

WESTSIDE UNION SCHOOL DISTRICT  
**PREVENTING HEAT STRESS EMERGENCIES**

**Recommendations and Guidelines for Preventing Heat Stress: Employees and Students**

**Rationale:** With year-round school and extreme heat of summer, especially in August and September, the students and staff are at higher risk for heat stress. Heat illnesses are preventable when necessary precautions are followed during hot weather.

**Introduction:** Heat illnesses (muscle cramps, heat exhaustion, heatstroke) are caused by *prolonged* exposure to hot temperatures, limited fluid intake or failure of the temperature regulation mechanisms in the brain. Without intervention and resolution of the problem, muscle cramps can lead to heat exhaustion, which can lead to heatstroke. Children, elderly, and obese people are at higher risk of developing heat illness.

**Contributing causes:**

Cardiovascular disease	Exercise: prolonged or excessive	High temperature or humidity
Dehydration	Lack of acclimatization	Drugs: alcohol, amphetamines
Excessive clothing	Chronic illnesses	Sweat gland dysfunction

**Symptoms:**

**HEAT STRESS** (Early symptoms):

- Fatigue, weakness
- Dizziness, lightheadedness
- Muscle cramps (caused by loss of salt from heavy sweating)
- Nausea
- Sweating: profuse
- Thirst
- Nosebleeds
- Headache

**First aid:**

Stop activity  
Get in a cool place (shade, indoors)  
Give cool water to drink  
Remove excess clothing  
Immerse in cool water or sponge down  
Check victim's temperature  
Notify parent/guardian as needed

**HEAT EXHAUSTION** (Later symptoms):

- Cool, moist, clammy, pale skin
- Extreme weakness
- Nausea and vomiting
- Pulse: rapid, weak
- Dilated pupils
- Irrational behavior
- Loss of consciousness, if not treated

**First aid:**

If school nurse not available, **call 911**  
Lie down in cool place with feet elevated  
Give water to drink, if conscious  
Apply cool, wet cloths to body

**HEAT STROKE** (Medical EMERGENCY):

- Dry, hot, red skin
- Fever (body temperature above 102 degrees F)
- Extreme confusion
- Rapid, shallow breathing
- Rapid, weak pulse
- Small (constricted) pupils
- Dark urine
- Seizures
- Unconsciousness
- Shock, brain damage, and death can occur

**First aid:**

**Call 911 (Paramedics)**  
Notify school nurse & administrator  
Cool body as directed above while awaiting Paramedics

**General First Aid for Heat-Related Illnesses:**

- Move the victim to a cool place.
- Have victim lie down in a cool place: elevate feet about 12 inches.
- Loosen or remove excess clothing.
- Apply cool, wet cloths to the victim's skin, neck, groin, and armpits.  
Do NOT apply rubbing alcohol.



- Do NOT give the victim medications that are used to treat fever (such as aspirin).
- Give the victim fluids (water, Gatorade) to drink.
  - Do NOT give victim liquids that contain caffeine.
  - Do NOT give the victim salt tablets.
- Observe for symptoms of shock (bluish lips and fingernails, decreased alertness). Administer first aid for shock.
- If victim has seizures, protect him/her from injury and give first aid.
- Notify parent/guardian, school nurse, and administrator.
- **CALL 911 (Paramedics): symptoms of heatstroke, unconsciousness, shock, seizures.**

**Weather Conditions requiring Modification of Physical Activities or School Schedule are:**

1. Excessive Heat: if wind velocity is  $\geq 10$  mph the effect may be less severe.
  - Temperature 92-95 degrees F: limit duration & intensity of physical activity.
  - Temperature  $\geq 95$  degrees F: prohibit or limit duration & intensity of P.E.; consider schedule change.
2. High Humidity:  $\geq 50\%$
3. Air Pollution: SCAQM report is checked daily by Health Services Coordinator

**Sources of Information:**

1. Southern California Air Quality Management District (SCAQMD): internet access
2. Local radio and television news reports
3. Enclosed guidelines
4. Health Services Coordinator

**Preventing Heat Stress (during Outdoor Activities):**

- Students should wear loose-fitting, lightweight, and light-colored clothing in hot weather.
- Students should rest frequently when exercising in hot weather.
  - New students to the high desert may need a longer time to acclimate to the weather.
  - Limit duration and intensity of exercise.
- Prevent dehydration: encourage students to drink adequate fluids (water).
  - Do not wait until thirsty: drink water often.
  - Personal water containers: students should be allowed to carry their own.
  - In order to prevent the spread of disease, personal water containers should not be shared.
  - Students must obey safety rules when carrying personal water containers: no running with straws or containers in mouth, no using water container inappropriately.
- Inclement weather schedule may be implemented at discretion of Administrator.
  - Use indoor facility (gymnasium, classroom, cafeteria – if available) for physical activities
  - Use hot days as P.E. instructional days
  - If exercising outdoors: limit intensity/duration of outdoor activity: i.e. walking instead of running.
- Sunscreen and hats/caps should be worn to prevent sunburn.
- Teachers and playground instructional aides must observe students during outdoor physical activity: know signs and symptoms of heat stress and emergency first aid. Students with known health problems should be closely monitored: modify/restrict activities as appropriate. Refer and consult with the School Nurse.

**Employee Training:**

School procedures for preventing and treating heat stress: reviewed by school nurse annually (during BBP inservice).

Written information posted and given to all personnel: signs, symptoms, and first aid for heat stress.

All personnel must be aware of contributing factors to heat stress:

- air temperature
- humidity
- air circulation
- air pollution
- medical problems
- fluid intake
- appropriate clothing
- physical conditioning
- acclimation to heat
- exercise: intensity and duration