

TACKLING OVERHEATING IN HOMES

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Why the interest in overheating in homes?



Heat waves in context

- Over **2000** people died in the UK of heat-related causes in the extreme heat wave of 2003 (ONS)
- That is more people than were killed in road accidents in GB in 2012 - **1,754** (DfT)
- **31,100** excess winter deaths occurred in England and Wales in 2012/13 (ONS)
- **Key point** - Summers as hot as 2003 could happen **every other year** by the year 2050 (Met Office)

Driver – Climate Change

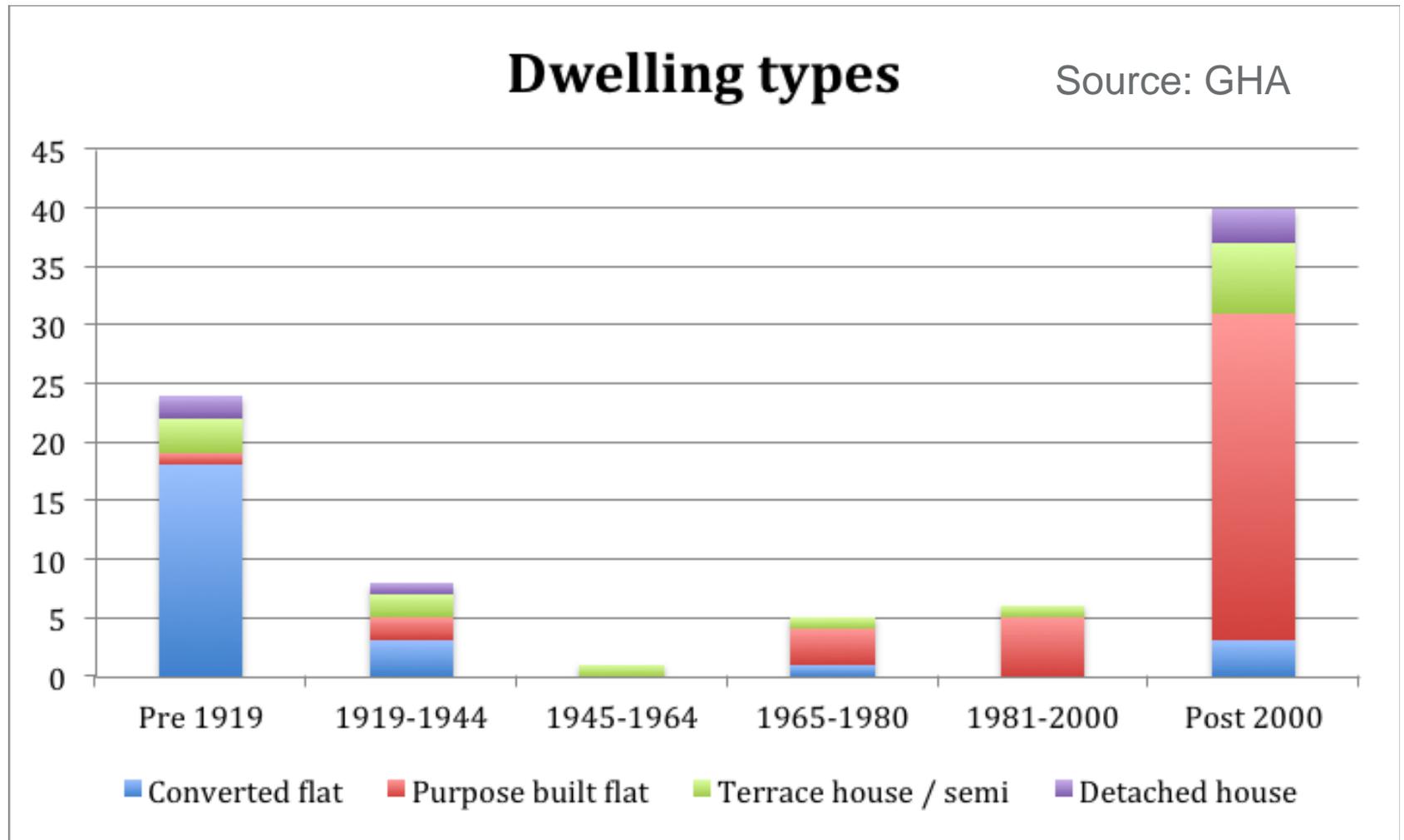
- CRA - There could be a **three-fold increase in heat-related mortality** by the 2050s from a baseline of around 1,100 annually – mainly among the elderly in poor health.
- South Gloucestershire - *‘Increased risk to ill health from over-heated buildings (e.g. dehydration and lethargy) (Very high risk after 2026)’*

Driver – A greater proportion of the population will be elderly

South Gloucestershire - The number of residents aged 85 and over will be up 27% by 2018 and 153% by 2035



Driver – The types of homes we live in



GHA Case study – New build sheltered flats

Problem

- Solar gain from windows, only 10% of which are openable
- Corridors are also overheated due to heating distribution pipes

Solutions

- Educating residents on how to control their heating and hot water system
- Solar reflective film on the windows
- Caretaker now opens the windows at either end of corridors

Process

- Resident complaints and refused tenancies
- Recommendations from surveyors and engineers
- 3 years



The challenge for the sector (industry and government)

To consistency provide homes which are warm and cosy in the winter, and also cool and comfortable in the summer

Incentives – what would motivate us?

- Occupants expecting healthy homes?
- Recognition in industry sustainability benchmarks?
- Avoiding health issues and costly medical care?
- Avoid costly remedial works if things go wrong?
- The threat of legal action?
- Avoiding unnecessary energy use for cooling?
- Mandatory legislation?

ZCH OVERHEATING PROJECT



HOW BAD IS THE PROBLEM OF OVERHEATING

- Current experiences?
- Which buildings most at risk?
- Where?
- Who?
- Why?
- Impacts?
- Governance?
- Future risk?
- Other countries?

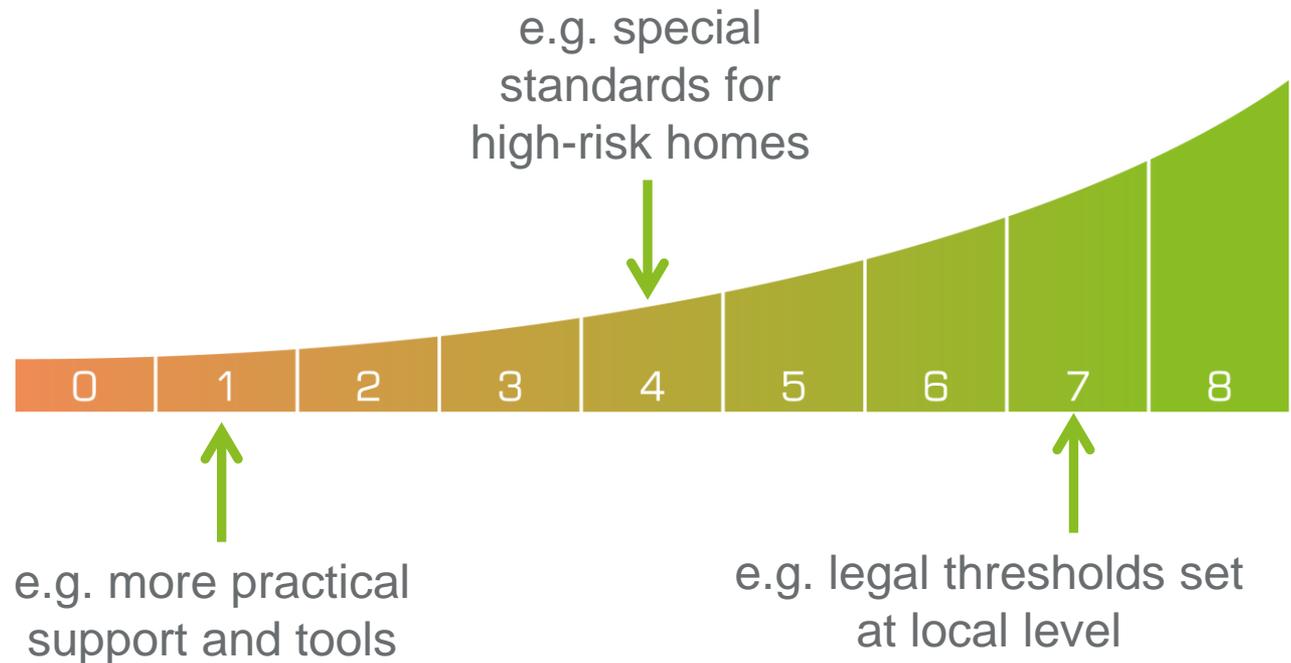
Objective 1 – We will review research and work with experts to provide an overarching ‘statement’ on the extent, severity, and impact of overheating in homes now, and how this could change over time. This includes assessing our level of ‘preparedness’. This will help us understand the scale of the problem and the possible impacts of ‘business as usual’.



OPTIONS FOR INCENTIVISING ACTION

- Imagine ourselves in a policymaker or industry body's shoes
- What are our options for incentivising action?
- Imagine implementing them – do they work?
- What evidence would be needed?
- Are they deliverable?
- Are they cost-effective?
- What difference do they make to people's lives?

Objective 2 - We will analyse in detail a set of approximately eight hypothetical options/scenarios for incentivising action to prevent or treat overheating in homes. This is intended to assist decision-makers with the difficult job of deciding how to respond to the problem.



*Scenarios go from light-touch through to mandatory options.
Options to be determined in consultation with government and industry.*

DISSEMINATION AND AWARENESS RAISING

- Motivate
- Practical support
- Show case best practice
- Summarise technical info
- Tailor information for professions
- Support organisations
- Links to specialist resources
- Other countries
- Using existing networks

Objective 3 – We will help to support and motivate industry to take action to prevent and manage overheating by creating and disseminating tailored messages, research summaries, factsheets, and by showcasing existing guidance and best practice.



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