serious threat to independence, because these limbs perform more specialized functions. The incidence of traumatic amputations is highest among young men. Most amputations in this group result from motor vehicle crashes or accidents involving machinery at work. The client may present to the trauma center with an injury that may be life threatening; significant loss of blood and tissue may have already occurred, and shock may develop. (See Chapter 6 for a discussion of shock and trauma.) Other traumatic events that may necessitate an amputation are frostbite, burns, or electrocution.

Amputations result from or are necessitated by interruption in blood flow, either acute or chronic. In acute trauma situations, the limb is partially or completely severed, and tissue death ensues. Replantation of fingers, small body parts, and entire limbs has been successful.

In the chronic disease processes, circulation is impaired, venous pooling begins, proteins leak into the interstitium, and edema develops. Edema increases the risk of injury and further decreases circulation. Stasis ulcers develop and readily become infected because impaired healing and altered immune processes allow bacteria to proliferate. The presence of progressive infection further compromises circulation and ultimately leads to gangrene (tissue death), which requires amputation.

LEVELS OF AMPUTATION

The level of amputation is determined by local and systemic factors. Local factors include ischemia and gangrene; systemic factors include cardiovascular status, renal function, and sever-