ROYAL COLLEGE
OF PHYSICIANS AND SURGEONS OF CANADA

# Specialty Training Requirements in Diagnostic Radiology

**2017**
**EDITORIAL REVISION 2019**
**VERSION 2.1**

*These training requirements apply to those who begin training on or after July 1, 2017.*

## MINIMUM TRAINING REQUIREMENTS

Five (5) years of approved residency in Diagnostic Radiology. This period must include:

1. One (1) year of basic clinical training taken as a junior resident, which must include:
    1.1. A minimum of eleven (11) blocks of broad-based medical experience relevant to Diagnostic Radiology, selected from the following or any combination of these, and not to exceed more than six (6) blocks in any one element:
        1.1.1. Internal Medicine and relevant subspecialties
        1.1.2. Any surgical specialty
        1.1.3. Pediatrics
        1.1.4. Obstetrics and Gynecology
        1.1.5. Emergency Medicine
        1.1.6. Neurology
        1.1.7. Family Medicine
        1.1.8. Radiation Oncology

    1.2. A maximum of two (2) blocks selected from the following:
        1.2.1. Diagnostic Radiology
        1.2.2. Nuclear Medicine
        1.2.3. Basic sciences related to Diagnostic Radiology
        1.2.4. Research related to Diagnostic Radiology

2. Four (4) years of approved residency training, which must include:
    2.1. Six (6) blocks of thoracic (respiratory and cardiac) imaging, which must include general radiography, fluoroscopy, interventional procedures, computed tomography (CT), magnetic resonance imaging (MRI), and nuclear imaging
        2.1.1. This must include a minimum of one (1) block of training, or longitudinal equivalent, in cardiac imaging using CT and MRI

2.2. Thirteen (13) blocks of imaging of the abdomen and pelvis, which must include experience in general radiography, fluoroscopy, interventional procedures, ultrasound, CT, MRI, and nuclear imaging

2.2.1. This must include a minimum of two (2) blocks of training, or longitudinal equivalent, in obstetric ultrasound and fetal imaging

2.3. Three (3) blocks of vascular and interventional imaging, which must include vascular and non-vascular procedures, ultrasound, CT, and MRI

2.4. Six (6) blocks of musculoskeletal imaging, which must include general radiography, diagnostic and interventional procedures, ultrasound, CT, MRI, and nuclear imaging

2.4.1. This must include a minimum of one (1) block of training, or longitudinal equivalent, in ultrasound of the musculoskeletal system

2.5. Six (6) blocks of neurological imaging, including head, face, neck, and spine, which must include general radiography, interventional procedures, CT, MRI, ultrasound, and nuclear imaging

2.6. Four (4) blocks of breast imaging, which must include mammography, ultrasound, MRI, nuclear imaging, and interventional procedures under ultrasound and MRI guidance

2.7. Four (4) blocks, or longitudinal equivalent, of pediatric imaging, which must include general radiography, fluoroscopy, interventional procedures, ultrasound, CT, MRI, and nuclear imaging

2.8. Ten (10) blocks of approved residency selected from any combination of the following, as long as these are appropriately integrated and approved by the residency training committee. The maximum time spent in any one of these areas is not to exceed three (3) blocks.

2.8.1. Thoracic imaging

2.8.2. Body imaging, which may include abdominal, pelvic, obstetric, or fetal imaging

2.8.3. Vascular imaging, which may include imaging for interventional procedures

2.8.4. Musculoskeletal imaging

2.8.5. Neurological imaging

2.8.6. Breast imaging

2.8.7. Pediatric imaging

2.8.8. Nuclear medicine

2.8.9. Quality improvement or research relevant to Diagnostic Radiology

2.8.10. Pathology, including training at the American Institute for Radiologic Pathology (AIRP)

2.8.11. Training in another clinical specialty relevant to the practice of diagnostic radiology

## *NOTES:*

For the purpose of this document, a block of training is equivalent to four (4) weeks of training.

Junior residency is defined as a period during which the resident provides patient care, under supervision, as a member of the health care team. The year of basic clinical training will generally occur in the first of the five years of Diagnostic Radiology training.

The five years of approved training require closely supervised practice, with the opportunity for increasing responsibility in the final years, so that the resident near the end of training can function as a general radiology consultant. The residency may be followed by one or more years of training in a subspecialty discipline, as the residency training is not intended to provide a subspecialty level of expertise.

The purpose of the year outlined in section 1 is to give the resident a degree of independent responsibility for clinical decisions; an opportunity for further development of the skills required in making effective relationships with patients; the consolidation of competence in primary clinical and technical skills across a broad range of medical practice; and an understanding of the nature of the relationship between a referring physician and a clinical radiological consultant.

Training in Diagnostic Radiology integrates training in the imaging modalities and in the imaging of organ systems. This training must include adequate experience in imaging of adult and pediatric patients in inpatient, emergency, and ambulatory settings. Resident training must include minimum training time, as specified in section 2, in each of the described organ systems, and must include experience in general radiography, fluoroscopy, interventional procedures, ultrasound, CT, MRI, and nuclear medicine, as relevant to the anatomical site.

## REQUIREMENTS FOR CERTIFICATION

Royal College certification in Diagnostic Radiology requires all of the following:

1. Successful completion of a 5-year Royal College-accredited program in Diagnostic Radiology;

2. Completion of a quality improvement or hypothesis-based research project relevant to Diagnostic Radiology; and

3. Successful completion of the certification examination in Diagnostic Radiology.

The 5-year program outlined above is to be regarded as the minimum training requirement. Additional training may be required by the program director to ensure that clinical competence has been achieved.

*Revised – 2009*
*Reviewed and approved – Specialty Committee – January 2013*
*Revised – Specialty Committee – February 2014*
*Approved – Specialty Standards Review Committee – March 2014*
*Revised – Specialty Committee – January 2017*
*Approved – Specialty Standards Review Committee – May 2017*
*Revised – Specialty Committee – December 2017*
*Approved (editorial revisions) – Specialty Committee and Office of Specialty Education – November 2018*