How to keep someone healthy during hot weather

This booklet provides important information about health and hot weather. The booklet is for anyone who cares for, supports or assists people at risk of serious health effects from hot weather. It includes tips and ideas on how to keep someone healthy during hot weather.
SECTION 1

Introduction

Hot weather can cause serious health problems, and some people in our community are at greater risk of serious health effects than others. Anyone who cares for, supports or assists people at risk of serious health effects from hot weather can play a key role in keeping them healthy during hot weather. It is important that people at risk are encouraged to manage their health appropriately in hot weather and visit their GP if necessary. For people at risk, please see Section 2.

This booklet includes information on:

- People most at risk of health effects from hot weather.
- How to prepare for a heat wave.
- How to help someone during a heat wave.
- What to do after a heat wave.
- Heat-related health conditions with appropriate first aid management.
- Available resources.

**Remember the four key messages to stay healthy in the heat:**

1. Drink plenty of water
2. Keep cool
3. Take care of others
4. Have a plan
SECTION 2

People most at risk

Everyone needs to take care in hot weather but some people are at greater risk of serious health effects from the heat than others. People who live alone or are socially isolated are especially at risk.

The following people are most at risk

People who are:
- over the age of 75
- infants and young children
- overweight or obese
- pregnant or breastfeeding
- not very mobile
- not drinking enough water
- living by themselves or homeless
- without social support
- working in a hot environment (for example labourers, gardeners, fire fighters)
- exercising vigorously in the heat

People who have a chronic illness, for example:
- heart disease
- high blood pressure
- diabetes
- cancer or kidney disease
- mental illness
- dementia
- alcohol and other drug use

People who have an acute illness such as:
- an infection with a fever
- gastroenteritis (diarrhoea and/or vomiting)

People who take certain medications:
- for a full list of medications that may place someone at risk, please see http://www.health.nsw.gov.au/campaigns/beattheheat

1 These are only examples; there are many more conditions that may be affected in hot weather. If you are unsure whether someone is at risk, discuss it with their GP.
A note on prescription medications

Many prescribed medications can make the risk of heat-related illness worse. Also, medications can become less effective or occasionally more toxic when stored in the heat. Most medications need to be stored below 25°C (discuss with a pharmacist if unsure about correct storage temperatures). Any person on regular medication should be encouraged to visit their GP to discuss how their medications could affect their health in the heat. For example, some medicines for blood pressure can decrease a person’s ability to sweat (which is the only way for the body to cool itself in the heat).

A list of medications that can affect a person during hot weather is available on the NSW Beat the Heat website (http://www.health.nsw.gov.au/campaigns/beattheheat). It is best to go through this list together with the person’s GP.
SECTION 3

How to prepare for a heat wave

If you are someone who cares for, supports or assists people at risk of serious health effects from hot weather, the following are some ideas of how to prepare them for a heat wave.

1. For the person
   - Check that extra care and support is available if needed.
   - Check they know who to call if they need help.
   - Check they have the contact details for their GP, care workers, carers and others that may be able to assist (family, friends and neighbours).
   - Check that their care plan includes information on how much they should drink (especially if the person is on a fluid restriction) and on their personal medication (some medications may affect what the person should do if it gets very hot). If it doesn’t, help to arrange a visit to the GP to determine a special care plan for hot weather.
   - Check that the person has light, loose-fitting cotton clothing to wear.

2. In their house or apartment
   - Check that the fridge, freezer, fan and air-conditioner work properly and that the air-conditioner is set to cool.
   - Help them to stock up with food before the hot weather arrives to reduce the need to go out.
   - Check they have cool packs available to put in the fridge to help them cool down.
   - Help them to put together a small emergency kit in case of a power failure. This may include a torch, batteries, candles, matches, a battery operated radio and a first aid kit.
   - Check their home or room can be aired properly and safely (for example without the need of leaving the front door wide open in an unsafe area).
   - If possible, add curtains with pale linings in rooms that get a lot of sunlight to help reflect the heat. Avoid dark reflective curtain linings and metal Venetian blinds as they take up heat and can make rooms hotter.
Consider putting external blinds, shutters or some other shading on windows in rooms that face west.

Create a cool room for them to go to during very hot weather. This room ideally should be east or south facing in the house and be cooled by: using indoor and outdoor shading; ventilation when it’s colder outdoors than indoors, and; use of a fan or air-conditioning.

Consider the risk of bushfires as they often occur on days of high temperature. Information on bushfire preparedness is available from the NSW Rural Fire Service (www.rfs.nsw.gov.au).
How to help someone during a heat wave

If you are someone who cares for, supports or assists people at risk of serious health effects from hot weather, the following are some ideas of how to help them during a heat wave.

1. For the person
   - Check that they’re drinking plenty of water – encourage them if necessary and place water in the fridge. A good way to check whether they are drinking enough is to get them to check the colour of their urine (see the urine colour chart in resources). If it is pale, they are drinking enough.
   - Check that they know who to contact if extra care and support is needed.
   - Talk to their family and friends and let them know how to best support their family member.
   - If you think they’re not coping, arrange a visit to their GP for them.
   - Check that they have a care plan with information on how much they should drink (especially if the person is on a fluid restriction). If the information is not there, call their GP to discuss.
   - Check that they have enough food for the next few days and if not, help them to arrange this.
   - Check that they are wearing light, loose-fitting cotton clothing.
   - Check that they have cool packs in the fridge or else cool wet cloths or washers available.
   - Consider offering to take them to a cool place like a shopping centre, library or cinema.
   - Remind them to do household chores early in the morning before the weather gets hot.
   - Encourage them to pursue activities that are easily done indoors such as reading, sowing, listening to radio programs.

2. In their house or apartment
   - Check that the fridge, freezer, fan and air-conditioner work properly and that the air-conditioner is set to cool.
   - Close windows, curtains, blinds and shutters early in the day before the weather gets hot especially on windows facing west.
Arrange for or remind them to ventilate their room or home as soon as the temperature outside drops, e.g. in the late evening or early in the morning.

Encourage the person to spend most of their time in coolest room in the house during very hot weather.

**A note on drinking recommendations**

It is important that people drink enough fluids during hot weather, even if they are not feeling thirsty. For most people, the following fluids are suitable: water, icy poles, diluted fruit juice (1 part juice in 4 parts water) or weak cordial. Each older person and people at risk should receive personalised drinking recommendations. This is best done by their GP and is particularly important for people with a restricted fluid intake.

A good way to find out if someone is drinking enough is by checking their urine colour. If the urine is pale, they are drinking enough. A urine colour chart is provided in Section 7 ‘resources’.
If you are someone who cares for, supports or assists people at risk of serious health effects from hot weather, the following are some ideas of what to do after a heat wave.

1. For the person
   - Discuss with the person what could have been done better to help them get through.
   - It might also be useful to discuss this with the person’s family and to identify ways to increase the person’s support if needed.
   - Write down possible improvements for the next heat wave.

2. In their house or apartment
   - Go through the checklist on the previous pages and note down improvements that can be made in the person’s house or apartment.
Most people who get sick in hot weather have an underlying chronic illness that gets worse because of the heat. This is because hot weather places a great deal of stress on the body. Also, during hot weather it is easy to become dehydrated (lose too much water from the body). When a person becomes dehydrated or loses too much salt from sweating, they may develop heat cramps or heat exhaustion. If a person begins to overheat, they may develop heat stroke.

Dehydration
Mild to moderate dehydration makes the heart work faster and leads to reduced fluid available for sweating.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dizziness</td>
<td>Offer plenty of water or diluted fruit juice to drink (1 part juice in 4 parts water); avoid tea, coffee or alcohol</td>
</tr>
<tr>
<td>Tiredness</td>
<td>Move the person somewhere cool, ideally somewhere air-conditioned</td>
</tr>
<tr>
<td>Irritability</td>
<td>If possible use a spray bottle with water in it to cool the person – with their consent</td>
</tr>
<tr>
<td>Thirst</td>
<td>If the person feels unwell, arrange an urgent appointment with their GP or take them/call an ambulance to be assessed in the nearest Emergency Department</td>
</tr>
<tr>
<td>Bright or dark yellow urine</td>
<td>1  See urine colour chart in ‘resources’.</td>
</tr>
<tr>
<td>Loss of appetite</td>
<td></td>
</tr>
<tr>
<td>Fainting</td>
<td></td>
</tr>
</tbody>
</table>

No matter what the heat related illness, the best way to prevent it is to drink plenty of water and to stay as cool as possible.
Heat cramps
Heat cramps usually affect people who sweat a lot during strenuous activity such as sport or gardening in hot weather. The sweating causes the body to lose salt and water. The low salt level in the muscles may be the cause of heat cramps. Heat cramps may also be a symptom of heat exhaustion.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muscle pains or cramps</td>
<td>Stop all activity and lie the person in a cool place, legs slightly raised</td>
</tr>
<tr>
<td></td>
<td>Offer water or diluted fruit juice to drink (1 part juice in 4 parts water)</td>
</tr>
<tr>
<td></td>
<td>Help the person to have a cool shower or bath</td>
</tr>
<tr>
<td></td>
<td>Massage the limbs to ease cramps, apply cool packs</td>
</tr>
<tr>
<td></td>
<td>Advise the person not to return to strenuous activity for a few hours</td>
</tr>
<tr>
<td></td>
<td>after the cramps have stopped (because this could lead to heat exhaustion/heat stroke)</td>
</tr>
<tr>
<td></td>
<td>If the heat cramps do not go away after 1 hour, arrange an urgent</td>
</tr>
<tr>
<td></td>
<td>appointment with their GP or get other medical advice</td>
</tr>
</tbody>
</table>

Heat exhaustion
Heat exhaustion is the body’s response to an excessive loss of water and salt contained in sweat. Those most at risk of developing heat exhaustion are elderly people, people with chronic diseases, and people working or exercising in a hot environment. If heat exhaustion is not treated, it can turn into heat stroke.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heavy sweating (cool and moist skin)</td>
<td>Get the person in a cool place, if possible in an air-conditioned room</td>
</tr>
<tr>
<td></td>
<td>and lay them down</td>
</tr>
<tr>
<td>Pale skin</td>
<td>Remove excess clothing</td>
</tr>
<tr>
<td>Fast and weak pulse rate</td>
<td>Give small sips of cool fluids</td>
</tr>
<tr>
<td>Breathing fast and shallow</td>
<td>Cool shower, bath or sponge bath</td>
</tr>
<tr>
<td>Muscle weakness or cramps</td>
<td>Put cool packs (or cool wet cloths) under armpits, on the groin, or on</td>
</tr>
<tr>
<td></td>
<td>the back of the neck to reduce body heat</td>
</tr>
<tr>
<td>Tiredness</td>
<td>If symptoms worsen or last longer than 1 hour, arrange an urgent</td>
</tr>
<tr>
<td>Dizziness</td>
<td>appointment with their GP or take them/call an ambulance to be assessed</td>
</tr>
<tr>
<td>Headache</td>
<td>in the nearest Emergency Department</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td></td>
</tr>
<tr>
<td>Fainting</td>
<td></td>
</tr>
</tbody>
</table>
Heat stroke

In a person with heat stroke, the body temperature is not controlled properly. It occurs when the body temperature rises above 40.5°C. Heat stroke is a **life-threatening emergency**. Immediate first aid is very important and the aim is to lower body temperature as quickly as possible.

<table>
<thead>
<tr>
<th>Symptoms</th>
<th>What to do</th>
</tr>
</thead>
<tbody>
<tr>
<td>A sudden rise in body temperature</td>
<td><strong>Immediately call 000 and ask for an ambulance</strong></td>
</tr>
<tr>
<td>Red, hot and dry skin (sweating has stopped)</td>
<td>Get the person into the shade, lie them down, and keep them as still as possible</td>
</tr>
<tr>
<td>Dry swollen tongue</td>
<td>Give small sips of cool fluids if the person is conscious and able to drink</td>
</tr>
<tr>
<td>Rapid pulse</td>
<td>Bring their temperature down using any method available (sponging with cool water, spraying with cool water from the garden hose or soaking clothes with cool water)</td>
</tr>
<tr>
<td>Rapid shallow breathing</td>
<td>Put cool packs (or cool wet cloths) under armpits, on the groin, or on the back of the neck</td>
</tr>
<tr>
<td>Intense thirst</td>
<td>Do not give aspirin or paracetamol; they do not help and may be harmful</td>
</tr>
<tr>
<td>Headache</td>
<td>If unconscious, lay the person on their side (recovery position) and check they can breathe properly</td>
</tr>
<tr>
<td>Nausea or vomiting</td>
<td>Perform CPR if needed</td>
</tr>
<tr>
<td>Dizziness</td>
<td></td>
</tr>
<tr>
<td>Confusion, poor coordination or slurred speech</td>
<td></td>
</tr>
<tr>
<td>Aggressive or strange behaviour</td>
<td></td>
</tr>
<tr>
<td>Loss of consciousness</td>
<td></td>
</tr>
<tr>
<td>Seizures or coma</td>
<td></td>
</tr>
</tbody>
</table>
SECTION 7

Resources

*Important telephone numbers*

- In an emergency – call 000
- For advice on medications and their effect in hot weather – talk to the person’s GP
- For general health advice – call Health Direct on 1800 022 222. This is a free 24-hour telephone health advice line staffed by Registered Nurses to provide expert health advice (a NSW government health advice line, calls from landlines are free).

*Internet resources*

Please visit our website http://www.health.nsw.gov.au/campaigns/beattheheat for:

- More detailed information on heat and health.
- A section for Aboriginal families.
- Printed leaflets with tips on how to stay healthy in the heat.
- To download this booklet ‘How to keep someone healthy during hot weather in English as well as 6 other languages: Arabic, Traditional and Simplified Chinese, Korean, Vietnamese and Italian.
Urine colour chart

This urine colour chart will give you an idea of whether a person is drinking enough or is dehydrated (lost too much water from the body).

<table>
<thead>
<tr>
<th>ARE YOU DRINKING ENOUGH?</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Very dehydrated</td>
</tr>
<tr>
<td>• Drink a large bottle of water immediately</td>
</tr>
<tr>
<td>• Dehydrated</td>
</tr>
<tr>
<td>• Drink 2-3 glasses of water now</td>
</tr>
<tr>
<td>• Somewhat dehydrated</td>
</tr>
<tr>
<td>• Drink a large glass of water now</td>
</tr>
<tr>
<td>• Hydrated – you are drinking enough</td>
</tr>
<tr>
<td>• Keep drinking at the same rate</td>
</tr>
</tbody>
</table>

Be Aware! If you are taking single vitamin supplements or a multivitamin supplement, some of the vitamins in the supplements can change the colour of the urine for a few hours, making it bright yellow or discoloured.
To do list for hot weather (for your notes)

To do before weather gets hot

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

To do during hot weather

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________

__________________________________________________________________________