics:

http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/articles-and-reports/a-guide-to-sources-of-data-on-earnings-and-income.pdf

Other National and Official Statistics

Details of other National and Official Statistics produced by the Department for Work and Pensions can be found on the DWP website at the following links:

- A schedule of statistical releases over the next 12 months and a list of the most recent releases: https://www.gov.uk/government/organisations/department-for-work-pensions/about/statistics
- In accordance with the Code of Practice for Official Statistics, all DWP National Statistics are also announced at: https://www.gov.uk/government/statistics/announcements