

IACUC Guidelines for the Use of Bell Jars with Inhalant Anesthetics for Euthanasia at UWM

Last Review: 4/2022

Revision History:

Bell jars refer to any small, transparent, sealable container that is filled with a volatile anesthetic via a soaked absorbent material. If used, the description of the bell jar must be included in the “Euthanasia” procedure as part of an IACUC-approved protocol.

The following practices must be followed and described in the protocol:

- a. This equipment should be used in a fume hood. The IACUC must approve the use of this equipment outside of a fume hood in the animal protocol.
- b. A physical barrier must be used to separate the rodent from the anesthesia soaked cotton or gauze material. The animal should only be exposed to vapors and should never come in contact with the liquid state of the anesthetic as this can be irritating. This separation should be accomplished by using a pre-fabricated container with a “shelf” or other durable screening in the container dedicated to this purpose.
- c. A bell jar should not be pre-charged with the volatile anesthetics as this can lead to a sudden hypoxemia in rodents, which can cause distress. Placement of anesthetic soaked materials into the bell jar must occur immediately prior to placement of separator and rodents into the bell jar.
- d. The bell jar should not be overcrowded. Only animals originating from the same home cage should be euthanized together.
- e. Animals should remain in the bell jar until breathing has ceased. Immediately after removing animals from the bell jar euthanasia or confirmation of euthanasia must be performed by an approved physical method.
- f. The bell jar’s interior will be cleaned with disinfectant and wiped clean after each use.
- g. Air dry used cotton pad(s) inside the jar within a hood for 15 minutes and then discard in a glove and put into the trash bin.

