

## Essex Local Health Resilience Partnership HEATWAVE ACTION CARD

This action card has been developed using the Public Health England Heatwave Plan 2015 as a guide. This action card has been developed from the Ipswich & East Suffolk and West Suffolk clinical commissioning group heatwave action card and will be reviewed annually.

The Heatwave Plan for England along with other supporting material at [www.gov.uk/government/publications/heatwave-plan-for-england](http://www.gov.uk/government/publications/heatwave-plan-for-england)

### 1 INTRODUCTION

Evidence about the risks to health from heatwaves is extensive and consistent from around the world. Excessive exposure to high temperatures can kill. During a heatwave, when temperatures remain abnormally high over more than a couple of days, it can prove fatal, particularly among certain at risk groups. A proactive approach to a heatwave response can serve to avoid or minimise capacity problems generated as a result of adverse weather.

The main causes of illness and death during a heatwave are respiratory and cardiovascular diseases.

Additionally, there are specific heat-related illnesses including:

- **heat cramps** – caused by dehydration and loss of electrolytes, often following exercise;
- **heat rash** – small, red, itchy papules;
- **heat oedema** – mainly in the ankles, due to vasodilation and retention of fluid;
- **heat syncope** – dizziness and fainting, due to dehydration, vasodilation, cardiovascular disease and certain medications;
- **heat exhaustion** (more common) - occurs as a result of water or sodium depletion, with non-specific features of malaise, vomiting and circulatory collapse, and is present when the core temperature is between 37°C and 40°C. Left untreated, heat exhaustion may evolve into heatstroke;
- **heatstroke** – can become a point of no return whereby the body's thermoregulation mechanism fails. This leads to a medical emergency, with symptoms of confusion; disorientation; convulsions; unconsciousness; hot dry skin; and core body temperature exceeding 40°C for between 45 minutes and eight hours. It can result in cell death, organ failure, brain damage or death. Heatstroke can be either classical or exertional (e.g. in athletes).

### 2 AT RISK GROUPS

There are certain factors that increase an individual's risk during a heatwave. These include:

- **Older age:** especially over 75 years old, or those living on their own who are socially isolated, or in a care home;
- **Chronic and severe illness:** including heart conditions, diabetes, respiratory or renal insufficiency, Parkinson's disease or severe mental illness. Medications that potentially affect renal function, the body's ability to sweat,

thermoregulation (e.g. psychiatric medications) or electrolyte balance (diuretics) can make this group more vulnerable to the effects of heat;

- **Infants** are vulnerable to heat due to immature thermoregulation, smaller body mass and blood volume, high dependency level, dehydration risk in case of diarrhoea;
- **Homeless people** (those who sleep in shelters as well as outdoors) may be at increased risk from heatwaves. Higher rates of chronic disease (often poorly controlled), smoking, respiratory conditions, substance dependencies and mental illness are more frequent in homeless populations than in the general population. These risk factors increase the risks of heat related morbidity and mortality, on top of social isolation, lack of air conditioning, cognitive impairment, living alone and being exposed to urban heat islands;
- **People with alcohol dependence and drug dependence** often have poorer overall health and increased social isolation which can increase their risk of heat stress;
- **Inability to adapt behaviour** to keep cool such as having Alzheimer's, a disability, being bed bound, drug and alcohol dependencies, babies and the very young; and
- **Environmental factors and overexposure:** living in urban areas and south-facing top-floor flats, being homeless, activities or jobs that are in hot places or outdoors and include high levels of physical exertion, children and adults taking part in organised sports (particularly children and adolescents).
- Older people with chronic or serious illness, mobility problems, or severe mental illness, those who are on certain medications, or those living in accommodation that is hard to keep cool, may need extra care and support.

### 3. ACTIVATION AND ACTIONS REQUIRED

A Heat-Health Watch system operates in England from 1<sup>st</sup> June to 15<sup>th</sup> September each year, with responder/provider actions being based on threshold day and night-time temperatures. Thresholds for the Eastern Region are; average of 30°C during the day and 15°C overnight. There are five alert levels.

Level 0 relates to long-term heatwave planning all year round. Alert levels 1 to 4 are effective between 1<sup>st</sup> June and 15<sup>th</sup> September.

Level 1 - Heatwave and Summer Preparedness - is in force throughout the summer. Actions within the Heatwave plan will remain at level 1 until a higher alert is triggered.

Level 2 - Alert and Readiness - is triggered when there is a 60% risk of Heatwave thresholds being reached on at least two consecutive days. This alert will normally be issued 2 - 3 days before the event is expected.

Level 3 - Heatwave Action - when the threshold temperature is reached in one or more Met Office National Severe Weather Warning Service regions.

Level 4 - Emergency Response - will be declared by central government in the event of severe or prolonged Heatwave affecting sectors other than health.

All NHS Funded organisations (Primary Care Exc.) should be signed up directly through the Met Office, in order to receive the Heatwave Alerts, which should then be circulated internally to relevant personnel. When these alerts are received, details of actions to be undertaken at each level are documented in this action card. <http://www.metoffice.gov.uk/public/weather/forecast>

## HEATWAVE ALERT LEVELS AND ASSOCIATED ACTIONS

Alert Level & Definition	
<p><b>LEVEL 1</b></p> <p><b>Heatwave &amp; Summer Preparedness</b></p> <p>Baseline level between 1<sup>st</sup> June - 15<sup>th</sup> September</p>	<p style="text-align: center;"><b><u>LEVEL 1 ACTIONS</u></b></p> <p><b>Ensure:</b></p> <ul style="list-style-type: none"> <li>• Current Heatwave Plan is accessible</li> <li>• Relevant personnel within your organisations are aware of the Met</li> <li>• Office Cold/Heatwave Alert Service and can access/are in receipt of these alerts</li> <li>• Monitor and circulate the Met Office Heatwave Alerts when received, as appropriate</li> <li>• Your organisation are able to identify high risk individuals and raise awareness of heat illness</li> <li>• Your organisation are able to raise the awareness of patients to the potential dangers of heat on health</li> <li>• Your organisation include risk in care records (where applicable) and consider whether changes to care plans might be necessary in the event of a Heatwave</li> <li>• Ensure working areas can be maintained below 26°C</li> </ul>
<p><b>LEVEL 2</b></p> <p><b>Alert &amp; Readiness</b></p> <p><b>60% risk of heatwave on at least 2 consecutive days</b></p> <p>[normally issued 2-3 days before the event is expected]</p>	<p style="text-align: center;"><b><u>LEVEL 2 ACTIONS</u></b></p> <p><b>Local NHS funded providers to:</b></p> <ul style="list-style-type: none"> <li>• Provide internal notification of the change in alert level</li> <li>• Review &amp; prioritise high risk people ensuring arrangements are in place to support/aid them (where applicable to your organisation)</li> <li>• Ensure Business Continuity incl. maintaining sufficient staffing levels</li> <li>• Communicate alerts to staff</li> <li>• Ensure appropriate public health messages are issued as outlined in the Heatwave Plan for England 2015</li> <li>• Check indoor areas, ensuring that indoor areas are below 26°C</li> <li>• Ensure sufficient supplies of cold water are available</li> </ul> <p>If requested, provide NHS England (East) with assurance that the change in alert level has been circulated and received</p>
<p><b>LEVEL 3</b></p> <p><b>Heatwave temperature reached in one or more region</b></p> <p><i>(30°C daytime temperature 15°C night time temperature in East of England)</i></p>	<p style="text-align: center;"><b><u>LEVEL 3 ACTIONS</u></b></p> <p><b>In Addition to Level 2 actions, ensure local NHS funded providers</b></p> <ul style="list-style-type: none"> <li>• Activate plans to maintain business continuity, including a possible surge in demand</li> <li>• Ensure staff can help and advise clients/patients</li> <li>• Visit/phone high risk patients (community providers)</li> <li>• Advise carers to contact the GP if there are any concerns regarding clients health</li> <li>• Take physical measures to reduce temperatures, e.g. by turning off lights</li> <li>• NHS England to act as the lead agency, in working with multi-agency partners through the Local Resilience Forum</li> </ul>
<p><b>LEVEL 4</b></p> <p><b>Emergency Response</b></p> <p><i>(Severe/prolonged heatwave affecting sectors other than health)</i></p>	<p style="text-align: center;"><b><u>LEVEL 4 ACTIONS</u></b></p> <ul style="list-style-type: none"> <li>• Continue actions as per level 3</li> <li>• Liaise with NHS England (East). Provide assurance that the change in alert level has been circulated and received, and supply information/undertake actions as requested. Sitreps may be required.</li> <li>• Ensure appropriate public health messages are reconfirmed</li> <li>• Central government led actions to be disseminated and responded to</li> </ul>