

# What are the dangers of surgical smoke?



The daily amount of surgical smoke is equal to

27-30 unfiltered cigarettes<sup>1,†</sup>



More than

150+

hazardous chemicals are found in laser plume<sup>2</sup>

## How does this affect your team?



Nurses experience

2x

more respiratory issues than the general population<sup>‡,3</sup>



Ready to join a growing number of healthcare systems working to combat surgical smoke? Get started today.

**Explore the options** 



- † Average based on 44 operating days in a single elective plastic surgery theatre where porcine tissue was subject to electrocautery tissue ablation. Results may not be indicative of the average operating theatre.
- ‡ Most frequently reported respiratory symptoms include nasal congestion, coughing, allergies, sinus infection/problems.
- Hill DS, O'Neill JK, Powell RJ, Oliver DW. Surgical smoke—a health hazard in the operating theatre: a study to quantify exposure and a survey of the use of smoke extractor systems in UK plastic surgery units. J Plast Reconstr Aesthet Surg. 2012;65(7):911–916.1
- 2. Pierce JS, Lacey SE, Lippert JF, Lopez R, Franke JE. Laser-generated air contaminants from medical laser applications: a stateof-the-science review of exposure characterization, health effects, and control. *J Occup Environ Hyg.* 2011;8(7):447-466.
- 3. Ball K. Surgical smoke evacuation guidelines: compliance among perioperative nurses. J AORN. 2010 Aug; 92(2):e1-e23.

Ready to see the benefits for yourself?
Request a demo

## Medtronic

What are the dangers of surgical smoke?

Valleylab™ laparoscopic smoke evacuation system

Valleylab™ SM smoke management pencil

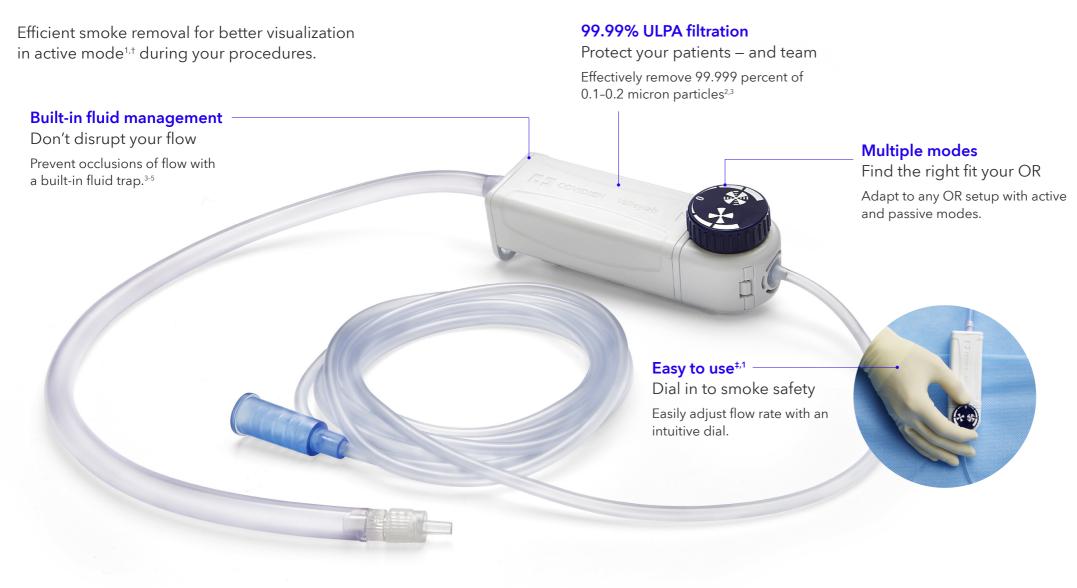
Valleylab™ smoke evacuation telescoping pencil

RapidVac™ smoke evacuator

AORN Go Clear Award™ Program

# Valleylab™ laparoscopic smoke evacuation system

## See better, breathe better.



†10 out of 10 surgeons surveyed after use agree. ‡Surgeons surveyed after use agree: 21 out of 21 agree easy to set up. 12 out of 12 agree intuitive, 9 out of 10 agreed simple.

- 1. Based on internal test report #RE00139506 rev A, Bourbon: Valleylab™ laparoscopic smoke evacuation system nurses and surgeons claims report. March 12, 2018.
- 2. Based on Buffalo report #PR-17003 Rev A, ULPA filtration. Jan. 12, 2018.
- 3. Based on Buffalo filter product specification form DC#2016-203 for Valleylab™laparoscopic smoke evacuation system, Jan. 31, 2018
- 4. Based on Buffalo test report #PR-17002 rev A, Filter life expectancy. Feb. 26, 2018.
- 5. Based on Buffalo Filter report #PR-18001 rev A, Filter visualization. Feb. 28, 2018.

Explore more on our website

View order codes

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# Valleylab™ SM smoke management pencil

## Smoke safety – simplified.<sup>†,‡,§,1</sup>

A number of features simplify surgical smoke removal, including:

management pencil (VSMPXX) marketing claims testing

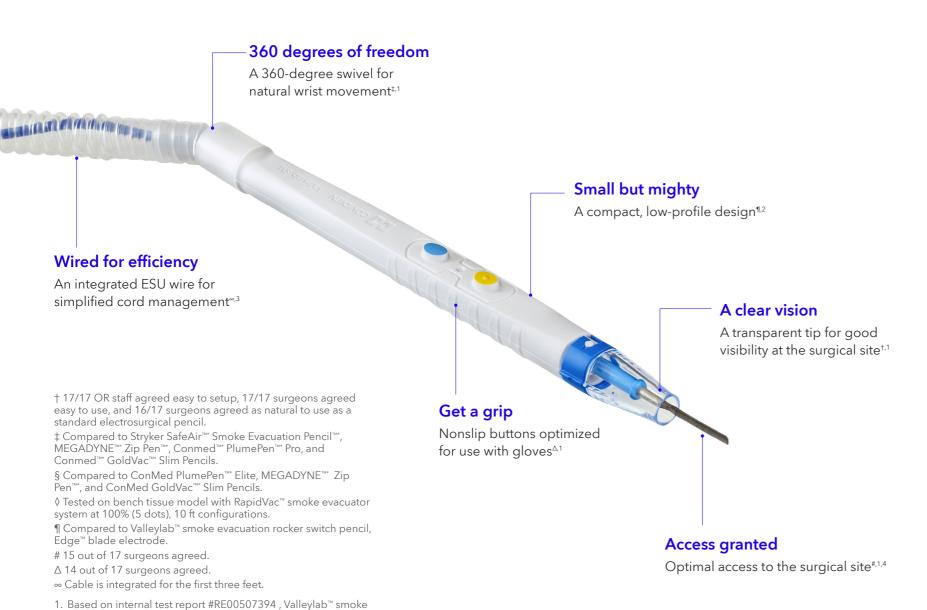
2. Based on internal test report #RE00486994, Valleylab™ smoke management pencil (VSMPXX) marketing claims testing

4. Based on internal test report #RE00460034, SPD-88 report surgeon summative Lucky Strike. July 12-19, 2023.

report. July 12-19, 2023.

3. ASSY, VSMP1X

report. December 6-7, 2023.



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# Valleylab™ smoke evacuation telescoping pencil

Get a handle on smoke safety.



Find the freedom to move

Free and easy turning during surgery.<sup>1,0</sup>

## Secure grip<sup>Ω,1</sup>

Put control at your fingertips

Built-in cut/coag rocker switch provides fingertip control.

## All-in-one system<sup>1,t,‡</sup> Simplify smoke safety

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An integrated ESU wire minimizes the need for cord management  $^{1,\$}$  – and corrugated tubing improves flexibility and range of movement.  $^{1,\Omega}$ 

Compact, ergonomic design<sup>1,#‡</sup>
Keep a low profile

A low-profile front end enhances visibility of the surgical field.  $^{1,\Omega\Omega}$ 

## At-the-source smoke capture<sup>2,3</sup> Stop smoke in its tracks

A transparent nozzle allows you to capture smoke at the source without sacrificing your view of the target anatomy.<sup>1,††</sup>

†17 out of 19 surgeons surveyed agreed.

‡30 out of 31 nurses surveyed agreed.

§31 out of 31 nurses surveyed agreed.

 $\Omega$ 19 out of 19 surgeons surveyed agreed. ††16 out of 19 surgeons surveyed agreed.

‡‡15 out of 19 surgeons surveyed agreed.

 $\Omega\Omega$ Compared to the current device they are using, 15 out of 19 surgeons surveyed agreed. 1. Based on internal test report #RE00166188 rev B, Marketing claims validation report.

- April 2021.
- 2. Based on internal test report #RE00125194 rev A, Surgical validation report. July 2018.
- 3. Based on internal test report #R0038994 rev A, Non-IEC verification report: smoke evacuation test. July 2018.

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## RapidVac<sup>™</sup> smoke evacuator

## Smoke safety. At the touch of a button.

basic system functionality. April 22, 2015.

2 Based on internal memo #RE0025744, Particle capture performance of ULPA filters vs. particle size. March 2020.

Designed to work with Valleylab™ generators – for fully synchronized smoke removal.



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Appendix: Electrosurgical products available as non-sterile and in bulk packaging

View order codes

It's time to show smoke the exit.
Together.

AORN Go Clear Award™ Program

We've partnered with the Association of periOperative Registered Nurses (AORN) to raise awareness about the dangers of surgical smoke. Join us and start your journey toward a smoke-safe OR – today.

Go Clear with us



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# Appendix

# Electrosurgical products available as non-sterile and in bulk packaging

## Sale restricted to kit packers only.

Code	Description
E0510NSB	Valleylab™ laparoscopic monopolar cord, non-sterile bulk, 10′ (3 m)
E0512-NSB	Valleylab™ bipolar forceps cord, non-sterile bulk, 12′ (3.6 m)
E1450-4NSB	Edge™ blade electrode, non-sterile bulk, 4″ (10.16 cm)
E1450-6NSB	Edge™ blade electrode, non-sterile bulk, 6.5″ (16.51 cm)
E1450G-NSB	Edge™ blade electrode, non-sterile bulk, 3″ (7.62 cm)
E1450XNSB	Edge™ hex-locking blade electrode, non-sterile bulk, 2.5″ (6.35 cm)
E1452NSB	Edge™ needle electrode, non-sterile bulk, 2.8″ (12.81 cm)
E1455-4NSB	Edge™ insulated blade electrode, non-sterile bulk, 4″ (10.16 cm)
E1455-6NSB	Edge™ insulated blade electrode, non-sterile bulk, 6.5″ (16.51 cm)
E1455BNSB	Edge™ insulated blade electrode Safety Sleeve™, non-sterile bulk, 2.75″ (7.0 cm)
E1455NSB	Edge™ insulated blade electrode, non-sterile bulk, 2.75″ (7.0 cm)
E1465-4NSB	Edge™ insulated needle electrode, non-sterile bulk, 4" (10.16 cm)
E1465-BNSB	Edge™ insulated needle electrode, Safety Sleeve™, non-sterile bulk, 2.8″ (7.2 cm)
E1465-NSB	Edge™ insulated needle electrode, non-sterile bulk, 2.8″ (7.2 cm)
E1551-6-NSB	Valleylab™ blade electrode, non-sterile bulk, 6.5″ (16.51 cm)
E1551X-NSB	Valleylab™ hex-locking blade electrode, non-sterile bulk, 2.4″ (6.2 cm)
E1552-NSB	Valleylab™ needle electrode, non-sterile bulk, 2.8″ (7.2 cm)
SEP5000NSB	Valleylab™ smoke evacuation rocker switch pencil, Edge™ blade electrode, non-sterile bulk, 10′
SEP5015NSB	Valleylab™ smoke evacuation rocker switch pencil, Edge™ blade electrode, non-sterile bulk, 15′
SEP6000NSB	Valleylab™ telescoping smoke evacuation rocker switch pencil, Edge™ blade electrode, non-sterile bulk, 10′
SEP6015NSB	Valleylab™ telescoping smoke evacuation rocker switch pencil, Edge™ blade electrode, non-sterile bulk, 15′
VSMP10NSB	Valleylab™ SM smoke management extended nozzle with Edge™ electrode, non-sterile bulk, 10 ft

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## **Built-in fluic**

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Prevent occlus a built-in fluid

## Valleylab™ laparoscopic smoke evacuation system

Code	Description	Quantity
SEL7010	Valleylab™ Laparoscopic Smoke Evacuation Active/Passive System, 10′ (3 m) tubing	10/case



†10 out of 10 surged ‡Surgeons surveyed intuitive, 9 out of 10

- 1. Based on internal evacuation systen
- 2. Based on Buffalo
- smoke evacuation 4. Based on Buffalo
- 5 Based on Buffalo



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electrosurgical penc ‡ Compared to Stryk MEGADYNE™ Zip Pe Conmed™ GoldVac™ § Compared to Conl Pen™, and ConMed I ◊ Tested on bench ti system at 100% (5 do ¶ Compared to Valle Edge™ blade electro # 15 out of 17 surge

† 17/17 OR staff agread easy to use a

1. Based on internal management pen report. July 12-19

Δ 14 out of 17 surge ∞ Cable is integrated

- 2. Based on internal management pen report. December
- 3. ASSY, VSMP1X
- 4. Based on internal surgeon summatir

## Valleylab™ SM smoke management pencil



Code	Description	Quantity
VSMP10	Valleylab <sup>™</sup> SM smoke management extended nozzle with Edge <sup>™</sup> electrode, 10 <sup>°</sup>	20/case
VSMP15	Valleylab™ SM smoke management extended nozzle with Edge™ electrode, 15'	20/case

#### **Extended nozzles**

Code	Description	Quantity
		•
VSMEN4	Valleylab™ SM smoke management extended nozzle, 4-inch	80/case
		The state of the s
VSMEN6	Valleylab™ SM smoke management extended nozzle, 6.5-inch	80/case

**VSMEN4** is designed for use with electrodes approximately 100 mm (4 in) in length. **VSMEN6** s designed for use with electrodes approximately 165 mm (6.5 in) in length.



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## All-in-one sys Simplify smok

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April 2021. 2. Based on internal

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## Independent telescoping cannula/electrode, rocker switch

Code	Description	Quantity
SEP5000	Valleylab™ smoke evacuation rocker switch pencil, Edge™ blade electrode, 10′	20/case
SEP5015	Valleylab <sup>™</sup> smoke evacuation rocker switch pencil, Edge <sup>™</sup> blade electrode, 15′	20/case







## Independent telescoping cannula/electrode, rocker switch

Code	Description	Quantity
SEP6000	Valleylab™ telescoping smoke evacuation rocker switch pencil, Edge™ blade electrode, 10′	20/case
SEP6015	Valleylab™ telescoping smoke evacuation rocker switch pencil, Edge™ blade electrode, 15′	20/case



## Valleylab™ smoke attachments, single use

Code	Description	Quantity
E3810	Valleylab™ smoke attachment 10′ smoke tubing	20/case
E3815	Valleylab™ smoke attachment 15′ smoke tubing	20/case

For use with standard electrosurgical pencils and Force TriVerse™ device.

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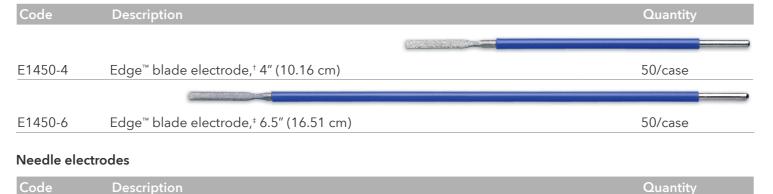
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‡30 out of 31 nurses §31 out of 31 nurses  $\Omega$ 19 out of 19 surge ††16 out of 19 surge ‡‡15 out of 19 surge

## Edge™ coated electrodes, single use

## Blade electrodes



## Edge™ insulated coated electrodes, single use

Edge<sup>™</sup> needle electrode,<sup>‡</sup> 6.5" (16.51 cm)

#### Blade electrodes

E1452-6

Code	Description	Quantity
		100
1455G	Edge™ insulated blade electrode,§ 2.5″ (6.4 cm)	50/case
1455-4	Edge <sup>™</sup> insulated blade electrode, † 4″ (10.16 cm)	50/case

#### Needle electrodes

Code	Description	Quantity
E1465	Edge™ insulated needle electrode, 2.8" (7.2 cm)	50/case
E1465-4	Edge™ insulated needle electrode,† 4" (10.16 cm)	50/case
E1465-6	Edge <sup>™</sup> insulated needle electrode,‡ 6.5″ (16.51 cm)	50/case

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†The 4" electrode is compatible with SEP6000/SEP6015. ‡The 6.5" electrode is compatible with SEP5000/SEP5015 and SEP6000/SEP6015.

50/case



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<sup>2.</sup> Based on internal

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## Simplify smok An integrated ES

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## Stainless steel electrodes, single use

## Blade electrodes

Code	Description	Quantity
E15516	Valleylab™ blade electrode,‡ 6.5″ (16.51 cm)	50/case

## Needle electrodes

Code	Description	Quantity
E15526	Valleylab™ needle electrode,‡ 6.5″ (16.51 cm)	50/case

## **Ball electrodes**

Code	Description	Quantity
E15644	Valleylab™ ball electrode,† 4″ (10 cm)	10/case
E15646	Valleylab™ ball electrode,‡ 6.5″ (16.5 cm)	10/case

†The 4" electrode is compatible with SEP6000/SEP6015. ‡The 6.5" electrode is compatible with SEP5000/SEP5015 and SEP6000/SEP6015.

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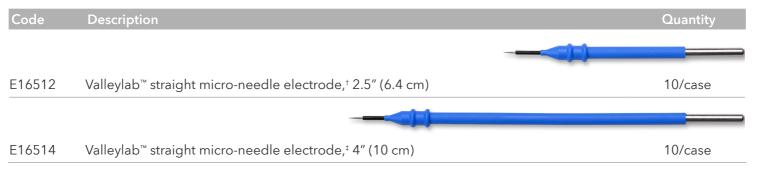
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- 3. Based on internal evacuation test. Ju

## Tungsten microsurgical needle electrodes, single use



## Tungsten loop electrodes, single use

## Round loops

Code	Description	Quantity
E15594	Valleylab™ tungsten loop electrode,‡ 10 mm x 10 mm, 4″ (10 cm)	10/case
E15596	Valleylab™ tungsten loop electrode,§ 10 mm x 10 mm, 6.5″ (16.5 cm)	10/case
E15604	Valleylab™ tungsten loop electrode,‡ 15 mm x 12 mm, 4″ (10 cm)	10/case
E15606	Valleylab™ tungsten loop electrode,§ 15 mm x 12 mm, 6.5″ (16.5 cm)	10/case
E15614	Valleylab™ tungsten loop electrode,‡ 20 mm x 12 mm, 4″ (10 cm)	10/case

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†The 2.5" electrode is compatible with SEP5000/ SEP5015.

‡The 4" electrode is compatible with SEP6000/

§The 6.5" electrode is compatible with SEP5000/ SEP5015 and SEP6000/

SEP6015.

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## **All-in-one sys** Simplify smok

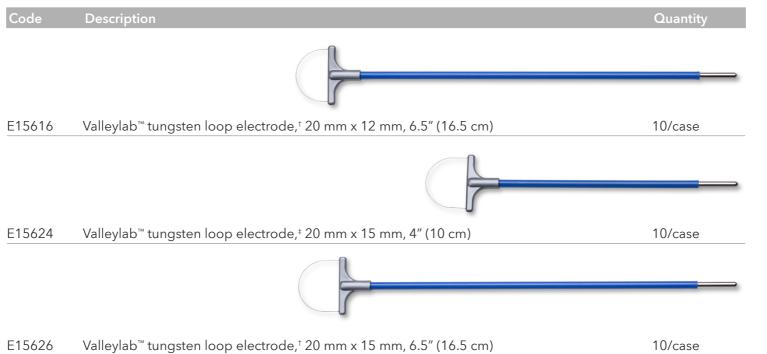
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## Tungsten loop electrodes, single use

## **Round loops**



†The 4" electrode is compatible with SEP6000/SEP6015. ‡The 6.5" electrode is compatible with SEP5000/SEP5015 and

SEP6000/SEP6015.



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## $RapidVac^{\scriptscriptstyle{\mathsf{TM}}}\,smoke\,\,evacuator$

Code	Description	Quantity
SE3690	RapidVac™ smoke evacuator, 110V	1 each



## RapidVac<sup>™</sup> smoke evacuator accessories

Description	Quantity	
RapidVac™ ULPA filter	2/case	
RapidVac™ interlink cable	1 each	
RapidVac™ remote switch activator	1 each	
RapidVac™ footswitch	1 each	
RapidVac™ fluid trap	1 each	
	RapidVac™ Interlink cable  RapidVac™ remote switch activator  RapidVac™ footswitch	RapidVac™ ULPA filter 2/case   RapidVac™ interlink cable 1 each   RapidVac™ remote switch activator 1 each   RapidVac™ footswitch 1 each



Code	Description	Quantity
SEA3705	RapidVac™ smoke tubing, 1/4″ x 10′ (0.6 cm x 3 m)	10/case
SEA3710	RapidVac <sup>™</sup> smoke tubing, 3/8″ x 10′ (1 cm x 3 m)	10/case
SEA3715	RapidVac™ smoke sponge guard tubing, 7/8″ x 10′ (2.2 cm x 3 m)	12/case
SEA3720	RapidVac <sup>™</sup> smoke lap tubing with valve, 1/4" x 10' (0.6 cm x 3 m)	12/case
SEA3725	RapidVac <sup>™</sup> smoke wand, 7/8" x 8" (2.2 cm x 20.3 cm)	5/case



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<sup>1.</sup> Based on internal basic system func

<sup>2</sup> Based on internal performance of U