

General principles for good radiographic practice

Equipment

Appropriate equipment, well maintained, is the basis for all good radiographic practice.

The present manual is primarily meant for the WHIS-RAD system (the World Health Imaging System for Radiology), but with appropriate modifications the instructions may be used with any type of adequate radiographic machines.

For a detailed description of the WHIS-RAD system, see page 113.

Maintenance and management

It is mandatory for good radiographic practice that the examination room with its X-ray equipment and accessories, as well as the dark room and the facilities to evaluate radiographs are in good condition. For a thorough description of management and maintenance, see the WHO Manual "Quality Assurance Work Book", Geneva 2001. (WHO/DIL/01.3)

Patient care

A radiographic examination is an integrated part of clinical management and care of a patient, and the same rules for good patient care apply for the radiographic personnel as for the rest of the clinical team.

Always give each patients a friendly greeting, treat them with care and respect their individuality.

Observe the medical/clinical instructions (concerning the patient's mobility, possible medication, etc.), given by the referring doctor.

Always make sure that the films are marked with correct name of the patient, date and name of the hospital.

And always remember: a professional, well-performed examination is good patient care.

Radiation protection

X-rays are potentially harmful, and should be used with care.

Care for the personnel and persons accompanying the patient:

- stand behind the control panel when the X-ray exposure is made.
- make sure that lead aprons are worn if the patient needs to be held.
- if possible, do not allow anyone else in the X-ray room. If other persons must be present, keep them behind the control panel when the exposure is made.
- when supplied, always wear your film badge. Have it checked regularly.

Care for the patient:

The radiation risk for the patients being x-rayed is very low because they are exposed to x-rays infrequently, and because only a small part of the body is exposed for each patient. Therefore, whenever there is a clinical reason for X-ray examination such an examination is justified and should be performed. However, always try to get all the details right the first time, so that there is no need for a second exposure.

The guiding rule for radiographic examinations must be the ALARA principle:

Radiation doses to everybody in or in the vicinity of an active X-ray room shall be As Low As Reasonably Achievable (ALARA) taking into account economic and social factors.

That rule will be kept if you follow what is said above in the general principles, and if you follow the instructions for examinations given in this manual.

And always remember:

X-RAYS MAY CAUSE HARM EVEN IF YOU DO NOT SEE OR FEEL THEM!