

August 28, 2020

By E-mail: [tech.web@oregon.gov](mailto:tech.web@oregon.gov)

Michael Wood, Administrator  
Oregon Occupational Safety and Health  
Department of Consumer and Business Services

**Re: Oregon OSHA Draft COVID-19 Temporary Standard**

Dear Administrator Wood:

I write on behalf of the Association of periOperative Registered Nurses (AORN) to express our support for your agency's draft COVID-19 Temporary Standard. AORN's mission is to promote safety and optimal outcomes for all patients undergoing operative and other invasive procedures. We represent the interests of over 160,000 perioperative registered nurses, including over 740 AORN members in Oregon.

We commend your agency for leading on this important health and safety issue for all workers and ask that you also consider addressing the unique risk to surgical teams of surgical smoke exposure as your agency finalizes its COVID-19 standard. In fact, we raised our concern over this COVID-19 transmission risk in a joint letter to you earlier this year signed by the executives of the Oregon Nurses Association, Oregon Federation of Nurse Health Professionals, and AORN (copy attached).

As you know, surgical smoke is the result of human tissue contact with lasers and electrosurgical pencils commonly used for dissection and hemostasis during surgery. Approximately 90% of all surgical procedures generate surgical smoke. In addition to already known and documented health concerns related to the toxic gases and vapors in surgical smoke – including as benzene, hydrogen cyanide, formaldehyde, bioaerosols, dead and live cellular material, blood fragments, and viruses – surgical teams now have the added concern of inhaling the COVID-19 virus during surgical procedures on COVID-19 positive patients.

Based on this concern, the American College of Surgeons is just one surgical society currently recommending the use of surgical smoke evacuation equipment in its COVID-19: Considerations for Optimum Surgeon Protection.<sup>1</sup> Similarly, AORN recommends the evacuation of all surgical smoke as it contains hazardous chemicals, ultra-fine particle, viruses, bacteria, and cancer cells.

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<sup>1</sup> [https://www.facs.org/-/media/files/covid19/considerations\\_optimum\\_surgeon\\_protection.ashx](https://www.facs.org/-/media/files/covid19/considerations_optimum_surgeon_protection.ashx)

Surgical smoke can be safely and effectively evacuated to protect patients and surgical team members, and smoke evacuation does not involve construction costs or changes to a facility's HVAC system or general room ventilation. In fact, surgical smoke can be evacuated by using the operating room suction systems already installed in every operating room or by using a local smoke evacuator that is attached to the electrosurgical pencil to capture the smoke at the source.

The Oregon OSHA draft COVID-19 Temporary Standard would have health care facilities conduct an exposure risk assessment considering (among other things) measures to minimize worker exposure to COVID-19. Healthcare settings are called upon to consider exposure risks related to aerosol-generating procedures, yet are not asked to consider the exposure risks related to the surgical smoke generated during surgical procedures. We urge Oregon OSHA to similarly require healthcare employers to consider both the exposure risks inherent in surgery settings related to surgical smoke and the hazard controls available to protect health care workers, both in connection with the general requirements in Section(3)(a)(A)-(F) and within the infection control plan required in Section (4).

Published annually, AORN's evidence-based Guidelines for Perioperative Practice provide the only evidence-based recommendations for patient and healthcare worker safety in the surgical setting. New in 2015, AORN's Guideline for Surgical Smoke documents the harmful effects of surgical smoke and the safety hazard it poses to patients and perioperative personnel and outlines recommendations for safe and cost-effective smoke evacuation. As the leading expert on the health effects of surgical smoke, we appreciate your agency's ongoing attention to this safety concern, especially as it relates to exposure risks unique to the surgical setting.

Thank you again for your work to protect the health and safety of Oregon's essential healthcare workers during this pandemic. Please let us know if you have additional questions as you continue your review.

Sincerely,

A handwritten signature in black ink, appearing to read 'Amy Hader', with a stylized, flowing script.

Amy Hader, JD  
AORN General Counsel