

## **Report on Fuel Poverty and poor Housing Conditions For the Health Improvement Board meeting on the 12<sup>th</sup> September 2019**

### **1. Summary and recommendations**

The Affordable Warmth Network (AWN) last reported to the HIB two years ago, on what it was planning to do over the coming years to tackle Fuel Poverty in Oxfordshire. Progress has been made on some of these ambitions.

Certain groups have been identified as being more likely to experience fuel poverty, namely those who experience socio-economic deprivation, are young, old, have a long-term health condition and who rent in the private rented sector or are in a rural setting.

The AWN has not only delivered the Better Housing Better Health freephone advice line, helping over 400 residents, it has been working to raise awareness and embed referral pathways with key health and social care partners. District Council's Environmental Health teams continue to work with landlords and tenants to tackle the poorer conditions in the private rented sector which contributes to improving the energy efficiency of the housing stock.

The AWN is addressing the needs of some of these groups well and other areas require more attention.

### **Recommendations**

The Health Improvement Board are requested to

- Continue to champion the role housing plays in protecting and maintaining the health of both young, old and vulnerable and ensures housing has a place in the Health and Wellbeing Strategy.
- Request the AWN to report next year on the progress on tackling inequalities, particularly around young families.
- Challenge clinical and health and social care partners to explore opportunities to work more closely with the AWN, with success being demonstrated by an increase in referrals from health and social care practitioners to the BHBH service.

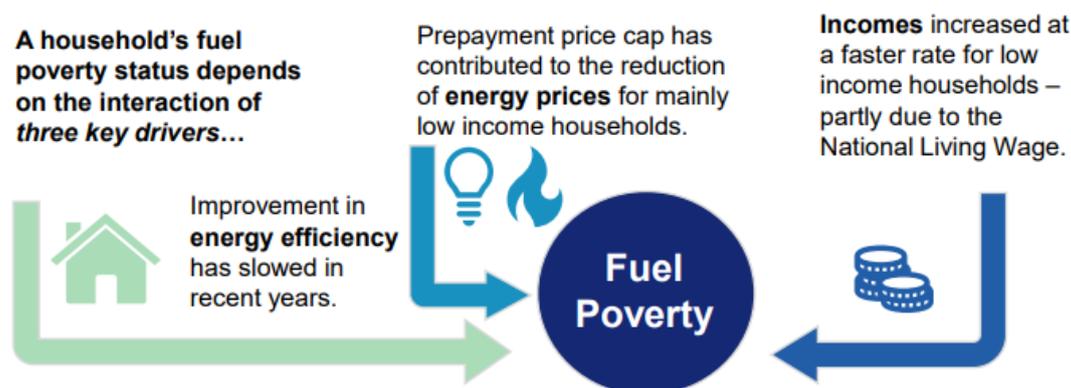
### **2. Background**

The Oxfordshire Health and Wellbeing Strategy 2018-2023 recognises that housing and the quality of housing, is a wider determinant of health. Fuel poverty and associated Excess Winter Deaths are indicators of the quality of the housing stock as well as the systems that are there to help vulnerable residents.

The Oxfordshire Affordable Warmth Network (AWN), is a partnership of all Oxfordshire District Councils, Oxfordshire County Council and others such as the Oxfordshire Clinical Commissioning Group and Citizens Advice Bureaux. The charity National Energy Foundation (NEF) is funded by the Districts and County to provide a free phone advice line and referral mechanism to local grants and loans.

This is in line with NICE guidance<sup>1</sup> which recommends a single point of contact and is locally branded as Better Housing Better Health (BHBH). The Network also captures the work of partners, such as Environmental Health and Trading Standards enforcement activities to improve housing conditions, in relation to cold or damp homes.

Broadly fuel poverty has three causative factors - low household income, poor energy efficiency of homes (higher energy bills) and high energy prices (which also mean energy bills are higher). If someone has to spend a lot of time in their home, this makes it more likely that they may struggle with energy bills and heating their home to a healthy temperature.

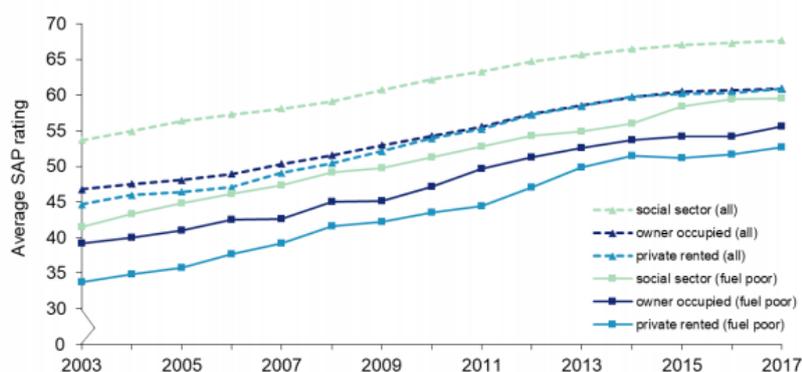


Fuel poverty is an indicator and not an absolute measure. Households can move in and out of it over time, dependent on income, energy efficiency of their home and fuel prices.

England's Fuel Poverty Strategy (currently out for consultation<sup>2</sup>), has a target to "Ensure that as many fuel poor homes as is reasonably practicable achieve a minimum energy efficiency standard of Band C in their Energy Performance Certificate, by 2030." This target is echoed in the government's Clean Growth Strategy which has a target to get as many houses as 'practically possible' upgraded to an Energy Performance Certificate (EPC) rating of band C by 2030.

The figure below the illustrates the gradual improvement in energy efficiency of the nation's housing stock.

Figure 1: Average SAP rating by tenure, fuel poor and all households, 2003-2017<sup>2</sup>



<sup>1</sup> <https://www.nice.org.uk/guidance/ng6>

<sup>2</sup> [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/819606/fuel-poverty-strategy-england-consultation.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/819606/fuel-poverty-strategy-england-consultation.pdf)

Energy efficiency improvement slowed between 2015 and 2017, due to a reduction in the number of energy efficiency measures installed<sup>3</sup>. At the current rate of upgrades of houses, the target of having as many upgraded as possible at an EPC rating of Band C will not be completed until 2060<sup>4</sup>.

### Local Fuel Poverty Picture

The Oxfordshire Joint Strategic Needs Assessment includes information on fuel poverty and that Oxford has a higher figure than England.

In 2017 (report released in 2019) England had an average of 10.9% of households in fuel poverty, up slightly from the previous year, the South East 8.7% and Oxfordshire's average is 8.5%, down slightly from the previous year. The rate varies across the County: Cherwell, 7.8%, South Oxfordshire, 7.7%, Vale of the White Horse is 7.4%, West Oxfordshire 7.3% and Oxford City 11.7%.

### Impact on health and wellbeing of Fuel Poverty

The inability to heat a home will mean a home becomes cold. Cold temperatures place a strain on the body, particularly the cardio-vascular and respiratory systems. The mental strain of being cold or worrying about debt can decrease a person's mental wellbeing and exacerbate existing mental health conditions.

A systematic review of the evidence linking fuel poverty and health indicates cold conditions and fuel poverty may have a moderate effect on adult physical health, but a significant effect on the mental health of adults and young people, children's respiratory health, as well as infant weight gain and susceptibility to illness. These poor health outcomes contribute to inequalities in health<sup>5</sup>.

Research into the cost of housing-related ill health, where poor housing conditions are a main contributor, estimates that the annual cost to the NHS is £2.5bn. This includes costs accrued by primary care services, treatment costs, hospital stays and outpatient visits<sup>6</sup>. According to the Kings Fund, housing interventions to keep people warm, safe from cold and damp are an effective use of resources. Every £1 spent on improving homes save the NHS £70 over ten years.



<sup>3</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/817725/Headline\\_Release\\_-\\_HEE\\_stats\\_18\\_Jul\\_2019.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/817725/Headline_Release_-_HEE_stats_18_Jul_2019.pdf)

<sup>4</sup> <https://www.ippr.org/publications/beyond-eco>

<sup>5</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/357409/Review7\\_Fuel\\_poverty\\_health\\_inequalities.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357409/Review7_Fuel_poverty_health_inequalities.pdf)

<sup>6</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/357409/Review7\\_Fuel\\_poverty\\_health\\_inequalities.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357409/Review7_Fuel_poverty_health_inequalities.pdf)

The NHS has several other policy levers to engage fully in delivering a prevention agenda for fuel poverty through increasing awareness of referrals to a single point of contact.

- 1) Local Cold Weather Plan
- 2) Winter Pressures
- 3) Better Care Fund
- 4) Long Term Plan
- 5) Social Prescribing, through the new Primary Care Networks
- 6) Making Every Contact Count
- 7) [‘Advancing our health: prevention in the 2020s’](#) – The recently published Prevention Green paper
- 8) NICE Guidance (NG6) and associated Quality Standard<sup>7</sup>. The quality standard covers reducing the health risks associated with cold homes. It includes identifying people at risk who are particularly vulnerable to the cold, such as young children, older people, and people with cardiovascular disease or mental health problems. It describes high-quality care in priority areas for improvement.

### **3. Progress of AWN since 2017**

The report to the HIB in 2017 committed to the following action (in italics) and underneath each section is a summary of the work completed against each of those actions.

1. *A new service incorporating the helpline and all onward referrals called ‘Better Housing Better Health’ (BHBH) will be established and rebranded. This will be promoted as a single service referring out to all relevant services and funding streams including those currently under the banner of ‘BHBH’. This will minimise confusion and duplication, and maximise engagement.*

The service has been established and developed using [NICE Guidance on ‘Excess winter deaths and illness and the health risk associated with cold homes’](#) and has been in operation since September 2017. This has included fully rebranding from the ‘Affordable Warmth Network’ to the ‘Better Housing Better Health Service’. The service has been promoted to health and social care professional across the county as a single-point-of-contact that acts as a central hub to access a host of other relevant schemes and funding streams.

2. *The service will offer direct referrals only rather than signposting thereby consistently linking in with all other services, and producing more measurable outputs.*
3. *Each year the number of health and social care services that BHBH refers to will increase. In the first year, the target will be to incorporate the falls service, fire service, befriending service and Oxfordshire advice services.*

As part of the new service model BHBH provides direct referrals wherever possible. This includes direct referrals into all of the following services:

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<sup>7</sup><https://www.nice.org.uk/guidance/qs117>

- LEAP – Home energy visits
- ECO Funding – installers such as YES Energy, Happy Energy and Instagroup (based on best available offer)
- Local Authority Home Improvement Agencies
- Available Grant Funding – Npower Health Through Warmth etc.
- Warm Home Discount Schemes

Services incorporated in 2017-18 and being referred to are:

- Falls Prevention Service
- Oxfordshire Volunteer Befriending Service
- Safe and Well Visits – Oxfordshire Fire Service

A further three services were incorporated into the service in 2018-19:

- Warm Home Discount Schemes
- Priority Services Register<sup>8</sup>
- ECHO – Emergency boiler replacement

4. *In order to enable more referrals from health, social care and other frontline staff, Better Housing Better Health will clarify and clearly lay out the ‘offer’ from the service. This will be publicised to appropriate frontline professionals, partly via training packages (online and face to face) and can be aligned with the recent update of the AWN website <http://affordablewarmthnetwork.org.uk/> .*

The BHBH website ([www.bhbh.org.uk](http://www.bhbh.org.uk)) has been updated to be more user friendly and with clearer branding and new marketing materials are being developed including a training guide, thermometer cards, leaflets and business cards which will be available for the 2019/20 winter period.

Contact has been developed with the Lead Respiratory Nurse and Respiratory Consultant, through the CCG Integrated Respiratory Team, to include training and referral pathways to respiratory clinicians, nurses and physiotherapists. This will be extended further through the training to primary care clinicians over the next 6 months. BHBH send out regular digital marketing including newsletters and social media campaigns aiming to engage with local health and social care professionals.

Two bids have been made for funding to the Energy Industry Voluntary Redress Scheme to provide the funding needed to develop an online training package although these have been unsuccessful to date, despite positive feedback.

5. *It is vital that health and social care professionals engage with this service and refer appropriate clients in to the service.*

Referrals from health and social care professionals continue (99 in 2018-19), however there is scope to increase the number of referrals. A meeting between Cherwell on behalf of districts with the CCG took place, which identified a need to simplify the referral process. The Winter Warmth campaign of 2019/20 is using a website with a referral form with enhanced

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<sup>8</sup> <https://www.ofgem.gov.uk/consumers/household-gas-and-electricity-guide/extra-help-energy-services/priority-services-register-people-need>

functionality, to streamline referrals to Environmental Health and Home Improvement Agencies.

The partnership would be keen to welcome NHS provider trusts and the Winter Pressures team to forge stronger links with the AWN to ensure housing conditions and cold homes are embedded in assessments and discharge packages. Making Every Contact Count through flu clinics also offer an excellent opportunity for GP Surgeries to promote the service to the correct demographic. A base-line<sup>9</sup> audit as suggested in NICE guidance may be a potential starting point for bringing in partners.

6. *All services engaged with the new Better Housing Better Health service (including the phone line) will utilise existing [Live Well](#) and [Family Information Services](#) databases to register their own services and seek other appropriate referrals where necessary. This further encourages integration within health and social care.*

The BHBH call centre team make use of the Live Well and Family Information Service platforms to find and offer services to vulnerable householders if a need has been identified during a warmth and wellbeing assessment outside the scope of the interventions BHBH is able to provide.

#### **4. Inequalities and Fuel Poverty**

The AWN has reviewed the evidence that is available on which groups are more at risk of Fuel Poverty and cold homes and what interventions are in place to address these gaps.

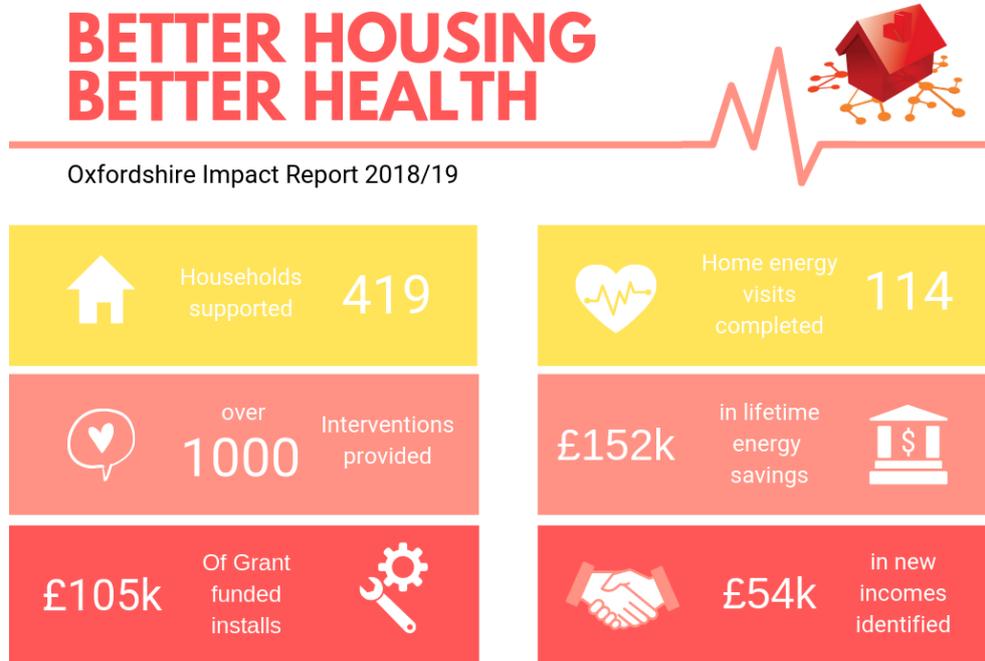
The following groups may experience fuel poverty more than others, more detailed information is available in Appendix 1.

- Those in lower socio-economic groups
  - Single parents
  - Couples with children, particularly under 5 years
  - Households with the youngest member is 15 years or under
  - Those households where the oldest member is between the ages of 16 and 24 years
  - Those who are unemployed
  - people who move in and out of homelessness
  - Those who are on either an electricity or gas prepayment meter
- Those in properties with a lower energy efficiency rating
- Those of an ethnic minority
- Those who live in rural areas.
- Those who live in privately rented accommodation
- Those who do not have a gas connection
- Older People (65 years and older) who live on their own.
- People with a disability or long term health condition, cardiovascular conditions, respiratory conditions (in particular, chronic obstructive pulmonary disease and childhood asthma), hearing or sight loss, people with addictions

<sup>9</sup> <https://www.nice.org.uk/guidance/ng6/resources/baseline-assessment-6629>

- Pregnant women
- People who have attended hospital due to a fall
- Recent asylum seekers and some immigrants

The Better Housing Better Health free advice phone line in 2018-19 delivered the following outputs.



Across the AWN partners in 2018-19 975 measures<sup>10</sup> were carried out which would likely remove a household from fuel poverty, which is up from 785 interventions in 2017-18. A breakdown can be found in Appendix 2.

### What work is currently being done to tackle inequalities

The BHBH service captures some basic inequalities data, such as whether the client is disabled, has a long term health condition, in receipt of benefits or over 60 years old.

In 2018/19 the BHBH service

- 60% of enquiries where from a service user with a long term health condition
- 25% of all service users lived in an 'off-gas' property
- Over 100 service users who had more than one vulnerability to fuel poverty and cold homes

### Lower socio-economic groups

- District Councils can access housing benefit data in order to target mail outs in order to reach low income households to direct people to local insulation and heating offers.

<sup>10</sup> Boiler installation, more efficient heating system installation, double glazed windows, HMO with F/G rating that have been improved to E or better, HHSRS excess cold resolved, HHSRS damp and mould resolved, insulation measure, smaller energy efficiency/warmth measure.

- All Oxfordshire District Councils have an ECO Flexible Eligibility Statements of Intent which includes those on benefits as potential recipients of funding. These statements enable vulnerable residents to access funding through the ECO scheme.

### Older people

- Home Improvement Agencies (HIA) are dedicated to helping older, disabled and vulnerable residents. The agency service is available to people who need help repairing, maintaining or adapting their home and is funded by the Better Care Fund.
- HIAs have grants available to keep clients safe and supported; for example in Oxford there is a Winter Warmth or Gas Safe grant, which has helped many residents remain warm and protected by servicing their boilers, cookers and gas fires and upgrading heating systems.

Repair Grants or Flexible Home Loans enable home owners financial assistance with damp related issues, draft proofing, roof and window repairs and upgrading or replacing full heating systems.

- Oxford City Council leaves Winter Warmth packs when there is no heating along with temporary radiators.
- Small Repairs services, carry out small repairs to a home at a subsidised rate and can tackle the tricky jobs many can't.
- Oxford City Council offers a free energy efficiency survey and will install the smaller measures such as draft proofing windows and doors, fixing reflective radiator panels and replaces inefficient Thermostatic Radiator Valve's.
- Age UK Oxfordshire is invited to join and contribute to the Awn meetings.
- BHBH was invited to and has presented to the voluntary, community and social enterprise groups that work with older people and attend the Age UK Oxfordshire Community Network events across the five county districts.
- Trading Standards and Fire & Rescue Service undertake free electric blanket testing yearly to ensure those using them are safe and warm. BHBH is invited to these events which tends to focus on the older demographic.
- This year the winter warmth campaign is aimed at directing older owner occupiers to local housing condition support, grants, loans, etc. It will also provide professionals who work with vulnerable people a single place to make on line referrals.
- The Winter warmth campaign 18/19 focussed on the role the local community can play in volunteering, by looking out for people who would be vulnerable to the impact of winter weather and signposting them to the BHBH service. The reach was social media reach was over 1,000,000 impressions with 26,211 clicks and on TV, radio and newspapers, over 18,000 people would have seen the campaign.

## Privately rented accommodation

- All District Councils have Environmental Health teams who inspect, advise and enforce housing standards in privately rented properties under
  - the Housing Act 2004,
  - Houses in Multiple Occupation Regulations and
  - the new Minimum Energy Efficiency Standards regulations.

Appendix 2 outlines the scale and nature of this work.

- Oxford City Council has been funded by the Department of Business, Energy and Industrial Strategy (BEIS) to increase awareness and compliance of the Minimum Energy Efficiency Standards<sup>11</sup> in the private rental sector (MEES). Building on previous work, the City Council is piloting MEES enforcement in private rented homes, therefore driving up their energy efficiency. Using council data, they are finding the unknown private rented sector in Oxford in order to check compliance with MEES. In partnership with the County Council, the project is assessing the feasibility of Energy Performance Certificates (EPCs) MEES enforcement delegation of powers to the City Council, whilst maintaining the ability to also enforce these regulations.
- Trading Standards enforces and provide compliance guidance on the The Energy Performance of Buildings (England and Wales) Regulations 2012. Homes must have an Energy Performance Certificate (EPC) when constructed, sold or let.
- Support responsible landlords with raising awareness of appropriate loans and grants.
- Enforcement of protection from eviction provisions (Deregulation Act 2015) and Protection from Eviction Act. The Tenancy Relations Officer supports and enforces (in Cherwell District Council and Oxford City) this legislation.
- Trading Standards is recruiting a project leader for Homes and Housing to make sure that renters get to make informed choices and are protected from the few rogue landlords.

## Disability or long-term health condition

- GP databases have a code to record referrals to the BHBH service, which means referrals can be tracked.
- Through the Clinical Commissioning Group's pilot project for an Integrated Respiratory Team, clinicians have
  - received briefings on the role cold (and damp) homes plays on respiratory health,
  - the self-management plan has been updated to include the impact of cold homes,

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<sup>11</sup> <https://www.gov.uk/guidance/domestic-private-rented-property-minimum-energy-efficiency-standard-landlord-guidance>

- training to primary care clinicians is to be delivered and
  - GP surgeries are receiving feedback on the number of referrals they are making to BHBH.
- In order to facilitate partnership working an open access Oxfordshire Winter Warmth Yammer group exists which hosts useful and relevant information for all those with a stake in helping residents thrive during the winter months.
  - Disabled Facilities Grants arrangements with referrals from Oxfordshire County Councils Occupational Therapy service and supported by the HIA, which is well established countywide.
  - Links have been made to Adult Social Care to provide them with
    - a briefing on cold homes and the BHBH service,
    - as well as planned training to the call centre team, in line with the new strengths based approach they are adopting.

Besides those that are not able to invest in improving their home a local scheme [Cosy Homes](#)<sup>12</sup> has been developed to provide project management support and energy efficiency, to those able to pay.

## 5. **Conclusions**

- The national picture on reducing fuel poverty is one of bold statements and ambition with some progress being made, yet the resource available to deliver on the objectives is limited.
- The local partnership, AWN, is functional and is delivering positive outcomes for local residents.
- Inequalities are being addressed but there needs to be more focus on young families and children, in order to tackle the chronic issues associated with fuel poverty.
- The local wider system partners could be engaged with better by the AWN alongside capturing and reporting on that progress through the Quality Standard<sup>13</sup> to either the Joint Management Group or the HIB.

For and on behalf of the Affordable Warmth Network  
Kate Eveleigh, Health Improvement Practitioner, August 2019

<sup>12</sup> <http://retrofitworks.co.uk/portfolio-item/cosy-homes-oxfordshire/>

<sup>13</sup> <https://www.nice.org.uk/guidance/qs117>

## Appendix 1

**Inequalities in fuel poverty**

While it is generally accepted that three key factors create fuel poverty: energy inefficient properties, high energy bills and low incomes, some groups are more likely to experience fuel poverty<sup>14</sup>.

Within the UK, fuel poverty is positively associated with poor fuel efficiency ratings (bands D to G), not being connected to the gas grid (relative risk 1.5), living in private rented accommodation (relative risk), and unemployment (relative risk 4). Lone parent and multi-occupancy households are the highest risk, reflecting a strong association with absolute deprivation. Conversely, single people under 60 are at lowest risk, as this cohort mainly comprises affluent single professional men and women; however, the risk rises for older people who live alone.

- **Those on a lower income**

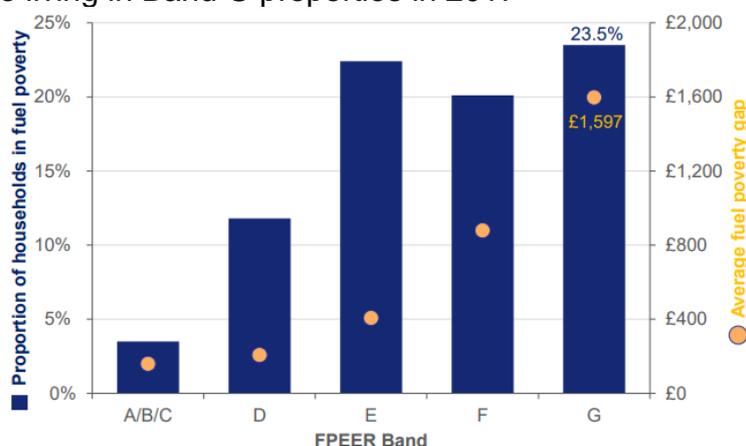
A social gradient in fuel poverty exists; those on lower household incomes are more likely to be at risk of fuel poverty, contributing to social and health inequalities.

A 2010 survey by the Centre for Sustainable Energy, reported that people in households with an income of less than 60% of the national average income had difficulty paying their fuel bills. During the previous winter, 62% of low-income households had cut back on heating and 47% had lived in homes that were colder than they wanted them to be. In low-income households, 47% of people with cold homes said the cold had made them feel anxious or depressed, and 30% said an existing health problem had worsened.

28% of those who had experienced rising expenses said this was due to housing costs, such as rent or energy, going up. Tenants in private housing were more likely to find it difficult to keep up with rents than socially rented properties.

- **Those in properties with a lower energy efficiency rating (SAP)**

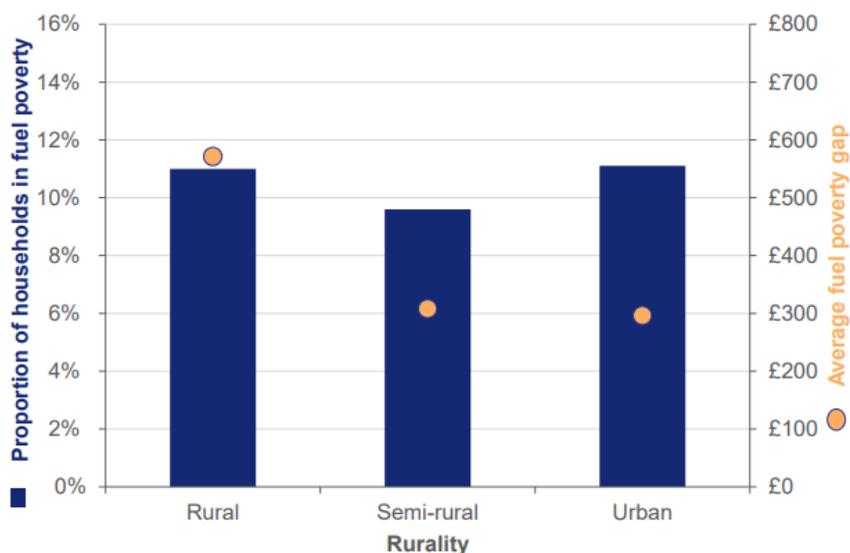
The proportion of households in fuel poverty and the size of the average gap is highest for those living in Band G properties in 2017



51% of all fuel poor households have an [Energy Performance Certificate](#) (EPC) rating of E or below.

- **Those who live in more rural areas.**

In 2017 households living in urban and rural areas have roughly the same likelihood of fuel poverty



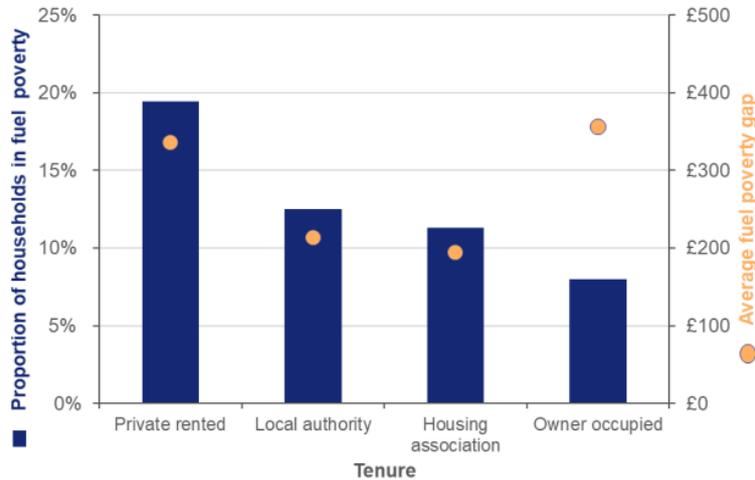
Properties not connected to gas mains are likely to be using more expensive fuels to heat their homes, including electricity and oil.

The rural Districts whilst they have a lower rate, will have households at risk due to being rural and being off the gas network, as well as houses with a lower energy rating due to non-standard constructions, such as solid walls. They will also have older people who live on their own.

In contrast Oxford City will have a population of young families, in private rented sector and on pre-payment meters.

- **Those who rent from private landlords**

Proportion of households in fuel poverty was highest for private renters at 19.4 per cent in 2017



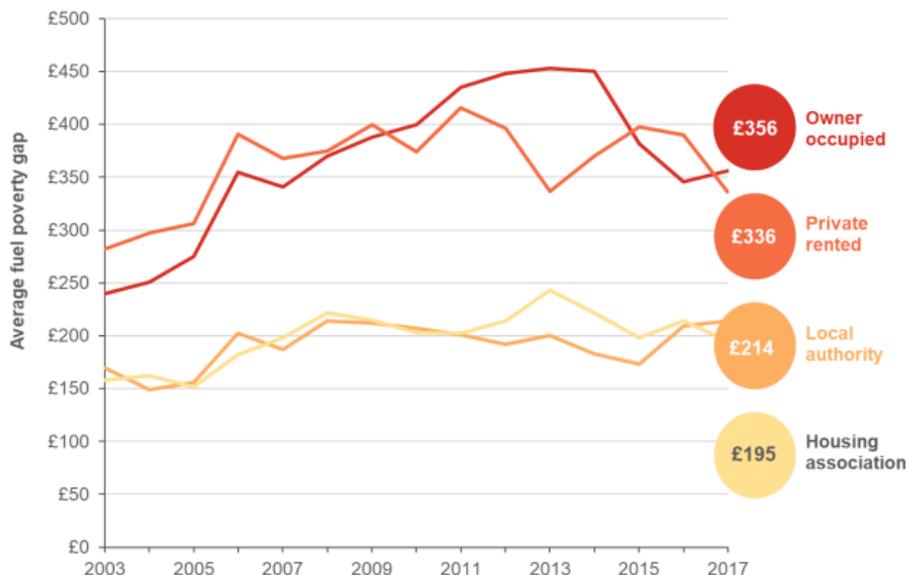
Private-rented housing is more likely to have the worst energy efficiency rating. There is no recent local data on housing conditions including energy efficiency. The latest national report, published in July 2018, relates to data from a survey on 12,292 occupied or vacant dwellings. The energy efficiency of the English Housing stock has increased over last two decades. This increase was evident in all tenures. Over same period, and across all tenures, the proportion of dwellings in lowest energy efficiency (bands F or G) has decreased.

35% of all people experiencing fuel poverty live in privately rented homes. This is double the combined percentage associated with homes which are rented from a local authority (8%) or through a housing association (10%).

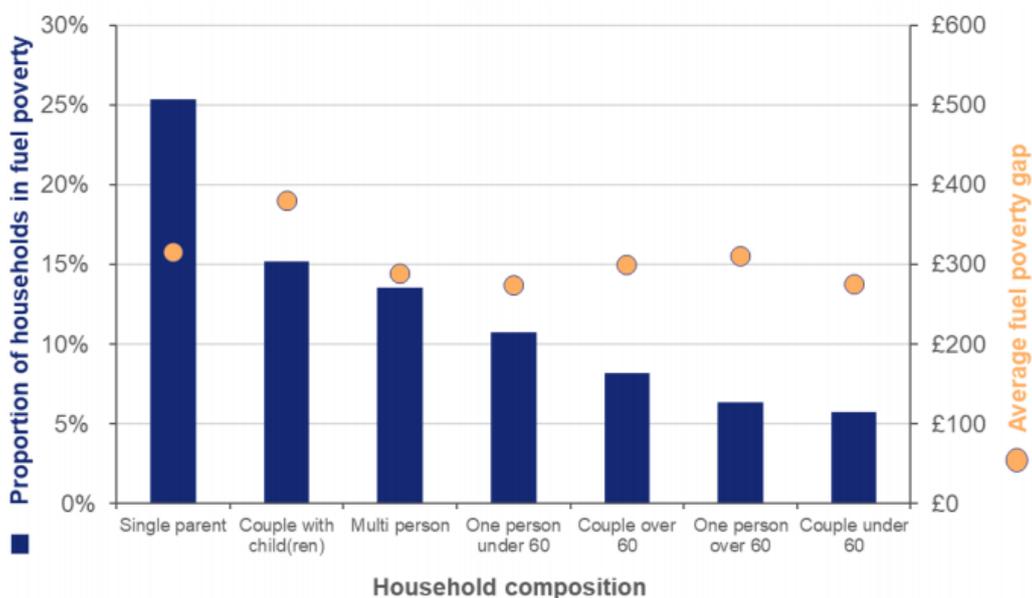
The private rented sector has a greater proportion of energy inefficient homes than other tenures. The private rented sector is twice as likely to be of a non-decent standard compared to social housing (30% compared to 15%) and is also more likely to have a lower EPC rating.<sup>30</sup> While the government has provided funding for improvements to social housing through the [Decent Homes programme](#) (which has an element covering thermal comfort)<sup>31</sup>, the private rented sector is not included in the scheme. This is a significant problem as private sector properties are more likely to be older and therefore more expensive to insulate<sup>32</sup> and there is little incentive for private landlords to pay for such improvements.

Properties in the private rented sector may have fewer main heating options compared to other tenure types. Many have no gas connection or the gas connection is not used.<sup>33</sup> Heating systems in privately rented properties can often be old, inefficient and poorly maintained, which can lead to higher operating costs.<sup>34</sup> People living in private rented homes are over four times more likely to be living in a cold home than people living in social housing.<sup>35</sup> Over 400,000 privately rented homes are classified as a Category 1 'excess cold' hazard under the Housing, Health and Safety Rating System (HHSRS).<sup>36</sup> This is around a tenth of all privately rented homes in England.

Owner occupied and private rented properties have consistently had the largest average gap between 2003 and 2017.

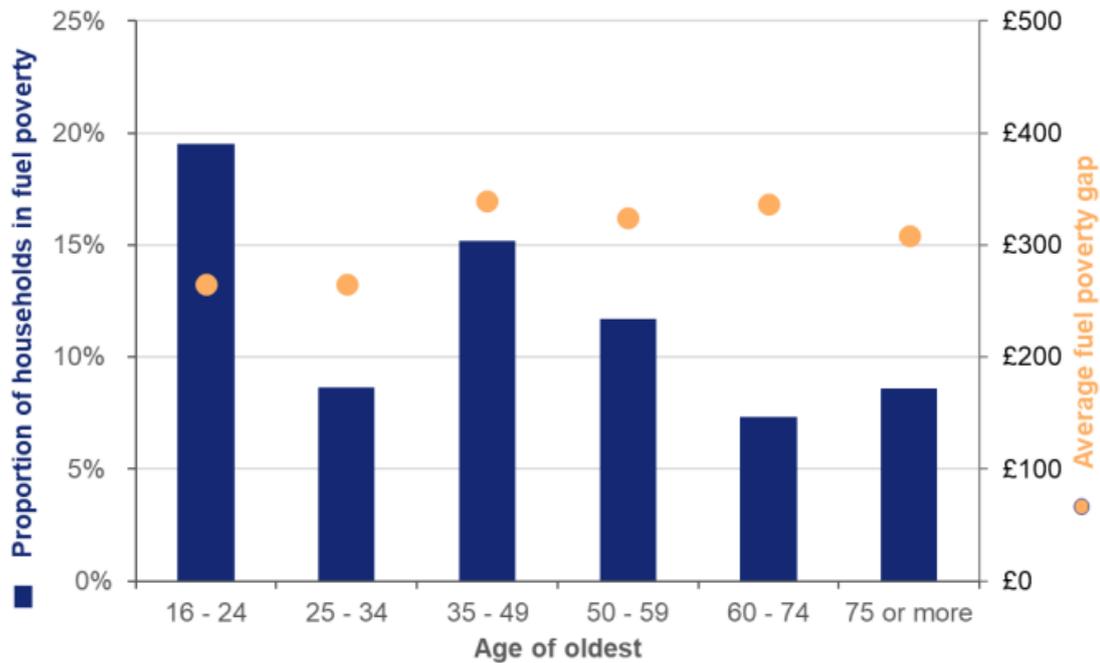


- **Single parents, couples with children have highest fuel poverty and highest average gap.**



The proportion of **single parent households** in fuel poverty is likely related to income - their median income is £12,830, 43.7 per cent less than the median income for all households (£22,790).

Younger households where the age of the oldest member is between **16 and 24** have the highest likelihood of being in fuel poverty (19.5%), with an average gap of £265, this is which is likely to be a result of lower incomes for younger households. There is scope to work with care leavers and those not employment, education and training.



Households where there are **children under 15 years** or under consistently have the highest proportion in fuel poverty.



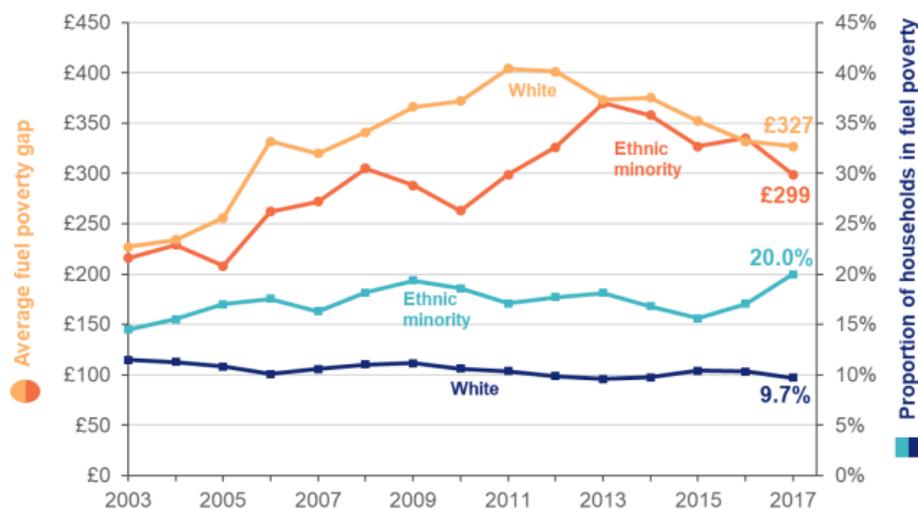
Households where the youngest member is 15 years or under has a higher prevalence of fuel poverty which is likely to be as a result of having the second lowest income and higher fuel costs. 45% of all households experiencing fuel poverty include at least one person under the age of 16.

Nearly 15% of dependent children living in privately rented housing are living in fuel poverty, compared to around 9-10% of children living in all other tenures.

A 2012 survey by the national children's charity Barnardo's found that the increasing austerity has led to 84% of the families they work with cutting back on heating. In addition 74% were cutting back on food; and 60% cutting back on buying clothes.<sup>22</sup> Many were in debt to their gas or electricity supplier and were cutting back spending on essentials in order to pay their energy bills.

- **Those of an ethnic minority**

Households with an ethnic minority (household reference person, HRP) tend to have lower average gaps between 2003 and 2017, but higher rates of fuel poverty



- **Older People**

Households where the occupants were 60 or over saw a decrease in their likelihood of fuel poverty between 2003 and 2017. The Warm Home Discount<sup>62</sup> (introduced in 2011) and the Winter Fuel Payment (which was introduced in 1997) are likely to have had an effect. Just over 23% of all fuel poor households include at least one person over the age of 60.

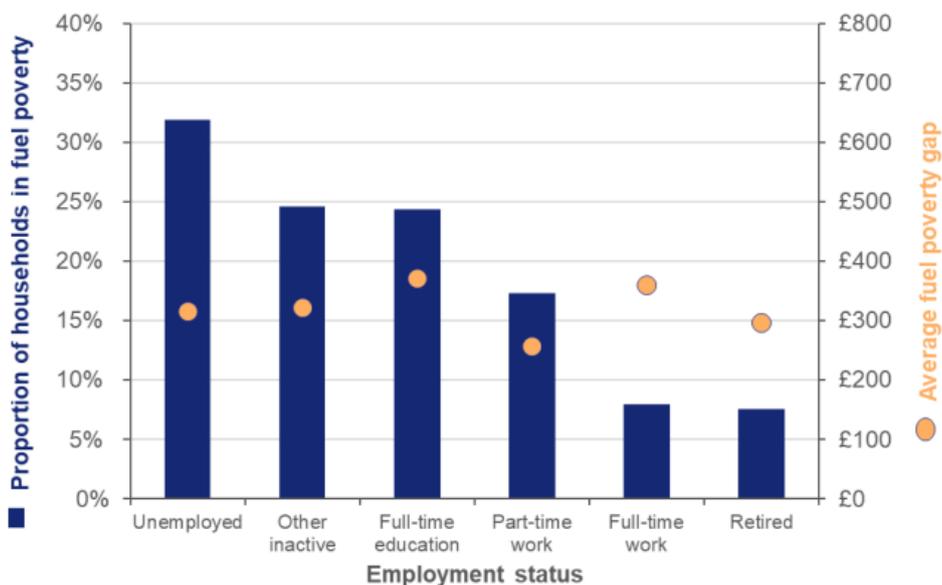
Older people are more likely than the rest of the population to live in homes with poor energy efficiency: among older people (aged 75 and over) the number of households with poor energy efficiency was 5% and they were more likely to be owner occupiers.

Older people may be particularly vulnerable during cold periods. Research suggests cold temperatures can cause blood pressure to rise in older people, increasing the risk of strokes and other circulatory problems.

Moreover, cold homes have been associated with lower strength and dexterity and exacerbated symptoms of arthritis, which can increase the risk of falls and unintentional injury. Finally, a population based study looking at vulnerability to winter mortality in elderly people in Britain found around a 30% increase in mortality in winter among people aged 75 years or older; cold homes are likely to contribute to this figure

- **Those who are unemployed**

Households with an unemployed HRP have the largest proportion of households in fuel poverty at 31.9 per cent while households with a retired HRP have the lowest (7.6%) in 2017.

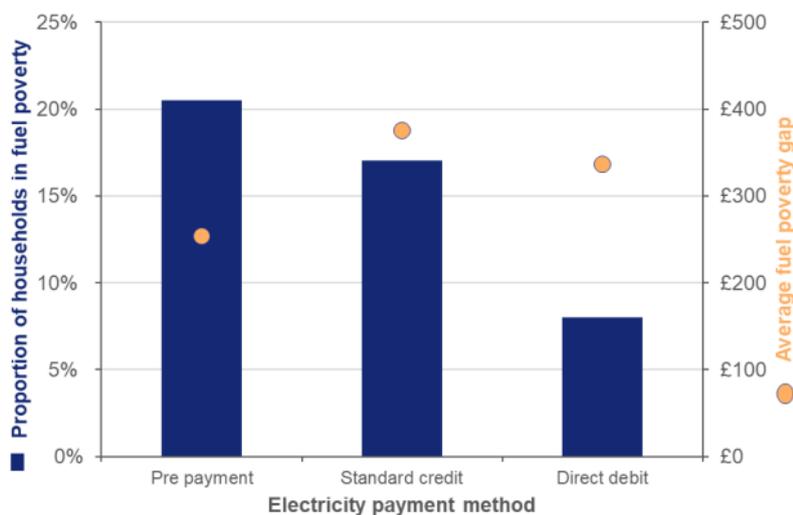


- **Those who are on either an electricity or gas prepayment meter**

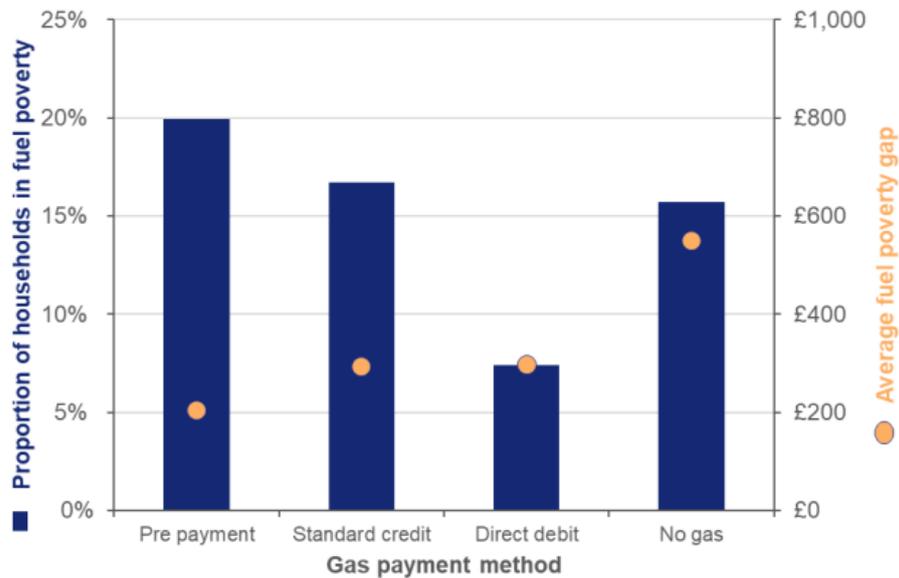
The proportion of fuel poor households using an electricity prepayment meter is around 27.1 per cent compared to 31.4 per cent in 2016. The same applies to gas which is 21.6 per cent compared to 25.0 per cent in 2016. This is likely to be as a result of the effect of the prepayment cap.

33% of all fuel poor households use an electricity PPM. This is low compared to other groups due to the relatively small proportion of people using this form of payment compared to others such as direct debit.

Households that pay for their electricity by prepayment have the highest proportion in fuel poverty but have the lowest average gap in 2017



Households that pay for gas by prepayment have the highest proportion of households in fuel poverty but the smallest average gap in 2017



Households using prepayment meters are most affected by price rises because these have an immediate effect, compared to households on fixed price credit tariffs or direct debit payments. These other forms of payment allow costs to be spread, so households have more time to adjust to price rises.<sup>38</sup>

Households that use prepayment meters are more likely to experience fuel poverty than those paying by other means. One quarter of all households using prepayment meters are fuel poor, compared to less than one in ten of those paying by direct debit and one in six of those paying by standard credit. Some low income households prefer prepayment meters even when they know these are more expensive because it enables them to more easily manage and keep within their budgets, but as a result, they may be suffering a poverty premium.

- **Those who do not have a gas connection have a higher fuel poverty gap.**

Households without a gas connection rely on electricity or other fuels like oil or coal to heat their home which likely contributes to why their average gap is the highest at £550.

Households not connected to mains gas (known as off gas<sup>12</sup>) households are usually found in rural areas and rely on more expensive heating options, such as electricity, oil and solid fuel. Due to the fact that the majority of households in England are connected to the gas network, only 19% of all households experiencing fuel poverty fall into the off gas<sup>13</sup> category. However, the depth of fuel poverty for these households can be severe, with the average fuel poverty gap<sup>14</sup> for households in non-cavity walled properties off the gas grid being £789, compared to £412 for the same types of properties located on the gas grid.

- **People with a disability or long term illness**<sup>15</sup>

35% of all fuel poor households include at least one person with a disability or a long term illness. They are more likely to spend more time at home and could need slightly higher room temperatures, which increases their fuel needs, whilst also having a greater likelihood of having a lower income.

<sup>15</sup>[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/357409/Review7\\_Fuel\\_poverty\\_health\\_inequalities.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/357409/Review7_Fuel_poverty_health_inequalities.pdf)

Studies indicate that cold conditions can exacerbate existing medical conditions including diabetes, certain types of ulcers and musculoskeletal pains. As mentioned above, studies have found an association between cold homes and the increased likelihood of developing symptoms of asthma and bronchitis which can develop into long-term conditions. In addition, cold homes may slow down recovery following discharge from hospital.

A systematic review of the evidence linking fuel poverty and health indicates cold conditions and fuel poverty may have a moderate effect on adult physical health, but a significant effect on the mental health of adults and young people, children's respiratory health, as well as infant weight gain and susceptibility to illness.<sup>7</sup> These poor health outcomes contribute to inequalities in health.

- **Those who experience loneliness and isolation**

The Warm Homes Healthy People Evaluation (WHHP) 2012-13<sup>15</sup> has shown that the identification of vulnerable people continues to be a challenge<sup>16</sup>. Specifically, people who are socially isolated or do not engage with services.

Age UK has published heat maps showing the variation in the risk of loneliness within local authority districts. These maps highlight the following areas as being in the highest risk quintile of all neighbourhoods in England: – Cherwell: Banbury, Bicester Town – Oxford: Blackbird Leys, Wood Farm, Barton, St Clements, Jericho, Cowley – South Oxfordshire: Didcot South

## Appendix 2 – Affordable Warmth Network monitoring

To establish a baseline of the number of households in Oxfordshire, who have received significant increases in the energy efficiency of their homes or their ability to afford adequate heating, as a result of the activity of the AWN and their partners.

Significant increases are defined as:

Loft insulation (including top ups, where the insulation level is at least doubled), cavity wall insulation, external / internal solid wall insulation, Installation of a more efficient boiler, installation of a more efficient heating system, upgrading of windows from single glazing and Increase in the uptake of benefits (at least £1200)

### 1st April 2017 - 31st March 2018

Cold Intervention	CDC	OCC	SOX	VOWH	WOX	BHBH	Total
Boiler installations	10	13	0	0	3	51	77
More efficient heating systems installations	0	21	0	0	0	13	34
Double glazed windows	3	3	0	0	0	5	11
HMOs with F/G rating that have been improved to E+	0	75	0	0	0	0	75
HHSRS excess cold resolved	20	46	6	14	4	0	90
HHSRS damp & mould resolved	40	35	22	20	18	0	135
Insulation measures	0	0	0	0	0	41	41
Smaller energy efficiency / warmth measures	0	0	0	0	0	322	322
<b>Total</b>	<b>73</b>	<b>193</b>	<b>28</b>	<b>34</b>	<b>25</b>	<b>432</b>	<b>785</b>

### 1st April 2018 - 31st March 2019

Cold Intervention	CDC	OCC	SOX	VOWH	WOX	BHBH	Total
Boiler installations	10	8	0	0	3	32	53
More efficient heating systems installations	2	2	0	0	0	22	26
Double glazed windows	2	1	0	1	0	6	10
HMOs with F/G rating that have been improved to E+	0	110	0	0	0	0	110
HHSRS excess cold resolved	7	46	8	14	3	0	78
HHSRS damp & mould resolved	4	39	23	26	29	0	121
Insulation measures	7	2	0	0	0	12	21
Smaller energy efficiency / warmth measures	0	0	0	0	0	556	556
<b>Total</b>	<b>32</b>	<b>208</b>	<b>31</b>	<b>41</b>	<b>35</b>	<b>628</b>	<b>975</b>

CDC = Cherwell District Council

OCC = Oxford City Council

SOX = South Oxfordshire District Council

VOWH = Vale of Whitehorse District Council

WOX = West Oxfordshire District Council

BHBH= Better Housing Better Health

<sup>1</sup> This may translate in to a reduction from a category 1 to category 2 hazard for Excess Cold under the Housing Health and Safety Rating Scheme. Or in other instances the increase of a band on an Energy Performance Certificate (EPC). <sup>1</sup> The value chosen as what the average cost of powering a house is, 44% of which is on heating.