

IACUC Policy: Fertilized Bird Egg Use

Purpose/Scope/Application

United States regulatory agencies and their respective laws and policies do not consider avian embryonated eggs live animals. Nonetheless, contingencies must be in place to address eggs that unintentionally hatch, as hatched birds are covered by federal policies. It is the expectation of OLAW that Assured institutions establish procedures to care for any birds that may hatch. Moreover, it is the duty of the researcher and the institution to prevent pain and distress to animals used in teaching, research, and display at the University of Minnesota. Lastly, the AVMA Guidelines for the Euthanasia of Animals 2020 Edition has specific requirements for the euthanasia of unhatched birds. These requirements are based on the developmental stage of the embryo and corresponding ability to experience pain and distress.

Definitions

Fertilized bird eggs - eggs from any avian species that are used for research in which embryos will develop.

Incubation period - time from egg fertilization until hatching.

Requirements

Notification to IACUC of Use:

Personnel using fertilized bird eggs must notify the IACUC prior to use (or within 60 days of policy publication) by using the Google Form located here: [Fertilized Egg Use Form](#)

IACUC Purview:

An IACUC protocol is not required for the use of embryonated avian eggs that will not hatch. Birds that are intentionally permitted to hatch will require an IACUC protocol and IACUC approval prior to animal use. The IACUC does require that the following information (see Notification section) is provided prior to use:

- Species
- Location
- Maximum age of eggs (i.e., age of incubation)
 - If birds are intended to hatch; further information will be required in an IACUC protocol
- Euthanasia method
- Confirmation that
 - Eggs will be checked daily starting at 80% of incubation
 - The on-call veterinary number is readily available to all personnel who check the incubator
 - The on-call vet will be notified immediately if an egg hatches unintentionally

Disposal of eggs after euthanasia and/or confirmation of death:

Egg disposal must be in accordance with the Department of Environmental Health and Safety and, if applicable, the Institutional Biosafety Committee and Health, Safety, and Risk Management. They should be disposed of in the same manner as animal tissue and carcasses (red bag/red bin) unless otherwise directed.

Euthanasia Reference

Euthanasia methods for eggs:

- CO₂ for 20 minutes
- Direct isoflurane through the air cell
- Addling
- Exposed embryos can be decapitated
- Prior to 80% incubation:
 - Freezing
 - At least 4 hour exposure to <4°C

Euthanasia methods for day-old chicks:

- CO₂ at 80-90% for at least 5 minutes
- As otherwise described in the AVMA Euthanasia Guidelines

Applicable Regulations

- OLAW FAQs: <https://grants.nih.gov/faqs#/guidance/faqs?anchor=50289>
- AVMA Guidelines for the Euthanasia of Animals: 2020 Edition:
<https://www.avma.org/sites/default/files/2020-02/Guidelines-on-Euthanasia-2020.pdf>

Related Documents:

- https://docs.google.com/forms/d/e/1FAIpQLSc7iw6T1Kyl3D6TF_7bC-aDAI3U94JymkGKxcF_KDKq2Qy7kA/viewform?usp=dialog