

Planning for Extreme Heat at Sports Grounds

Introduction

As climate change begins to make extreme weather events more frequent across the world, those involved in planning for safety at sports grounds need to consider new risks. In the UK, temperatures over 40 degrees were recorded for the first time in July 2022. As outlined in section 7.7g of SG03: Event Safety Management, planning for extremes of temperature including extreme heat, should be considered as part of routine risk assessment and contingency planning.

This guidance draws on the experience of the extreme heat event in England in 2022 and is intended to inform the development of contingency plans for future such events. This note has two sections:

- Section 1 – considerations of risk and planning
- Section 2 – safety management indicative questions

1. Considerations of risk and planning

Who is at risk and how

Anyone can be affected by extreme heat, but those who are most likely to suffer severe effects are older people (those over 65), young children (particularly those under five), and people with existing health conditions. Alcohol can also exacerbate the effects of heat. Guidance from NHS England notes that people attending large scale public events may be at heightened risk.

Risk assessments should consider the effect of extreme heat on all those present at sports grounds, including spectators, staff, match officials, visiting contractors and players.

Extreme heat is more likely to affect people if they are not acclimatised to hot weather. In other words, a sudden heatwave is more likely to be a problem than a prolonged hot spell with a gradual build up. So, the first hot period of the year, and the first few days of a heatwave, are likely to cause more issues than those that occur later when people have had chance to acclimatise.

Advanced planning

Some planning is best carried out well in advance, allowing time for plans to be developed and changes to be made to the physical infrastructure of the ground if required.

Consider:

a) **Developing a contingency plan for extreme heat.**

The postponement, cancellation (or a rescheduling of the start time) of an event should not be ruled out if there are any concerns that any necessary mitigations cannot be delivered due to a foreseeable lack of human resources, infrastructure, equipment or other safety measures.



Therefore, the contingency plan should outline the:

- trigger point for activating the plan,
- process for assessing the impact of an expected heatwave,
- decision-making process regarding whether the event can safely proceed, and
- full details of the measures to be taken to mitigate the identified risks should the event go ahead.

b) Conducting a shade mapping exercise.

This should involve an analysis of what shaded areas are available at different times of the day. If shade is very limited, consider how it might be increased when needed, either with temporary or permanent structures. In doing so, consider the position of any new installations carefully to ensure that ingress, egress and circulation is not impeded, and access for emergency services is maintained.

If using gazebos, shade sails or similar items ensure that the appropriate checks are made for fire retardancy, wind loading and anchor points. You may need to notify the local authority under the terms of the ground safety certificate. Experience shows that there will be high demand for seating in shaded areas so consider whether this could be increased.

c) Drinking water provision.

Consider where you may be able to install additional visible and easily accessed water stations in obvious areas of high demand, and check that the ground's supply will be sufficient to meet increased use.

Grounds should also consider the relaxation of any 'no liquids policy' at entry points to allow non-alcoholic drinks to be brought in, if practical.

d) Identifying potential 'cool rooms'.

Grounds should consider if there are any opportunities to provide air-conditioned rooms which could be made available to the public and others if required.

e) Engaging more fully with the local Health and Ambulance Trusts.

This will ensure they are aware of:

- any potential additional demands from your event, your mitigations and
- the positive or negative impacts on their own extreme heat contingency plans.

f) Longer term planning to mitigate the impact of extreme heat.

This may become increasingly necessary for grounds that suffer from the 'urban heat island' effect – planning to use surfaces and planting that can help - 'cool roofs' and 'green roofs' for example. Planting of trees and vegetation can assist and careful consideration should be given to the use of glass, and how to maximise areas of shade.



2. Safety management indicative questions

Alongside advanced planning and conducting a risk assessment, ground management may need to plan for event-specific issues. The following indicative questions provide some key points that should be considered in the detailed planning for the event.

Event planning

Is there a process for monitoring weather forecasts in the run up to events? Are trigger points identified for the activation of contingency plans if extreme weather is predicted?

Does the plan identify who is responsible for making the decision as to whether the event can safely go ahead, or should be cancelled or postponed, what information they need, and the timeframe within which this decision should be made?

Has due consideration been given to the expected crowd profile for the event, and in particular, the impact the predicted weather will have on:

- Different age groups?
- Those who are less mobile?
- Those who are likely to consume alcohol?

Does the plan recognise there may be a range in severity of risks throughout the event depending on:

- The duration of any pre-event entertainment?
- The start and end times for the event?
- The duration of the event?

Is there regular and effective liaison with local stakeholders such as the emergency services, transport and medical providers?

Has a risk assessment been carried out to establish whether sufficient staffing, medical cover, shade, and water will be available to ensure the safety of those attending the event?

If the event is to go ahead, does the event management plan address issues around:

Welfare of staff? Particularly those who may need to work in direct sunshine for extended periods. Additional breaks, rotation of positions, changes to dress codes, access to water and sunscreen are all options to consider.

Available shade? Reference should be made to the shade mapping exercise. Consider how to prevent overcrowding of shaded areas, and impact on entry/egress and circulation routes.

Pre-event communications to attendees? This should include information about the expected conditions, encouraging personal risk assessments, and measures being taken by the ground in response to the extreme weather.

Prohibited items? Consider whether a more flexible approach to some items may be appropriate. Ensure that any changes to this list are clearly communicated both to attendees and gate/security staff.



Increased fire risk? For example, from dry grass and vegetation or overheating electrical appliances, and any additional measures planned to counter these risks.

Cool rooms? These are air conditioned or naturally cool indoor areas where people can get some relief from the heat. Consider pre-identifying suitable areas and how they will be managed. Considerations include the potential for overcrowding, use of time limits where there is excess demand, priority access for vulnerable people, wayfinding, and including in staff briefings.

Event day

Have the venue's Crisis Management Team been briefed on the revised plans, possible contingencies and their roles in any critical decision making?

Has additional time been allocated to ensure the revised plans and contingency measures can be fully briefed to all staff?

Does the revised plan detail how there will be additional monitoring of:

- queues – to avoid prolonged exposure to the sun?
- shaded areas – to avoid overcrowding, overflows into ingress and egress routes?
- water stations – to ensure demand is being met and people can be advised to attend less busy locations?

Is there provision for additional fire marshal patrols to manage any identified fire risks such as increased use of portable electrical equipment?

Does the revised Communications Plan identify how to remind spectators and staff of:

- staying hydrated
- seeking medical assistance if feeling unwell
- taking shade breaks
- accessing cool areas

Have relevant staff been briefed to monitor the effect of extreme heat and glare on the physical infrastructure including:

- tarmac
- a broad range of electrical equipment – e.g. ticket scanners, air conditioning units, refrigeration units etc.
- switch rooms?

Medical and first aid issues

Has the Medical Plan been reviewed by medical advisers to identify:

- Whether certain type of medical incidents (particularly cardiac and respiratory issues) are likely to increase?
- Whether additional medical personal and/or equipment may be required?
- Whether the deployment tactics for medical teams need to alter?
- Whether additional triage and treatment facilities would be useful?
- Whether additional cooling rooms and equipment are needed and who would staff these?



References and more information

Health and Safety Executive: [Temperature in the workplace guidance](#).

[NHS Heatwave Plan for England](#)

[NHS Heatwave Plan for England – Making the Case: the impact of heat on health – now and in the future](#)

With thanks to Durham Cricket for sharing the learning from their experience of running a major event during extreme heat conditions in July 2022.