



# California Interscholastic Federation

## SPORTS MEDICINE BULLETIN

[www.cifstate.org](http://www.cifstate.org)

### PREVENTION OF HEAT ILLNESS

Exercise produces heat within the body and can increase the player's body temperature. Add to this a hot or humid day and any barriers to heat loss such as padding and equipment, and the temperature of the individual can become dangerously high. There are several steps which can be taken to prevent heat illness from occurring:

#### ADEQUATE HYDRATION

- The athlete should arrive at practice well-hydrated to reduce the risk of dehydration.
- Water or sports drinks should be readily available to athletes during practice and should be served ideally chilled in containers that allow adequate volumes of fluid to be ingested.
- Water breaks should be given at least every 30-45 minutes and should be long enough to allow athletes to ingest adequate volumes of fluid.
- Athletes should be instructed to continue fluid replacement in between practice sessions.

#### GRADUAL ACCLIMATIZATION

- Intensity and duration of exercise should be gradually increased over a period of 7-14 days to give athletes' time to build fitness levels and become accustomed to practicing in the heat.
- Protective equipment should be introduced in phases (start with helmet, progress to helmet and shoulder pads, and finally fully uniform).

#### HYDRATION STATUS RECORD KEEPING

- Athletes should weigh-in before and after practice, ideally in dry undergarments in their to check hydration status.
- The amount of fluid lost should be replaced by the next session of activity. An athlete should drink approximately 16 oz of fluid for each kilogram of fluid lost (1 kg = 2.2 lbs).
- The color of the urine can provide a quick guess at how hydrated the athlete. If the urine is dark like apple juice means the athlete is dehydrated. If the urine is light like lemonade in color means the athlete seems adequately hydrated.

#### ADDITIONAL PREVENTION MEASURES

- Appropriate medical coverage during exercise.
- The use of light weight synthetic clothing which aids heat loss.
- Athletes should wear light colored clothing.
- Well balanced diet which aids in replacing lost electrolytes.
- Avoid drinks containing stimulants such as ephedrine or high doses of caffeine.
- Alteration of practice plans in extreme environmental conditions.
- Adequate rest breaks in the shade.
- Allow athletes to remove unnecessary equipment during rest breaks.
- Adjust the amount of conditioning activities in hot weather.
- Athletes with febrile or gastrointestinal illnesses should not be allowed to participate until recovered.