



New Approach for Safety Management in Radiopharmaceutical Production Facilities

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SUMMARY. Radiopharmaceuticals are radiation-emitting substances used in medicine for radiotherapy and imaging diagnosis. Contemporary view on safety emphasizes that safety critical facilities should be able to proactively evaluate safety in their activities. This proactivity is related to organizational resilience and should be endorsed by the facility safety management system. Resilience is understood as the intrinsic ability of an organization to adjust its functioning prior to, during, or following changes or disturbances, so that it can sustain required operations under both expected and unexpected conditions. In this context, resilience engineering tools (RE) has fast become recognized as a valuable new complement to the existing approaches to safety management. In this direction, the study describes a leading indicators framework based on RE principles for safety management in a radiopharmaceuticals production facility located in Rio de Janeiro, Brazil. The organizations that use leading indicators will be able to proactively evaluate and manage safety, enhancing the overall system resilience.

KEY WORDS: Nuclear medicine, Radiopharmaceuticals, Radiopharmacy, Resilience engineering, Safety.

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