

# **How to Combine Security and Safety of Radioactive Sources and Good Patient Service in Public of Large Hospitals**

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## **Abstract**

A variety of radioactive sources in a wide range of activity is used in medical care. The spectrum runs from weak sources used as markers or in quality control of equipment to sources of high activity in radiotherapy or blood irradiators. It covers sealed sources as well as open sources that are mainly used in nuclear medicine.

Finding an appropriate balance between the security of the sources, the radiation safety of personnel, patient and public and the requirements of patient care is a challenge for the radiation protection officers, the stakeholder and the licensing authorities.

To highlight the problems the situation will be analyzed for diagnostic and therapy in Nuclear Medicine and for Radiotherapy devices with emphasis on Brachytherapy.

Possible improvements by combining tools used in radiation safety with security purposes will be worked out as well as existing limitations coming from the background of patient comfort, economic squeeze and existing technical conditions. This should possibly initiate a deeper discussion in one of the scheduled working groups.