Health checks during extreme heat events

A guide for doing in-person or remote health checks

Extreme heat events can lead to dangerous indoor temperatures in homes without functioning air conditioning. Health checks are used to assess how people at high risk of heat-related illness are doing during extreme events. In-person health checks are best, but a remote health check is better than no health check.

This guide has five pages with important information for doing health checks during extreme heat events.

Rapid risk assessment checklist

To assess whether someone is at risk, check all the personal factors that apply on the following list. The more boxes checked, the higher the potential risk.

☐ Older adult (60 years+)	The body's ability to cool itself is impaired as people age.
☐ Mental illness or cognitive impairment	Conditions such as schizophrenia, depression, anxiety, and dementia can reduce awareness of heat-related risks.
☐ Chronic disease	Chronic diseases such as diabetes, heart disease, respiratory disease, and cancer can limit the body's ability to cool.
☐ Living alone or socially isolated	People who live alone or do not have strong social connections are at higher risk because they have fewer people looking out for them.
☐ Substance dependency or use	The ability to sense and respond to heat can be affected by use of drugs or alcohol, especially for those who are dependent.
☐ Impaired or decreased mobility	People with impaired or reduced mobility might be less able to take protective measures during extreme heat events.
☐ Medication use	Some prescription medications for common conditions can cause dehydration and affect the body's ability to cool itself.
☐ Poor physical fitness	People who are not engaged in regular physical activity are less able to keep cool in the heat.

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Recognizing and responding to heat-related illness

Heat-related illness occurs when the body overheats. It is caused by prolonged exposure to high temperatures, and can be made worse by high humidity. The signs and symptoms of heat-related illness can range from mild to severe and can progress rapidly. If you are unsure, treat it like a life-threatening emergency and start cooling measures.

Severe heat-related illness

Severe heat-related illness is a life-threatening emergency. Act immediately to get help and start emergency cooling measures.

Signs and symptoms

Any of the following can be signs of **severe** heat-related illness:

- Fainting or loss of consciousness
- Unusual confusion or disorientation
- Severe nausea and vomiting
- Difficulty speaking
- Unusual coordination problems
- Hot, flushed skin or very pale skin
- Not sweating
- Rapid breathing and faint, rapid heart rate
- Body temperature >39°C (102°F)
- Very low, dark urine output

Moderate heat-related illness

Moderate heat-related illness can rapidly become severe heat-related illness. Immediate cooling is important to prevent progression.

Signs and symptoms

Any of the following can be signs of **moderate** heat-related illness:

- Nausea
- Light-headedness
- Weakness
- Extreme fatigue, malaise
- Very thirsty or dry mouth
- Difficulty swallowing
- Heat rash, unusual swelling, or cramps
- Rapid heart rate
- Body temperature >38°C (100°F)
- Reduced, dark urine output

Mild heat-related illness

Mild heat-related illness can rapidly become severe heat-related illness. Immediate cooling is important to prevent progression.

Signs and symptoms

Any of the following can be signs of **mild** heat-related illnes:

- Feeling unwell
- Dizziness
- Headache
- Irritability
- Fatigue
- Thirst
- Skin feels very warm and sweaty
- Increase in resting heart rate
- Reduced urine output

Emergency measures

If someone is experiencing severe heat-related illness, **take all the following actions:**

- Call 911 immediately
- Stay with the individual until emergency services arrive
- Move to a cooler area, if possible
- Remove excess clothing
- Have the individual rest comfortably flat on their back facing up or in a semi-upright position and offer water
- Apply cool, wet towels or ice packs around the body, especially to the neck, armpits, and groin, until emergency services arrive

Immediate measures for mild to moderate heat-related illness

If someone is experiencing mild to moderate heat-related illness, **take as many of the following cooling actions as possible:**

- Relocate individual to a cooler area
- Remove excess clothing and provide low-level fanning
- Activate air conditioning or open windows in different areas to create a cross-breeze
- Keep the individual resting comfortably flat on their back facing up or in a semi-upright position.
- Encourage sitting upright and drinking water
- Apply cool, wet towels or ice packs around the body, especially to the neck, armpits, and groin
- Call 911 if symptoms persist or get worse

In-person health checks

Before doing a health check, read page 2 on **Recognizing and responding to heat-related illness**

What you should have for an IN-PERSON HEALTH CHECK

- ☐ This 5-page document, either printed or digital
- ☐ Fully charged cell phone for emergency calls
- ☐ Information about others to contact if the individual is at risk
- ☐ Ear or mouth thermometer for taking body temperature
- ☐ Environmental thermometer for taking room temperature
- ☐ Wash cloths or towels for soaking in cool water
- ☐ Spray bottle
- ☐ Bottled water
- ☐ Ice packs and extra ziplock bags

Guidance for in-person health checks

- Do health checks at least twice daily, because heat-related illness can come on fast. Do one check during the evening hours when it is hottest indoors.
- When you enter the home, make sure the person is not in immediate distress and can communicate with you. **If someone is in immediate distress or cannot communicate with you, follow emergency measures** (page 2).
- Assess the situation with your own senses. Does the individual look or seem unwell? Does the environment feel hot? **If someone seems unwell and the environment is hot, take immediate measures to start cooling** (page 2) and alert others to the situation. Ask the individual for emergency contacts if you do not have this information.
- If you see no immediate risk, consider the rapid risk assessment checklist (page 1). If you do not know the individual well, ask them some questions to help with your risk assessment.
- Ask the individual about whether they have had any signs and symptoms of heat-related illness (page 2) since their last health check.
- If possible, use personal and environmental thermometers to help you understand the situation. See table on page 5 for information on measuring temperatures and cooling strategies.
- If you feel that the situation could become risky, alert others. Ask the individual for emergency contacts if you do not have this information.
- If you feel confident that the situation is safe, let the individual know when to expect the next health check, if possible.

Remote health checks

In-person health checks are best

It is much more difficult to assess how someone is coping with extreme heat during a health check by phone or digital media. However, remote health checks are better than no health checks. **If you cannot get through to the individual for a remote health check, take action.** Call someone who can help to arrange an in-person health check, such as a relative, a neighbour, a friend, or 911.

Before doing a health check, read page 2 on **Recognizing and responding to heat-related illness**

What you should have for a REMOTE HEALTH CHECK

- ☐ This 5-page document, either printed or digital
- ☐ Residential address of the individual in case you need to call 911
- ☐ Information about others to contact if the individual is at risk
- ☐ Some personal information about the individual such as age and general health

Guidance for remote health checks

- Do health checks at least twice daily, because heat-related illness can come on fast. Do one check during the evening hours when it is hottest indoors.
- Start by asking the individual simple questions about themselves and their general wellbeing. Listen carefully to how they respond, considering the signs and symptoms of heat-related illness (page 2).
- Ask the individual about the general temperature of their home. If they have a thermostat or thermometer, ask them to tell you the current temperature. See table on page 5 for information on indoor temperatures.
- Ask about how much water or other fluids they have been drinking. Recommend that the individual drink water regularly through all hours of the day.
- Ask about how they have been sleeping in the heat and what they have been doing to stay cool overnight.
- Make suggestions for keeping themselves and their home cool. See table on page 5 for information on cooling strategies.
- If you feel that the situation could become risky, alert others. Ask the individual for emergency contacts if you do not have this information.
- If you feel confident that the situation is safe, let the individual know when to expect the next health check, if possible.

Measuring body and room temperature

If you can get information on body temperature or room temperature, it may help you to assess the situation during health checks. Use the following tables to guide you.

Body temperature

- A normal body temperature is 36.5-37.0°C (97.7-98.6°F).
- A resting body temperature over 38°C (100.4°F) may indicate moderate heat-related illness.
- A resting body temperature over 39°C (102.2°F) requires immediate emergency attention.

Indoor temperature

- Indoor temperatures of 26°C (78.8°F) and below are usually safe.
- Risk of heat-related illness starts to increase at indoor temperatures over 26°C (78.8°F) for susceptible people.
- Risk of heat-related illness increases significantly at sustained indoor temperatures over 31°C (87.8°F) for susceptible people (page 1).

Reducing body temperature

- ☐ Take off extra layers of clothing to expose as much skin as possible.
- ☐ Have access to cool drinking water and drink regularly, even when not feeling thirsty.
- ☐ Prepare damp towels in a plastic bag and put them in the fridge to apply on the body regularly.
- ☐ Take cool showers or baths or sit with feet in cool water.
- ☐ Fill a spray bottle with cool water for misting.
- ☐ Limit physical activity and exposure to the outdoors during the hottest hours.

Reducing indoor temperatures

- ☐ Turn on an air conditioner, if available.
- ☐ Turn on fans if the room temperature is below 35°C.
- ☐ Move to a cooler space within the home, if safe to do so.
- ☐ Draw curtains, shades, or shutters to help block direct sunlight.
- ☐ Cover windows with a blanket or cardboard if there are no curtains or shades.
- ☐ Close windows during the heat of the day to trap cooler air indoors.
- ☐ Open windows overnight or whenever there is a cool breeze, keeping safety in mind.
- ☐ Turn off heat-generating devices such as appliances, electronics, lights, etc.

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