



Local health and wellbeing in a changing climate

Building preparedness for people, services and communities

Event Report

York

5 March 2013

Supported by



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Agenda

Local Health & Wellbeing in a Changing Climate

Building Preparedness for People, Services and Communities

Tuesday 5 March 2013

10am - 3.30pm

York CVS, Priory Street Centre, 15 Priory Street, York, YO1 6ET

Chair: **Will Day**

Sustainability Advisor - PwC

Senior Associate - The University of Cambridge Programme for Sustainability Leadership

Time	Agenda Item	Speaker(s)
10.00 - 10.30	Registration - Tea / Coffee Available	
10.30 - 10.50	Welcome & Introduction	Jon Clubb - Your Climate / Climate UK Will Day - Chair for event
10.50 - 11.20	An Introduction to Adaptation <ul style="list-style-type: none">Climate Ready and the National ContextLocal Impacts in Yorkshire & Humber	Jim Hodgson - Environment Agency Jon Clubb - Your Climate / Climate UK
11.20 - 11.50	Health & Wellbeing in the Context of Global Sustainability	Will Day - Chair
11.50 - 12.30	Building Climate Change Adaptation into Joint Strategic Needs Assessments	Charles Kitchin - NHS Sustainable Development Unit
12.30 - 13.10	Networking Lunch	
13:10 - 13.15	Welcome back	Jeremy Walker - Chair, Your Climate
13.15 - 13.35	Extreme Events and Climate Change - Emerging Local Challenges	Prof Virginia Murray - Health Protection Agency
13.35 - 13:50	Emergency Response and Resilience	Alexis Keech - Yorkshire Ambulance Service NHS Trust
13:50 - 14.00	Climate Impacts on Vulnerable People - 'ClimateJust' Project	Katharine Knox - Joseph Rowntree Foundation
14.00 - 14.10	Q&A for Afternoon Speakers	Virginia, Alexis and Katharine
14.10 - 15.10	Developing Options for Adaptation - Interactive Session	Jon Clubb - Your Climate / Climate UK
15.10 - 15.30	Reflections, Summary & Close	Will Day / Jeremy Walker

Delegates

Organisation Name	Title	First Name	Last Name	Position
Barnsley MBC	Mr	Peter	Rodderick	National Management Trainee
Bradford Council	Ms	Jen	White	Strategy Officer
Bradford Council	Mr	Richard	Williamson	Environment & Climate Change Manager
Climate North East	Ms	Jennifer	Atkinson	CIPR Accredited Practitioner Communications
Defra	Mr	Rob	Hitchin	Health and Local Government Team
Department of Health	Mr	Jonathan	Graves	Science Policy Officer
Doncaster NHS	Ms	Vanessa	Powell-Hoyland	Public Health Improvement Officer
Environment Agency	Mr	Jim	Hodgson	Climate Change Advisor - Climate Ready Support Service
Environment Agency	Ms	Victoria	Slingsby	Principal Officer, Climate Change
Hambleton DC	Miss	Bryony	Wilford	Sustainable Development Officer
Health Protection Agency	Dr	Angie	Bone	Dr
Health Protection Agency	Ms	Virginia	Murray	Professor
Hull City Council	Mr	Martin	Budd	Environment and Climate Change Strategic Advisor
Joseph Rowntree Foundation	Ms	Katharine	Knox	Programme Manager
Kirklees Council	Mr	John	Atkinson	Environment Assistant
Lincolnshire County Council Public Health Directorate	Mr	Ray	Wright	Senior Public Health Programme Officer (Environmental Issues)
Local Government Yorkshire and Humber	Ms	Ruth	Hardingham	Climate Change Skills Programme Officer
Middlesbrough Environment City	Dr	Mark	Fishpool	Director
NHS Barnsley Public Health	Mr	Alan	West	Wider Determinants of Health Lead Officer
NHS County Durham and Darlington	Mr	Tim	Wright	Public Health Portfolio Lead

NHS South of Tyne and Wear	Mr	Stephen	Naylor	Head of Estates
NHS Sustainable Development Unit	Mr	Charles	Kitchin	Communications and Engagement Manager
NHS Yorkshire and the Humber	Mr	Dick	Ockelton	Regional Sustainability Lead
North Lincolnshire Council	Mr	John	Collinson	Councillor
North Yorkshire CC	Mr	Nick	Kemp	JSNA Project Lead
North Yorkshire CC	Mr	Tony	Law	General Manager
North Yorkshire Fire and Rescue	Cllr	Peter	Popple	Fire Authority Member
Northumberland County Council	Mr	Hugh	Clear Hill	Sustainability Programme Manager
Northumberland County Council	Mr	Paul	Walker	Policy Officer - Health Care and Wellbeing
Northumberland Tyne & Wear NHS Trust	Mrs	Sarah	Neil	Sustainability Manager
PricewaterhouseCoopers	Mr	Will	Day	Sustainability Advisor
Rotherham MBC	Mr	David	Rhodes	Environmental Manager
Rotherham MBC	Ms	Rowena	Machon	Adaptation Consultant
Sheffield City Council	Mr	Bernd	Hoermann	Sustainable Development Officer
South Tees Hospitals NHS Foundation Trust		Rajni	Sisodiya	Energy and Sustainability Advisor
The Conservation Volunteers	Ms	Caroline	Crossley	Area Manager

Presentation summaries

Introduction

Your Climate and Climate North East, on behalf of the Environment Agency and Climate UK, hosted a stakeholder event on 5th March 2013. It was one in a programme of eight local workshops being held across England during February and March 2013, as part of the Climate Ready Support Service.

The event aimed to open dialogue with those who work across health and wellbeing and had a focus on helping Health & Wellbeing Boards to realise their objectives in a changing climate. The background to holding the events was that the Health and Social Care Act 2012 established Health and Wellbeing Boards as a forum where leaders from the health and social care system work to improve the health and wellbeing of the local population and target the reduction of health inequalities. Responses to climate change at the local level will be vital in protecting the health and wellbeing of local communities as well as building resilience.

This series of workshops was designed to provide information and tools to help local decision makers further develop their understanding of the impacts of climate change on the health and wellbeing of local communities and the steps they can take to improve local resilience.

Aims of delivering the national programme of events

These events aimed to encourage action on climate change adaptation within health, public health and social care at the local level. It followed that each workshop would have the flexibility to deliver a local focus in order to maximise relevance to the audience and inspire action.

The broad aims of these workshops were to:

- Demonstrate to the Health & Wellbeing Boards the links between climate change, health & wellbeing, and the importance of adaptation, providing them with the tools and guidance to develop some adaptation options.
- Encourage and empower delegates to embed the principles of adaptation into their Joint Strategic Needs Assessments and Joint Health & Wellbeing Strategies. Demonstrate that by doing so; this will help to reduce the negative impacts of climate change on community health and wellbeing, in addition to protecting business continuity and resilience of service delivery.
- Use evaluation questionnaires to gather information from the delegates on potential barriers to action and how we can best support them in the future. Offer the opportunity to open dialogue with us in the future, so we can learn how to best support their interests.

Jon Clubb from **Your Climate** welcomed everyone and introduced **Will Day**, from **PriceWaterhouseCoopers**, as chair of the event. He invited feedback from delegates about what they hoped to get from the day.

Some key 'hopes' of the day were:

- An opportunity to link the agenda between different organisations
- Potential for pooling of resources
- New colleagues to meet and network with

Some 'fears' of the day were:

- Vulnerability is more difficult to tackle
- Transition of public health to local government
- Mitigation is forgotten

Will highlighted that there were a lot of partners in the room that could help and support on this agenda – i.e. Environment Agency, NHS Sustainable Development Unit, Your Climate, Climate North East and the Health Protection Agency.

Adaptation and Climate Ready – a National and Regional Context

Jim Hodgson, Climate Change Advisor from the **Environment Agency** provided some background to this series of events and the [Climate Ready](#) support service that the Environment Agency delivers. He reiterated that action on adaptation will be required due to the effects of historic and future emissions: our climate will change even if emissions stop tomorrow, and will be significantly different by the end of the 21st century regardless of how successful we are in cutting carbon emissions. He indicated it therefore makes sense for businesses to develop adaptation plans without delay, which will protect the continuity of their services.

The UK was the first country to have a long term agreement on climate change enshrined in law - this was through the [Climate Change Act](#) of 2008. Within this is a provision for the UK to adapt to the impacts of climate change, which has informed the development of the [Climate Change Risk Assessment](#) and the [National Adaptation Programme](#) (NAP). The NAP will be published by November 2013 and will provide a framework for adaptation within different key sectors in the UK, one of which is Healthy and Resilient Communities. The NAP is built through co-creation across Government departments and affiliated bodies.

He spoke about the business case for adaptation by avoiding unexpected costs, but also about exploiting the opportunities that this could bring, such as reputation and greater efficiency. Jim concluded by providing a short introduction to the [UKCIP Adaptation Wizard](#) and [Business Areas Climate Assessment Tool](#) (BACLIAT) that were to be discussed further in the afternoon session.

Jon Clubb from **Your Climate** provided an overview on local delivery and how this was being embedded at the sub national level. We noted [Climate UK](#) was a UK wide network of independent Climate Change Partnerships, one of whom is [Your Climate](#), who provide outreach and support on climate change issues for businesses, organisations and communities, and are represented in each of the regions as well as the Devolved Administrations. Your Climate provides this delivery in Yorkshire and Humber and works across a wide range of organisations to support action on both the causes and effects of climate change.

Jon provided an overview of the regional impacts from a changing climate, making reference to the comprehensive reference materials available and work already undertaken at a local level to identify climate risks, impacts and action to become more resilient. These included a range of Local Climate Impact Profiles undertaken by each local authority as well as [Comprehensive Risk Assessments](#) that provide a strong evidence base for future actions.

Jon highlighted some recent impacts such as flooding on the A1, Thunder Thursday in the North East, snow and ice in 2009/10, moorland fires in 2011, drought in early 2012 followed by repeated flooding. We noted that vulnerable communities were likely to be the most affected by severe weather impacts and that Yorkshire and Humber had the highest correlation nationally between high flood risk and high levels of deprivation. A [summary of the key issues for Yorkshire and Humber](#) from the [Regional Adaptation Study](#) and National Climate Change Risk Assessment was available on-line via the Your Climate website.

The Interconnected Issues of Global Sustainability and Health and Wellbeing

Will Day from **PriceWaterhouseCoopers (PwC)** gave a thought provoking presentation, focusing on global trends, and how these could impact our national and local situations. PwC had recently carried out research that looked at the implications of climate change occurring elsewhere in the world, which indicated that there would be significant impacts on the UK. He spoke about our use of natural resources and the fact we don't behave as if we have only one planet - in 2012 World Overshoot Day was in August - the annual marker of when we begin living beyond our naturally renewable means. Freshwater is a key resource, yet it accounts for only 2.5% of the planet's total water supply. How, he asked, will populations without access to sufficient water address this? He gave a current example of the Yemen, where people have been encouraged to move from the capital to the coast, where water was desalinated, as this was easier to do than to move scarce and heavy water long distances.

Will highlighted the links between water, energy and food production, and the reliance that our commercial agriculture has on fossil fuel based energy and fertiliser. He also reflected on the size of the global population as well as on the implications of increased life expectancy. At the same time cities around the world are growing at a rate of approximately 200,000 people a day – a real challenge for those seeking to provide infrastructure and healthcare.

Will reminded the group about the impacts of a changing climate, and of increased temperature, and the fact that at and above a 2 degrees centigrade rise, there is a significantly increased risk of abrupt and irreversible change in the climate system.

Will concluded by reiterating the need to recognise the connections between social, financial and environmental issues. He urged participants to remember the 'scale, urgency and connections between the trends he had outlined and to also remember that behind every risk is an opportunity.

Building Climate Change Adaptation into Joint Strategic Needs Assessments

Charles Kitchin, Communications and Engagement Manager at the **NHS Sustainable Development Unit** spoke about the links to adaptation within the healthcare system and the issues about how to engage people. Charles indicated that the NHS can be seen as good at dealing with emergencies, but less good at really long term strategic planning.

The [NHS SDU](#) is a national unit that provides support across England to help the NHS provide sustainable and low carbon healthcare and will link into the work of Public Health England from April 2013. There are positive reasons behind healthcare organisations taking action on climate change such as to save money, comply with regulation (Climate Change Act 2008, Civil Contingencies Act 2004, Public Services (Social Value) Act 2012), improve resilience, enhance reputation, address scrutiny and to improve health and reduce inequalities. Addressing improved health and reducing health inequalities is not always top of this list – so it's important to remind ourselves of the NHS core business.

Charles spoke about the role of the NHS in delivering resilience and business continuity and for the need for the organisation to learn from any unexpected event and embed this in delivery plans. He reiterated that the healthcare system is well designed to deal with disease (cataracts, flu, and malaria). Issues associated with climate change adaptation relate more to systems being in place and this can be more complex, as to address these involves ensuring that links are in place to deal with flooding, excess heat etc.

He illustrated this with the example of the many deaths in Paris in the summer of 2003, where large numbers of elderly people died, not because they lived in poor housing or were in ill health, but because their families were away for the summer, so the social infrastructure wasn't in place at that time to care for them in the unexpected heat. Charles finished by highlighting the NHS [Sustainable Development Strategy Consultation](#) that is taking place until May 31 and will result in the publication of a broader Sustainable Development Strategy for the NHS in January 2014.

Following lunch, **Jeremy Walker**, Chair of **Your Climate** welcomed delegates back and invited them to participate in the afternoon's discussions and workshops.

Extreme Events and Climate Change – The Emerging Local Challenges

Professor Virginia Murray, Head of Extreme Events and Health Protection at the **Health Protection Agency** spoke about the challenge of addressing extreme events and protecting public health. The [Health Protection Agency](#) (HPA) is an independent UK organisation set up to protect the public from threats to their health from infectious diseases and environmental

hazards. From April 2013, the HPA will become part of Public Health England.

Virginia illustrated the breadth of challenges to public health with a number of case studies and examples of practical advice that the HPA has provided. Her talk was illustrated with a number of key national plans which are designed for local use, peer review publications and national and international reports.

She highlighted the impact of excess cold on the population and the concern about excess winter deaths related to extremes in low temperatures. The UK compares badly in relation to Western Europe statistically. Over the winter period 2011/2012 there was 24,000 excess winter deaths in England and Wales. Virginia spoke about the positive impact of the Cold Weather Plan and The Warm Homes Healthy People initiative. These plans and initiatives aim to reduce avoidable winter mortality and morbidity and support Local Authorities to protect individuals and communities from the effects of severe winter weather due to cold housing.

Virginia spoke about the Heatwave Plan for England, which is designed to be used at a local level and assists with planning for climate change adaptation. She also mentioned health impacts of flooding, and a number of other issues and explained that the HPA provides support by producing a number of fact sheets. One issue that delegates underestimated was the incidence of wildfires - in Great Britain in 2010-2011 over 55,000 wildfires were reported - which is a particular challenge in Yorkshire & Humber with places such as the Yorkshire Dales' moorland fires that were illustrated in Jon Clubb's presentation on regional impacts.

In 2012, the HPA published the Health Effects of Climate Change in the UK 2012 which provided scientific evidence of the wider risks to public health from climate change in the UK and follows on from evidence published as part of the Climate Change Risk Assessment and will be used to help inform the National Adaptation Programme. Virginia also referred to the IPCC report Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation. This report addresses how integrating expertise in climate science, disaster risk management and adaptation can inform discussions on how to reduce and manage the risks of extreme events and disasters in a changing climate.

Virginia concluded with the reminder that in addressing the emerging local challenges, a combined public health response is vital. More information on the work done by the Extreme Events and Health Protection Team at the HPA is at:

<http://www.hpa.org.uk/Topics/EmergencyResponse/ExtremeWeatherEventsAndNaturalDisasters/>

Emergency Response and Resilience – ‘Blue Light Climate’

Alexis Keech, Environmental and Sustainability Manager at the **Yorkshire Ambulance Service** spoke about the challenges for the service. The service has nearly 1500 vehicles, traveling a combined total of over 30M miles per year with over £8M per annum spent on fuel. The service has a challenging target to reduce its carbon impact by 30% by 2015.

Alexis highlighted the regional challenges for the Yorkshire Ambulance Service such as flooding, extreme weather and fuel poverty. Of particular interest was the impact of cold weather on health with marked spikes in serious health impacts following cold weather such as heart attacks, strokes and respiratory illnesses. In terms of business resilience the service was adapting to weather extremes (particularly the cold) through the use of 4x4 vehicles to get staff to work, use of snow tyres, use of air ambulance, considering the location of ambulance stations in the face of new vulnerabilities and working with other responders. This has led to improved coordination and deployment, including the provision of a 'Gold Cell' command and information sharing protocol – the first in the country for an ambulance service. Additionally, the service has had a significant role in contributing to a national adaptation mapping project with national partners and all ambulance services.

Climate Impacts on Vulnerable People – 'ClimateJust'

Katharine Knox, Programme Manager at the **Joseph Rowntree Foundation (JRF)** gave an update on their extensive work programme that looks at the social impacts of climate change. The JRF have been looking specifically at socially just adaptation and are developing a new resource called 'ClimateJust' for service managers in local authorities and other local services with a role in climate change adaptation to help them to develop socially just adaptation responses.

Delegates interested in following up this opportunity to use the tool should contact Katharine directly in the first instance.

BACLIAT workshop

Developing Options for Adaptation - Interactive Session: Business Areas Climate Impact Assessment Tool (BACLIAT)

Jon Clubb from **Your Climate** provided an introduction to this interactive session. He highlighted a range of support that is available from UKCIP – the UK Climate Impacts Programme, The Environment Agency - Climate Ready Support Service and from Climate UK.

The BACLIAT tool is a framework to help organisations begin to develop an adaptation strategy and is a starting point which can be used to raise awareness of the importance of adaptation, or to start exploring the implications of climate impacts on a business, service or process. Although originally designed for use by business it is readily adaptable for other sectors such as health. It is useful for taking a broad view and scoping the requirement to adapt. It is iterative so is suited to developing JSNAs, which need to be refreshed regularly. No detailed climate information is required to use the tool other than the broader UK messages around future climate:

- *hotter and drier summers*
- *milder and wetter winters*
- *rising sea levels*
- *more very hot days and heat waves*
- *more intense downpours of rain*
- *a possible increase in storms in the winter*

The tool can be used as a workshop resource for groups or individual organisations, is tried and tested and effective in producing real outputs. The tool invites consideration of current vulnerability, future impacts and potential responses, using six generic business areas:

- **Markets** - *Population need and changing demand for health services*
- **Logistics** - *Vulnerability of supply chain, utilities and transport infrastructure*
- **Premises** - *Impacts on building design, construction, maintenance and facilities mgt*
- **Process** - *Impacts on planning and service delivery*
- **People** - *Implications for workforce and changing lifestyles*
- **Finance** - *Implications for investment, resources and organisational reputation*

Working in six groups delegates looked at each of the six generic business areas and considered one question:

How will your organisation be affected by warmer wetter winters & hotter, dryer summers?

Groups were asked to consider both the opportunities and the challenges for this scenario.

BACLIAT - Summary of outputs from workshop

The outputs from the group discussions are summarised in the below table. Full notes transcribed from the discussions are included in the following pages.

Business area	Challenges	Opportunities
Markets	<ul style="list-style-type: none"> • An aging population • Increasing demand for services • Long term mental health issues • Demand on third sector 	<ul style="list-style-type: none"> • Source local goods and services • Increase use of telecare • Green space - health and flood management benefits
Logistics	<ul style="list-style-type: none"> • Ability to reach people • Ability for people to travel • Vulnerability of supply chains • Impact of drought on utilities 	<ul style="list-style-type: none"> • Less snow and ice • Procure locally and boost the local economy • Increase use of telecare
Premises	<ul style="list-style-type: none"> • Retrofitting existing buildings • Investing in well adapted design • Take up of insulation schemes 	<ul style="list-style-type: none"> • Planning and design of premises • Use of green infrastructure • Renewable / low carbon energy
Process	<ul style="list-style-type: none"> • Uncertainty of extreme weather • Service changes and budgets • Comprehensive contingency planning 	<ul style="list-style-type: none"> • Creative new approaches, focussed on home care and telecare • Knowledge management with H&WB Board and CCGs.
People	<ul style="list-style-type: none"> • Expectation of service continuity • Workforce planning and coordination • Impact of aging population 	<ul style="list-style-type: none"> • Up-skill staff on climate change • Flexible and remote working • Increase patient and voluntary sector awareness / engagement
Finance	<ul style="list-style-type: none"> • Flood insurance • Budget pressures and increasing cost of service provision • Reputational damage if service levels decline 	<ul style="list-style-type: none"> • Utilise incentives in renewables • Understand cost of not adapting

Discussion groups facilitated by:

Ruth Hardingham, Local Government Yorkshire & Humber / Your Climate

Alexis Keech, Yorkshire Ambulance Service

Victoria Slingsby, Environment Agency

Rob Hitchin, Defra

Jen Atkinson, Climate North East

Jim Hodgson, Environment Agency

Markets - Population need and changing demand for health services

Challenges	Opportunities
Increase in skin cancers	Sharing of resources
Increases in costs	Demand on housing infrastructure investment i.e. insulation, passive cooling etc. delivers the market to make their services more widely available
Increase in indirect CO2 emissions	Use of telecare could help identify overheating and other health problems and provide point of contact for care
Aging population and reducing social care budgets	Creating demand for services because people are living longer and being affected by a wider range of health related issues due to changes in climate
Increase in fair access to care	Opportunities for more green space to help wellbeing i.e. highlight the link between green public space and flood water storage areas
Increase in the personalisation of health and social care and decreases in the known vulnerable people	Drive for locally sourced seasonal food
Increase in A&E call outs	Increase in tourism
Aging population and reducing social care budgets	Increase in locally available goods and services the NHS can purchase from local suppliers
More long term stress from weather incidents	
Instant health demands from a weather incident such as heart attacks	
Possible increased demand for certain health services like the need for mental health support due to increases in flood incidents	
Sudden changes in health requirements and strategies and the impact of the third sector's ability to respond	
Need greater partnership working for forward planning	
Staffing increases required due to increased service demand - are there enough staff?	
Higher numbers of patients suffering from heat related issues	
Competing interests for land use i.e. recreation, health, development, etc.	

Challenge for Health and Wellbeing boards to include the voice of voluntary organisations and the third sector in terms of land use and demand on landscapes/housing requirements/use of land	
Increase service demand to deal with heat stress, older people, obesity, and other health impacts	
Staff training i.e. to deal with heat related illnesses	
Increased demand for services and care i.e. because of air pollution, winter deaths, summer deaths	
Contaminated water in homes from flood events and increase in diseases and service demand	
Disruption in medical supplies and medicines if people are evacuated	
Raising importance of public awareness and education	
Increased demand for mental health services from increased flooding	
Aging population and associated risks from extreme weather	
Rural versus urban service requirements and the ability to respond	
Increase in respiratory problems	

Logistics - *Vulnerability of supply chain, utilities and transport infrastructure*

Challenges	Opportunities
People needing care cannot be reached	Less snow and ice
Cutting costs = vulnerable people less well serviced	Localised disturbance - opportunity to embed adaptation into each organisation
Drought - impact of providing water and stand pipes	Adapting supply chain - using local suppliers so goods don't travel as far.
Drought impacting on gas suppliers (cracked pipes) affecting gas supply to core facility or hospital	Asking supply chains to provide resilience and adaptation plans to gain better resilience on goods and services purchased
Supply chain costs	Buy local and boost local economy
Disruption of services supplied	Raise population awareness e.g. not travelling if flood events occurring
Challenging existing planning and policies for logistics	Mapping resilient routes and roads to ensure service delivery during incidents and weather events

Cost of fuel	
Ability of people to travel during weather events	
Electric power and supply affected by weather and affecting logistics	
Looking at alternative ways to deliver care where logistics are difficult i.e. using telecare	
Ability to supply food and medicines	
Can staff get to work?	
Can patients get access to treatments?	
Can ambulances get to patients?	
Is out fleet suitable? Does the ambulance service need boats for access during flood events?	
Difficult to access data sets i.e. during flood events to re-route services	
Getting drugs where required and predicting where they will be need to be and cost - JIT procurement means very little sorted and if access limited may prevent treatment	
Boiler break downs in colder weather	
Vulnerability of supply chain	

Premises - *Impacts on building design, construction, maintenance and facilities mgt*

Challenges	Opportunities
Retrofitting existing infrastructure because the finances are tight and do not allow retrofitting to take account of climate change	Building requirements and designs force market improvements and cost reductions
Locating new sites that are not in the flood zone but are in suitable locations for the communities they serve	Newly built and properly sited well designed buildings will be cheaper to run and better able to combat extreme weather
Investing in higher level of design for flood risk and climate impacts	Drainage, sustainable porous paving, water collection
The need for reserve premises for back up and emergency evacuation when health facilities need to be re-located	Green space for shading and cooling to prevent overheating and the urban heat island effect
Many hospitals are out of town and the elderly, vulnerable, poor or less mobile who do not or cannot drive cannot access them - especially when public transport services are affected due to weather events	Rain water harvesting
Take up of insulation schemes	Invest in renewable and low carbon technologies

	Invest in non-carbon based heating solutions
	Investing in green infrastructure
	Using passive heating and cooling and natural shading
	If new builds need to be placed in the flood zone, ensure design will prevent and protect and increase resilience
	Better spatial planning for better health across all planning
	Review resilience of key infrastructure
	Use GP's to deliver wider messaging on fuel poverty and vulnerability
	Take advantage of vulnerability mapping and use trusted networks to access these community groups
	Being more imaginative on building design and function
	Use trusted community networks and individuals to deliver preventative messages on fuel poverty and health
	Local energy generation i.e. use of photovoltaics, providing more resilient buildings

Process - *Impacts on planning and service delivery*

Challenges	Opportunities
More uncertain extreme weather systems and planning for potential peaks on service demands	Unlock opportunities to work across sectors to deliver services
Structure of health and social care service can prevent sharing and joint working - new structures under Health and Wellbeing boards may help	Empower local communities through social inclusion
Aging carers and communities are looking after elderly people as well as children and grandchildren	Use risk registers and contingency planning and work with the communities and their networks
Joint planning required across care providers	Opportunities to look creatively at how we provide care i.e. more treatment in homes and different approaches to patient aftercare
Services changes	Refocus on health and keeping people healthy rather than curing disease and illness after people get ill
Lack of flexibility of service	More preventative measures

Fire fighting approach at present rather than coordinated forward planning approach	Whole life approach, people cared for in their home and signposted to help for other things e.g. insulation to prevent fuel poverty
More preparation for flooding (infrastructure not travel routes) and heat and cold but little activity addressing other risks	Health and Well Being Boards need to focus on better shared knowledge especially between partners and community and prevention over treatment
Increase in service demand	Better shared knowledge within Clinical Commissioning Groups (CCG's) and Health and Wellbeing Boards including extreme weather events
Expanding contingency planning i.e. back up fridge's for drugs if there are increases in temperatures	Increased preventative work i.e. insulation
Decreased budgets and capacity from budgetary reforms	Telehealth and telecare
	Promotion of green deal and insulation opportunities
	Join up between Health and Wellbeing Boards and local councils
	Ensure climate events are on the agenda for Health and Wellbeing Boards and joint strategic needs assessments.
	Integrated care - treatment of people at home helping to build resilience at home and independence
	Business continuity plans already exist so build climate change resilience into these plans
	Data sets and evidence needs to be better linked to allow service delivery planning across NHS services
	Shift to longer term infrastructure planning and accommodate climate change
	Planning and developing care in the community
	Revisit service delivery plans and overlay the context of climate change and weather events (i.e. into KPI's)

People - Implications for workforce and changing lifestyles

Challenges	Opportunities
Getting the workforce closer to place of work and the expectation that staff will be able to get into work	Increase the skills and knowledge of climate change within the work force

Changing customer expectations	Make climate impacts real and part of the day job
Workforce planning will need to consider service demands and when staff take their annual leave	Create a more flexible approach to working patterns i.e. working from home
Multifunctional use of equipment	Encourage people to be ready and to take responsibility for themselves i.e. educate how to stay warm, stay cool, be prepared for floods
Increased temperatures may affect cleanliness standards and how will the workforce cope with increased cleaning requirements?	Use advances in telehealth and internet to remove the need to face to face contact and reduce A&E call outs
Personal responsibility - people do not carry extra clothing or kits in their cars	Active encouragement of volunteer groups in community
Less mobile = less access to services	
Population expects a service from the NHS regardless of weather	
NHS transport services	
Vulnerable groups - less rooms, less availability of insurance for flooding, less able to recover	
Aging population have greater health requirements, especially during extreme events i.e. heat waves, slips, trips and falls	
Movement of people into Yorkshire seeking health services	
Increase in elderly population in Yorkshire and along the coast	
Increased flood risk increases health issues	
Heat related impacts on people	
Increase in burglaries due to increased temperatures and mental health implications	

Finances - *Implications for investment, resources and organisational reputation*

Challenges	Opportunities
Unexpected events i.e. landslips make longer term planning very difficult	Investment of pension funds in more stable markets that won't be affected by climate change.
No money available and selling the concept of investment in adaptation to save	Social capital projects
Financial cost of service provision is high and external/private providers are expensive	Longer term financial planning

Cost of health care	Use Salix funding, green deal and other Government funding to progress opportunities
Cost of fuel	Identify opportunities to gain finances from feed in tariffs and renewable heat incentives.
Reputational damage by not reaching the required standard of care	Investment in renewable energy due to good return on investment and increases resilience against power cuts.
Decreasing budgets with increasing financial cost including CRC and efficiency drives.	Factor in the cost of climate change and not adapting into business planning cases.
Many estates self-insure so there is no cover for infrastructure damage from flooding or other climate related impacts	
Low health resilience and poor health outcomes prevent investment	
Insurance - social issues i.e. is it acceptable for people in low risk flood areas to pay less than those in high risk flood areas? Social vulnerability.	
If we don't act insurance costs/damage costs rise and divert finances away from future service investment	
Availability of flood insurance	
Ability to continue to deliver core health services and maintain reputation	
Service provision is decreasing already due to a decrease in finances.	
Life cycle analysis does not always understand the 'real' cost and value of adaptation and resilience	
Pooling budgets to allow more flexible investment is difficult to sell.	

Closing remarks and discussion

Facilitated by **Will Day**

Who else should have been here?

- Transition towns
- Wider ranging representation from NHS organisations
- Commissioners'
- Universities
- Adult Social Care – seen as fundamental
- Elected Members and Portfolio Holders
- Education representatives
- Directors of Public Health
- Voluntary Sector
- Architects and civil engineers
- Housing providers
- Nursing staff and Doctors

If Chairs' of Health and Wellbeing Boards were here what would we be saying to them?

- *NHS has 1.3million staff and a budget of 20bn – a huge opportunity to influence the agenda and people's awareness of the issues both at work and at home.*
- *There is the opportunity for much stronger joint and integrated working, particularly looking at how best to utilise budgets.*
- *Look for the co-benefits of working together on this agenda.*
- *It is more effective (and cheaper) to take preventative action than to deal with the resulting health issues.*
- *Do we really understand the true costs of these health impacts?*
- *The challenge can't solely be the task of Health and Wellbeing Boards – they will need appropriate support.*

Jeremy Walker closed the event by highlighting the large number of ideas that were discussed during the day and the influence that we can have over decision makers by making the case for adaptation – citing the recent example of increased government funding for flood defence. He encouraged the discussion to carry on and to do more to help ourselves and that this would be assisted by further follow up that would be provided by Your Climate and the Environment Agency.

Copies of the presentations that were given at the event as well as the documents that were referred to at the event are available on the [Your Climate](http://www.yourclimate.org) website.

Your Climate
c/o Local Government Yorkshire & Humber
The Orangery
Back Lane
Wakefield, WF1 2TG

Website:	www.yourclimate.org
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Evaluation

22 delegates completed an evaluation form which included an opportunity to rate the event overall, feedback on the event organisation, speakers sessions, the workshop, general comments / learning and future support needs.

100% of delegates rated the event overall as excellent or good.

Delegate comments on the event overall:

'Excellent quality of speakers and interesting and informative presentations'

'Excellent - varied and entertaining'

'Good introduction to BACLIAT and I will take it back to my organisation'

'A wide range of facts I can use to feed in to HWB and JSNA'

Some key take away learning points from delegates:

'Incorporate adaptation in emergency planning'

'That health/local government and other partners must work closer together to approach the challenges of climate change'

'Overlap between general actions to improve health and actions to reduce impact of climate change'

'Some of the resources online will be very useful to inform/support our work'

Constructive criticisms:

'Get more of the health and social care sector here to understand the agenda'

'Good but could have spent more time doing this' [BACLIAT]

'Large area 'extreme weather' so hard to cover everything thoroughly in the time'

'Really important that microphones are used so people can hear. Thanks to those who used them'

Areas of support requested:

'Locally facilitated engagement to bring key partners together and support dialogue'

'Look at examples of good practice in incorporating in to JSNA and JHWS and experience of HWBBs'

'A general presentation that climate/SD people can deliver to H&W Boards, that covers key facts and links to key part of the H&W legislation and responsibilities'

'It would be good so see national awareness raising on this so Chief Executives/Finance Directors are made aware of the growing problem/issues/opportunities'

'Would be good to have only one website with all the tools on rather than each organisation having their own separate one... perhaps a follow up e-mail should link to all the support documents available'

Further reading

A number of key resources were presented or referred to during the presentations. A list of these documents and hyperlinks to them are provided below for your ease of reference.

Item	Summary	Publisher	On-line resource
A Summary of Climate Change Risks for Yorkshire & Humber	Sets out key climate risks, by sector, for Yorkshire & Humber	Climate UK / Your Climate	http://www.yourclimate.org/pages/uk-climate-change-risk-assessment
Health Effects of Climate Change in the UK	Provides scientific evidence of the wider health risks from climate change in the UK	Health Protection Agency (HPA)	http://www.hpa.org.uk/hecc2012
Adaptation to Climate Change for Health & Social Care organisations	Why must the health system adapt to climate change? Find out more in the latest guidance written by the SDU and its partners.	NHS Sustainable Development Unit	http://www.sdu.nhs.uk/documents/publications/Adaptation_Guidance_Final.pdf
Socially Just Adaptation to Climate change	Explores local approaches to climate change and the extent to which these take social justice issues into account	Joseph Rowntree Foundation (JRF)	http://www.jrf.org.uk/publications/socially-just-adaptation-climate-change
Linking Environment & Health	A resource for policy and decision makers working on Joint Strategic Needs Assessments	London Climate Change Partnership	http://climatelondon.org.uk/wp-content/uploads/2012/11/Linking-environment-and-health.pdf

Sustainable Development Strategy for the Health and Care System 2014 - 2020 : Consultation	To inform a new Sustainable Development Strategy for the Health, Public health and Social Care System to 2020.	NHS Sustainable Development Unit	http://www.sdu.nhs.uk/sustainable-health/engagement-resources.aspx
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