

**HEALTH  
EQUITY**

**NORTH**

**2023**



# Acknowledgements

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## About Health Equity North

Health Equity North (HEN) is a new virtual institute focused on place-based solutions to public health problems and health inequalities across the North of England. It brings together world-leading academic expertise from the NHSa's members of leading universities, hospitals, and academic health science networks, with the aim of fighting health inequalities through research excellence and collaboration.  
[@\\_HENorth](http://www.healthequitynorth.co.uk)

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# Executive summary

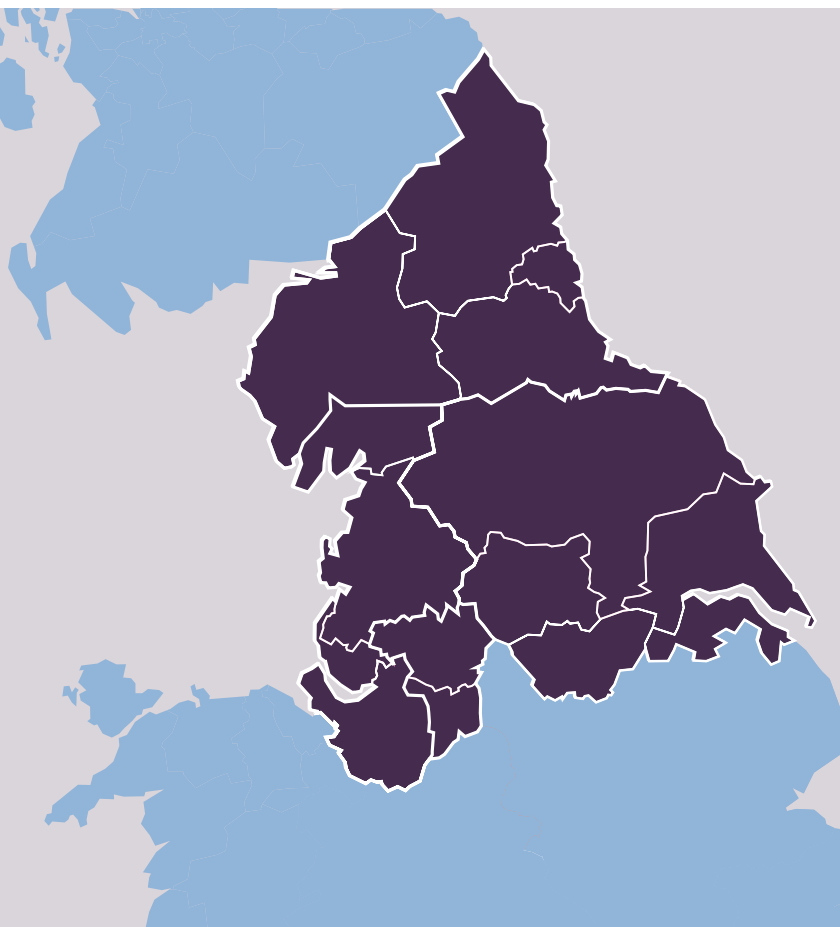
## 60 Second Summary

Health Equity North has produced this status report which provides a snapshot of the key health issues facing the North of England.

This report has been created to understand the impact of the past few years on health in the North of England and to explore the opportunities for levelling up health, improving productivity across the country, and reducing regional inequalities. Health Equity North will produce annual updates of health in the North to help - and challenge - local and national policy makers in their efforts to reduce regional inequalities.

Analysing the latest available data on life expectancy, infant mortality, self-assessed health, disability, and unpaid care, we find that the health divide between the North and the rest of England is large and increasing.

The North does considerably worse than other regions and this also has productivity costs with above average rates of economic inactivity due to ill health or disability across the North. Now, more than ever, we need to act to address these regional health inequalities and improve productivity.



## Key findings Overall, we have found a worrying pattern of lower life expectancy, higher infant mortality rates and worse health and wellbeing in the North of England:

**Babies born in the North had a life expectancy of at least**

**1 YEAR**

**less than the English average**

### Lower Life Expectancy in the North

- Babies born in the North had a life expectancy of at least 1 year less than the English average.
- The North East had the lowest life expectancy for both baby girls and baby boys
- Life expectancy in the North East is around three years less than in the best performing regions (London and the South East).
- We also found over the last decade, the regional life expectancy gap has increased for both baby girls and baby boys:
  - Life expectancy increased by only 0.7 years or less for baby boys born in the North compared to an increase of a whole year for baby boys born in London.
  - Life expectancy increased by only 0.3 years or less for baby girls born in the North, compared to an increase of over 1 year for baby girls born in London.

### Above average infant mortality rates in the North

- The three northern regions (North East, North West and Yorkshire and The Humber) have amongst the highest rates of infant mortality:
  - Across the North there is an average of 4 deaths per 1,000 live births compared to 3 deaths per 1,000 live births in London and the South East.
  - This equates to an extra 144 infant deaths in the North in 2021 above what would be expected if we had the same rates as in the best performing regions.

**144**

**extra infant deaths in the North in 2021**

Of the

72

local authorities in the North of England

52

have lower average levels of 'very good' or 'good' health than the national average

## Higher rates of bad/very bad health in the North

- The three northern regions have the lowest rates of people reporting that their health is either 'very good' or 'good':
  - 78.3% in the North East (3.4 percentage points below the English average)
  - 80.0% in the North West (1.7 percentage points below the English average)
  - 80.1% in Yorkshire and the Humber (1.6 percentage points below the English average)
- There is an 5.7 percentage points gap between the best performing region (South East at 84.0%) and the worst region (North East at 78.3%).
- Of the 72 local authorities in the North of England, 52 (72%) have lower average levels of 'very good' or 'good' health than the national average.
- The three northern regions have the highest rates of people reporting 'bad' or 'very bad' health:
  - 6.9% in the North East (1.6 percentage points above the English average)
  - 6.4% in the North West (1.1 percentage points above the English average)
  - 5.9% in Yorkshire and the Humber (0.6 percentage points above the English average)
- There is a 2.9 percentage points gap between the best performing region (South East at 4.0%) and the worst region (North East at 6.9%).

## Higher rates of disability in the North

- The three northern regions have the highest rates of people who report that their day-to-day activities are limited a lot by a disability:
  - 9.8% in the North East (2.3 percentage points above the English average)
  - 9.1% in the North West (1.6 percentage points above the English average)
  - 8.2% in Yorkshire and the Humber (0.7 percentage points above the English average)
- There is a 3.6 percentage points gap between the best performing region (South East at 6.2%) and the worst region (North East at 9.8%).
- Of the 72 local authorities in the North of England, 59 (82%) had a disability prevalence higher than the national average.
- The five local authorities with the highest levels of people who report that a disability limits their day-to-day activities a lot are located in the North: Knowsley (North West; 13.0%), Liverpool (North West; 12.7%), Blackpool (North West; 12.0%), Manchester (North West; 11.4%), and Hartlepool (North East; 11.3%).

There is a

3.6

percentage points gap between the best performing region (South East at 6.2%) and the worst region (North East at 9.8%).

All of the top five local authorities with the highest levels of economic inactivity due to long-term sickness or disability are in the North.

## Higher rates of economic inactivity due to ill health or disability in the North

- The three northern regions had the highest percentages of people economically inactive due to ill health or disability:
  - 5.7% in the North East (1.6 percentage points above the national average)
  - 5.3% in the North West (1.2 percentage points above the national average)
  - 4.7% in Yorkshire and the Humber (0.6 percentage points above the national average)
- There is a 2.6 percentage points gap between the best performing region (South East at 3.1%) and the worst region (North East at 5.7%).
- All of the top five local authorities with the highest levels of economic inactivity due to long-term sickness or disability are in the North.

## Higher rates of unpaid care provision in the North

- Across England, 8.9% of people state that they provide unpaid care. However, it is much higher in all three northern regions:
  - 10.1% in the North East
  - 9.7% in the North West
  - 9.3% in Yorkshire and The Humber
- Unpaid care provision is lowest in London, where 7.8% of people provide unpaid care.
- There is a 2.3 percentage points gap between the region with the lowest levels of unpaid care (London) and that with the highest (North East).
- The three northern regions also report above average levels of care provision of at least 50 hours per week.

The three Northern regions report above average levels of care provision of at least

50

hours per week

# Policy Recommendations

To improve productivity, health in the North needs to be improved. This requires:

- 1 Local government, Integrated Care Systems and combined mayoral authorities should work with researchers to identify areas of greatest health need within their authorities where they can most effectively implement evidence-based policies to tackle the social determinants of health.
- 2 Central government should commit to policies and interventions to improve health across the North and take a cross-governmental approach, across the Department for Levelling Up, Housing and Communities, the Department of Health and Social Care, Department for Work and Pensions and the Department for Science Innovation and Technology.
- 3 Long-term increases in public health funding to local authorities and the Integrated Care Systems in the North need to be made and ring-fenced and achievements reported to Parliament.
- 4 Prioritise the development of an integrated, national health inequalities strategy with an explicit focus on addressing the social determinants of health:
  - reducing poverty
  - improving housing
  - increasing energy security
  - creating better jobs
  - improving early child development and education
  - creating healthy and sustainable places in which to live and work
  - improving efforts at prevention
- 5 Research funders should give increased priority to research that helps to address health inequalities including a place-based focus on prevention.
- 6 Provide universal access to occupational health for the country's workforce with a specific focus on increasing access and supporting employers in areas with the worst health outcomes.
- 7 Increase NHS and local authority resources and service provision for mental health in the North. Increase the existing NHS health inequalities weighting within the NHS funding formula.
- 8 Embed Equality Impact Assessments in all policy processes relating to socioeconomic deprivation at national, regional, and local levels.
- 9 Integrated Care Systems should commission more health promotion, condition management and prevention services that promote the health and wellbeing of the workforce in the North.
- 10 Local public health and health inequalities budgets in the NHS should be safeguarded so that action to relieve acute NHS backlogs does not undermine efforts to tackle the root causes of ill-health and boost health resilience.



# Chapter 1: Introduction

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There is a well-known productivity gap between the three northern regions (North East, North West, Yorkshire and Humber) and the rest of England of £4 per person per hour.<sup>1</sup>

There is also a large gap in health outcomes between the North and the rest of England, with life expectancy lower in the North and health and wellbeing worse. In the Northern Health Science Alliance's (NHSA) 2018 'Health for Wealth' report<sup>2</sup>, we found that improving health in the North would reduce the regional gap in productivity by 30% or £1.20 per person per-hour, generating an additional £13.2bn in UK GDP per year.

The COVID-19 pandemic further exacerbated regional inequalities. In autumn 2021, we published a report that examined the impact of the COVID-19 pandemic on health and productivity in the North.<sup>3</sup> We found large regional inequalities in the health and economic impacts of COVID-19 on the North including:

- COVID-19 deaths were 17% higher in the North of England
- Hospital pressure due to COVID-19 was 10% higher in the North
- The three northern regions spent an additional 6 weeks in the harshest lockdown restrictions
- Unemployment has been 20% higher in the North since 2020
- Wages in the North fell during the pandemic, whilst increasing elsewhere
- The increased mortality in the North of England during the pandemic cost the national economy up to £7.3bn in lost productivity

In 2022, the NHSA published a follow-up report examining the regional impacts on mental health from the pandemic. This report found that:

- The pandemic negatively affected mental health across England, but those in the North experienced the largest and most prolonged hit to mental health
- Ethnic minority women in the North had the worst mental health scores throughout the pandemic
- The North experienced a 12% increase in the numbers of anti-depressants prescribed during the pandemic
- Mental health fell equally in the North and the rest of the country during the pandemic but it recovered more quickly in the rest of the country than in the North
- People in the North under 35 were more likely than any other age group to have developed a psychiatric disorder over the course of the pandemic
- The economic cost to the UK of the mental health impact of the pandemic on the North was estimated to be £2bn

The scale and persistence of these regional inequalities has prompted the NHSA to set up Health Equity North. To mark the launch of Health Equity North, we have produced this report on the current state of regional health inequalities.<sup>4</sup>

Our report provides the first of what will be annual 'Health Equity North Health Status Reports'. Here we outline the key health issues facing the North today. Specifically, we examine the latest data on regional inequalities in life expectancy, infant mortality rates, and provide new analysis of what the 2021 Census data tells us about self-assessed health, disability, economic inactivity and unpaid care in the North.

Overall, we find a worrying pattern of lower life expectancy; higher infant mortality rates and worse levels of bad/very bad self-assessed health, disability and unpaid care in the North of England. We also note the productivity impacts of the North's health burden, with above average rates of economic inactivity due to ill health or disability in all three northern regions.





# **Chapter 2:** Growing More Unequal: Regional Inequalities in Life Expectancy and Infant Mortality Rates

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## 2.1 Summary

This chapter analyses the latest data on regional inequalities in life expectancy and infant mortality rates. Overall we find a worrying pattern of lower life expectancy in the North of England:

- Babies born in the North had a life expectancy of at least 1 year less than the English average
- The North East had the lowest life expectancy for both baby girls and baby boys
- Life expectancy in the North East is around three years less than in the best performing regions (London and the South East)
- We also found that over the last decade, the regional life expectancy gap has increased for both baby girls and baby boys:
  - Life expectancy increased by only 0.7 years or less for baby boys born in the North compared to an increase of a whole year for baby boys born in London
  - Life expectancy increased by only 0.3 years or less for baby girls born in the North, compared to an increase of over 1 year or baby girls born in London
- The three northern regions have amongst the highest rates of infant mortality:
  - Across the North there is an average of 4 deaths per 1,000 live births compared to 3 deaths per 1,000 live births in London and the South East.
  - This equates to an extra 144 infant deaths in the North in 2021 above what would be expected if we had the same rates as the best performing regions

## 2.2 Regional Inequalities in Life Expectancy

Figure 1 shows the latest estimates for life expectancy across the nine regions of England.

Across England, in 2018-20 the average life expectancy for a newborn baby girl was 83.1 years (Figure 1A). This was considerably lower in the three Northern regions:

- 81.5 years in the North East (1.6 fewer years than the English average)
- 81.7 years in the North West (1.4 fewer years than the English average)
- 82.2 years in Yorkshire and the Humber (0.9 fewer years than the English average)

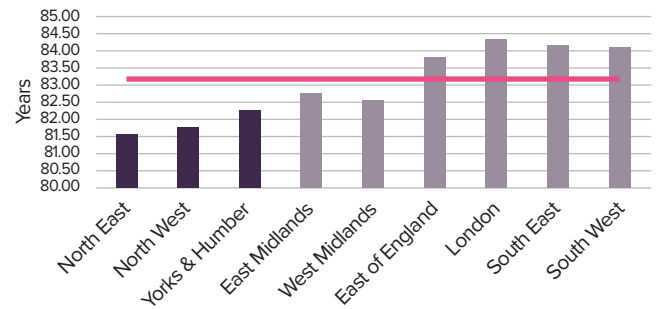
Conversely, the average life expectancy for a baby girl born in London was 84.3 years, 84.1 years in the South East, and 84.1 years in the South West.

Likewise, across England in 2018-20, the average life expectancy for a new born baby boy was 79.4 years (Figure 1B). This was considerably lower in the three Northern regions:

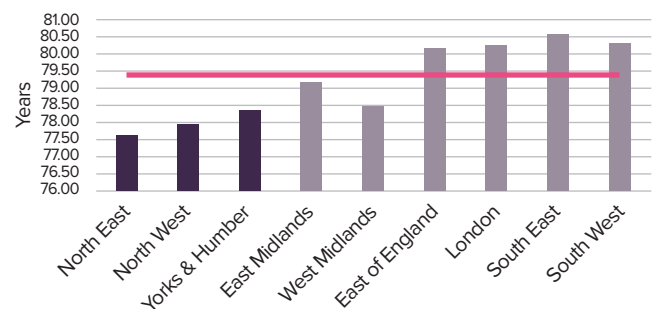
- 77.6 years in the North East (1.8 fewer years than the English average)
- 77.9 years in the North West (1.5 fewer years than the English average)
- 78.4 years in Yorkshire and the Humber (1 fewer years than the English average)

**Figure 1:** Life expectancy at birth for females and males in 2018-2020 across the nine English regions<sup>5,6</sup>

Panel (a): Female



Panel (b): Male



Note: The lines are the English averages (=83.14 years for females and 79.40 years for males)

The average life expectancy for boys is 80.6 years in the South East, 80.3 in the South West and 80.3 years in London - the highest in England.

## 2.3 A Growing Divide?

There is also evidence to suggest that these regional inequalities are growing over time (Figure 2). For example, between 2001-2020, life expectancy increased by:

- 2.1 years (or 2.6%) in the North East for women and 2.9 years (or 3.9%) for men
- 2.3 years (or 2.9%) in the North West for women and 3.1 years (or 4.2%) for men
- 2.0 years (or 2.4%) in Yorkshire in the Humber for women and 2.8 years (or 3.7%) for men

These increases in the North are smaller than the corresponding increases in the Southern most three regions:

- 3.5 years (or 4.4%) in London for women and 4.3 years (or 5.7%) for men
- 2.5 years (or 3.1%) in the South East and 3.2 years (or 4.2%) for men
- 2.3 years or (2.9%) in the South West and 2.9 years (or 3.8%) for men

If we consider the period from 2009-2020, the increases in life expectancy are much smaller. They only increased by:

- 0.1 years (or 0.2%) in the North East for women and 0.2 years (or 0.3%) for men
- 0.3 years (or 0.4%) in the North West for women and 0.7 years (or 0.9%) for men

- 0.3 years (or 0.4%) in Yorkshire and the Humber for women and 0.4 years (or 0.5%) for men

The increase in London, albeit modest when compared to the previous decade, was much larger. Life expectancy increased by 1 year (or 1.2%) for women and 1.1 years (or 1.4%) for men.

## 2.4 Regional Inequalities in Infant Mortality Rates

Here we present infant mortality rates by region of England using the most recent data, from 2021 (Figure 3). The three northern regions have among the highest rates of infant mortality; only the West Midlands has a higher rate.

On average, the Infant Mortality Rate in the three northern regions is 4 deaths per 1,000 live births compared to 3.1 in London and the South East.

In 2021, there were 159,657 live births in the three northern regions. Using these rates (of 4 in the northern three regions and 3.1 in the southern three regions) equates to an extra 144 infant deaths in the North in 2021 above what would be expected if we had the same rates as in the best performing regions.

Figure 3: Infant mortality rates 2021, by Region<sup>9</sup>

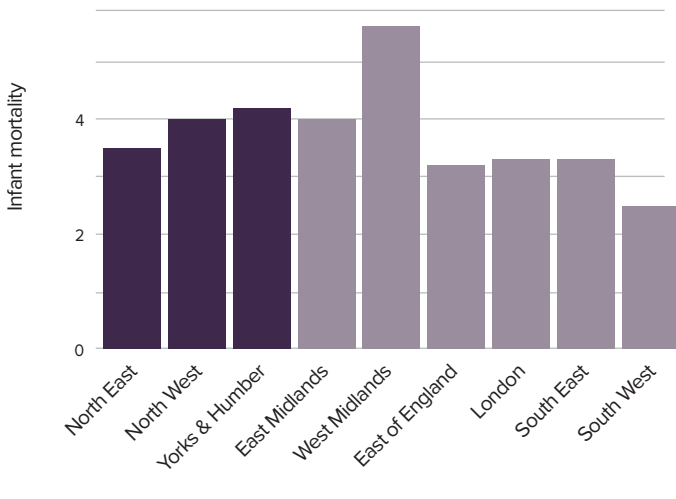
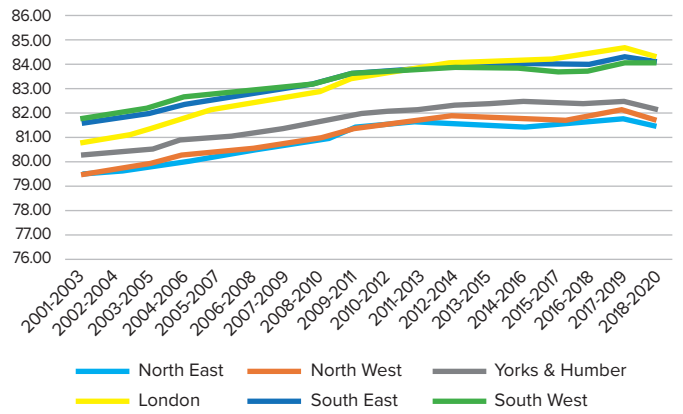
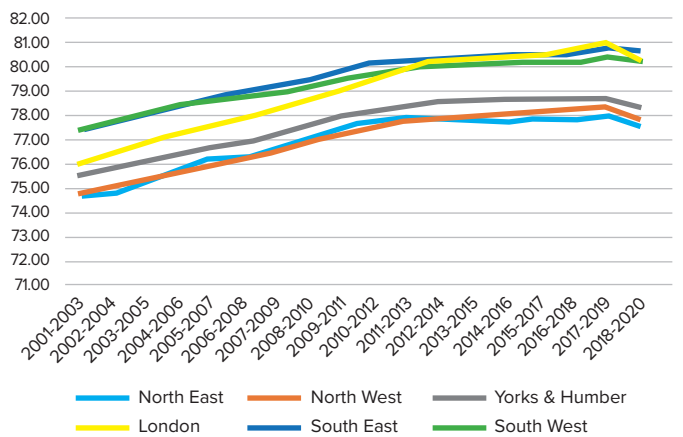


Figure 2: Life expectancy at birth for females and males in from 2001-2003 to 2018-2020 for six selected English regions, ONS 2021<sup>7</sup>

Panel (a): Female



Panel (b): Male



# **Chapter 3:** In Sickness and in Health: What the 2021 Census Tells Us about Health in the North

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## 3.1 Summary

This chapter analyses newly available data from the 2021 Census on regional inequalities in self-assessed health and disability.<sup>10</sup> Overall we find a challenging picture for the North, with rates of bad/very bad self-assessed health and disability all above average in the three northern regions.

- The three northern regions have the lowest rates of people reporting that their health is either ‘very good’ or ‘good’:
  - 78.3% in the North East (3.4 percentage points below the English average)
  - 80.0% in the North West (1.7 percentage points below the English average)
  - 80.1% in Yorkshire and the Humber (1.6 percentage points below the English average)
- There is an 5.7 percentage points gap between the best performing region (South East at 84.0%) and the worst region (North East at 78.3%)
- Of the 72 local authorities in the North of England, 52 (72%) have lower average levels of very good or good health than the national average
- The three northern regions have the highest rates of people reporting ‘bad’ or ‘very bad’ health:
  - 6.9% in the North East (1.6 percentage points above the English average)
  - 6.4% in the North West (1.1 percentage points above the English average)
  - 5.9% in Yorkshire and the Humber (0.4 percentage points above the English average)
- There is a 2.9 percentage points gap between the best performing region (South East at 4.0%) and the worst region (North East at 6.9%)
- The three northern regions have the highest rates of people who report that their day-to-day activities are limited a lot by a disability:
  - 9.8% in the North East (2.3 percentage points above the English average)
  - 9.1% in the North West (1.6 percentage points above the English average)
  - 8.2% in Yorkshire and the Humber (0.7 percentage points above the English average)
- There is a 3.6 percentage points gap between the best performing region (South East at 6.2%) and the worst region (North East at 9.8%)
- Of the 72 local authorities in the North of England, 59 (82%) had a disability prevalence higher than the national average
- The five local authorities with the highest levels of people who report that a disability limits their day-to-day activities a lot are located in the North: Knowsley (North West; 13.0%), Liverpool (North West; 12.7%), Blackpool (North West; 12.0%), Manchester (North West; 11.4%), and Hartlepool (North East; 11.3%)

## 3.2 Self-assessed health

In the 2021 Census, people were asked “How is your health in general?” and they could reply “very good”, “good”, “fair”, “bad”, or “very bad”. This question is known as ‘self-assessed health’ for people to make judgments about how they perceive their own

**Table 1:** The age-standardised percentage of people (panel a), women (panel b), and men (panel c) who report their health as very good, good, fair, bad, or very bad across the nine English regions, Census 2021<sup>11</sup>

Panel (a): People

	Very good (%)	Good (%)	Fair (%)	Bad (%)	Very bad (%)
North East	44.7	33.6	14.8	5.3	1.6
North West	46.8	33.2	13.7	4.9	1.5
Yorks & The Humber	45.3	34.8	14.0	4.6	1.3
East Midlands	45.8	35.1	13.7	4.2	1.2
West Midlands	45.2	35.0	13.9	4.5	1.4
East of England	47.9	35.0	12.5	3.6	1.0
London	49.0	32.9	12.6	4.1	1.3
South East	49.6	34.4	11.8	3.3	0.9
South West	48.7	34.1	12.5	3.7	1.1
<b>England</b>	<b>47.5</b>	<b>34.2</b>	<b>13.0</b>	<b>4.1</b>	<b>1.2</b>

Panel (b): Women

	Very good (%)	Good (%)	Fair (%)	Bad (%)	Very bad (%)
North East	44.5	33.6	14.9	5.5	1.6
North West	46.5	33.1	13.8	5.1	1.5
Yorks & The Humber	44.9	34.8	14.1	4.8	1.4
East Midlands	45.4	35.2	13.9	4.4	1.2
West Midlands	44.6	35.1	14.1	4.8	1.4
East of England	47.5	35.0	12.7	3.8	1.0
London	48.3	33.0	12.9	4.4	1.4
South East	49.4	34.3	11.9	3.5	0.9
South West	48.4	34.1	12.5	3.9	1.1
<b>England</b>	<b>47.1</b>	<b>34.2</b>	<b>13.2</b>	<b>4.3</b>	<b>1.2</b>

Panel (c): Men

	Very good (%)	Good (%)	Fair (%)	Bad (%)	Very bad (%)
North East	45.0	33.7	14.6	5.1	1.6
North West	47.1	33.2	13.6	4.7	1.5
Yorks & The Humber	45.7	34.8	13.8	4.4	1.3
East Midlands	46.2	35.1	13.5	3.9	1.2
West Midlands	45.8	35.0	13.7	4.2	1.3
East of England	48.3	35.0	12.3	3.4	1.0
London	49.8	32.9	12.2	3.8	1.3
South East	49.9	34.4	11.7	3.1	0.9
South West	48.9	34.1	12.4	3.5	1.0
<b>England</b>	<b>47.9</b>	<b>34.2</b>	<b>12.8</b>	<b>3.9</b>	<b>1.2</b>

health. This variable has been shown to be related to hospital admissions and mortality, and is widely acknowledged as a good measure of health.

Across England, 81.7% state that their health is either ‘very good’ or ‘good’. However, this differs by region. For example, in the North East only 78.3% of people report their health being very good or good (the region with the lowest percentage of these top two categories). In the

South East, 84.0% of people report their health as being very good or good, 8.7 percentage points higher than in the North East.

The three northern regions have the lowest values for these top two categories of health (Figure 4):

- 78.3% in the North East (3.4 percentage points below the English average)
- 80.0% in the North West (1.7 percentage points below the English average)
- 80.1% in Yorkshire and the Humber (1.6 percentage points below the English average)

For women, the percentages are typically lower:

- 78.1% in the North East (3.2 percentage points below the English average)
- 79.6% in the North West (1.7 percentage points below the English average)
- 79.7% in Yorkshire and the Humber (1.6 percentage points below the English average)

Men in the North also report their health to be worse than men in the rest of the country. Men living in the three northern regions have the lowest values for these top two categories of health good or very good):

- 78.7% in the North East (3.4 percentage points below the English average)
- 80.3% in the North West (1.8 percentage points below the English average)
- 80.5% in Yorkshire and the Humber (1.6 percentage points below the English average)

Conversely, the three northern regions have the highest values for percentage of people in the bottom two categories of health: bad or very bad (Figure 5):

- 6.9% in the North East (1.6 percentage points above the English average)
- 6.4% in the North West (1.1 percentage points above the English average)
- 5.9% in Yorkshire and the Humber (0.6 percentage points above the English average)

Similar patterns are observed for both women and men.

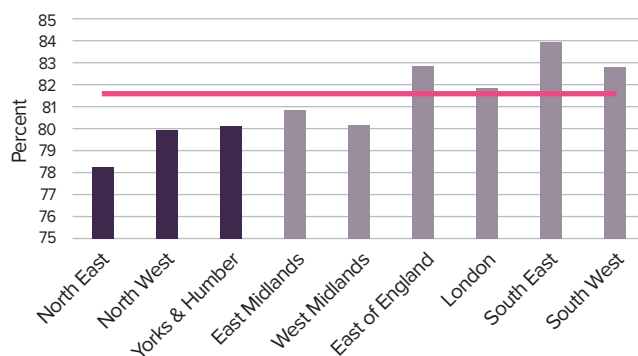
Data is also available at local authority district (LAD) level. Of the 72 LADs in the North of England, 52 (72%) have lower average levels of 'very good' or 'good' health than the national average (Figure 6). In the rest of England, 89 out of 237 LADs (38%) are lower than average. In the southern most three regions, only 37 out of 127 LADs (29%) have average levels of very good or good health lower than the national average.

Three of the five local authorities with the lowest levels of people who report their health as very good or good are in the North. The LADs with the lowest percentage of people are: Tower Hamlets (London; 74.5%), Blackpool (North West; 74.6%), Manchester (North West 75.5%), City of Kingston upon Hull (Yorkshire and the Humber; 75.8%), and Sandwell (West Midlands, 75.9%).

On the other hand, 53 out of the 72 LADs in the North (74%) have average levels of bad or very bad health above the national average (Figure 7). In the rest of England, 75 out of 237 (32%) have average levels of bad or very bad health above the national average. In the southern most three regions, 34 out of 127 LADs (27%) have average levels of bad or very bad health above the national average.

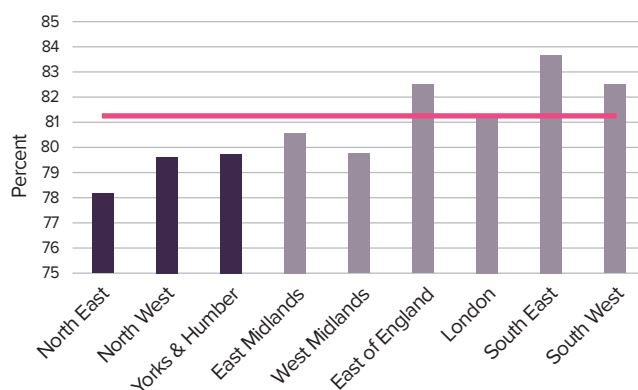
**Figure 4:** The age-standardised percentage of people (panel a), females (panel b), and males (panel c) who report their health as very good or good across the nine English regions<sup>12,13</sup>

Panel (a): People



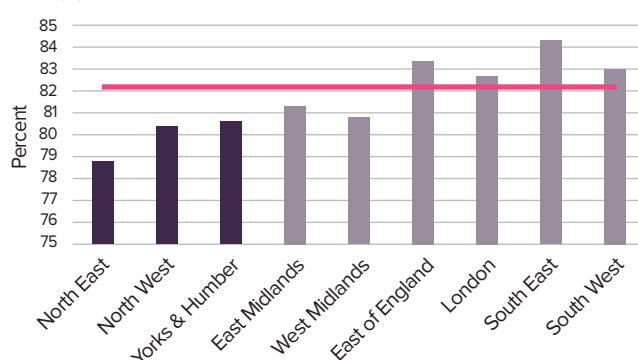
Note: The line is the English average (=81.7%)

Panel (b): Women



Note: The line is the English average (=81.3%)

Panel (c): Men



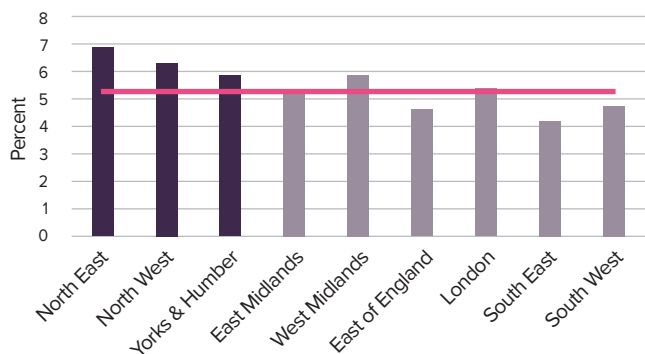
Note: The line is the English average (=82.1%)

Four of the five local authorities with the highest levels of people who report their health as bad or very bad are in the North. The LADs with the highest percentage of people are: Tower Hamlets (London; 9.5%), Liverpool (North West; 9.2%), Knowsley (North West; 9.0%), Manchester (North West 8.8%), and Blackpool (North West; 8.8%).

We additionally ranked each of the 309 LADs in England based on the age-standardised percentage of people who said their health was very good or good. We then created maps for the LADs in the lowest and highest 20% nationally (Figure 8). When looking at the lowest

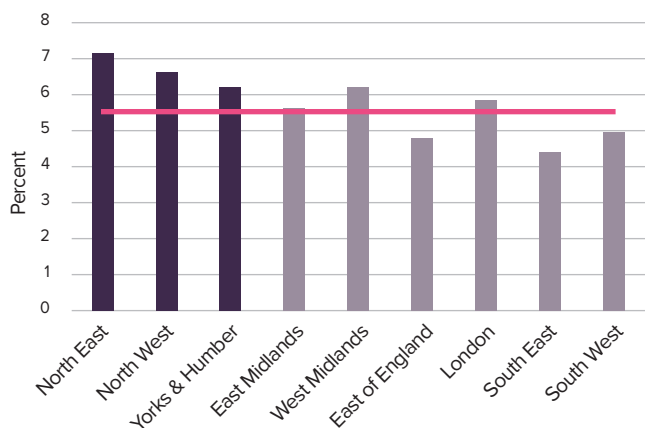
**Figure 5:** The age-standardised percentage of people (Panel a), women (Panel b), and men (Panel c) who report their health as bad or very bad across the nine English region<sup>14,15</sup>

Panel (a): People



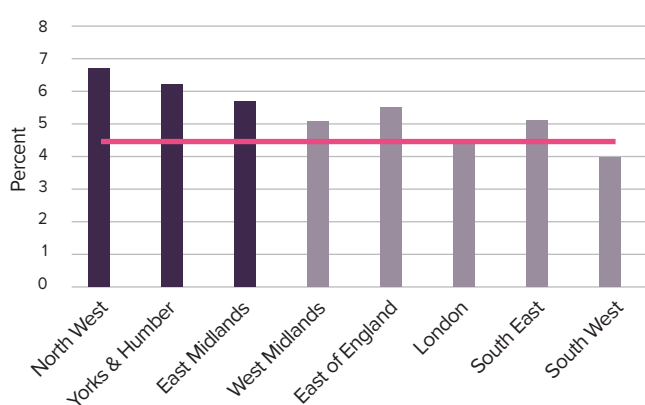
Note: The line is the English average (=5.3%)

Panel (b): Women



Note: The line is the English average (=5.5%)

Panel (c): Men

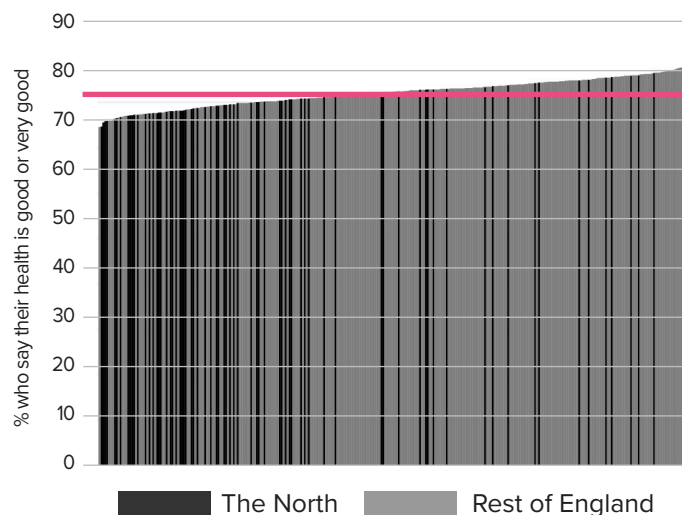


Note: The line is the English average (=4.5%)

20% of LADs (Panel a), there is clear evidence of over-representation in the northern regions, particularly the North East. Conversely, the North East has no LADs in the 'best' 20% nationally (Panel b).

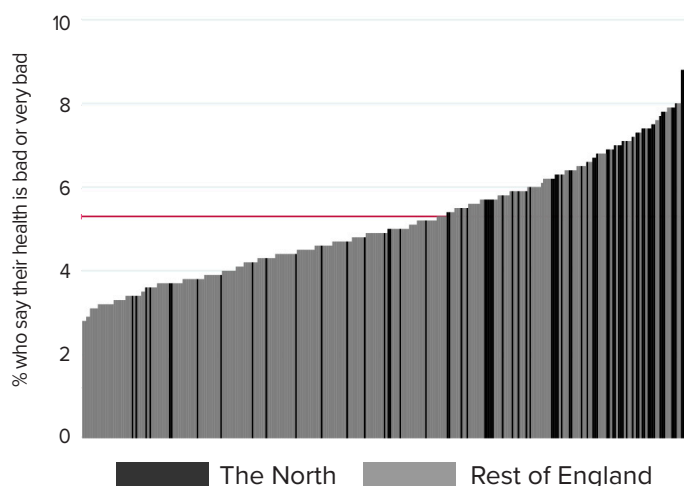
Similarly, we ranked each of the LADs in England based on the age-standardised percentage of people who said their health was very bad or bad. The results are mapped in Figure 9 where we show the 20% of LADs who had the lowest percentages (Panel a) and 20% of LADs who had the highest percentages (Panel b). Again, the North has over-representation of low levels of health.

**Figure 6:** The age-standardised percentage of people who report their health as very good or good at Local Authority District Level in England, Census 2021<sup>16,17</sup>



Note: The line is the English average (=81.7%)

**Figure 7:** The age-standardised percentage of people who report their health as bad or very bad at Local Authority District Level in England, Census 2021<sup>18,19</sup>

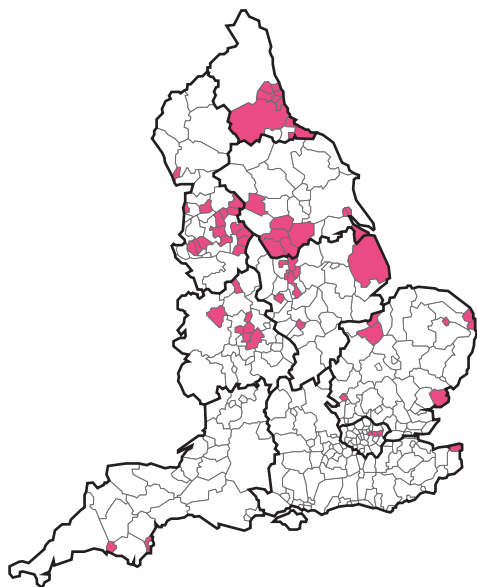


Note: The line is the English average (=5.3%)

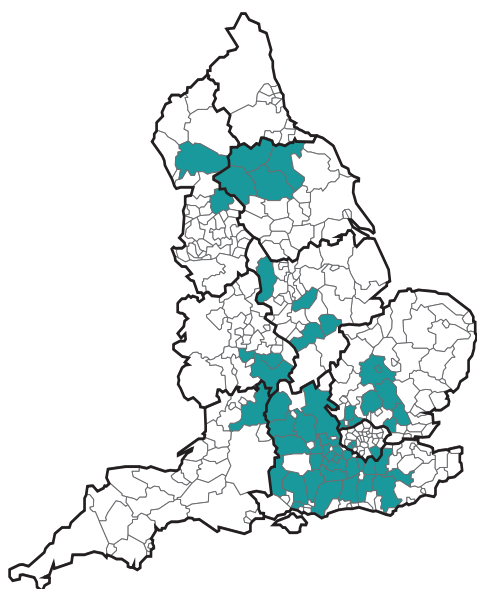


**Figure 8:** The age-standardised percentage of people who report their health as very good or good at Local Authority District Level in England, Census 2021<sup>20</sup>

Panel (a): The lowest 20% of Local Authority Districts

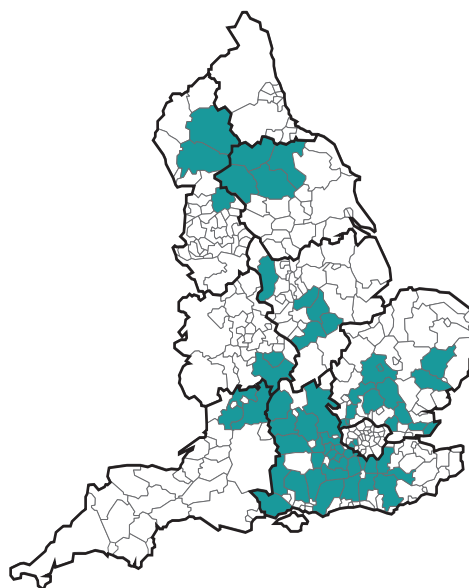


Panel (b): The highest 20% of Local Authority Districts

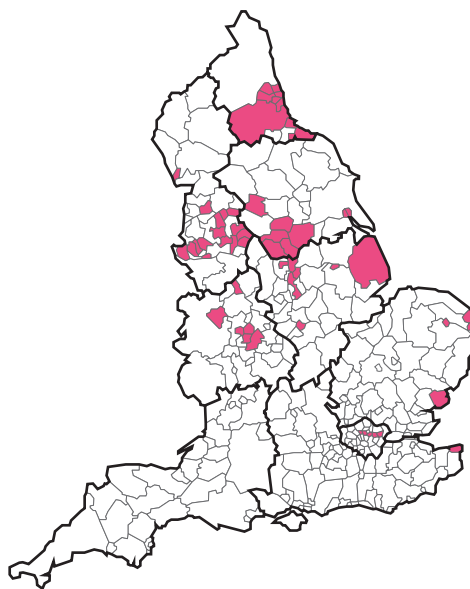


**Figure 9:** The age-standardised percentage of people who report their health as bad or very bad at Local Authority District Level in England, Census 2021<sup>21</sup>

Panel (a): The lowest 20% of Local Authority Districts



Panel (b): The highest 20% of Local Authority Districts





### 3.3 Disability

The 2021 Census also asked people “Do you have any physical or mental health conditions or illnesses lasting or expected to last 12 months or more?”. The response options were: “Yes” or “No”. If people answered yes, a further question “Do any of your conditions or illnesses reduce your ability to carry out day-to-day activities?” was asked. The response options were: “Yes, a lot”, “Yes, a little”, or “Not at all”. Table 2 reports the age-standardised percentage of people who self-report having a disability.

Across England, 82.3% of people state that they do not have a disability. However, this differs by region. In the North East only 78.8% of people report not having a disability (the region with the lowest percentage in this category). In the South East, 83.9% of people reported not having a disability, 5.1 percentage points higher than in the North East.

The three northern regions have the lowest values for this category for all people (Table 2A):

- 78.8% in the North East (3.5 percentage points below the English average)
- 80.2% in the North West (2.1 percentage points below the English average)
- 81.1% in Yorkshire and the Humber (1.2 percentage points below the English average)

As well as for women (Table 2B):

- 77.8% in the North East (3.5 percentage points below the English average)
- 79.2% in the North West (2.1 percentage points below the English average)
- 80.0% in Yorkshire and the Humber (1.3 percentage points below the English average)

And also men (Table 2C):

- 79.9% in the North East (3.6 percentage points below the English average)
- 81.3% in the North West (2.2 percentage points below the English average)
- 82.3% in Yorkshire and the Humber (1.2 percentage points below the English average)

Conversely, the three northern regions have the highest values for the percentage of people who report that their day-to-day activities are limited ‘a lot’ by a disability (Figure 10):

- 9.8% in the North East (2.3 percentage points above the English average)
- 9.1% in the North West (1.6 percentage points above the English average)
- 8.2% in Yorkshire and the Humber (0.7 percentage points above the English average)

Similar patterns are observed for both women and men (Figure 10, Panels a and b).

The three northern regions also have the highest values for the percentage of people who report that their day-to-day activities are limited ‘a little’ by a disability (Figure 11):

- 11.4% in the North East (1.2 percentage points above the English average)

**Table 2:** The age-standardised percentage of people (Panel a), women (Panel b), and men (Panel c) who report having a disability across the nine English regions, Census 2021<sup>22</sup>

Panel (a): People

	Day-to-day activities limited a lot (%)	Day-to-day activities limited a little (%)	Not disabled under the Equality Act (%)
North East	9.8	11.4	78.8
North West	9.1	10.7	80.2
Yorks & The Humber	8.2	10.7	81.1
East Midlands	7.7	10.7	81.6
West Midlands	8.0	10.4	81.5
East of England	6.6	10.0	83.4
London	7.1	8.5	84.3
South East	6.2	9.9	83.9
South West	7.0	10.8	82.2
<b>England</b>	<b>7.5</b>	<b>10.2</b>	<b>82.3</b>

Panel (b): Women

	Day-to-day activities limited a lot (%)	Day-to-day activities limited a little (%)	Not disabled under the Equality Act (%)
North East	10.0	12.2	77.8
North West	9.5	11.3	79.2
Yorks & Humber	8.6	11.4	80.0
East Midlands	8.1	11.5	80.5
West Midlands	8.4	11.1	80.5
East of England	6.9	10.8	82.3
London	7.6	9.1	83.4
South East	6.5	10.6	82.9
South West	7.3	11.6	81.0
<b>England</b>	<b>7.8</b>	<b>10.8</b>	<b>81.3</b>

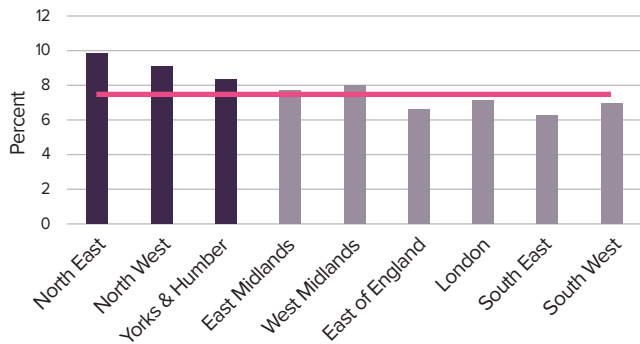
Panel (c): Men

	Day-to-day activities limited a lot (%)	Day-to-day activities limited a little (%)	Not disabled under the Equality Act (%)
North East	9.4	10.7	79.9
North West	8.7	10.0	81.3
Yorks & The Humber	7.8	9.9	82.3
East Midlands	7.3	9.9	82.8
West Midlands	7.6	9.7	82.7
East of England	6.2	9.3	84.5
London	6.6	8.0	85.4
South East	5.9	9.1	85.0
South West	6.6	10.0	83.4
<b>England</b>	<b>7.1</b>	<b>9.4</b>	<b>83.5</b>



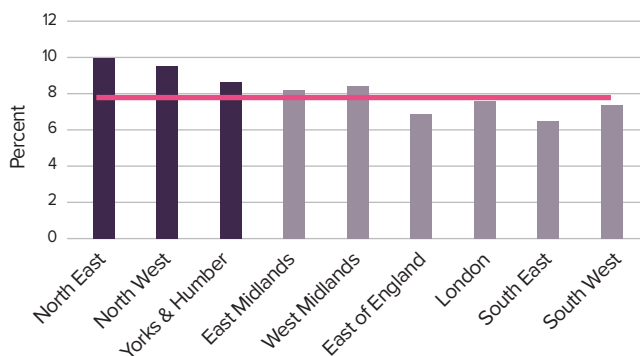
**Figure 10:** The age-standardised percentage of people (panel a), women (panel b), and men (panel c) who report a limiting disability that limits their day-to-day activities a lot across the nine English regions, Census 2021<sup>23,24</sup>

Panel (a): People



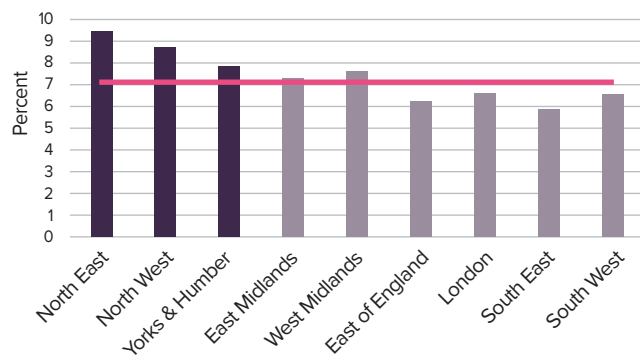
Note: The line is the English average (=7.5%)

Panel (b): Women



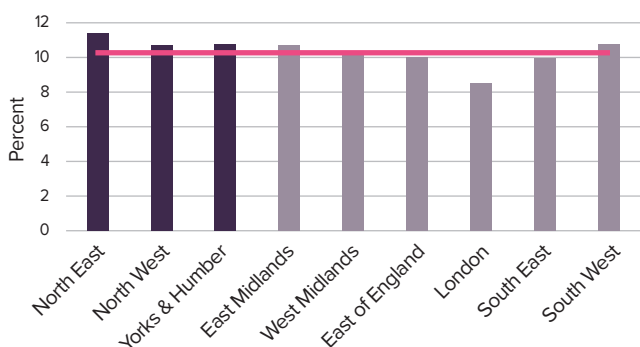
Note: The line is the English average (=7.8%)

Panel (c): Men



Note: The line is the English average (=7.1%)

**Figure 11:** The age-standardised percentage of people who report that a disability limits their day-to-day activities a little across the nine English regions, Census 2021<sup>25,26</sup>



Note: The line is the English average (=10.2%)

- 10.7% in the North West (0.5 percentage points above the English average)
- 10.7% in Yorkshire and the Humber (0.5 percentage points above the English average)

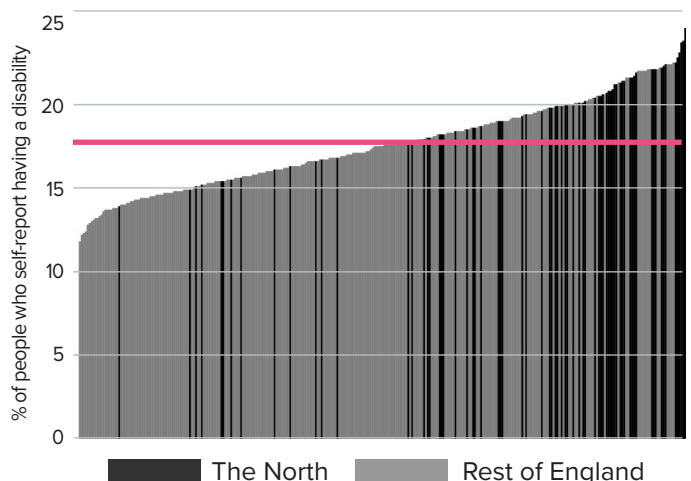
When we combined the groups 'disability limits day-to-day activity a lot' and 'disability limits day-to-day activity a little' to get an indicator of the prevalence of self-reported disability, we found that of the 72 LADs in the North of England, 59 (82%) had a disability prevalence higher than the national average (Figure 12). In the rest of England, 90 out of 237 LADs (38%) had a prevalence higher than the national average. In the southern most three regions of England, 40 out of 127 (32%) LADs had a higher prevalence than the national average.

All five of the five local authorities with highest self-reported disability prevalence were in the North of England: Blackpool (North West; 24.7%), Liverpool (North West; 23.8%), Knowsley (North West; 23.7%), Sunderland (North East; 23.1%), and Hartlepool (North East; 22.8%). When we considered if a person self-reported having a disability and that it limited their daily activity a lot (Figure 13), there was further evidence of regional inequalities. Of the 72 LADs in the North of England, 57 (79%) have average levels of people who report that a disability limits their day-to-day activity a lot higher than the national average. In the rest of England, 79 out of 237 LADs (33%) have average levels above the national level. In the southern most three regions, only 33 out of 127 LADs (26%) have average levels than the national average.

All of the five local authorities with the highest levels of people who report a disability limits their day-to-day activities a lot are in the North. The LADs with the highest percentage of people are: Knowsley (North West; 13.0%), Liverpool (North West; 12.7%), Blackpool (North West; 12.0%), Manchester (North West; 11.4%), and Hartlepool (North East; 11.3%).

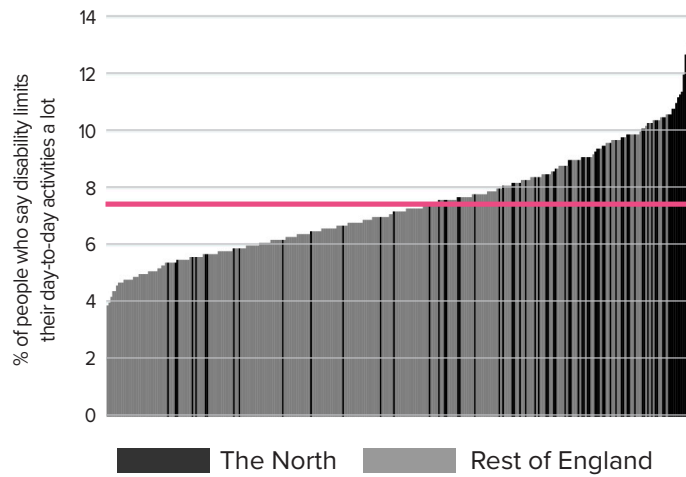
We additionally ranked each of the 309 LADs in England based on the age-standardised percentage of people who said a disability limits their day-to-day activities a lot. We then created maps for the LADs in the lowest and highest 20% nationally (Figure 14). When looking at the highest 20% of LADs (Figure 14, Panel b), there is clear evidence of over-representation in the northern regions, particularly the North East. Conversely, the North East has no LADs in the 'best' 20% nationally (Figure 14, Panel a).

**Figure 12:** The age-standardised percentage of people who report having a disability at Local Authority District Level in England, Census 2021<sup>27,28</sup>



Note: The line is the English average (=10.2%). Any self-reported disability is the sum of 'disability limits day-to-day activities a lot' and 'disability limits day-to-day activity a little'.

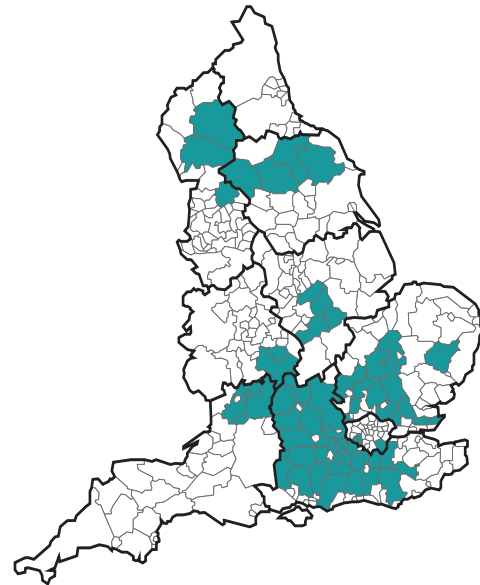
**Figure 13:** The age-standardised percentage of people who report having a disability that limits their day-to-day activity a lot at Local Authority District Level in England, Census 2021<sup>29,30</sup>



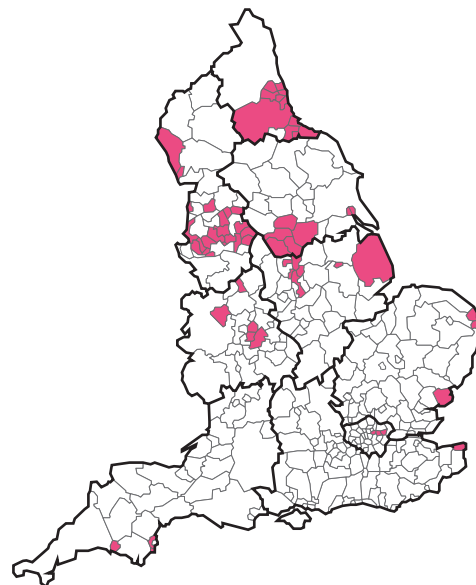
Note: The line is the English average (=7.5%).

**Figure 14:** The age-standardised percentage of people who report having a disability that limits their day-to-day activity a lot at Local Authority District Level in England, Census 2021<sup>31</sup>

Panel (a): The lowest 20% of Local Authority Districts



Panel (b): The highest 20% of Local Authority Districts



# **Chapter 4:** Health for Wealth: Economic Inactivity due to Long-term Sickness and Disability

---

## 4.1 Summary

- The three northern regions had the highest percentages of people economically inactive due to ill health or disability:
  - 5.7% in the North East (1.6 percentage points above the national average)
  - 5.3% in the North West (1.2 percentage points above the national average)
  - 4.7% in Yorkshire and the Humber (0.6 percentage points above the national average)
- There is a 2.6 percentage points gap between the best performing region (South East at 3.1%) and the worst region (North East at 5.7%).

## 4.2 Economic inactivity due to long-term sickness and disability

The Census also collected information from people aged 16 and over relating to their economic activity status. Here we focus on economic inactivity due to long-term sickness or disability. These are people whose long-term sickness or disability meant that they were not looking for work or they were looking for work but would not be able to start a new job in the next two weeks.

We focus only on people who were economically inactive due to their long-term sickness or disability here for reasons of brevity. This analysis is one indicator of the impacts on productivity of the worse health in the North.

Across England as a whole, long-term sickness or disability led to 4.1% of the population being economically inactive (Table 3, Figure 15). However, this was much higher in all three northern regions:

- 5.7% in the North East (1.6 percentage points above the national average)
- 5.3% in the North West (1.2 percentage points above the national average)
- 4.7% in Yorkshire and the Humber (0.6 percentage points above the national average)

The three northern regions had the highest percentages, and they were all considerably larger than in the South East (where the value was 3.1%).<sup>32</sup>

**Table 3:** The percentage of all usual residents aged 16 years and over who are economically inactive due to being long-term sick or disabled across the nine English regions, Census 2021<sup>33</sup>

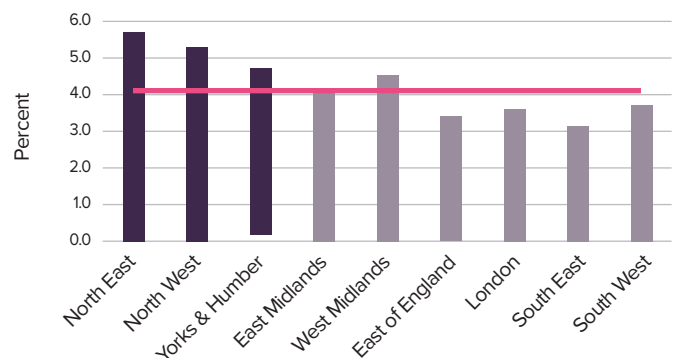
	Economically inactive: Long-term sick or disabled (%)
North East	5.7
North West	5.3
Yorkshire and The Humber	4.7
East Midlands	4.1
West Midlands	4.5
East	3.4
London	3.6
South East	3.1
South West	3.7
<b>England</b>	<b>4.1</b>

Of the 72 LADs in the North of England, 52 (72%) have average levels of economic inactivity due to long-term sickness or disability above the national average (Figure 16). In the rest of England, 64 out of 237 LADs (27%) are above the national average. In the southern most three regions, only 26 out of 127 LADs (20%) have average levels of economic inactivity due to long-term sickness or disability above the national average.

All of the top five local authorities with the highest levels of economic inactivity due to long-term sickness or disability are in the North. The LADs with the highest percentage of people are: Blackpool (North West; 8.2%), Knowsley (North West; 8.1%), Liverpool (North West; 7.6%), Hartlepool (North East; 7.3%), and Middlesbrough (North East; 6.9%).

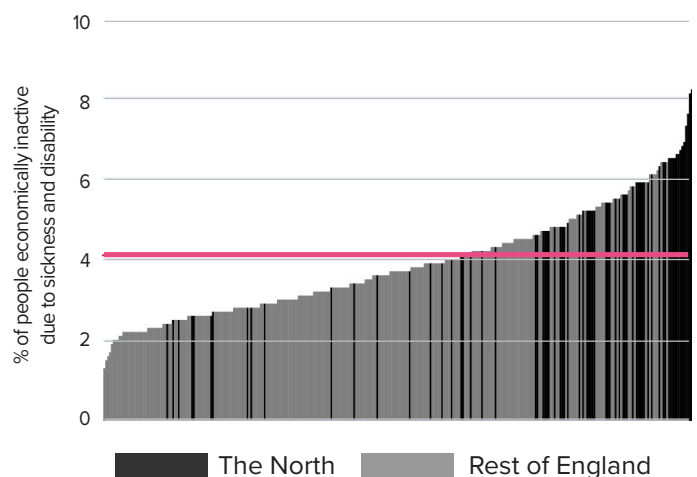
We additionally ranked each of the 309 LADs in England based on the percentage of people who said they were economically inactive due to long-term sickness or disability. We then created maps for the LADs in the lowest and highest 20% nationally (Figure 17). When looking at the highest 20% of LADs (Figure 17, panel b), there is clear evidence of over-representation in the northern regions, particularly the North East. Conversely, the North East has no LADs in the 'best' 20% nationally (Figure 17, panel a).

**Figure 15:** The percentage of all usual residents aged 16 years and over who are economically inactive due to being long-term sick or disabled across the nine English regions, Census 2021<sup>34,35</sup>



Note: The line is the English average (=4.1%).

**Figure 16:** The percentage of all usual residents aged 16 years and over who are economically inactive due to being long-term sick or disabled at Local Authority District Level in England, Census 2021<sup>36,37</sup>

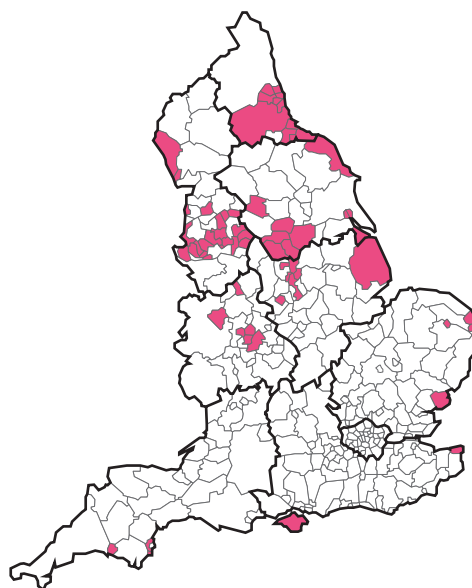
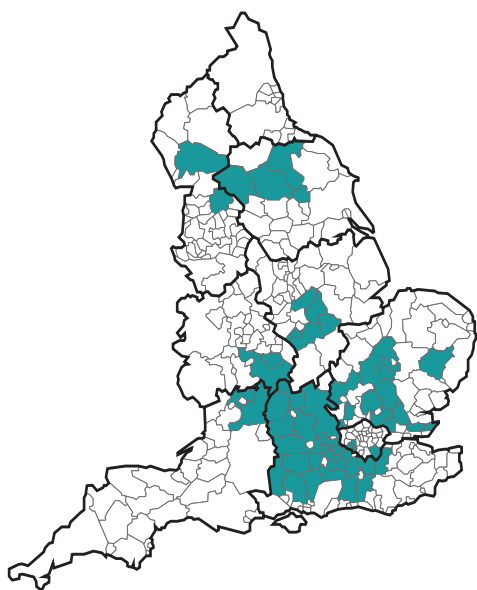


Note: The line is the English average (=4.1%).

**Figure 17:** The percentage of all usual residents aged 16 years and over who are economically inactive due to being long-term sick or disabled at Local Authority District Level in England, Census 2021<sup>38</sup>

Panel (a): The lowest 20% of Local Authority Districts

Panel (b): The highest 20% of Local Authority Districts



# **Chapter 5:** Caring too much? Regional Inequalities in the Provision of Unpaid Care

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## 5.1 Summary

- Across England, 8.9% of people state that they provide unpaid care. However, it is much higher in all three northern regions:
  - 10.1% in the North East
  - 9.7% in the North West
  - 9.3% in Yorkshire and The Humber
- Unpaid care provision is lowest in London, where 7.8% of people provide unpaid care
- There is a 2.3 percentage points gap between the region with the lowest levels of unpaid care (London) and that with the highest (North East)
- The three northern regions also report above average levels of care provision of at least 50 hours per week

## 5.2: Regional Inequalities in the Provision of Unpaid Care

The 2021 Census also collects information on whether or not a person provided unpaid care for a friend or family member. If the person reported they do, it also collected information on the amount of care provided per week, in hours.

People living in the North were more likely to provide care (Table 4 and Figure 18). They were also more likely to provide 50 or more hours unpaid care a week (Table 4 and Figure 19).

Across England, 8.9% of people state that they provide unpaid care. However, it is much higher in all three northern regions (Figure 18): it is highest in the North East where 10.1% of people provide unpaid care, in the North West it is 9.7% and in Yorkshire and the Humber it is 9.3%. It is lowest in London, where 7.8% of people provide unpaid care, 2.3 percentage points lower than in the North East. The northern regions also report above average levels of care provision of at least 50 hours per week (Figure 19).

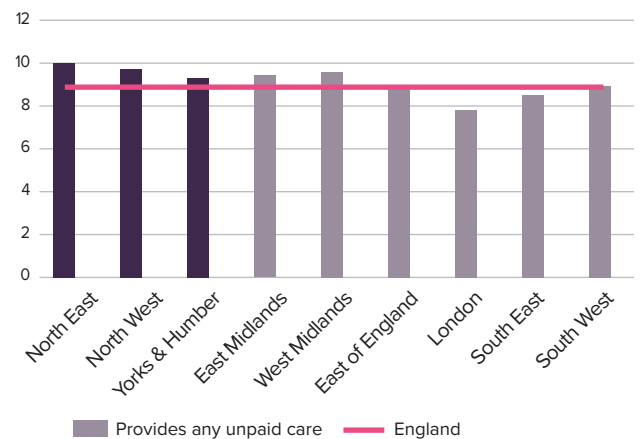


**Table 4:** The age-standardised percentage of people who report the level of unpaid care they provide per-week across the nine English regions, Census 2021<sup>39</sup>

	No unpaid care (%)	19 or fewer hours unpaid care a week (%)	20 to 49 hours unpaid care a week (%)	50 or more hours unpaid care a week (%)
North East	89.9	4.3	2.3	3.4
North West	90.3	4.5	2.1	3.1
Yorks & The Humber	90.7	4.4	2.0	2.9
East Midlands	90.6	4.6	1.9	2.9
West Midlands	90.5	4.5	2.1	3.0
East	91.3	4.5	1.7	2.5
London	92.2	3.8	1.7	2.3
South East	91.6	4.5	1.6	2.4
South West	91.0	4.7	1.7	2.6
ENGLAND	91.1	4.4	1.8	2.7

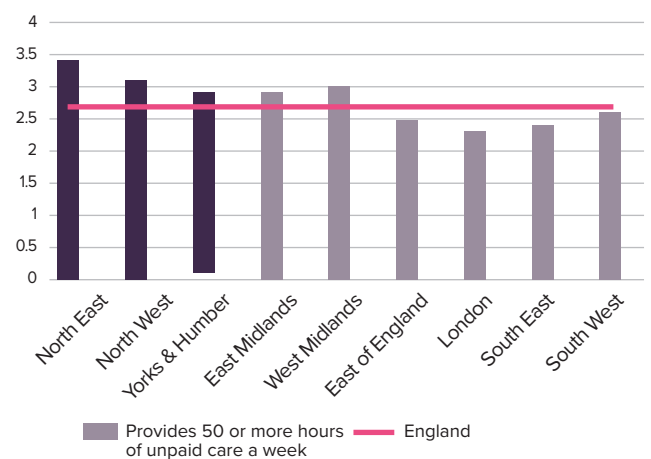
Note: row percentages may not add up to 100% due to rounding.

**Figure 18:** The age-standardised percentage of people who report that they provide unpaid care across the nine English regions, Census 2021<sup>40,41</sup>



Note: The line is the English average (=8.9%).

**Figure 19:** The age-standardised percentage of people who report that they provide at least 50 hours of unpaid care per-week across the nine English regions<sup>42,43</sup>



Note: The line is the English average (=2.7%).



# **Chapter 6:** Conclusions and Policy Recommendations

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Our report shows that health inequalities between the North and the rest of England are worsening. There is lower life expectancy in the North with babies born in the North having a life expectancy of at least 1 year less than the English average.

Life expectancy in the North East is around three years less than in the best performing regions (London and the South East). We also find that over the last decade, the regional life expectancy gap has increased for both baby girls and baby boys. The North also has above average infant mortality rates, equating to an extra 144 infant deaths in the North in 2021 above what would be expected if we had the same rates as in the best performing regions.

The North also has higher rates of bad/very bad health with 6.9%

of people in the North East, 6.4% in the North West, and 5.9% in Yorkshire and the Humber reporting bad/very bad health. We also have higher rates of disability in the North: 9.8% in the North East, 9.1% in the North West, and 8.2% in Yorkshire and the Humber.

Relatedly, the North has higher rates of economic inactivity due to ill health or disability: 5.7% in the North East, 5.3% in the North West, and 4.7% in Yorkshire and the Humber.

We also provide more unpaid care in the North: nationally, provision is highest in the North East where 10.1% of people provide unpaid care, 9.7% in the North West, and 9.3% in Yorkshire and the Humber. Now, more than ever, we need to act to address these regional health inequalities and improve productivity.

To improve productivity, health in the North needs to be improved. This requires:

- 1 Local government, Integrated Care Systems and combined mayoral authorities should work with researchers to identify areas of greatest health need within their authorities where they can most effectively implement evidence-based policies to tackle the social determinants of health.
- 2 Central government should commit to policies and interventions to improve health across the North and take a cross-governmental approach, across the Department for Levelling Up Housing and Communities, the Department of Health and Social Care, Department for Work and Pensions and the Department for Science Innovation and Technology.
- 3 Long-term increases in public health funding to local authorities and the Integrated Care Systems in the North need to be made and ring-fenced and achievements reported to Parliament.
- 4 Prioritise the development of an integrated, national health inequalities strategy with an explicit focus on addressing the social determinants of health:
  - reducing poverty
  - improving housing
  - increasing energy security
  - creating better jobs
  - improving early child development and education
  - creating healthy and sustainable places in which to live and work
  - improving efforts at prevention
- 5 Research funders should give increased priority to research that helps to address health inequalities including a place-based focus on prevention.
- 6 Provide universal access to occupational health for the country's workforce with a specific focus on increasing access and supporting employers in areas with the worst health outcomes.
- 7 Increase NHS and local authority resources and service provision for mental health in the North. Increase the existing NHS health inequalities weighting within the NHS funding formula.
- 8 Embed Equality Impact Assessments in all policy processes relating to socioeconomic deprivation at national, regional, and local levels.
- 9 Integrated Care Systems should commission more health promotion, condition management and prevention services that promote the health and wellbeing of the workforce in the North.
- 10 Local public health and health inequalities budgets in the NHS should be safeguarded so that action to relieve acute NHS backlogs does not undermine efforts to tackle the root causes of ill-health and boost health resilience.

# References

- 1 <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/labourproductivity/articles/regionalandsubregionalproductivityintheuk/jan2017>
- 2 <http://www.thenhsa.co.uk/app/uploads/2018/11/NHSA-REPORT-FINAL.pdf>
- 3 <https://www.thenhsa.co.uk/app/uploads/2021/09/A-Year-of-COVID-in-the-North-report-2021.pdf>
- 4 Health Equity North (HEN) is a virtual institute focused on place-based solutions to public health problems and health inequalities. We bring together world-leading academic expertise from the Northern Health Science Alliance's members of leading universities, hospitals, and academic health science networks.
- 5 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/lifeexpectancyestimatesallagesuk>
- 6 The lines are the English averages (=83.14 years for women and 79.40 years for men)
- 7 <https://www.ons.gov.uk/peoplepopulationandcommunity/healthandsocialcare/healthandlifeexpectancies/datasets/lifeexpectancyestimatesallagesuk>
- 8 Deaths amongst children aged under one year
- 9 <https://www.ons.gov.uk/peoplepopulationandcommunity/birthsdeathsandmarriages/deaths/bulletins/childhoodinfantandperinatalmortalityinenglandandwales/2021>
- 10 In all of the analysis that follows, we used age-standardised percentages which take into account different age structures and population sizes so that different areas can be compared with each other.
- 11 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 12 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 13 The line is the English average (all persons =81.7%; women = 81.3%, men = 82.1%)
- 14 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 15 The line is the English average (All persons =5.3%, women = 5.5%, men = 4.5%)
- 16 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 17 The line is the English average (=81.7%)
- 18 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 19 The line is the English average (=5.3%)
- 20 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 21 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 22 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 23 Source: Census 2021: <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 24 The line is the English average (All Persons =7.5%, women = 7.8%, men = 7.1%)
- 25 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 26 The line is the English average (=10.2%)
- 27 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 28 The line is the English average (=10.2%). Any self-reported disability is the sum of 'disability limits day-to-day activities a lot' and 'disability limits day-to-day activity a little'.
- 29 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 30 The line is the English average (=7.5%).
- 31 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 32 The statistics have not yet been published by gender, but when they are it will be of interest to examine if similar patterns occur across women and men.
- 33 Source, Census 2021, via NOMIS (indicator TS066): <https://www.nomisweb.co.uk/>
- 34 Source, Census 2021, via NOMIS (indicator TS066): <https://www.nomisweb.co.uk/>
- 35 The line is the English average (=4.1%).
- 36 Source, Census 2021, via NOMIS (indicator TS066): <https://www.nomisweb.co.uk/>
- 37 The line is the English average (=4.1%).
- 38 Source, Census 2021, via NOMIS (indicator TS066): <https://www.nomisweb.co.uk/>
- 39 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 40 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 41 The line is the English average (=8.9%).
- 42 <https://www.ons.gov.uk/releases/healthdisabilityandunpaidcare-census2021inenglandandwales>
- 43 The line is the English average (=2.7%).

