

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
OFFICE OF WASTE, AIR, RADIATION AND REMEDIATION
BUREAU OF RADIATION PROTECTION
HARRISBURG, PA 17101

February 24, 2020

BRP INFORMATION NOTICE 2020-02 RECENT REPORTED MEDICAL EVENTS INVOLVING THE ADMINISTRATION OF YTTRIUM-90 MICROSOPHERES FOR THERAPEUTIC MEDICAL PROCEDURES.

ADDRESSEES

All Pennsylvania Department of Environmental Protection (DEP) Specific Licensees that are authorized for yttrium-90 (Y-90) microsphere use as permitted by 10 CFR 35.1000.

PURPOSE

The DEP is issuing this Information Notice (IN) based on recent Nuclear Regulatory Commission (NRC) Information Notice 2019-12. NRC wants to inform licensees of recent medical events that involved the administration of Y-90 microspheres. The hope is to raise awareness and help reduce the occurrence of similar medical events. This IN should be regarded as “lessons learned” to help outline reoccurring issues with these therapeutic medical procedures.

DISCUSSION

From 2016 through 2018, the NRC received reports of seventy-one (71) medical events involving Y-90 microspheres. Currently, 2019 data is not yet available, however these medical events continue and have been monitored during the year. All of these reported medical events resulted from a variety of causes, including errors with the written directive; clogging and kinking in the catheters causing the administration of a reduced amount of microspheres to the patient; and treatment to the wrong location, such as the wrong lobe of the liver.

This IN is intended to provide licensees with a heightened awareness of the numerous types of medical events involving incorrect administrations of Y-90 microspheres in the past several years. Licensees are encouraged to review manufactures recommendations, visually inspect tubing before procedures, and communicate with peers within the industry and Y-90 microspheres vendors to help identify best practices with respect to administration.

CONTACT

This Information Notice requires no specific action or response. If you have any questions about the information in this notice, please contact the Radiation Control Division at 717-787-3720.

Issued By:
David J. Allard, CHP, Director
Bureau of Radiation Protection

Attachment: NRC Information Notice 2019-12