What happens to the body as a result of exposure to extreme heat?
People suffer heat-related illnesses when the body’s temperature control system is overloaded, and sweating is not enough to cool off. Such high body temperatures may damage the brain or other vital organs. Several factors limit the body’s ability to cool itself during extremely hot weather. High humidity slows the evaporation of sweat, preventing the body from releasing heat quickly. Other conditions that can impair the regulation of body temperature include old age, youth (ages 0–4), obesity, fever, dehydration, heart disease, mental illness, poor circulation, sunburn, prescription medications and alcohol use.

What is “Heat Stroke?”
Heat stroke is the most serious heat–related illness. Body temperatures can rise quickly, sometimes in 10–15 minutes, as high as 106 degrees. Death or permanent disability can occur if not treated immediately.

Warning signs of Heat Stroke include:
- Extremely high body temperature (103° F+)
- Red, hot and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

What should I do if I see someone with warning signs of Heat stroke?
If you see any of these signs, you may be dealing with a life–threatening emergency. Have someone call for immediate medical assistance, while you begin cooling the victim.
- Get the victim to a shady area.
- Cool the victim rapidly. You can immerse the victim in a tub or shower of cool water; use a sponge or spray with a garden hose; or if humidity is low, wrap the victim in a cool, wet sheet and fan him/her vigorously.
- Monitor body temperature and continue cooling efforts until the body temperature drops to 101–102° F.
- If emergency personnel are delayed, call an Emergency Room for further instructions.
- Do NOT give the victim alcohol to drink.
- Get medical assistance as soon as possible.

What is “Heat Exhaustion?”
Heat exhaustion is a milder form of heat–related illness that can develop after several days of exposure to high temperatures and inadequate or unbalanced replacement of fluids. Those most prone to heat exhaustion are elderly people, those with high blood pressure and those working or exercising in a hot environment.

Warning signs of Heat Exhaustion include:
- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness
- Dizziness
- Headache
- Nausea or vomiting
- Fainting

Also, skin may be cool and moist, pulse will be fast and weak, and breathing will be fast and shallow.
What steps can be taken to cool the body during Heat Exhaustion?

- Drink cool, non-alcoholic beverages
- STOP all activity and rest
- Take a cool shower, bath or sponge bath
- Seek an air-conditioned environment
- Wear lightweight clothing

Untreated, heat exhaustion may progress to heat stroke. Seek medical attention if symptoms last over one hour.

What are “Heat Cramps” and who is affected?

Heat cramps are muscle pains or spasms – usually in the abdomen, arms, or legs – that may occur in association with strenuous activity. People who sweat a lot during strenuous activity are prone to heat cramps. Sweating depletes the body’s salt and moisture. Low salt levels in the muscle causes painful cramps. Heat cramps may also be a symptom of heat exhaustion. If you have heart problems or are on a low sodium diet, seek medical attention for heat cramps.

What should I do if I have heat cramps?

- STOP all activity and sit quietly in a cool place
- Drink a clear juice or sports beverage
- Do not return to strenuous activity for a few hours after the cramps subside
- Seek medical attention for heat cramps if they do not subside in one hour

Who is at the greatest risk for heat-related illnesses?

Those at greatest risk include infants and children up to age 4, people 65 years and over, overweight people or people on chronic medications or with chronic diseases.

Can medications increase the risk of heat-related illness?

Yes. The risk for heat-related illness and death may increase if you use:
- Psychotropics, such as haloperidol or chlorpromazine
- Medications for Parkinson’s Disease, which inhibit perspiration
- Tranquilizers, such as phenothiazines, butyrophenones, and thiozanthenes
- Diuretic medications or “water pills,” which affect the body’s fluid balance

How effective are electric fans in preventing heat-related illness?

While electric fans may provide comfort, they will NOT prevent heat-related illness. Taking a cool shower or bath or moving to an air-conditioned place is a better way to cool off.

How much should I drink during hot weather?

During hot weather, you need to drink more liquid than your thirst indicates. Increase your fluid intake, regardless of your activity level. During heavy exercise in a hot environment, drink 2–4 glasses (16–32 ounces) of cool fluids each hour. AVOID alcohol, because it will cause you to lose more fluid.

What about salt tablets?

DO NOT take salt tablets unless directed by your doctor. The easiest and safest way to replace the loss of salts and minerals is through your diet. **Drink fruit juice or a sports beverage when you exercise or work in the heat.**

How can I protect my health when temperatures are extremely high?

- KEEP COOL, pace yourself and use common sense
- Drink plenty of fluid, avoid alcohol
- Replace salts & minerals with sports drinks or fruit juice
- Wear lightweight, loose fitting clothing and apply sunscreen
- Pat down with a wet cloth to keep cool
- Stay cool indoors when possible, increase ventilation
- Schedule outdoor activities for the coolest part of the day
- Use a buddy system

I’VE GOT TO KEEP MY COOL – NO MATTER WHAT!