

## Department of Anesthesia

**Title:**

Sevoflurane Hazard: Potential Fire and Toxic  
Byproducts

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**Attachment:****POLICY:**

The safe use of sevoflurane (Ultane) requires that certain clinical and technical support guidelines be followed to minimize or prevent prolonged sevoflurane contact with desiccated carbon dioxide absorbent.

**RATIONALE:**

There is a chance of fire and /or extreme heat production with toxic by-products (compound A, compound B, carbon monoxide) when sevoflurane comes into prolonged contact with desiccated carbon dioxide absorbent (Baralyme, soda lime)

**PROCEDURE:**

1. Anesthesia providers and technicians should turn off the gas flows at the end of every case and ensure that all vaporizers are off.
2. Anesthesia technicians should turn off the machines at the end of each day by turning the master switch to "off" in addition to turning off the gas flows.
3. Anesthesia technicians will replace the CO2 absorber canisters at least once a week or sooner if indicated. The date that the canister enters service will be recorded on a label placed on the outside of the canister. The integrity of the packaging on new canisters should be inspected to ensure they did not dry out during shipping and storage before use in the anesthesia machine.
4. Be sure to follow Department machine setup and operation protocols. In particular, be sure to follow good practices and Departmental protocols in storing, using and filling any vaporizer in the upright position. If a vaporizer is accidentally inverted, it should be purged before putting into clinical use.

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