

## THE SENTINEL PROJECT

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Health Care expenditure on radiological equipment in Europe is a growing fraction of the Gross Domestic Product (GDP) for all member states. This increase in expenditure has been driven by technical developments in equipment design, matched by the introduction of novel clinical practices, examinations and procedures. The radiation protection implications of these developments have to be assessed. The SENTINEL co-ordination action covers radiation protection, safety and related issues which arise from these technical and clinical developments. SENTINEL covers 90% of patient examinations in European Radiology, 60% of the collective dose from medical sources and approximately 50% of the collective dose to European citizens from man-made sources. The SENTINEL co-ordination actions 'main' objective is to address the safety and efficacy issues which are common to all digital diagnostic imaging systems, including nuclear medicine. High dose procedures and sensitive groups (such as children) are covered by the project. Specifically, the co-ordination action will: 1) establish both physical and clinical image quality criteria and link the two 2) undertake a series of dosimetry studies to establish reference levels for new procedures and 3) develop good practice guidelines for radiation protection in digital imaging and produce training material.

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