

DEFINITION FOR VENTILATOR ASSOCIATED PNEUMONIA (VAP) IN CCTC

Screen all patients ≥ 18 years in CCTC.

Clinical Criteria

Does the patient have clinical signs of pneumonia with at least 2 of the following findings?

1

- New onset of purulent sputum production or respiratory secretions or a worsening character of sputum
- Tachypnea (RR > 20 per minute)
- Hypoxemia with P/F ratio < 285 OR respiratory failure requiring mechanical ventilation

OR one of the above respiratory changes plus one laboratory evidence

- Positive blood culture not related to another source of infection
- Positive sputum culture with the same organism as found in the blood.
- Positive culture of pleural fluid, BAL or tracheal aspirate
- Histopathologic exam shows evidence of abscess, fungal hyphae,
- Positive tests on respiratory secretions for viruses, Mycoplasma, Chlamydia, or Legionella
- In an immunocompromised patient- matching positive blood and sputum with Candida sp
- In an immunocompromised patient - evidence of fungi or PCP from BAL

PLUS

Radiographic

Must have:

2

- New or persistent (radiographically visible for at least 72 hours) radiographic infiltrates (not related to another disease process).

PLUS

Must have one of the following:

3

- Fever* (in the absence of antipyretics) defined as an increase in core temperature by > 1^o C **OR** oral temperature > 38^o C or core (rectal, bladder or PA) > 39^o C **OR** *hypothermia* (core temperature < 35^o C)
- Leukocytosis (total WBC $\geq 10 \times 10^9/L$) **OR** $\geq 15\%$ bands, regardless of peripheral WBC **OR** leucopenia (total WBC $\leq 4.5 \times 10^9/L$)

Define VAP

VAP is defined as the following:

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- Development of criteria 1, 2 and 3 above after 48 hours of mechanical ventilation
- Development of criteria 1, 2 and 3 after 48 hours of mechanical ventilation AND within 48 hours following continuous spontaneous breathing

Aspiration pneumonia is considered nosocomial if meets above criteria and was not present or incubating at the time of admission.

Multiple VAP episodes are included if there has been prior resolution and new signs and symptoms are present accompanied by new radiographic evidence.

** **Immunocompromised** patients include those with neutropenia (absolute neutrophil count <500/mm³), leukemia, lymphoma, HIV with CD4 count <200, or splenectomy; those who are early post-transplant, are on cytotoxic chemotherapy, or are on high dose steroids (e.g. >40mg of prednisone or its equivalent (>160mg hydrocortisone, >32mg methylprednisolone, >6mg dexamethasone, >200mg cortisone) daily for >2weeks).