



erbe  
power your performance.

*HEALTH HAZARD*

**SURGICAL SMOKE**

# ~1.2

*million clinical professionals are  
exposed to surgical smoke in Europe.*

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**SURGICAL SMOKE IS OFTEN UNDERESTIMATED.**

These expert associations warn against  
surgical smoke

➔ AORN, EORNA, OSHA, JCAHO, NIOSH, TRGS

Denmark

➔ Protective law: evacuation as  
close as possible to the source

Great Britain, Australia, New Zealand

➔ Legal standard for protection of the  
surgical team

*Electrosurgery is a must in any OR –*

# **SURGICAL SMOKE IS NOT**

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**A SAFE WORKING ENVIRONMENT WITH THE IES 3 SMOKE EVACUATION SYSTEM.**

*Nausea*

*FEELING FAINT*

**58.3%**

**OF CLINICAL PROFESSIONALS ARE BOTHERED BY THE SMELL.**

*Muscle weakness*

THE ACTIVE CARBON BARRIER IN THE FILTER OF THE IES 3

**REMOVES ODORS.**

VAPORIZED  
TISSUE

1g = 3 to 6  
CIGARETTES

98.6%  
OF SMOKE ELIMINATED

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WITH EVACUATION 1CM DIRECTLY ABOVE THE SOURCE.

IRRITATION OF AIRWAYS

# Odors

*Operation room ventilation systems are ineffective.  
And face masks are insufficient.*

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**90% OF THE SMOKE PARTICLES ARE OF NANO-SIZE.**

THE ULPA-15 FILTER REMOVES  
**99.9995%**

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**OF THE 0.1 $\mu$ m PARTICLES IN THE OPERATING ROOM.**

*Aerosol*

*SMOKE*

440

## CHEMICAL SUBSTANCES

detected in the urine of a patient who had undergone laparoscopy without smoke evacuation.

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SURGICAL SMOKE CONTAINS TOXIC, MUTAGENIC SUBSTANCES.

SMOKE EVACUATION PROTECTS

**SURGICAL TEAM**



**PATIENT**

# PARTICLE SIZES

0.65  $\mu\text{m}$   
Ultrasound surgery

0.3  $\mu\text{m}$   
Laser surgery

0.1  $\mu\text{m}$   
Electrosurgery



## PROTECTION AGAINST CONTAMINATION WITH NANOPARTICLES

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A SAFE WORK ENVIRONMENT  
WITH THE IES 3 SMOKE EVACUATION SYSTEM.





HAZARD DETECTED.  
RISK AVERTED.



**SMOKE.ERBE-MED.COM**

*For references, please visit [smoke.erbe-med.com](https://smoke.erbe-med.com)*