

Specialty Training Requirements in Medical Microbiology

2018 VERSION 2.0

These training requirements apply to those who begin training on or after July 1, 2018.

MINIMUM TRAINING REQUIREMENTS

Five years of approved residency in Medical Microbiology. This period must include:

1. Thirteen blocks of approved basic clinical training

The purpose of this training is to provide a clinical experience for the trainee in a range of clinical specialties, and give the trainee an opportunity to develop an effective and mature physician-patient relationship. This training year must be a broadly based medical experience. This must include:

- 1.1. A minimum of three blocks spent in internal medicine or pediatrics
- 1.2. Up to ten blocks selected from any of the following:
 - 1.2.1. Family medicine (maximum of two blocks)
 - 1.2.2. Internal medicine and its subspecialties (no maximum)
 - 1.2.3. Surgical specialties (maximum of three blocks)
 - 1.2.4. Pediatrics and its subspecialties (no maximum)
 - 1.2.5. Critical care medicine (maximum of two blocks)
 - 1.2.6. Emergency medicine (maximum of two blocks)
 - 1.2.7. Obstetrics and gynecology (maximum of two blocks)
 - 1.2.8. Dermatology (maximum of one block)
 - 1.2.9. Elective (maximum of one block)

2. 26 blocks of diagnostic laboratory residency in an approved department or division of microbiology, to include:

- 2.1. Thirteen (13) blocks of training to include
 - 2.1.1. Bacteriology
 - 2.1.2. Mycobacteriology

© 2018 The Royal College of Physicians and Surgeons of Canada. All rights reserved.

This document may be reproduced for educational purposes only provided that the following phrase is included in all related materials: Copyright © 2018 The Royal College of Physicians and Surgeons of Canada. Referenced and produced with permission. Please forward a copy of the final product to the Office of Specialty Education, attn: Associate Director, Specialties. Written permission from the Royal College is required for all other uses. For further information regarding intellectual property, please contact: documents@royalcollege.ca.

For questions regarding the use of this document, please contact: credentials@royalcollege.ca.

¹ A block equals four weeks

- 2.1.3. Mycology
- 2.1.4. Molecular microbiology
- 2.1.5. Parasitology
- 2.1.6. Virology and serology
- 2.2. One block or equivalent in antimicrobial stewardship
- 2.3. One block or equivalent in infection prevention and control
- 2.4. One block, or equivalent, in laboratory management, including quality and safety, and completion of at least one quality related project
- 2.5. Two blocks in public health activities, including a minimum of one block in a public health laboratory
- 2.6. One block in a diagnostic microbiology laboratory that provides services to the community
- 2.7. Seven blocks of laboratory training, approved by the program director and/or the program committee selected from one or more of the following (see notes):
 - 2.7.1. Additional time under sections 2.1 2.5
 - 2.7.2. Research relevant to Medical Microbiology
- 3. Thirteen (13) blocks of approved residency in Infectious Diseases, experiencing a breadth of both inpatient and outpatient clinical adult and pediatric infectious diseases, including:
 - 3.1. A minimum of six blocks on an inpatient service either adult or pediatric, with at least one block of each
 - 3.2. An additional seven blocks selected from one or more of the following
 - 3.2.1. Inpatient infectious diseases
 - 3.2.2. Outpatient infectious diseases
 - 3.2.3. Community based infectious diseases
 - 3.2.4. Rotations focused on specific infections, such as sexually transmitted infections, hepatitis, tuberculosis, transplant infections, and/or dermatologic infections (see notes)
- 4. Thirteen (13) blocks of approved residency selected from one or more of the following relevant to Medical Microbiology training: (see notes)
 - 4.1. A minimum of one block in other laboratory medicine disciplines relevant to Medical Microbiology
 - 4.2. Diagnostic laboratory microbiology
 - 4.3. Clinical infectious diseases

- 4.4. Other branches of clinical medicine relevant to the laboratory or clinical practice of medical microbiology
- 4.5. Infection prevention and control
- 4.6. Antimicrobial stewardship
- 4.7. Training in research methods
- 4.8. Clinical epidemiology
- 4.9. Research
- 4.10. Public health and preventive medicine
- 4.11. International health
- 4.12. Training in laboratory management
- 4.13. Training in management or leadership
- 4.14. Training in quality assurance/improvement
- 4.15. Training in medical education

NOTES:

It is strongly recommended that the four years required under Sections 2, 3 and 4 be set up in a fashion that facilitates progressive development and maintenance of both laboratory and clinical skills. For example, the 13 blocks of training required in Section 3 can be taken as three or four blocks each year that are interspersed with laboratory blocks. The training required in Section 4 could also be interspersed in a fashion that tailors the residency to meet the needs of the individual.

Where appropriate, the approved training under Section 2 and 3 may accommodate competency development through longitudinal or overlapping components as long as the total time requirements as outlined are met.

The further training under section 2.7 and 4 must be approved by the Residency Training Committee to ensure the selectives meet the goals and objectives of the program and the needs of individual residents.

A maximum of three blocks of training may occur at a site not accredited by the Royal College, and must be approved by the residency training committee to assure that the quality of the experience is high, that objectives are met, and that the training is consistent with the requirements of the Royal College. The Residency Training committee must approve rotation specific objectives for any external training (either accredited or non-accredited programs) and monitor the progress of residents. The maximum allocation for pursuing external training outside of the program in the final year is three blocks.

Any proposed training under Section 4 that is not specifically described must get the prior approval of the Specialty Committee.

REQUIREMENTS FOR CERTIFICATION

Royal College certification in Medical Microbiology requires all of the following:

- 1. Successful completion of a five-year Royal College accredited program in Medical Microbiology;
- 2. Successful completion of the certification examination in Medical Microbiology; and
- 3. Completion of a scholarly project resulting in a peer-reviewed presentation or publication relevant to Medical Microbiology.

The five-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.

This document is to be reviewed by the Specialty Committee in Medical Microbiology by December 2019.

APPROVED – Specialty Standards Review Committee – June 2012 **APPROVED** – Specialty Standards Review Committee – April 2018