provides the exact definitions for SIRS, infection, sepsis, and severe sepsis. SIRS can occur in response to both infectious and noninfectious (e.g., trauma, burns) causes. When caused by infection, it is called **sepsis**. Septic shock is defined as sepsis with organ dysfunction and hypotension.

Box 23-15

Definitions of Systemic Inflammatory Response Syndrome, Infection, Sepsis, and Severe Sepsis

Systemic inflammatory response syndrome (SIRS): The presence of at least two of the following four criteria, one of which must be abnormal temperature or leukocyte count:

- 1. Core temperature of more than 38.5° C (101.3° F) or less than 36° C (96.8° F)
- 2. Tachycardia, defined as a mean heart rate more than two standard deviations above normal for age in the absence of external stimulus, chronic drugs, or painful stimuli; or otherwise unexplained persistent elevation over a 0.5- to 4-hour period; or, for children younger than 1 year old: bradycardia, defined as a mean heart rate less than the 10th percentile for age in the absence of external vagal stimulus, β-blocker drugs, or CHD; or otherwise unexplained persistent depression over a 0.5-hour period
- 3. Mean respiratory rate more than two standard deviations above normal for age or mechanical ventilation for an acute process not related to