Preface

This Report was developed under the auspices of Program Area Committee 2 of the National Council on Radiation Protection and Measurements, the committee that provides oversight for operational radiation safety.

Fluoroscopically-guided interventional medical procedures (e.g., diagnostic angiography, angioplasty, stent placement) are now commonly performed in the United States, are often less invasive and less costly, and result in shorter hospital stays than surgical procedures. They are performed by radiologists and other medical specialists (e.g., cardiologists, orthopedic surgeons) with the assistance of medical support staff.

This Report will be of benefit to these physicians and the medical support staff, particularly those who currently participate in fluoroscopically-guided interventional procedures but do not have sufficient training in the practical radiation protection aspects of the use of the equipment for the procedures (e.g., knowledge of equipment operation, optimal imaging techniques, radiation dose management for patients and medical staff, benefit-risk tradeoffs, and the potential for early or late detrimental radiation effects). An extensive bibliography is provided to facilitate access to the primary literature.

This Report is also intended for policymakers who can place radiation-dose management requirements on those who conduct fluoroscopically-guided interventional procedures with regard to:

- optimizing imaging protocols;
- managing procedure time;
- utilizing available radiation protective equipment and dose-management features;
- tracking and trending radiation doses to patients and medical staff; and
- credentialing and privileging physicians to use the fluoroscopic equipment for these specialized procedures.

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