

Testimony on Ohio SB86
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Chairman Huffman, Vice Chair Johnson, Ranking Member Antonio, and members of the Senate Health Committee.

Thank you for allowing me to testify today in strong support of Senate Bill 86 . My name is Dr. David Kirschman, and I am a former surgeon with over 20 years of experience in Ohio's operating rooms. I also founded Aerobiotix LLC, an Ohio-based company specializing in the research, development and manufacture of surgical air quality systems and smoke evacuation systems, so I am in a unique position to comment on this issue from both healthcare and industry perspectives. I am here to express my strong support for the proposed bill requiring hospitals and surgical centers to adopt policies regarding the use of surgical smoke evacuation systems in all operating rooms across Ohio.

As a former surgeon, I can attest to the difficulties faced by healthcare professionals when they are forced to work in an environment contaminated by surgical smoke. When we enter the operating room, our primary focus should be on providing the best possible care for our patients, not worrying about the potentially harmful effects of the smoke we are inhaling.

I remember well my first operating room experiences as a medical student and being shocked by the acrid odor of burning human tissue arising from the patient. Surgical smoke, a toxic byproduct produced during common surgical procedures, contains harmful chemicals, including carcinogens, mutagens, and irritants that pose significant health risks to those exposed. This problem is commonplace - 85% of all surgical procedures generate surgical smoke. Of particular concern is the detrimental effect upon reproductive health in healthcare workers by chemicals such as hydrogen cyanide, benzene, toluene, and formaldehyde. These chemicals are created when oxygen from the air combines with complex carbon-containing molecules of human tissues at high temperatures.

In our research, we have found multiple cases of toxic gases, specifically airborne formaldehyde generated by tissue combustion, present in operating rooms at greater than established OSHA limits for short and long term exposure. We have also found that these toxic levels are not only in the operating rooms themselves, but in adjacent hallways and support areas where large numbers of personnel are present.

In recent years, the cost, effectiveness, and ease-of-use of smoke evacuation systems have improved significantly. To be clear, Senate Bill 86 does not require a specific technology or product to be use in operating rooms, and there are numerous vendors in this space. However, our company, Aerobiotix LLC, has been at the forefront of these advancements, designing and manufacturing cutting-edge systems right here in Ohio. Our smoke evacuation products are proudly manufactured in Miamisburg, including system and filter production, supporting over 50 high-quality manufacturing jobs in Montgomery County, with multiple

regional contractors. Our products are used at pinnacle facilities such as Cleveland Clinic and Hospital for Special Surgery in New York.

Our state-of-the-art smoke evacuation systems are designed to ensure a safer environment for both patients and healthcare workers. However, as a society, we must do more than just create the technology. We must ensure that this life-saving equipment becomes a standard part of surgical practice across the country.

According to a recent study published in the Journal of Occupational and Environmental Medicine, perioperative nurses exposed to surgical smoke have a 2.5 times higher risk of developing respiratory symptoms, leading to sick leaves and increased healthcare labor costs. By requiring the use of smoke evacuation systems in Ohio's operating rooms, we can join eleven other states in significantly reducing these risks and associated financial burdens. The modest cost of implementing these systems is a fraction of the potential healthcare labor costs and liabilities resulting from occupational injuries and illnesses related to surgical smoke exposure. As the awareness of this danger continues to increase, these liabilities will only invariably grow in the future.

In conclusion, I strongly urge you to support the proposed bill. By doing so, we will not only protect the health of our dedicated surgical professionals but also do so in a fiscally responsible way for our healthcare system. 11 other states have enacted similar legislation. Together, we can make Ohio a leader in promoting safer, healthier work environments for those who dedicate their lives to saving others. Thank you for your time and consideration.