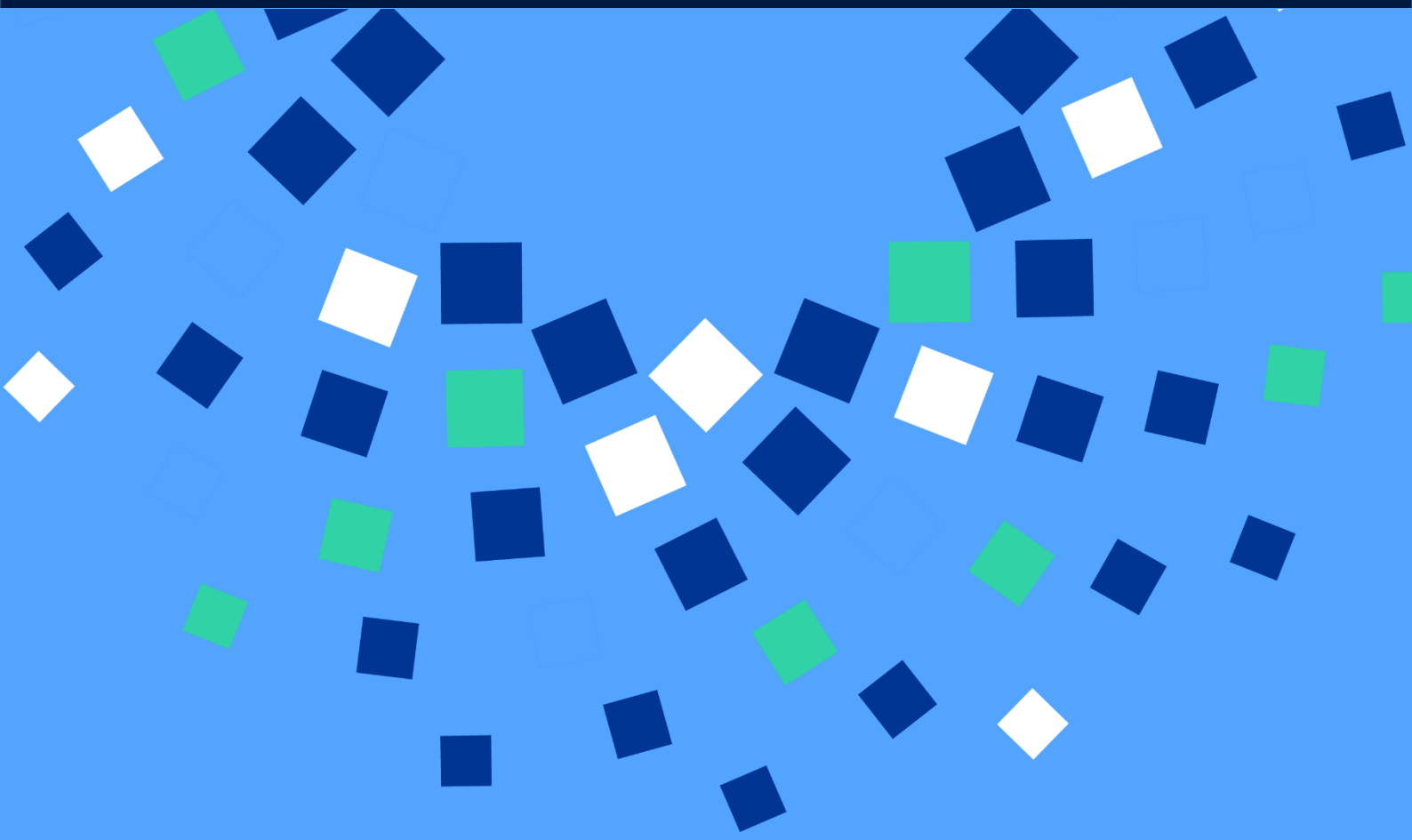
YDG CYMRU | ADR WALES

Data Insight

Characteristics of residents living in Houses in Multiple Occupation (HMOs) in Wales

Author: Rhodri D Johnson, Swansea University
Date: October 2026



Summary

This Data Insight summarises work undertaken within the ADR Wales Health and Care thematic research area to provide demographic insights into residents living in Houses in Multiple Occupation (HMO) in Wales. The work was initiated following a request from the Welsh Government building safety team to support evidence development for proposed building safety reforms following the Grenfell Tower disaster.

Analysis was completed using Census 2021 data linked with administrative data within the Secure Anonymised Information Linkage (SAIL) Databank. Analysis is descriptive in nature with simple tabulations describing factors relating to HMOs and demographic characteristics of residents.

Background

The Grenfell Tower fire disaster in 2017 resulted in the loss of 72 lives (1). Although Grenfell Tower itself was not classified as an HMO (House in Multiple Occupation), the disaster increased scrutiny of fire safety across multi-occupied residential buildings, including HMOs, and led to new regulations for large buildings as well as HMOs.

In 2021 Welsh Government set out plans for building and housing safety reforms to cover all multi-occupied residential buildings in Wales (2) within a white paper consultation (3). A request was made to ADR Wales (Health and Care theme) to support the Welsh Government building safety team to create information relating to individuals living in HMOs in Wales to inform impact analysis work towards the building safety reforms. The aim was to provide population-level insights into who lives in HMOs — their demographic profiles and geographical distribution using data held in the SAIL Databank (Secure Anonymised Information Linkage). Results were required to populate aspects of the Building Safety (Wales) Bill, specifically the integrated impact assessment.

The Census 2021 definition (4) of an HMO differs from the statutory definition used within Welsh housing legislation and official Welsh Government housing statistics (5). This analysis uses the Census definition to enable population-level analysis of residents living in HMOs within the SAIL Databank. Within Census 2021, an HMO is defined as a dwelling where at least three unrelated tenants forming more than one household share toilet, bathroom, or kitchen facilities. Small HMOs contain three to four unrelated tenants, while large HMOs contain five or more unrelated tenants.

What we did

We analysed Office of National Statistics (ONS) Census 2021 (C21) data held in the SAIL Databank. As there is no direct indicator to select HMOs in C21 data, initial work concentrated on understanding how to select and classify HMOs and subsequently extract residents. The HMO classification approach was developed using guidance from ONS and Welsh Government colleagues. HMOs were identified using rule-based classification methods derived from C21 household structure variables. HMOs were subsequently classified as either small or large. Initial counts of HMOs were created and validated against Census reporting.

Analysis proceeded by selecting all residents living in the created list of HMOs then creating descriptive reports to include various factors requested by the Welsh Government building safety team. The report included key demographic factors such as age, sex, tenure, and ethnicity, along with a range of other information. Where necessary, to adhere to statistical disclosure controls some characteristics were revised to provide less granular classifications.

We also created area-level measures (deprivation and rurality) by linking using Lower-level Super Layer Output Area (LSOA) data for each HMO. For deprivation we used the overall Housing and Income domains from the Welsh Index of Multiple Deprivation (WIMD 2019) (6) with the ONS urban-rural classification used to classify rurality measures (7).

What we found

Number of HMO by size classification

According to the 2021 Census, there were 6,891 dwellings classified as houses in multiple occupation (HMOs) in Wales on Census Day (21 March 2021) (8). Following implementation of the agreed selection process there were 6,914 dwellings in the SAIL HMO data selection. Of the total 6,914 dwellings, 63% were classed as Small HMO, and the remaining 37% classed as Large HMO, examples of which include purpose-built student accommodation. The dwellings were further subdivided into 7,117 households and 31,449 residents as shown in Table 1. As noted within ONS publications, a dwelling is a self-contained unit of accommodation which can comprise multiple households. It should be noted the HMO definition in Wales is different to that used within Census reporting (4).

Table 1: Number of dwellings and households with associated number of residents within HMOs in Wales for Census 2021 data held in the SAIL Databank

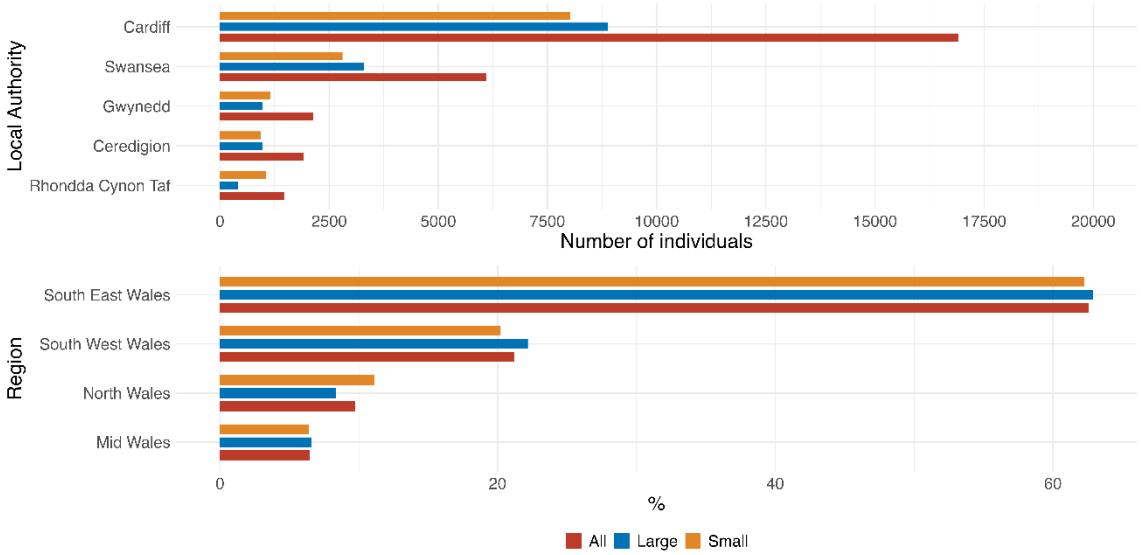
Category	Dwellings	Households	Residents
Small HMO	**4,356**	**4,415**	**15,843**
Large HMO	**2,558**	**2,702**	**15,606**
Total	**6,914**	**7,117**	**31,449**

The following section describes various characteristics for those residents living in HMOs in Wales; reported at the resident (individual) level unless stated (using the total number of residents to create percentage values rather than households).

Geographical location of HMOs: Local Authority and regional distribution

Figure 1 shows the number of residents in HMOs for the top five Local Authorities by resident count. Cardiff has the most residents living within HMOs (16,906), Swansea has 6,106, and Gwynedd with 2,135. Figure 1 also shows that South-East Wales is home to nearly two thirds (63%) of all residents in HMOs in Wales, followed by South-West Wales (21%), North Wales (10%), and Mid Wales (6%).

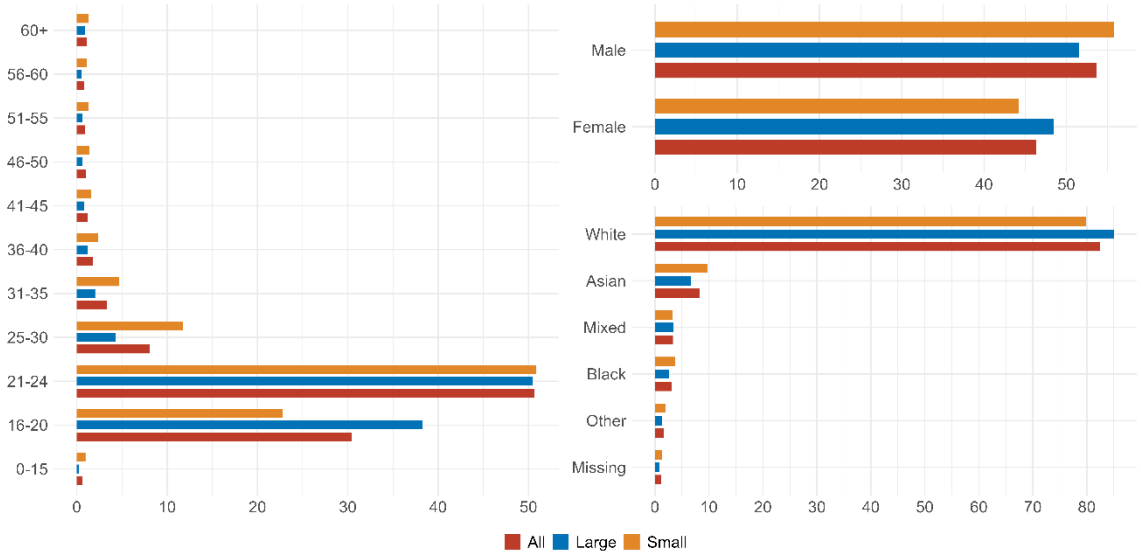
Figure 1: Geographical location of HMOs: Top five Local Authorities in Wales (by number of residents), and Corporate Joint Committee areas (CJC) areas of Wales by HMO type



Key demographic characteristics

Figure 2 combines key demographics of age, sex, and ethnicity for all residents. The age distribution has a clear pattern of younger-aged HMO residents; those aged 16-24 represent 81% of all residents; those aged 16-30 represent 89%. A larger proportion of 16–20-year-olds within large HMOs may reflect increased numbers of students within student accommodation; in older age groups (25+) this pattern is generally reversed. In terms of sex there are more males (53.7%) compared to females. Ethnicity of residents is predominantly White (82.5%), followed by Asian (8.2%), Mixed or Multiple Ethnic Groups (3.3%), Black (3.2%), Other ethnic groups (1.7%).

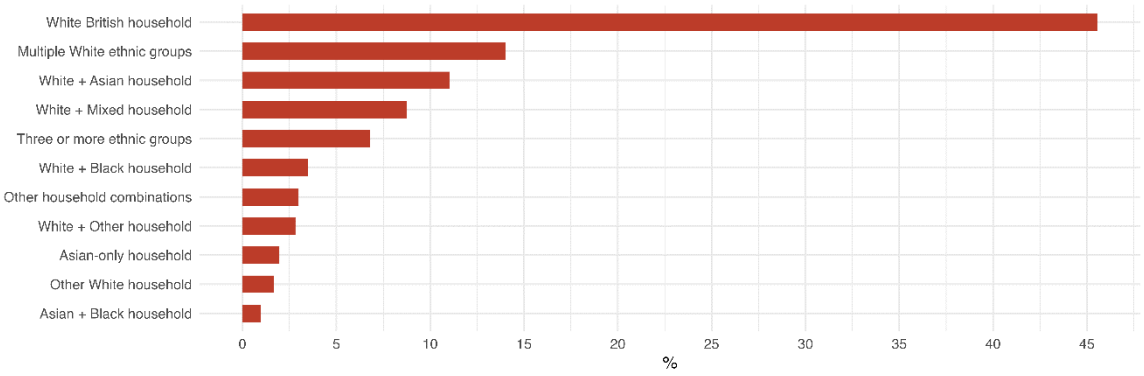
Figure 2: Demographic composition (%): age, sex, and ethnicity by HMO size type



Household ethnic composition

Figure 3 presents the household ethnic composition of HMOs using the Census 2021 Multiple Ethnic Group Household Combination classification. This complements the individual-level ethnicity presented in Figure 2 by illustrating how residents from different ethnic groups cohabit within HMOs. To improve readability, household composition categories with small numbers were combined into an 'Other household combinations' category.

Figure 3: Household ethnic composition (%) using the Census 2021 Multiple Ethnic Group Household Combination classification

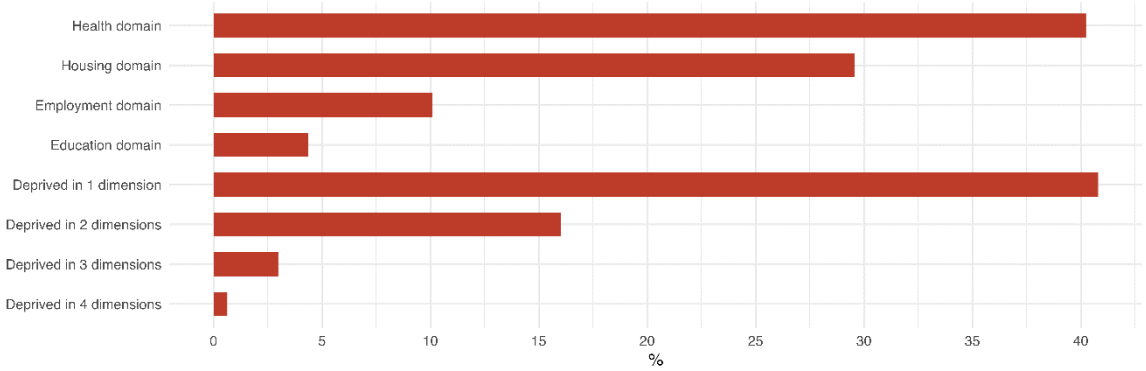


Most HMO households consisted exclusively of White British residents (45.6%), followed by households containing multiple White ethnic groups (14.0%). Mixed household compositions were also common, particularly White + Asian households (11.0%) and White + Mixed households (8.7%). Household compositions involving three or more ethnic groups accounted for 6.8% of HMOs, highlighting the ethnic diversity present within some shared households.

Census deprivation measures

Census data includes a set of four ONS-derived deprivation indicators (Housing, Health, Education and Employment domains) and the deprivation status is generally calculated and applied at household-level, so each member of a household has the same deprivation value. ONS publish methods for each of the four domains, for example, the Housing deprivation domain definition classifies households as deprived if the household's accommodation is either overcrowded, in a shared dwelling, or has no central heating. An additional Census deprivation measure counts the number of domains that each household is classed as deprived (from zero to four) (9). Figure 4 shows the percentage of residents whose households are classed as deprived by each of the separate domains as well as the summed deprivation measure. The highest individual domain is for Health with around 40% of households, Housing lies close to 30%, Employment at 10%, with Education under 5%. Around 40% and 16% of households are deprived in at least one or two dimensions respectively; with less than 5% deprived in three or four dimensions.

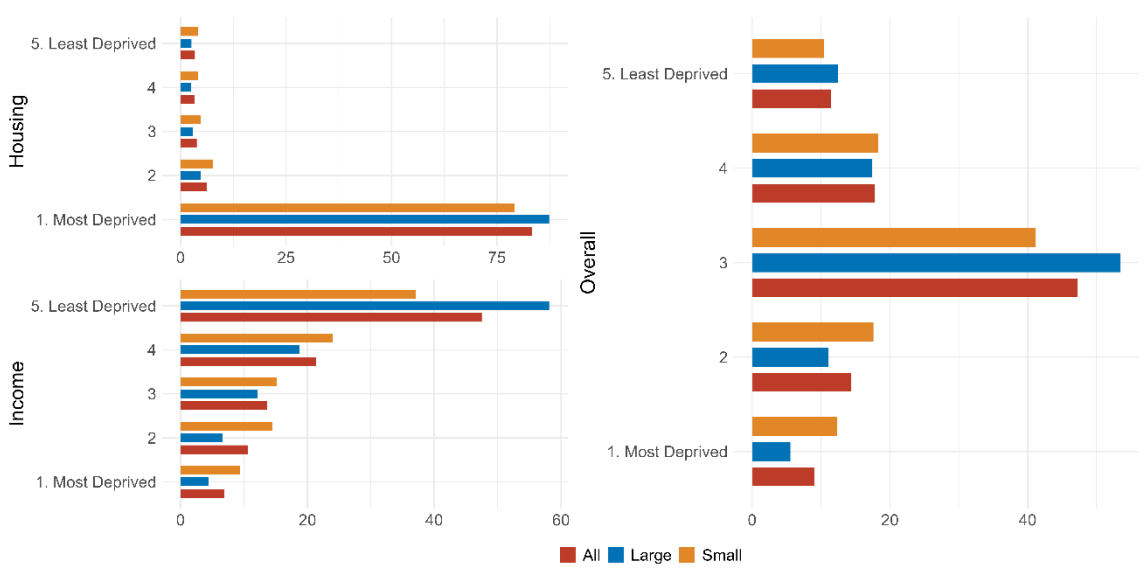
Figure 4: Census deprivation domains at household level



Area-level deprivation measures

Figure 5 displays area-level deprivation (for the Housing, Income, and the Overall measure domains from WIMD 2019). The Housing domain shows most residents living in HMOs are situated in areas classed as the most deprived in terms of Housing (83%). The income domain shows a reversed pattern compared to Housing; most residents live in areas classed as the least deprived (47.5%). The 'Overall' deprivation domain shows most residents live in areas classed as the middle quintile (47%). WIMD measures area-level deprivation rather than individual-level deprivation; therefore, residents living in deprived areas are not necessarily themselves deprived, and vice versa. Figures 4 and 5 measure different aspects of deprivation and are therefore non-comparable.

Figure 5: Area level proportions of deprivation using the WIMD Housing, Income, and overall domains by HMO type



In terms of rurality, nearly all residents (96%) in HMOs are situated in areas classed as urban; with the remainder split between rural towns and rural villages.

Housing characteristics

Figure 6 summarises selected housing characteristics of HMOs together with the living arrangements of HMO residents. Housing type and overcrowding (persons per bedroom) are household-level measures, whereas living arrangements are presented at the individual (resident) level.

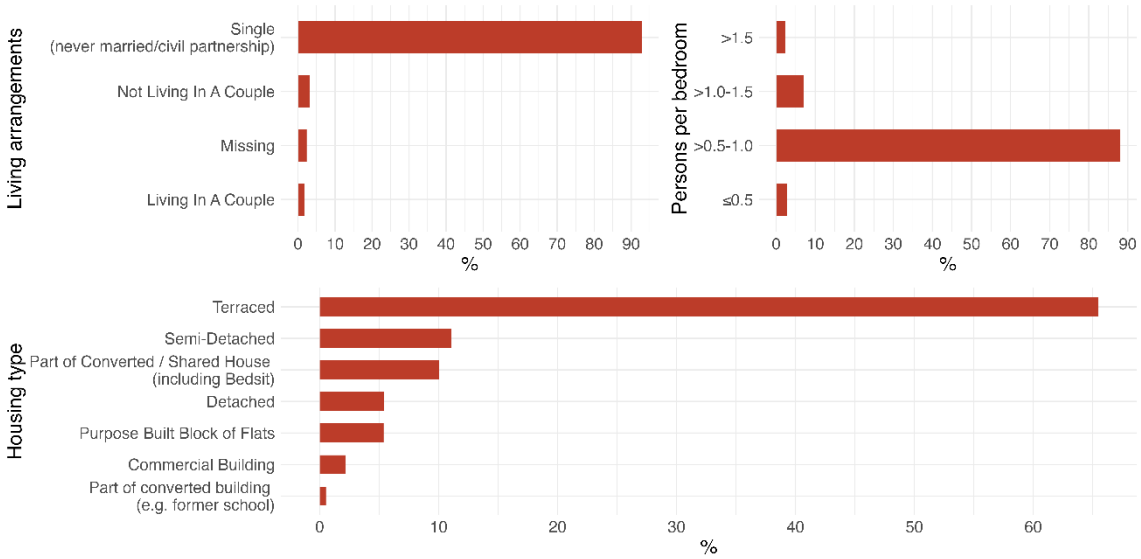
Most HMO households were located within terraced housing (65%), followed by semi-detached (11%) and detached (5%) housing. Around 10% were part of converted or shared houses (including bedsits), 5% were purpose-built flats, and approximately 2.5% were located within commercial buildings or other converted buildings.

Household tenure was almost exclusively private rented, with 96% of HMO households rented from a private landlord or letting agency. The remaining households were rented from an employer, relative or friend of a household member (not shown).

Most HMO households (88%) had between 0.5 and 1.0 persons per bedroom, while 9% had more than one person per bedroom, including 2% with more than 1.5 persons per bedroom.

At the individual level, most HMO residents (93%) were classified as single (never married and never registered in a civil partnership). Approximately 3% were classified as not living in a couple, while around 2% were living in a couple.

Figure 6: Household housing characteristics and resident living arrangements

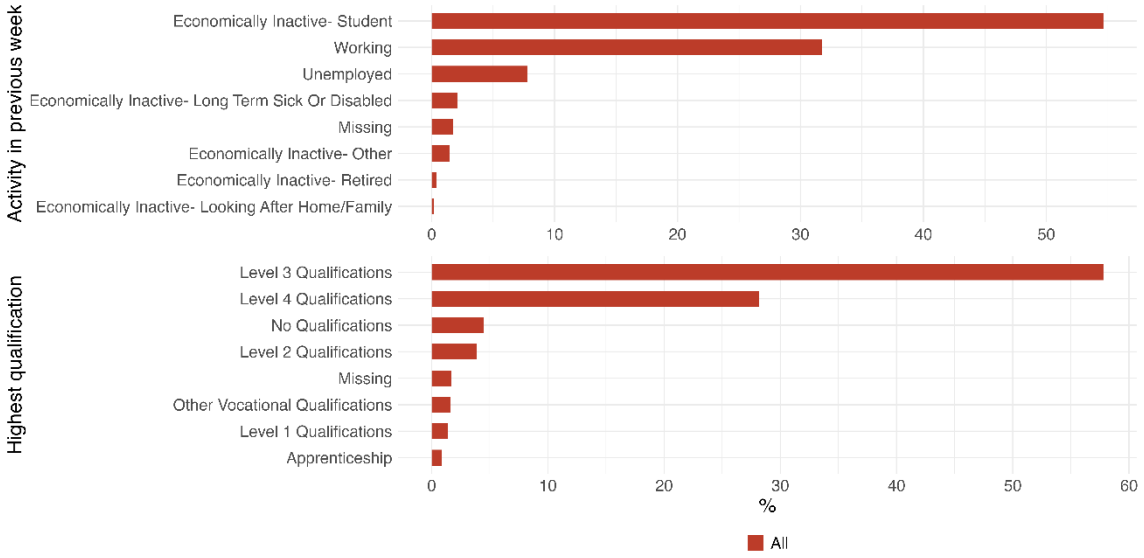


Note: For Figure 6, living arrangements are presented at the individual (resident) level; housing type and persons per bedroom are household-level measures

Economic activity

Based on recorded activity in the week of Census 2021, Figure 7 shows that the majority of residents are students (55%), followed by those classed as working (32%), with 8% unemployed, and the remaining 4% classed as inactive (either 'other', retired, or looking after the home and family); 2% of the data was missing. Around 86% of residents had highest qualifications classed as level 3 (for example, at least 2 or more A levels) or level 4 (indicative of higher education); 4% had no qualifications.

Figure 7: Demographic composition (%): Activity in previous week, and highest qualification by HMO type

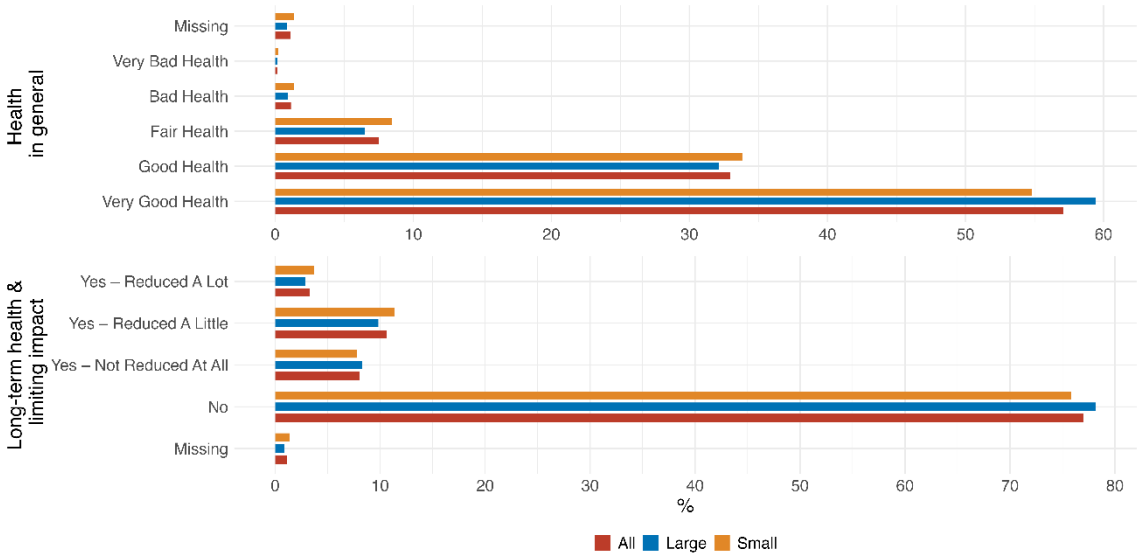


Health and long-term illness

Figure 8 includes self-reported health and relates to the question 'How is your health in general?'; the chart shows residents were generally in good health with 90% of residents reporting good or very good health; only a small proportion reported very bad or bad health (<1.5%).

In response to the Census question on long-term physical or mental health conditions the majority (77%) of residents did not report a long-term condition; for those with a long-term condition (22%) 3% of residents reported the condition limited activities 'a lot'.

Figure 8: Demographic composition (%): Health and long-term illness by HMO type



Why it matters

Findings supported the equality impact assessment and socio-economic impact assessment for the Building Safety (Wales) Bill by providing demographic evidence on populations likely to be affected by proposed reforms. The information created during this work was used by the Welsh Government building safety team to inform the integrated impact assessment for the Building Safety (Wales) Bill (10), specifically for the equality impact assessment (Annex B) (11) and the socio-economic assessment (Annex G) (12).

References

1. Grenfell Tower Inquiry Phase 2 Report: Government response (HTML) - GOV.UK [Internet]. [cited 2025 Dec 11]. Available from: https://www.gov.uk/government/publications/grenfell-tower-inquiry-phase-2-report-government-response/grenfell-tower-inquiry-phase-2-report-government-response-html
2. New building safety plans for Wales announced | Welsh Government News [Internet]. [cited 2025 Dec 11]. Available from: https://media.service.gov.wales/news/new-building-safety-plans-for-wales-announced
3. Welsh Government. Safer buildings in Wales | GOV.WALES [Internet]. 2021 [cited 2025 Dec 11]. Available from: https://www.gov.wales/safer-buildings-wales
4. Office for National Statistics. Households of multiple occupancy (HMO) variable: Census 2021 - Office for National Statistics [Internet]. 2024 [cited 2025 Dec 11]. Available from: https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/housingvariablescensus2021/householdsofmultipleoccupancyhmo
5. Houses in multiple occupation (HMOs) | Law Wales [Internet]. [cited 2025 Dec 11]. Available from: https://law.gov.wales/public-services/housing/houses-multiple-occupation-hmos
6. Welsh Government. Welsh Index of Multiple Deprivation (WIMD) 2019 [Internet]. 2019 [cited 2021 Feb 22]. Available from: https://gov.wales/sites/default/files/statistics-and-research/2019-11/welsh-index-multiple-deprivation-2019-results-report-024.pdf
7. 2011 rural/urban classification - Office for National Statistics [Internet]. [cited 2025 Dec 11]. Available from: https://www.ons.gov.uk/methodology/geography/geographicalproducts/ruralurbanclassifications/2011ruralurbanclassification
8. Office for National Statistics. Number of dwellings that are houses in multiple occupation (HMO) - Swyddfa Ystadegau Gwladol [Internet]. 2023 Mar [cited 2026 Jul 11]. Available from: https://cy.ons.gov.uk/datasets/RM192/editions/2021/versions/1
9. Office for National Statistics. Household deprivation variable: Census 2021 - Office for National Statistics [Internet]. 2023 [cited 2025 Dec 11]. Available from: https://www.ons.gov.uk/census/census2021dictionary/variablesbytopic/demographyvariablescensus2021/householddeprivation
10. Welsh Government. Building Safety (Wales) Bill: integrated impact assessment | GOV.WALES [Internet]. 2024. Available from: https://www.gov.wales/building-safety-wales-bill-integrated-impact-assessment
11. Welsh Government. Building Safety (Wales) Bill: equality impact assessment (B) [Internet]. 2025 Jul [cited 2025 Dec 11]. Available from: https://www.gov.wales/sites/default/files/publications/2025-07/building-safety-wales-bill-equality-impact-assessment.pdf
12. Welsh Government. Building Safety (Wales) Bill: socio-economic duty impact assessment (G) [Internet]. 2025 Jul [cited 2025 Dec 11]. Available from: https://www.gov.wales/sites/default/files/publications/2025-07/building-safety-wales-bill-socio-economic-duty-impact-assessment.pdf

Acknowledgements

This study uses anonymised data held in the Secure Anonymised Information Linkage (SAIL) Databank, which is part of the national population data research infrastructure for Wales. We would like to acknowledge all the data providers who make anonymised data available for research. This study was carried out as part of the ADR Wales programme of work. ADR Wales unites research expertise from Swansea University Medical School and WISERD (Wales Institute of Social and Economic Research and Data) at Cardiff University with analysts from Welsh Government.

This Data Insight has been produced by the ADR Wales Health and Care research team. It provides a snapshot of informative research currently underway at ADR Wales but is not intended to provide a complete picture of work undertaken within this field or the ADR Wales programme of work. The information presented in this Data Insight has been reviewed by ADR Wales colleagues with expertise within this thematic area and accepted to be accurate at the point of publication. Views expressed in this Data Insight are those of the researchers and not necessarily those of ADR Wales partner organisations.

The work is supported by ADR UK (Administrative Data Research UK). ADR UK is a partnership transforming the way researchers access the UK's wealth of public sector data, to enable better informed policy decisions that improve people's lives. ADR UK is an Economic and Social Research Council (ESRC) investment (part of UK Research and Innovation). [Grant number: ES/W012227/1].

Publication contact

Name: Rhodri Johnson
Email: r.d.johnson@swansea.ac.uk