



BEST PRACTICE GUIDANCE **Smoke Evacuation 101**

Create a safe environment for healthcare workers and patients with a smoke evacuation policy.¹

- Recognize that surgical smoke can be harmful to anyone in the OR suite²
- Healthcare organizations are expected to provide a surgical smoke-free work environment²

NIOSH Recommendations for Smoke Evacuation in the OR²

- Use portable smoke evacuators and room suction systems with in-line filters
- Keep the smoke evacuator or room suction hose nozzle inlet within 2" of the surgical site to capture airborne contaminants effectively
- Have a smoke evacuator available for every OR in which plume is generated
- Evacuate all smoke, no matter how much is generated
- Keep the smoke evacuator activated at all times when airborne particles are produced during all operative or other invasive procedures
- Consider all tubing, filters and absorbers as infectious waste and disposing of them appropriately according to standard precautions as required by the OSHA Bloodborne Pathogens standard
- Prepare new tubing before each procedure and replace the smoke evacuator filter as recommended by the manufacturer
- Inspect smoke evacuator systems regularly to ensure proper functioning
- Educate on smoke safety and the hazards it contains
- Develop policies and procedures to outline surgical smoke evacuation



References: 1. York, MS, BSN, RN, CNOR, CSSM, K., & Autry, BSN, RN, M. (2018, June). Surgical Smoke: Putting the Pieces Together to Become Smoke-Free. AORN Journal. https://www.aorn.org/docs/default-source/aorn/essentials/surgical-smoke/files/putting-the-pieces-together.pdf?sfvrsn=1d22566c_0, Accessed November 2, 2023.
2. King B, McCullough J. NIOSH Health Hazard Evaluation Report: HETA #2000-0402-3021. Falls Church, VA: National Institute for Occupational Safety and Health; 2006. <https://www.cdc.gov/niosh/hhe/reports/pdfs/2000-0402-3021.pdf>, Accessed November 2, 2023.