

Guidelines for the prevention of heat illness

The Following is an excerpt taken from the book the 3rd Edition of Clinical Sports Medicine on preventing heat illness – a problem many coaches face with their athletes in the summer months of competition. More info on the book can be found at the bottom of the page.

Most cases of heat illness could be prevented if the following guidelines are followed.

1. Perform adequate conditioning. The athlete must have trained appropriately and be conditioned for the planned activity.
2. Undergo acclimatization if competing in unaccustomed heat or humidity
3. Avoid adverse conditions. Event organizers should ensure that high intensity or endurance events should not take place in adverse conditions of heat or humidity. If events are to occur in hot climates, they should take place in the early morning before conditions deteriorate.
4. Alter training times. Unless trying to acclimatize, the athlete should avoid exercise at the hottest time of the day.
5. Wear appropriate clothing. In hot conditions, the athletes should wear a minimal amount of loose-fitting, light-colored clothing. An open weave or mesh top is ideal. Many athletes choose to remove their top during training in hot conditions. This has the advantage of allowing better heat loss from sweating but is counterbalanced by an increased heat gain from the environment.
6. Drink plenty of fluids before the event. The athlete should ensure that he or she is adequately hydrated in the 24 hours prior to the event. A good method of confirming this is to ensure that urine output is clear and of good volume. Fluids should be drunk right up until the commencement of exercise. It is recommended that 500 mL of fluid be drunk in the half hour prior to exercise in the heat.
7. Drink fluid during exercise. The athlete should drink at regular intervals during exercise. Ideally, 150-250 mL should be consumed every 15 minutes in hot conditions. This should occur whether the athlete is training or in competition. It is important that the athlete masters the technique of drinking while exercising. This should be practised during training. For exercise up to 1 hour in duration, plain water is the most appropriate form of fluid. For exercise lasting longer than 1 hour, a dilute glucose and electrolyte solution should be used (Chapter 33).
8. Ensure athletes and officials are well educated. It is important that event organizers, coaches and athletes understand the importance of adequate hydration, the danger of water intoxication, and the need to avoid excessive environmental conditions.
9. Provide proficient medical support. A well-equipped, well-trained medical team should be present at all endurance events occurring in hot or humid conditions. The guidelines for the medical coverage of an endurance event are discussed in Chapter 54.

ABOUT THE BOOK: CLINICAL SPORTS MEDICINE

Clinical Sports Medicine has been fully updated from the popular 2nd edition (2000). It is even more practical, now superbly illustrated, easy-to-read and packed with substantially updated and new material. There are samples of several chapters online including the whole "Pain in the Achilles region" chapter. This book describes a completely symptom-oriented approach to treating clinical problems.

The practitioner can flick to the chapter that describes the patient presentation (e.g., longstanding groin pain, acute ankle injuries) and review the likely differential diagnoses, the clinical approach and the full colour pictures of the physical examination (physical examination for several major systems are also available as a separate DVD).

