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Llywodraeth Cymru Welsh Government

Creating healthier communities in a changing climate



Introduction

Climate change is already affecting the health and wellbeing of people across Wales, as shown in Public Health Wales's health impact assessment of climate change, and these impacts will intensify as the climate-related risks increase.

The impacts on health are not only caused by heat, flooding and extreme weather, but also from the loss and decline of nature that supports clean air, water, food security and wellbeing. **Climate change and nature loss should be understood as a joint emergency for Wales**.

The conditions in which we are born, grow, live, work and age shape our health and resilience. Those already experiencing disadvantages are often at greatest risk of a changing climate, including older people, young children, people with long term health conditions, people on low income and those in poor quality housing. Existing inequalities can increase vulnerability to climate-related risk and highlights the importance of addressing this alongside adaptation measures.

Key Message

Climate adaptation* is a public health priority requiring **coordinated action across all sectors**. A preventative approach to adaptation is essential to reduce current and future climate-related risks, protect those most vulnerable, address health inequalities, and build resilient communities and services.

Adaptation actions should deliver shared benefits for health, nature recovery, and resilient places, recognising that these outcomes are mutually reinforcing. Decision-making should be informed by the needs and lived experiences of diverse populations to support healthy, equitable and resilient communities for current and future generations.

Purpose

This briefing summarises the key actions and recommendations from the UK Climate Change Committee's (CCC) A Well-adapted UK report. These actions are required to create a climate-ready health system that can prevent, prepare for and respond to climate-related risks to health. While climate mitigation** remains essential, this briefing focuses on climate adaptation and the actions needed to protect health from current and future climate-related risks.



*Climate adaptation: Actions to reduce vulnerability and improve resilience to current/expected climate impacts. Resilience is the ambition; adaptation is the method.

**Climate mitigation: Reducing greenhouse gas emissions to slow or stop global climate change.

A climate-ready health system

The briefing applies the CCC recommendations in a Welsh context and links them to Welsh Government policy, the Climate Adaptation Strategy for Wales, the Environment (Wales) Act 2016 and the sustainable management of natural resources. This briefing identifies the actions needed to:

1. **Prevent, prepare for and respond to climate-related health risks as a public health approach.**
2. **Maintain safe and accessible health and social care services as climate-related risks increase.**

The briefing sets out key evidence-based actions and the organisations responsible for or contributing to their delivery. Some actions are already in place but may need to be built upon and strengthened to enhance system-wide resilience. It also recognises that some actions can be strengthened within existing duties and resources, while others will require further policy development, investment and system-level change to adequately protect health from increasing climate risks. It aims to support a more integrated response across health, climate adaptation, nature recovery and the sustainable management of natural resources.

Wider determinants of health: reducing climate risk and inequality

All sectors have a role in climate adaptation through the services they provide and the decisions they make that influence the wider determinants of health. The wider determinants of health are the everyday conditions that shape our opportunities to live a healthy life. They are sometimes called the building blocks of health because they create the foundations we all rely on to stay well. These factors matter because they influence our health far more than healthcare alone.

A climate-ready health system depends on climate-resilient homes, places and communities. People's exposure and vulnerability to climate-related risks, and their ability to adapt, are shaped by factors such as housing quality, income, transport, access to green and blue space, social care, community networks, education, employment and the environment they live in. When these building blocks are weak, they limit opportunities, reduce community resilience and pass disadvantage from one generation to the next.

Strengthening resilience across these wider determinants is central to reducing avoidable harm and preventing additional pressure on health and social care services. Consistent with Wales's ambition to becoming a Marmot Nation, climate adaptation should not be viewed solely as a response to extreme weather, but as a preventative public health approach that recognises the social, cultural, economic and environmental conditions in which people live, work and age. Action on adaptation should advance both health equity and environmental sustainability, helping to create healthier, fairer and more resilient communities for current and future generations.



Who is this briefing for and how should it be used?

This briefing is intended for decision-makers, leaders and climate adaptation practitioners to support a whole-system approach to climate adaptation. It recognises the work already underway across Wales and aims to provide greater clarity about roles and responsibilities, helping organisations and partnerships work together to identify, prioritise and implement actions that reduce the health impacts of climate change. It complements emergency preparedness and response arrangements by focusing on climate adaptation, prevention and longer-term resilience-building.

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Building a climate-ready health system



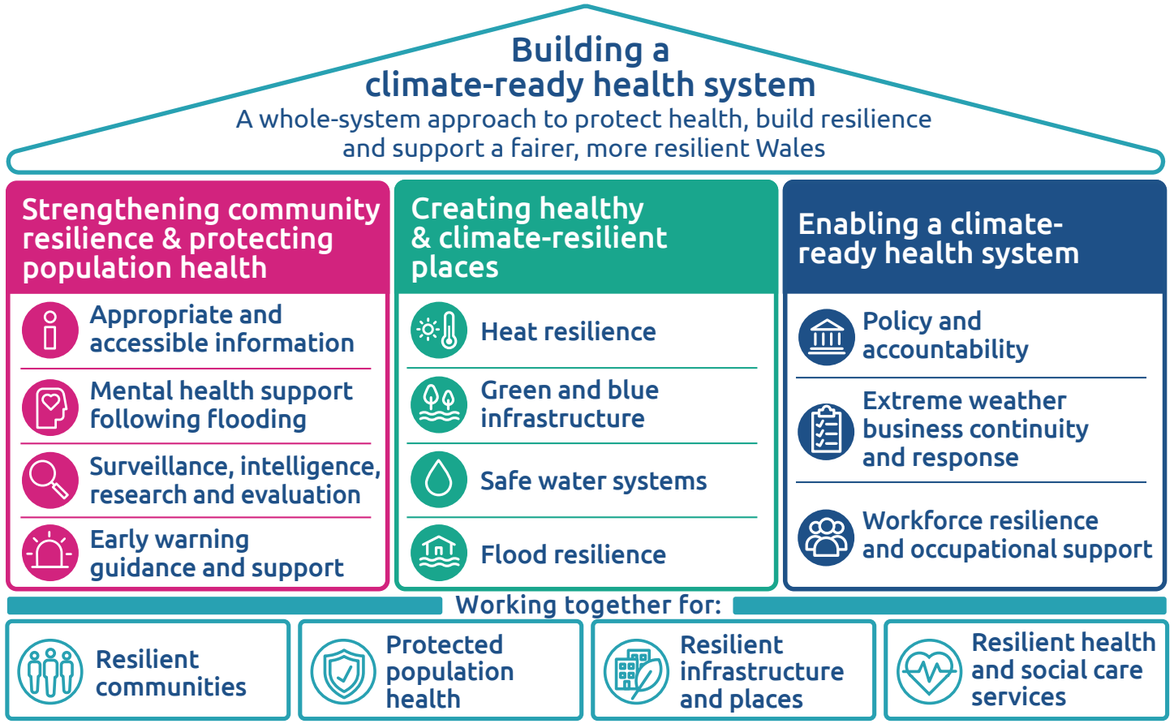
A single organisation cannot manage the health impacts of climate change and nature loss alone. Across all roles, actions should focus on protecting those most at risk, reducing health inequalities, maintaining safe and accessible services during extreme weather, strengthening nature resilience and using public health evidence to guide decisions.

Delivery should build on existing responsibilities and partnerships, while recognising where further policy development, investment and system-wide coordination will be needed. Organisations are identified for each action, although delivery will require wider partnership working across many organisations, including the private sector, not all of which are listed. The voluntary sector is also an important partner to engage early to ensure community voices are heard.

The following section summarises the actions, roles and responsibilities across sectors for:

- **Strengthening Community Resilience and Protecting Public health**
- **Creating Healthy and Climate-Resilient Places**
- **Enabling a Climate-Ready Health System**

Diagram 1. Priority actions for a whole system approach to protect, build resilience and support communities across Wales (adapted from CCRA4).



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Strengthening community resilience and protecting public health



Appropriate and accessible information on adverse weather

Providing clear, accessible and actionable information is an effective enabler for action to help reduce the health impacts of extreme weather events.

Welsh Government

- In line with the ambition of a new Climate and Nature Action Plan, set the national policy framework and expectations for adverse weather preparedness and climate adaptation.
- Lead, guide and support partners by providing evidence-based tools on communication and engagement such as the Welsh Government Climate Adaptation Toolkit.

Public Health Wales

- Lead national climate-health communications and awareness campaigns.
- Deliver targeted, evidence-based behavioural interventions and prevention messaging for vulnerable groups.
- Develop and implement an All-Wales public health Adverse Weather and Health Plan with partners, that adopts adaptation and response.
- Provide guidance and support to others to embed the use of statutory and voluntary Health Impact Assessment (HIA) approach, to reduce health inequalities and strengthen climate adaptation: Health Impact Assessment (HIA).

NHS organisations and Primary Care

- Apply adverse weather guidance and evidence to protect vulnerable populations.
- Identify and support people at greatest risk and maintain continuity of care during adverse weather.

Local Authorities and partnerships

- Use adverse weather guidance to support local communication and outreach activities to support and protect local communities and vulnerable populations.
- Work with others to support community resilience, sustainability and social cohesion.





Targeted mental health support following flooding

Flooding can have significant long-term impacts on mental health and wellbeing. Trauma-focused therapies can support recovery, alongside measures to reduce climate risk, and improve recovery and community resilience.

Government

- Provide support for the newly established Welsh Flood Forum Steering Group to bring together local authorities, Natural Resources Wales, emergency services, town and community councils and community organisations, to support communities to build resilience to and recover from flooding.
- Ensure flood resilience strategies explicitly consider the mental health impacts of flooding, including through the assessment and design of flood mitigation measures.

Public Health Wales

- Support children and young people to build resilience to the mental health impacts of climate change by increasing the support and resources available through the Whole School Approach to Emotional and Mental Health and Wellbeing.

NHS, Primary Care, Local Authorities and Voluntary sector

- Provide integrated mental health and wellbeing support for people affected by flooding and other climate-related events, with access to support ranging from self-help and peer support through to therapeutic interventions, specialist and crisis care.
- Support recovery through a whole-system approach that strengthens individual and community resilience and addresses the mental health impacts of climate-related events, including trauma, loss, uncertainty and climate anxiety.



Climate and health surveillance, intelligence, research and evaluation

Effective surveillance, intelligence, research and evaluation enable earlier action, better targeting of resources and improved protection of vulnerable populations.

Public Health Wales, Academic and research partnerships

- Lead climate and health surveillance, intelligence and evaluation across Wales, generating and sharing timely evidence on climate-sensitive risks, vulnerabilities and health outcomes with partners, to support public health policy, decision-making and adaptation action.
- In line with the Climate and Nature Action Plan, strengthen a One Health approach to climate-related risks through improved understanding, preparedness and action relating to environmental hazards, ecosystem change and emerging infectious disease threats.
- Strengthen research, evaluation and funding partnerships to address climate and health challenges, including health co-benefits, health equity, sustainable health systems, environment security and community engagement.





Early warning guidance and support

Timely guidance helps organisations prepare for and respond to periods of elevated risk. Effective warning support is particularly important for protecting vulnerable populations.

Public Health Wales

- Provide timely and appropriate national weather-health information, based on expert advice from organisations such as Met Office and consider behavioural science guidance and communication before and during extreme weather events.
- Provide timely information and guidance on emerging infectious disease and other health risks influenced by a changing climate, supporting preparedness and response.

Local Authorities, Health Boards, regional and local partnerships

- Act on guidance and strengthen local partnership arrangements, including with Local Resilience Forums and other local partnership networks, to identify, reach and protect vulnerable populations.

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Creating healthy and climate-resilient places



Heat resilience and protection during extreme heat

Heat is one of the most significant climate-related health risks in Wales. Protecting populations from heat requires coordinated action at every level of the health system to reduce heat-related illness, mortality and pressure on health services. Adaptation solutions that deliver heat resilience without increasing carbon emissions should be prioritised.

Welsh Government and Public Health Wales

- Embed Heat–Health Action Plans within the Adverse Weather and Health Plan, aligned with WHO guidance, and supporting climate surveillance, to reduce heat-related health impacts and protect people most at risk.

Welsh Government, Public Health Wales, Health Boards and Local Authorities

- Embed health prevention to climate risks in all policy development and ensure long term planning and strategic alignment of government action on the social determinants of health and wellbeing. This includes working at both national and local levels through the Health Equity Wales initiative to embed the use of the Marmot principles.



NHS Organisations, Primary Care and Community Partnerships

- Primary care and outpatient services to support heat preparedness, protect vulnerable populations, and maintain continuity of care during extreme heat events.
- Embed heat resilience into estates, planning and service delivery by improving building design, low carbon retrofits, natural cooling measures and action to protect equipment, temperature sensitive drugs and supplies.
- Provide cooling measures, promote hydration and support in clinical and social care settings, and identify and support people at greatest risk.

Local Authorities and local partnerships

- Apply Health Impact Assessment (HIA) and other evidence-based frameworks to ensure climate and health impacts are considered in policy-making, decision-making, planning and investment.
- Develop cool spaces, urban greening, shade, climate-adapted neighbourhoods and resilient local places.
- Support cooling and hydration in homes, schools and workplaces.

Green and blue infrastructure

Green and blue spaces are a core component of prevention, delivering co-benefits for public health, climate adaptation and nature recovery by reducing heat and flood risks, supporting wellbeing, and creating healthy, resilient places and communities.

Welsh Government

- Deliver a Climate and Nature Action Plan that sets the ambition for maximising health benefits from climate adaptation, ensuring that climate and nature is prioritised and effectively coordinated as one connected challenge between climate adaptation, nature recovery, public health and resilient places.

Public Health Wales

- Drive evidence-based options for stronger urban greening, active travel, healthy planning, and access to nature and wellbeing programmes, that reduce exposure to heat, flooding and other climate-related risks.
- Promote the benefits of nature and community well-being, working with partners to reduce barriers and enhance enablers to accessing green and blue infrastructure.

NHS, Primary Care, Local Authorities and Partnerships

- Support social prescribing and nature-based approaches that improve access to quality green and blue spaces, reduce heat exposure and support wellbeing.
- Work with partners, such as National Resources Wales, to prepare for a changing climate through sustainable management of natural resources, promoting sustainable land management, enhancing biodiversity, nature recovery, reducing climate-related risks and supporting public health and wellbeing.
- Engage communities in the co-design of green and blue spaces, such as sustainable urban drainage systems, tree canopies and other nature-based solutions, maximising benefits for health, biodiversity, climate resilience and community wellbeing.



Safe water systems

Safe water infrastructure is essential for protecting health in a changing climate, reducing risks from flooding and water contamination and strengthening resilience of communities and services.

Welsh Government and Natural Resources Wales

- Ensure effective regulation and monitoring of water quality and sustainable drainage systems and provide strategic oversight and direction across the water sector.

Local Authorities, Health Boards, Public Health Wales and partnerships

- Use health evidence to identify risks, to inform adaptation, investment and service planning, to maintain safe, reliable water supplies.
- Work in partnership to strengthen preparedness, response and adaptation to risks from contaminated water and environmental incidents.

Flood resilience

Health and social care facilities require protection from flood risk to ensure continued service delivery during extreme weather.

Welsh Government, NHS Organisations, Local Authorities and partnerships

- Strengthen the resilience of hospitals and care homes to flood risk through effective preparedness, planning and service continuity arrangements, including access to medication.
- Strengthen property and site-level flood resilience, alongside partnership working with Natural Resources Wales, to address wider catchment-level flood risk
- Optimise planning policies, Local Development Plans and public health evidence to minimise future flood risks, reducing exposure and protecting vulnerable populations.
- Strengthen the use of nature-based solutions to manage flood risk, support biodiversity recovery and build long-term community resilience.

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Enabling a climate-ready health system



Policy and accountability

Adaptation should become a core part of planning, investment and decision-making across the public sector to protect health, reduce inequalities and build resilience to current and future climate risks.

Welsh Government

- Strengthen governance, accountability and cross-sector climate adaptation across health, housing, planning, social care and infrastructure by embedding climate resilience and health equity into policy and regulatory frameworks, drawing on One Health principles where appropriate, and assessing, prioritising and scaling interventions that deliver the greatest health, equity and sustainability benefits for Wales.

All Organisations and partnerships

- Public Service Boards and their members use the evidence from their climate change risk assessments to inform their Well-being Assessments and their objectives to support the most vulnerable.
- Individual public sector organisations use evidence from their climate risk assessments to inform and implement adaptation actions across organisations.
- Use public health evidence of health inequalities to guide decisions and place health equity at the centre of adaptation.
- Strengthen partnership, including through the Health Equity Wales initiative, to identify and support vulnerable populations, building on existing partnership arrangements and local intelligence.

Extreme weather business continuity planning and emergency response

Health and social care services must be able to continue operating during periods of extreme weather. Strengthening adaptation helps reduce service disruption and responds to changing patterns of illness to maintain care and build a more climate resilient health system.

Welsh Government

- Provide clear governance, accountability and coordinated action for effective climate adaptation and emergency response.

All organisations and partnerships

- Integrate climate adaptation into business continuity, emergency preparedness and workforce planning, including testing preparedness for a range of climate-related scenarios and aligning with Local Resilience Forum arrangements.

Health Boards

- Ensure adaptation plans and business continuity address weather risks to protect health, minimise impacts of health inequalities and maintain essential services.

Local Authorities, NHS Organisations, Primary Care and partnerships

- Prioritise support for those at greatest risk from extreme weather and ensure adaptation measures reduce inequalities, protect health and build resilience for current and future generations.



Workforce resilience and occupational support

A resilient workforce is essential to maintaining services and protecting the health and wellbeing of staff and the population.

Organisations and partnerships

- Understand and address the impacts of climate change and extreme weather on the workforce through staff engagement, ensuring the needs of the most vulnerable are addressed.
- Train and equip staff to recognise, adapt to and respond effectively to climate-related health risks and emergencies.
- Strengthen workforce resilience through proactive workforce planning, business continuity arrangements, and occupational health and wellbeing support to manage pressures arising from increasing temperatures and extreme weather.

This briefing has been developed to support the work under the Health and social care climate emergency national programme.