

# 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.

## Isoflurane exposure occurs:

While filling the anesthesia machine

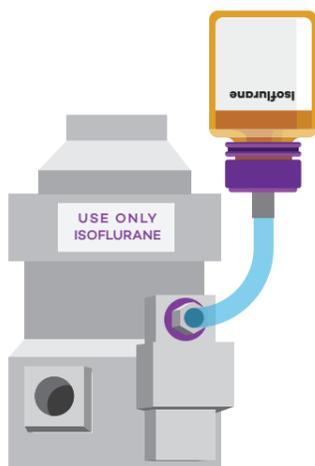


### To avoid exposure:

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.



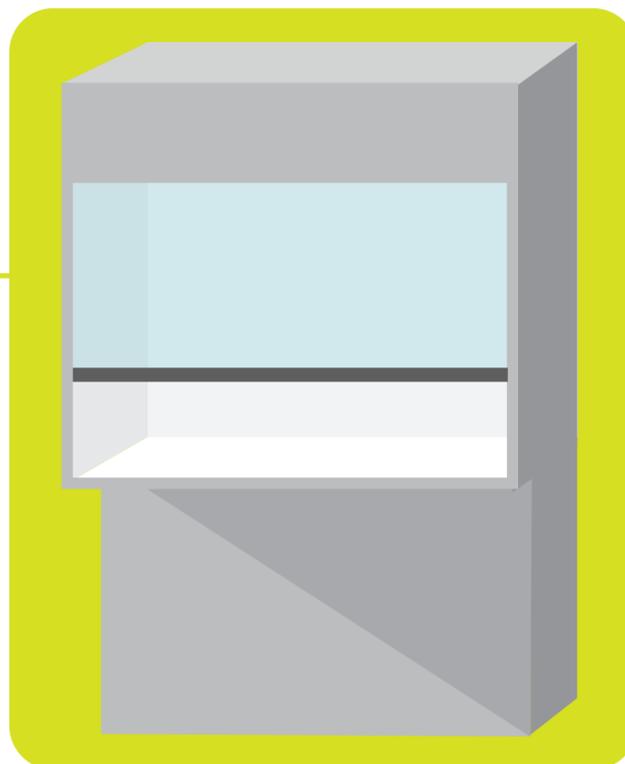
While administering the anesthetic



### To avoid exposure:

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.



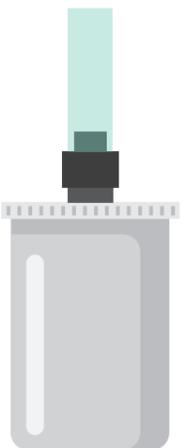
When waste anesthetic gases (WAGs) escape

### To avoid exposure:

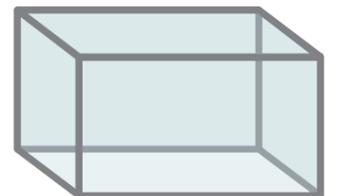
Use a scavenging system to remove WAGs.

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 biological safety cabinet.



## Waste Disposal

Gloves used to fill the vaporizer or for spill clean-up must be disposed as chemical waste.

Keep isoflurane-soaked materials (cotton/gauze, 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.

