

Job Class Profile: Electroneurophysiology Technologist III**Pay Level: LX-32 Point Band: 857-891**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	6	4	4	6	5	5	5	3	5	
Points	280	67	25	29	150	108	103	64	54	880

JOB SUMMARY

The Electroneurophysiology Technologist III is responsible for performing advanced technical and clinical work and coordinating all activities related to electromyography (EMG) and Nerve Conduction Studies (NCS) across sites. In addition to work performed by the Electroneurophysiology Technologist, is responsible for coordinating functions of the EMG laboratory by planning, organizing, assessing, implementing and evaluating procedures to ensure appropriate outcomes.

Key and Periodic Activities:

- Co-ordinates all functions within the EMG laboratory which includes: coordinating physician schedules; assigning activities for neurologists/lower level technologists by triaging referrals and evaluating workload to establish priorities with inpatients/outpatients; organizing EMG clinics and ensuring efficient use of resources.
- Performs specialized procedures directly on patients including compiling patient histories, and conducting physical assessments/examinations to determine and design appropriate testing.
- Performs systematic evaluations related to nerve, neuromuscular junction and muscle disorders. This involves invasive needle EMG exams as well as routine and advanced NCS.
- Prepares interpretive reports for Neurologist and management.
- Teaches and demonstrates neuromuscular diagnostic procedures to students, medical residents, technologists, as well as other professional staff.
- Searches literature regarding patient diagnosis and educates patients of disorders of neuromuscular transmission.
- Conducts EMG clinics across the Province in conjunction with Neurologist.
- Supervises the ordering and purchasing of supplies for the EMG lab.
- Collaborates with Neurologists and management in development and evaluation of new policies and procedures.
- Prepares tender specifications and evaluates and selects new equipment in conjunction with the Supervisor.
- Evaluates and implements policies related to EMG/NCS testing operations.
- Identifies and participates in ongoing educational programs.
- Performs EEG and Evoked Potentials testing.

SKILL

Knowledge

General and Specific Knowledge:

- Knowledge of:
 - The peripheral nervous system and neuromuscular diseases.
 - Organizational policies and procedures and policy development techniques.
- Current knowledge of research in best practices.

Formal Education and/or Certification(s):

Minimum: Certification with the "Board of Registration of Electromyography Technologists of Canada". (EMG/NCS) In order to participate in the examination an individual must be a member of the AETC and must have completed a variety of unassisted nerve conduction studies on at least one thousand patients; and Certification with the "Canadian Board of Registration of Electroencephalography Technologists". (EEG). EEG Technologists in Canada are trained either through college diploma programs in Neurophysiology or in-hospital EEG training programs.

Hospital-Based Programs: must include 10 hours of didactic instruction per week for student technologists; have at least one (1) C.B.R.E.T. Inc., Registered Technologist; and have a full time or major part-time Electroencephalographer who is an M.D. and a member of the C.S.C.N..

College Diploma Programs must include a minimum of 500 hours of EEG instruction.

There is currently a 2 year Diploma of Technology in Electroneurophysiology Program. After a period of work experience in a clinical situation, graduates are eligible to write the Technologist Registration examinations of the appropriate certifying body in their chosen fields of interest

Years of Experience:

- Minimum: 3-4 year of experience.

Competencies:

- Client care.
- Follow guidelines and processes.
- Written and oral communication skills.
- Presentation techniques.
- Computer operation and equipment calibration and troubleshooting.

Interpersonal Skills

- A range of interpersonal skills are used including asking questions and listening to take a concise history from patients, listening to complaints and being approachable. Must be comforting and nurturing to discuss exam findings and laboratory results with patients who may be sensitive and upset where there is a need for positive and supportive communication. Need to communicate effectively for teaching/demonstrating and be approachable by students.
- Communications occur with patients, students, medical residents, other technologists, other professional staff within and outside the organization, and supervisor/manager.
- The most significant contacts are with patients regarding diagnosis and education; supervisor/management regarding reports, selecting new equipment, and evaluating policies; students/medical residents/technologists and other professional staff while teaching and demonstrating procedures; and neurologists regarding interpretive reports.

EFFORT

Physical Effort
<ul style="list-style-type: none"> — Occasionally exerts physical effort which causes fatigue requiring periods of rest. — Occasionally lifts and moves objects over 50 lbs in the form of portable equipment needed at multiple sites and sometimes transfers or lifts patients. — There is a regular requirement to sit to operate equipment, interview patients and write reports. There is a constant need for fine motor skills to deliver electrical stimulus to peripheral nerves or to insert electrode invasively into human muscle.
Concentration
<ul style="list-style-type: none"> — Visual concentration is required for proper data acquisition in the form of graphs and moving waveforms on a computer screen, to interpret and troubleshoot numbers in tables and graphs and to stare at a computer screen for extended periods of time. — Auditory concentration is required to listen to what a patient is saying and when listening for EMG abnormalities, to hear specific and unique auditory sounds associated with neurogenic and myopathic neuromuscular abnormalities. — Higher than normal levels of attentiveness are required when entering test result data and when reviewing medical charts. Attentiveness to ensure the health and safety of others is required when inserting needles and when using electrical stimulus. — Experiences time pressures and interruptions when critical illness requires urgent attention to confirm disease, facilitate treatment, and when liaising with other disciplines to accommodate urgent patients. — Eye/hand coordination is required when inserting needle electrodes into human muscle and simultaneously to watch/interpret real time EMG data. — Exact results and precision are required when interpreting EMG/NCS data as waveform and chart analysis. Also analyzes potentials in mv/uv range as well as varying frequency and phases which requires precision. Precision is required for accurate needle EMG insertion into human skeletal muscle and for accurate electrode placement and electrical stimulus over peripheral nerves.
Complexity
<ul style="list-style-type: none"> — Performs a series of tasks that are different/unrelated and require the use of a broad range of skills and diversity of knowledge including performing technical and clinical work, coordinating activities related to EMG and Nerve Conduction Studies across sites, teaching students/medical residents, technologists, etc. and other administrative functions such as ordering and purchasing supplies, preparing tender specifications and evaluating equipment in conjunction with supervisor. — The most typical challenge is a patient presenting with symptoms that do not fit with the common neuromuscular syndromes. In this case, assesses, utilizes knowledge of the peripheral nervous system to create a differential diagnosis, designs a tailored NCS/EMG study and try to find supportive evidence for a clinical diagnosis. These situations will arise a few times per month. — Resources such as national technical standards, professional practice guidelines, scientific papers and literature searches are available if required.

RESPONSIBILITY

Accountability and Decision-Making
<ul style="list-style-type: none"> — Work tasks and activities are moderately prescribed and controlled. Work is performed independently in conjunction with neurologists and under the general direction of the manager. — Authority to order supplies, triage patient referrals, assign/delegate referrals to physicians, and assign/delegate tasks to junior staff without formal approval. — Has discretion to exercise within predetermined limits when determining appropriate testing for individual patients, interpreting test results supportive of diagnosis, and discuss diagnosis with patients. — Uses discretion and judgement to decide appropriate timeline to be seen when triaging referrals, to distinguish appropriate testing required when assessing patients and when obtaining a medical history, determining when to consult with appropriate health care professionals, and when to refer patients for other types of testing and consultations. — Exercises a high degree of independent discretion and judgement when determining tests to be completed and interpreting completed tests, relaying and discussing patient results with appropriate health care professionals and patients, and when triaging.
Impact
<ul style="list-style-type: none"> — Work tasks impact within immediate work area and department, outside the department/organization and on patients. — Work tasks also impact equipment (preparing specifications and selecting new equipment); finances and material resources (ordering and purchasing supplies); human resources (teaching students, medical residents, technologists and other professional staff on procedures); and health and safety of patients. — The most significant impact of errors or mistakes is the safety and health of patients. False positive and false negative results can be associated with the work activities; therefore, there is a need to be attentive and aware to recognize errors so results are not altered with potential impact to patients. If errors are made, laboratory data may be altered and interpreted incorrectly and subsequently impact a patient's diagnosis and/or treatment. — Errors will normally be detected and corrected within hours of occurrence.
Development and Leadership of Others
<ul style="list-style-type: none"> — There is no supervision of staff, as it works independently. — As the only EMG technologist in the province must demonstrate technical leadership, routinely teach residents/medical students and other professional staff by designing a teaching document/program for technologist training. Coordinates physician schedules and workload and maintains effective interdisciplinary communication by liaising with other disciplines. — As a team lead, liaises with users to plan and assign clinics and services, organizes EMG clinics to ensure resources are used appropriately and is expected to monitor daily processes, recognize and address areas of operational deficiency, and perform ongoing training and development.

WORKING CONDITIONS**Environmental Working Conditions**

- There is a requirement to practice electrical testing and universal safety precautions and are required to wear gloves regularly. For patients in isolation, must wear gowns, gloves and masks.
- There is a limited likelihood of minor cuts, bruises, abrasions, minor illnesses, fractures or other injuries or other more severe injuries or illnesses resulting in partial or total disability.
- Constantly exposed to electrical shocks from the use of equipment; regularly exposed to sharp objects and odours associated with an inpatient hospital setting; and is occasionally exposed to a variety of undesirable conditions with the most unpleasant being bodily fluids and infectious disease during invasive testing on patients and exposure to ethanol fumes.