



Position Statement

A256 / S732

Requires health care facilities to adopt and implement policies to prevent exposure to surgical smoke via use of smoke evacuation systems.

The Organization of Nurse Leaders of New Jersey (ONL NJ) supports the utilization of smoke evacuation systems to protect health care workers from exposure to surgical smoke. ONL NJ is therefore in support of A256/S732, which will effectively work to safeguard the health of our state's surgical teams.

ONL NJ is in alignment with the findings of numerous national professional organizations, such as the American Organization of Operating Room Nurses (AORN), the Occupational Safety and Health Administration (OSHA), the American National Standards Institute (ANSI), the National Institute for Occupational Safety and Health (NIOSH), the American College of Surgeons (ACS), the American Society for Laser Medicine & Surgery (ASLMS), Association of Surgical Technologists (AST), The Joint Commission, The Society of American Gastrointestinal and Endoscopic Surgeons (SAGES) and the Centers for Disease Control (CDC), all of whom recommend the use of surgical smoke evacuators. Surgical smoke is understood to represent a health hazard, containing well over 150 chemical elements, most of which are documented carcinogens or highly contagious pathogens (Pierce, et al., 2011). In fact, one day in the average U.S. Operating Room (OR) suite represents the equivalent of 30 unfiltered inhaled cigarettes; 1 gram of tissue that is cauterized produces the equivalent of five to six cigarettes worth of harm to pulmonary tissue (Hedley, 2018). Moreover, human papillomavirus (HPV) and malignant cancer cells have been detected in the physiology of surgical teams, following exposure of benign tissue to infectious surgical plume (Stratton, 2019), and in at least one study, there is a relationship between surgical smoke and reproductive hazards in female surgeons (Anderson & Goldman, 2020). Since air exchange is typically circulated throughout the surgical suite, everyone reporting to work within the operating room area is vulnerable (Stryker, n.d.).

Current OSHA requirements, the Occupational Safety and Health Act of 1970, Employee Safety Standards (General Duty, Section 5 A-1), state that "each employer shall furnish to each of his employee's employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees." The OSHA respiratory protection program does recognize that laser plume and electrosurgical smoke contain toxic, mutagenic, and carcinogenic elements. Further, OSHA standards mandate the removal of atmospheric contaminants with acceptable engineering controls and local ventilation, including smoke systems. There is a well-established process for filing potential violations to workplace

safety with OSHA, and while surgical smoke meets federal definitions for violation reporting, A256/S732 establishes constructive actions at the state level that supplement reporting by employees.

ONL NJ applauds the efforts of AORN to eliminate staff exposure to surgical plume in its “Go Clear Award” program. Moreover, compliance with the AORN guidelines is considered a best practice and is to be commended. ONL NJ agrees that appropriate use of surgical smoke evacuators should be a priority and as the recognized state organization for nursing leadership makes the following recommendations:

- 1) Chief Nursing Officers should collaborate with the Chairs of the Departments of Surgery, and Anesthesia, the Chief Operating and Financial Officers and Chief Medical Officers in their hospitals, to eliminate the hazards of surgical plume in their respective operating suites, outpatient surgical centers and other areas where staff exposure exists, to mitigate exposure to surgical smoke. The purpose of the collaboration is to educate leaders, surgeons, and surgical team professionals about the current state in their organizations, and to establish plans for remediation. These efforts include the use of devices designed to eliminate surgical plume and monitoring usage/compliance.
- 2) ONL NJ and New Jersey State Nurses Association (NJSNA) will establish a mentoring process to assist organizations in their application process for the AORN “Go Clear” Award, by linking successful awardees with those interested in the application process.
- 3) ONL NJ and NJSNA will create an AORN “Go Clear Award” recognition on their respective websites to appropriately recognize organizations in New Jersey who have already achieved this distinction of utilizing surgical plume evacuators in their surgical suites.
- 4) ONL NJ and NJSNA will advocate for nurses and surgical team members who have concerns about their exposure to surgical plume by directing them to utilize their own organizational chain of command to express their professional concerns and to the OSHA surgical plume and the AORN “Go Clear” informational websites.

References

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About ONL

Since 1971, the Organization of Nurse Leaders, New Jersey (ONL NJ) has been the professional organization of choice for nursing leaders in their quest for a united voice in representing nursing administration and management in all practice settings. ONL represents over 500 members, representing more than 90% of the hospitals in New Jersey. Our membership includes aspiring nurse leaders, doctoral recipients, educators, nurse managers, clinical nurse leaders, administrative directors of nursing and patient care, and Chief Nursing Officers.

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