fuel poverty+health

A guide for primary care organisations, and public health and primary care professionals

Produced by the **National Heart Forum**, the **Eaga Partnership Charitable Trust**, the **Faculty of Public Health Medicine**, **Help the Aged** and the **Met Office**

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By Dr Vivienne Press

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"Few people choose to live in cold damp homes that they cannot afford to heat well enough to protect their health. Yet for millions of British households this is the reality of poor quality housing, inefficient heating systems and inadequate building standards stretching back over generations."

From a *British Medical Journal* Editorial, by Dr Noel DL Olsen, 2001[1]

"We recommend policies which aim to improve the quality of housing. Specifically, we recommend policies to improve insulation and heating systems in new and existing buildings in order to reduce further the prevalence of fuel poverty."

From *Independent Inquiry into Inequalities in Health*,[2] Sir Donald Acheson, 1998

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Foreword

Cold, damp, thermally inefficient houses which people cannot afford to heat sufficiently to protect their health are a peculiarly British public health scandal and an affront to human rights. Millions of people in the UK live in houses which damage their health and quality of life, add to their financial problems, and contribute massively to excess winter mortality and pressures on the NHS.

It is not the job of the health service to provide decent housing for its patients, but it is health professionals who see the effects of bad housing – and particularly the effects of cold, damp housing – on the health of their patients. Health professionals have most contact with vulnerable people, and are often the most trusted confidants and advisers of isolated, old people. They also have the added burden on their workload caused by the effects of bad housing and cold, damp homes. Involving the NHS therefore provides the opportunity to target programmes to those most in need and most likely to benefit, but who are unlikely to apply on their own.

Unfortunately, collaboration between housing and health agencies is often poor, and for many the duty of confidentiality and the need to protect vulnerable people create real barriers. If such problems are to be overcome, easy local contact, simple referral mechanisms and good feedback of relevant information are essential. But before that, managers and professional bodies and, in the case of health service staff, ethical committees must have been approached, agreed the arrangements and disseminated them. The new primary care trusts have a key role in overcoming barriers, and often the director of public health can be the key contact to help establish such systems.

At national level, the policy framework is improving. After wide consultation, the government's UK Fuel Poverty Strategy has been introduced and is being implemented. It is being monitored and kept under constant review by the Fuel Poverty Advisory Group. The strategy includes grant programmes to improve thermal efficiency in vulnerable households. The Treasury, in its UK spending review 2003-2006, has identified poor housing as a major cause of inequality and ill health. In future, minimum standards in housing will be judged by a new housing health and safety rating system. This will enable defects in buildings to be assessed for their impact on the health and safety of occupants.

At a local level there are many examples of good practice where agencies are working together to identify and coordinate the services and grants available and to simplify arrangements for those who are entitled to them. Simple means of engaging NHS professionals' knowledge of who are the most vulnerable in the community are being explored. Often a single telephone call is sufficient to unlock a wide range of improvements.

Doctors and nurses do not need to become experts in housing and energy efficiency. They simply need to be able to point patients towards trustworthy agencies who can help them overcome their fuel problems.

What are now needed are local initiatives to develop effective and simple local solutions to fuel poverty. In the future, society should protect vulnerable people so that they are not forced to live in miserable, cold, damp, poorly ventilated houses that they cannot afford to heat adequately to protect their health.

Dr Noel DL Olsen MSc, FRCP, FFPHM

National Heart Forum Trustee, and National Heart Forum representative on the government's Fuel Poverty Advisory Group

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Executive summary

On average 40,000 more people die in winter (from December to March) in the UK than would be expected from death rates in the rest of the year.[1] Over half of these deaths are from cardiovascular disease and a third from respiratory disease. Influenza, in non-epidemic years, accounts for fewer than 4,000 deaths. This high level of excess winter mortality is not seen in countries with much colder winters than the UK, such as Finland and Russia.

Excess winter mortality is largely preventable if people keep warm both indoors and outside. Keeping warm outside needs a combination of warm clothing and being physically active. Keeping warm indoors needs a combination of adequate heating, insulation and ventilation to ensure comfortable temperatures and humidity levels.

Living in warm, dry, well ventilated homes rather than cold, damp homes can not only reduce mortality, but also reduce illness and promote faster recovery from illness, prevent unnecessary hospital admissions, support timely discharge and maximise independent living. Ensuring warmth at home is therefore an essential part of integrated care. Action to eliminate cold, damp homes could lessen the winter pressure on the NHS and help to achieve the national targets for coronary heart disease and to deliver the National Service Framework for older people.

However, for over 4 million households in the UK, keeping the home warm is financially difficult and often impossible. This is because they need to spend more than 10% of their household income on all fuel use including heating their home to an adequate level of warmth. This is known as fuel poverty.

Across the UK, there are now substantial government grants that will reduce fuel bills by improving insulation and heating. They are available for owner-occupiers and those in private rented homes who are receiving certain benefits. These grants are targeted at those most vulnerable to the cold – older people, families with children, disabled people, and those with long-term illness. (Social housing is covered by a government target to ensure that all social housing is brought up to a decent standard by 2010.) However, as is often the case in many areas of health, those people with the greatest need, particularly older people, are also the most difficult to reach.

The Chief Medical Officer for England has asked for all health professionals in contact with vulnerable households to help raise awareness of the grants and to encourage people to apply for help.[2] The benefits for patients and health professionals can be considerable. Data from the National Child Development Study show that the impact of multiple housing deprivations appears to be of the same magnitude as smoking, and greater than that of excess alcohol consumption.[3]

The aim of the toolkit

The aim of the *Fuel Poverty and Health Toolkit* is to improve the quality of life, to reduce morbidity and avoidable winter deaths, and to reduce winter strain on the NHS, by encouraging strategic planners and health professionals, in partnership with local authorities, to devise and implement well targeted local strategies to reduce fuel poverty.

Who the toolkit is for

The *Fuel Poverty and Health Toolkit* is directed at the following groups of people.

Strategic planners

To help directors of public health and board members of primary care organisations to include practical action on tackling fuel poverty within their winter plans and in their plans for improving health and reducing inequalities.

National Service Framework coordinators and leads (in England)

To contribute to the delivery of standards 1, 3, 4, 11 and 12 of the National Service Framework for coronary heart disease, and standards 3, 6, 7 and 8 of the National Service Framework for older people.

Primary care professionals

To inform primary care professionals about the health effects of the cold and of fuel poverty. The toolkit also contains some sample copies of *Fighting Fuel Poverty – Helping People Stay Warm*, a leaflet to help primary care professionals to identify those at risk of fuel poverty and to refer them easily and quickly to grant teams. A poster for use in primary care, and a sample client referral form are also included (see Appendix 2).

Local authorities

To help those working on fuel poverty strategies in local authorities and within local partnerships to understand the needs of primary care teams and the importance of the health impact of cold, damp homes.

Appendix 1 puts fuel poverty in the context of wider problems of poor housing and living conditions. It shows how action on fuel poverty can play a role in the national strategies for community regeneration and neighbourhood renewal, with their effects on other wider determinants of health. It also shows how improving the energy efficiency of homes can contribute to sustainable development and improved air quality.

Action by health professionals

Any action by health professionals to help vulnerable patients to have warm, dry homes should be:

- straightforward
- quick, and
- rewarding for both patients and professionals.

If this course is followed, then action on fuel poverty by those working in primary care will make a significant difference to the health and well-being of the poorest patients, and may also decrease workload in the future.

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Examples of successful programmes

Prescribing Warmer Homes

This was a six-week project run in the autumn as part of a wider programme called Beat the Cold. It has around 30 partners, including the NHS, local authorities, voluntary agencies and energy suppliers. Most practices in North Stoke Primary Care Trust took part. The aim was for practice staff to encourage patients attending the surgeries to fill in a short, one-page referral form while whey were waiting in reception. The forms were collected once a week from the practices. Practices received feedback on the results of all referrals.

Two thousand leaflets were distributed and 139 leaflets collected. 104 grants of a total value of £104,000 were made. People who did not qualify for grants received advice and information on energy efficiency and on other local services relating to help around the home or claiming disability payments.

Contact: Beat the Cold – **T:** 01782 683013

Coldbusters Health Referral Network

Coldbusters operates in and around Greater London, alleviating fuel poverty by providing energy efficient boilers and insulation. Clients are introduced to the scheme through the Coldbusters Health Referral Network that trains health and social workers to identify those most in need. To date, 150 people have been trained in sessions which last only half an hour. About 4,000 homes have received energy improvements, 1,000 of which came from referral. Grants of up to £5,000 are available. Funding comes from Warm Front, the Energy Saving Trust, participating local authorities, and London Electricity. This combination of funding allows speedy intervention – very vulnerable people have received home improvements within six weeks. The scheme is managed by Creative Environmental Networks (CEN).

Contact: Creative Environmental Networks – **T:** 020 8683 6600

The Home Health Programme

This pilot programme began in October 2002 in two deprived rural areas in West Cornwall. Fuel poverty is tackled in zones in which every household is eligible for assistance regardless of tenure or means testing. The programme involves GP surgeries to help with referral, including a GP supported letter to every household. Funding is from the Neighbourhood Renewal Fund, EAGA, British Gas' Here to Help scheme and social housing providers. Of 1,433 households within the zone, 880 accepted the offer of a survey and this identified 645 homes which need energy efficiency measures. The programme will be rolled out across West Cornwall in 2005 and to the whole of Cornwall by 2010.

Contact: E: tim@csep.co.uk

Healthy Homes referral scheme

This programme is a partnership between the local health bodies, Leicester City Council Housing and Social Services departments, and the voluntary sector. It is funded through the Health Action Zone (HAZ) Innovation Fund. Nurses and community workers are trained to identify people at risk of ill health due to poor living conditions. Those identified are offered a free home energy, security and hazard survey as well as advice on grants and other local initiatives available to them. A rapid response repairs and hazard removal service for vulnerable people, such as those being discharged from hospital, is also available.

Contact: Manager, HAZ Innovation Fund – **T:** 0446 221 1174

A Breath of Fresh Air

This programme is a HAZ innovation project, in partnership with the West of Cornwall Primary Care Trust, Kerrier and Penrith District Councils and Enact Energy (an energy consultancy). The aim is to make homes more 'asthma-friendly' for families with children suffering from asthma or other respiratory illness affected by airborne particles. Working closely with Sure Start projects, the families are being identified and referred by health professionals. Improvements include installing heating, providing better insulation and ventilation, and supplying filter vacuum cleaners.

Contact: T: 0870 442 7601 **W:** www.breathoffreshair.org.uk

Warm and Well

Warm and Well is a pilot programme run by six local authorities in the South of England. Three primary care trusts are contributing funds for measures directly related to health issues. The project aims to improve energy efficiency and reduce the levels of health problems and health risk associated with poorly heated, cold, damp homes (particularly heart and respiratory diseases), and high carbon monoxide levels. A very helpful pack for health professionals has been developed including a symptoms checklist and a one-page referral form. (Adapted versions of these are shown in Appendix 2.)

Contact: T: 0800 512 012

1 An introduction to fuel poverty

The UK Fuel Poverty Strategy

A 'household in fuel poverty' in the UK is now generally defined as one which needs to spend more than 10% of its income on all fuel use including heating its home to an adequate standard of warmth. This is double the percentage of income that the average household spends. **Five per cent of households spend more than 30% of their income on fuel.**[1]

The indoor temperature levels recommended in the UK Fuel Poverty Strategy[2] are shown in Table 1.

Table 1 **Indoor temperature levels recommended in the UK Fuel Poverty Strategy**

	Minimum (Maintains health)	Standard (Achieves comfort)
Living room	18°C	21°C
Other used rooms	16°C	18°C

Source: See reference 2.

Table 2 shows the effect on comfort and health of exposure to varying living room temperatures. People vary widely, however, and many people, particularly older people, do not feel cold even when living in cold rooms which are likely to have an adverse effect on their health.[3]

Table 2 **The effect on comfort and health of exposure to varying living room temperatures**

Indoor temperature	Effect
21°C	Comfortable temperature for all, including older people, in living rooms.
18°C	Minimum temperature with no health risk, although older and sedentary people may feel cold.
Under 16°C	Resistance to respiratory diseases may be diminished.
9–12°C	Exposure to temperatures between 9°C and 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.

Source: Adapted from Baker (in press),[4] based on source material from Collins (1986).[5]

The government estimates that there are currently over 4 million households in the UK who are suffering from fuel poverty. Of these, 3.3 million are in England, 0.5 million in Scotland, 200,000 in Wales and 170,000 in Northern Ireland.[2]

The *UK Fuel Poverty Strategy*[2] was published in 2001. It is jointly led by the Department for Environment, Food and Rural Affairs (DEFRA) and the Department of Trade and Industry (DTI) and focuses primarily on measures to improve energy efficiency and reduce the cost of fuel for poor

households. Measures to raise household income, which form part of a long-term solution, are being addressed in wider poverty and social exclusion policies. The strategy identifies older people, children, disabled people and those with a long-term illness as especially vulnerable to ill health from fuel poverty.

Fuel poverty definitions and targets

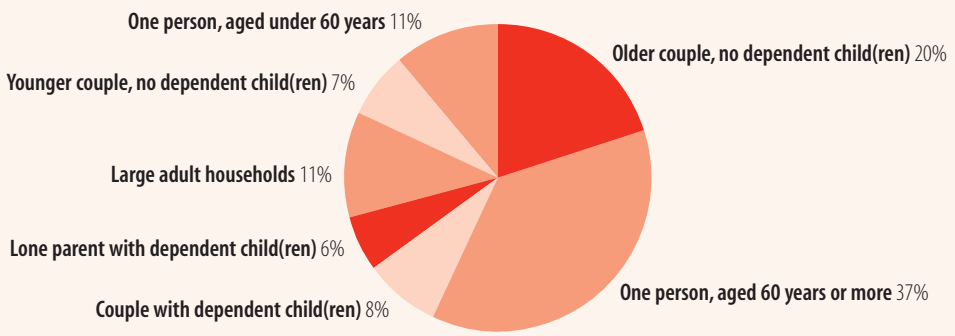
The goal of the UK Fuel Poverty Strategy is to end fuel poverty for vulnerable households by 2010. Fuel poverty for other households will also be tackled once progress is made on the priority vulnerable groups. There are slightly different definitions of fuel poverty and different interim targets for England, Wales, Scotland and Northern Ireland. These are shown in Appendix 3.

Who are those in fuel poverty?

In England, over half of those households in fuel poverty are of older people (aged over 60), particularly those living alone and especially if they live alone in a large house. Over two-thirds of households in fuel poverty are in the private sector (owning their own homes or renting privately).[6] (See Figures 1 and 2.)

Figure 1 **Household composition of the numbers in fuel poverty in England, 1998**

The definition of fuel poverty used here is those households who spend more than 10% of their income (including Housing Benefit and Income Support for Mortgage Interest) on all fuel use.



Source: See reference 6.

Figure 2 **The numbers in fuel poverty, by housing tenure, England, 1998**

The definition of fuel poverty used here is those households who spend more than 10% of their income (including Housing Benefit and Income Support for Mortgage Interest) on all fuel use.

Source: See reference 6.

The pattern in Scotland is different, with the largest numbers of households in fuel poverty occurring in local authority properties and in households of those under 60 years. In Northern Ireland, the private sector has the highest concentration of fuel poverty.[2]

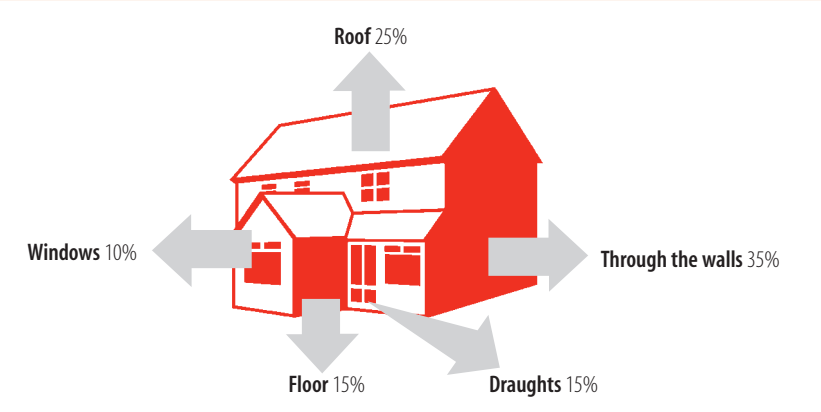
What causes fuel poverty?

Five factors determine how easy it is to keep a home warm:

- the energy efficiency of the house
- occupancy level related to the size of the house
- household income
- the cost of fuel
- the external environment.

Those in fuel poverty tend to live in homes that are the most expensive to heat due to poor energy efficiency and often also due to low occupancy level (for example, one person in a large house). Energy efficiency is dependent on both heating and insulation. Figure 3 shows the amount of heat that is lost from different parts of a house.[7]

Figure 3 **Where the heat goes**



Source: See reference 7.

Recent reductions in energy prices have helped households which are in fuel poverty. However, when outdoor temperatures are 2ºC or less, 18% of homes have living rooms below 16ºC.[8] Although household income is a major factor in fuel poverty, 14.5% of households in fuel poverty are not in the lowest 30% of household incomes.[6]

Fuel poverty in rural areas

There are a number of features of rural areas that increase the prevalence of fuel poverty:

- lack of access to the gas network
- the high proportion of older houses without cavity walls (which means that cavity wall insulation is not possible)
- the high proportion of detached houses, leading to higher heat loss
- a lack of good quality housing for those on low incomes.[9]

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2 The effects of cold homes on health

Cold-related deaths

In the UK we have become used to increased deaths in the winter, together with increased pressure on NHS beds. The cause of these excess winter deaths is not hypothermia, which is recorded as a factor in only around 500 people a year.[1] Nor is it influenza, which causes fewer than 4,000 deaths in a non-epidemic year. Over half are from cardiovascular disease and a third are from respiratory disease.[2] The underlying cause of 80% of excess winter deaths is the cold.[3]

Excess deaths from the cold do not only occur in the coldest months or at the coldest temperatures. Death rates increase steadily and linearly for each degree Celsius below 20ºC.[4] Throughout the year this accounts for an excess cold-related mortality of 60,000 to 80,000.[5]

Most of these deaths are unnecessary and preventable. Much colder countries than the UK, such as Finland and Russia, have much lower levels of excess winter mortality.[6] The coldest city in the world, Yakutsk, in Siberia, has none.[7] Compared with colder countries, at the same outdoor temperature:

- living rooms in the UK are colder
- bedrooms are less likely to be heated
- when we go outside, we are less likely to wear warm clothing such as anoraks, hats and gloves, and we are less active
- we are also more likely to shiver when outside, showing that we are cold.[8]

Facts about cold-related deaths

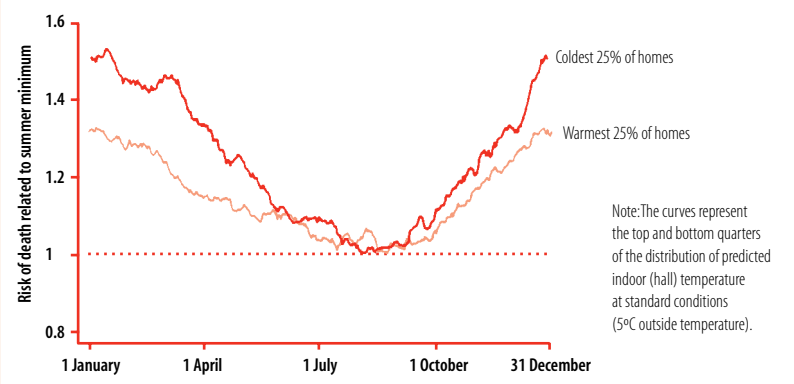
- There are over 60,000 cold-related deaths throughout the year in the UK.[5] Around 40,000 of these occur in the winter between December and March.[9]
- Over half the excess winter deaths are from cardiovascular disease and a third are from respiratory disease.[2]
- For every degree C below the winter average in the UK there are 8,000 extra deaths.[8]
- Around 20% of excess winter deaths are related to factors other than cold, such as air pollution, lack of exposure to sunlight, influenza incidence and diet.[10]
- The effect of cold temperatures is largely independent of air pollution.[11]
- We can predict when excess deaths will occur after a cold day: heart attacks after 2 days, strokes after 5 days, and respiratory disease after 12 days.[8]

- All social classes suffer from excess winter deaths. One study indicated that the highest rates are in social classes IV and V (unskilled manual workers and unemployed people).[12] However, subsequent studies have not confirmed this relationship.[4, 13, 14]

- There is a 20% difference in excess winter deaths between the coldest and warmest homes.[4] (See Figure 4.)

- Excess winter deaths are significantly more likely in:
  – private rented and owner-occupied homes
  – houses built before 1850, and
  – damp houses.[4]

Figure 4 **Seasonal fluctuation in mortality in cold and warm homes**



Source: See reference 4.

The impact of climate change

The climate scenarios produced by the UK Climate Change Impact Programme indicate that winters will become less cold but wetter, and that summers will become hotter. The Department of Health has calculated that the total number of cold-related deaths throughout the year in the UK will fall by around 20,000 by 2050 (from the current level of over 60,000) and so the cold will remain a major cause of death. This fall in cold-related deaths will be offset by 2,000 extra heat-related deaths.[5]

Mortality and low indoor and outdoor temperatures

Mortality and cold indoor temperatures appear to be linked independently of outdoor cold.[8] More research is needed to establish the proportion of excess winter deaths attributable to indoor as opposed to outdoor temperatures, but it appears to be between 20%[5] and 50%.[15] Respiratory disease seems to be related more to low indoor temperature, and cardiovascular disease to low outdoor temperature. This is further complicated by evidence that the effects of low indoor and outdoor temperatures are linked and that it is people's total experience of 'cold stress' that matters:

- For each 1°C fall in outdoor temperature, mortality rates rise by 2.8% for those living in the coldest 10% of homes, compared with a 0.9% rise in the warmest 10% of homes.[4]

- An older person living in a warm home is at risk if frequent excursions are made into the cold outside with inadequate clothing or if they are not physically active. If such exposure is prolonged, the benefits of a warm home will be completely offset.[16]
- Going out from a cold home into the cold produces more cardiovascular stress than leaving a warm home.[17]

Increased morbidity and cold homes

Cold homes are often also damp homes. Everyone who lives in these conditions is at risk, but there are four particularly vulnerable groups: older people, children, disabled people and those with long-term illnesses. Not only are such people more susceptible to illnesses caused by the cold, but they also tend to spend longer at home.

Table 3 **The effect of cold homes on health risk**

Health risk	Effect
Increased respiratory illness **Worsening asthma and COPD (chronic obstructive pulmonary disease)**	People with asthma are two to three times more likely than the general population to live in damp homes.[18] Temperatures below 16ºC are thought to lower resistance to respiratory infection. Damp leads to growth of moulds and fungi which can cause allergies and respiratory infections. Fifteen per cent of homes report mould.[19] The cold impairs lung function and is an important trigger of broncho-constriction in asthma and COPD.[20]
Increased blood pressure and risk of heart attacks and strokes	Blood pressure rises in older people with exposure to temperatures below 12ºC.[21] The risk of heart attacks and strokes increases with increasing blood pressure. In those aged 65-74 years, a 1ºC decrease in living room temperature is associated with a rise of 1.3mmHg systolic blood pressure and a rise of 0.6 mmHg diastolic blood pressure.[22]
Worsening arthritis	Symptoms of arthritis, particularly pain, become worse among people who live in cold, damp homes.[19]
Increased accidents at home	Having a cold home increases the risk of falls in the elderly, and the risk of accidents due to loss of strength and dexterity in the hands and due to open or free-standing heating. Finger strength and manual dexterity fall progressively in temperatures from 24ºC to 6ºC.[23]
Increased social isolation	People may become more socially isolated due to economising and reluctance to invite friends into a cold home. Increased social isolation is a risk factor for depression and coronary heart disease.
Impaired mental health	Damp housing is associated with increased mental health problems.[24]
Adverse effects on children's education	Home energy improvements have led to an 80% decrease in the rate of sickness absence from school for children with asthma and recurrent respiratory infections.[25] In many cold homes, only one room is heated, which causes difficulties for children doing homework. Loss of education can lead to loss of job opportunities for life, itself a risk of early mortality.[26]
Adverse effects on nutrition	Homes in fuel poverty have a choice between keeping warm and spending money on other essentials. Poor diet can be the result, with increased long-term health risks of cancer and coronary heart disease.

Physiological mechanisms

Cold and cardiovascular disease

There is a seasonal fluctuation in blood pressure. In older people blood pressure rises after two hours with exposure to indoor temperatures of 12ºC or below. Cold extremities and a slightly lowered core body temperature cause a rise in blood pressure which is seen in less than two hours.[21] The facial cooling reflex evokes a similar response, but an older person who is also cold is more likely to suffer raised blood pressure than an older person who is warm.[21]

Mild surface cooling also increases platelets, red blood cells and blood viscosity.[27] All these are factors in increasing the risk of thrombosis, which can lead to heart attacks or strokes.

Plasma fibrinogen levels and factor VII clotting activity also rise in the winter, respectively accounting for a 15% and a 9% rise in coronary heart disease risk in the winter.[28] Raised fibrinogen is probably due to increased respiratory diseases.

Cold and respiratory diseases

The direct effects of cold and the facial cooling reflex act on the respiratory tract in several ways: increased broncho-constriction; increased mucus production; decreased muco-ciliary clearance; decreased airway mucus blood flow and decreased forced expiratory volume.[20]

Cold, damp homes with relative humidity above 70% promote mould growth, with increased respiratory infections and the potential to cause type I and type III allergies.[20]

The cost to the NHS of fuel poverty

There is little published information on the cost to the NHS, or to the UK economy, associated with living in cold, damp homes. Estimates of costs to the economy of over a billion pounds have been made.[29] The only direct evidence comes from small-scale intervention studies. For example, the health and healthcare costs of people living in 107 homes on a poor estate in East London were compared with those of people living in homes in a similar improved estate.[30] The average annual health costs of a person living in the unimproved estate were £512, compared with £72 for a person in the improved estate. Another study looked at 203 adults on one poor estate and compared their health to a matched sample from the General Household Survey. The costs of health services were around 50% higher in the sample from the estate. If these results were extrapolated to the 10% of houses with damp, the cost to the NHS in 1994 prices would be around £600 million.

Health impact assessment

The Department for Environment, Food and Rural Affairs has commissioned the Energy Saving Trust to manage a health impact assessment of the Warm Front programmes which give grants for energy efficiency improvements for homes in England (see section 4 *The grants available*). It is looking at households with children under 16, or with people over 60, receiving heating measures. The key objectives are:

- to evaluate the impact of key Warm Front interventions on householders' quality of life, mental and physical health and risk of cold-related death
- to identify the potential of energy efficiency measures to improve householders' health and quality of life
- to assess the impact of key Warm Front interventions on the utilisation of health care services.

A final report will be published by December 2003.

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3 Alleviating fuel poverty

Achieving affordable warmth

Householders who are in fuel poverty tend to respond in one of three ways:

- They can run up only the fuel bills they can afford, leading to cold, and often damp, homes.
- They can spend more on fuel than they can afford, so living in adequate warmth, but in debt or cutting back on other essentials such as food.
- They can run up fuel debt and still live in a cold home.

The opposite of fuel poverty is affordable warmth. Those living in fuel poverty can often achieve affordable warmth by installing gas central heating and good insulation. These measures increase energy efficiency, allowing homes to be heated for less money.

Example

A pensioner on a low income spends £6.65 per week on fuel, which is all she can afford, but still has a cold home. (She should be spending £16.15 a week for adequate warmth.) Her home is heated by electricity and has poor insulation. If she had gas central heating installed, she would have to spend £10.35 on fuel to achieve adequate warmth. Installing insulation as well would bring her bill down to £5.65. She could then afford to be warm.[1]

The Affordable Warmth Index (AWI)

The Affordable Warmth Index provides a simple but accurate assessment of whether a householder can afford the energy required for their specific property. It is calculated on the basis of the householder's disposable income, exclusive of housing costs.

Energy efficiency

The average household can achieve savings of around £250 a year by a combination of energy efficiency measures including improved heating, insulation and energy efficient appliances.

Heating

An efficient mains gas system is currently the least costly to run. Using an electric storage heating system rather than a gas system means spending 40% more on total energy use to maintain the same level of comfort. Replacing a 15 year old gas boiler with a new gas boiler can save 20% on fuel bills, and 32% if a condensing boiler is installed. Table 4 shows the average savings that can be made by improving a gas central heating system.[2]

Table 4 **Savings that can be made by improving a gas central heating system**

Heating measure	Annual savings	Initial cost	Pay-back in years
Condensing boiler	£30-£40	£150 more than a non-condensing new boiler	4-5 years
Room thermostat	£10-£15	£110-£140	7-14 years
Thermostatic radiator valves	£7-£15	£75-£100	5-14 years

Source: See reference 2.

However, in the UK, 1.3 million of the 4 million households in fuel poverty do not have access to a gas supply. This is a particular issue for rural areas where oil and bottled gas are common sources of heating. (These are both more expensive than mains gas and their price varies widely.) In Northern Ireland, apart from Greater Belfast, oil is the main source of heating.[3]

Insulation

Good insulation can make almost as much difference as a good gas central heating system. Insulation includes insulating the hot water tank and loft, draught-proofing, and cavity wall insulation. Table 5 shows the savings that can be made from different insulation measures in the average semi-detached home using gas central heating.[4] However, all houses built before 1919, and most houses built before 1930, have solid walls and therefore cannot have cavity wall insulation. This is a particularly common problem in rural areas.

Table 5 **Savings that can be made through improved insulation**

Insulation measure	Annual saving	Initial cost	Pay-back in years
Hot water tank	£12	£10	0.8
Loft	£65	£200	3.0
Draught-proofing	£15	£130	8.6
Cavity wall	£65	£350	5.3

Source: See reference 4.

Energy efficient appliances

There is an energy efficiency labelling scheme for fridges, freezers, washing machines and tumble-dryers. The labels range from A (highly efficient) to G (inefficient). Table 6 shows the savings that can be made from upgrading an appliance more than 10 years old to an A-rated model.[2]

Table 6 **Savings that can be made by using energy efficient appliances**

A-rated model	Yearly savings compared with an appliance more than 10 years old
Fridge freezer	£45
Upright freezer or chest freezer	£35
Fridge	£25
Washing machine	£15

Source: See reference 2.

Measuring the energy efficiency of houses

The energy efficiency of houses can be measured by the Standard Assessment Procedure (SAP). The ratings range from 0 (poor) to 100 (good). The rating covers insulation and heating, but not house size, use of appliances, individual heating patterns, occupancy levels or position and

weather variations. The SAP gives a comparative measure of the annual heating cost of homes, measuring the cost of heating per unit of floor area. A rating above 60 represents a good standard of efficiency. The average SAP rating in England is 44.

Another measure of energy efficiency is the National Home Energy Rating (NHER) on a scale of 0 (poor) to 10 (good). This rating reflects the total fuel costs per square metre of floor area needed to achieve adequate overall temperature. Unlike the SAP rating, the NHER takes into account the impact of local climate. The NHER can be broadly converted to SAP scores by multiplying by 10.

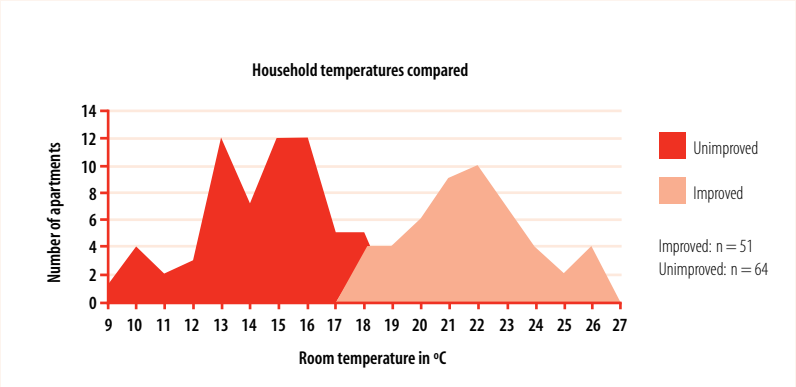
The effect of improving heating and insulation

The Sheffield study

A retrospective cross-sectional study in Sheffield[5] compared the effects on the home and health of improving the energy efficiency of a tower block with a similar neighbouring unimproved block. Electric under-floor heating was replaced by a gas system, insulation was improved by cladding the building, and a new ventilation system was installed. The results were as follows.

- The SAP rating improved from 28 to 68.
- Room temperatures increased on average by 7.1°C in the winter.
- Energy consumption was slightly reduced.
- Damp was virtually eliminated in the improved block, while 40% of the flats in the control block were damp.
- Health status, measured by the SF-36 survey instrument, showed significant improvements in physical role, emotional role and energy/vitality.

Figure 5 **Household temperatures in improved and unimproved blocks in the Sheffield study**

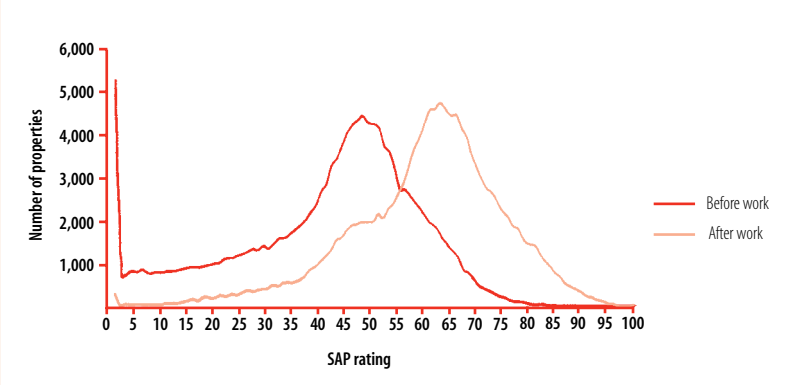


Source: See reference 5.

The effect of Warm Front Grants

A study which investigated the effect of Warm Front Grants (see page 29) found that the average improvement in SAP rating from these grants was 16,[3] compared with an increase in SAP rating of 40 in the Sheffield study. This suggests that, although houses which received Warm Front Grants became more energy efficient, for the majority of households the grants were not sufficient to lift them out of fuel poverty. Instead, there appears to be a tendency to make small improvements to houses that are already relatively energy efficient and probably not in fuel poverty in the first place. There is a clear role for public health professionals to ensure better targeting of grants to those with most need.

Figure 6 **The effects of Home Energy Efficiency Schemes and the Warm Front Team on energy efficiency rating**



Source: See reference 3.

Maintaining adequate ventilation and indoor air quality

As efforts are made to improve the energy efficiency of homes with gas central heating, better insulation and reduced draughts, the opportunity for accumulation of pollutants indoors due to poor ventilation is increasing. The main hazards are:

- house dust mites
- moulds
- formaldehyde
- nitrogen dioxide (NO_2)
- carbon monoxide (CO)
- tobacco smoke.

The effects of these hazards are discussed in Appendix 4. The main messages are:

- Measures to improve heating levels in the home should allow sufficient ventilation to ensure low relative humidity, in order to minimise house dust mite and mould growth.
- The trend towards colder, energy-saving washes results in house dust mites surviving the wash.
- There is an increased risk of high NO_2 levels if houses using gas cookers or individual gas heaters are not well ventilated, particularly if there is no extractor fan in the kitchen.
- There is potentially an increased risk of death and illness from carbon monoxide poisoning if ventilation is reduced while continuing to use old gas heating systems.
- There may be an increased risk from tobacco smoke if houses are not well ventilated and their occupants continue to smoke indoors.

Help available for those in fuel poverty

There are four types of help available that have an impact on fuel poverty:

- advice on achieving a warm home
- reducing fuel bills
- tackling low household incomes
- programmes and grants for home energy efficiency improvements.

Advice on achieving a warm home

Contact details of the organisations listed below are given in section 6 *Resources*.

- Fifty-two Energy Efficiency Advice Centres (EEACs) throughout the UK offer householders and organisations free, impartial advice about energy efficiency. The Centres can let householders know what energy efficiency grants and offers are available locally. They can also help with setting up and running local energy efficiency initiatives. To contact your local centre call 0800 512 012.
- Gas and electricity suppliers now have to encourage or enable domestic customers to take up energy efficiency measures under the Energy Efficiency Commitment.
- Home Improvement Agencies offer help and advice to older and disabled people and low-income householders, to enable them to carry out repairs, improvements and modifications to their homes. This includes advice on insulation and heating. There are over 200 agencies in England and there are similar bodies in Scotland and Wales.
- NEA (National Energy Action) is a charity which campaigns for affordable warmth and produces a range of publications.
- Older people can seek advice from Age Concern and Help the Aged.
- The Women's Royal Voluntary Service (WRVS) provides practical help to housebound and older people.
- Citizens Advice Bureaux provide advice on benefits and heating matters.
- Applicants to the Warm Front Team receive energy efficiency advice as part of the scheme.

Reducing fuel bills

- One way of reducing fuel bills is by switching to a cheaper energy supplier. The independent gas and consumer watchdog, energywatch, can supply information on the best prices in each area of the UK.
- Altering how people pay their energy bills can also reduce cost. Paying by direct debit is usually the cheapest method. Pre-payment meters are the most expensive. They can be imposed on people who have run into fuel debt, making it even harder for them to afford enough heating. This can lead to 'self-disconnection'.
- 1.3 million people in the UK in fuel poverty do not have access to a gas supply, which means they have to use more costly methods of home heating. Although many will be helped by the existing home improvement schemes, there are many homes which could not feasibly be connected to the gas network. There are pilot schemes to assess the contribution that renewable energy and other technologies can make.
- Ofgem's social action plan seeks to ensure that the economic benefits for liberalisation are distributed fairly among vulnerable customers. However, the maximum annual surcharge for electricity pre-payment customers, which had previously been fixed at £12, has recently been removed.

Tackling low household incomes

As well as general policies aimed at tackling poverty and social exclusion and ensuring that people are claiming their full benefits, there are two specific payments aimed at helping people keep warm in winter. These are Winter Fuel Payments and Cold Weather Payments.

- Winter Fuel Payments are now available to households with someone aged over 60 years, whether or not they are receiving a state retirement or other social security pension. The payment is now £200 per household (2002 rates).
- Cold Weather Payments are made automatically to people aged over 60, people who have a child under 5 years, those who are long-term sick or disabled, and those who receive Income Support or income-based Jobseeker's Allowance. A period of very cold weather is when the

average daily temperature at a specified weather station has been recorded as, or is forecast to be, 0ºC or below over seven consecutive days. The payment is £8.50 per week in addition to Winter Fuel Payments.

People can check if they are receiving all the benefits due to them by contacting any office of the Citizens Advice Bureaux. Some energy suppliers also provide a Benefits Health Check package, and people over 60 can ask the Help the Aged SeniorLine on 0808 800 6565.

Programmes and grants for home energy efficiency improvements

The government and the devolved administrations have a range of programmes to improve energy efficiency among both social and private sector housing. The extent of this help and the target groups vary between the devolved administrations. For details of the full range of programmes and grants for the private sector see section 4 *The grants available*. The main programmes are the Home Energy Efficiency Schemes.

The first Home Energy Efficiency Scheme (HEES) was developed in 1990. When the Home Energy Conservation Act was passed in 1995, the HEES grants became a significant part of the energy conservation measures used by local authorities to fulfil their obligations to plan to reduce home energy use.

In England, the HEES scheme was revised and re-named the New HEES in 2000, with grants targeted at tackling fuel poverty in those homes in greatest need. As well as aiming to increase energy efficiency, the new HEES grants became a main part of the UK Fuel Poverty Strategy goal to eliminate fuel poverty for vulnerable households by 2010.

However, there are two problems that detract from the ability of the new HEES grants to achieve their objectives:

- When the energy efficiency of households in fuel poverty is increased, families tend to spend almost the same on fuel by using more to achieve warmer homes. Therefore, there is no substantial decrease in fuel use.[5]
- The grants are not effectively targeting those who are in fuel poverty. They tend to be used to increase the energy efficiency of homes which are already fairly efficient. Most people qualifying for New HEES are not in fuel poverty, and 30% of households in fuel poverty are not eligible for these grants.[6]

Energy efficiency improvements in the social sector are driven by the government's housing target to ensure that all social housing is brought up to a decent standard by 2010. This includes the requirement that a home should provide a reasonable degree of thermal comfort.[7] Across Britain, funds from energy suppliers through the Energy Efficiency Commitment are targeted at social sector housing.

In England, social housing in many areas also benefits from Transco's Affordable Warmth programme which leases the installation of high efficiency gas central heating and energy efficiency measures. (Transco is an energy supplier.) In Scotland, the Central Heating Programme will ensure that all council housing has central heating by April 2004. In Wales, pilot schemes on energy efficiency measures in local authority housing are under way.

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4 The grants available

Advice on achieving a warm home
For information on where householders can get information about the energy efficiency grants and offers available locally, see *Advice on achieving a warm home* on page 26.

Home Energy Efficiency Schemes

These grants are certainly helping many people to live in warm, dry homes. However, 30% of households in fuel poverty do not qualify for them.

Grants in England

Private sector properties can benefit from grants from the Warm Front Team (previously called the New Home Energy Efficiency Scheme, HEES). These grants are targeted at those most vulnerable to cold-related ill health – older households, families with children, disabled people and those with long-term illnesses. The scheme provides grants for packages of insulation and heating improvements, including central heating. Households qualify if they receive a qualifying income or disability-related benefit. Warm Front Grants of up to £1,500 are available for qualifying householders with a child under 16, and Warm Front Plus grants of up to £2,500 are available for householders aged 60 or over.

The Warm Front Team grants are promoted and managed by two organisations appointed by government: the Eaga Partnership in most parts of England, and TXU Warm Front Team Ltd in the Midlands, Yorkshire and Humberside. Local managers survey the property, agree improvements and appoint companies to carry out the work.

Contact: T: Freephone 0800 316 6011. (Use this number to contact the local managers.)

Eligibility for Warm Front Team grants

Householders with a child under 16, or expecting a baby, who are receiving one or more of the following are eligible:

- Income Support
- Housing Benefit
- Council Tax Benefit
- income-based Jobseeker's Allowance.

Householders who are receiving one or more of the following benefits are eligible:

- Income Support (which must include a disability premium)
- Housing Benefit (which must include a disability premium)
- Council Tax Benefit (which must include a disability premium)

- Working Families' Tax Credit
- Disabled Person's Tax Credit
- Attendance Allowance
- Disability Living Allowance
- Industrial Injuries Disablement Benefit (which must include Constant Attendance Allowance)
- War Disablement Pension (which must include the mobility supplement or Constant Attendance Allowance)
- Pregnant women in receipt of MAT B1 certificate.

Eligibility for Warm Front Plus grants
Householders aged 60 or over and receiving one or more of the following benefits are eligible:
- Income Support
- Housing Benefit
- Council Tax Benefit
- income-based Jobseeker's Allowance.

Grants in Wales

The Welsh HEES (Home Energy Efficiency Scheme) is similar to the Warm Front Team in England. However, the level of grant is higher and covers a wider target group. HEES Plus grants are worth up to £2,700 and are available to lone parents and households with a sick or disabled person, as well as the over-60s. The lower grant level is £1,500.

The Welsh Assembly Government is working to integrate the HEES with other grant schemes, in particular the *Energy Efficiency Commitment*, so that resources are better targeted.
Contact: T: 0800 316 2815

Eligibility for Welsh HEES
Householders with a child under 16, or expecting a baby, who are receiving one or more of the following are eligible:
- Income Support
- Housing Benefit
- Council Tax Benefit
- income-based Jobseeker's Allowance
- Working Families' Tax Credit.

Eligibility for Welsh HEES Plus
Householders aged 60 or over or lone parent families with a child under the age of 16, and who are receiving one of the following benefits are eligible:
- Income Support
- Housing Benefit
- Council Tax Benefit
- income-based Jobseeker's Allowance.

People who are disabled or chronically sick and are in receipt of one of the following benefits are eligible:
- Income Support (which must include a disability premium)
- Housing Benefit (which must include a disability premium)
- Council Tax Benefit (which must include a disability premium)
- Working Families' Tax Credit

- Disabled Person's Tax Credit
- Attendance Allowance
- Disability Living Allowance
- Industrial Injuries Disablement Benefit (which must include Constant Attendance Allowance)
- War Disablement Pension (which must include the mobility supplement or Constant Attendance Allowance).

Also eligible are:
- householders with a child under 16 claiming Attendance Allowance or Disability Living Allowance
- pregnant women in receipt of MAT B1 certificate.

Grants in Scotland

The Central Heating Programme will ensure central heating:
- by April 2004 in all council houses
- by December 2004 for all housing association households
- by March 2006 for all private sector households.

The package is worth up to £2,500 per household for insulation and central heating. The Eaga Partnership has been appointed to deliver the programme in the private sector.

A separate initiative, called the Warm Deal, provides households dependent on benefit with a package of insulation measures up to £500.

Contact: Eaga Partnership – **T:** 0131 777 2501 **W:** www.eaga.co.uk

Eligibility for Warm Deal grants

If a person or their partner owns or rents their home and receives one of the following, they are eligible:
- Attendance Allowance
- Council Tax Benefit
- Family Credit
- Housing Benefit
- income-based Jobseeker's Allowance
- Income Support
- Industrial Injuries Disablement Benefit
- War Disablement Pension
- Working Families' Tax Credit
- Disabled Person's Tax Credit.

Grants in Northern Ireland

The new Warm Homes Scheme focuses on households in fuel poverty in private rented and owner-occupied properties. It provides insulation and heating improvements to eligible home-owners and private sector tenants. Grants of up to £2,700 are available for qualifying households with a person over 60 years, and grants of up to £700 to those under 60 years.

Contact: Eaga Partnership – **T:** 0288 775 3636 **W:** www.eaga.co.uk

Eligibility for the Warm Homes Scheme

Grants of up to £700 are available for private sector households on income and disability-based benefits. Grants of up to £2,700 are available for pensioners on certain income-related benefits.

Energy Efficiency Commitment programmes

This new programme started in April 2002 throughout Britain, and is funded by energy supply companies and administered by Ofgem (Office of Gas and Electricity Markets). Its purpose is to encourage and assist domestic consumers to take up energy efficiency measures, so that energy suppliers can meet the target for improvements in energy efficiency set by the government. Around £450 million is likely to be available over three years and at least half the energy savings must come from low-income households (those in receipt of a means-tested benefit or tax credits). In many cases the householder will receive 100% of the cost. Measures include:

- cavity wall insulation
- efficient heating devices
- energy efficient light bulbs
- energy efficient appliances.

Fifty-two Energy Efficiency Advice Centres (EEACs) throughout the UK offer householders and organisations free, impartial advice about energy efficiency. The Centres can let householders know what energy efficiency grants and offers are available locally. They can also help with setting up and running local energy efficiency initiatives.

Contact: Local Energy Efficiency Advice Centre – **T:** Freephone 0800 512 012. Or contact the energy supplier.

Local authority grants and programmes

Local council grants

Local councils may be able to offer financial help for owner-occupiers or private tenants or housing association tenants who have low incomes.

House renovation grants

These cover a wide range of works including insulation measures, energy surveys and consequent works. The amount of grant depends on household income and savings.

Disabled facilities grants

These pay for the cost of altering or adapting a home to enable a disabled person to live there independently. This may include installing or improving a central heating system to meet the needs of the disabled person. The amount of grant depends on household income and savings.

Home repair assistance

This is assistance with the cost of small-scale works to improve, repair or adapt a home. Those eligible are the elderly, infirm or disabled and those on income-related benefits.

Care and Repair Scheme (Scotland and Wales)

This scheme enables older and disabled owner-occupiers to get help for repairs and improvement work so that they can stay in their own homes.

5 Developing a local fuel poverty strategy

Why a strategy is needed

Thousands of lives could be saved every year in the UK if people no longer lived in cold, damp homes. Illness, mainly from cardiovascular and respiratory disease, could also be substantially reduced. Households who are in fuel poverty not only cannot afford to keep their home warm but also risk debt, social isolation, mental ill health and poor diet, and children's education can also suffer (see section 2 *The effects of cold homes on health*).

All social housing will provide a reasonable degree of warmth by 2010 if the government's housing target is met.[1] For those living in the private sector there are now generous grants available to improve the energy efficiency of the poorest homes, which can also lift people out of fuel poverty (see section 4 *The grants available*). However, the grants are not being targeted effectively at the most vulnerable groups who are the least likely to claim them. In addition, 30% of households in fuel poverty are not eligible for the main source of grants, the Home Energy Efficiency Schemes.[2]

There is an important role for public health professionals, working in partnership with local authorities and other local organisations, to develop localised and focused delivery of services, meeting both energy conservation and health objectives.

The UK Fuel Poverty Strategy (see page 13) states that:

"The profusion of the various schemes and the lack of familiarity of the fuel poor with these potential grants and services means that a strategic approach is needed."

and:

"With over half of fuel poor households living in their own homes, systematic identification of clients or client groups has always presented a problem."

Key elements of an effective strategy

An analysis of the key elements of seven successful affordable warmth strategies has been published by National Energy Action.[3] The common key elements were:

- Recognising that an effective strategy requires the involvement of the health services, social services, the voluntary sector and other community interest groups.
- The commitment of a lead officer who has the support of senior colleagues.
- A project steering group and strategy workshops.
- Acknowledging the constraints of size, as smaller organisations can achieve collaboration and consensus more quickly than larger organisations.
- Recognising related policy areas.
- A high profile launch involving a wide range of partners.

Deciding on the aims and objectives

Effective action on fuel poverty requires partnership working across a wide range of local organisations including health organisations and local authorities. The aims and objectives will depend on local needs and priorities and should reflect the needs of the various partner organisations to deliver on a range of related policies.

Health, environment and social policies related to fuel poverty

Actions that lead to reducing cold-related mortality and morbidity will also contribute to the delivery of several government health, environment and social policies. Through these environment and social policies, whose implementation is largely the responsibility of local authorities, action on fuel poverty can also make a positive contribution to the wider determinants of health including education and the physical environment. The policies for all four countries of the UK are listed below. For more details of these policies see Appendix 5.

The process of delivering such action in England and Wales is supported by the *NHS Plan* and the Health Act 1999 which require NHS bodies to work in partnership with local authorities to improve health and health care. Likewise, the Local Government Act 2000 gives local authorities the power to improve the economic, social or environmental well-being for their area and extends their ability to work in partnership with the NHS and other local organisations.

Government health policies

England

- The New NHS. Modern. Dependable
- Health Act 1999
- NHS Winter Planning
- Saving Lives: Our Healthier Nation
- National Service Framework for Coronary Heart Disease
  - reducing inequalities
  - reducing risk factors
  - managing heart failure
- The NHS Plan
- Tackling Health Inequalities
- Shifting the Balance of Power. Securing Delivery
- Shifting the Balance of Power. Next Steps
- National Service Framework for Older People
  - Single Assessment Process
  - intermediate care
  - falls
  - mental health
  - promotion of health and active life in older age
- Future National Service Frameworks
  - children
  - long-term medical conditions

Wales

- Promoting Health and Well-being
- Improving Health in Wales. A Plan for the NHS with its Partners
- Well-being in Wales
- Tackling Coronary Heart Disease in Wales: Implementing through Evidence
  – reducing risk factors
  – cardiac rehabilitation
  – heart failure
- When I'm 64 and More
- Creating a Unified and Fair System for Assessing and Managing Care
- Emergency Pressures Planning Guidance

Scotland

- Designed to Care
- Towards a Healthier Scotland
- Our National Health – A Plan for Action, A Plan for Change
- Coronary Heart Disease and Stroke: Strategy for Scotland

Northern Ireland

- Investing for Health

Government environmental and social policies

UK-wide (England, Wales, Scotland and Northern Ireland)

- Home Energy Conservation Act (HECA) 1995
- A Better Quality of Life. A Strategy for Sustainable Development for the UK
- The Air Quality Strategy for England, Scotland, Wales and Northern Ireland: Working Together for Clean Air
- UK Fuel Poverty Strategy
- Utilities Act 2000

Great Britain (England, Wales and Scotland)

- Energy Efficiency Commitment (ECC)

England and Wales

- Local Government Act 2000
- Best Value Framework
- Sure Start
- Warm Homes and Energy Conservation Act 2000

England

- Decent Home Public Service Agreement
- HECAction
- New Deal for Communities
- Our Towns and Cities. The Future. Delivering an Urban Renaissance. Urban white paper.
- Our Countryside. The Future. A Fair Deal for Rural England. Rural white paper.
- Quality and Choice: A Decent Home for All. The Way Forward for Housing. Housing green paper.
- A New Commitment to Neighbourhood Renewal: National Strategy Action Plan

Wales

- Communities First
- Better Homes for People in Wales: A National Housing Strategy for Wales
- Warm Homes and Energy Conservation Act 2000. A Fuel Poverty Commitment for Wales

Scotland

- Scotland Fuel Poverty Statement
- Social Justice Strategy
- Local Government in Scotland Bill

Working in partnerships

Effective strategies for reducing fuel poverty require the formation of true and meaningful community partnerships to target those most in need and to contribute to the decision-making process to ensure locally sensitive solutions. Within local authorities, strategies on fuel poverty or affordable warmth may be led by a member of the housing department or environmental health department. However, many other departments such as education and social services will have an interest, as will the social inclusion officer or equivalent. Other potential partners include utility companies, Energy Efficiency Advice Centres, voluntary organisations, residents' associations and community leaders.

The voluntary sector is engaged in partnerships which may enable the identification of vulnerable older people, for example in partnerships in intermediate care schemes, and also provides services aimed at preventing ill health in the winter (see section 6 *Resources*).

In England

Local Strategic Partnerships (LSPs) are single bodies that bring together at a local level the different parts of the public sector as well as the private, business, community and voluntary sectors so that different initiatives and services support each other and work together. One of their core tasks is to prepare and implement a Community Strategy for the area. They will coordinate and rationalise the activities of other local partnerships, in order to cut down the number of separate partnerships and consultation arrangements which local agencies and local people have to deal with.

Primary care trusts (PCTs) are now the lead NHS organisation in assessing need, planning and securing health services and improving health. Their responsibilities include participation in Local Strategic Partnerships. They are also responsible for the Health Improvement and Modernisation Plans (HIMPs) and for mainstreaming Health Action Zone programmes. The HIMPs will become part of wider local plans for the delivery of services.

Primary care trusts are accountable to their strategic health authority who will bring all their PCT plans together into a Local Delivery Plan. Councils will contribute to these as necessary. The Local Delivery Plans will deliver the Department of Health's priorities as set out in its Public Service Agreement. Three of the twelve objectives of the Public Service Agreement for 2003-06 are relevant to fuel poverty. These are: decrease in deaths from coronary heart disease (objective 6); improving quality of life and independence for older people (objective 8); and reducing inequalities in health outcomes (objective 11).

There are three main points of influence within PCTs: the Chief Executive, the PCT Board (led by a lay chair and with a majority of non-executive directors), and the Executive Committee (whose members are mainly local health professionals). The lead person within PCTs who can develop strategies on fuel poverty will be a member of the PCT's public health team.

In Wales

Local health groups are, until April 2003, the lead NHS organisation in primary care. They also lead in achieving effective local joint working across the statutory and non-statutory sector to develop strong community-based health and social care services. They make use of the provisions in the 1999 Health Act for flexibility in financing and accountability.

From April 2003, health authorities will be replaced by 22 local health boards (LHBs) which will also take over the roles of local health groups. The LHBs will be co-terminous with their associated unitary authority and they will be under a joint duty to produce local health, social care and well-being strategies in conjunction with other organisations and public consultation. Well-being in Wales will provide the direction and context for these strategies. Each LHB will have a number of local health alliances, which will include local authorities, voluntary sector organisations and health organisations.

A national Health and Well Being Partnership Council was established in August 2002. It will encourage the development of joint working across health and local government services.

In Scotland

Primary care trusts are responsible for all primary care as well as community hospitals and mental health services. Primary care trusts work with their parent health board to develop their Local Health Plans (LHPs). They are accountable to the health board for the delivery of primary care aspects of the LHP. They do not commission services directly (unlike primary care trusts in England). There are 15 health boards and, in some board areas, there are Joint Investment Funds to encourage the interface between primary and secondary care. Health boards and local authorities work together on community plans in association with other local partners. Primary care trusts work closely with those responsible for social care and housing.

There are two main points of influence within primary care trusts: the Trust Team (with a non-executive chairman) and the Chief Executive of the Trust. Each primary care trust supports a number of local health care cooperatives (LHCC). (An LHCC is a network of general practices.)

In Northern Ireland

There are four health and social services (HSS) boards throughout Northern Ireland, each with a number of local health and social service groups which are sub-committees of the boards. These HSS groups include members from primary care teams, local communities and the acute health sector.

In each board there is an Investing for Health Partnership. This includes key local statutory, community and voluntary interests as well as key social partners. Each partnership will develop a long-term Health Improvement Programme in line with the priorities of Investing for Health. There is also a Local Strategic Partnership in each district council area. This includes representatives from the statutory sector and local government (50%), and from the community, voluntary and business sectors (50%).

Identifying those at greatest risk

Those most at risk from fuel poverty are older people, young children and those with disabilities or a long-term medical condition. In England, most people in fuel poverty live in the private sector and are in the lowest 30% in terms of household income[4] (see section 1 *An introduction to fuel poverty*).

The only way of obtaining a truly accurate picture of fuel poverty at the local level would involve carrying out a primary survey of housing conditions and household income, which would prove very costly and time-consuming. However, health and housing data can be used together to identify those areas which are likely to have a high percentage of households in fuel poverty.

Individual cases can be picked up by health and housing professionals' personal knowledge of their patients and clients. (See the leaflet for health professionals, *Fighting Fuel Poverty – Helping People Stay Warm*. This leaflet is reproduced in Appendix 2 and sample copies are included in this toolkit.)

Data sources

Primary care teams will already have much knowledge on where households in fuel poverty are likely to be. If more detailed information is needed, the following may be helpful.

Council tax bands

People living in band A or B or paying no council tax use primary care services more often than people living in other bands. This appears to be an excellent way of quickly and easily identifying the poorest people who have the worst health and live in the poorest housing.[5]

HECAction surveys

These involve a self-completed questionnaire which is analysed by standard software. Local authorities use them to assess the annual improvements to housing within their geographical area for inclusion in the HECA annual report.

Hospital emergency admission data

These data are available down to groups of five postcodes, for those with respiratory or cardiovascular disease, and for those under and over 75 years of age.

Excess winter mortality data

The Met Office can supply these data down to ward area for the whole of the UK.

Household health and safety rating system

This is currently being piloted and will assess building defects and their effects on health and safety, including excessive cold, damp, house dust mites, falls and fires. This work is being organised by the Office of the Deputy Prime Minister.

Low-demand housing

The Department of the Environment, Transport and the Regions recently produced a baseline of the number of dwellings and the number and locations of wards affected by and at risk of low-demand and unpopular housing.[6]

Low-income households

Council Tax Benefits and Income Support are available to all households. Information on these is available on the Office for National Statistics' website (www.statistics.gov.uk) under 'Neighbourhood' statistics.

SAP ratings

Local authorities are building up databases of SAP ratings for all dwellings in their areas to fulfil the requirements of the Home Energy Conservation Act.

Small area indicator of fuel poverty

The Centre for Sustainable Energy and Bristol University are producing a small area indicator of fuel poverty in a project funded by SWEB, the main electricity supplier in South West England. The indicator comprises a weighted model of single indicators of problems related to fuel poverty, such as low income, under-occupation, and poor heating. The indicator shows a very close match to the national fuel poverty results contained within the 1996 *English House Condition Survey*.[7]

The role of health professionals

Identifying which health professionals to involve

The local fuel poverty strategy must first identify those people working in the health service who come into contact regularly with the target groups in their homes. They include intermediate care staff and health visitors, midwives, practice nurses, and domiciliary physiotherapists, chiropodists and occupational health professionals. GPs and their receptionists come into regular contact with the most vulnerable patients, but home visits by GPs are no longer common. However, it is important to get the support of GPs whether or not they refer patients themselves.

Raising awareness among health professionals

Various training resources are available for health professionals. An evaluation has shown that the most effective courses are short, convenient and repeated – for example, short presentations to GPs and nurses as part of regular practice or other educational meetings.[8] The objective is to alert them to:

- the health problems related to fuel poverty
- those people who are most vulnerable to the cold
- the signs of fuel poverty in the home – for example, only one room heated, or a cold or damp living room
- the improvements in energy efficiency that can be made
- the scope of the grants available for home improvements
- who to refer the patient to.

Training should be accompanied by information material for the health professionals, posters for surgeries and leaflets for patients. Some sample leaflets for professionals, and a poster, are included in this toolkit and are reproduced in Appendix 2.

Referral or recommendation?

There are two ways in which patients can be referred: self-referral or referral by a professional.

Self-referral

With self-referral, the professional tells the patient about the scheme, recommends action and the patient refers him/herself.

Referral by a professional

It is important to remember that a health professional cannot give personal details or information about the health of their patients to another person without the patient's informed consent. It is possible to design a simple referral form that does not require any information about the person's health. However, the patient still needs to give his or her consent to making the referral. (See the sample referral form in Appendix 2.) If a programme has a research element it may need the approval of the local ethics committee.

Key aspects of successful involvement of health professionals

Health professionals will be encouraged to refer their patients if the process is efficient and effective. One aspect of many current schemes that discourages referrals is the frequent long gap of up to a year from referral to implementation of the grants. Another problem occurs when someone who is obviously in need does not qualify for a grant. Successful schemes such as Warm and Well (see page 11) provide funding from additional sources to help fill the gaps and meet these needs so that everyone who is referred benefits quickly.

Health professionals should not be expected to perform any energy efficiency inspection of the home. It should be sufficient for them to recognise the symptoms of habitual cold in the home and identify whether their patients are at risk of health problems that are affected by the cold. (See the health professionals' leaflet *Fighting Fuel Poverty – Helping People Stay Warm*, included in this toolkit and in Appendix 2.) The referral form should therefore only need the patient's and health professional's contact details and address. (See the sample referral form in Appendix 2.)

Key aspects of successful involvement of health professionals

- ✓ Short referral form or self-referral by patients.
- ✓ Feedback to the health professional on the outcome of the referral.
- ✓ Quick response for both home assessments and home improvements, leading to satisfied patients and encouraged referrers.
- ✓ Good quality workmanship for home improvements.
- ✓ A positive outcome for referrals that do not qualify for a Warm Front Grant (or its equivalent), such as advice on energy savings, or help or a grant from another source.

Sources of funding

The main source of funds will be the Warm Front Grants in England and equivalent grants in the devolved administrations. However, many people identified as being in fuel poverty will not qualify for these grants. Other sources of funding may be available to help these people and to give urgent help to those waiting for the Warm Front Grants to be implemented (which can take up to a year). Such funding sources are:

- Energy Efficiency Commitment programmes
- local authority grants
- Neighbourhood Renewal Fund
- New Deal for Communities
- Single Regeneration Budget
- Winter Pressures funding
- Joint Service Development Fund
- National Lottery Community Fund.

Some health authorities have contributed funds to housing projects which aim to improve health.

Case study

The Cornwall and Isles of Scilly Health Authority awarded non-recurrent funding to the district councils in Cornwall to use on housing improvements to improve health.[8] The public health medicine department in Cornwall agreed with the councils that the money should be directed to reducing damp in the homes of children with asthma. Health visitors, asthma liaison nurses and paediatricians were asked to recruit likely children.

Ninety-eight homes received an intervention at an average cost of £3,061 per home. Energy efficiency, as measured by the NHER (National Home Energy Rating), improved from 4.4 to 6.5 and the number of damp bedrooms was reduced from over 60% to 21%. All respiratory symptoms were significantly reduced after the intervention and school-aged children lost significantly less time from school due to asthma (9.3 days per 100 before the intervention and 2.1 days afterwards; $p<0.01$).[9]

Monitoring and evaluation

Indicators of progress should reflect the overall aims and objectives of the programme and should be agreed by all local partners. They should also identify and motivate local action, reflect local priorities and be consistent with the overall aims of the *NHS Plan* of improving health and reducing inequalities. The process of developing, monitoring and publicising indicators of progress can raise awareness among the public and professionals and help people understand what they need to do.

Below are the four main types of indicators of progress, with examples relevant to fuel poverty strategies.

Input indicators
Partners involved
Numbers of staff trained

Process indicators
Number of referrals
Number and value of grants awarded
Quality and quantity of feedback to the referring health professionals

Intermediate outcome indicators
Increase in SAP rating
Increase in Affordable Warmth Index

Final outcome indicators
Change in physical and mental health and well-being
Change in health service usage
Decrease in home energy usage

References

1 Department of the Environment, Transport and the Regions and Department of Social Services. 2001. *Quality and Choice: A Decent Home for All. The Way Forward for Housing.* Green Paper. London: Department of the Environment, Transport and the Regions and Department of Social Services.

2 National Energy Action and Centre for Sustainable Energy. 2002. *Warm Zones Evaluation*. Accessed from: www.cse.org.uk

3 National Energy Action. 2001. *Strategies for Warmth: An NEA Programme of Work with Local Authorities.* Newcastle: National Energy Action.

4 Building Research Establishment. 2001. *Fuel Poverty in England in 1998: A Summary Report*. London: Department of Trade and Industry and Department for Environment, Food and Rural Affairs.

5 Beale N, Baker N, Straker-Cook D. 2000. Council tax valuation band as marker of deprivation of general practice workload. *Public Health*; 114: 260-64.

6 Department for Environment, Transport and the Regions. *Low Demand and Unpopular Housing. Housing Research Summary No 114.* London: Department of the Environment, Transport and the Regions. Accessed from: www.housing.odpm.gov.uk/hrs/hrs114.htm.

7 Office of the Deputy Prime Minister. 1998. *English House Condition Survey 1996.* Accessed from: www.housing.odpm.gov.uk/research/ehcs96.

8 Association for the Conservation of Energy and Projects in Partnership. 1999. *Health and Energy Efficiency: Working in Partnership for Healthy Homes.* London: Association for the Conservation of Energy.

9 Somerville M et al. 2000. Housing and health: does installing heating in their homes improve the health of children with asthma? *Public Health*; 114, 434-39.

6 Resources

Publications

Affordable Warmth and Health Action Zones: A Good Practice Guide

The purpose of this free guide is to encourage the adoption of affordable warmth strategies within the mainstream Health Improvement and Modernisation Programmes, to encourage partnerships among health authorities, local authorities, social services and other sectors, to promote training and to develop links with referral networks in order to maximise the uptake of energy efficiency grants and services by vulnerable households.

Published by National Energy Action (1991).

Contact: National Energy Action – **T:** 0191 261 5677 **W:** www.nea.org.uk (See the 'Publications' section of this website.)

Cold Homes and Health

This is a report to the Eaga Charitable Trust, published in 1997. (See also *Fuel Poverty, Energy Efficiency and Health*, on the next page.)

Contact: Dr Naomi Brown – **T:** 01768 210220

Community Strategies and Health Improvement: A Review of Policy and Practice

This free report provides important evidence and examples of the commitment of local authorities and NHS bodies to work together for the health and well-being of their communities. It highlights the steps that are being taken across the country to bring together plans and partnerships around common community priorities which impact on health and inequalities. It also sets out the links in a number of government guidance documents that support a more integrated approach to local strategic planning across sectors.

Published by the Health Development Agency.

Contact: Health Development Agency – **T:** 0870 121 4194.

Or download from: www.hda-online.org.uk or www.lga.gov.uk or www.idea.gov.uk.

Energy Efficiency Guide for Community Projects

This is a comprehensive and free guide for members of voluntary and community groups and people working in sectors such as anti-poverty, health, social exclusion, sustainable development, Local Agenda 21, housing, money and debt advice, training and the environment. The guide gives practical advice on setting up community energy efficiency projects, identifies potential partners and the range of possible projects, and gives advice on funding. It also contains a list of useful contacts and details of case studies from different sectors.

Published by the Energy Efficiency Partnership for Homes.

Contact: T: 08457 277 200. (Quote code 6302/1320.)

Fuel Poverty, Energy Efficiency and Health

This is a report to the Eaga Charitable Trust, published in 1997. (See also *Cold Homes and Health*, on page 42.)

Contact: Dr Naomi Brown – **T:** 01768 210220

Fuel Poverty Fact File

An analysis of some statistics from 1980 to the present, showing what has been achieved so far and what still needs to be done before fuel poverty can finally be eradicated.

Published by The National Right to Fuel Campaign.

Contact: The National Right to Fuel Campaign – **T:** 020 7288 1213

Fuel Poverty Scheme Design Database

This is a valuable resource of information about the UK experience of energy efficiency schemes for low-income households.

Contact: Energy Savings Trust – **W:** www.est.org.uk

Getting the Most from Energy: A Guide for Advice Workers

This handbook provides information on energy efficiency and payment advice services available from electricity and gas suppliers, and best practice in partnership initiatives.

Published by The Electricity Association.

Contact: T: 020 7963 5708 **E:** enquiries@electricity.org.uk

HAZnet

For information on the Health Action Zone activities see www.haznet.org.uk

Health and Energy Efficiency: Working in Partnership for Healthier Homes

A study of 10 examples of partnerships between health authorities and local authorities where the objective is to reduce ill health by improving residential energy efficiency. Case studies were written on the 10 schemes, and workshops were held with the key partners in three of them. The objective of the research was to examine the different approaches that have been taken, identify barriers to multi-agency working, and make suggestions for how these barriers might be overcome.

Published by the Association for the Conservation of Energy and Projects in Partnership.

Contact: T: 020 7359 8000

Health Trusts and the Home Energy Conservation Act 1995

This good practice briefing from National Energy Action aims to: make health trusts aware of the Act; outline its provisions; identify some potential roles for trusts and heath care professionals; and highlight the advantages of their involvement in the HECA process.

Published by National Energy Action.

Contact: National Energy Action – **T:** 0191 261 5677 **W:** www.nea.org.uk (See the 'Publications' section of this website.)

Health Visitor Practice Development Resource Pack

The need to strengthen the public health role of health visitors has been highlighted in recent government documents. This free resource pack is one element of the Health Visitor and School Nurse Development Programme that was set up to support practitioners to work in new ways.

Published by the Department of Health (2001).

Contact: NHS response line – **T:** 08701 555 455

Download from www.innovate.hda-online.org.uk

Introducing Health Impact Assessment: Informing the Decision-making Process

This free booklet provides a simple overview of the health impact assessment approach. It aims to highlight its potential value and encourage people to use it to inform and enhance equitable, health-aware decision-making at all levels.

Published by the Health Development Agency.

Contact: Download from www.hda-online.org.uk

Keep Warm Keep Well

The Keep Warm Keep Well campaign is organised every winter by the Department of Health in England. A key component is the freephone Winter Warmth advice line 0800 085 7000. The current edition of an information booklet contains advice on keeping warm, preparing for winter and seeking financial help for insulation and central heating. There is also a resource pack for health professionals and voluntary organisations to use in their own information campaigns.

Contact: NHS response line – **T:** 08701 555 455 **W:** www.doh.gov.uk/kwkw.index.htm

Local Strategic Partnerships: Government Guidance

Guidance for all those involved in Local Strategic Partnerships.

Published by the Department of the Environment, Transport and the Regions (2001).

Contact: T: 0870 122 6236

A Partnership Approach to Health and Housing: Measuring the Health Impact of Housing. A Resource Manual for Housing and Community Practitioners

By J Palmer and P Molyneux.

Published by the Health and Housing Network, London (2000).

Power to Promote or Improve Economic, Social or Environmental Well-being

Guidance to local authorities, explaining their new powers under Part 1 of the Local Government Act 2000.

Published by the Department of the Environment, Transport and the Regions (2001).

Contact: T: 0870 122 6236

Rural Fuel Poverty Position Report

This publication aims to raise awareness of the problem of rural fuel poverty among policy-makers, improve understanding by summarising existing knowledge, and help identify solutions.

Published by the Centre for Sustainable Energy and Eaga Charitable Trust (2002).

Contact: Centre for Sustainable Energy – **T:** 0117 929 9950

Eaga Partnership Charitable Trust – **T:** 01768 210220

Energy efficiency organisations

Association for the Conservation of Energy (ACE)

Westgate House
Prebend Street
London N1 8PT
T: 020 7359 8000
W: www.ukace.org

ACE was formed in 1981 by a number of major companies active within the energy conservation industry. Current membership is limited to 24 UK-based companies. Membership of the Friends of ACE is open to local authorities and housing associations who are actively engaged in energy conservation and related issues. ACE aims to encourage a positive national awareness of the need for and benefits of energy conservation, to help establish a sensible and consistent national policy and programme, and to increase investment in all appropriate energy-saving measures. They are currently carrying out an evaluation of health and energy efficiency projects for the Energy Saving Trust.

Centre for Sustainable Energy (CSE)

Create Centre
B-Bond Warehouse
Smeaton Road
Bristol BS1 6XN
T: 0117 929 9950
W: www.cse.org.uk

The aim of the Centre for Sustainable Energy, a charitable company established in 1979, is to promote energy efficiency and sustainable energy supply, alleviate fuel poverty and advance sustainable energy policy and practice at a local, regional and national level. On a practical level it provides tools for health professionals to identify the health effects of fuel poverty and advice on local strategies for fuel poverty.

The CSE manages Community Action for Energy (CAfE), a major new initiative to promote community-based energy projects funded by the Energy Efficiency Partnership for Homes (see page 46).

Eaga Partnership Ltd

Eaga House
Archbold Terrace
Jesmond
Newcastle upon Tyne NE2 1DB
T: 0191 247 3800
W: www.eaga.co.uk

The Eaga Partnership was established in 1990 to manage the Home Energy Efficiency Scheme (now renamed the Warm Front Team), on behalf of the government. The Partnership also manages the Warm Deal in Scotland, the Warm Homes Scheme in Northern Ireland, and the Home Energy Efficiency Scheme in Wales.

Eaga Partnership Charitable Trust (EAGA-PCT)

23 Macadam Gardens
Penrith
Cumbria CA11 9HS
T: 01768 210220
E: eagact@aol.com
W: www.eaga.co.uk.

The sole funder of EAGA-PCT is the Eaga Partnership Ltd. Its current objectives are the relief of fuel poverty and the preservation and protection of health by the promotion of the efficient use of energy. (These objectives are currently under review with the aim of widening its remit.) There is currently a research initiative on health and fuel poverty and there are no minimum or maximum limits on the size of the research grants. However, EAGA-PCT wishes to fund larger projects where possible and encourages the co-funding of projects where appropriate.

Energy Efficiency Advice Centres

T: Freephone 0800 512 012

There are 52 Energy Efficiency Advice Centres (EEACs) throughout the UK, run by the Energy Saving Trust. They offer free, impartial and independent advice to householders on energy-saving measures in homes, designed to help reduce fuel bills. Some Centres also offer assistance or a coordinating role to local authorities and other local stakeholders interested in promoting energy efficiency.

The Energy Efficiency Partnership for Homes (EEPH)

c/o Energy Saving Trust
21 Dartmouth Street
London SW1 9BP
W: www.est.org.uk/partnership

The Energy Efficiency Partnership for Homes is an independent group of over 250 organisations and individuals working together on different aspects of domestic energy efficiency. It has recently set up the Fuel Poverty Scheme Design database which is a valuable source of information about the UK experience of energy efficiency schemes for low-income households. It has also published the *Energy Efficiency Guide for Community Projects* (see page 42), and funds Community Action for Energy (see *Centre for Sustainable Energy* on page 45).

Energy Saving Trust (EST)

21 Dartmouth Street
London SW1 9BP
T: 020 7222 0101
W: www.est.org.uk

The Energy Saving Trust (EST) is a not-for-profit organisation with the mission of 'working through partnerships towards the sustainable and efficient use of energy'. Among its many programmes, EST facilitates the Energy Efficiency Partnership for Homes (see above); coordinates the network of Energy Efficiency Advice Centres (see above); runs a Practical Help support service for local authorities; offers grant funding for innovative local authority schemes (including over 20 schemes with a strong health dimension); and evaluates the effects of a wide range of initiatives, including an assessment of the health benefits of the government's Warm Front scheme. For more information on local authority related initiatives, see www.practicalhelp.org.uk/content/housing.htm

energywatch

Third floor
Artillery House
Artillery Row
London SW1P 1RT
T: 0845 906 0708
W: www.energywatch.org.uk

energywatch is the independent gas and consumer watchdog set up by the Utilities Act 2000. It is funded by the Department of Trade and Industry from licence fees that energy companies have to pay to the government. It provides free, impartial information and advice to consumers in England, Wales and Scotland about gas and electricity issue. This includes:

- helping consumers to choose an energy supplier
- investigating consumer complaints against suppliers about related matters
- running a priority service register campaign (where people who are elderly or in ill health can register with the company to ensure that any problems with their supply are addressed within 24 hours.)

Home Improvement Agencies (HIAs)

Foundations
Bleaklow House
Howard Town Mills
Glossop SK13 8HT
T: 01457 891909

Home Improvement Agencies are small, independent organisations providing personal advice and help to older people, people with disabilities and those on low incomes who need to carry out repairs, improvements and adaptations to their homes in order to remain independent.

National Energy Action (NEA)

St Andrews House
90-92 Pilgrim Street
Newcastle upon Tyne NE1 6SG
T: 0191 261 5677
W: www.nea.org.uk

National Energy Action develops and promotes energy efficiency services to tackle the heating and insulation problems of low-income households. Working in partnership with central and local government, with fuel utilities, housing providers, health services, and consumer organisations, NEA aims to eradicate fuel poverty and campaigns for greater investment in energy efficiency to help those who are poor or vulnerable. Current programmes include:

- Health Through Warmth. An NHS/NEA/npower partnership in the West Midlands providing support and training to health workers. T: 08450 702809
- Nottingham Healthy Housing Project. This includes a number of initiatives and research programmes into asthma/cold homes resulting in an extensive training programme for health workers.
- Leicester Warm and Healthy Homes Referral Project. This project targets in particular ethnic minority households. Advice, policy development and implementation are through the HAZ and primary care groups.
- A major three-year research project in North Tyneside, funded by the National Lottery, to assess

the impact of energy efficiency improvements on health.

- Development of training modules on fuel poverty for health workers' professional training courses.

Other organisations

Age Concern

1268 London Road
London SW16 4ER
T: Age Concern Information line 0800 00 99 66
W: www.ageconcern.org.uk

Produces policy papers on fuel poverty, and information sheets for the public on help with heating.

Benefits Agency

T: Helpline 01253 33222
W: www.dwp.uk/ba/ral/htm

For information about a wide range of benefits, and advice for people on the support available.

Citizens Advice Bureaux (CAB)

T: Local branches are listed in the phone book.

Citizens Advice Bureaux provide general advice to people on all sorts of issues including benefits and heating matters.

Help the Aged

207-221 Pentonville Road
London N1 9UZ
T: Help the Aged SeniorLine 0808 800 6565 (Weekdays 9am to 4pm.)

SeniorLine is a free telephone helpline with trained advice workers who can answer queries on a range of issues, including housing.

Help the Aged produces a free advice leaflet for older people, called *Can You Claim It? Keeping Out The Cold*. This can be ordered in bulk by contacting the Information Department at Help the Aged (E: adviceleaflets@helptheaged.org.uk F: 020 7239 1839). Help the Aged has also produced *Addressing Excess Winter Deaths: The Causes and Solution – A Report of a Policy Seminar, September 2000*, and *Hypothermia – A Fact Sheet for Health Professionals and Students*.

WRVS (Women's Royal Voluntary Service)

Milton Hill House
Milton Hill
Steventon
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The WRVS provides practical help to housebound people, older people, families in crisis and those affected by disaster.

Appendices

Appendix 1: UK housing and living conditions

Poor energy efficiency is only part of the wider problems of housing conditions in the UK, which are the worst in Northern Europe.[1] In addition, across the UK, poor quality housing tends to be more common in areas with a harsher climate.[2]

The reasons for the UK housing problems include:

- the high proportion of older housing
- low levels of replacement housing
- high levels of non-decent housing
- historically low standards of building regulations
- high levels of poor living conditions.[3]

The cost of installing efficient heating systems and insulation is only one part of the overall cost of urgent and needed repairs and modernisations for many households.

Older housing

- The average SAP rating for houses in England built before 1919 is 37, compared with 70 for those conforming to the 1995 building standards.[4]
- Forty-five per cent of houses in the UK are more than 50 years old, compared with 39% in France and 24% in the USA.[3]
- Only around 135,000 new homes are being built each year in England. (The total stock is 21 million.)[3]
- Sixteen per cent of pre-1919 homes in England are unfit to live in.[3]

Non-decent housing

Non-decent housing is housing that is unfit to live in, in substantial disrepair or requires essential modernisation, or does not supply a reasonable degree of thermal comfort. 14.2% of households in England live in non-decent housing, but this percentage is much higher for some groups in society. The government estimates that there is a £19 billion backlog of renovation and improvements.[3]

Table 7 **Percentage of the population living in non-decent housing, England, 1996**

Population group	Percentage of households in the group living in non-decent housing
Pakistani and Bangladeshi	35%
Black	23%
Young (aged 16-24)	29%
Unemployed	25%
Elderly (aged 75+)	20%
Lone parents	18%

Source: See reference 3.

There are also geographical inequalities in non-decent housing. The highest levels are in old London boroughs, older resort and university towns and large urban districts.

Unfit housing

One and a half million homes (7.5%) in England are currently classified as unfit to live in because they do not meet the current statutory minimum standards for housing. The most common reasons are inadequate facilities for the preparation and cooking of food, disrepair, thermal comfort, ventilation and dampness. The

average cost of making homes just fit is £5,230. A small proportion (8%) can be made fit for around £500, where the only problem is an acute health and safety hazard, typically ventilation and heating.[3]

Housing in disrepair
The average cost of urgent repairs in England is £1,280 per dwelling. The mean cost of repairs and replacements due over the next 10 years is nearly £3,500. However, there is much variation between types of dwelling, with pre-1919 houses of all types and tenancies the most costly to repair.[3]

Poor living conditions
Nearly 1.3 million households (6.6%) in England are housed in poor living conditions. These are areas where there are concentrations of poor housing and/or environmental problems. Many of the groups who are more likely to live in poor housing are also more likely to be housed in poor living conditions. The most likely are Bangladeshi and Pakistani households (30%) and unemployed households (19%).[3]

Measuring housing standards
Minimum standards in housing are currently enforced by local housing authorities in England and Wales under the housing fitness regimes set out in the Housing Act of 1985. This Act was modified in 1989 to include adequate heating for the first time. There is now a broad agreement that the fitness standard does not reflect a modern understanding of the health and safety hazards and risks within a dwelling. These include hazards from excessive cold, damp, house dust mites, slips, trips and falls, and fires.

The government is currently considering the results of a consultation exercise on a proposed new housing health and safety rating system. This not only looks at the defects in a dwelling, but also enables an assessment of their effects on the health and safety of the current and potential occupants.[5]

Research by the Building Research Establishment suggests that 1.9 million dwellings would have health and safety hazards exceeding a threshold that would lead to mandatory intervention under the new rating system mentioned above, compared with 1.5 million under the current housing fitness standard. Much of the difference would be due to poor heating and ventilation.[6]

Improving housing standards
The government's strategy for improving housing standards in England is set out in the housing statement *Quality and Choice: A Decent Home for All*.[7] A key measure is to bring all social housing up to a decent standard by 2010. Current spending plans provide funding to reduce by one-third the number of non-decent houses in the social sector by 2004. Most of the improvements will take place in the 132 most deprived 'renewal' areas. The housing statement also seeks to improve the management of social housing by local authorities and registered social landlords. Measures include the introduction of a Best Value in housing framework, backed up by a new Housing Inspectorate and tenant participation compacts.

Improving living conditions
The gap between poor neighbourhoods and the rest has widened over the 1980s and 90s. The poorest communities have become less mixed with increasing proportions of unemployed and vulnerable people. Such neighbourhoods tend to have multiple deprivations, including poor schools, higher prices in shops, poor health services and higher rates of crime. This has led to low-demand housing and abandoned housing.

There are three government action plans for England which, if effective, could improve living conditions:

- A New Commitment to Neighbourhood Renewal: National Strategy Action Plan[8]
- A Better Quality of Life. A Strategy for Sustainable Development for the UK[9]
- The Air Quality Strategy for England, Scotland, Wales and Northern Ireland.[10]

These strategies are reflected in the recent urban white paper, *Our Towns and Cities*,[11] and the rural white paper, *Our Countryside: The Future*[12] and the housing green paper, *Quality and Choice: A Decent Home for All*.[7]

Neighbourhood renewal
The strategy for neighbourhood renewal[8] outlines policies and seeks action across many of the factors of multiple deprivations. This includes a duty for local authorities to produce local housing strategies which include tackling and preventing low-demand housing where this is a problem. To improve planning, the Department of the Environment, Transport and the Regions has published a baseline assessment of the number of dwellings and the number and locations of wards affected by and at risk of low-demand and unpopular housing.

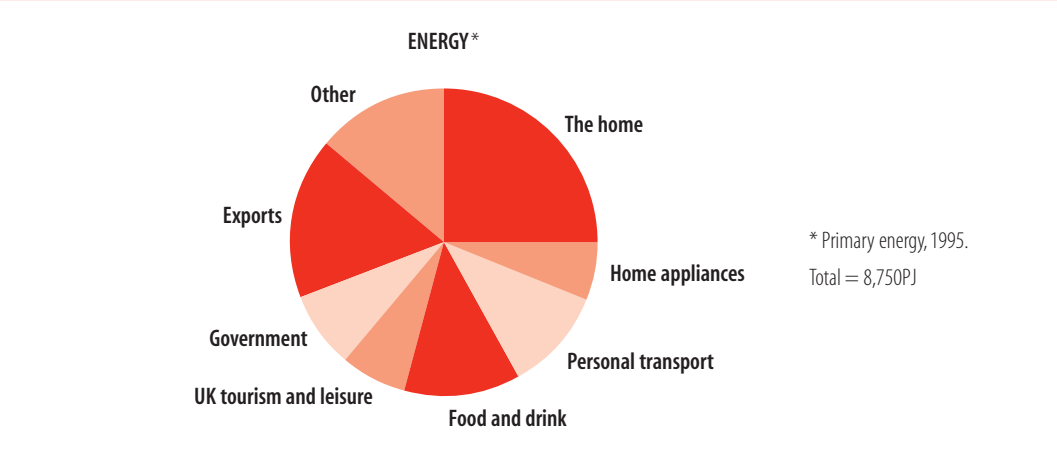
Sustainable development
The government's strategy for sustainable development[9] reflects the agreed plan of action, *Agenda 21*. It has four objectives:

- social progress which recognises the needs of everyone
- effective protection of the environment

- prudent use of natural resources, and
- maintenance of high and stable levels of economic growth and employment.

The home is a key area for sustainable development, with home electrical appliances consuming 25% of UK electricity. Homes are also responsible for 25% of the UK's CO_2 emissions.[10]

Figure 7 **Estimated energy consumption in key areas, United Kingdom, 1995**



Source: See reference 9.

The Home Energy Conservation Act (HECA) 1995 encourages local authorities to implement measures to reduce domestic energy use of all housing in their area by 30% over 10 years. They also have to report on reduced CO_2 emissions and energy use as well as the percentage improvement in energy efficiency. However, the Sheffield study (see page 24) has shown that, although improving energy efficiency of fuel poor homes leads to warmer and drier homes, it leads to only a 3% reduction in energy consumption. It may be that improving insulation and heating will only lead to substantial decreases in energy consumption in those households which can already afford to be warm.

The UK air quality strategy

The primary objective of this strategy[10] is to make sure that everyone can enjoy a level of ambient air quality in public places which poses no significant risk to health or quality of life. The strategy does not include indoor air quality even though most people spend around 90% of their time indoors. The main source of many pollutants found indoors is outside (for example from car exhaust fumes). However, there are also significant internal sources of pollution, such as gas cookers, paints, cleaning agents and building materials (see page 25).

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8 Social Exclusion Unit, Cabinet Office. 2001. *A New Commitment to Neighbourhood Renewal: National Strategy Action Plan*. London: Social Exclusion Office.

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Leaflet for health professionals

This page and the next can be reproduced as a leaflet for health professionals. Alternatively, to download a version of the colour leaflet enclosed in the *Fuel Poverty and Health Toolkit*, visit the National Heart Forum website on www.heartforum.org.uk

fuel poverty+health

Fighting fuel poverty …

Helping people stay warm

There are around 40,000 excess winter deaths in the UK every year and the underlying cause is exposure to cold.

Most of these deaths are unnecessary and can be prevented if people keep warm both indoors and outside. **Keeping warm outside** needs a combination of warm clothing and being physically active. **Keeping warm indoors** needs a combination of adequate heating, insulation and ventilation to ensure comfortable temperatures and humidity levels.

Thousands more people could survive the winter if they no longer lived in cold, damp homes. Illness, mainly from cardiovascular and respiratory diseases, could also be substantially reduced. Those living in the private sector can now be helped by generous grants that are available to improve heating and insulation of the poorest homes. However, those most in need are often the least likely to know about the grants and the least likely to claim them.

The average household can achieve savings of around £250 a year by a combination of energy efficiency measures including **improved heating**, **insulation**, and using **energy efficient appliances**.

How you can help

You can help fight fuel poverty simply by:

- **knowing** which diseases and conditions are related to cold homes
- **recognising** who is vulnerable
- **listening** to what your patients tell you, and
- **using** your own observations about their home.

(Use the *Fuel poverty checklist* on the next page.)

You can then refer your patients (or they can self-refer) to your local home energy efficiency scheme which will give them advice on how to reduce fuel bills and whether they are eligible for a grant. Grants are available for cavity wall insulation, loft insulation, draught-proofing, high efficiency gas boilers, and energy-saving heating controls.

"It's great to be able to offer practical assistance in this way. Previously I would visit homes and think, 'If only these were warmer, my clients would feel a lot better.' Now I can make a long-term difference to their living conditions." **Health visitor, Birmingham**

fuel poverty+health

Fuel poverty checklist

Use this *Fuel poverty checklist* to look for signs of fuel poverty among your patients.

Diseases and conditions related to cold homes

- ☐ Asthma
- ☐ Chronic bronchitis or emphysema
- ☐ Coronary heart disease
- ☐ Stroke and TIAs
- ☐ Worsening of long-term conditions in the winter
- ☐ Falls and accidents
- ☐ Slow recovery from illness

Increased vulnerability to the cold

- ☐ Older people
- ☐ Children
- ☐ Disabled people
- ☐ Those with a long-term medical condition

What your patients tell you

- ☐ Home is usually too cold.
- ☐ Home is draughty.
- ☐ Says that fuel bills are too high.
- ☐ Owes money for fuel.
- ☐ Uses prepayment meter to avoid running up debt.
- ☐ Stays in bed to keep warm.
- ☐ Sits with hot water bottle to keep warm.
- ☐ Wants to stay in hospital because it is more comfortable.

What you notice when you visit

- ☐ The home feels cold.
- ☐ The home feels draughty.
- ☐ The home smells of damp.
- ☐ No visible form of heating.
- ☐ The only heating is electric fires, fan heaters, oil-filled radiators or bottled gas.
- ☐ Only one room is heated.
- ☐ Home-made draught-proofing.
- ☐ Ventilators have been blocked up or covered.
- ☐ The person wears lots of clothes indoors.
- ☐ Curtains are closed in the day to keep in the heat.
- ☐ There are signs of damp such as:
  - pools on window sills
  - mouldy patches around windows, outer walls, ceilings or upper corners of upstairs rooms.

Action

- ✔ Fill in the one-page referral form. (Or the patient can self-refer.)
- ✔ Leave a thermometer card for your patient.
- ✔ Leave a customer leaflet from your local scheme for their information.
- ✔ It may be helpful for your patient to know that referral to the scheme does not affect their eligibility to state benefits.

What happens next?

- The local scheme will make contact with your patient to assess the level of assistance that can be given.
- The scheme manager will let you know the outcome of the referral.

Reproduced from the *Fuel Poverty and Health Toolkit*, produced by the **National Heart Forum**, the **Eaga Partnership Charitable Trust**, the **Faculty of Public Health Medicine**, **Help the Aged** and the **Met Office**. For details see **www.heartforum.org.uk**

The *Fuel Poverty Checklist* is based on a checklist produced by Warm and Well.

Is your home cold... damp... draughty?

Are you either a home-owner or a private tenant?

Are you receiving benefits because of ill health, disability or low income?

If the answer is 'Yes' to both questions, you might be able to get a grant of up to £2,700 to spend on insulation, central heating, and energy efficiency measures.

TO FIND OUT MORE

To find out if you can get a grant call:

- **0800 316 6011** (England)
- **0800 316 2815** (Wales)
- **0131 777 2501** (Scotland)
- **0288 775 3636** (Northern Ireland) or
- **0800 512 012** for your local Energy Efficiency Advice Centre

OR

Ask at Reception for a referral form

Reproduced from the *Fuel Poverty and Health Toolkit*, produced by the **National Heart Forum**, the **Eaga Partnership Charitable Trust**, the **Faculty of Public Health Medicine**, **Help the Aged** and the **Met Office**. For details see **www.heartforum.org.uk**

Poster

This page can be reproduced as a poster for use in primary care. You may first wish to add your own text to the *To find out more* box. Alternatively, to download a version of the poster enclosed in the *Fuel Poverty and Health Toolkit*, visit the National Heart Forum website on www.heartforum.org.uk

Sample client referral form

This page can be reproduced as a client referral form. You may first wish to add a title to the form and, at the bottom, an instruction about to whom the client should give or send the form. Alternatively, to download a version of this form, see the National Heart Forum website on www.heartforum.org.uk

Client details

Name _____

Address _____

_____

_____

_____

_____ Postcode _____

Phone number _____ Date of birth _____

Client's additional contact (if required)

Name _____ Phone number _____

Is the client (please tick) a) a home owner ☐ b) a private tenant ☐

GP practice (if known) _____

Please tick to indicate that the client agrees to the referral ☐

Client's signature _____

Your details (who referred by)

Name _____

Organisation _____

Job title _____

Contact address _____

_____

_____

_____ Postcode _____

Phone number _____

Your signature _____ Date of referral _____

Appendix 3: Fuel poverty definitions and targets

The goal for the UK Fuel Poverty Strategy is to end fuel poverty for vulnerable households by 2010. Fuel poverty for other households will also be tackled once progress is made on the priority vulnerable groups. There are slightly different definitions of fuel poverty and different interim targets for each country. These are as follows.

England

Definition

The definition on which the interim target is set is:

A household is in fuel poverty if, in order to maintain a satisfactory heating regime, it would be required to spend more than 10% of its income, including Housing Benefit or Income Support for Mortgage Interest (ISMI), on all household fuel use.

However, a second definition that excludes Housing Benefit and ISMI was used in the 1991 English House Condition Survey and will continue to be monitored.

Target

The interim target for England is: by 2004 to have assisted 800,000 vulnerable households through the Warm Front Team, and to reduce the number of non-decent social sector homes by one-third.

Wales

Definition

Wales uses the same two definitions as England (see above).

Target

The interim target for Wales is: by March 2004 to have assisted 38,000 households likely to be in fuel poverty through the Home Energy Efficiency Scheme for Wales.

Scotland

Definition

The definitions of fuel poverty in Scotland are those used in the Scottish House Condition Survey 1996. They are:

Households that spend 10% or more of income on all fuel use.

Households that spend 10% or more of income on heating.

Target

The interim target for Scotland is: by 2006 to ensure that all pensioner households and tenants in the social rented sector live in a centrally heated and well insulated home.

Northern Ireland

Definition

The definition of fuel poverty in Northern Ireland is:

A household that needs to spend in excess of 10% of their household income on fuel use to achieve a satisfactory heating regime (20°C in the living room and 18°C in other occupied rooms).

Target

The interim target for Northern Ireland is: by 2006 to have assisted at least 40,000 households in fuel poverty through the new Warm Homes Scheme and partnership programmes.

Appendix 4: Maintaining adequate ventilation and indoor air quality

As efforts are made to improve the energy efficiency of homes – with gas central heating and better insulation – the opportunity for accumulation of pollutants indoors due to poor ventilation is increasing. The main hazards are as follows.

House dust mites

House dust mites are present in almost every UK home and are a major cause of allergies. The main allergenic material is their faeces. The optimal condition for house dust mite growth is 25ºC and 80% relative humidity. They do not survive for longer than 11 days at a relative humidity of less than 50%. The doubling time for house dust mites speeds up dramatically with increasing temperature: at 75% humidity, doubling time is 274 days at 15ºC, 22 days at 20ºC, and 12 days at 25ºC.[1]

Measures to improve heating levels in the home should therefore also allow sufficient ventilation to ensure low relative humidity. Mechanical ventilation and heat recovery systems, and individual heat recovery fans are effective in reducing relative humidity while allowing around 80% of the heat to be recovered.

House dust mites are killed by water temperatures of over 55ºC. The trend towards colder, energy-saving washes results in mites surviving the wash, although colder washing does remove nearly all the allergens.

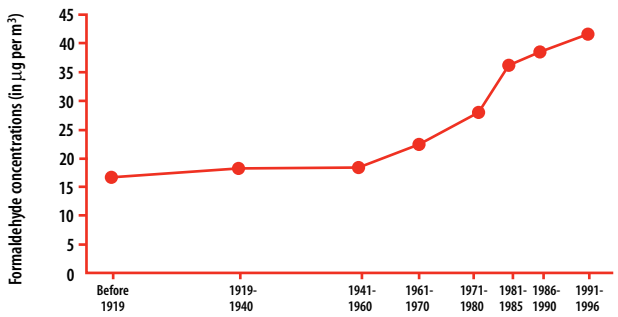
Moulds

Moulds are a major cause of allergies. They also break down human skin debris so that house dust mites can digest it. Moulds will grow on usual wall coverings at a relative humidity of 80% and they grow faster in warmer conditions. If the inside temperature is increased with decreased ventilation, then moisture produced inside the home will not be able to escape and mould can remain a problem.

Formaldehyde

Formaldehyde levels have increased exponentially in houses built after 1940 (see Figure 8). This may reflect the effect of increased sources of this indoor pollutant, especially in particle board floors, combined with improved air-tightness of new homes. Levels found in very new homes may breach WHO guidelines. Formaldehyde causes irritation of mucous membranes including asthma.[2]

Figure 8 **Formaldehyde concentration (µg per m³), by building date, England**



Source: See reference 2.

Total volatile organic compounds (TVOCs)
TVOCs are also highest in new homes. There are no WHO guidelines for TVOCs but the levels in new homes are sufficiently high to cause odour nuisance and effects on health such as headache, nausea and slight narcotic effects.[2]

Nitrogen dioxide
The mean level for nitrogen dioxide (NO_2) in homes with a natural gas cooker in England exceeded WHO guidelines, as did kitchen levels in homes with individual gas heaters.[2] Levels of NO_2 are highest in the autumn and winter in homes with gas ovens or hobs, or gas heaters, presumably because windows are less likely to be open than in the warmer seasons. Kitchen levels of NO_2 are reduced by extractor fans. The health effects of NO_2 include increased susceptibility to respiratory infection in children, and impaired lung function.[2]

There is an increased risk of high NO_2 levels if houses using gas cookers or individual gas heaters are not well ventilated, particularly if there is no extractor fan in the kitchen.

Carbon monoxide
Sixty people die each year in England and Wales from carbon monoxide (CO) poisoning and another 500 sub-lethal incidents per year are reported. Symptoms range from tiredness to decreased exercise capacity, impaired vigilance, headaches and dizziness. The effects are strongest in those with respiratory or cardiovascular disease, older people, young children and pregnant women. Indoors, carbon monoxide originates from faulty gas cookers and heating systems and smoking. As with NO_2, levels of carbon monoxide are higher in the autumn and winter.[2]

There is potentially an increased risk of death and illness from carbon monoxide poisoning if ventilation is reduced while continuing to use old gas heating systems.

Tobacco smoke
Chronic exposure to environmental tobacco smoke is associated with increased mortality due to lung cancer and cardiovascular disease, and with morbidity from asthma and other respiratory conditions, particularly in infants and young children.

There may be an increased risk from tobacco smoke if houses are not well ventilated and their occupants continue to smoke indoors.

References

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2 Coward SKD et al. 2001. *Indoor Air Quality in Homes in England.* Watford: Building Research Establishment; and London: Department for Environment, Food and Rural Affairs.

Appendix 5: Health, environment and social policies related to fuel poverty

Government health policies	How action on fuel poverty can help achieve policy objectives
ENGLAND	*Documents can be accessed from www.doh.gov.uk*
The New NHS. Modern. Dependable.[1] 1997. White paper.	A 10-year programme. Replaced the internal market with integrated care. Introduced primary care groups and trusts, Health Improvement Programmes (HImPs), National Service Frameworks and Health Action Zones (HAZs). Health authorities to work closely with social services, housing, education and employment. The HImP would be the core of integrated care and the method of delivering new national and local targets. Announced a new duty for NHS bodies to work in partnership with local authorities and other local organisations. This was confirmed by the Health Act 1999 and the Local Government Act 2000. Health Action Zones were introduced as an initiative to explore new ways of delivering local strategies on health improvement in areas of deprivation. There are 26 HAZs, of which 11 have action on housing and health. Funding for HAZs ends in March 2003. Joint Investment Plans (JIPs) are essential parts of producing an HImP. They require the NHS and local authorities to assess the service needs for specific groups, compare this with existing services, identify shortfalls and set out the investment required to develop and re-shape services. JIPs for older people were established by 1999.
Health Act 1999	The Health Act 1999 made provision for primary care trusts (PCTs). It created a new duty of co-operation within NHS bodies and between NHS bodies and local authorities in England and Wales. It provided for local strategies to be developed for improving health and health care. It also gave new operational flexibilities, including pooled budgets, to allow NHS bodies and local authorities to enter into joint arrangements for the purchase or provision of health and heath-related services.
NHS Winter Planning	Local Winter Planning Groups were established in 1999. They are supported by national criteria for local winter planning, which acknowledge the importance of intermediate care and the involvement of local authority housing departments.
Saving Lives: Our Healthier Nation.[2] 1999. White paper.	Introduced new national targets including those for coronary heart disease and stroke, accidents, mental health and cancer. Also introduced the concept of local health inequality targets. Called for new directions and new, more effective partnerships formed at local community level between the NHS, local authorities and other agencies. HImPs would reflect these new partnerships and be renamed Health Improvement and Modernisation Plans (HIMPs). The white paper also acknowledged

	that good quality housing is important for health and that cold homes are one of the factors responsible for excess winter mortality.
National Service Framework for Coronary Heart Disease.[3] 2000.	Sets national standards for the care and prevention of coronary heart disease. Standards 1, 3, 4, 11 and 12 are relevant to fuel poverty action. Standard 1: Reducing the prevalence of coronary heart disease risk factors in the population and reducing inequalities in risk of developing heart disease. Public agencies are encouraged to estimate and report publicly on the likely impact that their major decisions will have on the cardiac health of the local population, including inequalities (health impact assessments). Directors of public health are expected to produce an 'equity profile' for their population which will inform the HIMP. A community development approach is sought, with health visitors a vital resource. Standards 3 and 4: Identifying and treating all people with established cardiovascular disease (CVD) and those at high risk of developing CVD, including information on modifiable risk factors. Standard 11: Heart failure and palliative care for people with coronary heart disease. Includes treatments to relieve symptoms and reduce the risk of death. Standard 12: Cardiac rehabilitation. Including assessment of individuals' risks and needs and developing individualised plans to meet those needs.
The NHS Plan.[4] 2000. White paper.	This white paper has 10 priorities. Priority 9 is "The NHS will help keep people healthy and work to reduce inequalities." The white paper recognises that good health also depends on social, environmental and economic factors (such as housing) and requires the NHS to work with other public services to intervene not just after but also before ill health occurs. Introduced the concept of national targets for health inequalities. Introduces the concept of intermediate care, to bridge between hospital and home, by helping people recover and resume independent living more quickly. Rapid response and integrated health care teams will respectively ensure that people get active support to avoid unnecessary hospital admissions and to remain independent at home. Calls for new partnerships between health and local services to address the wider determinants of health. Requires the NHS to play a full part in the government's national strategy for neighbourhood renewal and to help develop Local Strategic Partnerships (LSPs). Suggests that Health Action Zones could be integrated into Local Strategic Partnerships.
Tackling Health Inequalities. Summary of the 2002 Cross-cutting Review.[5] 2002.	This joint publication from the Treasury and the Department of Health identifies the most significant interventions to deliver the government's inequalities targets. These interventions include improving housing quality to tackle cold and dampness and improvements in housing conditions for children in disadvantaged areas.
Shifting the Balance of Power. Securing Delivery.[6] 2001. **Shifting the Balance of Power. Next Steps.**[7] 2002.	In England, primary care trusts (PCTs) (300) have become the lead NHS organisation in assessing need, planning and securing all health services and improving health. They are to form new partnerships with local communities and lead the NHS contribution to joint work with local government and other partners (via LSPs). PCTs took over HIMP development from October 2002, and will benefit from aligning with local authorities' Community Strategies. They will also be responsible for mainstreaming Health Action Zone programmes. Strategic health authorities (28) will lead the strategic development of the local heath service and performance manage PCTs. From April 2003, nine regional directors of public health and their teams will be co-located in each of the government offices for the regions. Their work will include developing an integrated approach to tackling the wider determinants of health at regional level, and providing an overview of the health contribution to LSPs in their region.

National Service Framework for Older People.[8] 2001.	Introduces a Single Assessment Process which aims to ensure that older people receive appropriate, effective and timely responses to their health and social care needs. The Framework is a10-year programme of action with eight standards, four of which are directly relevant to tackling fuel poverty. Standard 3: Intermediate care, re-iterating the NHS Plan. "To provide integrated services to promote faster recovery from illness, prevent unnecessary acute hospital admissions, support timely discharge and maximise independent living." Standard 6: Falls. "The NHS, working in partnership with councils, takes action to prevent falls and reduce resultant fractures or other injuries in their population of older people. Older people who have fallen receive effective treatment and, with their carers, receive advice on prevention through a specialised falls service." Standard 7: Mental health. "To promote good mental health in older people and to treat and support those older people with dementia and depression." Standard 8: The promotion of health and active life in older age. "The health and well-being of older people is promoted through a coordinated programme of action led by the NHS with support for councils." Advocates local initiatives to reduce poverty and improve housing and local amenities, including improving the quality of homes in order to reduce fuel poverty, and prevent ill health and accidents.
Future National Service Frameworks	The National Service Framework for long-term conditions will concentrate on stroke and other neurological conditions. A National Service Framework for children is also being planned.
WALES	*Documents can be accessed from www.wales.nhs.uk*
Promoting Health and Well-being	The national health promotion strategy and action plan. This established local health alliances in each local authority area in Wales as a means of developing the partnership needed to focus action on the underlying influences on health in local communities, including housing.
Improving Health in Wales. A Plan for the NHS with its Partners. 2001.	This white paper set the direction for health services in Wales over the following ten years. It states that the NHS will work with local government and its other partners to create healthier communities. It increased the power of local health groups in commissioning and delivering services and widened their membership to include local authority members. Local health groups were also given the responsibility of achieving effective local joint working across the statutory and non-statutory sectors to deliver strong community-based health and social care services. This paper also introduced the concept of intermediate care for Wales to maximise older people's rehabilitation and recovery after illness and injury and to minimise dependence and long-term care.
Well-being in Wales. 2002	This was a consultation document, which highlighted the relevance of health to well-being for all policy areas and emphasises the importance of people's health to the economy. It set out proposals for action to help reduce inequalities in health and requires health, public health and care services to make a significant contribution to building strong communities and to the objectives of other policy areas through their day-to-day roles. Well-being in Wales also provides national direction and context for Local Health, Social Care and Well Being Strategies which, from April 2003, local health boards and local authorities will be under a joint duty to produce in conjunction with other organisations and through public consultation.

Tackling Coronary Heart Disease in Wales: Implementing through Evidence. 2001.	There are five evidence-based standards for tackling coronary heart disease in Wales. There are no specific links to poor housing nor any mention of excess winter mortality. However, actions to reduce cold-related disease will help deliver improved care within standard 2 (addressing those at high risk, and multifactorial risk assessments), and standard 4 (those with heart failure).
When I'm 64 and More	This report provides the basis for the development of a strategy for the health, social care and well-being of older people in Wales. Through the strategy it is hoped that the Welsh Assembly Government will establish a framework to meet the challenges of the next 10 years. The seven main themes are social inclusion, transport, lifelong learning, housing, health promotion, health and social care, and other non-devolved issues.
Creating a Unified and Fair System for Assessing and Managing Care	A unified assessment and care management system for older people and for adults with serious or complex needs.
Emergency Pressures Planning Guidance	This provides a framework for emergency pressure care delivery. It includes Keep Well This Winter, a campaign to improve the health and well-being of older people, particularly in the winter months.
SCOTLAND	*Documents can be accessed from www.scotland.gov.uk*
Designed to Care. 1997.	This white paper announced the end of the internal market in Scotland and introduced primary care trusts. Health boards were retained, but were given additional powers to ensure that local strategies could be implemented. To discharge their responsibilities, health boards need to liaise closely with local authorities.
Towards a Healthier Scotland. 1999.	This white paper followed the green paper *Working Together for a Healthier Scotland*. It sets out action at three levels. The first level involves improving life circumstances that impact on health, including housing and the environment. The second level includes unhealthy lifestyles. The third level sets out the health priorities which include heart disease, mental health, reduction of accidents and effective support for children in their early years and for their parents. Tackling health inequalities is the overarching aim of all three levels. The white paper also announced four health demonstration projects, including Starting Well (for young children), and The Heart of Scotland (for heart disease, with effects on stroke and cancer).
Our National Health – A Plan for Action, A Plan for Change	This plan sets out the priorities for investment and reform. Two of the three clinical priorities are relevant to fuel poverty: mental health and coronary heart disease. The plan gives a commitment to developing national service frameworks in these areas. Reducing inequalities is a core aim of the plan. There is also an objective of maximising independence and maintaining dignity and good health for older people.
Coronary Heart Disease and Stroke: Strategy for Scotland. 2002.	This document refers to the wider environmental issues tackled in *Towards a Healthier Scotland*, but does not specifically mention housing. However, action on fuel poverty would help to address the prevention of coronary heart disease which is a major part of the strategy.
NORTHERN IRELAND	*Documents can be accessed from www.dhsspsni.gov.uk*
Investing for Health	This is a framework for a new strategy to improve the health of people in Northern Ireland by a multidisciplinary approach, including social, economic, physical and cultural environments and health policy. Objective 4 is directly relevant to fuel poverty: "To offer everyone the opportunity to live and work in a healthy environment and to live in a decent affordable home". Target (i) of objective 4 is "to lift at least 20,000 households out of fuel poverty by December 2004".

Government environment and social policies	How action on fuel poverty can help achieve policy objectives
UK-WIDE POLICIES (England, Wales, Scotland and Northern Ireland)	
Home Energy Conservation Act (HECA) 1995	Encourages UK housing authorities to plan to reduce domestic energy use for all housing by 30% over a 10-year period. Annual reports are required identifying measures to significantly improve all residential accommodation in their areas and report on progress, including reduction in CO_2 emissions and energy use as well as the percentage improvement in energy efficiency. They do not report on fuel poverty progress.
A Better Quality of Life. A Strategy for Sustainable Development for the UK.[9] 1999.	Reflecting Agenda 21, this is a strategy to meet the needs of the present generation without compromising the ability of future generations to meet their own needs. One of the headline indicators is homes judged unfit to live in. One of the guiding principles is combating poverty and social exclusion, which includes access to decent, energy efficient housing.
The Air Quality Strategy for England, Scotland, Wales and Northern Ireland. Working Together for Clean Air.[10] 2000.	Relates mainly to outdoor air quality. Acknowledges that air pollution hits hardest the most vulnerable in society: the old and the young and those suffering from asthma, or heart or lung diseases. The strategy sets objectives for eight air pollutants, to protect health. Actions advocated include informed choice about energy use at home.
UK Fuel Poverty Strategy.[11] 2001.	Sets out the government's Fuel Poverty Strategy. It focuses on measures to improve energy efficiency and reduce the costs of fuel for households which are in fuel poverty. The goal is to end fuel poverty for vulnerable households by 2010. Fuel poverty in other households will also be tackled once progress is made on the priority vulnerable groups. There are also interim targets for each country. (See Appendix 3.)
Utilities Act 2000	This act brings together the regulation of the gas and electricity industries. It has a strong focus on protection of the interests of consumers, including the needs of people on low incomes, the disabled, people suffering from a long-term illness and those living in rural areas. The act also gave the government power to set energy efficiency targets from April 2002. At least 50% of the energy savings suppliers are required to make must be among households in receipt of benefits and tax credits.
GREAT BRITAIN STRATEGIES (England, Wales and Scotland)	
Energy Efficiency Commitment[12]	This is an obligation on licensed gas and electricity suppliers to encourage or assist domestic customers to take up energy efficiency measures. It came into operation in April 2002.
STRATEGIES FOR ENGLAND AND WALES	
Local Government Act 2000	Part 1 of this act creates a new discretionary power for principal local authorities in England and Wales to do anything they consider likely to promote or improve the economic, social or environmental well-being of their area. It reinforces the provisions in the Health Act 1999, reinforced in the *NHS Plan*, which provided health authorities and local authorities with a power to work with each other where there is a clear cross-over between the services being commissioned and provided by the local authority and the NHS. The well-being provision extends the ability of local authorities to work in partnership with other bodies, in addition to the NHS.

Best Value Framework	Best Value, introduced in the Local Government Act 1999, gives a duty of securing continuing improvements in the exercise of all functions undertaken by local authorities, whether statutory or not, having regard to a combination of economy, efficiency and effectiveness.
Sure Start	Enables children from the most deprived areas of England to start school healthy and ready to learn. Local Sure Start programmes are led by partnerships, including health bodies, social services, and voluntary sector and community groups. Targets include a 10% reduction in children admitted to hospital as an emergency during their first year of life with gastro-enteritis, a respiratory infection or a severe injury.
Warm Homes and Energy Conservation Act 2000	This act required the government to draw up and implement a strategy to eliminate fuel poverty in England and Wales within a period of no more than 15 years. It led to the UK Fuel Poverty Strategy.
ENGLAND	
Decent Home Public Service Agreement	Seeks to ensure that all social housing meets set standards of decency by 2010, by reducing the number of households living in social housing that does not meet these standards by a third between 2001 and 2004 with most of the improvement taking place in the most deprived local authority areas. One of the four criteria for decent housing is that a home provides a reasonable degree of thermal comfort.
HECAction	A programme designed to pump-prime strategies that will help local authorities to meet their HECA targets. Funded by the Department for Environment, Food and Rural Affairs (formerly the Department of the Environment, Transport and the Regions) and administered by the Energy Saving Trust.
New Deal for Communities	A programme to tackle multiple deprivation in the very poorest areas.
Our Towns and Cities. The Future. Delivering an Urban Renaissance.[13] 2000. Urban white paper.	Acknowledges that lack of good housing can act as a deterrent to businesses looking to locate in an urban area. Decent homes contribute to government objectives by: • giving people a stronger sense of security and identity • strengthening communities • protecting health • providing a better setting in which people can raise families and promote educational achievement.
Our Countryside. The Future. A Fair Deal for Rural England.[14] 2000. Rural white paper.	Reiterates the target for the housing green paper (see below) that all social housing is brought up to a decent standard within 10 years. Acknowledges that lack of access to mains gas and lack of cavity walls are barriers to eradicating fuel poverty in rural areas.
Quality and Choice: A Decent Home for All. The Way Forward for Housing.[15] 2001 Housing green paper.	The main themes are quality through better homes and better services, and choice through people being given greater involvement in and control over their housing. There is an emphasis on the need for local authorities to take a stronger strategic role in housing, meeting needs across all types of housing and integrating housing policy with wider social, economic and environmental policies. The government will provide guidance to enable local authorities to carry out proper needs assessments and stock condition surveys to underpin their housing strategies.
A New Commitment to Neighbourhood Renewal: National Strategy Action Plan.[16] 2001.	An action plan to renew poor neighbourhoods, based on joint working and enabling communities to be actively involved. Introduced Local Strategic Partnerships as equal partnerships including representatives from public, private, voluntary and community sector organisations. Expected to set local targets to reflect national targets and ideally incorporate them into local public service agreements and Best Value Performance Plans.

WALES	*Documents can be accessed from www.wales.gov.uk*
Communities First. 2002.	The second consultation paper on the Communities First programme which will address the multi-dimensional problems that affect the most deprived communities in Wales. Community partnerships will develop and manage the process of community renewal. Health and well-being will be a key theme of the Communities First programme.
Better Homes for People in Wales: A National Housing Strategy for Wales. 2001.	This housing strategy specifically addresses fuel poverty and draws the links between poor housing and ill health.
Warm Homes and Energy Conservation Act 2000. A Fuel Poverty Commitment for Wales. 2002.	This consultation document, published in October 2002, builds on the UK Fuel Poverty Strategy.
SCOTLAND	*Documents can be accessed from www.scotland.gov.uk*
The Scottish Fuel Poverty Statement. 2002.	Reflects and develops the approach set out in the UK Fuel Poverty Strategy.
Social Justice Strategy. 1999.	Providing dignity and security for older people is central to the social justice agenda. Two of the five key milestones are relevant to fuel poverty. These concern increasing home care opportunities, and reducing the rate of death from coronary heart disease and the prevalence of respiratory disease.
Local Government in Scotland Bill. 2002.	Parts 1 and 4 are relevant to fuel poverty. Part 1 concerns best value and part 4 concerns the power to advance well-being.

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Glossary

AWI	Affordable Warmth Index
CSE	Centre for Sustainable Energy
DEFRA	Department for Environment, Food and Rural Affairs
DTI	Department of Trade and Industry
EEAC	Energy Efficiency Advice Centres
EEC	Energy Efficiency Commitment
EEPH	Energy Efficiency Partnership for Homes
EST	Energy Saving Trust
EWD	Excess winter deaths
HECA	Home Energy Conservation Act
HEES	Home Energy Efficiency Schemes
HIA	Home Improvement Agencies
ISMI	Income Support for Mortgage Interest
LSP	Local Strategic Partnership
NEA	National Energy Action
NHER	National Home Energy Rating
NSF	National Service Framework
Ofgem	Office of Gas and Electricity Markets
SAP	Standard Assessment Procedure
TVOC	Total volatile organic compounds

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The aim of the *Fuel Poverty and Health Toolkit* is to improve the quality of life, to reduce morbidity and avoidable winter deaths, and to reduce winter strain on the NHS, by encouraging strategic planners and health professionals, in partnership with local authorities, to devise and implement well targeted local strategies to reduce fuel poverty.

It is aimed at strategic planners, National Service Framework coordinators and leads, primary care professionals and those working on fuel poverty strategies in local partnerships.

The *Fuel Poverty and Health Toolkit* contains:

- **Fuel Poverty and Health: A Guide for Primary Care Organisations, and Public Health and Primary Care Professionals** (this book)
- **Fighting Fuel Poverty … Helping People Stay Warm**, a leaflet for health professionals (10 copies) and
- a **poster** for use in primary care.
- The book also contains an easy-to-use **client referral form.**

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