



Health Career Directory

Medical Laboratory Assistant

Overview

Medical laboratory assistants (MLA) do clerical and pre-analytical tasks. These include data entry and blood collection in medical laboratories.

Medical laboratory assistants, once known as medical laboratory technicians, do pre-analytical functions. This involves, for example, collecting blood samples (phlebotomy), processing and moving specimens, and preparing special chemicals (called reagents) for use in testing. In BC,

Medical laboratory assistants also perform electrocardiograms (ECGs).

MLAs work in:

- medical laboratories in hospitals
- clinics
- research institutes
- universities
- government research laboratories.

Medical laboratory assistants must be concerned with detail and be able to follow strict procedures. The work of medical laboratory assistants requires a high level of accuracy. In other words, they need to be precise both in work procedures and in maintaining concise records.

These workers must have good social skills and be able to work both independently and as part of a team.

Main Roles:

Duties vary from one position to another but, in general, medical laboratory assistants:

- label and sort tissue samples and specimens
- load and operate laboratory testing equipment
- collect blood samples and body fluids from patients for laboratory testing
- prepare slides of blood and other fluids for examination under a microscope
- perform simple tests on body fluids and stool
- make chemical solutions and stocks of culture media
- plant specimens to culture bacteria
- use computers to input and analyse data
- throw out hazardous waste
- sterilize equipment
- keep up stock levels of laboratory supplies.

They also may perform administrative tasks such as answering the phone and keeping records. Medical laboratory assistants may specialize in working with scientists, medical laboratory technologists or medical professionals. This can be in areas such as:

- biochemistry (studying chemical reactions in the body)
- hematology (analysing diseases of the blood and blood forming tissues)
- histopathology (examining the structure of diseased tissue)
- immunology (examining how the immune system works)
- microbiology (studying bacteria and viruses).

Medical laboratory assistants also perform some or all of the following duties:

- collect blood or other samples from patients
- receive tissue samples from patients
- log patient samples and prepare them for testing
- set up medical laboratory equipment
- clean and maintain medical laboratory and medical laboratory equipment
- perform ECGs (Electrocardiograms measure and record the heart's electrical activity).

Who is suited to become a medical laboratory assistant?

Medical laboratory assistants are most effective when they have the skills and characteristics:

- the ability to follow instructions, pay close attention to detail, and take detailed readings
- the ability to work quickly and accurately
- good finger and manual skill to handle specimens and small laboratory equipment
- normal colour vision
- good communication and problem solving skills
- good organizational skills
- social skills required to work well with co-workers and the public.

They should enjoy:

- taking a methodical approach to their work
- setting up and maintaining laboratory equipment
- helping people and assisting medical personnel.

This can be a physically demanding job. It is not appropriate for anyone with a back problem or mobility challenges. In hospitals, the main duty is phlebotomy. Phlebotomy means to draw blood from a live person for tests, transfusions, donations, or research.

Work tasks are often demanding and require medical laboratory assistants to move quickly throughout the hospital.

Who employs medical laboratory assistants?

Medical laboratory assistants are employed in:

- private diagnostic testing laboratories
- hospitals
- doctors' offices and clinics
- public and private research institutes.
- community health clinics
- public health facilities
- university research labs
- biotechnology companies
- specialty labs.

Experienced medical laboratory assistants may move into related jobs. These related jobs may be in industrial process or manufacturing company laboratories, pharmaceutical company laboratories, veterinary laboratories or government science laboratories.

Salary

\$18.19/hour – \$23.50/hour

Required Training and Education to become a medical laboratory assistant

Medical laboratory assistants need:

- a basic understanding of biological science and medical terminology
- a detailed understanding of laboratory safety procedures
- basic computer skills and good record keeping skills
- the numerical skills necessary to check test results and do simple calculations
- the practical skills necessary to operate and maintain laboratory equipment.

Employers generally prefer to hire high school graduates who have completed a related post-secondary program.

In BC, medical laboratory assistants must be graduates of British Columbia Society of Laboratory Science (BCSLs), approved Medical Laboratory Assistant training programs.

Completion of one of these programs can lead to certification by the BCSLS. This certification is voluntary and is not currently required; however, certification may be preferred by employers. A list of the BCSLS approved Medical Laboratory Assistant training programs can be found at: www.bcsls.net

National certification is offered by the Canadian Society for Medical Laboratory Science, which is widely recognized across Canada. In BC, medical laboratory assistants are also trained to perform ECGs. This is unique to BC and workers in this occupation do not perform this task in other provinces in Canada. Therefore, it is important to note that national certification does not include the ability to perform ECGs, and that graduates from other provinces will be required to have extra training in order to do this task.

Career Advancement

With additional education and experience, workers may progress to supervisory or management positions or they may choose to teach their profession in an educational setting. Advancement opportunities depend on the assistant's ability, experience and education. Employment prospects for medical laboratory assistants are expected to be average in upcoming years.

British Columbia's population is growing and aging, which is increasing the demand for health-care services and health-care professionals. As well, a significant number of those employed are expected to retire over the next few years. This will increase the need for medical laboratory assistants.

Additional openings will also become available due to worker turnover. Many workers are attracted to this occupation as a step towards obtaining employment in more skilled positions.

For assistants who have taken specialized training, the turnover rates are generally low.

The introduction of simplified tests for routine diagnoses allows doctors and, and in some cases patients, to carry out some tests themselves. This has somewhat reduced the number of medical laboratory assistants needed to do the same volume of work. However, the development of new diagnostic tests that are now requested by doctors has balanced this effect, and has increased work opportunities.

Resources

Education Programs

CDI College

<http://www.cdicollege.ca/programs-and-courses/medical-laboratory-assistant/>

Camosun College

<http://camosun.ca/learn/programs/med-lab/>

MTI Community College

<http://www.mticc.com/English/Programs/HealthCare/Medical-Lab-Assistant-Diploma.aspx>

Stenberg College

http://www.stenbergcollege.com/programs/medical_laboratory_assistant.html

Thompson Rivers University

<http://www.tru.ca/distance/programs/health-science/medical-laboratory-assistant.html>

Vancouver Community College

<http://www.vcc.ca/programscourses/program-areas/health-sciences/medical-laboratory-assistant/>

West Coast College of Health Care)

http://www.westcoastcollege.com/medical_lab.html

Financial assistance and bursaries

For information about Canada student loans and grants, please visit:

http://www.hrsdc.gc.ca/eng/jobs/student/loans_grants/index.shtml

Association

Canadian Society for Medical Laboratory Science

<http://www.csmls.org/>