

# Kimberly-Clark\*

Closed Suction Systems

# Manipulation of the ventilator circuit can increase cross-contamination – a leading cause of VAP<sup>1</sup>

- Ventilator-associated pneumonia (VAP) is the most common and deadly healthcare-associated infection, affecting up to 28% of ventilated patients.<sup>2</sup> To help protect patients, a closed ventilator circuit is recognized as a best practice in the prevention of VAP.<sup>3</sup>
- Maintaining a closed ventilator circuit is recommended by the American Association for Respiratory Care (AARC)<sup>3</sup>
- A closed circuit maintains ventilation and oxygen therapy throughout suctioning, and prevents approximately 50% of the lung volume fall observed when suctioning after disconnection from the ventilator<sup>4</sup>
- Closed suctioning is a best practice that protects patients and caregivers<sup>3,5</sup>
  - Reduces the risk for contamination from outside pathogens<sup>5</sup>
- Reduces colonization within the circuit<sup>5</sup>
- Designed to protect caregivers from exposure to body fluids

### Advanced infection control that sets a new standard in clean

**From the leader in closed suctioning, KIMBERLY-CLARK\* KIMVENT\* Closed Suction Systems** have advanced infection control features that redefine the standard of care for closed suctioning. These unique infection prevention features have been proven to reduce cross-contamination, reducing ICU days and associated costs.<sup>6</sup> With a solution to meet every patient need, KIMVENT\* Closed Suction Systems are a powerful tool in your fight against this deadly HAI.

"The pathogenesis of VAP...is linked to two separate but related processes: colonization of the aerodigestive tract with pathogenic bacteria, and aspiration of contaminated secretions." — Kollef, et al. Respiratory Care, 2005





Trusted Clinical Solutions\*



# **Kim**Vent\* Turbo-Cleaning

**Closed Suction System** with Ballard\* Trach Care\* Technology

### Proven to provide an 89% cleaner catheter tip.<sup>7</sup>

**KIMVENT\* Turbo-Cleaning Closed Suction System**, which features technology from *BALLARD\* TRACH CARE\**, is the only catheter that retracts within a unique, isolated and vacuum-sealed turbulent cleaning chamber. The turbulent cleansing action results in an 89% cleaner catheter tip compared to a standard closed suction system?\*This reduced colonization may help reduce risk of VAP in your ventilated patients.

Sealed by our patented "PEEP seal" technology, the suction and saline produce turbulent cleansing action, for a cleaner catheter tip



One-way lavage port designed to prevent "sprayback"

#### Hinged valve isolates catheter tip and helps prevent inadvertent

#### Turbulent cleaning chamber creates cleansing action, resulting in

a cleaner catheter

PEEP seal helps reduce PEEP loss and inadvertent

Compared to Ballard\* Trach Care 24-hour closed suction systems

Integrated MDI port (optional) 89% Cleaner

KIMVENT\* Turbo-Cleaning Closed Suction System cleaned in the isolated, turbulent cleaning chamber Standard Closed Suction System cleaned by usual method of squeezing saline vial to dispense

# KimVent\* VAP Solutions –



**Closed Suction System** with Ballard\* Trach Care\* Technology

## Multiple access. Multiple procedures. One closed circuit.

Introducing the new **KIMVENT\* Multi-Access Port Closed Suction System.** It features a compact rotating manifold that provides multiple ports to access the patient's airway without jeopardizing integrity of the closed circuit. And a closed circuit helps you protect your patient from cross-contamination and VAP.



Package includes KIMVENT\* Turbo-Cleaning Closed Suction System Catheter Additional replacement catheters available



**Rotating manifold locks into place with a click** for reassurance that circuit remains sealed

Clinicians can perform suctioning and other procedures such as bronchoalveolar lavage, bronchoscopy, or MDI drug delivery while maintaining a closed vent circuit as recommended to help prevent VAP

Catheter locks into separate port and stays connected and clean Single-use seal cassette maintains PEEP during insertion of sampling catheter or other devices

#### Also available: KIMBERLY-CLARK\* KIMVENT\* BAL CATH\* Bronchial Aspirate Sampling Catheter

Designed for use with the KIMVENT\* Multi-Access Port System. Insert the KIMVENT\* BAL CATH\* catheter through the alternate therapy port to obtain a lower respiratory tract sample without opening the ventilator circuit.

Turbulent cleaning chamber for a cleaner catheter

Sleeve tether prevents over-retraction of catheter

Helping You Protect Your Patients From VAP

### As a global leader in VAP prevention, Kimberly-Clark offers a comprehensive range of products, education, in-service training, and compliance programs to assist you as you develop your best-practice protocol that can help protect your patients from VAP.

KIMBERLY-CLARK\* KIMVENT\* Solutions: Closed Suction Systems Endotracheal Tubes Bronchial Aspirate Sampling Catheter Oral Care Solutions



For more information, please call your sales representative, or visit our website at: www.VAP.kchealthcare.com/CSS

KIMBERLY-CLARK\*



### The Kimberly-Clark Advantage\*

Clinical Education Ongoing Customer Support Expert Sales Force Tools & Best Practices Clinical Research Commitment to Excellence

Infection prevention website: 📈



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### Figure 1 KIMVENT\* Turbo-Cleaning at 72 hours vs. Standard at 24 hours All organisms combined

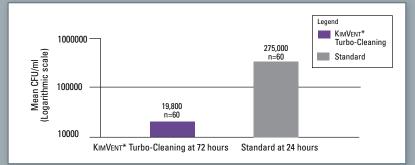


Figure 1: KIMBERLY-CLARK\* KIMVENT\* Turbo-Cleaning Closed Suction Systems, at 72 hours, show over an (89%) reduction in mean catheter tip colonization compared to the control catheters at 24 hours (p<0.001)<sup>7</sup>



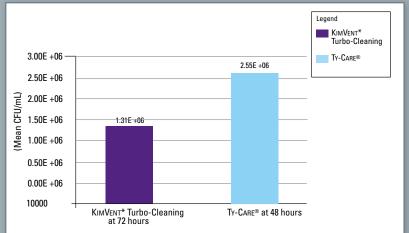


Figure 2: KIMVENT\* Turbo-Cleaning Closed Suction Systems at 72 hours show a (50%) reduction in mean catheter tip colonization compared to the control Ty-CARE® catheters at 48 hours.<sup>®</sup>

- 1. Guidelines For Preventing Healthcare Associated Pneumonia, 2003, CDC Centers For Disease Control.
- 2. Chastre J, Fagon J. Ventilator-Associated Pneumonia, Crit Care Med, 2002; 165:867-903
- 3. Hess DR, Kallstrom TJ, Mottram CD, Myers TR, Sorenson HM, Vines DL; American Association for Respiratory Care. Care of the ventilator circuit and its relation to ventilator-associated pneumonia.Respir Care. 2003 Sep;48(9):869-79.
- Maggiore SM, Lellouche F, Pigeot J, Taille S, Deye N, Durrmeyer X, Richard JC, Mancebo J, Lemaire F, Brochard L. Prevention of endotracheal suctioning-induced alveolar derecruitment in acute lung injury. Am J Respir Crit Care Med. 2003 May 1;167(9):1215-24.
- 5. Freytag CC, Thies FL, Konig W, Welte T. Infection, Clinical and Epidemiological Society, 31-2003-No. 1.
- 6 Kollef, MH, Prentice D, Shapiro SD, Fraser VJ, Silver P, Trovillion E, Weilitz P, Von Harz B, St. John R., Mechanical Ventilation with or without Daily Changes of In-Line Suction Catheters, Am J Respir Crit Care Med., Volume 156, Number 2, August 1997, 466-472
- 7 Compared to BALLARD\* TRACHCARE\* 24-hour closed suction systems. BALLARD\* Critical Care Products TRACH CARE\* 72 Microbiology Report, Nelson laboratories Final Reports, Laboratory Numbers 18343, 163901.1
- 8. Compared to Ty-Care<sup>®</sup> Catheter at 48 hours. TRACH CARE\* 72 versus Ty-Care<sup>®</sup> Microbiology Report Sales Sheet.

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