



Heat – Wave Incident - Specific Plan

June 2006

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Reviewed:	June 2006
Date Approved:	30 June 2006
Review Date;	June 2007

Distribution List

Bedfordshire PCT

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Bedford Borough Council
South Beds District Council

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Bedfordshire and Luton Fire and Rescue Service

Other

Anglian Water
Environment Agency
London Luton Airport

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Purpose of this Document

To inform staff of the action required under different levels of 'Alert' declared by Department of Health (DH) in its 'National Heatwave Plan' issued in May 2006

Aims

- q To inform action
- q To reduce risk to patients
- q To reduce risk of Trust failing to respond to emergency need

Introduction

This plan is based on the (DH) National Heat Wave Plan issued in May 2006, specifically those elements relating to health and social care professionals. It deals with the practical application of the National Heatwave Plan, as it pertains to PCTs and the Social Care System.

"Extreme heat is dangerous to everyone. During a heatwave, when temperature remains abnormally high over more than a couple of days, it can prove fatal, particularly among certain at-risk groups. In one hot spell in London in 2003, deaths among people over 75 rose by 60%"

"Climate change means heatwaves are likely to become more common in England by the 2080's and it is predicted that an event similar to that experienced in 2003 will happen every year."

"...during relatively mild heatwaves, death rates are significantly, but avoidably, raised in this country. Timely preventive measures can reduce these excess rates. IN contract to ...cold snaps in winter, the rise in mortality follows very sharply – within one or two days of the temperature rising"

(Heatwave plan for England, DH, 2006)

National Plan Summary

The national plan has five core elements:

- q A 'Heat Health watch' system, operating from **1June to 15th September** each year, based on Meteorological office forecasts, which will trigger levels of response from the DoH and other bodies.

- q Advice and information issued by the DH direct to the public and to health and social care professionals, particularly those working with at-risk groups both before a heatwave is forecast and when one is imminent.¹
- q Identification of individuals most at risk by primary care teams and social services. These people will be the first to receive advice on preventive measures. They may be assessed to see if they need extra care and support during a heatwave.²
- q Extra help, where available, from the voluntary sector, families and others to care for those most at risk, mainly older people and people with disability. This will be determined locally, as part of individual care plans, and based on existing relationships between statutory and voluntary bodies.
- q Using the media to get advice to people quickly, both before and during a heatwave.

Levels of Response

Four levels of response are required under the national plan. They are defined as follows:

Level 1 Awareness – this is the minimum state of vigilance. Both before and during this period, preparedness must be enhanced and maintained by the measures set out in the heatwave plan.

Level 2 Alert – this is triggered as soon as the Met Office forecasts threshold temperatures (30°day, 15°night for the Eastern Region) for at least three days ahead in any one region, or that there is an 80% chance of temperatures being high enough on at least two consecutive days to have significant effects on health

Level 3 Heatwave – this is triggered as soon as the Met Office confirms that the threshold temperatures have been reached in one or more regions.

Level 4 Emergency - this is reached when a heatwave is so severe and/or prolonged that its effects extend outside health and social care, such as water shortages, and/or where the integrity of health and social care systems is threatened.

1 The text for Information Messages to the public is contained in Appendix 1 'A Guide To Looking After Yourself and Others During a Heatwave'

2 The full list of At Risk groups is contained in Appendix 2 – 'Caring for Patients During a Heatwave'

Levels of Action

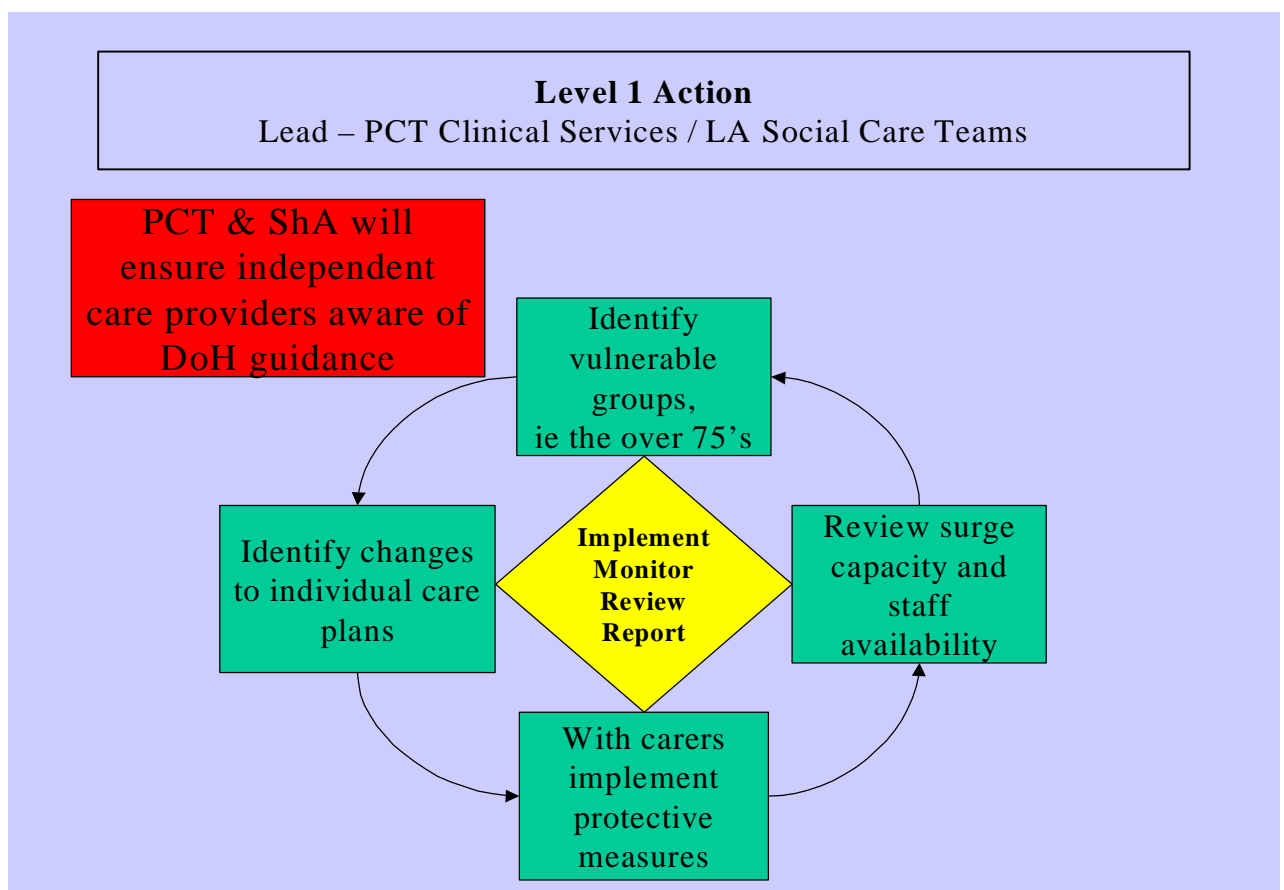
On activation of a Response Level from the DH, Primary Care Trusts and Local Social Service Authorities will support community and primary care staff as follows:

Level 1 Principle Owners – Clinical Services Directorate and local PCT Associate Directors of Social Care. (fig 1)

- q Identify individuals, who are at particular risk from extreme heat, especially those aged over 75. These people are likely to be already receiving care.
- q Identifying any changes to individual care plans that might be necessary in the event of a heatwave, including initiating daily visits by formal or informal carers to check on people living on their own.
- q Work with at risk individuals' families and informal carers to put simple protective measures in place, such as installing proper ventilation and ensuring fans and fridges are available and in working order; and
- q Review surge capacity and the need for, and availability of, staff support in the event of a heatwave, especially if it lasts for more than a few days.

Strategic Health Authorities and Primary Care Trusts will ensure independent health care providers are aware of the guidance on minimising and coping with heat related health risks. NHS trusts will check the resilience of their estates and equipment, especially medical and IT systems, to ensure that where necessary they can be maintained at working temperatures and there is no risk of system failure through overheating.

Figure 1

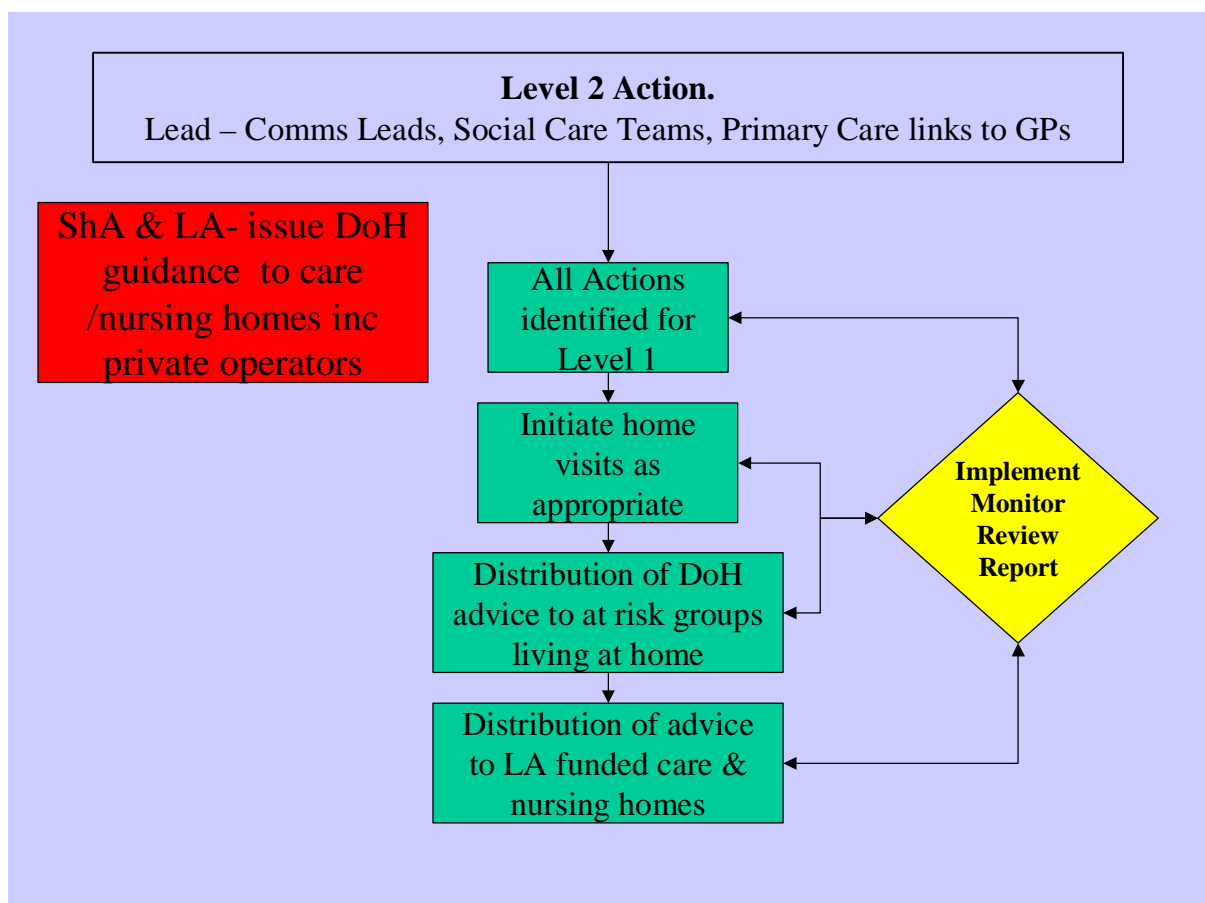


Level 2 Principle Owners – Communications Leads for PCTs and Social Care Team and Primary Care links to GP Practices. (fig2)

- q As above and as soon as possible after a Level 2: Alert is announced and no later than the second day of a heatwave if level 3 is reached, plus:
- q Distribution of DOH advice to all those defined as at risk living at home and the initiation of home visits planned and, where appropriate;
- q Distribution of department of health advice to the managers of local authority funded residential and nursing care homes, supported living and inpatient areas.

Strategic Health Authorities and Local Authorities will also ensure that DoH advice is distributed to all nursing and residential care home managers, including those with whom the local authority has no contact.

Figure 2



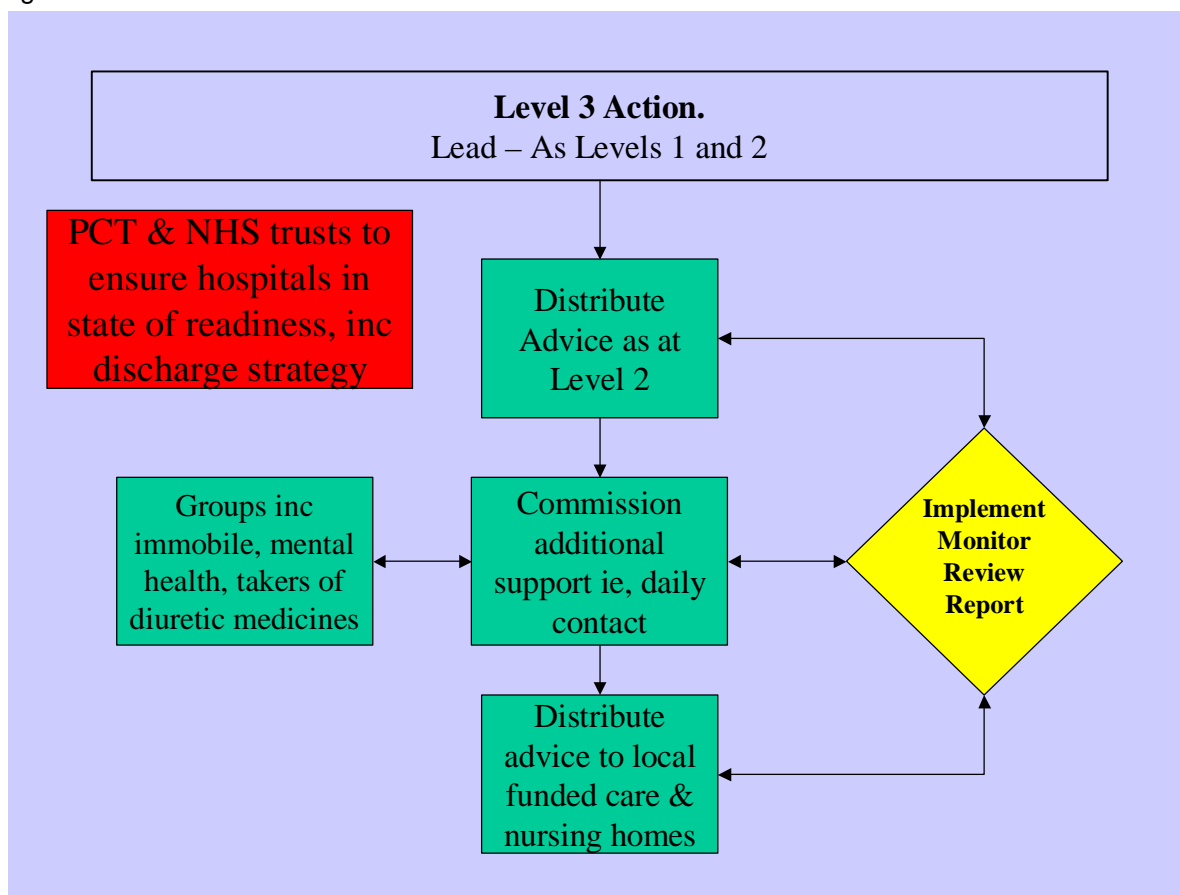
Level 3 Principle Owners – As Levels One and Two.

- q As level 2, continue to distribute advice to people at risk and managers and staff of residential and nursing care homes.
- q Commission additional care and support, involving at least daily contact, as necessary, for at risk individuals living at home. This may involve informal carers, volunteers and care workers. It will be particularly targeted at people with mobility or mental health problems, or receiving medication likely to give rise to heat related risks and those living in accommodation that cannot easily be kept cool. Informal carers should be consulted about additional arrangements wherever possible.
- q Ensure DoH advice reaches locally funded residential and nursing care home managers as soon as a heatwave starts.

Primary Care Trusts and **NHS Trusts** will ensure hospital services are in a state of readiness in case there is a rise in admissions. Discharge planning should reflect local and individual circumstances so that people at risk are not discharged to unsuitable accommodation or reduced care during a heatwave.

Strategic Health Authorities and **Local Authorities** will continue to ensure that DoH advice is distributed to all nursing and residential care home managers, particularly those not funded by the local authority.

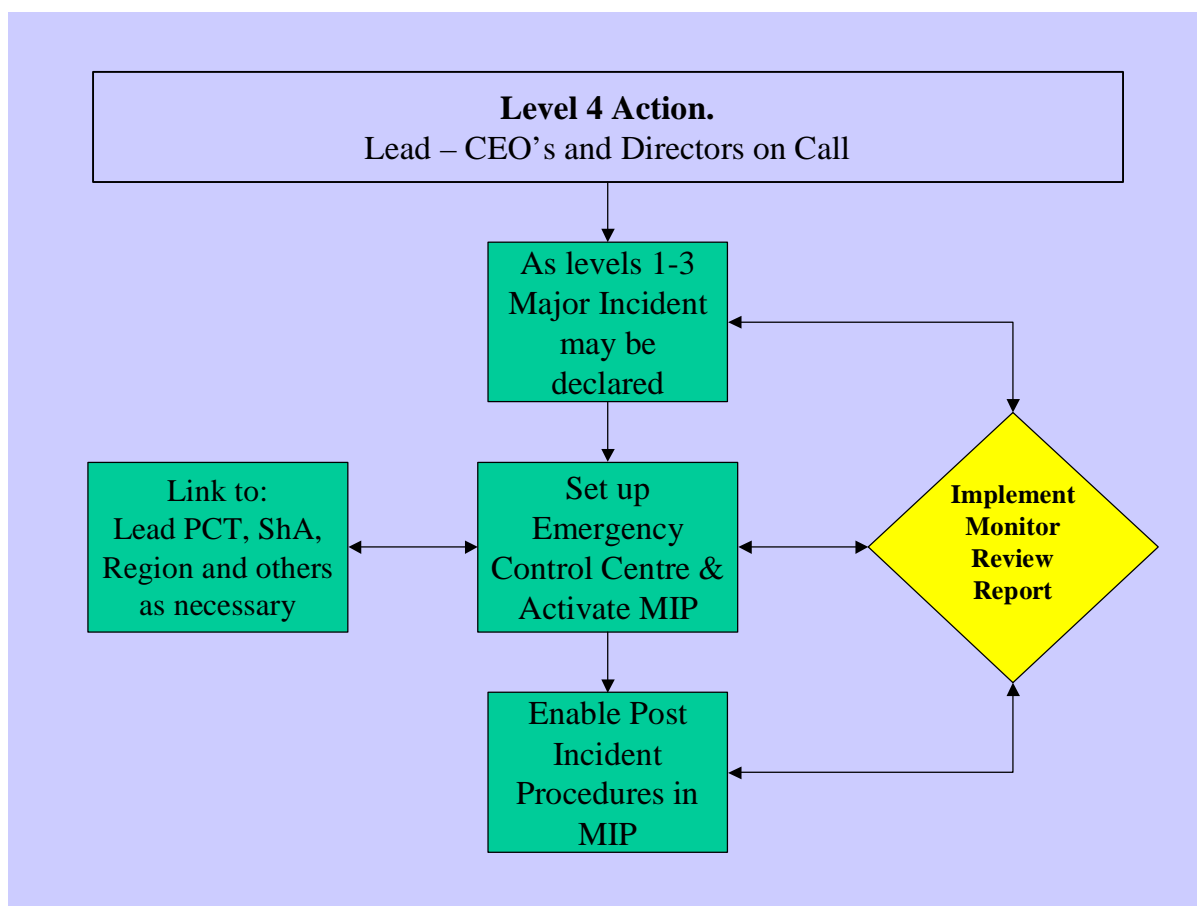
Figure 3



Level 4 Principle Owner – Chief Executive / Director on Call

- q As Level 3, but a 'major incident' may be declared locally, regionally or nationally during this period as the effects of the heatwave are so severe they extend outside the capacity of the health and social care system.
- q In such circumstances an Emergency Control Centre will be established and Organisational Emergency Plans will be utilised for the duration of the emergency. For Bedfordshire PCTs identified links with the Lead PCT, Acute Trusts, Social Care Teams, ShA, Region and others will be established and maintained as necessary.

Figure 4



Responsibilities

- q This plan pertains to the roles and responsibilities of, and actions to be taken by, Primary Care Trusts.
- q The responsibilities of other organisations or bodies are in part explained in this plan but only insofar as they link to PCTs. The full gamut of roles and responsibilities for all organisations are explained in the National Heatwave Plan and this principle document should be referred to in all cases.

References:

- q HEATWAVE PLAN FOR ENGLAND, *NHS May 2006*.
- q CARING FOR PATIENTS DURING A HEATWAVE, *NHS May 2006*.
- q A GUIDE TO LOOKING AFTER YOURSELF AND OTHERS DURING HOT WEATHER, *NHS May 2006*.

Available in pdf format at: WWW.DH.GOV.UK/PUBLICATIONS

Appendix 1

A GUIDE TO LOOKING AFTER YOURSELF AND OTHERS DURING HOT WEATHER

Heatwave

What are the risks?

In a severe heatwave you may get dehydrated and your body may overheat, leading to heat exhaustion or heatstroke. Both need urgent treatment. The symptoms of heat exhaustion include headaches, dizziness, nausea and vomiting, muscle weakness or cramps, pale skin, and a high temperature. You should move somewhere cool and drink plenty of water or fruit juice. If you can, take a lukewarm shower, or sponge yourself down with cold water. Heatstroke can develop if heat exhaustion is left untreated, but it can also occur suddenly and without warning. Symptoms include headaches, nausea, an intense thirst, sleepiness, hot, red and dry skin, a sudden rise in temperature, confusion, aggression, convulsions and loss of consciousness. Heatstroke can result in irreversible damage to your body, including the brain, or death.

Who is at risk?

The heat can affect anyone, but some people run a greater risk of serious harm. These include:

- q Older people.
- q Babies and young children.
- q People with mental health problems.
- q People on certain medication.
- q People with a serious chronic condition, particularly breathing or heart problems.
- q People who already have a high temperature from an infection.
- q People who use alcohol or illicit drugs.
- q People with mobility problems.
- q People who are physically active, like manual workers and sportsmen and women.

What should you do?

Mostly it's a matter of common sense. Listen to your local weather forecast so you know if a heatwave is on the way. Plan ahead to reduce the risk of getting heat exhaustion or heatstroke.

Keep out of the heat

- q If a heatwave is forecast, try and plan your day in a way that allows you to stay out of the heat.
- q If you can, avoid going out in the hottest part of the day (11am-3pm).
- q If you can't avoid strenuous outdoor activity, like sport, DIY, or gardening, keep it for cooler parts of the day, like early morning.

- q If you must go out, stay in the shade. Wear a hat and light, loose-fitting clothes, preferably cotton. Apply plenty of high factor sun block
- q If you will be outside for some time, take plenty of water with you.

Stay cool

- q Stay inside, in the coolest rooms in your home, as much as possible.
- q Close the curtains in rooms that get a lot of sun.
- q Keep windows closed while the room is cooler than it is outside. Open them when the temperature inside rises, and at night for ventilation. If you are worried about security, at least open windows on the first floor and above.
- q Take cool showers or baths, and splash yourself several times a day with cold water, particularly your face and the back of your neck.

Drink regularly

- q Drink regularly even if you do not feel thirsty – water or fruit juice are best.
- q Try to avoid alcohol, tea and coffee. They make dehydration worse.
- q Eat as you normally would.
- q Try to eat more cold food, particularly salads and fruit, which contain water.

Seek advice if you have any concerns

- q Contact your doctor, a pharmacist or NHS Direct if you are worried about your health during a heatwave, especially if you are taking medication, or have any unusual symptoms.
- q Watch for cramp in your arms, legs or stomach, feelings of mild confusion, weakness or problems sleeping.
- q If you have these symptoms, rest for several hours, keep cool and drink water or fruit juice. Seek medical advice if they get worse or don't go away.

Helping others

- q If anyone you know is likely to be at risk during a heatwave (see the list on page 4), help them get the advice and support they need. Older people living on their own should be visited daily to check they are OK.

While waiting for the ambulance

- q If possible, move the person somewhere cooler.
- q Increase ventilation by opening windows or using a fan.
- q Cool them down as quickly as possible by loosening their clothes, sprinkling them with cold water or wrapping them in a damp sheet.
- q If they are conscious, give them water or fruit juice to drink.
- q Do not give them aspirin or paracetamol.

Further information

Check the weather forecast and any high temperature health warnings at www.metoffice.gov.uk.

Contact NHS Direct on **0845 4647** or NHS Direct Online at www.nhsdirect.nhs.uk for advice about heat exhaustion and heatstroke.

You can get advice on protecting your skin during hot weather from the Cancer Research UK SunSmart campaign website at www.cancerresearchuk.org/sunsmart/

Remember, heatstroke can kill. It can develop very suddenly, and rapidly lead to unconsciousness. If you suspect someone has heatstroke, call 999 immediately.

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Appendix 2

CARING FOR PATIENTS DURING A HEATWAVE

Extreme heat is dangerous to everyone. During a heatwave, when temperatures remain abnormally high over more than a couple of days, it can prove fatal. Climate change means heatwaves are likely to become more common in England. In one hot spell in London in August 2003, deaths among people aged over 75 rose by 60 per cent.

At-risk groups include:

- q Older people, especially those over 75 and/or living on their own.
- q Babies and young children, especially under four years old.
- q People suffering from mental ill health, those with dementia, and those who rely on help from other people to manage day-to-day activities.
- q People taking certain types of medication (see Additional notes).
- q People suffering from chronic ill health (see Additional notes).
- q People with an already raised temperature from an infection.
- q People using psychoactive drugs, including alcohol or illicit drugs.
- q People who are bed-bound.
- q People who have previously experienced problems in adapting to extreme heat.

What are the risks?

- q *Heat exhaustion* is usually one of the first signs that someone is at risk of developing heatstroke. Symptoms include headaches, dizziness, nausea and vomiting; muscle weakness or cramps, pale skin, weak pulse and high temperature.
- q *Heatstroke* can develop if the symptoms of heat exhaustion are left untreated. It can also occur suddenly and without warning. Symptoms include confusion and disorientation, convulsions, unconsciousness, racing, thumping pulse, flushed, hot and dry skin and very sudden rise in temperature.
- q *Heatstroke* can result in organ failure, brain damage or death.

REDUCING THE RISK

Before a heatwave

- q Heatwaves can happen suddenly, and rapid rises in temperature affect vulnerable people very rapidly. Make as much use as possible of existing care plans to assess which individuals are at particular risk, and to identify what extra help they might need.
- q Plan ahead to ensure that care and support for people at risk can be accessed in the event of a heatwave. Anyone living alone is likely to need at least daily contact, whether by care workers, volunteers or informal carers. People with mobility or mental health problems, who are on certain medication, or living in Accommodation that is hard to keep cool, will probably need extra care and support.

- q Where possible, involve family and any informal carers in these arrangements.

Environment

- q Check any south-facing windows, which let in most sunlight, can be shaded, preferably with curtains. Metal Venetian blinds may make things worse.
- q Check that the environment can be properly ventilated, without causing any additional health risk, discomfort or security problems.
- q Consider the possibility of moving the person to a cooler room.

Facilities

- q Check fridges and freezers work properly.
- q Check fans and/or air conditioning works properly.
- q Check that people have light, loose-fitting, cotton clothing to wear.
- q If you plan to move the person somewhere cooler in the event of a heatwave, consider what equipment or help you might need.

Organisation

- q Check that extra care and support is available if needed on discharge.
- q Check that the person can contact the primary care team if one of their informal carers is unavailable.
- q Check that their care plan contains contact details for their GP, other care workers and informal carers.
- q Check that there are adequate arrangements for food shopping.

If a heatwave is forecast for your region

- q Make sure you have taken the steps outlined above.
- q Make sure you know what advice to give people at risk. An information leaflet with tips on what to do in a heatwave is available for you to reproduce and keep on the ward/department.

DURING A HEATWAVE

Keep out the heat

- q Keep curtains at windows exposed to the sun closed while the temperature outside is higher than it is inside.
- q Once the temperature outside has dropped lower than it is inside, open the windows. This might need to be done when settling patients at night.
- q Use fans, particularly if the area is difficult to keep cool.

Keep body temperatures down

- q Make sure patients are wearing light, loose, cotton clothes to absorb sweat and prevent skin irritation.
- q Suggest sprinkling clothes with water regularly, and splashing cool water on their face and the back of their neck.
- q Recommend cold food, particularly salads and fruit with a high water content.
- q Advise them to drink regularly, preferably water or fruit juice, but avoid alcohol and caffeine (tea, coffee, colas). Offer fluids frequently and ensure water jugs are kept topped up more regularly than usual.
- q Monitor fluid intake carefully, particularly in patients who are not always able to drink unaided.

Be alert

As well as the specific symptoms of heat exhaustion and heatstroke, watch out for signs which could be attributed to other causes, such as:

- q Difficulties in sleeping.
- q Changes in behaviour.
- q Tiredness.

Emergency treatment

- q Take the patient's temperature.
- q If possible, move them somewhere cooler.
- q Cool them down as quickly as possible by giving them a cool shower, sprinkling them with water or wrapping them in a damp sheet, and using a fan to create an air current.
- q Encourage them to drink fluids, if they are conscious.
- q Do not give aspirin or paracetamol.

Additional notes

People suffering from the following are likely to be at particular risk:

- q Cardiovascular and cerebrovascular conditions
- q Obesity
- q Malnutrition
- q Diabetes
- q Parkinson's Disease
- q Respiratory insufficiency
- q Renal insufficiency
- q Peripheral vascular conditions
- q Alzheimer's or related diseases

The following drugs are theoretically capable of increasing risk in susceptible individuals. It may be worth careful review of the medication such individuals are taking, and assessing the risks and benefits of any changes to their regime.

MEDICATIONS LIKELY TO PROVOKE OR INCREASE THE SEVERITY OF HEATSTROKE			
Those causing dehydration or electrolyte imbalance		Diuretics, especially loop diuretics Any drug which causes diarrhoea or vomiting (colchicine, antibiotics, codeine)	
Those likely to reduce renal function		NSAIDS, Sulphonamides, Indinavir, ciclosporin	
Those with levels affected by dehydration		Lithium, Digoxin, anti-epileptics, Biguanides, statins	
Those which interfere with thermoregulation:		by central action	Neuroleptics, Serotonergic agonists
	by interfering with sweating	Anti-cholinergics	<ul style="list-style-type: none"> q Atropine,hyoscine q tricyclics q H1 (first generation) anti-histamines q certain anti-parkinsonian drugs q certain anti-spasmodics q neuroleptics q disopyramide q anti-migraine agents
		Vasoconstrictors	
		Those reducing – beta blockers cardiac output – diuretics	
		by modifying Basal Metabolic Rate	Thyroxine
Drugs which exacerbate the effects of heat			
by reducing arterial pressure		All anti-hypertensives Anti-anginal drugs	
Drugs which alter states of alertness (including those in section 4.4 of the British National Formulary)			