CITY OF NEWARK
Mayor Ras J. Baraka

CITY OF NEWARK
Department of Health
And Community Wellness

Newark Department of Health and Community Wellness

Division of Surveillance & Prevention

HEAT PREPAREDNESS PLAN
Summer 2020

Revised July , 2020

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PURPOSE

- To prevent exposure to extreme heat conditions that could potentially result in heat-related injuries or severe adverse health effects.
- To coordinate responsibilities and activities among Newark municipal agencies and volunteer organizations.
- To provide public education to minimize the risk of heat-related injuries among vulnerable individuals.

SITUATION

General

During a heat wave, daytime temperatures typically exceed 90°F for several days in a row. The air is usually humid and stagnant, and nighttime temperatures do not fall enough to allow for cooling before daylight warms the area again.

During hot weather, people cool themselves by sweating which evaporates on the skin and pulls heat out of the body. During extreme heat, sweat evaporation is slowed and the body must work extra hard to maintain a normal temperature resulting to lack of cooling in the body. This can lead to heat-related illness such as heat rash, cramps, heat exhaustion, and stroke.

High Risk Populations

Anyone can suffer from heat-related illness during a heat wave, but some people are at greater risk than others. Vulnerable populations include:

a) Infants and young children. They are sensitive to the effects of high temperatures and rely on others to regulate their environments and provide adequate liquids.

b) People 65 years of age or older. They may not effectively compensate for heat stress and are less likely to sense and respond to temperature changes.

c) People who are overweight. They may be prone to heat sickness because of their tendency to retain body heat.

d) Outdoor workers and athletes. They may become dehydrated and susceptible to heat sickness because of physical exertion during peak heat hours.

e) People with disabilities or mental illness. Certain medications can affect the body due to irritation of excessive heat.

f) People with certain chronic conditions, such as heart disease or poor circulation, may be more susceptible to heat-related illness.

g) Pregnant women, breast-feeding mothers have some degree of heat intolerance and are

susceptible to dehydration and fatigue.

h) People who are socially isolated, low-income, dependent upon others for care, or who are otherwise unable to control the heating and cooling conditions in their environments can become ill from excessive heat.

Other Risk Factors

The following behavioral and environmental risk factors have also been associated with people developing heat-related illness, including:

a) No air conditioning in the home, or no access to an air-conditioned area, such as a cooling center or public library.

b) Failure to reduce activity or increase fluid intake during periods of high heat.

c) Use of certain medications, or consuming alcoholic or sugary drinks.

d) Living on second or third floor of a building without air-conditioning.

e) Living in a residence without shade, such as in an urban areas

NEWARK HEAT PREPAREDNESS TASK FORCE

Department of Health and Community Wellness (Newark DHCW)

Newark Office of Emergency Management (NOEM)

Newark Department of Recreation, Cultural Affairs and Senior Services (DORCASS)

Newark Police Department

Newark Fire Department

Newark Office of the Business Administrator

City Office of Public Information

Department of Engineering/Public Buildings

Newark Public Schools (NPS)

Essex County Red Cross

University Hospital EMS

Essex County Senior Services

Regional Medical Examiner's Office

PSE&G

HEAT PREPAREDNESS WEATHER MONITOR

NATIONAL WEATHER SERVICE EARLY SYSTEM FOR HEAT

The National Weather Service Regional Office in New York established heat wave notification procedures based on heat index criteria. The **HEAT INDEX (HI),** which considers the combination of temperature and humidity, is used to trigger alert announcements and response activities. The National Weather Service provides weather information for the NJZ005 Essex and Union zone, which includes the City of Newark. The system is as follows:

DEFINITIONS

Heat Index, also known as apparent temperature, is a measurement of temperature and humidity. For example, ***a Heat Index of 105°F*** can be reached when the temperature is 95°F and the relative humidity is 50 percent.
Note: Heat Index can be reached in any combination of temperatures and relative humidity.

EXCESSIVE HEAT ADVISORY – CODE RED

The National Weather Service, Eastern Region issues heat advisories based upon the heat index. *Excessive Heat Advisories* are issued when a daytime heat index of 105°F is expected to last more than 3 hours within the next 12 to 24 hours or when the daytime heat index is expected to exceed 115°F for any length of time. Excessive heat advisories shall be issued at most 12 hours before excessive heat advisory criteria are met and continued with frequent updates (e.g., special weather statements every 6 hours). At the Directors' or Health Officers' (if so designates) discretion, excessive heat advisories may be issued at a lower threshold (e.g. 102°F) at any time to account for possible differences between the official temperature reported at exposed observation sites and those within the more congested urban areas. Code Red would be issued at this point to activate cooling centers.

EXCESSIVE HEAT WARNING

An excessive heat warning shall be issued when a heat wave is expected. ***Heat Wave*** is defined as daytime temperatures reaching 90°F or more for 2 or more consecutive days with a heat index of 100°F or less. The excessive heat warning shall be issued 12 to 48 hours before the event.

EXCESSIVE HEAT WATCH

An excessive heat watch shall be issued when excessive heat is expected. Excessive Heat is defined as daytime temperatures reaching 95°F or and a heat index 100°F or less. The excessive heat watch shall be issued 24 to 48 hours before the event.

NOTE: When the heat index meets or is expected to meet excessive heat watch or warning criteria, the excessive heat advisory will be issued.

NEWARK WEATHER MONITORING PROTOCOL

Response activity shall be based upon the National Weather Service Heat Alert announcement criteria. The Newark Department of Health and Community Wellness (NDHCW) in collaboration with Newark Office of Emergency Management (OEM) will monitor the temperatures from June 1st to September 30th. The National Weather Service Alert System (Table A) will be used by Newark DHCW to guide response activities. NOEM will regularly inform the City Business Administrator and Assistant Business Administrator of heat-related alerts and activities.

Newark DHCW monitoring activities will include:

- Monitoring the National Weather Service for Special Weather Statements (SPSs)
- Checking the five-day forecast indicating if a Health Advisory or Excess Heat Watch will be issued
- Notifying any changes in the heat index for Newark after the five-day forecast is given
- Weekly recording temperatures on a documentation log

TABLE A

The National Weather Service Early Warning System for Heat Preparedness

WARNING	ISSUE TIME	EVENT/CRITERIA
ADVISORY (Condition is more than watch or warning level) –CODE RED	At least 12 hours before the event criteria is met. Special Weather Statements (SPSs) updates issued every six hours for as long as heat situation continues or until HI is expected to exceed heat warning/watch criteria	**Should be issued** Daytime **HI** expected to reach 105°F or greater for more than 3 hours and night lows remain greater than 80° F. **May be issued** For daytime **HI** between 100°F and 105°F or multi-day continued high-stress conditions.
WARNING	Between 12 to 48 hours before heat warning criteria is expected to be met	Daytime temperatures of 90°F and **HI** is expected to reach 100°F for 2 or more consecutive days **(heat wave)**
WATCH	Between 24 to 48 hours before heat watch criteria is expected to be met	**Should be issued** Daytime temperatures reaching 95°F or and a heat index 100°F or less any day.

ORGANIZATION AND ASSIGNMENT OF RESPONSIBILITIES

A. Organization

The Newark Office of Emergency Management (NOEM) and the Newark DHCW are the lead agencies in the event of a heat emergency. City of Newark departments and agencies will participate in heat preparedness response operations under the direction of the City of Newark Health Officer and Health Director.

Operations will focus on:

- Public education and health promotion
- Public and private sector response
- Emergency management system response

B. Assignment of Responsibility

The Newark Heat Preparedness Task Force will advise the Business Administrator and Assistant Business Administrator on heat-related responses. Each city agency will have targeted responsibilities.

(See related sections for agency and department responsibilities.)

NEWARK DEPARTMENT OF HEALTH AND COMMUNITY WELLNESS:

NDHCW shall be responsible for the following heat preparedness/response activities:

1. Convene the Newark Heat Preparedness Task Force
   - Director, DHCW
   - Director of OEM
   - Manager, Surveillance and Prevention
   - Medical Director
   - Registered Environmental Health Specialist
   - Health Educator
   - Additional staff assigned by Director of DHCW
2. Review heat emergency plan for possible implementation and execution
3. Monitor weather conditions for excessive heat from June 1st to September 30th.
4. Disseminate medical and health information for heat-protective actions
5. Survey hospital emergency departments for incidence of heat-related morbidity and mortality
6. Responsible to call CODE RED and activate cooling centers when heat advisory is issued by OEM
7. Disseminate health advisories through the Public Information Office and post advisories on DHCW social media outlets and City and Department of Health website

8. Continue monitoring conditions at nursing homes, senior centers and other licensed facilities for the elderly.
9. Inform the Newark Business Administrator of all activities

NEWARK OFFICE OF EMERGENCY MANAGEMENT:

NOEM shall be responsible for the following heat preparedness/response activities:

1. Participate in the Heat Preparedness Task Force
2. Communicate with Newark DHCW on weather conditions, status updates and alerts
3. Submit an "official" alert notice to be disseminated to the public
4. Monitor heat-related telephone calls to NOEM
5. Remain in contact with Newark DHCW for heat-related morbidity and mortality data
6. Respond to heat-related emergencies
7. Inform the Newark Business Administrator of all activities

UNIVERSITY HOSPITAL EMERGENCY MEDICAL SERVICE:

UH EMS shall be responsible for the following heat preparedness/response activities:

1. Participate in the Heat Preparedness Task Force
2. Receive weather condition and alert updates from the NOEM and DHCW
3. Monitor heat-related emergencies utilizing FirstWatch analytical data system and inform Newark DHCW of any spikes
4. Coordinate appropriate emergency heat-related responses with NOEM

NEWARK DEPARTMENT OF RECREATION, CULTURAL AFFAIRS AND SENIOR SERVICES:

Newark DORCASS shall be responsible for the following heat preparedness activities:

1. Participate in the Heat Preparedness Task Force
2. Review heat emergency plan for possible implementation
3. Provide updated list of cooling centers
4. Activate Cooling Sites upon authorization by the Newark DHCW Director
5. Ensure water fountains and AC units are properly functioning
6. Staffing and operation of cooling centers
7. Transportation of seniors to and from cooling centers
8. Communicate with the Newark DHCW about heat-related emergencies that occur at the cooling centers.

NEWARK PUBLIC SAFETY DEPARTMENT:

NPSD shall be responsible for the following heat preparedness/response activities:

1. Participate in the Heat Preparedness Task Force
2. Aid Newark DHCW and OEM during a heat-related emergency at the request of the Business Administrator or Assistant Business Administrator.

ESSEX COUNTY RED CROSS:

Essex County RC shall be responsible for the following heat preparedness activities:

1. Participate in the Heat Preparedness Task Force
2. Monitor situation through communication with the Newark DHCW and NOEM
3. Assist with staffing Cooling Sites, if needed
4. Maintain contact with NOEM for heat-related emergencies possibly requiring Red Cross assistance

NEWARK OFFICE OF PUBLIC INFORMATION:

Newark PIO shall be responsible for the following heat preparedness activities:

1. Work closely with DHCW and OEM to educate, inform, and instruct residents about heat-protective behaviors and heat-related health issues
2. Disseminate "Beat the Heat" tips during a heat wave
3. Disseminate information about locations and hours of operations of cooling centers
4. Disseminate heat emergency plans to the following outlets:

    i. Star Ledger and RLS Metro Media
    ii. Cable station show "Senior Citizens In Action"
    iii. 1010 WINS
    iv. Portuguese and Spanish language stations and newspapers
    v. Public Service Announcements using social media outlets such as Twitter/Facebook and City and Health department websites

COVID-19 Operational Addendum

Purpose of Addendum

This Addendum describes the objectives and procedures agreed upon by the NEWARK HEATWAVE PREPAREDNESS TASK FORCE. It provides the best practices in line with the Federal Emergency Management Agency (FEMA), Center for Disease Control and Prevention (CDC), and American Red Cross operational guidance for Mass Care and sheltering during the present COVID-19 Pandemic or alike. Consideration to the degree to which these guidelines are adhered to, must be governed around needs, and emergency response capabilities.
This document provides interim guidance to reduce the risk of introducing and transmitting (SARS COV-2 the agent responsible for causing) COVID-19 during Cooling centers and shelter operations. This Addendum should be used in conjunction with existing Cooling centers and Shelter Operational plans.

Overview

Extreme heat is a major public health concern in the United States. Exposure to extreme heat can cause a variety of health problems, including heat stroke and death. Many communities use cooling sites (a cooling site or air-conditioned facility designed to provide relief and protection during extreme heat) to protect health during heat events. However, the use of cooling centers can result in congregating of groups of at-risk people, such as older adults or those with respiratory

diseases, and potentially provide a route for the transmission of the SARS COV-2 virus and subsequent development of COVID-19 disease among both visitors and staff.

Considerations and Potential Intervention Strategies

The CDC recommends the following considerations and strategies when implementing cooling centers during heatwave emergencies to prevent the spread of COVID-19.

Identify critical Job functions:

- Identify critical job functions and positons, and then plan for alternative coverage by cross-training cooling center staff.
- Develop flexible attendance and sick leave policies, staff and volunteers may need to stay home when they are sick or caring for sick household members and their children.

Screening and Alternative Site:

- Implement verbal screening or temperature checks before admitting visitors into cooling centers.
- If possible, provide alternative cooling sites for those showing symptoms of COVID-19 (i.e., fever, cough, shortness of breath). This may be separate rooms within cooling centers or a space that can be used to accommodate visitors with symptoms separating them from others if alternative locations are not available.
- Designate an alternate site, or a separate room and bathroom (if available) for visitors with mild illness who remain at the cooling center. Be prepared to contact emergency officials (call 911) in the case of severe illness requiring medical assistance.

Physical Distancing:

- Maintain social (physical) distancing within cooling centers, ideally at least six feet between individuals. Consider separation of furniture and creating spaces for individual family units (families who live together do not need to maintain physical distancing in a cooling center). In larger cooling center facilities, it may be possible to provide adequate space for social distancing among visitors.
- Smaller cooling centers can limit the number of visitors, in accordance with local guidelines that limit the size of gatherings. This **could** lower capacity, so consider setting up a greater number of smaller cooling centers. If a lack of potential cooling center sites arises, emergency alternatives such as using parked air-conditioned buses can be utilized. Communities may also collaborate with closed businesses, such as movie theaters, as alternative cooling sites.

Cleaning:

- Follow the Centers for Disease Control and Prevention (CDC) cleaning and disinfection guidelines for community facilities, and cleaning facilities if someone is sick. Because even individuals with no symptoms can still transmit the virus, and the virus can survive for several days on non-porous surfaces, it is important to continue routine cleaning and disinfection (every day if possible) with a focus on high touch surfaces, including those in common areas and bathrooms.

Communication:
Enhance communication about COVID-19 onsite. Share or post COVID-19 posters, CDC Fact Sheets, and keep your visitors informed about public health recommendations to prevent disease spread. Messaging may include:

- Posting signs at entrances and in strategic places providing instruction on hand hygiene, respiratory hygiene, cough etiquette, and cloth face coverings.
- Providing educational materials about COVID-19 for non-English speakers, as needed.
- Encouraging ill staff and volunteers to stay home (or be sent home if they develop symptoms while at the facility), to prevent transmitting the infection to others.
- Identify and address potential language, cultural, and disability barriers associated with communicating COVID-19 information to workers, volunteers, and those visiting cooling centers

Implement Infection Control measures:

- If available, provide COVID-19 prevention supplies onsite at cooling centers. Have supplies on hand for staff, volunteers, and visitors, such as soap, alcohol-based hand sanitizers that contain at least 60% alcohol, tissues, and trash baskets.
- Visitors and staff should wear a cloth face covering, or if supplies are available, be given a clean disposable facemask, even if they are not showing any symptoms.
- Cloth face coverings should not be placed on children under the age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.
- Place posters that encourage hand hygiene to help stop the spread at the entrance to the facility, at sinks in restrooms, and in other areas where they are likely to be seen. If water bottles are distributed at the cooling center, ensure visitors to not share bottles or glasses**.**

Maintain a daily contact log of all visitors, voluntaries and facility workers

- Cooling Centers will maintain daily logbooks with the contact information of every visitor, volunteer and city employee. These logs provide the ability to carry out contact tracing in the event that a COVID-exposure should occur.

How to Protect Yourself & Others
Older adults and people who have severe underlying medical conditions like heart or lung disease or diabetes seem to be at higher risk for developing serious complications from COVID-19 illness. More information on Are you at higher risk for serious illness.

- **Know how it spreads**
  - There is currently no vaccine to prevent coronavirus disease 2019 (COVID-19).
  - The best way to prevent illness is to avoid being exposed to this virus.
  - The virus is thought to spread mainly from person-to-person.
    - Between people who are in close contact with one another (within about 6 feet).
    - Through respiratory droplets produced when an infected person coughs, sneezes or talks.
    - These droplets can land in the mouths or noses of people who are nearby or possibly be inhaled into the lungs.
    - Some recent studies have suggested that COVID-19 may be spread by people who are not showing symptoms.

- **Everyone Should**
  - Wash your hands often with soap and water for at least 20 seconds especially after you have been in a public place or after blowing your nose, coughing, or sneezing.
  - If soap and water are not readily available, use a hand sanitizer that contains at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
  - Avoid touching your eyes, nose, and mouth with unwashed hands.

- **Avoid close contact**
  - Avoid close contact with people who are sick, even inside your home. If possible, maintain 6 feet between the person who is sick and other household members.
  - Put distance between yourself and other people outside of your home.
    - Remember that some people without symptoms may be able to spread virus.
  - Stay at least 6 feet (about 2 arms' length) from other people.
  - Keeping distance from others is especially important for people who are at higher risk of getting very sick.
- **Cover your mouth and nose with a cloth face cover when around others**
  - You could spread COVID-19 to others even if you do not feel sick. when they have to go out in public, for example to the grocery
  - Everyone should wear a cloth face cover when they have to go out in public, for example to the grocery store or to pick up other necessities.
    - Cloth face coverings should not be placed on young children under age 2, anyone who has trouble breathing, or is unconscious, incapacitated or otherwise unable to remove the mask without assistance.
  - The cloth face cover is meant to protect other people in case you are infected.
  - Do NOT use a facemask meant for a healthcare worker.
  - Continue to keep about 6 feet between yourself and others. The cloth face cover is not a substitute for social distancing.
- **Cover coughs and sneezes**
  - If you are around others and do not have on your cloth face covering, remember to always cover your mouth and nose with a tissue when you cough or sneeze or use the inside of your elbow and do not spit.
  - Throw used tissues in the trash.
  - Immediately wash your hands with soap and water for at least 20 seconds. If soap and water are not readily available, clean your hands with a hand sanitizer that contains at least 60% alcohol.
- **Clean and disinfect**
  - Clean AND disinfect frequently touched surfaces daily. This includes tables, doorknobs, light switches, countertops, handles, desks, phones, keyboards, toilets, faucets, and sinks.
  - If surfaces are dirty, clean them. Use detergent or soap and water prior to disinfection.
  - Then, use a household disinfectant. Most common EPA-registered household disinfectants will work.

- **Monitor Your Health**
  - Be alert for symptoms. Watch for fever, cough, shortness of breath, or other symptoms of COVID-19 especially important if you are running essential errands, going into the office or workplace and in settings where it may be difficult to keep a physical distance of 6 feet.
  - Take your temperature if symptoms develop.
    - Don't take your temperature within 30 minutes of exercising or after taking medications that could lower your temperature, like acetaminophen.
  - Follow CDC guidance if symptoms develop.

- **Training and Ordination Requirements**
  - Awareness level training, and operations level training, personnel should be trained to operate in accordance with site-specific policies & procedures.
  - Training must include practice in putting on and taking off personal protective equipment (PPE), including protective clothing and respirators, and performing decontamination procedures until personnel demonstrate competency and confidence.

CODE RED

ACTIVATION OF COOLING CENTERS

During extremely hot conditions that may pose a threat of serious harm or death, City of Newark implements extraordinary measures to preserve the lives of residents of Newark and chronically homeless individuals.
The Department of Health and Community Wellness will call a Code Red when the National Weather Service predicts the following:

- *Excessive Heat Advisory: heat index of 105°F is expected to last more than 3 hours within the next 12 to 24 hours or when the daytime heat index is expected to exceed 115°F for any length of time.*

Cooling sites will be activated when a Code Red is called. The designated cooling sites are listed in Appendix I and II.

The following activities will take place during an activation of cooling centers

1. DORCASS will ensure sufficient staff and security are in place
2. Advertisement of cooling sites in newspapers/press releases by the Office of Public Information
3. Activities at the site will be organized by the Division of Senior Services
4. Manager of Division of Senior Services will monitor the use of Cooling Centers and inform the DHCW the need for additional sites.

Additional Cooling Sites:

Newark public libraries, Newark Museum, local supermarkets, malls

Senior Citizen Centers:
Senior Citizen Centers that **are not designated** cooling sites will be asked to accommodate additional seniors during a heat wave as follows:

1. Office of Public Information will issue a news release encouraging seniors to join their local centers, which are air-conditioned.
2. A list of air-conditioned senior centers will be maintained by the Division of Senior Services and advertised with an information hotline in the press release.
3. Seniors will be encouraged to call the centers directly for services.

APPENDIX I

NEWARK SENIOR CITIZEN CENTERS/ COOLING SITES

Central Ward	Site Address	Hours	Contact Information
Bethany Baptist Church/Bethany Senior Citizen Center (for Seniors ONLY)	275 W. Market Street Newark, NJ 07103 (entrance 58 Hartford Street)	Monday - Friday 9:00am – 4:00pm	Almetta Sabb (973) 733-5739
East Ward			
Ironbound Senior Citizen Center	226 Rome Street Newark, NJ 07105	Monday - Friday 9:00am – 4:00pm Saturday 9:00am-6:00pm	Christina Couto (973) 424-4101
North Ward			
Vince Lombardi	201 Bloomfield Ave Newark, NJ 07107	Monday - Friday 9:00am – 9:00pm Saturday 9:00am-6:00pm	Debra Friday (973) 482-5439
South Ward			
Nellie Grier Senior Citizen Center	98-104 Maple Avenue Newark, NJ 07112	Monday - Friday 9:00am - 4:00pm	Rose Guinyard (973) 424-4096

APPENDIX II

RECREATIONAL CENTERS AND POOLS
SUMMER HOURS

(Open to all Newark Residents)

Central Ward	Site Address	Hours	Contact Information
John F. Kennedy Recreation Center	211 West Kinney St Newark, NJ 07103	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Arthur Johnson (973) 733-6454
Hayes Park West	179 Boyd Street Newark, NJ 07108	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Cerenthia McElroy (973) 733-3959
East Ward			
Kenneth Gibson Sharpe James Aquatic Recreation Center	226 Rome Street Newark, NJ 07105	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Tia Montique (973) 733-3707
North Ward			
Rotunda Recreational Center	75 Clifton Ave Newark, NJ	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Arthur Hardy (973) 733-3677
South Ward			
St. Peter's Recreation Center/Bo Porter Sports Complex	378 Lyons Avenue Newark, NJ 07112	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Yass Asberry (973) 733-8006
West Ward			
Boylan Recreation Center	916 South Orange Avenue Newark, NJ 07106	Monday - Friday 9:00am - 7:00pm Saturday 9:00am-5:00pm	Quatisha Brownson (973) 733-8947

Note: Manager of ALL Recreational Centers, Obalaji Jones, can also be contacted at 973-951-2016 when CODE RED is activated.

Appendix III

Homeless Site			
Holiday Inn Newark Intl Airport - North	**160 Frontage Rd, Newark, NJ 07114**	**Monday - Friday**	**Arthur Johnson** **(973) 589-1000**

APPENDIX IV — Signs and Symptoms of Heat-Related Illnesses

Heat-Related Illnesses Symptoms	What You Should Do
Heat Stroke – Most Serious Illness • High body temperature (above 103°F with oral thermometer) • Red, hot, moist or dry skin with no sweating • Strong, rapid pulse • Throbbing headache • Dizziness • Nausea • Confusion • Unconsciousness • Muscle cramps	Call 911 and cool victim while awaiting medical assistance – this is a medical emergency. DO NOT GIVE THE PERSON FLUIDS. If assistance is delayed, contact your local emergency department and follow their instructions. While awaiting medical assistance, get victim to a shaded area and cool him/her rapidly using whatever methods you can. For example, cool victim in a pool or shower of cool water; spray the person with cool water from a garden hose or sponge them with cool water. If the humidity is low, wrap the person in a cool, wet sheet and fan them vigorously. Monitor the person's temperature until it drops below 101-102°F. Sometimes the victim's muscles may twitch rapidly and they may vomit. Please ensure they do not harm themselves or choke.
Heat Exhaustion – the body's response to excessive fluid and salt loss from sweating • Heavy sweating • Muscle cramps • Tiredness and weakness • Headache or dizziness • Cold, pale and clammy skin • Fast, weak pulse • Nausea or vomiting • Fainting	Have victim move to an air-conditioned environment and change into lightweight clothing. Help the victim cool off by having them rest, drink cool, non-alcoholic beverages and take a cool shower, bath or sponge bath. If victim has vomited and continues, seek medical attention immediately.
Heat Cramps – may signal heat exhaustion and are associated with strenuous activity • Painful spasms or cramps in the legs, arms and abdomen	Stop physical activity and cool down in a quiet place. Also, drink clear juice or a sports drink. Do not return to physical activity for a few hours after cramping, because resuming activity can lead to heat exhaustion or stroke. Seek medical attention if cramps do not subside after one hour.

Sunburn • Red, painful and abnormally warm skin after sun exposure • Severe sunburn can cause fluid-filled blisters, fever, and severe pain	Avoid repeated sun exposure by staying in the shade, especially the hours between 10am and 4pm. Also, wear a wide-brimmed hat and cover exposure areas with lightweight clothing. Apply cold compresses or soak affected areas in cool water. Use lotions (e.g., aloe vera). Do not use petroleum jelly, ointments or salves. Do not break blisters. Seek medical attention if an infant under the age of 1 has any degree of sunburn, or if severe sunburn affects you or another person.

APPENDIX V

Heat and Outdoor Workers

People who work outdoors are more likely to become dehydrated and are more likely to develop a heat-related illness.

STOP all activity and get to a cool environment if you feel faint or weak!

- Drink at least four cups of water every hour while working. Don't wait until you are thirsty to drink.
- Eat meals and snack regularly to replace salt and electrolytes lost through sweat.
- Avoid alcohol or liquids containing large amounts of sugar.
- Wear and reapply sunscreen as indicated on the package.
- Ask if heavy duty tasks can be scheduled for earlier or later in the day to avoid midday heat.
- Wear a brimmed hat and loose, lightweight, light-colored clothing.
- Spend time in air-conditioned buildings during breaks and after work.
- Encourage co-workers to take breaks to cool off and drink water.
- Seek medical care immediately if you or a co-worker has symptoms of heat-related illness.

For more information, please visit: http://www.cdc.gov/niosh/topics/heatstress/.

This information is intended for educational purposes only and is not intended to replace consultation with a healthcare professional. Adapted from the Centers for Disease Control and Prevention

APPENDIX VI

Heat and People with Chronic Medical Conditions

People with a chronic medical condition are less likely to sense and respond to changes in temperature. Also, they may be taking medications that can worsen the impact of extreme heat. People in this category need the following information:

Closely Monitor People Who Depend on You for Their Care

- Are they drinking enough water?
- Do they have access to air conditioning?
- Do they know how to keep cool?

People with chronic medical conditions should:

- Drink more water than usual and don't wait until you're thirsty to drink.
- Check on a friend or neighbor, and have someone do the same for you.
- Check the local news for health and safety updates regularly.
- Don't use the stove or oven to cook-it will make you and your house hotter.
- Wear loose, lightweight, light-colored clothing.
- Take cool showers or baths to cool down.
- Seek medical care immediately if you or someone you know experiences symptoms of heat-related illness.

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APPENDIX VII

"BEAT THE HEAT" WEATHER TIPS

Take the necessary precautions to prevent serious health effects such as heat exhaustion or heat stroke

Keep your body temperature cool to avoid heat-related illness.

- Stay in air-conditioned buildings
- Do not rely on a fan as your primary cooling device. Fans circulate the warm air and do not effectively assist in cooling your home
- Limit outdoor activity, especially midday when it is hottest
- Avoid direct sunlight and use sun block on exposed skin
- Wear loose, lightweight, light-colored clothing
- Take cool showers or baths to lower your body temperature
- Check on at-risk friends, family and neighbors at least twice a day

Because your body loses fluids through sweat, you can become dehydrated during times of extreme heat

- Drink more than usual and don't wait until you're thirsty to drink
- When working or exercising outside, drink between two to four cups of water every hour
- Avoid alcohol or liquids containing high amounts of sugar.
- Make sure your family, friends and neighbors are drinking enough water.

Stay updated on local weather forecasts so you can plan activities safely when it's hot outside.

- Stay informed by checking your local news for extreme heat alerts, warnings and safety tips.
- Keep your friends, family and neighbors aware of weather and heat safety information.
- Learn the symptoms of heat illnesses.

APPENDIX VIII

HOT WEATHER CAN BE DANGEROUS TO YOUR HEALTH AND LIFE

WHAT IS A HEAT WAVE?

- Generally, a heat wave is three consecutive days of temperatures of 90°F or more with high humidity.
- High temperature and high humidity determine the heat index.

WHAT IS A HEAT INDEX?

- Relative humidity combines with temperature to make up the heat index.
- A heat index in summer is similar to the wind chill factor in winter. For example, the temperature on a winter's day may be 20°F but feel like 0°F due to the wind. The body reacts to the weather as if it were truly 0 °F. Similarly, in the summer, HUMIDITY, not WIND, makes it feel hotter.

IS A HEAT WAVE DANGEROUS?

YES. Heat waves are the second leading cause of death among weather-related events.

WHO IS AT RISK OF HEAT STROKE OR OTHER HEAT-RELATED ILLNESS?

- Elderly adults; infants and young children; overweight and obese individuals; people with chronic medical or mental conditions, and chronic users of alcohol.
- People who must restrict their water intake or are on certain medications, particularly tranquilizers, diuretics, antiparkinsonian drugs and antihistamines.
- People living in highly-populated areas, such as cities, because the concrete, asphalt and tar roofing retain heat. In some urban areas, fear of crime causes people to keep windows shut. Many inner city dwellers cannot afford air conditioners or fans, or do not have control over heating and cooling in their residences.

WHY ARE HEAT WAVES DANGEROUS FOR OLDER PEOPLE?

- As people age their body's ability to regulate its internal temperature is weakened. Older adults often lack the bodily fat that acts as insulation, and have lessened sensations of heat and cold. Elderly individuals can have a diminished sense of thirst, and therefore can easily become dehydrated. The ability to sweat lessens with age, and sweating is the body's primary way of carrying heat out of the body. Be sure to check on elderly family, friends and neighbors during excessive heat to ensure they are staying cool and hydrated.

WHAT CAN BE DONE TO BEAT THE HEAT?

- Use an air-conditioner. A fan is helpful too, but can actually make the room warmer by circulating hot air in temperatures greater than 95 °F.
- A cool bath or shower will help cool your body faster than air-conditioning or as a substitute if you do not have air conditioning.
- Try to keep cool by staying in cooler rooms. If you do not have air conditioning, try going to an air-conditioned public place such as a mall, shopping center, senior center, or library. A few hours a day in air conditioning is important to avoiding heat-related illnesses.
- Wear lightweight, light colored, loose fitting clothing. Always wear a hat outdoors on hot, sunny days. Use sun block on exposed skin, because sunburn reduces the body's ability to regulate its internal temperature.
- If you are taking medication, check with your pharmacist or your doctor on any side effects due to the heat. The safest advice is to stay out of the sun when you are taking medications.
- Drink often; water is best. Drink reasonable amounts **BEFORE** you are thirsty. Limit coffee, tea, sugary drinks and alcohol, because these drinks make you dehydrated.
    - If you have a health condition that limits the amount of water you can drink (e.g., congestive heart failure) or you are taking water pills, speak with your doctor about increasing fluid intake during hot days.
- Avoid hot or heavy meals, because consuming them can raise your body temperature. Do not increase your salt intake or take salt tablets without your doctor's permission.
- Avoid heavy physical exercise and exertion during peak heat hours.
- DO NOT leave children, elderly adults or pets in a parked car.
- Ensure your pets have access to fresh water and be sure to put their water dishes in a shaded area.

WHEN SHOULD YOU CALL A DOCTOR?

Symptoms of heat-related illness can develop quickly and become life-threatening. Seek medical assistance as soon as possible when dealing with the following signs and symptoms.

- **Heat Cramps** are indicated by heavy sweating and painful spasms in the muscles of the legs and abdomen.
- **Heat Exhaustion** is indicated by heavy sweating, weakness, and skin that is pale, cold and clammy. A person with heat exhaustion can have a thready pulse and be fainting or vomiting.
- **Heatstroke** is indicated by high body temperature (106°F or higher), hot, dry skin, rapid and strong pulse and possible unconsciousness.
- **Heat-Related Illness** may also be indicated by throbbing headache, diarrhea, chest pains, not sweating, irritability, breathing problems or staggering.

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