

Local Authority Toolkit: Supporting Fuel Poor and Vulnerable Households

“Fuel poverty is a long-standing health issue: the impact of cold housing on health and the stresses brought on by living in fuel poverty have been recognised by all policy makers... fuel poverty is avoidable and it contributes to social and health inequalities”.

Marmot, The Health Impacts of Cold Homes and Fuel Poverty 2011

This is an interactive toolkit.

Elements have roll over and clickable content to add more detail or help navigate to further information.

You can use the arrow buttons to click through page by page or hover over graphics to see the link. You can use the navigation bar on the top of pages to move to each section.



February 2018 – Version 1

We will continue to add to this toolkit as more evidence is generated and more examples of work being carried out in this area becomes available.

Before you start:

Introduction to this toolkit

Who is this toolkit for?

The toolkit is for local authorities, health and third sector partners to work together to reduce fuel poverty in their localities. An accompanying guide is aimed at the healthcare sector.



Look out for **Case Studies** for more information throughout this toolkit.

The purpose of this toolkit is to capture the hearts and minds of local government and their partner agencies so that when they come across a cold, damp home they know where to refer, why they are referring and be confident that the referral could make a difference to people's lives.

This is a call to action, that by working together we can all ensure that as many homes as possible are energy efficient by 2030 and their occupiers are staying warmer for less.

The toolkit is focussed on how Local Authorities can use energy efficiency to support fuel poor and vulnerable households. The toolkit is designed to:

- Help local authority officers and members understand the drivers for taking action;

- Help local authority officers and members understand what options they have and what outcomes they are trying to achieve;
- Provide guidance and signpost to tools to support in taking action.

Health services and local authorities already work closely together to reduce the health and wellbeing risks (including preventable deaths) associated with living in a cold or under-heated home. This toolkit provides local authorities with up to date tools for their communities to stay warmer and healthier for less to improve the health of the population. This toolkit is not designed to critically review evidence. Please refer to **Resources** for reviews of evidence linking cold homes and unaffordable fuel bills to ill health.

The toolkit and the information contained applies to England only. Local authorities in Scotland and Wales may find some of the information of value and equally we could learn a lot from how things are done in Scotland and Wales.

Why is tackling fuel poverty important?



...for local authorities

Most local authorities have fuel poverty and energy efficiency programmes to support vulnerable people living in cold homes within their area.

Under the Energy Company Obligation (ECO), local authorities can engage with energy suppliers to identify households that would benefit from energy efficiency improvements.



...for health services

Cold homes cost the NHS in England £850 million – £1.36 billion per year.*

Those living in cold homes place increased pressure on already stretched health and social care services.

Overall poor housing represents a similar risk to the NHS as physical inactivity, smoking and alcohol.

*(BRE – 2015, Age UK – 2012)



...for anyone vulnerable to cold

Living in cold homes causes cumulative problems for the health and wellbeing of some of the most vulnerable people in the UK.

The elderly, very young, those living in fuel poverty, or those with an existing respiratory or cardiovascular health condition are all at risk.

It also affects their ability to pay for heating or use their energy efficiently or to progress and stay in work.



...for other partners

Across housing and energy services there is a range of support available for people at risk from cold homes.

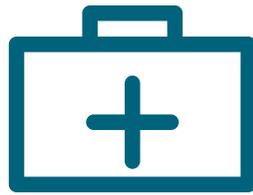
However provision is patchy and can be hard for people to access and link together without support.

Why local authorities should act

Fuel poverty affects approximately 2.5 million households in England. There are four perspectives that underpin Government and Local Authority concerns about fuel poverty:



Overall Poverty



Health and well-being



Cutting carbon emissions



Addressing energy performance of the housing stock

Local Authorities have important roles that relate to fuel poverty and cold homes:

- Health and Wellbeing Boards: responsibility to improve the health of their populations and reduce excess winter deaths (section 4.15)
- Public Health Outcomes Framework: direct duty on upper tier authorities to tackle fuel poverty (section 1.17)
- Housing and Environmental Health legislation: enforcement powers to tackle hazards to health and housing in homes, particularly in the private rented sector. Several pieces of legislation including:
 - > The Private Rented Property minimum standard – landlord guidance documents;
 - > Housing Act 2004; and
 - > Home Energy Conservation Act (HECA): responsibility to report on progress in improving energy efficiency and tackling fuel poverty.
- Benefits and grants – By working together, the local authority can use discretionary funds to help people stay warmer for less. The use of welfare funds such as help with Council Tax and Discretionary Housing Payments can help to increase income. Other options could include social services, concessionary fares or blue badge schemes to raise awareness or target those customers to help.
- Bid for capital and revenue funds as well as support other partners to bid for funds to invest in energy efficiency.

How Local Authorities Can Act

Health and Wellbeing Boards –

The 1848 Public Health Act was one of the first Acts to link population health and housing. Health and Wellbeing Boards have a critical role to focus and lead affordable warmth and fuel poverty strategies. They embed a preventative and social determinants approach within the working practices of the local authority, NHS, and social care commissioners and providers. Local Authorities can use their leadership role and bring together its services with health, voluntary and community partners and local residents to tackle fuel poverty and cold homes.

Public Health – overall aim is to improve healthy life expectancy of the population they serve. Reducing fuel poverty and improving warmth is an important element of improving life chances and closing that gap.

Health and social care - improve health and wellbeing, reduce health inequalities, reduce fuel poverty, save lives and deliver public health, NHS and social care national outcome frameworks, reduce pressure on the health and care system and support climate change mitigation and adaptation.

Housing – Strategic role to oversee all housing in local authorities' areas, in terms of new supply, homelessness and housing advice and improving conditions in all tenures.

Planning - use of S106 to fund improvements to housing and community infrastructure levies on large developments to fund physical, social or green improvements



Hospital Admission Fines – an incentive to prevent re-admissions by correct treatment in first instance. Redirect to use a proportion into fuel poverty/affordable warmth programmes, thereby reducing demand upstream.

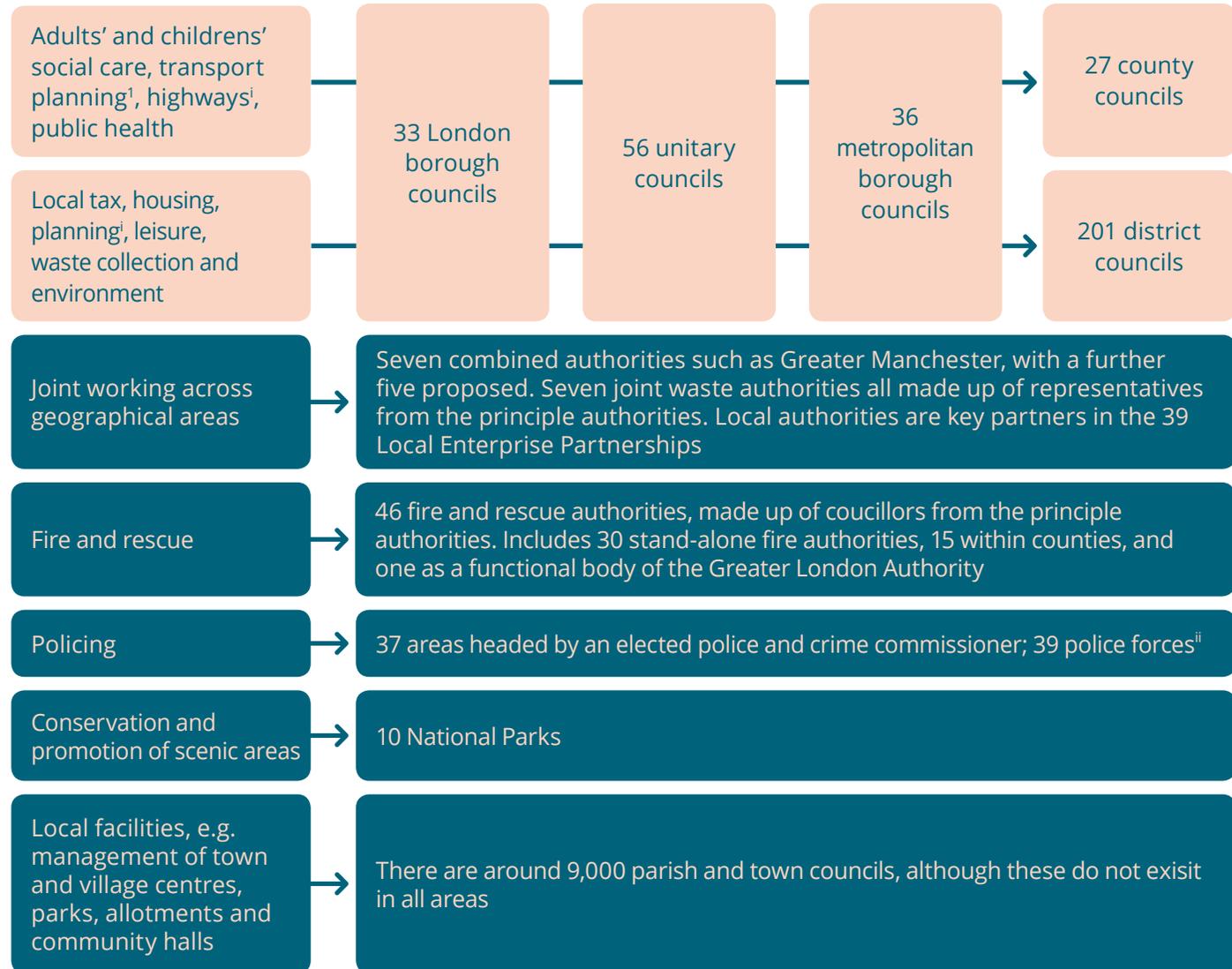
Benefits – use Welfare funds (if available) and ensure those eligible are making full access of discretionary housing payments, Council Tax assistance to support the cost of housing.

Environmental Health - enforcement powers to tackle hazards and improve housing conditions that can improve health and housing in homes, particularly in the private rented sector.

Grants – lead applicant for fuel poverty schemes or be a supporting partner – letter of support to help lever in investment. Refer to [Brief Guide to Local Government](#).

Local Authorities

Local Government across England offers a broad range of services. An introduction to local government (courtesy of Local Government Association – Councillors Guide 2017). Local government touches the lives of everybody, every day. Councils deal with everything from schools to care of older people, from roads to rubbish, libraries and local planning.



ⁱ In London, the Greater London Authority also has responsibility in these areas.

ⁱⁱ The number of police and crime commissioners differs from the number of police forces because the Metropolitan Police Services and City of London Police have different arrangements compared to other areas.

1 Understanding Fuel poverty

Addressing fuel poverty and cold homes has multiple benefits, both for the household receiving support and for local communities. This includes better standards of living and conditions for people with low incomes, improved and more energy efficient houses, fewer avoidable winter deaths and reduce costs for the health, wellbeing and care services.



Fuel poverty and its contribution to social and health inequalities are recognised as avoidable. The links between poor housing and health have been established for some time. Fuel poverty occurs when a household cannot afford to keep their home adequately warm at a reasonable cost, meaning that people living within the home are often cold, or if they choose to heat their house, don't have enough money to pay for food or other services. This can often lead to poor physical and mental health for members of that household.

In 2015, 11% of all households lived in fuel poverty, according to the [Annual Fuel Poverty Statistics report 2017](#).

This leaves more than 2.5 million people that cannot afford to heat their homes to recommended standards, leaving many living in homes that are persistently damp and cold.

2.5 million households
in England in 2015 lived in Fuel Poverty



What causes fuel poverty?

While the reasons for fuel poverty are complex, it is generally agreed that fuel poverty is caused by a convergence of three factors :



Low income, which is often linked to general poverty



High fuel prices, including the use of relatively expensive fuel sources



Poor energy efficiency of the home

Individuals in households who are 'living on a lower income in a home that cannot be heated at reasonable cost' can be considered to be in fuel poverty. This challenge is exacerbated by some of the very lowest income households live in some of the coldest, leakiest and hardest to heat homes'.

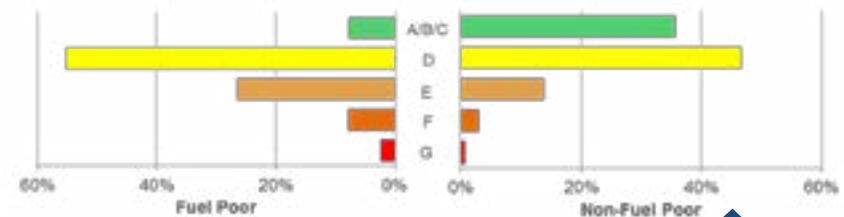
How is fuel poverty measured?

The Low Income High Cost (LIHC) indicator is the official fuel poverty indicator and classes a household as being in fuel poverty if its required energy costs are above the average (median) for its household type and this expenditure pushes it below the poverty line.

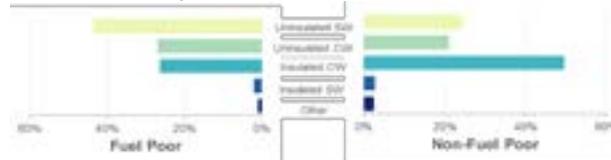
Fuel Poverty in England, 2015

Who are the fuel poor?

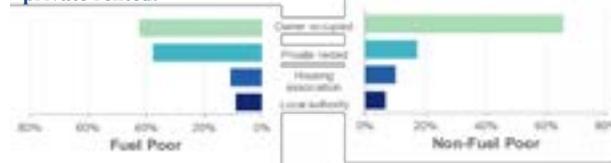
The fuel poor live in *less energy efficient dwellings*, with only 8% living in homes rated as A/B/C compared to 36% of non-fuel poor.



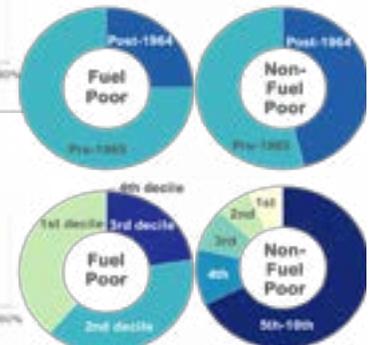
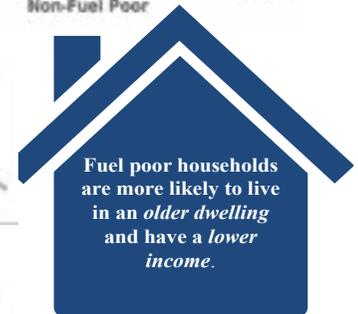
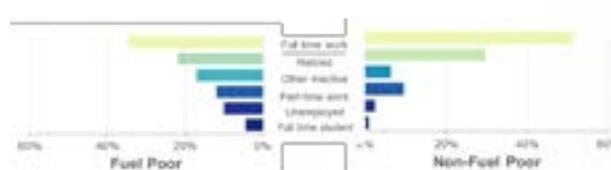
The majority of fuel poor dwellings have uninsulated solid or uninsulated cavity walls.



The majority of fuel poor households are owner occupied or private rented.



Around a third of fuel poor households are in full time work.



Source: <https://www.gov.uk/government/collections/fuel-poverty-statistics> - BEIS

Fuel Poverty in England, 2015

Who are most severely impacted by fuel poverty?

The *least energy efficient* fuel poor dwellings are the most severely impacted with a fuel poverty gap of over £1,500.



Fuel poor living in the *private rented sector* are the most severely impacted with a fuel poverty gap of £410.



Fuel poor households with *uninsulated walls* are most severely impacted by fuel poverty.



Fuel poor living in *other multi person households* are the most severely impacted with a fuel poverty gap of £493.

LEFT:
Who are fuel poor

RIGHT:
'What is Fuel Poverty' demonstrate the housing, tenure and cost issues

What is fuel poverty?

Households in fuel poverty face both lower incomes and higher energy needs compared to typical households.

Department for Business, Energy & Industrial Strategy

Typical English household

Typical fuel poor household

Annual income after tax and housing costs

£21,333

less than half

>

£10,118

Annual energy needs

£1,236

more than 20% higher

<

£1,430

Incomes are for 2015 and are adjusted to reflect spending power of households. Energy costs are also for 2015 and are those required to meet a standardised heating regime.

Source: <https://www.gov.uk/government/collections/fuel-poverty-statistics> - BEIS

2 What are the impacts of living in a cold home?

Living in cold, damp homes impairs the health and wellbeing of householders. Cold homes waste energy and harm their occupants.



Children living in cold homes are more than twice as likely to suffer from a variety of respiratory problems as children living in warm homes.

1/4

Mental health is negatively affected by fuel poverty and cold housing for any age group. More than 1 in 4 adolescents living in cold housing are at risk of multiple mental health problems.



Mobility and falls
Cold homes affect mobility and increase falls and non-intentional injuries. In cold homes, symptoms of arthritis become worse and strength and dexterity decreases, increasing the risk of falls in the elderly.



Other indirect effects include a risk of carbon monoxide poisoning and a wider effect on wellbeing and life opportunities.

Improving the energy efficiency of homes can improve “affordable warmth” and result in multiple health gains. It leads to improved home finances, reduce the cause of avoidable, unjust health inequality and supports long term environmental gains. The lower your income the more likely you are to be at risk of fuel poverty.

There is a strong relationship between cold temperatures, cardio-vascular and respiratory diseases, which has been associated with fuel poverty and cold housing.

For more detail, refer to:

Reducing fuel poverty helps more people to be more healthy, helping the economy.

There is a substantial body of evidence linking cold temperatures with ill health and higher mortality and morbidity rates in winter, and the World Health Organisation estimates that 30% of winter deaths are caused by cold housing.⁹

Excess winter deaths

While excess winter deaths occur in both cold and warm housing, there is greater risk of death in colder housing, especially for people aged 75 and over. Excess winter mortality is for a large part preventable, with much higher levels in Britain than in most other European countries, including ones with much colder winters such as Norway and Russia.

Respiratory illness

Around a third of excess winter deaths are caused by respiratory illness. Cold homes lower resistance to respiratory

infections, and for every 1°C drop in temperature below 5°C, GP consultations for respiratory illness in older people increase by 19%. People with Chronic Obstructive Pulmonary Disease (COPD) are four times more likely to be admitted to hospital with respiratory problems over the winter and increases in mould, which is associated with cold homes, can increase prevalence of asthma.¹²

Cold housing

This increases the level of minor illnesses such as colds and flu and exacerbates existing conditions such as arthritis and rheumatism.

Mental health

Damp, cold housing and being in fuel debt is associated with an increase in poor mental health. Living in a cold home can contribute to social isolation, as some people become reluctant to invite friends to a house that is cold. [More information.](#)

Having Good/Fair Employment

Cornwall and Isles of Scilly's Winter Wellbeing has pioneered linking work and progress to work with improving health and reducing fuel poverty. By tackling fuel poverty, customers have stayed in work or moved to work. They are thus better able to afford their energy and their health improves.

“A healthy population is the engine of a healthy economy... PHE believes that health and wealth are two sides of the same coin”.

Public Health England's (PHE) Chief Executive
(PHE Conference 2017).

3 Risk Factors of Fuel Poverty and Cold Homes

The following characteristics are risk factors for fuel poverty and cold homes.

For more information on the link between fuel poverty and dwelling type, see [Annual Fuel Poverty Statistics report 2017](#).

Risk Factors of Cold Homes Characteristics



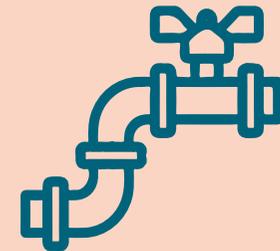
Buildings constructed with solid walls have a higher prevalence of fuel poverty compared to those with cavity walls



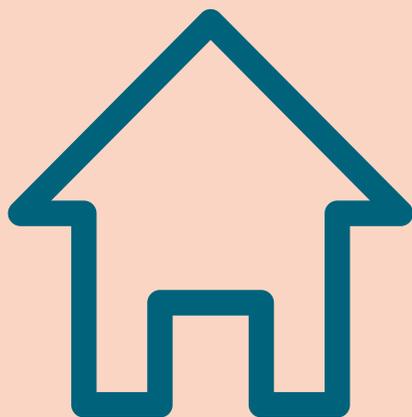
Older and larger buildings see higher levels of fuel poverty compared to new builds and smaller dwellings



Households with no boiler or a non-condensing boiler have higher levels of fuel poverty compared to those with condensing boilers



The level and depth of fuel poverty is also greater for households not connected to the gas grid



Homes rated Energy Performance Certificate (EPC) E, F or G are more difficult to heat and keep warm at an affordable cost. There is a much higher proportion of fuel poor households in low rated homes than non-fuel poor households.

You can find small area estimates of the number and proportion of homes with poor EPC ratings for 2012 on the [Centre to Sustainable Energy \(CSE\) website](#).

Local Authorities can now obtain more up to date **EPC data** from the [DCLG](#). You will need to register first and have facilities for processing the data.

Location

A much higher proportion of households in rural areas than urban areas are not connected to the gas grid and therefore rely on more expensive heating fuels. They therefore have a higher level and depth of fuel poverty.

BEIS produces small area estimates of the level of fuel poverty in local areas that are helpful for showing where the worst problems are in your local authority. Please note that these are reliable at local authority level but should be treated with caution at lower levels, such as Super Output Area.



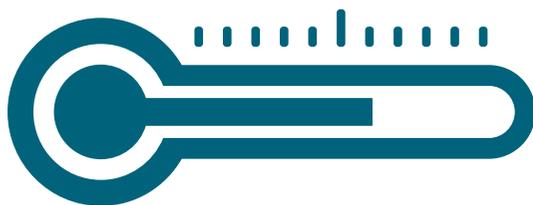
4 What is a healthy temperature for a home?

Public Health England recommends the following indoor temperature thresholds:

Heating homes to at least 18°C (65F) in winter poses minimal risk to the health of a sedentary person, wearing suitable clothing. More general advice is to keep warm and set your heating to 18–21°C in living rooms and 18°C in all other rooms.

A more detailed guide is featured on the right.

The effect on comfort and health of exposure to varying living room temperatures:



Indoor temperature	Effect
18°C	Heating homes to at least 18°C (65°F) in winter poses minimal risk to the health of a sedentary person, wearing suitable clothing. Additional advice for vulnerable groups and healthy people is outlined in the Cold Weather Plan for England.
Under 16°C	Resistance to respiratory diseases may be diminished.
9-12°C	Exposure to temperatures between 9–12°C for more than two hours causes core body temperature to drop, blood pressure to rise and increased risk of cardiovascular disease.
5°C	Significant increase in the risk of hypothermia.

Developed by PHE and UKHF, 2014

5 Policy drivers to support cold homes work



There are a range of health, environmental and social policies that support action on fuel poverty and cold homes. This section summarises the most relevant policy, planning and regulatory levers for local authorities.

We've outlined some of the key national drivers for cold homes work:

England Fuel Poverty Strategy

The Fuel Poverty Strategy 2015 set a fuel poverty target to ensure that as many fuel poor homes 'as is reasonably practicable' achieve a minimum energy efficiency rating of Band C by 2030. This includes interim milestones of 'as many fuel poor homes as is reasonably practicable' to achieve a minimum energy efficiency rating of Band E by 2020, and Band D by 2025.

Local authorities can produce a local fuel poverty strategy. Many have, either as a stand alone strategy or as part of a related strategy such as housing or health and wellbeing strategy.

The Committee on Fuel Poverty update on progress and make recommendations to ensure that the Government's fuel

poverty target and milestones can be met.

The Committee on Fuel Poverty (CFP) reported in October 2017 and highlighted progress in tackling fuel poverty since the first report in September 2016 and what still needs to be done.

"... The average fuel poverty gap (this is the average additional amount that fuel-poor households need to spend to meet their energy needs, compared to the national median spend) has only fallen £18 per year from £371 to £353.

Progress is being made towards the two fuel poverty strategy milestones of upgrading as many fuel poor homes as is reasonably practicable to Energy Performance Certificate Band E (Band E) by 2020 and to Band D by 2025.

This means there will still be around 175,000 fuel poor households living in Band F and G properties. Many will be suffering from the worst extremes of fuel poverty and have annual fuel needs well in excess of £1,000 per year above the national median spend.”

Energy Company Obligation (ECO)

The Energy Company Obligation (ECO) is an obligation that government has placed on the larger energy suppliers to reduce the UK’s energy consumption and support those living in fuel poverty. Energy suppliers are required to provide households with energy efficiency improvements.

It is available in two parts:

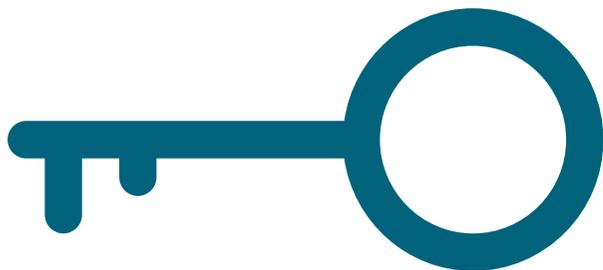
- Carbon Emissions Reduction Obligation (CERO): obligated suppliers must promote ‘primary measures’, including roof and wall insulation and connections to district heating systems.
- Home Heating Cost Reduction Obligation (HHCRO): obligated suppliers must promote measures which improve the ability of low income and vulnerable household to heat their homes. This includes actions that result in heating savings, such as the replacement or repair of a boiler.

Under ECO “flexible eligibility”, local authorities can declare certain households meet the eligibility criteria for a measure under the Affordable Warmth (i.e. HHCRO) element of ECO.

Flexible eligibility is being piloted in the current ECO programme. It is currently capped at 10% and participation by suppliers or local authorities is not mandatory. It is intended to help two groups of households:

- i. Fuel poor households, especially those that are not in receipt of ECO eligible benefits; and
- ii. Low income households that are vulnerable to the effects of living in a cold home.

BEIS have indicated they will be consulting soon on focusing the whole of ECO on low income and vulnerable households from October 2018.



This table shows BEIS guidance on setting low income thresholds for different types of household composition, based on assumption that larger households require larger incomes in order to achieve the same standard of living as smaller ones. Some local authorities have used the guidance to determine eligibility for ECO under the local flexibility arrangements.

Local Authority Flexible Eligibility Income Thresholds (BEIS)

Household composition	Annual household income	Monthly household income Equivalent
1 adult (18 years and over)	£8,900	£740
and 1 child	£11,700	£980
and 2 children	£14,400	£1,200
and 3 children	£17,300	£1,440
and four or more children	£20,100	£1,680
2 adults (18 years and over)	£14,600	£1,220
and 1 child	£17,400	£1,450
and 2 children	£20,200	£1,680
and 3 children	£23,100	£1,930
and four or more children	£25,700	£2,140

Source: p.34-35 at: https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/608042/ECO_Help_to_Heat_flexible_eligibility_guidance_for_LAs.pdf

Housing Health Safety Rating System (HHSRS) and Minimum Energy Efficiency Standards

In many parts of England, the rapid growth in recent years of private rented homes is welcomed but also of concern that many properties are not of suitable quality.

Energy Act 2016 states that from 2018, private landlords will not be allowed to re-let existing rented homes rated EPC F or G, unless they have applied for exemption. Local authorities will have a key role in enforcing the regulations.

Local authorities can work closely with partners to improve the quality and widen access to safe, warm and well managed private rented housing, including through Landlord Registration Schemes and carrying out House Condition Surveys.



Cornwall Private Rented Sector

House Condition Surveys are the main source of local information and Cornwall's 2010 version provided some key findings indicating the current state of the private rented sector (PRS) in Cornwall:

58% of dwellings in the PRS in Cornwall **do not meet the decent homes standard**

37% of all privately rented dwellings have a **Category 1 hazard in Cornwall** (approx. 15,000 dwellings)

The Category 1 hazards in Cornwall with the top three most prevalent hazards are:

Excess cold is responsible for **72%** of Category 1 hazards

Falls on stairs: **22%**

Falls on the level: **19%**

38% 

of the population in private housing are over 65, compared to **24.4%** in England

Local Authorities have a statutory duty to review and remove Category 1 hazards.

Nationally over the last 10 years the proportion of households in the PRS with dependent children increased from 30% in 2014/5 to 37% in 2014/15. Therefore, given our known understanding of the quality of the stock, many more children are being exposed to hazardous property conditions.

Source: Cornwall Council

“Energy Efficiency offers the cheapest, swiftest, most employment intensive and publically acceptable energy efficiency policy”

#Gas 2017 8th November 2017

All interested Local Authorities should aspire to make this work as COMMON practice.

Home Energy Conservation Act (HECA)

The 1995 Home Energy Conservation act requires all of England’s local authorities to report on action to improve energy efficiency in all residential accommodation in their area and to report every 2 years to BEIS on progress in implementing improvements.

Town and Country Planning Act 1990 – Section 106 (S106)

Local authorities can use S106 to fund or co-fund improvements to housing. A local planning authority can use S106 to enter into a legally binding agreement or planning obligation with a landowner or developer over a related planning issue, which may include funding.

Public Health Outcome Framework

Direct duty on upper tier local authorities to tackle fuel poverty (1.17) and reduce Excess Winter Deaths (4.15).

The Planning Act 2008 – Community Infrastructure Levy (CIL)

The Planning Act 2008 introduced powers for local authorities to charge a community infrastructure levy on all development over 100 square metres, or one or more dwellings. The levy can be used to finance a range of physical, social or green infrastructure arising from increased development in an area.

NHS Five Year Forward View

The NHS Five Year Forward View outlines three areas of focus to address the widening gap between resources and demands on services. Central to this is a shift towards emphasis on prevention and working in partnership. The 44 Sustainability and Transformation Partnerships (STPs), which link the NHS with local authorities across the UK, are likely to play a key role in the move towards this. The NHS Five Year Forwards plan strengthens the case for NHS involvement in tackling ill health due to cold homes and unaffordable bills.

Cold Weather Plan for England

The Cold Weather Plan for England helps prevent the major avoidable effects on health during periods of cold weather in England and is produced by the Department of Health, Public Health England and NHS England. It recommends a series of steps for the NHS, local authorities, social care and other public agencies, professionals working with those at risk, individuals, local communities and voluntary groups to prevent harm to health during periods of cold weather.

Joint Strategic Needs Assessments

In England, local authorities, Clinical Commissioning Groups (CCGs) and other public sector partners are required to produce a Joint Strategic Needs Assessment, which provides evidence on the health and wellbeing needs of their local community. The JSNA can provide an evidence base on the wider determinants of health and identify where health indicators or outcomes are of particular concern, and prescribe actions, outcomes, targets or indicators that relate to this.

Local Authorities can highlight the following for the local authority and partners to tackle fuel poverty:

- [Big Energy Saving Network \(BESN\)](#)
- Collective Energy Switch schemes and shopping around for energy (energy buying clubs) – Citizens Advice also offer a free, impartial online energy comparison [service](#)
- [Smoke Alarms, Carbon Monoxide](#)
- Gas Safety Valves ([YouTube films](#))
- [Digital inclusion](#) – for financial inclusion
- European Funds – [Low Carbon and Capital programmes](#)
- [Health advice](#) and [Weather Alerts](#)
- [Electricity Distribution Network Operators \(DNOs\)](#)
- [Gas Distribution Network \(GDN\)](#) for mains gas
- [Fuel Poor Network Extension Scheme \(FPNES, Gas\)](#)
- Heating Oil ([Federation of Petroleum Suppliers](#))

6 What actions can you take to address cold homes?



There are many initiatives in place across the country to address cold homes and unaffordable fuel bills. There are a variety of services that can help vulnerable people. The table on the next page provides examples of types of actions available to support people living in cold homes :

Action type	What is typically offered?
Year round telephone advice.	Information advice for improved energy efficiency, e.g. tariff discounts, debt advice, collective switching, energy efficiency installations, grants and energy saving behaviours.
Income maximisation advice either over the telephone or face to face.	Advice on benefit entitlement and reducing debt, such as that provided by Local Citizens Advice, can make a major contribution towards reducing fuel poverty.
Face to face advice or training provision. May include services aimed at frontline workers.	Different options – home visits, workshops or specific events. May include training front line professionals who have contact with vulnerable people. This helps frontline workers to spot people vulnerable to cold and help refer them to a service that can help.
Practical help at home, normally for older or disabled people, in the form of a 'handyperson' service.	Physical help around the home to make energy savings changes, e.g. draught proofing windows and doors.

Table cont.

Action type	What is typically offered?
Local Authority employees and teams – referrals of vulnerable patients.	Using whole local authority to refer vulnerable residents to energy efficiency referral programmes.
GP/Allied Health Workers referrals of vulnerable patients.	GP practices/Allied Health Workers may have social prescribing schemes to refer vulnerable to cold patients to energy efficiency schemes. The provider of the cold homes prescription may include the local CCG, public health and the third sector.
Collective switching schemes, run by switching services or local authorities.	This brings people together to enable collective buying power to negotiate a cheaper deal from a supplier.
Public health awareness scheme run by local authority/NHS/other.	Giving advice on how to keep warm and links to services that can help.
Local authority and housing associations mass retrofit.	Retrofit of energy efficiency installations such as boilers, cavity walls and loft installation.
Set Up an ECO Flexible Eligibility mechanism.	Support delivery of ECO focussed on private rented and privately owned homes.
Creation of ‘warm zones’.	Area based schemes to target delivery of various energy efficiency services.
Improve health and increase income through removing barriers to work/employment opportunities.	Improving warmth through income – support to stay in work or move into work can increase income sustainability, improve health and increase ability to afford energy costs long term.

Opportunities for tackling health inequalities through fuel poverty work

Local Authority led poverty and energy efficiency schemes can make an important contribution towards closing the health inequalities gap.

‘Health inequalities’ refers to the unjust and avoidable differences between people or groups due to social, geographical or other factors. These differences have a huge impact, because they result in people who are worst off experiencing poorer health and shorter lives.

Local government public health is accountable for addressing health inequalities. A healthy population is the engine of a healthy economy.

We must look beyond the NHS to address the causes of the causes of ill health and make sure everyone has a fair chance of good health.



Top tip

First time central heating can help a household remain in work, prevent them losing employment as well as inspire households to progress to work, thereby improving their health and well being.

Cornwall's Central Heating Fund

Opportunities for health and work outcomes from tackling fuel poverty

Cornwall and Isles of Scilly's Winter Wellbeing Partnership has a unique approach of Reducing Fuel Poverty, Improving Health and Progress to Work. It has supported 348 customers to remain in work or progress to work since 2011. Having an income/maintaining an income (and being in work or staying in work is critical to that) is often the forgotten element of fuel poverty.

The Energy Bill Revolution report stated that making all low income households highly energy efficient can improve our Gross Domestic Product (GDP) with a calculation that for every £1 of investment in energy efficiency increases GDP by £3.20". This approach is added to by Policy Exchange report, that states that "Beyond the direct economic impacts to the recipients (thermal efficiency and reduced energy costs), there are also strong macro-economic arguments for investing in energy efficiency. ... The International Energy Agency demonstrates that large scale energy efficiency programmes can lead to increases in GDP of up to 1.1% per year".



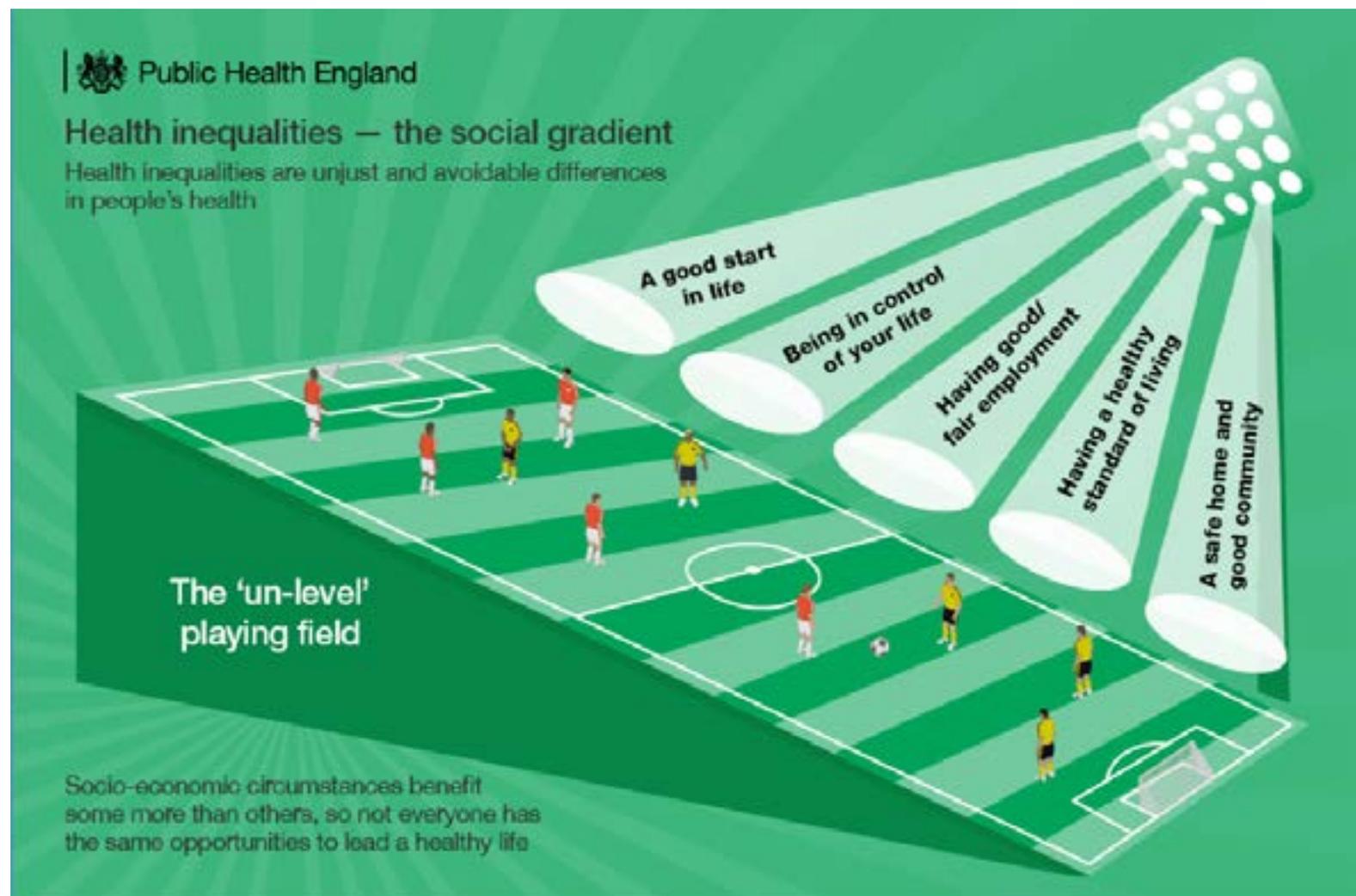
Health inequalities and fuel poverty

Health inequalities are underpinned by the social determinants of health, which are determined by the broad social and economic circumstances into which people are born, live, work and grow old.

Fuel poverty is a social determinant through housing (age, location, building type, security of tenure), income (ability to afford energy costs), employment, age and mobility (how often in the home and for how long each day) and digital access.

The Health Profile for England combines PHE data and health data in one document and is a useful resource on health inequalities.

The social gradient of health inequalities and the links to fuel poverty.



7 Cold homes referral pathway

How to develop and maintain a cold homes referral pathway

NICE Guidance is a good starting point for a checklist of what to do to set up a referral network. This is relevant for local authority and health practitioners.

"I can now think because you freed up my money as it was all going on coal. I have completed my CV and am going to apply for jobs. I couldn't face this when I was so cold. I lived in my fleece pyjamas."

Cornwall Winter Wellbeing Customer from 2015. Since then, the customer has moved back into work with a job in the care sector.

- [Recommendation 1](#) Develop a strategy
- [Recommendation 2](#) Ensure there is a single point of contact health and housing referral service for people living in cold homes
- [Recommendation 3](#) Provide tailored solutions via the single point of contact health and housing referral service for people living in cold homes
- [Recommendation 4](#) Identify people at risk of ill health from living in a cold home
- [Recommendation 5](#) Make every contact count by assessing the heating needs of people who use primary health and home care services
- [Recommendation 6](#) Non-health and social care workers who visit people at home should assess their heating needs
- [Recommendation 7](#) Discharge vulnerable people from health or social care settings to a warm home
- [Recommendation 8](#) Train health and social care practitioners to help people whose homes may be too cold
- [Recommendation 9](#) Train housing professionals and faith and voluntary sector workers to help people whose homes may be too cold for their health and wellbeing
- [Recommendation 10](#) Train heating engineers, meter installers and those providing building insulation to help vulnerable people at home
- [Recommendation 11](#) Raise awareness among practitioners and the public about how to keep warm at home
- [Recommendation 12](#) Ensure buildings meet ventilation and other building and trading standards

Linking into existing partnerships



One way to develop your referral pathway is to link into existing partnerships.

This will allow you to meet the right people, connect your scheme to their cause, and build new relationships to develop referral pathways.

Establishing a data sharing agreement with partners and customers

If you plan to work with partner agencies then you need to establish a data sharing agreement to share confidential information such as names and addresses and preferably by as few people as possible. Health information is identified as a special category of data. If data is to be moved between partners offer the "opt in" choice for customers on the understanding that data is shared between partners, stored, and protected for the purpose of helping meet their specific energy efficiency needs.

New Digital Economy Act 2017



The new Digital Economy Act 2017 introduces powers which enable the disclosure of personal information for the purposes of alleviating fuel poverty. The powers enable data sharing for fuel poverty alleviation:

- between public authorities, including local authorities (bodies to be specified in Regulations);
- with energy suppliers for the purposes of fuel poverty schemes, such as the Warm Home Discount and Devolved Administrations grant schemes (bodies and schemes can be added/removed by Regulations) (See clause 30)
- From energy suppliers with public authorities, or with the persons providing services to the public authority who will then be able to 'flag' which of the supplier's customers should be eligible for assistance (see Clause 31).

This could include data to target low income and high cost households (e.g. using social security data and Valuation Office Agency data on property characteristics), and there are limitations and safeguards to ensure data is used appropriately.

General Data Protection Regulations

The new powers come into force on 25 May 2018 and work alongside the Data Protection Act and the Information Commissioner's data sharing code of practice. There are also new criminal sanctions for unlawful disclosure and the powers are permissive, which means public authorities have the discretion whether to share data or not. Data sharing will be subject to business cases, privacy impact assessment and data sharing agreement.

All data sharing for fuel poverty work must be compliant with the General Data Protection Regulation and the Data Protection Act

Top tips for data sharing



- If you plan to exchange data with health sector via email, you will need an NHS email account. You won't be able to exchange data via email without one.
- Where it is not possible to acquire an NHS email address, or time is too short, consider other ways to share data. In East Riding the hospital emails a spreadsheet every month of people requiring a referral. They weren't able to use an NHS email address, so use a GSX one instead. In other areas the NHS has issued a contract to a member of staff in the referral service.
- You'll need a secure system to store your data – one that meets data storage regulations relevant to your local authority for safe storage of information.
- Where it is not possible to collect data, consider what you actually need. Can you ask fewer questions that do not require sensitive information? Keep it as simple as possible!

Choosing a referral method

There are lots of different referral methods you can put in place, using new, innovative solutions, keeping it simple with paper, or anywhere in between. What matters most when designing your referral system, is choosing a method that will work for customers and partners that you are trying to work with. It may sound simple, but the more complicated you make your referral process, the fewer referrals you will receive. Find out what will work for your customers and partners.

We have found the following tips and themes very helpful from our interviews for this toolkit that can be summarised as around Three Themes and Nine Steps.

Three themes to inform setting up cold homes and fuel poverty referral partnerships and schemes:

Theme **A Staying Warmer for Less** – this means providing information and advice and signposting customers to partners and agencies that can help with the running costs of the home.

Theme **B Capital investment** or measures to improve home – through energy efficient heating systems, boilers, replacing storage heaters and insulation.

Theme **C Behavioural changes** – digital inclusion and cultural shifts – shop around for best deals, take control of life (heating and warmth), ventilate and use improved heating most efficiently.

Nine steps to help you set up a Fuel Poverty Partnership and Referral Network

Local government touches the lives of everybody, every day. The aim of this toolkit is to encourage local government to take up the mantle to drive up the energy efficiency of homes in its area and thereby eliminate a preventable driver of poor health and wellbeing.

By looking wider, it can help the young population to start well and the older population to age well. Furthermore all the population can be helped to stay warmer for less and help with aspiration of residents and the economic productivity of an area – through staying in or progress to work. It can do this in partnership with business, community and voluntary and community sector.

The key steps are:

Nine steps to pick and mix to set up a Fuel Poverty Partnership and Referral Network



Step 5

Establish or enhance one point of contact to help support and navigate customers through the complex system. Ensure anyone who comes into contact with vulnerable groups can refer or signpost them to the referral service.

NEA Fuel Poverty Action Guides or NICE Guidance are both helpful to show the relevant front line workers in health and local government practitioners, fire prevention and safety services personnel and workers from charities and voluntary organisations, such as advice agencies.

Think wider and include those that carry out home repairs, energy installers and maintenance contractors, those that read or install meters (including the installation of smart meters), carers support

or provide general support or socialise/ overcome isolation such as faith, voluntary sector organisations, energy and water utilities and electricity, gas, coal or oil distribution companies. The list is a guide as you may have local expertise and local variations within your area.

It is a good idea to include people who work in wider fields than health and social

care services but who visit people at home. Work with a core cluster of committed partners and ensure the referral service links with relevant national and local services that can provide a range of solutions.

Step 6

Raise awareness among front line workers that people they see may be in fuel poverty, even if they don't identify as such. The following statements could indicate risk of fuel poverty:

- I can't pay my electricity/gas bill
- My oil/gas tank is empty
- I've run out of coal or wood
- I'm about to be disconnected
- My boiler is broken
- My heating is not working properly
- My home is cold
- I can't afford to heat my home
- My home is damp
- I'm always ill
- I'm wrapped up in rugs to stay warm
- I only use one room
- I only have one heater
- I don't turn the gas on as it's too expensive
- I'm too cold to apply for jobs
- I would like to go back to work
- I don't go out much
- I've lost my job

Step 7

Monitor and review the effectiveness of your partnership – have a reflective workshop/ session at the end of each Winter.

Step 9

Put in place coordinated packages of support to tackle fuel poverty. Energy efficiency and related home improvement measures should form a central component.

Step 8

Funding is helpful to support programmes and often provides the basis to apply for funding, whether capital bids or revenue bids. In some cases, partners are already doing this work locally. The role of the lead partner or local authority is to draw all partners together to help customers access the services available and makes best use of those services. Below are some of the partners that local government can work with or apply for help with:

- Energy Company Obligation (ECO) and Energy Supplier Trust Funds
- Warm Homes Discount
- Cold Weather Payment or Winter Fuel Payment (DWP)

- Department of Work Pensions, maybe known as Job Centre Plus or Pension Service
- Citizens Advice
- Money Advice Agency
- Energy Advice Service
- Rural Community Charity
- Community Foundation
- Home Improvement Agencies (HIAs or Care and Repair)
- Charities and Third Sector – Age UK, National Energy Action, Red Cross, Macmillan and many others. Please check and find out relevant organisations in your local area
- Benevolent and Occupational Trust
- Other assistance and intelligence - Local Welfare Assistance Scheme, Social Services, Concessionary Fares, Blue Badge Parking Service, Council Tax or Benefits. They may be run under different service in each local authority.



Derby City Council's Healthy Housing Hub work with care coordinators to receive cold homes referrals from GP surgeries

Derby City Council's Healthy Housing Hub has set up a strong partnership with care coordinators within local GP surgeries. GPs are able to direct patients who they consider vulnerable to cold homes to their surgery's care coordinator, who makes referrals onto the Healthy Housing Hub.

Care coordinators work within GP practices in south Derbyshire as part of the Community Support Team (CST), to support and enhance integrated care delivery in the community. The main aim of the care coordinator is to help to avoid unplanned and inappropriate hospital admissions. They do this by liaising with colleagues and other health and social care professionals to help to support and coordinate the care of patients within a GP practice identified as being at 'high risk' of their current situation deteriorating and who may benefit from a multi-agency approach either through referrals and/ or analysis of available data (e.g. frequent attendees to A&E or out of hours services).

Demonstrating the urgency for early referrals

Interventions for cold homes take time to implement, depending on requirements, infrastructure and the type of energy intervention. It will be important to communicate this to the customer and partner you are hoping to engage in making a referral, so that they understand the importance of an early referral.



Top tips for maintaining your referral service

Setting up a referral network is important and it has to be maintained and evolve long term to keep the referrals coming in. You need to find a way to keep local authority and partners motivated so that they continue making referrals, and this is especially important during times of staff turnover and busy work periods. By this stage you have put in the effort to form the relationship and develop the referral system – now it is down to stewardship to keep the process going!



Gloucester and District Citizens Advice - CCG and Better Care funding for tackling cold homes

Gloucester and District Citizens Advice is launching a cold homes referral service this winter (2017), thanks to funding from Gloucestershire Clinical Commissioning Group (CCG) and Gloucestershire Council.

Working with partners, Warm and Well, Gloucester and District Citizens Advice will provide a complete advice and referral service for people suffering ill health due to living in cold homes. They will take referrals from health care professionals in GP surgeries, the Gloucestershire Respiratory Team and Warm and Well, as well as self-referrals from people who see their publicity about the service and tailor support to meet the client's needs.

Following the launch of Citizens Advice 'Winter Resilience' project last year, which piloted the housing and health referral service recommended by NICE at seven local Citizens Advice, Gloucester and District Citizens Advice approached their local CCG to request support for their scheme.

Their request for support came at a time when commissioning budgets are being cut nationally, and services are being commissioned with a significantly reduced budget. This makes it a challenging time to secure funding, and commissioners are having to decide how best to spend limited funds.

Despite this, Gloucester and District Citizens Advice were successful in their request for CCG funding, and have some tips for securing health sector funding!



Pointers

➔ Offer regular training sessions on how to make referrals, both as a refresher and to capture new staff member, and tell people 'if you don't use it, you'll lose it!'

Jane Mears, East Riding of Yorkshire.

➔ Choose a referral mechanism that works for the local government professionals you want to engage. The London-based Seasonal Health Intervention Network (SHINE) keeps a league table of best referrers to encourage a bit of competition. They share the league table in their quarterly newsletter.

John Kolm-Murray, SHINE

➔ Stay involved with relevant partnership groups to keep your project on the agenda – if you aren't represented then your cause will lose momentum.

➔ Try where possible to feedback to those who made the referral – let them know what impact their referral has made to their client's home and what energy efficiency support has been provided – this will help to keep them motivated, knowing their referral has made a difference.

➔ Think of innovative ways to reward professionals who make referrals – the team East Riding of Yorkshire invite referrers to an awards event to say thank you, and ask them to bring along someone who has never referred before.

Jane Mears, East Riding of Yorkshire

➔ If you want to work with GP surgeries, make sure you stay engaged with the practice manager, as they are the one who will keep the practice on board with your work.

Paul Burns, Gentoo

Monitor and evaluate cold homes referrals

It is important to build an evidence base for your affordable warmth scheme, as professionals within the local government will be more inclined to support a scheme, whether financially or as a referrer, that has an evidence base showing benefits to health and wellbeing. You can use impact evaluation to show practitioners that your affordable warmth scheme has benefits that the:

- scheme contributes to health and wellbeing outcomes
- learning from your practice and able to adapt to make your scheme more effectively contribute to health and wellbeing outcomes.
- contribution towards fulfilling local authorities' Public Health responsibilities, by understanding the health outcomes of an affordable warmth scheme.
- evidence that the scheme contributes towards the aims of the Joint Strategic Needs Assessment and Public Health Framework.

Through assessing fuel poverty need and risk in the local population, local authority teams and health and wellbeing boards may identify the need for specific projects and commissions to improve collection and use of data in the future. Outline how the intervention helped to reduce fuel poverty, improve health and progress work.

1



How effective the intervention in:

- a.** targeting those in fuel poverty compared non fuel poor households.
- b.** helping to address the causes and impacts of fuel poverty.
- c.** difference (could be work, income, self esteem, confidence) made to health and wellbeing of customers

2



The time period of effectiveness is important. When does the impact kick in and how long does it last? What difference(s) has the intervention made to people's health and wellbeing.

3



Look at the cost of the intervention, both the investment to set it up and the ongoing running costs. What difference(s) has the intervention made to people's health and wellbeing. This will then help to assess the cost-effectiveness or return on investment.

4



Consider the 'perspective' of the analysis – which specific costs and benefits are included and to whom. What difference(s) has the intervention made to people's health and wellbeing. This can be quantified in money saved, heating measures installed, tariff switches, health gains or others appropriate to your area. This focusses on the immediate savings, but more typically will involve a longer and broader societal perspective to quantify health benefits (e.g. by using quality adjusted life years, QALYs) and place a value on these alongside other benefits.

Learning from Evidence – Health Booster Fund and Central Heating Fund

Health Booster Fund – The research analysis (small basis) shows that investment in fuel poverty and health, based on personal feedback leads to improved outcomes of warmer homes, easier to pay heating bills and health and wellbeing improved, post intervention.

The data on fuel poverty intervention and their impact generally supports previous findings, and its limitations are noted, such as lack of focus on private rented tenants.

[Fuel Poverty Health Booster Fund Evaluation](#) and [Fuel Poverty Health Booster Survey](#)

Further detailed research, including NHS data analysis with Wigan Council is underway to produce a more in-depth study of their AWARM service to understand more clearly any links between fuel poverty interventions and direct healthcare costs. This remains a real challenge for government, local authorities and other stakeholders (including landlords associations) to work together to target the PRS in future fuel poverty / energy efficiency policy and schemes.

Data mapping and Tools

On the following pages are two case studies that demonstrate how local authorities can identify, highlight and importantly map a multitude of issues that affect the health and well-being of householders. They are examples on how it can be done and there may be other examples relevant to your area.





Warm Wales - Foundation data for Robust Energy Strategies for Housing (FRESH)

Warm Wales' Foundation data for Robust Energy Strategies for Housing modelling takes complex big data on poor health and income and matches that with street-level maps of poor housing. by applying 'finer grain' data analysis. This creates a much more detailed and usable neighbourhood profile, enabling specific streets to be identified.

FRESH identifies 'street clusters' of fuel poor, energy inefficient households, based on mass EPC analysis. This results in a suite of powerful maps, showing levels of vulnerability which can then be cross-matched with local agencies, including DWP housing benefits data and GP Health Cluster data, to help prioritise existing resources.

FRESH Vulnerability Maps are now being used to guide deployment of a regional

Community Energy Champion programme across Wales and the South West England. This works in partnership with local third sector agents, avoiding duplication and harnessing 'local knowledge' to identify vulnerable households with house-to-house surveys. FRESH provides a complete all-authority and all-tenure 'spotlight' on those most likely to be vulnerable in suffering from fuel poverty and cold-related ill-health.

What they did

The FRESH service has been developed from software developed through the Cardiff University Solcer Programme and is sponsored by Wales & West Utilities. It has already been successfully deployed in the Cardiff and Flintshire Fuel Poverty Reduction Hubs to inform the work of their Affordable Warmth Partnerships. The service can be rolled out to local authorities for a fee.

The new Health and Vulnerable Household profiling provided by the

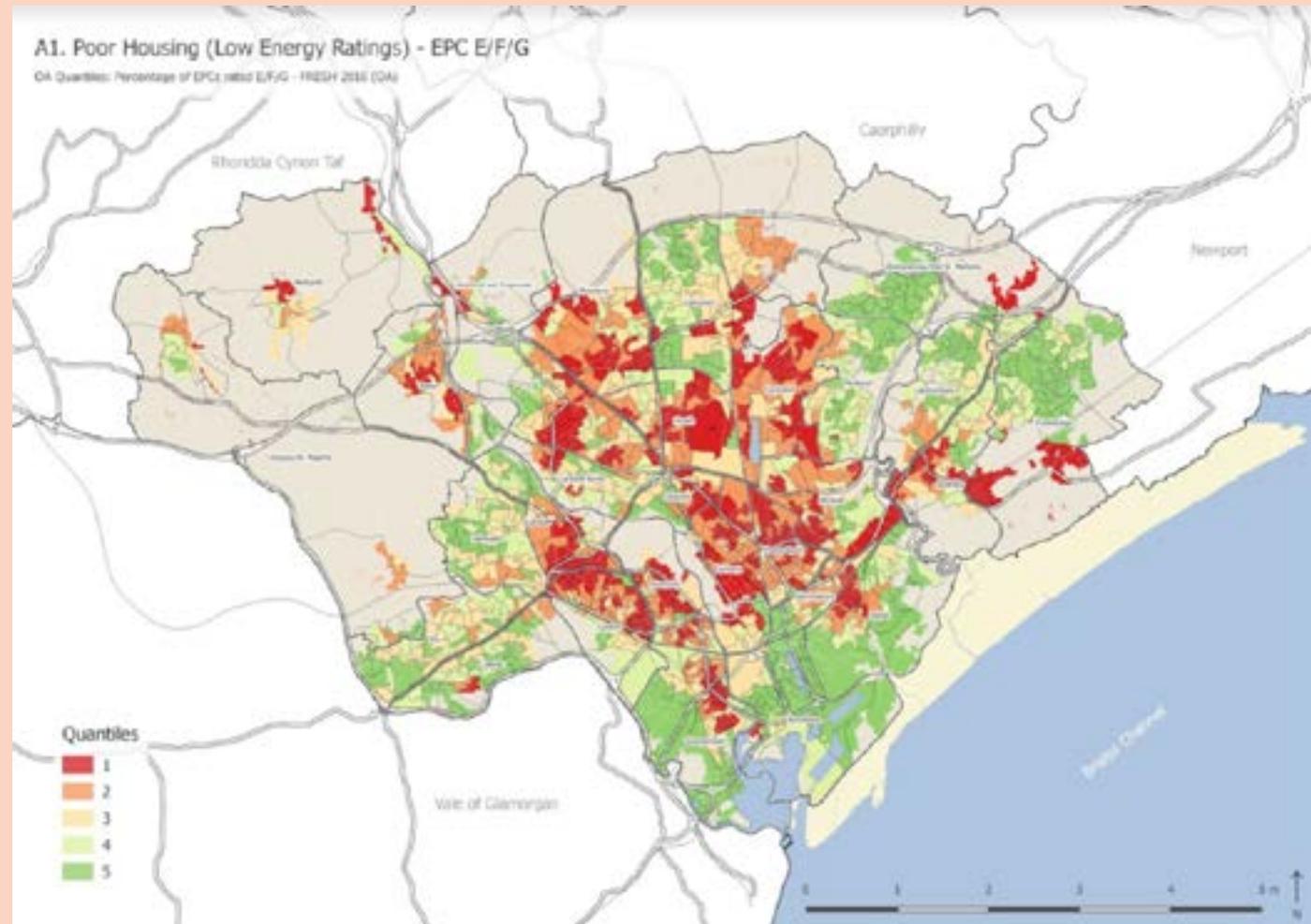
FRESH maps, overcomes the limitations of LSOA-scale data by providing a much more accurate neighbourhood focus, showing exactly where extra help is required. It can also overcome the 'aggregation limitations' of LSOA data which can mask streets with vulnerable households adjacent to more affluent households.

It can inform the Local Authority ECO Statements of Intent. e.g. Healthy Homes Healthy People North Wales, and help Cornwall Council for post 2018 ECO Flex regime.

As part of the FRESH maps, Warm Wales are able to profile the work in each local authority area against the criteria in the NICE Guidelines in reducing Excess Winter Deaths. This then forms the basis of a working toolkit for each local authority fuel poverty reduction hub, improving knowledge sharing and resource deployment across health, housing and social service agencies.

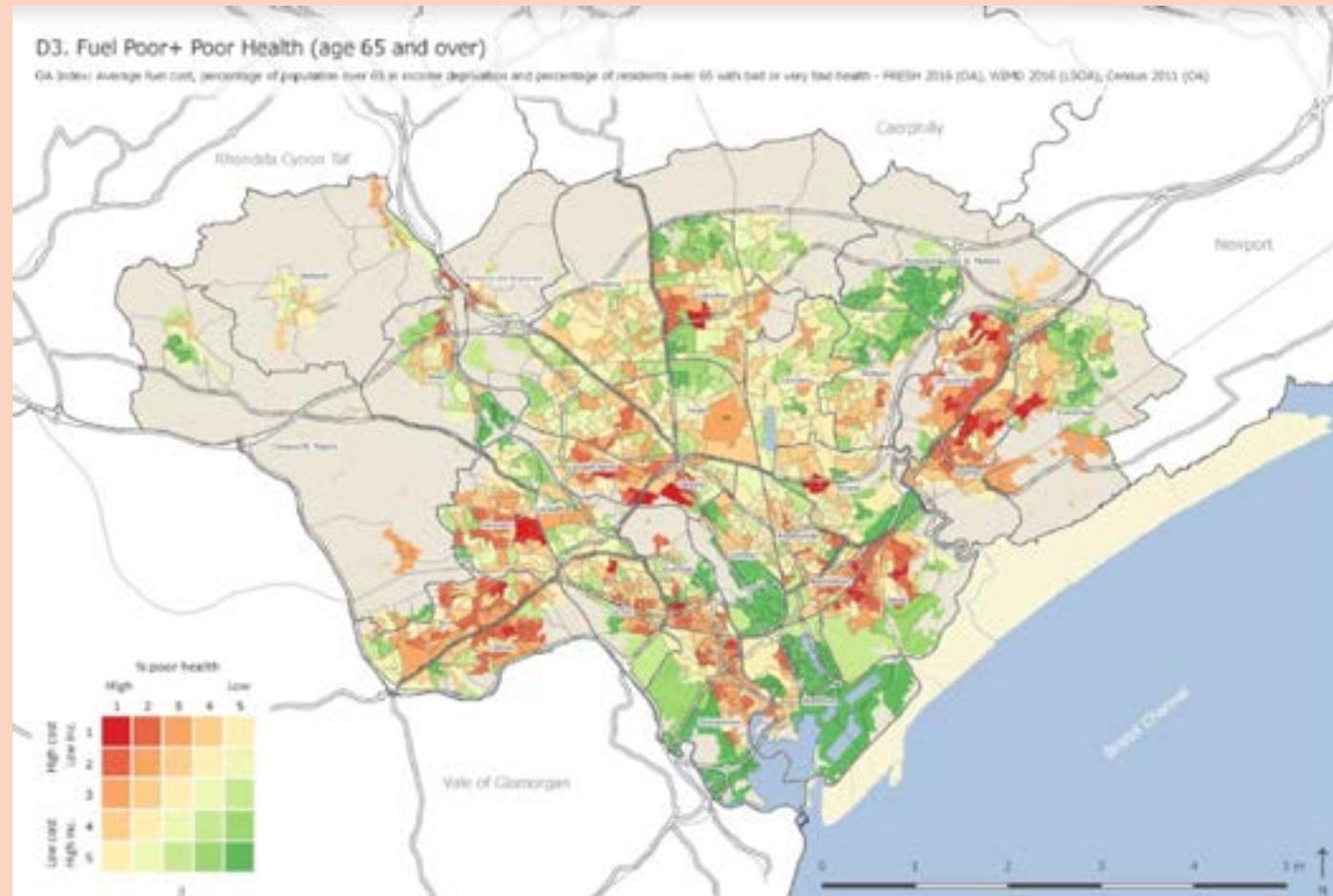
**i) Poor Housing
(Low Energy Ratings) -
EPC E/F/G**

This map highlights areas of Cardiff with concentrations of poor housing stock at an OA level and identifies E, F and G rated properties.



ii) Fuel Poor and Poor Health (age 65 and over)

This map highlights areas the concentrations of fuel poor households and poor health in over 65 years old. This is more spread across the city but the map highlights area of need where resources should be allocated.





Western Power Distribution - Social Indicator Mapping

Western Power Distribution (WPD) social mapping tool helps support and identifies their customers in vulnerable situations; including power cut vulnerability and fuel poverty.

They use Lower Social Output Area (c 600 household) data to identify areas with the highest concentrations of vulnerable customers. Better outcomes for customers are achieved through the ability to target outreach projects in areas of the highest vulnerability or deprivation following on from this analysis.

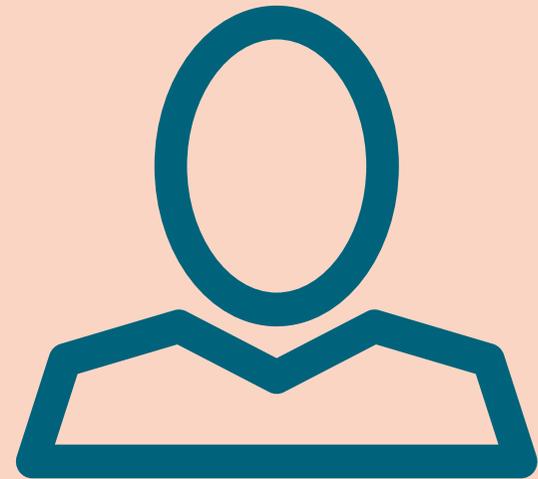
What they did

WPD have worked with the Centre for Sustainable Energy (CSE) to undertake analysis to gain a better understanding of the nature, scale and distribution of different types of household vulnerability. This includes those who may be eligible to be included on the Priority Service Register (PSR) and those likely to be finding it difficult to afford energy to heat their home.

WPD have published all the findings to help other organisations and agencies working in their region to support the most vulnerable in our society. The analysis takes into account changes to definitions of vulnerability and fuel poverty (by Ofgem, Government and stakeholders), and uses the most recent data-sets available.

The results

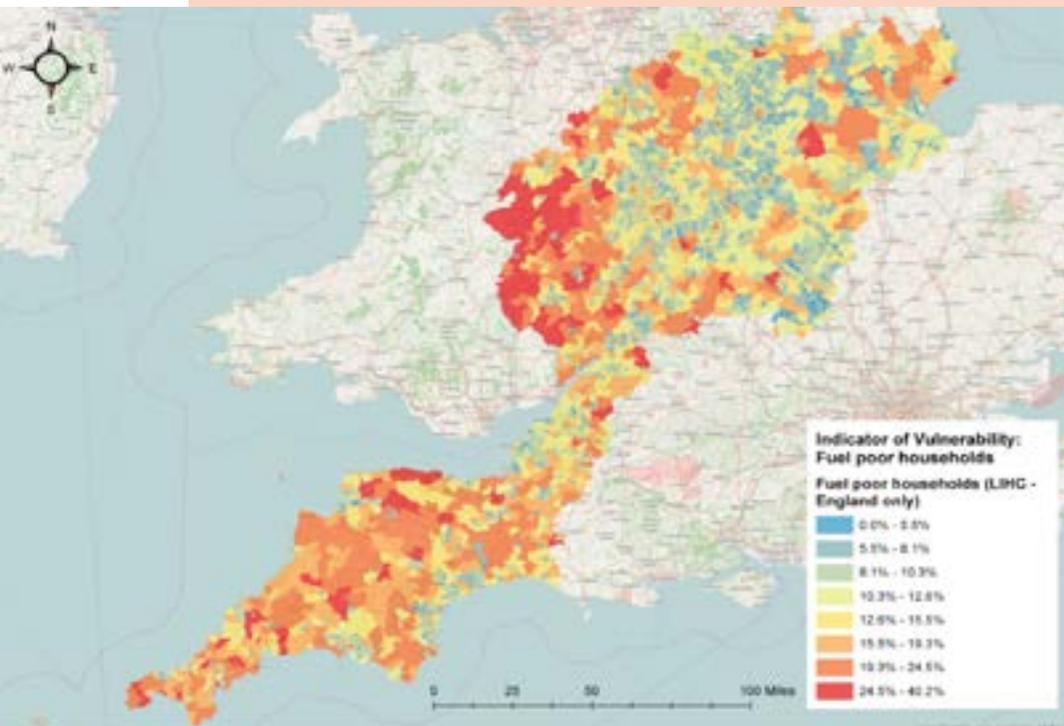
The analysis used to produce summary multiple indicator maps including PSR eligibility, fuel poverty, network vulnerability and low community resilience. To produce the combined index maps 24 datasets were analysed including long term unemployment, disability benefits and mental health benefits amongst others.



Examples of the maps produced are below:

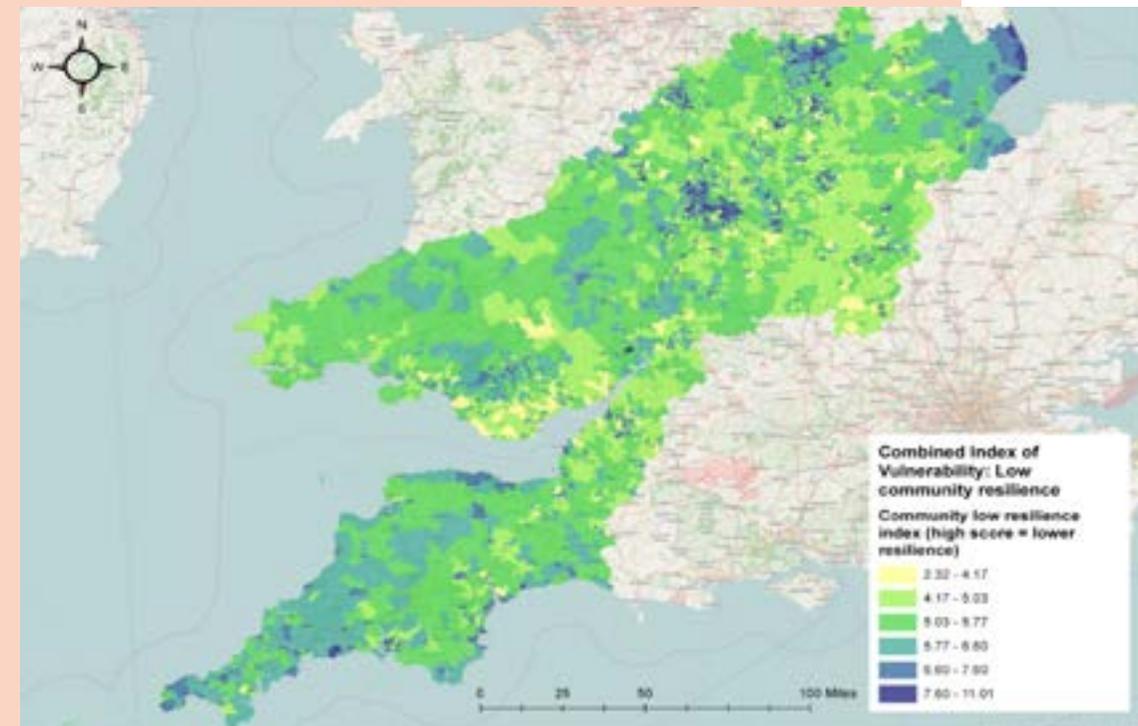
i) Fuel Poverty

This map highlights areas where there are likely to be high numbers of customers impacted by fuel poverty; for example customers living in cold homes and/or struggling to afford their energy bills.



ii) Network Vulnerability

This map highlights areas with high numbers of individual customers who are likely to be significantly vulnerable to power cuts.



Methodology

This toolkit was produced by Cornwall Council and Citizens Advice. Methods included a desk top review of UK based cold homes and energy efficiency schemes, and semi structured interviews with cold homes experts.

'Experts' were identified through the desktop review, recommendations from key stakeholders and through a call out to relevant organisations asking fuel poverty, cold homes and energy efficiency schemes to make contact and self-refer for an interview. Interviews lasted on average for one hour, and conversation was directed using a survey.

The toolkit was produced using case studies from these interviews to provide best practice examples for cold homes referrals and input from expert partners.

Produced in February 2018 by Cornwall Council and Citizens Advice.

Project Lead - Anthony Ball aball1@cornwall.gov.uk with Emma McMaster, Richard Sharpe and Shevaughan Tolputt (Cornwall Council Public Health), Ben Simpson (Cornwall Council Economic Growth), William Baker (Citizens Advice), and Jonathan Cosson, Warm Wales. Funded by Department of Business Energy and Industrial Strategy.

For more information contact:

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Resources

Number	Year	Organisation	Title	Link
1	2012	Department of Energy & Climate Change (Hills Review)	Final report of the Fuel Poverty Review	https://www.gov.uk/government/publications/final-report-of-the-fuel-poverty-review
2	2016	National Audit Office	Overview 2015-16: Local government	https://www.nao.org.uk/wp-content/uploads/2016/11/Overview-Local-government.pdf
3	2014	UK Health Forum	Fuel Poverty: How To Improve Health and Wellbeing through action on Affordable Warmth	http://www.fph.org.uk/uploads/UKHF-HP_fuel%20poverty_report.pdf
4	2017	Department of Business, Energy & Industrial Strategy	Annual Fuel Poverty Statistics Report, 2017 (2015 Data)	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/639118/Fuel_Poverty_Statistics_Report_2017_revised_August.pdf
5	2011	Marmot Review Team	The Health Impacts of Cold Homes and Fuel Poverty	http://www.instituteofhealthequity.org/resources-reports/the-health-impacts-of-cold-homes-and-fuel-poverty/the-health-impacts-of-cold-homes-and-fuel-poverty.pdf
6	2015	Department of Energy & Climate Change	Cutting the cost of keeping warm	https://www.gov.uk/government/publications/cutting-the-cost-of-keeping-warm
7	2015	Department of Energy & Climate Change	Cutting the cost of keeping warm	https://www.gov.uk/government/publications/cutting-the-cost-of-keeping-warm
8	2015	NICE	Excess winter deaths and illness and the health risks associated with cold homes	https://www.nice.org.uk/guidance/ng6

Footnote	Year	Organisation	Title	Link
9	2015	Association for Conservation of Energy (ACE)	Chilled to Death : The Human Cost of Cold Homes	http://www.ukace.org/wp-content/uploads/2015/03/ACE-and-EBR-fact-file-2015-03-Chilled-to-death.pdf
10	2007	Regional Public Health Group in the South East	Health And Winter Warmth – Reducing Health Inequalities	https://www.housinglin.org.uk/_assets/Resources/Housing/Housing_advice/Health_and_Winter_Warmth_-_Reducing_Health_Inequalities_January_2007.pdf
11–14	2013	Public Health England	Cold Weather Plan : Making the case: why long-term strategic planning for cold weather is essential to health and wellbeing	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/252854/Cold_Weather_Plan_2013_Making_the_Case_final_v2.pdf
15, 17	2017	Department of Business, Energy & Industrial Strategy	Sub-regional fuel poverty data 2017	https://www.gov.uk/government/statistics/sub-regional-fuel-poverty-data-2017
16	2012	Centre for Sustainable Energy (CSE)	EPC data for England and Wales	https://www.cse.org.uk/downloads/file/EPC%20Data%20in%20England%20and%20Wales.xlsx
18	2013	Public Health England	Cold Weather Plan : Making the case: why long-term strategic planning for cold weather is essential to health and wellbeing	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/252854/Cold_Weather_Plan_2013_Making_the_Case_final_v2.pdf
19	2017	Department for Business, Energy & Industrial Strategy	The Private Rented Property minimum standard – landlord guidance documents	https://www.gov.uk/government/publications/the-private-rented-property-minimum-standard-landlord-guidance-documents
20, 21	2015	Department of Energy & Climate Change	Cutting the cost of keeping warm	https://www.gov.uk/government/publications/cutting-the-cost-of-keeping-warm
22	2017	Department of Business, Energy & Industrial Strategy	Committee on Fuel Poverty - Annual Report 2017	https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/652701/CFP_report_formatted_-_final.pdf
23	2016	Department of Business, Energy & Industrial Strategy	Energy Act 2016 – Explanatory Notes	http://www.legislation.gov.uk/ukpga/2016/20/pdfs/ukpgaen_20160020_en.pdf

Footnote	Year	Organisation	Title	Link
24, 27	2015	NICE	Recommendation 4 Identify people at risk of ill health from living in a cold home	https://www.nice.org.uk/guidance/ng6/chapter/1-Recommendations#recommendation-4-identify-people-at-risk-of-ill-health-from-living-in-a-cold-home
25	2017	Public Health England	Blog: Public health matters	https://publichealthmatters.blog.gov.uk/2017/09/08/closing-the-health-gap-and-reducing-inequalities/
26	2015	Policy Exchange, Richard Howard	Warmer Homes: Improving fuel poverty and energy efficiency policy in the UK	https://policyexchange.org.uk/wp-content/uploads/2016/09/warmer-homes.pdf
	2014	Pratima Washan, Jon Stenning, Max Goodman	Building the Future: The economic and fiscal impacts of making homes energy efficient	http://www.energybillrevolution.org/wp-content/uploads/2014/10/Building-the-Future-The-Economic-and-Fiscal-impacts-of-making-homes-energy-efficient.pdf
28	2017	Cornwall Council	Winter Wellbeing	http://www.cornwall.gov.uk/winterwellbeing
29	2017	Sheffield Hallam University / Centre for Regional Economic and Social Research	Fuel Poverty Health Booster Fund Evaluation	http://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/fuel-poverty-health-booster-fund-eval.pdf
30	2017	Sheffield Hallam University	Fuel Poverty Health Booster Survey	http://www4.shu.ac.uk/research/cresr/sites/shu.ac.uk/files/fuel-poverty-health-booster-fund-infographic.pdf