



UK Health
Security
Agency

Adverse Weather and Health Plan

Midterm report

2023 to 2024

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Introduction

The Adverse Weather and Health Plan (AWHP; 'the plan') for 2023 to 2024 was published on the 27 April 2023 by the UK Health Security Agency (UKHSA). The AWHP aims to protect individuals and communities from the health effects of adverse weather and to build community resilience. It was published alongside:

- a new Weather-Health Alert early warning system
- a comprehensive evidence review of the science underpinning the impacts of adverse weather on health and wellbeing
- a collection of guidance for health and social care organisations, professionals and the general public on how stay healthy and well during periods of adverse hot weather

Since April, these resources have been complemented with the latest editions of cold and flooding guidance

UKHSA is committed to regular reporting on the implementation of the AWHP, led by the Extreme Events and Health Protection team (EEHP), based in UKHSA's Centre for Climate and Health Security. This report reviews the ongoing progress of the implementation of the Plan and makes recommendations for the next iteration of the Plan for 2024/25. This report, continues to align with the ISO9001:2015 7 quality management principles, namely 'Engagement of people' (P3) and 'Improvement' (P5) being of particular focus.

The scope of this report is limited to internal operations of UKHSA. A more detailed annual report will be published in May 2024. In 2025, the annual report will also include key conclusions from audits conducted on the implementation of the plan.

Launching the plan

The plan was formally launched on 27 April 2023 and then introduced to a wider audience at the AWHP launch webinar on the 10 May 2023, for which there were 692 of registrations.

UKHSA also hosted a series of operational webinars to help different stakeholders gain a better understanding of the plan's implementation, including the 'Summer 2023 Preparedness Programme' with 656 registrants held on 11 May 2023 and the 'Cold Weather Preparedness' webinar which was held on 7 September 2023 with 1,272 registrants.

An UKHSA internal exercise for extreme heat was held on the 18 May 2023, with 57 internal staff registered. UKHSA staff also presented the plan at several webinars organised by external partners.

Feedback on the 2023 to 2024 plan launch webinar was positive: 90% were satisfied with the webinar and 95% of attendees found that the concepts were presented in a clear and easy-to-understand way, 86% found the webinar engaging throughout (total of 87 responses).

However, from the feedback we will carefully consider the scope, breadth and depth of future seminars to ensure that they give a balance between adequate coverage of significant issues versus length of the webinar.

Recommendations for the next iteration of the plan

1. Relevant AWHP activities to be defined in the next plans, as defined in AWHP 2023 to 2024 section 5.5.
2. Improve the scope statement for AWHP to clearly define which hazards are in an out of scope by March 2024.
3. To map activities required with relation to thunderstorm asthma by March 2025.
4. To consider duration of AWHP 2024/25 launch webinar in light of feedback.

Guidance materials

The plan is supported by a series of guidance materials to support stakeholders to prepare and respond to significant adverse weather events. The collections of guidance describe the potential impact of each hazard on health, who is at risk and the actions to be taken before and during periods of adverse and extreme weather events in England. They detail what preparations national, regional, and local organisations and health and social care professionals can make to reduce health risks and includes measures to protect vulnerable groups as well as advice for the public. This includes new resources and updates to previously published guidance.

UKHSA published heat-related materials in the period April to June 2023. The updated cold- and flooding-related materials were published in September and October 2023, respectively.

There was also a Health Protection Unit 'Environmental Change and Health' workshop on the impacts of flooding on health with partners on 26 October 2023, delivered to coincide with these publications.

For the first time, UKHSA has published guidance for those with responsibilities for rough sleepers for both hot and cold weather and for children and young people for cold weather.

A challenge for UKHSA is to fully understand how the guidance is being used by frontline services. There is a need to establish a feedback and assurance mechanism to verify its implication.

Recommendations for guidance development

General

1. To agree with partners on an activity that would allow monitoring of the implementation of guidance with frontline workers in social care by 2024 to 2025 plan iteration.
2. To include a section in each guidance focussed on long term planning and adaptation to increase resilience to impacts of adverse weather by March 2026.

For adverse hot weather

3. To update 'Hot Weather-Health risk: actions to prevent harm' slide set by March 2024.
4. To update the structure of healthcare professional guidance for hot weather to better reflect service organisation by March 2024.
5. To update the structure of social care professional guidance for hot weather to better reflect service organisation by March 2024.
6. To expand the scope of heat guidance materials for people sleeping rough to include wider definitions of homelessness by March 2026.
7. To translate 'Beat the Heat' advice materials for the general public into at least 3 non-English languages by June 2024.
8. To produce training slide sets on 'Impacts of hot weather on health' for NHS England and social care colleagues by June 2024.

For adverse cold weather

9. To update 'Cold Weather-Health risk: actions to prevent harm' slide set by September 2024.
10. To update the structure of healthcare professional guidance for cold weather to better reflect service organisation by September 2024.
11. To update the structure of social care professional guidance for cold weather to better reflect service organisation by September 2024.
12. To expand the scope of heat guidance materials for people sleeping rough to include wider definitions of homelessness, by September 2026.
13. To translate the 'Stay Warm, Stay Well' advice materials for the general public into at least 3 non-English languages by September 2024.
14. To update the slide sets for NHS England and social care colleagues on the Impacts of cold weather on health by September 2024.

Evidence

In April 2023, a comprehensive supporting evidence document (SED) was published alongside the plan, that specifies the impacts of adverse weather and climate change on health. It built on previous [Making the Case](#) documents for both heatwave and cold weather plans for England. It details the specific health effects of adverse weather, those vulnerable groups who are most at risk and considers the impacts of adverse weather events and climate change on health inequalities. It also includes a chapter on the policy and legal commitments related to adverse weather and health.

The supporting evidence document makes a series of recommendations and the mechanism to ensure they are acted upon is in development for 2024. For future editions, priority areas for evidence updates have been identified with internal and external colleagues. These include, but are not limited to, increased vulnerability associated with health inequalities, dementia, experiencing homelessness and poor indoor air quality. Further work is needed to assess the evidence base for the hazard of thunderstorm asthma, which is not detailed in the National Risk Register but does fall within scope of the AWHP. The second edition of the SED will be supported by the upcoming Health Effects of Climate Change (HECC) report to be published by UKHSA in Winter 2023 and a resource of case studies. Finally, UKHSA is currently undertaking an equity review and impact assessment of the AWHP, which will be published in early 2024, and identifies the action that can be taken to reduce health inequalities and promote equity and inclusion.

Recommendations for supporting evidence document

1. To convert SED recommendations into a required activity, with an associated indicator, by February 2024.
2. To publish the methodology of the SED by February 2024.
3. To create a framework for academic collaborations for future SED updates by February 2024.
4. To incorporate the [PHASE report](#) on using routine health data for surveillance of the health effects of floods into the 2024 to 2025 plan.
5. To ensure the recommendations from the AWHP equity review are mapped to the next AWHP supporting evidence document.

Weather-Health Alerts

A major change implemented as part of the AWHP was the development of a new Weather-Health Alert System. Early warning systems have been shown to be the most cost-effective component of weather-health plans. The new 'impact-based' warning system is run by UKHSA

and has been developed in close association with the Met Office (MO) to align with existing MO National Severe Weather Warning Service.

The new system and associated [Weath Health Alert platform](#) launched in April 2023. Over 29,000 users have signed up for Weather-Health Alert email service compared to approximately 7,000 to the previous version. The Weather-Health Alert System is supported by a user guide, and a series of action cards that provide sector-specific suggested actions by alert level. The next iteration of the plan should include formal evaluation of these resources.

Recommendations for Weather-Health Alerts System

1. Review of health impacts over the heat and cold season to inform review of alerting thresholds by March 2025.
2. Review of health impacts over cold season to inform review of alerting thresholds by September 2025.
3. To clarify the differences between alerts and MO National Severe Weather Warning Service within the Weather-Health Alert user guide by February 2024.
4. For 24/25 Plan iteration to agree on activity that would allow users to provide feedback on the use of Weather-Health Alert User Guides and action cards with frontline workers in social and health care.
5. To plan activity to gather user feedback on their experience of Weather-Health Alert platform and email service by May 2024 and consider the results by September 2024
6. Weather-Health Alert emails to be received by users within 30 minutes of alert being issued by June 2024.
7. Addition of further specific action cards and guidance to be included with alert emails for providers, commissioners, third sector and national government departments and agencies by May 2024.
8. Addition of filter on the [Weather-Health Alert dashboard](#) to allow users to see the alert situation over the next 5 days by May 2024.

Next steps

The implementation of the 2023 to 2024 AWHP by UKHSA is progressing as planned. The recommendations detailed in this report will be reported on in the AWHP for 2024 to 2025. Following this, the AWHP annual report will provide wider and more detailed analysis of the implementation of the AWHP and is planned to be published in the autumn of 2024.

Summary of recommendations

Programme area	Code*	Recommendation	Due date
Plan	MR23P1	The AWHP 2024 to 2025 launch webinar not to exceed one hour.	May 2025
Plan	MR23P2	Relevant AWHP activities to be defined in the next plans, as defined in AWHP 2023 to 2024 section 5.5.	February 2024
Plan	MR23P3	Improve the scope statement for AWHP to clearly define what hazards are in an out of scope.	March 2024
Plan	MR23P4	To map activities required with relation to thunderstorm asthma.	March 2025
Guidance	MR23G1	To agree with partners on an activity that would allow monitoring of the implementation of guidance with frontline workers in social care by 2024 to 2025 plan iteration.	February 2024
Guidance	MR23G2:	To include a section in each guidance focussed on long term planning and adaptation to increase resilience to impacts of adverse weather.	March 2026
Guidance	MR23G3	To update 'Hot Weather-Health risk: actions to prevent harm' slide set.	March 2024
Guidance	MR23G4	To update the structure of healthcare professional guidance for hot weather to better reflect service organisation.	March 2024
Guidance	MR23G5	To update the structure of social care professional guidance for hot weather to better reflect service organisation by March 2024.	March 2024
Guidance	MR23G6	To expand the scope of heat guidance materials for people sleeping rough to include wider definitions of homelessness.	March 2026
Guidance	MR23G7	To translate 'Beat the Heat' advice materials for the general public into at least 3 non-English languages.	June 2024

Programme area	Code*	Recommendation	Due date
Guidance	MR23G8	To produce training slide sets on impacts of hot weather on health for NHS England and social care colleagues.	June 2024
Guidance	MR23G9	To update 'Cold Weather-Health risk: actions to prevent harm' slide set.	September 2024
Guidance	MR23G10	To update the structure of healthcare professional guidance for cold weather to better reflect service organisation.	September 2024
Guidance	MR23G11	To update the structure of social care professional guidance for cold weather to better reflect service organisation.	September 2024
Guidance	MR23G12	To expand the scope of heat guidance materials for people sleeping rough to include wider definitions of homelessness.	September 2026
Guidance	MR23G13	To translate the 'Stay Warm, Stay Well' advice materials for the general public into at least 3 non-English languages.	September 2024
Guidance	MR23G14	To update the slide sets for NHS England and social care colleagues on the impacts of cold weather on health.	September 2024
Evidence	MR23E1	To convert SED recommendations into a required activity, with an associated indicator.	February 2024
Evidence	MR23E2:	To publish the methodology of the SED.	February 2024
Evidence	MR23E3:	Create a framework for academic collaborations for future SED updates.	February 2024
Evidence	MR23E4:	To have conducted a workshop with academic partners for the next iteration of the SED.	September 2024
Evidence	MR23E5:	To incorporate the PHASE report on using routine health data for surveillance of the health effects of floods into the 2024 to 2025 plan.	February 2024
Evidence	MR23E6:	To ensure the recommendations from the AWHP equity review are mapped to the	February 2024

Programme area	Code*	Recommendation	Due date
		next AWHP supporting evidence document.	
Weather-Health Alerts	MR23WHA1	Review of health impacts over the heat and cold season to inform review of alerting thresholds.	March 2025
Weather-Health Alerts	MR23WHA2	Review of health impacts over cold season to inform review of alerting thresholds.	September 2025
Weather-Health Alerts	MR23WHA3	To insert clarification of differences between alerts and MO National Severe Weather Warning Service into Weather-Health Alert user guide.	February 2024
Weather-Health Alerts	MR23WHA4	For 2024 to 2025 plan iteration to agree on activity that would allow users to provide feedback on the use of Weather-Health Alert User Guides and action cards with frontline workers in social and health care.	February 2024
Weather-Health Alerts	MR23WHA5	To plan activity to gather user feedback on their experience of Weather-Health Alert platform and email service by May 2024 and consider the results by September 2024.	September 2024
Weather-Health Alerts	MR23WHA6	Weather-Health Alert emails to be received by users within 30 minutes of alert being issued.	June 2024
Weather-Health Alerts	MR23WHA7	Addition of further specific action cards and guidance to be included with alert emails for providers, commissioners, third sector and national government departments.	May 2024
Weather-Health Alerts	MR23WHA8	Addition of filter on the Weather-Health Alert dashboard to allow users to see the alert situation over the next 5 days.	May 2024

Abbreviations

*MR = midterm review, P = plan, G = guidance, E = evidence, WHA = Weather-Health Alerts

About the UK Health Security Agency

UKHSA is responsible for protecting every member of every community from the impact of infectious diseases, adverse weather, chemical, biological, radiological and nuclear incidents and other health threats. We provide intellectual, scientific and operational leadership at national and local level, as well as on the global stage, to make the nation health secure.

[UKHSA](#) is an executive agency, sponsored by the [Department of Health and Social Care](#).

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