

Vermont State High School Guidelines


Risk	WBGT*	Modifications**
Minimal Risk	≤76.1°F ≤24.5°C	Normal Activities, no modifications necessary
Low Risk	76.2-81°F 24.4-27.2°C	Normal Activities/Regular practice/game prep. Discretion for intense/prolonged activity. Watch at risk players. Provide at least 3 rest/fluid breaks each hour of 4+ minutes each.
Moderate Risk	81.1-84°F 27.3-28.9°C	Rest/Work ratio to be increased; 15-20 min of activity followed by 4+ min rest/fluid breaks. Practice will be in shorts, helmets, shoulder pads only. No equipment may be worn for conditioning activities. Maximum length of practice 2 hours.
High Risk	84.1-86°F 29-30°C	Rest/Work ratio to be increased; 20 mins activity/6+ min rest, or 20 mins of rest distributed throughout 1 hr of practice. Practice will be in shorts only (all protective equipment removed). No conditioning activities. Maximum length of practice 1 hour. Change time of day activity is held (no practices between 11am-4pm).
Extreme Risk	≥86.1°F ≥30°C	No outdoor workouts. May delay practice until cooler WBGT reading occurs.


* Cat 1 from Grundstein


** Adapted from: Andrew Grundstein, Applied Geography, 2015, Regional Safety Thresholds for Athletics in the Contiguous US.


Source: VPA Hot Weather Guidelines 2015, <http://www.vpaonline.org/page/33>


Heat Illness and What to Do


 **Heat Cramps:** Painful, involuntary muscle spasms (usually occurring in the legs) associated with exercise in the heat when athletes have been sweating profusely.

 **What to do:** Stop activity and rest in cool area. Rehydrate.

 **Heat Exhaustion:** Inability to sustain exercise in the heat due to cardiovascular strain. Signs and symptoms include: fatigue, weakness, nausea, light-headedness, headache, heavy sweating, dehydration, decreased muscle coordination, and chills. Improvement is seen usually within 10-15 minutes.

 **What to do:** Stop activity and rest in cool area. Rehydrate. Remove excess clothing and cool the athlete with ice-wet towels. If exertional heat stroke is suspected, take rectal temperature for differential diagnosis.

 **Exertional Heat Stroke:** Occurs when (1) the rectal temperature is ≥104°F and (2) there are signs/symptoms of central nervous system dysfunction. Signs and symptoms include: high body temperature (≥104°F), irrational behavior, emotional instability, confusion, nausea, diarrhea, loss of muscle coordination, collapse, dehydration, rapid pulse, low blood pressure, heavy sweating. **This is a medical emergency.**

 **What to do:** Stop activity and aggressively cool the patient using cold water tub. Activate emergency medical service, but always cool first and transport second. Remove excess clothes. Continuously monitor the rectal temperature until it is cooled down to 102°F.

Information provided by the Korey Stringer Institute <http://ksi.uconn.edu>



!! WARNING!!

These WBGT Reference Guidelines are summarized from published papers, policies, and position statements relating to preventing heat injury. These guidelines provide a reference as to danger zones but do not constitute or take the place of medical advice.

The Kestrel Heat Stress Tracker is an environmental meter, not a medical device, and must be employed correctly according to these instructions to ensure accurate readings. Always let the instrument equilibrate to the environment you are in.

These guidelines, and your Kestrel Heat Stress Tracker, must be employed with care and good judgment. Remember that certain individuals are more susceptible to exertional heat stress and may suffer injury before a Zone Threshold is reached. When in doubt, set your Zone Thresholds lower, reduce work time, and increase rest, hydration and access to shade. Have and practice a heat injury emergency action plan, ensure ready access to cooling equipment such as ice baths and chilled sheets, and always intervene when any individual appears disoriented, weak or ill.



**Heat Stress
Emergency Action Plan**

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