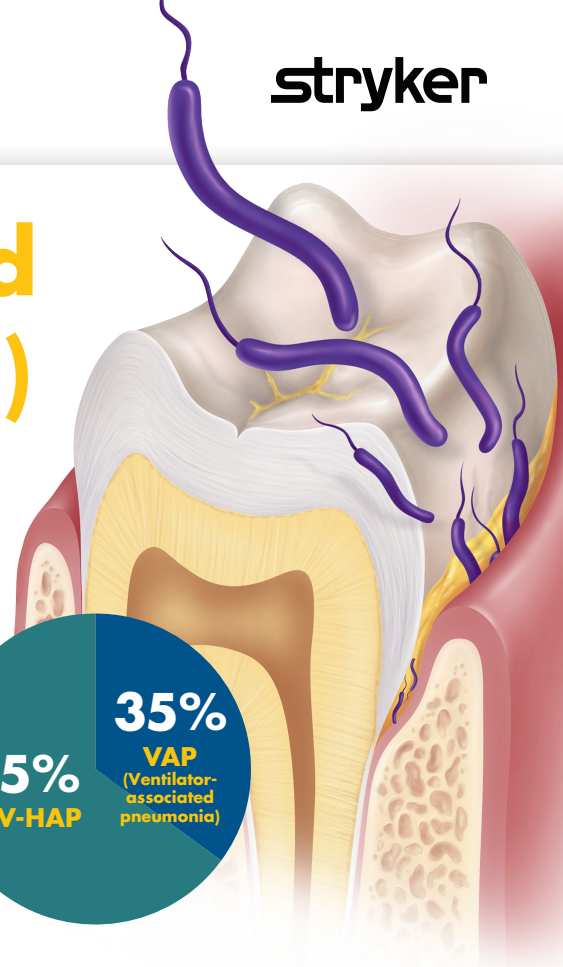


Hospital-acquired pneumonia (HAP)

In a multistate prevalence study, HAP was found to be one of the most prevalent healthcare-acquired infections (HAIs), accounting for 25% of HAIs. Of those HAIs, 65% were non-ventilator HAP (NV-HAP).¹



#1 HAI

Hospital-acquired infection in the US¹

50%↑
of sepsis cases
originate as pneumonia²



80%↑
hospital admissions
may be at a higher
risk for HAP³

Within **48 hours** of admission, the normal oral flora changes to include respiratory pathogens not normally found in healthy individuals⁴

Every **4-6 hours** 20 billion microbes replicate in the oral cavity⁵

Patients with NV-HAP:

5x
more likely to require a ventilator⁶

22%
average mortality rate⁷

The cost of NV-HAP:

19.3%
of patients are readmitted for pneumonia within 30 days⁸

\$18,586
average additional cost of NV-HAP⁹

Professional guidelines

ADA evidence-based protocol¹⁰

Brush two - four times a day

- Use a **soft bristled** toothbrush
- Use an **antiseptic oral rinse**
- Use toothpaste containing **sodium bicarbonate or fluoride**
- Use a **nonpetroleum-based moisturizer**

Dependent patients

- Use **24-hour suction toothbrush kits** for high aspiration-risk patients
- Use a **soft bristled** toothbrush

Edentulate patients (2 times a day)

- For patients with dentures, remove and soak dentures
- **Brush gums and mouth**
- Prevent patients from sleeping with dentures in place

AACN guideline recommendations¹¹

Brush at least two times a day

- Use a **soft bristled** toothbrush
- Use an alcohol-free **antiseptic oral rinse**
- Use **non petroleum-based** moisturizer
- Use **therapeutic toothpaste with fluoride**

Dependent patients

- Brush with a **suction toothbrush**
- Consider performing oral care more frequently for **patients at a higher aspiration risk**

Edentulate patients

- If no teeth or dentures, **gently brush gums, tongue** at least two times a day

Continuum of care: HAP reduction initiative

One hospital's findings in 1 year:⁸

70%

reduction
in NV-HAP

31

lives saved

\$5.8M

return on investment (ROI)

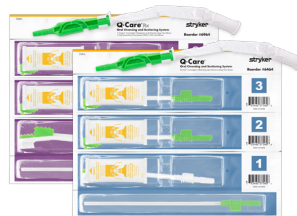
All hospital patients are at risk⁸

Help address the risk factors associated with pneumonia throughout the **continuum of care**:

Pre-surgical

Ventilated

Non-ventilated
Dependent Independent



References: 1. Magill SS, O'Leary E, Janelle SJ, et al. Changes in Prevalence of Health Care-Associated Infections in U.S. Hospitals. *New England Journal of Medicine*. 2018;379(18):1732-1744. 2. Giuliano K, Baker D. Sepsis in the Context of Nonventilator Hospital-Acquired Pneumonia. *AJCC*. 2020;29(1):9-14. 3. Quinn B, Ruble C. Procedure 3 - Endotracheal Tube Care and Oral Care Practices for Ventilated and Non-Ventilated Patients. In: *AACN Procedure Manual for Progressive and Critical Care*. 8th Edition;35-40. 4. Vollman K, Sole ML, Quinn B. Procedure 4 - Endotracheal Tube Care and Oral Care Practices for Ventilated and Non-ventilated Patients. In: *AACN Procedure Manual for High Acuity, Progressive, and Critical Care*. 7th Edition. Vol 37. 2nd ed. ELSEVIER. 5. Quinn B, Baker DL. Comprehensive oral care helps prevent hospital acquired nonventilator pneumonia. *American Nurse Today*. 2015;10(3):18-23. 6. Micek, S. et al. A Case-Control Study Assessing the Impact of Non-Ventilated Hospital-Acquired Pneumonia on Patient Outcomes. *CHEST*. 439. 2017. 7. Jones B, Sarvet A, Ying J. Incidence and Outcomes of Non-Ventilator-Associated Hospital-Acquired Pneumonia in 284 US Hospitals Using Electronic Surveillance Criteria. *JAMA*. 2023;6(5):e2314185. 8. Baker D, Quinn B. Hospital Acquired Pneumonia Prevention Initiative-2: Incidence of nonventilator hospital-acquired pneumonia in the United States. *American Journal of Infection Control*. 2018;46(1):2-7.9. Data on file. The Moran Company. 2021. 9. Quinn B, et al. Non-ventilator health care-associated pneumonia (NV-HAP): Best practices for prevention of NV-HAP. *American Journal of Infection Control*. 2020;48: A23-A27. 10. Quinn B, Ruble C. Procedure 3 - Endotracheal Tube Care and Oral Care Practices for Ventilated and Non-Ventilated Patients. In *AACN Procedure Manual for Progressive and Critical Care*. 8th Edition;35-40.

Stryker or its affiliated entities own, use, or have applied for the following trademarks or service marks: Corinz, Q-Care, Sage and Stryker. The absence of a product, feature, or service name, or logo from this list does not constitute a waiver of Stryker's trademark or other intellectual property rights concerning that name or logo. All other trademarks are trademarks of their respective owners or holders.

SAGE-OC-BROC-1044742_REV-0_en_us © 2024 Stryker

Sage Products LLC | 3909 Three Oaks Road | Cary, IL 60013 | stryker.com | 800 323 2220