Anesthesia Machine/Vaporizer Preventive Maintenance Policy

A. Purpose:
The purpose of this document is to provide guidelines regarding recommended scheduling for anesthesia machine/vaporizer (isoflurane, halothane and methoxyflurane) preventive maintenance. You are advised to follow the manufacturer recommendations if they differ from this document.

Policy:
Anesthesia machines and vaporizers must be in good working condition to reduce anesthetic gas leaks, to have the best performance of scavenging equipment, and ensure the appropriate percentage of anesthetic is being delivered. Personnel must be trained in the proper use of anesthetic machines and vaporizers prior to operation. Each piece of equipment involved in the delivery of inhalant anesthetics should be evaluated regularly to assure its proper function and integrity.

All anesthetic vaporizers must have preventive maintenance performed at least annually. Preventive maintenance includes:

- Electrical Safety inspection and battery replacement for Desflurane Vaporizers.
- Physical inspection for loose or missing screws, sharp edges, or loose connectors.
- Visual inspection for mechanical or electrical damage.
- Verify operation of safety interlock if applicable.
- Verify operation of handwheel lock and release button.
- Verify handwheel turns smoothly through entire range.
- Check Fill / Drain system operates properly and that there are no leaks.
- Verify concentration delivery accuracy at 0, 1, 3, & 5% settings using room temperature 100% Oxygen at 5 LPM flow is within manufacturer’s specifications.

References:
OSHA Health Care Workers Guidelines/Chap5b (http://origin.cdc.gov/niosh/hcwo5d5b.html)

Approved by UCAR: 4/19/06