Appendix E (Heat Advisory) to the Summit County Basic Plan

HEAT ADVISORY

I. PURPOSE

The purpose of this appendix is to provide a tool and method to identify excessive heat episodes that could impact the health and well-being of people in Summit County.

II. SITUATION

Extreme heat and humidity may be one of the most underrated and least understood of the deadly weather phenomena. In contrast to the very visible, destructive, and violent nature associated with hurricanes, tornadoes, floods, and earthquakes, a heat wave is a “silent disaster.” Unlike violent weather events that cause extensive physical damage and leave victims who are easily discernible, the hazards of a heat wave are dramatically less apparent, especially at the onset.

Extreme and chronic heat coupled with high humidity pose serious hazards to human health. Health outcomes following exposure to severe heat range from cramps and exhaustion to heat stroke and death. Individuals most at-risk for heat-related illnesses include: the elderly and very young children, individuals with respiratory and/or cardiac difficulties, individuals taking certain medications, persons living alone, or living in urban areas. The health of these most at-risk individuals is often impacted by environmental conditions and heat-relieving behaviors.

Mobilizing an organized, effective response using knowledge of the critical conditions, behaviors, and populations remains the most pro-active approach to adapting to chronic heat stress and to reducing heat-related illness and death. A comprehensive heat emergency plan combines meteorological information, epidemiological findings, and community outreach into a collaborative and thorough response comprised of many components.

III. ASSUMPTIONS

1. The agency responsible for monitoring the weather for excessive heat episodes will be under the Environmental Health Division of Summit County Public Health.
2. Excessive heat conditions can be detrimental to the health and well-being of people.
3. Providing a mechanism to monitor weather conditions can provide an early warning system to the public for excessive heat conditions.

IV. CONCEPT OF OPERATIONS

Beginning April 1st through October 31st, Monday through Friday (not to include recognized holidays) the Air Quality Staff of Summit County Public Health (SCPH) will utilize the National Weather Service (NWS) to monitor advisories issued related to excessive heat. The NWS will initiate alert procedures when the Heat Index is expected to exceed 105°F to 110°F, depending on local climate, for at least two consecutive days. The 48 hour timeframe for issued advisories will help to ensure weekend days and holidays are monitored as well. The
SCPH Air Quality Monitoring Staff and SCPH Emergency Preparedness Staff will make the necessary arrangements to continue monitoring activities during timeframes lasting longer than 48 hours, i.e., a three day weekend. When the SCPH Air Quality Staff observes that the NWS has issued an excessive heat outlook, excessive heat watch, or excessive heat warning or advisory for Summit County, the SCPH Heat Plan will be activated and the Summit County Emergency Management Agency notified.

**Excessive Heat Outlook:** is issued when the potential exists for an excessive heat event in the next 3-7 days. An “Outlook” provides information to those who need considerable lead time to prepare for the event, such as public utilities, emergency management and public health officials.

**Excessive Heat Watch:** is issued when the conditions are favorable for an excessive heat event in the next 12 to 48 hours. A “Watch” is used when the risk of a heat wave has increased, but its occurrence and timing is still uncertain. A “Watch” provides enough lead time so those who need to prepare can do so, such as cities that have excessive heat mitigation plans.

**Excessive Heat Warning or Advisory:** is issued when an excessive heat event is expected in the next 36 hours. A warning or advisory is issued when an excessive heat event is occurring, is imminent, or has a very high probability of occurring. The warning is used for conditions posing a threat to life or property. An advisory is for less serious conditions that cause significant discomfort, or inconvenience and, if caution is not taken, could lead to a threat to life or property.

**V. RESPONSIBILITIES**

Public Health To monitor weather conditions for excessive heat episodes. To alert appropriate staff to send out information pertaining to weather conditions through the Public Information Staff.

Emergency Management Agency To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

Hospitals To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

Fire/EMS To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

Law Enforcement To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

MRC/CC To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

Community Bases Organizations To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.
needed.

**Faith Based Organizations** To perform duties related to normal function. To relay information received via Public Information Officer regarding excessive heat episodes as needed.

**Public Information Officer** To disseminate information regarding excessive heat episodes as directed by the Health Commissioner or designee.

**VI. PROCESS OF ACTIVATION**

**Excessive Heat Outlook, Watch, Advisory/Warning**

During an excessive heat outlook, watch, advisory/warning, the Heat Advisory Plan will be placed in the alert mode and agencies notified to prepare for potential excessive heat conditions.

When excessive heat conditions exist, the SCPH Air Quality Staff will notify the Health Commissioner or designee, SCPH Emergency Preparedness Supervisor, SCPH Emergency Preparedness Coordinator, and SCPH Public Information Officer.

The SCPH Public Information Officer may notify the following that an **excessive heat outlook, watch, advisory/warning has** been declared by the NWS:

- Media
- Local municipal and township governments
- Akron Regional Hospital Association
- EMS and Law Enforcement
- Summit County Emergency Management Agency
- Summit County Medical Examiner’s Office
- American Red Cross
- Area Agency on Aging
- Summit County ADM Board
- Summit County Hospitals

**Termination of an Excessive Heat Outlook, Watch, Advisory/Warning**

Any alert issued for an excessive heat episode will remain in effect until cancelled by the NWS.

The Air Quality Staff will notify the Health Commissioner or designee, SCPH Emergency Preparedness Supervisor, SCPH Emergency Preparedness Coordinator, and SCPH Public Information Officer when an alert issued by the NWS has been cancelled or downgraded.

A. The Public Information Officer may notify the following of the heat advisory status or cancellation by the NWS:

- Media
- Local municipal and township governments
- Akron Regional Hospital Association
- EMS and Law Enforcement
- Summit County Emergency Management Agency
- Summit County Medical Examiner’s Office
- American Red Cross
- Area Agency on Aging
- Summit County ADM Board
- Summit County Hospitals
. APPENDIX

Possible intervention activities to be considered by public service departments and governmental municipalities when an excessive heat occurrence is imminent:

- Media announcements
- Promotion of the “buddy system”
- Increase awareness of high risk patients through mental health agencies
- Increase awareness of high risk clients through aging agencies.
- Home visits
- Client checks by Mobile Meals personnel
- Nursing and residential/group home notifications
- Halt of utility service suspensions
- Increase emergency medical service staffing
- Outreach to the homeless
- Air conditioned shelter facility capability
- Information distribution
  ➢ Neighborhood Watch Associations
  ➢ Churches and Clergy
  ➢ Pharmaceutical Associations (to customers receiving psychotropic medications)

Recommendations Adapted from the National Center for Environmental Health, United States Centers for Disease Control¹

Drink Plenty of Fluids

During hot weather you will need to increase your fluid intake, regardless of your activity level. Don't wait until you're thirsty to drink. During heavy exercise in a hot environment, drink two to four glasses (16-32 ounces) of cool fluids each hour.

Warning: If your doctor generally limits the amount of fluid you drink or has you on water pills, ask how much you should drink while the weather is hot.

Don't drink liquids that contain alcohol, or large amounts of sugar—these actually cause you to lose more body fluid. Also avoid very cold drinks, because they can cause stomach cramps.

Replace Salt and Minerals

Heavy sweating removes salt and minerals from the body. These are necessary for your body and must be replaced. If you must exercise, drink two to four glasses of cool, non-alcoholic fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat. However, if you are on a low-salt diet, talk with your doctor before drinking a sports beverage or taking salt tablets.
Wear Appropriate Clothing and Sunscreen

Wear as little clothing as possible when you are at home. Choose lightweight, light-colored, loose-fitting clothing. Sunburn affects your body's ability to cool itself and causes a loss of body fluids. It also causes pain and damages the skin. If you must go outdoors, protect yourself from the sun by wearing a wide-brimmed hat (also keeps you cooler) along with sunglasses, and by putting on sunscreen of SPF 15 or higher (the most effective products say "broad spectrum" or "UVA/UVB protection" on their labels) 30 minutes prior to going out. Continue to reapply it according to the package directions.

Schedule Outdoor Activities Carefully

If you must be outdoors, try to limit your outdoor activity to morning and evening hours. Try to rest often in shady areas so that your body's thermostat will have a chance to recover.

Pace Yourself

If you are not accustomed to working or exercising in a hot environment, start slowly and pick up the pace gradually. If exertion in the heat makes your heart pound and leaves you gasping for breath, STOP all activity. Get into a cool area or at least into the shade, and rest, especially if you become lightheaded, confused, weak, or faint.

Stay Cool Indoors

Stay indoors and, if at all possible, stay in an air-conditioned place. If your home does not have air conditioning, go to the shopping mall or public library—even a few hours spent in air conditioning can help your body stay cooler when you go back into the heat. Call your local health department to see if there are any heat-relief shelters in your area. Electric fans may provide comfort, but when the temperature is in the high 90s, fans will not prevent heat-related illness. Taking a cool shower or bath or moving to an air-conditioned place is a much better way to cool off. Use your stove and oven less to maintain a cooler temperature in your home.

Use a Buddy System

When working in the heat, monitor the condition of your co-workers and have someone do the same for you. Heat-induced illness can cause a person to become confused or lose consciousness. If you are 65 years of age or older, have a friend or relative call to check on you twice a day during a heat wave. If you know someone in this age group, check on them at least twice a day.
Monitor Those at High Risk

Although anyone at any time can suffer from heat-related illness, some people are at greater risk than others:

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

- People 65 years of age or older may not compensate for heat stress efficiently and are less likely to sense and respond to change in temperature.

- People who are overweight may be prone to heat sickness because of their tendency to retain more body heat.

- People who overexert during work or exercise may become dehydrated and susceptible to heat sickness.

- People who are physically ill, especially with heart disease or high blood pressure, who take certain medications, such as for depression, insomnia, or poor circulation, may be affected by extreme heat.

Visit adults at risk at least twice a day and closely watch them for signs of heat exhaustion or heat stroke. Infants and young children need much more frequent watching.

Adjust to the Environment

Be aware that any sudden change in temperature, such as an early summer heat wave, will be stressful to your body. You will have a greater tolerance for heat if you limit your physical activity until you become accustomed to the heat. If you travel to a hotter climate, allow several days to become acclimated before attempting any vigorous exercise, and work up to it gradually.

Do Not Leave Children in Cars

Even in cool temperatures, cars can heat up to dangerous temperatures very quickly. Even with the windows cracked open, interior temperatures can rise almost 20 degrees Fahrenheit within the first 10 minutes. Anyone left inside is at risk for serious heat-related illnesses or even death. Children who are left unattended in parked cars are at greatest risk for heat stroke, and possibly death. When traveling with children, remember to do the following:

- Never leave infants, children or pets in a parked car, even if the windows are cracked open.
To remind yourself that a child is in the car, keep a stuffed animal in the car seat. When the child is buckled in, place the stuffed animal in the front with the driver.

When leaving your car, check to be sure everyone is out of the car. Do not overlook any children who have fallen asleep in the car.

Use Common Sense
Remember to keep cool and use common sense:

• Avoid hot foods and heavy meals—they add heat to your body.

• Drink plenty of fluids and replace salts and minerals in your body. Do not take salt tablets unless under medical supervision.

• Dress infants and children in cool, loose clothing and shade their heads and faces with hats or an umbrella.

• Limit sun exposure during mid-day hours and in places of potential severe exposure such as beaches.

• Do not leave infants, children, or pets in a parked car.

• Provide plenty of fresh water for your pets, and leave the water in a shady area.

Hot Weather Health Emergencies
Even short periods of high temperatures can cause serious health problems. During hot weather health emergencies, keep informed by listening to local weather and news channels or contact local health departments for health and safety updates. Doing too much on a hot day, spending too much time in the sun or staying too long in an overheated place can cause heat-related illnesses. Know the symptoms of heat disorders and overexposure to the sun, and be ready to give first aid treatment.

\(^1\) National Center for Environmental Health (NCEH)/Agency for Toxic Substances and Disease Registry (ATSDR), Office of Noncommunicable Diseases, Injury and Environmental Health, National Center for Chronic Disease Prevention and Health Promotion (NCCDPHP), National Center on Birth Defects and Developmental Disabilities (NCBDD), July 31, 2009.