

**NICE** National Institute for  
Health and Care Excellence

## Preventing excess winter deaths and illness; the health risks associated with cold homes

Centre for sustainable energy seminar 2015, Bristol  
David Sloan, Co-chair of Public Health Advisory Committee

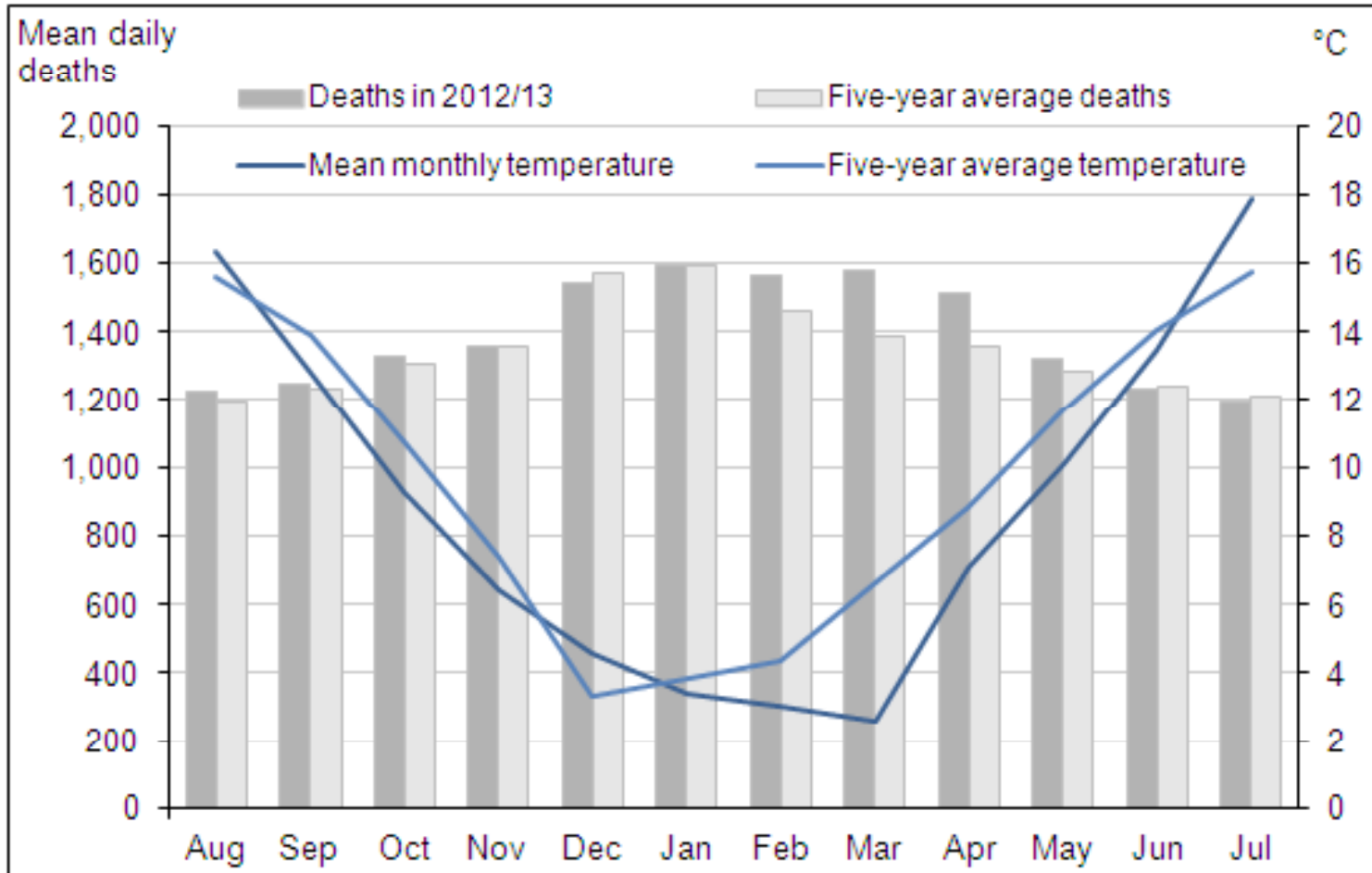
# Context and overview

- Poverty and inequity are health issues, so is fuel poverty
- Cold weather causes an increase in illness and death
- Policy and initiatives on carbon saving, public health, housing, fuel efficiency and poverty and inequalities do not always align at national or local level
- Many organisations and sectors are involved
- So there is a problem; what can be done?
  
- NICE were asked to review the evidence and produce guidance

# NICE's brief

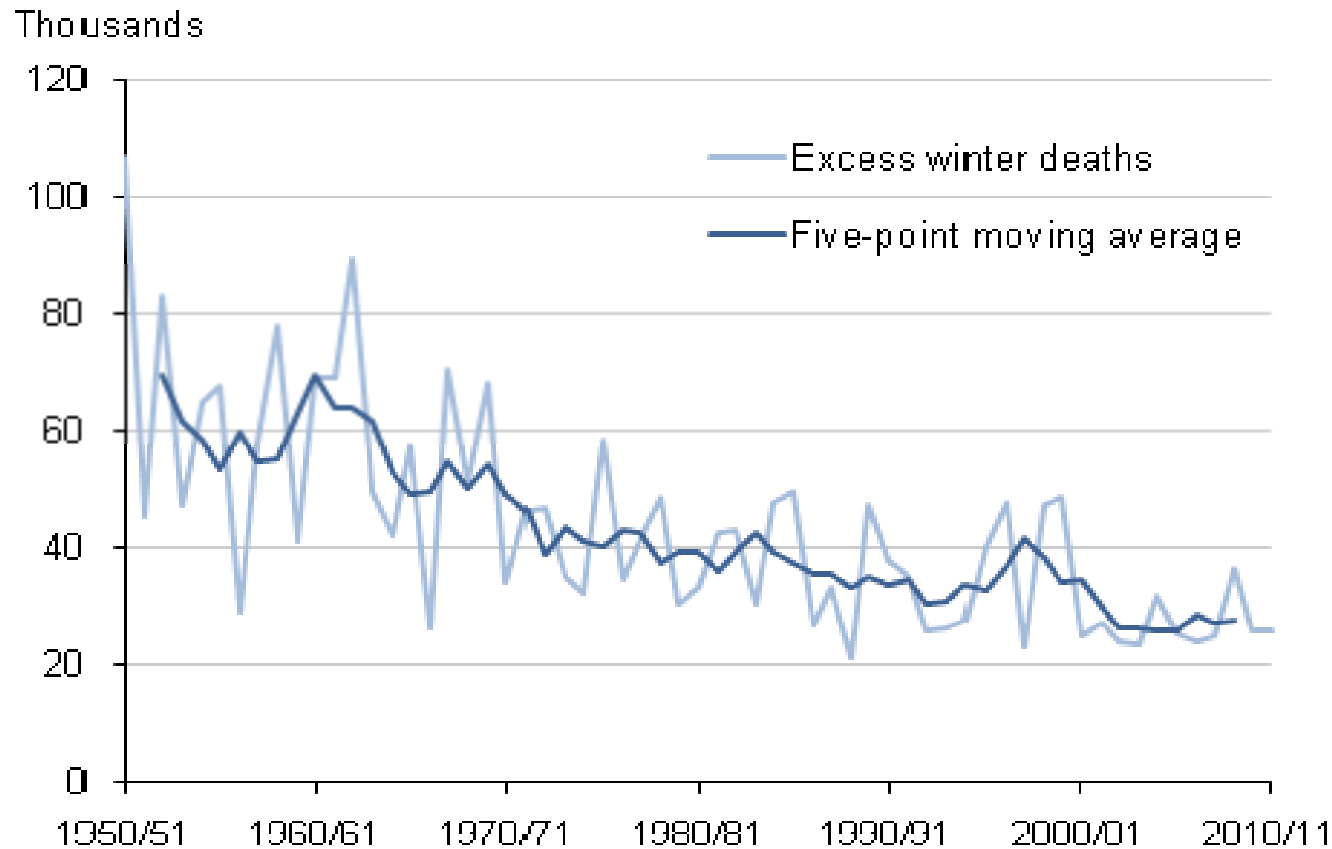
- NICE was asked by the Department of Health to produce evidence-based guidance on interventions to reduce excess winter deaths and illness associated with cold homes, focusing particularly on
  - Those people and groups who are vulnerable
  - An integrated approach to identifying people at risk and in taking action
  - Complementary to Cold Weather Plan
- Aimed not just at the NHS but also a much wider audience – local authorities, commercial, community and voluntary sector organisations

# Daily deaths vs. temperature



Source: Excess winter mortality in England and Wales. Nov 2014. National Statistics

# Excess winter mortality in England



Source: Excess winter mortality in England and Wales. Nov 2014. National Statistics

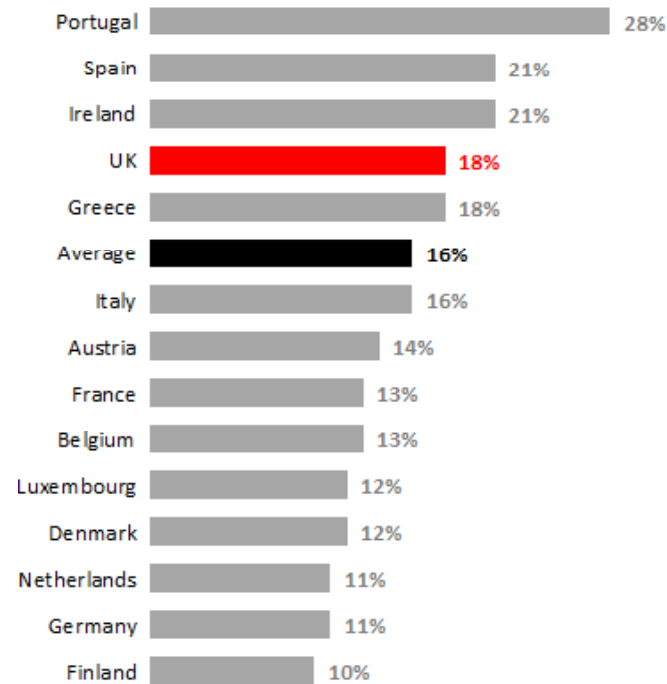
# Costs in illness and deaths

- On average there are about 25,000 extra deaths in the winter months each year compared with non winter months; so called excess winter deaths (EWD)
- Estimated that for every death there are an additional eight non fatal hospital admissions
- Temperature only has to drop below about 6C for death rates to rise
- The effect lasts for weeks
- The UK has more EWD than most other western European countries

# International comparisons

## Excess winter deaths

% increase in mortality rate during winter compared to rest of year's average, between 1988 and 1997



Source: J D Healy: Excess winter mortality in Europe: a cross country analysis identifying key risk factors (2003)

# Fuel Poverty trends England 2003-13

2003		2013
2.44M (11.8 %)	Households living in fuel poverty n (%)	2.35M (10.4%)
1.22M (50.5 %)	Owner occupied houses in fuel poverty	1.10M (47%)
483K (20 %)	Private rented houses in fuel poverty	816K (34.8 %)
496K (20%)	Local Authority properties	193K (8.2%)
215K 8.9%	Housing Association Properties	234K (10%)
857K	Households in fuel poverty where oldest resident 60 or over	542K

Source: Annual fuel poverty statistics report 2015, DECC and National Statistics



# The monetary costs

- Age UK have estimated that “the annual cost to the NHS in England of cold homes is £1.36 billion”, not to mention the associated cost to social care services, which is likely to be substantial.
- This is made up of the costs of hospital admission, A&E attendance, additional GP and community nurse visits etc.
- Costs to families and carers also considerable

# Causes and vulnerable people

- People with cardiovascular (40%) or respiratory diseases (33%)
- People with mental health conditions
- People with disabilities
- Older people (>65 and especially >75)
- Households with young children
- Pregnant women
- People on low income **and especially those in fuel poverty**

And of course combinations of the above

# How NICE works

- Defined “scope” based on referral and consultation
- Reviews of evidence of effectiveness and economics (London School of Hygiene and UCL)
- Best available evidence, including testimony
- **Public Health Advisory Committee discussions**
- 3 month public consultation on draft guidance
- Open process; public meetings and stakeholders able to comment at each stage
- Final guidance published 5 March 2015

# The evidence

- The nature of evidence – research literature; testimony
- Confirmed a clear link between cold weather and increase in illness and death
- Strong inference that tackling cold homes and fuel poverty will reduce excess deaths and illness
- Interventions often short term, confusing and not “joined up”
- Variation in practice, with many examples of innovation and good practice and coordinated local initiatives
- Some limitations to the evidence

# The recommendations

Thirteen quite detailed recommendations so key points:

- Make cold homes part of planning by Health and Wellbeing Boards; Joint Strategic Needs Assessment
- **Single-point-of-contact health and housing referral service providing**
  - **Information on risks, on what help is available, access to tailored housing/energy efficiency interventions and grants and advice on benefits, fuel options, debt management etc.**
- Identify people at risk of ill health from cold homes
  - Use existing data sources, record the risk and share information across agencies(with safeguards)

# A case study

A community nurse visited an elderly gentleman with severe respiratory disease. He was on a continuous oxygen supply driven by an electric pump. She asked him about his electricity contract and learned that he was on a pre-payment meter and had to go out to top up his credit at least once a week.

The nurse had just been on a training course about cold homes and health so knew that the local health and housing service could help him and therefore referred him.

An adviser worked with him to get him onto a better tariff, helped him claim unclaimed pension credit, get him onto his energy suppliers emergency list to ensure a continuous supply (of electricity and oxygen!) and saved him several hundred pounds a year.

*Source : Centre for Sustainable Energy*

## Recommendations (2)

- Health and social care professionals (and others visiting vulnerable people) should “make every contact count”
  - Think about heating and housing needs when seeing patients/clients in vulnerable groups, provide information about the risks and the help available and be aware that needs may be hidden
- Don't discharge people from hospital to cold homes
  - Assess need for immediate and longer term action in advance of discharge. Consider referral but don't delay discharge.
- Harness the non-health and social care work force (such as heating engineers and meter installers) going into homes to identify people at risk, advise them and refer appropriately.

# Recommendations (3)

- Training of health and social care staff, housing and voluntary sector workers and technical staff
  - In the health risks of cold homes, what can be done to mitigate them and how to help clients sensitively and effectively
- Raise awareness among professionals and the public about how to keep warm at home.
  - Publicity depends on central and local leadership and drive – DECC, DH, PHE, HWBs and Local Authorities
- Make sure buildings meet ventilation and other building and trading standards
  - Through enforcement of existing powers; don't make things worse.



# Research recommendations

- Studies into the effect of cold homes on the rate of illness as well as death and multiple vulnerabilities.
- Quantitative and qualitative research into the barriers and facilitators for action and coping strategies – e.g. self disconnection.
- Studies specifically designed to test the effectiveness and cost effectiveness of interventions to tackle cold homes and fuel poverty.
- What is the relationship between improved energy efficiency and its impact on indoor temperature?

# Conclusions

- There is much that can be done.
- Several potentially congruent policy initiatives which could be catalysts for coordinated local action:
  - Cold weather plan, environmental policies to reduce fuel use, drive for energy efficiency and the reduction of fuel poverty, benefits programmes
- Public Health within LAs should be an asset
- National policy provides framework but local action and especially coordination is key.

# Acknowledgements

- NICE staff, review staff (London School of Hygiene and Tropical Medicine and UCL), PHAC colleagues and expert witnesses
- Guidance available at [www.nice.org.uk](http://www.nice.org.uk) and follow the links to *NG6 Excess winter deaths and morbidity and the health risks associated with cold homes*

# And finally

## **A question for you**

Are you confident that all households in your area and especially those at greatest risk of cold-induced harm have easy access to advice and services which will help mitigate those risks?