

Extreme Heat Health Guidelines: First, Protect the Vulnerable! Information for Community Service Providers and Agencies

When the weather gets hot and humid, the vulnerable are at risk of heat-related illness and death. This is preventable!

What makes people vulnerable to heat-related illness and why?

Elderly

- Frequently have co-existing chronic, physical, and cognitive illnesses that compromise their ability to tolerate extreme heat.
- Often have a diminished sense of thirst, delayed sweat response, decreased number of sweat glands.
- Dementia places elderly at extreme risk of dying from a heat-related illness.

Infants (under 1 year of age)

- Have poor sweating mechanisms and rely upon others to regulate the temperature of their environment.

Homelessness

- Lack of access to shelter and air-conditioning. These people often have untreated chronic physical, mental or substance abuse illnesses.

Environmental risk factors

- Living above the third floor, lack of air-conditioning and living in surrounding air temperature above 32°C (90°F).

Certain medical conditions. Taking certain medications

- Mobility impaired persons and those who are unable to self-care for themselves.
- People with diabetes and those who have heart conditions may have difficulty getting blood supply to the skin to aid in cooling.
- Scleroderma, cystic fibrosis and diabetes affect the number and function of sweat glands.
- Anti-depressants, anti-Parkinson drugs, some anti-histamines, blood pressure or "fluid pills" and drugs that alter mood, thought processes or sleeping patterns can affect how a person tolerates extreme heat.

Mental Illness

- Impaired decision making and altered perception of heat may prevent a person from staying cool.
- Certain medications can impair the body's ability to cool down.

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Obesity

- Decreased blood flow to the skin makes obese persons less able to cool their bodies.
- A larger body mass holds heat for longer periods of time.

What is my role during extreme heat?

- Develop a plan to deal with extreme heat. Include back up plans for loss of power and air-conditioning.
- Ensure staff and volunteers know the signs and symptoms of heat-related illness and what to do.
- Educate clients about the hazards and risk factors and how to prevent heat-related illness.
- Check on clients during an Extreme Heat Alert, Warning, or Emergency.
- Encourage them to drink lots of water, keep their body cool, use fans with caution and keep out of the heat.
- Advise clients that time spent outdoors should be limited to early morning or later in the day. Wear UV protective sunscreen and sunglasses, a wide-brimmed hat, and loose-fitting, light coloured clothes. Some medical conditions increase the sensitivity to the heat.
- Be aware and suggest local facilities that are air-conditioned.
- Listen and watch for KFL&A Public Health Extreme Heat Health alert and warning notices on the radio, on the TV, or by fax/email to your service agency. Post these notices.
- Monitor the weather reports.

Heat-related illness – Know the signs!

Heat-related illness can begin as dehydration and fatigue and progress to heat cramps, heat exhaustion and heat stroke. In serious cases there can be permanent damage to vital organs such as the brain, heart and nervous system.

- **Dehydration** results from too much water loss from the body. Sweating, poor fluid intake and certain medications can cause this condition.
- **Heat cramps** often occur as a result of dehydration and loss of salts and minerals through sweating during strenuous activities. Painful spasms are felt in the muscles of the legs, arms and abdomen.
- **Heat exhaustion** occurs from prolonged exposure to high temperatures and inadequate fluid replacement. It causes headache, heavy sweating, weakness, and a fast but weak pulse. **Immediate cooling is needed. Seek medical attention.**
- **Heat stroke** is a medical emergency with a death rate as high as 33 percent. It is a total breakdown of the body's heat regulation system. Signs include red, hot and dry skin, a fast and strong pulse, confusion, seizures or unconsciousness, and a very high temperature (over 40°C or 104°F). **This is a life-threatening emergency - call 9-1-1 before giving first aid!**

For information on where to stay cool or obtain services:

City of Kingston – 613-546-0000 or www.cityofkingston.ca

County of Frontenac – 613-548-9400 or www.frontenacounty.ca

County of Lennox & Addington – 613-354-4883 or www.lennox-addington.on.ca