**Heatwave plan – are you prepared?**

The Heatwave Plan for England is a guide to protect the population from heat-related harm to health. The aims of the plan are to prepare, alert and prevent the major avoidable effects on health during periods of severe heat in England. In a moderate heatwave, it is mainly high-risk groups that are affected but during an extreme heatwave fit and healthy people can also be affected.

The main causes of illness and death during a heatwave are respiratory and cardiovascular diseases. A linear relationship between temperature and weekly mortality was observed in England in summer 2006, with an estimated 75 extra deaths per week for each degree of increase in temperature. Part of this rise in mortality may be attributable to air pollution, which makes respiratory symptoms worse.

As the warmer months are approaching, we wanted to remind everyone about the key messages and measures that should be in place to protect vulnerable individuals from serious heat-related complications.

Heatwaves can have **serious health impacts** on the most vulnerable, including.

* **Heatstroke** – a medical emergency, which can result in organ failure and can be fatal. Symptoms are confusion, convulsions, unconsciousness, core body temperature over 40°C for between 45 minutes and eight hours.
* **Heat exhaustion -** more common and occurs because of water or sodium depletion, with non-specific features of malaise, vomiting and circulatory collapse, with a body temperature between 37°C and 40°C – if left untreated may evolve into heatstroke
* **Heat syncope** - dizziness and fainting, due to dehydration, vasodilation, cardiovascular disease, and certain medications
* When blood temperature rises, excess sweating can occur, **depleting fluid and salts** and heat cramps can occur. Blood vessels dilate and **heart rate increases**
* Increased blood flow to the skin cools the body by radiating heat, leading to **heat rash** (small, red itchy papules)
* **Heat oedema** – swelling mainly in the ankles, due to dilation of blood vessels and retention of fluid

**Groups that are particularly at risk include:**

* older people, especially those over 75 years old
* those with chronic and severe illness, including heart conditions, diabetes, respiratory or renal insufficiency, Parkinson’s disease, or severe mental illness, and those on medications that potentially affect renal function, sweating, thermoregulation, or electrolyte balance
* those who are unable to adapt their behavior to keep cool, including those with Alzheimer’s, disabilities, or who are bed bound

- people at greater risk due to environmental exposure, e.g., living in a top floor flat, homeless, with activities or jobs that are in hot places or outdoors and include high levels of physical

**Heatwave alert levels:**

A heat-health alert system operates from 1 June to 15 September each year, when the Met Office may forecast heatwaves. The system has 5 levels (Levels 0 to 4) outlined in further detail below.

See [Heatwave-plan-for-England](https://www.gov.uk/government/publications/heatwave-plan-for-england) for more information. The plan includes information about actions at each level which should be taken by people supporting vulnerable people.



If you are a health and social care professional involved in supporting vulnerable people:

* Read the Heatwave Plan and identify long term actions (e.g., environmental, organizational or facilities) needed to help reduce the effects of heatwave, especially as summers are expected to get hotter
* Read the ‘Heatwave Plan for England - Supporting vulnerable people before and during a heatwave’ at the link below, and brief staff about actions to take if a heatwave is forecast or during a heatwave
* Monitor Met Office forecasts and ensure staff are aware of actions to take at each Heatwave alert level
* Provide advice to people you are involved in supporting, particularly those who are especially vulnerable, including how to keep out the heat and keep body temperature down
* Identify anyone who may require extra care during hot weather
* Be alert for adverse impacts of heat on those you are supporting and know what action to take

**For further information:**

* [Heatwave plan for England](https://www.gov.uk/government/publications/heatwave-plan-for-england)
* [supporting vulnerable people before and during a heatwave for HSC professionals](https://www.gov.uk/government/publications/heatwave-plan-for-england/supporting-vulnerable-people-before-and-during-a-heatwave-for-health-and-social-care-professionals)
* Beat the heat: staying safe in hot weather - GOV.UK (www.gov.uk)
* [NHS Choices advice on how to cope in hot weather](https://www.nhs.uk/live-well/seasonal-health/heatwave-how-to-cope-in-hot-weather/)
* [BBC weather and air quality reports](https://www.bbc.co.uk/weather)
* [Sun protection, advice on way to minimise ultraviolet rays-induced skin and eye damage can be found at NHS Choices.](https://www.nhs.uk/Live-well/seasonal-health/sunscreen-and-sun-safety/)