Heatwave Plan

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Consultation Groups	Key leads
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Services	Applicable
Trust wide	x
Mental Health and LD	
Community Health Services	

Version Control Summary

Version No.	Date	Author	Comment
1.0	2007	Eirlys Evans	Initial Heatwave Plan
2.0	2011	Mason Fitzgerald	Annual Review
3.0	March 2012	Jane Connor	Annual Revision and update
3.1	June 2012	Jane Connor	Review against 2012 DH Guidance
3.2	July 2013	Petra Nittel	Review against 2013 Heatwave Plan for England
3.3	May 2014	Petra Nittel	Review against Heatwave Plan for England 2014. Director of Nursing replaced as AEO by Director of Corporate Affairs.
3.4	June 2015	Petra Nittel	Reviewed to include Luton & Bedford Directorate. Inclusion of NHSE(L) heatwave plan regional supplement information on command and control.
3.5	January 2018	Richard Harwin	Review date.
4.0	February 2021	Richard Harwin	Review date.
4.1	July 2024	Jess Rizwani	No changes made, reviewed in line with 3-year review requirement.

Executive Summary

This plan details the East London NHS Foundation Trust's (ELFT) response to heat waves or high temperatures, focusing on the associated public health risks. It aligns with the Department of Health's guidance for health and social care organizations during the annual heat wave monitoring period from June 1 to September 15.

The primary aim is to outline the necessary actions ELFT must take to mitigate health risks for mental health and community health service users in Newham during heat waves. The plan should be used alongside the Incident Response Plan and relevant business continuity plans to ensure comprehensive preparedness and response.

East London
NHS Foundation Trust

Contents

1. Introduction

This plan outlines the response of East London NHS Foundation Trust (ELFT) to a heat wave or period of high temperature which may cause increased risks to public health. The Department of Health publication 'Heatwave – Advice for Health and Social Care Professionals' outlines the roles and responsibilities of health and social care organisations during the annual heat wave monitoring period from 1 June to 15 September.

1.1 Policy Aims and Scope

The key aim of this policy is to

- Outline the actions which may need to be taken by ELFT during a period of high temperature or official heat wave in order to
- Reduce the health risks to mental health service users and community health service users within Newham.

The plan should be read in conjunction with the Incident Response Plan and the supporting business continuity plans.

1.2 Heat Health Watch Threshold

During the Heat-Health Watch period (1 June to 15 September) the Met Office forecasts heatwaves as defined by forecasts of day and night temperatures and their duration.

There are five alert levels:

Level 0 – long term planning	Level 3 – Heatwave Action – threshold temperatures are reached
Level 1 – Heatwave and Summer preparedness programme	Level 4 – Major Incident – emergency response, declared by Central Government
Level 2 – Heatwave is forecast – Alert and readiness, 60% of heatwave in next 2-3 days	In the event of severe or prolonged heatwave

Alert Level 3 – Heatwave Action requires action to ensure the safety and wellbeing is triggered as soon as the Met Office confirms that threshold temperatures have been reached.

Heatwave thresholds differ across England. This means that depending on location, a heatwave alert may affect different parts of the Trust. For Luton & Bedford Directorate, it is the East of England thresholds.

Heatwave Threshold	DAY	NIGHT	DAY
London	32°C	18°C	32°C
East of England	30 °C	15°C	30°C

1.3 Alert level actions (2-4) Command and Control

Level 2 – 3

- NHS England (London) will request assurance as to the impact and mitigation in place.
- Bedfordshire Local Resilience Forum will initiate severe weather teleconferences.

In the event of a Level 4 heat-health alert being issued:

- In London, a pager message will be cascaded to all NHS organisation directors on call via the paging system.

  The pager message will read:
  'RED from NHS01: Level 4 Heatwave – National; Emergency Declared. Confirm email address to receive further instructions to england.london-incident@nhs.net

  NHS England will initiate command and control arrangements across London and establish a reporting rhythm for situational reporting on the impacts of the incident on health organisations, in accordance with the Incident Response Plan.

- For East of England, actions as required by the Bedfordshire Local Resilience Forum will be followed.

- The Trust may consider activating the Incident Response Plan and forming an Incident Response Team.

2. Alert Levels and Local Actions

Level 0	Level 1	Level 2	Level 3	Level 4
Long-term planning *All year* *See accompanying document 'Making the Case' for more detail*	**Heatwave and Summer preparedness programme** *1 June – 15 September*	**Heatwave is forecast – Alert and readiness** *60% risk of heatwave in the next 2–3 days*	**Heatwave Action** *Temperature reached in one or more Met Office National Severe Weather Warning Service regions*	**Major incident – Emergency response** *Central Government will declare a Level 4 alert in the event of severe or prolonged heatwave affecting sectors other than health*
Professional Staff (all settings): • Develop systems to identify and improve resilience of high-risk individuals • Request an HHSRS assessment from EH for clients at particular risk. • Encourage cycling/walking where possible to reduce heat levels and poor air quality in urban areas. **Care Homes and Hospitals** • Work with commissioners to develop longer term plans to prepare for heatwaves • Make environmental improvements to provide a safe environment for clients in the event of a heatwave • Prepare business continuity plans to cover the event of a heatwave (e.g. storage of medicines, computer resilience, etc) • Work with partners and staff to raise awareness of the impacts of severe heat and on risk reduction awareness (key public health messages – box 1)	**Professional Staff (all settings)** • Identify high-risk individuals on your caseload and raise awareness of heat illnesses and their prevention among clients and carers (see key public health messages – box 1) • Include risk in care records and consider whether changes might be necessary to care plans in the event of a heatwave (e.g. initiating daily visits by formal or informal care givers for those living alone) **Care Homes and Hospitals** • Ensure business continuity plans are in place and implement as required; ensure appropriate contact details are provided to LA/NHS emergency planning officers to facilitate transfer of emergency information • Identify or create cool rooms/areas (able to be maintained below 26°C) • Install thermometers where vulnerable individuals spend substantial time	**Professional staff (all settings):** • Check high-risk people have visitor/ phone call arrangements in place • Reconfirm key public health messages to clients • Check client's room temperature if visiting **Care Homes and Hospitals** • Check indoor temperatures are recorded regularly during the hottest periods for all areas where patients reside • Ensure cool areas are below 26°C • Review and prioritise high-risk people • Ensure sufficient cold water and ice • Consider weighing clients regularly to identify dehydration and rescheduling physio to cooler hours • Communicate alerts to staff and make sure that they are aware of heatwave plans • Ensure sufficient staffing • Implement business continuity	**Professional staff (all settings):** • Visit/phone high-risk people • Reconfirm key public health messages to clients • Advise carers to contact GP if concerns re health **Care Homes and Hospitals** • Activate plans to maintain business continuity – including a possible surge in demand • Check indoor temperatures are recorded regularly during the hottest periods for all areas where patients reside • Ensure staff can help and advise clients including access to cool rooms, close monitoring of vulnerable individuals, reducing internal temperatures through shading, turning off unnecessary lights/equipment, cooling building at night, ensuring discharge planning takes home temperatures and support into account	**NATIONAL EMERGENCY** Continue actions as per Level 3 unless advised to the contrary **Central government will declare a Level 4 alert in the event of severe or prolonged heatwave affecting sectors other than health and if requiring coordinated multi-agency response**
High-risk Groups **Community:** Over 75, female, living on own and isolated, severe physical or mental illness; urban areas, south-facing top flat; alcohol and/or drug dependency, homeless, babies and young children, multiple medications and over-exertion **Care home or hospital:** over 75, female, frail, severe physical or mental illness; multiple medications; babies and young children (hospitals).				
*Because Level 2 is based on a prediction, there may be jumps between levels. Following Level 3, wait until temperatures cool to Level 1 before stopping Level 3 actions. ** Level 4: *A decision to issue a Level 4 alert at national level will be taken in light of a cross-government assessment of the weather conditions, co-ordinated by the Civil Contingencies Secretariat*				

2.1 Alert Level 1 – Summer Preparedness

The Emergency Planning Lead will check the Heatwave Plan for England and update the Trust's Heatwave Plan accordingly.

The Emergency Planning Lead will ensure that the Information Guides that support the Heatwave Plan for England are uploaded onto the Intranet and announced via the Staff Brief.

The Emergency Planning Lead ensures that the Trust receives alerts directly from the Met Office.

The Emergency Planning Lead and the Physical Health Lead Nurse will work with Borough Directors and Service Leads to:

- Review mechanisms to identify individuals who may be at high risk during a heat wave including those with chronic illness or severe mental illness. Due to the additional risk of psychiatric medications affecting thermoregulation and sweating, heatwave considerations must be included within an individual's Care Programme Approach.
- Raise awareness of the dangers of heat and provide advice on how to keep cool.
- Ensure care plans will be amended for at risk individuals, where necessary, to provide additional support during periods of high temperature.
- Review surge capacity and business continuity arrangements to maximise staff and service availability including, where possible, altering appointments to reduce heat exposure during peak periods (11.00 am to 3.00 pm).
- Liaise with the local health and social care organisations to identify and assess preventative measures that can be put in place for at risk individuals.
- Co-ordinate communications to staff, service users and with NHS East London and The City co-ordinate messages to the general public and at-risk groups.
- Review ELFT estates provision to identify cool rooms for staff use, heat reduction methods (e.g. additional air conditioning) and additional drinking fountain supplies which may be needed during prolonged periods of high temperature.
- Ensure temperatures in healthcare facilities are monitored to identify hot and cool areas. All residential / in-patient facilities should move any high risk patients to cool rooms when temperatures reach 26°C.
- Test the communications network to ensure that emergency heat wave information can be successfully cascaded.

2.2 Alert Level 2 – Alert and Readiness

Alert Level 2 is triggered as soon as the Met Office forecasts threshold temperatures at least two or three days ahead in any one region, or forecasts that there is a 60 per cent chance of

temperatures being high enough on at least two consecutive days to have significant effects on health.
It is important to note, however, that one day of high temperature (e.g. 25°C - 29°C) may also have an impact on business continuity for ELFT as staff and services may be affected by external issues including reduction of public transport, delays in local infrastructure and increase in primary care access due to sunburn and alcohol consumption. In this event, business continuity measures may be put in place within services. The Chief Executive or on-call Director may make a concession regarding working hours for staff during periods of high temperature, especially for those working in buildings over 26°C.

At Alert Level 2, the Physical Health Lead Nurse and Emergency Planning Manager will support teams to achieve the following:

- Ensure that individuals who may be at high risk during a heat wave including those with chronic illness or severe mental illness are identified.
- Distribute Department of Health heatwave advice leaflets to relevant staff and facilities for onward transmission to service users and / or identified at risk individuals.
- Community teams to identify and list those service users living in the community considered 'high risk', ie those with severe mental illness, physical healthcare needs, living on their own, or without regular contact with a carer.
- Direct at risk individuals to additional clinical advice regarding storing and taking medication during periods of high temperatures.
- Ensure the Estates Team source additional air conditioning and water supplies available for priority areas.
- Due to the additional risk of psychiatric medications affecting thermoregulation and sweating, teams must ensure that in-patient environments have a cooler room (26ºC or below), and that heatwave considerations are included within an individual's Care Programme Approach. In-patient Duty Ward Nurses should identify cooler rooms or cooler areas for high-risk groups who are vulnerable to the effects of heat, and are physiologically unable to cool themselves efficiently once temperatures rise above 26ºC. Cooler areas can be developed with appropriate indoor and outdoor shading, ventilation, the use of indoor and outdoor plants and, if necessary air-conditioning.
- Indoor thermometers should be installed in all Trust inpatient sites in areas that vulnerable individuals spend substantial time in (bedrooms, living areas, eating areas and day hospital facilities). During a heatwave, i.e. when temperatures reach 32ºC, indoor temperatures should be monitored at least three times a day at the handover of each shift and once during the night, or as determined by the manager in charge of individual area.

2.3 Alert Level 3 – Heatwave Action

2.3.1 Alert action
Alert Level 3 is triggered as soon as the Met Office confirms that threshold temperatures have been reached in any one region or more.

Heatwave Threshold	DAY	NIGHT	DAY
London	32°C	18°C	32°C
East of England	30 °C	15°C	30°C

The Department of Health will issue national communications messages and monitor increase in calls to health services and GP consultations.

At this stage, the Director of Operations, The Director of Corporate Affairs, the Emergency Planning Manager and the Physical Health Lead Nurse will assess the impact of the heatwave on staff and service users and identify ways of how the impact can be minimised.

If necessary, an Emergency Management Team may be formed to consider implementing a business continuity measures to maximise resources and minimise the impact of the heat wave on staff and service users.

Similar to Alert Level 2, At Alert Level 3, ELFT will support staff (where practical) to:

- Ensure that individuals who may be at high risk during a heat wave including those with chronic illness or severe mental illness are contacted on a daily basis or more frequently depending on the category of risk.
- Enable in-patients are able to have regular cool showers, baths or body washes. Encourage use of light, loose clothing.
- Review catering arrangements and recommend more cold food, e.g. salads and fruit with high water content.
- In clinical areas, ensure adequate fluid intake and monitor weight and fluid balance in at risk individuals.
- Discourage physical activity for in-patients and outdoor activities for any staff or service user between 11:00 and 15:00 where possible.
- Ensure greater discharge assessment of patients at risk, with appropriate support in place and advice to carers. Ensure place of transfer is fit for use during heatwave and consider delaying transfer if appropriate measures cannot be put in place.
- Increase number of telephone calls to at risk individuals and reduce need to attend non urgent appointments (e.g. reduce unnecessary travel or reason to be outdoors unless facility will provide an opportunity for individual to spend time in a cool environment).
- Direct at risk individuals to additional clinical advice regarding storing and taking medication during periods of high temperatures.
- Promote awareness of heat wave risks through local media outlets.
- Implement additional building cooling methods, access to cool drinking water; monitor temperatures at health facilities and implement cool rooms where necessary.
- Ensure residential and in-patient facilities are undertaking actions to minimise risks to vulnerable patients. Check that temperatures are recorded up to four times per day on in-patient wards and common areas.
- Maximise external shading and night time ventilation (where practicable) for in-patient and ELFT facilities including offices to maximise overnight natural cooling.

- Implement alternative appointment schedules, flexible working hours and additional transport times for staff to minimise heat risks (co-ordinate through multi agency incident team to avoid conflicting changes).
- Increase capacity at primary care facilities (e.g. Urgent Care Centres) where necessary including additional supplies of heat condition treatments (e.g. rehydration solutions, sunburn treatments).
- Remind staff and service users to use sunscreen when exposed to the sun at all times during periods of high temperatures, especially at lunch times. Use of sunscreen is often thought of just for holiday periods and overlooked when making daily journeys or going outside for short periods.
- Reduce additional heat output by turning off all unnecessary electrical equipment including computers, printers, televisions and lights.
- Expedite any repair of cooling or refrigeration breakdown and make alternative arrangements where possible to maintain cool areas and safe storage of food and medication.

2. 4 Alert Level 4 – Heatwave Emergency

Alert Level 4 may be implemented when a heat wave is so severe and / or prolonged that its effects extend outside health and social care, such as power and water shortages. At this level, illness and death may occur amongst the fit and healthy and not just in high risk groups. In the event of Alert Level 4, the Incident Response Management Team should establish a regular meeting pattern to implement emergency and business continuity measures. Multi agency incident teams may also be established to co-ordinate the response and prioritise supplies of essential utilities at local Borough level.

The impact of a prolonged period of high temperature could include damage to:

- Transport infrastructure (including tarmac melting and rail track damage)
- Power supplies (increase demand and potential damage to infrastructure)
- Environmental pollution (decrease in air quality, water quality and sanitation)
- Water supplies (increase demand, potential damages to infrastructure)
- Food supplies (transport delays, spoilage and loss of harvests).

The risk of fire will also increase and it is important that all Fire Doors remain closed during a heatwave.

Communicable and infectious diseases may also increase if there is a reduction in available water. ELFT should review the provision of alternatives e.g. alcohol gel to staff and service users during water shortages and provide public health advice to the general public regarding infection control during periods of disruption.

As well as human health, animals will also be affected and communication messages should also include reminders on providing cool facilities and additional water for animals, especially pets of service users and staff.

2.5 Heatwave Room Temperatures Recording Chart

ELFT HEATWAVE RECORD CHART

This table has been designed to keep a record of room temperatures over seven days in the event of a heat wave. The left hand columns have been divided into four temperature measurements per day. These should be recorded at either the beginning of handover e.g. 07:00, 14:00, 21:00 and one during the night (01:00) or as determined by the person in charge in a unit that does not operate 24 hours. Therefore there MUST be up to four recordings per day.

The top row specifies rooms from within the unit that would need to be monitored. The rooms listed are *examples* of rooms, and this form should be altered to be specific to the unit. The temperature for each room should be recorded for each of the four periods in degrees Celsius (°C). There is a separate section for any comments to be written.

Site / Ward:	
Week Commencing:	

Day	Period	Bedroom	Dining	Lounge	Office	Bathroom	Other
Monday	1						
	2						
	3						
	4						
Tuesday	1						
	2						
	3						
	4						
Wednesday	1						
	2						
	3						
	4						
Thursday	1						
	2						
	3						
	4						
Friday	1						
	2						
	3						
	4						
Saturday	1						
	2						
	3						
	4						
Sunday	1						
	2						

	3						
	4						

3. Heat Health Risks

3.1 The Effect of Heat on Health

The body normally cools itself using four mechanisms:

- Radiation in the form of infrared rays;
- Convection via water or air crossing the skin;
- Conduction by a cooler object being in contact with the skin; and
- Evaporation of sweat.

Increasing temperatures in excess of approximately 25°C are associated with excess summer deaths, at 27°C or over, those with impaired sweating mechanisms find it especially difficult to keep their bodies cool. However, the main causes of illness and death during a heatwave are respiratory and cardiovascular diseases. In order to keep cool, large quantities of extra blood are circulated to the skin. This causes strain on the heart, which for elderly people and those with chronic health problems can be enough to precipitate a cardiac event, for example heart failure. Additionally, death rates increase in particular for those with renal disease.

Sweating and dehydration affect electrolyte balance. For people on medications that control electrolyte balance or cardiac function, this can also be a risk. Medicines that affect the ability to sweat, thermoregulation or electrolyte imbalance can make a person more vulnerable to the effects of heat. Such medicines include anticholinergics, vasoconstrictors, and antihistamines, drugs that reduce renal function, diuretics, psychoactive drugs and antihypertensives. Ozone and PM10s also increase the level of cardiovascular-related deaths.

3.2 High-Risk Factors

Certain factors increase an individual's risk during a heat wave including:

- Older age: especially women 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 or electrolyte balance can make this group more vulnerable to the effects of heat.
- Inability to adapt behaviour to keep cool: having Alzheimer's, a disability, being bed bound, too much alcohol, babies and the very young.
- Environmental factors and over exposure: 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.

In a moderate heatwave, it is mainly the high-risk groups mentioned above who are affected.

However, during an extreme heatwave normally fit and healthy people can also be affected. People with chronic or severe illness are likely to be at particular risk including the following conditions:

- Respiratory disease
- Cardiovascular and cerebrovascular conditions
- Diabetes and obesity
- Severe mental illness
- Renal insufficiency
- Peripheral vascular conditions
- Alzheimer's or related diseases.
- Parkinson's disease and difficulties with mobility

3.3 Heat Related Illnesses

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 – is more common. It 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 37ºC and 40ºC. 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 40ºC 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).

Whatever the underlying cause of heat-related symptoms, the treatment is always the same – move the person to somewhere cooler and cool them down.

3.3 Medications

The following drugs are theoretically capable of provoking or increasing the severity of heatstroke:

<table>
<tr><td colspan="2">Those causing dehydration or electrolyte imbalance</td><td colspan="2">Diuretics, especially loop diuretics. Any drug that causes diarrhoea or vomiting (colchicines, antibiotics, codeine)</td></tr>
<tr><td colspan="2">Those likely to reduce renal function</td><td colspan="2">NSAIDS, sulphonamides, indinavir, cyclosporine</td></tr>
<tr><td colspan="2">Those with levels affected by dehydration</td><td colspan="2">Lithium, digoxin, antiepileptics, biguanides, statins</td></tr>
<tr><td rowspan="4">Those that interfere with thermoregulation</td><td>By central action</td><td colspan="2">Neuroleptics, serotoninergic agonists</td></tr>
<tr><td rowspan="2">By interfering with sweating</td><td>Anticholinergics</td><td>- atropine, hyoscine
- tricyclics
- H1 (first generation) antihistamines
- certain antiparkinson drugs
- certain antispasmodics
- neuroleptics
- disopyramide
- antimigrane agents</td></tr>
<tr><td colspan="2">Vasconstrictors</td></tr>
<tr><td></td><td colspan="2">Those reducing cardiac output – beta blockers, diuretics</td></tr>
</table>

	By modifying metabolic rate	Thyroxine
Drugs that exacerbate the effects of heat	By reducing arterial pressure	All antihypertensives Antianginal drugs
Drugs that alter states of alertness (including those in Section 4.4 of the British National Formulary)		

Communication Messages

The Department of Health website has leaflets specifically designed for at risk individuals and the general public which should be distributed locally during an alert period.

4.1 Receipt of Alert Level Messages

Alerts are circulated via the Met Office and the local Commissioning Support Unit (NEL CSU).

At the start of the Heatwave Alert period (1 June to 15 September), ELFT's Emergency Planning Lead will ensure that the Director of Corporate Affairs, the Director of Operations and the Physical Health Lead receive notifications from the Met Office.

On receipt of an Alert message, they will assess the situation and for Alert Level 3 and 4, consider convening an Emergency Management Team or telephone conference to assess the potential impact on ELFT.

4.2 ELFT Communications and Distribution

During a heatwave, the Trust is responsible for informing service users. This may include forwarding Department of Health information through cascades or delivery of printed leaflets for onward circulation. Before the heatwave period, the Emergency Planning Lead will work with the communications team to promote heatwave awareness and review business continuity arrangements. Information may also be published on the ELFT intranet for use by staff.

4.3 Department of Health Core Messages

These are to be broadcast as official Department of Health warnings alongside national and regional weather forecasts. They may be expanded or otherwise refined in discussion with broadcasters and weather presenters.

Level 1: Summer preparedness and long-term planning
No warning required unless there is a 60 per cent probability of the situation reaching Level 2 somewhere in the UK within the next three days, then something along the lines of: "If this does turn out to be a heatwave, we'll try to give you as much warning as possible. But in the meantime, if you are worried about what to do, either for yourself or somebody you know who you think might be at risk, for advice go to NHS 111 by calling 111. There is advice on NHS choices available online: **http://www.nhs.uk/Pages/HomePage.aspx.**

Level 2: Alert and readiness
The Met Office, in conjunction with the Department of Health, is issuing the following heatwave warning for [regions identified]: "Heatwaves can be dangerous, especially for the very young or very old or those with chronic disease. Advice on how to reduce the risk either for yourself or somebody you know can be obtained from NHS 111 by calling 111. There is advice on NHS choices available online:
http://www.nhs.uk/Pages/HomePage.aspx.

or from your local chemist."

Level 3 and 4: Heatwave action/Emergency
In London, level 3 – Heatwave action is activated when day time temperatures are above 32 degree Celsius and 18 degree Celsius at night.
The Met Office, in conjunction with the Department of Health, is issuing the following heatwave advice: "Stay out of the sun. Keep your home as cool as possible – shading windows and shutting them during the day may help. Open them when it is cooler at night. Keep drinking fluids. If there's anybody you know, for example an older person living on their own, who might be at special risk, make sure they know what to do."

4.4 Protective Measures

The key message for preventing heat-related illness and death is to keep cool! The best ways to do this include the following:

Stay out of the heat:
- Keep out of the sun between 11.00am and 3.00pm.
- If you have to go out in the heat, walk in the shade, apply sunscreen and wear a hat and light scarf.
- Avoid extreme physical exertion.
- Wear light, loose-fitting cotton clothes.

Cool yourself down:
- Have plenty of cold drinks, and avoid excess alcohol, caffeine and hot drinks
- Eat cold foods, particularly salads and fruit with high water content.
- Take a cool shower, bath or body wash.
- Sprinkle water over the skin or clothing, or keep a damp cloth on the back of your neck.

Keep your environment cool:
- Place a thermometer in your main living room and bedroom to keep a check on the temperature.
- Keep windows that are exposed to the sun closed during the day, and open windows at night when the temperature has dropped.
- Care should be taken with metal blinds and dark curtains, as these can absorb heat – consider replacing or putting reflective material in-between them and the window space.
- Consider putting up external shading outside windows.
- Have your loft and cavity walls insulated – this keeps the heat in when it is cold and out when it is hot.
- Use pale, reflective external paints.
- Turn off non-essential lights and electrical equipment – they generate heat.
- Grow trees and leafy plants near windows to act as natural air-conditioners.
- Keep indoor plants and bowls of water in the house as evaporation helps cool the air.
- If possible, move into a cooler room, especially for sleeping

Longer Term:
- Consider putting up external shading outside windows;

- Use pale, reflective external paints.
- Have your loft and cavity walls insulated – this keeps the heat in when it is cold and out when it is hot; and
- Grow trees and leafy plants near windows to act as natural air-conditioners (see Dept of Health publication 'Making the Case').

- Keep an eye on isolated, elderly, ill or very young people and make sure they are able to keep cool.
- Ensure that babies, children or elderly people are not left alone in stationary cars.
- Check on elderly or sick neighbours, family or friends every day during a heat wave.
- Be alert and call health or social services if someone is unwell or further help is needed.

If you or others feel unwell:

- Try to get help if you feel dizzy, weak, anxious or have intense thirst and headache; move to a cool
- Place as soon as possible and measure your body temperature;
- drink some water or fruit juice to rehydrate;
- Rest immediately in a cool place if you have painful muscular spasms (particularly in the legs, arms or abdomen, in many cases after sustained exercise during very hot weather), and drink oral rehydration solutions containing electrolytes;
- Medical attention is needed if heat cramps last more than one hour; and
- Consult your doctor if you feel unusual symptoms or if symptoms persist.

NOTE: Use of Fans - At temperatures above 35°C fans may not prevent heat-related illness. Additionally fans can cause excess dehydration. The advice is to place the fan at a certain distance from people, not aiming it directly on the body and to have regular drinks. This is especially important in the case of sick people confined to bed.

5. Additional Information

The Department of Health's Heatwave Plan for England 2015 provides a full overview of national, regional and strategic arrangements which have not been detailed in this document due to the health service transition period. It is noted that the Health Protection Agency will monitor consultation rates and calls to NHS 111 during the heat wave period and it is envisaged that this role will be transferred to Public Health England.

The following websites may be of use during a heat wave:

- www.metoffice.gov.uk – information on alert levels, temperatures and forecasts
- http://www.defra.gov.uk/environment/quality/air/air-quality/ – information on air quality including health advice
- **https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/429384/Heatwave_Main_Plan_2015.pdf**
- **www.euro.who.int** – EuroHeat project and heat health action plans
- http://www.environment-agency.gov.uk/ - environment advice including flood and drought management
- http://www.unitedutilities.com/Emergencies.aspx - United Utilities incidents, water supplies and infrastructure
- http://www.enwl.co.uk/content/News/ElectricityEmergencies.aspx - Electricity North West electricity emergencies, supplies and infrastructure
- www.cancerresearchuk.org/sunsmart - UK Sunsmart campaign
- http://news.sky.com/skynews/Weather - Sky News Air Pollution Bulletin (airs around 07:45 and 18:45 daily)
- http://uk-air.defra.gov.uk/air-pollution/bandings - Air Pollution health bandings
- Air Pollution Information Service – 0800 55 66 77