

Extreme Summer Heat

Tips for Service Providers Who Work with Special Needs Individuals

Organizations that provide services to special needs populations can play a critical role in preventing some of the most devastating effects of extreme summer heat. Preparation and planning before heat waves arrive can help your organization respond more effectively.

- Organize your client list to flag those at highest risk for heat-related illnesses based on health risks and lack of access to air conditioning. Social isolation can increase vulnerability, but vulnerable people who live with others can also be at risk.
- During routine client contacts, provide information and help clients prepare for hot weather (stressing that an air conditioned environment is the best protection against heat-related illness)
- Make plans for client outreach during heat emergencies – document these plans and communicate them to staff

Risk Factors for Heat-Related Illness

Although anyone can suffer from heat-related illness, some people are at greater risk. *Organize your client list in advance to flag those at highest risk* for heat-related illnesses:

1) Health Risk Factors:

- Age 65 and older
- Age 4 and younger
- One or more medical conditions, including:
 - Heart disease
 - High blood pressure
 - Psychiatric or cognitive disorders
 - Diabetes Mellitus
 - Respiratory conditions
 - Obesity
- Alcohol consumption
- Taking certain medications. Always check with the prescribing physician to determine particular risks. Medications that increase risk can include:
 - Tricyclic antidepressants
 - Antipsychotic or neuroleptic medications
 - Certain tranquilizers
 - Some medications for Parkinson's disease
 - Diuretics
 - Beta blockers
 - Calcium channel blockers
 - Antihistamines
 - Illicit drugs such as amphetamines, cocaine and "ecstasy"

2) Heat Exposure

- Lack of a working air conditioner
- Presence of a working air conditioner, but unable to afford higher electric bill
- Living on top floor in a non-air-conditioned unit

3) Social Isolation

Helping Clients Prepare for Extreme Heat

During routine client contacts, provide information and help clients plan for hot weather:

- If an at-risk individual has an air conditioner, encourage them to USE IT during periods of extreme heat. Many people prefer not to use their air conditioners, either to save money or because they do not like cold air. Suggest tips to conserve energy and keep the climate comfortable, such as setting the temperature at 78°F or higher. Check the air conditioner to make sure it is in good working condition, and insulate any spaces between the air conditioner and window to make sure there is a tight fit.
- If an at-risk individual does not have an air conditioner, discuss any other options they may have during periods of extreme heat. Spending even a few hours in an air conditioned environment can be beneficial. If they are able to relocate, help them make a plan for how they will get to a friend or relative's house, a library, shopping mall, or a Cooling Center (call 311, TTY: 212-504-4115, or visit www.nyc.gov/oem for more information). If these are not viable options, consider contacting their health care provider to discuss alternatives.
- Be careful about relying on fans. When the room temperature is in the high 90s, fans will not prevent heat-related illness because they just blow the hot air around. Fans may be useful at night, to help circulate cooler air from open windows, or when used in conjunction with an air conditioner.
- Shades, draperies, or awnings should cover windows that receive morning or afternoon sun.
- Distribute the City's "Beat the Heat" brochure (call 311 or visit www.nyc.gov/oem for more information)

Outreach During Periods of Extreme Heat

Make plans for increased outreach during extreme heat, including frequent (at least daily) calls to the highest risk clients.

- Whenever possible, encourage at-risk individuals to use air conditioners or seek out air conditioned environments (see above tips). Educate their family and friends about symptoms and prevention tips, and encourage them to check in at least daily to watch for signs of heat exhaustion or heat stroke.
- Remind at-risk individuals about the following general tips:
 - Limit strenuous activities
 - Dress in loose-fitting clothes. Outdoor activities should be limited, but if it is necessary, clothes should be light-colored, lightweight, and cover as much skin as possible. A wide-brimmed hat and sunscreen of SPF 15 or higher can also provide valuable protection. Outdoor activity should be scheduled during morning and evening hours, when temperatures are cooler.
 - Drink plenty of non-alcoholic, non-caffeinated fluids. Sports drinks may be consumed, but avoid overly sugary beverages. Individuals who have heart, kidney, or liver disease; are on fluid-restrictive diets; or have a problem with fluid retention should consult a doctor before increasing liquid intake.
 - Avoid hot foods and heavy meals
 - Cool (not cold) showers or baths may be helpful, but avoid extreme temperature changes
- Be aware of air quality-related respiratory problems. High levels of ozone (and other air pollutants) can occur during heat waves. Ozone can cause breathing problems, especially among those with respiratory conditions. When ozone levels are high, individuals with respiratory conditions should limit outdoor activity, especially during the afternoon and early evening hours. Staying in an air conditioned environment reduces ozone exposure. For air quality updates, visit www.airnow.gov or call the NY State Air Quality Hotline at 800-535-1345.

Signs and Symptoms of Heat-Related Illness

Monitor at-risk individuals and educate their family and friends about the symptoms and first aid for heat-related illness:

Condition	Symptoms	First Aid
Sunburn	<ul style="list-style-type: none"> • Skin redness and pain, possible swelling, blisters • Fever, headaches 	<ul style="list-style-type: none"> • Take a shower using soap to remove oils that may block pores, preventing the body from cooling naturally • Apply dry, sterile dressings to any blisters, and get medical attention
Heat Cramps	<ul style="list-style-type: none"> • Painful spasms, usually in leg and abdominal muscles • Heavy sweating 	<ul style="list-style-type: none"> • Get the victim to a cooler location – air-conditioned, if possible • Firm pressure on cramping muscles, or gentle massage to relieve spasm • Give sips of water, up to a half glass every 15 minutes (do not give liquids containing caffeine or alcohol) • If nausea occurs, discontinue liquids and seek medical attention
Heat Exhaustion	<ul style="list-style-type: none"> • Heavy sweating, but skin may be cool, pale and clammy • Weak and/or rapid pulse • Normal body temperature is possible, but temperature will likely rise • Fainting or dizziness, nausea, vomiting, exhaustion, and headaches are possible 	<ul style="list-style-type: none"> • Get victim to lie down in a cool place • Loosen or remove as much clothing as possible • Apply cool, wet cloths to neck, face and upper arms • Move victim to air-conditioned place, if possible • Give sips of water if victim is conscious (a half glass every 15 minutes) - be sure water is consumed slowly, and discontinue if nausea occurs • Seek immediate medical attention if vomiting occurs • Watch carefully for changes in the victim's condition. If heat exhaustion is untreated, it may progress to heat stroke. Seek medical attention if symptoms do not improve or last longer than one hour.
Heat Stroke	<ul style="list-style-type: none"> • High body temperature (104°F+) • Hot, red, dry skin • Rapid pulse and rapid, shallow breathing • Victim will probably not sweat • Possible unconsciousness 	<ul style="list-style-type: none"> • Call 911 or get the victim to a hospital immediately. Delay can be fatal. • Move victim to air-conditioned place, if possible • Remove as much clothing as possible • Try a cool bath, sponging, or wet sheet to reduce body temperature • Watch for breathing problems • Use extreme caution • Keep the victim lying down • Do NOT give the victim any fluids

Note: The information contained in this document is not intended to provide medical advice. Always seek the advice of a health care provider. This document was drafted by the NYC Office of Emergency Management and the NYC Department of Health and Mental Hygiene, and represents a compilation of information from sources including the U.S. Centers for Disease Control and Prevention (http://www.bt.cdc.gov/disasters/extremeheat/heat_guide.asp) and the US Federal Emergency Management Agency (<http://www.fema.gov/areyouready/heat.shtm>).