

VOLUME 4: MEDICAL SERVICES	Effective Date: 6/1/12
CHAPTER 30: MEDICAL IMAGING	Revision Date(s):
4.30.2 MEDICAL IMAGING SERVICES DEPARTMENTAL SAFETY GUIDELINES	Attachments: Yes 🗌 No 🖂

#### I. PROCEDURE OVERVIEW

The California Correctional Health Care Services (CCHCS) Medical Imaging Services (MIS) staff shall take the necessary precautions to ensure all potential safety risks are minimized during the administration of medical imaging services to patient-inmates.

MIS staff shall be knowledgeable of all risks inherent in the use of contrast media and radiation safety procedures shall be strictly enforced for all examinations per CCHCS policies.

#### II. PURPOSE

To maintain a safe environment for patient-inmates, and CCHCS and California Department of Corrections and Rehabilitation (CDCR) staff while under the oversight of MIS.

#### III.RESPONSIBILITIES

The Chief Executive Officer of healthcare is responsible for the implementation of this policy at the local level.

#### IV.PROCEDURE

### A. Administration of Diagnostic Agents

- 1. CCHCS currently utilizes a non-ionic, iodine-based, water soluble, radiopaque contrast medium. The most serious possible side effect of such contrast media is a histaminic imbalance and/or possible anaphylactic shock, a generalized systemic and frequently fatal reaction occurring within minutes after administration of foreign serum or drugs. For purpose of this policy MIS staff may reference licensed Radiological staff working under a contractual agreement with CCHCS for the administration of diagnostic agents.
- 2. The Statewide Radiology Supervisor and Operator shall take the following steps to ensure the safety of the patient-inmate:
  - a. All MIS staff are to be knowledgeable of the warning signs of histaminic imbalance and anaphylactic shock, and document such briefings.
  - b. All MIS staff are to be knowledgeable regarding their responsibilities in reference to severe reaction and the use of the emergency kit and ambu bag.
  - c. All MIS staff shall ensure that CDCR/CCHCS staff is within eye contact of the patient-inmate at all times.
  - d. MIS staff shall take the following preventive measures prior to examination:
    - 1) Question the patient-inmate about any previous contrast reaction, allergies to medications, foods, or pollens.
    - 2) Verify that Creatinine clearance values (BUN-to-creatinine ratio) are within recommended range. Laboratory tests performed within 30 days must indicate

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- that Creatinine is below 1.5 for diabetic patient-inmates, and 2.0 for patient-inmates who are not diabetic, as set by the interpreting radiology group.
- 3) Ensure consent form is signed by patient-inmate prior to administration of contrast agents.
- 4) Maintain Intravenous access (IV site) for a 5 to 10 minute monitoring period.
- 5) Disconnect the IV and monitor the patient-inmate for the remainder of the procedures for any delayed contrast reactions.
- 6) Ensure availability of crash cart/drug box prior to injection of contrast media.
- 3. Licensed IV certified Radiologic Technologists can inject contrast under the supervision of the facility physician.
- 4. Refer to the Inmate Medical Services Policies and Procedures (IMSP&P), Volume 4, Chapter 30, Policy 3, Contrast Media.

## **B.** Care and Handling of Patient-Inmates

- 1. Radiation Shielding Devices:
  - a. For all examinations, protective devices such as lead gloves, lead shields or aprons shall be utilized as appropriate. Escorting custody staff and other employees who remain in the examination room during an exposure shall stand behind a lead protective barrier or wear adequate radiation protective apparel if assisting or staying within the X-ray room.

#### 2. Patient-Inmate Comfort:

- a. A pillow shall be given to the patient-inmate for his/her comfort when appropriate. The pillowcase shall be exchanged after every examination. If there is a technical reason why the patient-inmate cannot be provided with a pillow, the Radiologic Technologist shall explain the reason to the patient-inmate.
- b. Foam table pads shall be used whenever possible when dealing with paraplegics, acutely injured patient-inmates, and those suffering from severe trauma.
- 3. At no time shall any MIS employee leave an aged, debilitated, or psychotic patient-inmate unattended for any length of time while in the MIS department.
- 4. Refer to the IMSP&P, Volume 4, Chapter 30, Policy 6, Radiological Examination & Radiation Safety.

### C. Electrical Safety Precautions

- 1. No MIS employee shall plug in or turn on any electrical circuitry while standing in water that is on the floor.
- 2. All electrical repairs shall be completed by qualified repair personnel.
- 3. All frayed or loose wiring shall be reported to the supervisor.
- 4. Any hint or smell of an electrical fire shall be immediately reported to the supervisor.
- 5. All technologists shall be aware of the location and purpose of the emergency shutdown switches in the MIS department and on the X-ray unit.

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#### **D.** Mechanical Safety Precautions

- 1. Caution shall be taken when entering and exiting the X-ray room. The X-ray tube shall be returned to a designated position at the conclusion of each examination to ensure awareness of the X-ray tube's location and prevent potential head or bodily injuries.
- 2. Caution shall be taken when handling the examination room doors to the X-ray rooms. These doors are lead lined therefore caution shall be taken to prevent possible crush injuries to fingers and hands.

### E. Radiation Safety Survey

Guidelines for radiation safety survey are provided in the IMSP&P, Volume 4, Chapter 30. Policy 6, Radiological Examination and Radiation Safety.

## F. Practice X-ray Exposures

No practice X-ray exposures shall be taken on any patient-inmate, employee, person, or visitor. (Refer to California Code of Regulations, Title 17, Section 30305 (b)(4))

## **G.** Equipment and Supplies

Radiation shielding devices (lead aprons, etc.), pillows, sheets, foam table pads, emergency kit, and appropriate drugs.

#### V. REFERENCE

- California Code of Regulations, Title 17, §§ 30100, 30305
- California Code of Regulations, Title 22, §§ 79711, 79713, 79715, 79717, and 79719
- Inmate Medical Services Policies and Procedures, Volume 4, Chapter 30. Policy 3, Contrast Media
- Inmate Medical Services Policies and Procedures, Volume 4. Chapter 30. Policy 6, Radiological Examination and Radiation Safety