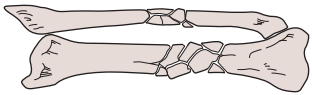
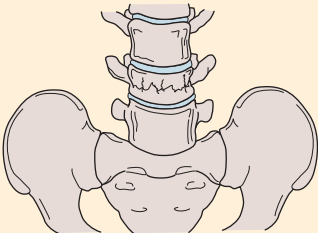
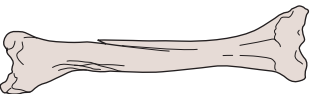
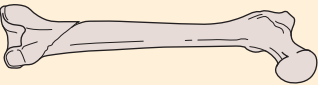
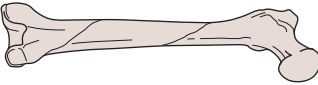
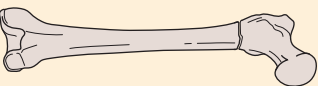
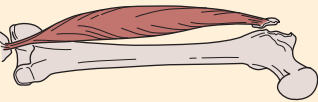
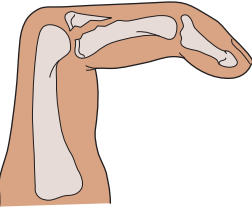
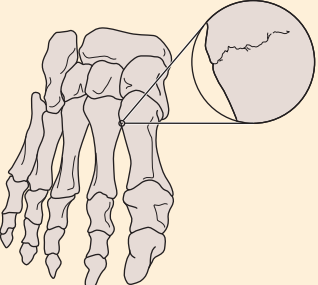


Table 1.3 Classifications of Closed Fractures

Classification	Illustration	Description
Comminuted		Fracture resulting in multiple fragments or shattering of the bone at the site of injury.
Compression		Failure of the bone and subsequent compression or impaction of the fracture ends due to axial compression forces.
Greenstick		Incomplete fracture through the bone, most often occurring in young bones. Resembles the breaking of a "green stick."
Oblique		The fracture line extends obliquely or diagonally in relation to the long axis of the bone.
Spiral		An S-shaped fracture line that twists around and through the bone due to rotation or torsional forces.
Transverse		The fracture line runs transverse or horizontal to the long axis of the bone. Usually caused by direct lateral impact or stress failure.
Avulsion		The pulling away of a piece of bone secondary to tensioning of an attaching ligament, tendon, or muscle.
Osteochondral		A fracture that extends through the articular cartilage (i.e., joint surface) and into the underlying bone.
Stress of "fatigue"		Complete or incomplete failure of a bone due to repetitive stress or loading. Weakening and failure occur when bone breakdown/absorption exceeds bone production.

From S. Shultz, P. Houglum, and D. Perrin, 2016. *Examination of musculoskeletal injuries*, 4th ed. (Champaign, IL: Human Kinetics).