Public Health England

NHS England

Beat the heat: staying safe in hot weather

Although most of us welcome the summer sun, high temperatures can be harmful to your health. In one hot spell in August 2003 in England and Wales there were over 2,000 extra deaths than would normally be expected. The heat can affect anyone, but some people run a greater risk of serious harm. As our climate changes, hot spells are expected to be more frequent and more intense.

This document will tell you how to stay safe in hot weather, including how to keep your home cool. It tells you who is at greatest risk of ill health from the heat, how to recognise when you or someone's health may be affected, and what to do if you or someone else becomes unwell as a result of the heat.

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Stay connected

Look after yourself, older people and the young

Why is this important?

- the heat can affect anyone, but some people run a greater risk of serious harm. Remember to think of those who may be more at risk from the effects of heat – these include the following:
  - older people, especially those over 75
  - babies and young children
  - people with a serious chronic condition, particularly dementia, heart, breathing or mobility problems
  - people with serious mental health problems
  - people on certain medications, including those that affect sweating and temperature control (for example, diuretics, antihistamines, beta-blockers and antipsychotics
  - people who are already ill and dehydrated (for example, from gastroenteritis)
  - people who misuse alcohol or drugs
  - people who are physically active (for example, soldiers, athletes, hikers and manual workers)
  - homeless people

What can I do?

- stay out of the heat, cool yourself down, keep your environment cool or find somewhere else that is cool
- look out for neighbours, family or friends who may be isolated and unable to care for themselves; make sure they are able to keep cool during a heatwave
- get medical advice if you are suffering from a chronic medical condition or taking multiple medications
- make sure medicines are stored below 25°C or in the fridge (read the storage instructions on the packaging)
- carry on taking all prescribed medicines unless advised not to by a medical professional. But be aware that some prescription medicines can reduce your tolerance of heat
- be alert and if someone is unwell or needs further help, see the resources section at the end of this leaflet

Listen to the weather forecast and the news

Why is this important?

- knowing the forecast can help you plan ahead and adapt as necessary
- heatwaves may affect other services, such as power and water supplies, and transport
- air pollution can become worse during periods of hot weather

What can I do?

- listen to the news to be aware of when a heatwave has been forecast and how long it is likely to last
- check the weather forecast and any high temperature health warnings at www.metoffice.gov.uk
- recommended actions and health advice for the general population and those who may be particularly sensitive to air pollution are available from UK-AIR by calling 0800 55 66 77 (recorded information) or visiting https://uk-air.defra.gov.uk/

Plan ahead to avoid the heat

Why is this important?

- it is best to avoid getting too hot in the first place
- if you plan ahead you can avoid situations where you become dangerously hot

What can I do?

- avoid being out in the sun during the hottest part of the day (around midday) and plan your day to avoid heavy activity during extreme heat
- bring everything you will need with you, such as a bottle of water, sun cream and a hat
- if you have to go out in the heat, walk in the shade, apply sunscreen, and wear a hat and light clothing
- be prepared, as heatwaves can affect transport services and you might need extra water

Keep well

Drink plenty of water, cut back on alcohol & caffeinated drinks

Why is this important?

- everyone is at risk of dehydration in hot temperatures
- some drinks can increase dehydration such as drinks with alcohol or caffeine (including tea, coffee or cola drinks), and drinks high in sugar

What can I do?

- have plenty of cold drinks, and avoid excess alcohol, caffeine, or drinks high in sugar. If drinking fruit juice, dilute it with water
- if you're not urinating frequently or your urine is dark, it's a sign that you're becoming dehydrated and need to drink more
- eat cold foods, particularly salads and fruit with a high water content
- if you are fasting for Ramadan during a heat wave, it is important to drink before dawn and follow the advice here to keep cool and prevent dehydration. If you become dehydrated you should break the fast in order to re-hydrate, this can be compensated by fasting at a later date. People with certain conditions should not fast, more information is available at http://www.nhs.uk/Livewell/Healthyramadan/Pages/faqs.aspx

Dress appropriately for the weather

Why is this important?

- dressing appropriately can protect you from the sun's radiation and keep you cool to prevent heat related illness
- children are particularly at risk of skin damage from the sun

What can I do?

- if you have to go out in the heat, walk in the shade and wear lightweight, loose-fitting, light coloured cotton clothes
- wear suitable head wear, such as a wide-brimmed hat, to reduce exposure to the face, eyes, head and neck
- when exposed to direct sunlight, cover your skin with clothing giving good protection; examples are long-sleeved shirts and loose clothing with a close weave. At home wear as little clothing as necessary
- sunglasses should exclude both direct and peripheral exposure of the eye to ultraviolet (UV) radiation, so a wraparound design is best
- apply sunblock, or broad-spectrum sunscreens, with high sun protection factor (SPF) of at least SPF 15 with UVA protection regularly to exposed skin

Slow down when it it hot

Why is this important?

- heavy activity can make you prone to heat related illnesses

What can I do?

- avoid extreme physical exertion. If you can't avoid strenuous outdoor activity, such as sport, DIY or gardening, keep it for cooler parts of the day – for example, in the early morning or evening
- children should not take part in vigorous physical activity on very hot days, such as when temperatures are above 30°C

Find somewhere cool

Know how to keep your home cool

Why is this important?

- even during a relatively cool summer, 1 in 5 homes are likely to overheat
- for many people, this makes life uncomfortable and sleeping difficult
- some people are particularly vulnerable to heat and for them a hot home can worsen existing health conditions, or even kill

What can I do?

- in preparation for warmer weather, use our simple checklist to find out if your home is at risk of overheating and what you can do if there is a problem. You can download the checklist from the PHE heatwave webpage https://www.gov.uk/government/publications/heatwave-plan-for-england
- shade or cover windows exposed to direct sunlight, external shutters or shades are very effective, while internal blinds or curtains are less effective but cheaper
- metallic blinds and dark curtains can make a room hotter
- open windows when the air feels cooler outside than inside, for example, at night. Try to get air flowing through your home, if possible
- turn off the central heating
- turn off lights and electrical equipment that aren't in use
- use electric fans if the temperature is below 35°C, but do not aim the fan directly at the body and ensure you stay hydrated with regular drinks
- check that fridges, freezers and fans are working properly
- If insulating your home, ask for advice about avoiding overheating in summer
- consider the risk of overheating if buying or renting, particularly for vulnerable people
- if you have concerns about an uncomfortably hot home that is affecting your health or someone else's health, seek medical advice
- get help from the environmental health department within your local authority; they can do a home hazard assessment
- if considering home improvements to reduce overheating, you can get help and advice from Foundations or, if you are elderly, FirstStop may be able to help (contact details listed below)

Go indoors or outdoors, whichever feels cooler

Why is this important?

- it is important for your health to avoid getting hot in the first place
- if you do get hot, it is important to give your body a break from the heat
- it may be cooler outside in the shade than it is inside an overheated building

What can I do?

- take a break from the heat by moving to a cooler part of the house (especially for sleeping)
- find some shaded green space or have a cool bath or shower
- remember lots of public buildings (such as places of worship, local libraries or supermarkets) can be cool in summer; consider a visit as a way of cooling down

Cars get hot, avoid closed spaces

Why is this important?

- small closed spaces, such as cars, can get dangerously hot very quickly
- some people, especially babies, young children and older people find it harder to stay cool
- they may not be able to move themselves to a cool place if they are dependent on others

What can I do?

- ensure that babies, children or older people are not left alone in stationary cars or other closed spaces
- look out for children in prams or pushchairs in hot weather; keep them in the shade, remove excess clothing, ensure there is adequate air flow, and check regularly to ensure they are not overheated
- for more information about how to identify if a baby/child is overheated, visit NHS Choices (http://www.nhs.uk/Conditions/Heat-exhaustion-and-heatstroke/Pages/Introduction.aspx?url=Pages/What-is-it.aspx)

Watch out

Be on the lookout for signs of heat related illness

Why is this important?

- chronic illnesses can get worse in hot weather
- heat exhaustion and heatstroke are two potentially serious conditions that can occur if you get too hot:
  - **heat exhaustion** is where you become very hot and start to lose water or salt from your body. Common symptoms include weakness, feeling faint, headache, muscle cramps, feeling sick, heavy sweating and intense thirst
  - **heatstroke** is where the body is no longer able to cool itself and a person's body temperature becomes dangerously high. Heatstroke is less common, but more serious. Untreated symptoms include confusion, seizures and loss of consciousness

What can I do?

- you can find out more, such as common signs and symptoms to look out for, on NHS Choices (http://www.nhs.uk/conditions/Heat-exhaustion-and-heatstroke/Pages/Introduction.aspx)

Cool your skin with water, slow down and drink water

Why is this important?

- if heat exhaustion isn't spotted and treated early on, there's a risk it could lead to heatstroke. Untreated heatstroke can be fatal

What can I do?

- if you notice that someone has signs of heat related illness, you should:
  - **get them to lie down in a cool place** – such as a room with air conditioning or somewhere in the shade
  - **remove any unnecessary clothing** to expose as much of their skin as possible
  - **cool their skin with cool water,** you could use a cool wet sponge or flannel, cool water spray, cold packs around the neck and armpits, or wrap them in a cool, wet sheet
  - **fan their skin while it's moist** – this will help the water to evaporate, which will help their skin cool down. An electric fan could be helpful to create an air current if the temperature is below 35^{o}C, but fans can cause excess dehydration so they should not be aimed directly on the body and will not be enough to keep them cool at temperatures above 35^{o}C
  - **get them to drink cool fluids** – these should ideally be water, diluted fruit juice or a rehydration drink, such as a sports drink
  - **do not give them aspirin or paracetamol** – this can put the body under more strain, they should carry on taking all other prescribed medicines unless advised not to by a medical professional
- stay with the person until they're feeling better. Most people should start to recover within 30 minutes

Stay safe when swimming

Why is this important?

- During warm weather cooling off in swimming pools or bodies of water such as rivers, lakes or the sea can provide much welcomed relief. While this can be a fun activity on warm days, people who do not take the right precautions may find themselves in difficult situations.

What can I do?

- Whether you are an experienced swimmer or not, there are simple principles you should follow when swimming:
  - Always look for warning and guidance signs
  - Only enter the water in areas with adequate supervision and rescue cover
  - Always wear a buoyancy aid or lifejacket for activities on the water or at the water's edge (such as when boating or fishing)
  - Never enter the water after consuming alcohol
  - Be aware of underwater hazards
  - Get out of the water as soon as you start to feel cold
  - Swim parallel with the shore, not away from it
  - Avoid drifting in the currents
  - Do not enter fast flowing water
  - Always take someone with you when you go into or near water. If something goes wrong they will be able to get help
  - If someone is in difficulty in the water shout reassurance to them, shout for help and call the emergency services (call 999 or 112)

Get help. Call NHS 111 or in an emergency 999

Why is this important?

- severe heat exhaustion or heatstroke requires hospital treatment

What can I do?

- if a person has improved with the cooling advice above but you still have concerns about them, contact your GP or NHS 111 for advice
- **you should call 999 for an ambulance if:**
  - the person doesn't respond to the above cooling treatments within 30 minutes
  - the person has severe symptoms, such as a loss of consciousness, confusion or seizures
- if the person is unconscious, you should follow the steps above and place them in the recovery position until help arrives. If they have a seizure, move nearby objects out of the way to prevent injury

For more information

- NHS Choices ‘Heatwave: be prepared’ http://www.nhs.uk/heatwave
- NHS Choices ‘Heat exhaustion and heat stroke’ http://www.nhs.uk/Conditions/Heat-exhaustion-and-heatstroke/Pages/Introduction.aspx?url=Pages/What-is-it.aspx
- NHS 111 for free medical advice for any non-emergency 24 hours a day: call 111
- PHE heatwave information including a checklist for identifying and managing indoor overheating: available at https://www.gov.uk/government/publications/heatwave-plan-for-england
- Met Office weather forecast and high temperature health warnings: www.metoffice.gov.uk
- Red Cross emergency app has information and alerts, available at http://www.redcross.org.uk/What-we-do/Emergency-response/Emergency-app
- Local authority contact details: http://local.direct.gov.uk/LDGRedirect/Start.do?mode=1
- Local accredited home improvement agency or handyperson services: Foundations (http://www.findmyhia.org.uk/ or call 0300 124 0315) or, for elderly people, FirstStop (http://www.firststopcareadvice.org.uk/ or call 0800 377 7070)
- Sunsmart – information about saying safe in the sun: www.sunsmart.org.uk/
- UK-AIR – health advice about those who may be particularly sensitive to air pollution: https://uk-air.defra.gov.uk/ or call 0800 55 66 77
- Free air quality text alerts: http://www.airtext.info/ or text 78070
- Royal Life Saving Society UK advice on water safety: http://www.rlss.org.uk/water-safety/water-safety/

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