

Thoracic Surgery Training Experiences

2025 VERSION 1.0

These training requirements apply to those who begin training on or after July 1, 2025.

ELIGIBILITY REQUIREMENTS TO BEGIN TRAINING

Royal College certification in General Surgery

OR

Royal College certification in Cardiac Surgery and demonstrated achievement of the competencies required to perform the following General Surgery Entrustable Professional Activities (EPAs):

- Recognizing and initiating management for patients with a surgical abdomen or acute abdomen
- Providing initial assessment and management of patients with multiple traumatic injuries, and performing procedures for patients with traumatic injuries
- Performing the pre-procedural assessment and risk optimization for patients undergoing endoscopy and performing esophagogastroduodenoscopy
- Performing the skills of minimally invasive surgery (MIS)
- · Performing procedures on
 - o stomach and duodenum
 - small bowel
 - appendix and colon
 - spleen
 - lymph nodes
 - breast
 - abdominal wall and hernia
 - skin and soft tissue
 - head and neck

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OR

Completion of training and eligibility for the Royal College examination in General Surgery

OR

Completion of training and eligibility for the Royal College examination in Cardiac Surgery and demonstrated achievement of the competencies required to achieve the above-named General Surgery EPAs

ELIGIBILITY REQUIREMENTS FOR EXAMINATION¹

All candidates must be Royal College certified in their primary specialty in order to be eligible for the Royal College examination in Thoracic Surgery.

The following training experiences are required, recommended, or optional, as indicated:

TRANSITION TO DISCIPLINE (TTD)

The purpose of this stage is to verify achievement of the competencies of the entry discipline, particularly pertaining to clinical assessment, chest tube insertion, and diagnostic esophagogastroduodenoscopy (EGD). This stage also provides residents with an orientation to the institution, the thoracic surgery program, and the settings in which they will train and work.

Required training experiences (TTD stage)

- 1. Clinical training experiences:
 - 1.1. Thoracic Surgery
 - 1.1.1. Inpatient ward
 - 1.1.2. Service providing consultation to intensive care unit(s), emergency department(s), and other inpatient areas
 - 1.1.3. Clinic
 - 1.1.4. Operative experience
 - 1.1.5. Endoscopy suite
 - 1.1.6. After-hours coverage
 - 1.1.7. Collaboration with multidisciplinary health care team
- 2. Other training experiences:
 - 2.1. Orientation to the hospital(s), including policies and procedures, information systems, electronic medical records, and the physical facilities available for the resident

¹ These eligibility requirements do not apply to Subspecialty Examination Affiliate Program (SEAP) candidates. Please contact the Royal College for information about SEAP.

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- 2.2. Orientation to the institution and program, including structure, policies and procedures, resources, and expectations
- 2.3. Meeting with the Program Director to discuss
 - 2.3.1. Academic and professional expectations and documentation of such
 - 2.3.2. Wellness and fatigue risk management
 - 2.3.3. Knowing whom to contact if needed
 - 2.3.4. Introduction to career planning, which may include discussions of advanced degrees and clinical fellowships
- 2.4. Completion of local and national ethics privacy courses required to initiate a scholarly project, such as the Tri-Council Policy Statement 2: Course on Research Ethics 2022 (TCPS2: CORE 2022), if not already completed

Recommended training experiences (TTD stage)

- 3. Other training experiences:
 - 3.1. Orientation to collecting data and participating in Morbidity and Mortality (M&M) rounds
 - 3.2. Attendance at the Canadian National Thoracic Surgery Bootcamp

Optional training experiences (TTD stage)

- 4. Other training experiences:
 - 4.1. Completion of a robotic surgery course or module

FOUNDATIONS OF DISCIPLINE (F)

The focus of this stage is the development of the fundamental interventional skills of thoracic surgery using open and minimally invasive techniques. Trainees will gain proficiency in performing and providing interventional management for patients with simple pleural disease, using a variety of techniques and incision sites to obtain surgical access and exposure, and performing non-anatomic lung resections. Trainees will lead the delivery of care on the thoracic surgery inpatient service, including medical and pre-operative and post-operative management.

Required training experiences (Foundations stage)

- 1. Clinical training experiences:
 - 1.1. Thoracic Surgery
 - 1.1.1. Inpatient ward and step-down unit
 - 1.1.2. Service providing consultation to intensive care unit(s), emergency department(s), and other inpatient services

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- 1.1.3. Clinic
- 1.1.4. Operative experience
- 1.1.5. Endoscopy suite
- 1.1.6. After-hours coverage
- 1.1.7. Participation in multidisciplinary rounds
- 2. Other training experiences:
 - 2.1. Formal instruction in thoracic anatomy and physiology
 - 2.2. Review of procedural log with supervisor
 - 2.3. Participation in M&M rounds
 - 2.4. Introduction to the active research projects in the thoracic department
 - 2.5. Initiation of a scholarly research, quality improvement, or educational project
 - 2.6. Critical appraisal activities, such as journal club

Recommended training experiences (Foundations stage)

- 3. Clinical training experiences:
 - 3.1. Cardiac surgery or lung transplantation surgical service for operating room and perioperative inpatient management
- 4. Other training experiences:
 - 4.1. Participation in in quality assurance and quality improvement activities

Optional training experiences (Foundations stage)

- 5. Other training experiences:
 - 5.1. Attendance at local, regional, national, or international scientific meeting(s) relevant to Thoracic Surgery
 - 5.2. Simulation-based education in
 - 5.2.1. Rigid bronchoscopy and airway management
 - 5.2.2. Intraoperative complications

CORE OF DISCIPLINE (C)

The purpose of this stage is to advance the trainees' knowledge and skills to enable them to provide clinical assessment and interventional and surgical management for the full breadth of patient presentations in Thoracic Surgery. This includes endoscopic, interventional, and open and minimally invasive procedures for conditions affecting the chest wall, mediastinum, lungs, trachea, pleura, esophagus, stomach, and diaphragm. Trainees will have increased responsibility leading care teams on the thoracic surgery service and contributing thoracic surgery expertise to multidisciplinary cancer conferences.

Required training experiences (Core stage)

- 1. Clinical training experiences:
 - 1.1. Thoracic Surgery
 - 1.1.1. Inpatient ward and step-down unit in the role of senior resident²
 - 1.1.2. Service providing consultation to intensive care unit(s), emergency department(s), and other inpatient services in the role of senior resident
 - 1.1.3. Clinic
 - 1.1.4. Operative experience
 - 1.1.5. Endoscopy suite
 - 1.1.6. After-hours coverage
 - 1.1.7. Participation at multidisciplinary conferences
 - 1.2. Cardiac Surgery or lung transplantation surgical service, if not already completed
- 2. Other training experiences:
 - 2.1. Formal instruction in
 - 2.1.1. Thoracic anatomy and physiology
 - 2.1.2. Natural history, diagnosis, and treatment of diseases of the chest wall, mediastinum, lungs, trachea, pleura, esophagus, stomach, and diaphragm
 - 2.1.3. Difficult discussions, including end-of-life and breaking bad news
 - 2.1.4. Management of pulmonary artery (PA) bleeding
 - 2.2. Review of procedural log with supervisor
 - 2.3. Participation in quality assurance and quality improvement activities (e.g., M&M rounds)

² Senior residency is defined as the period during which the resident functions in a consultant capacity under the supervision of, and directly responsible to, a faculty member in Thoracic Surgery. This experience must incorporate increasing professional responsibility to achieve the level of a junior consultant.

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- 2.4. Critical appraisal activities, such as journal club
- 2.5. Participation and presentation of a clinical research, quality improvement, or educational scholarly project
- 2.6. Provision of teaching and supervision for junior learners and other health professionals

Recommended training experiences (Core stage)

- 3. Clinical training experiences:
 - 3.1. Thoracic trauma surgical service
 - 3.2. Longitudinal patient care
- 4. Other training experiences:
 - 4.1. Formal instruction in
 - 4.1.1. Leadership, including resource stewardship
 - 4.1.2. Wellness
 - 4.1.3. Equity, diversity, and inclusion
 - 4.2. Simulation training for uncommon and complex procedures
 - 4.3. Simulation training for management of PA bleeding
 - 4.4. Attendance at national and international educational seminars and roundtables relevant to Thoracic Surgery
 - 4.5. Attendance at professional surgical society meetings

Optional training experiences (Core stage)

- 5. Clinical training experiences:
 - 5.1. Robotic thoracic surgery
 - 5.2. Participation in advanced endoscopic procedures such as peroral endoscopic Myotomy (POEM), endoscopic ultrasound (EUS), endoscopic mucosal resection (EMR), endoscopic submucosal dissection (ESD), and navigational/robotic bronchoscopy
 - 5.3. Clinics
 - 5.3.1. Medical oncology
 - 5.3.2. Radiation oncology
 - 5.4. Medical imaging of the chest and abdomen

- 5.5. Diagnostic laboratories
 - 5.5.1. Pulmonary function test (PFT)
 - 5.5.2. Esophageal function
- 6. Other training experiences:
 - 6.1. Completion of ultrasound course for EUS and Endobronchial Ultrasound (EBUS)
 - 6.2. Canadian Association of Thoracic Surgeons (CATS) postgraduate course

TRANSITION TO PRACTICE (TTP)

The focus of this stage is the consolidation of skills required to manage a thoracic surgery practice. Additionally, residents will participate in advanced thoracic surgery procedures with an experienced fully qualified thoracic surgeon. During this final stage, residents participate in administrative tasks and learn about human resource and financial aspects of practice.

Required training experiences (TTP stage)

- 1. Clinical training experiences:
 - 1.1. Thoracic Surgery in junior attending³ role
 - 1.1.1. Inpatient ward and step-down unit
 - 1.1.2. Service providing consultation to intensive care unit(s), emergency department(s), and other inpatient services
 - 1.1.3. Operative experience
 - 1.1.4. Endoscopy suite
 - 1.1.5. Presentation and participation at multidisciplinary conferences
 - 1.1.6. After-hours coverage, which may include outside calls and referrals while on call
- 2. Other training experiences:
 - 2.1. Formal instruction in practice management
 - 2.2. Review of procedural log with supervisor
 - 2.3. Participation in quality assurance activities, including M&M rounds
 - 2.4. Provision of teaching and supervision of junior learners and other health professionals
 - 2.5. Development of a plan for wellness and/or fatigue risk management (FRM) in future practice

³ "Junior attending" means that the resident assumes responsibility for patient care, and leadership in the education and clinical supervision of junior colleagues, with as much independence as permitted by ability, law, and hospital policy.

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Recommended training experiences (TTP stage)

- 3. Clinical training experiences:
 - 3.1. Longitudinal patient care
- 4. Other training experiences:
 - 4.1. Formal instruction in
 - 4.1.1. Financial considerations
 - 4.1.1.1. Billing
 - 4.1.1.2. Financial planning
 - 4.1.2. Human resource management
 - 4.1.3. Medicolegal requirements, including the role of the Canadian Medical Protective Association

CERTIFICATION REQUIREMENTS

Royal College certification in Thoracic Surgery requires all of the following:

- 1. Royal College certification in General Surgery or Cardiac Surgery⁴
- 2. Successful completion of the Royal College examination in Thoracic Surgery
- 3. Successful completion of the Royal College Thoracic Surgery Portfolio

NOTES

The Thoracic Surgery Portfolio refers to the list of entrustable professional activities across all four stages of the residency Competence Continuum and associated national standards for assessment and achievement.

MODEL DURATION OF TRAINING

Progress in training occurs through demonstration of competence and advancement through the stages of the Competence Continuum. Thoracic Surgery is planned as a 2-year residency program. There is no mandated period of training in each stage. Individual duration of training may be influenced by many factors, which may include the resident's singular progression through the stages, the availability of teaching and learning resources, and differences in program implementation. Duration of training in each stage is therefore at the discretion of

⁴ Including the requisite competencies needed to perform the General Surgery Entrustable Professional Activities (EPAs) listed above in the eligibility requirements to begin training.

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the faculty of medicine, the competence committee, and the program director.

Guidance for programs

The Royal College Specialty Committee in Thoracic Surgery's suggested course of training, for the purposes of planning learning experiences and schedules, is as follows:

- 1-2 months in Transition to Discipline
- 3-6 months in Foundations of Discipline
- 15-18 months in Core of Discipline
- Up to 3 months in Transition to Practice

Guidance for postgraduate medical education offices

The stages of the Competence Continuum in Thoracic Surgery are generally no longer than

- 2 months for Transition to Discipline
- 6 months for Foundations of Discipline
- 18 months for Core of Discipline
- 3 months for Transition to Practice
- Total duration of training 2 years

This document is to be reviewed by the Specialty Committee in Thoracic Surgery by December 2027.

APPROVED - Specialty Standards Review Committee - June 2024