

Medical Laboratory Technologist

Job description

Medical laboratory technologists perform a variety of laboratory tests and procedures to assist physicians in diagnosing, monitoring, treating and preventing disease. These tests have a wide range of areas; blood banking, chemistry, hematology, immunology, and microbiology to name a few

As a medical laboratory technologist, you will:

- Examine body fluids and tissues for abnormal chemical levels, cells or bacteria.
- Prepare tissue for microscopic examination by pathologists.
- Determine blood type for transfusions.
- Conduct medical research and analyses.
- Operates and maintains sophisticated instruments and equipment used in the division, is able to properly set up, calibrate, maintain, operate and shut down such instruments. Maintains competence in Laboratory Information System that is crucial to the quality operations of the laboratory and patient care.
- Actively participates in Quality Improvement Programs essential to ensure that laboratory testing is accurate, timely and meets customer needs.
- Trains and orientates new Medical Laboratory Technologists in the performance and interpretation of tests.

Medical laboratory technologists may specialize in the following areas:

- Clinical chemistry - chemically analyzing blood and other body fluids.
- Clinical microbiology - culturing and identifying micro-organisms and determining antibiotic sensitivities.
- Hematology - studying blood cells and their formation in health and disease, and investigating coagulation factors and disorders.
- Histotechnology - preparing tissue specimens for microscopic examination.
- Transfusion medicine - taking and testing blood to determine its suitability for transfusions and preparing blood products.
- Cytotechnology - microscopically examining prepared cellular slides for evidence of abnormality or disease.
- Clinical genetics - analyzing patient tissue to determine the presence of a pre-existing or neoplastic genetic condition.

Work environment

Medical laboratory technologists may perform a number of different activities, or they may specialize in a particular area. Those who work with infectious patients and samples or hazardous chemicals must take safety precautions to avoid infection or injury.

Working hours for medical laboratory technologists vary depending on the type of laboratory in which they work. Research laboratories usually operate weekdays only. In diagnostic clinical laboratories, technologists may work rotating shifts of days, evenings and nights including weekends and holidays

They can be employed in

- hospital laboratories
- public health departments
- pharmaceutical laboratories
- veterinary research clinics
- agricultural, industrial, government or private laboratories
- post-secondary institutions
- scientific supply companies

Education

Medical Laboratory Technologist Program

Required High School Courses:

- Community Health
- Information Processing
- Biology
- Chemistry
- Physics
- Math
- English

Personal characteristics and skills

- Integrity and a professional attitude.
- Aptitude for mathematics and science and a keen interest in scientific work.
- Ability to do detailed work and maintain a high level of accuracy.
- Good colour and form perception (to study blood cells, etc.)
- Good communication and interpersonal skills.
- Ability to adapt easily and quickly to change.
- Enjoy taking a methodical approach to their work, analyzing results, establishing procedures and using computers and specialized instruments for accurate and precise testing.

Employment and earning potential

- [Working in Canada](#)
- Capital Health \$ 43,373-52,809 per year
- [Salary ranges in Canada](#)

More Information

[Canadian Society for Medical Laboratory Science](#)

[Canadian Association of Pathologists](#)

[American Society of Cytopathology](#)

[Canadian Association of Pathologists](#)

[Ontario Association of Pathologists](#)

[Canadian Society of Clinical Chemists](#)

[American Association for Clinical Chemistry](#)

[Canadian Association for Clinical Microbiology and Infectious Diseases](#)

[American Society for Microbiology](#)

[Microbiology & Immunology - University of Leicester](#)

[Canadian Blood Services](#)

[AABB](#)

[CSTM Online](#)

[Transfusion Ontario](#)