Event Detail - Abnormal Occurrence

ITEM #:	050143	**AO #:**	05-02	**AO REPORT:**	NUREG-0090, Vol. 28
TITLE:	Medical Event at St. Johns Mercy Hospital in St. Louis, Missouri				
NAME:	St. Johns Mercy Hospital				
DATE:	03/09/2005	**CITY:**	St. Louis	**STATE:**	MO

Criteria:

Criterion I.A.2, "For All Licensees," of Appendix A to this report states, "Any unintended radiation exposure to any minor (an individual less than 18 years of age) resulting in an annual total effective dose equivalent (TEDE) of 50 millisieverts (mSv) (5 rem) or more, or to an embryo/fetus resulting in a dose equivalent of 50 mSv (5 rem) or more," will be considered for reporting as an AO.

Nature and Probable Consequences:

The licensee reported that a 5-month old infant was prescribed 18.5 MBq (0.5 mCi) of technetium-99 metastable (Tc-99m), but instead received 414.4 MBq (11.2 mCi) of Tc-99m. Hospital personnel did not look at the dosage label to verify the dose to be administered. The whole body dose to the infant was calculated to be between 0.052 to 0.10 Sv (5.2 to 10 rem). The physician informed the infant's parents. The NRC's medical consultant determined that there were no acute or subacute effects noted in the patient, but recommended that a pediatric gastroenterologist monitor the patient for cancer for an extended period of time.

Cause:

The event was caused by human error. The hospital staff member did not look at the dosage label before administering the radiopharmaceutical.

Licensee Action:

Corrective actions taken by the licensee involved revision of their procedures to require dual verification of all dosages to be administered to children and retraining the staff on the new procedures.

NRC Action:

Other Agency Action: