License No. 08-01738-02
Docket No. 3001317
MLER-RI - 91-173

DEPARTMENT OF THE ARMY
WALTER REED ARMY MEDICAL CENTER
WASHINGTON, D.C. 20307-5001

REPLY TO ATTENTION OF:

31 July 1991

Health Physics Office

United States Nuclear Regulatory Commission
631 Park Avenue
King of Prussia, Pennsylvania 19406

Dear Sir:

Pursuant to Title 10, Chapter 1, Code of Federal Regulations, Part 35, Section 35.33 (c), we provide you with notification of a diagnostic misadministration of a radiopharmaceutical involving three patients. This notification includes, as an enclosure, a NRC Form 473, Diagnostic Misadministration Report detailing specifics of the incident.

Using the package insert, the Staff Nuclear Pharmacist calculated, and health physics personnel verified, the following doses:

Patient	Administered Activity	Thyroid Dose	WB Dose
"X"	20.6 mCi	2.68 rad	0.29 rad
"Y"	21.8 mCi	2.83 rad	0.31 rad
"Z"	21.5 mCi	2.80 rad	0.30 rad

In addition to the referring physician, the Acting Chief, Nuclear Medicine notified the patient. The Health Physics Office received prompt notification and conducted an investigation.

Our review of written statements and interview with Nuclear Medicine personnel reveal this incident to be isolated in nature and due to a student technologist's error that was not properly observed and corrected by the supervising technologist. The Nuclear Pharmacist formally counseled the responsible student and supervisory technologist. The Acting Chief, Nuclear Medicine discussed the incident during the next technical staff meeting following the misadministration. As indicated in the attached NRC Form 473, revisions of the Nuclear Medicine work practices now require closer scrutiny of student technologists and delineate measures for supervisory technologists to confirm the adequacy of drawn dosages.

In light of these facts, the Health Physics Office concurs fully with the corrective actions taken. The Radiation Safety Officer will retain appropriate records in accordance with

W/21

RETURN ORIGINAL TO REGION I

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Nuclear Regulatory Commission regulations and will discuss the matter at the next Radiation Control Committee meeting.

Sincerely,

ROY D. QUICK, JR.
MAJ, MS
Executive Officer

Enclosure

Copy Furnished:

Commander
US Army Health Services Command
Fort Sam Houston, Texas 78234-6000

TSG (HQDA(DASG-PSP-E))
5111 Leesburg Pike
Falls Church, Virginia 22041-3258

DIAGNOSTIC MISADMINISTRATION REPORT

Expires 5 31 9

(N1) LICENSEE NAME: WALTER REED ARMY MEDICAL CENTER

(N2) LICENSE NUMBER: 08-01738-0

(N3) CITY: WASHINGTON

(N4) STATE: D.C.

(N5) EVENT DATE: MONTH 07 DAY 22 YEAR 91

(N6) REPORT DATE: MONTH 10 DAY 8 YEAR 91

(N7) TYPE OF MISADMINISTRATION

- [x] (01) WRONG RADIOPHARMACEUTICAL
- [ ] (02) DOSAGE DIFFERING FROM PRESCRIBED BY 50%
- [ ] (03) WRONG PATIENT
- [ ] (04) WRONG ROUTE

(N8) DID THE MISADMINISTRATION INVOLVE AN ISOTOPE OF IODINE

- [ ] (999) YES
- [x] (111) NO

(N9) NUMBER OF PATIENTS WHO RECEIVED A MISADMINISTRATION UNDER THIS REPORT: THREE

(N10) INTENDED

- [ ] (05) NO CLINICAL PROCEDURE
- [ ] (06) NUCLEAR MEDICINE STUDY (Complete (N10A) INTENDED and (N11) GIVEN)
- [ ] (07) X-RAY STUDY
- [ ] (08) ULTRASOUND STUDY
- [ ] (09) CT STUDY
- [ ] (10) NMR STUDY
- [ ] (11) OTHER

(N10A) INTENDED				(N11) GIVEN			
MILLICURIES	ISOTOPE	CHEMICAL FORM	STUDY	MILLICURIES	ISOTOPE	CHEMICAL FORM	STUDY
20	Tc^{99m}	Tc-MDP	BONE SCAN	20	Tc^{99m}	TcO_4	Thyroid UPTAKE

(N12) PRECIPITATOR

- [ ] (71) REFERRING PHYSICIAN
- [ ] (72) WARD NURSE
- [ ] (73) WARD CLERK
- [ ] (74) NUCLEAR PHARMACY
- [ ] (75) AUTHORIZED USER
- [ ] (76) HOT LAB TECHNOLOGIST
- [x] (77) IMAGING TECHNOLOGIST
- [ ] (78) CLINIC RECEPTIONIST
- [ ] (79) SCHEDULING TECHNOLOGIST
- [ ] (80) PATIENT
- [x] (81) OTHER: SUPERVISING TECH

NAME OF NUCLEAR PHARMACY | CITY | STATE

(N13) ERROR

HOT LAB	REFERRAL	ADMINISTRATION	OTHER
[ ] (11) MISLABELED A SYRINGE	[ ] (20) MISUNDERSTOOD REFERRING PHYSICIAN'S REQUEST	[ ] (30) SELECTED WRONG PATIENT	[x] (40) Specify: Improper Supervision of Student Technologist
[ ] (12) MISLABELED A VIAL OR VIAL SHIELD	[ ] (21) REQUESTED WRONG STUDY	[ ] (31) ANSWERED WAITING ROOM PAGE INTENDED FOR OTHER PATIENT	
[ ] (13) RECONSTITUTED WRONG REAGENT KIT	[ ] (22) REQUESTED STUDY FOR WRONG PATIENT	[ ] (32) BROUGHT WRONG PATIENT TO CLINIC	
[ ] (14) PLACED RECONSTITUTED VIAL IN WRONG SHIELD		[ ] (33) SELECTED WRONG SYRINGE FROM DOSAGE CART	
[x] (15) SELECTED WRONG VIAL WHEN DRAWING DOSAGE			
[ ] (16) SET DOSE CALIBRATOR IMPROPERLY			
[ ] (17) MISREAD DOSE CALIBRATOR			
[ ] (18) MISUNDERSTOOD RADIOPHARMACEUTICAL OR DOSAGE ORDER			

(N14) CONTRIBUTING FACTORS

- [x] (80) STUDENT TECHNOLOGIST
- [ ] (81) NEW EMPLOYEE
- [ ] (82) FOREIGN LANGUAGE
- [ ] (83) PATIENT INCOHERENT OR UNCONSCIOUS
- [ ] (84) ID BRACELET NOT CHECKED
- [ ] (85) REQUISITION NOT CHECKED
- [ ] (86) PATIENT CHART NOT CHECKED
- [ ] (87) NEW PROCEDURE
- [ ] (88) HEAVY WORKLOAD
- [x] (89) OTHER: Procedure blocked by Shielding

(N15) ACTION TAKEN TO PREVENT RECURRENCE

IMPLEMENT NEW PROCEDURES FOR:

- [ ] (C1) VERIFICATION OF REQUEST
- [ ] (C2) RADIOPHARMACEUTICAL LABELING AND HANDLING
- [ ] (C3) VERIFICATION OF PATIENT IDENTIFICATION
- [ ] (C4) REINSTRUCT PERSONNEL
- [x] (C5) REPRIMAND PERSONNEL
- [x] (C6) IMPROVE SUPERVISION OF PERSONNEL
- [ ] (C7) NO ACTION
- [x] (C8) OTHER: REVISION OF MANDATORY WORK RULES

(N16) EFFECT ON PATIENTS

- [x] NONE APPARENT
- [ ] SEE ABSTRACT

(N17) ABSTRACT (If more space is required, attach additional sheets.)

A student Technologist intended to prepare 3 doses of 20 mCi Tc-99m-MDP but drew 3 doses of Tc-99m O_4 by accident and dosed patients "X", "Y", and "Z". The supervising Technologist did not closely observe the drawing of the wrong radiopharmaceuticals and signed off on the dosages. Acting Chief, Nuclear Medicine notified the patients and their referring physicians. Formal written counseling was given to both the student Technologists and the supervising Technologist by their supervisor, the Nuclear Pharmacist. The clinic SOP will be revised requiring all student Technologists to leave out all vials and instruments after drawing doses and supervising Technologists to check which radiopharmaceutical was drawn.

Health Physics investigation reveals this to be an error on the part of a student coupled with a lapse in his supervision. If the recommended SOP changes are implemented no further action is required.

RADIATION OFFICER (Printed Name)	SIGNATURE	TELEPHONE	DATE
FOR Mark A. Nolan, CPT, MS, C, OPNS, HPO ARTHUR G. SAMILJAN, LTC, MS, HEALTH PHYSICS OFFICER		(301) 427-5104	2 NOV 91

NUCLEAR REGULATORY COMMISSION USE

(N18)	(N19) AS	(N20) REGIONAL LOG NUMBER	(N21) ACCESSION NUMBER	(N22) INITIALS
[ ] (999) YES [ ] (111) NO				

NRC FORM 473 (5-88)

REGION I

NMSS LICENSEE EVENT REPORT

License No. 08-01738-02

Docket No. 3001317

MLER-RI-91-173

I. ACTION CONTROL DATA

Licensee Walter Reed Army Medical Center

Event Description Diagnostic Misadministrations

Event Date 7-22-91 Report Date 7-31-91

II. REPORTING REQUIREMENT

[ ] 10 CFR 20.402 - theft or loss

[ ] 10 CFR 20.403(a)(b) overexposure/release

[ ] 10 CFR 20.405 - 30 day report

[ ] Other

[ ] 10 CFR 35.33 Therapeutic Misadministration

[X] 10 CFR 35.33 Diagnostic Misadministration

[ ]-License Condition

III. REGION I RESPONSE

[ ] Immediate Site Inspection Inspector Date

[ ] Special Inspection Inspector Date

[ ] Telephone Inquiry Inspector Date

Licensee Representative and Title

[ ] PN [ ] Daily Report

[ ] Information entered - Region I log and Outstanding Items List

[X] Review at next routine inspection

IV. REPORT EVALUATION

[X] Description of Event

[X] Levels of R/M involved

[X] Cause of Event

[X] Corrective Actions

[X] Calculation Adequate

[ ] Letter to Licensee requesting additional information

Completed by: Date 11-22-91

Reviewed by: Date 12.4.91

V. SPECIAL INSTRUCTIONS OR COMMENTS

3 patients were affected. Original letter sent to wrong address.