MAINE PUBLIC HEALTH ALERT NETWORK SYSTEM

Maine Department of Health and Human Services
Maine Center for Disease Control and Prevention (Maine CDC)
(Formerly Bureau of Health)
11 State House Station
Augusta, Maine 04333-0011
Phone 1-800-821-5821 / Fax 207-287-7443

*****ADVISORY – Important Information*****

2010PHADV014

TO: All HAN Recipients

FROM: Dora Anne Mills, M.D., M.P.H., Public Health Director
Stephen Sears, M.D., M.P.H., State Epidemiologist

SUBJECT: **Heat Advisory**

DATE: Thursday, July 1, 2010

TIME: 2:00pm

PAGES: 4

PRIORITY: **Low**

Maine CDC Advises Caution in Heat
Keep Cool, Drink Adequate Fluids, and Rest Frequently
July 1, 2010

With Maine heading into summer and a possible hot spell forecast for this upcoming weekend into next week, this is a reminder that it is important for all of us to prevent heat-related problems and to recognize the signs of heat illness early. Heat-related illnesses and deaths are preventable, yet over the past 30 years more people have died in this country from heat than from hurricanes, lightning, tornadoes, floods, and earthquakes combined.

All Mainers should take some simple measures to prevent heat-related illness. However, those who are most susceptible include infants and young children, people 65 years old and older, people with a mental illness, and those who are ill with chronic illnesses such as heart and lung diseases. High temperatures often contribute to poor air quality, which disproportionately also affects people with lung or heart conditions. Check for any air quality advisories on http://www.maine.gov/dep/air/.

It is also important for us to check on our neighbors, family and friends, especially those who are at high risk for heat-related illness.

Heat index is a measurement that combines air temperature and humidity in order to determine the human-perceived equivalent temperature. The three-day forecast for heat index can be found at: http://www.hpc.ncep.noaa.gov/heat_index_MAX/hiprob95_day3.html.

Some measures communities and officials may consider if the heat index is 95 or above:

- Extend the hours of swimming areas such as pools and beaches.
- Make sure public events have as much shade, beverages, and other cooling measures available as possible.
- Work with organizations such as emergency management agencies, other government officials, Area Agencies on Aging, Healthy Maine Partnerships, health organizations, and others to identify and promote cooling centers. In other states cooling centers are often located in local senior centers, adult day service sites, health centers, libraries, churches, or businesses with air conditioning that do not mind providing chairs for others to come and sit to cool down.
- Check on people living alone and/or who are more vulnerable to heat's effects.
- Use communication channels to provide advice to individuals on addressing the heat.

Some measures all should consider:

Keep Cool

- Use air conditioning to cool down or go to an air-conditioned building such as a store, a library, or a cooling center.
- If you don't have air conditioning in your home, open windows and shades on the shady side and close them on the sunny side to try to cool it down.
- Take a cool shower or bath.
- Wear loose, lightweight, light-colored clothing to help keep cool.
- Stay out of the sun as much as possible.
- Wear sunscreen and a ventilated hat (e.g., straw or mesh) when in the sun, even if it is cloudy.
- Never leave children, pets or those with special needs in a parked car, even briefly. Temperatures in the car can become dangerous within a few minutes. Even with the windows rolled down two

inches, it only takes 10 minutes for the inside of a vehicle to reach deadly temperatures on a hot summer day.

Drink Fluids

- Drink more fluids regardless of your activity level.
- Avoid alcohol, caffeine and sugary drinks, since these actually cause you to lose more body fluid.
- If you are on fluid restrictions or on diuretics, ask your doctor how much fluids you should drink.

Rest Frequently

- Take regular breaks from physical activity – at least every hour.
- Avoid strenuous activity during the hottest part of the day (between 11 a.m. and 4 p.m.).

If you must be out in the heat

- Try to limit your outdoor activity to morning and evening hours.
- Cut down on exercise. If you must exercise, drink two to four glasses of cool, nonalcoholic fluids each hour. A sports beverage can replace the salt and minerals you lose in sweat. If you are on a low-salt diet, talk with your doctor before drinking a sports beverage.
- Rest often in shady areas – at least every hour.
- Protect yourself from the sun by wearing a wide-brimmed hat (also keeps you cooler) and 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).

With many summer camps in session, it is important for coaches and teachers to make sure children and youth are given frequent rest breaks and are drinking plenty of fluids, including stopping play or other activity at any time they desire for rest and fluids. Children are more sensitive to heat and dehydration than adults, and dehydration can occur quickly in them.

It is also important for us to recognize the early signs of heat-related illnesses and what to do about them. During normal weather, the body's internal thermostat produces perspiration that evaporates and cools the body. However, during periods of extreme heat and high humidity, evaporation is slowed and the body must work extra hard to maintain a normal temperature. If the body cannot cool itself, serious illness can result. Those who are susceptible, such as infants, children, older adults, those with mental illness or other chronic illnesses, are less able to sweat or regulate their internal temperatures than others, and are much more likely to become overheated. They need more frequent rest and cool down breaks than others do.

Serious heat-related illnesses include:

Heat stroke occurs when the body is unable to regulate its temperature. Body temperatures can reach dangerous levels. Warning signs include hot, dry, red skin (no sweating), rapid pulse, high body temperature ($\geq$ 105 F), headache, loss of alertness, confusion, rapid and shallow breathing, and unconsciousness or coma. Emergency 911 should be called immediately. While waiting for assistance, cool the person rapidly with such methods as moving them to a shady or cooler area, using cool water, ice, fans, and loosening their clothing.

Heat exhaustion typically occurs when people over-exert themselves in high heat and humidity. Symptoms include heavy sweating, fainting, vomiting, cold, pale, and clammy skin, dizziness, headache,

nausea and weakness. Move the person to a cool place, have them drink fluids and rest, loosen their clothes, and cool them off with water or wet cloths. Heat exhaustion can quickly lead to heat stroke. So, if symptoms worsen or do not improve, get medical help.

Heat cramps are muscle cramps in the abdominal area or extremities (e.g. arms and legs) that often occur in people who sweat a lot during strenuous activity and as a result their muscles lose salt and moisture. The cramps are often accompanied by heavy sweating and mild nausea. Move the person to a cool place to rest, and apply firm pressure to the cramping muscle. The person can also gently stretch the cramped muscle and hold it for 20 seconds, and then gently massage it. Have the person drink some cool beverages such as water or a sports drink. The person should seek medical attention if there is no improvement or if the person has underlying medical problems.

Sunburn damages the skin and causes the skin to become red, painful, and warm after sun exposure. Medical attention should be sought if the sunburn affects an infant or if there is fever, fluid-filled blisters, or severe pain. Otherwise, the person should avoid sun exposure, apply cold compresses or immerse the burned skin in cool water, apply moisturizing lotion to the burn.

Heat rash is a skin irritation caused by excessive sweating during hot humid weather and is most common in young children. The rash looks like a red cluster of pimples or small blisters and is most common in the neck and upper chest and in creases such as in the elbow and groin. Move the person to a cooler place and keep the affected area dry. The person can also use talcum powder to increase comfort.

FMI:
Maine DEP Air Quality
http://www.maine.gov/dep/air/
Heat Index Forecast
http://www.hpc.ncep.noaa.gov/heat_index_MAX/hiprob95_day3.html
Heat Index Calculator
http://www.crh.noaa.gov/jkl/?n=heat_index_calculator
US CDC Extreme Heat Prevention Guide
http://emergency.cdc.gov/disasters/extremeheat/heat_guide.asp
US CDC Heat in the Elderly
http://emergency.cdc.gov/disasters/extremeheat/elderlyheat.asp
National Weather Service Heat Wave Guide
http://www.nws.noaa.gov/om/brochures/heat_wave.shtml
National Alliance on Mental Illness Heat Effects Communication
http://www.nami.org/Template.cfm?Section=20065&Template=/ContentManagement/ContentDisplay.cfm&ContentID=35581