BILL ANALYSIS

C.S.H.B. 4365
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Public Health
Committee Report (Substituted)

BACKGROUND AND PURPOSE

Surgical smoke results from human tissue contact with lasers and electrosurgical pencils, which are commonly used during surgery for dissection and hemostasis. According to OSHA and the CDC, approximately 90 percent of surgical procedures generate surgical smoke, resulting in consistent exposure to it for an estimated 500,000 health care workers every year. Additionally, the Association of periOperative Registered Nurses (AORN), reports that surgical smoke contains over 150 hazardous chemicals and carcinogenic cells, with its average daily impact on the surgical team being equivalent to inhaling the smoke of 27-30 unfiltered cigarettes. According to an article coauthored by John N. Fletcher, M.D., Daphne Mew, Ph.D., M.D., and Jean-Gaston DesCoteaux, M.A., M.D., in addition to the risks for health care workers, patients are endangered as surgical smoke can result in cancer cells metastasizing at the incision site during cancer removal surgery. Research by the National Institutes of Health also confirms that viruses can be transmitted through surgical smoke. Surgical smoke can be safely eliminated using existing technologies, with evacuation systems capturing surgical smoke and disposing of it as hazardous waste. Despite many agencies and medical professionals recognizing the hazard of surgical smoke, there are currently no national or statewide enforceable requirements for surgical smoke evacuation. C.S.H.B. 4365 seeks to establish a smoke evacuation standard by requiring the adoption of surgical smoke evacuation systems for health care facilities during each planned surgical procedure with a likelihood of generating surgical smoke.

CRIMINAL JUSTICE IMPACT

It is the committee's opinion that this bill does not expressly create a criminal offense, increase the punishment for an existing criminal offense or category of offenses, or change the eligibility of a person for community supervision, parole, or mandatory supervision.

RULEMAKING AUTHORITY

It is the committee's opinion that this bill does not expressly grant any additional rulemaking authority to a state officer, department, agency, or institution.

ANALYSIS

C.S.H.B. 4365 amends the Health and Safety Code to require a licensed hospital, a state-maintained or -operated hospital, and a licensed ambulatory surgical center to adopt and implement, not later than January 1, 2024, a policy to mitigate an individual's exposure to surgical smoke through the use of a surgical smoke evacuation system during each planned surgical procedure in an operating room that is likely to generate surgical smoke. The bill authorizes such a health care facility to use any surgical smoke evacuation system that provides protection to patients and health care providers, based on the types of surgical techniques and procedures performed at the facility. The bill defines the following terms:

- "surgical smoke" as the gaseous by-product, including surgical plume, smoke plume, bio-aerosols, laser-generated airborne contaminants, or lung-damaging dust, produced by an energy-generating device used in connection with a surgical procedure; and

- "surgical smoke evacuation system" as equipment that may be used to capture, filter, and remove surgical smoke before the surgical smoke makes contact with the eyes or respiratory tract of an individual, including a patient or health care provider, occupying a room where a surgical procedure is performed.

The bill specifies that such a system includes equipment that is integrated with or separate from the energy-generating device.

EFFECTIVE DATE

September 1, 2023.

COMPARISON OF INTRODUCED AND SUBSTITUTE

While C.S.H.B. 4365 may differ from the introduced in minor or nonsubstantive ways, the following summarizes the substantial differences between the introduced and committee substitute versions of the bill.

The substitute revises the definitions in the introduced as follows:

- whereas the introduced included a licensed mental hospital in the definition of "health care facility," the substitute does not;
- whereas the introduced defined "surgical smoke" as gaseous by-product produced by an energy-generating device used in a room in which a surgical procedure is performed, the substitute defines that term as such a by-product produced by such a device that is used in connection with a surgical procedure;
- whereas the introduced defined "surgical smoke evacuation system" as equipment designed to capture and neutralize surgical smoke at the site of origin and before the smoke makes contact with the eyes or respiratory tract of any individual occupying a room in which a surgical procedure is performed, the substitute defines the term as equipment that may be used to capture, filter, and remove surgical smoke before it makes contact with the eyes or respiratory tract of an individual, including a patient or health care provider, occupying such a room; and
- the substitute includes a specification absent from the introduced that the term "surgical smoke evacuation system" includes equipment that is integrated with or separate from the energy-generating device.

The substitute changes the purpose of a health care facility's duty to adopt and implement a surgical smoke evacuation system policy from the prevention of an individual's exposure to surgical smoke through the use of such a system during each planned surgical procedure that is likely to generate such smoke, as in the introduced, to the mitigation of such exposure during each such procedure in an operating room.

The substitute includes an authorization absent from the introduced for an applicable health care facility to use any surgical smoke evacuation system that provides protection to patients and health care providers, based on the types of surgical techniques and procedures performed at the facility.