Medical Microbiology & Infectious Diseases Profile

Updated December 2019





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# **General information**

Microbiology and infectious diseases focuses on the diagnosis and treatment of infectious diseases; thus, it is concerned with human illness due to micro-organisms. Since such disease can affect any and all organs and systems, this specialist must be prepared to deal with any region of the body.

The specialty of Medical Microbiology and Infectious Disease consists primarily of four major spheres of activity:

- 1. the provision of clinical consultations on the investigation, diagnosis and treatment of patients suffering from infectious diseases;
- 2. the establishment and direction of infection control programs across the continuum of care;
- 3. public health and communicable disease prevention and epidemiology;
- 4. the scientific and administrative direction of a diagnostic microbiology laboratory.



### **General information**

Once you've completed medical school, it takes an additional 5 years of Royal College-approved residency training to become certified in medical microbiology and infectious disease. This residency training must include:

- 1 year of basic clinical training;
- 2 years of diagnostic laboratory residency in an approved department or division of microbiology, including bacteriology, immunology, mycology, mycobacteriology, parasitology and virology. In addition the resident must attain adequate experience in general hospital microbiology, including laboratory management, infection control, molecular biology, research and how microbiology relates to other hospital departments including administration;
- 1 year of approved residency in directly relevant clinical medicine (e.g. Internal Medicine or Pediatrics). This year must include six months of clinical practice centred around the management of patients with infectious diseases;



# **General information**

 1 further year of residency that may consist of: residency in the clinical microbiology laboratory, infectious diseases, infection prevention and control, research, public health, epidemiology, community medicine; or residency in other branches of laboratory or clinical medicine; or residency or research at a hospital or university centre recommended by the program director.

For further details on training requirements please go to: Royal College of Physicians and Surgeons of Canada

Association of Medical Microbiology and Infectious Disease Canada

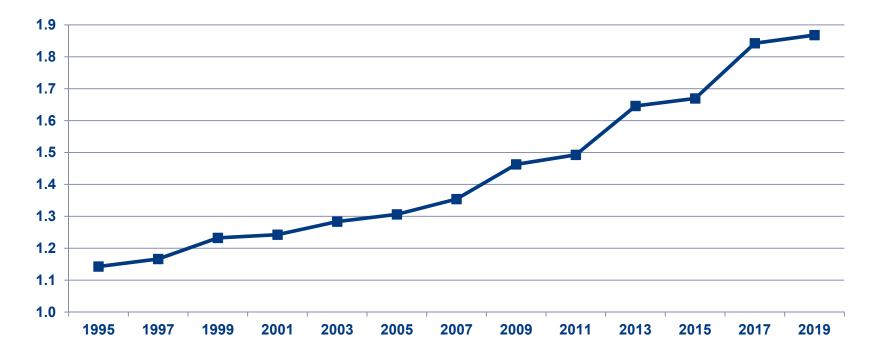


#### Total number & number/100,000 population by province, 2019

Province/Territory	Physicians	Phys/100k pop'n
Newfoundland/Labrador	6	1.1
Prince Edward Island	1	0.6
Nova Scotia	15	1.6
New Brunswick	13	1.7
Quebec	245	2.9
Ontario	195	1.4
Manitoba	26	1.9
Saskatchewan	14	1.2
Alberta	87	2.0
British Columbia	95	1.9
Territories	0	0.0
CANADA	697	1.9



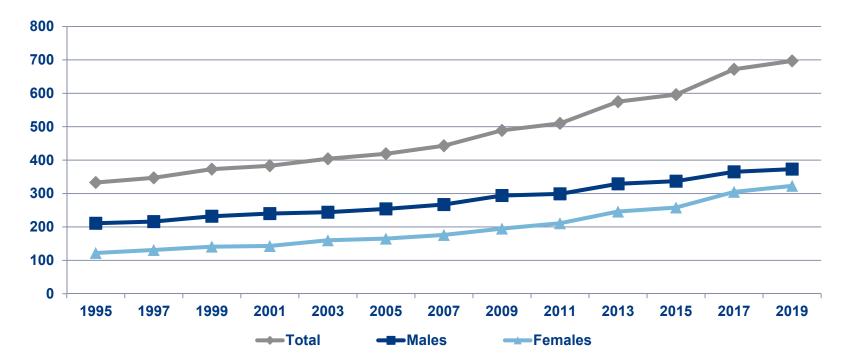
### Number/100,000 population, 1995 to 2019



Source: 1995-2019 CMA Masterfiles



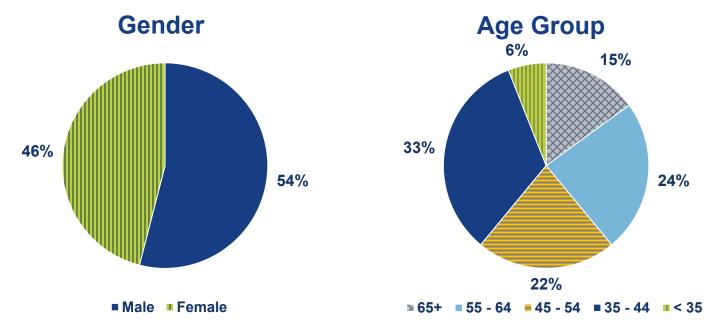
#### Number by gender & year, 1995 to 2019







#### Percentage by gender & age, 2019

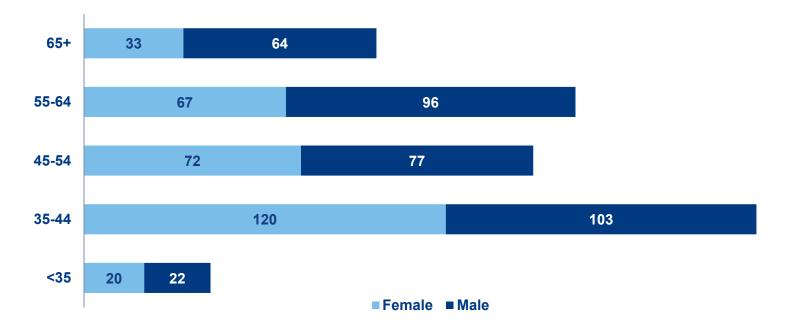


Excludes those where gender or age is unknown.

Source: 2019 CMA Masterfile



#### Number by gender & age, 2019

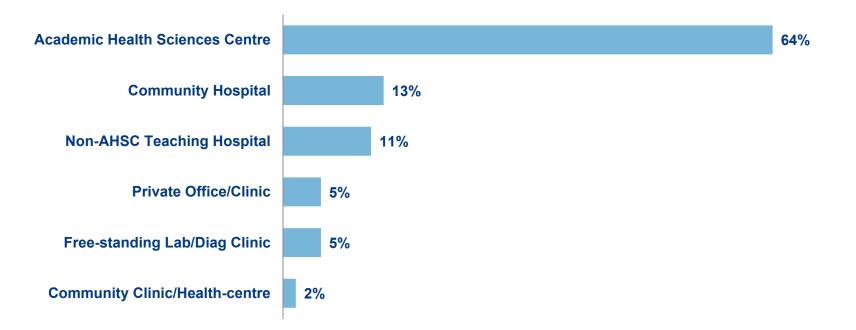


Excludes those where gender or age is unknown.

Source: 2019 CMA Masterfile

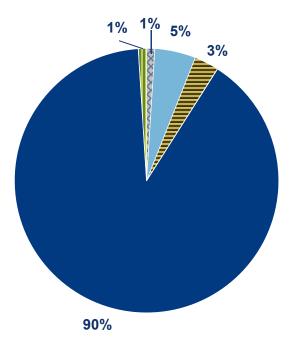


#### Percentage by main work setting, 2019





### Percentage by practice organization, 2017\*



- Solo Practice
- Group Practice
- Interprofessional Practice
- Hospital-based Practice
- NR

\*Most recent available data for this specialty

Source: 2017 CMA Workforce Survey. Canadian Medical Association



### Hours worked per week (excluding on-call), 2019

Activity	Hours worked per week
Direct patient care without teaching component	15.0
Direct patient care with teaching component	8.6
Teaching without patient care	3.4
Indirect patient care	7.2
Health facility committees	2.8
Administration	6.4
Research	5.4
Managing practice	1.2
Continued professional development	2.8
Other	2.2
TOTAL HOURS PER WEEK	55.0



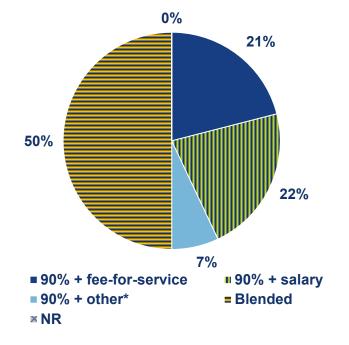
#### **On-call duty hours per month, 2019**

- 80% provide on-call services
- On-call hours = 141 hours/month
- On-call hours spent in direct patient care = 72 hours/month



#### Percentage by remuneration method

#### Primary payment method<sup>1</sup> in 2017



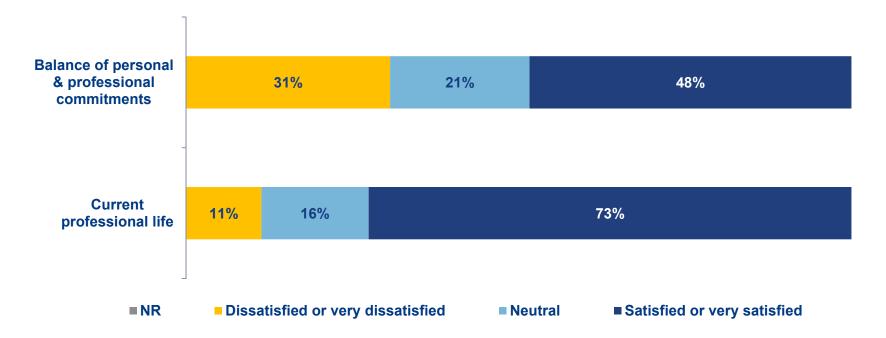
Average gross payment per physician for Internal Medicine & subspecialties in 2017/18 (those earning at least \$60,000) = \$437,000<sup>2</sup>

Average percent overhead reported by Medical Microbiology and Infectious Diseases specialists in 2017 =  $11\%^3$ 

\*Other includes capitation, sessional, contract and other methods <sup>1</sup> 2017 CMA Workforce Survey. Canadian Medical Association <sup>2</sup> National Physician Database, 2017/18, CIHI <sup>3</sup> 2017 CMA Workforce Survey. Canadian Medical Association

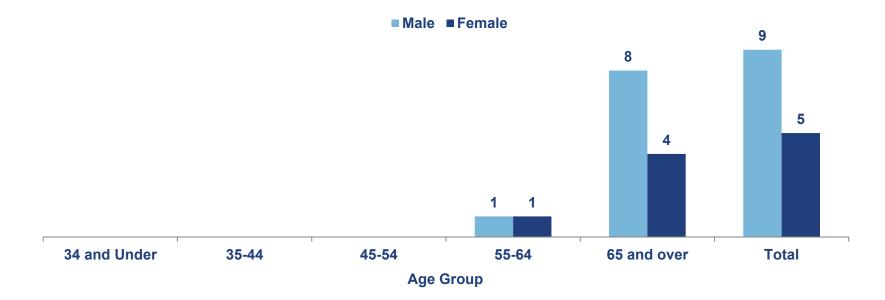


#### **Professional & work-life balance satisfaction, 2019**





#### Number of retirees during the three year period of 2016-2018

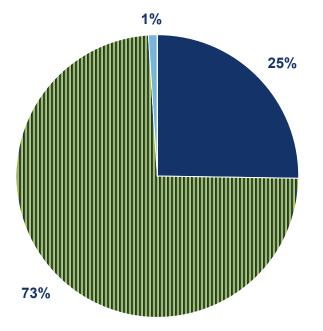


#### Source: CMA Masterfile – year over year comparisons

Note: "Retired" is based on giving up licence and therefore excludes those who have retired from clinical practice but are still licensed; those younger than 45 may include physicians who have temporarily given up their licence but return to practice at a later date.



#### **Employment situation, 2017**



- Overworked in my discipline
- Employed in my discipline to my satisfaction
- Underemployed in my discipline
- = Not employed in my discipline
- No response

#### Links to additional resources

- Association of Faculties of Medicine of Canada
- <u>Canadian Institute for Health Information</u>
- Canadian Medical Association's Physician Data Centre
- Canadian Post-MD Education Registry (CAPER)
- <u>College of Family Physicians of Canada</u>
- <u>National Physician Survey</u> (2004-2014)
- Royal College of Physicians and Surgeons of Canada

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