

Protecting and improving the nation's health

Looking after children and those in early years settings during heatwaves: guidance for teachers and professionals

High temperatures both outdoors and indoors may harm children's health. In the event of a heatwave alert, local authorities will be alerted by the Met Office, and the alert will be more widely publicised. The advice given here focuses specifically on children and is provided for teachers and others looking after children.

Children's susceptibility to high temperatures varies; those under four years of age, who are overweight, or who are taking certain medication may be at increased risk of adverse effects. Some children with disabilities or complex health needs may be more susceptible to high temperatures. The school nurse, community health practitioner, family health visitor or the child's specialist health professional may be able to advise on the particular needs of the individual child. Support staff should be made aware of the risks and how to manage them. Further information about supporting children with medical condition can be found at the Department for Education website.

What are the health risks from heat?

Children cannot control their body temperature as efficiently as adults during hot weather because they do not sweat as much and so can be at risk of ill-health from heat. Heat-related illness can range from mild heat stress to potentially life-threatening heatstroke. The main risk from heat is dehydration (not having enough water in the body). If sensible precautions are taken children are unlikely to be adversely affected by hot conditions, however, teachers, assistants, school nurses and all child carers should look out for signs of heat stress, heat exhaustion and heatstroke.

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Heat stress

Children suffering from heat stress may seem out of character, or show signs of discomfort and irritability (including those listed below for heat exhaustion). These signs will worsen with physical activity and if left untreated can lead to heat exhaustion or heatstroke.

Heat exhaustion

Symptoms of heat exhaustion vary but include one or more of the following:

- tiredness
- dizziness
- headache
- nausea
- vomiting
- hot, red and dry skin
- confusion

Heatstroke

When the body is exposed to very high temperatures, the mechanism that controls body temperature may stop working. Heatstroke can develop if heat stress or heat exhaustion is left untreated, but it can also occur suddenly and without warning.

Symptoms of heatstroke may include:

- high body temperature a temperature of or above 40°C (104°F) is a major sign of heatstroke
- red, hot skin and sweating that then suddenly stops
- fast heartbeat
- fast shallow breathing
- confusion/lack of co-ordination
- fits
- loss of consciousness

Actions to protect children suffering from heat illness

The following steps to reduce body temperature should be taken immediately:

- move the child to as cool a room as possible and encourage them to drink cool water (such as water from a cold tap)
- cool the child as rapidly as possible, using whatever methods you can. For example, sponge or spray the child with cool (25 to 30°C) water; if available place cold packs around the neck and armpits, or wrap the child in a cool, wet sheet and assist cooling with a fan

Dial 999 to request an ambulance if the person doesn't respond to the above treatment within 30 minutes.

If a child loses consciousness, or has a fit, place the child in the recovery position, call 999 immediately and follow the steps above until medical assistance arrives.

Protecting children outdoors

During periods of high temperature the following steps should be taken:

- children should not take part in vigorous physical activity on very hot days, such as when temperatures are in excess of 30°C
- encourage children playing outdoors to stay in the shade as much as possible
- children should wear loose, light-coloured clothing to help keep cool and sunhats with wide brims to avoid sunburn
- use sunscreen (at least factor 15 with UVA protection) to protect skin if children are playing or taking lessons outdoors for more than 20 minutes
- provide children with plenty of water (such as water from a cold tap) and encourage them to drink more than usual when conditions are hot

Protecting children indoors

During periods of high temperature the following steps should be taken:

- open windows as early as possible in the morning before children arrive, or preferably overnight to allow stored heat to escape from the building - it is important to check insurance conditions and the need for security if windows are to be left open overnight
- almost close windows when the outdoor air becomes warmer than the air indoors - this should help keep the heat out while allowing adequate ventilation
- use outdoor sun awnings if available, or close indoor blinds/curtains, but do not let them block window ventilation
- keep the use of electric lighting to a minimum

- switch off all electrical equipment, including computers, monitors and printers when not in use - equipment should not be left in 'standby mode' as this generates heat
- if possible, use those classrooms or other spaces which are less likely to overheat, and adjust the layout of teaching spaces to avoid direct sunlight on children
- oscillating mechanical fans can be used to increase air movement if temperatures are below 35°C; at temperatures above 35°C fans may not prevent heat-related illness and may worsen dehydration
- if necessary, consider rearranging school start, finish and play times to avoid teaching during very hot conditions
- encourage children to eat normally and drink plenty of cool water

For further information on reducing temperatures within school buildings and grounds see Public Health England's Heatwave Plan for England.

The school sun policy

A sun protection policy will assist in protecting children and Cancer Research UK's Sun Protection Policy Guidelines advise that schools allow the reapplication of sunscreen, particularly around midday.

Advice on developing a school sun protection policy is available from the Cancer Research UK Sun Smart website

Other information

The following information is also available:

- Heatwave plan for England (Public Health England 2015) and associated documents
- clothing as protection from the sun
- ultraviolet radiation safety

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