

Job Class Profile: Laboratory Technologist IIB**Pay Level: LX-29 Point Band: 752-786**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	4	4	6	4	4	4	3	6	
Points	233	67	25	29	120	87	83	64	64	772

JOB SUMMARY

The Laboratory Technologist IIB performs specialized procedures/tests and/or provides administration/technical direction, instruction, and guidance to laboratory technologists/technicians. Work involves troubleshooting processes, equipment operations, quality control activities, inventory management, and/or performing specialized test/procedures for a laboratory.

Key and Periodic Activities

- Provides guidance and direction to technologists/technicians in a specific division or sub-division of a laboratory. Specifically, provides guidance and direction related to laboratory practices, procedures, identification of organisms, problem samples, workflow, and reporting of results; trains and instructs technologists in routine and complex testing, students during clinical rotations, and other health disciplines; and participates in the orientation of new staff. Assigns tasks and monitors workflow; and provides guidance and advice to laboratory staff when performing special procedures or with difficult analyses, reviews results, and determines if additional tests are required.
- Performs advanced (specialized) procedures, tests, studies, etc., or operates advanced and specialized instruments/equipment (i.e. flow cytometer, bone marrows, smear morphology, malaria preparations and slides, advanced blood banking, special staining procedures, immunofluorescence studies, etc.), prepares media and reagents for testing, and reports results as applicable. May also perform routine tests/procedures or assist other staff in doing those tests/procedures.
- Interprets test results, verifies reports, if applicable, determines the appropriate need for further investigation, and responds according to laboratory guidelines and policies. Provides verbal test results to medical and clinical personnel and where necessary provides interpretative guidance with respect to laboratory procedures and instrumentation, or advice as to the type of tests to order to aid in diagnosis.
- Assists the Laboratory Technologist III with any technical or operational difficulties such as responding to equipment failures, reports of significant infections, and assists and/or consults with nursing, or physicians regarding abnormal reports.
- Receives specimens in department, checks specimen against accompanying information, enters specimen information into logbook, and/or computerized system.

Key and Periodic Activities

- Performs quality control tests/procedures such as test reagents, task batches, and equipment; performs evaluations on new tests and environmental samples. Performs routine maintenance, troubleshoots, calibrates equipment; records and maintains all activities; documents all incidents and occurrences, and follows up through the automated Clinical Safety Reporting System (CSRS).
- Monitors inventory levels and orders supplies and reagents as necessary; provides administrative direction for the processing of supplies and shipments; inspects shipments as they arrive, verifies, and inspects supplies for damage, expiry dates, documents lot numbers, quantities, checks for procedure changes for use, and stocks items in appropriate areas for usage.
- Prepares and maintains American Type Culture Collection (ATCC) reference organisms for use in quality control testing.
- Troubleshoots and resolves issues with equipment, printers, and resolves outstanding problems with reports.
- Performs some activities of the Laboratory Technologist I level, as required.
- Prepares new isolates for various quality control testing procedures, stores and discards as required.
- Records workload measurement statistics as applicable; prepares various reports (i.e. utilization, activities, etc.); schedules daily and call back schedules; and maintains records for compliance with International Standardized Organization (ISO) for the Laboratory Program.
- Prints, maintains, and stores documents related to task batches, quality control testing, equipment logs, equipment maintenance, inventory, and supply orders. Monitors equipment temperatures and calibrates accordingly.
- Reviews and updates standard operating procedures (SOP) for all tests; provides input into policies and procedures; evaluates new laboratory methodologies, tests, and equipment; and makes recommendations as required. Participates in quality control surveys for evaluation of procedures.
- Works on call and responds to after hour calls for advice and direction.
- Performs general housekeeping activities (i.e. disinfecting and cleaning glassware, bottles, laboratory benches, refrigerators, and freezers).

SKILL

Knowledge

General and Specific Knowledge:

- Laboratory testing techniques for the particular area where performed.
- Operation and maintenance of diagnostic equipment, and instruments.
- New guidelines, standards, and developments in all disciplines.
- Principles of Quality Management and performance measurements.
- Laboratory Quality/Safety guidelines.

Formal Education and/or Certification(s):

Minimum: Graduation from an accredited program with a 3 year Diploma in Medical Laboratory

Technology; Registration as a General Registered Technologist (R.T.) with the Canadian Society of Medical Laboratory Sciences (CSMLS), Quality Management courses/training, and may require specific training/course work to perform various tests/procedures.

Years of Experience:

Minimum: 2 – 3 years of experience is required with some positions requiring experience in a particular laboratory.

Competencies:

- Ability to repair and calibrate machinery.
- Ability to analyze results and communicate information to others.
- Ability to follow established testing guidelines and procedures.
- Oral and written communication skills.
- Computer skills.

Interpersonal Skills

- A range of interpersonal skills are used to perform activities such as listening, asking questions, gaining the cooperation of others to complete work, address issues and/or solve problems; providing direction and communicating with staff regarding activities, tests, updates on procedures and results, and equipment problems. There is also communication with physicians and other health personnel, including the lead technologist regarding work activities and practices; providing advice, routine and complex information to medical personnel; instructing/teaching/training staff and students; providing expert advice, guidance, and counselling to staff, members of the healthcare team; and dealing with upset/angry people; communicating with suppliers and contractors for troubleshooting technical equipment, or in the purchasing and ordering of supplies and reagents.
- Interactions are with employees within the immediate work area, department, and outside the organization and less frequently with professional advisors, suppliers for inventory and equipment problems, and with executives and professional associations.
- The most significant interactions are with the manager for guidance on implementing quality management processes; the staff and healthcare professionals to discuss laboratory tests/procedures; and senior technical staff to discuss new/revised procedures and solutions for effectively implementing them.

EFFORT

Physical Effort

- This class is regularly required to exert physical effort resulting in considerable fatigue, and requiring periods of rest.
- Constantly lifts or moves objects less than 10 lbs (i.e. specimens, instruments, scalpels, tweezers, etc.), and occasionally objects up to 25 lbs (i.e. supplies, reagents, and equipment). Very infrequently will be required to lift or move objects over 50 lbs (i.e. unloads and mixes reagents or packs up laboratory equipment for shipping and repair).
- Constantly stands to perform some tests, sits on a workbench for extended periods requiring constant repetitive movement when cutting specimens, using an analyzer or viewing specimens through a microscope, or when working on a computer terminal to load samples, examine specimens, record results, or walks to deliver reports/results. Occasionally bends or stretches

and works in awkward positions when performing tests/procedures.

- When performing tests, there is a constant requirement for fine finger and precision work, and to use hand tools that require accurate control and steadiness to prepare samples and to use pipettes, scalpels, and tweezers.

Concentration

- **Visual** concentration is required when performing procedures using a pipette to draw up small quantities of antibodies into test tubes, to review computer screens and analyzers to ensure accurate testing, to view specimens and samples through a microscope for certain procedures, to read digital thermometers, barcode labels, to interpret results of tests, match specimens with slides, label specimens, to match requisitions with specimens, cut tissue sections, and to prepare slides.
- **Auditory** concentration is required to communicate and give information, to listen for alarms on temperature equipment and monitors, timers, or alerts from equipment, and to listen or talk on the telephone.
- There is the need for other sensory demands including **touch** to feel specimens for consistency in order to describe them (i.e. hard, soft, fatty, etc.). Through work with various chemicals and gases (i.e. propane gas, alcohol, acetone, and formaldehyde) **smell** is required to detect possible harmful situations.
- **Repetitive tasks that require alertness** include entering patient data into the computer, measuring similar specimens, performing similar tests and procedures, and using similar instruments. **Higher than normal levels of attentiveness or alertness for the health and safety of others** is required during test set-up to prevent biohazard risks, when handling multiple samples to prevent mix-up, using propane gas, when working with infectious substances and biohazard waste, and reviewing test analysis for accuracy of results.
- There is a **lack of control over the pace of the work** when there are equipment failures and when there are an unpredictable number of tests that have to be performed (i.e. many tests require no appointments). Often there are urgent requests for testing that require various levels of response time (i.e. stat – within one hour; urgent – within two hours; etc., and routine often have a 24 hour turnaround), and to complete reports, and statistics. There are **time pressures and deadlines** to perform emergency requests and there are many **interruptions** from telephone calls and healthcare staff requesting information or testing.
- **Eye/hand coordination** is required to perform laboratory tests/procedures, view specimens under a microscope, and to type on the computer keyboard.
- **Exact results and precision** is required to calculate specimen samples, to measure volumes and weights of reagents, to convert plots and graphs on instruments to numerical values, when choosing the correct blood and products to be transfused, and when using technical procedures such as cutting specimens, diluting antibodies, and using controls.

Complexity

- Work typically involves tasks and activities that are different but allow the use of similar skills and knowledge.
- Complexity of the position varies. Tasks generally are repetitive and well defined, however some tasks are different and unrelated. Some tasks have a limited number of guidelines available for resolution. Problems can be simple where a limited number of solutions exist to select from and they can be addressed by following procedures and/or guidelines. Often there

are problems with a limited opportunity for standardization. Tasks are regularly technical and occasionally they may be unique with some policy significance. Occasionally, tasks require creative problem definition, analysis, and solution development that may be solved in a team setting.

- Typical challenging problems are related to decisions being made regarding interpretation of patient data, distinguishing artifacts/contamination in sterile samples, dealing with incorrect reporting of names on specimens, unusual laboratory results, the suitability of samples for testing, whether to request further testing, and whether the results of a sample are acceptable for release. Other challenges are related to equipment malfunctions, breakdowns, errors in reporting, etc., and identifying those issues and responding or getting appropriate services for repair as quickly as possible.
- Complexities tend to be solved through discussion with the lead technologist, manager, physicians, and coworkers, or to review policy or operational manuals, national guidelines, practices, textbooks, journal articles, internet, and external suppliers/vendors are available to assist with problem solving.

RESPONSIBILITY

Accountability and Decision-Making

- Work tasks are highly monitored and controlled through documentation, checks and balances, monitoring and compliance activities, and occurrence reporting.
- Work is performed independently within the laboratory but collaboratively with the lead technologist in the day-to-day operations of the laboratory.
- Decisions without formal approval can be made as it relates to the ordering of supplies, granting leave and scheduling staff, answering and providing information to staff regarding procedures or policies, etc., sending/receiving blood and blood products from the Canadian Blood Services on flights or courier services, and authorizing air ambulance in extreme emergencies and taxis to collect and deliver blood products. Other decisions made independently include requesting repairs or maintenance on equipment, and decisions related to the types of testing that is performed, adding additional tests to the laboratory process, monitoring and making corrections on laboratory processes, and signing off on results of tests.
- Prior approval would be required to make equipment purchases, to change policies and procedures including SOPs, and to make staff shift and scheduling changes.
- Exercises discretion and judgment to interpret directions and apply guidelines when dealing with routine and problem workload and testing issues. Has some discretion to exercise within predetermined limits and procedures when arranging of the workflow including handling of priority cases, to question reports or samples and have it repeated, or if possible, recollected, calling in staff to work, and ordering supplies.
- Exercises a high degree of independent discretion and judgment when making decisions related to analysing results of tests and testing situations (i.e. changes to procedure, quality and accuracy of specimens, and release of results), when working alone during weekends, and when giving advice to lower level technologists/technicians.

Impact

- Tasks performed have an impact within the immediate work area (i.e. coworkers), department,

in and outside the organization (i.e. doctors offices, clinics, professional community agencies, etc.), and on patients. There is a significant impact felt by the patient when incorrect test results are given to health care providers; thus, impacting the diagnosis and treatment plan. Activities could either negatively or positively impact on the patients well-being.

- Work activities impact equipment (i.e. the laboratory uses a variety of equipment), processes and systems (i.e. testing procedures and quality control activities), information (i.e. results can be beneficial), material resources (i.e. inventory used), health and safety, finances (i.e. supplies that is required and performing tests correctly the first time), human resources, and corporate image.
- Typical examples of mistakes or errors are mix up of samples including patient identification and mislabelling, equipment errors, mix up of reagents, giving incorrect results, and entering incorrect data into reports.
- The impact of a mistake or error, depending on the circumstances, could be moderate to extreme. Tasks are highly monitored and controlled through documentation, checks and balances, monitoring and compliance activities, and occurrence reporting. While errors can be extreme, due to quality control procedures, most are detected by other laboratory technologists or health professionals and are corrected within hours of identification.

Development and Leadership of Others

- Does not provide bargaining level supervision to staff.
- Provides team lead responsibilities which include providing direction, coordination, delegation, feedback on work activities, some staffing activities, and expert advice and guidance to staff, on procedures, tests, and work activities. Other development and leadership activities include providing on-the-job guidance/advice, orientation, and on the job training to staff and students.
- There may be some project related activities and the provision of direction and guidance on those activities (i.e. accreditation standards, new information technology systems, and equipment).

WORKING CONDITIONS

Environmental Working Conditions

- During their work activities there is a requirement to take special precautions and use safety equipment when appropriate. This includes wearing of proper footwear, gloves, masks, goggles, face shields, safety glasses when exposed to chemicals, fume hoods when pouring off reagents and setting up procedures, use proper sharps containers for disposal, be familiar and use eyewash stations, and wear laboratory coats.
- The potential for minor cuts, bruises, abrasions is moderate and there is limited likelihood for injury or illness resulting in partial or total disability, if health and safety procedures are followed.
- Work is typically performed in an open environment and there is constant exposure to lack of privacy, and unusual/distracting noise from diagnostic equipment. There is regular exposure to awkward and confined spaces.
- There is constant exposure to bodily fluids and waste, infectious diseases, sharp objects, and in some laboratory settings odours; regularly this class is exposed to fumes, glare from monitors; and occasionally is exposed to other undesirable environmental working conditions which

includes wet or slippery surfaces, limited lighting and ventilation, hazardous chemicals, and toxic or poisonous substances.