

Identification & Treatment of Severe Sepsis and Septic Shock

Based on the CMS Sepsis Core Measure and guidelines provided by the Surviving Sepsis Campaign (SSC)

Severe Sepsis/Septic Shock Definitions	Treatment Overview
<p><i>Severe Sepsis present when the following three are met within 6 hours of each other:</i></p> <ul style="list-style-type: none"> • Presence of infection/suspected infection • Two or more Systemic Inflammatory Response Syndrome (SIRS) criteria <ul style="list-style-type: none"> • Temp > 100.9°F (38.3°C) or < 96.8°F (36°C) • HR > 90 bpm • RR > 20 per min • WBC count > 12000 or < 4000 or > 10% bands • One or more signs of organ dysfunction* <ul style="list-style-type: none"> • Lactic acid > 2 and < 4 • Hypotension** • Creatinine > 2 • Urine output < 0.5 ml/kg/hr x 2 hrs • Bilirubin > 2 mg/dl • PLT count < 100,000 • INR > 1.5 • aPTT > 60 • Acute respiratory failure requiring a new need for invasive or non-invasive mechanical ventilation <hr/> <p><i>Septic Shock present when both of the following are met within 6 hours of each other:</i></p> <ul style="list-style-type: none"> • Patient meets Severe Sepsis criteria above • Either: <ul style="list-style-type: none"> • Lactic acid ≥ 4 • Hypotension** occurring in the hour following crystalloid fluid bolus <hr/> <p style="text-align: center;"><i>Notes</i></p> <ul style="list-style-type: none"> • If clinical criteria for Severe Sepsis/Septic Shock are not met, Physician/APN/PA documentation of Severe Sepsis/Septic Shock will be designated as the presentation time. • If clinical criteria are met prior to Physician/APN/PA documentation, the presentation time will be the time that the last clinical criteria is met. <p><small>*Organ dysfunction caused by a chronic condition or medication is not included</small></p> <p><small>**Hypotension = SBP < 90 or MAP < 65 or decrease in SBP by > 40 from last SBP considered normal for patient</small></p> <p><small>***Persistent hypotension = Two or more consecutive BP readings of SBP < 90 or MAP < 65 or decrease in SBP by > 40 from last SBP considered normal for patient, in the hour immediately following crystalloid fluid bolus</small></p>	<p><i>After identification of Severe Sepsis and/or Septic Shock, patient receives all of the following:</i></p> <p style="text-align: center;"><i>Within 3 hours of presentation time</i></p> <ul style="list-style-type: none"> • Lactic acid – initial specimen collected • Blood culture prior to IV antibiotics – specimen collected • IV antibiotic(s) initiated • Crystalloid fluid bolus (30 ml/kg Lactated Ringer’s (LR) or 0.9% NaCl (NS) initiated) – if hypotension** present and/or initial lactic acid ≥ 4 <p style="text-align: center;"><i>Within 6 hours of presentation time</i></p> <ul style="list-style-type: none"> • Repeat lactic acid – if initial level > 2 <hr/> <p><i>If Septic Shock identified, patient receives the following in addition to those listed above:</i></p> <p style="text-align: center;"><i>Within 6 hours of presentation time</i></p> <ul style="list-style-type: none"> • Focused exam (.SEPSISFOCUSEDEXAM) Physician/APN/PA note that is documented after the crystalloid fluid bolus was started and must include all of the following: <ul style="list-style-type: none"> • Review of VS: Must include temp, HR, RR and BP. Nursing may obtain VS • Cardiopulmonary evaluation: Includes heart <u>and</u> lung evaluations. Performed by Physician/APN/PA • Capillary refill: Performed by Physician/APN/PA • Peripheral pulse evaluation: Performed by Physician/APN/PA • Skin exam: Includes reference to skin color, performed by Physician/APN/PA <p style="text-align: center;">-OR any two of the following-</p> <ul style="list-style-type: none"> • Central venous pressure measurement – CVP may be documented by RN • Central venous oxygen saturation (ScvO2) – Documentation that specimen was obtained from central line • Cardiovascular ultrasound – Physician/APN/PA, RN or US tech documentation of date/time that test was performed • Passive leg raise OR fluid challenge: <ul style="list-style-type: none"> • Passive leg raise must be performed and documented by Physician/APN/PA • Fluid challenge – LR or NS bolus (500ml/15 min or 1000ml/30 min) <p style="text-align: center;"><i>If Septic Shock with persistent hypotension***, also receives within 6 hours of presentation time</i></p> <ul style="list-style-type: none"> • Vasopressors – initiated, must include one/more of the following: <ul style="list-style-type: none"> • Norepinephrine (LEVOPHED), phenylephrine (NEOSYNEPHRINE), dopamine, epinephrine, vasopressin (PITRESSIN)

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