PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE PNO-IV-98-003

This preliminary notification constitutes EARLY notice of events of POSSIBLE safety or public interest significance. The information is as initially received without verification or evaluation, and is basically all that is known by Region IV staff in Arlington, Texas on this date.

Facility	Licensee Emergency Classification
Memorial Medical Center	Notification of Unusual Event
Memorial Medical Center	Alert
Tulsa,Oklahoma	Site Area Emergency
License No: 35-27041-01	General Emergency
	X Not Applicable

Subject: HIGH DOSE RATE BRACHYTHERAPY MISADMINISTRATION

The subject event was identified by a regional inspector during a routine inspection at the licensee's facility on January 15, 1998. During review of the licensee's Radiation Safety Committee meeting minutes, the inspector discovered documentation of an event involving an error associated with a High Dose Rate (HDR) therapy treatment. A written directive was prepared by an authorized user physician which prescribed a treatment dose of 500 centigray (cGy) to a portion of the left lung. When the HDR treatment planning software was setup for the prescribed treatment, an incorrect value for the start position (1st dwell position) was entered. The data entry error caused the source to be positioned incorrectly and resulted in an unintentional exposure of approximately 500 cGy to a 3 cm section of lung tissue outside of the intended treatment site. The data entry error also resulted in an under exposure to approximately 3 cm section of target tissue. The error was identified by a radiation therapy technologist approximately 30 minutes after the therapy session had taken place. After the error was identified, the medical physicist, radiation safety officer, attending and treating physicians determined that the difference in dose to the patient due to the unplanned catheter length/position was not clinically significant. At the time of the occurrence, the licensee did not determine the event to be a misadministration. However, on January 23, 1998 after consultation with NMSS, Region IV advised the licensee that the event was a reportable misadministration based on radiation dose to an unintended site and a dose deviation greater than 20 percent.

The state of Oklahoma has been informed.

Region IV received notification of this occurrence from the NRC Operations Center at 1:51 p.m. (CT) on January 23, 1998. Region IV has informed NMSS.

This information has been discussed with the licensee and is current as of 2:00 p.m. (CT), January 23.

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