

Protocol for Radioactive Materials in Experimental Animals

Instructions

Investigators using radionuclides in experimental animals must comply with the policies and requirements established by the Institutional Animal Care and Use Committee (IACUC) in conjunction with the Center for Comparative Medicine (CCM), and with the policies and requirements of the Radiation Safety Committee in conjunction with Research Safety.

Radioactive materials administered to experimental animals are potential sources of personnel exposure and contamination of facilities. The information you provide on this form will help guide CCM and Research Safety in determining and implementing those measures necessary to minimize the risks, protect personnel and the facilities, and comply with regulatory requirements.

Questions about radioactive materials authorization, radiation safety, and radioactive waste disposal should be directed to Research Safety at 312-503-8300. Questions about the animals, facilities, and CCM requirements should be directed to CCM at 312-908-8257.

Who must complete this form?

Each Investigator who administers radioactive materials to animals in CCM facilities, or houses animals containing radioactive materials in CCM facilities must complete this form.

When must the form be submitted?

Submit the form no later than two weeks prior to administration of radioactive materials to animals.

Where should the form be sent?

Email a completed copy of the form to radiation-safety@northwestern.edu.

Reference: [Radiation Safety Handbook](#)

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Complete this form and return no later than two weeks prior to administration to: radiation-safety@northwestern.edu

Section 1

Principal Investigator Name:

Date:

Department:

Phone:

Campus:

IACUC Form 101 Proposal #:

Date Approved:

List individuals authorized to use radioactive materials under this protocol:

Date radioactive materials will be administered:

Species:

Average Weight, or Range:

Number of animals to which radioactive materials will be administered:

Radionuclide:

Chemical Form:

Complete one: { Total microcuries administered per animal:
Total microcuries per gram body weight:

Laboratory where radioactive material will be administered:
(Building and Room #)

Briefly describe the radionuclide administration protocol:

Are animals to be sacrificed the same day of the experiment? Yes No

If yes, stop here and submit the form to Research Safety.

If no, complete Section 2 on next page.

For Research Safety use only

Date Received:

Reviewed by:

Date Forwarded to CCM:

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Section 2

You must complete this section if animals are not sacrificed on the same day the radionuclide is administered.

1. Are the animals to be maintained in the Investigator's laboratory? Yes No
2. Are the animals to be kept in or returned to CCM for maintenance? Yes No
3. How long will the animals be housed in CCM?
4. Describe animal housing (location, type of cage, etc.; must be approved by CCM/Research Safety:
5. Identify the route of excretion of the radionuclide from the animal (e.g., urine, feces, lungs):
6. What is the rate of excretion of the radionuclide from the excretory compartments:
7. Will animals be maintained by CCM personnel? Yes No
If yes, identify the extent of caretaker handling of the animals and special precautions for animal caretakers. Radiation safety precautions will be similar to those required in your laboratory when using radioactive materials. Address each of the following items:
 - a. Personal protective equipment (e.g., gloves, eye protection, etc.)
 - b. Dosimeters
 - c. Special handling precautions for cages, bedding, or excreta
 - d. Shielding
8. Describe protocol for collecting waste. Contaminated bedding shall be collected and identified as biological waste. Standard Research Safety radwaste containers shall be used. Each Investigator shall use a waste container dedicated to the approved project. Investigators shall complete the radioactive waste card for each container and coordinate container delivery and pickup with Research Safety. Bedding shall not be combined with any other radioactive or nonradioactive waste. Contact Research Safety for instructions on disposal of large-animal excreta.
Will the above protocol be followed? Yes No
If no, describe protocol:

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9. Describe procedure for disposal of carcasses and tissues. Disposal of carcasses by incineration is prohibited unless approved *in advance* by Research Safety. Contact Research Safety for instructions *prior to administration*.

10. Signs and labels: The Investigator is responsible for labeling each cage with a label bearing the radiation symbol, radionuclide name, activity administered per animal, and date of administration.

11. Closing Survey: The Investigator is responsible for notifying Research Safety when CCM housing is concluded and arranging for a closing survey.