

improves (Martin, 2012).

TABLE 23-6

Age-Specific Vital Signs and Laboratory Variables in Septic Shock*

Age Group	HEART RATE (beats/min)		Respiratory Rate (breaths/min)	Leukocyte Count (Leukocytes × 10 ³ /mm ³)	Systolic Blood Pressure (mm Hg)
	Tachycardia	Bradycardia			
0 days to 1 week old	>180	<100	>50	>34	<65
1 week to 1 month old	>180	<100	>40	>19.5 or <5	<75
1 month to 1 year old	>180	<90	>34	>17.5 or <5	<100
2 to 5 years old	>140	N/A	>22	>15.5 or <6	<94
6 to 12 years old	>130	N/A	>8	>13.50 or <4.5	<105
13 to <18 years old	>110	N/A	>4	>11 or <4.5	<117

*Lower values for heart rate, leukocyte count, and systolic blood pressure are for fifth percentile, and upper values for heart rate, respiratory rate, or leukocyte count are for 95th percentile.

N/A, Not applicable.

From Goldstein B, Giroir B, Randolph A, et al: International Pediatric Sepsis Consensus Conference: definitions for sepsis and organ dysfunction in pediatrics, *Pediatr Crit Care Med* 6(1):2–8, 2005; used with permission.

Three stages have been identified in septic shock. In early septic shock, the patient has chills, fever, and vasodilation with increased cardiac output, which results in warm, flushed skin that reflects vascular tone abnormalities and hyperdynamic, warm, or hyperdynamic-compensated responses. BP and urinary output are normal. The patient has the best chance for survival in this stage. The second stage—the normodynamic, cool, or hyperdynamic-decompensated stage—lasts only a few hours. The skin is cool, but pulses and BP are still normal. Urinary output diminishes, and the mental state becomes depressed. With advancing disease, certain signs of circulatory decompensation that deteriorate to signs of circulatory collapse are indistinguishable from late shock of any cause. In the hypodynamic, or cold, stage of shock, cardiovascular function progressively deteriorates even with aggressive therapy. The patient has hypothermia, cold extremities, weak pulses,