CITY OF ARLINGTON
Fire Department

Summer EMS Prevention

As summer approaches, we see an increase in heat related illnesses and water related accidents.

Heat Related Illnesses

Although any one at any time can suffer from heat-related illness, some people are at greater risk than others. Those at greatest risk for heat-related illness include infants and children up to four years of age, people 65 years of age and older, people who are overweight, and people who are ill or on certain medications. The best defense against heat related illness is ***prevention***. Staying cool and making simple changes in your fluid intake, activities and clothing during hot weather can help you remain safe and healthy. What you can do to protect yourself:

1. Drink cool nonalcoholic beverages. Don't wait until you are thirsty to drink.
2. Rest
3. Take a cool shower, bath or sponge bath
4. Wear lightweight, light-colored, loose-fitting clothing
5. Stay indoors and, if at all possible, seek an air-conditioned environment.
6. Do not engage in strenuous activities
7. NEVER leave anyone in a closed, parked vehicle, including pets
8. Check regularly on:
    - Infants and young children
    - People aged 65 or older
    - People who have a mental illness
    - Those who are physically ill, especially with heart disease or high blood pressure

Elderly people (that is, people aged 65 years and older) are more prone to heat related illnesses than younger people for several reasons:

- Elderly people do not adjust as well as young people to sudden changes in temperature.
- They are more likely to have a chronic medical condition that changes normal body responses to heat.
- They are more likely to take prescription medicines that impair the body's ability to regulate its temperature or that inhibit perspiration.

The following signs & symptoms are to help you recognize and respond promptly to warning signs of trouble.

Heat Stroke is the most serious heat-related illness. It occurs when the body becomes unable to control its temperature: the body's temperature rises rapidly, the body loses its ability to sweat, and it is unable to cool down. Body temperature may rise to 106°F or higher within 10 to 15 minutes. Heat stroke can cause death or permanent disability if emergency treatment is not provided. Call for immediate medical assistance while you begin cooling the victim.

Warning signs of heat stroke vary but may include the following:

- An extremely high body temperature (above 103°F, orally)
- Red, hot, and dry skin (no sweating)
- Rapid, strong pulse
- Throbbing headache
- Dizziness
- Nausea
- Confusion
- Unconsciousness

Do the following:

- Get the victim to a shady area.
- Cool the victim rapidly using whatever methods you can. For example, immerse the victim in a tub of cool water; place the person in a cool shower; spray the victim with cool water from a garden hose; sponge the person with cool water; or if the humidity is low, wrap the victim in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature, and continue cooling efforts until the body temperature drops to 101-102°F.
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
- Do not give the victim fluids to drink.
- Get medical assistance as soon as possible.

Sometimes a victim's muscles will begin to twitch uncontrollably as a result of heat stroke. If this happens, keep the victim from injuring himself, but do not place any object in the mouth and do not give fluids. If there is vomiting, make sure the airway remains open by turning the victim on his or her side.

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. It is the body's response to an excessive loss of the water and salt contained in sweat. Those most prone to heat exhaustion are elderly people, people with high blood pressure, and people working or exercising in a hot environment.

Warning signs of heat exhaustion include the following:

- Heavy sweating
- Paleness
- Muscle cramps
- Tiredness
- Weakness

- Dizziness
- Headache
- Nausea or vomiting
- Fainting

The skin may be cool and moist. The victim's pulse rate will be fast and weak, and breathing will be fast and shallow. If heat exhaustion is untreated, it may progress to heat stroke. Seek medical attention immediately if any of the following occurs:

- Symptoms are severe
- The victim has heart problems or high blood pressure

Otherwise, help the victim to cool off, and seek medical attention if symptoms worsen or last longer than 1 hour. Cooling measures that may be effective include the following:

- Drink cool, nonalcoholic beverages
- Rest
- Take a cool shower, bath, or sponge bath
- Seek an air-conditioned environment
- Wear Lightweight clothing

Heat Stress: If you see any signs of severe heat stress, you may be dealing with a life-threatening emergency. Have someone call for immediate medical assistance while you begin cooling the affected person. Do the following:

- Get the person to a shady area.
- Cool the person rapidly, using whatever methods you can. For example, immerse the person in a tub of cool water; place the person in a cool shower; spray the person with cool water from a garden hose; sponge the person with cool water; or if the humidity is low, wrap the person in a cool, wet sheet and fan him or her vigorously.
- Monitor body temperature and continue cooling efforts until the body temperature drops to 101°–102°F
- If emergency medical personnel are delayed, call the hospital emergency room for further instructions.
- Do not give the person alcohol to drink.
- Get medical assistance as soon as possible.

What You Can Do to Help Protect Elderly Relatives and Neighbors? If you have elderly relatives or neighbors, you can help them protect themselves from heat-related stress:

- Visit older at-risk adults at least twice a day and watch them for signs of heat exhaustion or heat stroke.
- Encourage them to increase their fluid intake by drinking cool, nonalcoholic beverages regardless of their activity level. Warning: If their doctor generally limits the amount of fluid they drink or

they are on water pills, they will need to ask their doctor how much they should drink while the weather is hot.
- Take them to air-conditioned locations if they have transportation problems

Frequently Asked Questions (FAQ) About Extreme Heat:

1. **How effective are electric fans in preventing heat-related illness?** 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. Air conditioning is the strongest protective factor against heat-related illness. Exposure to air conditioning for even a few hours a day will reduce the risk for heat-related illness. Consider visiting a shopping mall or public library for a few hours.

2. **How much should I drink during hot weather?** During hot weather you will 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 two to four glasses (16-32 ounces) of cool fluids each hour. Avoid drinks containing alcohol because they will actually cause you to lose more fluid.

3. **What should I do if I work in a hot environment?** 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 in the shade, and rest, especially if you become lightheaded, confused, weak, or faint.

Water Related Accidents

Our biggest concern is having children in or around water. Remember - **Kids Don't Float**. They must have adult supervision at all times when they are in or near water. Drowning and water related accidents increase during the summer months. Rivers can be especially dangerous as they have hidden swift currents and deep unseen holes. Often the rivers are still **high in July** from winter run off and can be very deceiving and dangerous.

Any child near the water should wear a **Personal Flotation Device** (PFD). Most river parks and lakes do not have life guards thus making adult supervision vital.

Another injury associated with water comes from jumping off of lake or river banks into unknown areas. Head injuries and broken bones frequently occur from diving accidents.

Keeping Children Safe In, On, and Around the Water

- Maintain constant supervision. Watch children around any water environment (pool, stream, lake, tub, toilet, bucket of water), no matter what skills your child has acquired and no matter how

shallow the water. For younger children, practice "Reach Supervision" by staying within an arm's length reach.

- Don't rely on substitutes. The use of flotation devices and inflatable toys **cannot** replace parental supervision. Such devices could suddenly shift position, lose air, or slip out from underneath, leaving the child in a dangerous situation.
- Enroll children in a water safety course or swim classes. Your decision to provide your child with an early aquatic experience is a gift that will have infinite rewards. These courses encourage safe practices.
- Parents should take a CPR course. Knowing these skills can be important around the water and you will expand your capabilities in providing care for your child.