# **EVERYONE DESERVES A SMOKE-FREE O.R.**

# 27-30

The average daily impact of surgical smoke to the O.R. team is equivalent to inhaling the smoke of 27-30 unfiltered cigarettes.<sup>1</sup>



Perioperative nurses report twice as many respiratory issues as compared to the general population.<sup>2</sup>



<sup>1</sup> 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.

 $^2$  Ball K. Compliance with surgical smoke evacuation guidelines: Implications for practice. ORNAC J. 2012;30(1):14-16.

<sup>3</sup> Pierce JS, Lacey SE, Lippert JF, Lopez R, Franke JE. Laser-generated air contaminants from medical laser applications: a state-of-the-science review of exposure characterization, health effects, and control. J Occup Environ Hyg. 2011;8(7):447-466.



## What is surgical smoke?

Like cigarette smoke, surgical smoke can be seen and smelled. It is the result of human tissue contact with mechanical tools and/or heat-producing devices, such as lasers and electro-surgery pencils commonly used for dissection and hemostasis. An estimated 90% of all surgical procedures – including such common surgeries as cesarean sections, mastectomies, knee replacements and appendectomies – generate surgical smoke.

### **Dangerous effects**

Surgical smoke is full of carcinogenic and mutagenic cells, can include 150 hazardous chemicals, 16 of which are on the EPA Priority Pollutant List, and likely exposes O.R. staff to biological (human) contaminant, including aerosolized blood.<sup>3</sup>

#### **Going Smoke-Free**

Eighteen states have passed laws to protect O.R. staff and patients from harmful surgical smoke: AZ, CA, CO, CT, GA, IL, KY, LA, MN, MO, NJ, NY, OH, OR, RI, VA, WA, and WV.\* Perioperative nurses are actively working in several more states to ensure operating rooms are surgical smoke-free. Join the movement to protect patients and surgical team members by going smoke-free in the O.R. \*As of May 17, 2024



For education and resources on this initiative, please visit **www.aorn.org/smokefreeor.**