



Footballers fall victim to heat stroke

Question: Please discuss the problem of heat stroke deaths among football players during preseason practice. Why are these athletes so susceptible to heat disorders, and what can be done to minimize the potential problems?

— J.G. Farmington Hills State University reviewed the circumstances of nine heat stroke deaths which occurred in high school and college football players.

All players were dressed in full uniform which served to increase heat production and block heat dissipation. Most casualties occurred during the first few days of preseason practice, indicating that the players were neither acclimatized to the heat nor in good physical condition. Finally, many were not allowed to drink water during practice.

The temperature and relative humidity at the time of the nine deaths are indicated in the Figure. The deaths occurred under conditions ranging from either high temperature and low relative humidity to low temperature and high relative humidity.

ONE DEATH (arrow) occurred at a temperature of 64 degrees Fahrenheit and relative humidity of 100 percent. Although the temperature was low, heat could not be lost through evaporation because the air was totally saturated with water vapor.

These findings suggest several recommendations to the coach initiating preseason football practice:

• There should be one- to two-week period of acclimatization to heat with a gradual introduction to full football equipment.

• Players should be permitted to drink cool water as desired during practice.

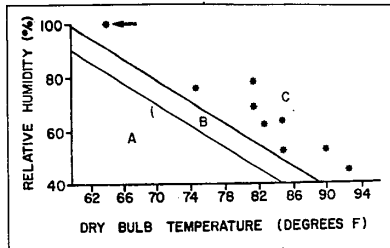
• Practices should initially be conducted during the cooler parts of the day, preferably when the sun's radiation is minimal (early morning or early evening).

• Both temperature and humidity should be considered when evaluating environmental heat stress. At high temperatures, the only means for heat dissipation is the evaporation of sweat. With high humidity, very little sweat is actually absorbed by the moisture-laden air. Consequently, body heat tends to rise abruptly.

Each year needless football deaths result from heat stroke during preseason practice. Most potential complications can be prevented by a well-informed coach or team physician.

Thursday, July 16, 1981

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Temperature and relative humidity at the time of nine heat stroke deaths are designated by stars. Arrow represents one casualty which occurred at a temperature of 64 degrees and relative humidity of 100 percent. The combination of relative humidity and temperature in Zone A can be considered safe; for Zone C, use extreme caution when working in a football uniform.



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Chamber raps plant-closing bill

The Oakland County Chamber of Commerce board of directors has voted to oppose House Bill 4350, a wide-ranging bill that seeks to limit Michigan corporations' abilities to move out of state.

The bill, sponsored by state Rep. Perry Bullard, D-Ann Arbor, is referred to in business circles as the "industrial hostage bill."

Chamber President Earl A. Kreps called the bill "insane," saying it "infringes on the basic rights of an employer to relocate, shut down or reduce op-

erations as he/she sees necessary." The bill would require companies to give one year's notice of shutdowns or layoffs affecting more than 100 workers.

The chamber fears the bill, if approved, would deter new businesses from locating in the state and discourage existing businesses from expanding.

"This bill does not take into consideration such factors as economic conditions that are beyond the control of the business," said the chamber in announcing Monday's vote.

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