



## VAP care range

Targeting Ventilator-Associated Pneumonia (VAP)



**Critical Care** ▪ VAP care range



## Ventilator care range

Ventilator-Associated Pneumonia (VAP) is a healthcare-associated infection, which can be efficiently fought when applying certain strategies. It has a significant impact on patient's health, length of stay and hospital cost.<sup>1</sup>

In order to actively reduce the incidence of VAP it is recommended to implement a ventilator care bundle. The ventilator care bundle consists of a series of activities and interventions, which will help reduce the incidence of VAP.<sup>2</sup>

Ventilator care bundles provide a variety of key measures to follow including oral care programmes to reduce bacterial growth in the oral cavity, before it can be aspirated into the lungs.<sup>2</sup>

Breathing system changes should only be made when clinically indicated, as every time a system is opened this action may allow bacteria to enter the patient's airway. Maintaining a closed breathing system by using a closed suction system may further reduce this exposure.<sup>2</sup>

Intersurgical can provide a range of products which can help the clinician deliver the ventilator care bundle to help in the reduction of VAP.

## Oral Care

A combination of oral care treatments (brushing and suctioning) as part of a structured oral care protocol allows care providers to efficiently prevent build up of oropharyngeal plaque and biofilm. This in turn can lead to a reduction of VAP and aspiration pneumonia and greatly reduces associated treatment costs.<sup>3,4,5</sup>

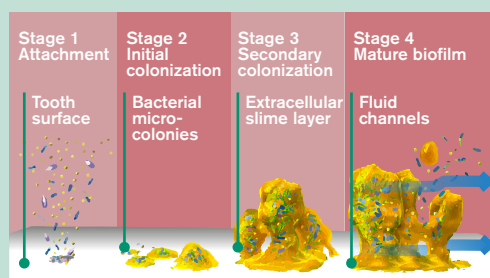
**VAP Fact 1:** VAP occurs in 10-20% of all patients in ICU.<sup>3</sup>

**VAP Fact 2:** Each case of VAP costs the hospital \$30,000–\$40,000.<sup>4</sup>

**VAP Fact 3:** VAP leads to increased mortality rate and length of ICU stay.<sup>2</sup>

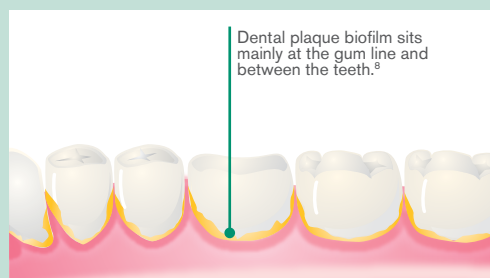
### Four stages of plaque build up<sup>6</sup>

Dental plaque is a biofilm made up predominantly of bacteria, sitting mainly at the gum line and between teeth.<sup>7,8</sup>



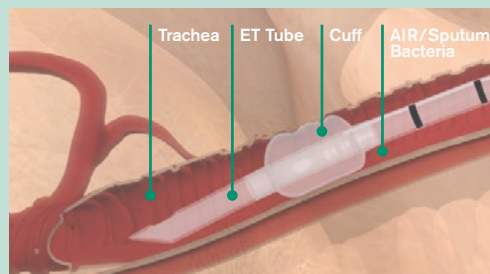
### Dental plaque biofilm

Fresh plaque will develop after each intervention and will cover the tooth surface within hours. The biofilm protects bacteria such as *Staphylococcus aureus* and *Klebsiella pneumoniae*, which are common oral microbes. Biofilm must be broken up prior to the application of antibacterial agents.<sup>7,9</sup>



### Aspiration

From the oropharynx saliva, mucous and bacteria accumulate at the ET tube cuff and may be aspirated into the lungs, as the cuff seal will never be 100%. When aspirated into the lungs, these bacteria may cause VAP.<sup>10,11</sup>



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## Cleaning tools

For the most effective removal of plaque and biofilms regular mechanical toothbrushing should be carried out. Intersurgical offer a range of toothbrushes with soft bristles and cleaning implements for both adult and paediatric patients. These have been designed with small brush heads which facilitate access to the oral cavity.<sup>5</sup>

3011000



### OroCare™ Mini toothbrush

Ideal for patients with difficult oral care needs. The long slim neck of this brush assists the user in accessing the oral cavity.

3016000



### OroCare Aspire suction toothbrush

With built in direct attachment for the suction line this toothbrush eliminates the need for an additional yankauer. The long slim neck of this brush assists the user in accessing the oral cavity without interfering with ET tubes and other equipment.

3017000



### OroCare Sensitive oral suction wand

This unique suction wand is used for cleaning delicate gums and tissues. The integral moulded soft head provides a safer solution to the commonly used foam swab. The wand allows application of mouthwash solutions or water whilst gently cleaning the teeth and soft pallet.

Code	Description	Box Qty.
3011000	OroCare Mini toothbrush	30
3016000	OroCare Aspire suction toothbrush	25
3017000	OroCare Sensitive oral suction wand	15

## Accessories

To complement the range Intersurgical has developed a range of accessories, to assist in an effective oral care programme.

3023000



### OroCare suction valve - stepped connector

Features a rotating control that allows suction to be paused as required. Designed for use with funnel style suction tubing.

3024000



### OroCare suction valve - flexible connector

Features a rotating control that allows suction to be paused as required. Designed for use with finger-tip style suction tubing.

3022000



### OroCare suction line splitter

Designed for the simultaneous use of two suction lines on a single suction canister. This may become necessary, when a closed suction system is already attached to the vacuum source.

3021000



### OroClean tooth gel sachet

Tooth gel available in single use sachets. This prevents cross contamination of tooth gel tubes and the associated potential for recontamination of patients.

Code	Description	Box Qty.
3023000	OroCare suction control valve, flexible - stepped connector	25
3024000	OroCare suction control valve, flexible - flexible connector	25
3022000	OroCare suction line splitter	25
3021000	OroClean tooth gel sachet, 2g	250



## Daily protocol kits

In order to help in the introduction of an oral care protocol we have three basic day kits available for either four hour (q4) or eight hour (q8) interventions. There are also two complete kits including chlorhexidine mouthwash for use every four (q4) or eight hours (q8), offering a single use solution straight from the pack.

[Make an enquiry](#)[Watch the video](#)

3014100

Code	Description	Box Qty.
3014000	OroCare™ 24 hour day kit – q4 (four hour intervention kit)	10
3014001	OroCare 24 hour day kit – q4 (four hour intervention kit) without foam swabs	10
3014100	OroCare 24 hour day kit with chlorhexidine mouthwash – q4 (four hour intervention kit)	10
3015000	OroCare 24 hour day kit – q8 (eight hour intervention kit)	15
3015100	OroCare 24 hour day kit with chlorhexidine mouthwash – q8 (eight hour intervention kit)	15

## Single use treatment packs

For situations where full daily kits are not suitable, Intersurgical offer a variety of single use treatment packs. A selection of pack options contain a toothbrush, a choice of cleaning agents, dispenser cups and foam swabs for lip moisturising.



3016001



3016002



3016003



3016100

Code	Description	Box Qty.
3016001	OroCare Aspire suction toothbrush with chlorhexidine mouthwash, dispenser cup and foam swab	100
3016002	OroCare Aspire suction toothbrush with chlorhexidine mouthwash and tooth gel, dispenser cup and foam swab	100
3016003	OroCare mouthcare kit with chlorhexidine mouthwash and tooth gel, OroCare Aspire suction toothbrush OroCare Sensitive oral suction wand and dispenser cup	100
3016100	OroCare Aspire suction toothbrush with tooth gel	25

[Find out more](#)





## Closed suction systems

Maintaining a closed breathing system is part of the AARC Clinical Practice Guidelines for Endotracheal suctioning, designed to reduce the incidence of VAP.<sup>12</sup>

Another important factor in infection control is the cough reflex of the patient. By using a closed suction system the care provider reduces the risk of cross infection by aerosolised pathogens.<sup>13</sup>

TrachSeal™ features an ultra clear, soft sleeve, allowing tactility when inserting the catheter with optimum visibility of blockage assessments.

TrachSeal closed suction systems are available for 24 hour or 72 hour usage depending on patient requirements. There are two length options to allow attachment to either endotracheal or tracheostomy tubes. The endotracheal products feature a catheter length of 54cm and the tracheostomy tube variants have a catheter length of 30.5cm.

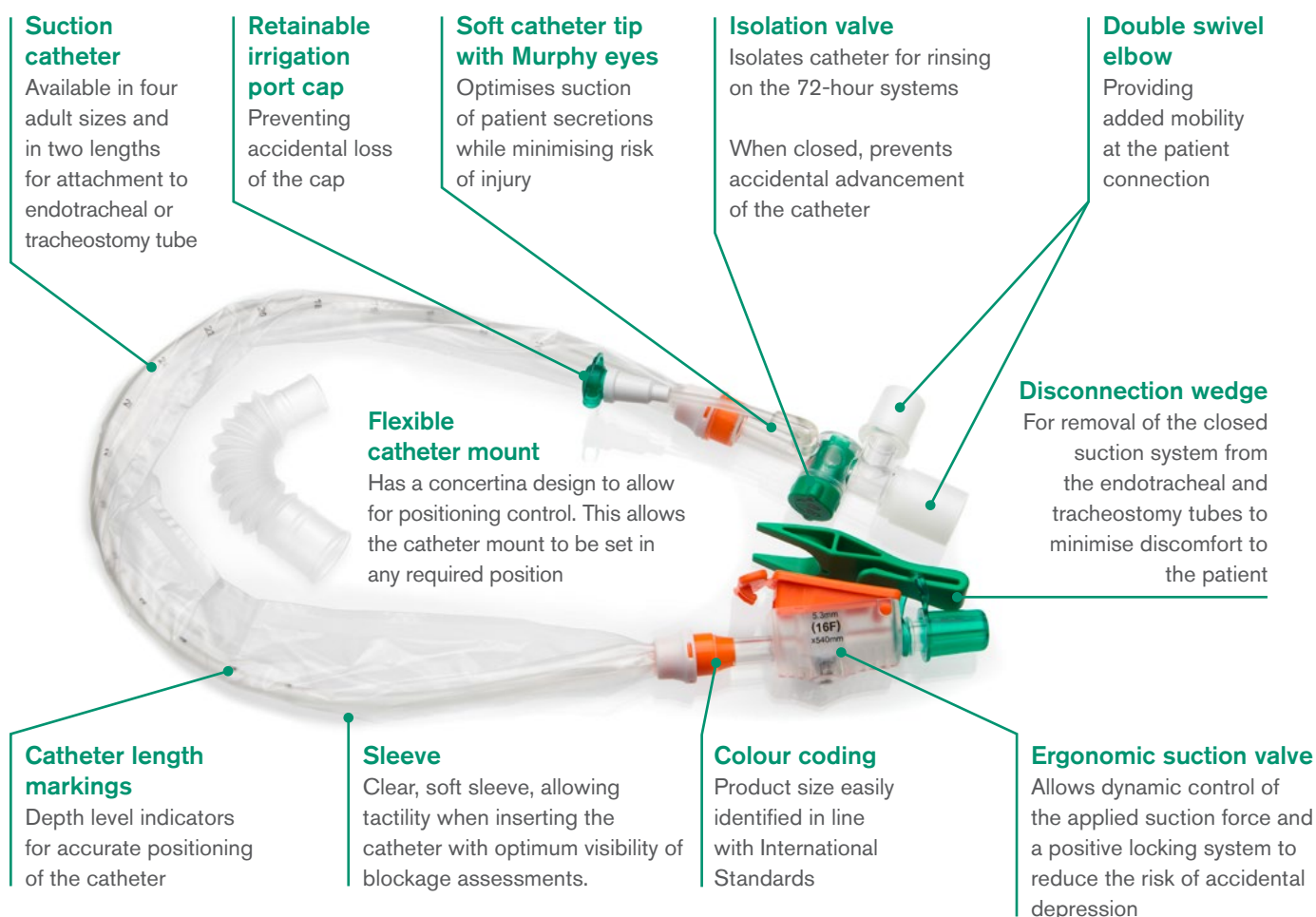
All Intersurgical TrachSeal systems are supplied with:

1. Day stickers which easily identify change requirements
2. 15F–22F catheter mount for flexible connection to the patient
3. A disconnection wedge for removal of the closed suction system from the endotracheal and tracheostomy tubes to minimise discomfort to the patient



### References:

12. American Association for Respiratory Care, 2010. AARC Clinical Practice Guidelines. Endotracheal suctioning of mechanically ventilated patients with artificial airways 2010. Respiratory care, 55(6), pp.758-764.
13. Yu HJ, Zhu XY, Xu SA, Cao WZ, Yu YS. Effect of Closed Suctioning on Reducing the Contamination Released into the Environment. Chin Med J (Engl). 2017 Jul 20;130(14):1745-1746. doi: 10.4103/0366-6999.209892. PMID: 28685730; PMCID: PMC5520567.



## 24 hour TrachSeal

Code	Description	Size	Box Qty.
3240002	TrachSeal adult <b>endotracheal</b> closed suction system, 24 hour	F16	15
3240001	TrachSeal adult <b>endotracheal</b> closed suction system, 24 hour	F14	15
3240000	TrachSeal adult <b>endotracheal</b> closed suction system, 24 hour	F12	15
3240003	TrachSeal adult <b>endotracheal</b> closed suction system, 24 hour	F10	15
3240007	TrachSeal adult <b>tracheostomy</b> closed suction system, 24 hour	F16	15
3240006	TrachSeal adult <b>tracheostomy</b> closed suction system, 24 hour	F14	15
3240005	TrachSeal adult <b>tracheostomy</b> closed suction system, 24 hour	F12	15
3240004	TrachSeal adult <b>tracheostomy</b> closed suction system, 24 hour	F10	15

## 72 hour TrachSeal

Code	Description	Size	Box Qty.
3720002	TrachSeal adult <b>endotracheal</b> closed suction system, 72 hour	F16	15
3720001	TrachSeal adult <b>endotracheal</b> closed suction system, 72 hour	F14	15
3720000	TrachSeal adult <b>endotracheal</b> closed suction system, 72 hour	F12	15
3720003	TrachSeal adult <b>endotracheal</b> closed suction system, 72 hour	F10	15
3720007	TrachSeal adult <b>tracheostomy</b> closed suction system, 72 hour	F16	15
3720006	TrachSeal adult <b>tracheostomy</b> closed suction system, 72 hour	F14	15
3720005	TrachSeal adult <b>tracheostomy</b> closed suction system, 72 hour	F12	15
3720004	TrachSeal adult <b>tracheostomy</b> closed suction system, 72 hour	F10	15



## 72 hour TrachSeal with saline ampoules

	Code	Description	Size	Box Qty.
●	3721002	TrachSeal adult <b>endotracheal</b> closed suction system with saline ampoules, 72hour	F16	15
●	3721001	TrachSeal adult <b>endotracheal</b> closed suction system with saline ampoules, 72hour	F14	15
○	3721000	TrachSeal adult <b>endotracheal</b> closed suction system with saline ampoules, 72hour	F12	15
●	3721003	TrachSeal adult <b>endotracheal</b> closed suction system with saline ampoules, 72hour	F10	15
●	3721007	TrachSeal adult <b>tracheostomy</b> closed suction system with saline ampoules, 72hour	F16	15
●	3721006	TrachSeal adult <b>tracheostomy</b> closed suction system with saline ampoules, 72hour	F14	15
○	3721005	TrachSeal adult <b>tracheostomy</b> closed suction system with saline ampoules, 72hour	F12	15
●	3721004	TrachSeal adult <b>tracheostomy</b> closed suction system with saline ampoules, 72hour	F10	15

## Accessories

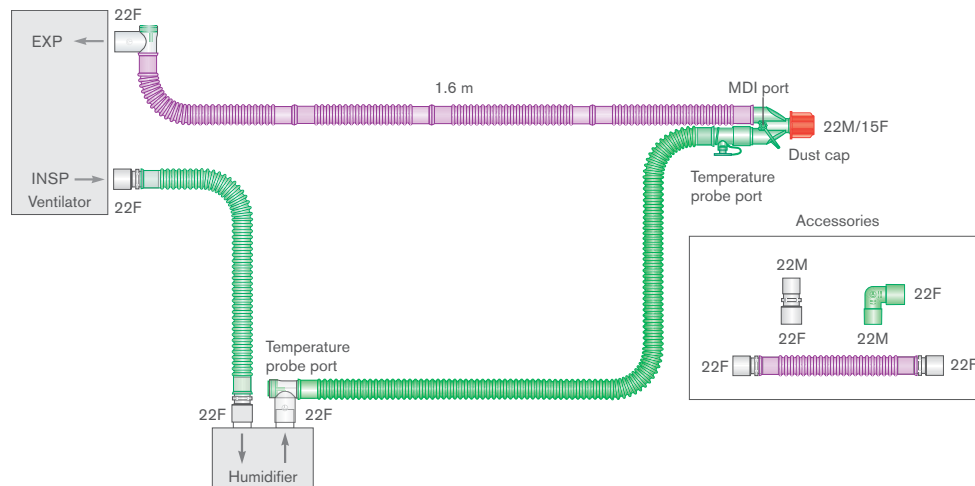
	Code	Description	Box Qty.
	3022000	Suction line splitter for use with closed suction and oral care lines	25
	3700000	0.9% NaCl solution for closed suction systems, 15ml	70



The Intersurgical range also includes a wide range of single use breathing systems, including Silver Knight™ anti-microbial systems which contain silver-based ions to further enhance patient safety to aid the prevention of cross contamination.

A wide range of accessories and breathing filters are available, all of which can play a part in the infection control strategy and the reduction of cross infection and potentially VAP.

A few products available in our extensive range are outlined below. Visit our website to view our full range.



system illustrated

Code	Description	Box Qty.
2026100	22mm Flextube™, Silver Knight dual heated wire breathing system with extra limbs $\geq 1.6\text{m}$	10
2026310	22mm Flextube dual heated wire breathing system with auto-fill chamber and limbs $\geq 1.6\text{m}$	7

## Accessories

<b>Code</b>	3521000
<b>Box Qty.</b>	75
<b>Compressible Volume</b>	26-50 ml

<b>Code</b>	1898000
<b>Box Qty.</b>	30
<b>Compressible Volume</b>	12 ml

<b>Code</b>	3505000
<b>Box Qty.</b>	50
<b>Compressible Volume</b>	48 ml

## Breathing filters and HMEFs

<b>Description</b>	Air-Guard™ Clear
<b>Code</b>	1790000
<b>Box Qty.</b>	50

<b>Description</b>	Filta-Guard™
<b>Code</b>	1944000
<b>Box Qty.</b>	70

<b>Description</b>	Filter-Therm™
<b>Code</b>	1941000
<b>Box Qty.</b>	70

Silver Knight

**Note:** Not all products are available in all markets, please contact your local office for details.

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