

Effective for residents who enter training on or after July 1, 2018.

NOTE: Throughout this document, references to stakeholders are intended to include persons from one or more of the following groups: families of the deceased, law enforcement personnel, legal professionals, or others involved in medico-legal investigations or legal proceedings.

Throughout this document, references to lawyers are intended to include Crown attorneys and defense counsel.

DEFINITION

Forensic Pathology is a medical subspecialty of Anatomical Pathology and General Pathology that applies pathologic principles and methodologies to support the medico-legal and judicial systems in determining cause and manner of death, support the investigation of circumstances surrounding deaths, and assist in the interpretation of post-mortem findings of medico-legal significance. These principles may also be applied to injuries in the living.

FORENSIC PATHOLOGY PRACTICE

Forensic Pathologists serve the public by providing unbiased, evidence-informed opinions based on the findings of medico-legal investigations. This work is of relevance to a broad group of stakeholders that includes families of the deceased, law enforcement personnel, legal professionals, or others involved in medico-legal investigations or legal proceedings. Canadian jurisdictions operate within one of two death investigation systems: a coroner system, in which the pathologist assists the coroner by performing an autopsy and determining the cause of death; or a medical examiner system, in which the Forensic Pathologist oversees death investigations and certifies deaths, in addition to performing post-mortem examinations.

The findings of medico-legal death investigations can impact the health and safety of vulnerable populations and society at large. Forensic Pathologists engage with various agencies concerned with public safety, acting as advocates for measures to prevent injuries and untimely deaths. Public safety, government policy, health research funding, and legal issues are informed by the work of Forensic Pathologists who can assess deaths in an unbiased manner and provide evidence-informed opinions.

Forensic Pathologists function as expert consultants to coroners, law enforcement personnel, judges, lawyers, and other physicians. They consult and collaborate with other medical specialists such as neuropathologists, cardiac pathologists, and pediatric

pathologists, as well as other forensic experts. Forensic Pathologists may practise in academic health centres, major regional hospitals, or centralized forensic pathology units.

ELIGIBILITY REQUIREMENTS

Royal College certification in Anatomical Pathology or General Pathology, or enrolment in a Royal College-accredited residency program in these areas (see requirements for these qualifications). All candidates must be certified in Anatomical Pathology or General Pathology in order to be eligible to write the Royal College examination in Forensic Pathology.

FORENSIC PATHOLOGY COMPETENCIES

Medical Expert

Definition:

As *Medical Experts*, Forensic Pathologists integrate all of the CanMEDS Roles, applying medical knowledge, clinical skills, and professional values in their provision of high-quality and safe delivery of services. Medical Expert is the central physician Role in the CanMEDS Framework and defines the physician's clinical scope of practice.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Practise medicine within their defined scope of practice and expertise

- 1.1. Demonstrate a commitment to high-quality delivery of services
- 1.2. Integrate the CanMEDS Intrinsic Roles into their practice of Forensic Pathology
- 1.3. Apply knowledge of the clinical and biomedical sciences, as well as issues of medical jurisprudence, relevant to forensic pathology
 - 1.3.1. Anatomy and physiology
 - 1.3.2. The basis for and appearance of post-mortem changes and embalming artifacts
 - 1.3.3. Principles of histology and pathophysiology as they relate to death investigations
 - 1.3.4. Principles of the various fields of forensic sciences, including but not limited to toxicology, chemistry, biology (including DNA testing), firearm and tool mark examination, entomology, forensic photography, blood pattern analysis, fingerprint analysis, trace evidence, and alternate light source examinations
 - 1.3.5. Principles of the interpretation of toxicological results
 - 1.3.6. Principles of forensic neuropathology, forensic anthropology, and forensic odontology
 - 1.3.7. Principles of the various types of death investigation systems in Canada
 - 1.3.8. Principles of death investigation and the role of the post-mortem examination in such investigations

- 1.3.9. Sections of the Criminal Code of Canada relevant to Forensic Pathology
- 1.3.10. Principles of consent, privacy, and confidentiality
- 1.3.11. Relevant laws and regulations in relation to tissue/organ procurement and tissue retention
- 1.4. Perform appropriately timed assessments with evidence-informed opinions that are presented in an organized manner
 - 1.4.1. Function in the role of a Forensic Pathologist at the scene of a fatality
 - 1.4.2. Conduct a death investigation
 - 1.4.3. Act as a consultant to clinical colleagues, coroners, law enforcement personnel, judges, and lawyers, on the interpretation and relevance of pathological findings
- 1.5. Carry out professional duties in the face of multiple competing demands
- 1.6. Recognize and respond to the complexity, uncertainty, and ambiguity inherent in the practice of forensic pathology
 - 1.6.1. Describe the information and limitations that pathological findings can provide, including but not limited to determination of time of death
- 2. Conduct a death investigation, including determination of the identification of the deceased, and the cause and manner of death**
 - 2.1. Prioritize issues to be addressed in a forensic encounter
 - 2.1.1. Determine whether organ and tissue donation is permissible
 - 2.2. Assess a death scene
 - 2.3. Establish identification of the deceased, with consultation where appropriate
 - 2.3.1. Establishment of identification in multiple victim fatalities with appropriate consultations
 - 2.4. Maintain the chain of custody of evidence
 - 2.5. Perform a complete post-mortem examination in a range of natural and unnatural deaths, with appropriate description of the external and internal findings, including gross and microscopic examinations. This includes the following:
 - 2.5.1. Review of the death scene information and clinical history
 - 2.5.2. Establishment of the identity of the body
 - 2.5.3. External examination of the body
 - 2.5.4. Identification of the circumstances wherein toxicological and other ancillary investigations/tests may be appropriate, and application of the procedures for sampling tissues, fluids and other evidence for these additional investigations

- 2.5.5. Recognition of the need for consultations, including but not limited to neuropathology, cardiovascular pathology, forensic anthropology, and/or forensic odontology, and retention of appropriate specimens
 - 2.5.6. Evisceration of organs and gross dissection
 - 2.5.7. Performance of special examinations and/or dissections, and sample procurement
 - 2.5.8. Examination of tissues microscopically
 - 2.5.9. Preparation of written descriptions of the findings
 - 2.5.10. Review of toxicology and/or other ancillary test results
 - 2.5.11. Interpretation of post-mortem findings in light of the clinical history and/or scene investigation and appreciation of potential limitations of such interpretations
 - 2.5.12. Formulation of conclusions regarding cause, manner, and mechanism of death, using an evidence-informed approach
- 2.6. Obtain photographic documentation of the post-mortem examination

3. Plan and perform procedures for the purpose of death investigation

- 3.1. Determine the most appropriate procedures to accurately assess cause, manner, and mechanism of death
- 3.2. Ensure appropriate legal authority is obtained for procedures
- 3.3. Prioritize a procedure, taking into account available resources
- 3.4. Perform a procedure in a skillful and safe manner, adapting to unanticipated findings or changing clinical circumstances
 - 3.4.1. Opening the calvarium, and removal of the brain
 - 3.4.2. Collection of cerebral spinal fluid
 - 3.4.3. Removal of the spinal cord
 - 3.4.4. Exposure of the optic nerves and posterior eyes, or removal of the eyes, as necessary
 - 3.4.5. Examination of the middle ear
 - 3.4.6. Dissection of the face
 - 3.4.7. Anterior layer-by-layer dissection of the neck with tongue removal
 - 3.4.8. Dissection of the posterior neck
 - 3.4.9. Evaluation of the vertebral artery
 - 3.4.10. Evaluation of the cardiac conduction system
 - 3.4.11. Layered dissection of the anterior and/or posterior torso
 - 3.4.12. Dissection of the extremities
 - 3.4.13. Removal of the testes

- 3.4.14. Dissection of the perineum and pelvic block
- 3.4.15. Pediatric autopsy techniques
- 3.4.16. Examination of the placenta

4. Establish plans for ongoing cases and, when appropriate, timely consultation

- 4.1. Implement an action plan that supports ongoing cases, follow-up on investigations, response to stakeholder needs, and further consultation

5. Actively contribute, as an individual and as a member of a team, to the continuous improvement of death investigation

- 5.1. Recognize and respond to errors in death investigation
 - 5.1.1. Prevent contamination of the death scene
- 5.2. Adopt strategies that promote safety and address human and system factors
 - 5.2.1. Describe CBRNE (chemical, biological, radiological, nuclear, and explosive) safety considerations for post-mortem examinations
 - 5.2.2. Demonstrate knowledge of reportable and communicable infectious diseases, and determine the need for communication with the appropriate authorities

Communicator

Definition:

As *Communicators*, Forensic Pathologists form relationships with stakeholders, which may include families, to facilitate the gathering and sharing of essential information for effective delivery of service.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Establish professional relationships with stakeholders

- 1.1. Communicate using an approach that encourages trust and is characterized by empathy, respect, and compassion
- 1.2. Optimize the physical environment for the dignity and privacy of the deceased person
- 1.3. Recognize when the values, biases, or perspectives of stakeholders or health care professionals may have an impact on the quality of services
- 1.4. Manage disagreements and emotionally charged conversations
- 1.5. Adapt to the unique needs and preferences of stakeholders and to their circumstances

- 1.5.1. Apply knowledge of cultural and religious accommodations in scheduling and selection of techniques for post-mortem examinations and death investigations, while ensuring that the death investigation is not compromised

2. Elicit and synthesize accurate and relevant information

- 2.1. Seek and synthesize relevant information from a variety of sources, including stakeholders and other experts

3. Share death investigation information with stakeholders, where appropriate

- 3.1. Share information and provide explanations that are clear, accurate, and timely, while assessing for understanding

4. Document and share written and electronic information about the death investigation to optimize decision-making, confidentiality, and privacy

- 4.1. Document death investigations in an accurate, complete, timely, and accessible manner, in compliance with regulatory and legal requirements
 - 4.1.1. Communicate post-mortem findings
- 4.2. Communicate effectively using written, electronic, or other digital technology
- 4.3. Share information with stakeholders and others in a manner that respects privacy and confidentiality and enhances understanding
 - 4.3.1. Communicate information appropriately, including evidence-informed opinions and conclusions, to law enforcement personnel, coroners/medical examiners, and lawyers

Collaborator

Definition:

As *Collaborators*, Forensic Pathologists work effectively in a medico-legal team to achieve optimal delivery of services.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Work effectively with physicians and other colleagues in the medico-legal team

- 1.1. Establish and maintain positive relationships with physicians and other colleagues in the medico-legal team to support collaborative services
- 1.2. Negotiate overlapping and shared responsibilities with physicians and other colleagues in the medico-legal team
- 1.3. Engage in respectful shared decision-making with physicians and other colleagues in the medico-legal team

- 1.3.1. Demonstrate an interprofessional approach for a death investigation in collaboration with other members of the medico-legal team
- 1.3.2. Participate in death investigation team meetings when needed, demonstrating the ability to consider and respect the opinion of other team members
- 1.3.3. Use referral and consultation as opportunities to improve quality of death investigation and outcomes by sharing expertise

2. Work with physicians and other colleagues in the medico-legal team to promote understanding, manage differences, and resolve conflicts

- 2.1. Show respect toward collaborators
- 2.2. Implement strategies to promote understanding, manage differences, and resolve conflict in a manner that supports a collaborative culture
 - 2.2.1. Demonstrate awareness of medico-legal death investigation as a collaborative effort between individuals and groups with different skills and experience working toward a common goal

Leader

Definition:

As *Leaders*, Forensic Pathologists engage with others to contribute to a vision of high-quality medico-legal and health care systems and take responsibility for the delivery of excellent services through their activities as physicians, administrators, scholars or teachers.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Contribute to the improvement of the death investigation system

- 1.1. Apply the science of quality improvement to contribute to improving death investigations
- 1.2. Contribute to a culture that promotes safety
 - 1.2.1. Apply the principles of laboratory safety and universal precautions
- 1.3. Analyze safety incidents to enhance systems of care
- 1.4. Use informatics to improve the quality of death investigations

2. Engage in the stewardship of resources

- 2.1. Allocate resources for optimal delivery of services
- 2.2. Apply evidence and management processes to achieve cost-appropriate services

3. Demonstrate leadership in professional practice

- 3.1. Demonstrate leadership skills to enhance medico-legal or health care systems
 - 3.1.1. Describe the principles of laboratory management
 - 3.1.2. Engage personnel and procedures effectively in death investigations, including but not limited to maintaining the legal chain of custody of evidence
- 3.2. Facilitate change in forensic pathology procedures and investigative approaches to enhance services and outcomes

4. Manage career planning, finances, and human resources

- 4.1. Set priorities and manage time to integrate practice and personal life
 - 4.1.1. Complete clinical responsibilities in a timely fashion
- 4.2. Manage a career and a practice
 - 4.2.1. Develop and maintain a curriculum vitae with formatting and content appropriate for use in medico-legal proceedings
- 4.3. Implement processes to ensure personal practice improvement
 - 4.3.1. Apply the methods of professional quality assurance to Forensic Pathology practice

Health Advocate

Definition:

As *Health Advocates*, Forensic Pathologists contribute their expertise and influence as they work with communities or populations to improve health. They work with those they serve to determine and understand needs, speak on behalf of others when required, and support the mobilization of resources to effect change.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Respond to health needs by advocating within and beyond the death investigation system

- 1.1. Incorporate disease prevention, health promotion, and health surveillance into interactions with individual cases
 - 1.1.1. Identify hereditary diseases and inform family members to protect the health of living relatives

2. Respond to the needs of the communities or populations they serve by advocating with them for system-level change in a socially accountable manner

- 2.1. Contribute to a process to improve health in the community or population they serve
 - 2.1.1. Contribute to mortality surveillance systems to reduce population mortality and morbidity
 - 2.1.2. Collaborate with public health officials to identify threats to public health

Scholar

Definition:

As *Scholars*, Forensic Pathologists demonstrate a lifelong commitment to excellence in practice through continuous learning, and by teaching others, evaluating evidence, and contributing to scholarship.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Engage in the continuous enhancement of their professional activities through ongoing learning

- 1.1. Develop, implement, monitor, and revise a personal learning plan to enhance professional practice
- 1.2. Identify opportunities for learning and improvement by regularly reflecting on and assessing their performance using various internal and external data sources
 - 1.2.1. Participate in peer review for purposes of personal practice improvement
- 1.3. Engage in collaborative learning to continuously improve personal practice and contribute to collective improvements in practice

2. Teach students, residents, the public, other health care professionals, and members of the medico-legal team

- 2.1. Recognize the influence of role-modelling and the impact of the formal, informal, and hidden curriculum on learners
- 2.2. Promote a safe learning environment
- 2.3. Ensure integrity of the death investigation is maintained when learners are involved
- 2.4. Plan and deliver learning activities
 - 2.4.1. Identify the learning needs and desired learning outcomes of others collaboratively, including but not limited to peers, junior learners, law enforcement personnel, coroners/medical examiners, lawyers, and other members of the medico-legal team
- 2.5. Provide feedback to enhance learning and performance

- 2.6. Assess and evaluate learners, teachers, and programs in an educationally appropriate manner

3. Integrate best available evidence into practice

- 3.1. Recognize practice uncertainty and knowledge gaps in medico-legal and other professional encounters, and generate focused questions that can address them
- 3.2. Identify, select, and navigate pre-appraised resources
- 3.3. Critically evaluate the integrity, reliability, and applicability of medico-legal research and literature
- 3.4. Integrate evidence into decision-making

4. Contribute to the creation and dissemination of knowledge and practices applicable to Forensic Pathology

- 4.1. Demonstrate an understanding of the scientific principles of research and scholarly inquiry and the role of research evidence in Forensic Pathology
- 4.2. Identify ethical principles for research and incorporate them into obtaining ethics approval and permission from the custodian of the mortality database (e.g., the chief coroner or chief medical examiner), considering potential harms and benefits, and considering vulnerable populations
- 4.3. Contribute to the work of a research program
- 4.4. Pose questions amenable to scholarly investigation and select appropriate methods to address them
- 4.5. Summarize and communicate to professional and lay audiences the findings of relevant research and scholarly inquiry

Professional

Definition:

As *Professionals*, Forensic Pathologists are committed to the integrity of the medico-legal and health systems, and the well-being of society through ethical practice, high personal standards of behaviour, accountability to the profession and society, physician-led regulation, and maintenance of personal health.

Key and Enabling Competencies: Forensic Pathologists are able to...

1. Demonstrate a commitment to death investigations by applying best practices and adhering to high ethical standards

- 1.1. Exhibit appropriate professional behaviours and relationships in all aspects of practice, demonstrating honesty, integrity, humility, commitment, compassion, respect, altruism, respect for diversity, and maintenance of confidentiality
 - 1.1.1. Demonstrate respect for the deceased and the death investigation in publications and teaching presentations

- 1.2. Demonstrate a commitment to excellence in all aspects of practice
 - 1.2.1. Demonstrate an appreciation of the limitations of certain findings, individual professional limitations, and the necessity of seeking appropriate second opinions
 - 1.2.2. Recognize the need for a balanced approach when addressing controversial issues and/or competing findings and presenting forensic pathology information in the medico-legal setting
 - 1.3. Recognize and respond to ethical issues encountered in practice
 - 1.3.1. Ethical issues in organ retention
 - 1.4. Recognize and manage conflicts of interest
 - 1.5. Exhibit professional behaviours in the use of technology-enabled communication
- 2. Demonstrate a commitment to society by recognizing and responding to societal expectations in death investigations**
- 2.1. Demonstrate accountability to stakeholders, society, and the profession by responding to societal expectations of physicians
 - 2.2. Demonstrate a commitment to public safety and quality improvement
- 3. Demonstrate a commitment to the profession by adhering to standards and participating in physician-led regulation**
- 3.1. Fulfil and adhere to the professional and ethical codes, standards of practice, and laws governing practice
 - 3.1.1. Fulfil the requirements of the physician's duty to report, including but not limited to communicable disease, and suspected child, domestic, or elder abuse
 - 3.1.2. Demonstrate an understanding of criminal, civil, and inquest procedures, the role of the Crown and the defense, and the rules of evidence
 - 3.1.3. Meet legal, ethical, procedural, and behavioural requirements when testifying
 - 3.2. Recognize and respond to unprofessional and unethical behaviours in physicians and colleagues in the death investigation system
 - 3.3. Participate in peer assessment and standard setting
 - 3.3.1. Demonstrate a commitment to excellence in the discipline by participating in regular peer review

- 4. Demonstrate a commitment to physician health and well-being to foster optimal delivery of services**
 - 4.1. Exhibit self-awareness and manage influences on personal well-being and professional performance
 - 4.2. Manage personal and professional demands for a sustainable practice throughout the physician life cycle
 - 4.3. Promote a culture that recognizes, supports, and responds effectively to colleagues in need

This document is to be reviewed by the Specialty Committee in Forensic Pathology by December 31, 2019.

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