

How effectively do UK local authorities communicate mould guidance to diverse populations: an accessibility and equity assessment?

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Abstract

Effective communication of damp and mould risks is vital for public health equity in the UK. This paper presents findings from a 10-council evaluation focused on accessibility outcomes. A ten-element rubric derived from National Health Service (NHS) and Department for Levelling Up, Housing and Communities (DLUHC) UK Health Security Agency (UKHSA) guidance assessed websites for content coverage, readability, usability (click depth ≤ 3 , WCAG 2.2 compliance), and availability of translations or alternative formats. While most councils included definitions and causes explanations, accessibility was uneven and only Newham met best-practice thresholds, offering Easy-Read or translated content. In contrast, Liverpool and Glasgow failed due to excessive click-depth, poor readability, and lack of support for non-English speakers. Translations were the weakest provision across the sample. The results highlight the urgent need for national coordination to deliver pre-translated, Easy-Read templates and ensure WCAG compliance.

Keywords: mould, accessibility, readability, translations, UK local authorities

1. Introduction

Damp and mould remain critical housing and health issues in the UK. The English Housing Survey reports visible damp or mould in around 4% of English dwellings (DLUHC, 2022), a figure that rises significantly in older, poorly insulated housing stock and social housing.

Around 38% of English residences were built prior to 1945 (DLUHC, 2022), often lacking adequate insulation and damp proofing, creating conditions ripe for fungal proliferation (WHO, 2009). Exposure is linked to respiratory disease, allergies, and mental health burdens. Vulnerable groups particularly children, older adults, and residents with limited English proficiency or low literacy face compounded risks where guidance is inaccessible (Nutbeam, 2000).

Over 16 million adults in the UK have educational qualifications at Level 3 or below, and around one million residents report limited or no English proficiency (ONS, 2021), making clear, accessible communication a matter of health equity.

The tragic case of Awaab Ishak in 2020, a two-year-old who died from prolonged exposure to mould, catalysed national attention and led to consolidated national guidance (Department for Housing and Communities DHSC/DLUHC/UKHSA, 2023) and new legislative measures such as Awaab's Law (DLUHC, 2025). However, implementation by local authorities remains inconsistent. Councils vary widely in their housing stock and demographic profiles, from urban "super-diverse" boroughs with high linguistic diversity and social housing concentrations (e.g., Newham, Hackney) to rural/coastal areas facing climatic challenges (e.g., Cornwall, Gwynedd) and post-industrial cities with ageing infrastructure (e.g., Liverpool,

Glasgow). The central issue is whether residents across this diverse landscape can access and understand the guidance provided.

This study asks: *How effective do UK local authorities communicate mould prevention and remediation guidance to diverse populations?* It evaluates ten purposely-selected councils representing these varied risk archetypes to assess not just if information is present, but if it is findable, readable, and inclusive.

2. Methodology

This study developed a novel, replicable method to evaluate the efficacy of mould guidance communication. A qualitative content analysis was conducted on ten local councils purposely selected to represent three key risk archetypes prevalent in UK housing and public health literature:

- **Urban/super-diverse** (e.g., Newham, Manchester, Birmingham, and Nottingham): Ageing housing stock, high deprivation and significant populations with limited English proficiency.
- **Rural/coastal** (e.g., Cornwall, Gwynedd): Unique pressures from Atlantic humidity and salt-laden winds on historic building fabric, often with older populations and lower digital literacy.
- **High social-housing concentrations** (e.g., Liverpool, Hackney, Leeds, Glasgow): Over 25% of housing in social rent, associated with higher prevalence of damp and mould and tenant reliance on landlord remediation.

A bespoke ten-element rubric (E1- E10 see table 1) was derived from DHSC/DLUHC/UKHSA (2023) and NHS (2023) guidance. This rubric operationalised narrative recommendations into a practical assessment tool, evaluating four critical dimensions:

- Content completeness:** Each website was scored on a 3-point ordinal scale (2=Present, 1=Partially Present, 0=Absent) across 10 elements. A score of Present required all key sub-points for an element to be explicit and accessible within three clicks from the homepage.

Table 1 Assessment Rubric for Content Completeness (Elements E1-E10)

Element	Code	Description & Key Sub-points Required for a 'Present' (2) Score
Definitions	E1	Clear definitions of damp and mould, supported by illustrative images.
Health Risks	E2	Explanation of potential health impacts, specifically mentioning respiratory issues (e.g., asthma) and risks to vulnerable groups.
Causes	E3	Description of common causes (e.g., condensation, leaks, rising damp).
Prevention	E4	Actionable advice for tenants on how to prevent damp and mould (e.g., ventilation, heating).
Treatment	E5	Guidance on how to safely remove mould (e.g., recommended cleaning products).
Reporting	E6	Clear, systematic instructions on how and where to report a damp and mould problem.
Response Times	E7	Information on expected timeframes for the landlord or council to respond.

Element	Code	Description & Key Sub-points Required for a 'Present' (2) Score
Support Routes	E8	Details of additional support services (e.g., tenant advocacy, environmental health).
Accessible Formats	E9	Promotion of available alternative formats (e.g., Easy-Read, large print) beyond just translations.
Translations	E10	Availability of pre-translated materials in other languages (excluding automated widgets).

- ii. **Usability:** Measured via **click-depth** (≤ 3 clicks threshold) from the homepage to the first mould-specific page, based on established usability principles that task completion rates drops significantly beyond this point (Nielsen, 1998). **WCAG 2.2 Compliance** using Web Accessibility Evaluation (WAVE) tool to assess Level-A conformance errors (e.g., missing alternative text for images, insufficient colour contrast, and unlabelled form fields). Any Level-A error counted as failure.
 - iii. **Readability:** Analysed via Flesch-Kincaid Grade Level (FKG), Simple Measure of Gobbledygook (SMOG Index), and Flesch Reading Ease (FRE). Passing grade was set at FKG Grade ≤ 9 or the provision of an Easy-Read or translated version.
 - iv. **Language/Formats:** Recorded provision of pre-translated resources, Easy-Read formats, British Sign Language (BSL) videos, or interpreter support.
- Reliability testing on Newham and Glasgow produced strong inter-rater agreement ($\kappa=0.81$).

3. Results and Discussion

3.1 Readability

The analysis revealed a widespread failure to communicate mould guidance in plain English. Readability using the Flesch-Kincaid Grade Level (FKG), Simple Measure of Gobbledygook (SMOG Index Most) and Flesch Reading Ease (FRE) confirmed that most councils exceeded the recommended FKG threshold of ≤ 9 , with scores ranging from 8.6 to 11.4.

Only Newham passed the readability criterion, achieved solely through its provision of a dedicated Easy-Read version, its standard text still scored 8.6. In contrast Glasgow (11.4) and Liverpool (11.2) produced the most complex texts, making them inaccessible to an estimated 15% of UK adults whose literacy skills are at or below the level of an 11-year-old (DfE, 2011). This gap between plain language standards and actual practice creates a significant structural barrier to comprehension for a large portion of the population.

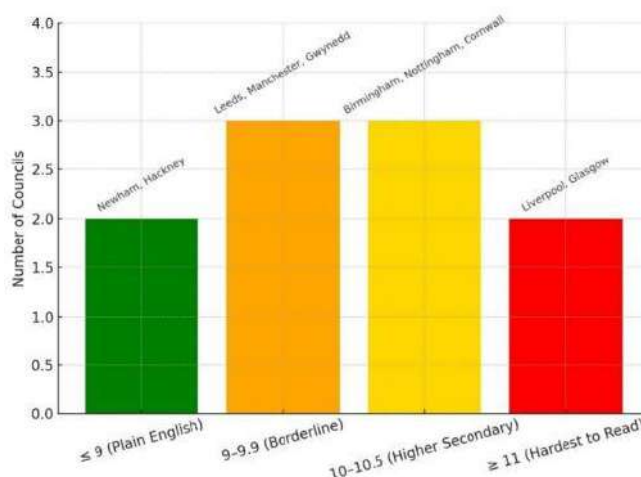


Figure 1: Readability Levels (Flesch-Kincaid Grade) across Councils, showing Newham achieved the plain language threshold via Easy-Read provision.

3.2 Translations and Alternative Formats

Provision of translations and alternative formats was the weakest element across the sample, representing a critical equity gap. Only Gwynedd, through its statutory bilingual Welsh/English website, and Newham, via an interpreter request line and an Easy-Read PDF, provided full provision (20% of councils).

Three councils (Hackney, Manchester, and Cornwall, 30%) offered partial provision, such as translated PDFs that were not linked from the main mould guidance page, making them difficult for residents to locate. The remaining five councils (Birmingham, Leeds, Glasgow, Liverpool, and Nottingham, 50%) offered no substantive provision, relying solely on unreliable automated Google Translate widgets or providing nothing at all.

This lack of inclusive formats systematically excludes non-English speakers, as well as tenants with learning disabilities or low literacy, from accessing vital health information.

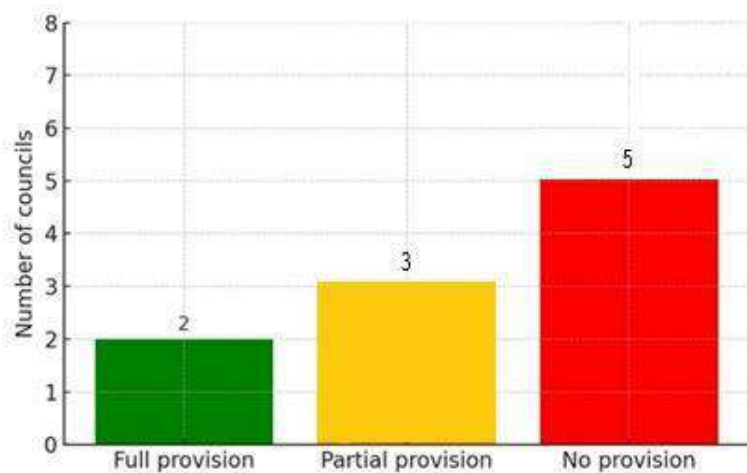


Figure 2: Provision of Translations and Alternative Formats across all 10 Councils, highlighting that only two councils met full accessibility standards.

3.3 Usability and Web Content Accessibility Guidelines (WCAG) Compliance

Usability was evaluated using two key metrics: (1) click-depth, the number of navigational steps required to reach mould guidance from the homepage, and (2) technical accessibility, measured by compliance with the Web Content Accessibility Guidelines (WCAG) 2.2.

Click-depth ranged from 2 to 6 steps. Four councils Newham (2), Leeds (3), Gwynedd (3), and Manchester (3) met the ≤ 3 click usability threshold. Others, such as Liverpool (6) and Hackney (4), exceeded it, creating substantial navigational barriers.

WCAG 2.2 audits revealed widespread Level-A errors. Newham recorded only minor issues, but others performed poorly: Glasgow had seven errors, Hackney two, and Leeds one. The most common problems were missing alternative text and insufficient colour contrast, both of which reduce compatibility with screen readers. In many cases, deep navigation and technical inaccessibility occurred together, compounding the barriers faced by users with disabilities.

3.4 Comparative Analysis and Equity Implications

Table 1 summarises outcomes across councils, showing how performance on usability, readability, and inclusivity translated into overall accessibility ratings. The distribution illustrates clear contrasts rather than sectoral averages, with three councils classified as Good (Green), five as Moderate (Brown), and two as Poor (Red).

Table 1. Usability and accessibility results across the 10 councils

Council	Elements fully Present (10 max)	Click depth	Readability (F-K Grade)	Translations/Formats	Overall Accessibility
Newham	8	2	8.6	Interpreter line, Easy-Read PDF	Good
Hackney	7	2	8.9	Interpreter line	Good
Manchester	7	3	9.4	Google translate widget	Good
Leeds	6	2	9.1	None	Moderate
Nottingham	6	5	10.2	None	Moderate
Birmingham	5	4	10	None	Moderate
Cornwall	5	4	10.5	Yes, Welsh - PDF	Moderate
Gwynedd	5	3	9.8	Yes - Bilingual (Welsh/English) site	Moderate
Glasgow	4	5	11.4	None	Poor
Liverpool	4	6	11.2	None	Poor

Note: Overall Accessibility uses the Housing Ombudsman Spotlight traffic-light logic: Good = ≥ 7 elements and click-depth ≤ 3 , Moderate = 5-6 elements or click-depth 4-5, Poor = ≤ 4 elements or click-depth > 5 .

The councils rated **Good** (Newham, Hackney, Manchester) combined strong content coverage with low navigational barriers, but their inclusivity varied. Newham stands out as the exemplar, pairing comprehensive content and easy navigation with inclusive formats such as Easy-Read and interpreter services. Hackney also provides interpreter access but lacks simplified formats, while Manchester relies on an automated Google Translate widget, a tool widely criticised for inaccuracy and limited usability.

The **Moderate** group shows mixed performance. Leeds achieved excellent findability (2 clicks) and good technical accessibility (one WCAG error) but offered no translations or alternative formats. Gwynedd benefited from statutory bilingual provision yet scored only average on content and readability. Birmingham and Nottingham were undermined by higher click-depth and the absence of alternative formats. This demonstrates that providing information is not the same as making it accessible.

The **Poor** performers (Liverpool and Glasgow) failed across all dimensions. They had the weakest content coverage (4/10 elements), the most complex navigation (5-6 clicks), the highest readability scores, and no support for non-English speakers. Both are located in highly deprived areas, meaning the populations most at risk of mould exposure face the least accessible guidance

3.5 The Equity Gap: Need vs. Provision

The results reveal a clear mismatch between local needs and the accessibility of guidance provided. Councils serving highly diverse and deprived populations, such as Newham (ranked 12th most deprived in England, with 8% of residents reporting limited English proficiency), demonstrated stronger practices by offering Easy-Read or translated formats. In contrast, equally deprived councils like Liverpool (3rd most deprived in England) and Glasgow (in

Scotland's most deprived quintile) performed poorly, failing to provide even basic inclusive communication.

This divergence shows that access to essential housing and health guidance depends more on geography than on vulnerability or deprivation levels. Such inconsistency undermines health equity and risks excluding the very groups most affected by mould-related harm.

Addressing this inequity requires national coordination. Standardised Easy-Read and pre-translated templates, mandatory WCAG 2.2 compliance, and embedded accessibility requirements in local housing practice would help reduce disparities and ensure consistent, equitable access across the UK.

4. Conclusion

This study shows that UK local authority communication on mould risks is inconsistent and often inaccessible. Best-practice councils combined sufficient content with accessible formats, but these were exceptions. Significant barriers in readability, navigation, and digital accessibility persist, with provision for non-English speakers being the most neglected area.

Key recommendations:

- National rollout of pre-translated, Easy-Read mould guidance templates.
- Mandatory Web Content Accessibility Guidelines (WCAG 2.2) compliance audits for all local authority-housing pages.
- Training frontline housing officers to ensure clear, inclusive communication.
- Future research could expand the sample to all UK councils nationally.

The framework piloted here provides a replicable tool for assessing digital housing communication and highlights urgent equity gaps.

5. Limitations and Future Work

This study was limited to ten councils, selected to represent different archetypes but not the full diversity of UK authorities. The analysis focused on website-based communication, excluding other channels such as housing officers, printed leaflets, or tenant support lines. Future research could expand the sample to all UK councils, compare online and offline guidance, and assess the accuracy of automated translations.

Complementary tenant surveys could also evaluate how residents interpret and act on guidance in practice.

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