

# The impact of poor housing on health inequalities and respiratory disease



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In this article Anthony Ball and Rachel Williams provide a summary of why it is so important to address poor housing as a way of tackling health inequalities. They outline some of the key issues, potential barriers to and opportunities for addressing poor housing, as well as some top tips for primary care. This article is also accompanied by a PCRS summary of the impact of poor housing on individuals with respiratory disease.



Too many individuals and families in Cornwall and the Isles of Scilly, and across the UK, are trapped in cold, damp and poor-quality homes. Our homes should be a place of safety, healthy living and warmth for residents. Instead, particularly with high levels of fuel poverty, they can both create and exacerbate health conditions, thereby widening health inequalities and shortening healthy lives.

Cold, damp and underheated homes remain costly despite the collective work of local government and initiatives, landlords, homeowners and the NHS. Abrupt and unforeseen changes in Government policies and global forces on energy mean the UK has some of the least energy-efficient homes and the highest level of energy debt in Europe.

In England, winter “costs” healthcare (NHS and local authority) £2.5bn per year,<sup>1</sup> with broader societal costs from lost education and employment opportunities. Respiratory illness, cardiovascular disease, common mental disorders and healthy life years lost are among the most expensive examples of health-related implications of poor housing. Fuel poverty also exposes regional disparities, with households in Yorkshire and the Humber and the West Midlands more likely to live in fuel poverty than households in the South East of England.<sup>2</sup> Fuel poverty is a structural problem, with home upgrades and independent and trusted advice on use of existing and new heating systems the best long-term solution.

## Excess cold and heat

In the extreme, cold homes cost lives. Across the UK it is estimated that 10,000 people die each year due to living in a cold home.<sup>3</sup> The alarming increase in excess winter deaths due to a sharp rise in energy costs leaves more households exposed to the risks of living in a cold home than ever before. However, excess heat is also a factor as many older homes cannot cope with high prolonged summer temperatures and some are at significant risk of overheating. This poses health risks for those most vulnerable to overheating, including older people, young children and those with long-term conditions, placing additional pressure on healthcare services.<sup>4</sup>

## Damp and mould

Mould is a common form of fungus that can grow indoors, particularly in damp, cold and poorly ventilated spaces. Mould produces spores which, when inhaled, can cause irritation, allergic reactions and

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breathing difficulties, with the respiratory effects of damp and mould potentially causing serious illness and, in the most severe cases, death. Those most vulnerable are babies, young children and older people, as well as those with existing respiratory conditions, allergies and co-morbidities (cardiovascular disease, skin conditions (eczema), weakened immune systems, etc).

## Potential barriers

The number of people requiring support and intervention in these areas can be overwhelming and consideration may be needed on how to prioritise identification and support of those most at risk.

It is important to understand housing tenure, households at higher risk of cold, damp and mould and the updated legislation. Table 1 shows the proportion of households in fuel poverty by tenure type in England in 2024. It shows that the highest level of fuel-poor households is in private rented housing, and this represents the largest opportunity to improve health and wellbeing.

**Table 1: Proportion of households in fuel poverty by tenure type in England, 2024**

Tenure (2024)	Households (%)	Not fuel-poor	Fuel-poor	Households (n)
Owner-occupied	65%	92.5%	7.5%	19 million
Private rented	19%	78.5%	21.5%	4.7 million
Social rented	16%	86.9%	13.1%	4.1 million

Most private renters are subject to landlord decisions on energy efficiency measures, and the tenure has the lowest average energy performance certificate (EPC) rating compared with social housing and owner-occupied housing. For tenants in substandard accommodation, the impacts can be severe.

Households in social rented homes are more likely to live in a home with an EPC of C or above. However, they will generally have lower than average incomes and are more likely to be in fuel poverty relative to the overall housing stock.

By addressing the root causes of fuel poverty and targeting those most vulnerable, it will make a tangible difference to tens of thousands of people's lives but will also work

to better align efforts to tackle health inequalities, poverty and release healthcare resources at regional and national levels.

## Opportunities

The Government has adopted legislation – the Renters Rights' Reform Act (also known as Awaab's Law)<sup>5</sup> – to improve the standard of rented homes. Initially, this requires social landlords to act promptly to fix housing hazards and is regulated by the Housing Ombudsman. In future this will be extended to private rented homes. All tenures of energy-inefficient homes are covered by the new Warm Homes Plan,<sup>2</sup> and the Government is working across departments to help ensure more health-vulnerable households get the help they need to improve their homes.

In Cornwall and the Isles of Scilly we have introduced new approaches, pathways and collaborative ways of working between the local authority and the NHS (across all levels, including primary care) to address our above average damp and mould challenges. To access full details on the Cornwall Rising Risk COPD Winter Project, please go to <https://www.pcrs-uk.org/case-repository/submission/693>

### References

1. Local Government Association. The cost of unhealthy housing to the NHS. House of Commons debate. 26 February 2019. Available at: <https://www.local.gov.uk/parliament/briefings-and-responses/cost-unhealthy-housing-nhs-house-commons-26-february-2019>. Accessed March 2026.
2. UK Government. Warm Homes Plan 2026. Available at: <https://assets.publishing.service.gov.uk/media/69cea1d7019a4faf2745b333/warm-homes-plan-corrected-print-ready.pdf>
3. National Energy Action (NEA). Our Health, Our Homes. Available at: <https://www.nea.org.uk/who-we-are/policy-and-research/our-health-our-homes/>
4. UK Health Security Agency. Adverse Weather and Health Plan - GOV.UK. April 2026, page 44. Available at: [https://assets.publishing.service.gov.uk/media/69cbbd2b024cdf09254f3f57/Adverse\\_Weather\\_and\\_Health\\_Plan\\_2026\\_2027.pdf](https://assets.publishing.service.gov.uk/media/69cbbd2b024cdf09254f3f57/Adverse_Weather_and_Health_Plan_2026_2027.pdf)
5. Ministry of Housing, Communities and Local Government. Guide to Renters Right Act. November 2025. Available at: <https://www.gov.uk/government/publications/guide-to-the-renters-rights-act/guide-to-the-renters-rights-act> (applies to England). Accessed March 2026.



## Further information / resources

- GOV.UK
- NHS England
- National Energy Action
- House of Commons Library
- Centre for Sustainable Energy
- Institute of Health Equity

## Top tips for primary care – make every contact count

*"Health inequalities and the social determinants of health are not a footnote to the determinants of health. They are the main issue." Sir Michael Marmot (2020)*

### ASK

- Link with your local authority for information/schemes that may support poor housing issues eg, Winter Wellbeing, Warmer Homes initiatives, Housing Associations, Neighbourhood events, etc.
- Cover accommodation at each contact point and/or annual review and ask screening questions which may help identify housing and poverty issues:
  - ▶ *"Do you struggle to make ends meet at the end of the week/month?"*
  - ▶ *"Are you having to decide between food and fuel?"*
  - ▶ *"Is there visible condensation on windows or surfaces in your house or visible patches of damp, mould or water damage on walls, windows or ceilings?"*
  - ▶ *"Have you raised concerns about your housing which have not been responded to and/or addressed?"*
- Benefit and income maximisation: check if people are accessing all the benefits they should receive.

### ASSESS

- Assess clinical vulnerability of the whole household, particularly any challenges in accessing healthcare.
- Is there overcrowding within the household?
- Are there other patients which visit your practice who may potentially be at risk, particularly those who may find accessing healthcare challenging. Can any action be taken to engage with them?

### ACT

- Signpost and refer to things like Community Energy Plus (<https://cep.org.uk/>) or your local equivalent and identify local Winter Wellbeing advice and information. Cornwall's example is <https://www.cornwall.gov.uk/health-and-social-care/public-health/public-health-campaigns/winter-wellbeing/#guides>.
- Once you have identified all local schemes, support or initiatives available to those affected by poor housing issues, signpost individuals to the relevant service. Don't forget to consider social prescribing!
- Link and invite local authority/housing associations to neighbourhood events.
- Liaise with your social prescribers, community health and wellbeing workers and voluntary, community and social enterprise (VSCE) groups.
- Train staff who visit people in their homes to recognise signs of poor housing that may impact health, as well as giving advice and referring for support.
- Raise the correlation between poor housing conditions and healthcare resource expenditure at strategic boards (dealing with cold, damp and mould will improve healthcare and outcomes and reduce healthcare costs in the longer term).
- Improve your own knowledge: <https://www.nice.org.uk/guidance/ng149/resources/visual-summary-pdf-7022755693>

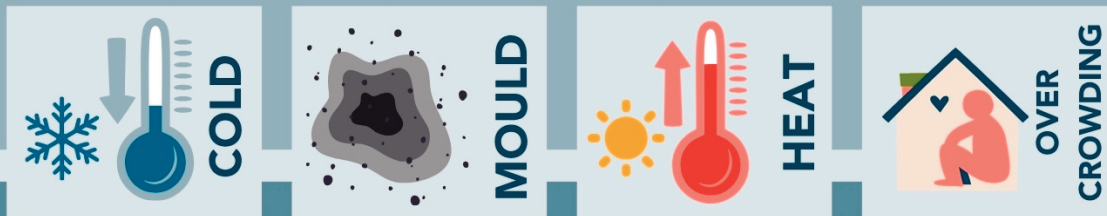
# Health inequalities



## Poverty and poor housing

Poverty and poor housing can exacerbate chronic and acute respiratory conditions - as a combination they are hard to isolate from each other and overlap with other inequalities.

In this infographic we explore the impact of the following conditions on respiratory health:



### COLD

Cold air inflames lungs and causes bronchoconstriction leading to:

- ↑ Respiratory tract infections.
- ↑ Worsening of COPD.
- ↑ Risk of asthma attacks.

The cold has wider implications on health:

- Worsens cardiovascular disease, mental illness, and dementia.
- Negatively impacts child development.
- Children and older adults are most affected.



Poorly insulated, draughty, or badly designed properties lead to cold homes in winter and hot homes in summer.

Geographical disparities in heat efficient homes are leading to increased fuel poverty.

Cold spells are associated with increased mortality and respiratory morbidity.<sup>1</sup>



Cold, poor ventilation and mould are linked. Sealing homes to keep heat in, traps indoor pollution particulates and increases risk of mould.



### MOULD

Damp and mould is associated with bad housing:

- Leaking pipes and roofs, overflowing gutters, and ground water.
- Condensation.

Mould releases spores and mycotoxins into the air. When inhaled, these can trigger allergic reactions, chronic inflammation, and infection.

People with asthma are

# 2x-3x

more likely to live in cold, damp household conditions than those without asthma.<sup>2</sup>



Awaab's Law came into effect in 2025. It compels social landlords to investigate and fix damp, mould and other serious hazards within strict timeframes. Named after two-year-old Awaab Ishak, who died in 2020 from mould exposure.

## HEAT

Physiological response to overheating:

- Oxygen requirements increase.
- Hot air activates upper airway thermal sensor, causes coughing.
- Sweating causes dehydration including of the lungs.



Humidity increases the concentration of pollutants which can trigger exacerbations.

## OVER CROWDING

Overcrowding is associated with low-income households and fuel poverty is often a co-factor.

Crowded homes have an increased risk of spread of respiratory infections.



Housing and nutrition are linked - household budget pressures shape dietary practices (e.g. reliance on nutrient poor food) which impacts on health.

## Suggested actions for primary care clinicians:

## ACTIONS

- ✓ Identify and link with your local authority for information and schemes that may support poor housing issues. Signpost individuals to all relevant services.

**"Do you struggle to make ends meet at the end of the month?"**

- ✓ Ask screening questions which may help identify housing and poverty issues.
- ✓ Identify anyone who may potentially be at risk, particularly those who may find accessing healthcare challenging.
- ✓ Train staff who visit people in their homes to recognise signs of poor housing that may impact health (provide training on giving advice and referring).

- ✓ Cover housing at each point of contact and/or annual review.
- ✓ Raise housing conditions and value-based healthcare at strategic boards (addressing poor housing will improve health outcomes and reduce costs in the longer term).



Explore further in our Cornwall Rising Risk case study

- ✓ Benefits - are people accessing all the benefits they are entitled to? Signpost to relevant services, including social prescribing.
- ✓ Improve your own knowledge [nice.org.uk/guidance/ng149](https://www.nice.org.uk/guidance/ng149).



## RISKS

- The number of people requiring support and intervention in these areas - how to prioritise alongside competing demands.
- Using the healthcare system to address inequality risks widening the gap (further disenfranchises those who aren't known to primary/community care).

## Learn more about health inequalities

Click on the QR code to access our podcasts, videos, and articles on the topic.



### References

1. World Health Organization. WHO housing and health guidelines. Recommendations to promote healthy housing for a sustainable and equitable future. 2018. [Available via the WHO website.](#)
2. Public Health England (PHE) and Institute of Health Equity (IHE). Local action on health inequalities: Fuel poverty and cold home-related health problems. 2014. [Available via the gov.uk website.](#)

# Primary Care Respiratory Update

*Standard letter from HCP for patient with COPD to give to landlord/council*



NAME/LOGO PRACTICE/CLINIC



*Insert date*

*Insert patient name and address*

To whom it may concern

I am writing on behalf of the above patient and /or carer who attends the above service. This person lives with Chronic Obstructive Pulmonary Disease (COPD) and I am currently involved in their care for this problem.

As part of a holistic assessment of their care I have asked about their housing and explored whether there are any factors that may be resulting in worsening of their condition.

The patient reports the following housing related factors that can cause worsening of COPD (delete those that don't apply):

- Overcrowding
- Mould
- An energy inefficient home combined with fuel poverty resulting in a cold home
- Damp
- Inadequate ventilation

COPD is a condition which requires a number of different treatments, however it is essential to optimise indoor air quality as part of the treatment approach.

I have encouraged the above-named patient and /or carer to engage with you to discuss a resolution of these housing related problems that could be impacting on their COPD.

Yours,

*Name of HCP*

*This model letter template has been written by PCRS as a service to health practitioners in the UK who wish to advise and advocate for patients with respiratory illness with their local authority, housing association or private landlord where their patient's housing may be a trigger for worsening of their condition.*

**More information about how housing can impact on respiratory health can be found at <https://www.pcrs-uk.org/resource/current/poverty-and-poor-housing>**

### Standard letter from HCP for patient with asthma to give to landlord/council



NAME/LOGO PRACTICE/CLINIC



*Insert date*

*Insert patient name and address*

To whom it may concern

I am writing on behalf of the above patient or their parent or carer who attends the above service. This person lives with asthma and I am currently involved in their care for this problem.

As part of a holistic assessment of their care I have asked about their housing and explored whether there are any factors that may be preventing them from gaining control of their asthma and preventing acute asthma attacks.

The patient reports the following housing related factors that can influence control of a sthma symptoms and cause asthma attacks (delete those that don't apply):

- Overcrowding
- Mould
- An energy inefficient home combined with fuel poverty resulting in a cold home
- Damp
- Inadequate ventilation

Asthma is a condition which can be controlled effectively with medication, however it is essential to also remove the underlying triggers as described above.

I have encouraged the above-named patient, their parent or carer to engage with you to discuss a resolution of these housing related triggers.

Yours,

*Name of HCP*

*This model letter template has been written by PCRS as a service to health practitioners in the UK who wish to advise and advocate for patients with respiratory illness with their local authority, housing association or private landlord where their patient's housing may be a trigger for worsening of their condition.*

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