

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

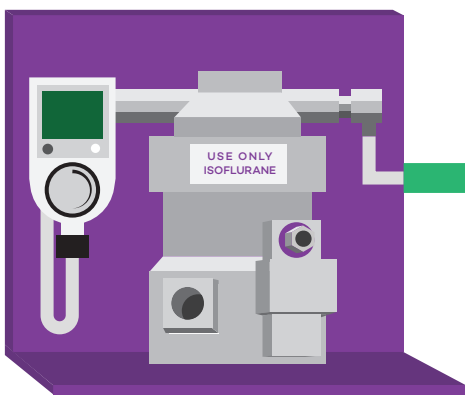
Kidney disease

Adverse reproductive effects

Exposure during pregnancy is not recommended and may pose risks

To avoid exposure:

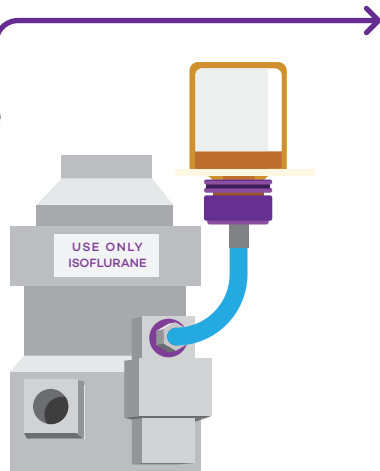
While filling the anesthesia machine



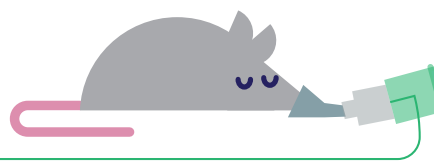
Inspect the anesthesia machine before each use. Check for cracks in hoses or other damage.

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.

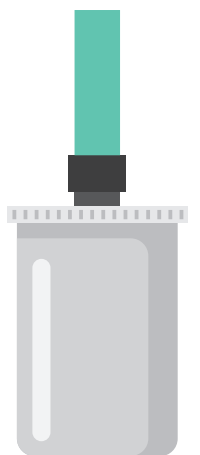


When waste anesthetic gases (WAGs) escape

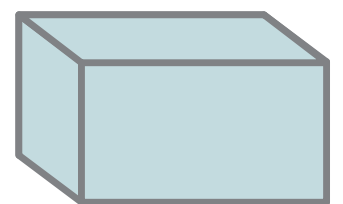
Use a scavenging system to remove WAGs:

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.

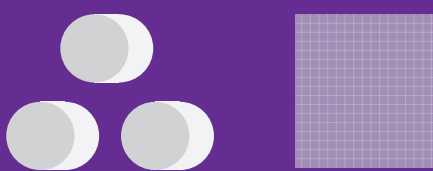


Waste Disposal

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.

