

HB 58 Surgical Smoke Evacuation System Requirements

Dear State of Utah legislators,

I write in support of House Bill 58.

I have practiced my entire neurosurgical career since 1996 in the state of Utah.

I had a colleague who was a world renowned Utah cardiothoracic surgeon for over 35 years. He never smoked a day in his life but did thousands of open heart and open lung surgeries using electro cautery without a smoke evacuation device. Despite never having smoked, he developed lung cancer soon after his retirement and died.

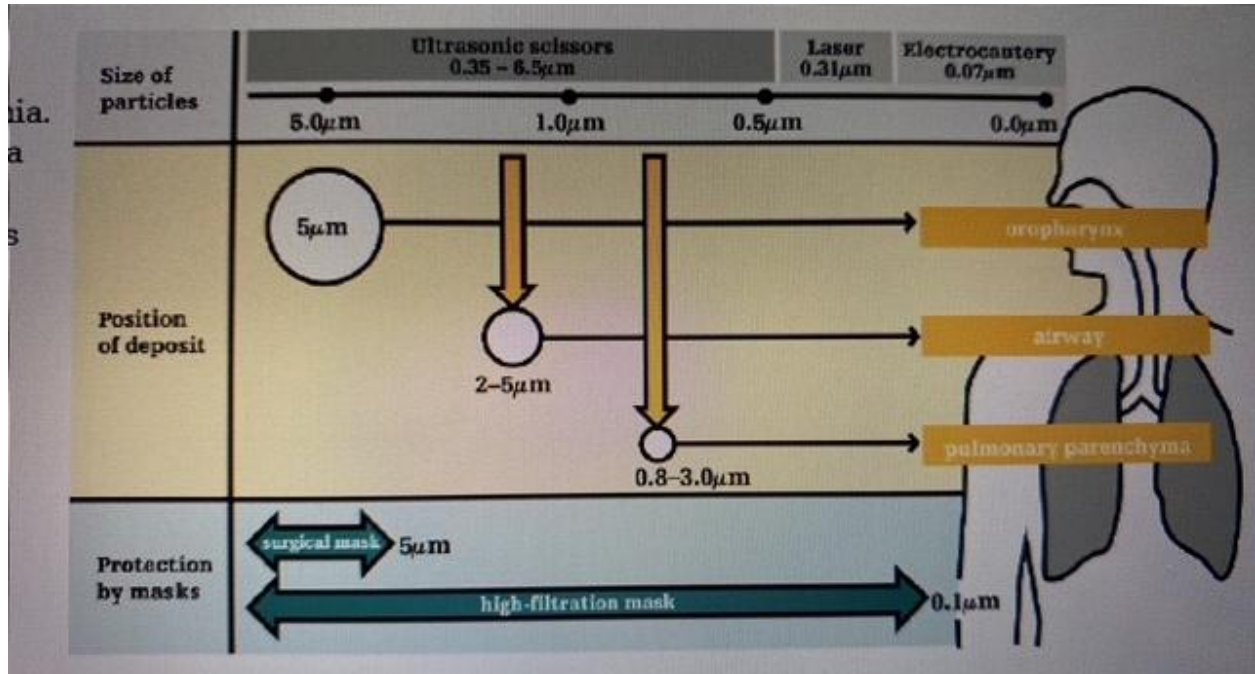
My neurosurgical operating partner for over 25 years has had asthma attacks and bronchitis every winter for the past ten years which are incapacitating and require dangerous steroid medications, time off and travel away from Utah.

Two years ago, I was introduced to the operating room smoke evacuation system. The system has suction connected directly to the electrocautery. Since then, my partner and I have used the system for every operation. My partner has been able to reduce his asthma medications and has not had a severe asthma attack or severe bronchitis since we began using the smoke evacuation system.

I perform cranial and spinal surgery that generates significant smoke from electrocautery. The smoke is carcinogenic and mutagenic and can contain viruses and over 150 chemicals. Twelve hours in the operating room exposed to surgical smoke has been equated to the equivalent to the exposure of smoking 27 cigarettes. Surgical smoke has been found to contain dead and living cellular material, bacteria, viruses including Covid-19, benzene, carbon monoxide, toluene, acetaldehyde and blood fragments.

Exposure to surgical smoke also can increase the incidence of acute conditions such as bronchitis, asthma and sinus infections, as well as exacerbating allergies. It also can increase the risk of chronic deadly pulmonary fibrosis and lung cancer. Surgical smoke also increases the risk of irritation, dermatitis, infection with viruses or bacteria.

The particulates in surgical smoke are smaller than the protection provided by standard surgical masks, shown as follows:



I strongly support extending these protections to all operating room personnel. As we protect our patients, we should also protect our caregivers. Thank you for your consideration of this bill.

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 Neurosurgeon
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