# Ventilator-Associated Pneumonia (VAP) Prevention Essential Practices1

## Avoid intubation if possible.2-3

* Consider alternative strategies, such as, high flow O2 or noninvasive positive pressure ventilation.
* Consider each patient’s clinical scenario to determine the most appropriate strategy.

## Minimize sedation.2-5

* Determine a clear plan and targets for sedation. Consider multimodal and alternative strategies.
* Conduct daily sedation awakening trials, unless contraindicated.

## Conduct daily spontaneous breathing trials.2, 4-5

* Perform for all ventilated patients without contraindications.
* Coordinate concurrently with sedation awakening trials.

## Mobilize patients as soon as possible.4-5

* Early mobilization contributes to reduction in duration of mechanical ventilation and shorter ICU stay.
* Identify barriers to early mobility and discuss solutions with staff.

## Elevate head of bed above 30 degrees.2-4

* Current evidence recommends avoiding the supine horizontal position.

## Complete daily oral care.

* Daily toothbrushing is an essential practice.
* **Do NOT use chlorhexidine for oral care**. Evidence suggests potential for increased mortality rates.

## Provide early enteral feeding.2-3

* Early enteral nutrition is preferred over parenteral nutrition.

## Maintain ventilator circuits properly.3

* Change circuits only when soiled or nonfunctioning, or according to manufacturer instructions.
* If condensation occurs, drain away from patient.

# Additional Interventions To Consider

## Perform selective decontamination of oropharynx and digestive tract.2-3,6

* Should only be considered in populations/units with low rates of multidrug-resistant organisms.
* Must be coupled with a mechanism to monitor for antibiotic resistance.

## Use endotracheal tubes with subglottic suction.4

* Associated with reduced VAP rates but has not been found to affect other outcomes (e.g., mortality).

## Consider early tracheostomy (within 7 days of intubation).3

* Associated with reduced VAP rates but the broader impact on patient health must be considered.

## Consider post-pyloric feeding.2,7

* Associated with a lower incidence of pneumonia than gastric feeding.

# Guidelines and Resources

* [**2022 SHEA Compendium Strategies to Prevent VAP, Ventilator-Associated Events, and Non-Ventilator Hospital-Acquired Pneumonia**](https://shea-online.org/guidance/strategies-to-prevent-ventilator-associated-pneumonia-ventilator-associated-events-and-nonventilator-hospital-acquired-pneumonia-in-acute-care-hospitals-2022-update/)**1**
* [**Society of Critical Care Medicine ICU Liberation Bundle (published 2020)**](https://www.sccm.org/Clinical-Resources/ICULiberation-Home/ABCDEF-Bundles)**5**
* [**AHRQ Toolkit To Improve Safety for Mechanically Ventilated Patients**](https://www.ahrq.gov/hai/tools/mvp/index.html) **(2017)4**

# References

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