The summer months are upon us once again. Although the warm weather is welcomed by most, it can be deadly if treatment for the adverse effects of heat is not understood or utilized. The following article explains how heat can adversely affect the body and provides first-aid tips for three types of heat emergencies, including heat cramps, heat exhaustion and heatstroke.

The body has a built-in mechanism to regulate a normal internal temperature. This process begins when heat is released through the blood vessels, resulting in sweat. As external heat and physical activity increase, so does the sweating process. When fluid intake is adequate, the sweating process cools the body successfully. However, excessive sweating combined with a lack of adequate fluid intake can result in muscle cramps, heat rash, heat stress or heat exhaustion.

The symptoms of these dangerous conditions include dry, pale skin; irritability; dizziness; weakness; headache; nausea; rapid pulse; convulsions; or lack of consciousness. If not treated quickly, these conditions could result in death.
Prevention Strategies

• Drink plenty of fluids (six ounces every 15 to 20 minutes).

• Take appropriate breaks from work or play and find shaded areas when possible.

• Wear appropriate clothing for the activity you’re participating in, usually something loose and lightly colored.

• Acclimate yourself to hot weather by taking it easy the first 7 to 10 days.

• Stay in good physical condition with regular exercise and, if overweight, weight reduction.

• Eat wisely during the summer months by reducing calorie intake and foods high in fat content.

• Avoid special risk items such as alcohol and caffeine. Energy drinks are especially dangerous, as they can lead to rapid dehydration.

• Prepare for your environment by using hats, sunglasses and sunblock.

First-Aid for Heat-Related Emergencies

HEAT CRAMPS
Move the person to a cooler place and have him or her rest in a comfortable position. Stretch the affected muscle lightly and administer a half glass of cool water every 15 minutes. Do not give the person liquids containing alcohol or caffeine. These types of liquids dehydrate the body further, thus making the condition worse.

HEAT EXHAUSTION
Move the person out of the heat and into a cooler place. Remove or loosen any tight clothing and apply cool, wet cloths, such as towels or sheets. If the person is conscious, administer cool water to drink. Be sure the person drinks the water slowly. A half glass of cool water should be given to the person every 15 minutes.

Once again, do not give the person liquids containing alcohol or caffeine. As the person rests comfortably, watch for any sudden changes in his/her condition.

HEATSTROKE
If the person is suffering from heatstroke, get emergency help immediately by calling 911 or your local emergency number. Heatstroke is a potentially deadly situation. Move the person to a cooler place and quickly begin cooling the body by immersing the person in a cool bath, or wrap wet sheets around the body and fan it. Keep the person lying down and continue cooling the body.

Monitor the person’s breathing and watch for any signs of problems. If the person refuses water, is vomiting or experiences changes in the level of consciousness, do not give anything to eat or drink.

Information excerpted from Heat Wave, published by the American Red Cross.
10 Guidelines for Skin Protection

1. Avoid intense sun, which usually occurs between 10 a.m. and 4 p.m. If you must work outside during this time, wear long-sleeved shirts, preferably with a tight weave. Stay in the shade as much as possible.

2. Apply broad-spectrum sunscreen rated at SPF 15 or higher.

3. Apply sunscreen 15 minutes prior to sun exposure. This gives the sunscreen a chance to bond to the skin. For additional protection, consider using products with titanium dioxide.

4. Use large amounts of sunscreen and apply it often. Reapply the sunscreen at least once during the day.

5. Sunscreen does not provide protection from all the harmful effects of the sun. Even if wearing sunscreen, be sure to utilize the safety rules for heat exposure and exhaustion. Sun exposure is known to depress the immune system.

6. To protect your eyes while in the sun, wear a wide-brimmed hat and UV-blocking sunglasses.

7. Protect your lips by using an SPF-rated lip balm.

8. Avoid sunburn.

9. Examine your skin on a regular basis. Check for moles that change size, shape or color. Also take note of sores that do not heal, persistent areas of irritated skin or small growths. These may be signs of cancer and should be evaluated by medical personnel.

10. If you suffer sunburn that results in blisters, seek medical attention. These blisters are second-degree burns and should be treated by a doctor.