August 22, 2002

This Event is not for public disclosure per Agreement State request until MM/DD/YY.

PRELIMINARY NOTIFICATION OF EVENT OR UNUSUAL OCCURRENCE -- PNO-IV-02-043

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 the Region IV staff on this date.

Facility
Providence Everett Medical Center
Everett, WA
License No. WN-M0135-1
Agreement State Licensee

Licensee Emergency Classification
___ Notification of Unusual Event
___ Alert
___ Site Area Emergency
___ General Emergency
_X_ Not Applicable

SUBJECT: MEDICAL MISADMINISTRATION

DESCRIPTION:

On August 21, 2002, the NRC was notified by the Washington Department of Health (WDOH), Division of Radiation Protection, that a medical misadministration involving the use of an intravascular brachytherapy device occurred on August 19, 2002, at Providence Everett Medical Center located in Everett, Washington.

The licensee notified WDOH that a patient received 2640 centigray (rad) during a cardiac intravascular brachytherapy treatment instead of the intended 2000 centigray (rad), a 32 percent overexposure. The patient was being treated with the Guidant Corporation Galileo Intravascular Radiotherapy System (Serial No. 27958502) with a model GDT-P32-2 source wire (Serial No. 020807016) containing 4.44 gigabequerel (119.9 millicurie) of phosphorus-32 at time of treatment. The Galileo device has an automated dosimetry system that automatically calculates dwell time based on the reference arterial lumen diameter and activity of the source. The patient's vessel size was larger than the maximum diameter allowed in the automated dosimetry system. The licensee manually calculated the dwell time based on the dose rate tables available in the Guidant Manual. However, the licensee inadvertently used the dose rate for a 4.6 millimeter diameter vessel (3.30 millimeter treatment depth) instead of the patient's vessel diameter of 4.05 millimeter (3.03 millimeter treatment depth). This resulted in a delivered dose of 2640 centigray (rad) at 3.03 millimeter. The cause of the event is human error. The licensee's corrective action is to have a second independent calculation performed by Physics and Dosimetry staff prior to treatment whenever a manual calculation using the dose rate tables is necessary. No adverse consequences are expected. The referring physician and the patient were notified of the overexposure.

Region IV received notification of this occurrence by email from the State at 11:31 a.m. (CDT) on August 21, 2002 . Region IV has informed OEDO, NMSS, OSTP and Region IV's PAO and SLO.

This information has been discussed with the State and is current as of 4:15 p.m. (CDT) on August 21, 2002 .

CONTACTS: Vivian Campbell 817-860-8143
Dwight Chamberlain 817-860-8106