

TEMPERATURE CONTROL

VERSION No	2
REVIEWED BY	Manager (MP)
NUMBER OF PAGES	6



Policy Statement

Older people are at higher risk than the general population for temperature-related health issues. The body's reduced ability to regulate temperature, medical problems, medications and the environment are all factors affecting the ability of individuals to maintain a healthy body temperature. Dangerous body temperatures are below 35°C or above 40°C for the general population. Individuals have a narrower range of safe temperatures, varying by approximately 2 degrees on either end of the scale.

Temperature Control

Healthy young adults adapt to temperature changes through various processes aimed at core body temperature maintenance. Sweating cools the body and shivering warms the body. Although there is variation among individuals, the elderly loses these thermoregulation functions, with reduced ability to sweat and shiver. Blood circulation problems increases thermoregulation responses. Decreased thirst awareness affects body temperature in the older individual, as dehydration further reduces the body's ability to maintain a steady temperature.

Hypothermia

Hypothermia results when an individual's core body temperature drops below 35°C (95 degrees Fahrenheit). While vasoconstriction and shivering in healthy young adults act to increase the body temperature and prevent damage, older people do not respond with these autonomic reactions until their temperature is significantly lower. Furthermore, the geriatric population has a prolonged reaction to hypothermia, taking longer to respond to interventions to help them warm up and return to a healthy temperature.

Hyperthermia

Hyperthermia is the result of the body overheating. Older people are at higher risk of hyperthermia because of the normal aging process of decreased autonomic responses for cooling, chronic medical conditions and certain medications. When the ambient temperature is higher than skin temperature, the only effective heat loss mechanism is sweating. Therefore, any factor that reduces the effectiveness of sweating such as dehydration, lack of breeze, tightfitting clothes or certain medications can cause the body to overheat. Additionally, thermoregulation, which is controlled by the hypothalamus, can be impaired in older people and the chronically ill, and potentially in those taking certain medications, rendering the body more vulnerable to overheating. Older women appear to be more vulnerable to the effects of heat than older men, possibly due to having fewer sweat glands and being more likely to live on their own.

The Policy








- 1. During Very Cold weather:** How do cold temperatures affect health? A lowering of temperature by 1°C can result in a rise in blood pressure of 1.3 mm Hg. Higher blood pressure, coupled with increased blood viscosity (which is caused by mild skin surface cooling), increases the risk of strokes and heart attacks.

Cold air also affects the normal protective function of the respiratory tract; this leads to increased broncho-constriction and mucus production, and reduced mucus clearance.










The temperature of the rooms are kept at 21°C to 24°C The heating is thermostatically controlled and cannot be turned off accidentally. Room temperatures are checked daily and any concerns reported immediately to the maintenance personnel and the person in charge. Extra knee rugs are available for residents and staff monitor the very frail and those unable to communicate easily.

Exercise is always encouraged to improve circulation.
If heating should fail contingency plans are put in place





a) **Heat-related Illnesses**

-  **Increased risk of cardiovascular and respiratory illnesses:** these cause the majority of excess mortality during a heatwave
-  **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; 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 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).

b) **Preparations:** This organisation draws up a checklist based on the actions below, to complete by the end of May each year. For the building and surroundings:

-  Check that windows can be shaded, preferably by curtains with pale, reflective linings rather than by metal venetian blinds and curtains with dark linings (which can make conditions worse). If these are fitted, check that they can be raised
-  Check that there are no problems opening windows while acknowledging security considerations
-  Increase outside shading in the form of shutters, shades, trees or leafy plants. Reflective paint can also assist in keeping the building cool. Increase outside greenery, especially in concreted areas, as it increases moisture content and aids cooling as a natural air conditioner
-  Cavity wall and loft insulation help to keep the building warm in winter and cooler in the summer. Contact your local authority's energy efficiency officer or your energy company to see what grants are available
-  Cool areas can be developed with appropriate indoor and outdoor shading, ventilation, the use of indoor and outdoor plants and, if necessary, air conditioning
-  Ensure that staff know which rooms are the easiest to keep cool and which are the most difficult, and review the distribution of residents according to those most at risk;
-  Create cool rooms or cool areas. High-risk groups that are vulnerable to the effects of heat are physiologically unable to cool themselves efficiently once temperatures rise above 26°C. Therefore, every care, nursing and residential home should be able to provide a room or area that maintains a temperature at 26°C or below
-  If temperatures exceed 26°C, high risk individuals should be moved to a cool area that is 26°C or below
-  If a heatwave is forecast we check local weather forecasts (www.metoffice.gov.uk).

c) **Facilities:** We:

-  Check that we have an adequate supply of fans and water sprays
-  Check that water and ice are widely available, ensuring that we have a supply of oral rehydration salts, orange juice and bananas to help maintain electrolyte balance for those on diuretics
-  Arrange for cold drinks to be distributed regularly in the event of a heatwave
-  Plan to adapt menus to cold meals (preferably with a high-water content, such as fruit and salads) in consultation with residents.

- d) **Working Arrangements:** We put contingency plans in place in the event of a heatwave when necessary, to cover:
- 👉 Mobilisation of staff, including recalling those on holiday
 - 👉 Changes to rotas
 - 👉 Getting extra help from relatives of residents
 - 👉 Providing an email address to local authority/NHS emergency planning officers, to facilitate the transfer of emergency information
- e) **Residents:** We:
- 👉 Ensure we know the residents most at risk, working with the district nurses in these decisions
 - 👉 Ensure that we monitor residents most at risk and provide additional care and support (for example body temperature, pulse rate, blood pressure and dehydration may need to be monitored)
 - 👉 Ask GPs to identify “at-risk residents” and about possible changes in treatment or medication in the event of a heatwave and a review of residents on multiple medications
 - 👉 Check that residents have light, loose fitting cotton clothing to wear.








2. **During a Heatwave**

We keep the care home as cool as possible through the following methods:






- 👉 Increase outside shading. Spraying water on the ground outside helps to cool the air (but avoid creating slip hazards)
- 👉 Keep curtains and windows closed while the temperature outside is higher than it is inside
- 👉 Once the temperature outside has dropped lower than the temperature inside, open the windows. This may not be until very late at night or the early hours of the morning.
- 👉 Discourage residents from physical activity and going out during the hottest part of the day (11.00am to 3.00pm)
- 👉 Monitor temperatures inside the building at least four times a day
- 👉 Make the most of cooler night time temperatures to cool the building with ventilation. High night-time temperatures have been found to be especially associated with excess mortality.
- 👉 We monitor residents by
- 👉 Checking body temperature, heart and breathing rates, blood pressure and hydration levels, especially in “at-risk” residents.
- 👉 Watch for any changes in behaviour, especially excessive drowsiness
- 👉 Watch for signs of headache, unusual tiredness, weakness, giddiness, disorientation or sleeping problems.
- 👉 Whatever the underlying cause of heat related symptoms, the basic treatment is always the same: move the person to somewhere cooler and cool them down.

a) **Reduce the Health Risks of Heat**

- 👉 Encourage residents to remain in the coolest parts of the building as much as possible.
- 👉 Move residents so that each spends time in the cool room or area (below 26°C)
- 👉 Give priority and extra time to high-risk residents or any showing signs of distress (including increased body temperature)
- 👉 Monitor residents’ fluid intake, providing regular cold drinks, particularly if they are not always able to drink unaided. Oral rehydration salts are suggested for those on high doses of diuretics. Bananas, orange juice and occasional salty snacks can also help replace salts lost due to sweating
- 👉 Advise residents to avoid caffeine (coffee, tea, and colas), very sweet drinks and alcohol
- 👉 Encourage residents to wear light, loose cotton clothes to absorb sweat and prevent skin irritation

-  Regularly sprinkle or spray cool water on exposed parts of the body. A damp cloth on the back of the neck helps with temperature regulation
-  Arrange cool showers or baths if possible.
-  If you suspect someone has heatstroke then call 999. While waiting for the ambulance perform the following:
-  Take the person's temperature
-  If possible, move them somewhere cooler
-  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.
-  Encourage them to drink fluids if they are conscious.

Further information

-  *The full Heatwave Plan can be accessed on the Department of Health website at www.dh.gov.uk/publications. It outlines the responsibilities of health and social care organisations at different stages during a heatwave.*
-  *Freephone Air Pollution Information Service telephone number: 0800 55 66 77*
-  *Sky News Air Pollution bulletin (which normally airs in the evening around 18.45)*
-  *Cold Weather planning issued by Public Health England annually when the temperature falls below the British normal temperature also available on their website*
-  *https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/365756/CWP_2014.pdf*

Training Statement

Staff are regularly updated on any guidance related to extreme weather alerts.

Related Policies
Business Contingency and Emergency Planning
Health and Safety
Nutrition and Hydration

ADL 3g**COLD WEATHER, PREVENTION OF HYPOTHERMIA**

HYPOTHERMIA IS CAUSED BY GETTING TOO COLD. THE BODY LOSES MORE HEAT THAN IT CAN GENERATE AND THE BODY TEMPERATURE DROPS BELOW 35°C. NORMAL BODY TEMPERATURE IS AROUND 37°C.

There are different types of hypothermia depending on how quickly the body loses heat. The three types are described by doctors as:

acute or immersion hypothermia - happens when a person loses heat very rapidly – for example, after falling into cold water

exhaustion hypothermia – this happens when a person’s body is so tired it can no longer generate heat

chronic hypothermia – heat is lost slowly over time; this is common in elderly people who live in poorly heated accommodation.

Hypothermia is most common in cold environments. People are **more at risk if do not wear enough layers to keep warm or do not cover the head (a large amount of body heat is lost through the head)**. It is also possible to get hypothermia in mild weather. For example, if a person is soaked in the rain and do not dry off properly soon afterwards (particularly if there is a cool wind), the water evaporates from the skin and lowers the body temperature.

WHO IS AT RISK?

Certain groups, described below, have an increased risk of getting hypothermia because they're vulnerable to cold environments or they're unable to keep warm.

Older people, particularly if they're not very active, do not eat enough, have other illnesses or take medication that can interfere with the body's ability to regulate temperature.

Heavy drug and/or alcohol users – these substances affect the body's ability to retain heat. The blood vessels stay widened (dilated), allowing heat to escape. Someone who is under the influence of drugs or alcohol may also not realise that they have hypothermia.

People with a condition that affects their memory, such as Alzheimer's disease, may not be able to recognise the symptoms of hypothermia or recognise when they are cold.

Someone who has fallen into cold water, which can cause the body's core temperature to fall very quickly.

People who have suffered severe injury, particularly a head injury.

People with certain health conditions, such as heart problems, severe arthritis or someone who has had a stroke. These conditions can change the body's ability to respond to temperature changes – for example, by affecting the fingers and toes (where you may first feel cold).

People taking sedatives, which can interfere with the body's ability to regulate temperature.

**PREVENTION / WHAT TO DO IN COLD WEATHER**

No	ACTIONS TO BE TAKEN	WHEN / CIRCUMSTANCES	WHO IS RESPONSIBLE
1	To ensure regular service and checks of the heating system	Annually	Manager
2	Additional heating (e.g. electric heaters) is available in sufficient quantities	Emergencies, extreme cold	Manager
3	Energy efficient heating and isolation (e.g. double glazed windows) are fitted	Already done	Manager
4	The manager and business co-ordinator have signed to receive weather alerts from the Met Office and Local Authorities	During the cold weather	Manager / Business Co-ordinator
5	Stock of additional bedding (e.g. duvets, blankets, etc.) are purchased and made available	If and when required	Manager
6	Bendigo Nursing Home is on the corner of Carew Road which is a primary gritting route	During snowfall access is not restricted	Local Authority
7	Pathways and immediate pavement are cleared	During snowfall	Maintenance Person
8	To ensure government and local authorities guidance for cold weather is implemented	Cold weather	Manager
9	To work in co-operation with other service providers	All the time	Manager
10	Encourage Service Users to have Seasonal Vaccines	Autumn	RGN staff
11	Check the weather forecast	From 1 st October to 1 st May	RGN in charge
12	Ensure all windows and doors are closed to retain heat (double glazed and energy efficient)	Cold weather	HCA's
13	Check the room temperature (available in individual rooms), daily which should be 21° C during the day and 18° C during the night and record in the 'Room Temperature Records' located in individual rooms	When outside temperature is 2° C or less and / or heavy snow and ice	HCA's
14	Provide additional heating such as an electric heater from the storage to ensure that the room temperature is at the desired level.	If room temperature is below required level or if heating is not working	HCA's
15	Thermostatic valves in individual rooms should be turned to the highest level	When outside temperature is 2° C or less and / or heavy snow and ice	HCA's
16	Radiators should be checked that they are working and if not report to the manager or RGN	From 1 st October to 1 st May	HCA's
17	Encourage Service Users to do gentle exercise activities to promote body heat	If feasible as many Service Users are not mobile	HCA's



ADL 3g

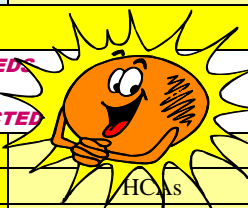
PREVENTION / WHAT TO DO IN COLD WEATHER (cont.)

No	ACTIONS TO BE TAKEN	WHEN / CIRCUMSTANCES	WHO IS RESPONSIBLE
18	Offer additional bedding (e.g. duvet, blankets, etc.) or Best Interest Decision is made	<ol style="list-style-type: none"> If the service user requires or appears to be feeling cold or if the Service User is unable to communicate or have some form of mental impairment 	HCA's
19	Encourage Service Users to wear appropriate clothing for the winter including socks, vest, etc.	From 1 st October to 1 st May	HCA's
20	Encourage Service Users to wear layers of clothing	From 1 st October to 1 st May	HCA's
21	Encourage Service Users to have plenty of hot drinks such as hot chocolate, hot milk	From 1 st October to 1 st May	HCA's
22	Encourage Service Users to have regular hot food intake including hot soup	From 1 st October to 1 st May	HCA's
23	Offer Service Users to have a blanket on their lap	From 1 st October to 1 st May	HCA's
24	To contact NOK or POAs	If and when items of clothing and other wear are required	HCA key workers
25	Observe for signs of hypothermia and report to the RGN in charge and if necessary Best Interest Decision is made	If and when the Service User is unable to communicate due to e.g. Dementia and other cognitive impairment and appears to be: <ol style="list-style-type: none"> shivering / shaking body temperature / hands are cold on touch extra confused / sleepy weak / tired / lethargic 	HCA's
26	Measure the Service User body temperature and record	<ol style="list-style-type: none"> When the Service User reports that he or she is feeling cold When there are signs of hypothermia If the Service User is prescribed and taking sedatives 	RGN in charge
27	RGN key workers to ensure that Service Users' Care Plan and specifically ADL 3 'Personal Care and Sleeping' and ADL 7 'Nutrition, Eating and Drinking' are reviewed and amended accordingly to meet the Service Users needs during cold weather	1 st October	RGN key workers



HOT WEATHER / HEAT / PREVENTION OF HYPERTHERMIA

THE DEFINITION RECOMMENDED BY THE WORLD METEOROLOGICAL ORGANIZATION IS WHEN THE DAILY MAXIMUM TEMPERATURE OF MORE THAN FIVE CONSECUTIVE DAYS EXCEEDS THE AVERAGE MAXIMUM TEMPERATURE BY 5 °C, THE NORMAL PERIOD BEING 1961-1990. THE COMFORT CRITERIA FOR ANY ONE REGION ARE DEPENDENT UPON THE NORMAL CONDITIONS OF THAT REGION, UP TO 25 ° C, DISCOMFORT - OVER 30 ° C.. HYPERTHERMIA IS ALSO KNOWN AS HEAT STROKE - 45 ° C. INDIVIDUAL PREFERENCES MUST BE RESPECTED



1	To encourage Service Users to stay away from direct sunlight	Particular during the hottest time of the day between 11 am and 3 pm	HCA's
2	Encourage the Service Users to wear a hat and / or stay under an umbrella / sprinkle water	Particular during the hottest time of the day between 11 am and 3 pm	HCA's
3	Encourage the Service Users to dress accordingly, loose clothes are best and to cover all parts of the body	Throughout the day	HCA's
4	Encourage the Service Users to use sunscreen for the parts of the body that are exposed to the sun	Throughout the day	HCA's
5	Encourage the Service Users to drink plenty of fluids (water and juice is best) to avoid dehydration	Throughout the day	HCA's
6	Offer Service Users to open the windows to air the rooms	In the morning when the air is still cool and fresh	HCA's
7	Offer Service Users a fan to cool them down	Throughout the day and if necessary during the night	HCA's
8	Offer Service Users to close the curtains to shade the room	Throughout the day	HCA's
9	Encourage the Service Users to eat cold food, particular salads and avoid heavy foods	During the hot weather	HCA's
10	Observe for non verbal signs and report to the RGN in charge and if necessary Best Interest Decision is made	If and when the Service User is unable to communicate due to e.g. Dementia and other cognitive impairment and appears to be: <ol style="list-style-type: none"> breathless increased heart rate (measure pulse) temperature hot to the touch hallucinations, headache, confusion, tiredness, nausea, chills 	RGN in charge
11	RGN key workers to ensure that Service Users' Care Plan and specifically ADL 3 'Personal Care and Sleeping' and ADL 7 'Nutrition, Eating and Drinking' are reviewed and amended accordingly to meet the Service Users needs during hot weather	1 st June	RGN key workers

