September 1, 2020 – March 31, 2021 RAM NMED Events	
6 total events	
1 - Transportation Accident Damaging Licensed Material.	
1.	On December 23, 2020 the New Jersey Department of Environmental Protection reported to the Pennsylvania Department of Environmental Protection (DEP) that a licensee's courier had been involved in a fatal vehicle accident. The vehicle was carrying nine packages of Technetium-99m, one of which was ripped open releasing two syringe pigs into the interior of the vehicle. One of those two had been used by a customer and shattered during the accident. The other of those two remained intact and was labeled 27mCi of Tc99m which was calibrated on 12/21/2020 at 1130am. The remaining eight packages were intact and had background radiation readings. The vehicle was surveyed, and no contamination was found. The material was picked up by the licensee RSO and safely returned to its destination.
1 - Inability to Retract Radiography Source	
1.	A licensee reported that on February 12, 2021 while using a QSA Global Model 880, Serial # D15520, containing a 128 curies source of iridium-192, the source failed to fully retract and lock. The technicians secured the area by adjusting their 2 mR/hr boundaries to an unshielded source distance and immediately contacted their company designee. Once on scene, the designee surveyed the scene and device and found elevated readings. Working the crank handle back and forth several times he was able to return the source to the secured and locked position. The device was taken back to the licensee's storage vault in Williamsport, PA for inspection. The cause of the incident is believed to be cold temperature and freezing of the lock mechanism. The Radiation Safety Officer (RSO) subsequently investigated the incident and found that neither the radiographer nor the assistant radiographer had been performing proper radiation surveys during the workday which would have identified the lock failure sooner. As a result, the Radiographer received a dose of 876 mR. We are still awaiting a dose on the assistant radiographer. Corrective actions include retraining all radiography employees to follow proper procedure. Also, both the radiographer and assistant radiographer are no longer employed by the licensee.
3 – Lost /Abandoned / Stolen	
1.	On September 30, 2020 the licensee informed the DEP of an event that was discovered on September 10, 2020 and occurred on September 4, 2020. Two (2) I-125 seeds of 200 microcuries each had been placed within a patient for Radioactive Seed Localization (RSL). One seed in a breast lesion and one seed in a breast sentinel node. After excision of one seed, in the OR, staff labeled the specimen with a radioactive label and delivered it to Pathology with the Specimen and I-125 Seed Removal and Verification form. It was noted that the RSL data form above was edited by scratching out the 2 in the specimen image reviewed under the "# of seeds visualized" section and replacing it with a 1. Pathology staff went to the OR and retrieved the other sample from the OR specimen refrigerator. This specimen did not have a radioactive label. The seed was discarded in regular waste because it was thought to be a clip. The nurse who was in the OR with the patient confirmed that she altered the form, changing the number of seeds. This inappropriate practice was addressed separately with the nurse. The consulting physicist, along with nuclear medicine staff surveyed the biohazard trash and the trash compactor and could not detect any radioactive source. The source was never located. The corrective action is to modify procedures, in that, two lines were added to the form called Specimen and I-125 Seed(s) Removal and Image Verification. The first was to add additional information of where each seed was placed. The second line (added) is for the Nuclear Medicine Technologist to confirm that the number of seeds retrieved from Pathology equals the number of seeds implanted.

2.	On October 20, 2020 a licensee discovered a lost gadolinium-153 source. This source, Eckert and Ziegler Model NES8412, is an attenuation correction source in a SPECT camera. These sources are sold in pairs, and the serial numbers for the pair are R3-129 and R3-130. Only one is missing and it is unknown which it is currently. The licensee believes the sources were present in mid-June when the source holders were removed from the gamma camera in preparation for scrapping. The licensee is investigating to confirm that is true. The sources were nominally 250 mCi (+20%/-10%) each on March 1, 2019. The activity on June 15, 2020 was calculated to be 64 mCi, and on the date of discovery 44 mCi. The licensee has notified its facility and safety staff and is actively searching for the source.
3.	On December 10, 2020 a licensee discovered a lost Iodine-131 shipment. A shipper of the 475 mCi of Iodine-131 Liquid (Yellow II label) delivered the package to the wrong address, a neighboring business. The package was delivered to the licensee by the neighboring business before the package was known to be "lost". The surface reading of 12 mR/hr was obtained upon the licensee receiving the package. The package was estimated to be in the possession of the recipient for approximately 1 hour. The estimated dose was approximately 12 mrem if an individual had been in contact with the package for the entire time it was in the possession of the recipient. Since the material was delivered by the recipient within the time frame the shipper would normally deliver, and the facility had no reason to suspect the material was miss-delivered, the licensee will inform the shipper of the incident to handle training of their staff on proper delivery of radioactive packages.
1 **- Medical Events**	
1.	The Department received notification from a licensee on March 12, 2021 of a medical event involving Y-90 TheraSpheres. The licensee believes a patient received only 2mCi of the 63.7 mCi prescribed dose. The connection piece between the TheraSpheres apparatus and the patient catheter failed when the injection started. All contamination was contained with absorbent pads that were located below the connection. The room, staff and patient were extensively surveyed and not found to be contaminated. The patient and the prescribing physician have been informed. No adverse effects to the patient are anticipated.