

infection that leads to acute organ dysfunction. This definition distinguishes sepsis from uncomplicated infection that does not lead to organ dysfunction, a poor course, or death. In light of the wide variation in the ways that septic shock is identified in research, clinical, or surveillance settings, the Third International Consensus Definitions further specified that *septic shock* be defined as a subset of sepsis cases in which underlying circulatory and cellular/metabolic abnormalities are profound enough to substantially increase mortality risk.

To aid clinicians in identifying sepsis and septic shock at the bedside, “Sepsis-3” clinical criteria for sepsis include (1) a suspected infection and (2) acute organ dysfunction, defined as an increase by two or more points from baseline (if known) on the sequential (or sepsis-related) organ failure assessment (SOFA) score (**Table 304-1**). Criteria for septic shock include sepsis plus the need for vasopressor therapy to elevate mean arterial pressure to ≥ 65 mmHg with a serum lactate concentration >2.0 mmol/L despite adequate fluid resuscitation.

TABLE 304-1 Definitions and Criteria for Sepsis and Septic Shock

CONDITION	DEFINITION	COMMON CLINICAL FEATURES	CRITERIA IN 1991/2003 (“SEPSIS-1”/“SEPSIS-2”)	CRITERIA IN 2016 (“SEPSIS-3”)
Sepsis	A life-threatening organ dysfunction caused by a dysregulated host response to infection	Include signs of infection, with organ dysfunction, plus altered mentation; tachypnea; hypotension; hepatic, renal, or hematologic dysfunction	Suspected (or documented) infection plus ≥ 2 systemic inflammatory response syndrome (SIRS) criteria ^a	Suspected (or documented) infection and an acute increase in ≥ 2 sepsis-related organ failure assessment (SOFA) points ^b
Septic shock	A subset of sepsis in which underlying circulatory and cellular/metabolic abnormalities lead to substantially increased mortality risk	Signs of infection, plus altered mentation, oliguria, cool peripheries, hyperlactemia	Suspected (or documented) infection plus persistent arterial hypotension (systolic arterial pressure, <90 mmHg; mean arterial pressure, <60 mmHg; or change in systolic by >40 mmHg from baseline	Suspected (or documented) infection plus vasopressor therapy needed to maintain mean arterial pressure at ≥ 65 mmHg and serum lactate >2.0 mmol/L despite adequate fluid resuscitation

^aSIRS criteria include 1 point for each of the following (score range, 0–4): fever $>38^{\circ}\text{C}$ ($>100.4^{\circ}\text{F}$) or $<36^{\circ}\text{C}$ ($<96.8^{\circ}\text{F}$); tachypnea with >20 breaths per min; tachycardia with heart rate >90 beats/min; leukocytosis with white blood cell count $>12,000/\mu\text{L}$; leukopenia ($<4000/\mu\text{L}$) or $>10\%$ bands. ^bSOFA score is a 24-point measure of organ dysfunction that uses six organ systems (renal, cardiovascular, pulmonary, hepatic, neurologic, hematologic), where 0–4 points are assigned per organ system.

■ ETIOLOGY

Sepsis can arise from both community-acquired and hospital-acquired infections. Of these infections, pneumonia is the most common source, accounting for about half of cases; next most common are intraabdominal and genitourinary infections. Blood cultures are typically positive in only one-third of cases, while many