# UNITED STATES NUCLEAR REGULATORY COMMISSION OFFICE OF NUCLEAR MATERIAL SAFETY AND SAFEGUARDS WASHINGTON, D.C. 20555

July 16, 2002

NRC INFORMATION NOTICE 2002-23: UNAUTHORIZED ADMINISTRATION OF BYPRODUCT MATERIAL FOR MEDICAL USE

Addressees:

All medical licensees.

#### Purpose:

The U.S. Nuclear Regulatory Commission (NRC) is issuing this information notice (IN) to remind licensees of the importance of appropriate authorization before administration of byproduct material for medical use. It is expected that recipients will review this information for applicability to their licensed activities and consider actions, as appropriate, to avoid similar problems. However, suggestions contained in this IN are not new NRC requirements; therefore, no specific action nor written response is required.

### **Description of Circumstances:**

Over the past year, NRC has become aware of cases involving the deliberate unauthorized administration of licensed material to humans. For example, on April 26, 2001, a nuclear medicine technologist deliberately administered an unauthorized dose of technetium-99m tagged methylene diphosphonate to a student. The student requested the administration of the licensed material for a bone scan. The technologist performed the bone scan without prior authorization from a physician.

#### Discussion:

The regulations of 10 CFR Part 35 provide that only an authorized user physician, or someone under the supervision of an authorized user, may administer licensed material for medical uses. In the case described above, the nuclear medicine technologist administered licensed material without the approval of an authorized user. Such action by the technologist resulted in an unnecessary radiation dose to the individual.

NRC expects licensees to ensure that their staff, including nuclear medicine technologists, and other persons supervised by physicians, fully understand and adhere to the requirements associated with the medical administration of licensed material. NRC will consider enforcement actions for both licensees and their staff when NRC requirements are knowingly violated, as in the case described above.

This IN notice requires no specific action nor written response. If you have any questions about the information in this notice, please contact the technical contact listed below or the appropriate regional office.

#### /RA/

Donald A. Cool, Director Division of Industrial and Medical Nuclear Safety Office of Nuclear Material Safety and Safeguards

#### Attachments:

- 1. List of Recently Issued NMSS Information Notices
- 2. List of Recently Issued NRC Information Notices

Technical Contact: Anita L. Turner, Ph.D., NMSS

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# LIST OF RECENTLY ISSUED NMSS INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to
2002-19	Medical Misadministrations Caused By Failure to Properly Perform Tests on Dose Calibrators for Beta- and Low- Energy Photon-Emitting Radionuclides	06/14/2002	All nuclear pharmacies and medical licensees.
2002-17	Medical Use of Strontium-90 Eye Applicators: New Requirements for Calibration and Decay Correction	05/30/2002	All U.S. Nuclear Regulatory Commission medical licensees that use strontium-90 (Sr-90) eye applicators.
2002-16	Intravascular Brachytherapy Misadministrations	05/01/2002	All Medical Licensees.
2001-18	Degraded and Failed Automatic Electronic Monitoring, Control, Alarming, Response, and Communications Needed for Safety and Safeguards	12/14/2001	All uranium fuel conversion, enrichment and fabrication licenses and certificate holders authorized to receive safeguards information. Information notice is not available to the public because it contains safeguards information.
2001-17	Degraded and Failed Performance of Essential Utilities Needed for Safety and Safeguards	12/14/2001	All uranium fuel conversion, enrichment, and fabrication licenses and certificate holders authorized to receive safeguards information. Information notice is not available to the public because it contains safeguards information.

**Note**: NRC generic communications may be received in electronic format shortly after they are issued by subscribing to the NRC listserver as follows:

To subscribe send an e-mail to < <a href="mailto:listproc@nrc.gov">listproc@nrc.gov</a> >, no subject, and the following command in the message portion:

subscribe gc-nrr firstname lastname

# LIST OF RECENTLY ISSUED NRC INFORMATION NOTICES

Information Notice No.	Subject	Date of Issuance	Issued to			
2002-22	Degraded Bearing Surfaces in GM/EMD Emergency Diesel Generators	06/28/2002	All holders of operating licenses for pressurized- or boiling-water nuclear power reactors, including those that have ceased operations but have fuel on site.			
2002-21	Axial Outside-Diameter Cracking Affecting Thermally Treated Alloy 600 Steam Generator Tubing	06/25/2002	All holders of operating licenses for pressurized-water reactors (PWRs), except those who have permanently ceased operations and have certified that fuel has been permanently removed from the reactor.			
2002-20	Microwave Parameter Intrusion Detection System Installation	06/20/2002	All holders of operating licenses or construction permits for nuclear power reactors, decommissioning reactors with fuel on site, category 1 fuel facilities, uranium conversion facilities, independent spent fuel installations, and gaseous diffusion plants that are authorized to receive Safeguards Information and have a need to know.			
2002-19	Medical Misadministrations Caused By Failure to Properly Perform Tests on Dose Calibrators for Beta-and Low- Energy Photon-Emitting Radionuclides	06/14/2002	All nuclear pharmacies and medical licensees.			
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