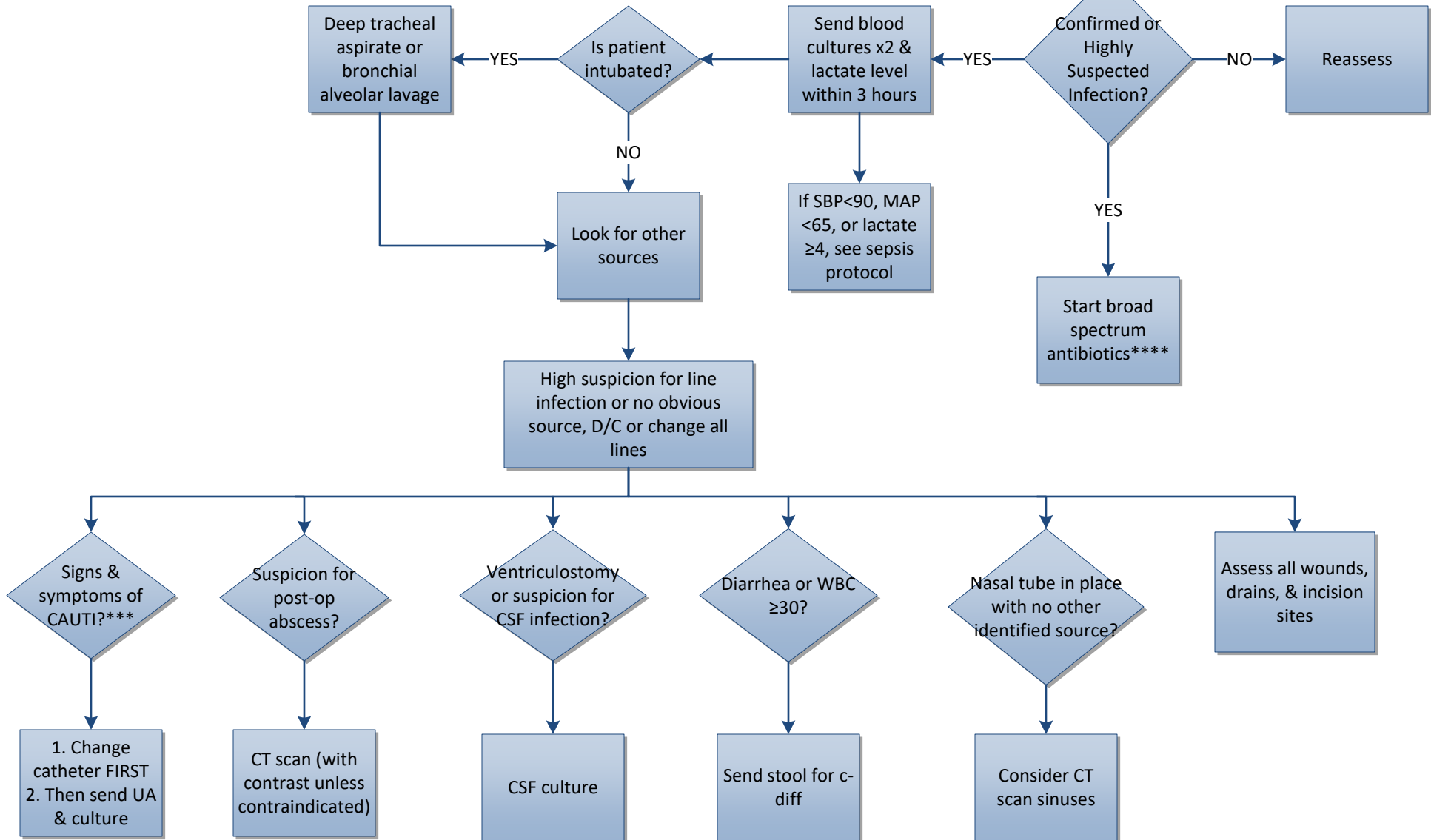


# Infection Workup (72 h after admission)

- 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



## Reference Tables

### Non-infectious causes of fever

- Post-operative
- Venous thromboembolism
- Subarachnoid hemorrhage
- Cerebral/myocardial infarction
- Alcohol withdrawal
- Drug-induced
- Neuroleptic malignant syndrome
- Malignant hyperthermia
- Fat embolus
- Acute hemorrhage
- Contrast reaction
- Serotonin syndrome

- Decubitus ulcers
- Thrombophlebitis
- Hematoma
- Solid organ injury
- GI bleed
- Pancreatitis
- Ischemic bowel
- Acalculous cholecystitis
- Adrenal crisis
- Neoplastic conditions
- Immunologic conditions

### \*\*\*Catheter-Associated Urinary Tract Infections – Signs & Symptoms

In general, bacteriuria/candiduria represent colonization & are RARELY the cause of fever.

- Altered mental status
- Rigors
- Malaise
- Lethargy
- Costovertebral angle tenderness
- Flank pain
- Acute hematuria
- Pelvic discomfort

### References

1. Antibiotic guidelines: Treatment recommendations for adult inpatients. Johns Hopkins Hospital Antibiotic Management Program. 2010.
2. Fuentes A. Fever assessment. SurgicalCriticalCare.net/AcuteCareSurgery.net. OrlandoHealth Surgical Critical Care and Acute Care Surgery Fellowships website.<http://surgicalcriticalcare.net/Guidelines/Fever%20Assessment%202013.pdf>. April 30, 2001. Revised January 30, 2013. Accessed August 12, 2015.
3. Marik PE. Fever in the ICU. CHEST 2000; 117:855-869.
4. O'Grady NP, Barie PS, Bartlett JG, et al. Guidelines for evaluation of new fever in critically ill adult patients: 2008 update from the American College of Critical Care Medicine and the Infectious Diseases Society of America. Crit Care Med. 2008; 36,4:1330-1349.

## Empiric Antibiotics for Suspected Infection

Step 1  Select one of the following:	Zosyn 4.5 g IV q6 *	Pro: anaerobic coverage Con: does not penetrate CNS
	Cefepime 2g IV q8h*	Pro: penetrates CNS Con: does NOT cover anaerobes
Step 2  Add MRSA coverage with one of the following:	Vancomycin 25/kg mg IV x1 then 15 mg/kg TID* w/pharmacy consult  ** drug of choice for bacteremia	Pro: preferred for suspected bacteremia Con: complicated dosing, large volume of fluid
	Linezolid 600 mg po BID	Pro: can be given po to minimize fluid, easy to dose Con: bacteriostatic – not appropriate for bacteremia
Step 3  Consider adding anaerobic coverage if using cefepime (when source is anything other than pneumonia)	Flagyl 500 mg po/IV Q8h	Can be given po or IV
Step 4  Review previous cultures & consider specific situations:	History of multidrug resistant gram-negative rods:  Meropenem 1g IV q8h* instead of Zosyn or cefepime	<b>**meropenem is ONLY for documented multidrug resistant organisms. Do NOT start meropenem empirically for any patient without MDR organism</b>
	History of organisms requiring specific coverage	Example, previous history of Enterobacter, use cefepime over Zosyn. Ask pharmD for assistance if needed.
	CNS infection	Vanc or linezolid  PLUS  Cefepime 2g IV q8 (or meropenem 2g IV q8 if history of cefepime resistance)  PLUS  Flagyl 500 mg PO/OV q8h
	Intra-abdominal infection	Does not usually need MRSA coverage Zosyn (preferred for enterococcus coverage) OR cefepime/Flagyl (if unable to use Zosyn)

\*Requires renal dose adjustment

This chart is for empiric coverage only. Antibiotics should be adjusted once culture data is available