**THE SAFE USE OF ISOFLURANE**

### Required PPE
- Safety glasses or goggles
- Chemical-resistant gloves
- Lab coat

The isoflurane exposure limit is below the human odor detection threshold. **If you can smell the anesthetic, the exposure level is too high.**

### Acute Health Effects
- Headache, irritability, dizziness, fatigue, impaired judgment or coordination
- Nausea, vomiting

### Chronic Health Effects
- Liver disease
- Kidney disease
- Adverse reproductive effects

### Exposure during pregnancy is not recommended and may pose risks

### To avoid exposure:

#### While filling the anesthesia machine
- Inspect the anesthesia machine before each use. Check for cracks in hoses or other damage.
- Read and follow the Safety Data Sheet and your lab specific Standard Operating Procedure.
- Open isoflurane stock bottles in the chemical fume hood and use an anti-spill or key fill adaptor when filling the vaporizer.

#### While administering the anesthetic
- Use a nose cone appropriate for the species and ensure a snug fit.
- Always use bell jars inside a chemical fume hood or a ducted Class II B2 biological safety cabinet.

#### When waste anesthetic gases (WAGs) escape
- Use a scavenging system to remove WAGs:
  - Active scavenging in a chemical fume hood or a ducted class II B2 biological safety cabinet is preferred.
  - If use of active scavenging is not possible, use passive scavenging (such as a charcoal canister). Place the canister in the manufacturer’s recommended position and ensure the exhaust ports/vents are not blocked.

Regardless of scavenging method, induction chambers with a flush valve must be purged with oxygen before opening it to remove the animal. If using active scavenging, open induction chambers in a chemical fume hood or a ducted Class II B2 biosafety cabinet.

### Waste Disposal
- Gloves used to fill the vaporizer or for spill clean-up must be disposed as chemical waste.
- Keep isoflurane-soaked materials such as cotton, gauze, and disposable gloves in properly labeled waste containers in the chemical fume hood until the waste is picked up.
- Submit a Hazardous Waste Pickup Request to dispose of empty isoflurane bottles or other contaminated waste.