



# Patient Safety Component

## Device-Associated Module

### Ventilator-Associated Event (VAE)

#### Quick-Reference Guide

### Acronyms and Abbreviations

<b>APRV</b>	Airway Pressure Release Ventilation
<b>ARDS</b>	Acute Respiratory Distress Syndrome
<b>BAL</b>	Bronchoalveolar Lavage
<b>DVT</b>	Deep Vein Thrombosis
<b>FiO<sub>2</sub></b>	Fraction of Inspired Oxygen
<b>HOB</b>	Head of Bed
<b>IVAC</b>	Infection-Related Ventilator-Associated Complication
<b>PE</b>	Pulmonary Embolism
<b>PEEP</b>	Positive End-Expiratory Pressure
<b>PNEU</b>	<i>(NHSN definitions include PNU1, PNU2, PNU3)</i> Pneumonia
<b>PVAP</b>	Possible Ventilator-Associated Pneumonia
<b>RT</b>	Respiratory Therapist
<b>VAC</b>	Ventilator-Associated Condition
<b>VAE</b>	Ventilator-Associated Event
<b>VAP</b>	Ventilator-Associated Pneumonia

### Key Points

When doing NHSN reporting, it's always important to keep in mind that you're using *surveillance* definitions, which may differ from *clinical* definitions.

The purpose of surveillance is to assess where, when, why and to whom certain events/conditions occur. Surveillance definitions help to make "associations" between data elements, but are not intended for clinical management of patients. NHSN data can show how your facility's rates compare to others across the country. In order to make valid comparisons, it's extremely important that all facilities apply surveillance definitions accurately and consistently.

The VAE surveillance definition was developed due to difficulties with applying the VAP definition. VAE is intended to be less subjective than VAP and easier to apply. The VAE definition applies to adult inpatient locations in an acute care hospital (ACH), long-term acute care hospital (LTAC), or inpatient rehab facility (IRF).

### VAE Prevention Strategies

- Staff hand hygiene
- Environmental cleaning and disinfection
- Strong collaboration between nursing and RT
- Elevation of HOB (30-45 degrees)
- Daily sedation vacation in the weaning process
- Spontaneous breathing trial process
- Early progressive mobility
- DVT prophylaxis
- Regularly scheduled oral care with chlorhexidine
- Reporting any concerns about ventilator care
- Patient/family education
- Staff education and training about VAE

### Tools and References

- NHSN manual, VAE surveillance section: [http://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE\\_FINAL.pdf](http://www.cdc.gov/nhsn/PDFs/pscManual/10-VAE_FINAL.pdf)
- VAE Calculator Version 3.0 <http://www.cdc.gov/nhsn/VAE-calculator/vaeCalcV3.html>
- Ventilator-Associated Event form CDC 57.112 [http://www.cdc.gov/nhsn/forms/57.112\\_VAE\\_BLANK.pdf](http://www.cdc.gov/nhsn/forms/57.112_VAE_BLANK.pdf)
- Instructions for Completing the VAE form [http://www.cdc.gov/nhsn/forms/instr/57\\_112-VAE.pdf](http://www.cdc.gov/nhsn/forms/instr/57_112-VAE.pdf)
- Denominator form CDC 57.117 [http://www.cdc.gov/nhsn/forms/57.117\\_DenominatorSCA\\_BLANK.pdf](http://www.cdc.gov/nhsn/forms/57.117_DenominatorSCA_BLANK.pdf)
- Denominator form CDC 57.008 [http://www.cdc.gov/nhsn/forms/57.118\\_DenominatorICU\\_BLANK.pdf](http://www.cdc.gov/nhsn/forms/57.118_DenominatorICU_BLANK.pdf)