



ADPH
Yorkshire
and Humber

Improving Health, Protecting the Planet

Association of Directors of Public
Health Yorkshire & the Humber

SHORT READ VERSION



Authors & Acknowledgements

This document has been developed for ADPH YH by Catherine Ward, ADPH Fellow and Climate Change Lead; and Greg Fell, Director of Public Health, Sheffield Council; with support from Toni Williams, Consultant in Public Health.

This document is intended for use by Directors of Public Health and their teams in Yorkshire and the Humber. The document is a short-read version of a [longer document](#), describing the links between climate change, health and health inequalities. The narrative can be used to support local conversations and action in tackling the climate crisis by highlighting the co-benefits of action on both health and climate, as well as highlighting the future risks to health that we need to prepare for.

Improving health

Human health goes hand in hand with the planet's health. But right now society's actions are hurting our health and the planet. It is in our power to make changes and make a difference.

Imagine a world with greater energy security, lower energy bills, and more efficient homes so that no-one worries about whether they can afford to heat their home. The air we breathe will be cleaner; fewer children will experience wheeze and asthma, and need to use inhalers to protect their lungs. Our water will be cleaner, and safe.

Local communities want to see much more action to save our planet and secure a healthy future. Our politicians work on our behalf so our desire for change matters. They can and must take the actions that will make the most difference, such as protecting nature and phasing out our dependence on fossil fuels. Change is possible.

Action on climate change, moving to low carbon, clean energy, provides one of the greatest opportunities to improve health and reduce inequalities. Too often we view action on climate as too restrictive or a sacrifice.

A health-centred response to climate change will deliver huge improvements in the health of our communities through the associated co-benefits of climate action.

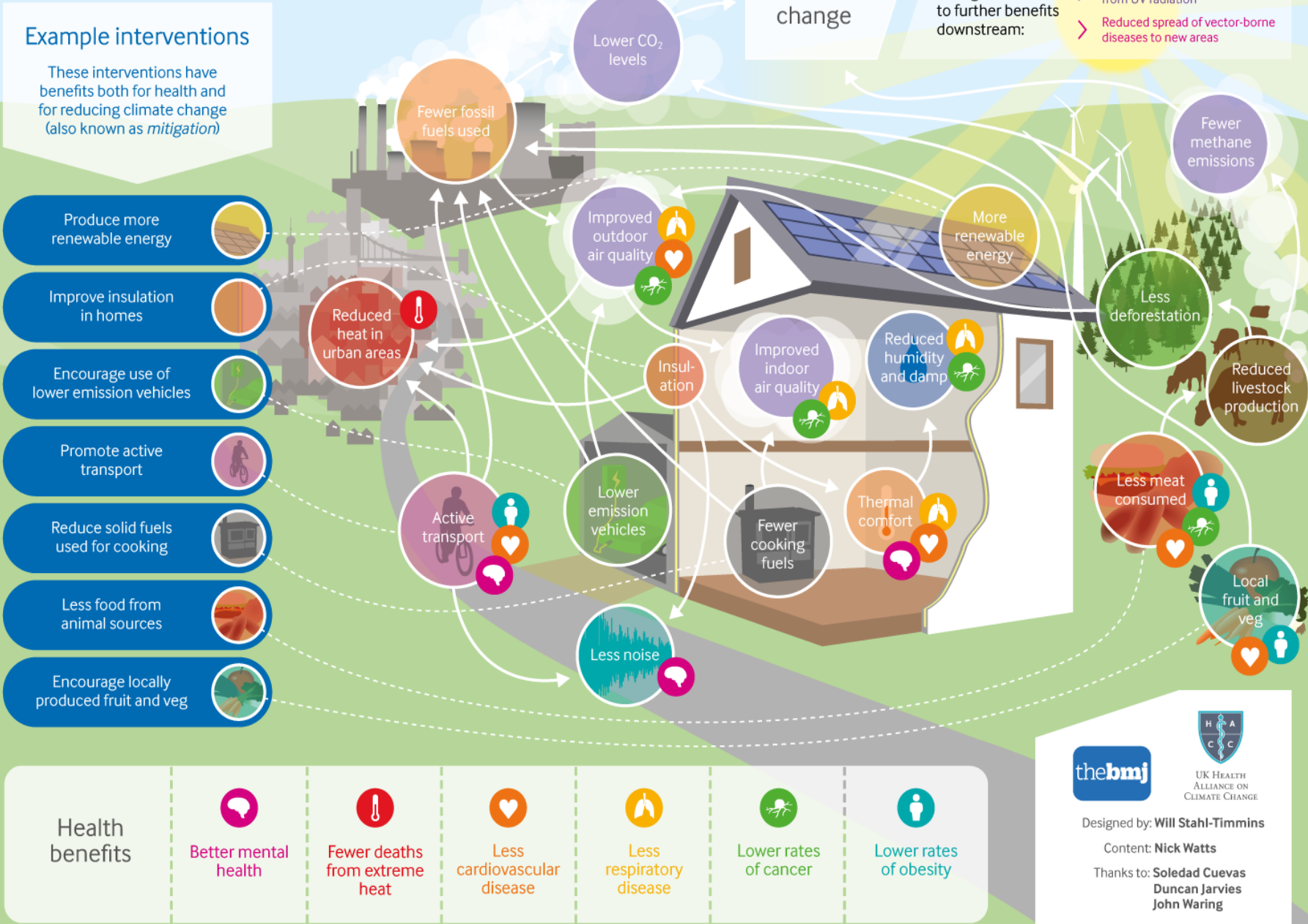
Climate Change is a Public Health Issue


1. The actions that are good for the planet are good for health.
2. Climate change is already impacting on the health of our communities.
3. The effects of climate change are disproportionately impacting on our most disadvantaged communities, widening inequalities.
4. Prevention is cheaper and better for the planet than the treatment of ill health. Delivering care comes at a financial cost as well as an environmental cost.
5. Climate specific policies and climate in all policies can help us to achieve major health and wellbeing co-benefits, strengthening the case for action on climate change.
6. The health benefits of climate policies resonate strongly with the public and policy makers due to the direct nature of some of the health effects, with benefits evident over shorter timescales, strengthening the case for action on climate change.

The health and climate co-benefits mean that tackling climate change represents one of the best opportunities to improve the region's health

Source: BMJ

Health and climate: co-benefits





 UK HEALTH ALLIANCE ON CLIMATE CHANGE
 Designed by: Will Stahl-Timmins
 Content: Nick Watts
 Thanks to: Soledad Cuevas
 Duncan Jarvis
 John Waring

The effects of climate change are impacting on our health now

The consequences of climate change are bad for health. **The UK's 3rd [Climate Change risk assessment](#) independent report by the Climate Change Committee sets out the direct, and indirect ways in which climate change can negatively affect our health.**

A warming climate affects health in 3 main ways:

1. Effects of extreme weather, such as heatwaves, flooding, wildfires, storms and drought on physical and mental health (for example injuries and trauma, heat-related illness).
2. Effects on the planet's life-support systems, such as rising sea levels and safe water availability, changing patterns of zoonotic and vector-borne disease (for example malaria, dengue fever), reduced pollination and crop failure leading to food shortages.
3. Effects mediated by social systems, such as livelihood loss, rising prices of food and fuel, supply chain disruption, pressure on health and care services, conflict or forced migration.

Adaptation and Mitigation

Mitigation means making the impacts of climate change less severe by preventing or reducing the emission of greenhouse gases into the atmosphere.

Mitigation is achieved by:

- reducing the sources of these gases, for example by phasing our fossil fuels and increasing clean and renewable energy sources;
- enhancing the storage of greenhouse gases, for example by increasing the size of forests or through carbon capture.

In short, mitigation is a human intervention that reduces the sources of greenhouse gas emissions and/or enhances the sinks.

Adaptation means anticipating and preparing communities for the adverse effects of climate change, and taking appropriate action to prevent or minimise the damage they can cause, or taking advantage of opportunities that may arise. Protecting people now saves more lives and reduces risks moving forward. It makes financial sense. The longer we wait, the more the costs will escalate. In short, adaptation can be seen as the process of adjusting to the current and future effects of climate change.

We must do both – mitigate and adapt - at the same time.

Mitigation and Adaptation

Mitigation

- We need to rapidly phase our fossil fuels
- We need a greener and fairer approach to transport
- We need affordable, safe and energy efficient homes
- We need access to affordable, healthy and sustainably produced food
- We need to value biodiversity to protect health

Adaptation

- We need to prepare for increased temperatures and more heatwaves
- We need to prepare for periods of extreme rainfall and more flooding
- We need to prepare for disrupted food supplies and food insecurity
- We need to prepare for changing vector patterns and infectious disease
- We need to prepare for changing the way in which we deliver our services

Community centred and equity in all policies

Taking action: mitigation

Rapid phase out of fossil fuels

- We cannot stop or reduce the scale of climate change without addressing the powerful fossil fuel industry. A rapid phase out of fossil fuels is essential.
- Our reliance on fossil fuels harms our health in many ways; its not just a result of the release of particulate matter into the air when they are burnt, but through cold homes as a result of unaffordable energy, and through the impacts of climate change.
- The fossil fuel industry have tried to shift the responsibility for action onto individuals, but in public health we have seen that when the harm is shared across society – as it is for smoking and climate change - then ONLY the state can act effectively and at the scale required.
- We are vulnerable to the volatile and unpredictable fossil fuel markets, as the cost of living crisis has demonstrated, and this is impacting on health.
- We need a long term approach to protect our essential energy needs and reduce bills for households and businesses.
- This means protecting our communities from unstable energy prices for good by shifting to affordable clean power and the certainty it can give us.

Greener and fairer transport

- Good transport has the ability to transform the lives of people and places, reducing inequalities.
- Our current approach to transport is too often, bad for the planet, its harmful to our health, and it can exclude some of our most disadvantaged communities.
- We need better cars but less driving. This means more choice and better alternatives for all of our communities to thrive.
- Less driving and more active travel means fewer harmful emissions, better air quality, less noise pollution, fewer road traffic accidents, better health and longer lives.
- We need an **EQUITABLE** approach to decarbonisation, public transport and active travel.
- More choice means investing in and scaling up healthy and green infrastructure to promote active travel and public transport to deliver more friendly, connected and liveable places.

Affordable, safe and energy efficient homes

- Everyone should be safe and comfortable in their home, yet too many people do not have this and this has a negative impact on health.
- The UK's legally-binding climate change targets will not be met without the near-complete elimination of greenhouse gas emissions from UK buildings.
- We need to reduce demand for energy in our homes by improving and enforcing energy efficiency and ventilation standards.
- This can only be achieved through retrofitting at scale but we **MUST** target this activity at the households with the lowest incomes and least efficient homes first to prevent widening health inequalities.
- Retrofitting at scale also has the potential to reduce inequalities through supporting the redistribution of sustainable skilled jobs, lifting people out of poverty.
- The design of any new homes and communities should be low carbon and water efficient from the outset, taking into consideration the infrastructure needed to support healthy lives, including active travel and green spaces.

Equitable access to healthy & sustainable food

- Our food system is harming our health and harming the planet; eating a healthy diet is unaffordable and unattainable for too many, driving an epidemic of non-communicable disease, whilst at the same time harming the planet through greenhouse emissions and other routes.
- It is the people living in our most disadvantaged communities for whom the impacts are greatest including higher levels of food insecurity, obesity and diet related ill health. We know the impacts of climate change will also have a greater impact on these same communities.
- Reforming our food system means escaping the junk food cycle; reducing diet related inequality, making the best use of our land; and creating a long term shift in our food culture.
- We can improve health, increase choice, reduce food poverty and reduce environmental harm by making changes to the types of food we eat, and reforming how this food is produced and consumed, including reducing waste.
- In the midst of a climate emergency, it is recognised that meat-heavy diets and food production are major contributors to climate change. Including more plant based products in our diets has the potential to reduce emissions by up to 80% (by 2050) whilst at the same time reduce diet related disease.
- In the coming years, climate change will increasingly influence the quality and quantity of food which can be produced, and so will also have very real implications for people's health and food security in the long term, including driving up prices.

Valuing biodiversity and nature

- Biodiversity and nature are our most precious assets, with our economies, livelihoods and wellbeing dependent upon them.
- Biodiversity is rapidly declining globally and in the UK and this will have a significant impact on health and inequalities.
- Valuing and protecting biodiversity and nature is good for health; it reduces the transmission of infectious diseases, it protects against food insecurity; it contributes to better mental health and is a protective factor for our wellbeing.
- Valuing and protecting biodiversity and nature will also help to protect us from the inevitable impacts of climate change through cooling our cities, and reducing the likelihood of flooding associated with extreme rainfall.
- We must take action now to protect nature and reverse trends in biodiversity loss.
- This will require action from all of our institutions and systems, recognising the economic value of nature and the costs associated with our demands upon it.

**Adaptation to climate change: increasing
resilience for a changing climate**

Increasing resilience to a changing climate

- Further warming is now unavoidable and we need to plan and prepare to for the impact of the climatic changes which are now inevitable.
- Whilst these impacts may be inevitable, adaptation can help to reduce exposure and reduce vulnerability, thus protecting health.
- Adaptation plans should identify the communities and populations most at risk from the [health] impacts of climate change and seek to increase resilience and reduce risk and vulnerability in these populations.
- Equity should be embedded in all policies to ensure that adaptation policies do not widen inequalities, and where possible reduce inequalities.
- Local communities must be part of the solution - they have a powerful voice in ensuring the process of decarbonisation is equitable and empowering for all places. Adaptation is local.
- Nature based adaptation offers co-benefits, protecting against the impacts of climate change, whilst improving health and wellbeing and providing economic opportunities.

We need to anticipate and prepare for the adverse effects of climate change

Adaptation seeks to reduce the risks posed by climate change. Further warming is now unavoidable and adaptation will be needed to deal with the climatic changes which are now inevitable. The [LGA](#) states that *'adaptation is sometimes known as resilience. Adaptation is how we adjust and implement measures to adjust to the changing climate and our response to increasing frequency and severity of weather events. Resilience is the ambition, adaptation is the method.'*

In May 2023 researchers reported that there is now a [66%](#) chance we will pass the 1.5C global warming threshold between now and 2027. The impact of this for our communities in Yorkshire and the Humber means:

- **More heatwaves**
- **More frequent flooding**
- **Declining air quality (exacerbated by extreme heat)**
- **Changing vector profiles and infectious diseases**
- **Disrupted food and drinking water supply chains**
- **Further biodiversity and habitat loss**
- **Migration as a result of displaced populations (nationally and globally)**

We need to prepare for these impacts now.

Whilst these impacts may be inevitable, adaptation can help to reduce exposure and reduce vulnerability, thus protecting health.

The [FPH Special Interest Group](#) recommends:

1. Carrying out a climate vulnerability assessment to identify local priorities for action based on need and potential impacts. Understanding of vulnerable populations, locations and services through risk assessment and local intelligence will be needed to inform local actions.
2. Developing an adaptation plan. Adaptation planning is an opportunity to identify and assess available options, including evaluation. There are many [tools](#) to support such planning.

Inequalities needs to be at the centre of our adaptation plans.

We know that the ***impacts of climate change will not be distributed equally***; some populations will be at greater risk, particularly in terms of the negative effects on health and adaptation plans should reflect this.

Equity in all policies: there is also a risk that without due consideration and planning at the outset, adaptation policies may widen inequalities. Equity should be considered in all climate mitigation and adaptation policies.

Preparing for increasing temperatures

- High temperatures are a threat to health and wellbeing. Severe heat compromises the body's ability to regulate temperature and can disrupt sleep, it impairs cognitive performance and can lead to heat exhaustion and heatstroke.
- Some people are at *higher risk of the health consequences associated with heat*. This includes people with chronic conditions, children, older people, and people living in built up cities.
- We need to plan ahead and be prepared for all scenarios that are heat related and understand how we build on the things that make a difference that we can do now and keep people well.
- We need *climate resilient communities* including more *green spaces and vegetation* to reduce urban heat islands and provide cool places and shade for people.
- We need to consider *early warning systems*, working with partners across the health and care system to communicate with our communities about the risk of heat.
- We need to ensure that *heat is considered as part of retrofits*, particularly in the social housing sector, as well as being considered in the design and building of new homes.

Preparing for extreme rainfall

- We are likely to see more frequent and intense rainfall meaning that under all of the climate change scenarios that have been modelled the incidence of flooding is expected to increase.
- Flooding can disrupt the fabric and functioning of society and can have a long lasting impact on health.
- Some people are at *higher risk of the health consequences associated with flooding*. This includes people with chronic conditions, children, older people, transient communities, and those living in rental accommodation.
- We need to protect homes and infrastructure from flooding: whilst flood defences, good spatial planning and sustainable drainage are effective preventative measures, flood protection measures include property flood resilience, preventing flood water entering a property.
- We need to minimise the impact of flooding on health: a combination of interventions are required to minimise the impact of flooding on health – before, during and for a sustained period after flooding events occur. This should include interventions aimed at *identifying those at highest risk* and most vulnerable to the negative health impacts.
- Community resilience and social cohesion are recognised protective factors against some of the mental health consequences of flooding.

Preparing for disrupted food supplies

- Climate change and biodiversity loss are contributing to food insecurity and are likely to result in greater volatility in domestic food prices.
- Food insecurity and increased food prices are likely to have a negative impact on health and inequalities.
- Some communities are at higher risk of experiencing food insecurity than others; people with a limiting disability, people on Universal Credit, households with children and people from Black, Asian and minority ethnic groups are most likely to experience food insecurity.
- We need to promote health and sustainable food to the public, building community food knowledge, skills and resources.
- We need to tackle food poverty, diet related ill health and access to healthy food, promoting a vibrant and diverse sustainable food economy.
- We need to transform catering and food procurement and take action to reduce waste and the ecological footprint of the food system.

Preparing for changing vector patterns

- The distribution of vector such as mosquitoes and ticks is changing across Europe and within the UK; the reasons are complex but climate change plays a key role.
- Changing vector patterns may see the emergence of diseases transmitted by vectors not previously seen in the UK.
- In the short term we need to prepare and adapt to the risks posed by changing vector patterns includes developing and establishing surveillance strategies, including citizen science; raising public awareness.
- Longer term policies will be needed to control any vector borne disease, including vaccine development.
- An important element in reducing the incidence of vector-borne diseases is behavioural change. This includes helping people know how to protect themselves and their communities from mosquitoes, ticks, bugs, flies and other vectors.
- Community based approaches will be essential in ensuring all communities have the support and capacity to reduce their risk of exposure to vector borne diseases.

Communities at the heart

- Local actions can have impact and reach beyond that of international, national or individual actions.
- Local communities must be part of the solution; they have a powerful voice in ensuring the process of decarbonisation is equitable and empowering for all places.
- By unlocking the potential of communities to meaningfully address climate change as it manifests in their lives, we can create an ecosystem of climate action that permits braver policymaking from the top.
- Climate action is largely shaped by political decision making and more needs to be done to ensure that the voices of our communities is heard. This is perhaps most true for our children and young people, our future generations, who will be most affected by climate change.
- Young people think that there is a disconnect between climate commitments and climate action. They want to see stronger regulation of the fossil fuel industry and they have criticised the emphasis on personal responsibility as the way to tackle the climate crisis.
- We need to engage young people in climate policy decisions. This means coproducing engagement strategies with young people to facilitate their meaningful input into climate decisions, and address structural and systemic barriers to political participation.