Table 1: Definition of Severe Sepsis and Septic Shock

Term	Definition
Severe sepsis	Sepsis plus one of the following: cardiovascular organ dysfunction OR acute respiratory distress syndrome OR two or more other organ dysfunctions.
Sepsis	Systemic Inflammatory Response Syndrome (SIRS) in the presence of, or as a result of, suspected or proven infection
SIRS	The presence of at least two of the following four criteria, <u>one of which must be abnormal temperature or leukocyte count</u>: • Core temperature of > 38.5°C or < 36°C. • Tachycardia, defined as a mean heart rate > 2 SD 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-hr time period **OR** for children <1 yr old: bradycardia, defined as a mean heart rate <10th percentile for age in the absence of external vagal stimulus, β-blocker drugs, or congenital heart disease; or otherwise unexplained persistent depression over a 0.5-hr time period. • Mean respiratory rate > 2 SD above normal for age or mechanical ventilation for an acute process not related to underlying neuromuscular disease or the receipt of general anesthesia. • Leukocyte count elevated or depressed for age (not secondary to chemotherapy-induced leukopenia) or > 10% immature neutrophils.
Infection	A suspected or proven (by positive culture, tissue stain, or polymerase chain reaction test) infection caused by any pathogen OR a clinical syndrome associated with a high probability of infection. Evidence of infection includes positive findings on clinical exam, imaging, or laboratory tests (e.g., white blood cells in a normally sterile body fluid, perforated viscus, chest radiograph consistent with pneumonia, petechial or purpuric rash, or purpura fulminans).

Suspected infection	Infection is suspected when one of the following is documented:
	• Orders for antibiotics OR
	• Antibiotics administered OR
	• Orders for urine, blood or spinal culture OR
	• Urine, blood or spinal culture drawn OR
	• Chart notation of:
	  • "Rule out infection" OR
	  • "Suspected infection" OR
	  • "Rule out sepsis" OR
	  • "Suspected sepsis"

Term	Definition
Organ dysfunctions	**Cardiovascular** Despite administration of isotonic intravenous fluid bolus ≥ 40 mL/kg in 1 hour, • Decrease in BP (hypotension) < 5th percentile for age or systolic BP < 2 SD below normal for age **OR** • Need for vasoactive drug to maintain BP in normal range (dopamine > 5 µg/kg/min or dobutamine, epinephrine, or norepinephrine at any dose) **OR** • Two of the following: – Unexplained metabolic acidosis: base deficit > 5.0 mEq/L – Increased arterial lactate > 2 times upper limit of normal – Oliguria: urine output < 0.5 mL/kg/hr – Prolonged capillary refill: > 5 seconds – Core to peripheral temperature gap > 3°C **Respiratory** • PaO_2/FIO_2 < 300 in absence of cyanotic heart disease or preexisting lung disease **OR** • $PaCO_2$ > 65 torr or 20 mm Hg over baseline $PaCO_2$ **OR** • Proven need or > 50% FIO_2 to maintain saturation ≥ 92% **OR** • Need for non-elective invasive or noninvasive mechanical ventilation **Neurologic** • Glasgow Coma Score ≤ 11 **OR** • Acute change in mental status with a decrease in Glasgow Coma Score ≥ 3 points from abnormal baseline **Hematologic** • Platelet count < 80,000/mm^3 or a decline of 50% in platelet count from highest value recorded over the past 3 days (for chronic hematology/oncology patients) **OR** • International normalized ratio >2 **Renal** • Serum creatinine ≥ 2 times upper limit of normal for age or 2-fold increase in baseline creatinine **Hepatic** • Total bilirubin ≥ 4 mg/dL (not applicable for newborn) **OR** • ALT 2 times upper limit of normal for age
Septic Shock	Sepsis and cardiovascular organ dysfunction

Table 2: Codes to Identify Severe Sepsis and Septic Shock

Condition Name	ICD-9 Code(s)
Septicemia	038.xx
Streptococcal septicemia	038.0
Staphylococcal septicemia	038.1
Staphylococcal septicemia, unspecified	038.10
Methicillin susceptible Staphylococcus aureus septicemia	038.11
Methicillin resistant Staphylococcus aureus septicemia	038.12
Other staphylococcal septicemia	038.19
Pneumococcal septicemia [Streptococcus pneumoniae septicemia]	038.2
Septicemia due to anaerobes	038.3
Septicemia due to other gram-negative organisms	038.4
Septicemia due to gram-negative organism, unspecified	038.40
Septicemia due to Haemophilus influenzae [H. influenzae]	038.41
Septicemia due to escherichia coli [E. coli]	038.42
Septicemia due to pseudomonas	038.43
Septicemia due to serratia	038.44
Other septicemia due to gram-negative organisms	038.49
Other specified septicemias	038.8
Unspecified septicemia	038.9
Severe sepsis	995.92
Sepsis	995.91
Septicemia [sepsis] of newborn	771.81
Systemic inflammatory response syndrome due to non-infectious process with acute organ dysfunction	995.94
Bacteremia	790.7
Septic shock	785.52

Table 3: Parenteral Antibiotics

Drug Class	Drugs	
Aminoglycosides	Amikacin Sulfate Kanamycin A Sulfate	Gentamicin Tobramycin Sulfate
Beta Lactamase Inhibitor	Piperacillin and Tazobactam	Ticarcillin and Clavulanate Ampicillin and Sulbactam
Carbapenems	Imipenem Meropenem	
Cephalosporins	Cefazolin Cefotaxime Cefoxitin Ceftriaxone	Cefepime Cefotetan And Dextrose Ceftazidime Cefuroxime
Macrolides	Erythromycin Lactobionate	
Glycopeptides	Vancomycin	
Lincosamides	Clindamycin	
Macrolides	Azithromycin	
Monobactams	Aztreonam	
Oxazolidinones	Linezolid	
Penicillins	Ampicillin Oxacillin Penicillin G	Nafcillin
Quinolones	Ciprofloxacin Moxifloxacin	Levofloxacin
Sulfonamides, Dihydrofolate Reductase Inhibitors	Sulfamethoxazole-Trimethoprim	
Tetracyclines	Doxycycline Tigecycline	Minocycline Hydrochloride