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Kenney WI. Heat balance limits in football
uniforms: how different uniforms ensembles
alter the equation. Phys Sportsmed
2002;30(7):29-39.

Green Line: Regular practices with full practice gear can be conducted for conditions that plot to the left of the green line.

Red Line: Cancel all practices when the temperature and relative humidity plot to the right of the red line. Practices may be moved into air-conditioned spaces.

Between Red and Yellow Lines: Increase rest to work ratio with breaks every 20 minutes and all protective equipment should be removed to practice in shorts only when the temperature and relative humidity plot between the red and yellow lines.

Between Yellow and Green Lines: Increase rest to work ratio with breaks every 30 minutes and wear shorts with helmets and shoulder pads only when the temperature and relative humidity plot between the yellow and green lines.

Heat risk rises with increasing heat and relative humidity. Fluid breaks should be scheduled for all practices and increased as the heat stress rises.

Using the heat guidelines

The heat stress graph is designed to give a competition safety estimate in hot, humid conditions. It is most relevant for long distance running and prolonged high intensity events like Lacrosse, Soccer, Football, and Tennis. It should be applied to practices and games.

Using a weather radio or local radio station, collect the air temperature and relative humidity data every hour during the event and plot it on the relative humidity Vs air temperature graph. In the late spring and summer months on bright sunny days a correction factor of up to 5 degrees Fahrenheit should be added to the air temperature from 10 AM to 5 PM. This should be plotted as a bar rather than a single point to give an estimate of maximum and minimum heat stress.

The decision to cancel or postpone an event should be made when the heat stress moves into the danger range. Although competition can be continued in the other ranges for increased heat stress risk, coaches and athletes should be aware that hypothermia and exertional heat stroke could occur in the lower risk ranges. Track and cross country runners should stay out of the heat between events and stay well hydrated. A rest

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break should be provided in activities that require continuous activity like soccer and tennis.