

The Regulation of Medical Laboratory Technologists (MLTs) in Canada: Safeguarding Public Interest and Ensuring Quality Healthcare

Every day, Medical Laboratory Technologists (MLTs) in Canada play pivotal roles in early disease detection, uncovering rare conditions, epidemic control, and averting misdiagnoses. Behind these accomplishments lie robust regulatory standards that ensure the highest level of competence and professionalism among MLTs. Here are some examples that illustrate the impact that regulated MLTs can have on patient care and public health:

- Consider an MLT who discovered a slight but consistent rise in a patient's white blood cell count, a trend that went unnoticed as it was still within the normal range. It was the MLT's diligence and competency, reinforced by regulatory standards, that led to the early detection of a form of leukemia. Without regulation to ensure education and skills standards, this could have been overlooked, delaying critical treatment, and affecting the patient's prognosis.
- Next, let's look at the case of an MLT analyzing genetic material during a prenatal screening. This
 MLT found a rare chromosomal abnormality suggesting a possible genetic disorder. As a result,
 the medical team was able to prepare a detailed care plan before the baby's birth, significantly
 enhancing the child's health outcomes. Without educational requirements and professional
 standards set by regulatory bodies the abnormality might be overlooked.
- During a local outbreak of an infectious disease, the prompt and accurate identification of the specific strain of bacteria causing the illness by an MLT reflects the high standards of practice and competency assessments enforced by regulatory bodies. The rapid and precise response allowed healthcare officials to track the source of the infection and implement control measures, highlighting how MLTs, backed by rigorous regulation, can influence public health.
- Last, consider a patient suspected of a particular diagnosis based on their symptoms. However, the MLT processing the patient's samples identified a different possible diagnosis while conducting a microscopic analysis of the blood. This prompted the MLT to add additional testing based on their findings to establish the diagnosis. It was the MLT's education and clinical experience, mandated by regulatory standards, that led to the evaluation of the case, resulting in the correct diagnosis and treatment.



Context

Medical laboratory technologists (MLTs) play a critical role in the Canadian healthcare system, conducting laboratory investigations on patient samples and providing information for the diagnosis, prevention, and treatment of disease. This work demands a high level of competence, professionalism, and accountability. Although it is not always obvious to the public, professional regulation of medical laboratory technologists is essential to protect the public and ensure the highest quality of care. This article explains the significance of these regulations and provides examples of how the regulations protect public interest.

History of Regulation in Canada

The landscape of occupation-specific regulation in Canada has evolved significantly over the years, with a focus on maintaining professional standards, protecting the public, and adapting to societal and sector-specific changes.¹ Professional regulation in Canada traces its history to the 19th century with provincial legislation establishing regulatory bodies that were given the mandate, responsibilities, and powers to protect the public interest. This function has expanded over time to include ensuring that professionals are competent and ethical, and to give the regulatory bodies the power to oversee and discipline members of the profession. Over the last quarter century, regulatory bodies have also been engaged in efforts to achieve inter-jurisdictional coordination to improve labor mobility across provincial and territorial boundaries.²

There is a social contract between governments and self-regulating professional bodies where the government grants professions the privilege to regulate themselves in exchange for the profession's commitment to serve and protect the public interest above all else. The key concepts underpinning the contract are public interest, professional autonomy, accountability, and transparency.

Self-regulating professions are given the autonomy to set their own standards of practice and conduct, establish educational requirements, and oversee the competence and ethical behavior of their members. In exchange for this autonomy, these professions commit to prioritize the public interest by ensuring high professional standards, promoting ethical conduct, providing quality services, and responding to societal needs and expectations.

The professions agree to make their services accessible and fair to all members of society and commit to upholding fair procedures for licensing and disciplinary actions. They must be accountable to the public

¹ For an historical overview of the preparation of medical laboratory technologists see Twohig, Peter L. "Education, Expertise, Experience and the Making of Hospital Workers in Canada, 1920-1960." Scientia Canadensis, 29 (2), 2006, p. 131–153. https://doi.org/10.7202/800522ar provides.

² <u>https://www.canada.ca/en/employment-social-development/programs/labour-mobility.html</u>



by enforcing rigorous standards and disciplinary procedures and by being transparent in their decisionmaking processes.

The social contract allows the government to delegate regulatory responsibilities to those with specialized knowledge, while still ensuring the protection of public welfare. The government retains an oversight role, typically through legislation and ministerial powers, to ensure that the self-regulating profession is upholding its end of the contract. The social contract can be revised or revoked, however, if the profession fails to meet its responsibilities. In such cases, the government may intervene to make changes or assume direct control over the regulation of the profession. This makes it clear that self-regulation is a privilege granted by society, requiring the profession to continually earn public trust by demonstrating its commitment to the public interest.

The importance of accurate laboratory investigations and the risks associated with unregulated professionals

An important aspect of upholding the public interest is providing quality healthcare, with accurate diagnosis being its cornerstone. The quality of laboratory investigations has a significant impact on the diagnostic process. Errors in the laboratory can lead to misdiagnosis, delayed treatment, and adverse health outcomes. Consequently, the expertise and competence of medical laboratory technologists are crucial to ensure the best quality health care.

The absence of stringent regulation and verification of the qualifications of MLTs poses a substantial risk to public health and safety. Relying solely on employer verification of educational credentials could potentially be problematic. Economic constraints and staffing shortages might prompt some employers to hire individuals who lack the necessary education and competencies to carry out the tasks properly and safely. Relying solely on employer reviews of credentials can lead to inconsistency in the standard of practice, as different employers may have varying standards. The MLT regulators across Canada strive to maintain national standards to ensure consistent, safe, ethical practice and facilitate labour mobility.

The Role of Regulatory Bodies

Registration (licensing)

Regulatory bodies in Canada are responsible for registering (licensing) medical laboratory technologists. These organizations establish standards for education, clinical experience, competency, and continuing professional education, ensuring that only qualified individuals can practice in the field. The registration process includes an evaluation of applicant credentials and assessment of their competence and knowledge before individuals can begin their employment as medical laboratory technologists.



Code of ethics and professional standards of practice

The provincial bodies that regulate the profession also enforce codes of ethics and professional standards of practice, helping to guide medical laboratory technologists in making responsible decisions in the best interests of the public. Adherence to these standards helps ensure that technologists maintain the highest standards of practice and contribute to a culture of trust and accountability.

Disciplinary action

Regulatory bodies have the authority to investigate and take appropriate disciplinary action in cases where a medical laboratory technologist's conduct or competence is called into question. This process helps protect the public by holding professionals accountable and maintaining the integrity of the profession.

How Regulation Protects the Public

Competency assessment and evaluation

Competency assessment is one of the several ways that professional regulation helps to ensure highquality services and public safety.

Standardization of education and competency

MLT regulatory bodies establish and enforce standards for education programs that help to ensure that medical laboratory technologists possess the necessary knowledge, skill, and judgement to provide accurate, reliable services. This standardization ensures that all technologists, regardless of location or educational program, meet a defensible level of competence.

Canadian MLT regulatory bodies are currently working together under the auspices of the Canadian Alliance of Medical Laboratory Professionals Regulators to develop entry-to-practice competency standards for medical laboratory technologists that reflect the current demands of the profession. This collaboration is focused on ensuring that applicants, regardless of their international or non-traditional education backgrounds, meet current standards of practice in a field that is rapidly evolving.

Continuing competence

Regulatory bodies establish continuing competence requirements. Items such as ccontinuing professional education help ensure that medical laboratory technologists stay current with advances in technology, diagnostic techniques, and best practices. This ongoing education supports the delivery of high-quality care and minimizes the risk of errors.



Protection of privacy

Regulatory bodies develop and enforce guidelines related to patient privacy and confidentiality, ensuring that medical laboratory technologists handle sensitive patient information with care and discretion. This protection of patient privacy is crucial for maintaining trust in the healthcare system.

Addressing complaints and disciplinary action

Regulatory bodies investigate and address complaints regarding the conduct or competence of medical laboratory technologists. If a regulatory body determines that a technologist's conduct or competence falls short of expected standards, it may impose sanctions or requirements such as additional education, supervised practice, practice monitoring, suspension, limits or conditions of practice, or removal from the provincial register. This process ensures that the public is protected and that medical laboratory technologists maintain the highest standards of professionalism.

Conclusion

Regulation of medical laboratory technologists is essential for safeguarding public interest and ensuring quality healthcare in Canada. Regulatory bodies establish and enforce standards for education, clinical experience, professional conduct, and competence, ensuring that medical laboratory technologists possess the necessary knowledge and skills, adhere to ethical guidelines, and maintain a commitment to quality. These regulations protect the public interest, maintain trust in the healthcare system, and promote patient safety. With the oversight of regulatory bodies, medical laboratory technologists contribute to the overall well-being of Canadians by providing accurate diagnostic information to support their healthcare.