## Ventilator-Associated Event Data Collection Worksheet

**PATIENT ID_________________________**

**Abbreviations:** Vent = ventilator; PEEP = Positive End-Expiratory Pressure; FiO2 = fraction of inspired oxygen; Min = daily minimum; Max = daily maximum; ≤4K = ≤4,000 WBC/mm³; ≥12K = ≥12,000 WBC/mm³; QAD = Qualifying Antimicrobial Day (see Antimicrobial Worksheet or protocol for details); cx = culture; BAL = bronchoalveolar lavage; PSB = protected specimen brush; ETA = endotracheal aspirate; qual = qualitative (non-quantitative); quant = quantitative; PrVAP = Probable VAP; Path = pathology/histopathology; VAC = Ventilator-Associated Condition; IVAC = Infection-related Ventilator-Associated Complication; PoVAP = Possible VAP.

### Step 1: VAC (change in A or B)

- A.
- B.
- C. Temp
- D. WBC
- E. QAD (✓)

### Step 2: IVAC (VAC, plus C or D, and E)

- F. Purulent respiratory secretionsa (✓)
- G. Positive cultureb,c
  - i. Any sputum cx, or qual cx of BAL, ETA, PSB, lung tissue (✓)
  - ii. Meets semi-quant or quant criteria (BAL, PSB, ETA, lung tissue cx)² (✓)
- H. Other positive PrVAP criteriaa

### Step 3: PoVAP (IVAC, plus F or G) — OR — PrVAP (IVAC, plus [F and Gii] or IVAC, plus H)

- VAE (VAC, IVAC, PoVAP, PrVAP)
- Date
- Vent Day
- PEEP Min
- FiO2 Min
- Min [≤36°C]
- Max [>38°C]
- Min [≤4K]
- Max [≥12K]
- QAD (✓)
- Purulent respiratory secretionsa (✓)
- i. Any sputum cx, or qual cx of BAL, ETA, PSB, lung tissue (✓)
- ii. Meets semi-quant or quant criteria (BAL, PSB, ETA, lung tissue cx)² (✓)
- Pleural fluid (✓)
- Path (✓)
- Legionella or viral diagnostic (✓)

### VAE (VAC, IVAC, PoVAP, PrVAP)

- Date
- Vent Day
- PEEP Min
- FiO2 Min
- Min [≤36°C]
- Max [>38°C]
- Min [≤4K]
- Max [≥12K]
- QAD (✓)
- Purulent respiratory secretionsa (✓)
- i. Any sputum cx, or qual cx of BAL, ETA, PSB, lung tissue (✓)
- ii. Meets semi-quant or quant criteria (BAL, PSB, ETA, lung tissue cx)² (✓)
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- PEEP = Positive End-Expiratory Pressure
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- ≤4K = ≤4,000 WBC/mm³
- ≥12K = ≥12,000 WBC/mm³
- QAD = Qualifying Antimicrobial Day
- cx = culture
- BAL = bronchoalveolar lavage
- PSB = protected specimen brush
- ETA = endotracheal aspirate
- qual = qualitative (non-quantitative)
- quant = quantitative
- PrVAP = Probable VAP
- Path = pathology/histopathology
- VAC = Ventilator-Associated Condition
- IVAC = Infection-related Ventilator-Associated Complication
- PoVAP = Possible VAP

- Excludes the following, when cultured from sputum, ETA, BAL, PSB: Normal respiratory/oral flora, mixed respiratory/oral flora or equivalent, Candida species or yeast not otherwise specified, coagulase-negative Staphylococcus species, Enterococcus species. Exclusions do not apply to cultures of lung tissue or pleural fluid.

- Any of the following can be used to meet the PrVAP definition: 1) positive pleural fluid culture where specimen was obtained during thoracentesis or initial placement of chest tube; 2) lung histopathology (see protocol for guidance); 3) positive diagnostic test for Legionella spp. or for the following respiratory viruses: influenza virus, respiratory syncytial virus, adenovirus, parainfluenza virus, rhinovirus, human metapneumovirus, coronavirus.

### Notes
- For Purulent respiratory secretionsa:
  - ≥25 neutrophils per low power field [lpf, x 100] (or heavy, 4+)
  - ≤10 squamous epithelial cells per low power field [lpf x 100] (or rare, occasional, few, 1+ or 2+)

### Quantitative Culture Criteria
- BAL: quantitative threshold ≥10⁴ CFU/ml (or moderate-heavy, 2+-4+ growth)
- Lung tissue: quantitative threshold ≥10⁴ CFU/g (or moderate-heavy, 2+-4+ growth)
- PSB: quantitative threshold ≥10³ CFU/ml (or moderate-heavy, 2+-4+ growth)

### PrVAP Definition
- Any of the following can be used to meet the PrVAP definition: 1) positive pleural fluid culture where specimen was obtained during thoracentesis or initial placement of chest tube; 2) lung histopathology (see protocol for guidance); 3) positive diagnostic test for Legionella spp. or for the following respiratory viruses: influenza virus, respiratory syncytial virus, adenovirus, parainfluenza virus, rhinovirus, human metapneumovirus, coronavirus.

### Cx Criteria
- i. Any sputum cx, or qual cx of BAL, ETA, PSB, lung tissue (✓)
- ii. Meets semi-quant or quant criteria (BAL, PSB, ETA, lung tissue cx)² (✓)

### Other Positive PrVAP Criteria
- Pleural fluid (✓)
- Path (✓)
- Legionella or viral diagnostic (✓)