

Division of Nuclear Medicine Procedure / Protocol University Hospital (UH), The American Center (TAC) and The American Family Children's Hospital (AFCH)

RECEIVING RADIOPHARMACEUTICALS
UPDATED: DECEMBER 2020

CPT CODE: N/A

Purpose: To ensure safe handling procedures when receiving radiopharmaceuticals.

Personnel: Only personnel authorized by the UW-Madison Office of Radiation Safety to handle radioactive material, and who have been properly trained in DOT Hazardous Materials Shipping and UW Health Nuclear Medicine procedures may receive radiopharmaceuticals.

Delivery: **University Hospital:** During normal Nuclear Pharmacy business hours (0600-1700 M-F), carriers will be instructed to enter University Hospital through the 3rd floor entrance and deliver the radiopharmaceutical directly to the Nuclear Pharmacy (Room E1/378). After hours, carriers must contact hospital security to gain entry to the Nuclear Pharmacy and sign the "Radioactive Materials Receipt Log for After Hours Deliveries".

American Family Children's Hospital (AFCH): All vendors will deliver to the University Hospital Nuclear Pharmacy as noted above.

The American Center (TAC): All deliveries will be during business hours (0600-1600 M-F) and directly to Nuclear Medicine Hot lab (Room 1033A).

Procedure for Opening Packages:

Within 3 hours of receipt of package during normal business hours, a package containing radiopharmaceuticals will be opened.

Note: Record all receiving and inventory data into the current computer database as prompted by the application.

- Step 1: Don gloves and inspect the outside of the package for damage. If damage is noted, stop the procedure and notify the Office of Radiation Safety.
- Step 2: Survey the package with an energy compensated survey meter. If the readings exceed the Transport Index identified on the package, notify the Office of Radiation Safety. The labeling requirements are as follows:
 - At 1 meter:
 - "Radioactive - White I" - N/A
 - "Radioactive - Yellow II" - ≤ 1 mR/hr
 - "Radioactive - Yellow III" - ≤ 10 mR/hr
 - At the surface:
 - "Radioactive - White I" - ≤ 0.5 mR/hr
 - "Radioactive - Yellow II" - > 0.5 to ≤ 50 mR/hr
 - "Radioactive - Yellow III" - > 50 to ≤ 200 mR/hr
- Step 3: Wipe test the outside of the package (300 cm³)
 - Count the wipe test in the designated scintillation well counter.
 - Action level: 2,200 dpm/100 cm³
 - In the case of contamination, notify the vendor and the Office of Radiation Safety. A master list of vendors will be maintained and posted next to the phones in the Nuclear Pharmacy, Nuclear Pharmacist office and all receiving hot labs.
- Step 4: Open the package. Inspect and verify the contents of the package.
- Step 5: Enter the information of the shipment into the computer database as the system requests or by bar code.
 - Step by step instructions for computer order entry will be maintained in the Nuclear Pharmacy Operations Manual.
- Step 6: Turn or deface all radioactive symbols on all shipping materials and set the case/box for return or disposal.

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Inventory: The computer software tracks all inventory including:

- The amount ordered
- The amount received
- The amount in active inventory
- The amount used to compound other radiopharmaceuticals
- The amount administered
- The amount in waste

References:

NRC Model Procedure in Regulatory Guide 10.8, APPENDIX L: Model Procedure for Safely Opening Packages Containing Radioactive Material

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