

Extreme Summer Heat

Tips for Service Providers Who Work with People with Disabilities and Others with Access and Functional Needs

Organizations that provide services to people with disabilities and others with access and functional needs 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 and keep your clients healthy.

Organizational Preparation Before a Heat Wave

- Identify your clients who are at highest risk for heat-related illnesses based on lack of access to or unwillingness to use air conditioning AND health risks.
 - Those who are at greater risk include older adults, those who are obese, those with chronic cardiovascular or respiratory disease, serious mental health, cognitive, or developmental disorders that impair judgment or self-care, those taking medications that can impair thermoregulation, those who drink heavily or use illicit drugs, and those who are unable to communicate being hot or uncomfortable. (See Appendix A - Checklist for Identifying Patients at At-Risk for Heat Related Illness and Death)
- Provide information about heat-related illness and prevention during routine client contacts. Help clients prepare for hot weather by stressing that an air conditioned environment is the best protection against heat-related illness. Determine whether clients have access to cool environments (e.g., working home air conditioners, cool locations accessible to clients).
- Identify family or caregivers who can check in on clients during a heat wave.
- Make plans for client outreach during heat emergencies, prioritizing the highest risk clients. Document these plans and communicate them to staff.
- Develop plans for outreach during heat emergencies. Outreach plans should include:
 - A regular schedule for monitoring clients.
 - A checklist for client monitoring that ensures assessing access to a cool environment (i.e., a working home air conditioner, nearby cool locations) and to water, specifies a regular hydration schedule if appropriate, describes a protocol for monitoring hydration status (e.g., through regular weighing) if recommended by a client's physician, includes a plan for moving a client to a cooler location if needed, and a standard for documenting client checks.
- For additional information on how your organization can prepare for a heat wave, visit: <http://www1.nyc.gov/assets/doh/downloads/pdf/ehs/provider-heat-checklists.pdf>

Helping Clients Prepare for Extreme Heat

During routine client contacts, provide information and help clients plan for hot weather. Involve family and caregivers in preparation including informing them about health risks of extreme heat and emphasizing importance of a cool indoor environment for clients during extreme heat.

- If an at-risk individual has an air conditioner, encourage them to USE IT during periods of extreme heat. Advise clients to set the air conditioner temperature at 78°F or low-cool to conserve energy while staying safe.
- For individuals who prefer not to use their air conditioners due to cost or because they do not like cold air, suggest tips to conserve energy, such as:
 - Using air conditioning only in the room clients spend the most time in and closing off other rooms.
 - Pulling shades and cutting down on light and other electronics use.
- Check the air conditioner to make sure it is in good working condition, clean the filter if needed, and insulate any spaces between the air conditioner and window to make sure there is a tight fit.
- If at-risk individuals do not have air conditioning, 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. Help them identify air conditioned public spaces nearby where they can go. Help them make a plan for how they will get to a friend, neighbor, or relative's house, a library, shopping mall, or a cooling center in their neighborhood (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.
 - Your client may also qualify for a free air conditioner through the Home Energy Assistance Program (HEAP). Clients who meet income criteria will require written documentation from their healthcare provider of increased risk for heat-related illness due to a medical or psychiatric condition, or use of medication(s) that increases risk. Income eligibility criteria are available at <http://otda.ny.gov/programs/heap> Please note that funds are limited. Call 311 or the Human Resources Administration at 1-800-692-0577 or 1-212-835-7216 for more information.
- Assist clients who rely on electrically-powered life-sustaining equipment register with his or her utility company's priority power restoration program. Power outages occur most often during the summer months, when residents run air conditioners and power usage is at its peak. In addition, help your client develop an emergency plan which includes:
 - An alternate source of electric power, such as a battery back-up system.
 - If using a generator be sure to follow the manufacturer's instructions, local building codes, and ensure that it's in a well-ventilated area.
 - Include a variety of telephone options (land-line, cordless, cellular) if possible.
 - Customers with life-sustaining equipment registered with providers will receive priority during outages, but if it takes more than a couple of days to restore power, it is important to be independent and have a back-up source of electric power, such as a battery. Before the power goes out, make sure to charge all medical and communications devices.

- If you rely on oxygen, talk to your vendor about emergency replacements. In the event that you do not have access to oxygen, call 911 for immediate assistance. For more information, visit: <https://www1.nyc.gov/site/em/ready/utility-disruptions.page>
- Advise clients to wear light, loose-fitting clothing.
- Advise them that bathing or showering with cool (not cold) water can be helpful for those able to do so safely.
- Discuss medical conditions or medications that could increase risk during hot weather. If necessary, check with client's doctor, or advise clients to do so, concerning precautions they should take during hot weather and whether self-monitoring hydration (e.g., using bodyweight measurement to ensure appropriate intake of water) is recommended.
- Remind clients to drink plenty of water both outdoors and indoors during hot weather, even if they do not feel thirsty. If clients are unable to communicate thirst, make sure they are given water at regular intervals throughout the day.
- Avoid strenuous activity.
- Advise clients that during periods of extreme heat, a fan alone may not be enough to keep them cool. When the room temperature is in the high 90s or above, fans will not prevent heat-related illness because they just circulate hot air. Fans may be useful when used in conjunction with an air conditioner or at night, if temperatures drop, to help circulate cooler air from open windows if air conditioning is not used.
- Educate family and friends about symptoms of heat illness (see Appendix B- Signs and Symptoms of Heat-Related Illness) and prevention tips. Encourage clients to check in on family/friends/neighbors who may also need help at least daily during heat waves and again after a heat wave. Distribute the City's "Beat the Heat" and "Summer Heat – It's Enough to Make You Sick" brochures. Call 311 (TTY: 212-504-4115) or search "Beat the Heat" or "Summer Heat – It's Enough to Make You Sick" on NYC.gov for more information.

Outreach During Periods of Extreme Heat

Implement outreach plans developed before a heat wave, including frequent (at least daily) visits and/or calls to highest risk clients.

Encourage clients to use air conditioning if they have it, or to go to air conditioned places if they are able. Close curtains or blinds to block sun during the day. If clients remain at home without air conditioning, open windows and use fans to bring in cooler air at night.

- Check for signs of heat stress (see Appendix B - Signs and Symptoms of Heat-Related Illness).
- Move clients to cooler areas if signs of overheating are present.
- Make sure clients are drinking plenty of water, even if they are not thirsty. For those who have heart, kidney, or liver disease; are on fluid-restrictive diets; or have a problem with fluid retention, consult with their doctor or advise individuals to ask their providers about how much water they should be

drinking. Providers may recommend using monitoring hydration using bodyweight measurement or other methods.

- Make sure they are wearing light, loose-fitting clothing.
- Limit strenuous activity. Outdoor activities should be limited, but if it is necessary, it should be scheduled during morning and evening hours when temperatures are cooler.
- 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, call the NY State Air Quality Hotline at 800-535-1345, or listen to your local weather report.

Appendix A

Checklist for Identifying Patients At-Risk for Heat Related Illness and Death

Although anyone can suffer from heat-related illness, people with no working air conditioning **AND** certain health risk factors are at greater risk. *Identify your clients at highest risk for heat-related illnesses in advance of a heat wave.*

1) Home Environment

- Lack of a working air conditioner, or
 - Unable or unwilling to use air conditioning because of cost, energy overload, or comfort concerns.
 - Unable or unwilling to go to a cool place (i.e., socially isolated, limited mobility, safety concerns).
- Ability to hydrate:
 - Limited access to water, unable to get water for themselves because they are bedbound or have decreased mobility, or refusal of elderly patients to drink regularly or to drink more during extreme heat (for fear of having to go to the bathroom).

2) Health Risk Factors:

- Age 65 and older
- One or more medical conditions, including:
 - Heart disease
 - High blood pressure
 - Psychiatric or cognitive disorders
 - Diabetes
 - Obesity
 - Respiratory conditions
- Consumption of alcohol or illegal drugs, such as amphetamines, cocaine, and MDMA or methylone (also called “ecstasy” or “Molly”)
- Certain medications also affect the body’s ability to maintain a safe temperature. Always check with the prescribing physician to determine particular risks. Medications that increase risk include:
 - Tricyclic antidepressants, including selective serotonin reuptake inhibitors (SSRIs)
 - Antipsychotic or neuroleptic medications
 - Certain tranquilizers
 - Some medications for Parkinson’s disease
 - Diuretics
 - Beta blockers
 - Calcium channel blockers
 - Antihistamines

Appendix B

Signs and Symptoms of Heat-Related Illness

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

Condition	Symptoms	First Aid
Heat Stroke	<ul style="list-style-type: none">• High body temperature (104°F+)• Confusion, delirium, hallucinations or possible unconsciousness• Lack of sweating• Hot, red, dry skin• Rapid pulse and rapid, shallow breathing	<ul style="list-style-type: none">• Call 911 or get the victim to a hospital immediately. Delay can be fatal.• While waiting for emergency services<ul style="list-style-type: none">• 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
Heat Exhaustion	<ul style="list-style-type: none">• Heavy sweating• 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 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
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 prevent the body from cooling naturally by blocking pores• Apply dry, sterile dressings to any blisters, and get medical attention

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>).