

# A.B. 1007 WORKPLACE PROTECTIONS FROM SURGICAL SMOKE IN HOSPITALS

Assemblymember Liz Ortega

## BACKGROUND

Laser and electrosurgery procedures are increasingly used, as they are less invasive and safer for patients. Unfortunately, studies have shown that these procedures also generate toxic smoke — known as surgical smoke or surgical plume — and that hospitals are not protecting patients and nurses from exposure.

Surgical smoke generated during medical procedures contains toxic chemicals, gases, vapors, and particulates in addition to infectious particles and possibly even malignant and viable cancer cells. Surgical smoke can cause respiratory irritation, asthma exacerbation, infectious disease exposure, and other issues for health care workers. It also poses a threat to patients who may breathe in or be exposed to the toxic chemicals in surgical plume.

California Nurses Association/National Nurses United (CNA) filed a petition to the Occupational Safety and Health Standards Board (OSHSB) Standards Board to adopt a standard for protecting health care personnel from exposure to surgical smoke. The OSHSB unanimously granted CNA's petition in February 2018 and a discussion draft of an occupational safety and health standard was presented at a Cal/OSHA Advisory Meeting in November 2018. No further action has been taken by Cal/OSHA or the OSHSB.

## PROBLEM

Protection from surgical smoke is relatively simple — a smoke evacuation device (also known as plume scavenging systems) should be used every time laser or electrosurgery is performed and surgical smoke is generated. The U.S. National Institute for Occupational Safety and Health (NIOSH) conducted a survey of health care workers regarding safety practices in their workplaces. Only

half of respondents reported the smoke evacuation was always used during laser surgery. A mere 15 percent of respondents reported that smoke evacuation was always used during electrosurgery.<sup>1</sup>

Without a mandate requiring the use of a local plume scavenging systems at the site of production, occupational exposure to these noxious airborne contaminants will not be eliminated in those settings where plume is generated.

## SOLUTION

This bill would direct the OSHSB to adopt, within a certain time frame, an occupational safety and health standard mandating the removal of potentially dangerous surgical smoke generated during a variety of therapeutic procedures in acute-care setting.

This legislation requires regulations mandating the use of plume scavenging systems that capture and neutralize smoke at the site of origin sufficient to prevent ocular or respiratory contact with healthcare personnel or patients.

## CONTACT

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## ENDNOTES

- 1 National Institute for Occupational Safety and Health (Nov 3, 2015). "NIOSH Study Finds Healthcare Workers' Exposure to Surgical Smoke Still Common." [www.cdc.gov/niosh/updates/upd-11-03-15.html](http://www.cdc.gov/niosh/updates/upd-11-03-15.html).

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