

Event Reporting Handbook

**EVENT REPORT COVER PAGE**

**AGREEMENT STATE**

**EVENT REPORT NO.** KY - 97 - 02

**DATE:** June 9, 1997

**TO:** Paul Lohaus  
**Deputy Director**  
**Office of State Programs**

**SUBJECT:** Misadministration

**STATE:** Kentucky

**Signature and Title:** Vicki D. Jeffs

Vicki D. Jeffs, Supervisor

Radioactive Materials Unit

**NRC FILE CENTER COPY**

230035

## MEDICAL MISADMINISTRATION

ESTIMATED BURDEN PER RESPONSE TO COMPLY WITH THIS INFORMATION COLLECTION REQUEST: 1 HOUR. THIS INFORMATION IS REQUESTED TO ASSESS MISADMINISTRATIONS AND EVALUATE ACTIONS NECESSARY TO PREVENT THEIR RECURRENCE. FORWA COMMENTS REGARDING BURDEN ESTIMATE TO THE INFORMATION AND RECORDS MANAGEMENT BRANCH (T-8 F33), U.S. NUCLEAR REGULATORY COMMISSION, WASHINGTON, DC 20555-0001, AND TO THE PAPERWORK REDUCTION PROJECT (3150-0178), OFFICE OF MANAGEMENT AND BUDGET, WASHINGTON, DC 20503.

LICENSEE <u>Western Baptist Hospital</u>		CITY AND STATE <u>Paducah, KY</u>		ORIGINAL ITEM NUMBER
TYPE OF LICENSE (e.g., Broad Scope, Private Practice Medical, etc.) <u>Medical</u>		LICENSE NUMBER <u>KRML No. 202-079-31</u>		THIS ITEM NUMBER
ABNORMAL OCCURRENCE	FOLLOW-UP REPORT		THE PATIENT WAS NOTIFIED	DATE OF EVENT
YES	YES	<input checked="" type="checkbox"/> YES	DATE OF THIS REPORT	
NO	NO	NO		<u>6-9-97</u>
SODIUM IODINE, I-125 OR I-131, > 30 MICROCURIES				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG RADIOPHARMACEUTICAL <input type="checkbox"/> ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY > 20% AND DIFFERENCE EXCEEDS 30 MICROCURIES				
THERAPEUTIC RADIOPHARMACEUTICAL DOSE, OTHER THAN I-125 OR I-131				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG RADIOPHARMACEUTICAL <input type="checkbox"/> WRONG ROUTE OF ADMINISTRATION <input type="checkbox"/> ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY > 20%				
STEREOTACTIC RADIOSURGERY (GAMMAKNIFE)				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG TREATMENT SITE <input type="checkbox"/> ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY MORE THAN 10%				
TELETHERAPY				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG MODE OF TREATMENT <input checked="" type="checkbox"/> WRONG TREATMENT SITE <input type="checkbox"/> ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY MORE THAN 10% IF THERE ARE 3 OR FEWER FRACTIONS PRESCRIBED; OR WHEN WEEKLY CALCULATED ADMINISTERED DOSE EXCEEDS PRESCRIBED DOSE BY > 30%, OR WHEN CALCULATED TOTAL ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY > 20%				
BRACHYTHERAPY				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG RADIOISOTOPE <input type="checkbox"/> WRONG TREATMENT SITE <input type="checkbox"/> LEAKING SOURCE <input type="checkbox"/> ONE OR MORE SOURCES NOT REMOVED AT END OF TREATMENT <input type="checkbox"/> CALCULATED ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSE BY > 20%				
DIAGNOSTIC RADIOPHARMACEUTICAL DOSE, OTHER THAN QUANTITIES THAT EXCEED 30 MICROCURIES OF I-125 OR I-131, OR BOTH, WHEN THE PATIENT DOSE EXCEEDS 5 REM EFFECTIVE DOSE EQUIVALENT OR 50 REM ORGAN DOSE AND INVOLVES:				
<input type="checkbox"/> WRONG PATIENT <input type="checkbox"/> WRONG RADIOPHARMACEUTICAL <input type="checkbox"/> WRONG ROUTE OF ADMINISTRATION <input type="checkbox"/> ADMINISTERED DOSE DIFFERS FROM PRESCRIBED DOSAGE				

ABSTRACT (Include the cause of the misadministration, contributing factors, and licensee corrective action. May be continued on the reverse side.)

See attached.



**CABINET FOR HEALTH SERVICES**  
COMMONWEALTH OF KENTUCKY  
FRANKFORT 40621-0001

DEPARTMENT FOR PUBLIC HEALTH

**MEMORANDUM**

TO: Misadministration File  
Western Baptist Hospital  
(KRML No. 202-079-31)

FROM: Vicki D. Jeffs, Supervisor ✓  
Radioactive Materials Unit

SUBJECT: Possible Misadministration

DATE: May 20, 1997

On this date, the RSO of the above referenced facility reported a possible misadministration by telephone. This event occurred on May 19.

A patient being treated on a Theratron 1000 teletherapy unit containing a cobalt-60 source (7496 Curies as of May 19, 1997), was due to receive radiation to the superior clavicle area which involved a head/neck dose. This treatment occurred during a thunderstorm which resulted in the power being disrupted twice during the treatment period. The technologist reset the machine both times to allow for the continuation of the treatment. The patient then commented to the technologist at the conclusion of the treatment that apparently they were "treating a different area". The technologist then noticed that the light field was not aligned to the intended treatment area. Originally the light field and treatment area were aligned.

The RSO thinks the disruption in the power supply resulted in the table moving since the table is a free-floating table thus placing the patient in the wrong position for the intended treatment.

The RSO and technologist attempted to recreated the problem. The table did not move when the emergency cut-off switch was switched off without a person on the table. The table also did not move when the emergency switch was shut off when the technologist laid on the table in the normal patient position. However, when the technologist was in the position that was occupied by the patient being treated when the power was interrupted, the table did move approximately 20 centimeters in the longitudinal direction according to the RSO when the emergency switch was shut off. This second patient position was the position of the patient being treated since this patient was a small patient.

The RSO stated she checked the service manual which addressed removing the patient from the room when the power supply was shut off but did not address the table moving when the electricity is momentarily interrupted as occurred during the storm.

The intended total treatment time on this day was 1.5 minutes. The first 0.35 minutes was given to the correct area according to the technologist. The total possible treatment time to the unintended area would be 1.15 minutes. This would result in an exposure of 138 cGy (Rads) to a depth of 0.5 centimeters according to the RSO. The patient is not expected to have any adverse effects from the misadministration. The total dose prescribed for the patient was 5040 cGy to be given in twenty-eight (28) fractions of 180 cGy per day at the rate of five (5) fractions per week. The prescribing physician elected not to make up the missed dose.

The RSO was given the telephone number of FDA for reporting the incident since this may be considered an equipment problem and was also told to send this office a misadministration report. This report was received on May 30. The RSO said based on the definitions received from FDA for equipment malfunctions, a determination was made by the facility that the event was not reportable to the FDA.

All therapists were instructed to recheck all patient setups after power outages at a meeting held the next morning. All notifications - patient, referring physician and prescribing physician - were made.