

Healthy and Resilient Communities in a Changing Climate: An Introduction

Jim Hodgson Climate Change Advisor Thursday 28th January 2016

A support service led by the Environment Agency



Outline

Exploring community resilience & its challenges

Health: a pathway to 21st century resilience?

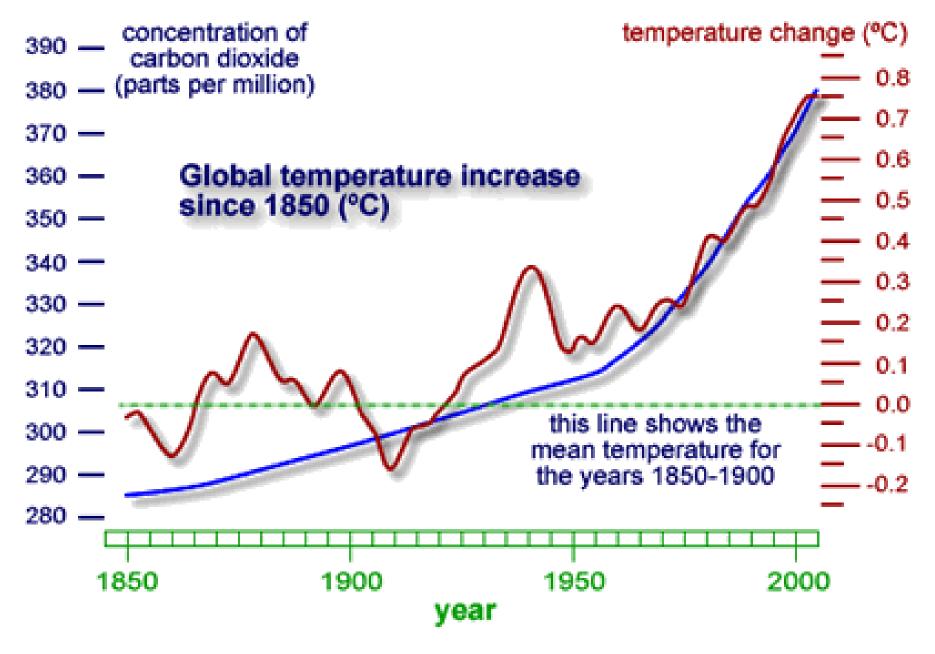
A (brief) vision for the future



Defining resilience...

"the capacity of individuals, communities, institutions, businesses, and systems within a city to survive, adapt, and grow no matter what kinds of chronic stresses and acute shocks they experience."

(Rockefeller Foundation)



'EXTREME' WEATHER IN THE UK

2000 – flooding

2001- flooding

2003 – heatwave

2005 - flooding

2006 – drought

2006 - heatwave

2007 – flooding

2008 – flooding

2008 – snow and ice

2009 – snow and ice

2009 – flooding

2010 – flooding

2010 – snow and ice

2011 – warm spring

2011 – warm autumn

2012 - drought

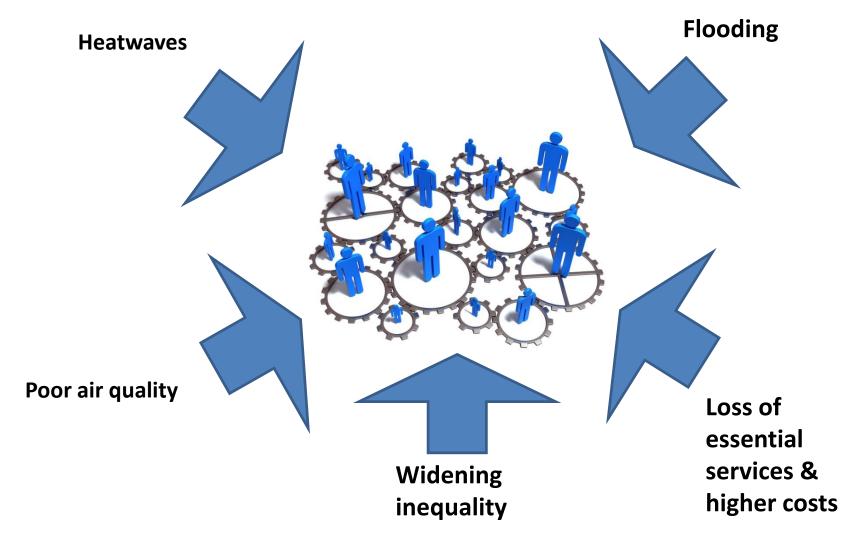
2012 – wet summer

2013 – snow and ice

2013 – heatwave

2014 – flooding

Impacts of climate change on communities: multiple challenges



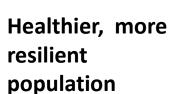
Impacts of climate change on communities: multiple opportunities

Greater social cohesion: know your neighbour



Sharing risks across health services, social care and the voluntary & community sector







More green space = better health



Saving money and resources: more resilient, prepared services



Health: a pathway to 21st century resilience?



The significant seven: effects of climate change on health, wellbeing, and the health and social care system

	Climate change health impact	Adaptation examples
1.	Increased heat related illness and death – increased mortality from respiratory and cardiovascular diseases. ³	Planning of the built environment; indoor heat reduction measures
2.	Flood related illness and displacement – as well as injury and infection, the effect of flooding on mental health is well documented, and a considerable part of the overall health burden. ⁴	Flood defences; flood preparedness plans; building controls/restrictions
3.	Increase in food, water and vector borne diseases – an increase in incidences of infections may be seen due to higher temperatures, drought, flooding, changes in habitat and rainfall patterns. ⁵	Surveillance and monitoring programmes; educational programmes
4.	Health impacts relating to air quality and aeroallergens— high temperatures are linked to poor air quality with high levels of ozone which are formed more rapidly in strong sunlight; fine particles (PM ₁₀ , PM _{2.5}) that damage health may also become more prevalent in the future. Climate change may result in earlier seasonal appearance of respiratory symptoms and longer duration of exposure to aeroallergens (e.g. pollen). ⁵	Monitoring, alerting, green infrastructure, education programmes
5.	Skin cancer and sunburn – excessive exposure to UV may have consequences ranging from premature aging of the skin to skin cancer. Malignant melanoma incidence rates in the UK have more than quadrupled over the last thirty years.	Monitoring; provide shade; educational programmes
6.	Pressure on health care providers to keep services running in the face of extreme weather – extreme events such as droughts, wildfires and storms may impact on service delivery as they become more common in the future. § 2 This includes ability to deliver services in the community.	Building and infrastructure design; all hazards risk assessment
7.	Increase in health inequalities – between different population groups. For example increase fuel and food prices, reduced access to heating, cooling, health services, education and food security. 10	Identify and involve vulnerable groups; targeted/tailored information to at risk groups

"Climate change is the greatest threat to public health in the 21st century"

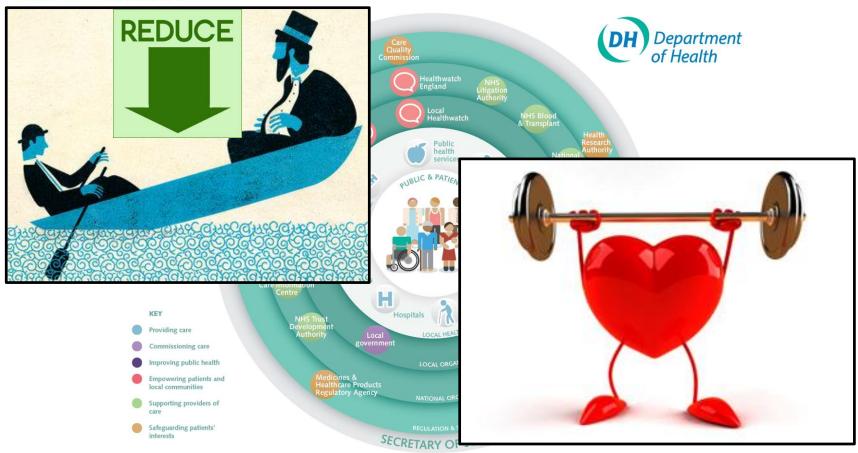
~ The Lancet 2009

"Tackling climate change could be the greatest global health opportunity of the 21st century"

~ The Lancet 2015



Response in the new local health and social care system

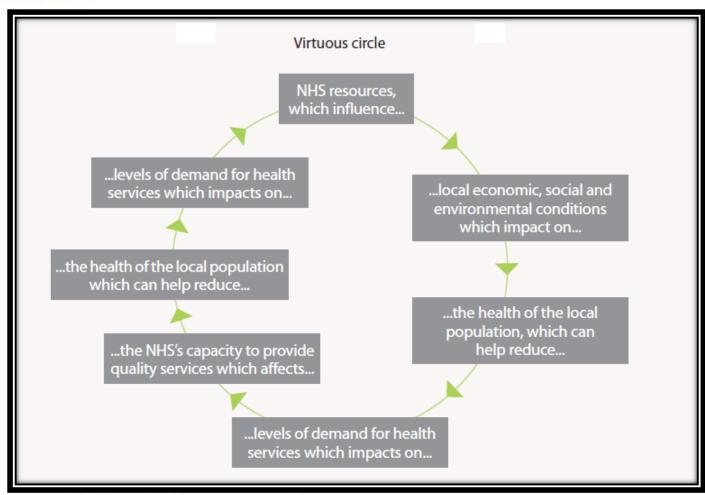




A vision for the future...







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1952 London Smog



Autumn 1952

"I suggest we form a committee. We cannot do very much, but we can seem to be very busy and that is half the battle nowadays."



- Harold MacMillan

'Salus populi suprema est lex'. Cicero

