



and older children are more likely to break their bones. Fractures in children differ from fractures in adults in that children heal faster (due to a thicker covering on the bone, or a thicker periosteum) and their bones are still growing. This is beneficial because more fractures can be treated with conservative management, such as casting and splinting. However, if the fracture affects the growth plate, this may stunt the amount of growth that can occur in a particular bone or the bone can grow abnormally.

Fracture Types

Since the periosteum of bone is thicker in children, bones are more likely to bend rather than break during an injury. These incomplete fractures present as either greenstick or buckle fractures. Greenstick fractures often involve the diaphyseal region, or midportion, of long bones, where there is a force on one side of the bone that causes partial fracture on one side and a bend in the bone on the other side (Figure 8-1). The other incomplete fracture type is commonly called a *buckle fracture*, but it is also known as a *torus*, or the base of a pillar. These occur in the metaphyseal region, or almost at the end of the bone, where the bone is compressed and the cortex of the bone is acutely angulated (Figure 8-2).

Fracture Classification

The most common fracture classification in children is the Salter-Harris classification. The types range from I to V, with I being the least severe and V being the most severe. For type I, the fracture occurs through the growth plate. Type II fractures pass through the growth plate but then exit through the metaphysis, or away from the end of the bone. Type III fractures pass through the growth plate and exit through the epiphysis, or through the bone that makes up the joint. Type IV fractures are a combination of type II and III fractures, where the fracture goes