

- EXCLUSIONS:**
- Less than 18 years of age
  - Antibiotics for >24 hours
  - Patient refuses blood draw, fluid administration or antibiotic administration (documented by LIP)
  - Comfort Care

## Surgery, Trauma & Burn Severe Sepsis & Septic Shock Protocol

- Patient meets at least Two (2) SIRS Criteria:
- Temperature > 101°F (38.3°C)
  - HR > 90 bpm
  - RR > 20 bpm
  - WBC > 12,000  $\mu\text{L}^{-1}$  or < 4,000  $\mu\text{L}^{-1}$  or normal WBC with > 10% bands

Confirmed or Highly Suspected Infection?

No

Re-evaluate for sepsis after 24 hours

- Positive sepsis screen**
- MUST** complete the following within 3 hours:
- Order lactate (If  $\geq 2$  mmol/L, repeat w/in 6 hours)
  - Blood cultures X 2
  - Start broad spectrum antibiotics\*

- Hemodynamically unstable (SBP < 90 mmHg or MAP < 65 mmHg or a drop in SBP by >40 points from last SBP considered normal for pt)?
- OR**
- Lactate level  $\geq 4$ ?

Monitor

No

Yes

Administer 30 mL/kg of IV crystalloid. Complete within 3 hours \*\*\*

Start norepinephrine for persistent hypotension (maintain MAP  $\geq 65$  mmHg)

Re-evaluate volume status\*\*; re-measure lactate if initially  $\geq 4$  mmol/L  
\*\***MUST** document in patient chart within 6 hours

- \*\*\*\*Broad Spectrum Antibiotics**
1. Vancomycin – follow initiation order set with pharmacy consult.
- plus**
2. Piperacillin-tazobactam 4.5g IV q6h\* **If AKI or possible CSF infection**, consider cefepime 2g IV q8h. If likely source is likely anything other than pneumonia, add metronidazole 500 mg IV q8
- or**
- If penicillin allergy: Cefepime 2g IV q8h (If likely source is likely anything other than pneumonia, add flagyl 500 mg IV q8) **or** meropenem 2g IV q8h
- or**
- If history of multidrug resistant gram-negative infection, meropenem 2g IV q8h\*
- plus**
4. Fluconazole 800mg IV x1 then 400mg IV daily\* or Miconazole 100mg IV daily in patients at high risk for fungal infection
- \* requires adjustment for impaired renal function.

- \*\*Reassessment of Volume Status**
1. Repeat focused exam including vital signs, cardiopulmonary, capillary refill, pulse and skin findings
  2. Or document 2 of the following:
    - Bedside cardiovascular ultrasound
    - Fluid challenge
    - CVP

\*\*\*Fluid challenge must be with NS or LR. Calculate bolus based on actual body weight. You may give more, but do NOT give less. If the patient cannot tolerate the desired volume, document the rationale in the progress notes