



Rancho Los Amigos National Rehabilitation Center

DEPARTMENT OF NURSING

OPERATING ROOM

POLICY AND PROCEDURE

SUBJECT: RADIOLOGICAL SAFETY IN THE OPERATING ROOM

Policy No.: OR71
Supersedes: ALL
Reviewed Date: 02/2016
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Purpose of Procedure: To provide a safe environment for patients and O.R. personnel exposed to radiation.

Performed By: All members of surgical team

Procedural Steps:

1. The patient will be protected from unnecessary exposure to x-rays.
KEY POINT: X-rays to abdomen and pelvis of pregnant women must be avoided especially in the first trimester.
 - a. Lead shields will be used to protect patient's gonads, when possible, during x-ray studies of hips and upper legs.
 - b. Lead shields will be used, when possible, to protect thyroid during x-ray studies of upper extremities, trunk and head.
2. All personnel will be protected from unnecessary exposure to x-ray in the practice setting.
KEY POINT: Non-scrubbed personnel who can safely leave the operating room during single x-ray film exposure will do so.
 - a. During single x-ray film exposure, lead shields will be provided for scrubbed personnel and others who cannot leave the room. Lead aprons may also be worn.
 - b. Personnel, even when protected by aprons or lead shield, should position themselves behind or to the side of the x-ray beam whenever possible.
 - c. Personnel wearing aprons should always face the x-ray unit unless the apron wraps around the body.
 - d. Slings, traction devices, sandbags, cassette holder should be used to maintain patient and film position, when possible.
 - e. During fluoroscopy, personnel must wear lead aprons.
 - f. For optimum protection during fluoroscopy, personnel within two meters of the unit will wear a thyroid shield.
 - g. During lateral/oblique x-ray, including fluoroscopy, all members of surgical team must wear lead aprons and thyroid shields.
3. Radiation monitoring devices must be worn by all personnel.

KEY POINT: All OR personnel assigned to patient care will be assigned film badges to be worn at the neckline.

X-ray film badges will be exchanged on a monthly basis by the Radiation Physicist. Staff members are responsible for obtaining current badges and returning past month's badge to the designated area.

4. Leaded protective devices must be handled carefully and examined periodically to prevent damage that could diminish their effectiveness.

KEY POINT: Aprons should be laid flat or hung by the shoulders when not in use. Physical integrity of the apron should be evaluated prior to use. The Medical Imaging Department will test leaded protective devices for effectiveness at regular intervals.

Reviewed By:

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References:

Guidelines for Perioperative Practice 2015 Edition
RLANRC Radiation Safety Manual

05/06 – Reviewed

09/09 – Reviewed

09/11 - Reviewed

02/16 – Reviewed