

Data, analysis and research in support of the public health impacts of climate change strategic priority

December 2023

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Tackling public health effects of climate change

What this priority covers:

The International Association of National Public Health Institutes (IANPHI) plan for action on health and climate change sets out how national public health agencies have a critical role in dealing with climate change. The plan is in line with our own views about the work needed to respond to the health effects of climate change and has been used as a basis for action. We need to do the following:

Protect, promote and educate

- Protect people and communities from the health effects of climate change, with a particular focus on equity and reducing health inequalities.
- Educate colleagues from across the health and care system about climate and health risks, making sure they feel able to act and respond to changing demand.
- Promote healthy environments and lifestyles, using changes in health behaviours and health impact assessments to influence policy and decision-making.
- Help people and communities adapt to and reduce the health effects of climate change

Response and action

- Make sure policy advice and guidance, based on evidence, is given across the public health system in Wales.
- Co-ordinate action and contact with other UK nations and agencies and across the public health system in Wales.
- Make sure we are prepared for and respond to extreme weather, together with other partners, in a way that meets the needs of our most vulnerable communities.

Monitor and evaluate

- Develop our climate monitoring so that we can check the effects of climate change on health and well-being and guide further action from agencies, including incorporating early-warning systems.
- Carry out research into the public health effects of climate change, and the effectiveness of interventions aimed at reducing them.
- Evaluate the health effects of climate policies in Wales.
- Evaluate the effect of our own ways of working.

Tackling public health effects of climate change

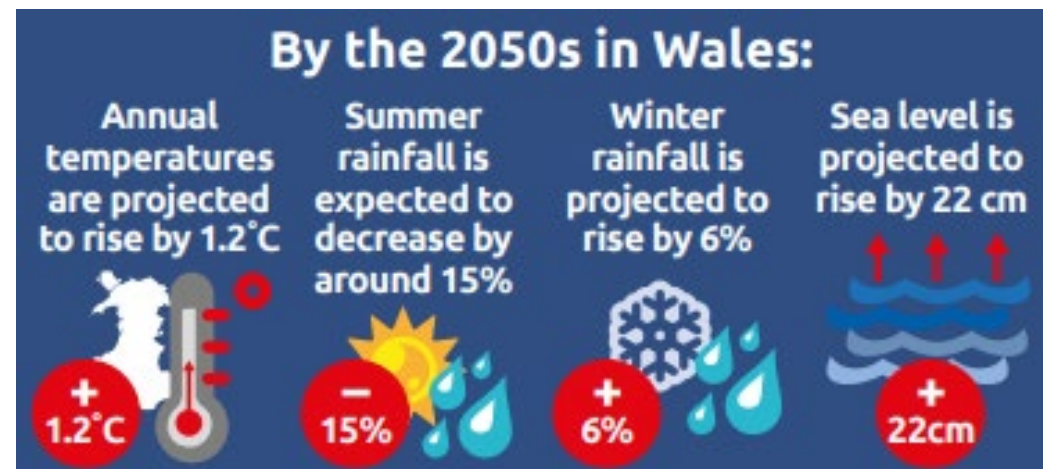
Our commitment

By 2030, we will have:

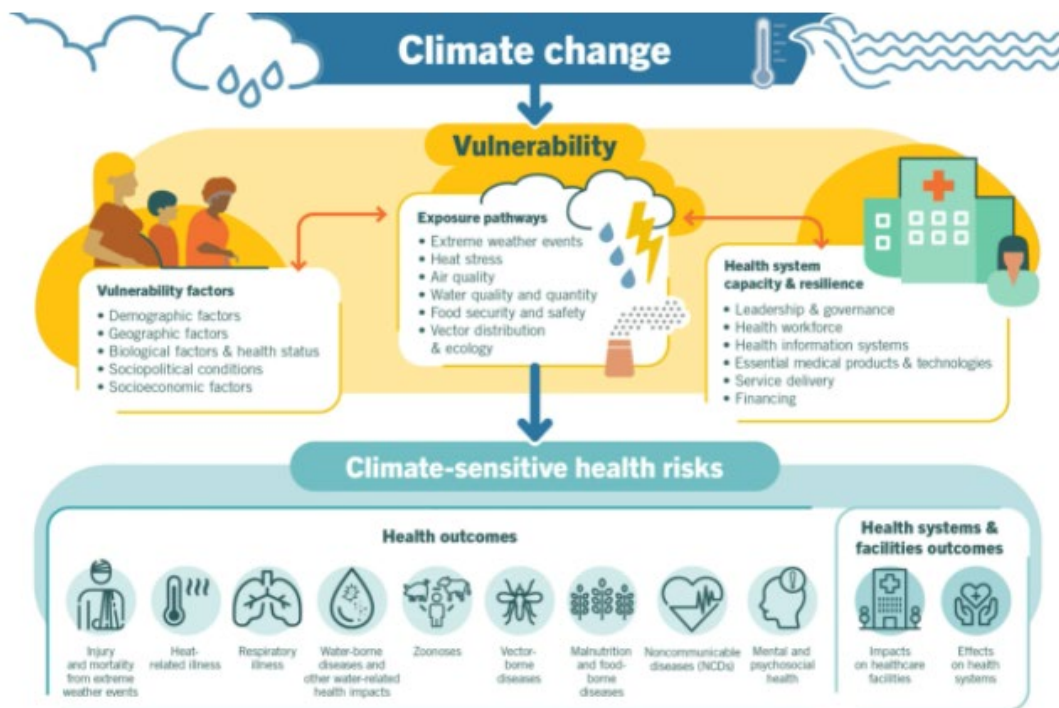
supported the Welsh Government's ambition of achieving a net zero NHS Wales (reducing our greenhouse gas emissions to as close to zero as possible and reabsorbing any remaining emissions by natural or technological means).

Our Strategic Plan (or IMTP) 2023/26 sets out our work under three strategic objectives:

- By 2026 we will be recognised as an environmentally sustainable organisation, and our actions together with partner organisations, have co-benefits for health and equity for communities in Wales
- By 2026 we will have provided public health system leadership on climate change so that our actions together with partner organisations, have co-benefits for health and equity for communities in Wales.
- By 2026, we will support the public and the public health system to mitigate and adapt to the effects of climate change



The Health Impact Assessment was initiated by Public Health Wales following the declaration of a climate emergency by Welsh Government in 2019



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Climate Change in Wales: Health Impact Assessment Summary Report

Nerys Edmonds and Liz Green

Contributors: Sumina Azam, Mark A Bellis, Katie Creswell, Christine Clar, Morganna Davies, Mark Drane, Michael Fletcher, Karen Hughes, Kristian James, Natasha Judd, Sue Toner, Phil Wheeler, Sara Wood.

July 2023

Health and wellbeing impacts of climate change

Climate change means that extreme weather, flooding and heatwave events are likely to occur more often in Wales

Climate change affects all parts of Wales. Some examples of health impacts for specific groups are shown below



By the 2050s in Wales:

Annual temperatures are projected to rise by 1.2°C



Summer rainfall is expected to decrease by around 15%



Winter rainfall is projected to rise by 6%



Sea level is projected to rise by 22 cm



Climate change is happening in Wales

Extreme weather and flooding

- Disruption to education, outdoor sport and play
- Displacement from their homes, friends and community
- Stress and anxiety for themselves and their families



Children and young people

Increased heat

- Higher risk of heat related illness



Mental wellbeing

- Anxiety about how climate change will impact their future



Positives

- Have a positive role in reducing carbon emissions and adaptation to climate change
- Can be positive agents of change
- Practical and creative ideas to help communities recover from disasters



Air quality

- More susceptible to poor air quality and wildfire smoke



People on low income

Extreme weather and flooding

- Less resources to prepare, respond and recover from floods or other extreme weather
- Less likely to be fully insured



Air quality

- Air pollutant concentrations are currently higher in areas of socioeconomic disadvantage



Food and nutrition

- Potential for increase in food costs



Positives

- Potential in the long term for reduced heating costs



Climate change affects us all

Older adults

Extreme weather and flooding

- Disruption to access to health, social care and support services
- Displacement from their home and support networks
- More vulnerable in emergency situations such as flooding
- Increase in mental distress



Increased heat

- Higher risk of heat related illness and mortality
- Social isolation may increase during heat waves



Air quality

- Older adults are more susceptible to poor air quality and wildfire smoke



Positives

- Warmer winters are projected to decrease cold related deaths



People with disabilities and long-term health conditions

Extreme weather and flooding

- Disruption to access to health, social care and support services
- Increase in mental distress
- More vulnerable in emergency situations such as flooding



Increased heat

- Negative impacts on some conditions such as mental health problems, cardiovascular and respiratory disease, and diabetes
- Some medications can increase vulnerability to heat related illness
- Social isolation
- Sleep disturbance



Air quality

- Those with respiratory conditions are more susceptible to poor air quality and wildfire smoke



• Planning and preparing for climate change needs to include action across sectors to promote and protect the health and wellbeing of different population groups and places in Wales.



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Title	Publication Date	Overview	Audience
Climate Change Surveillance	August 2023	Provides an overview of current climate change surveillance activity underway within PHW, as well as a vision for how this could look in the future	PHW/WG
Climate Change in Wales: A Health Impact Assessment (Link)	July 2023	Strategic and comprehensive appraisal of the potential implications of climate change on population health in Wales	External
How do we cut out carbon emissions? A short film (Link)	July 2023	A short video highlighting actions that our staff are taking to help reduce their carbon footprint	External
Time to Talk Public Health: April 2023 Panel Survey Findings (Link)	May 2023	A nationally representative panel of Welsh residents established by PHW to enable regular public engagement to inform public health policy and practice. This month's survey covered physical activity, active travel, menopause, shingles, and climate change.	External
Responding to the Climate Crisis: applying behavioural science (Link)	November 2022	This guide offers useful tips on incorporating behavioural insights into policy work, hopefully increasing the likelihood of a change in behaviour being adopted	External
Cutting our carbon emissions infographic (Link)	October 2022	This infographic explains why climate change is a significant threat to health	External
Communities and Climate Change in a Future Wales (Link)	October 2022	Explores how particular communities feel about the impacts of climate change, and how these impacts might exacerbate existing inequalities. The project was designed collaboratively and involved participants in long-term thinking about climate and inequalities	External
Climate Change and health in Wales: views from the public (Link)	September 2022	This report presents initial findings from a survey of adult residents in Wales on their perceptions of climate change and health	External
Resources for Sustainable Health (Link)	July 2022	E-catalogue of the various resources developed by the Health and Sustainability Hub over the past few years	External
Circular Economies and Sustainable Health and Wellbeing (Link)	June 2022	Details how implementing policies to reduce and re-use waste, alongside recycling schemes will have possible significant positive impacts on health and well-being for the whole population of Wales	External

Title	Publication Date	Overview	Audience
Rising to the Triple Challenge of Brexit, Covid-19 and Climate Change for health, well-being and equity in Wales: spotlight on rural communities (Link)	April 2022	Provides a strategic overview of the impact, and interconnectedness, of the enormous events of Brexit, Covid-19 and climate change in relation to rural communities	External
Sustainability Improvement for Teams (SIFT): Healthy Environment Workshop (Link)	April 2022	Workshop providing an opportunity for teams to identify their environmental impacts and do something to reduce them.	External
Decarbonisation Action Plan 2022-24	March 2022	Sets out the vision for Decarbonisation within PHW, co-produced on pan organisational basis	External
The importance of household energy efficiency for health and wellbeing (Link)	Dec 2021	This discussion paper highlights how, at present, Wales’s housing stock is some of the least energy efficient in Europe. Highlights how efforts to improve household energy efficiency can have a positive impact on decarbonisation and climate change, and can lead to improvements in health and wellbeing	External
Inequality in a Future Wales: areas for action in work, climate change and demographic change (Link)	Nov '21	Report explores how three key trends – changes to how we work, climate change, and demographic change – may affect inequalities in a future Wales. Rapid review of evidence	External
Health and Wellbeing impacts of climate change infographic (Link)	Nov 2021	Infographic highlighting the importance of climate change impact on the health and wellbeing of the population of Wales	External
Rising to the Triple Challenge of Brexit, Covid-19 and Climate Change for health, well-being and equity in Wales: spotlight on food security (Link)	Oct 2021	Highlights how the combined influences of Brexit, Covid-19 and climate change will potentially impact everything through the food that is produced, accessed, available and consumed	External
Rising to the Triple Challenge of Brexit, Covid-19 and Climate Change for health, well-being and equity in Wales (Link)	Oct 2021	Provides a strategic overview of the impact, and interconnectedness, of the enormous events of Brexit, Covid-19 and climate change.	External

Key national and international documents



UK CLIMATE RISK
 Evidence for the UK Climate Change Assessment (CCRA) Summary for Wales
 September 2023
Adapting to climate change
 Progress in Wales
 Author: Dr. Alan Netherall
 Image: Miners Trail, Snowdonia
 Climate Change Committee



Shaping Our Health
 CHIEF MEDICAL OFFICER FOR WALES
 ANNUAL REPORT 2023
 How commercial interests influence our choices and behaviours
 gov.wales



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**Climate Change in Wales:
 Health Impact Assessment**
 Summary Report
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Climate Change Surveillance Report – Draft V4
 August 2023
 Prepared by Rebecca Masters in partnership with Sarah Jones, Behrooz Behbod, Andrew Nelson, Harriet Hallum, Louisa Nolan and Chris Williams



November 2021
IANPHI
 IANPHI ROADMAP FOR ACTION ON HEALTH AND CLIMATE CHANGE
**ENGAGING AND SUPPORTING
 NATIONAL PUBLIC HEALTH
 INSTITUTES AS KEY CLIMATE ACTORS**



The 2023 report of the
**Lancet Countdown on health
 and climate change**
 Read the full report at www.thelancet.com

Health, Communities and the Built Environment

Risk or Opportunity	Risk number and Receptor	Nature of risk/opportunity	Urgency Score
RISKS	H1. Health and wellbeing	High temperatures	More action needed
RISKS	H3. People, communities and buildings	Flooding	More action needed
RISKS	H4. Viability of coastal communities	Sea level rise	More action needed
RISKS	H5. Building fabric	Moisture, wind and driving rain	Further investigation
RISKS	H7. Health and wellbeing	Changes in indoor and outdoor air quality	Further investigation
RISKS	H8. Health	Vector-borne disease	Further investigation
RISKS	H9. Food safety and food security	Higher temperatures (food safety) and extreme weather (food security)	Further investigation
RISKS	H10. Health	Poor water quality and household water supply interruptions	Further investigation
RISKS	H11. Cultural heritage	Changes in temperature, precipitation, groundwater, land, ocean and coastal change	More action needed
RISKS	H12. Health and social care delivery	Extreme weather	More action needed
RISKS	H13. Education and prison services	Extreme weather	More action needed
RISKS & OPPORTUNITIES	H6. Household energy demand	Summer and winter temperature changes	More action needed
OPPORTUNITIES	H2. Health and wellbeing	High temperatures	Further investigation

Future focus

- Roadmap for future action
- Development of surveillance, monitoring and evaluation
- Healthcare demand as a driver for carbon
- Making the case for investment in adaptation and mitigation
- Systems development

