

Chairman Huffman, Vice Chair Antani, Ranking Member Antonio, and members of the Senate Health Committee,

Thank you for allowing me to testify today. My name is Dr. James Klosterman and I've been an orthopedic surgeon in the Dayton, Ohio area for 25 years. Many of the surgeries I perform create surgical smoke so I strongly support Senate Bill 161, the surgical smoke evacuation bill.

First, let me tell you my story. In early December of 2018, I was in a workout class with a family physician, who is a friend of mine. He noticed that I was going to the water bottle frequently. I explained to him that I had a little indigestion when I work out and that the water seemed to calm it down. He suggested that I get checked out, so I agreed to do so. I have had regular follow-ups with my own Primary Care Physician with no concerns, but I took his advice. I made an appointment with a cardiologist later that week. He didn't seem too concerned with my story but, "due to my age," recommended a cardiac stress test. We scheduled the stress test for the next week, which was Dec 19, 2018. After the test, I was called later that evening and was told that there was a "little" abnormality in the RIGHT coronary. Due to the anatomy, and its proximity to the GI nerves, it was explained that this could be the cause of my symptoms. I was a bit relieved that it was not apparently a life-threatening issue. I agreed to his suggestion that I have a heart catheterization done after the holidays. I was a little concerned about this delay but I went with the recommendation.

The next day, Dec 20, 2018, I received a call from the cardiology office stating that they had a cancelation for Friday, so I was able to be moved up. I went to the hospital on Friday, December 21, 2018. I was awake during the heart cath. They brought in the cardiac surgeon during the procedure and explained that I had three vessel LEFT side disease, bad enough that I needed urgent bypass surgery. It was so urgent, that they admitted me to the ICU and scheduled surgery for Monday, Dec 24, 2018, Christmas Eve.

I spent those two days in the hospital before the surgery wondering what risk factors got me to this place. I had no family history. I did not smoke. I was not being treated for hypertension. I had borderline dislipidemia that I was treating, under the guidance of my medical staff, with diet and exercise. I was not diabetic. I had no significant risk factors to explain the severity of the situation I was in. I underwent a triple vessel bypass graft open heart surgery on Dec 24, 2018.

Some personal history. I was very active. My main activity was cycling. I did my first 100-mile event in 2008. Since then, I have done several more, in addition to adding multi-day events to my itinerary. I logged around 200 miles per week while training. I have done multi-day events including San Francisco to LA (over 500 miles down the pacific coast highway), Utah (5 parks tour), San Juan Island, and Yellowstone. I even have a training center in my basement. I chalked it to "bad luck" about having to have open heart surgery and tried to find something positive about my situation.

In the fall of 2019, my eyes were opened when I discovered a risk factor that may have contributed to my health condition. I was given a memo that reported the dangers of surgical smoke in the OR. It said that surgical smoke contained over 150 chemical toxins and ultrafine particles. Attached references suggested that working in the OR for one day without smoke evacuation was equivalent to “smoking 30 unfiltered cigarettes per day.” Had I finally found my risk factor? The OR leaders put out a plea to become “smokeless” which I agreed to champion on their behalf. The memo referenced articles from nearly a decade earlier. I heard from the nursing staff that this has been a “common topic” in the AORN for many years. I have asked many of the surgeons from my hospital if they were aware of the dangers of surgical. None of them attested to being aware of such potential exposure. I assumed that my body had already suffered the negative consequences of surgical smoke exposure over the years of working in a smoke-filled operating room. I was thrilled that the hospital was taking apparent corrective action. I thought that at least I might be able to protect my new grafts by working in a clean air environment.

The good news? We were able to procure the smoke evacuation bovie for a period of time.

The “new smokeless bovie” (electrosurgical pencil with a smoke tube designed within the pencil) was used up until June 2, 2020.

On June 2, 2021, I had 6 total joint replacement cases on the schedule. That morning, I was informed that the hospital was no longer keeping the smoke evacuation bovie in the inventory. We would have to proceed that day without it. We completed all 6 cases.

I would be in the ER the very next morning. At 630 am that day, my blood pressure at home was 190/150. I felt I was having “stroke like” symptoms so I asked my wife to take me straight to the ER. I was admitted to the neuro ICU for a “stroke work up”. Most of my acute disability came from the swelling in the cerebellum.

After several weeks of rest and physical therapy, I was able to return to work.

I am back working as a full time orthopedic surgeon. My neurologist has recommended that I use a bovie smoke evacuation in the future to hopefully avoid potential ramifications down the road.

. The danger of surgical smoke in the operating theater has been a known concern for well over a decade. The time is NOW that this hazard be taken seriously! I have been fortunate to have a very successful orthopedic career but I need to work in a smoke-free OR. I actively promote the practice of surgical smoke evacuation for all surgical procedures producing plume. I hope I leave

a legacy of workplace safety and clean air in the OR to those surgeons following me and for the entire surgical team. This is a critical legacy. Thank you for giving me the opportunity to tell my story.