



## Health & Safety Alert #2-08-07

# Heat Related Illness & Summer Safety

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Plan ahead and take the necessary precautions to help prevent heat related illnesses and summer accidents from occurring.

### Heat related illnesses

Can be life-threatening, and are caused by overexposure to a hot environment, such as:

- A hot, humid sunny day (>90 degrees F).
- A hot building with inadequate ventilation or cooling.

### Prevention of heat related illnesses

- Maintain hydration with cool water and sports drinks; provide extra fluids at meal times.
  - At least 8 glasses of water a day, more in hot weather.
  - Avoid caffeinated beverages and alcohol (both increase fluid loss).
- Maintain ventilation of environment, including buildings and apartments, and keep it as cool as possible.
  - When outdoors, seek open, shaded areas, avoid crowds.
  - Use fans and air conditioning indoors.
  - Open windows at night when air is cooler outside to allow cross ventilation if no air conditioning.
  - During heat of the day, keep blinds drawn and windows shut, and move to cooler rooms.
  - If no air conditioning at home, go to a shopping mall or public library.
- Take frequent breaks when outside in hot sun or from physical activity
  - Know the limits of activity tolerance and avoid overexertion.
  - Schedule activities for cool environments or during the cooler part of the day.
- Wear light-colored loose-fitting clothing (dark colors absorb heat, loose clothing helps the body to cool); wear a hat and sunglasses.
- Eat regular light meals to ensure you have adequate salt and fluids.
- Take a cool shower or bath.
- Be aware of individuals with risk factors for heat related illness; observe them at regular intervals.

## **Risk factors for heat related illnesses**

- Elderly, chronically ill or incapacitating illness, very young.
  - Chronic medical conditions include cardiac (heart) disease, hypertension (high blood pressure), obesity, diabetes, kidney and lung disease.
- Poor physical conditioning.
- High environmental temperature and humidity.
- Poor ventilation or cooling in buildings.
- Poor fluid intake.
- Alcohol use (increases fluid loss).
- Medications that inhibit perspiration or increase fluid loss, including:
  - Those used to treat movement disorders (antiparkinsonian drugs, including Cogentin).
  - Those used to treat allergies (antihistamines such as Benadryl [diphenhydramine]).
  - Diuretics (water pills) such as Lasix (furosimide), bumetanide, hydrochlorothiazide.
  - Those used to treat psychiatric conditions including, but not limited to, the following common psychotropic medications (generic name):
    - Abilify (aripaprazaole)
    - Asendin (amoxapine)
    - Artane (trihexyphenidyl)
    - Aventil, Pamelor (nortriptyline)
    - Clozaril (clozapine)
    - Cogentin (benztropine)
    - Compazine (prochlorperazine)
    - Desyrel (trazodone)
    - Elavil, Limbitrol, Triavil (amitriptyline)
    - Escalith, Lithobid, Lithonate (lithium)
    - Geodon (ziprasidone)
    - Haldol (haloperidol)
    - Loxitane (loxapine)
    - Ludiomil (maprotiline)
    - Mellaril (thioridazine)
    - Moban (molindone)
    - Navane (thiothixene)
    - Norpramin (desipramine)
    - Phenergan (promethazine)
    - Prolixin (fluphenazine)
    - Risperdal (risperidone)
    - Serentil (mesoridazine)
    - Seroquel (quetiapine)
    - Sinequan (doxepin)
    - Stelazine (trifluoperazine)
    - Thorazine (chlorpromazine)
    - Tofranil (imipramine)
    - Trilafon (perphenazine)
    - Wellbutrin (bupropion)
    - Zyprexa (olanzapine)

## Types of heat related illnesses

### Heat cramps

- Caused by not taking enough oral fluids to replace fluids and body salts lost from sweating during physical activity.
- Not life-threatening, can progress to heat exhaustion.
  - ❖ Symptoms:
    - *Muscle cramps (usually in legs),*
    - *Sweating*
  - ❖ Treat with non-caffeinated fluids (water or sport drinks are best), rest, move to cool environment.

### Heat exhaustion

- Caused by not enough fluids during physical activity, high environmental temperature, body temperature rises to over 102 degrees F.
- Serious illness, can be life-threatening.

#### ☀ Warning Signs and Symptoms

- *Nausea*
- *Extreme weakness*
- *Vomiting, lightheadedness*
- *Fainting*
- *Skin cool and clammy (heavy sweating) and pale or red*
- *Rapid heart beat*
- *Low blood pressure*

#### ☀ Treatment

- Move to a cooler environment, rest.
- Offer non-caffeinated, non-alcohol fluids (water or sports drinks are best).
- Loosen or remove clothing.
- Cool body with wet towels and fanning, or take a cool shower or bath.
- Lie down with feet elevated.
- Seek medical attention.

### Heat stroke

- Caused by failure of the heat regulating systems of the body when environment is hot and humidity high; individual may be dehydrated; may or may not be related to physical activity.
- Life-threatening.

#### ☀ Warning Signs and Symptoms:

- *Red-hot flushed dry skin (usually lack of sweating, although young persons may show wet skin).*
- *High body temperature (usually >105-106 degrees F).*
- *Headache.*
- *Rapid pulse.*
- *Disorientation/confusion or strange behavior.*
- *Hallucinations.*
- *Seizures.*
- *Unconsciousness.*

☀ Treatment:

- Seek emergency medical treatment from emergency medical services or the closest emergency department immediately.
- Remove individuals to cool environment.
- Position individual lying down with feet elevated, and cool body with wet towels, cold packs, and fanning.
- Offer cool water to drink

## Summer Safety

Summer is an enjoyable time for picnics and outdoor activities. Listed below are areas to be mindful of when planning or participating in activities.

### **Sunburn/Insect Bites**

- Some medications increase a person's sensitivity to the sun. Check this out with your nursing staff.
- Be sure sunscreen is applied upon going out and during the outing.
- Use lotion or repellent to keep away mosquitoes. Be mindful of bees and possible allergies to them.

### **Bicycle Safety**

- Review safety procedures with the individual.
- Know where they are going to be riding.
- Wear a helmet and kneepads.

### **Choking**

- Be mindful of individuals eating while walking/running around or eating food rapidly so they can rush to enjoy an activity. Be sure they have finished eating before getting involved in other activities

### **Barefoot/Sandals**

- Be mindful of potential injuries when going barefoot or wearing sandals

**Outdoor grills** can result in burns if proper safety requirements and supervision are not provided and followed.

- Be sure lid is open before lighting a gas grill.
- Don't squeeze extra fire starter on coals when they are already burning.
- Check grills for proper working order.
- Supervise individuals closely when grilling.

## **Summer Camps**

Camps provide fun and enjoyment for individuals, but also can result in serious harm or death if necessary precautions are not taken. Be very mindful of the high risk for drowning and individuals wandering off unattended when at camps. It is also time for sunburn, bug bites, poison ivy, heat stroke, and related illnesses.

Proper planning is important when individuals are attending camp. The following steps may assist with ensuring an enjoyable experience:

- Be familiar with the camp and possible dangers for the individual(s) attending.
- Know who will be supervising the individual and what experience they have. Be sure you are comfortable with what will be occurring.
- Communicate face-to-face with the camp director on any dietary requirement, supervision requirements, medical needs, or behavior issues. Provide a written copy of the information needed (e.g., ISP, Behavior Plan, etc.).
- Be sure lotion for sunburn and bug bites is provided or available. Be aware of any medications that increase a person's sensitivity to the sun and communicate this to the camp staff.
- If there is a pond, lake or pool discuss the individual's abilities in the water with the camp director and any special needs that exist. Provide a written copy of those needs.
- Be aware of the camp activities and how they match with the individual's physical or health needs.

For questions or comments regarding the above Alert, please contact the MUI/Registry Unit at (614) 995-3810.

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