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# RADIOGRAPHY DIDACTIC AND CLINICAL COMPETENCY REQUIREMENTS



*Eligibility Requirements Effective January 2005\**

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Candidates for certification are required to meet the Professional Requirements specified in Section 2.02 of the *ARRT Rules and Regulations*. This document identifies the minimum didactic and clinical competency requirements for certification referenced in the *Rules and Regulations*. Candidates who complete a formal educational program accredited by a mechanism acceptable to the ARRT will have obtained education and experience beyond the requirements specified here.

## **Didactic Requirements**

Candidates must successfully complete coursework addressing the topics listed in the *ARRT Content Specifications for the Examination in Radiography*. These topics are presented in a format suitable for instructional planning in the *ASRT Radiography Curriculum* (2002).

## **Clinical Requirements**

As part of their educational program, candidates must demonstrate competence in the clinical activities identified in this document. Demonstration of clinical competence means that the program director or designee has observed the candidate performing the procedure, and that the candidate performed the procedure independently, consistently, and effectively. Candidates must demonstrate competence in the areas listed below.

- Six mandatory general patient care activities.
- Thirty-six mandatory radiologic procedures.
- Fifteen elective radiologic procedures to be selected from a list of 30 procedures.

## **Documentation**

The following pages identify specific clinical competency requirements. Candidates may wish to use these pages, or their equivalent, to record completion of the requirements. The pages do NOT need to be sent to the ARRT.

To document that the didactic and clinical requirements have been satisfied, candidates must have the program director (and authorized faculty member if required) sign the ENDORSEMENT SECTION of the **Application for Certification** included in the *Certification Handbook*.

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\* *Note: Candidates who complete their educational program during 2005 or 2006 may use either the previous requirements (effective 2001) or the current requirements (effective 2005). Candidates who graduate after December 2006 may no longer use the previous competency requirements.*

# Radiography Clinical Competency Requirements

The clinical competency requirements include the six general patient care activities listed below and a subset of the 66 radiologic procedures identified on subsequent pages. Demonstration of competence should include variations in patient characteristics (e.g., age, gender, medical condition).

## 1. General Patient Care

**Requirement:** Candidates must demonstrate competence in all six patient care activities listed below. The activities should be performed on patients; however, simulation is acceptable (see endnote) if state or institutional regulations prohibit candidates from performing the procedures on patients.

General Patient Care	Date Completed	Competence Verified By
CPR		
Vital signs (blood pressure, pulse, respiration, temperature)		
Sterile and aseptic technique		
Venipuncture		
Transfer of patient		
Care of patient medical equipment (e.g., oxygen tank, IV tubing)		

## Radiography Clinical Competency Requirements (cont.)

### 2. Radiologic Procedures

**Requirement:** Candidates must demonstrate competence in all 36 procedures identified as mandatory (M). Procedures should be performed on patients; however, up to eight mandatory procedures may be simulated (see endnote) if demonstration on patients is not feasible.

Candidates must demonstrate competence in 15 of the 30 elective (E) procedures. Elective procedures should be performed on patients; however, electives may be simulated (see endnote) if demonstration on patients is not feasible.

Institutional protocol will determine the positions or projections used for each procedure.

Demonstration of competence includes requisition evaluation, patient assessment, room preparation, patient management, equipment operation, technique selection, positioning skills, radiation safety, image processing, and image evaluation.

Radiologic Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
<b>Chest and Thorax</b>				
Chest Routine	M			
Chest AP (Wheelchair or Stretcher)	M			
Ribs	M			
Chest Lateral Decubitus	E			
Sternum	E			
Upper Airway (Soft-Tissue Neck)	E			
<b>Upper Extremity</b>				
Thumb or Finger	M			
Hand	M			
Wrist	M			
Forearm	M			
Elbow	M			
Humerus	M			
Shoulder	M			
Trauma: Shoulder (Scapular Y, Transthoracic or Axillary)*	M			
Clavicle	E			
Scapula	E			
AC Joints	E			
Trauma: Upper Extremity (Nonshoulder)*	M			

## Radiography Clinical Competency Requirements (cont.)

Radiologic Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
<b>Lower Extremity</b>				
Foot	M			
Ankle	M			
Knee	M			
Tibia-Fibula	M			
Femur	M			
Trauma: Lower Extremity *	M			
Patella	E			
Calcaneus (Os Calcis)	E			
Toe	E			
<b>Cranium</b>				
Skull	M			
Paranasal Sinuses	M			
Facial Bones	E			
Orbits	E			
Zygomatic Arches	E			
Nasal Bones	E			
Mandible (Panorex acceptable)	E			
<b>Spine and Pelvis</b>				
Cervical Spine	M			
Trauma: Cervical Spine (Cross Table Lateral)*	M			
Thoracic Spine	M			
Lumbosacral Spine	M			
Pelvis	M			
Hip	M			
Cross Table Lateral Hip	M			
Sacrum and/or Coccyx	E			
Scoliosis Series	E			
Sacroiliac Joints	E			
<b>Abdomen</b>				
Abdomen Supine (KUB)	M			
Abdomen Decubitus or Upright	M			
Intravenous Urography	E			

## Radiography Clinical Competency Requirements (cont.)

Radiologic Procedure	Mandatory or Elective	Date Completed	Patient or Simulated	Competence Verified By
<b>Fluoroscopy Studies</b>				
Upper GI Series (Single or Double Contrast)	M			
Barium Enema (Single or Double Contrast)	M			
Small Bowel Series	E			
Esophagus	E			
Cystography/Cystourethrography	E			
ERCP	E			
Myelography	E			
Arthrography	E			
<b>Surgical Studies</b>				
C-Arm Procedure	M			
Surgical Cholangiography	E			
Retrograde Pyelography	E			
<b>Mobile Studies</b>				
Chest	M			
Abdomen	M			
Orthopedic	M			
<b>Pediatrics (age 6 or younger)</b>				
Chest Routine	M			
Upper Extremity	E			
Lower Extremity	E			
Abdomen	E			
Mobile Study	E			

\* Trauma is considered a serious injury or shock to the body. Modifications may include variations in positioning, minimal movement of the body part, etc.

Note: The ARRT requirements specify that certain clinical procedures may be simulated. Simulations must meet the following criteria: (a) the student is required to competently demonstrate skills as similar as circumstances permit to the cognitive, psychomotor, and affective skills required in the clinical setting; (b) the program director is confident that the skills required to competently perform the simulated task will generalize or transfer to the clinical setting. Examples of acceptable simulation include: demonstrating CPR on a mannequin; positioning a fellow student for a projection without actually activating the x-ray beam, and evaluating an image from a teaching file; performing venipuncture by demonstrating aseptic technique on another person, but then inserting the needle into an artificial forearm or grapefruit.