

BOX 5-1 *Functional Classifications and Examples of Shock*

Hypovolemic: A Decrease in Circulating Blood Volume

Hemorrhage
Severe dehydration
Trauma

Cardiogenic: A Decrease in Forward Flow from the Heart

Congestive heart failure
Cardiac arrhythmia
Cardiac tamponade
Drug overdose (e.g., anesthetics, β -blockers, calcium channel blockers)

Distributive: A Marked Decrease or Increase in Systemic Vascular Resistance or Maldistribution of Blood

Sepsis
Obstruction (heartworm disease, saddle thrombosis)
Anaphylaxis
Catecholamine excess (pheochromocytoma, extreme fear)
Gastric dilatation-volvulus

Metabolic: Deranged Cellular Metabolic Machinery

Hypoglycemia
Cyanide toxicity
Mitochondrial dysfunction
Cytopathic hypoxia of sepsis

Hypoxemic: A Decrease in Oxygen Content in Arterial Blood

Anemia
Severe pulmonary disease
Carbon monoxide toxicity
Methemoglobinemia