Adult ED to ICU Sepsis Treatment

**Early Recognition**

*IF:* Suspected infection + SIRS Criteria  
Assess for two or more of the following:  
1. Temp ≥ 38.0°C (100.4°F) or ≤ 36.0°C (96.8°F)  
2. Heart rate ≥ 90  
3. Resp rate ≥ 20 or PaCO₂ ≤ 32 mmHg  
4. WBC ≥ 12K, ≤ 4K or ≥ 10% bands  

*THEN:*  
1. Check serum lactate (ABG or VBG)  
2. Obtain appropriate cultures  

*IF:* SBP < 90 or MAP < 70, despite fluids (minimum 30ml/kg NS bolus) or serum Lactate ≥ 4 mMol and not a cardiogenic cause  

*THEN:* PATIENT HAS SEVERE SEPSIS/SEPTIC SHOCK

**Early Goal Directed Therapy (Achieve within 6 hours)**

1. Central line placement for CVP/S₂CVO₂ monitoring (IJ or Subclavian)  
2. Call Appropriate Surgical or ICU Team  
3. Supplemental oxygen or mechanical ventilation  
4. GOAL CVP 8-12 (Mechanical ventilation may alter CVP)  
   A. 1 L crystalloid per hour (minimum 30 ml/kg) in the first 4-6 hours; if patient responding hemodynamically, continue intermittent boluses  
5. GOAL SBP 90-140, and/or MAP 65-90  
   A. Arterial line placement (preferred)  
   B. Norepinephrine 2-20 mcg/min  
6. GOAL ScVO₂ ≥ 70% when CVP 8-12 (distal port central line VBG)  
   A. Hgb < 10 Transfuse PRBC.  
   B. Dobutamine 2 to 5 mcg/kg/min  
7. GOALS NOT ACHIEVED  
   A. Reassess steps 5-7  
   B. Consider mechanical ventilation with sedation

Within 1 hour of early recognition, administer broad spectrum intravenous antibiotics:

**Cefepime 2g IV STAT**

If history of immediate anaphylactic reaction to PCN or cephalosporins:

Aztrenonam 2g IV + Levofloxacin 750 mg IV STAT

Within 1-3 hours: identify primary source & start additional intravenous antibiotics STAT as specified below:

**Pulmonary:**  
CAP: ADD Levofloxacin 750 mg IV  
HAP: ADD Levofloxacin 750 mg IV PLUS Vancomycin IV*  
**Line/Bloodstream/Skin/Bone/Joint:** ADD Vancomycin IV*  
**GI:** ADD Metronidazole 500 mg IV  
**Urine:** ADD Vancomycin IV*  
**CNS:** ADD Vancomycin IV*  
   If Patient: >50 yr or immunocompromised or chronic EtOH: ADD Ampicillin 2g IV  
**Other/Unknown:** ADD Vancomycin IV*  

* Vancomycin dosing:  
  Adult Patient <55 kg: 1000 mg OTO  
  Adult Patient 55 to 90 kg: 2000 mg OTO  
  Adult Patient >90 kg: 3000 mg OTO