Our skull and spine house the CNS. That is a large responsibility; the center of all movement, thought, balance, emotion, and vital function sloshing around in fluid protected by your skull and a couple dozen or so vertebrae. It is quite an amazing system given the stress and strain we place upon it. The athletic trainer must be aware of the types of injuries that can happen to the head and spine. At times, these injuries may be routine and, at worst, catastrophic. The human skull weighs around 2.2 lbs and despite its thickness (no pun intended), injuries to the brain are commonplace, and they can be deadly if not properly detected. Epidemiology research suggests that over 300,000 sports-related concussions occur annually in the United States.¹ Recent studies suggest that players with a history of previous concussions are more likely to have future concussive injuries than those with no history and that previous concussion may be associated with slower recovery of neurological function.² The potential for lifelong disability or even death should give us great pause as care providers when dealing with brain injury—both mild and traumatic.

The spine is equally subject to both mild and catastrophic injury. In Chapter 6, emphasis was placed on the fact that humans walk upright, which contributes to some of our lower extremity problems. However,