

Health in Sustainable Development:
barriers and drivers in implementing
sustainable transport policy in
Copenhagen, London, Mumbai, and
Shanghai

Jack Haywood, London School of Hygiene and Tropical
Medicine



Health in Sustainable Development –
Barriers and drivers in implementing sustainable transport policy in
Copenhagen, London, Mumbai, and Shanghai

Dr Jack Haywood

Public Health Specialty Registrar, London

National Medical Director's Clinical Fellow, NHS England

Background

- Anthropogenic-induced greenhouse gas emissions and particulate matter exposure have health impacts both locally and globally.
- Transport contributes to a large proportion of these.
- This reflected in the WHO COP26 special health report, where one of the recommendations to achieve this is to *“prioritise walking, cycling and public transport.”*
- Several cities have sustainable transport policies including active and public transport
- Both must be designed and implemented in a way which is attractive to realise the environmental and health benefits.
- There has been little context-specific analysis examining if drivers and barriers of their uptake are acknowledged in policy to enable successful implementation.

Aim

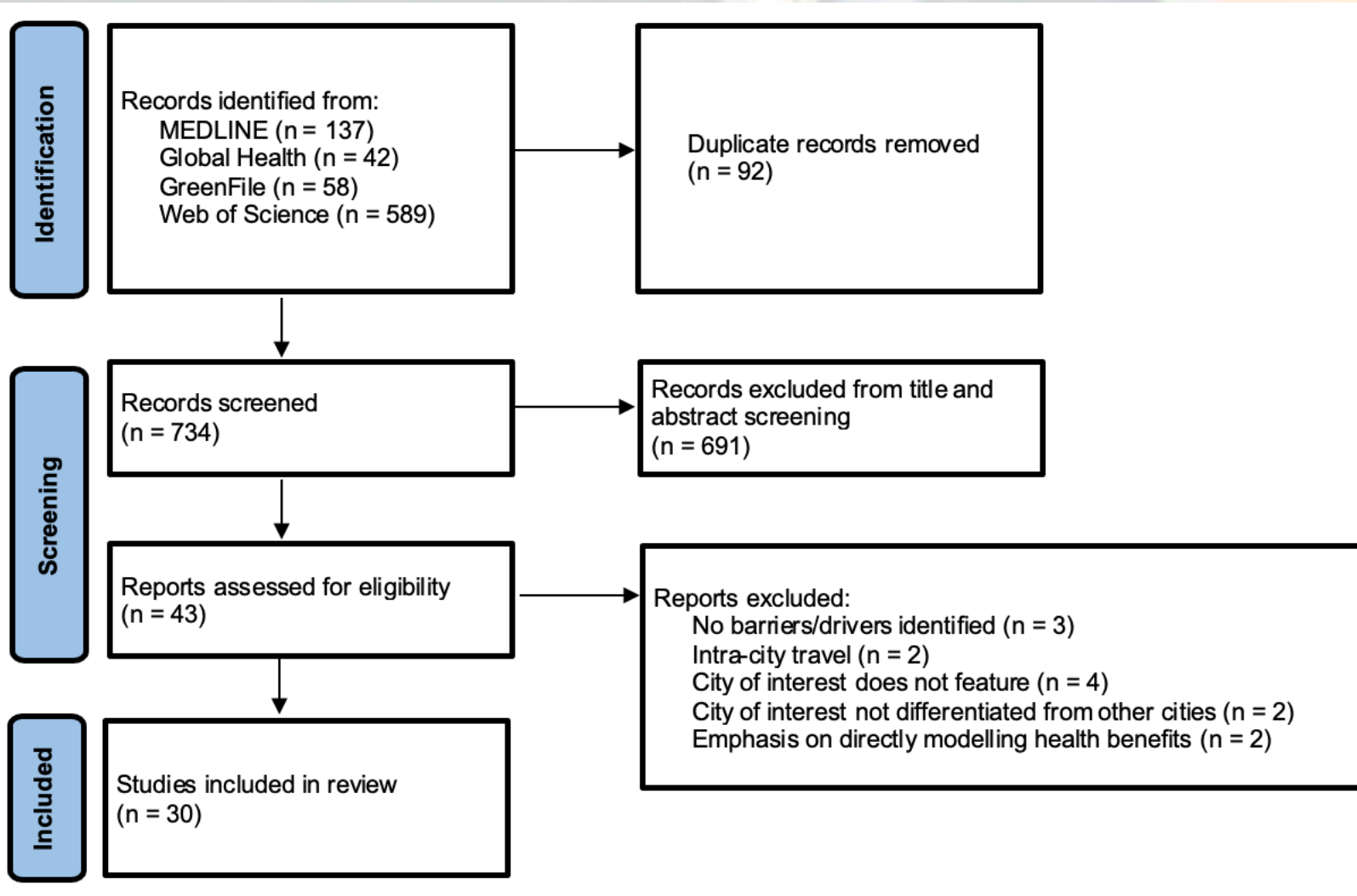
To assess if known context-dependent barriers and drivers of active and public transport uptake are acknowledged in sustainable transport policy to enable successful implementation and thus improve human health

Methodology

Two parts

1. Sustainable transport policies from four cities were found using a grey literature search and reviewed to identify barriers and drivers of implementation and uptake
2. Literature review with systematic approach to identify active and public transport uptake in the four cities, from 2012 until the year of the sustainable transport policy publication, analysed using a thematic analysis approach

Results



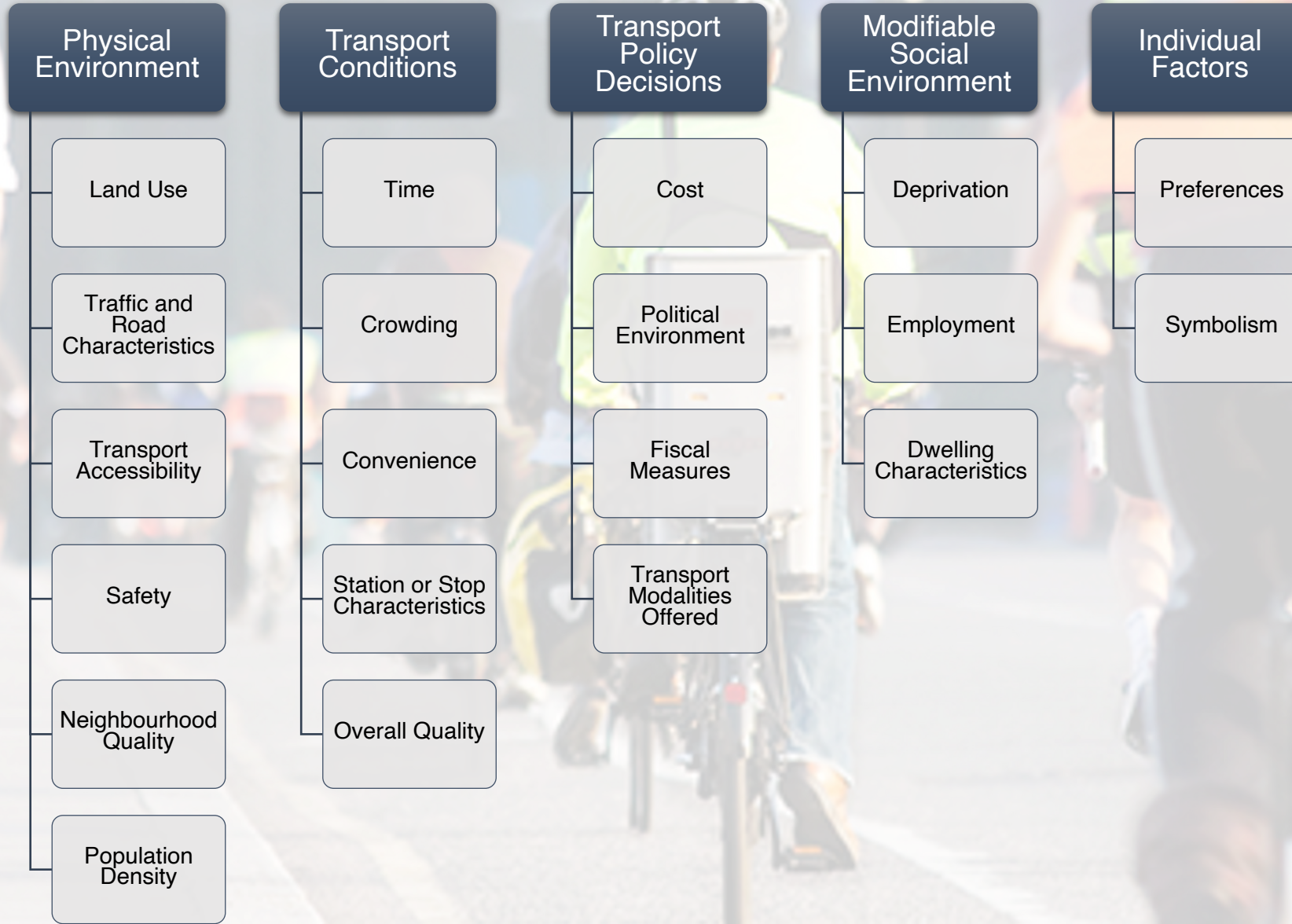
Results



City	Active Transport	Public Transport
Copenhagen	6	5
London	9	7
Mumbai	0	5
Shanghai	4	3

Number of studies per country

Results



Conclusions

- Cost and speed of active and public transport options were important in all cities
- There were also differences in focus
- The results also made clear a 'one size fits all' approach will not work
- There was a gap in middle-income-based literature
- Many of the literature review-identified barriers/drivers were not acknowledged in the transport policies
- There were also barriers/drivers identified in policy which were not in the evidence
- To ensure successful policy making, context-specific evidence must inform

Recommendations

1. Any future transport policies should involve a detailed review of the literature to ensure all locally known barriers and drivers of AT and PT uptake are acknowledged in policy,
2. The evidence suggests that no matter the location, all AT and PT should be affordable and quick,
3. Engagement with the relevant organisations and departments are needed from an early stage of ST policy design to understand the institutional barriers from an early stage,
4. Specifically, there needs to be a HiAP approach taken, ensuring the focus on improving human health is taken from the start of a project through HIAs, and
5. MIC development is key, but this must be done in an evidence-based and sustainable manner to ensure success. Therefore, there is the urgent need for research on the barriers and drivers of AT and PT in MICs, possibly using methodologies from other studies, with

Limitations

- The inclusion of literature only in English means high-quality literature may be excluded
- The use of a literature review with a systematic approach, rather than a systematic literature review, may result in a less comprehensive review, limiting its wider applicability
- It is good practice for thematic analysis to be performed by at least two, independent researchers
- The quality of the literature identified in this review is generally poor, with many weaknesses identified
- The grey literature search for policies may not be comprehensive



Thank You!

Any Questions?

Local Climate Adaptation Tool Supports Health and Wellbeing

Jess Dicken, European Centre for Environment and Human
Health, University of Exeter Medical School

Local Climate Adaptation Tool Supports Health and Wellbeing

Jess Dicken, Research Fellow

European Centre for Environment and Human Health

j.dicken2@exeter.ac.uk



LCAT

LOCAL CLIMATE
ADAPTATION TOOL



University
of Exeter



CORNWALL
COUNCIL
one and all - onen hag oll



The
Alan Turing
Institute



Blue
Adapt



Co-funded by
the European Union



UK Research
and Innovation

Background

- Scoping exercise – decision-makers in Cornwall. What are you doing on adaptation, how might the ECEHH help?
 - Limited action
 - Lacked financial and time resources
 - Culture of short-term decision making
 - Lack of expertise, and confidence
 - Desire for cross-service & partnership working
 - Concerns focussed on inequality, mental health, isolation
 - No climate model for the local area
 - Needed guidance/ tools to support work in this area

Aim of the project

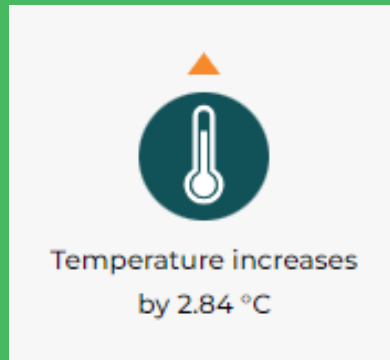
To co-design a digital tool that supports local decision makers in finding evidence-based adaptation solutions for the effects of climate change, using health as a common language.



How LCAT works



Select
geographical
area



View the local
climate model



Explore health
impacts of the
change



Who is
vulnerable
locally



Adaptation
actions

View the prototype, exploring
the impact of heat [here](#)

Taking a just and equitable approach to adaptation

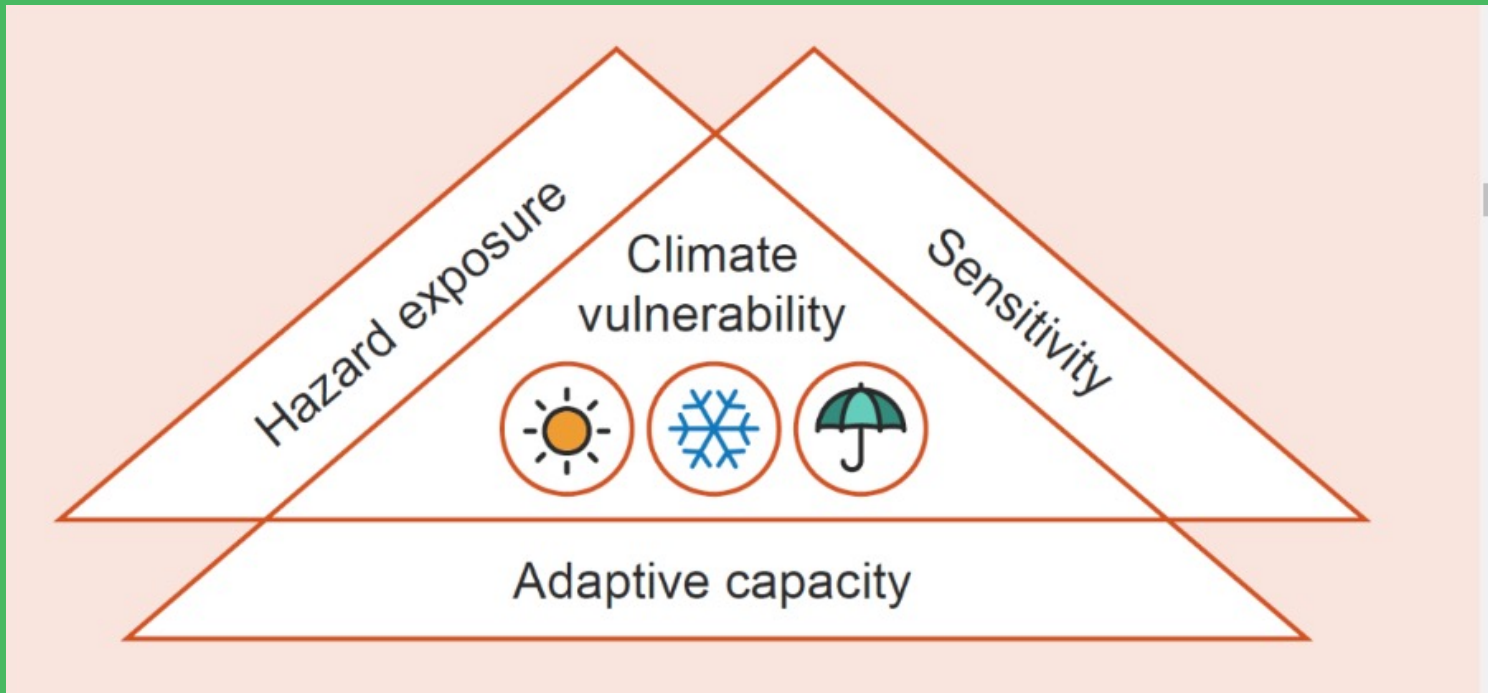
- Key theme for stakeholders
- *“The term climate justice, while used in different ways in different contexts by different communities, generally includes three principles: distributive justice which refers to the **allocation of burdens and benefits** among individuals, nations and generations; procedural justice which refers to **who decides and participates in decision-making**; and recognition which entails **basic respect and robust engagement with and fair consideration of diverse cultures and perspectives.**”*

[IPCC, 2021, p.7](#)

- Build in vulnerability data at a local level – [Climate Just](#)
- Guidance on equitable adaptation.

Who is vulnerable and how?

“Environmental health inequalities relate to **socioeconomic, sociodemographic** or **spatial differences** in **exposure** to environmental health risk factors and to differences in health status caused by environmental conditions.” (WHO, 2022 [ref](#))



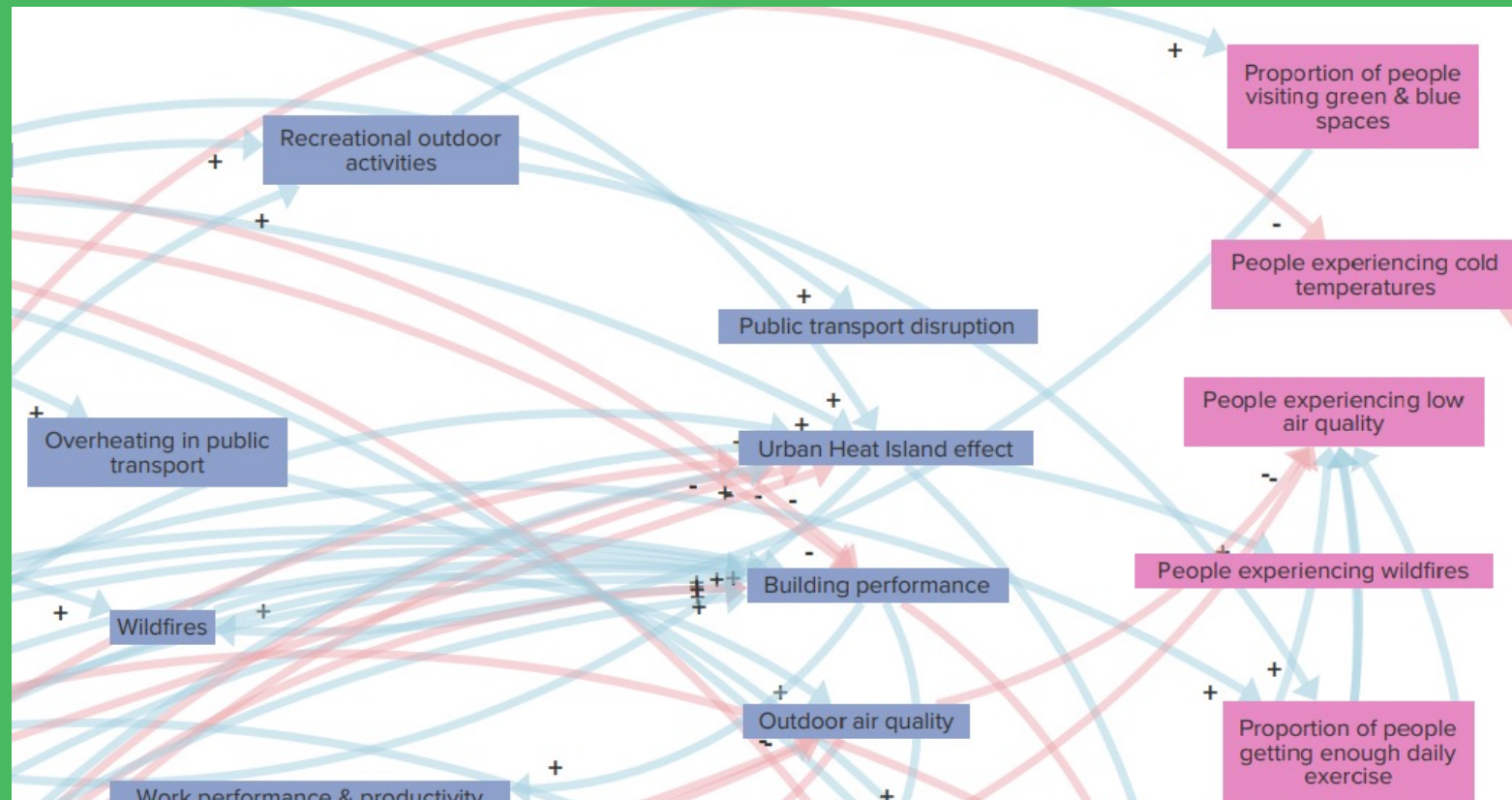
Ref: Met Office, 2022
[Urban Heat Risk in Belfast \(arctis.com\)](#)

Taking a just and equitable approach to adaptation

“Maladaptation can be avoided by flexible, multi-sectoral, inclusive, long-term planning and implementation of adaptation actions, with co-benefits to many sectors and systems.” (IPCC, 2023 [Ref](#))

LCAT supports this approach by providing:

- A multi-agency approach
 - Promote partnership working
 - Co-design with partners
 - Complex impact maps
- Short, medium & long-term adaptation actions



Current focus and challenges

- National climate models
- Developing impact pathways for temperature, coastal security, extreme storms, flooding and drought, food & personal security
- Improving functionality inc vulnerability data
- Showing the 'so what' via localised risk data (flood risk / heatwave risk/ coastal erosion)
- Knowledge and skills resource
- Understanding national policy and practice

Thanks

[Email: j.dicken2@exeter.ac.uk](mailto:j.dicken2@exeter.ac.uk)

Project page:

<https://www.ecehh.org/research/local-climate-adaptation-tool/>



Co-funded by
the European Union



UK Research
and Innovation

Research on the impact of the COVID-19 pandemic, and shift to more agile working, on Public Health Wales carbon footprint

Tracy Evans, Senior Sustainable Development Officer, Public Health Wales

Research on the impact of the COVID-19 pandemic, and shift to more agile working, on Public Health Wales' carbon footprint.

Tracy Evans



GIG
CYMRU
NHS
WALES

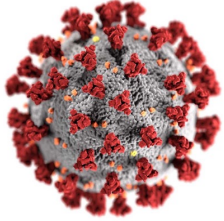
Iechyd Cyhoeddus
Cymru
Public Health
Wales

Background & Assessment Process



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a Chynaliadwyedd

Health and
Sustainability Hub



- Increase in agile working
- Increase in lab activity and staff numbers

2019/20



Compare the difference and identify the impact of the shift to more agile working on our carbon emissions

2020/21



- Internal data – business/ site and business travel emissions
- Online survey – home working and commuting emissions

Results

Four areas were considered:



Procurement



Travel



Home Working



Business/Site Operations



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Overall emissions

PHW's
overall emissions
+ 161%
in 2020-21
(mid-pandemic)



Compared to 2019-20
(pre-pandemic) due to
increased procurement
of COVID consumables.

PHW's overall
emissions
(excluding
procurement)
-48%

Significant reductions from
Business Travel, vehicle
fleet, and fuel consumption
onsite.



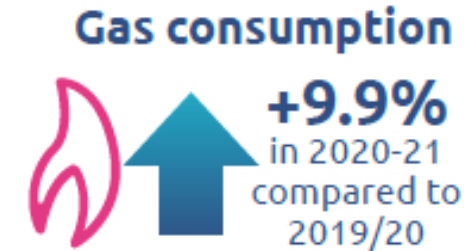
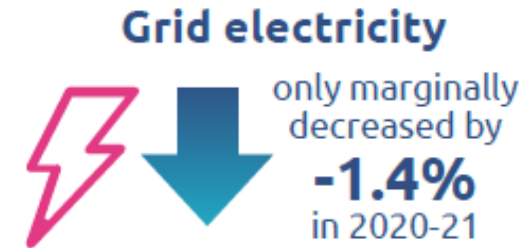
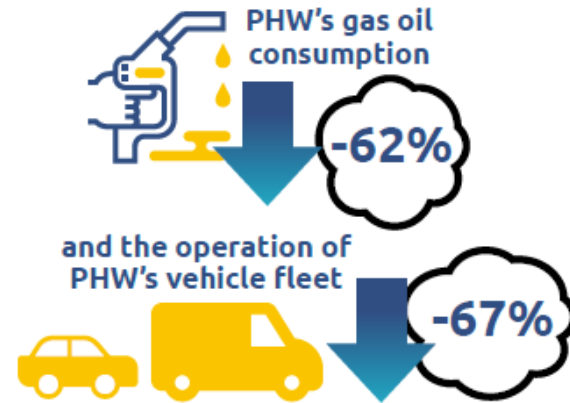
Results & Recommendations – Business/ Site Emissions



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-29%
PHW's Business/
Site Operations
emissions
between 2019/20
and 2020/21



- Increase the proportion of energy sourced from green/renewable tariffs
- Revise existing building management systems, heating, cooling and lighting schedules

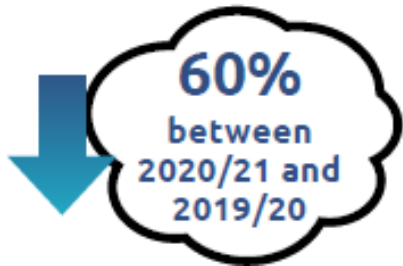
Results – Travel Emissions



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Sustainability Hub

Overall commuting emissions
decreased by



Business Travel

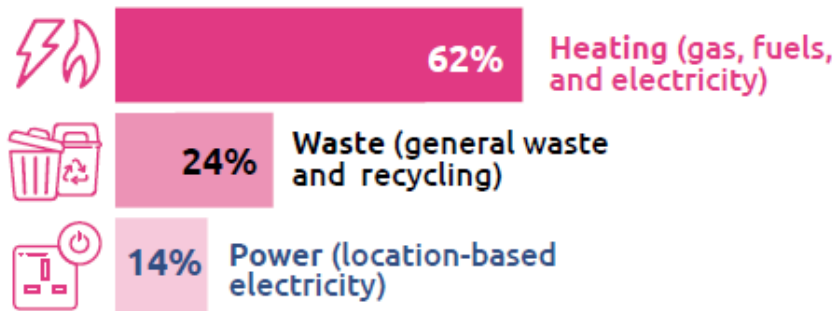


- Majority of commuting and business travel – staff using their own cars
- Support staff to use public transport and active travel
- Further research/ data collection on staff travel

Results – Homeworking Emissions



Emissions produced by Home Working



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Health and Sustainability Hub



- Opportunities to share space within our estate
- Work How it Works Best – determine the proportion of staff who could regularly work remotely

Results – Procurement Emissions



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PHW's procurement and supply chain emissions accounts for the majority of PHW's total emissions


+244%

PHW's Procurement costs



- Procurement & Supply Chains are our most significant source of emissions
- Opportunity to engage with supply chain – capture information on supplier emission footprints

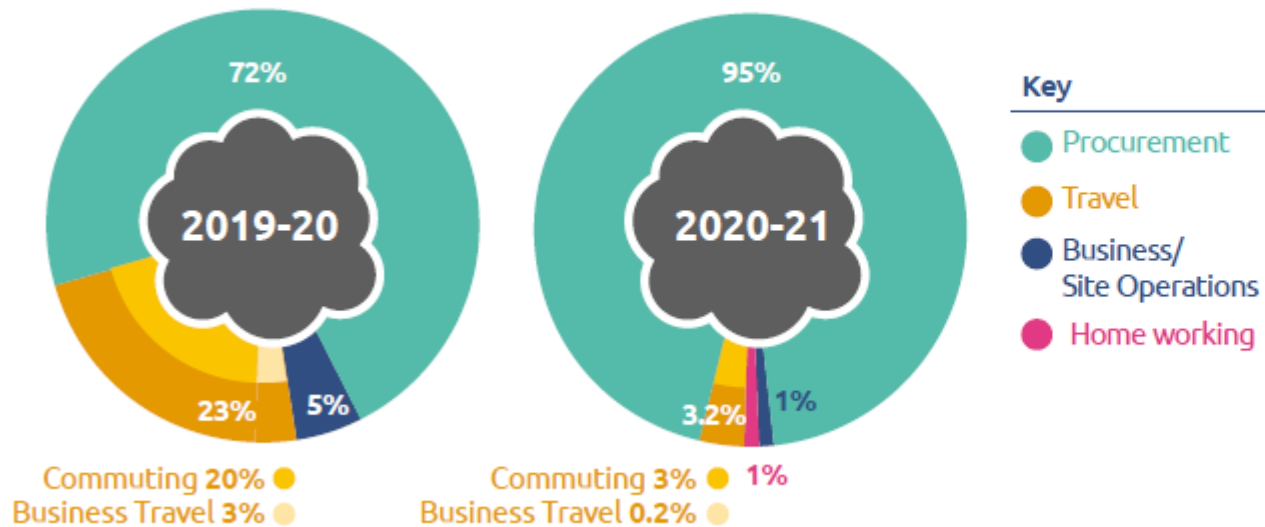
Summary



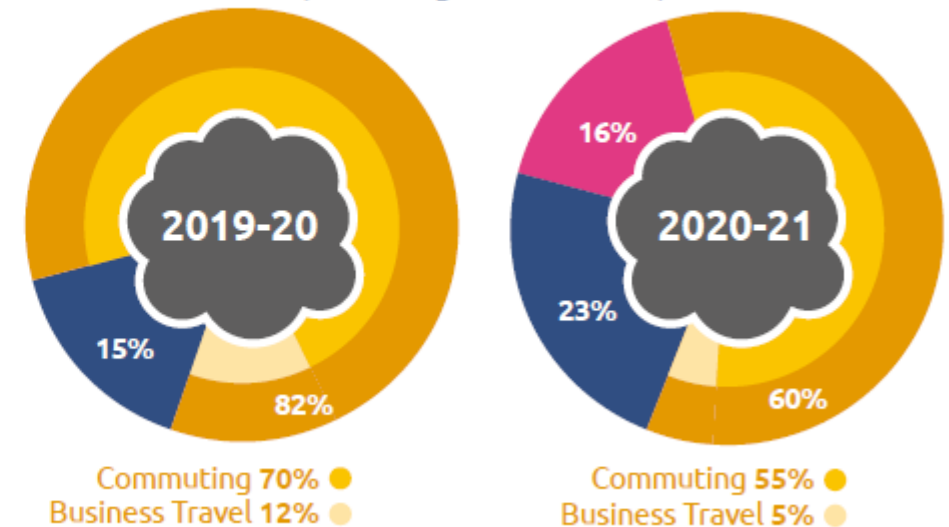
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PHW total emissions
(including Procurement)



PHW total emissions
(excluding Procurement)



Next Steps



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- Evaluate and implement recommendations
- Highlight the quick wins along with short, medium and long term actions
- Emission reductions associated with each action



Thank you for listening

Any questions?



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a Chynaliadwyedd

Health and
Sustainability Hub

Contact us:

publichealth.sustainability@wales.nhs.uk

<https://phwwhocc.co.uk/teams/health-and-sustainability-hub/>

Improving Heatwave preparedness in Haringey

Miho Yoshizaki, Public Health Team, London Borough of
Haringey

Improving heatwave preparedness in Haringey

Miho Yoshizaki

Public Health Speciality Registrar (ST5)

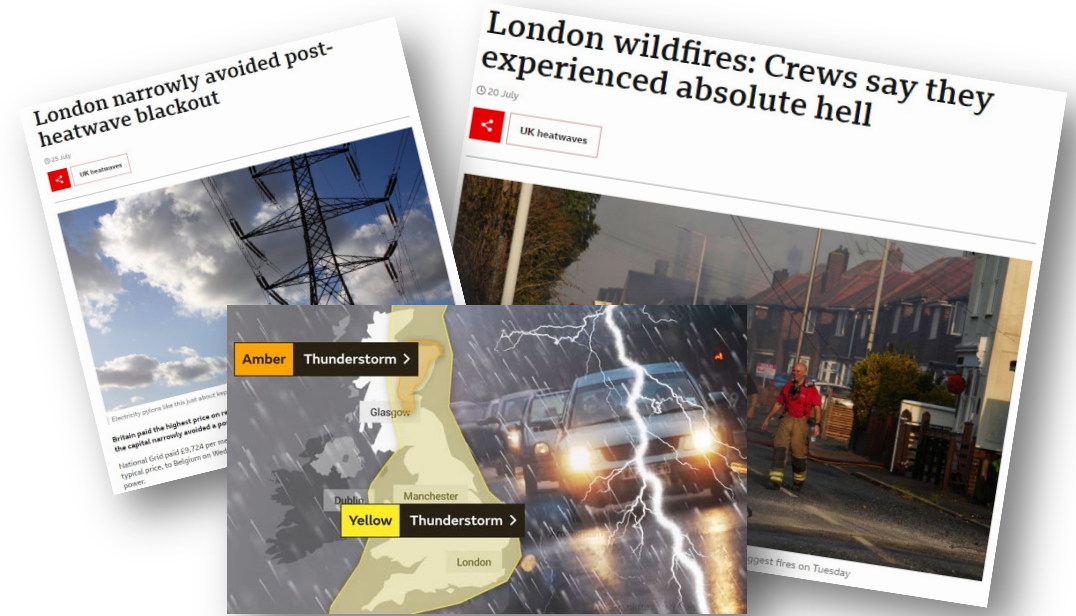
Haringey Public Health

Heatwaves – Haringey context

- In summer 2022, there were five heat-periods recorded in England. During these heat-periods, a red warning was issued for the first time for a heatwave in England.
- This trend of increased frequency and intensity of heatwaves is **expected to continue due to climate change**.

Heatwaves impacts in Haringey, Summer 2022:

- In summer 2022, **excess deaths** during the heat-periods in Haringey was **21% higher than the five-year average** (26 excess deaths).
- More deaths were recorded among rough sleepers during summer, compared to winter period.
- Schools / Early Years settings – 3 closed, 6 offered early pick-up times
- Healthcare settings – Generally, report of high pressure. ‘Critical Incident’ declared over bed pressures in one of the local providers.
- Emergency Services – LFB declared Major Incident

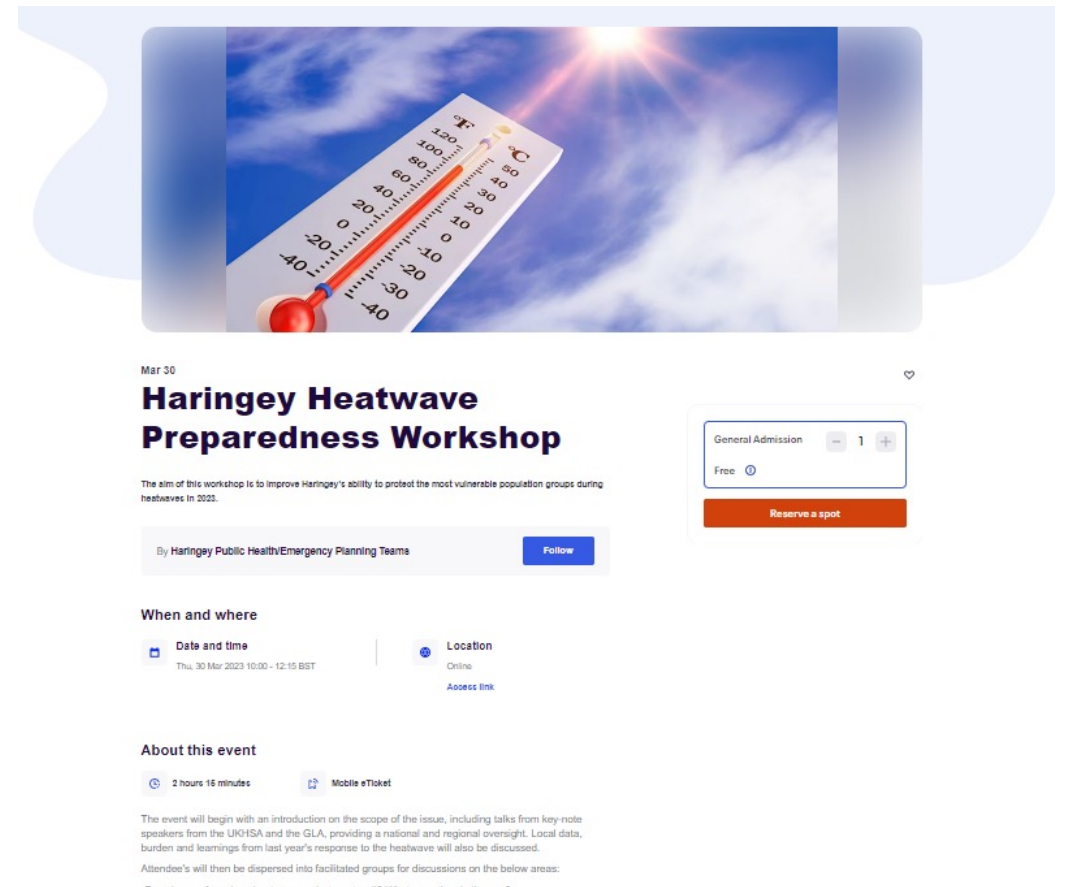


Aims of the project in Haringey

- To understand the immediate and longer-term challenges and opportunities in preparing for and responding to heatwaves.
- To orient action planning to improve heatwave preparedness, response and resilience in Haringey, focusing on the people most vulnerable to adverse health impacts from heatwaves within our community.

Methods – understanding needs and opportunities

- Epidemiological analysis:
 - Vulnerable population
 - Vulnerable settings
- Rapid evidence review
- Individual stakeholder engagements
- Stakeholder workshop



Mar 30

Haringey Heatwave Preparedness Workshop

The aim of this workshop is to improve Haringey's ability to protect the most vulnerable population groups during heatwaves in 2023.

By Haringey Public Health/Emergency Planning Teams [Follow](#)

When and where

Date and time
Thu, 30 Mar 2023 10:00 - 12:15 BST

Location
Online
[Access link](#)

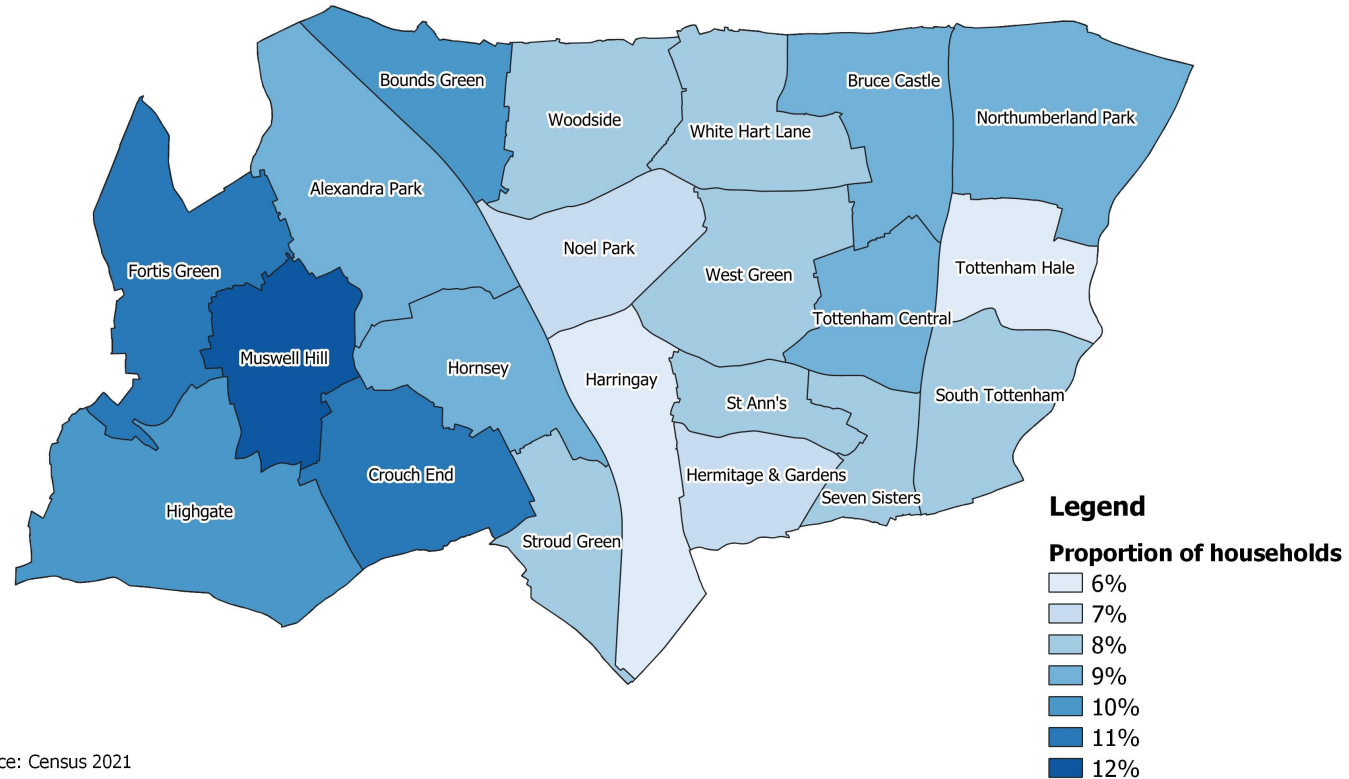
About this event

2 hours 16 minutes [Mobile eTicket](#)

The event will begin with an introduction on the scope of the issue, including talks from key-note speakers from the UKHSA and the GLA, providing a national and regional oversight. Local data, burden and learnings from last year's response to the heatwave will also be discussed. Attendee's will then be dispersed into facilitated groups for discussions on the below areas:

Vulnerable population in Haringey

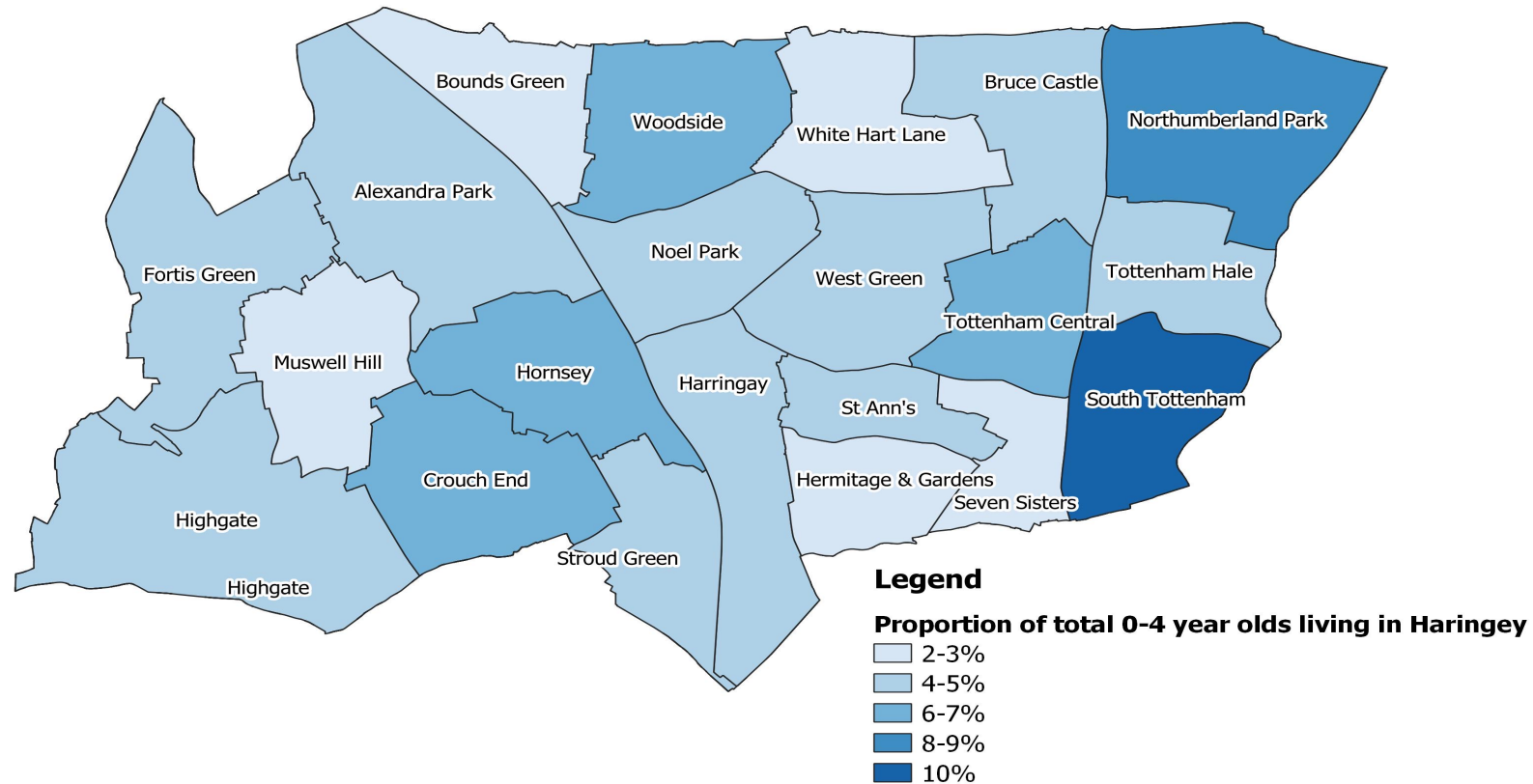
Individuals aged 66+ living alone as a proportion of all households



Source: Census 2021

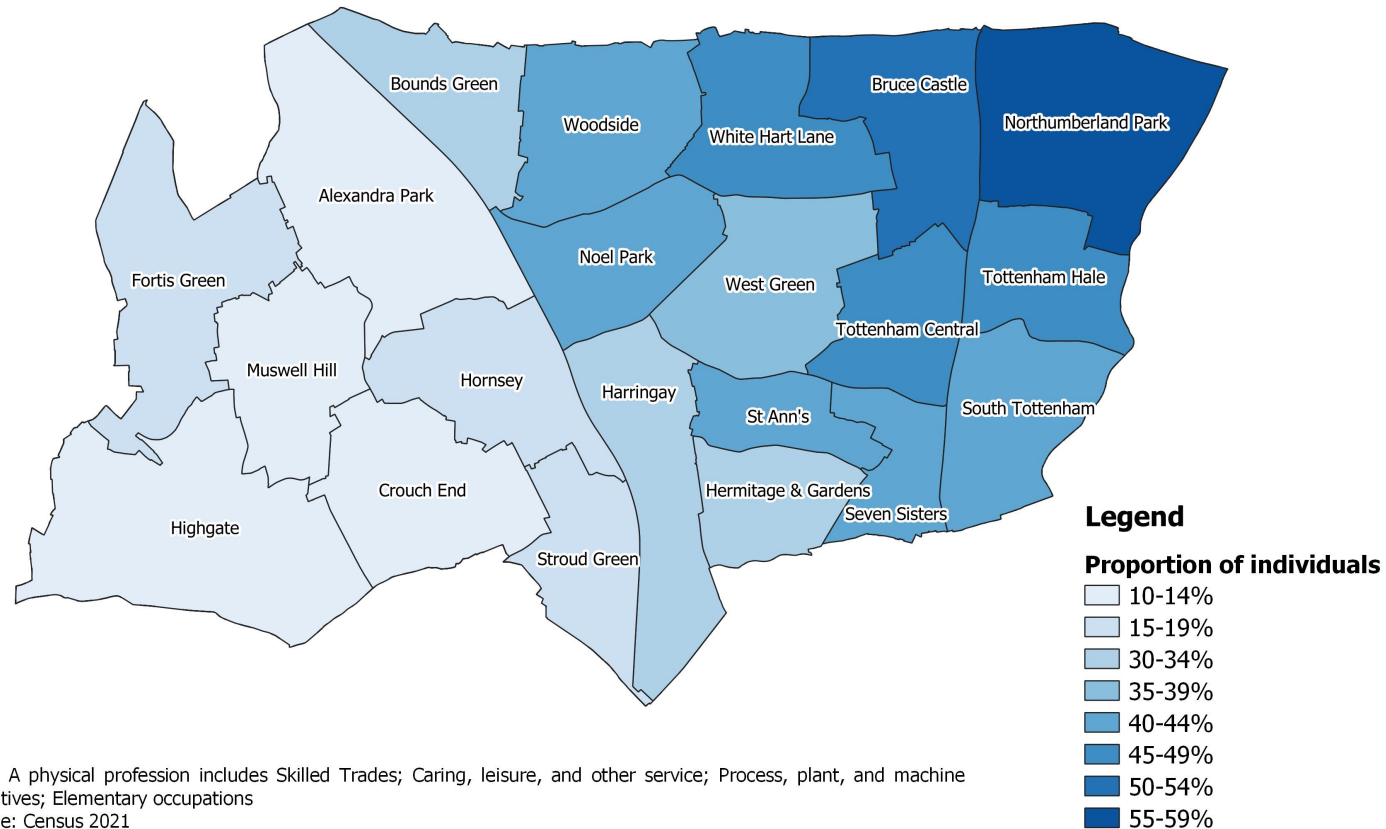
Vulnerable populations in Haringey

0-4 year olds living in Haringey



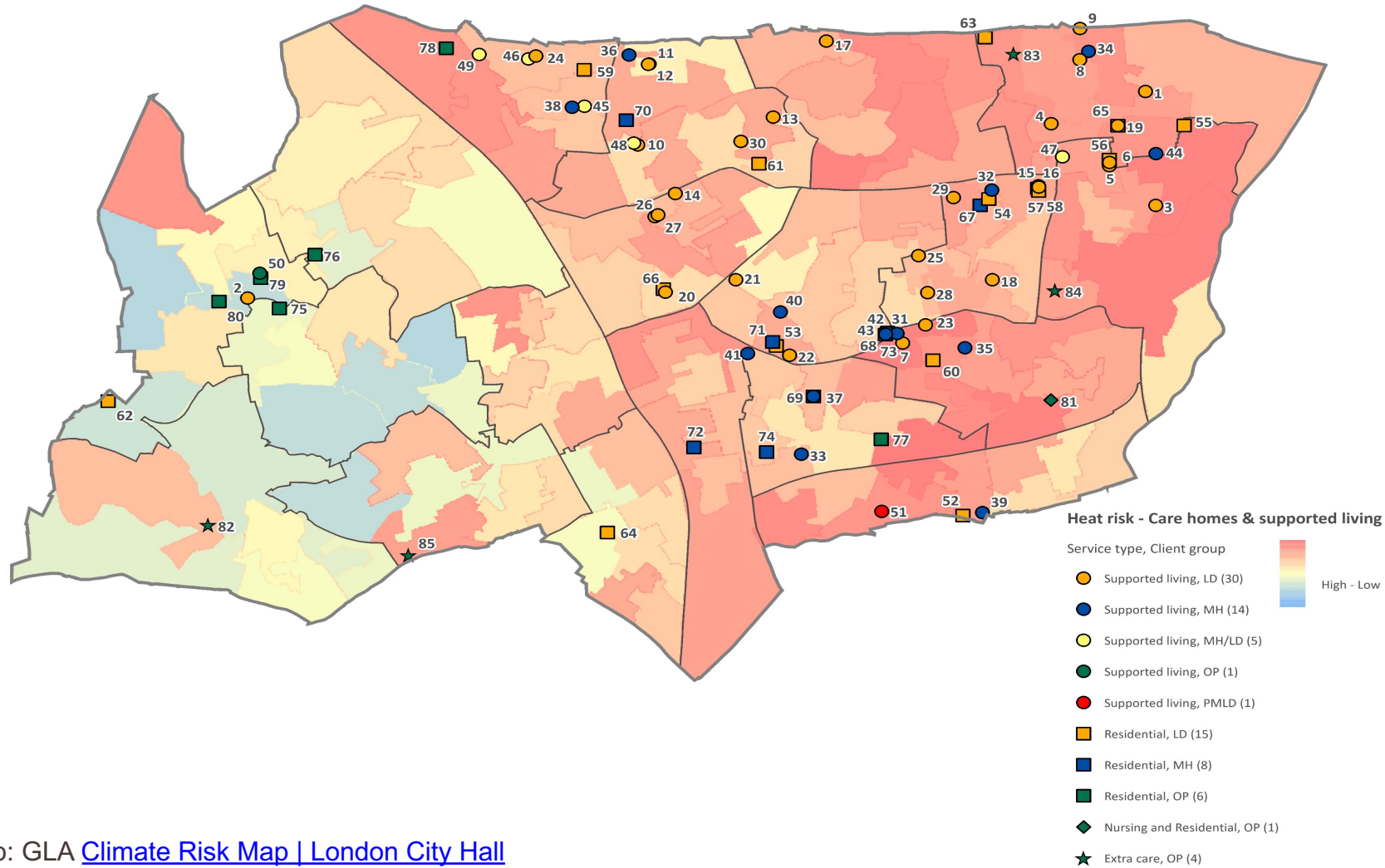
Vulnerable populations in Haringey

Proportion of individuals who are considered to have a physical profession



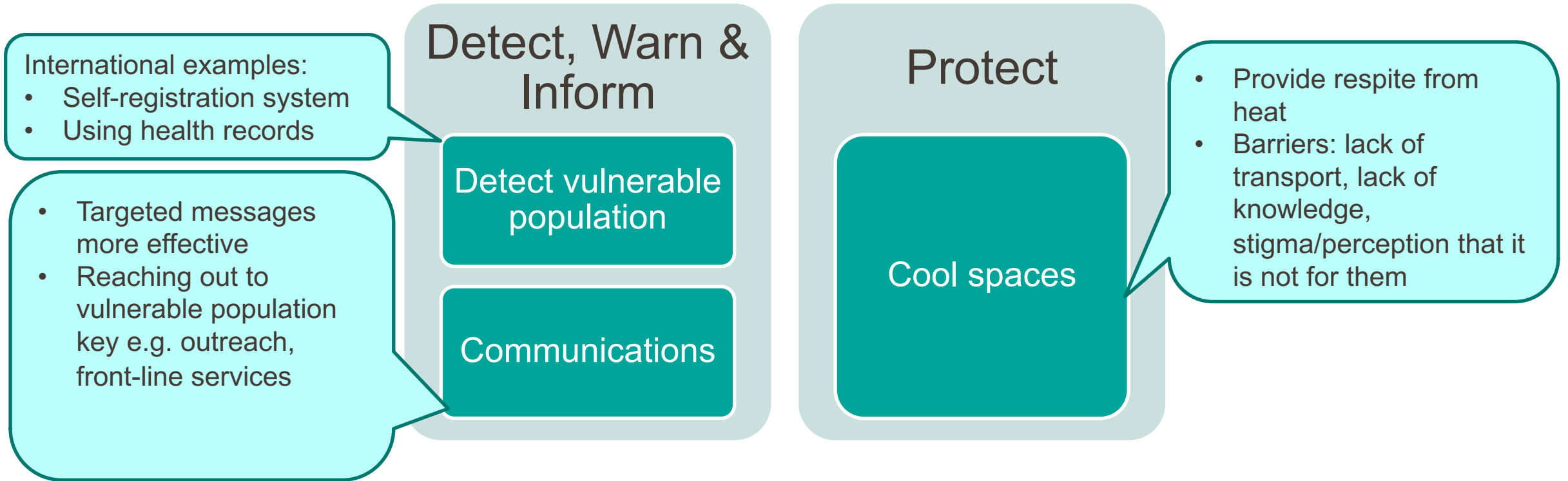
Note: A physical profession includes Skilled Trades; Caring, leisure, and other service; Process, plant, and machine operatives; Elementary occupations
Source: Census 2021

Vulnerable settings – care/nursing homes



Source of Heat Risk Map: GLA [Climate Risk Map | London City Hall](#)

Strategies to protect vulnerable population



Stakeholder engagement and workshop results

There was general consensus that we responded well, but they would have benefited from greater and more tailored support.

What went well:

- 1) Communications and information sharing
- 2) Practical actions implemented rapidly

Challenges:

- 1) not much time to prepare once an alert is issued;
- 2) lack of practical advice and guidance;
- 3) Lack of clarity around priorities;
- 4) infrastructure and cooling resources issues

Future additional support needs

- 1) Practical Advice & Guidance
- 2) Proactive and targeted communications
- 3) Expanding coverage of cool spaces
- 4) Feedback loop, a platform to share experience and good practices

- Are we really reaching out to the most vulnerable population?
- What the Council should/could do to support vulnerable individuals?

Conclusion - What's developing and next step

Preparedness & response

- Adverse weather and health preparedness group was set up
- Developing local practical resources
- Setting up community based cool spaces programme
- Expanding general cool space locations
- Strengthening the communication strategy
- More targeted and tailored communications to vulnerable residents

Longer-term resilience

- JSNA on heat and health – recommendations focus on longer-term adaptation

Reflection:

- Longer-term adaptation measures, such as infrastructure improvements, must be considered along with the short-term actions identified to improve preparedness.
- Currently there is a gap in central funding to support local preparedness and response to heatwaves.

Thank you

Contact:

Miho.yoshizaki@haringey.gov.uk

Acknowledgements:

Angharad Shambler, , Damani Goldstein, Marlene D'Aguilar, Joe Baker, Will Maimaris

Elective surgical services need to start planning for summer pressures

Maria Picciochi, University of Birmingham

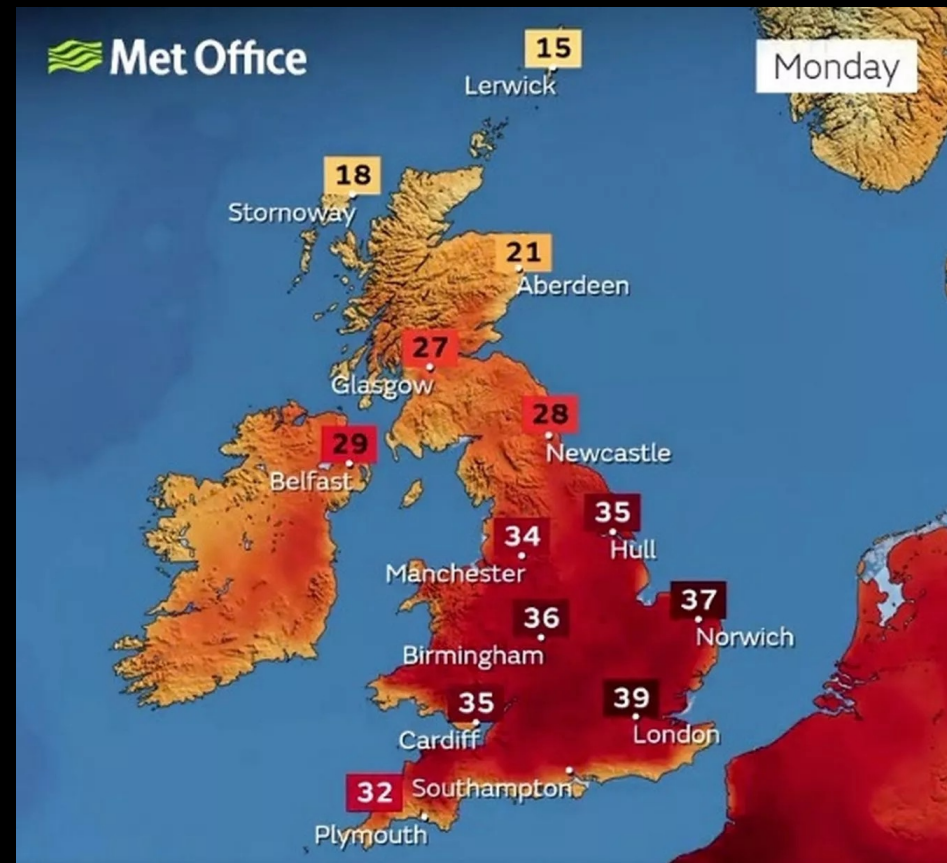
Elective surgical services need to start planning for summer pressures

Maria Picciochi

PhD fellow at the NIHR Global Surgery Unit,
University of Birmingham

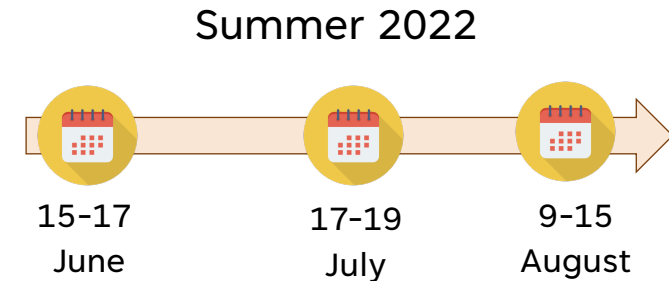
General Surgery Trainee, Portugal

On behalf of GreenSurg Collaborative



Background & Aims

- Heatwaves will occur more frequently
- Elective services are prone to external pressures



AIM: Determine the impact of heatwaves on elective surgery in the UK



Methods



? Impact

? Preparedness



17-19 July

Frontline teams



Results



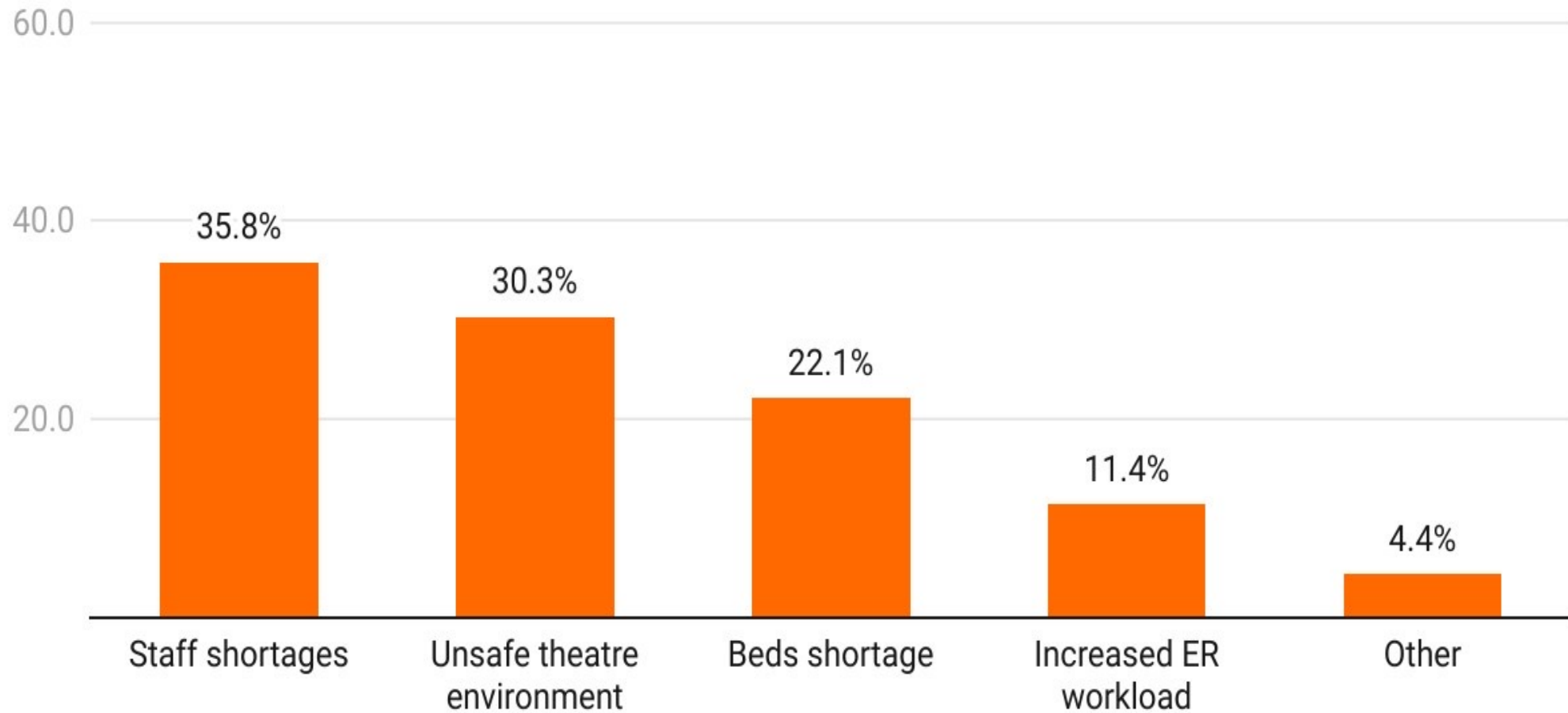
- 271 responses
- 140 hospitals in the UK
- 20 specialties

1 in 5 respondents
heatwave resulted directly in
cancellation of elective surgery

41%
Operating theatres unable to
control ambient temperature



Results



Factors contributing to heatwave-related cancellations of elective surgery



Implications to practice



- Planning before summer is needed
- Improvement of air-conditioning coverage
- Checklist for operating theatres during heatwaves
- Learning from other countries



Operating theatre heatwaves checklist

- ✓ **Do you have a operating theatre heatwave plan?**
Who is responsible for overseeing this?
- ✓ **Can your operating theatres function during heatwaves?**
Do ventilation systems need to be upgraded?
Is any equipment at risk of overheating?
- ✓ **Do you have a plan in case there are staff shortages?**
Is it feasible to have "backup" staff?
- ✓ **If there is a heatwave-related surge in emergency admissions, can surgical activity be maintained?**
Ringfencing elective surgery beds, switching inpatient theatre lists to day-cases



Thank you Questions?

Maria Picciochi

PhD fellow at the NIHR Global Surgery Unit,
University of Birmingham

General Surgery Trainee, Portugal

On behalf of GreenSurg Collaborative

@MariaPicciochi | m.picciochi@bham.ac.uk

