

Ethnicity and health in Wales



GIG
CYMRU
NHS
WALES

Arsyllfa Iechyd
Cyhoeddus Cymru
Public Health
Wales Observatory

This document is available on www.publichealthwalesobservatory.wales.nhs.uk/ethnicity

Project team: James Allen, Ruth Davies, Rhys Gibbon, Mari Ann Jones

Project director: Nathan Lester

Acknowledgements:

Thanks to the following people for their help with this publication: Dr. Gareth Davies, Andrew Dring, Arthur Duncan-Jones, Ioan Francis, Nathan Lester, Rhys Powell, Tracy Price

Contact:

Public Health Wales Observatory
14 Cathedral Road
Cardiff CF11 9LJ

Email: publichealthwalesobservatory@wales.nhs.uk
Website: www.publichealthwalesobservatory.wales.nhs.uk

Publication details:

Title: Ethnicity and health in Wales
Publisher: Public Health Wales NHS Trust
Date: May 2015
ISBN: 978-1-910768-04-4

© 2015 Public Health Wales NHS Trust

All tables, charts and maps were produced by the Public Health Wales Observatory and the data source is noted under each heading. Material contained in this profile may be reproduced without prior permission provided it is done so accurately and is not used in a misleading context. Acknowledgement to Public Health Wales NHS Trust to be stated. Typographical copyright lies with Public Health Wales NHS Trust.

Key messages

Demography

- The Census is the most comprehensive source of information on ethnic groups in Wales.
- Wales is less ethnically diverse than any of the regions of England with the exception of the North East. The White British or Irish population account for almost 94% of the population.
- The age structure of the White British or Irish population is much older than the other groups. The younger age structures in other groups reflect patterns of immigration and, in some cases, higher birth rates.
- The percentage of the population of Wales who define themselves as not White British or Irish has doubled from 3% to 6% between 2001 and 2011.
- People describing themselves as not White British or Irish are concentrated in urban centres, particularly Cardiff and Newport.

Determinants of health

- There are differences in the socio-economic profiles (as defined by the National Statistics Socio-economic Classification) of the ethnic groups shown within this report. The White British or Irish group has the highest percentage in the higher managerial, administrative and professional class. The Black/African/Caribbean/Black British group has the highest percentage who are long term unemployed or never worked.
- The percentage of the population lacking qualifications within each ethnic group is likely influenced by differences in age structures. In the 16-24 year old age group, the percentage of Asian/Asian British people without qualifications (8%) is half that of the White other group (16%).
- This report includes three measures that can be considered as proxies for income (which is not measured directly by the Census). The White British or Irish group exhibits higher levels of car ownership, is far less likely to reside in non-owner occupied housing, and has a much lower percentage living in overcrowded households than all other groups.

Health outcomes

- After accounting for age, the White British or Irish group has a higher percentage of its population reporting limiting illness than the other groups with the exception of the Mixed multiple ethnic group.
- The Mixed multiple ethnic group reported the highest levels of bad or very bad general health, but the differences between groups were not stark.
- The White British or Irish group were more likely to be providing unpaid care than those in other ethnic groups. This is a reflection of the older age structure of this group.

Table of contents

DEFINITIONS..... 3

1 INTRODUCTION..... 6

2 DEMOGRAPHY 8

3 DETERMINANTS OF HEALTH 19

4 HEALTH OUTCOMES 26

5 CONCLUSIONS..... 31

6 REFERENCES..... 32

APPENDIX 34

Figures & Tables

Figure 1: Dahlgren & Whitehead social model of health	7
Figure 2: Population by ethnic group excluding White British or Irish, percentage, Wales and English regions, 2011	9
Figure 3: Population by ethnic group, percentage, Wales, 2011	10
Figure 4: Age distribution of the total population and White other population, percentage, males and females, Wales, 2011	11
Figure 5: Age distribution of the total population and the Mixed/multiple ethnic population, percentage, males and females, Wales, 2011	12
Figure 6: Age distribution of the total population and the Asian/Asian British population, percentage, males and females, Wales, 2011	13
Figure 7: Age distribution of the total population and the Black/African/Caribbean/Black British population, percentage, males and females, Wales, 2011	14
Figure 8: Age distribution of the total population and of the Other ethnic group population, percentage, males and females, Wales, 2011	15
Table 1: Comparison of ethnic group populations, count and percentage, Wales, 2001 and 2011	16
Figure 9: Population excluding White British or Irish, percentage, Wales local authorities, 2011	17
Figure 10: Population excluding White British or Irish, all ages, Wales, 2011	18
Figure 11: NS-SEC by ethnic group, percentage, aged 16-64, Wales, 2011	20
Figure 12: Long term unemployed and never worked by ethnic group, percentage, aged 16 and over, Wales, 2011	21
Figure 13: Persons without qualifications by ethnic group, percentage, aged 16-64, Wales, 2011	22
Figure 14: No car access by ethnic group, percentage, households, Wales, 2011	23
Figure 15: Living in non-owner occupied accommodation by ethnic group, percentage, Household Reference Person, Wales, 2011	24
Figure 16: Living in overcrowded accommodation by ethnic group, percentage, Household Reference Person, Wales, 2011	25
Figure 17: Limiting illness: limited a little or a lot by ethnic group, percentage, Wales, 2011	27
Figure 18: General health: bad or very bad by ethnic group, percentage, Wales, 2011	29
Figure 19: Provision of unpaid care by ethnic group, percentage, Wales, 2011	30

Definitions

Age-standardisation

Age-standardisation allows comparison of percentages across different populations while taking account of different age structures of those populations. Failure to take account of differing age structures can be misleading when comparing percentages in different populations.

Census

A census is a count of all people and households within a defined area; here it is undertaken for England and Wales with simultaneous censuses in Scotland and Northern Ireland. The data gathered includes information on population, health, housing, employment, transport and ethnicity. In England and Wales it is undertaken every 10 years with the most recent Census conducted in 2011.

Ethnic groups

Ethnic group	Consists of:
White British or Irish	White: English/Welsh/Scottish/Northern Irish/British White: Irish
White other	White: Gypsy or Irish Traveller White: Other White
White	White: English/Welsh/Scottish/Northern Irish/British White: Irish White: Gypsy or Irish Traveller White: Other White
Mixed / multiple ethnic group	White and Black Caribbean White and Black African White and Asian Any other Mixed/ Multiple ethnic background
Asian / Asian British	Indian Pakistani Bangladeshi Chinese Any other Asian background
Black/African/Caribbean/Black British	African Caribbean Any other Black/African/Caribbean background
Other ethnic group	Arab Any other ethnic group

General Health

A self reported indicator, collated from the 2011 Census, outlining whether an individual's general state of health was very good, good, fair, bad or very bad.

Household Reference Person (HRP)

Introduced for the 2001 Census, a HRP is an individual who acts as a reference point within a household. A HRP is required to provide further information which is used to detail household characteristics. If a person lives alone, they are the HRP.

Long-term health problem or disability

A self reported indicator, collated from the 2011 Census, outlining whether an individual feels that their daily activities are limited a lot or a little or not limited at all by a health problem (including problems related to old age).

Long term unemployment

An individual is classed as being long term unemployed if they had not worked since at least 31st December 2009, on 27th March 2011, Census Day.

Middle Super Output Area (MSOA)

A defined geographical area based on Census Output Areas with an average population of 7,500. There are 410 MSOAs in Wales.

National Statistics Socio-economic Classification (NS-SEC)

The NS-SEC is an occupation-based classification created by the Office for National Statistics¹. Its aim is to help explain differences in social behaviour. Whereas deprivation indices such as WIMD are measured at the area level, which means that individuals living within the area can be misclassified, the NS-SEC has the advantage of being measured at the household or individual level.

There are eight NS-SEC classes¹:

1. Higher managerial, administrative and professional occupations
 - 1.1. Large employers and higher managerial and administrative occupations
 - 1.2. Higher professional occupations
2. Lower managerial, administrative and professional occupations
3. Intermediate occupations
4. Small employers and own account workers
5. Lower supervisory and technical occupations
6. Semi-routine occupations
7. Routine occupations
8. Never worked and long-term unemployed

For the purpose of this profile, the eight NS-SEC classes have been configured into five classes. These are:

1. Higher managerial, administrative and professional occupations
2. Intermediate occupations
3. Small employers and own account workers
4. Lower supervisory and technical occupations
5. Semi-routine and routine occupations

Occupancy rating

Occupancy rating measures how over or under-occupied a household is². It takes in to account the ages and relationships between the household members and calculates the number of rooms required. An occupancy rating of -1 indicates that a household is overcrowded, and an occupancy rating of +1 suggests that a household has one or more rooms or bedrooms than needed for the number of people living there.

Provision of unpaid care

A self reported indicator collated from the 2011 Census outlining whether an individual provides unpaid care, with an estimation of how much care is provided. Respondents are asked to indicate whether they provide no unpaid care, 0 to 19 hours, 20 to 49 hours or 50+ hours per week to family members, friends, neighbours or another due to long-term physical or mental ill health or disability, or problems relating to old age.

Tenure

Tenure gives an indication of whether a household rents or owns the accommodation that it occupies. Tenure consists of the following categories:

1. Owned
2. Private rented
3. Social rented
4. Other social rented

Working age

The working age population is defined as males or females aged between 16 and 64 years³.

1 Introduction

This profile aims to provide a description of the ethnic make-up of Wales, together with information about the determinants of health and health outcomes experienced, using the 2011 Census as the data source.

The Census asks respondents to provide information on their ethnic group. There are five broad groups:

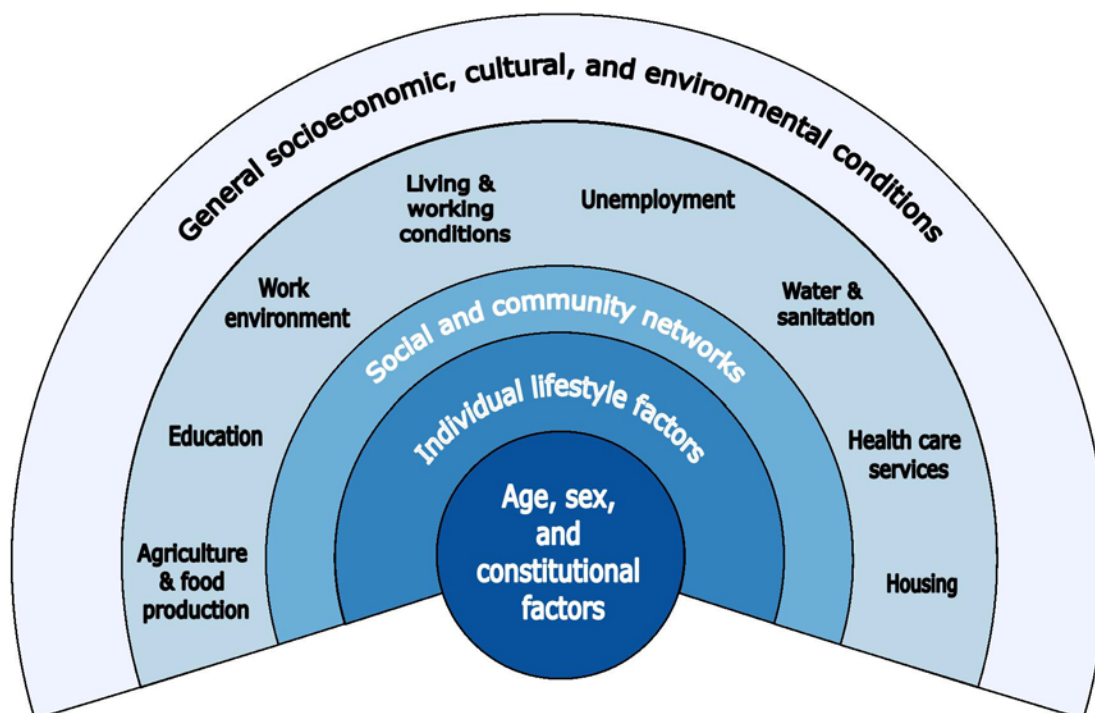
- White
- Mixed/multiple ethnic groups
- Asian/Asian British
- Black/African/Caribbean/Black British
- Other ethnic group

These in turn split into a total of 18 detailed groups – please refer to the [Definitions section](#) for the detail.

Although growing, the minority ethnic population of Wales is relatively small. Therefore, this profile provides information broken down only by the broad groups. In addition, the White group has been sub-divided to show those who define themselves as White British or Irish separately from 'White other'. The White British and White Irish groups have been combined as they are a relatively stable population whereas the White other group, made up predominantly of people from Eastern European backgrounds, has seen a large increase in recent years and warrants specific investigation. As the profile will show, the White other group, is distinct from the White British and White Irish group in terms of its demography and outcomes. The White other group includes people from other white backgrounds including Europe, North America, and the Commonwealth as well as Gypsies and Irish Travellers. The latter group is very small and can be difficult to quantify. Therefore, this report does not contain any analysis specific to Gypsies and Irish Travellers. However, it is important to recognise that they have unique health needs due to the difficulties they face accessing health and social services. In 2011, the Welsh Government published 'Travelling to a Better Future' - Gypsy and Traveller Framework for Action and Delivery Plan. One of the aims of the framework is to ensure that services are flexible enough to respond to their needs⁴.

The health of minority ethnic groups in the UK tends to be worse than the white population and tackling inequalities is important in helping to close this health gap⁵. The factors that determine an individual's health and wellbeing are varied and complex. Dahlgren and Whitehead's social model of health, figure 1, helps illustrate these factors, showing that they range from individual lifestyle, to social and community networks, and socio-economic, cultural and environmental conditions⁶. All of these factors play an influential role from the early years and throughout life.

Figure 1

Dahlgren & Whitehead social model of health⁶

Dahlgren G, Whitehead M. *Policies and strategies to promote equity in health*. Stockholm: Institute for Future Studies; 1991.
Adapted by Public Health Wales Observatory

In addition, there are variables beyond an individual's control such as age, sex and hereditary factors that are influential on their health. An individual's ethnicity is one such factor. Ethnicity can relate to one's cultures, customs and often, lifestyle factors.

Within Wales, ethnic populations, excluding White British or Irish, are relatively small. Those that live here tend to be located in urban areas such as Cardiff, Newport and Swansea. Because the population is small and is concentrated in a few areas it has only been possible to undertake a comparative analysis of health and its determinants within ethnic groups at the all Wales level.

2 Demography

This section provides information on the demography of ethnic groups within Wales. This includes a breakdown of the representation of each of the groups categorised in the 2011 Census; the distribution of the population across Wales; the age and sex structure of each group, and the changes that have occurred since the 2001 Census.

Knowledge of the demography of the minority ethnic population is a prerequisite for the understanding of health needs and outcomes. For those involved in planning the provision of services, health related or not, it is vitally important to understand these factors so that needs can be met appropriately.

Figure 2**Population by ethnic group excluding White British or Irish, percentage, Wales and English regions, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)

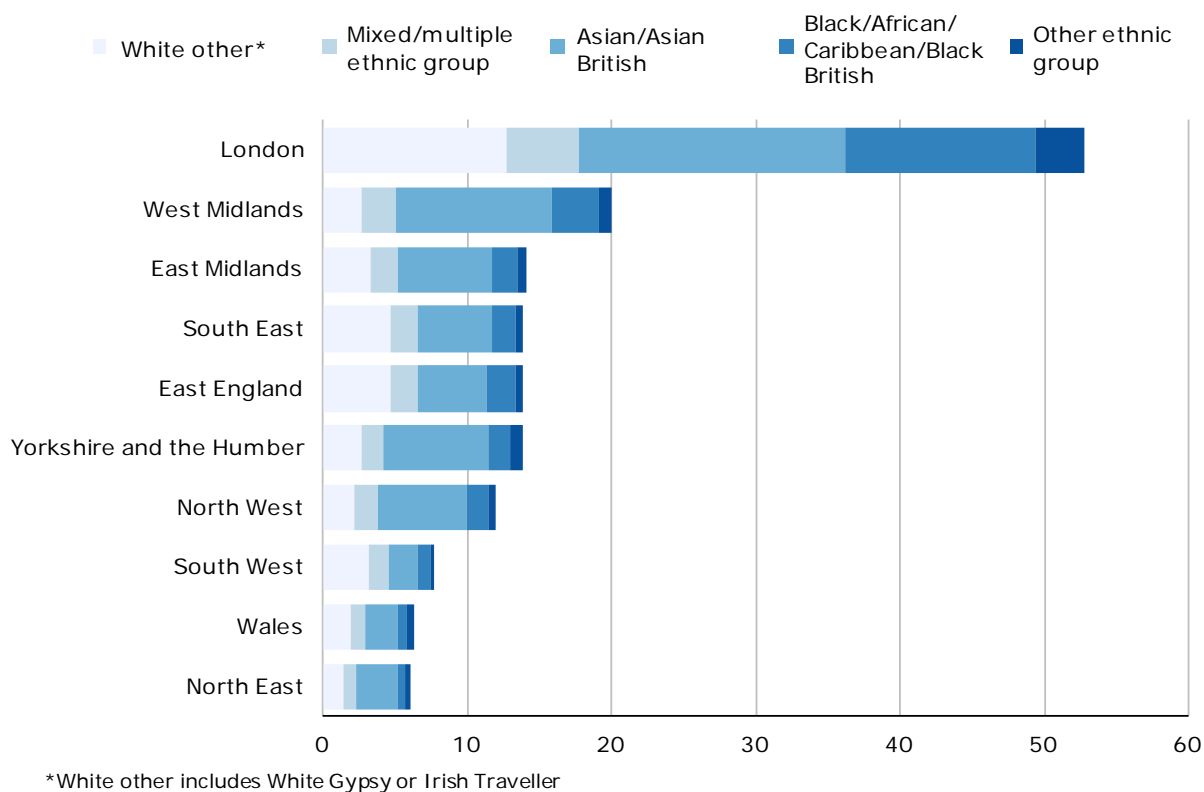
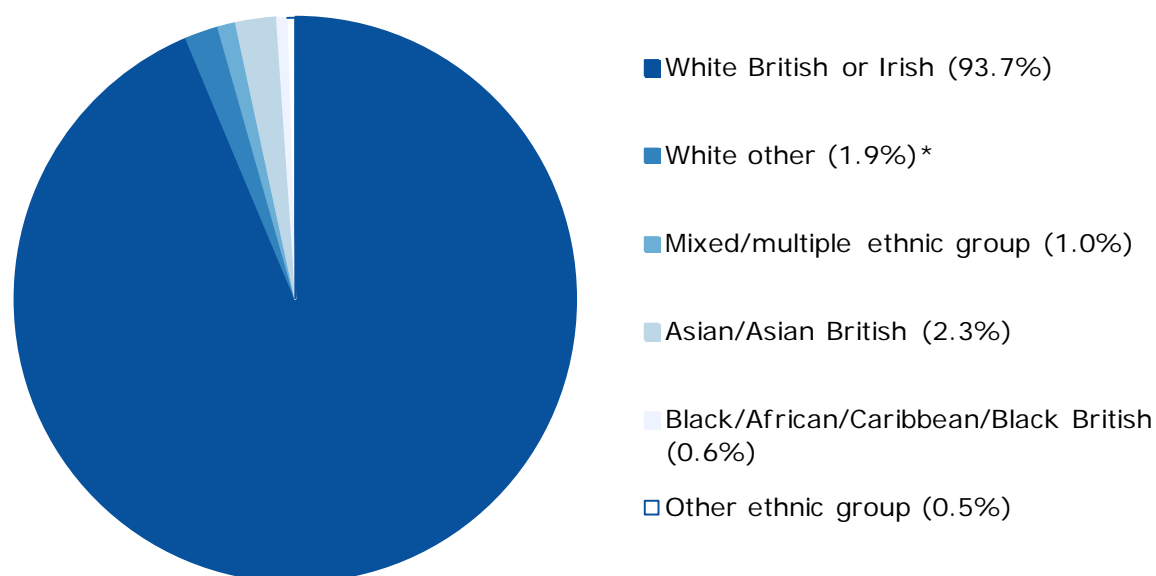


Figure 2 shows percentage breakdown of ethnicity for Wales and the English regions, of all usual residents. The data excludes those who define themselves as White British or Irish.

Looking at the regions it is clear that there is great variability. As expected, London has the highest percentage of residents who are not White British or Irish, 52.9%. The South West, Wales and the North East have the lowest percentages (7.7%, 6.3% and 6.1%, respectively).

Figure 3**Population by ethnic group, percentage, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)



*White other includes White Gypsy or Irish Traveller

Figure 3 illustrates the ethnic make-up of Wales, as reported by the 2011 Census.

The total population of Wales at the time of the 2011 Census was 3,063,456, with the greatest percentage of the population (93.7%) reporting to be White British or Irish. The White British or Irish population in Wales is 2,869,536.

Of the populations excluding White British or Irish, the Asian/Asian British population has the highest number of people, representing 2.3% (70,128) of the total population. The White other group, including White Gypsy or Irish Traveller, represents 1.9% of the population with 58,717 persons reporting as belonging to this group. The Mixed/multiple ethnic group represents 31,521 people, which corresponds to 1.0% of the population. The Black/African/Caribbean/Black British population is made up of 18,276 people, representing 0.6% of the population of Wales. Finally, the Other ethnic group has a population of 15,278, approximately 0.5% of the total population.

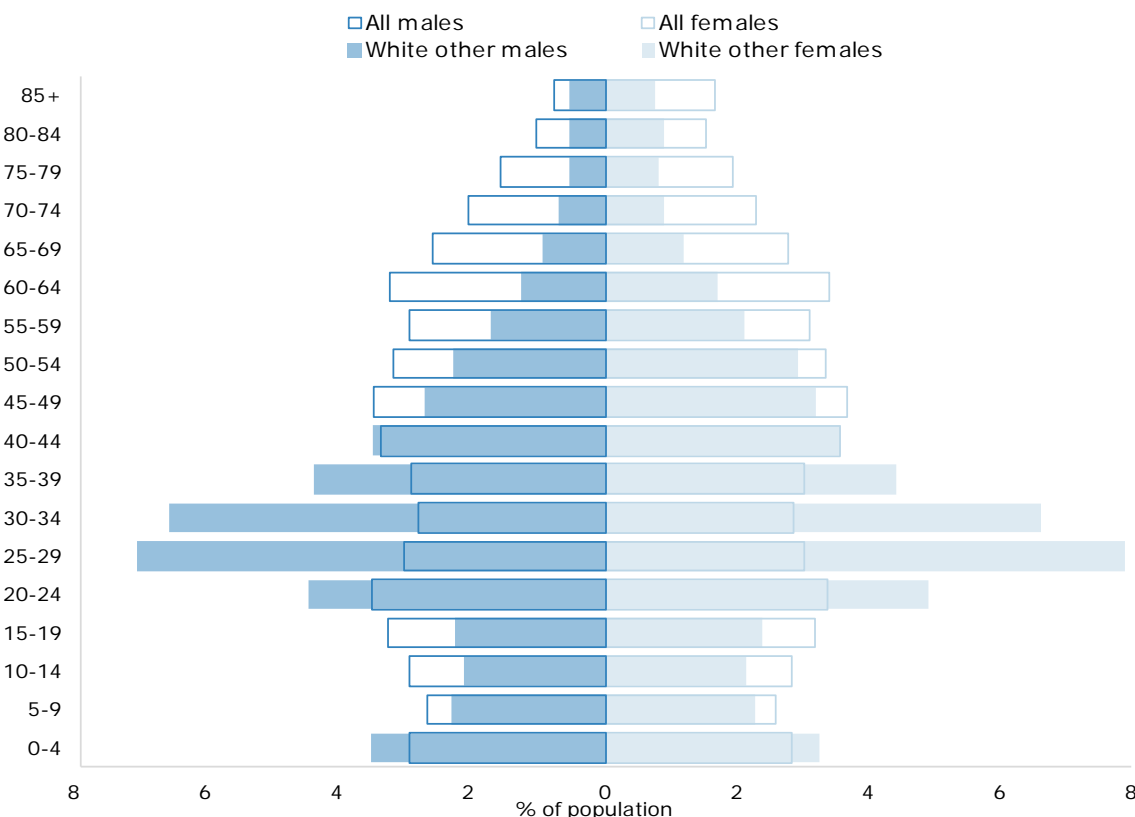
Further details about the composition of the ethnic groups defined by the 2011 Census can be found in the [Definitions section](#).

Population pyramids are a useful tool to help understand the structure and make-up of different populations. The population pyramids (figures 4 - 8) show the age distribution of the main ethnic groups, excluding White British or Irish, by five year age bands and sex, compared to the total population of Wales.

Figure 4

Age distribution of the total population and White other* population, percentage, males and females, Wales, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table DC2101EW (ONS)



* White other includes White Gypsy or Irish Traveller

Figure 4 illustrates the breakdown by age and sex of the White other population.

Since the accession of ten former Eastern Bloc countries to the European Union in 2004 and 2007, there has been an increase in immigration to the UK from these countries⁷. The pattern exhibited in the White other population pyramid is likely to be a reflection of the increase in eastern European immigration as people arrive seeking employment.

Figure 5**Age distribution of the total population and the Mixed/multiple ethnic population, percentage, males and females, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC2101EW (ONS)

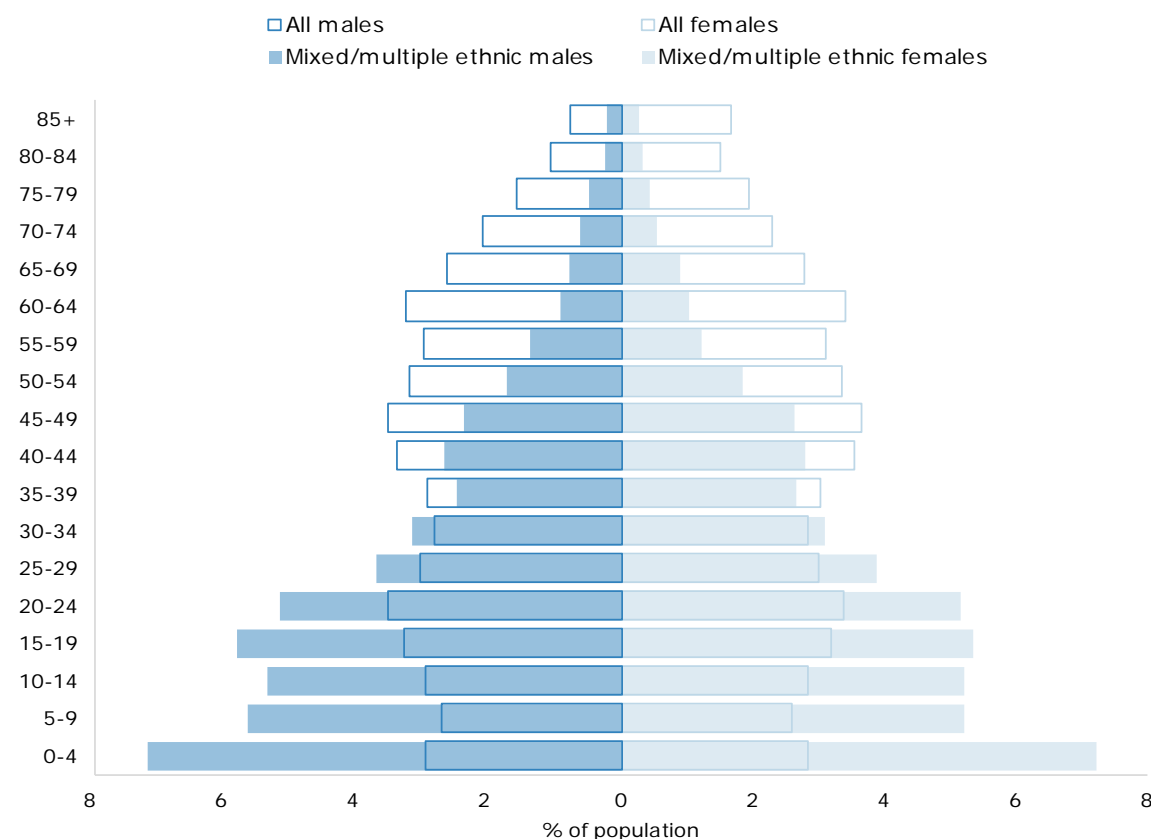


Figure 5 shows the demography of the Mixed/multiple ethnicities population.

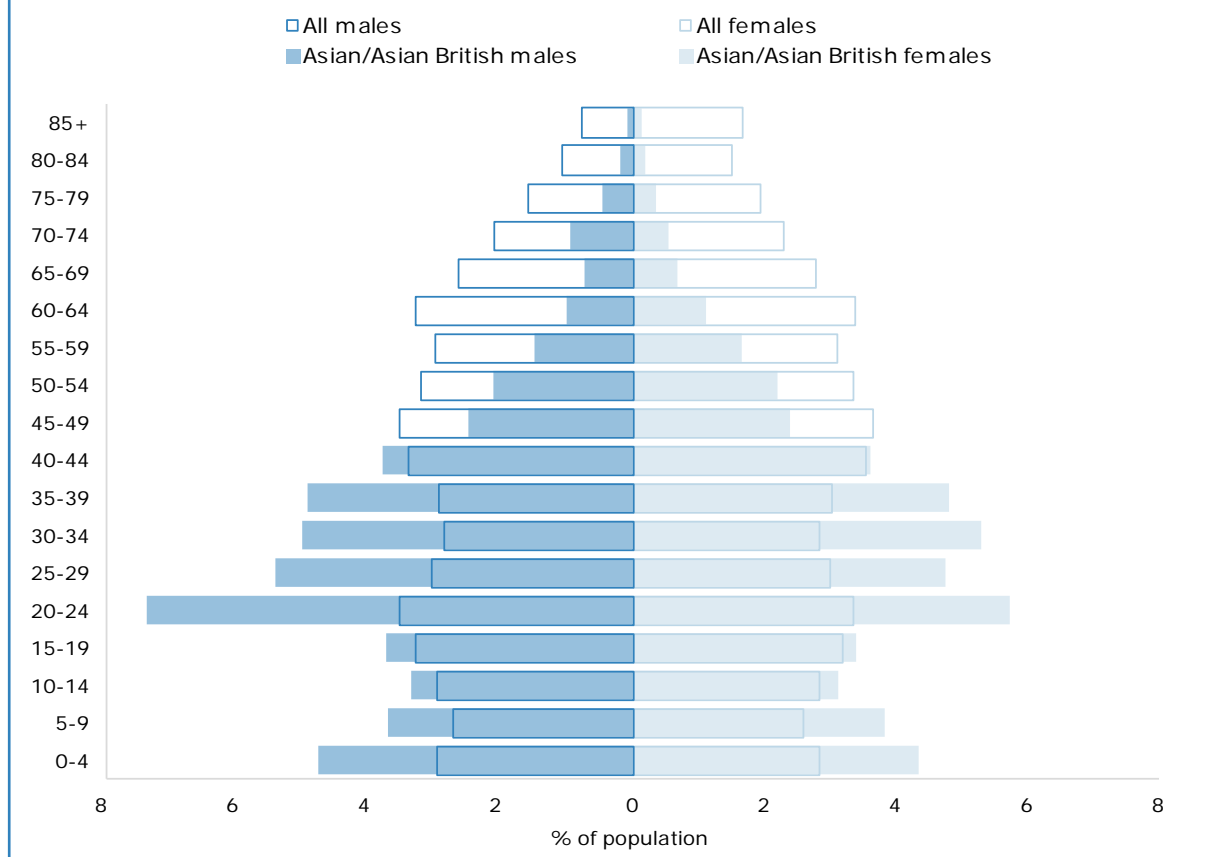
The age distribution of the mixed/multiple ethnicity population in Wales is different to the other ethnic groups in that it has a much younger age distribution. Almost half the population (47.1%) of the Mixed/multiple ethnicities population is aged under 20 compared to 23% in the total population.

The percentage of the Mixed/multiple ethnic population who are aged 35 years and over is much lower than the total Wales population.

Figure 6

Age distribution of the total population and the Asian/Asian British population, percentage, males and females, Wales, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table DC2101EW (ONS)



The age structure of the Asian/Asian British population is shown in figure 6.

The Asian/Asian British population has a far higher percentage of its population concentrated in the 20 to 39 year old age groups compared to the total population. Males aged 20-24 account for 7.4% of the total Asian/Asian British population; many of these are likely to be higher education students⁸. The percentage who are children aged under 10 is also much higher than in the total population. The percentage who are aged 45 years and over is much lower than in the total population.

Figure 7**Age distribution of the total population and the Black/African/Caribbean/Black British population, percentage, males and females, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC2101EW (ONS)

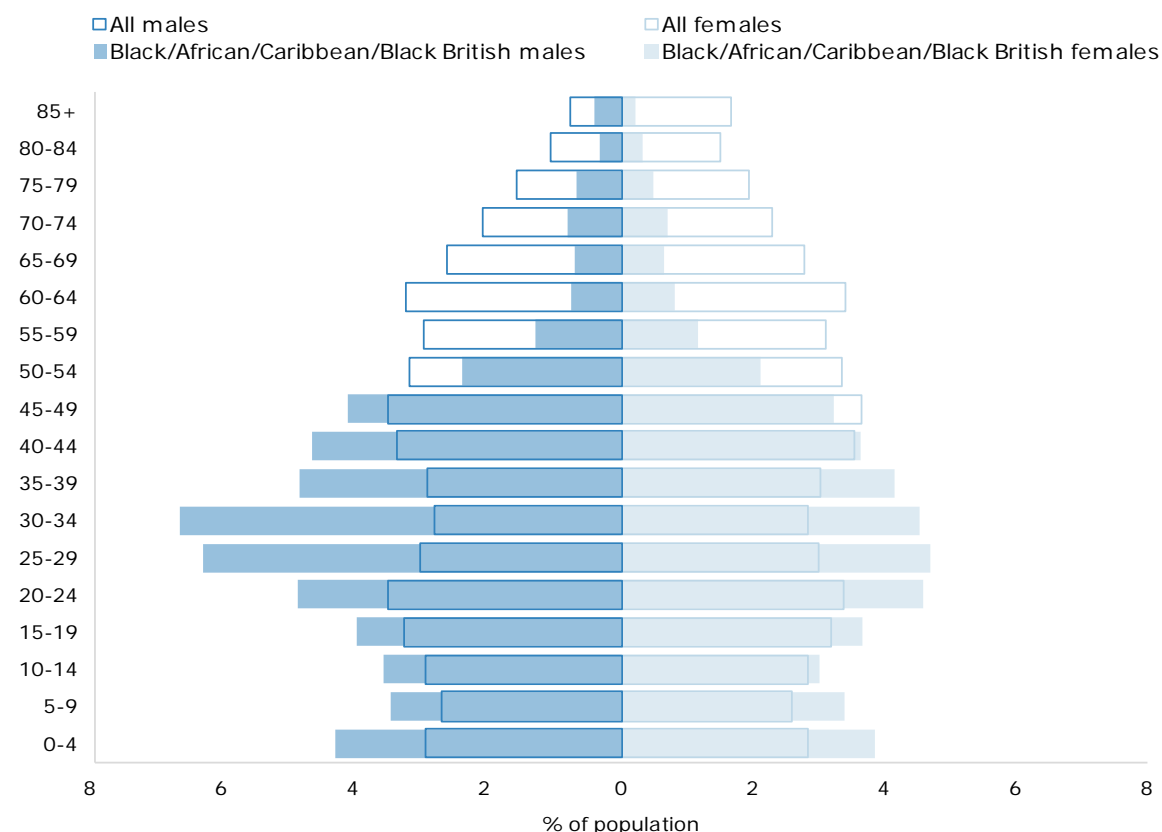


Figure 7 illustrates the age structure of the Black/African/Caribbean/Black British population.

The Black/African/Caribbean/Black British population has a higher percentage than the total population in age groups under 50, except for females aged 45 to 49. The percentage of males aged 25 to 34 is considerably higher than that of the total population and notably higher than the female population of the same age groups. The percentage of the population aged 50 and over is much lower than the total population. Unlike the other ethnic groups, there are a higher percentage of males than females in the 85+ age group.

Figure 8**Age distribution of the total population and of the Other ethnic group population, percentage, males and females, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC2101EW (ONS)

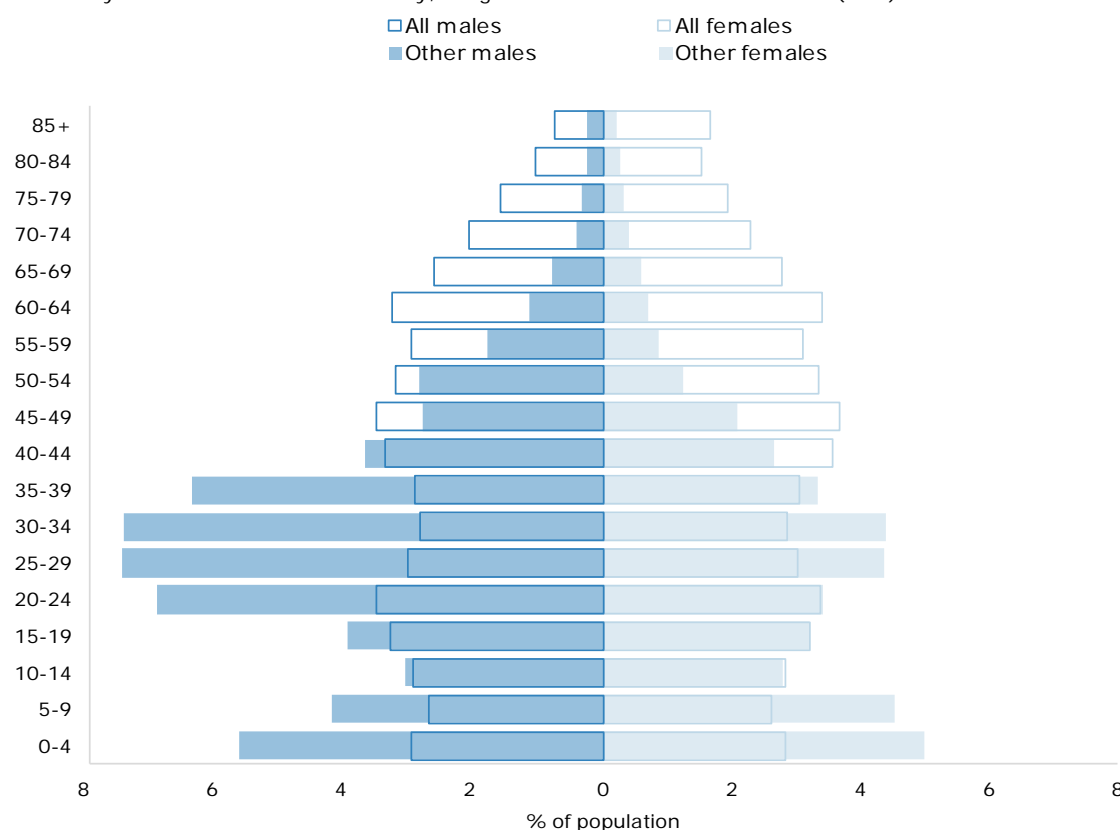


Figure 8 shows the population structure for the Other ethnic group.

The population pyramid shows that the Other ethnic population has a high percentage of males (60% are male), and for some age groups, twice the size than that seen for females. The percentage of the population aged under 10 is considerably higher than that of the total population, suggesting higher fertility rates.

Table 1**Comparison of ethnic group populations, count and percentage, Wales, 2001 and 2011**

Ethnic group	2001	2011	Difference	% difference
White British or Irish	2,804,294	2,869,536	65,242	2.3
White other*	37,211	58,717	21,506	57.8
Mixed/multiple ethnic groups	17,661	31,521	13,860	78.5
Asian/Asian British [†]	31,715	70,128	38,413	121.1
Black/African/Caribbean/Black British	7,069	18,276	11,207	158.5
Other ethnic group	5,135	15,278	10,143	197.5
Wales population	2,903,085	3,063,456	160,371	5.5

Produced by Public Health Wales Observatory, using 2001 Census data table KS06 and 2011 Census data table KS201EW (ONS)

[†]Changes in recording persons of Chinese origin from Other ethnicities in 2001 to Asian/Asian British in 2011 results in a loss of comparability for the Asian/Asian British group

* White other includes White Gypsy or Irish Traveller

Table 1 shows the changes in the ethnic make-up of Wales between the 2001 and 2011 Census.

Although each of the ethnic groups has seen a rise in numbers, the percentage increases vary greatly.

The White British or Irish population saw an increase of 65,242 persons; however, this is the smallest percentage increase (2.3%).

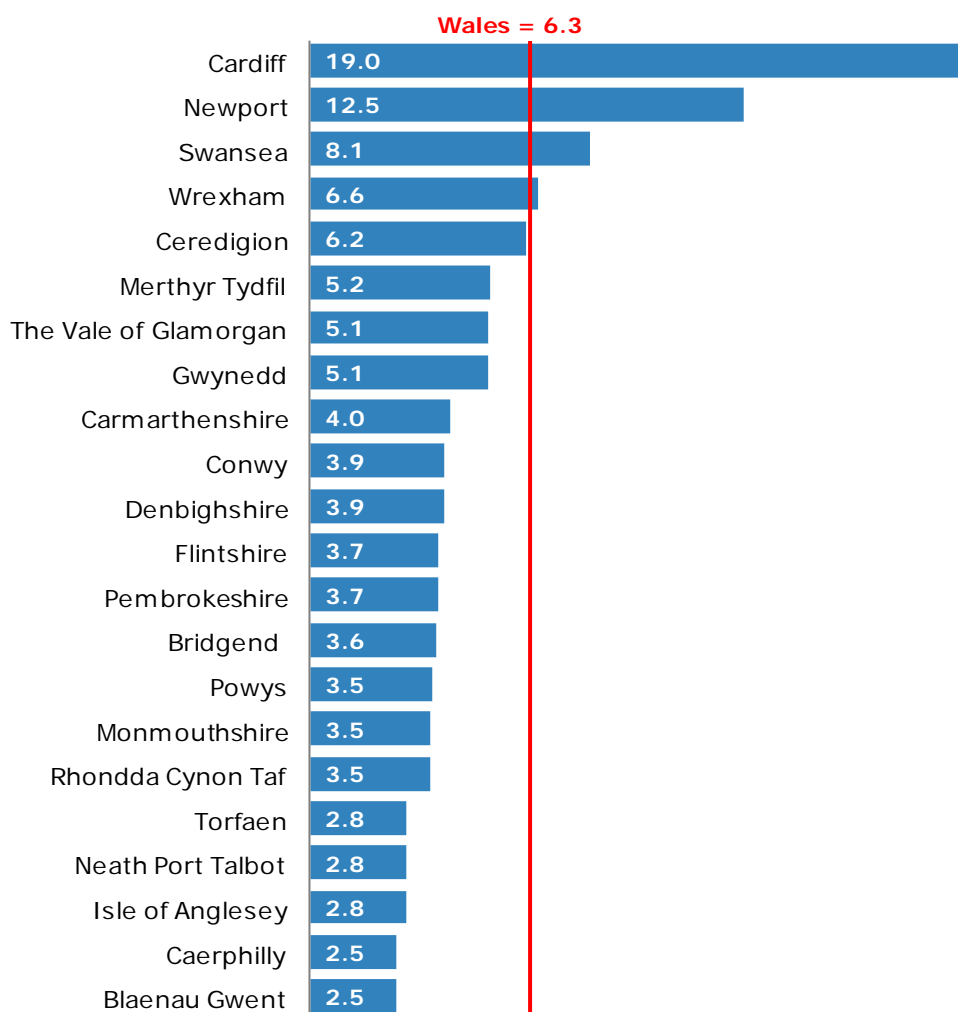
The Asian/Asian British population increased from 31,715 to 70,128 (121.1% increase), however changes in recording persons of Chinese origin from the Other ethnicities category in 2001 to Asian/Asian British in 2011 results in a loss of comparability for the Asian/Asian British group.

The largest percentage increase is seen in the Other ethnic group. The population almost trebled from 5,135 to 15,278 during the period, an increase of 197.5%. Although the percentage increase has been large, this group only accounts for 0.5% of the total population.

Figure 9

Population excluding White British or Irish, percentage, Wales local authorities, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)



*Population excluding White British or Irish is defined as the following: White Gypsy or Irish Traveller, White other, Mixed/multiple ethnic group, Asian/Asian British, Black/African/Caribbean/Black British or Other ethnic group.

Figure 9 shows the percentage of the population who do not define themselves as White British or Irish, by local authority.

Cardiff (19.0%) and Newport (12.5%) have the highest percentage defining themselves as not being White British or Irish followed by Swansea, Wrexham and Ceredigion (8.1%, 6.6% and 6.2%, respectively). The remaining local authorities have a percentage of 5.2% or less, with Caerphilly and Blaenau Gwent being the least ethnically diverse local authorities in Wales, both 2.5%.

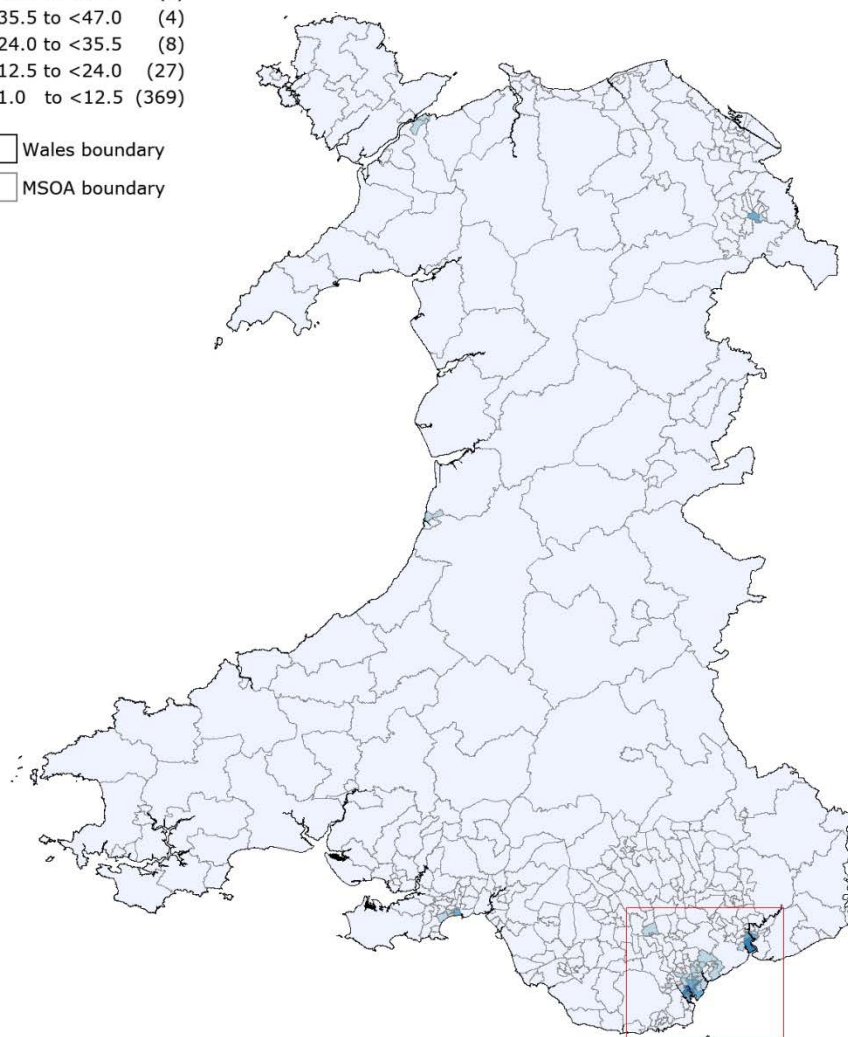
Figure 10

Population excluding White British or Irish*, all ages, Wales, 2011

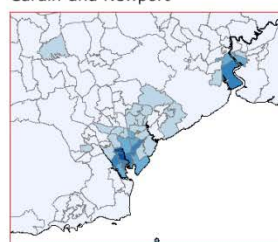
MSOA, Percentage

47.0 to 58.4	(2)
35.5 to <47.0	(4)
24.0 to <35.5	(8)
12.5 to <24.0	(27)
1.0 to <12.5	(369)

Wales boundary
MSOA boundary



Cardiff and Newport



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

*Population excluding White British or Irish is defined as the following: White Gypsy or Irish Traveller, White other, Mixed/multiple ethnic group, Asian/Asian British, Black/African/Caribbean/Black British or Other ethnic group.

Figure 10 shows the distribution of the population defining themselves as not being White British or Irish, in Wales, by Middle Super Output Area (MSOA).

The map shows that this population is predominantly located in urban areas such as Cardiff, Newport and Swansea. Within the ethnic groups that make up this population, there are some variations, none more so than the White other population. As shown in the [Appendix](#), the White other population is more dispersed throughout Wales including parts of West Wales, many of whom are likely to be agricultural workers. Other areas include Brecon, Aberystwyth, Wrexham, Llandudno and Flint.

3 Determinants of health

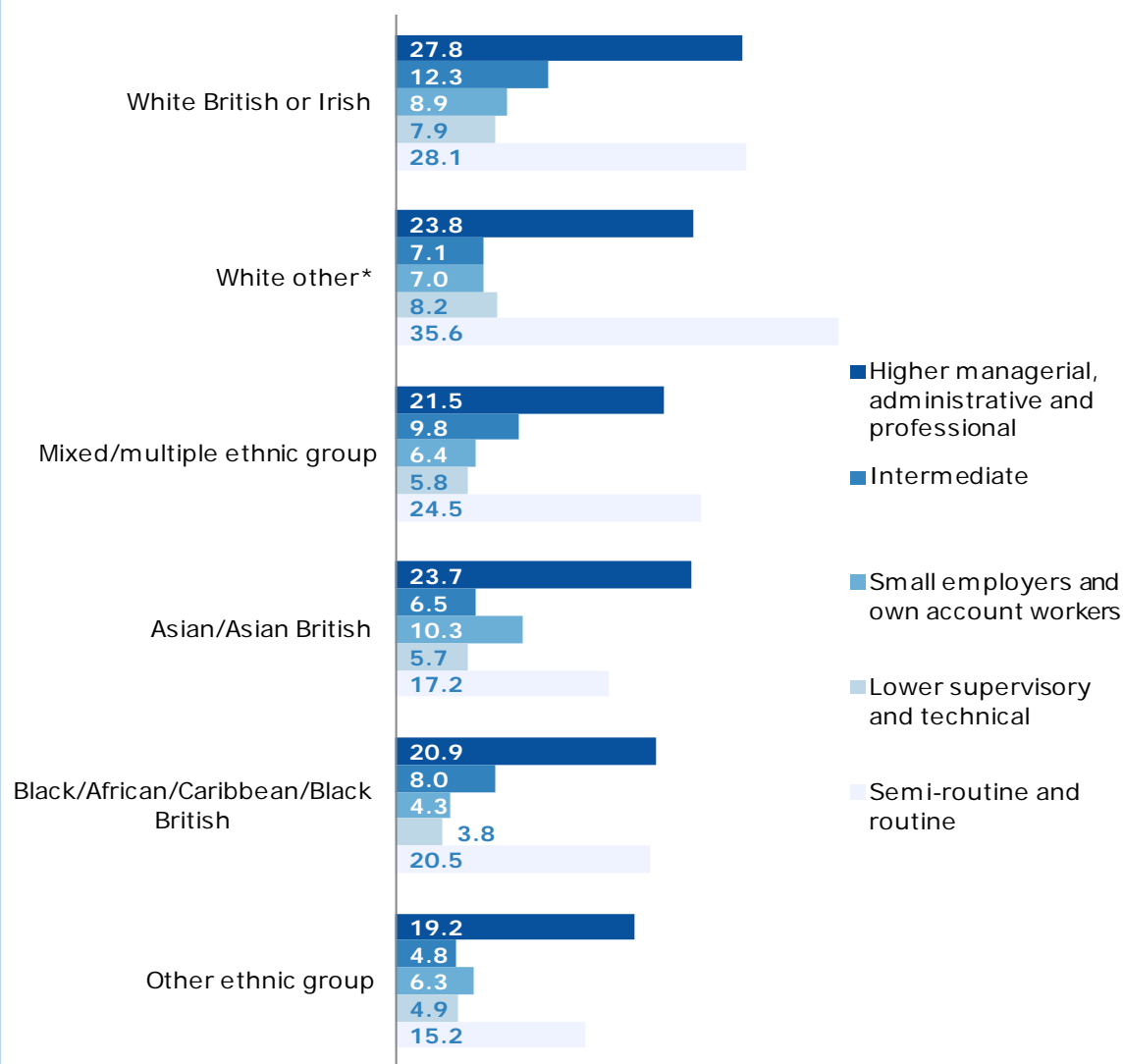
This section provides analysis of some of the determinants of health included in the Dahlgren and Whitehead model⁶. The 2011 Census data allow these factors to be measured for ethnic groups. The following indicators have been included:

- Socio-economic class
- Unemployment
- Education
- Proxy measures of income (car ownership and housing tenure)
- Household overcrowding

These are factors that lie beyond the direct influence of the health service but which can have a major impact on people's life chances and health outcomes.

Figure 11**NS-SEC by ethnic group, percentage, aged 16-64, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC6206EW (ONS)



*White other includes White Gypsy or Irish Traveller

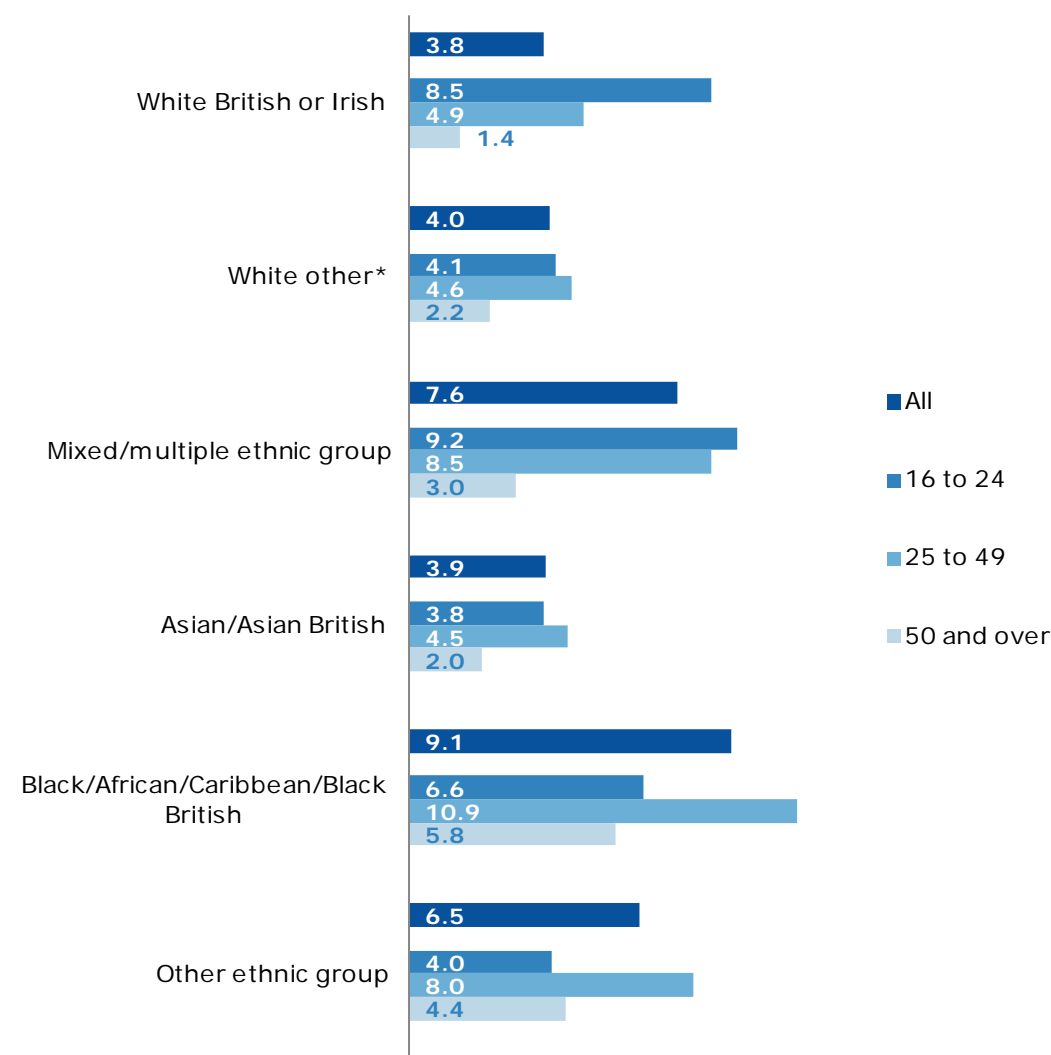
Socio-economic conditions are one of the factors that contribute to the health of an individual, illustrated in Dahlgren and Whitehead's social model of health⁶. The socio-economic position a person holds can have an influence on social behaviour and ultimately, their health outcomes⁹.

Figure 11 shows the breakdown of each ethnic group by National Statistics Socio-economic Classification (NS-SEC). For more information on NS-SEC please refer to the [Definitions section](#).

For all ethnic groups the largest percentage of the population falls in either higher managerial, administrative and professional occupations or semi-routine and routine occupations; these are at the opposite ends of the NS-SEC scale. This apparent polarity in NS-SEC category might, in part, be explained by the self reported nature of the Census. The White other population has a relatively high percentage of their working age population who are in semi-routine and routine occupations (35.6%).

Figure 12**Long term unemployed and never worked⁺ by ethnic group, percentage, aged 16 and over, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC6201EW (ONS)

⁺Excludes full time students

*White other includes White Gypsy or Irish Traveller

Work environment and unemployment are key factors which determine the health of an individual⁶. There is growing evidence that (long-term) worklessness is harmful to physical and mental health¹⁰.

Figure 12 shows the distribution of the population aged 16 and over classed as long term unemployed or having never worked by ethnic group. For the 2011 Census, long term unemployment means an individual had not worked since at least 31st December 2009.

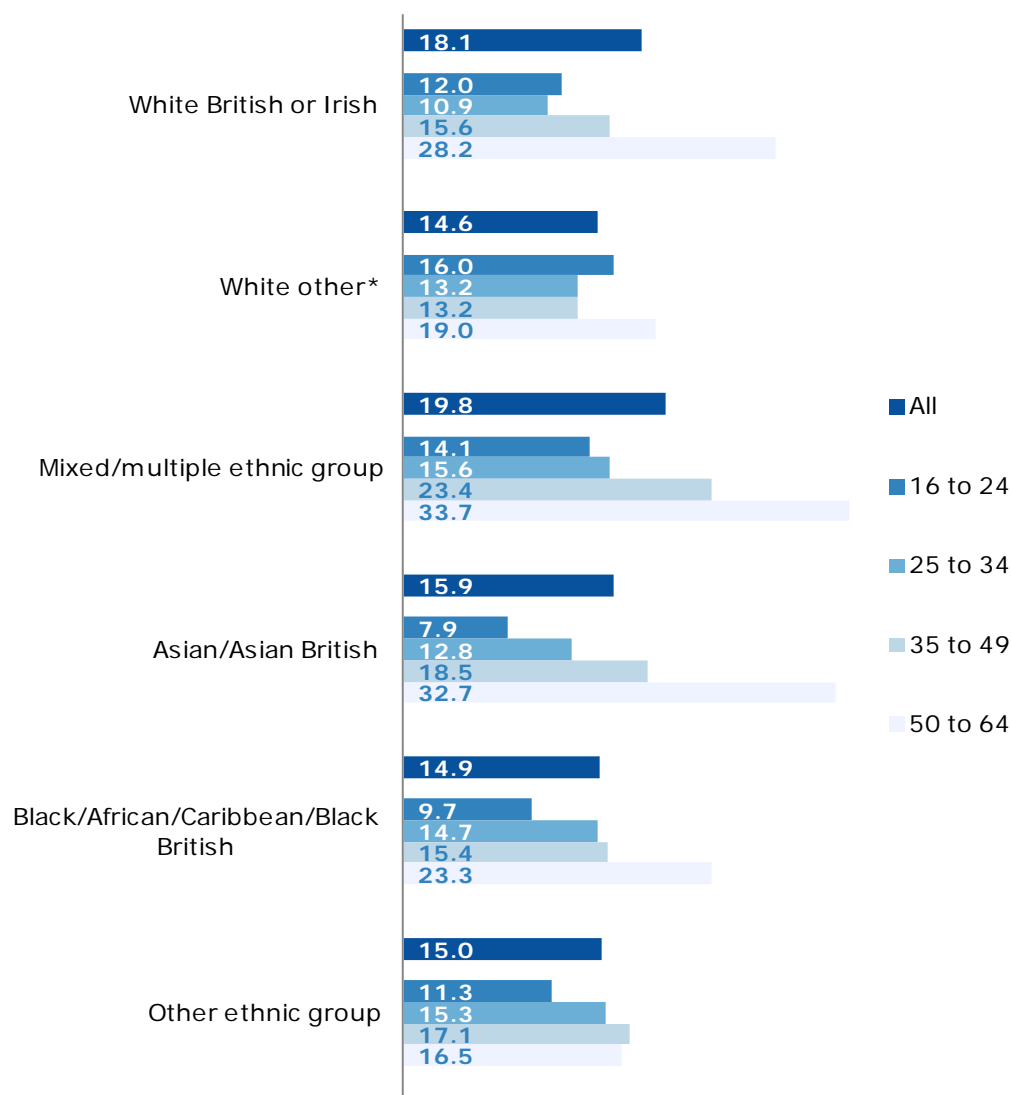
The percentage classed as long term unemployed or never worked is highest in the Black/African/Caribbean/Black British population (9.1%). This is higher than any other ethnic group and increases to 10.9% in those who are aged 25 to 49.

Of those categorised as White British or Irish, the percentage that are classed as long term unemployed or having never worked is highest in those aged 16 to 24 (8.5%).

Overall, percentages are lowest in those categorised as being White British or Irish (3.8%), White other (4%) or Asian/Asian British (3.9%).

Figure 13**Persons without qualifications by ethnic group, percentage, aged 16-64, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC5202EW (ONS)



*White other includes White Gypsy or Irish Traveller

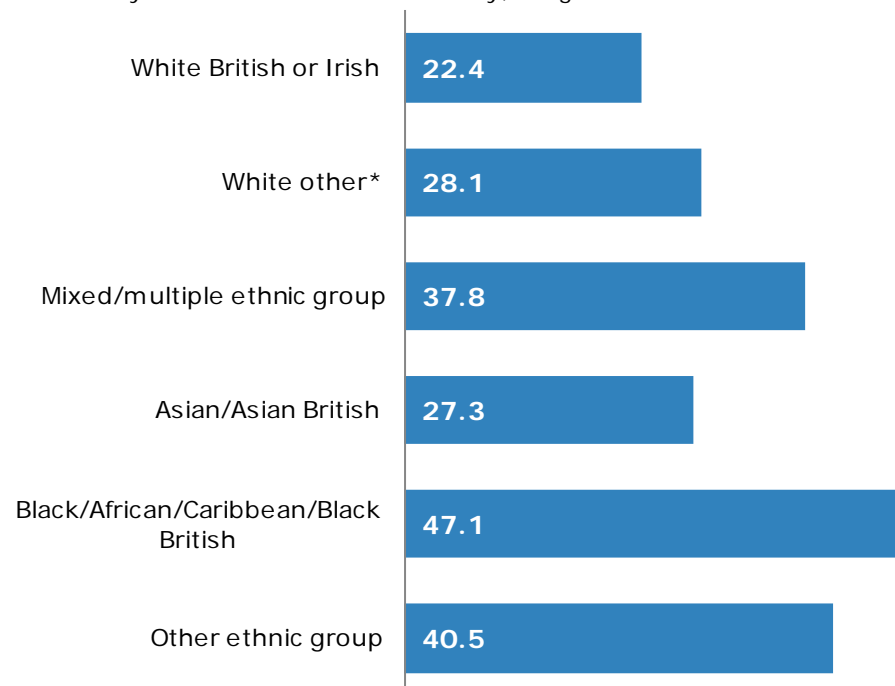
Education is another key determinant of health. Education plays a major part in determining one's life chances. There is evidence to suggest that those with lower levels of educational attainment are more likely to live an unhealthy lifestyle and experience associated negative health outcomes¹¹.

Figure 13 shows the percentage of each ethnic group that have no qualifications by specific age bands.

The chart shows that across all groups, the percentage with no qualifications increases with age. This is a reflection of improvements in the education system over time. In the 16 to 24 age group, the ethnic group with the lowest percentage with no qualifications is Asian/Asian British (7.9%). The ethnic group with the highest percentage aged 16 to 24 with no qualifications is White other (16%).

Figure 14**No car access by ethnic group, percentage, households, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC4202EW (ONS)



*White other includes White Gypsy or Irish Traveller

Figure 14 shows the percentage of households that have no car access for each ethnic group.

Car access is very important for those living in isolated communities and influences how easily they can access services such as dentists, GP surgeries, opticians and pharmacies. If populations find it hard to access services such as these, it may mean that visits are put off and symptoms are left untreated, having detrimental effects on a person's health.

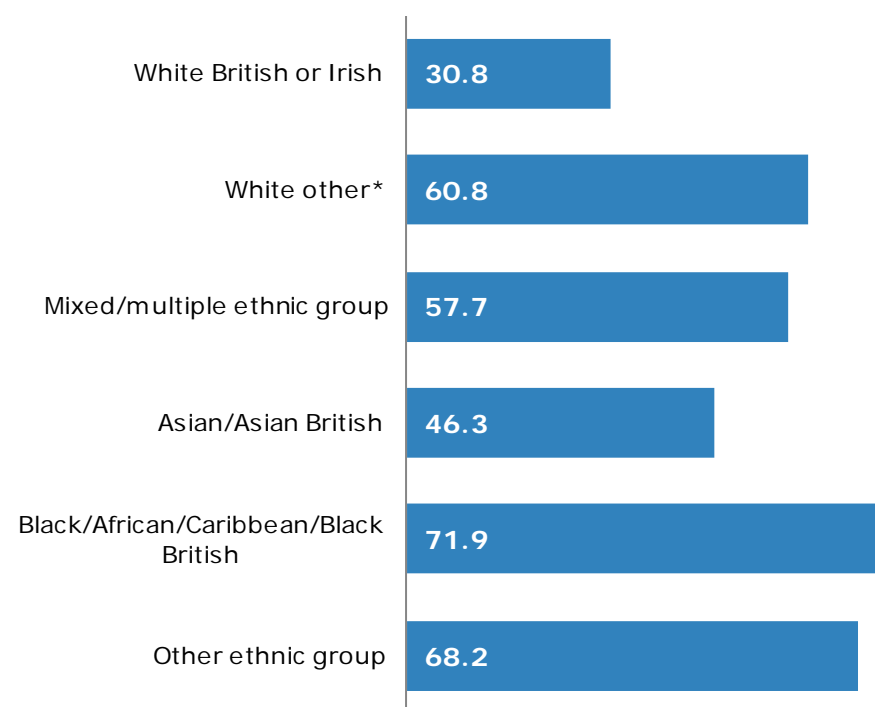
In urban areas, services are often within walking distance, public transport links are better and other forms of transport may be used such as bicycles. In urban areas, therefore, car ownership is not so much a necessity and can be used as a proxy measure of income. There are no direct measures of income contained within the 2011 Census.

The percentage of households without car access is lowest within the White British or Irish population, 22.4% (276,903 households). The percentage of households without car access is highest within the Black/African/Caribbean/Black British population and those forming the Other ethnic group, 47.1% (3,594 households) and 40.5% (2,377 households) respectively.

It is important to be mindful of the distribution of the ethnic groups throughout Wales ([Figure 10, Demography](#)) when looking at this indicator. Ethnic groups who define themselves as other than White British or Irish, are predominantly located in urban areas.

Figure 15**Living in non-owner occupied accommodation by ethnic group, percentage, Household Reference Person, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC4201EW (ONS)



*White other includes White Gypsy or Irish Traveller

A person's physical environment can have a major influence on health, as illustrated in Dahlgren and Whitehead's social model of health: water and air quality, combined with housing and community safety are all important factors¹².

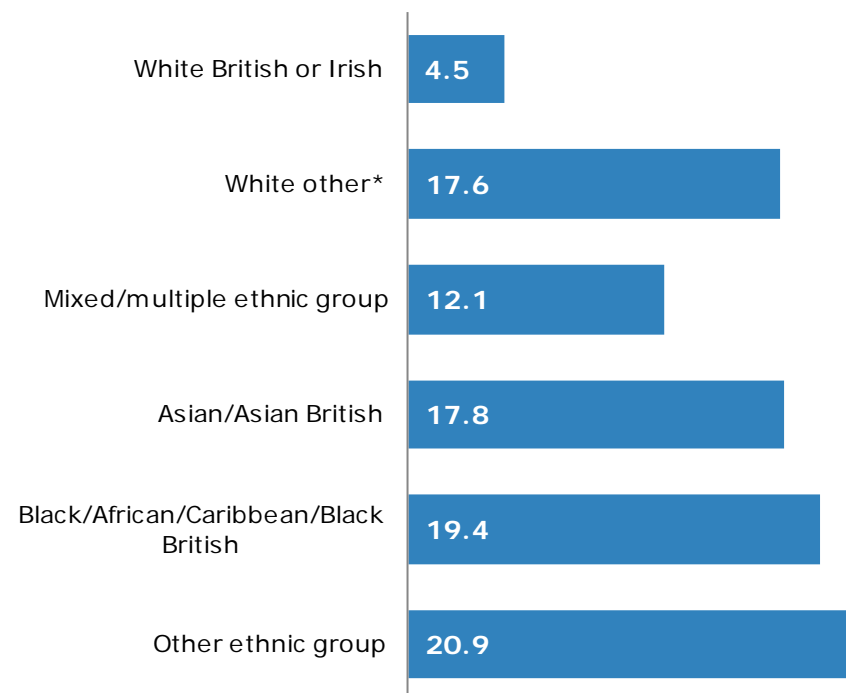
Figure 15 shows the percentage of households that live in non-owner occupied accommodation including that which is rented privately or socially. This is another measure that can be used as a proxy for income.

The Black/African/Caribbean/Black British group has the highest percentage of their population residing in non-owner occupied accommodation (71.9%) compared to 30.8% of the White British or Irish population.

Properties which are owner occupied tend to have more bedrooms compared to rental properties¹³, this in turn would suggest that overcrowding is more likely in rental properties.

Figure 16**Living in overcrowded⁺ accommodation by ethnic group, percentage, Household Reference Person, Wales, 2011**

Produced by Public Health Wales Observatory, using 2011 Census data table DC4205EW (ONS)

⁺Occupancy rating of -1 or less

*White other includes White Gypsy or Irish Traveller

Figure 16 shows the percentage of each ethnic population which resides in overcrowded households based on the response provided by the household reference person (HRP). The HRP acts as a reference point within the household (further details on HRP and occupancy rating can be found in the [Definitions section](#)).

The crowded living conditions associated with an occupancy rating of -1 or less can have detrimental effects on an individual's health. Respiratory problems can be a result of overcrowded living conditions. Also, there is increased risk of children contracting diseases such as meningitis when living in overcrowded households¹⁴.

The percentage of households which are overcrowded is between three and five times higher in groups defining themselves as not being White British or Irish, compared to the White British or Irish population. The highest percentage is in the Other ethnic group population (20.9%). Factors such as income and age structure amongst these populations will have influenced these patterns.

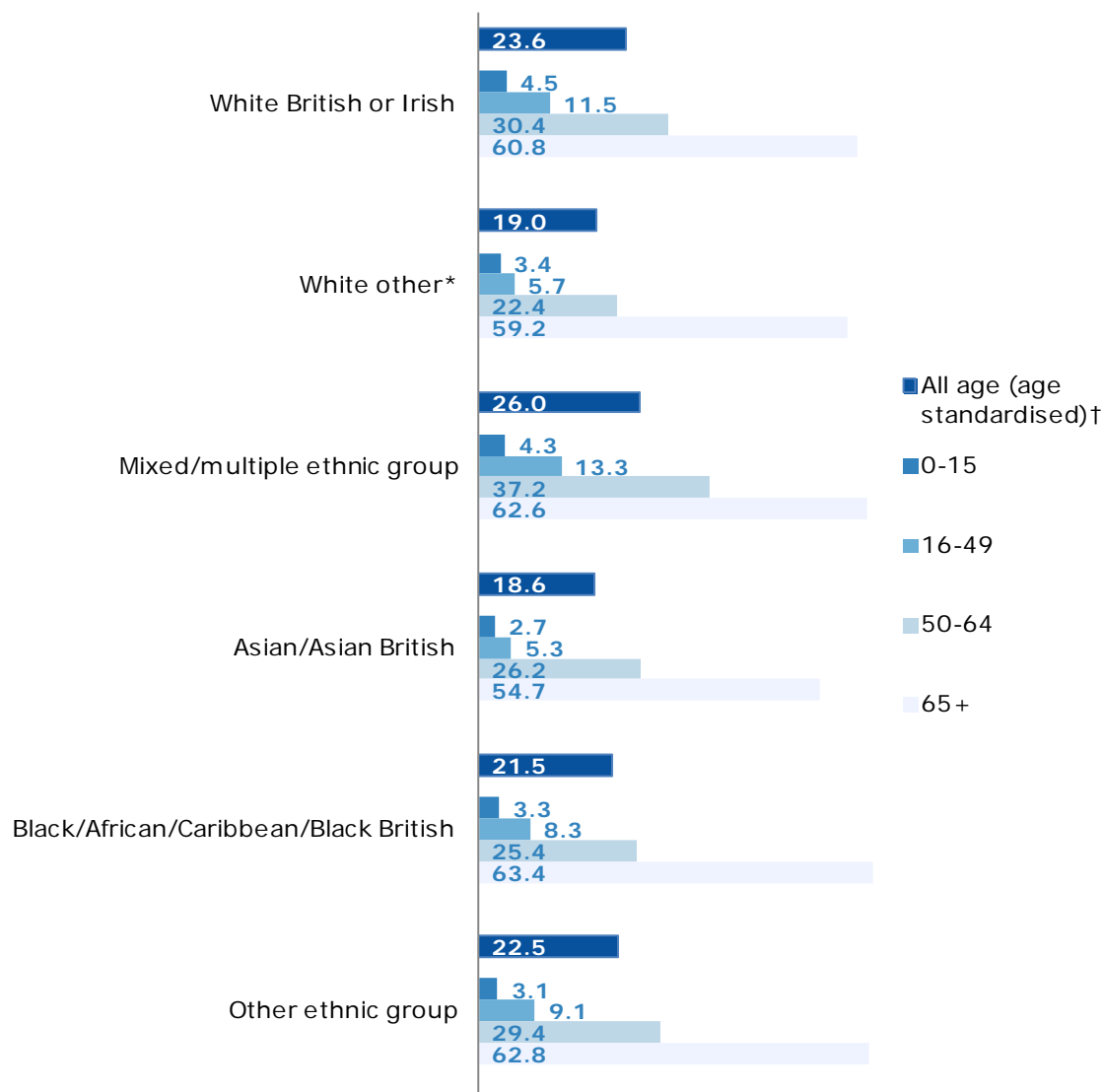
4 Health outcomes

The Census gathers limited information on health outcomes. The questions around health concern limiting illness, perception of general health and the provision of unpaid care to others. This section provides analysis of those health outcomes reported within the 2011 Census. Although self reported, these indicators provide a good measure of how different ethnic populations perceive their health on a day to day basis.

Figure 17

Limiting illness: limited a little or a lot by ethnic group, percentage, Wales, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table LC3205 (ONS)



†Rates have been age standardised to remove the confounding factor of age.

Weightings have been derived from 2013 ESP

*White other includes White Gypsy or Irish Traveller

Figure 17 shows the distribution, by ethnic group and broad age groups, of those reporting that their daily activities were limited a little or a lot by a long term health problem or disability, including problems relating to old age. Those suffering with a long term limiting illness tend to use health and social services more frequently and this can provide an indication of the burden on these services¹⁵.

The chart shows that limiting illness increases sharply with age across all ethnic groups. For this reason, the all age percentage has been age standardised. The [Demography section](#) shows that the age structure of ethnic groups in Wales differs markedly. Age standardised percentages allow comparisons to be made across groups taking those differences in age structure into account.

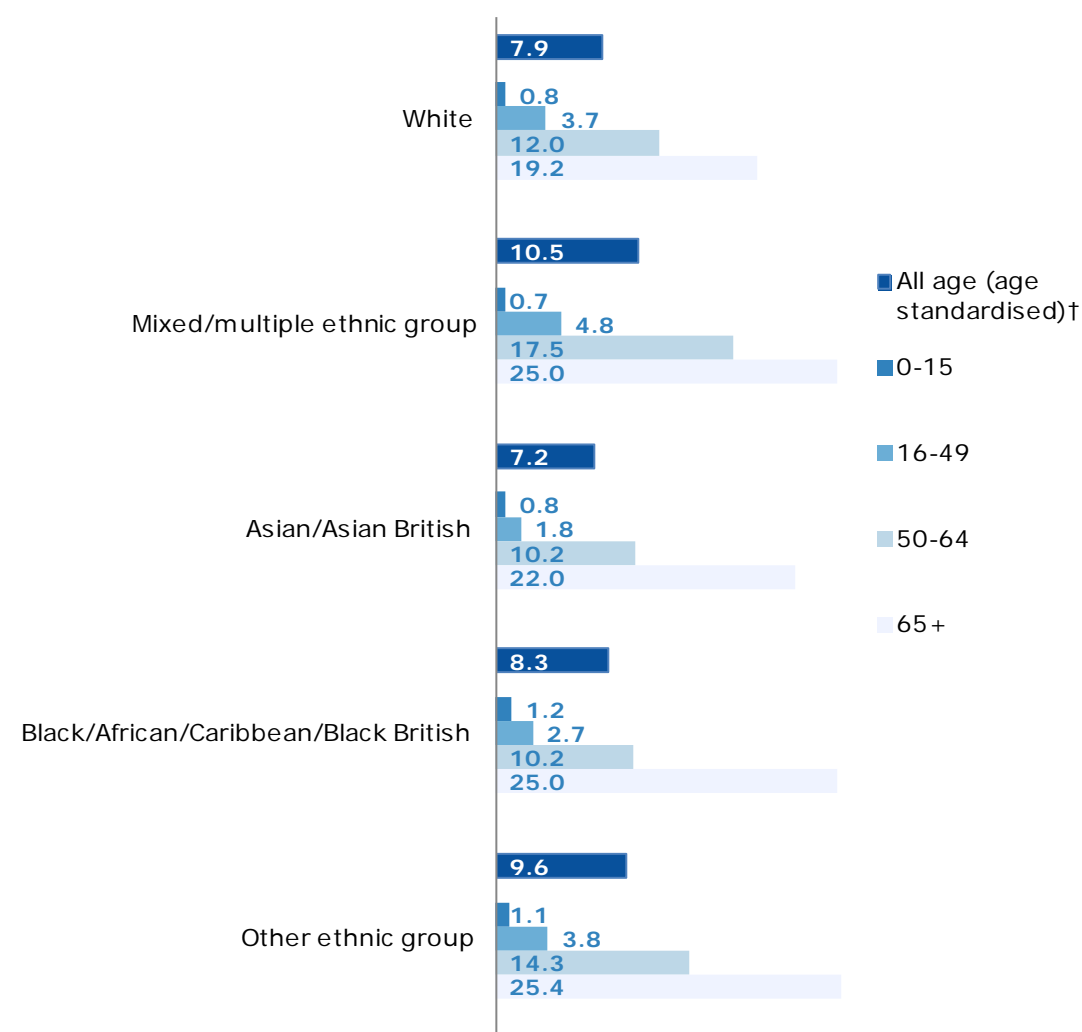
The data shows that the Mixed/multiple ethnic group exhibits the highest percentage across all ages (age standardised percentage). Looking at the age specific breakdown, the Mixed/multiple ethnic and White British or Irish groups have the highest percentages in those

aged under 65. In the 65+ age group there is less variation across the groups with the Asian/Asian British group having the lowest percentage.

Figure 18

General health: bad or very bad by ethnic group, percentage, Wales, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table DC3201EW (ONS)



†Rates have been age standardised to remove the confounding factor of age.
Weightings have been derived from 2013 ESP

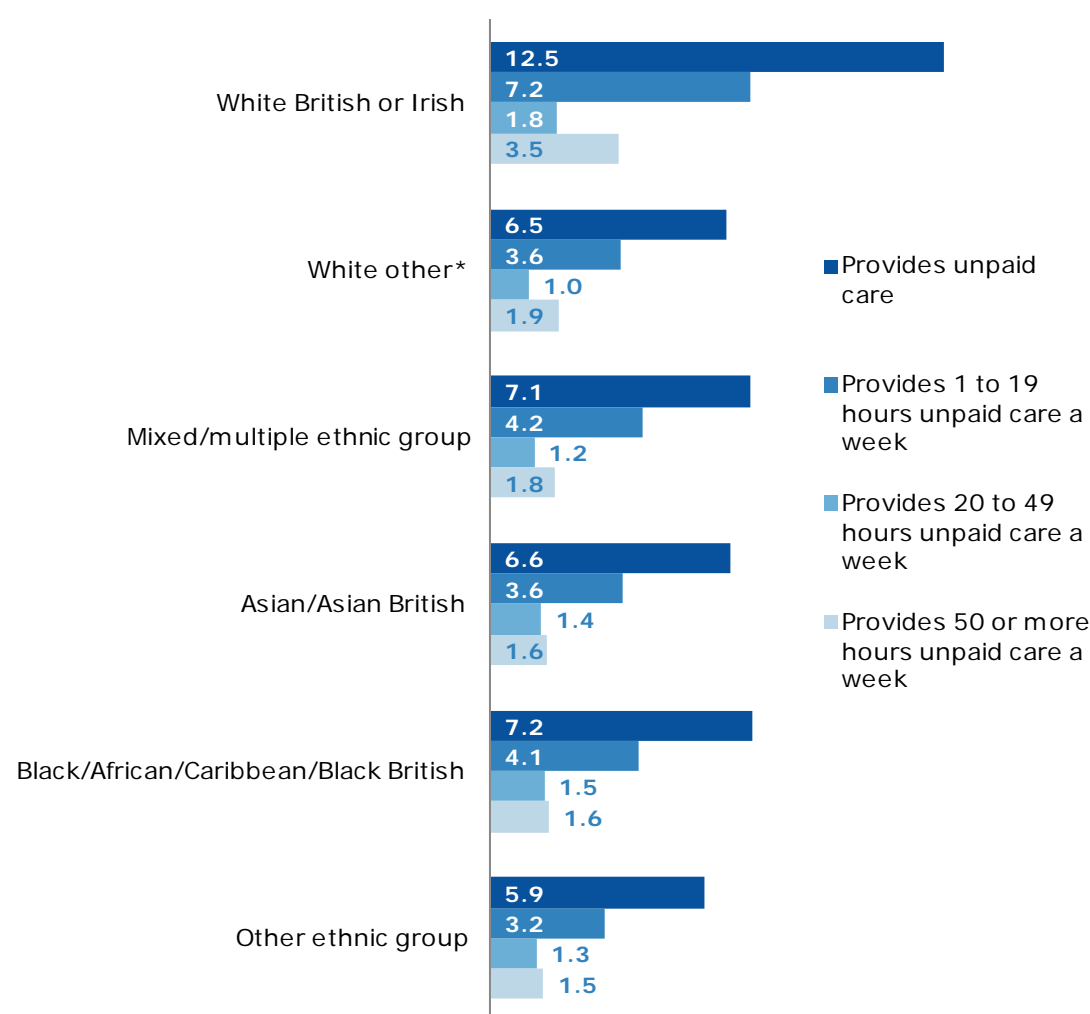
The 2011 Census asked individuals to assess whether their general health was very good, good, fair, bad or very bad. Figure 18 shows the distribution, by ethnic group and by defined age groups, of those reporting their general health as being bad or very bad. For this indicator, White British or Irish and White other have been grouped together to avoid the risk of disclosure. The way an individual reports their general health can give an indication of their general perception of well-being and health related quality of life¹⁵.

The chart shows that the percentage of those reporting bad or very bad health increases sharply with age. For this reason, the all age percentage has been age standardised. The [Demography section](#) shows that the age structure of ethnic groups in Wales differs markedly. Age standardised percentages allow comparisons to be made across groups taking those differences in age structure into account. The age standardised percentage shows that bad or very bad general health is highest amongst the Mixed/multiple and Other ethnic populations. The Asian/Asian British group is the only population with a lower percentage reporting bad or very bad general health than the White population, at 7.2%. Amongst those aged 65+, the White group has the lowest percentage reporting their general health as bad or very bad.

Figure 19

Provision of unpaid care by ethnic group, percentage, Wales, 2011

Produced by Public Health Wales Observatory, using 2011 Census data table DC2301EW (ONS)



*White other includes White Gypsy or Irish Traveller

The provision of unpaid care tends to be higher in those populations that have higher percentages of persons 'limited a lot' by a limiting illness¹⁶. The provision of unpaid care is an important social policy issue because it not only makes a vital contribution to the supply of care, but can also affect the employment opportunities and social and leisure activities of those providing it¹⁵. There is evidence that people providing unpaid care are at increased risk of psychological stress depending on their age and place in the labour market which has a negative effect on their mental and emotional well-being¹⁶. The 2011 Census shows a correlation between the provision of greater amounts of unpaid care and higher percentages of those reporting their as general health as 'not good'¹⁷.

Figure 19 shows the breakdown of those who reported providing unpaid care by ethnic group, and by the amount of care provided on a weekly basis.

The chart shows that across all ethnic groups, the highest percentage of the population providing care is within the White British or Irish population. This is likely to be as a result of the older age structure of this group, as shown in the [Demography Section](#). It is not possible to provide an age standardised percentage for this indicator.

5 Conclusions

The Census is the most comprehensive source of information on ethnicity in Wales. This report has used the 2011 Census to describe the ethnic make-up of Wales, together with information about the determinants of health and health outcomes experienced. The analysis shows a breakdown of these factors for people defining themselves as White British or Irish, White other, and for minority ethnic groups.

Wales is less ethnically diverse than all areas of England except the North East. Only just over 6% of the population define themselves as not White British or Irish, however, this represents a doubling of the proportion since the previous Census in 2001.

The population defining themselves as not White British or Irish is not distributed evenly across Wales. Rather it is concentrated in urban centres. Cardiff has the highest proportion with just under 20% of its population not being White British or Irish. In rural areas and the south Wales valleys the proportion is as low as 2.5%. Even within cities like Cardiff the spread is not even. In some areas in the south of the city over 50% of the population are not White British or Irish, compared with less than 10% in parts of the north of the city.

The fact that Wales has a small population in the White other and minority ethnic groups, together with the uneven distribution of these populations means that it has not been possible to provide a comprehensive analysis. As shown in the [Definitions section](#), the Census allows a detailed breakdown by ethnic group, but the small populations mean that only the broad groups could be considered for analysis. For the same reason, it was not possible to look at geographic variation in the health and determinants of ethnic groups. It is important to recognise that each ethnic group is diverse, but this has been hidden by the above constraints.

This report provides a useful insight into the demography, health and determinants of ethnic groups in Wales. It is important that the capture of information relating to ethnicity in administrative data is improved. This will allow service providers and policy makers a better understanding of the needs of these groups with a view to reducing inequalities and improving outcomes.

6 References

1. Office for National Statistics. *Standard Occupational Classification 2010*. London: ONS; 2010. Available at: <http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/soc2010-volume-3.pdf> [Accessed: 16th April 2015]
2. Office for National Statistics. *2011 Census Glossary of Terms*. 2014. London: ONS; 2014. Available at: <http://www.ons.gov.uk/ons/guide-method/census/2011/census-data/2011-census-data/2011-first-release/2011-census-definitions/2011-census-glossary.pdf> [Accessed: 16th April 2015]
3. Nomis. *Working age definition* [Online]. 2010. Available at: <https://www.nomisweb.co.uk/articles/487.aspx> [Accessed: 16th April 2015]
4. Welsh Government. *Travelling to a Better Future*. Cardiff; 2011. Available at: http://ec.europa.eu/justice/discrimination/files/roma_uk_strategy_annex1_en.pdf [Accessed: 13th May 2015]
5. Szczepura A. *Access to health care for ethnic minority populations*. Coventry: University of Warwick; 2004. Available at: <http://pmj.bmj.com/content/81/953/141.full.pdf+html> [Accessed: 16th April 2015]
6. Dahlgren G, Whitehead M. Policies and strategies to promote equity in health. Stockholm: Institute for Future Studies; 1991. Available at: https://saludcomunitaria.files.wordpress.com/2008/05/dahlgren_whitehead.pdf [Accessed: 16th May 2015]
7. Vargas-Silva C Dr. *Briefing. Migration Flows of A8 and other EU Migrants to and from the UK*. University of Oxford: The Migration Observatory; 2014. Available at: http://www.migrationobservatory.ox.ac.uk/sites/files/migobs/Migration%20Flows%20of%20A8%20and%20other%20EU%20Migrants%20to%20and%20from%20the%20UK_0.pdf [Accessed: 16th April 2015]
8. Office for National Statistics. *The number of graduates in the UK broken down by gender and by ethnic group*. [Online]. 2014. Available at: <http://www.ons.gov.uk/ons/about-ons/business-transparency/freedom-of-information/what-can-i-request/published-ad-hoc-data/labour/august-2014/graduates-in-the-uk-by-gender-and-graduates-by-ethnicity.xls> [Accessed: 16th April 2015]
9. Office for National Statistics. *Volume 3 The National Statistics Socio-economic Classification: (Rebased on the SOC2010) User Manual*. [Online]. Available at: <http://www.ons.gov.uk/ons/guide-method/classifications/current-standard-classifications/soc2010/soc2010-volume-3-ns-sec--rebased-on-soc2010--user-manual/soc2010-volume-3.pdf> [Accessed 16th April 2015]
10. G Waddell, A K Burton. *Is work good for your health and well-being?* Cardiff University & University of Huddersfield; 2006. Available at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/214326/hwwb-is-work-good-for-you.pdf [Accessed 16th April 2015]

11. Higgins C et al. *Health Impacts of Education a review*. Institute of Public Health in Ireland; 2008. [Online]. Available at: <http://www.publichealth.ie/download?url=http://www.publichealth.ie/sites/default/files/documents/files/Health%2520Impacts%2520of%2520Education.pdf¤tUrl=/publications/healthimpactseducationareview> [Accessed 16th April 2015]
12. World Health Organisation. *Health Impact Assessment (HIA) The determinants of health*. [Online]. Available at: <http://www.who.int/hia/evidence/doh/en/> [Accessed 16th April 2015]
13. Office for National Statistics. *Home ownership and renting in England and Wales – Detailed Characteristics*. [Online]. 2013. Available at: <http://www.ons.gov.uk/ons/rel/census/2011-census/detailed-characteristics-on-housing-for-local-authorities-in-england-and-wales/short-story-on-detailed-characteristics.html> [Accessed 16th April 2015]
14. Harker L. *Chance of a lifetime The impact of bad housing on children's lives*. Shelter; 2006 [Online] Available at: https://england.shelter.org.uk/_data/assets/pdf_file/0016/39202/Chance_of_a_Lifetime.pdf [Accessed 16th April 2015]
15. Public Health Wales Observatory. *2011 Census: A snapshot of key health, employment and qualification indicators*. Cardiff: Public Health Wales; 2012. Available at: <http://www.wales.nhs.uk/sitesplus/922/page/66223> [Accessed 16th April 2015]
16. Office for National Statistics. *2011 Census Analysis: Unpaid care in England and Wales, 2011 and comparison with 2001*. London: Office for National Statistics; 2013. Available at: http://www.ons.gov.uk/ons/dcp171766_300039.pdf [Accessed 16th April 2015]
- 17 .Office for National Statistics. *Full story: The gender gap and unpaid care provision: is there an impact on health and economic position?* London: Office for National Statistics; 2013. Available at: http://www.ons.gov.uk/ons/dcp171776_310295.pdf [Accessed 16th April 2015]

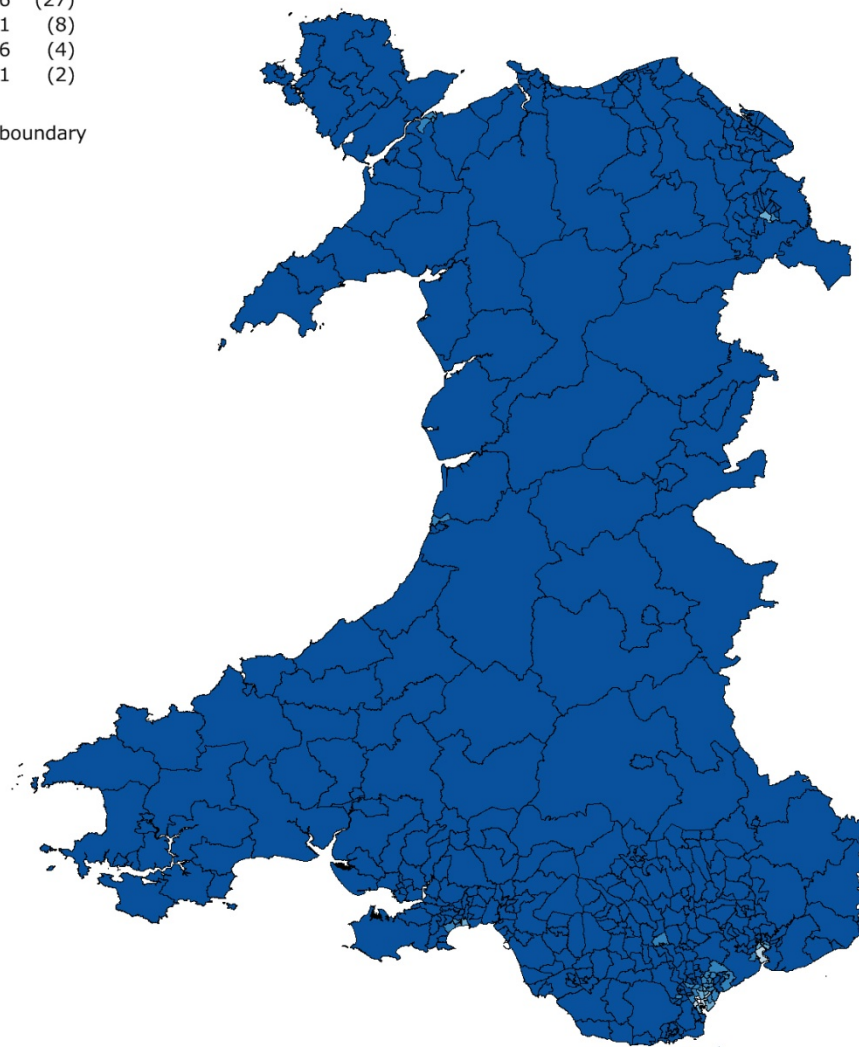
Appendix

Population classed as White British or Irish, all ages, Wales, 2011

MSOA, percentage

87.6 to 99.0	(369)
76.1 to <87.6	(27)
64.6 to <76.1	(8)
53.1 to <64.6	(4)
41.6 to <53.1	(2)

MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

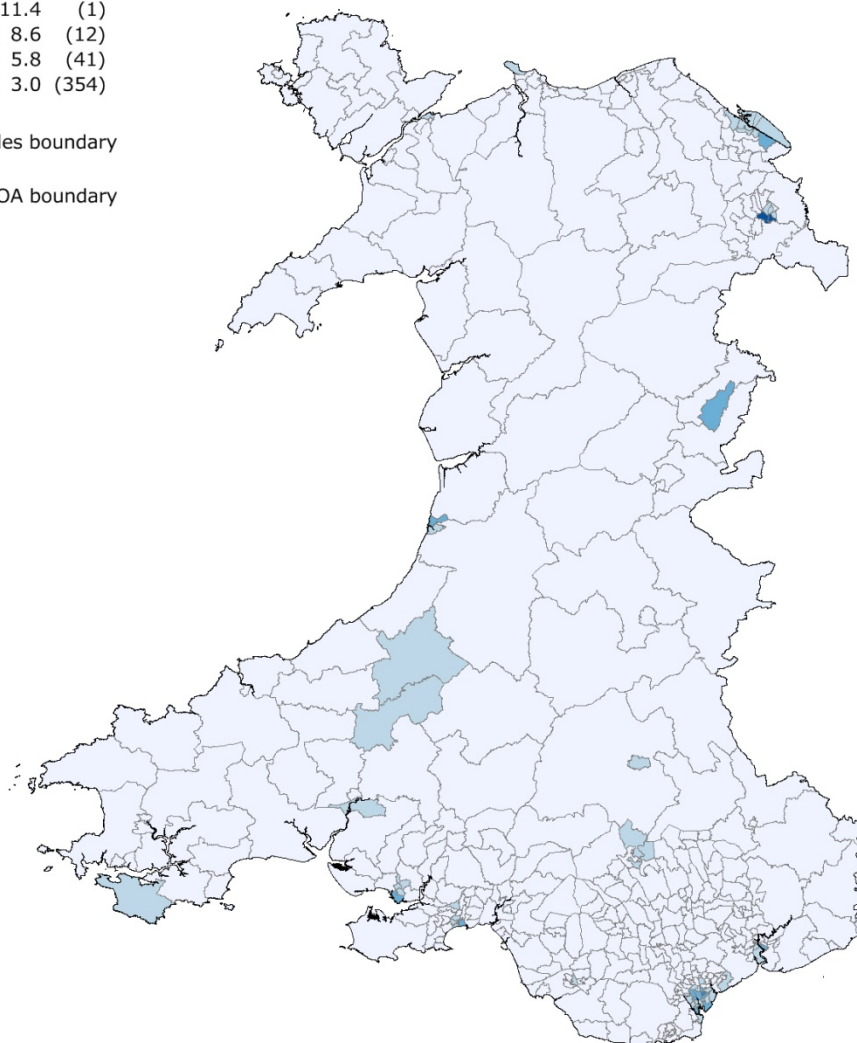
Population classed as White other, all ages, Wales, 2011

MSOA, percentage

11.4 to 14.0	(2)
8.6 to <11.4	(1)
5.8 to < 8.6	(12)
3.0 to < 5.8	(41)
0.2 to < 3.0	(354)

Wales boundary

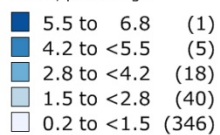
MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

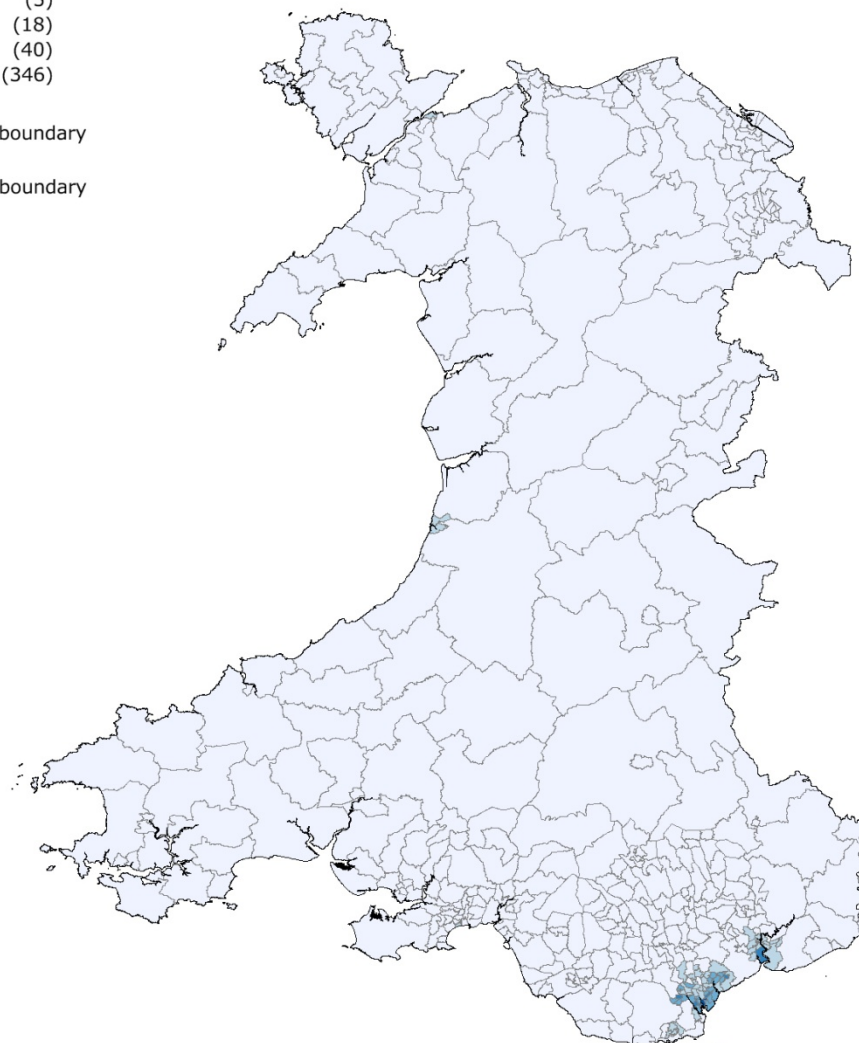
Population classed as Mixed/multiple ethnicity, all ages, Wales, 2011

MSOA, percentage



□ Wales boundary

□ MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

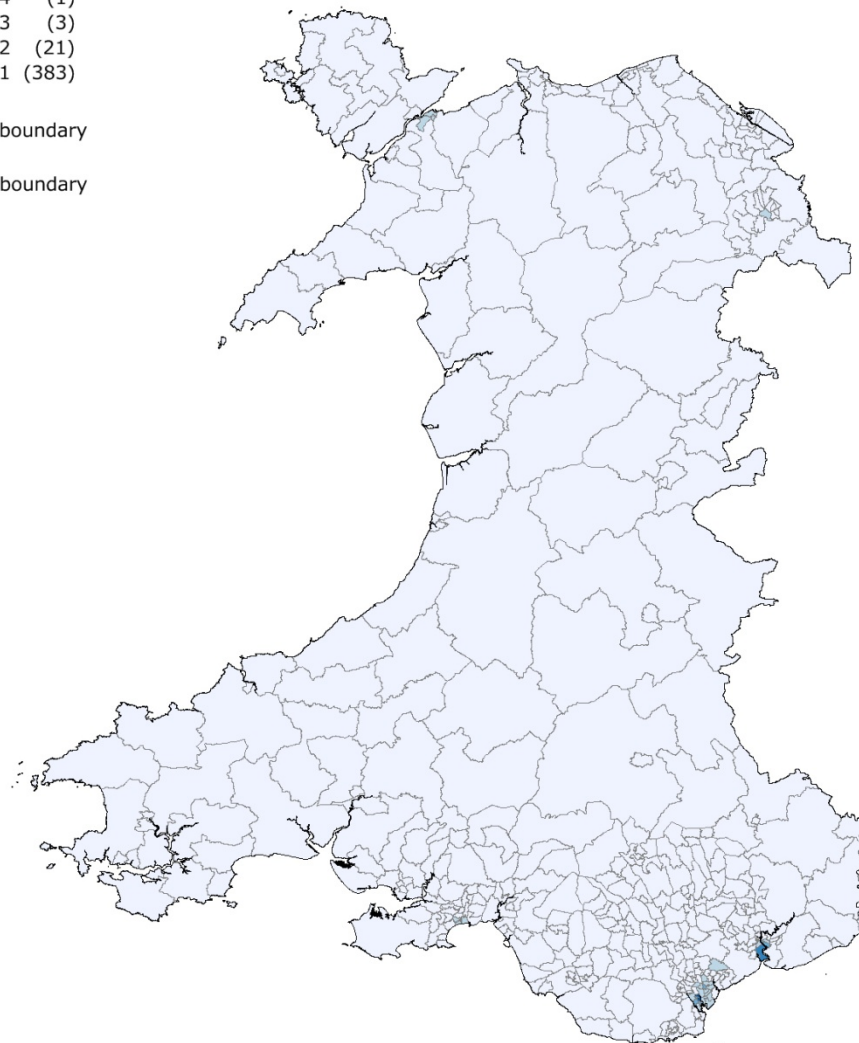
Population classed as Asian/Asian British, Wales, 2011

MSOA, percentage

- 28.4 to 35.6 (2)
- 21.3 to <28.4 (1)
- 14.2 to <21.3 (3)
- 7.1 to <14.2 (21)
- 0.0 to < 7.1 (383)

□ Wales boundary

□ MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

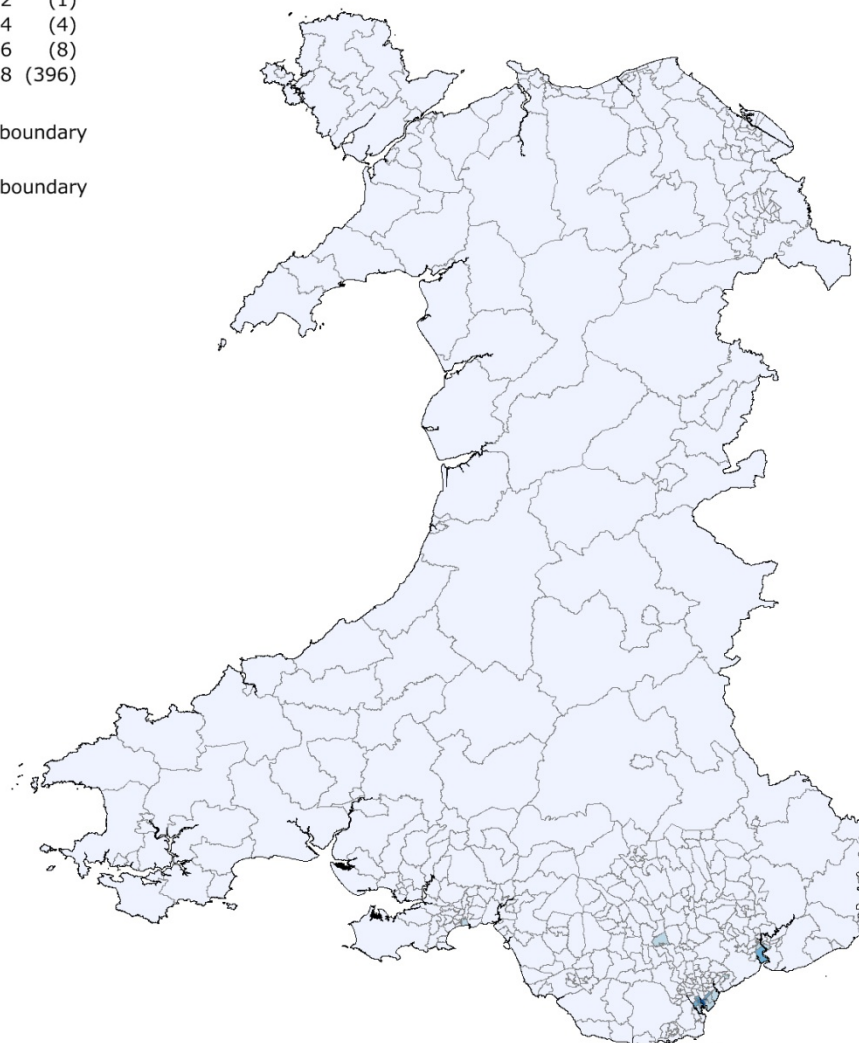
Population classed as Black/ African/ Caribbean/ Black British, all ages, Wales, 2011

MSOA, percentage

11.2 to 14.2	(1)
8.4 to <11.2	(1)
5.6 to < 8.4	(4)
2.8 to < 5.6	(8)
0.0 to < 2.8	(396)

Wales boundary

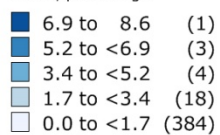
MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810

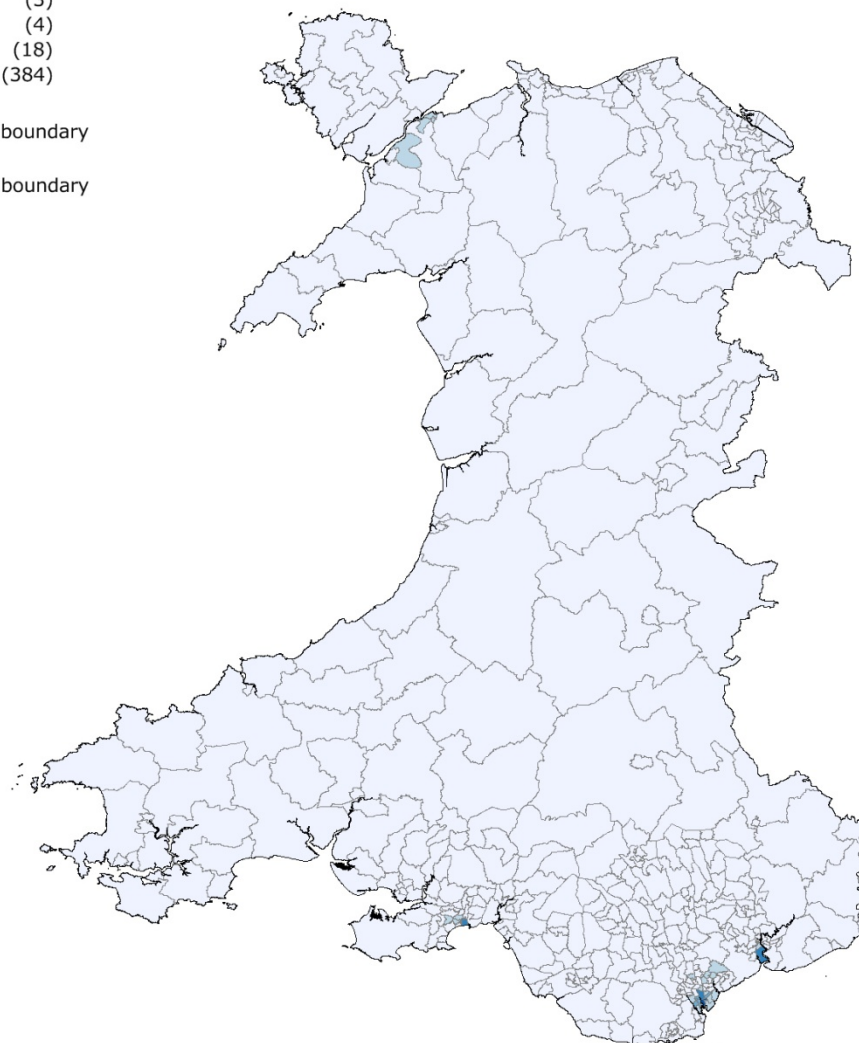
Population classed as Other ethnicity, Wales, 2011

MSOA, percentage



Wales boundary

MSOA boundary



Produced by Public Health Wales Observatory, using 2011 Census data table KS201EW (ONS)
© Crown Copyright and database right 2015, Ordnance Survey 100044810