

Job Class Profile: Laboratory Technician**Pay Level: LX-23 Point Band: 562-586**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	4	3	4	6	2	2	4	2	5	
Points	187	50	25	29	60	43	83	43	54	574

JOB SUMMARY

The Laboratory Technician performs a variety of routine and/or more complex technical work near the technologist level associated with laboratory tests and procedures to aid in the diagnosis, treatment, and prevention of disease. Work also involves receiving and collecting specimens, operating and maintaining technical equipment, and providing technical support to veterinarians, physicians, and research institutions. Work may involve providing lead direction to laboratory assistants or students. Work is performed in a hospital, a specialized unit, or in a government laboratory.

Key and Periodic Activities

- Receives, sorts, labels, verifies information on requisitions and specimens, prepares, performs tests, packages or arranges specimens for transport to referral laboratories.
- Collects blood and other specimens from patients, may collect specimens in live hatcheries and nurseries; performs various examinations and tests on specimens; records results, and compiles reports.
- Registers and confirms identification of patients, provides instructions in specimen collection procedures, prints and scans labels to affix to specimens, and scans labels to enter results electronically or enters results manually.
- Centrifuges (separates) blood and other products for processing and analysis by technologists; prepares media, plates and cultures specimens; and prepares smears and differentials.
- Prepares general and selective media; and maintains quality control on all prepared media.
- Performs a variety of routine automated and manual tests such as routine urine, pregnancy, and glucose tolerance tests; answers questions regarding test procedures or contacts physicians or nursing staff for response; answers inquiries from patients regarding test requirements; and contacts nursing floors or doctor's office with abnormal test results.
- Prepares slides and runs through staining procedure; runs daily quality controls on tests conducted; and files and labels slides.
- Autoclaves (sterilizes) and disposes of bacteriological waste, and outdated surgical and autopsy specimens.
- Performs quality control tests on machines. Maintains Standard Operating Procedures (SOP) for all laboratory procedures and biosafety protocols, and reviews and provides input into

Key and Periodic Activities

- updates as applicable.
- Assists with the performance of autopsies including preparing the morgue, data collection and entering of information into the computer, preparing the body, assisting with external examination, weighing and measuring organs, preparing specimens to be delivered to laboratory, and following up to ensure any tests ordered during the autopsy are completed.
- May provide lead direction and training to laboratory assistants in laboratory technical work.
- Performs seasonal activities such as osmolality testing, bacterial and viral isolation from seawater, prepares toxicology samples, bioassay trials, and sample collection and vaccination research.
- Provides technical support to veterinarians, physicians, and research institutions.
- Cleans laboratory areas, workspace, and surgical tools.
- Orders laboratory supplies, restocks work area, and checks inventory levels.
- Operates, maintains, and calibrates diagnostic equipment and analyzers.
- Attends departmental meetings as required.

SKILL

Knowledge

General and Specific Knowledge:

- Laboratory methods and procedures.
- Organizational policies and procedures.
- Medical Sciences disciplines.
- Cleaning and sterilization techniques.
- Technical knowledge of equipment and its operation, and transportation of dangerous goods.

Formal Education and/or Certification(s):

- Minimum: Completion of the Medical Laboratory Assistant Program (approximately 1 year), and registration with the Canadian Society for Medical Laboratory Sciences (CSMLS).

Years of Experience:

- Minimum: 1 – 2 years of experience

Competencies:

- Manual dexterity.
- Multi-tasking.
- Organizational/time management skills.
- Oral and written communication skills.
- Computer skills.
- Operate and calibrate machinery.

Interpersonal Skills

- A range of interpersonal skills are used to perform activities such as listening to others to gain information and advice, communicating with co-workers to ensure an efficient service is

provided, providing care and comfort to patients or their family members if they are anxious, nervous, or upset, providing patients with routine verbal and written instructions on specimen collection, and dealing with upset/angry people when tests are delayed. Occasionally, there will be instruction/teaching to students or new staff, and using interpersonal skills to gain the cooperation of others, and to resolve disputes among co-workers.

- Communications occur with employees within the immediate work area/department, employees in other departments, patients, supervisor, government departments, public, funeral homes, professional advisors, and students. There may also be periodic contact with suppliers for supplies, technical services to repair equipment, and with courier service employees to facilitate deliveries.

EFFORT

Physical Effort

- Work demands regularly require exertion of physical effort resulting in considerable fatigue requiring periods of rest and may require the need for strength and endurance.
- Regularly lifts or moves objects less than 10 lbs (i.e. tubes, sample, specimens, reagents), and objects 10 – 25 lbs (i.e. supplies such as cases of tubes, specimen bottles and reagents, coolers with ice and samples, water jugs, etc.). There is occasional lifting of transportation bags and coolers in preparation for specimen transportation that may be in the 25-50 lb range. There may also be a requirement to lift or move objects or patients over 50 lbs (i.e. patient or their beds to collect blood, assist with lifting of bodies requiring physical handling, pushing, and pulling, While others in a non-health care environment may have to physically handle skidoos, and perform docking and tying up of vessels to wharfs).
- Constantly stands, walks, bends or stretches into awkward positions when performing specimen collection procedures or tests; assists with autopsies, and cleans, calibrates, or moves laboratory equipment. If in a government laboratory, occasionally there is a requirement to climb in and out of marine vessels, and in and out of vehicles. Regularly sits to perform tests, to view test results on the computer, register patients, and to print labels.
- Constantly requires fine finger and precision work when using needles to extract specimens, when palpating for veins, using pipetting to make up reagents and dilutions, dissecting specimens, when entering data into the computer, and preparing specimen labels. Also uses hand tools that require accuracy and steadiness to obtain specimens, change reagents, or perform certain tests.

Concentration

- **Visual** concentration is required when using needles, knives, or tools to collect samples, reading doctor's orders on requisitions, when preparing dilutions or weighing specimens, measuring solutions/specimens, performing microscope work, staining and processing of samples, and tests, observing patients during blood collection to ensure their health and safety, to ensure correct information is attached to specimens and requisitions, to check patient's information, scanning or data entry of information and to view results on the computer, and to operate motorized vehicles.
- **Auditory** concentration includes listening to patients, doctors or other staff for information on specimens, tests, and or guidance on procedures, sometimes on the telephone over the noise in the laboratory and listening for alarms or beeps from diagnostic equipment, freezers, and

incubators.

- Other sensory demands include **touching** to palpate veins or other body parts during specimen collection. There is exposure to numerous **smells** and odours from specimens, chemicals, toxics, solvents, and cleaners and must be aware of these in order to detect any health and safety issues, or problems with equipment.
- **Repetition requiring alertness** is required when pipetting serums, labeling slides and plates, staining slides, entering specimen results, compiling reports, and examining specimens. **Higher than normal levels of attentiveness** is required when entering data, observing patients during collection procedures to ensure they do not faint, being aware of aggressive patients for safety reasons, ensuring patient information is correct on the specimen label, filing of surgical slides, when working around specimens that may be infectious, when tests or procedures are complicated or have medical or legal implications (i.e. collecting samples from newborns, compromised medical conditions, and homicides), and when working around flammable solvents.
- There is a **lack of control over the pace of the work** as often there are unpredictable numbers of samples/specimens received, when there are equipment malfunctions, breakdowns, or power outages, staff shortages, and for some positions when working in the field there are environmental and weather factors that contribute to longer hours and slower pace. Working under **time pressures and deadlines** occur when handling perishable samples to perform tests some of which are urgent or “stat” requiring a quick turnaround time (i.e. life or death situations, forensic autopsies), and to complete documentation, or reports. **Interruptions** occur as a result of requests for information, when issues arise unexpectedly, or when priorities in workload, etc. are shifted.
- **Eye/hand coordination** is required when making reagents, pipetting, pouring samples from one container to another, using scalpels, handling and inserting needles into patients’ veins, operating various types of laboratory equipment/machines, performing maintenance on equipment where there are very small parts that need to be changed, performing various tests/procedures, entering data into the computer, and collecting and preparing samples.
- **Exact results and precision** is required when collecting specimens, inserting needles, affixing labels to specimens, mixing or pipetting solutions, entering data, and reporting results.

Complexity

- Work typically involves tasks and activities that are different/related, but allow the use of similar skills and knowledge.
- Tasks are typically repetitive, well defined, for which guidelines or procedures exist. There is a wide variety of responsibilities and situations where the challenges have obvious solutions. Challenges are typically addressed by following procedures, guidelines, and may be resolved in a team setting.
- The most typical problems encountered involve the collection of samples which may be difficult because of patients’ condition (i.e. newborns, medically compromised), requirements for testing (i.e. specimens may be perishable), and decisions related to the handling of specimens or requisitions without the proper information, or where equipment fails, urgent tests are not able to be performed, and trying to solve these situations which result in minor or major problem solving (i.e. sending specimens to outside laboratories or setting new equipment up). Other challenges involve situations around the handling and control of biohazards (i.e. animal

pathogens).

- Problems tend to be addressed by following manuals, policies, procedures, internet, guidelines and advice from physicians, coworkers, supervisors, and technical advisors.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks and activities are highly monitored and controlled as there is some level of supervision in most of the daily tasks. Procedures are generally well defined; therefore, interpreting directions and applying guidelines to make decisions is limited.
- Decisions can be made to order basic supplies needed for the day-to-day operations, general testing and procedural decisions including verifying results and whether tests need to be repeated, checked, and/or recollected, adequacy of specimens, equipment calibrations and maintenance without formal approval. Also can independently communicate with applicable diagnostic facilities or provide advice to outside agencies related to laboratory tests/procedures.
- Formal approval is required to make changes to policies and procedures, request maintenance repairs, to arrange flights for urgent samples, to make large purchases, attendance at conferences and workshops, communicate with media, and travel to field sites. Results of tests that are abnormal would be discussed with the lead technologist before releasing to physicians.
- There is some discretion and judgment permitted to interpret directions and apply guidelines with daily routines of testing, to ship samples, perform non-urgent tests during weekends when there may be limited staff, when determining the order of patients testing depending on their conditions and urgency, and in some positions the diagnostic tests to perform. Also has some discretion to exercise within predetermined limits and procedures when contacting a physician if the incorrect test was ordered on a patient, or correct information is not given, when to call a physician with an abnormal report, and to discuss confidential information on patients with coworkers. A high degree of independent discretion and judgment are used during weekends, evenings, or on call when there are limited staff available.

Impact

- Work activities impact the immediate work area, department, in and outside the organization, and on patients.
- Work activities can either negatively or positively affect the diagnosing and treatment of diseases.
- The resources that impact the work activities are equipment (i.e. its functioning and accuracy in reporting), processes and systems, information (i.e. validity of tests), finances (i.e. supplies used, and human resources needed), health and safety, and corporate image.
- Typical errors can have moderate to extreme consequences depending on the error. For example, errors such as entering wrong data into the computer, but fixing immediately can result in little impact. However, selecting the wrong patient or taking incorrect samples would result in incorrect results and improper treatment. Other errors are incorrect labelling of samples which could produce the same results. When performing routine and complex tests, any misinterpretation of results or mistakes in procedures could have an impact. Another error that could result is the maintenance and calibration of equipment/machines which if not done

correctly could result in errors of tests.

- While errors can be extreme, due to quality control procedures they are mitigated. Most errors are detected by the performer of the task, laboratory technologists, or health professionals usually within hours of awareness.

Development and Leadership of Others

- Not responsible for bargaining level supervision of staff.
- Provides development and leadership activities such as on the job training, orientation, and advice and guidance to other staff and students on procedures, tests, and work activities.
- Typically, does not provide team or project lead activities; but in some instances may perform a team lead role to other technicians/assistants such as on the job direction and delegation of activities.

WORKING CONDITIONS

Environmental Working Conditions

- Required to wear gowns, gloves, masks, boot covers, goggles, laboratory coat, face shield, respirators (if required), and follow universal safety precautions when handling specimens such as using proper hand washing techniques, fume hoods, and eyewash stations.
- There is limited likelihood of minor cuts, bruises, abrasions or minor illnesses and a limited likelihood of fractures or other injuries and disability.
- Work is performed in an open environment with constant exposure to bodily fluids, waste, infectious diseases (i.e. blood, urine, etc.), hazardous chemicals, sharp objects such as needles, and lack of privacy. There is regular exposure to odours, and fumes. There is occasional exposure to toxic or poisonous substances, limited ventilation, limited lightening, unusual and distracting noise from equipment, glare from monitors, physical dangers and threats from unruly or disoriented patients, wet or slippery floors, dirt/dust, and electrical shocks. There may be occasional exposure to radiation there may be a requirement to travel on various modes of transportation to collect specimens, sometimes in adverse weather conditions depending on the work placement.