

# Plak-Vac<sup>®</sup>

## Oral Care System



...Protocol Driven  
Solutions

# The Problem - Nosocomial Pneumonia

Nosocomial pneumonia presents a complex treatment challenge for healthcare professionals which increases risk of morbidity and mortality for patients in all healthcare settings, from acute to long term care. The impact of nosocomial pneumonia includes:

- increased length of stay
- increased patient care intensity for staff
- higher facility resource utilization levels
- substantially increased healthcare costs

Ventilated patients are particularly at risk for nosocomial pneumonia and Ventilator-Associated Pneumonia (VAP):

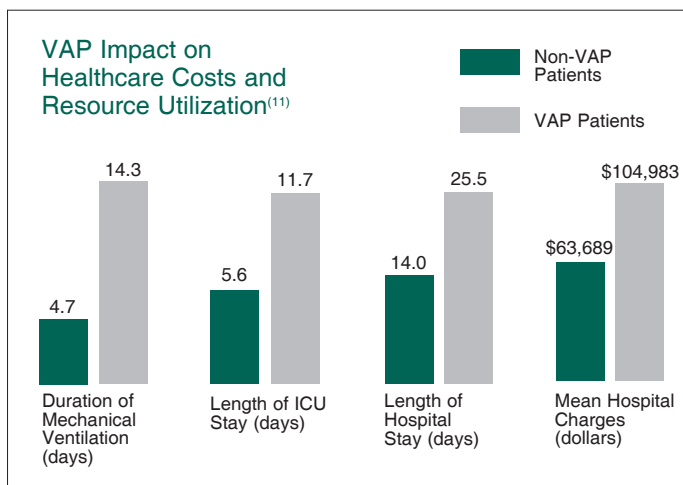
- Ventilated patients are at higher risk for pneumonia due to aspiration of oral secretions related to endotracheal intubation<sup>(1)</sup>
- VAP can occur in greater than 10% of ventilated patients.<sup>(2,3)</sup>
- Hospital Associated Pneumonia (HAP) potential increases with length of mechanical ventilation by 6-21 times<sup>(1)</sup>

Recent studies have found that a number of patient care measures, including oral hygiene, can help reduce pneumonia rates. Oral hygiene has been determined to be important as:

- the oral cavity can be colonized with pathogens that can lead to nosocomial pneumonia and VAP.<sup>(2, 4, 5)</sup>
- dental plaque can be a critical reservoir for these bacteria.<sup>(6,7)</sup>

- Studies have shown a 60% reduction in VAP rates after implementation of a comprehensive oral care program.<sup>(8)</sup>
- Patients in long-term care settings are at increased risk of Community Acquired Pneumonia (CAP) due to aspiration of oral secretions from dysphagia caused by stroke, Alzheimer's disease, Parkinson's disease and other conditions.<sup>(9,10)</sup>

Formal oral care protocols have been shown to play an important role in reducing nosocomial pneumonia, including VAP, by reducing dental plaque and bacteria levels in the oral cavity through routine brushing and cleaning of the mouth. These findings led to the CDC Guidelines for Preventing Healthcare-Associated Pneumonia, 2003, which recommends that healthcare facilities "develop and implement a comprehensive oral-hygiene program" to reduce pneumonia rates.



## The Plak-Vac Oral Care Kit

Plak-Vac Oral Care Kits provide a customized, component formulary to assure the implementation of your protocol while minimizing cost and waste. Our unique approach offers benefits that "off the shelf" solutions can't:

- Collaboration in incorporating the institution's best practices protocol into a customized oral care delivery kit.
- Incorporation of unique details such as protocol instructions, treatment times and product components into the kit packaging.
- Individualized treatment intervals including q2, q4, q8, q12, q24, or any combination.
- Accommodation of both acute and long term care needs.

Plak-Vac Oral Care Kits offer a customized, comprehensive point of care delivery approach that assures ease of use to facilitate staff implementation and increase compliance.



# The Solution - The Plak-Vac® Oral Care System

Trademark Medical has developed the Plak-Vac Oral Care System to facilitate implementation of an oral care program.

The Plak-Vac System includes:

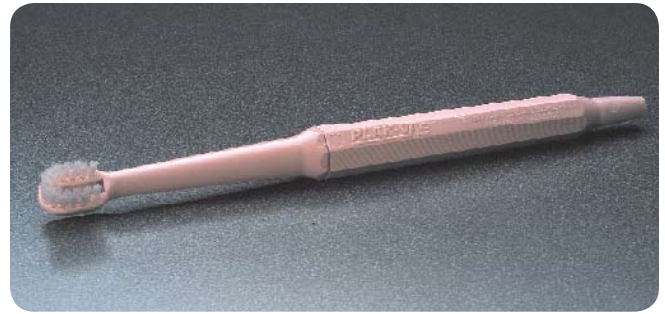
## The Plak-Vac Suction Toothbrush

Plak-Vac is a reusable single patient use oral hygiene instrument. The Plak-Vac Suction Toothbrush has been in use for over 17 years and provides the ultimate in oral hygiene. A combination suction instrument and toothbrush, the Plak-Vac allows the removal of debris, plaque, bacteria and fluid from the mouth.

The Plak-Vac has soft bristles that are gentle to gums, teeth and other tissues in the mouth. Suction level is controlled by a finger control port located in the Plak-Vac handle.

## The Plak-Vac Storage Holder

The Plak-Vac Storage Holder provides a simple, convenient, and hygienic way to store the Plak-Vac suction toothbrush between uses. Made of translucent polypropylene, the Plak-Vac storage holder helps avoid contamination of the Plak-Vac toothbrush by preventing accidental contact with bed linens, furniture and other potentially contaminated surfaces. The Plak-Vac storage holder is great for storing other patient care devices such as yankauer suction instruments, as well. Use with the Plak-Vac storage holder bracket or clip.



## Typical Custom Plak-Vac Oral Care Treatment Pouch

Treatment Time or Interval

Institution-Specific Protocol

List of Contents

**10:00 Hours**

### Oral Care Procedure

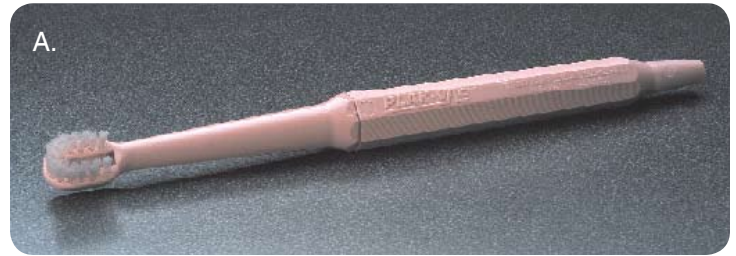
- > Brush teeth, palate and gums
- > Clean patient's teeth, palate and gums with the Plak-Vac oral suction brush and toothpaste.
- > Brush for approximately 1-2 minutes: Exert gentle pressure while moving in short horizontal or circular strokes. Gently brush the surface of the tongue. If patient has no teeth use a brush to their gums and roof of mouth gently with toothpaste to remove plaque and stimulate the gums.
- > If brush causes bleeding or discomfort use a soft swab or suction swab: Place swab perpendicular to gum and apply gentle mechanical action for 1-2 minutes. Turn swab in clockwise motion to remove mucous and debris.
- > Assess and remove subglottic secretions Provide deep suction, as needed, in intubated patients to remove oropharyngeal secretions that have migrated down the tube and settled on top of the cuff
- > As recommended: Normal saline should not be instilled down the ETT or tracheostomy tube while suctioning. Normal saline should only be used to clean or rinse out the suction catheter after each use.

**Pouch Contents**  
Swab  
Mouthwash  
Lip moisturizer  
Suction catheter  
Toothpaste

# Product Listing

## A. Plak-Vac Suction Toothbrush

Reorder No.: 2200-K, 144 per case



## B. Plak-Vac Storage Accessories

Reorder No.:

2700 Plak-Vac Storage Holder, 50 per case

2701 Plak-Vac Storage Holder Bracket, each

2702 Plak-Vac Storage Holder Clip, 25 per case



B. Holder



Bracket



Clip

## C. Applicator Swabs

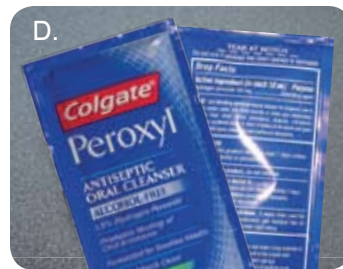
Reorder No.: 2710 Untreated foam applicator swab.  
50 bags of 20 swabs, 1000 swabs per case.



C.

## D. Mouth Wash

Reorder No.: 2720 Mint flavored 1.5% Hydrogen peroxide mouth wash. 0.34 ounce foil packet.  
100 packets per case.



D.

## E. Mouth and Lip Moisturizer

Reorder No.: 2740 Mint flavored mouth and lip moisturizer 2 gram tube. 150 tubes per case.



E.

**Disclaimer: The scientific and medical publications referenced herein are intended for informational purposes only. These studies are not intended to promote the safety or efficacy of the Plak-Vac oral care system or any of its components beyond their legally approved claims and indications for use.**

### References:

1. CDC. Guidelines for Preventing Healthcare Associated Pneumonia, 2003 Recommendations of CDC and the Healthcare Infection Control Practices Advisory Committee, 2003.
2. Sole ML, et al. Bacterial Growth in Secretions and on Suctioning Equipment of Orally Intubated Patients. Am J Crit Care. 2002 Mar;11(2):141-9.
3. Ibrahim EH, Tracy L, et al. The Occurrence of Ventilator-Associated Pneumonia in a Community Hospital. Chest 2001; 120:555-561.
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6. Fourrier F, Duvivier B, et al. Colonization of Dental Plaque: A Source of Nosocomial Infection in ICU Patients. Crit Care Med 1998; 26:301-308.

7. El-Solh AA, Peitranoni C, et al. Colonization of Dental Plaques: A Reservoir of Respiratory Pathogens for Hospital-Acquired Pneumonia in Institutionalized Elders. Chest 2004;126:1575-1582.
8. Schleder B, Stott, K. The Effect of a Comprehensive Oral Care Protocol on Patients at Risk for Ventilator-Associated Pneumonia. J Advocate Health Care. Spr/Sum 2002;4(1):27-30.
9. Coleman PR. Pneumonia in the Long Term Care Setting: Etiology, Management and Prevention. J Gerontol Nurs. 2004 Apr;30(4):14-23.
10. Marik PE, Kaplan D. Aspiration Pneumonia and Dysphagia in the Elderly. Chest 2003; 124:328-336.
11. Rello J, et al. Epidemiology and Outcomes of Ventilator Associated Pneumonia in a Large U.S. Database. Chest 2002 122: 2115-2121.

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