



# **REGULATORY GUIDE 6.0**

## **GUIDE FOR THE PREPARATION OF WRITTEN SAFETY PROCEDURES TO BE PROVIDED TO OPERATORS OF X-RAY EQUIPMENT IN THE HEALING ARTS**

### **INTRODUCTION**

The purpose of this guide is to provide an outline of the subjects to be addressed in the written safety procedures required by Title 180, "Control of Radiation," 6-003.01, item 1.d.

### **RESTRICTIONS OF THE OPERATING TECHNIQUE REQUIRED FOR SAFE OPERATION**

The procedures should contain:

- An anode cooling chart or recommended time interval between exposures.
- Technique factor settings which would cause tube overload.
- Instructions for the proper setup and electrical connection of portable and mobile x-ray equipment.
- Location of the technique chart to be used for each particular x-ray system.

### **PROTECTION OF THE PATIENT FROM EXPOSURE TO RADIATION**

The procedures should contain:

- Any instructions on the use of patient shielding not included on the technique chart as required by 180 NAC 6-003.01, item 1.c.(4).
- Instructions for the termination of x-ray production in an emergency (e.g. exposure continues after preset time interval).
- Precautionary measures to be adhered to during the use of image intensified fluoroscopes with a source-to-skin distance less than 30 centimeters.
- Instructions to ask each female patient of child-bearing age if she may be pregnant and to notify the Doctor if she indicates yes.
- Instructions to set variable filtration for the highest available amount.
- Instructions to ensure that the proper fixed-aperture, beam-limiting device/image receptor combination is in use.

#### **NEBRASKA DEPARTMENT OF HEALTH & HUMAN SERVICES (DHHS), REGULATORY GUIDES**

Regulatory Guides are issued to describe and make available to the public acceptable methods of implementing specific parts of Title 180 NAC Nebraska regulations, "Control of Radiation," to delineate techniques used by the staff in evaluating specific problems or postulated accidents, or to provide guidance to applicants, licensees, or registrants. Regulatory Guides are not substitutes for regulations, and compliance with them is not required. Methods and solutions different from those set out in the guides will be acceptable if they provide a basis for the DHHS, Division of Public Health, Office of Radiological Health, to make necessary determination to issue or continue a license or certificate of registration.

Comments and suggestions for improvements in these Regulatory Guides are encouraged at all times and they will be revised, as appropriate, to accommodate comments and to reflect new information or experience. Comments should be sent to the DHHS, Division of Public Health, Office of Radiological Health, 301 Centennial Mall South, P.O. Box 95026, Lincoln, NE 68509-5026. OR radiation.programs@dhhs.ne.gov

Requests for single copies of issued guides (which may be reproduced) should be made in writing to the address above.

(Rev. 4 )7-2009

**PROTECTION OF THE STAFF AND ANCILLARY PERSONNEL  
FROM EXPOSURE TO RADIATION**

The procedures should contain:

- Instructions on the use of mechanical holding devices. Projections where mechanical holding devices cannot be utilized. The requirements for selecting a human holder and the procedure the holder shall follow.
- The location of the protected area provided for each particular x-ray system.
- Instructions to remain in the protected area during the entire exposure.
- Instructions on the proper wearing of personnel monitoring devices.
- Instructions on the amount and use of shielding required by 180 NAC 6-003.01, item 1.e.
- Instructions to close all doors posted "Close door during x-ray procedures".

**GENERAL SAFETY**

The procedures should contain:

- Measures to be taken in case of fire.
- Location of nearest fire extinguisher.
- Cautions on the movement and positioning of x-ray equipment.