

Guideline Number:	IG002
Approved By:	IACUC
Approval Date:	07/11/2024
Version:	5

## **IG002: ANESTHESIA VAPORIZER MAINTENANCE**

The anesthesia vaporizer is a critical component of your anesthetic machine. It is very important to ensure that the appropriate percentage of anesthetic agent is being delivered. A malfunctioning vaporizer can deliver an inappropriate depth of anesthesia (either too light or too deep) and potential exposure of personnel to waste anesthetic gases. Further, unrecognized leaks in your machine can pollute the surrounding laboratory environment unknowingly.

- Anesthesia vaporizers used with biomedical and agricultural animal species at MSU must be calibrated at least **EVERY OTHER YEAR** or more often, if needed, unless specified differently by the manufacturer.
- The vaporizer owner (whether departmental, individual, or through CAR) is responsible for maintaining an established schedule of testing on vaporizer(s).

Calibrations can be scheduled with on-campus sources or through outside vendors; a list of options is available on the Animal Care Program website: [CAR Rate-Based Services | Animal Care Program | Michigan State University \(msu.edu\)](#)

- For calibration verification, a sticker must be affixed to each vaporizer and machine which includes the due date for next calibration verification, and initials of person performing the verification.
- Calibrations which fall outside of +/- 20% tolerance will be red-tagged and can no longer be used until a manufacturer or certified repair is completed.
- If vaporizers are intentionally not in use by a laboratory, e.g. due to a change in experimental planning, please place a sign to indicate 'OUT OF USE, WILL BE CALIBRATED PRIOR TO NEXT USE' on the vaporizer to assist with communicating to the CAR/IACUC/EHS compliance staff.

Please direct inquiries about vaporizer service/certification vendors and loaner anesthesia machines to the CAR veterinary staff [carvets@msu.edu](mailto:carvets@msu.edu) .