

DEVELOPMENT OF OPERATIONAL POLICY IN NUCLEAR MEDICINE SERVICES FOR THE MINISTRY OF HEALTH MALAYSIA: SECURITY OF RADIOACTIVE MATERIAL

BACKGROUND

In Malaysia, the Ministry of Health played a very important role to ensure the safety and security of radioactive material used in medicine particularly in nuclear medicine. The mechanism of the controlled was set by the implementation of the regulatory requirements such as registration and registry requirements, monitoring, and enforcement as well as prosecution practice. These elements were according to the standard set by the Director General of Health through embarking the new policy document called the Operational Policy in Nuclear Medicine Services. The document which has been produced was the operational requirements according to the Atomic Energy Licensing (Basic Safety Radiation Protection) Regulations 2010 (the subsidiary regulations under the Atomic Energy Licensing Act 1984).

The security of radioactive materials was taken into consideration where the specific chapter of the document was meant for the security aspect. From the order, purchase, transportation, radioactive waste management as well as management of theft, loss or sabotage of radioactive source used also highlighted and covered in this document. The topics of the chapter are designed through the special Task Force formed under the Drafting Committee of the Nuclear Medicine Services, Malaysia Ministry of Health.

The paper aimed to describe the commitment of the government of Malaysia particularly the Ministry of Health (MOH) and its institution such as hospitals to initiate and designed the policy dedicated for the security of radioactive material used in nuclear medicine services.

METHODS

The Malaysian's MOH has developed the document based on the needs of the latest requirements under the Atomic Energy Licensing (Basic Safety Radiation Protection) Regulations 2010. This is the subsidiary regulations under the Act 304. The topics of the chapter are designed through the special Task Force formed under the Drafting Committee of the Nuclear Medicine Services, Malaysia Ministry of Health.

RESULTS

The medical institutions especially the facilities involved in radioactive used for medical purpose have applied good practice according to this document. The policy of the management of theft, loss or sabotage of radioactive source is very important and these guidelines are in-line with requirement stipulated under the Atomic Energy Licensing (Basic Safety Radiation Protection) Regulations 2010. The policy quoted 'upon discovering of any theft, loss or sabotage of any radiation source in his possession or under his control, the licensee has to notify the appropriate authorities (e.g. police, fire & rescue department, etc.) and in all cases, the licensee / Nuclear Medicine physician / RPO shall notify the MRSB / AELB of the accident within 24 hours; confirm in writing within 48 hours, investigated with necessary corrective measures taken and submit a complete report of the accident within 30 days after notifications to the appropriate authority'.

Radioactive source security should be of concern to the leadership (board members and executive management) of a healthcare facility because they are the ones who would bear the ultimate liability should one or more of the radioactive sources used in their facility be lost, stolen or sabotaged and result in harm to people and/or the environment. Even a minor security incident could generate widespread public panic, make the facility's radioactive sources temporarily unavailable, and seriously impact the patient population that the facility serves.

CONCLUSIONS

In the interest of public safety and national security, the potential hazards of using radioactive source on the patients and the associated radiation risks to staff, public and the environment should be kept in mind. All personnel shall comply with the laws, regulations, local rules and the radiation protection guidelines set by the department.

Based on this document, the Policy Makers encompasses of the Top Management and Regulators as well as the medical institution could consider enhancing the content of developing a common standard for incident reporting that requires reporting Category 1 and 2 losses; encourage wider reporting transparency, Improve

physical security measures; expand electronic tracking of dangerous radioactive sources, Improve security culture and Encourage material replacement efforts.

Gender

Male

State

Malaysia

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