Recruit Firefighter Dies Nine Days After Heat Stroke



The victim, a 22-year-old male firefighter recruit collapsed while running at the end of a training day. Training started at 7 a.m. and ran throughout the day. Frequent rest breaks and a lunch break were part of the training. In the afternoons an instructor led physical training consisting of stretching, light aerobics, abdominal crunches and a run.

During the run the recruit exhibited fatigue and complained of blurred vision, but did not stop until he stumbled and fell at the end of the run. He was transported to the office by truck. Training staff started two intravenous lines, gave the victim oxygen, elevated his extremities and removed his clothes as a cooling measure for a possible heat-induced illness. Ambulance attendants found the victim's skin warm, with normal color and moisture. The recruit was transported to the hospital.

The recruit never regained consciousness and died nine days later. The cause of death was severe heat stroke with multisystem organ failure.

The NIOSH investigator concluded that to reduce similar heat injuries, the training school should:

- *Formulate and institute a heat stress program.*
- *Use qualified physical training staff who are knowledgeable about all aspects of heat stress.*
- *Improve communication between physical training leaders on off-site runs.*

The investigation also suggested that the training atmosphere at the school needed to be more conducive to letting recruits report problems upward.

Source: National Institution for Occupational Safety and Health (NIOSH), Fire Fighter Fatality Investigation and Prevention Program, Case Report F2005-26