Table 10-1

Key Points in Recognizing Exertional Heat Illnesses

- Each EHI is a stand-alone condition that can occur independently of the others.
- An individual may collapse from EHS without warning or the presence of heat exhaustion.
- A victim of EHS will often still be sweating, since he or she was just exercising in the heat.
- The initial presentation for various heat illnesses is similar; an accurate recognition is the key to a positive outcome.

discussion, it can further cloud the issue. It is also not likely that someone suffering from heat cramps will progress to heat exhaustion, then EHS if not treated. Heat syncope, defined as fainting in a hot environment,[1] is caused by hypotension and will not likely progress to other heat illnesses either. Confusion in this area exists because some of the initial signs and symptoms for heat illnesses are similar. The following section gives examples and provides rationale to illustrate that EHI do not occur in a continuum.

EHS can have a sudden onset. When marathon runners collapse from EHS during a race, they often do so without warning. Survivors of EHS often mention that they experienced some signs, such as headache, dizziness, fatigue, and feeling hot but were still able to continue running for a few miles before actually collapsing and becoming unconscious.[3,4] In cases that involve the medical tent staff, however, a marathon runner may suddenly collapse near the end of the race (mile marker 20 to 26) with no previous warning and a body temperature well above 105°F. Therefore, these events demonstrate that heat exhaustion is not necessarily a precursor to EHS. With heat exhaustion, the initial signs and symptoms may be more obvious (pallor, feeling faint, vomiting). With these signs and symptoms, the individual is often unable to continue exercising due to dehydration, fatigue, and cardiovascular insufficiency. It is not clear then how heat exhaustion can lead to EHS if exercise ceases. It is important to note, however, that many of the signs and symptoms of both heat exhaustion and EHS are quite similar.

Real-life cases of EHS where an individual collapses without warning during exercise tell us that heat exhaustion does not *have* to be present in order for EHS to occur. But does this mean that it is impossible for someone who experiences heat exhaustion to continue to exercise and potentially experience EHS? This is difficult to ascertain. Consider the following scenario. Suppose a football player is experiencing heat exhaustion while running sprints at the end of practice. The