

The chemical, biological, and physical components of surgical smoke pose a health risk to the exposed perioperative team and patients. Eliminating surgical smoke from your OR will improve patient and worker safety and allow you to recruit and retain top employees. **Do you know the hidden dangers of surgical smoke?**



There are an estimated **500,000** healthcare workers who are exposed to laser or electrosurgical smoke each year¹



More than **150** hazardous chemicals have been identified in surgical smoke²

ALL 16 U.S. EPA PRIORITY POLLUTANT PAHS (polycyclic aromatic hydrocarbons) have been detected in surgical smoke³

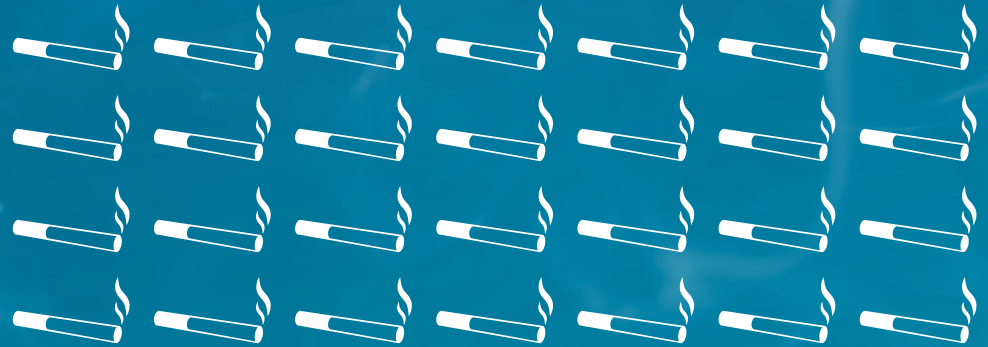


Sur.gi.cal (a) \'smok\ (n)

The result of the interaction of human tissue with mechanical tools and/or heat producing devices used for dissection and hemostasis.

27-30

unfiltered cigarettes:
the average daily
impact of surgical
smoke to the OR team⁴



2x

Perioperative nurses report twice as many respiratory issues as compared to the general population⁵



POTENTIAL RISKS OF SURGICAL SMOKE^{4,6}:

- Asthma
- Emphysema
- Chronic bronchitis
- Hypoxia or dizziness
- Nasopharyngeal lesions
- Sneezing
- Nose and throat irritation
- Coughing
- Rhinitis
- Eye irritation
- Anemia
- Anxiety
- Carcinoma
- Leukemia
- Cardiovascular dysfunction
- Skin irritation
- Headache
- Hepatitis
- Nausea or vomiting
- Weakness/ fatigue
- Allergies

1. Laser/Electrosurgery Plume. Occupational Safety & Health Administration. <http://www.osha.gov/SLTC/laserelectrosurgeryplume/index.html>. Accessed February 19, 2016.

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3. Näslund Andréasson S, Mahteme H, Sahlberg B, Anundi H. Polycyclic aromatic hydrocarbons in electrocautery smoke during peritonectomy procedures. J Environ Public Health. 2012;2012: 929053.

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5. Ball K. Compliance with surgical smoke evacuation guidelines: Implications for practice. ORNAC J. 2012;30(1):14-16.

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