



# "Under The Weather"

## Improving Health, Wellbeing & Resilience in a Changing Climate

28<sup>th</sup> February 2014, York.





Department  
of Health

# Under The Weather Keynote Address

Professor David Walker  
Deputy Chief Medical Officer  
Department of Health

# Outline

---



Department  
of Health

- Challenges of climate change for health and social care
- National Legislative Framework
- Health and Social Care system
- International Climate Change and Health
- Health Co-benefits of lowering emissions

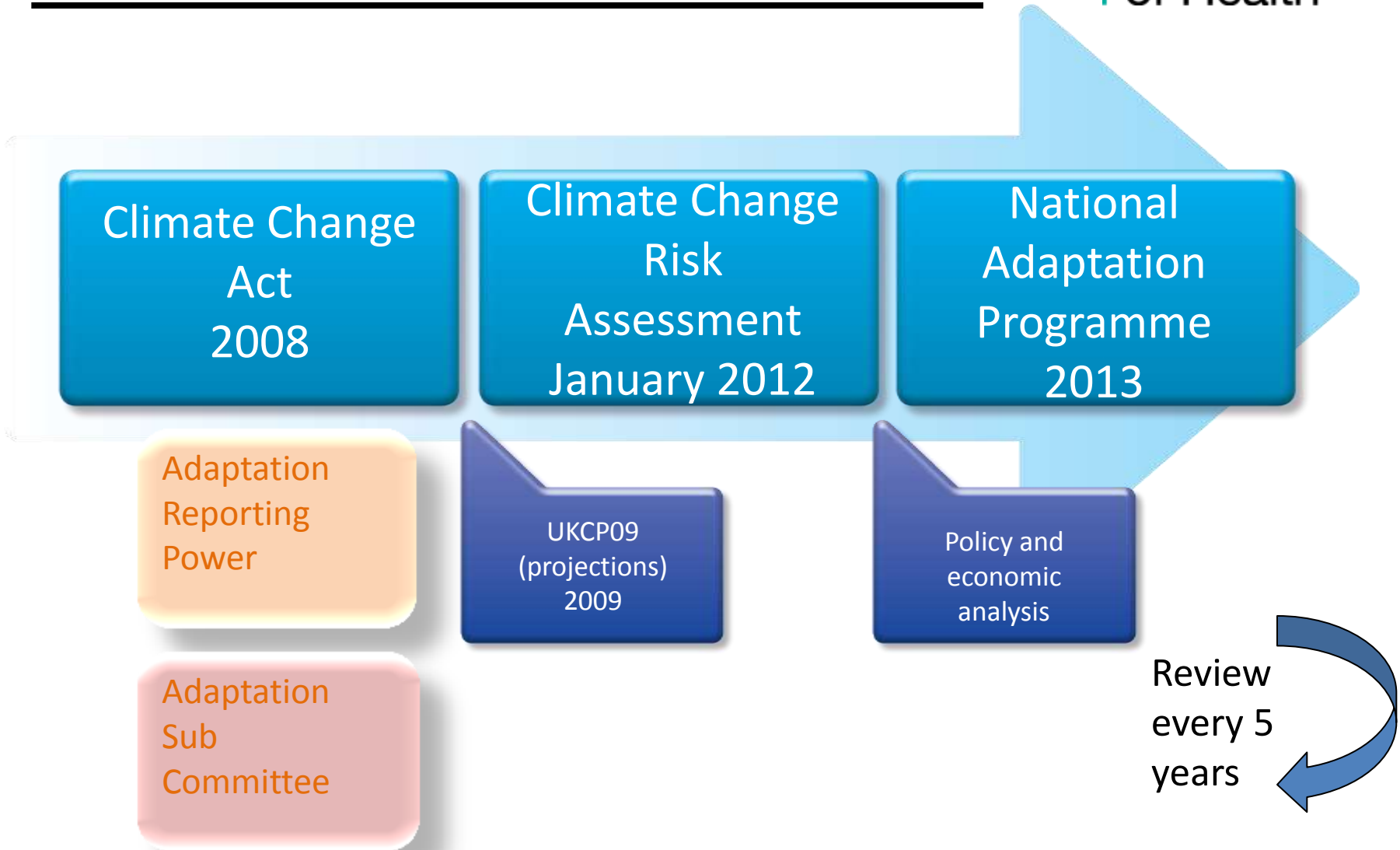
# Extreme weather events and the National Risk Register

Overall relative impact score	5				Pandemic Influenza	
	4			Coastal Flooding		
	3	Major industrial accidents	Major transport accidents	Effusive Volcanic eruption	Other infectious diseases	Severe Space Weather
	2			Inland Flooding	Low Temperature /Heavy Snow	Heat wave
	1		Public Disorder	Zoonotic animal disease	Volcanic Ash disruption	Storms and Gales
				Severe Industrial Action	Non-zoonotic animal disease	
		Greater than 0.005%	Greater than 0.05%	Greater than 0.5%	Greater than 5%	Greater than 50%



Department of Health

# Legislative Framework



# How the health risks are managed...

## NAP 'Healthy & Resilient Communities'

---



Department  
of Health

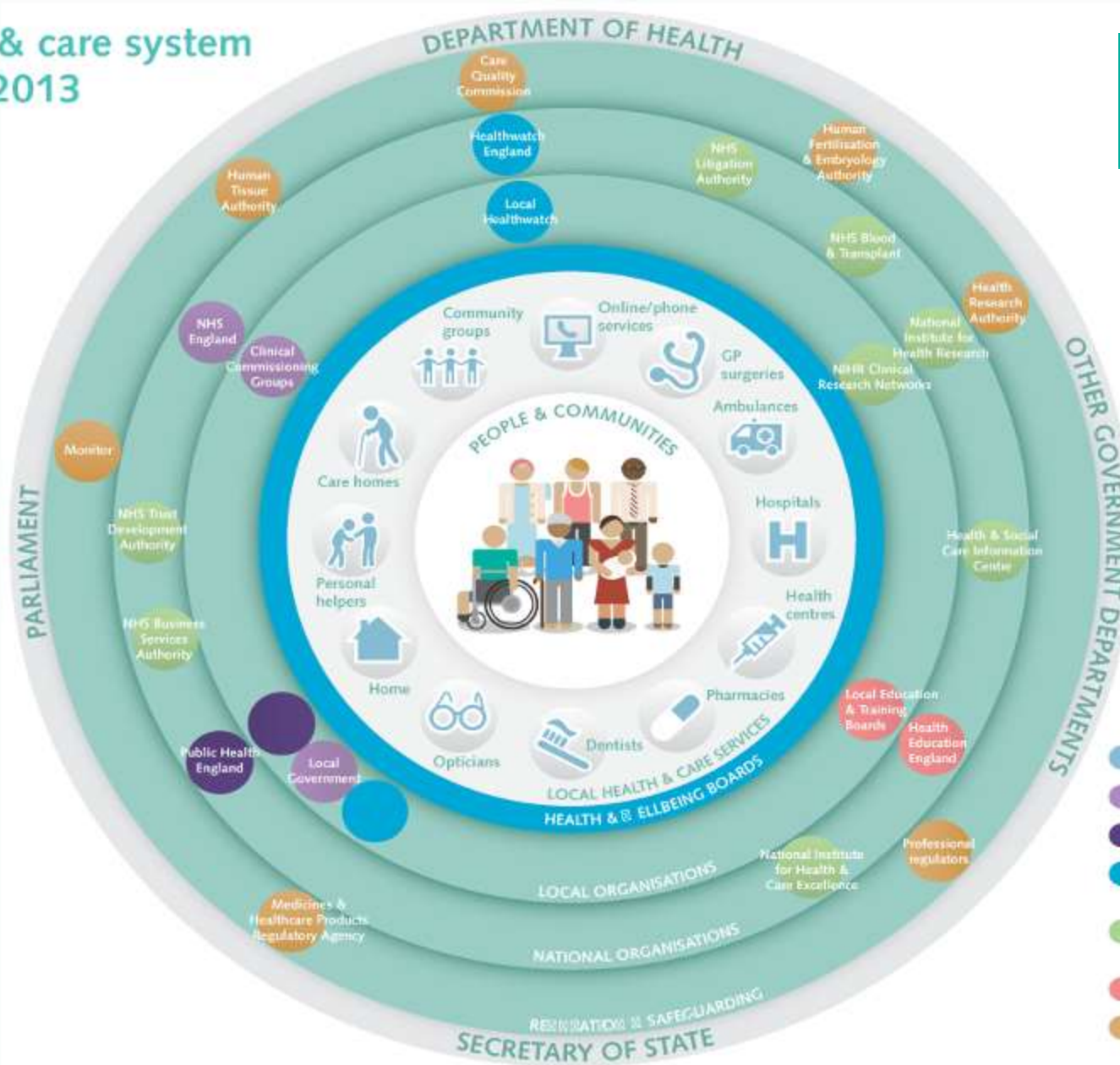
- ***Obj. 11. Reduce the risk of death & illness associated with severe weather events & CC... increase preparedness & resilience to impacts on public health...***
- ***Obj. 12. Ensure continuity of services & resilient assets / estates, adapt to expected increased demand from severe weather-related events...***

**NAP Steering Group – DH, PHE, SDU, NHS England, Defra, EA**

# The health & care system from April 2013



Department of Health



**KEY**

- Providing care
- Commissioning care
- Improving public health
- Empowering people and local communities
- Supporting the health and care system
- Education and training
- Safeguarding patients' interests

# Levers for Action

---



Department  
of Health

## • National:

- Health & Social Care Act 2012
- Climate Change Act 2008:  
Adaptation Reporting Power -  
SDU to report for health and  
social care sector
- Scrutiny by Adaptation Sub  
Committee, reporting 2015
- Civil Contingencies Act 2004
- National Planning Policy  
Framework
- Building Regulations
- Flood & Water Management Act  
2010

## Local:

- PHOF – SDMP indicator,
- H&WBs, JSNAs,
- Local Health Resilience  
Partnerships
- Local Resilience Forums
- Local Adaptation Plans
- Local Flood risk mapping and  
strategies
- Built environment / town  
planning



Pivotal role played  
by councils



# International collaboration

## ‘Climate Change is Global’



Department  
of Health

- WHO Resolution on Climate Change and Health (61.12), 2008. 2013 – workplan to be renewed. Global conference in August 2014.
- Commonwealth Ministers agreement to cooperate on climate change and health. WHA, May 2008
- UK co-chaired the WHO (Europe) Climate Change Task Force, to develop a Framework for Action on Climate Change and Health for the European Region.
- WHO European Environment and Health 5<sup>th</sup> Ministerial Conference, Parma, 2010
- DH chairs the WHO Euro Working Group on Health Impacts of Climate Change (HIC)
- UNFCCC COP – Paris 2015



# Health Co-benefits

---

- Lancet co-benefits research, Nov 2009, LSHTM
- Health benefits of low carbon actions in transport, built environment, food and agriculture, both in the UK and the developing world
- Eg Health benefits from low car use
  - increased active transport
  - reduce obesity,
  - reduce urban pollution,
  - reduce road traffic accidents.
  - ‘Greener’ fuels also lead to reduced indoor and outdoor air pollution.
- In WHO European region :
  - 800,000 deaths/yr outdoor air pollution
  - 1.5 million from indoor air pollution
  - 1.9 million from physical inactivity
  - 2.6 million from obesity
- WHO *‘Health in the Green Economy’* series



Department  
of Health



**Lower carbon saves lives!**  
**– and money!**



Think SD! - **Supports growth, saves lives,  
improves wellbeing**

- **Health and social care sector can provide leaders**
  - People trust health care professionals
  - 1.3 million workers involved
  - Touches all of our lives
- **Raise awareness and communicate case for action**
  - Public engagement, transformational behaviour change.

# Summary

---



Department  
of Health

- Find the right place for climate change adaptation/ sustainability
- Manage the complex interactions of partnership working over diverse areas
- National drivers are in place to help local actions – eg risk registers
- *‘Under the Weather’* can assist local adaptation



Public Health  
England

# UNDER THE WEATHER: Evidence: Who and What are Affected and How?

Professor John E. Thornes, Principal Climate Change Scientist

Public Health England

Air Pollution and Climate Change Group, Toxicology Department  
Centre for Radiation, Chemical & Environmental Hazards (CRCE)

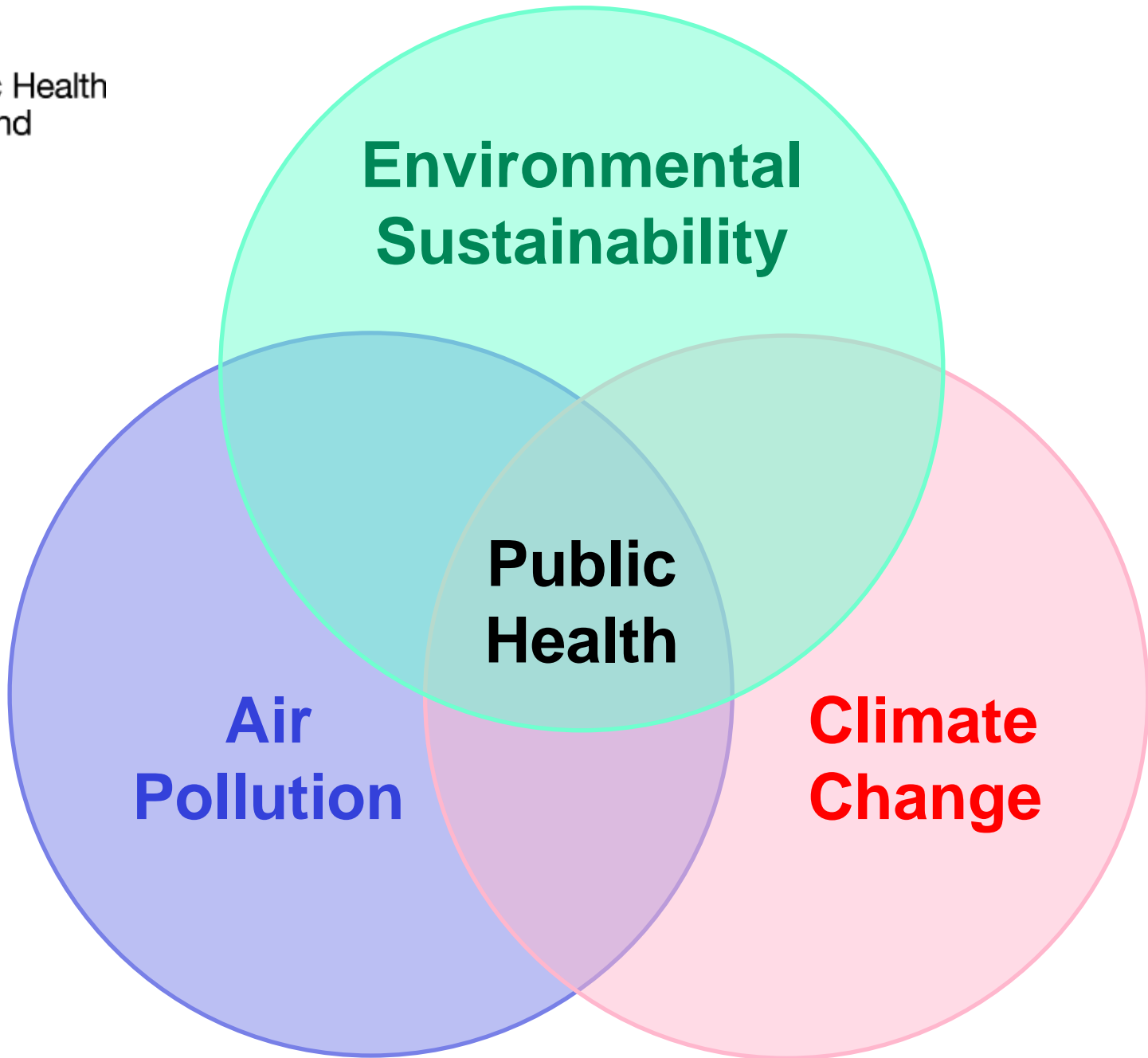


# Outline

- \* Introduction: Climate Change and Health
- \* Public Health England Research & Policy
- \* Adaptation: Ambulance Response Times
- \* Mitigation: Air Quality: Public Transport
- \* Innovation: BUCCANEER Model
- \* Climate Ready: Be Smart - Be Resilient



Public Health  
England



# Climate Change Risk Assessment (2012)

## Health Sector

- Temperature mortality and morbidity (heat and cold)
- Summer air pollution mortality and morbidity (ozone)
- Extreme weather event mortality, injuries and mental health (floods)
- Sunlight / UV radiation exposure



## National Adaptation Plan (2013)

**UK 2012 Climate Change Risk Assessment**

(Defra Project Code GA0204)

Climate Change Risk Assessment  
for the Health Sector


January 2012


<sup>1</sup>Hames, D. and <sup>2</sup>Vardoulakis, S.


Contractors: <sup>1</sup>HR Wallingford  
<sup>2</sup>Health Protection Agency  
AMEC Environment & Infrastructure UK Ltd  
(formerly Entec UK Ltd)


The Met Office  
Collingwood Environmental Planning  
Alexander Ballard Ltd  
Paul Watkiss Associates  
Metroeconomica

---

 Llywodraeth Cymru  
Welsh Government

 DOE  
Department of the Environment  
Heritage and Planning

 The Scottish  
Government

 defra  
Department for Environment  
Food and Rural Affairs



# Health Effects of Climate Change in the UK (2012)

## Contents

1. Current evidence and climate projections
2. Temperature
3. Air pollution
4. Aeroallergens
5. Indoor environment
6. Ultraviolet radiation
7. Floods
8. Vector-borne diseases
9. Water and food-borne diseases
10. Health co-benefits

[www.hpa.org.uk/hecc2012](http://www.hpa.org.uk/hecc2012)



## Health Effects of Climate Change in the UK 2012

Current evidence, recommendations and research gaps

Sotiris Vardoulakis and Clare Heaviside (Editors)



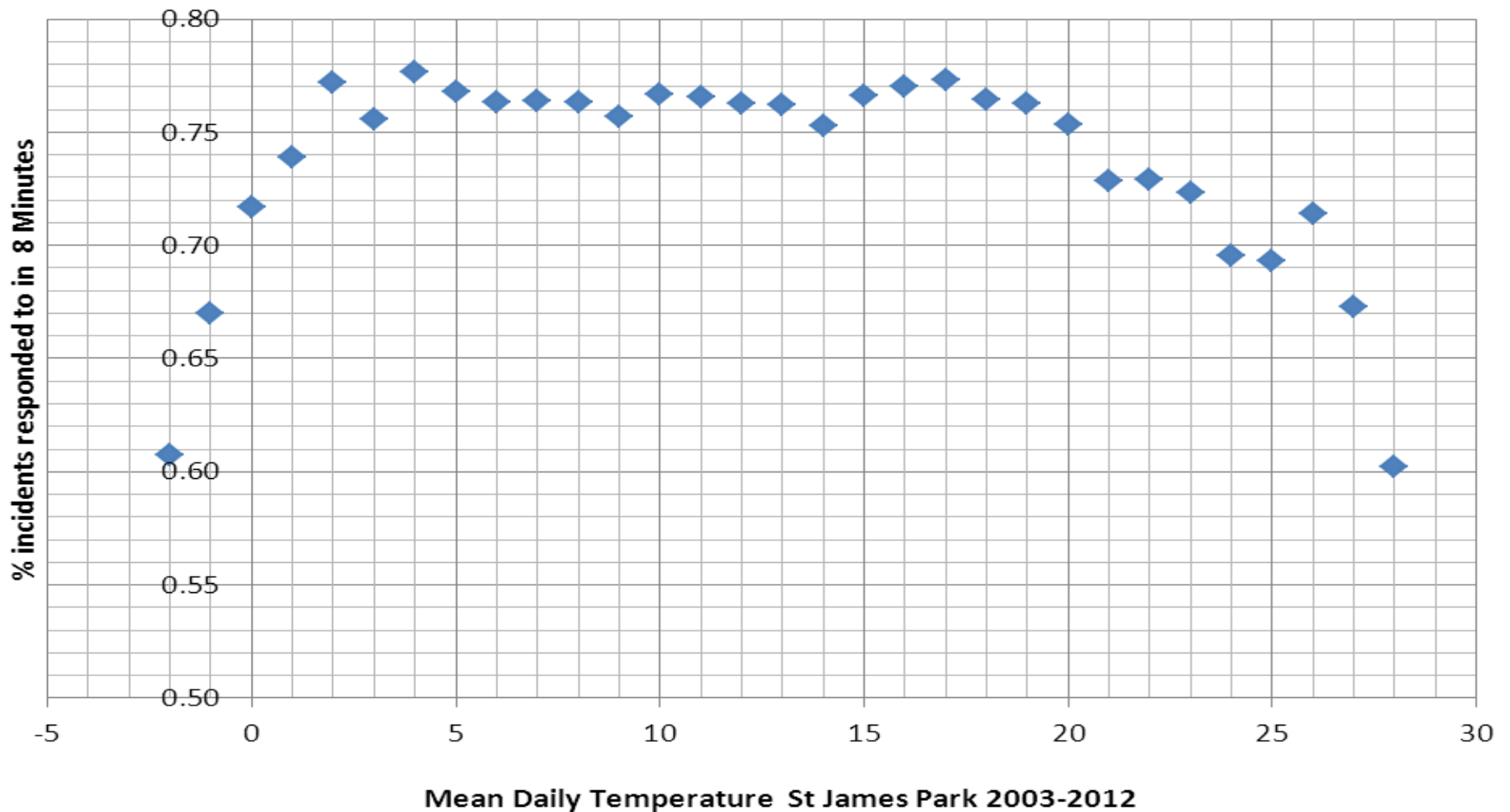


## Ambulance Response Times in Severe Weather

- \* **Evidence:** In 2012/13 More than 9 Million emergency ambulance 999 calls in England.
- \* That is almost 25,000 calls per day of which about 8,000 triaged as life threatening. **“A Snapshot of the Nation’s Health”**.
- \* 75% of CatA (life threatening) calls within 8 mins
- \* Performance falls below 75% when Temperature is below 2 DegC or above 20 DegC.



# EVIDENCE: Impact of Temperature on 3.7m Ambulance 999 Response Times



*(Thornes et al. 2014)*

# WMAS



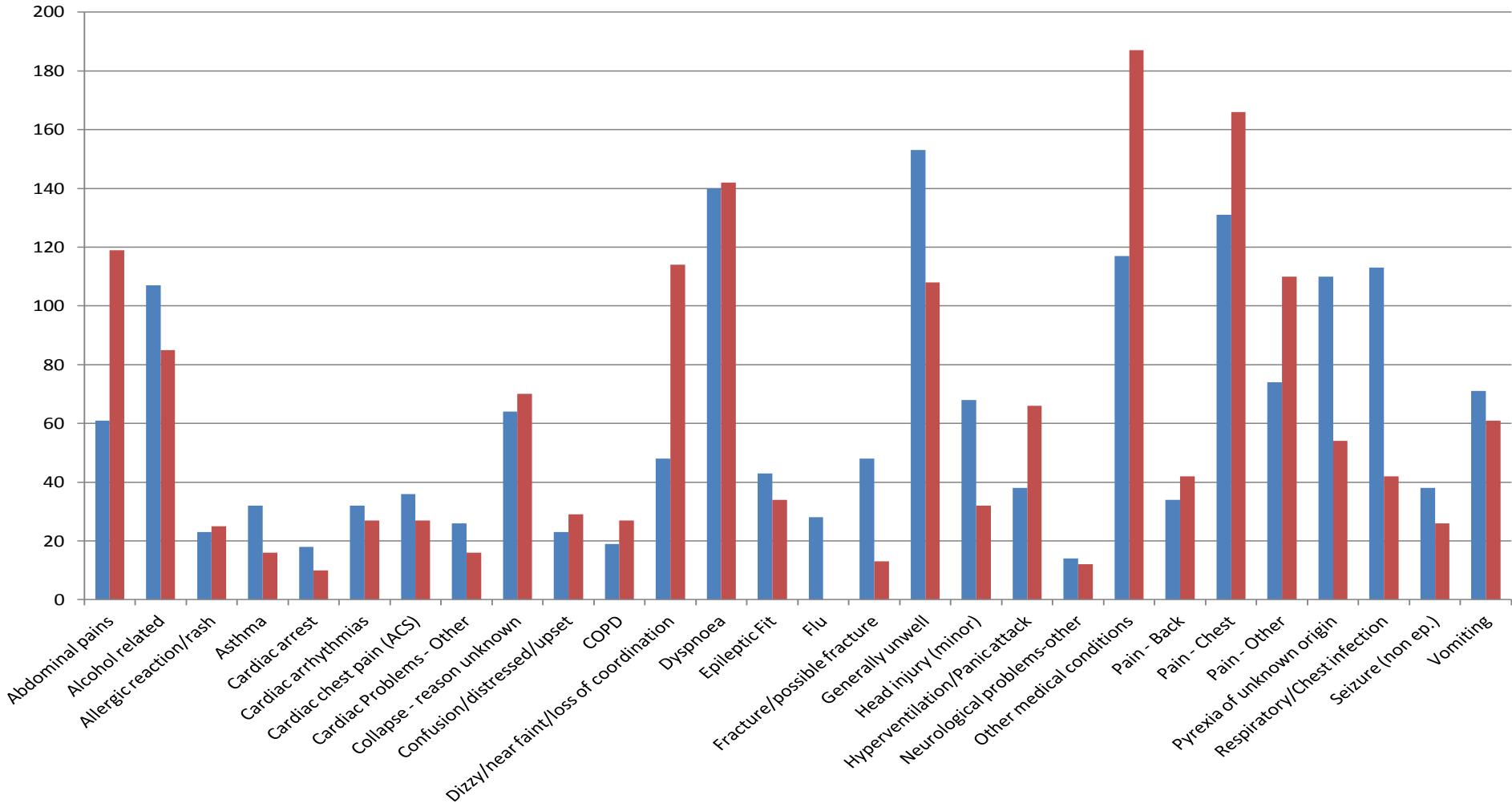
	Birmingham	Black Country	Cov & Warwick	Staffordshire	West Mercia
Performance	<p>82.3%</p>	<p>83.1%</p>	<p>83.3%</p>	<p>79.6%</p>	<p>74.4%</p>
Incidents vs Forecast	-2.8%	-3.1%	-5.9%	-1.3%	-2.4%
Hours vs Forecast	2.7%	8.7%	3.2%	13.5%	8.8%
Planned Overtime	581:52	424:37	191:30	243:15	488:40

up to 10%    10 - 20 %    over 20%

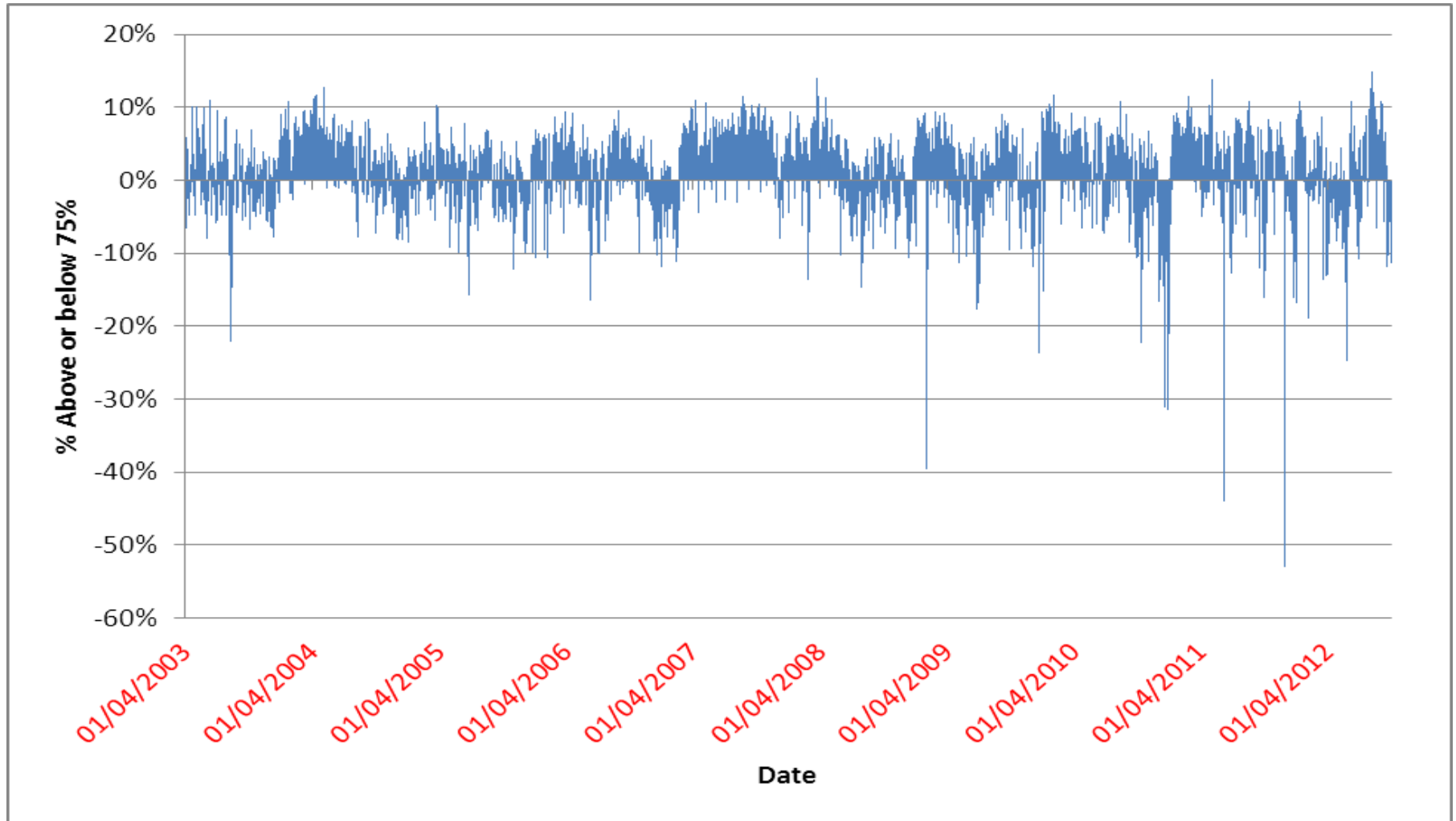
Overtime data only available from 01/08/2011. Incidents shown are Emergency & Referral only

[Click on Division name to see further detail by hour](#)  
[Click on Overtime Value to view Overtime details](#)  
[\\* Click on Hours vs Forecast Title for further summary](#)

# **EVIDENCE: LAS Selected Daily Total Illness Codes: 17<sup>th</sup> December 2010 (Blue) versus 22<sup>nd</sup> July 2013 (Red)**



# Evidence: LAS Daily Cat A Response Rate % above or below 75% within 8 minutes





Public Health  
England

# New New Street Station BUCCANEER

(Birmingham Urban Climate Change  
Adaptation with Neighbourhood Estimates of  
Environmental Risk)

## Thermal Comfort & Air Quality

[UHI / Climate Layers](#)
[Risk Layers](#)

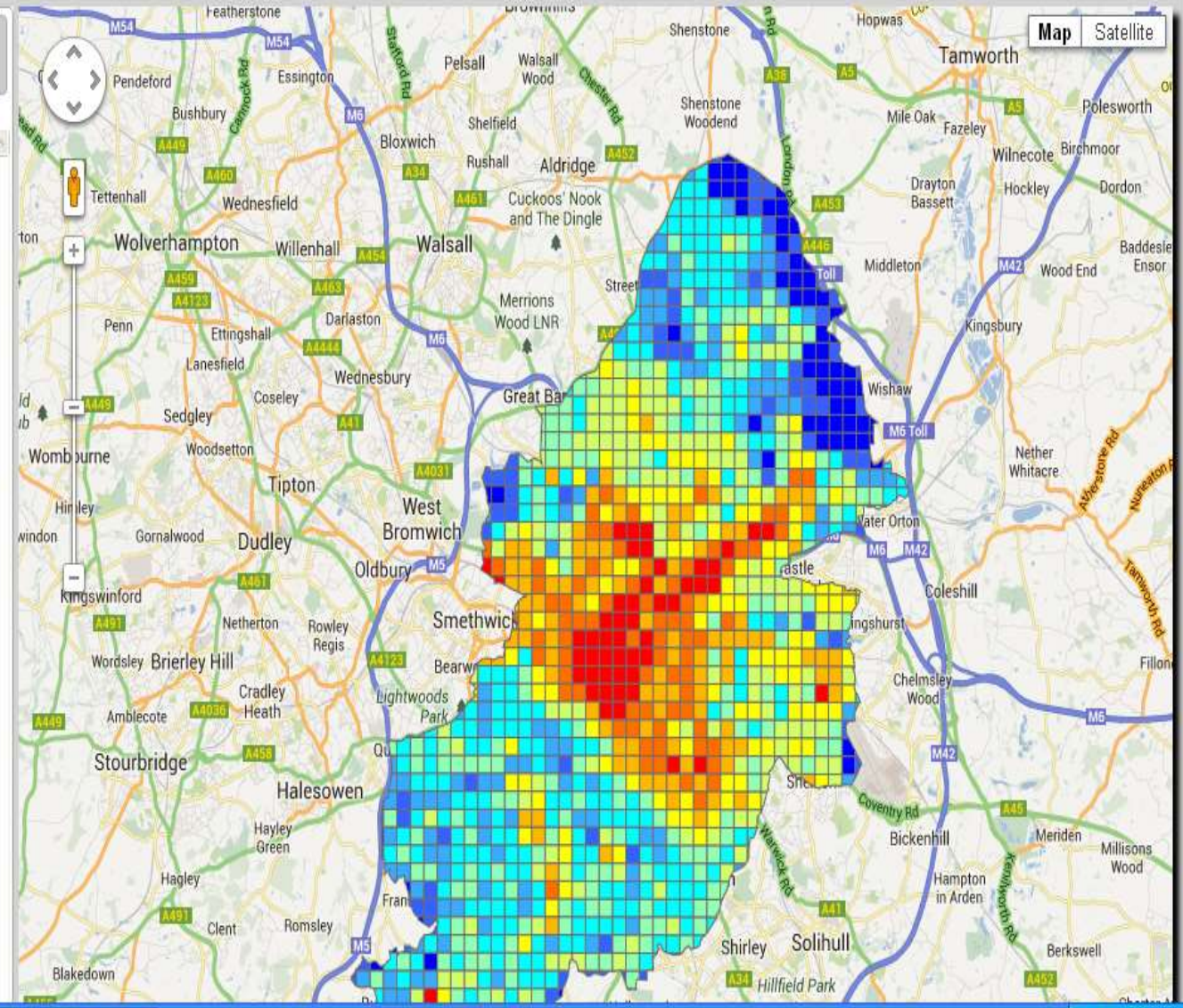
### UHI / Climate Layers Menu

Expand All | Minimise All | Add Ruler | Reset Map

- Urban Heat Island** | Info
  - Statistical Model
  - JULES Model
    - 18th July 2006 01:00
  
- Off
 



 On
  
- Future Climate Change** | Info





UHI / Climate Layers

Risk Layers

Expand All | Minimise All | Add Ruler | Reset Map

- Urban Heat Island | Info
- Future Climate Change | Info
  - 2020
  - 2050
  - 2080

Low Emissions

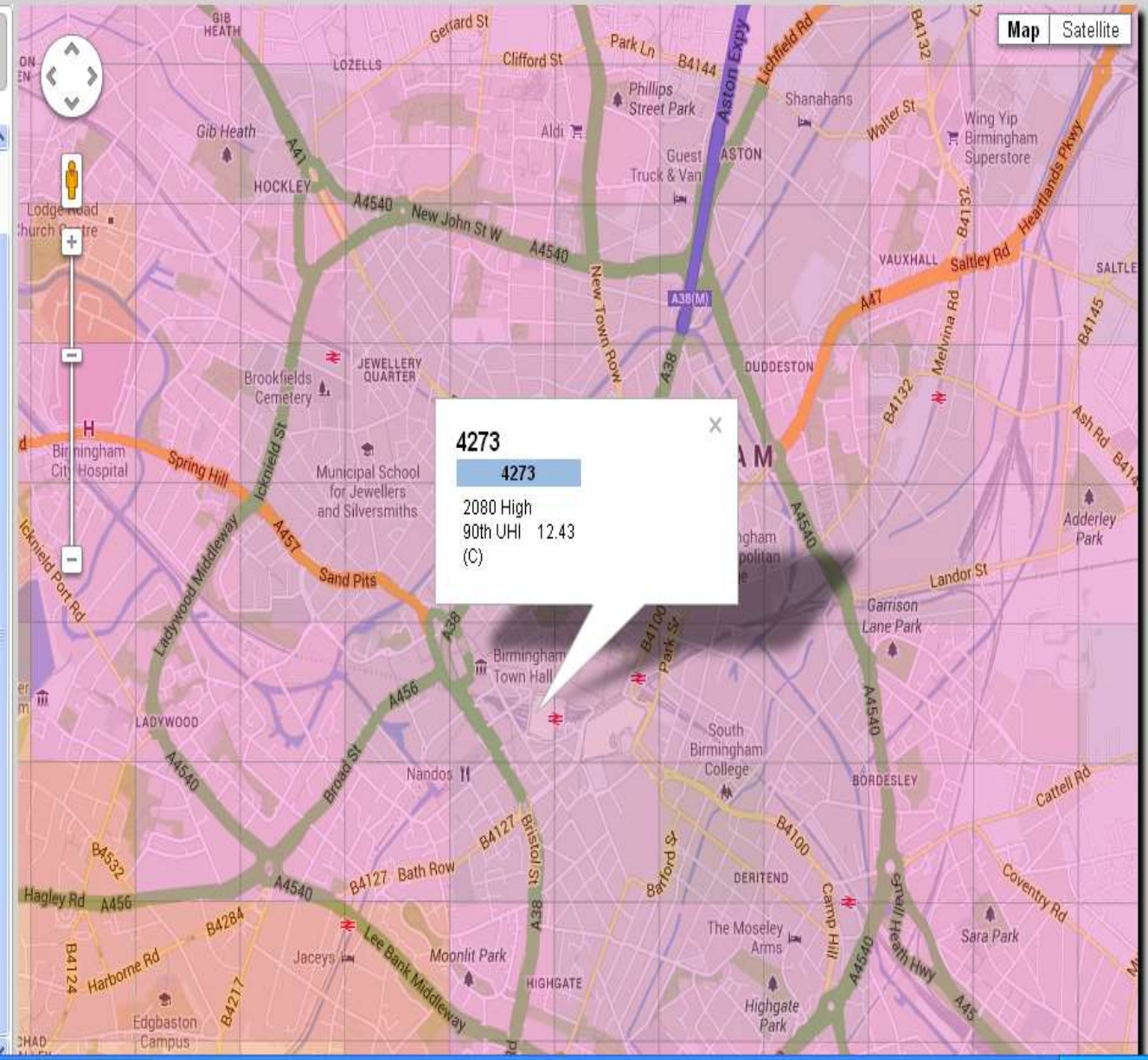
- 10th | Off       On
- 50th | Off       On
- 90th | Off       On

Medium Emissions

- 10th | Off       On
- 50th | Off       On
- 90th | Off       On

High Emissions

- 10th | Off       On
- 50th | Off       On
- 90th | Off       On




 Ladywood Ward  Ward urban fraction (0 - 1)

3.58 Present nocturnal summer UHI for Ward

## Urban Climate Projection Matrix

Change in summer mean nocturnal min temperature including the UHI effect (Based on the urban fraction value given above). (10th, 50th and 90th are the probability levels, 50th being the central estimate).

 2020 Low Emissions  10th  50th  90th

 2030 Low Emissions  10th  50th  90th

 2080 Low Emissions  10th  50th  90th

 2020 Medium Emissions  10th  50th  90th

 2050 Medium Emissions  10th  50th  90th

 2080 Medium Emissions  10th  50th  90th

 2020 High Emissions  10th  50th  90th

 2050 High Emissions  10th  50th  90th

 2080 High Emissions  10th  50th  90th




# LORD STAFFORD AWARD 2013

**BUCCANEER** - Birmingham Urban Climate Change Adaptation with Neighbourhood Estimates of Environmental Risk

**Innovation for Environmental Sustainability Award Winner**



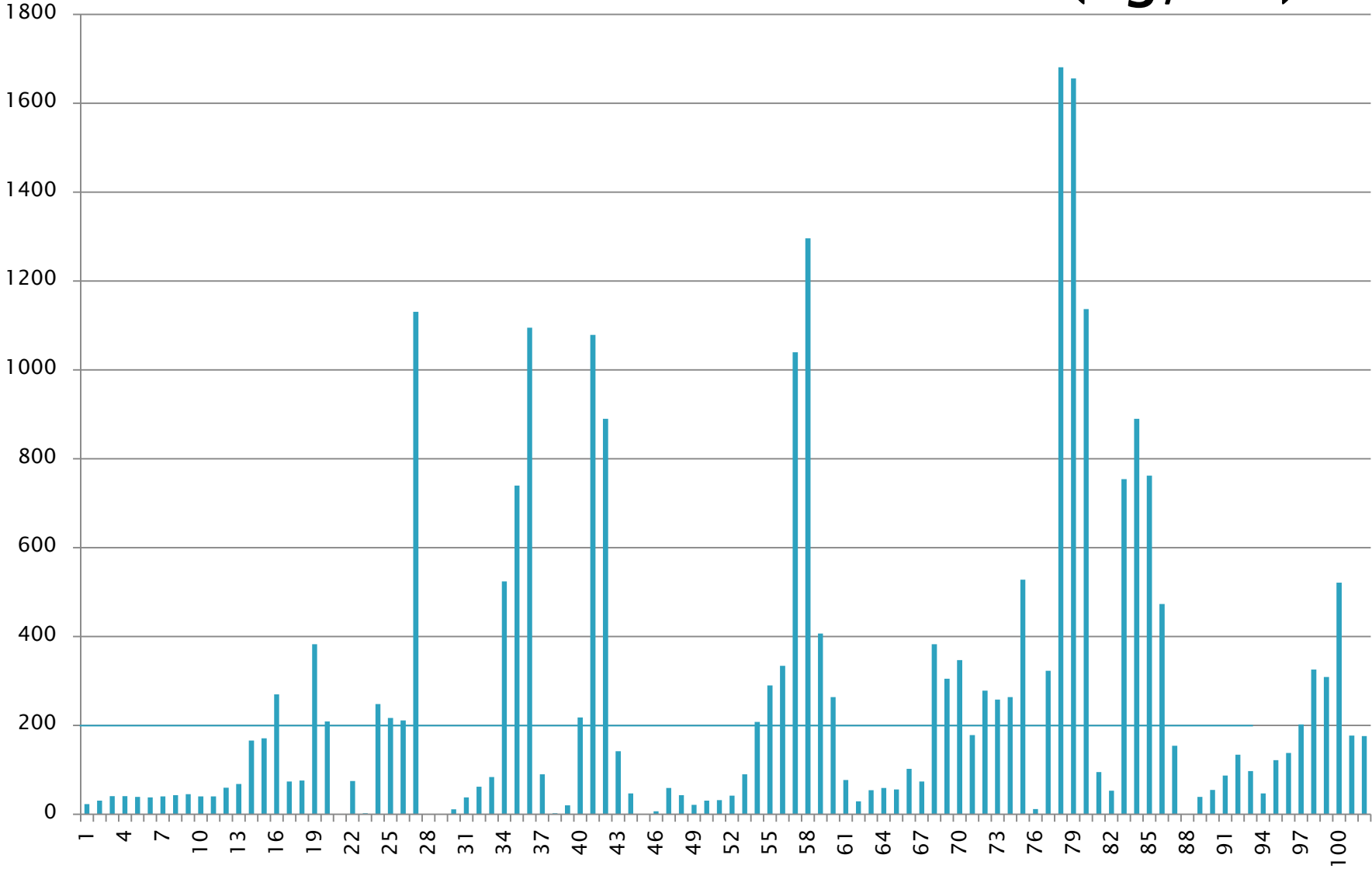
Technology Strategy Board  
Driving Innovation

Knowledge  
Transfer  
Partnerships

UNIVERSITY OF  
BIRMINGHAM



# Evidence: New Street Station NO2 (ug/m3)





Public Health  
England

# COMEAP

## Information for the public

**Main Menu**

- Home
- Membership
- Subgroups
- Documents
- Contacts
- Links
- Health Effects of Air Pollutants**
  - Pollutants
  - Cardiovascular disease and air pollution
  - Asthma and air pollution
  - Public Health and Policy Development
  - Current thinking/Issues in air pollution and health

### The Health Effects of Air Pollutants

Air pollution causes a number of effects on health including: wheezing; coughing; worsening of asthma; changes in lung function; deaths and hospital admissions from respiratory and cardiovascular diseases.

Many studies have shown that current levels of air pollutants are linked with effects on health.

Levels of air pollution are monitored widely in the UK. Data provided from monitors allows us to estimate the scale of the effects of air pollution on health in the UK today.

Researchers link this information to information from doctors and hospitals to assess whether any relationship exists between the levels of a pollutant and illness or death using epidemiological studies. Read about the use of [epidemiological studies](#) and [toxicological studies](#) in air pollution research.

**Pollutants**

Read about the health effects of short- and long-term exposure to these pollutants

COMEAP

COMMITTEE ON THE MEDICAL EFFECTS OF AIR POLLUTANTS

### Review of the UK Air Quality Index

A report by the  
Committee on the  
Medical Effects of  
Air Pollutants

<http://www.comeap.org.uk/>



**James Mackenzie**  
Senior Business Manager

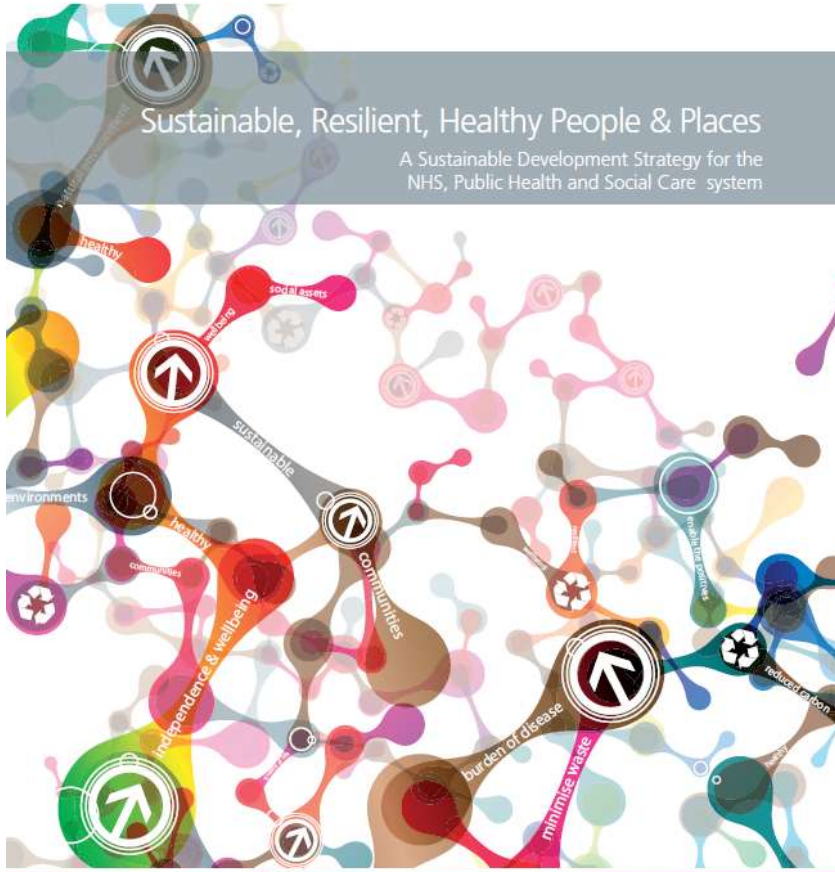
Sustainable  
Development Unit

Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system

# Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system



Sustainable Development Unit  
Working across the NHS, Public Health and Social Care system





# Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system





Goal 2-  
Communities and  
services are  
resilient to  
changing times  
and climates

Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system

JSNAs

Health and  
Wellbeing Strategies

HWBB reports

Sustainability as an identifiable component of local plans

### Organisation:

1. Board approved  
plan

- Sustainable Development Management Plan (or equivalent) including carbon reduction, adaptation plans and actions across the sustainability agenda

2. Measure, monitor  
and report

- Statement of progress and action on sustainable development and adaption performance with recognisable core standard figures in annual report

3. Evaluation

- Evaluation, for instance with the Good Corporate Citizenship self assessment tool, to ascertain areas of strengths and opportunities for development

4. Engage staff,  
service users and  
the public

- Engagement with public, patients, clients and staff to help understand and support the development of a more sustainable and resilient health and care system

# Module: Healthy, sustainable and resilient communities

Sustainable, Resilient, Healthy People & Places

Module:  
Healthy, sustainable and resilient communities

- Public services and communities work together within a high level framework for sustainable development
- Current and future risks to health and wellbeing from changing times and climates are understood and minimised
- Communities, services and infrastructures are prepared and resilient to weather events and other crises
- Health and wellbeing is protected and improved by building on social assets, reducing environmental harm and enhancing the natural environment.



Sustainable Development Unit  
Working across the NHS, Public Health and Social Care system

# Existing mechanisms

- **Public Health Outcomes Framework** -  
Number of public sector organisations with a Sustainable Development Management Plan
- **National Adaptation Programme - ARP**
- **CCG annual reporting requirements**
- **NHS Standard contract**



Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system



## Sustainable, Resilient, Healthy People & Places

A Sustainable Development Strategy for the  
NHS, Public Health and Social Care system



## **UNDER THE WEATHER**

**Jon Clubb**

**Director, Climate UK &  
Climate Change Coordinator,  
Your Climate**

# OUTLINE

- **Background to Climate UK and Your Climate**
- **Key Climate Messages for Yorkshire & Humber**
- **What help is available locally?**

# THE CLIMATE UK NETWORK

- 1 Sustainability East
- 2 Climate East Midlands
- 3 London Climate Change Partnership
- 4 Climate NE
- 5 Climate Change Northwest
- 6 Climate South East
- 7 Climate SouthWest
- 8 Sustainability West Midlands
- 9 Your Climate - Climate Change Partnership for Yorkshire and Humber
- 10 Climate Northern Ireland
- 11 Adaptation Scotland
- 12 Welsh Assembly Government





# YOUR CLIMATE PRIORITIES



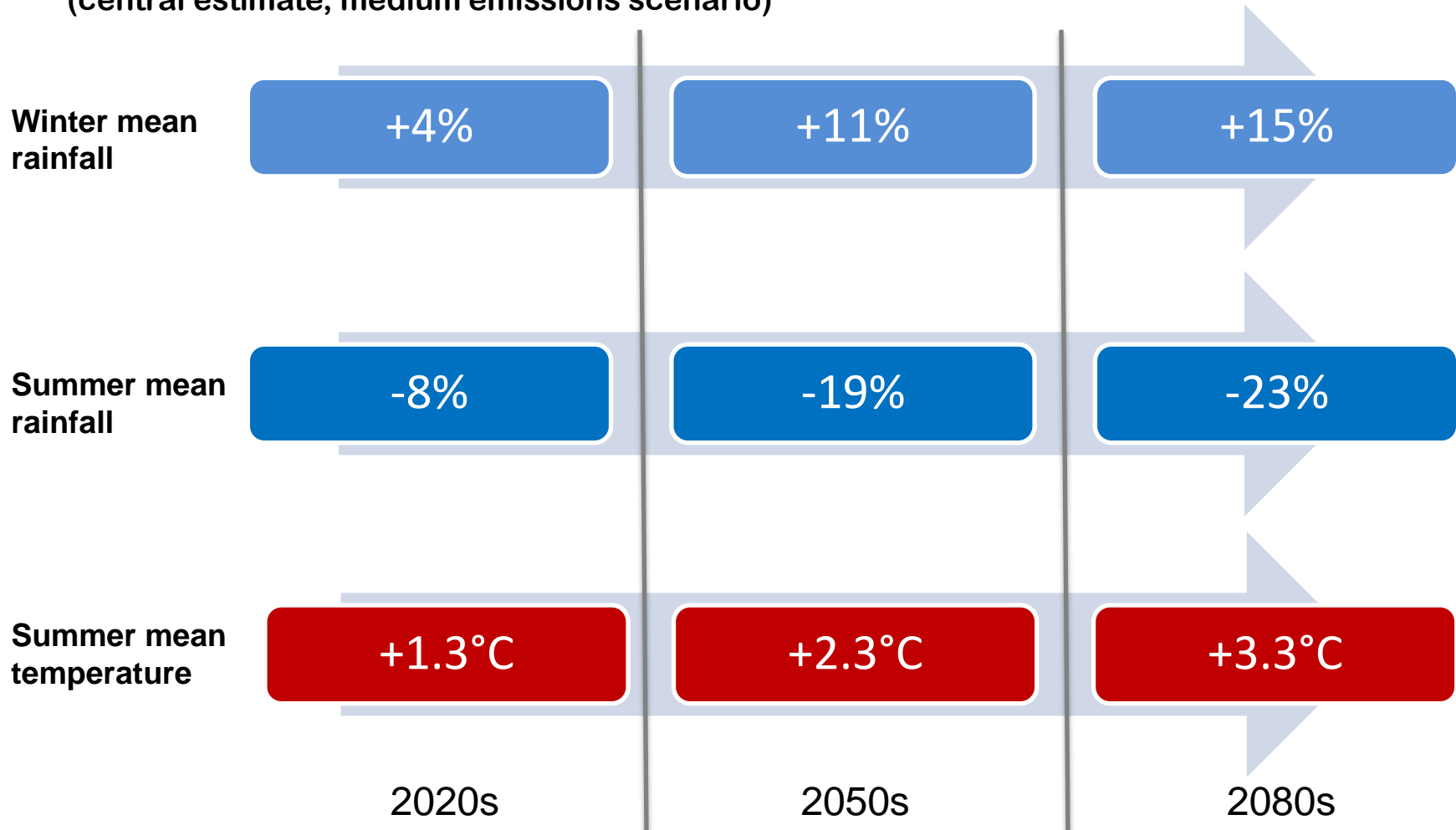
- Engage clearly and simply with businesses
- Build capacity and expertise in public, education and 3rd sectors
- Develop projects to support a resilient and low carbon future
- Influence and support the Natation Adaptation Programme



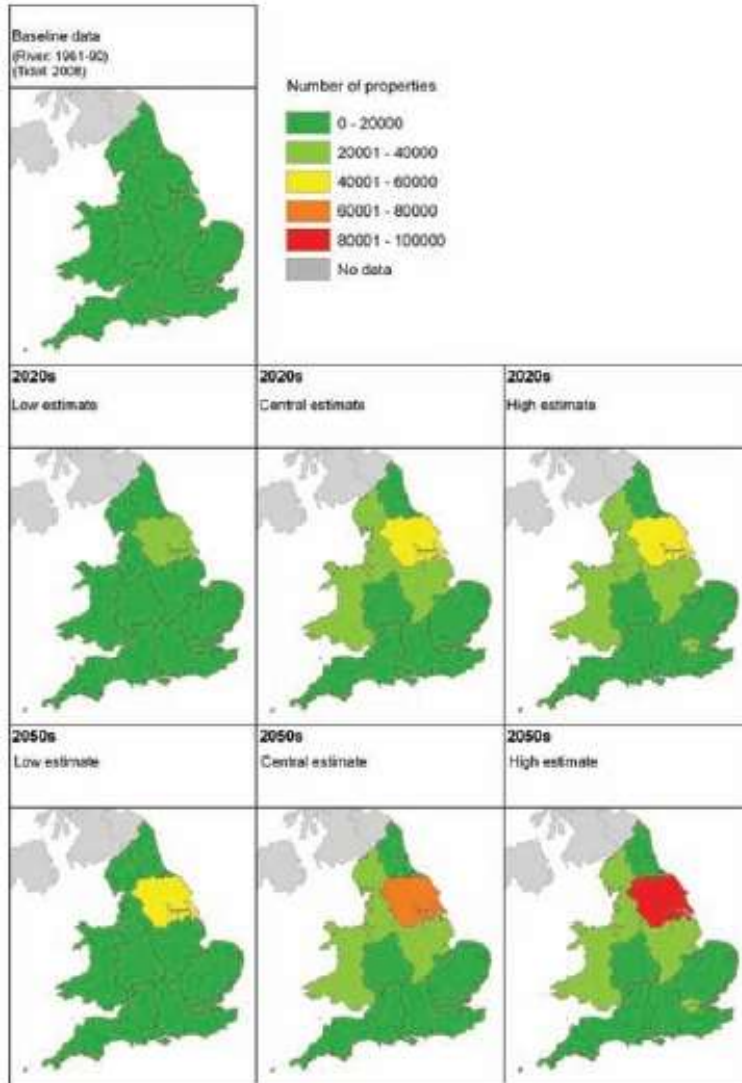
# CLIMATE MESSAGES FOR Y&H

## UKCP09 Climate Projections

(central estimate, medium emissions scenario)



# FLOOD RISK AND DEPREVATION



Number of properties in England & Wales in the highest 20% of deprived areas at significant risk of flooding

CCRA, 2012

# CLIMATE MESSAGES FOR Y&H

## Health & Wellbeing

- Areas of high flood risk and high deprivation
- Impacts exacerbated by disadvantage
- Exacerbation of existing health conditions
- Changing nature of health needs
- Challenges to healthcare delivery



# PROVIDING SUPPORT



- Evidence
- Research
- Guidance
- Tools
- Projects





Thank you.

Jon Clubb  
**Director, Climate UK &  
Climate Change Coordinator,  
Your Climate**

[jon.clubb@climate.uk.net](mailto:jon.clubb@climate.uk.net)

07970 120827



## Introducing *Under the Weather*:

Improving health, wellbeing and resilience in a changing climate

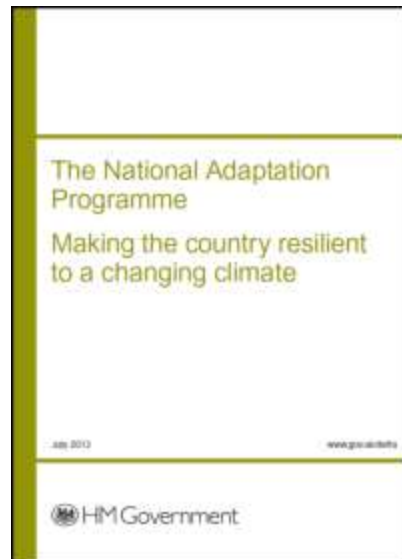
Jim Hodgson  
Climate Change Advisor  
Climate Ready Support Service

A support service led by the Environment Agency

# Climate Ready Support Service

- ➔ 3 year programme launched in 2012
- ➔ Part of Government's wider adaptation programme
- ➔ Aim: to help 'key sectors increase their resilience to climate risks' by incorporating climate risk management into routine business decision-making:

**UK  
2012** | **Climate  
Change  
Risk  
Assessment**



A support service led by the Environment Agency



# National Adaptation Delivery Group: Healthy and Resilient Communities

 Sustainable  
Development Unit



Public Health  
England

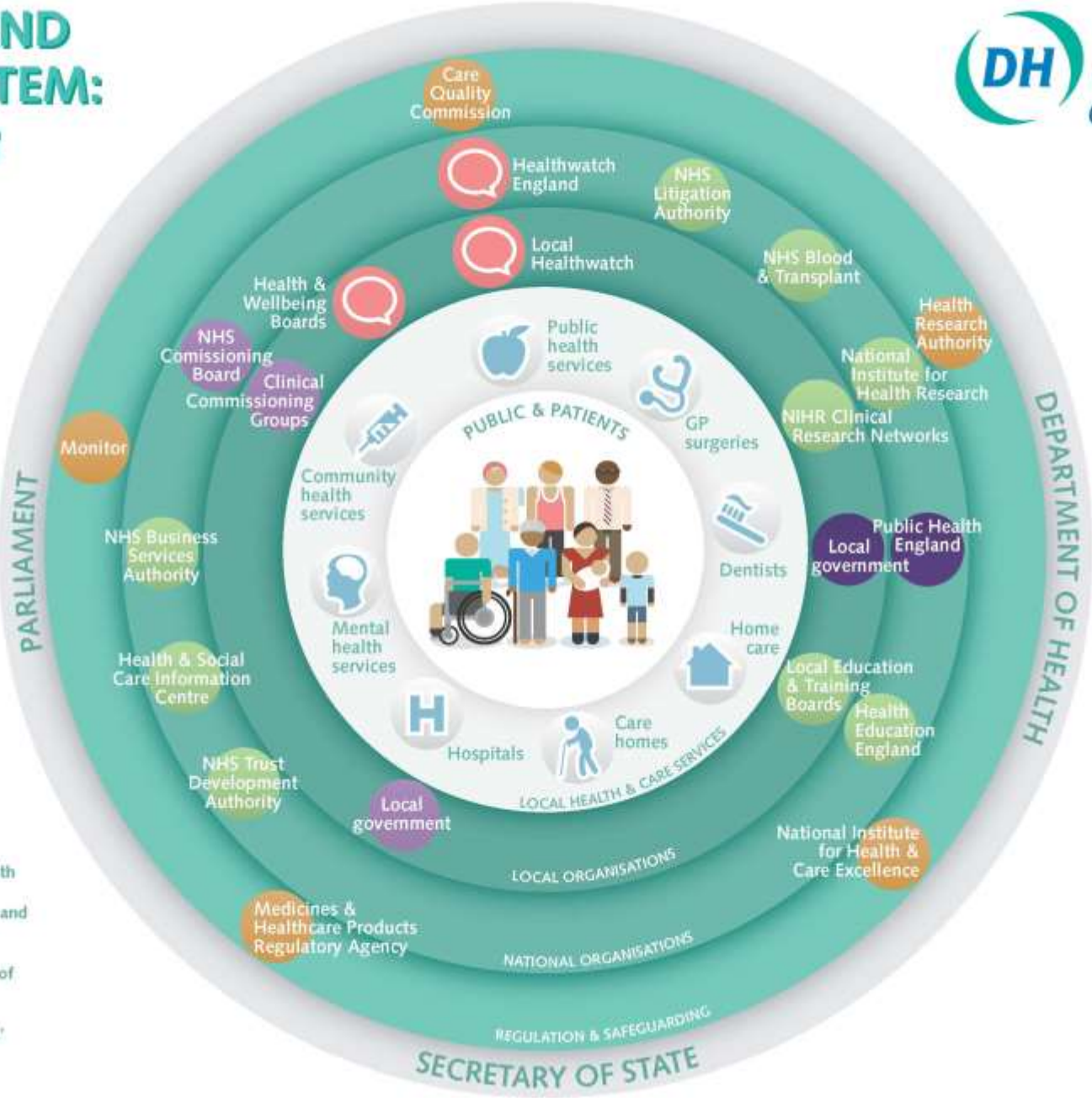
The National Adaptation  
Programme



A support service led by the Environment Agency

# HEALTH AND CARE SYSTEM:

April 2013



- KEY**
- Providing care
  - Commissioning care
  - Improving public health
  - Empowering patients and local communities
  - Supporting providers of care
  - Safeguarding patients' interests

# Adaptation for Health and Wellbeing Boards: Assessing Customer needs

- ➔ Stage 1: 2013 Health workshops
  - ➔ Run in partnership with CUK
  - ➔ Support from NAP delivery partners
  
- ➔ Stage 2: Market research
  - ➔ Economics
  - ➔ Identifying vulnerable populations
  - ➔ Risk assessment
  - ➔ Case studies



# Developing the toolkit

# URS



A support service led by the Environment Agency

**Getting Ready:**

**Understanding the benefits of adaptation**

**Enabling action:**

**What you can do in your role**

**Becoming climate ready:**

**Tools and resources for adaptation**





A support service led by the Environment Agency

# **Adaptation and Resilience**

## ***What Social Care Has to Offer***

**Catherine Max**

**‘Under the Weather’ Launch Events**

**Manchester and York, February 2014**



# *From safeguarding to social value?*





# Sustainable social care and personalisation: a guide for community engagement



social care institute for excellence **scie**

ADULTS SERVICES SCIE REPORT 55

## Sustainable systems of social care



social care institute for excellence **scie**

WORKFORCE DEVELOPMENT REPORT 55

## Independence, community and environment

Final report of the Sustainable Social Care Learning Network



Local Government Association

## Changing climate, changing conversations

Climate change and health reforms



Local Government Association

### KEY FEATURES: ALL CHANGE

#### Fuel poverty can keep climate on the agenda

The Public Health England (PHE) 2014-15 strategy recognises the significance of the wider determinants of health, including the environment, and this is reinforced by the return of public health to local authorities. But the impact of public health councils are making climate change less of a priority as they find their work in this area. How can we keep environmental sustainability and climate change at the agenda in terms of funding and resources?

A Social Care Institute for Excellence (SCIE) report outlines the following messages for organisations:

- the impact of climate change on sustainable growth and health inequalities
- adaptation at risk management
- the importance of community resilience
- the role of public health, both as the co-ordinator of health and the prevention of at-risk groups

Building on PHE Sustainable Health and Social Care: A Guide for Commissioners and Health and Wellbeing Boards (Local Care Improves the Sustainable and Healthy Sustainable Development Case, 2011) and other sustainability evidence for health care – and better – care (a 2012 report for quality, prevention, productivity and innovation (QPI) Case for reducing wasteful use of natural as well as financial resources, and for integrating health and well-being for better care, joined services, and also for social responsibility.

Health and social care collaboration in action can be found at [www.leading-into-it.co.uk](http://www.leading-into-it.co.uk)



**Speaking practically, fuel poverty is a harmful conjunction of health, social care and environmental concerns.**

making sure people have ways which reflect local needs. Across the world, it's not environmental policy that causes the most climate change, it's fuel poverty. As the world struggles to meet the 2015 goals, fuel poverty affects almost a fifth of London households and contributed to 2,300 avoidable deaths in 2012/13. The risk is exacerbated by the nature of London's housing stock which is old and

difficult to modify, but to maintain the high standards of the previous seasons and changes to reduce health and income.

The National Climate Change Risk Assessment (2012) suggests that there will be increased incidence of adverse weather events, with continued strong cold spells to which we are not currently well adapted. The Cold Weather Plan for England (Department of Health, 2012) recommends, therefore, that health and wellbeing boards consider resource re-allocation events to meet local Strategic Needs Assessments and Joint Health and Wellbeing Strategies. It is also the added Climate LAs' ability to provide a co-ordinated approach to climate change mitigation and adaptation in order to ensure that people can be safe and comfortable in their homes in the face of

Weather and behaviour do not exist in a vacuum. The strategy, from Home to a Changing Climate: Greater London Authority, 2014, Greater London Authority (GLA) Strategic Council's Local Health Improvement Network (LHIN) offers a framework for integrating health, social care, and environmental concerns. It is a community-based approach to the health of London.

Fuel poverty is a health and social care issue. But, speaking practically, it is a harmful conjunction of health, social care and environmental concerns because the most sustainable way to reduce fuel poverty is to improve household energy efficiency which reduces energy and carbon emissions at the same time. If London's own health and social care systems is to be sustainable, then concerted action to address fuel poverty, making better use of health and community resources to climate change, is a very good idea to consider.

**Catherine Mack**  
Chair  
NHS London Carbon Reduction Steering Group



LGU LOCAL GOVERNMENT URBANISM UNIT



social care institute for excellence **scie** SOCIAL CARE INSTITUTE FOR EXCELLENCE

ADULTS SERVICES SCIE REPORT 55

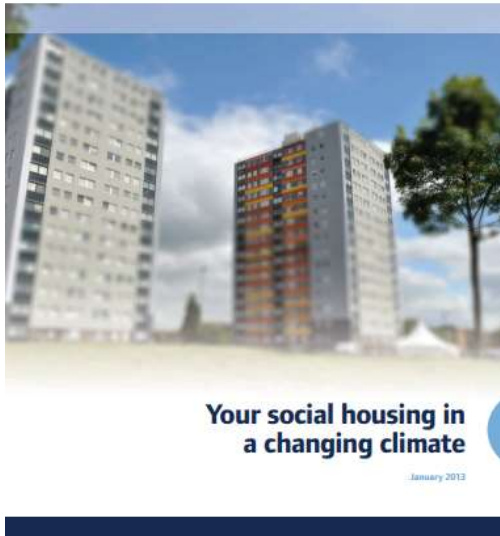
## The ethics of sustainable health and social care: Towards a framework for decision-making





Seasonal Health Interventions Network  
improving health and well being

[www.islington.gov.uk/seasonalhealth](http://www.islington.gov.uk/seasonalhealth)



*Photo courtesy of Friends of the Earth*

# Adaptation resonates with social care

‘Many of the principles used in social care, such as risk assessment, harm reduction, resilience and the importance of early intervention, are equally useful when we think about the environment.’

Bradshaw, Sillett and Walker

[Independence, community and environment](#)

Scie 2010

# Expectations are growing

‘The generations coming into social care now are going to be more environmentally aware so it is about accepting people as individuals and helping them to take control and continue to be self-sufficient if they want to be.’

Service Manager Gill Scott, quoted in

[Making adult social care greener](#)

Community Care 8 April 2011

# Service users are environmental leaders



# Think global, act ... personal

‘Community-based models of personalisation, such as those that adopt the principles of co-production, localism and time-banking, have great potential to facilitate the development of care and support that is environmentally, economically and socially sustainable.’

Evans, Hills and Grimshaw

[Sustainable systems of social care](#)

Scie 2010

# Connectivity and quality of life



# Community and resilience are key

‘Building resilience in people’s lives and their experiences of community is now key to modern social care. It’s also the key to adapting to uncertainty such as climate change, and makes this work topical and timely.’

Peter Hay, Strategic Director for Adults and  
Communities

Birmingham City Council

in [Changing climate, changing conversations](#) LGA 2011



# Thank you!



[www.catherinemax.co.uk](http://www.catherinemax.co.uk)  
[catherine@catherinemax.co.uk](mailto:catherine@catherinemax.co.uk)  
[@catherine\\_max](https://www.instagram.com/catherine_max)

# Climate Change, Vulnerability and the Voluntary Sector

Supported by:



# **The National Council for Voluntary Organisations**

**Champion volunteering and the voluntary sector**

**Strengthens voluntary organisations**

**Grow and enhance volunteering**

**10,000 members right across sector**

**171,000 VCOs across England**

**1/4 VCOs Health and Social Care**

**Statutory sector spends £3.39 billion on health services delivered by VCOs**

Supported by:



# The Project

- 2 year project April 2011 – March 2013
- 4 cohorts of VCOs working in England:
  - Older people (London)
  - Disability and mental health (London)
  - BME communities (Manchester)
  - Low income (Hull and Portsmouth)

**What impact will climate change have on your beneficiaries and work?**

# Cohorts

U3As, **volunteering bodies**, user-led organisations, **big, small**, learning disability groups, **community garden**, **mental health agencies**, homelessness organisations, **stroke/brain injury specialists**, **older people's forums**, arts organisations, **youth groups**, **faith**, asylum/refugee, **advocacy bodies**, **lunch clubs**, work programme, **Age UKs**, **advice agencies**, student unions



# Beneficiary projects

- Special events
- Games
- Surveys
- Art sessions
- Songs
- Life-skills discussions
- Trips





## Further information

# Climate Change, Vulnerability and the Voluntary Sector Report

<http://www.ncvo.org.uk/practical-support/impact/climate-change>

[Leesa.herbert@ncvo.org.uk](mailto:Leesa.herbert@ncvo.org.uk)

**Tel 0207 520 2557**



## Under the weather: Health and wellbeing and climate change



Katharine Knox, Joseph Rowntree Foundation

# Role and focus of Joseph Rowntree Foundation



## OUR WORK THEMES

### POVERTY:

To identify the root causes of poverty and injustice

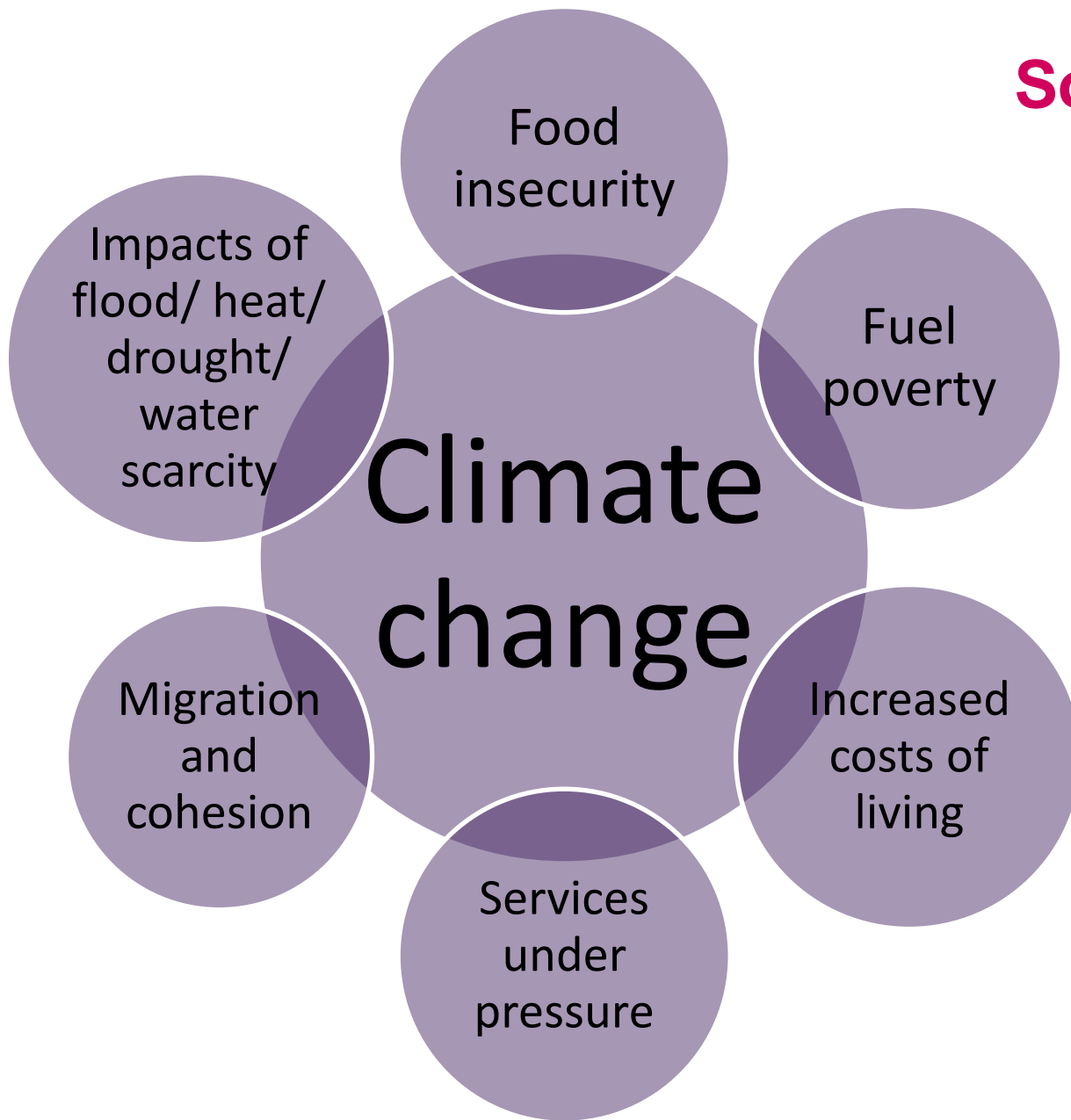
### PLACE:

To support resilient communities where people thrive

### AGEING SOCIETY:

To respond positively to the opportunities and challenges of an ageing society

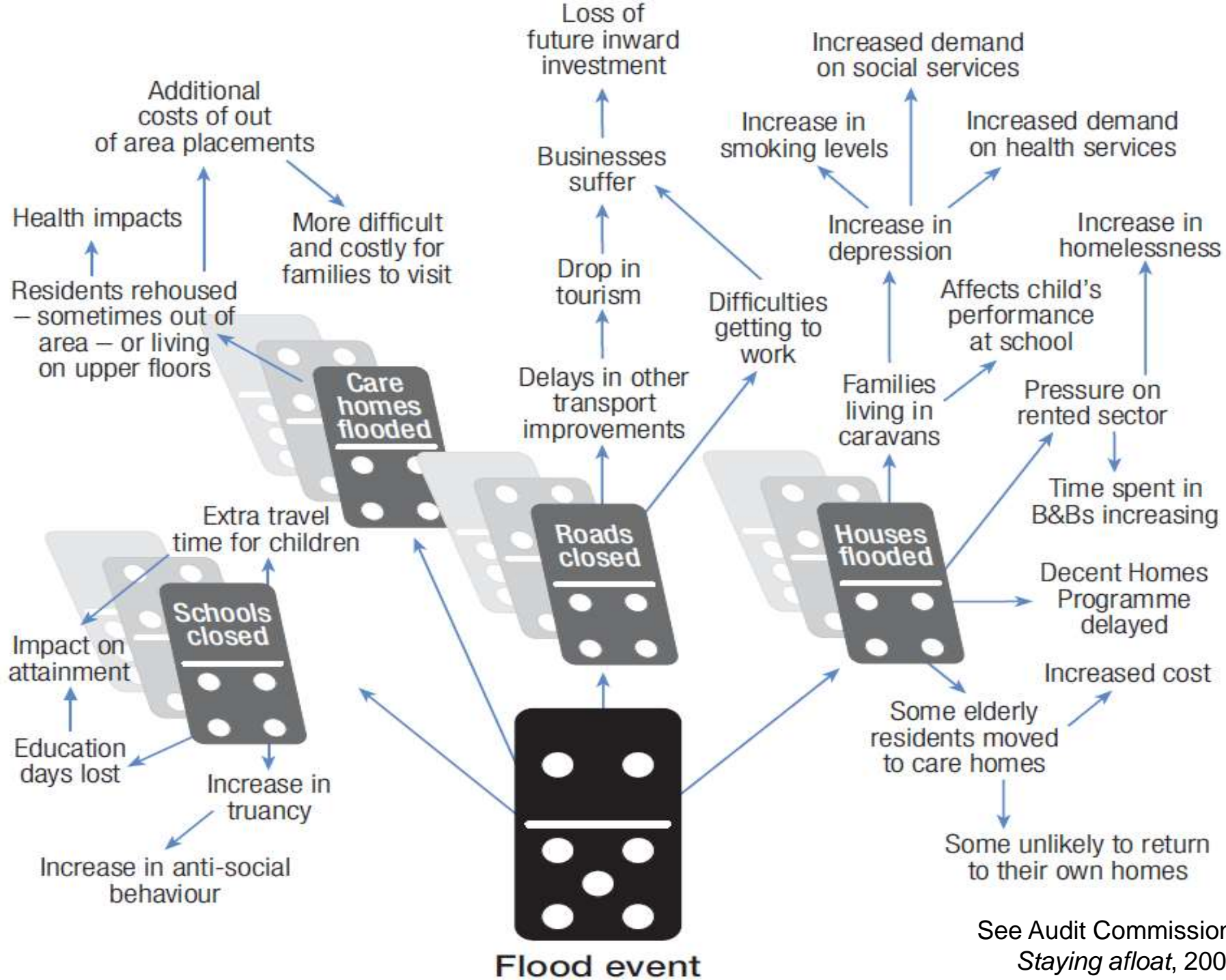
## Social impacts of climate change



Climate change will affect health and wellbeing in different ways from direct impacts of flood, heat, drought and water scarcity to issues over costs of living, including due to policy responses from energy and other policies eg affecting fuel poverty and food security

# What are the issues?





See Audit Commission, *Staying afloat*, 2007

# Why does social justice matter?

- **Distributional justice:** climate impacts and policy/practice responses could increase health and other social inequalities
- **Procedural justice:** whose voice is heard in decisions, who decides what action is taken?
- **Inter and intra-generational justice:** implications of responses today for future generations

*JRF focus on vulnerable groups incl people facing poverty and disadvantage*



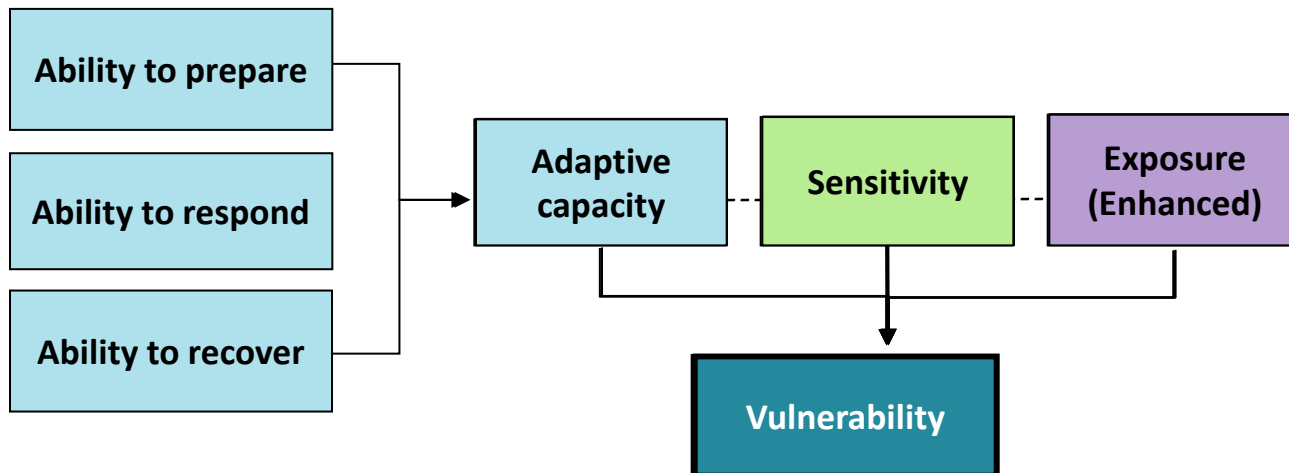


# Who is vulnerable and how does it link to wellbeing?

- Vulnerability is a matter of how external stresses impact on well-being
- People are more vulnerable if they are less able to respond to stresses placed on their well-being
- Key questions: how is vulnerability distributed? And how should inequality be measured?
  1. Likelihood and severity of the weather related event – flood, heatwave
  2. Vulnerability: The conversion of the event into welfare impacts and losses
  3. Climate disadvantage is a function of 1 and 2.

# Who is vulnerable to flooding?

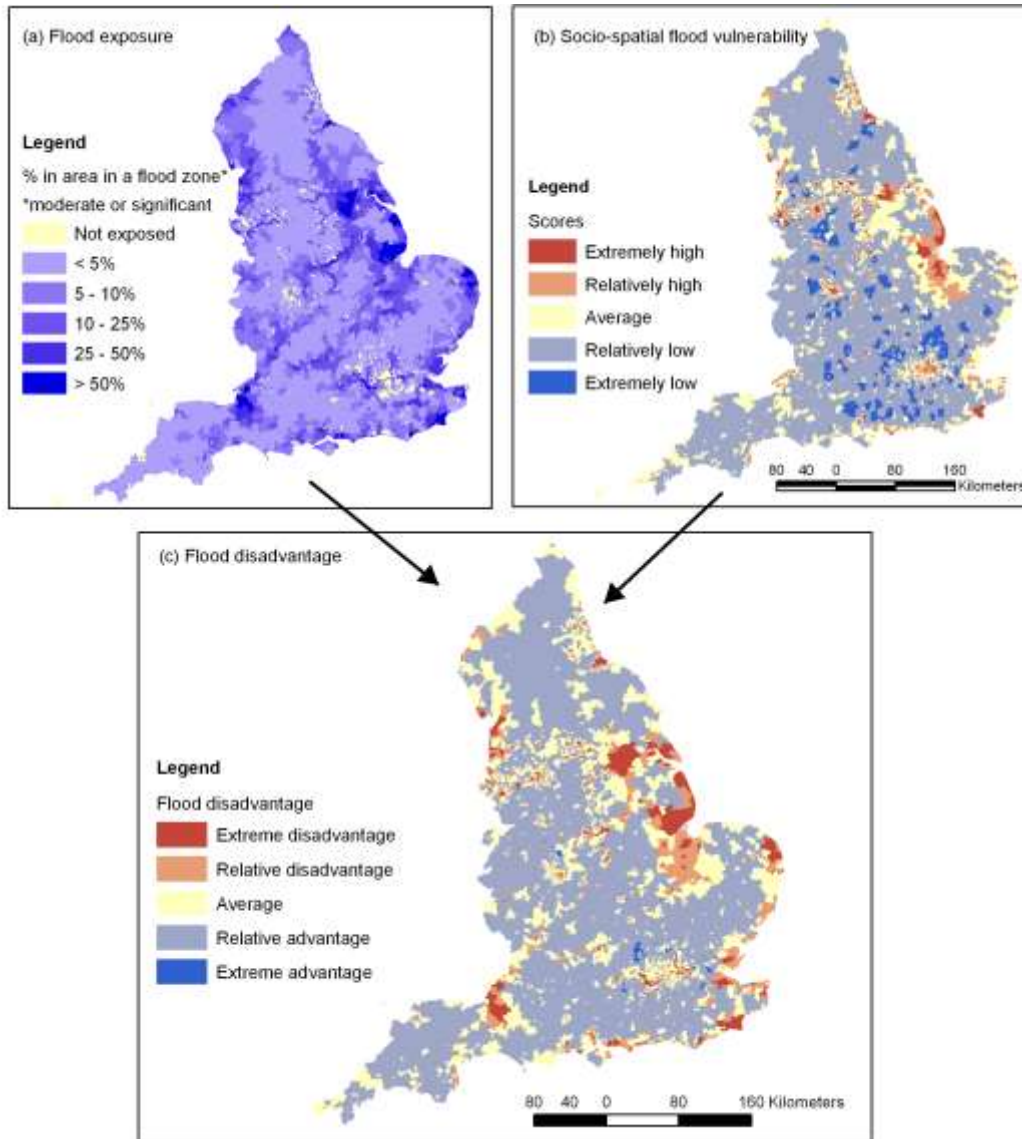
- Dynamic social and spatial issue (changes over people's lives)
- Personal, social and environmental factors
- Climate disadvantage = the likelihood & degree of exposure to a hazard e.g. flooding/ heatwave combined with vulnerability



# Important factors affecting vulnerability

Social factors: Adaptive capacity	Personal factors: Sensitivity	Environmental factors: Enhanced exposure
Low income	Age (very young & elderly)	Neighbourhood characteristics (green/blue space)
Tenure: ability to modify living environment	Health status: illness	Housing characteristics: (e.g basement/ high rise/ single storey buildings)
Mobility and access to services	Special care	Buildings (ventilation/cool spaces)
Social isolation	Homeless, tourists, transient groups	High housing density
Information and local knowledge		
Access to insurance		

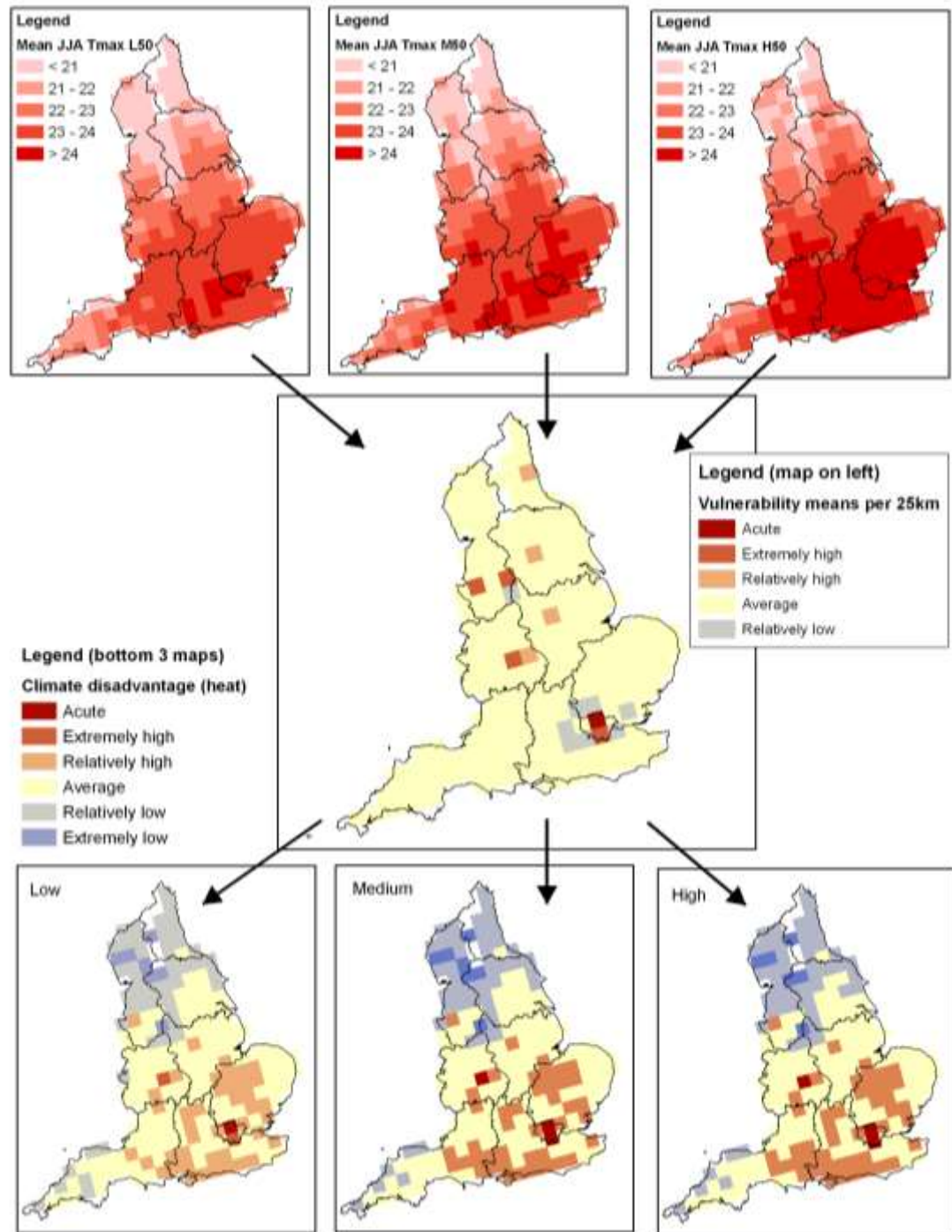
# Flood disadvantage in England



- Some areas have both high socio spatial vulnerability and high potential exposure to flooding
- Urban and coastal areas particularly vulnerable
- Most flood disadvantaged region is Yorkshire & Humber (ie social vulnerability coincides with high likelihood of flooding)

# Heat disadvantage in England

- London's high average vulnerability to heat is coupled with a tendency for higher temperatures so makes it a particular area of concern
- Other areas of concern mainly in south and east
- Also questions re water availability and drought in some of these areas



# Messages from JRF research...

- Compounded injustice in relation to climate change in UK
  - Low income households who contribute least to problem (lowest emissions) also...
  - Among worst effected by climate change impacts
  - Pay more and benefit less from responses to it (through energy bills & measures)
  - Often have least voice in decisions
- Poverty is an important factor increasing vulnerability
- To support resilience, need to build adaptive capacity
  - to prepare, respond and recover from climate impacts

# Aims of ClimateJust...

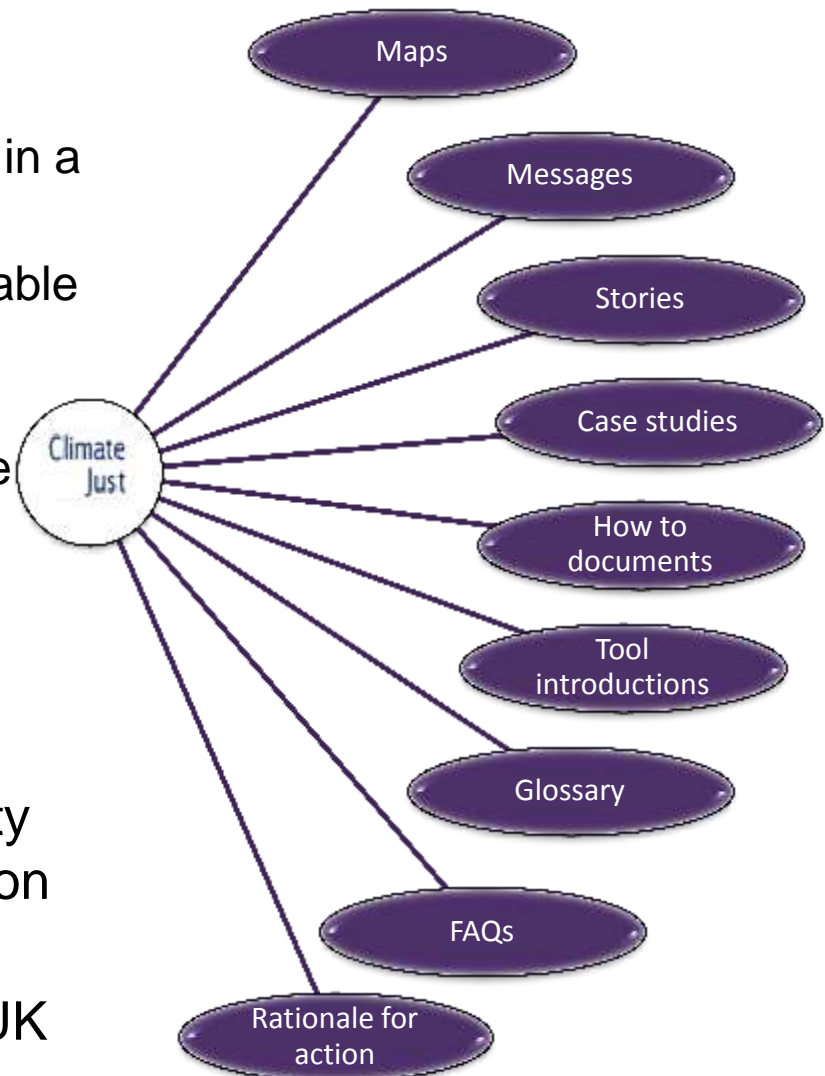
*To provide information & guidance that can support practitioners at a local level to develop socially just responses to climate change in UK*

## **What could it help you with?**

- Awareness of key issues on developing socially just responses to climate change
- Understand which people and places are vulnerable to climate impacts of flooding and heat
- Understand responsibility for emissions and patterns of fuel poverty
- Assess local patterns of social vulnerability and connect these to actions (- maps to assess local risk)
- Identify who needs to be involved in developing responses
- Develop ideas on possible strategies and actions
- Make a case for equitable action (eg to address strategic priorities)
- Support responses by learning from case studies of local action

# About the ClimateJust resource

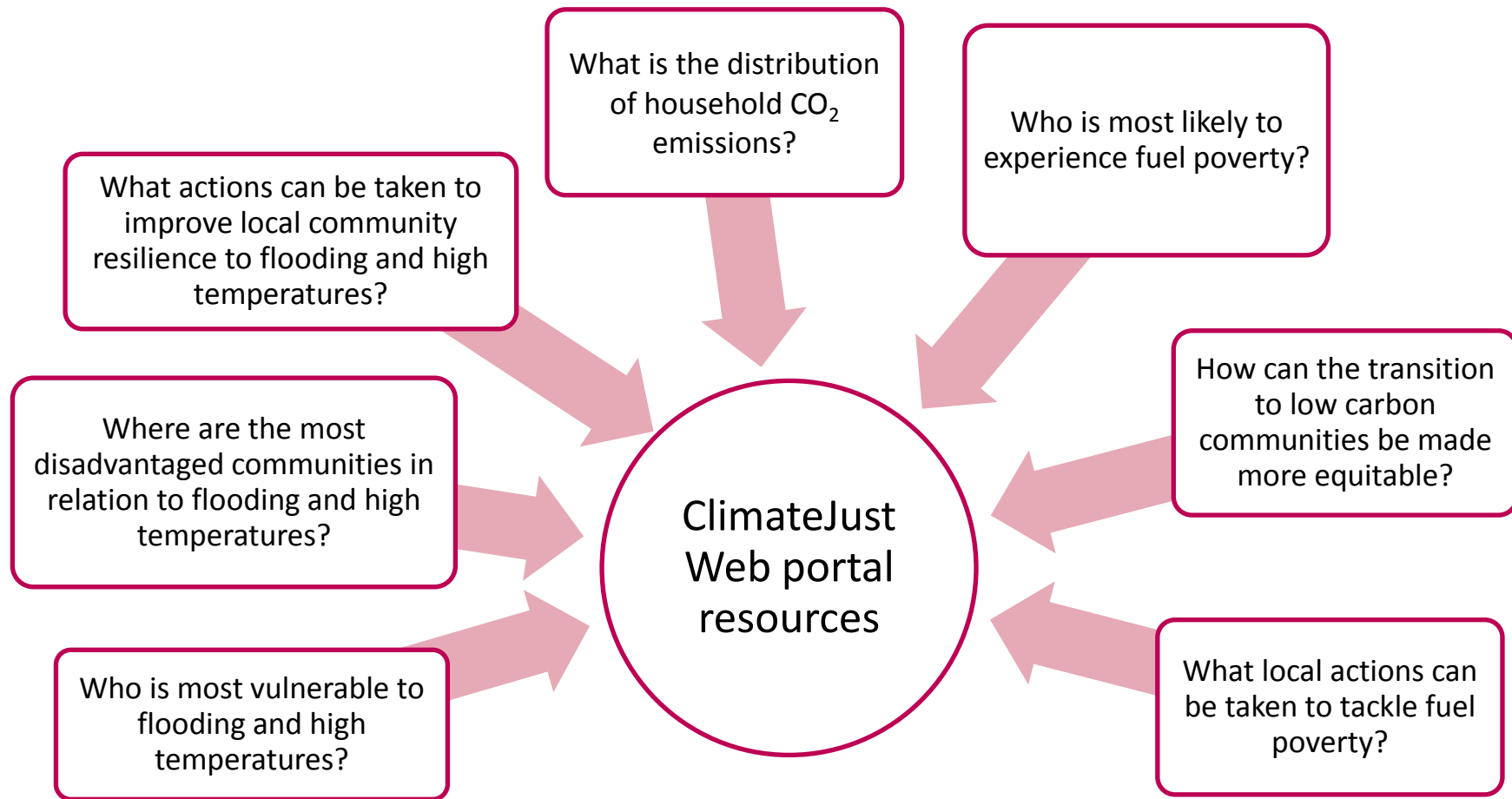
- Aims to:
  - Raise awareness of social justice in a changing climate
  - Increase knowledge about vulnerable groups in the context of climate change
  - Help to respond to climate change impacts and challenges
- Searchable resource
- Draws on existing tools and resources
- New information about vulnerability to climate change impacts based on census 2011 data
- Online portal, hosted by Climate UK





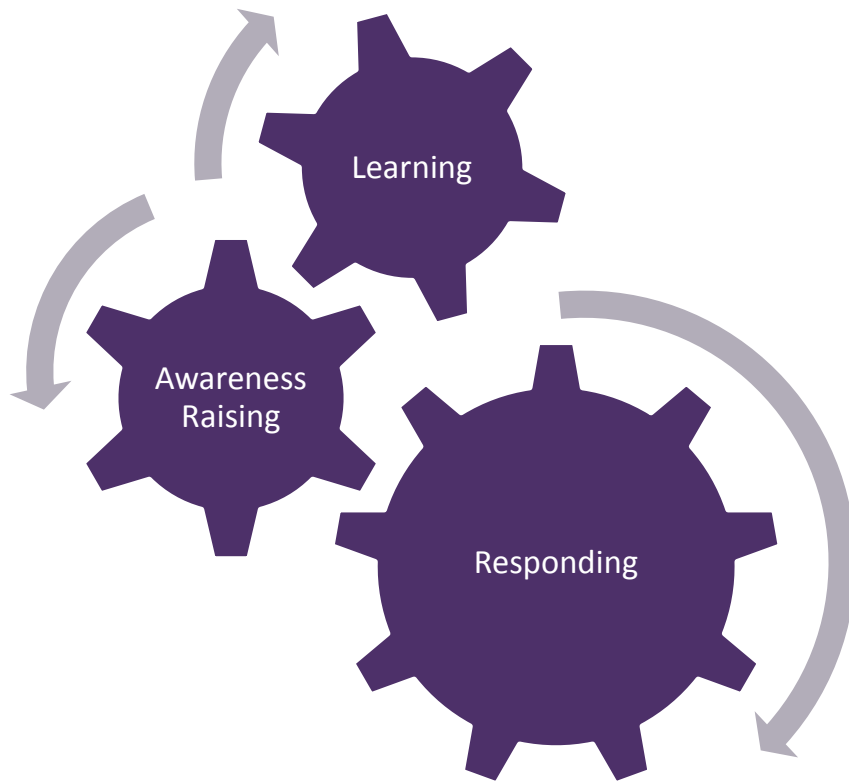
# Introducing ClimateJust: web portal

Resources to help delivery of equitable responses to climate change at local level



# Why use ClimateJust?

Primary audience is **local authorities and partners in social care, health, housing and voluntary and community sector** with a role in supporting vulnerable groups affected by climate change/policy & practice responses



The **National Adaptation Programme** mentions the ClimateJust project as one of the initiatives which can help deliver on its Objective 13:

*To minimise the impacts of climate change on vulnerable groups in society by strengthening their resilience to better prepare for, respond to and recover from future climate risk.*

## ClimateJust next steps

- Content developed by Manchester University
- Being used to develop a website
- Website to be hosted by Climate UK
- User testing over the Summer
- Due for completion by end 2014
- Practitioner workshops to support use
- Would you like to get involved?

*Please get in touch to find out more:*

[Katharine.Knox@jrf.org.uk](mailto:Katharine.Knox@jrf.org.uk) [www.jrf.org.uk](http://www.jrf.org.uk)

Twitter: @jrf\_uk @katharineknox

## *Moving Forward*

*What are the core features of a healthy, resilient, and sustainable community? What does it look like to you?*

*How can local action on climate change adaptation contribute to this?*

*What can you do in your local Health and Wellbeing Board/your role to make this happen?*

