SICU TRAUMA PATIENT VAP (Ventilator Associated Pneumonia) Diagnosis and Treatment Protocol:

The clinical triggers for bronchoscopy with BAL included any **three** of the following (only when not explained by other processes)
This applies to TRAUMA PATIENTS ONLY (not to every SICU patient)

Suspected VAP (3 out of 5):

- T >38.5 or <35
- WBC >12 or <4, >10% bands
- Macroscopically purulent sputum
- New or changing infiltrate on chest radiograph
- New hypoxia (increase in *daily minimum* PEEP by ≥3 or in daily minimum FiO2 of ≥20% over previous day; e.g. PEEP from 5 to 8 or FiO2 from 40% to 60%)

BAL should only be performed in presence of clinical triggers.

What if:

- BAL doesn't confirm PNA, and
- ≥48 hr from last bronch, and
- ≥3 of 5 suspicion criteria present and concern for VAP persists?

Repeat bronch/BAL; may extend antibiotics while awaiting cultures
Goal is to stop antibiotics ≤4 days from

Confirmed VAP:
VAP established by quantitative culture; ≥100,000 CFU is considered positive.

How to perform BAL:

- Blind endotracheal (inline) suction through ventilator circuit prior to inserting the scope.
- Advance bronchoscope into the lung segment (**without suctioning)** where radiographic changes were seen or into the left lower lobe of patients with diffuse bilateral infiltrates.
- With the bronchoscope wedged into the appropriate lung segment, instill 40 mL of sterile, non-bacteriostatic saline into the lung in two 20-mL aliquots (at same location).
- Walk specimen to micro lab for Gram's stain, quantitative aerobic and anaerobic culture.
- If the scope is used to suction anything prior to sampling, the procedure is terminated, a new scope is procured and the sample process started over.