The SAFety in RADiological procedures (SAFRAD) project for fluoroscopically-guided interventional procedures is the creation of an international collection centre for the reporting of clinical cases that have the potential to result in radiation injuries (deterministic effects) to the patient. Based on voluntary reporting, this educational system will assist the medical community in assessing the risk for radiation injury from these complex procedures.

Thanks to the detailed information provided in the reports, a better knowledge of factors leading to high exposure of patients will also be obtained as well as a refined protocol for the follow up of patients.

The SAFRAD project reflects the concerns of IAEA to raise awareness of radiation protection concerns amongst the radiation users and to help define evidence-based alert levels for deterministic effects of radiation.

The recording of exposures exceeding one or more SAFRAD trigger levels will help establish a statistical population that can permit the estimation of the frequency of such incidents. Such a database can assist the regulatory, medical physics, and clinical practice communities in their efforts to minimize the risks associated with these complex invasive fluoroscopic procedures.

The treating physician or dermatologist may be the first person to see the patient when a radiation effect occurs. Radiation injuries are extremely rare in diagnostic or interventional radiology or cardiology, which can make their diagnostic difficult. In order to assist treating physicians and dermatologists in detecting these injuries, the IAEA has made available a number of publications readily available through the links below:

- Guidelines for recognizing radiation injuries
- How to recognize and initially respond to an accidental radiation injury?
- Description of a radiation injury
- Description of the different phases of an erythema