Chapter 3

Section

3.08

Ministry of the Solicitor General

Office of the Chief Coroner and Ontario Forensic Pathology Service

1.0 Summary

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) that operates within the Ministry of the Solicitor General has a broad mission to conduct high-quality death investigations that support the administration of justice and the prevention of premature death. The Office conducts investigations and inquests to ensure that no death will be overlooked, concealed or ignored, and establishes death review committees that have specialized expertise in certain types of deaths to support death investigations. Recommendations made through these processes help improve public safety and prevent death in similar circumstances.

Since 2009, the Office has been led by both a Chief Coroner, responsible for death investigations and the work of coroners and inquests, and a Chief Forensic Pathologist, responsible for the work of forensic pathologists and pathologists who perform autopsies. The Office's total expenditures for both coroner and pathology services in 2018/19 were about \$47 million. It employs about 131 permanent, full-time staff, and through fee-for-service arrangements, about 350 licensed physicians who work as coroners and about 100 pathologists and forensic pathologists. In 2018, the Office conducted about 17,000 death investigations. In almost half of these cases, an autopsy was performed.

Coroners perform death investigations for types of deaths defined by the *Coroners Act* (Act)—mostly those that are sudden and unexpected. Coroners in Ontario are physicians, or medical doctors, who usually have a medical practice in addition to their fee-for-service work as coroners. Currently about 70% of the about 350 licensed physicians who work as coroners have a background in family medicine.

Coroners investigate to answer five key questions: who is the deceased, when did the death occur, where did the death occur, how did the person die, and by what means (also called "manner of death"), such as whether the death will be classified as natural, accidental, a homicide or a suicide. When a manner of death cannot be determined based on available facts, the coroner will determine the manner of death to be undetermined. In almost half of all death investigations, coroners ordered additional tests, most often an autopsy, because they could not answer these five questions after an initial assessment. The 117 pathologists and forensic pathologists in Ontario who perform autopsies are physicians who specialize in disease and injury. The police, the criminal justice system and the family of the deceased rely on the findings of the Office, particularly death investigation reports after a sudden or unexpected death occurs.

In some cases, most of which are defined in the Act, the Office holds an inquest. Cases may also be forwarded to a death review committee for additional review. The Office has five specialized

committees—for example, for deaths of children and youth and deaths that result from domestic violence. The Death Investigation Oversight Council oversees the Office. It provides non-binding recommendations to the Office on a wide range of areas including finance, strategy and quality assurance.

Overall, our audit found that the Office does not have effective processes to demonstrate that its coroners and pathologists consistently conduct high-quality death investigations, and does not sufficiently analyze data or follow up on the implementation of its recommendations to improve public safety and to help prevent further deaths.

We found that coroners perform death investigations with little supervision and many deficiencies have gone undetected. Coroners have performed death investigations on 132 of their former patients, billed for more than 24 hours of coroner and physician services in one day, and conducted death investigations while under practice restrictions by the College of Physicians and Surgeons of Ontario (College). The Office was unaware of some of these issues before we brought them to its attention. These cases involve about 11% of the province's coroners, and they highlight risks to the integrity of the death investigation system.

Pathologists' work is also a critical component of the death investigation process because coroners often rely on autopsy reports. Autopsy findings can indicate if a death was natural or caused by something or someone else. The Office made improvements to autopsy quality assurance after a 2008 provincial inquiry made recommendations to improve the integrity and reliability of the province's death investigation system. A key improvement was the creation of a pathologist register to help ensure the assigned pathologists could, in each case, competently conduct the autopsy. For example, only pathologists with training and experience in pediatric autopsies are permitted to perform them.

However, our review of quality assurance processes on pathologists' work noted deficiencies. For example, the Office's policy requires autopsy reports of criminally suspicious cases to be peerreviewed by a centrally assigned reviewer on a rotation list. However, some forensic pathologists do not follow this process and instead choose their reviewer. Choosing a reviewer can lead to bias in the review process and unintended consequences in the criminal justice system. As well, while the Office's policy requires 10% of each pathologist's autopsy cases on non-criminally suspicious deaths to be reviewed, only 5% in some cases were reviewed, leading to a risk that errors were not identified and corrected.

We found that the Office did not centrally track the errors of pathologists and forensic pathologists. Some of these errors required intervention, such as additional training or even removal from the register. As well, the Office does not have policies to guide its actions when performance issues are identified with a pathologist or forensic pathologist. As a result, the Office cannot ensure that it applies consistent interventions for performance concerns of all the forensic pathologists and pathologists working across the province and determine whether actions taken are effective.

Our other observations include:

Quality Assurance on Coroner Reports

• Regional supervising coroners did not always identify coroners' errors through their review of coroner reports. The only structured training required for a physician to work as a coroner is a five-day course, with neither a check to ensure course completion nor a competency examination. Refresher training is only required after the initial course if quality issues are identified. However, the Office's quality assurance unit identified significant errors in 18% of the 2017 coroner reports. The reports were incorrect, incomplete, or did not meet the standards of the Office—even after the regional supervising coroners had reviewed them. • There is no policy on suspending or removing coroners. The Office does not have a documented policy for suspension or removal of coroner appointments for those under practice restrictions by the College of Physicians and Surgeons of Ontario. We found that 16 coroners had performed death investigations while under practice restrictions by the College. One of these coroners was restricted by the College from prescribing narcotics in 2012 but had investigated 19 cases since then where the death was as a result of drug toxicity.

Body Storage Weaknesses

• Weaknesses exist in body storage practices in hospital-based regional forensic pathology units. Bodies that need autopsies are often stored with other bodies in the hospital morgue. In 2019, one regional unit conducted an autopsy on the wrong body. Due to limited capacity, regional units have stored bodies in hospital hallways and other rooms.

Data on Death

- The Office misses the opportunity to make more effective use of its death investigation data to identify actions to improve public safety and reduce preventable deaths. The Office has a significant amount of data, such as circumstances of death, and age and gender of deceased persons, that it does not use to study and to then recommend ways to reduce further deaths. Most often, the Office uses its data to respond only to current, high-profile issues.
- Deaths are not always reported to the Office as required by law. In 2018, about 2,000 deaths, including those that resulted from pregnancy, fractures, dislocations or other trauma, were under-reported to the Office and so not investigated.

• Coroners are not required to document reasons for deciding that a death investigation was not necessary. The Office does not require its coroners to provide it with documented reasons when they conclude a death investigation is not needed. While the Office does not track how frequently coroners do not provide reasons, our audit found that in about 56% of the cases we sampled, the coroner did not do so.

Governance and Recommendations Not Sufficiently Addressed

- The Death Investigation Oversight Council is not effectively fulfilling its legislative mandate to oversee the Office due to its limited authority. The Council is the primary oversight for the Office's activities, but its recommendations are non-binding. As well, it was not informed of key decisions such as the closure of a hospital-based regional forensic pathology unit.
- The Office has not fully ensured it delivers death investigations and related services cost-effectively. For example, the Office has not analyzed whether its new service delivery model of using different health care professionals as coroners in place of the current part-time physician coroners would help improve efficiencies of death investigations. Also, it has not evaluated whether its transfer payments to regional hospital-based forensic pathology units were reasonable, based on the actual cost to operate these units.
- The Office does not publicly report responses to hundreds of recommendations made by inquest and death review committees. The Office published about 600 recommendations made by inquests and death review committees in 2018 but did not report information to help the public evaluate whether recommendations were properly implemented.

This report contains 14 recommendations, consisting of 38 action items, to address our audit findings.

Overall Conclusion

Our audit concluded that the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) did not demonstrate that it has effective systems and procedures in place to have consistent, high-quality death investigations that improve public safety and prevent or reduce the risk of preventable deaths.

The Office can do more to measure and report on the effectiveness of its activities. Unlike other Canadian provinces that publish government and other organizations' responses to inquest and death review committee recommendations, Ontario does not do this, limiting their usefulness in learning from the past to minimize the occurrence of future preventable deaths.

OVERALL RESPONSE

Recognizing the importance that death investigation plays in health and safety in Ontario, the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) is committed to working with its partners toward continuous improvement of cost-effective, efficient, equitable and high-quality death investigation services.

The Office welcomes and accepts the insights and recommendations provided by the Auditor General. As indicated to the audit team throughout the process, there are some key initiatives already under way that, when fully implemented, will satisfy the recommendations and greatly improve efficiencies, effectiveness and documented performance of the organization. Several of the recommendations are in keeping with those recently provided by Justice Gillese in her report: *The Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System*. The Office has committed to

implementing an action plan with our Ministry of Health partners that includes key themes also provided by the audit team: training and education; improved data surveillance, analysis and tracking; a new service delivery model for death investigation; and quality assurance.

Ontario has the largest death investigation system in the country and one of the largest in North America, both geographically and by investigation numbers. While the Office is recognized worldwide for its expertise in areas such as forensic pathology and international training programs, we recognize and share the audit team's view that our work in modernizing death investigation is not yet complete. The audit rightly identified several areas of consideration where the Office will build on existing efforts and initiatives to evaluate, address and improve. We will continue to take strides to strengthen the death investigation system to support our health and justice sector partners in contributing to the health and safety of Ontarians.

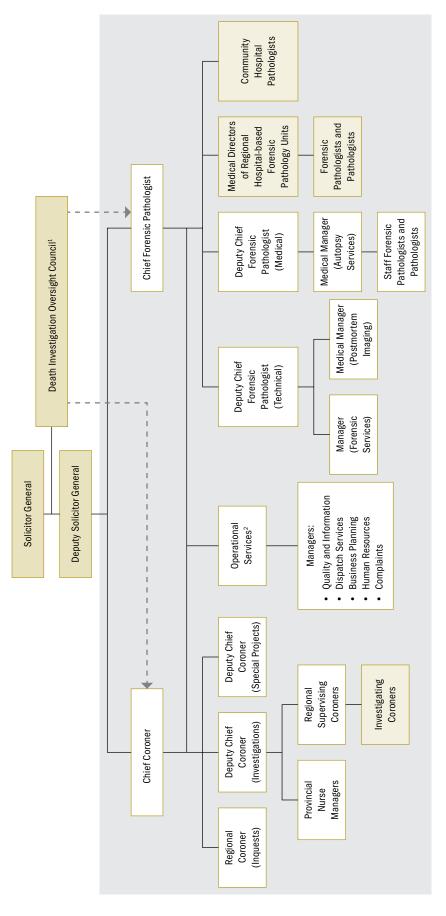
2.0 Background

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) reports to the Ministry of the Solicitor General (Ministry), and is responsible for conducting death investigations required by the *Coroners Act* (Act). Under the Act, death investigations must be conducted for all deaths that are not natural, as well as deaths that are natural but sudden and unexpected. **Figure 1** shows the organizational structure of the Office as of July 2019.

According to the Ministry, death investigations strengthen public safety and security, and are also intended to help ensure that public safety systems are effective, efficient, accountable and responsive to the needs of Ontario's diverse communities. According to its 2015–2020 Strategic Plan, the Office aspires to improve the health and safety

Figure 1: Organizational Structure of the Office of the Chief Coroner and Ontario Forensic Pathology Service as of July 2019

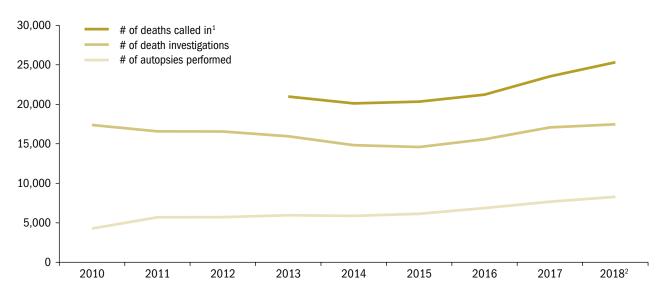
Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service



- Government staff external to Office of the Chief Coroner and Ontario Forensic Pathology Service
 - Office of the Chief Coroner and Ontario Forensic Pathology Service
- Internal office staff
- Contract or fee-for-service office staff
 - Reporting relationship
- - Provides advice to
- 1. The Death Investigation Oversight Council provides advice and makes non-binding recommendations to the Chief Coroner and the Chief Forensic Pathologist on matters that include quality assurance and compliance with the Coroners Act. Members are appointed through the Public Appointments Secretariat.
- 2. The Director of Operational Sewices reports to both the Chief Coroner and the Chief Forensic Pathologist.

Figure 2: Number of Deaths Called In, Death Investigations and Autopsies, 2010–2018

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service (Office)



- 1. Dispatchers at the Office assign cases to coroners (explained in Figure 5). Dispatch data is less reliable prior to 2013. No total-calls-received amount is available because there was no central provincial dispatch system at that time, and call-recording processes were inconsistent across the regions.
- 2. 2018 data was still being finalized when we completed the audit. Data is current as of September 2019.

of Ontarians and prevent future and sudden unexpected deaths, and:

- support the needs of families by providing answers and information after sudden and unexpected deaths;
- search for the truth and provide evidence and data to support the administration of justice;
 and
- advance forensic medicine and public safety through knowledge and capacity development.

The Office has two primary functions:

- coroner services, including overall responsibility for death investigations, fall under the authority of the Chief Coroner; death investigations are led by physician coroners; and
- post-mortem examinations or autopsies, are the responsibility of the Ontario Forensic Pathology Service, led by the Chief Forensic Pathologist; pathologists and forensic pathologists conduct autopsies when coroners request them.

Refer to **Appendix 1** for a glossary of terms.

The Operational Services Branch of the Office provides support to both the coroner and forensic pathology service areas.

The Office employs about 131 staff and is headquartered in the Forensic Services and Coroners Complex in Toronto.

In 2018, the Office conducted about 17,000 death investigations. In almost half of these cases, an autopsy was performed. While the total number of deaths in Ontario in 2018 was not available at the time of our audit, we noted that between 2009 and 2017, the Office performed death investigations on between 15% and 20% of all deaths in Ontario. The Office's overall expenditures have increased from \$43 million in 2016/17 to about \$47 million in 2018/19. The increase in expenditures is consistent with the increase in death investigations. The number of death investigations rose from about 15,600 in 2016 to about 17,500 in 2018. Figure 2 shows the trend of death investigations and autopsies between 2010 and 2018. **Figure 3** shows the steady increase in death investigations, and death investigations with autopsies over the same period.

Figure 3: Proportion of Death Investigations With Autopsy, 2010–2018

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

	Total # of Death Investigations (Coroners)	Total # of Autopsies (Pathologists)	% of Death Investigations With Autopsy
2010	17,378	4,270	25
2011	16,579	5,703	34
2012	16,549	5,708	34
2013	15,946	5,874	37
2014	14,817	5,955	40
2015	14,592	6,138	42
2016	15,567	6,858	44
2017	17,078	7,657	45
2018*	17,461	8,287	47

^{* 2018} data was still being finalized when we completed the audit. Data valid as of September 2019.

2.1 Coroners

Coroners in Ontario are physicians and members of the College of the Physicians and Surgeons of Ontario. As of December 2018, about 350 licensed physicians were appointed to the coroners' service by the Chief Coroner. Most have their own medical practices as well. The Office expects coroners to attend a five-day training course before they assume coroner responsibilities. **Appendix 2** provides further details on the appointment process for coroners. **Appendix 3** describes key topics covered in the coroners training course.

The coroners' service is divided into 10 regions across the province, including two in the Toronto area. Each region is led by a regional supervising coroner. Regional supervising coroners are full-time, salaried staff of the Office.

In the 2018/19 fiscal year, the Office paid a total of \$8 million, which is included in the Office's overall expenditures of \$47 million, to about 330 coroners for death investigations. All coroners in Ontario are paid on a fee-for-service basis, and the Office pays them a base rate of \$450 for a death investigation. The Office expects coroners to complete death investigation reports within 30 days of accepting a case—this deadline is generally achieved.

2.1.1 Reporting Deaths and Dispatching Coroners to Death Scenes

According to the Act, certain deaths must be reported to a coroner. Listed in **Appendix 1**, these include deaths where there is reason to believe the death is a result of violence, misadventure, negligence, misconduct or malpractice, and deaths that are sudden or unexpected.

Figure 4 shows the process for death investigations in Ontario. **Figure 5** shows the key parties at the Office that are involved in the process.

2.1.2 Documentation and Quality Assurance for Coroners' Death Investigations

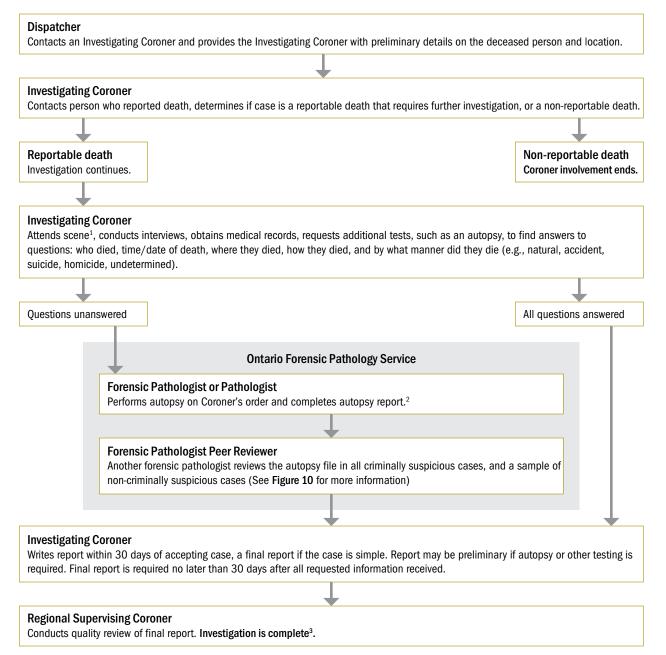
The coroner's investigation report provides a summary of the death investigation with all the relevant observations made by the investigating coroner. These reports are used by police, lawyers in the criminal justice system and the family of the deceased person to help understand why and how someone died.

These reports include answers to five questions about the deceased and the death—who, when, where, how, and by what means. Some of the specific information includes:

Figure 4: Death Investigation Process Map

Prepared by Office of the Auditor General of Ontario

When someone dies in most community settings in Ontario, the person who discovers the death usually calls 911. When emergency service personnel dispatched by 911 attend, they contact the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) through its Central Provincial Dispatch. When someone dies in a health-care facility, like a hospital or long-term-care home, a facility representative will report the death directly to Dispatch if it meets the requirements for a reportable death (see **Appendix 1**). The Forensic Pathology Service group within the Office becomes involved only in some cases. (For more on who does what in reporting deaths, see **Figure 5**.)



- 1. The Coroners Act allows a coroner to delegate a death scene investigation to a police officer or a physician who is at scene. The delegate is to communicate relevant details about the death scene and the body by phone or video to the investigating coroner.
- 2. May involve Centre of Forensic Sciences (part of the Ministry of the Solicitor General, for toxicology testing, for example).
- 3. Inquest, death review committee or re-opening of death investigation is possible in some cases (see Section 2.3 for more information).

Figure 5: Responsibilities of Various Parties Involved in Death Investigations

Prepared by Office of the Auditor General of Ontario

Responsible Party	Key Activities
General public, police or health- care worker	 contacts Dispatch at the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) after becoming aware that a death has occurred in the community or an institution
Dispatcher	 contacts investigating coroner on duty relays information to the investigating coroner regarding basic details on the deceased and location of the death scene opens a case upon confirming with investigating coroner that a death investigation is warranted; enters preliminary information into the Coroners Information System
Investigating Coroner	 accepts or returns calls from dispatcher contacts person who reported the death; makes initial inquiries accepts the investigation if coroner determines the death constitutes a reportable death under the <i>Coroners Act</i> (see Section 2.1.1) or if the deceased does not have a regular physician; for such reported deaths, a coroner may be sent to the scene, but an increasing number of these calls are expected to be referred to coroner investigators—see Section 4.6.2 declines the investigation if coroner determines death is not-reportable and if the deceased has a physician—the physician is expected to go to the scene to complete the death certificate; the coroner receives a small fee (\$30 or \$60) for documenting the rationale for declining the case for death investigations accepted, attends and assesses death scene; conducts death investigation (such as by examining the body, interviewing family and police and obtaining medical records) to determine answers to the five questions may complete a case remotely by relying on information provided by police or others on scene, and not attend death scene if no local coroner is available contacts dispatcher within five hours of accepting case to update whether a cause of death can be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determined orders an autopsy or other tests if a cause of death cannot be readily determ
Regional Supervising Coroner	 after they are completed conducts quality review of death investigation report to ensure that investigating coroner conducted the death investigation appropriately
Forensic Pathologist/Pathologist	 performs autopsy at coroner's order completes autopsy report
	 performs peer reviews on all autopsies of criminally suspicious cases and quality assurance reviews on a sample of other autopsy cases (see Figure 10)

- basic information regarding the deceased, including date of birth and gender;
- relevant aspects of the medical history of the deceased;
- a description of the known circumstances leading up to the death, the body at the scene and results of the body examination;
- a narrative that supports and expands upon the investigation, and refers to relevant autopsy findings or toxicology tests; and
- additional details, including the location type of where the death occurred, such as a longterm-care home or the home of the deceased, and in what manner the death occurred whether it was natural, accidental, suicide, homicide or undetermined.

Figure 6 shows that between 2014 and 2018, about half of the deaths investigated resulted from natural causes such as heart or lung disease, and almost a third were due to accidents such as opioid overdose.

Coroners complete their reports using a standard form that is submitted to the Office and downloaded into the Coroners Information System. Regional supervising coroners must review the reports and identify any areas requiring changes. The Coroners Information System, now 17 years old, is being replaced. The Office contracted a third-party vendor in March 2018 to create a new system for about \$2 million following a competitive

process. The new information system will be webbased, allowing investigating coroners to access and submit their investigation reports directly to the Office. The Office expects the new system to be available by the end of 2020.

2.2 Pathologists and Forensic Pathologists

The Office's forensic pathology service performs autopsies on deceased individuals when coroners request them. Autopsies provide more detailed information about the deceased and details of the death, informing the death investigation and any subsequent law enforcement activities.

Under the Act, the Chief Forensic Pathologist supervises and directs pathologists and forensic pathologists on the provincial register in providing these services, including their education and training. Pathologists are licensed physicians who study the cause and development of disease, and perform autopsies in cases with no suspicion of criminal wrongdoing. In comparison, *forensic* pathologists need additional education and training, as well as certification in forensic pathology. Forensic pathology is a sub-specialty of pathology that focuses on determining the cause of death through the examination of a deceased person.

Figure 6: Number and Percentage of Deaths Investigated by Coroner Based on Manner of Death, 2014–2018¹ Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

Manner of Death	2014	2015	2016	2017	2018 ²
Natural	8,374	8,145	8,582	9,186	9,021
Accident	4,598	4,494	4,715	5,381	5,697
Suicide	1,334	1,404	1,623	1,745	1,556
Undetermined ³	166	183	217	208	266
Homicide	345	357	401	475	623
Open cases still under investigation	0	9	29	83	298
Total # of cases with death investigations	14,817	14,592	15,567	17,078	17,461

^{1.} Data valid as of September 2019.

^{2.} Some cases in 2018 may have cause and manner of death determined, but are still open as they have not been officially closed by the regions (e.g., awaiting further reports—such as police and ambulance reports—to come in).

^{3.} A death is classified as "undetermined" if the death investigation concludes without sufficient evidence to determine manner of death.

2.2.1 Specialization Areas and Work Locations of Forensic Pathologists and Pathologists

The Chief Forensic Pathologist maintains a register of pathologists who may conduct autopsies under the Act. Each pathologist is assigned a category that defines what types of autopsies can be assigned, based on credentials and medical experience. A Credentialing Committee was created at the same time as the register to assist the Chief Forensic Pathologist in deciding on pathologists to add to or remove from the register. This committee consists of three senior forensic pathologists who make recommendations to the Chief after considering a pathologist's body of work, including performance, peer review history, and any issues related to professionalism, such as complaints.

As of March 31, 2019, the register included 117 pathologists, 96 of whom performed autopsies in 2018/19. **Figure 7** shows where these 96 pathologists worked, and their autopsy categories. These pathologists conduct autopsies in three types of settings:

- The Toronto Forensic Pathology Unit is located in the Forensic Services and Coroners Complex in Toronto. This unit is responsible for all autopsies in the Greater Toronto Area, and across the province when pathologists with the required skills are not available locally. This unit is also the headquarters for forensic pathology. In 2018/19, 44% of all autopsies were conducted at this unit.
- Regional Hospital-Based Forensic Pathology Units are located in six cities: Hamilton, Kingston, London, Ottawa, Sudbury, and Sault Ste. Marie. These units, located in teaching hospitals, are responsible for autopsies in their own regions and the surrounding areas. Each unit is led by a medical director who is a forensic pathologist. In 2018/19, these units conducted 42% of all autopsies.
- Community Hospitals employ pathologists who conduct autopsies for the Office's forensic pathology service. These pathologists worked out of 16 community hospitals,

Figure 7: Category of Pathologists on the Provincial Register as of March 31, 2019, by Location Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

	Category	per Pathology	Register ¹	
Autopsy Location	A ²	B³	C ⁴	Total
Toronto Forensic Pathology Unit	15	0	1	16 ⁵
Regional Hospital-Based Forensic Pathology Units				
Hamilton	4	1	0	5
Ottawa	5	0	0	5
London	4	8	0	12
Sudbury	3	0	0	3
Kingston	1	14	0	15
Sault Ste. Marie	1	1	0	2
Community Hospitals	4	29	5	38
Total	37	53	6	96

^{1.} The register reflects the availability of pathologists in different parts of the province. Anyone who is qualified can be added to the register; consequently, staffing levels vary across the province.

^{2.} Category A pathologists can perform all autopsies, including pediatric, homicide and criminally suspicious cases. All category A pathologists are forensic pathologists.

^{3.} Category B pathologists can only perform non-criminally-suspicious adult cases.

^{4.} Category C pathologists can only perform non-criminally-suspicious pediatric cases.

^{5.} During 2018/19, 13 of these pathologists worked on a full-time basis and three worked on a part-time basis.

^{6.} These active pathologists, together with 21 other pathologists that did not work on cases in 2018/19, formed the entire provincial register of 117 pathologists.

Figure 8: Caseload per Autopsy Location, 2014/15-2018/19

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service (Office)

Autopsy Location	2014/15	2015/16	2016/17	2017/18	2018/19
Toronto Forensic Pathology Unit	2,350	2,577	3,044	3,224	3,742
Regional Hospital-Based Forensic Pathology Units					
Hamilton*	815	891	999	1,276	1,386
Ottawa	633	669	709	786	763
London	471	455	521	528	566
Sudbury	197	283	356	380	402
Kingston	227	188	233	244	355
Sault Ste. Marie	62	85	103	118	127
Community Hospitals	1,168	1,051	1,126	1,241	1,233
Total	5,923	6,199	7,091	7,797	8,574

^{*} In July 2019, the Office decided to close the Hamilton hospital-based regional forensic pathology unit due to staffing and other operational difficulties. Current plans include transferring all Hamilton autopsy cases to the Toronto Forensic Pathology Unit by July 2020. The Office estimated that the closure could result in \$750,000 annual savings after two years of decommissioning and would increase efficiencies since the Toronto Forensic Pathology Unit has unused facilities for performing autopsies; in particular, the Unit usually has six autopsy bays that are not in use.

typically located in more remote areas, and conducted 14% of all autopsies in 2018/19.

Figure 8 shows the caseloads of these autopsy locations between 2014/15 and 2018/19.

2.2.2 Payment to Forensic Pathologists and Pathologists

Of the 117 forensic pathologists and pathologists on the provincial register, 12% are full-time, salaried staff of the Office. These full-time staff all work out of the Toronto Forensic Pathology Unit. Three additional forensic pathologists work at the Toronto unit on a part-time, fee-for-service basis. All other pathologists—those who work at regional hospital-based forensic pathology units or community hospitals—either work as full-time employees of the hospitals, or provide autopsy services on a fee-for-service basis, as shown in **Figure 9**.

2.2.3 Quality Assurance for Pathologists and Forensic Pathologists

Figure 10 outlines the Office's three different quality assurance processes for autopsy reports, including:

- criminally suspicious deaths;
- non-criminally suspicious deaths; and
- transcripts of court proceedings where the forensic pathologist testifies and the related autopsy report is presented in court.

2.2.4 Morgue Management

Bodies for autopsies ordered by investigating coroners in the Greater Toronto Area are transferred to the Toronto Forensic Pathology Unit by either dedicated body transfer services or funeral homes. The Unit also receives bodies from other parts of the province to reduce local backlogs.

In addition to dispatching coroners to death scenes, dispatchers in the Office's Central Provincial Dispatch unit at the Toronto headquarters also act as morgue attendants. Their morgue-related duties include receiving and releasing bodies, checking the identities of deceased persons, and managing body storage. Staff conduct body inventories to monitor morgue capacity, and to confirm bodies are in the correct location.

In regional hospital-based forensic pathology units and community hospitals, hospital staff are responsible for managing the morgue. The intake

Figure 9: Pathologist and Forensic Pathologist Fees across Ontario, April 2018

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

Pathologists Working In	Remuneration Type
Toronto Forensic Pathology Unit	Salaried employees ¹
Regional Hospital-Based Forensic Pathology Units	Transfer payment agreement (annual) • each regional unit receives a transfer payment ranging from \$100,000 to \$570,000 to
	be a Provincial Centre of Excellence for Forensic Pathology ²
	Professional fees (per case) ³
	\$300 for external autopsy (i.e., no dissection)
	• \$1,200 for standard autopsy
	• \$1,650 for complex autopsy (i.e., criminally suspicious, homicide or pediatric)
	Facility fees (per case)
	 \$400 to reimburse each regional unit for costs incurred by the regional unit to perform autopsies
Community Hospitals	Same professional fee rate and facility fee rate per case as regional hospital-based forensic pathology units; no centre of excellence transfer payments

- 1. Another three forensic pathologists performing cases at this unit work on a fee-for-service basis, and receive the same professional fees as pathologists who work in regional forensic pathology units and community hospitals.
- 2. The agreement indicates that the hospital will conduct all autopsies required as part of death investigations, including homicide and criminally suspicious and pediatric autopsies, and these will be overseen by a medical director. The agreement also outlines the specific responsibilities of the Medical Director.
- 3. Depending on the contractual arrangements between regional units and pathologists, professional fees may be paid to the hospital, the pathologist or an organization that receives these payments on behalf of its members (for example the Eastern Ontario Regional Laboratory Association). These fees are set out in O.Reg 19/15 under the *Coroners Act*.

and release of bodies from the morgue are the responsibility of hospital security.

2.3 Inquests, Death Review Committees and Expert Panels

Inquests and death review committees operate under the authority and supervision of the Office. While they are both tasked with considering the circumstances of deaths, and suggesting recommendations to help reduce the risk of further deaths, **Figure 11** shows the key differences between them. The Office held 186 inquests from 2014 to 2018; 170 inquests were mandatory and 16 were discretionary. In 2018 alone, there were 35 inquests, 31 of which were mandatory and four were discretionary.

In addition, the Chief Coroner may establish expert panels to inform the investigation of certain types of deaths. **Appendix 4** shows a list of five death review committees active at the time of our audit, as well as three expert panels established

by the Chief Coroner since 2013 that have issued reports. In 2019, the Chief Coroner initiated an expert panel to review the deaths of nine police officers by suicide during 2018. This panel had not completed its report at the time of our audit.

2.4 Death Investigation Oversight Council

The Death Investigation Oversight Council was created in 2010. It is an oversight body for the Office that provides advice. Its 12 voting members have mostly legal, policing and health care backgrounds, and members are appointed through the Public Appointments Secretariat. The Council has a mandate to support the provision of effective and accountable death investigation services. The Chief Coroner and the Chief Forensic Pathologist also sit on the Council as non-voting members.

The Council was created by an amendment to the *Coroners Act* following a recommendation from the Inquiry into Pediatric Forensic Pathology in Ontario led by Commissioner Stephen T. Goudge (Goudge Inquiry). This inquiry was established by the government to provide improved oversight for forensic pathologists and coroners and specifically, to address systemic weaknesses in the

oversight of forensic pathology services. These weaknesses ultimately resulted in miscarriages of justice after faulty forensic pathology work led to innocent people being charged with manslaughter.

Figure 10: Quality Assurance Processes for Pathologists and Forensic Pathologists

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service (Office)

Type of			# of Reviews	Conducted	Review
Review	Type of Cases and Coverage	Scope of Review	2017/18	2018/19	Completed By
Peer Review ¹	100% of autopsy reports of criminally suspicious cases before they are released to the coroner and police.	Reports are evaluated regarding: completeness, consistency, and ease for another forensic pathologist to review and reach the same conclusion; reasonableness of cause of death stated in the autopsy report given the evidence available; and an unbiased expert opinion on content of autopsy report.	282	391	Category A pathologists (i.e., pathologists who perform all autopsies including homicide and criminally suspicious cases) on a rotation basis
Quality Reviews ²	Non-criminally suspicious autopsies: 10% of all autopsies; 100% of autopsies involving undetermined cause of death; 100% of autopsies involving natural death of individuals under age 40; and 100% of autopsies conducted by pathologists who perform fewer than 20 autopsies a year.	Reports are evaluated regarding: completeness and consistency; reasonableness of cause of death stated in the autopsy report given the evidence available; and turnaround times from autopsy conducted to report issued and from toxicology sampling to report issued.	1,300	1,251	Deputy Chief Forensic Pathologists, Medical Directors, category A pathologists
Court Transcripts	Forensic pathologists are sometimes called to court to provide expert opinions based on their autopsy findings. All forensic pathologists who testify in court are to have the courtroom transcript of at least one case peer reviewed by another forensic pathologist each calendar year.	Forensic pathologists are evaluated regarding whether they: are prepared to testify; only provide opinions on areas of expertise; demonstrate general knowledge, interpret evidence properly and draw conclusions and form opinions that are credible, objective and scientifically sound.	63	19 ³	Category A pathologists randomly assigned

^{1.} Refer to Section 4.3.1 for details.

^{2.} Refer to Section 4.3.2 for details.

^{3.} The Office does not maintain records of court cases attended by forensic pathologists; therefore we are unable to confirm whether the number of reviews conducted met Office requirements.

Appendix 5 provides further details on the Goudge Inquiry.

The Inquiry recommended the creation of the Council to address the gap in oversight, and to ensure more objective and independent governance. The Council has oversight regarding the work of both the Chief Coroner and the Chief Forensic Pathologist and staff of the coroner and forensic pathology services.

The Council is supported by three staff members from the Ministry of the Solicitor General. The total

cost of the Council has been about \$500,000 for the last several years. About 70% of this cost is salaries for support staff.

The Council also administers a public complaints process. As set out in the Act, the Council does not review a complaint unless it has been addressed first by the Office for response. The only exception is a complaint about the Chief Coroner or Chief Forensic Pathologist, which the Council would review directly.

Figure 11: Overview of Inquests and Death Review Committees

Prepared by the Office of the Auditor General of Ontario

Coroners Act Regional supervising coroner responsible for determining	Public forum, case specific and time-limited
responsible for determining	and amo innica
	Citizen jurors deliver a verdict answering the five questions regarding a death and determine recommendations ¹
Ocyanava Ast	Dublic famore
Regional supervising coroner, with input from the Inquest Advisory Committee, ² responsible for determining when a mandatory inquest is required.	Public forum, case specific and time-limited Citizen jurors deliver a verdict answering the five questions regarding a death and determine recommendations
At the discretion of the Chief Coroner .	Private forum, deliberations continue at the discretion of the Chief Coroner
	Stakeholders and experts in related fields
	Coroners Act Regional supervising coroner, with input from the Inquest Advisory Committee, ² responsible for determining when a mandatory inquest is required. At the discretion of the Chief

^{1.} Responses from parties receiving these recommendations, which are received by the Office of the Chief Coroner and Ontario Forensic Pathology Service, are available to members of the public upon request.

^{2.} The Inquest Advisory Committee members are appointed by the Chief Coroner and include both Deputy Chief Coroners, three regional supervising coroners, and the Chief Counsel to the Chief Coroner and is chaired by a Deputy Chief Coroner.

3.0 Audit Objective and Scope

Our audit objective was to assess whether the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) has effective systems and procedures in place to:

- conduct high-quality death investigations and prevent premature deaths, according to legislative requirements, internal policies and best practices;
- deliver death investigation and related services cost-effectively; and
- measure and report on the effectiveness of its activities.

Before starting our work, we identified the audit criteria we would use to address our audit objective. These criteria were established based on a review of applicable legislation, policies and procedures, internal and external studies, and best practices. Senior management at the Office reviewed and agreed with the suitability of our audit objective and related criteria as listed in **Appendix 6**.

Our audit focused on activities of the Office in the three-year period ending March 31, 2019, and considered relevant data and events in the last 10 years. We conducted our audit from January to September 2019, and obtained written representation from the Office that effective November 5, 2019, it has provided us with all the information it was aware of that could significantly affect the findings or the conclusions of this report.

In conducting our work, we reviewed applicable legislation, agreements, reports, program guidelines and policies. We also examined documents and relevant files, analyzed data, reviewed information technology controls and assessed risks, and observed the processes involved in death investigations, including activities within the Forensic Services and Coroners Complex located in Toronto, and selected regions outside of Toronto.

Regarding forensic pathology services, we interviewed 45 management, pathology and support staff including:

- senior management, including Deputy Chief Forensic Pathologists and the Chief Forensic Pathologist, forensic pathologists, pathologists and other forensic pathology and support services staff in the Provincial Forensic Pathology Unit in Toronto;
- medical directors at all regional forensic pathology units including Kingston, London, Ottawa, Sault Ste. Marie and Sudbury—since the position of medical director was vacant in Hamilton during much of our audit—and other forensic pathologists and pathologists in Hamilton, Ottawa and Sudbury; and
- pathologists and forensic pathologists at two community hospitals.

To compare how these functions are performed across the province, we reviewed quality assurance processes in all autopsy locations including Toronto and the six regional hospital-based forensic pathology units, and observed morgue management practices in Ottawa, Sudbury and Toronto; we visited the Ottawa and Sudbury regional units and also visited two community hospitals in Ottawa and Toronto. In addition, we engaged an expert with experience in death investigation practices in other provinces and in the United States. Our expert reviewed a sample of death investigation reports and autopsy reports to ensure sufficient evidence was gathered and reasonable conclusions were reached based on the evidence obtained. As well, we conducted a survey of pathologists and forensic pathologists across Ontario and received a 34% response rate overall—25% of pathologists and 49% of forensic pathologists who had a valid email address responded.

Regarding coroner services, we interviewed the Deputy Chief Coroners and the Chief Coroner, and interviewed and obtained information from regional supervising coroners, including their review of coroners' work, in all 10 regions across the province. We also analyzed the Office's death investigation data against data we obtained directly from the Ministry of Health. As well, we conducted surveys of active and recently resigned coroners and regional supervising coroners; 41% of the coroners who had a valid email address responded and 100% of the regional supervising coroners responded.

We sat in on the hearings of two inquests conducted in Toronto to better understand the purpose of inquests and the parties that participate in them. We met with and obtained relevant information from the Death Investigation Oversight Council to better understand its role and mandate as an oversight body for the Office. As well, we reviewed the work of the Office's death review committees and interviewed select chairs from these committees to better understand how their work assists in the Office's death investigations.

In addition, we met with the Registrar of the College of Physicians and Surgeons of Ontario, two representatives from municipal police forces, one of whom also represented the Ontario Association of Chiefs of Police and four lawyers—current and former Crown attorneys and defence lawyers—who have experience working with the Office, to understand their perspectives on the Office in conducting death investigations.

We researched how other Canadian provinces operate their death investigations systems and spoke to or otherwise communicated with representatives from all nine provinces to identify areas for improvement in Ontario.

In determining the scope and extent of our audit work, we reviewed relevant audit reports issued by the Ontario Internal Audit Division.

3.1 Outstanding Issues

During our audit, we identified instances of certain coroners investigating deaths of individuals to whom the coroners had provided patient care in the years prior to their deaths. These coroners provide medical care to living patients when not performing coroner work. We discuss this in **Section 4.1**. The

Office began investigating these cases as soon as we brought them to its attention; senior management at the Office informed us that they would need to thoroughly evaluate these cases to determine whether the circumstances constitute inappropriate actions by the coroners. At the completion of our audit, the Office had developed a plan to review and analyze the case information for the instances we identified. The plan includes an assessment of whether the coroners:

- should reasonably have known about the conflicts at the time they accepted and conducted the death investigation;
- should have considered the cases as being possible conflicts of interest; for example, given the nature and timing of the care the physician had provided; and
- should have informed their regional supervising coroner about the potential conflicts of interest since they oversee the coroners' work.

When we completed our audit, the Office's investigation process was still ongoing.

As well, during our audit, two forensic pathologists—one currently employed and one formerly employed in the Hamilton regional hospital-based forensic pathology unit—filed separate complaints with the Death Investigation Oversight Council against the Chief Coroner and the Chief Forensic Pathologist. Among other concerns, the complainants alleged that the two Chiefs abused their power in reaching the Office's decision to decommission the Hamilton unit. The Council was still finalizing the complaint investigation reports when we completed the audit.

4.0 Detailed Audit Observations

4.1 Some Coroners Suspected to Be Engaging in Unethical Practices and Professional Misconduct

Overall, we found that 36, or 11% of the coroners who worked for the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) in 2018, have potentially engaged in unethical practices or violated either the Office's policies or professional practice rules. Some coroners investigated the deaths of former patients without declaring conflicts of interest. Others conducted death investigations while under practice restrictions by their regulatory college, such as restrictions from prescribing narcotics in their medical practices. Others were no longer licensed to practise medicine. The Office was not aware of some of these restrictions. We also found that some coroners had double-billed for their work.

Coroners are expected to abide by the Office's Coroners Code of Ethics. Coroners, as physicians, are also expected to follow the College of Physicians and Surgeons of Ontario's (College) policies and guidelines on medical professionalism because the College regulates the medical profession. However, neither the Code of Ethics nor the *Coroners Act* requires coroners to be physicians in good standing with the College. Since the primary subject of the investigation does not have a voice, and coroners typically work independently, it is critical that the Office ensures its coroners are held to a high standard of conduct.

4.1.1 Some Coroners Investigated Their Former Patients' Deaths

We found that 19 of the 23 top-billing coroners of 2018 conducted death investigations on 132 people whom they had provided care for between April 1, 2013, and December 31, 2018. If this analy-

sis is reduced to patients seen within one year by the physicians who later investigated their deaths, we found 15 of these 23 coroners conducted death investigations on 54 of their former patients. This practice constitutes a potential conflict of interest under the Office's policy. These cases are concerning because there is a risk that the truth about a death will not come to light if the physician's treatment decisions while the patient was alive could have contributed to the patient's death. Of the 132 cases, 64 did not have autopsies.

The majority of coroners in Ontario are physicians with their own medical practices. More than 70% have family medicine backgrounds, while the rest specialize in areas including cardiology, psychiatry and internal medicine. Of the 19 physician-coroners, at least two practised addiction medicine, at least six practised in emergency departments and at least one in long-term-care homes.

The Office requires coroners to declare and discuss a potential conflict of interest if they are asked to perform a death investigation on former patients to ensure they are free of bias when conducting death investigations. **Appendix 7** outlines the Office's policy on conflict of interest. The Chief Coroner and Deputy Chief Coroners were not aware of any of the cases we found because the Office does not monitor whether coroners are abiding by the Office's policy. The Ministry of Health, which tracks physician billings, does not review the work of coroners.

Of these 19 coroners, we found no documentation that 14 declared a conflict of interest with their regional supervising coroners, contrary to the Office's policy; five documented declaring a conflict of interest with their regional supervising coroners but did so only in 12% of their cases. Overall, these 19 coroners did not document their declaration of conflicts of interest in 95% of their cases.

Moreover, for five of the patients of these coroners, we used Ministry of Health data on dispensed opioid prescriptions and found that the investigating coroner had prescribed methadone to the patient within one month of the death.

Investigating the death of a former patient could influence a coroner's judgment in the death investigation. For example, as highlighted in **Figure 12**, one coroner saw his patient 143 times in the four years prior to the patient's death, and last saw the patient 10 days prior to the patient's death. Another coroner saw a patient 43 times in the three years prior to the patient's death and last saw the patient four days before death. Both coroners practised addiction medicine and prescribed methadone to

these patients. Both patients died from drug toxicity. As the coroners were actively managing their patients' care and addictions, it would be difficult for the coroner to impartially evaluate the circumstances leading up to death, which is central to the role of coroner.

However, the Office does not have access to any information on the identities of the patients that coroners care for in their medical practices and so cannot exclude certain coroners from being

Figure 12: Examples¹ of Coroners Who Investigated Their Own Patients' Deaths and Did Not Declare Conflict of Interest²

Prepared by the Office of the Auditor General of Ontario

Coroner/Specialty/ Primary Location of Practice	Case Description
Coroner A Addiction Medicine Toronto	Coroner A had seen the patient 10 days prior to the patient's death. In the last four years prior to the patient's death, the coroner saw the patient 143 times (the patient was seen on a weekly basis). The coroner wrote in the death investigation report the exact dosages of methadone that the deceased was taking and what dose was last dispensed. The coroner did not document or report that he was the prescribing physician for the methadone ³ . The cause of death was drug toxicity.
	Coroner A had seen the patient 32 days prior to the patient's death. The coroner found that the patient died as a result of multiple gunshot wounds; the coroner was informed of the death by the Special Investigations Unit—a civilian law enforcement agency that investigates incidents where deaths involving the police have occurred. The deceased tested positive for methadone and cocaine, as well as other drugs. The coroner and another physician had prescribed methadone to the patient in the month before death. ³
Coroner B Addiction Medicine Brampton	Coroner B had seen the patient four days prior to the patient's death. In the three years before the patient's death, the coroner saw the patient 43 times. The coroner noted in the death investigation report the exact dosage of methadone that had been prescribed to the patient, and that methadone was found in the patient's home; however, the coroner did not report that it was he who had prescribed the methadone ³ . The cause of death was drug toxicity.
Coroner C Family Medicine Toronto	Coroner C had seen the patient the day before the patient's death. The coroner indicated a death investigation was warranted because the patient had sustained an accidental fall almost a week prior to death (and deaths caused by accident are required to be investigated). The coroner did not document in the death investigation report that she assessed the patient the day before the patient died. The cause of death was complications from a rib fracture.
Coroner D Orthopedic Surgery Oshawa	Coroner D, who practised as an orthopaedic surgeon at a hospital, had overseen the surgery to repair a hip fracture of a patient. After surgery, the patient was transferred to an intensive care unit where the patient continued to deteriorate. The patient died a week later. The coroner's report indicated that there were "no care concerns" and a decision was made not to conduct an autopsy. The cause of death was complications from a hip fracture.

- 1. We reviewed all coroners who conducted more than 119 death investigations in 2018 (i.e., the 90th percentile caseload, explained in Figure 13) to identify instances where they billed the Ontario Health Insurance Plan (OHIP) for providing patient care to people between April 1, 2013, and December 31, 2018 and also later investigated their deaths as a coroner. This test did not include 11 of these high-volume coroners who receive compensation outside of OHIP, such as through a hospital salary or payments through a group practice such as a family health organization or group.
- 2. The documentation of any conflict of interest declaration was determined by reviewing the narrative of the death investigation report.
- 3. Methadone is a replacement drug that helps individuals deal with opioid cravings and withdrawal symptoms. It can also be prescribed for pain management. For cases where methadone was found to be the cause or factor that led to the patient's death, we used the Ministry of Health's data to confirm that the coroner who investigated that patient's death was also the physician who prescribed the methadone.

assigned to death investigations where they are likely to have a conflict of interest. Furthermore, contrary to the spirit of the conflict of interest policy, the Office does not require a coroner to confirm that the coroner has not provided care to the deceased, either when accepting the death investigation or when reports are submitted, and dispatchers do not ask coroners if the deceased was a patient prior to death. The Office policy defines and restricts coroners from performing death investigations that constitute a conflict of interest but does not specify the time lapse needed between treating a living patient and performing a death investigation that would be considered appropriate and not a conflict situation.

The Office has never obtained physician fee claims of its coroners from the Ministry of Health. This Ontario Health Insurance Plan information could help to identify coroners who had conducted death investigations on former patients.

We met with the Registrar of the College of Physicians and Surgeons of Ontario, who informed us that the College would be concerned about a potential conflict of interest for coroners who investigate their own patients' deaths. Although the College has no specific policies prohibiting this, because it does not routinely review the work of coroners, it informed us that it would review any concern about potential conflict and evaluate it based on the circumstances of the situation. The availability of coroners to do an investigation can vary across the province, particularly in more isolated areas, and coroners who find themselves in those circumstances can discuss the matter with a regional supervising coroner. However, if an issue of apparent conflict of interest were to present itself, the College would still review the matter.

We informed the Office in May and September of 2019 about the cases we found. For cases where there were reasonable grounds to believe that the physicians had committed acts of professional misconduct, a regulation under the *Coroners Act* requires the Office to report the physicians to the College. If the cases were reported immediately, the

College could undertake an unannounced investigation, requiring the physicians to provide their records of both coroner and physician work without any advance warning. However, the Office chose instead to discuss the cases with their coroners first. They indicated to us that these discussions will inform the Office's decision on whether or not to contact the College. These discussions were still ongoing when we completed the audit.

RECOMMENDATION 1

To strengthen the objectivity and quality of death investigations, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service:

- update its conflict of interest policy to be more specific about the time lapse required by a coroner between treating a living patient and performing a death investigation on that patient;
- communicate to coroners and regional supervising coroners the policy prohibiting coroners from investigating the deaths of former patients clearly and periodically;
- require coroners to formally confirm the absence of conflict of interest when they accept a death investigation, or complete a death investigation report;
- track the workplaces of coroners, for example addiction medicine or long-termcare homes, and take this information into consideration when assigning death investigations; and
- monitor compliance with this policy routinely and, for instances where the policy has been violated, suspend or terminate coroner appointments, and report coroners to the appropriate party, such as the College of Physicians and Surgeons of Ontario.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and will take subsequent actions aimed at strengthening the objectivity and quality of death investigations. The Office will:

- revise, review and update its conflict of interest policy to reflect learnings from the findings of the Office of the Auditor General, including ensuring specific guidance about the time interval between treating a living patient and performing a death investigation. This will include explanations regarding what constitutes a correlation between "treatment" and the death investigation, such as when a coroner who is also a rural family physician treats a patient for a sprained ankle, then two months later, this patient dies in a local car crash;
- clearly communicate the policy to coroners and regional supervising coroners through regular reminders in the all coroner updates and annual course;
- require investigating coroners to complete
 the new Coroner Investigation Template in
 QuinC (a coroner investigation database
 under development and expected to be
 complete by the end of 2020) that includes
 a mandatory field to indicate whether the
 coroner has treated the deceased person
 and if so, when and under what circumstances. If "yes" is indicated, the case will
 prompt immediate review by the responsible
 regional supervising coroner;
- expand the existing coroner database to include fields that identify the type of practice and expertise of each coroner. This will include affiliated treatment facilities and hospitals. Regional offices will send annual requests to confirm whether there are changes to a physician's place(s) of employment

- or specialty of practice. The Office will consider mechanisms to integrate this data into the case assignment process; and
- identify approaches to monitor and evaluate for compliance, including but not limited to the use of the conflict of interest mandatory field on the electronic investigation template, to ensure timely review and response. If non-compliance is identified, potential responses may include: performance management, suspension, termination or notification of the appropriate regulatory body, such as the College of Physicians and Surgeons of Ontario, if required.

4.1.2 Some Coroners Investigating Deaths While under Practice Restrictions Imposed by Regulatory College

A regulation under the *Coroners Act* requires both the Chief Coroner and the Registrar of the College of Physicians and Surgeons of Ontario to provide notification to each other about instances where a physician who is also a coroner has committed an act of professional misconduct, or is found to be incompetent. The Act does not require the College to provide details of the circumstances leading up to the investigation and the results.

By reviewing information available on the College's public website for coroners who were permitted to perform death investigations in 2018, we found that the Ontario College and another province's regulatory college had concerns with 16 coroners.

For six of these coroners, the Office was not aware that the College had imposed practice restrictions on the coroners' practice of medicine.

For seven of these coroners, the Office was aware that the colleges—including another province's regulatory college—had imposed practice restrictions following investigations of these coroners' practice of medicine. However, the Office did not restrict the coroners' work following the regulatory college's notification that these coroners

had been found to be incompetent or engaged in professional misconduct.

For three of these coroners, the Office restricted the coroners' work by placing one on a leave of absence for 13 months, and requiring regional supervising coroners to provide closer supervision for the other two coroners. Consequently, all conducted death investigations while under practice restrictions by the College because the Chief Coroner did not consider their infractions to impact their work as coroners.

We reviewed the work of these coroners and in some cases, we were able to identify quality concerns regarding their work, as described below. However, neither we nor the Office were able to assess whether there were any significant performance concerns, such as insufficient depth of investigation at the death scene, or not interviewing all appropriate witnesses, because coroner work is largely unsupervised.

Office Was Not Aware of Regulatory College's Notifications of Coroners' Practice Restrictions

The College makes public, by posting on its website, cases where it has imposed terms, conditions or limitations on a physician's ability to practice. We identified cases where the Office was unaware of such issues, mainly because it does not periodically check the College's website for such information. Instead the Office expected the College to provide this information through direct communications, since this is required under the *Coroners Act*. The College informed us that it had provided this information to the Office. However, because the College also sends the Office notices about every public sanctioning action of any Ontario physician—about 650 emails annually, and less than 1% are coroners or forensic pathologists—the Office did not consistently identify communications about coroners until we brought this to their attention.

The Office was not aware that six practising coroners collectively performed 104 death investigations while under the College's medical practice

restrictions. One of these coroners signed an agreement with the College in October 2017 to cease practising due to concerns about the way he had practised medicine. This coroner was subsequently involved in 52 death investigation requests—accepting and investigating 28, and deciding that 24 did not require an investigation. In June 2018, the coroner resigned from the College but still took on another six death investigations the following month, and resigned from being a coroner July 1, 2018.

We reviewed a sample of the death investigation reports of these coroners and found obvious deficiencies, and ethical concerns:

- One coroner investigated the deaths of nine individuals who were either his patients or were treated at the hospital where he was the chief of staff—both constitute a potential conflict of interest. Further, in two of these cases, the family of the deceased expressed concerns regarding the care their relative had received at the hospital in the period leading up to the death. As chief of staff, it would be especially inappropriate for the coroner to investigate these deaths, since poor quality of care at a hospital could reflect negatively on both the hospital and the chief of staff. The Office informed us that these death investigations were acceptable because the deaths occurred in a small community and there were limited options for another coroner to attend the death. However, there was no documentation of the conflict, and how the risk of a biased death investigation was managed.
- With another coroner, the College identified deficiencies with record-keeping. All 2018 death investigation reports completed by the coroner either lacked details required by policy, or were not submitted to the regional supervising coroner by the time our audit concluded, making some reports almost one year overdue.

4.1.3 Policy Not Addressing When to Suspend or Terminate Coroners

The Office policy sets out the responsibilities of a coroner and the Office when a coroner is under investigation by the College, or for civil or criminal matters. Under this policy, the Office relies on coroners to notify their regional supervising coroners when they are under investigation. The policy does not provide guidance or criteria on when to suspend or terminate a coroner.

Since his 2013 appointment, the Chief Coroner had identified two cases where, in his judgment, a coroner's behaviour warranted being reported to the College and the Chief Coroner reported these cases to the College. He has not revoked any coroner's appointment, however. One coroner voluntarily resigned during an investigation by the Office and another coroner was suspended from working on coroner cases. In the latter case, the regional supervising coroner had raised concerns about the coroner's work in 2017, causing the Chief Coroner to initiate a review, which was ongoing when we completed our audit. The Chief Coroner also notified the College in 2017 that it was performing this review.

In another case, the Chief Coroner, who was then relatively new to the role, dismissed a regional supervising coroner due to concerns raised about this supervising coroner's workplace behaviour, which led to a revocation of his appointment as a coroner. This action warranted notification to the College but the Chief Coroner did not notify the College because the Office did not have a formal process in place to notify the College at that time.

However, we noted other cases where the regulatory colleges cited practice concerns related to prescribing narcotics, poor record-keeping, and failing to properly dispose of patient records, as well as concerns about the care and management of falls of elderly patients, communication and professionalism. The Chief Coroner did not restrict the work of any of these coroners because in his view these concerns did not affect the coroner's ability to perform death investigations. Restricting the work of

these coroners would be prudent since weaknesses in judgment in the above areas could contribute to poor decisions being made in a death investigation. For example, one coroner who was restricted by the College from prescribing narcotics in 2012 has investigated 19 cases since then where the death was as a result of drug toxicity.

RECOMMENDATION 2

To improve its communication with the College of Physicians and Surgeons (College) regarding coroners who have practice concerns and properly address performance concerns of coroners, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service:

- work with the College to develop more effective ways of sharing information about physicians appointed as coroners who already have or may have serious performance issues;
- update its policy to address when to suspend or terminate coroners with identified cases of professional misconduct, incompetence, other quality issues or ethical concerns; and
- report instances of professional misconduct, incompetence or other quality issues or ethical concerns to the College on a timely basis.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and will take the recommended steps to improve communication with the College of Physicians and Surgeons of Ontario (College) regarding coroners who have practice concerns and will properly address performance concerns of coroners.

In addition to working with the College to develop more effective ways to share information about physicians appointed as coroners with performance concerns, the Office is developing a new service delivery model that will include a defined contractual relationship, which will outline clear performance, service and conduct expectations. The service-level agreements will encompass all aspects of the terms of service including, but not limited to: availability; remuneration; conflict of interest attestation; continuing education requirements; defined reappointment periods and adherence to quality standards.

The Office will involve the College in developing the contractual agreements to ensure a seamless approach to reporting instances of potential professional misconduct, incompetence or other quality issues that is acceptable and workable with the College.

The Office will also work with the College to update its policy to address when to suspend or terminate coroners with identified cases of professional misconduct, incompetence, other quality issues or ethical concerns. One of the defined components of the revised policy will be to set clear expectations about when and how reporting of potential concerns of professional misconduct, incompetence or other quality issues or ethical concerns to the College will occur. One of the components of the Office's quality management approach will be to track the timeliness of these reports.

4.2 Minimal Oversight of Coroners' Work

4.2.1 Coroners New to the Role Provided Five Days of In-Class Training

When physicians are appointed as coroners, they are required to take a five-day training course on death investigations run by the Office each year as explained in **Section 2.1**. The course is also sometimes used to improve the skills of coroners where regional supervising coroners identify deficiencies in their work. However, coroners are not required to pass a competency examination at course

completion. Further, the Office does not verify that coroners actually attend all of the sessions and senior staff acknowledged to us that they did not know who had actually attended the training or whether they achieved the desired learning goals.

The Death Investigation Oversight Council in 2014 recommended to the Minister at the time, who accepted the recommendation, that the Office make ongoing training a requirement to continue to be a coroner. However, at the time of our audit, not all coroners were required to undergo ongoing training.

4.2.2 Office Did Not Consistently Establish Reasonable Coroner Caseload or Detect Questionable Billing Practices

Most of the regional supervising coroners and other senior coroner staff agree that conducting a minimum number of death investigations helps to ensure coroners are competent, and support high-quality death investigations. Senior staff at the Office agreed that low investigation numbers present a risk for poor quality death investigations. They also agree that an excessive caseload could lead to poor quality investigations. However, the Office had not established minimum or maximum investigation numbers for coroners. Our communications with other Canadian provinces indicated that British Columbia expects its coroners to complete a minimum of 160 reports per year; both Manitoba and Saskatchewan, similar to Ontario, do not have a standard for minimum coroner cases.

With respect to coroners who conducted few death investigations, we found that in 2018, 113 (or 33%) of the coroners conducted 20 or fewer death investigations in the year, with 30 (or 9%) conducting fewer than five investigations. In analyzing caseload data, we included only those coroners who were active—that is, investigated at least one case during that year—and excluded those coroners who had been appointed for less than a year. One coroner who conducted fewer than 20 death investigations in 2018 did not provide sufficient detail in the

reports and failed to complete some investigations on time, as discussed in **Section 4.1.2**.

With respect to coroners who had a heavy case-load of death investigations in 2018, we found that, while the average caseload for a coroner in 2018 was 52 cases, 34 coroners carried about 90% of the total caseload. One coroner performed 16 times the average number of death investigations in 2018—872 in total, the highest of any coroner in 2018. The same coroner investigated the most deaths in each year from 2014 to 2018. In 2018, a coroner with 52 cases would be paid about \$23,000. In contrast, the coroner who performed the 872 investigations was paid about \$440,000—this coroner incurred additional premiums such as for travel. **Figure 13** shows the average and highest coroner caseloads between 2009 and 2018.

We examined how reasonable the workloads were for the five coroners with the highest numbers of death investigations in 2018. These coroners also provide patient care as physicians in their medical practices when they are not performing death investigations. While coroners have some flexibility in conducting much of the work of death investigations—for example, requesting the deceased's health records—death scene work must be conducted on the same day as the death investigation is accepted.

In performing this analysis, we compared coroner billings with Ontario Health Insurance Plan (OHIP) billings to assess how much work—both as coroners and as physicians—these coroners were performing in a single day. Using the Office's estimate, we assumed each death investigation takes 90 minutes. While this analysis did not highlight any concerns regarding the majority of coroners who bill OHIP, we found that on one day in 2018, the top billing coroner, in addition to the time spent on investigating deaths, saw 82 living patients. The doctor would have had only about five minutes to see each patient—if this doctor worked around the clock for 24 hours.

We also found other questionable billing practices, including:

• Twelve coroners who billed twice for the same service from 2014 to 2018. These coroners billed and received both the \$450 case fee from the Office, and OHIP fees for pronouncing and certifying deaths. The coroners should have billed only the \$450 coroner fees. These inappropriate billings were not identified because the Office and the Ministry of Health do not share billing data. While the total amount inappropriately billed to OHIP was less than \$1,000 in total, the

Figure 13: Coroner Caseloads Statistics, 2009–2018

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

	Total # of Cases	# of Coroners with at Least One Case Commenced During the Year	Average Caseload per Coroner	90 th Percentile Caseload ¹	Highest # of Cases per Coroner
2009	17,058	313	54	127	605
2010	17,378	321	54	125	587
2011	16,579	311	53	127	616
2012	16,549	314	53	123	601
2013	15,946	327	49	111	602
2014	14,817	323	46	106	662 ²
2015	14,592	309	47	108	792 ²
2016	15,567	325	48	110	1,111 ²
2017	17,078	339	50	115	985 ²
2018	17,461	337	52	119	872 ²

^{1.} Nine out of 10 coroners carried a caseload at or below this amount in the year specified.

 $^{2. \ \} The same coroner completed the highest number of death investigations in 2014 through 2018.$

Office informed us that it assumed physicians would understand that double billing was unethical. Therefore, it did not have a policy that prohibits charging both fees.

- One coroner conducted two death investigations and performed post-mortem eye donations on the individuals. The coroner double-billed after-hours and travel premiums to both OHIP (over \$200) and the Office (over \$100) for these two cases.
- One coroner billed the Office the full death investigation fee of \$450 for a death investigation that was transferred to another coroner because of a conflict of interest. The Office policy, again, does not include this situation. However, senior management indicated that billing for a case in which a conflict of interest has been identified indicates poor coroner judgment.

RECOMMENDATION 3

To improve the quality of coroners' death investigations and quality of care to their living patients, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office):

- require all coroners to attend ongoing training as a requirement to continue to be a coroner, in accordance with the recommendation from the Death Investigation Oversight Council in 2014;
- establish minimum and maximum caseload guidelines for coroners' work;
- assess the reasonableness of coroners' caseloads periodically by analyzing caseload and total workload using Ontario Health Insurance Plan (OHIP) claims data;
- establish a policy prohibiting coroners billing OHIP for the same services as the Office, and monitor compliance with this policy; and
- report any trends of billing violations or concerns to the Ministry of Health.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and will take steps to improve the quality of coroners' death investigations and quality of care to their living patients. This will be achieved by:

- Working together with experts in medical education development to prepare an evidence-informed, competency-based training and continuing education program. As part of the Office's service delivery contractual relationship, all coroners will be required to attend ongoing training to allow reappointment as a coroner. The Office will continue its engagement with a university continuing medical education department to build on the foundational work recently completed to replace the current new coroners' course.
- The new service delivery model will establish both minimum and maximum caseload guidelines for coroners' work clearly outlined in the service-level agreements. For example, some coroners may be "full time" whereas some may work on a per diem basis. Remuneration is expected to be based on per diem as opposed to per case.
- Case numbers will be evaluated as part of performance reviews that will be integral to the new service delivery model contractual relationship. The Office will work with the Ministry of Health to determine potential methods of claim data access to support contractual compliance oversight.
- Service level agreements will clearly indicate that coroners are prohibited from billing OHIP for the same services as the Office.
- While the Office does not have direct access to OHIP billing information, we will work with the Ministry of Health to establish an

approach to information sharing, monitoring compliance and anticipated Office action arising from discovery of billing violations.

4.2.3 Opportunities to Improve Quality of Death Investigation Reports Lost Due to Inconsistent Supervisor Reviews

Since coroners perform their work with little or no direct supervision, regional supervising coroners sign off on each death investigation report to confirm the coroner has conducted a thorough death investigation, completed the report properly and arrived at a reasonable conclusion.

However, the Office's policy is silent on how regional supervising coroners should communicate changes needed to the coroner who authored the report, or how to document and track deficiencies identified. We surveyed all of the regional supervising coroners and found that their review practices varied. For example, they usually do not consistently document evidence of their review, making it difficult to assess the depth and extent of review. Consequently, the Office cannot confirm that the reviews consistently identify and correct quality concerns in death investigation reports. Specifically, we found that:

- only one of the 10 regional supervising coroners used the checklist the Office developed to help guide their reviews of death investigation reports. The one regional supervising coroner who did use the checklist said it was used only for new coroners' work. Our survey of the regional supervising coroners indicated that they did not use the checklist because it was not required, and a few said it was too time-consuming. Further, one regional supervising coroner did not know it existed. However, most of the regional supervising coroners indicated that the checklist could be useful and were considering using it in the future;
- when the cause and manner of death provided does not flow logically from the

- evidence obtained in the investigation, all regional supervising coroners indicated they would contact the coroner to discuss this situation because they considered this type of error to be most significant. However, for other errors, such as coding, report-writing style or derogatory comments—that could unnecessarily distress the family of the deceased and undermine the professional reputation of the Office—some regional supervising coroners would correct the reports, while others would direct coroners to revise and resubmit the reports. This informal process made it difficult for us to confirm whether certain coroners' reports required more revisions than others; and
- no regional supervising coroners kept records of issues they had identified in their reviews to determine whether certain coroners were repeating the same errors, making it difficult to identify coroners who require additional support or training.

With the assistance of an experienced expert who has a death investigation and medical background, we reviewed a sample of 15 death investigation reports to assess whether the Office's conclusions were reasonable given the evidence in the file. While we found no issues in five of the 15 reports, the remaining 10 contained various concerns with either the coroner's death investigation report or the pathologist's autopsy report. The concerns we had on the coroner reports—all of which would have been reviewed by a supervisor—mainly relate to the accuracy of the report and the completeness of evidence considered. For example, in one case, the name of the deceased was inconsistent throughout the report, which could have upset the family. In another case, we found no evidence that the coroner reviewed photos taken by police at the death scene, which could have assisted the coroner in assessing the fatal injury. We discuss concerns with pathologist's autopsy report from this work in **Section 4.3.1**.

4.2.4 Quality Assurance Unit Identified Errors in Coroners' Reports Even after Supervisor Reviews

The Office requires that quality assurance staff at the Operational Services Branch's quality assurance unit review a sample of coroners' final investigation reports after the supervisor has reviewed them. Our audit found that quality assurance staff did not review all death investigation reports of new coroners in their first year as required. As well, the Office did not have procedures for performing additional reviews on the work of coroners at higher risk of completing erroneous death investigation reports.

In 2017, quality assurance staff found that 18% of the death investigation reports reviewed contained information that was incorrect, incomplete, or did not meet the Office's standards, even after the supervisor reviews. Because quality assurance reviews are conducted after death investigation reports are finalized and issued to external parties, undetected errors in death investigation reports could affect policy development that relied on the data, and could have legal or medical ramifications. For example, the Domestic Violence Death Review Committee chair indicated there are difficulties in identifying which deaths that are included in the Committee's review involved victims in Indigenous communities, thereby making it difficult to develop recommendations to address their unique concerns.

The quality assurance unit reviews its sample, chosen according to the risk attached to the manner of death, to identify whether conclusions are documented clearly and flow from the investigation. Unit staff do not question whether the investigation was done properly because they do not have the expertise to do so. They instead review the report and identify incorrect information by comparing the death investigation report to other documents in the file, such as autopsy reports, toxicology reports and reports from the police and ambulance services.

We have the following concerns regarding the Office's quality assurance reviews:

- The quality assurance unit did not review reports of all new coroners in their first year as required in the Office's policy: In 2017, the most recent year for which sufficient data was available, unit staff reviewed only 19% of cases performed by new coroners in their first year because the regional supervising coroners did not send in all new coroners' death investigation reports for review, and quality assurance unit staff had not followed up to obtain them. In contrast, the Office's policy requires all such cases to be reviewed. In comparison, the unit reviewed beyond the required amounts for other types of death investigation reports—the unit reviewed 63% for accidents (25% required), 55% for natural deaths (10% required), 79% for suicides (50% required), and 77% for undetermined deaths (50% required). The unit reviewed all homicide cases as required.
- The Office does not have additional target coverage rates aimed at testing the quality of other higher-risk death investigation **reports:** Coroners who had a higher rate of major errors identified by quality assurance reviews are not subject to further reviews. We reviewed error rates as identified by the quality assurance process by coroner and found that 23 coroners who had at least five cases reviewed in 2017 had a major error rate of between 40% and 80%, but the Office did not require additional quality assurance reviews for these coroners. As well, the Office does not require each coroner to have at least one death investigation report reviewed each year. We found that 36 coroners did not have any cases reviewed in 2017.
- Quality assurance reviews are conducted after death investigation reports are issued externally; undetected major errors could have an impact on the family of the deceased, other investigating partners and the justice system: Quality assurance reviewers categorize errors as major when

they could potentially affect the justice system or the Office's investigative partners, such as the police, investigators from the Office of the Fire Marshal and the Ministry of Labour. For example, major errors include first and/or last name of the deceased spelled wrong, cause of death not logical or consistent with the details of the investigation, the absence of body examination details, and the inclusion of any findings or conclusions of legal responsibility, which are not to be made by coroners.

• No analysis on what common major errors are trending year over year: We found that the major error rate found in coroner reports has increased to 18% in 2017 from 6% in 2013, as indicated by an operational review of the Office of the Chief Coroner conducted by the Ministry's internal audit in 2013. At our request, the Office compiled data on the type of errors coroners had made. According to this information, the top major errors found in the Office's 2017 quality assurance reviews included improperly recording factors that contributed to the death, such as drug or alcohol abuse, and not correctly recording the location of death.

We also reviewed the quality assurance results of coroners who are currently or have been a regional supervising coroner. Several regional supervising coroners were recently promoted and some regional supervising coroners elected to take on cases to keep their skills current. Our analysis of quality assurance unit data indicated that seven out of 14 regional supervising coroners who performed death investigations had higher error rates, ranging between 20% and 63% in 2017—as compared with the 18% error rate over all reviewed cases. These regional supervising coroners had between two and 71 death investigation reports reviewed by the quality assurance unit.

4.2.5 Coroner Decisions to Not Investigate Certain Deaths Often Not Documented

As noted in **Figure 5**, a coroner's acceptance of a case from a coroner dispatcher is always preliminary. The coroner must make inquiries of police or medical staff at the death scene to determine if the case warrants a death investigation. According to the Coroners' Investigation Manual, a coroner should only accept the investigation if there is reason to believe the death is not from natural causes, or is a natural death that is sudden and unexpected.

It is important for the coroner to document the rationale for not investigating a death for the Office to be assured that all deaths required by the Cor*oners Act* are investigated. However, the Office does not require coroners to provide documentation to support their rationale for deciding death investigations are not warranted. The Office pays coroners \$30 for documenting and providing them with the reasons in a daytime case, and \$60 for a case at night; however, coroners still sometimes choose not to do so. We reviewed a sample of dispatcher records of incoming and assigned death investigation cases in the month of June 2018 and found that, for cases the dispatchers had coded as not warranting a death investigation according to the coroner, coroners did not submit documentation of their rationale in 56% of the cases.

The Office has never estimated how frequently coroners indicate that a death investigation is not warranted, and does not provide reports to regional supervising coroners on the rate their coroners accept death investigations versus informing dispatch that an investigation is not warranted. The risk of not documenting these reasons was highlighted in the Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System, which focused on the actions of one nurse who administered lethal doses of insulin to eight long-term-care home residents and attempted to kill six other victims. In one of the deaths, a nurse at the long-term-care home reported the death to the Office to investigate, as physicians at the

hospital flagged the patient's symptoms preceding death—a sudden drop in blood sugar—as suspicious. However, the coroner who was assigned informed dispatch that a death investigation was not warranted because, in his opinion, the death appeared to be from natural causes. Because this coroner did not document the rationale supporting his opinion, neither the Office nor the Inquiry was able to review the reasonableness of the coroner's rationale. Over the next two-and-a-half years, the nurse went on to murder one additional victim and attempted to murder two more victims. The final July 2019 report of the Inquiry recommended that the Office require a coroner who decides not to perform a death investigation to complete a standard document setting out the reasons for the decision. This document should then be submitted electronically to both the regional supervising coroner and the Office within specified timelines.

4.2.6 Lack of Data Available to Supervisors to Help Monitor Coroners' Work Performance

The Office does not track certain data that could help inform the regional supervising coroners' assessments of their coroners' decision-making in managing deaths reported to the Office. This assessment includes whether coroners responded to requests to perform death investigations on a timely basis, and whether they performed high-quality work. Without this information, regional supervising coroners cannot determine whether their coroners have met legislative requirements in investigating deaths.

Figure 14 lists a number of indicators that would help the Office monitor and assess whether its coroners are producing high-quality work.

RECOMMENDATION 4

To strengthen the objectivity and accuracy of death investigations and to support informed decision-making, we recommend that the Office

of the Chief Coroner and Ontario Forensic Pathology Service (Office):

- require regional supervising coroners to fully document their reviews of death investigations;
- track coroner errors to identify systemic issues through both the regional supervising coroner reviews and the quality assurance unit, and take appropriate actions such as providing more training to help reduce errors, and performing more reviews of reports from coroners with higher error
- provide reports to regional supervising coroners on the rate their coroners indicate a death investigation is not warranted;
- require all coroners to provide documented rationale to the Office when they determine a death investigation is not warranted;
- require regional supervising coroners to review such cases to ensure the rationale documented was reasonable; and
- identify all significant areas of coroners' work that require their judgment and timely response, including the rate at which they order autopsies and collect and critically review this information regularly.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and will take steps to strengthen the objectivity and accuracy of death investigations, and support informed decision-making. The Office's new information technology system, QuinC, and the Coroner Investigator program will be key in satisfying this recommendation.

 With the new QuinC system, coroners will submit their reports for review electronically to their respective regional supervising

Figure 14: Data Not Tracked and Provided to Regional Supervising Coroners to Manage Quality of Work of Coroners

Prepared by the Office of the Auditor General of Ontario

Indicator	Why This is Important
How often each coroner answers or returns phone call requests from the dispatchers to conduct	This would allow the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) to monitor whether coroners are making themselves reasonably available during their on-call period.
death investigations	A high refusal rate might indicate that they should be taken off of the on-call roster.
How often each coroner applies sound judgment in accepting a case for investigation	This would allow the Office to monitor whether death investigation resources are used only on cases that warrant investigation—for example, coroners would be expected to decline obvious natural death cases.
	An unusual ratio may indicate that poor decisions are being made. The Ontario Internal Audit Division noted in its 2013 operational review of the Office that there is a risk that coroners "may accept a case outside of the mandatory legislated cases in order to increase their income" when undertaking death investigations that do not meet the criteria established in the <i>Coroners Act</i> .
How often each coroner orders an autopsy for a death investigation	While unnecessary autopsies incur unnecessary expense (from \$700 to \$2,000 per autopsy), a low percentage of autopsies may indicate coroners are coming to conclusions about cause and manner of death without sufficient evidence.
	A high or low ratio could help the regional supervising coroner identify possible trends that indicate poor death investigation practices.
	For example, we noted that the percentage of death investigations for which coroners determined an autopsy was necessary has gradually increased from 37% of $15,946$ death investigations in 2013 to 47% of $17,461$ death investigations in 2018 , as shown in Figure 3 .
The amount of time that elapses after a coroner has agreed to conduct a death investigation until arrival at the	This would allow the Office to determine whether coroners arrived at the scene within reasonable amount of time to limit wait times by external parties such as the police or health-service providers.
death scene*	While significant time elapses before a coroner's arrival on scene could result in a complaint being received at dispatch, such complaints are not tracked.
How often death scenes are not visited by a coroner and instead are managed remotely; when coroners do not attend the death scene in person, but instead delegate the investigation to police or other health-care professionals	According to the Office's guidelines for coroners, coroners should attend the death scenes whenever possible to examine the body; the coroner's attendance at the death scene can provide valuable information that other people may miss, such as examining the position of the body to determine whether it was moved after the person died, and the relevance of how the death may have been caused by objects in the deceased person's proximity.
	The June 2019 report <i>Reclaiming Power and Place: The Final Report of the National Inquiry into Missing and Murdered Indigenous Women and Girls</i> had identified coroners not attending scenes as an example of the difficulty Indigenous people have in accessing justice. The report recommended that, "In order to ensure consistency in all sudden death investigations, wherever possible, and taking into account the resources available in a community, coroners on call should coordinate their schedules to avoid other responsibilities that would prevent them from attending a scene."
How frequently coroners make errors in completing death investigation reports	This would help identify whether certain coroners had repeated errors in the same areas, as described in Section 4.2.3 .

^{*} The Ministry's internal audit performed an operational review of the Office of the Chief Coroner in 2013 and also noted this information was not tracked.

- coroner. The system will have version tracking so the supervising coroner's changes will be fully documented and available for review directly by the coroner. The report will not be finalized until the coroner accepts the changes and returns the revised report to the supervisor for further review.
- The QuinC system will allow tracking of coroner errors and will identify systemic issues when a quality review is conducted. This provides a roadmap for systemic change organizationally and individually for the supervising coroner to inform the need for remediation and training that may be required for a coroner to improve performance.
- The QuinC system will require documentation of all contacts requesting involvement of the Office. Case selection decisions, including rationale for not accepting a case for investigation, will be mandatory and will be reviewed for reasonableness by the regional supervising coroner on a case-by-case basis. Reports will be able to be generated to illustrate individual coroner actions and comparable regional or provincial data.
- The Office's Coroner Investigator program should greatly reduce the investigating coroner's need to assess whether a case will be accepted. Coroner Investigators complete a vigorous, documented screening of apparent natural death calls from Provincial Dispatch (the ones most commonly rejected by coroners) and only refer cases to coroners that clearly meet the criteria outlined in the *Coroners Act*. Up until now, these calls were sent from dispatchers to the coroners directly, as Provincial Dispatch does not have the legislative authority to perform any investigative function. Coroner Investigators will be documenting all calls in the coroner investigator module in QuinC.
- Performance expectations will be clearly defined in the new service delivery contractual relationships. Key performance

indicators will be developed with reporting facilitated by the QuinC system to allow individual coroner review.

4.3 Gaps Identified in Oversight of Pathologists' Autopsy Work

The quality of autopsies is key to two of the core priorities of the Office—to provide answers and information to families after sudden and unexpected deaths, and to search for the truth and provide evidence in support of the administration of justice.

4.3.1 Established Process to Support Objective Review of Autopsy Cases for Criminally Suspicious Deaths Not Consistently Followed

The Office completed 391 peer reviews of autopsy reports of criminally suspicious deaths in 2018/19, the most recent year for which data was available. However, over six and a half years, between January 2013 and June 2019, about 185 cases or 11% of such autopsy cases were not assigned to reviewers in the manner prescribed by policy. The Office policy requires cases to be centrally assigned by pathology administrators, by rotating through all forensic pathologist reviewers. These reviews can help confirm that the opinions stated by the original forensic pathologist are reasonable, given the available evidence, and that the autopsy report is clear to other forensic pathologists. This is important if the autopsy report is presented as evidence in court, and those without medical training are required to understand it.

We found that:

 For the cases where forensic pathologists did not follow the established peer review policy, forensic pathologists either directly requested that another forensic pathologist review their work, or requested the pathology administrator in charge of the peer review process assign it to a particular forensic pathologist.
 For example, a pathologist requested a specific peer reviewer because they had previously discussed the case, and the requested reviewer was more familiar with the details. However, we question how objectively a reviewer could evaluate a report in these circumstances, particularly for clarity. While it may be reasonable for the rotation to be set aside if a forensic pathologist has expertise with a particular type of case, such exceptions should be described in the Office quality assurance policy, and centrally assigned with the rationale documented.

 The Chief Forensic Pathologist can override the rotation policy if he determines this to be appropriate. This practice was not formalized in the Office's policy until May 2019. Even so, the Office still does not require the rationale for overriding the rotation policy to be documented and does not track when this occurs.

In our survey of forensic pathologists, half of the respondents indicated that the peer review process was effective, while the other half indicated that some improvements could be made to increase its effectiveness—they responded it was only "usually effective" in identifying significant errors. Effective peer review of criminally suspicious cases is important because even one undetected error can have legal ramifications.

With the assistance of an experienced expert who has a death investigation and medical background, we reviewed a sample of 15 death investigation reports to assess whether the Office's conclusions were reasonable given the evidence in the file. While we found no issues in five of the 15 reports, the remaining 10 contained various concerns—some of which could have legal ramifications, the most significant of which are described in this report—with either the coroner's death investigation report or the pathologist's autopsy report.

These cases were previously peer reviewed. In one case, the autopsy report was not signed by all responsible pathologists who conducted and oversaw the autopsy, which could be questioned in court. In another case, a peer reviewer did not

document his rationale for accepting the autopsy pathologist's opinion that a prior assault of the deceased was not an influence on the death. Significant unanswered questions remained regarding the cause of death in this case.

4.3.2 Weaknesses in Review Process of Autopsy Cases for Non-criminally Suspicious Deaths

We found that the Office does not monitor whether the various locations where autopsies are conducted consistently review autopsies of noncriminally suspicious cases in an objective manner, and in accordance with its policy. It also does not track the concerns raised in these reviews to identify systemic issues or concerns with individual pathologists. Knowing the quality of pathologist work is important; such information must be documented in personnel files to help inform the senior forensic pathologists on the Credentialing Committee. This Committee advises on adding or removing pathologists from the register of approved forensic pathologists and pathologists and may also make recommendations to the Chief Forensic Pathologist to help inform his supervisory decision on particular pathologists.

The policy does not indicate how to choose cases for quality assurance review—for example, self-selection or random selection—or how a reviewer is chosen. Senior staff informed us that they expect 10% of each pathologist's reports to be reviewed. We found the following:

- Regarding the selection of cases to be reviewed, different units across the province used different approaches. One regional unit selected cases randomly; another regional unit allowed its pathologists to self-select the cases to be reviewed; and the Toronto unit pulled every tenth case from each pathologist, which allowed pathologists to predict which of their cases would be selected for review.
- Regarding the selection of reviewers, similar to the review process for criminally suspicious

cases, for one of the regional units we visited, pathologists would select the reviewer, thereby introducing bias into the review process. In this unit, two married forensic pathologists reviewed each other's cases. While the Chief Forensic Pathologist informed us that he did not have any concerns with this arrangement since no concerns had been raised about the quality of the work of these forensic pathologists, the expert we engaged noted that this practice should not be considered acceptable as a general rule since it introduces the possibility of bias.

We also found that for the 2013/14 to 2018/19 fiscal years, regional units did not always submit quarterly summary reports of their reviews to the Office as required and various units did not review the required number of non-criminally suspicious cases, as shown in **Figure 15**. In one regional unit, nine quarterly reports noted that between 3% and 17% of autopsy reports it reviewed contained

significant errors. As well, four of the six units informed us that the medical director would review and correct errors and not count them in the reports that were forwarded to the Office.

Regarding community hospitals where no direct supervision of the quality of autopsies is available onsite, the Office provides the oversight. In 2016/17, 12 pathologists who conducted fewer than 20 cases per year had only 39% to 93% of cases reviewed. In 2017/18, 11 pathologists had only 29% to 95% of cases reviewed. Policy requires all such cases to be reviewed.

4.3.3 No Policies on When Pathologists Require More Training, Suspension or Removal from the Register

Under the *Coroners Act*, the Chief Forensic Pathologist is responsible for the supervision and direction of pathologists in the provision of services. The Office does not have policies that

Figure 15: Weaknesses of Quality Review Practice for Autopsies of Non-Criminally Suspicious Cases by Location Prepared by the Office of the Auditor General of Ontario

	Policy Red	quirement
Regional Hospital- Based Forensic Pathology Units	All Quarterly Summary Reports Submitted to Office of the Chief Coroner and Ontario Forensic Pathology Service (Office)	Reviews Done for 10% of Non-criminally Suspicious Cases in Fiscal Year per Pathologist
Hamilton	Missing one quarterly report from 2014/15 and one from 2015/16; Office sent an email to follow up:	Reviews 10% of unit cases, not per pathologist
	 For 2014/15 quarter, the Medical Director informed the Office that the Unit had not retained the results of the review and the Office decided to assign a 100% compliance rate. 	
	 For 2015/16 quarter, the regional unit did not provide a response and the Office did not follow up further. 	
Ottawa	No concern	Only 5%-9% of cases were reviewed between 2016/17 and 2018/19, except for one quarterly report that met 10% requirement.
London	No concern	Reviewed all cases of Category B pathologists and minimal Category A pathologists; that is, not meeting 10% per pathologist requirement.
Sudbury	No quarterly reports submitted since 2013/14	Reviewed minimal cases.
Kingston	No concern	No concern
Sault Ste. Marie	No concern	No concern

describe circumstances that warrant interventions such as training, suspension or removal from the register. As well, when the Office requires pathologists or forensic pathologists to undergo supplementary training, it does not consistently document the reasons for training, or its objectives and results. Furthermore, while the Goudge Inquiry recommended that the regional directors at hospital-based forensic pathology units conduct performance appraisals of the forensic pathologists that report to them, the Office does not obtain copies of these and cannot consider this information when making decisions on whether to retain or remove the physician from the register. Without this information, the Office cannot ensure that pathologists' performance issues are being addressed and actions to improve performance are effective.

The Office typically requires pathologists with performance concerns to undergo training, or supervision while completing cases. We were informed that when the Office's quality assurance processes, peers, or stakeholders such as Crown or defence attorneys identify a pattern of deficient performance with a pathologist, the Chief Forensic Pathologist determines if it is necessary for the pathologist to undergo performance intervention.

The Office does not centrally track which pathologists the Chief Forensic Pathologist has required to undergo performance intervention. We reviewed the personnel files of all pathologists on the register since 2014 to identify performance concerns, and the actions taken to address these concerns. Our review found that performance issues were noted with 10 pathologists. In six cases, we found one or more of the following issues:

- the Office did not consistently document the rationale for supplementary training;
- the Office lacked clear policies on the risks posed by deficiencies of the pathologists' work on living patients that might affect their autopsy work; and
- the policies were silent on situations that warrant removal of a pathologist from the register.

In another case, the Chief Forensic Pathologist did not remove a forensic pathologist from the register despite repeated performance concerns since 2011, and the Office's Credentialing Committee's advice recommending removal from the register in 2014. The Chief Forensic Pathologist did not notify the College of Physicians and Surgeons of Ontario about the concerns that led to this 2014 recommendation, but required this forensic pathologist to undergo supplementary training in 2017 and 2019—which was still ongoing when we completed the audit—and notified the College about the concerns that led to these later actions. The Chief Forensic Pathologist did not remove this forensic pathologist from the register because in his view, "boundaries of professionalism are not welldefined" in forensic pathology, the forensic pathologist was showing improvement, technical expertise was not an issue, and de-registration would end this forensic pathologist's career.

RECOMMENDATION 5

To support the provision of consistent, highquality autopsies across Ontario, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office):

- define in policy the situations where the rotation process does not need to be observed for autopsies of criminally suspicious cases, and document in the peer review report when these exceptions apply;
- monitor that autopsy cases of criminally suspicious deaths are assigned on a rotation basis as per Office policy;
- define in policy the situations that warrant performance interventions, such as training, direct supervision or removal from the register of pathologists and forensic pathologists, and communicate this policy to staff;
- revise the transfer payment agreement with regional hospital-based forensic pathology units to allow the Office to obtain more detailed quality assurance data, particularly

- on the types of errors made by forensic pathologists and pathologists, and follow up on any missed reports; and
- track all errors by pathologists and forensic pathologists and use this information to inform appropriate intervention of staff, such as training.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts the recommendation and will implement procedural improvements to increase the level of documentation on decisions made pertaining to the registration of pathologists and forensic pathologists. The Office will:

- define circumstances for non-random assignment of peer reviewers for autopsy reports;
- create standards for the continuing professional development of registered pathologists and forensic pathologists including defining circumstances for suspension or removal from the register;
- update transfer payment agreements to include key quality indicators; and
- improve tracking of errors by registered pathologists and forensic pathologists.

4.4 Weaknesses in Body Storage Practices

4.4.1 Minimal Safeguards in Hospital Morgues Increase Risk of Body Misidentification and Degradation

Proper body storage practices are crucial to maintaining the integrity of a death investigation and for maintaining public trust with grieving families by ensuring that their loved ones will be handled with dignity and respect. As discussed in **Section 2.2.4**, while the Toronto Forensic Pathology Unit has dedicated storage spaces for bodies before and after

autopsies, regional hospital-based forensic pathology units and community hospitals store bodies for coroners along with other bodies. Morgues in these settings store bodies that do not warrant death investigations, such as natural deaths at the hospital, and unclaimed bodies that municipalities are ultimately responsible for burying. Typically, hospital porters and nurses are responsible for bringing the bodies of those who die in hospital to these storage areas, and hospital security is responsible for both receiving the bodies of those who die in the community, and releasing bodies from the morgue. We visited two regional hospital-based forensic pathology units and two community hospitals, observing in some cases that hospitals had three to nine lockable spaces for homicide victims, but no assigned spaces for other coroner cases.

The Office does not have agreements with or information on community hospital policies and procedures for body storage, and does not receive reports from these hospitals about their ability to store bodies for death investigations. While the Office has transfer payment agreements with each regional hospital-based forensic pathology unit in the area of morgue management, the agreements merely require that the unit be "equipped and up-to-date." Cold storage rooms where bodies are kept are under the authority of the hospital, not the regional unit.

The Goudge Inquiry also recommended that, "with the support of the Ministry of Health and Long-Term Care and the Ministry of Community Safety and Correctional Services, the Ontario Forensic Pathology Service and each hospital with which a regional unit is associated should create protocols to clearly define the areas and limits of the hospital's responsibilities, to avoid confusion about the oversight roles of the Chief Forensic Pathologist and the hospital." While the Office introduced transfer payment agreements to define these limits, they do not address the operation and security of the cold storage rooms, where bodies may be held while in the custody of the coroner and pathologist. The expert we engaged informed

us that coroners and pathologists—regardless of where they work—should be expected to consistently demonstrate care and respect until the body is released from the coroner's custody.

The absence of arrangements for body storage has resulted in misidentification or degradation of bodies at three regional hospital-based forensic pathology units.

- At one regional unit in 2019, a forensic pathologist autopsied the wrong body. The hospital incident report noted that contributing factors were "a lack of appropriate numbered storage spaces within the morgue cold storage room and secondary checks to prevent inadvertent mix-ups; and high volume of bodies on stretchers in the cold storage room."
- Senior management at another regional unit reported that due to limited storage space, bodies have been moved out of cold storage into the hallway, and bodies in body bags are sometimes stored side by side or on top of each other in storage spaces. This regional unit did not document these instances but indicated that they occurred during 2019 and did not know if any of these bodies were coroner cases.
- A bag containing personal effects of a
 deceased person went missing in 2019 in
 another regional unit. The regional unit
 investigated but could not locate the bag.
 It informed us that it subsequently paid the
 next-of-kin for the lost items. In this regional
 unit, there are no cameras in the morgue or
 in the cooler area, and the unit cannot track
 who has accessed the morgue given that hos pital porters, nurses and security use a key,
 not a security card, to access it.

RECOMMENDATION 6

To safeguard evidence needed for death investigations and maintain the dignity of the deceased, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service:

- develop minimum standards for both community hospitals and regional hospital-based forensic pathology units to apply to bodies that form part of a death investigation performed at these locations that require them to secure and maintain bodies at appropriate temperatures; and
- revise transfer payment agreements with the regional hospital-based forensic pathology units to include standards on body management and monitor compliance.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts the recommendation and will develop minimum standards for securing and maintaining bodies in community hospitals and forensic pathology units. The Office will share these standards with hospitals and include them in the transfer payment agreements.

4.4.2 Lack of Body Storage Procedures in the Office's Headquarters Results in Errors in Release of Bodies

Proper quality assurance measures for the storage of bodies is important to ensure that bodies are treated in a respectful way, and released only with proper authorization. Between December 2015 and January 2018, the Toronto Forensic Pathology Unit released the wrong body to a funeral home or cremation service on three separate occasions. In all three cases, the cause was a combination of human error and the lack of proper controls to identify and locate bodies in the morgue at the Toronto Forensic Pathology Unit. Families impacted by these incidents were notified after the errors were discovered.

At the beginning of 2018, the Office introduced policies to guide the release of bodies to families or funeral homes to reduce the risk of inappropriate

release at the Toronto Forensic Pathology Unit. However, no standard operating procedures exist for performing an inventory of bodies.

While morgue staff informed us that they performed body inventories periodically, they saved only body count results, so we could not review any errors that were identified. We performed a body inventory in the Toronto Unit in May 2019, and identified 10 errors in body location—a body was found in the wrong cooler twice, and bodies were located on the wrong tray or gurney eight times. These errors increase the risk of a body being released incorrectly for burial or cremation. It also creates inefficiencies for the morgue attendant, who might need to check many locations to find the correct body. Management informed us that they could not conclusively say why these errors had occurred. They suggested that the errors were likely due to typos in logging bodies, morgue staff errors in locating or releasing bodies, or their electronic logging system, which does not prevent the same location from being entered twice. The risk of the lack of controls for body storage is likely to increase as caseloads increase at the Toronto Forensic Pathology Unit when it takes on an additional 1,300 cases each year by July 2020 as a result of the decommissioning of the Hamilton unit.

RECOMMENDATION 7

To reduce the risk of inappropriately releasing bodies in the Toronto Forensic Pathology Unit, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service develop policies to describe the proper and systematic storage of bodies and for performing inventories of bodies, and to monitor compliance.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service accepts this recommendation and will develop internal policies for the acceptance, storage and discharge of bodies from the cold storage facility, including the regular inventory of bodies and compliance monitoring.

4.5 Thousands of Deaths Under-reported to the Office

While police and health-care workers report the majority of deaths reported to the Office, everyone is required under the *Coroners Act* to contact the police or a coroner when certain types of deaths occur. (See **Section 2.1.1**). Coroners may investigate a death when a family member or health-care provider raises concerns about the care provided to an individual prior to death.

To examine whether the Office was informed of all reportable deaths as defined by the Act, we reviewed the cause of death that physicians included in their Ontario Health Insurance Plan billings in 2018 for certification of death, and identified those that appeared to meet the reporting requirements under the Act.

We identified about 2,300 deaths in 2018 that appeared to meet the criteria of reportable deaths but were not reported to the Office. These include sudden deaths with unknown causes; deaths resulting from fractures, dislocations, or other traumas; adverse effects of drugs and medications; and deaths during pregnancies. Senior medical staff at the Office confirmed that these deaths should have been reported. The Office does not electronically track the identity or details about the person reporting a death. The lack of such information makes it difficult for the Office to know how to develop a public education campaigns to improve understanding about reporting deaths.

The Office informed us that generally, death investigations are more difficult after significant time has passed since bodies may have been cremated, witnesses may not recall details and death scenes may no longer be available.

According to the Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System, as discussed in **Section 4.2.5**, six of the eight deaths were not reported to the Office and so were not investigated until these cases came to light after the confession of the individual who committed these crimes.

RECOMMENDATION 8

To strengthen its ability to investigate all deaths defined as reportable under the *Coroners Act*, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office):

- track and assess the groups of people—for example whether police, hospital staff or members of the public—reporting deaths into the Office; and
- develop a communication strategy (with a public education component) to educate relevant parties from the medical community and law enforcement on the legislative requirement to report deaths for investigation.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts the recommendation to strengthen its ability to investigate all deaths defined as reportable under the *Coroners Act*. To achieve this, the Office will:

 ensure that QuinC has the capacity to track the categories of people, such as police, hospital or member of the public reporting deaths to the Office, to help inform strategies to enhance notification of reportable deaths to the Office. This would be a required field that is completed upon intake of the initial call to Provincial Dispatch;

- build on its response to recommendations arising from The Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System to develop an education curriculum for all members of the health-care sector to include specific education about the legislative requirement, purpose and benefit of reporting deaths to the Office in a timely manner; and
- revisit its current death investigation training programs delivered to law enforcement to ensure clarity in detailing the legislative requirements for reporting deaths for investigation.

4.6 Review of Service Delivery Model Needed

4.6.1 Pilot Project of Forensic Pathologist-Led Death Investigation Not Evaluated

Over the last decade, the Ontario government has commissioned various studies, as well as a pilot project, to review the benefits of having forensic pathologists attend death scenes. Although some forensic pathologists attend death scenes, the reasons for and benefits of doing so have not been examined. For example, the Office terminated the pilot project in 2018 without evaluating whether it had helped improve death investigations. Conducting such an assessment would help guide when it is cost-beneficial to use this valuable resource in such a manner. See **Appendix 8** for details on the events that led to the scene attendance practices that are followed by forensic pathologists who provide autopsy services for the Office.

In May 2018, the Office noted that prior to the pilot project "forensic pathologists did attend scenes but this was done ad hoc and not tracked." At the time of our audit, the Toronto Forensic Pathology Unit was not tracking scene attendance by forensic pathologists. In contrast, outside of Toronto, we found that in 2017/18, forensic pathologists at six regional hospital-based forensic pathology units

made 41 scene visits. Our review of this data indicated the majority (almost 70%) of these visits were made in one regional unit but the Office had not assessed whether this higher attendance rate was because the scene visits were found to provide valuable insights to these death investigations in that area. We surveyed other Canadian provinces and found that forensic pathologists either do not attend death scenes or do so only in rare circumstances.

4.6.2 Alternative Coroner Staffing Models Not Evaluated

The Ministry's internal audit noted in its 2013 operational review of the Office of the Chief Coroner that regional supervising coroners have difficulty managing coroners because of the lack of contractual relationships. The Chief Coroner responded by acknowledging that a "more robust framework (was) needed for engaging and managing the performance parameters and expectations of our coroners." He informed us that the absence of timelimited appointments for coroners makes it more difficult to remove coroners with quality concerns since there is no mechanism established to prompt a review. In comparison, pathologist appointments are periodically revisited through the time-limited appointment process set out in the pathologist register. In 2014, the Death Investigation Oversight Council recommended that coroners be appointed for a specified time period and that the reappointment be contingent on the recommendation of the Chief Coroner.

The Office began a pilot in early 2018 to reduce the instances of coroners investigating natural deaths. A registered nurse, acting as a "coroner investigator," makes an initial judgment about whether a death requires an investigation, which primarily consists of determining whether it is likely from natural causes. The Office expects this approach to reduce the number of deaths a coroner investigates by about 3,400 cases per year, with annual net savings estimated at about \$1 million. Further, the Chief Coroner informed us that

his long-term plan is to introduce a new service delivery model composed of trained health-care professionals who will dedicate a portion of their time to death investigations and will be engaged to work for the Office through a contractual relationship. The health-care providers will likely include doctors, nurses and paramedics. This is expected to improve efficiencies and develop the competence of these coroners through experience in death investigations. However, the Office has not performed an analysis of this model. Such an analysis could include comparing the salaries of the non-physician coroners and the time needed to conduct a death investigation for a full-time staff person, against the current \$450 fee for a part-time physician coroner. According to our research, death investigation conclusions are made by those with a medical background in the majority of other Canadian provinces (see Appendix 9).

RECOMMENDATION 9

To improve the accountability and cost-efficiency of Ontario's death investigation services, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service:

- develop a process to track forensic pathologists' scene attendance and the impact of such attendance on the death investigation;
- assess the costs and benefits of including forensic pathologists at death scenes, and the types of scenes that their expertise helps improve the quality of the death investigation: and
- evaluate staffing model alternatives such as changing the current workforce of coroners with other non-physician professionals or forensic pathologists when autopsies are involved, and making coroner positions full time, and implement changes required.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service accepts this recommendation and will develop tools to implement improvements in accountability and cost-efficiency of Ontario's death investigation services, including:

- tracking the frequency, investigative effectiveness and cost-efficiency of scene attendance by forensic pathologists;
- establishing guidelines for caseload and workload for professional contributors to the death investigation system to ensure a sustainable workforce; and
- ensuring effective analysis of the proposed new coroner service delivery model to ensure a cost-effective service model, as compared with other possible models.

4.6.3 Transfer Payments to Regional Forensic Pathology Units Not Reviewed Based on Workload and Cost-Effectiveness

The Office makes annual transfer payments to six hospital-based regional forensic pathology units, but does not ensure the funding is used for autopsies, staff or any other measurable factor. In fact, in the 2018/19 fiscal year, the Office's overall cost for each autopsy varied from \$1,569 at the Sault Ste. Marie unit to \$2,610 at the Ottawa unit—a 66% difference.

The Office has not assessed the actual costs needed to operate the forensic pathology service program. As noted in **Figure 9**, each regional unit receives from \$100,000 to \$570,000 per year. These amounts were determined about a decade ago and have not changed. The Ministry's internal audit also reported in June 2018 that funding to regional units did not align with autopsy workload.

RECOMMENDATION 10

To demonstrate that it is receiving value-formoney from regional hospital-based forensic pathology units, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service review its funding to these units for workload and cost-effectiveness and revise as necessary.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and will endeavour to review funding of the units based upon workload and cost-effectiveness. The Office requires approval from Treasury Board and the Ministry of the Solicitor General to increase transfer payment amounts to forensic pathology units.

4.7 Public Reporting on Office's Activities Not Timely or Not Available

4.7.1 Published Reports at Least Four Years Old

When information is not shared with the public in a timely way, the public's confidence in the work of an organization may be diminished. Although the *Coroners Act* does not require the Office to publish an annual report, the Chief Coroner and the Ontario Forensic Pathology Service have published separate reports for the public. While the Ontario Forensic Pathology Service informed us that it has shared its annual results ending July 26, 2017 and July 26, 2016 with stakeholder groups such as police, Crown Attorneys and coroners, at the time of our audit, the most recent reports published online for the general public included only a report from the Ontario Forensic Pathology Service for the period ended July 26, 2015, and from the Chief

Coroner for the four-year period from 2012 to 2015. In comparison, we noted that Newfoundland and Labrador and Quebec had published more recent results, from 2017 and 2018, respectively.

For the year 2017, the Office took about 21 months—from January 2018 to September 2019—to complete about 98% of that year's 17,078 death investigations, about half of which (7,657) included autopsies. Senior management at the Office explained that the delay in publishing these results was partially due to a significant turnover of five of 10 regional supervising coroners since January 2017. The Chief Coroner informed us that the Office does not have an annual reporting cycle and that other operational matters had been focused on such as the day-to-day requirements of conducting death investigations as well as providing data to stakeholder groups when requested.

RECOMMENDATION 11

To increase its transparency and be more accountable to the public for its death investigation work, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service annually report on performance and provide updates in future years if statistics pertaining to a particular year are revised.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation. To increase transparency and be more accountable to the public for its death investigation work, the Office will:

- annually report on performance and provide updates if statistics pertaining to a particular year are revised, such as changes arising from finalizing conclusions when investigations are completed; and
- work with the Ministry of the Solicitor General's Research, Analytics and Innovation

Branch, and Communications Branch, to develop an innovative approach to annual reporting that can provide more real-time data, such as publishing links to Public Health Ontario's Opioid tracker with the Office's most recent data.

4.7.2 No Public Status Updates on Recommendations to Reduce the Risk of Further Deaths

One of the Office's goals is to prevent further deaths. Senior staff informed us, however, that measuring the Office's impact in this area is inherently difficult because multiple parties are involved in making changes to help improve safety in Ontario. Inquests involve legal counsel and other parties presenting evidence on the processes within government organizations to help develop recommendations to prevent further deaths. The Chief Coroner informed us that the Office does not have specific insights to know whether these recommendations are fully implementable. Consequently, he indicated that the recommendations made under the Office's authority should not be considered binding. Death review committees and inquests, together with one expert panel, produced about 600 written recommendations that were published in 2018, as shown in Figure 16.

The Office has never publicly indicated that it does not validate whether these recommendations can be implemented. Yet the public would view coroner recommendations made through inquests and death review committees to be fully supported by the Office.

The Office requests that ministries and other organizations that receive recommendations from death review committees or inquests respond within six months. The Office rarely reports the responses that it receives publicly. According to the Chief Coroner, the rationale for not publishing responses is the concern that the number of requests may not justify the time and cost of formatting responses for their website from hard copy, and translating them

into French. Without responses to inquest and death review committee recommendations, the public cannot determine whether organizations or ministries have addressed deficient areas that could still contribute to further deaths.

We noted that both the governments of British Columbia and Saskatchewan make responses to inquests public. British Columbia publicly posts responses to its death review units, which are similar to Ontario's death review committees.

RECOMMENDATION 12

To better serve and be transparent to the public in its role in preventing further deaths and protecting the living, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office):

- make the current status of implementation and responses to recommendations made by inquests and death review committees publicly available online; and
- communicate to the public the Office's position regarding the usefulness and practicality of these recommendations.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation. To better serve and be more transparent to the public about our role in preventing further deaths and protecting the living, the Office will:

Figure 16: Recommendations Made by Inquests, Death Review Committees and an Expert Panel in 2018
Prepared by the Office of the Auditor General of Ontario

Source of Recommendation	Description	# of Recommendations Published in Reports
Inquests		
35 inquests held during 2018 for 47 deaths	Five Ontarians appointed as jurors hear testimony from witnesses, experts and other parties such as ministries and are presented with information from these parties. Jurors may choose from presented recommendations and/or develop some of their own.	536
	Each inquest is self-contained, a one-off, that produces a formal report containing recommendations.	
Death Review Committees		
Domestic Violence Death Review Committee	Five death review committees that each review specific types of deaths, usually those that are considered to be of more critical concern to	33
Paediatric Death Review Committee	Ontarians, in order to: • help ensure consistent review processes over each type of death	23
Maternal and Perinatal Death Review Committee	 support coroners in conducting death investigations as needed by providing expertise in the subject area 	22
	Death review committees meet on an ongoing basis, provide case- specific recommendations and produce formal reports. Only three of the committees published reports in 2018.	
Expert Panel		
Deaths of Children and Youth in Residential Placement	Consist of a group of experts who evaluate deaths that meet a certain criteria (for example, deaths of youth in residential placements) and create recommendations to reduce future deaths.	5
	Expert panels meet for a limited time and produce a formal report containing recommendations.	

- work with the Ministry of the Solicitor General's Communications Branch to provide
 more immediate access to the current status
 of the implementation of and responses to
 recommendations made at inquests and
 death review committees publicly available
 online; and
- develop a communications strategy that facilitates communicating to the public the value, benefit and potential concerns about recommendations following death reviews and inquests. Any immediate public health and safety improvements should be highlighted.

4.7.3 Death Data Not Systematically and Periodically Analyzed to Identify Death Trends to Protect the Living

Although the motto of the Office is "we speak for the dead to protect the living," we found that the Office performs limited analysis on the data it collects to identify death patterns or trends. Performing more systematic analysis could identify areas of risk that could be addressed to help prevent further deaths and improve public safety. Data collected by the Office includes the circumstances of death, age and gender of the deceased, location of death, and manner of death, such as accident or suicide. Without regularly analyzing this data, the Office is missing an opportunity to use its information to prevent or reduce the risk of further deaths.

The Office acknowledges the importance of data analysis. The *Coroners Act* notes that a coroner's work involves collecting and analyzing information about deaths in order to prevent further deaths. In the Office's 2015–2020 Strategic Plan, the Office intended to implement a data management plan to capture, track and analyze information to make meaningful and measurable contributions to health and public safety. The plan also included an intention to have the "capacity for dynamic analysis to assess for emerging trends and areas of interest across the broader public safety and health sectors."

In recent years, the Office has analyzed its death investigation data to inform a 2018 expert panel on the deaths of children and youth in the care of Children's Aid Societies and Indigenous Wellbeing Societies in residential placements. The expert panel evaluated this systemic issue further to the Office's analysis of deaths as reported by stakeholder groups.

In December 2017, the Office initiated a pilot project to evaluate and prevent the deaths of children and youth between the ages of 10 and 25. (See **Appendix 4** for more on expert panels.) The project uses data from five ministries, as well as community child and youth agencies in four municipalities, to create a risk model to learn more about the circumstances leading up to the death of a child or youth, and evaluate trends. The intent is to evaluate intervention points for future recommendations. The Office may consider the possibility of reviewing all child and youth deaths in Ontario after the pilot is completed in March 2020.

4.7.4 Data on Deaths in Correctional Facilities to Inform Intervention Policies Not Publicly Released

While death review committees publish statistics on specific types of deaths, such as pediatric and domestic violence-related deaths, the Office does not publish the number and nature of deaths of inmates in correctional facilities. This includes whether a death is by suicide, accident, or natural causes. This information could help inform intervention policies. In comparison, the British Columbia Coroners Service tracks and publishes the number of inmate deaths by nature of death, and by federal or provincial correctional facility. The British Columbia Coroners Service informed us this data can help those who manage or provide oversight of correctional facilities to make changes for the better. Similarly, Saskatchewan's Ministry of Justice and the Attorney General tracks and publishes the number of suicides by year, gender and age group. For example, we noted that this data

indicates that suicides by males in Saskatchewan have generally been increasing since 2005, and that 2018 had the most suicides of any year.

4.7.5 Lack of Information Collected to Inform Intervention Policies and Public Health Concerns

The information coroners typically collect in death investigations is not always complete enough to address public health concerns. To enhance the Office's ability to support the reduction of opioidrelated deaths, beginning in 2017 the Office initiated a form to be used for coroners to complete in this type of death investigation. The Office started requiring coroners to gather additional information from hospitals, family members, bystanders and emergency responders to build data on deaths that may be related to opioid use. This information included demographics, mental health and substance use history. While the Chief Coroner informed us that he has from time to time conducted media interviews where he has provided information on deaths resulting from high temperatures, the Office has not released any formal reports to the public on the extent to which heat has resulted or contributed to deaths to Ontarians. The Chief Coroner informed us that given current data limitations, he could not perform such an analysis. We noted that heat-related deaths related to climate change have been an issue of growing public concern.

Similarly, the Public Inquiry into the Safety and Security of Residents in the Long-Term Care Homes System report, released in July 2019, recommended that the Office redesign its form for institutional patient deaths to collect additional information. This information could include clinical observations from staff, or concerns raised by family or other care providers about the resident's care in the period leading up to and including the death.

RECOMMENDATION 13

To reduce the occurrences of preventable premature deaths and improve public safety, we recommend that the Office of the Chief Coroner and Ontario Forensic Pathology Service collect relevant information to analyze deaths, identify trends and provide the information to government and other organizations that can use this information in policy development.

OFFICE OF THE CHIEF CORONER AND ONTARIO FORENSIC PATHOLOGY SERVICE RESPONSE

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) accepts this recommendation and agrees that to reduce the occurrences of preventable premature deaths and improve public safety, that we collect relevant information to analyze deaths, identify trends and provide the information to government and other organizations to inform policy development to enhance the health and safety of Ontarians.

The QuinC system will implement casespecific templates to guide the investigation and collection of defined data elements in multiple death types, such as motor vehicle crashes, deaths of children, gunshot-related deaths, and drownings.

The general and specific investigative approaches were developed to capture information about the determinants of health with a view to inform a public health approach to intervention, and to inform prevention of further deaths. Each of the case specific approaches were informed by those with expertise in the case type, for instance, the Lifesaving Society for the drowning template.

In addition, in 2018 there were amendments to the *Coroners Act* that provide clarity, framework and privacy processes to support the

sharing of mortality data with other entities for data analysis and research.

4.8 Oversight Role of Death Investigation Oversight Council Cannot be Effectively Executed

As noted in **Section 2.4**, the Death Investigation Oversight Council (Council) was established in 2010 to provide independent oversight for the Office, following recommendations by the 2008 Goudge Inquiry. The Council was established to improve the oversight of forensic pathologists working on death investigations, as well as coroners, and to ensure that the Office of the Chief Coroner is independent of government.

The Council is unique to Canada. Ontario is the only province that has established an oversight body for death investigation services. Its function is to provide advice and recommendations to the Chief Coroner and Chief Forensic Pathologist, as outlined in the **Appendix 10**.

Our audit identified many areas where the Council was not effectively supporting and overseeing the effective operation of the Office:

- The Council made about 60 recommendations to the Office in the last five years that the Office committed to implement.
 The Council does not have the authority to require the Office to implement these recommendations.
- The Council does not review the work of the Chief Coroner or Chief Forensic Pathologist.
 The Goudge Inquiry recommended in 2008 that a forensic pathologist from outside
 Ontario be appointed as a member of the Council. A forensic pathologist still had not been appointed to the Council by the time of our audit.
- The Coroners Act sets out the broad responsibilities of the Council, which include financial management, strategic planning, quality assurance and accountability. However, when the Office proposed closing one of its regional

- hospital-based forensic pathology units in 2019, it requested and obtained Ministry approval to do so without informing the Council; the Office informed us that they did not inform the Council because the Ministry of the Solicitor General directed them to keep this confidential. The Office did not engage with the Council on this decision until the government's confidential annual budget planning cycle was complete. The Ministry informed us that it acknowledges the importance of the Council's financial and strategic planning role and commits to engaging with Council on Office plans before entering into any future confidential budget planning cycles.
- Despite the Council having a specific mandate—over its nine years of operations—to make recommendations to the Office on its performance measures, it informed us that it had recently begun, during the course our audit, to more regularly inquire about the Office's specific key indicators. The Council informed us this is partly because it has been waiting for the new coroner information system to be rolled out; the Council expected this system to form the basis of a new performance framework. The Council has been receiving regular updates on the new system and the expectations of it. While we found that the Office had certain performance indicators that measure the timeliness of completing death investigation reports, as noted in Section 4.2.6, the Office did not track data to measure the quality of individual coroners' work.

RECOMMENDATION 14

To improve the effectiveness of oversight of the Office of the Chief Coroner and Ontario Forensic Pathology Service, we recommend that the Ministry of the Solicitor General revisit the terms of reference and authority of the Death Investigation Oversight Council.

MINISTRY RESPONSE

The Death Investigation Oversight Council (Council) was established in December 2010 as an independent advisory body, which generally aligns with the recommendations of the Goudge Inquiry related to the province's forensic pathology system. The legislative framework for the Council is set out in the *Coroners Act*. The government's Agency Review Task Force recently reviewed the Council and determined that it should be maintained, while exploring improvements to its complaints and appointments processes. The Ministry will consider this recommendation as part of its work identified by the Agency Review Task Force related to the Council.

Appendix 1: Glossary of Terms

Prepared by the Office of the Auditor General of Ontario

Autopsy: Also known as a post-mortem examination, a pathologist or forensic pathologist examines a deceased person's body to help determine cause of death. An autopsy could include an external examination, full dissection (examination of internal organs), or targeted dissection (examination of specific organs based on findings from a computerized tomography (CT) scan).

Coroner: A medical doctor, appointed by the Chief Coroner to conduct death investigations as mandated by the *Coroners Act.* About 70% of active coroners have a background in family medicine.

Death Investigation: A coroner, with the assistance of a forensic pathologist (when required) conducts analysis of available evidence to understand how and why a person died. A coroner must answer five questions when investigating a death:

- · Who (identity of the deceased)
- · When (date of death)
- · Where (location of death)
- · How (medical cause of death) and
- · By what means (natural causes, accident, homicide, suicide or undetermined).

Information may be obtained from several sources including, but not limited to, family, co-workers, neighbours, doctors, hospital records, police and other emergency service workers.

Death Review Committees: Five committees established between 1989 and 2014 that offer specialized knowledge and expertise in complex death investigations within the specific subject matter areas of patient safety, domestic violence, maternal and perinatal, geriatric and long-term care, and pediatric. Refer to **Appendix 4** for further details.

Expert Panels: Established by the Office of the Chief Coroner to inform the investigation of certain deaths, such as children and youth who die in residential placements, and those who die from participating in winter sports, to identify any commonalities and/or trends, systemic issues or concerns, and make recommendations that may assist in preventing further deaths in specific areas.

Forensic Pathologist: A physician who performs autopsies and is expert in disease and injury that result in sudden death; has about one year of additional schooling/training compared to a pathologist. By definition, all Category A pathologists on the Ontario register of pathologists are forensic pathologists and can perform all autopsies, including homicide, pediatric and criminally suspicious cases.

Forensic Pathology: A sub-specialty of pathology that focuses on determining the cause of death through the examination of a deceased person.

Inquest: A public hearing designed to focus public attention on the circumstances of a death through an objective examination of facts. At the conclusion of an inquest, the five-person jury makes recommendations that are intended to prevent further deaths. There are two types of inquests: mandatory (required by law) and discretionary (at the discretion of the coroner). (See **Figure 11** for more information.)

Pathologist: A physician who performs autopsies and is expert in disease and injury, requiring about four to five years of additional schooling/training in general pathology or anatomical pathology after becoming a physician. All pathologists on the Ontario register of pathologists are categorized by the types of autopsies they can perform. Category A pathologists can perform all autopsies, including pediatric, homicide and criminally suspicious cases. All Category A pathologists are forensic pathologists. Category B pathologists can perform autopsies on non-criminally-suspicious adult cases. Category C pathologists can perform non-criminally-suspicious pediatric cases.

Pathology: A branch of medical science that involves the study and diagnosis of disease through the examination of surgically removed organs and tissues, and in some cases the whole body (i.e., an autopsy).

Reportable Death: The *Coroners Act* requires that every person in Ontario must report certain types of deaths to a coroner. Reportable deaths are defined as:

- Deaths as a result of violence, misadventure, negligence, misconduct, or malpractice;
- Deaths during pregnancy or following pregnancy in circumstances that might reasonably be attributable to pregnancy;
- Deaths that are sudden and unexpected;
- Deaths from disease or sickness for which he or she was not treated by a legally qualified medical practitioner;
- Deaths from any cause other than disease;
- Deaths where a person dies while resident or an in-patient in the following settings:
 - a children's residence as defined under Part IX (Residential Licensing) of the *Child, Youth and Family Services Act, 2017* or premises that had been approved under subsection 9(1) of Part I (Flexible Services) of the *Child and Family Service Act,* as it read before its repeal:
 - a supported group living residence or an intensive support residence under the Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act, 2008;
 - a psychiatric facility designated under the Mental Health Act;
 - a public or private hospital to which the person was transferred from a facility, institution or home referred to in this list;
- · Deaths in long-term care homes;
- Deaths off premises of psychiatric facilities, correctional institutions, youth and custody facilities (the person was a patient or committed to the facilities; however, death occurred while not on premises or in actual custody of the facilities);
- Deaths of individuals while detained in and on the premises of a lock-up;
- Deaths of individuals while committed to or on the premises of a place of temporary detention under the *Youth Criminal Justice Act* (Canada);
- Deaths of individuals while committed to and on the premises of a place or facility designated as a place of secure custody under section 24.1 of the *Young Offenders Act* (Canada);
- Deaths of individuals while committed to or on the premises of a correctional institution, or off premises of the institution but in the actual custody of a person employed at the institution; or at a hospital after having been transferred to the hospital by the correctional institution;
- Deaths of individuals while detained by or in the actual custody of peace officers, or an injury sustained or other event that occurred while the individual was detained by or in the actual custody of peace officers is a cause of the death;
- Deaths of individuals as a result of the use of force by a police officer, auxiliary member of a police force, special constable or First Nations Constable;
- Deaths of individuals where the Special Investigations Unit Director causes an investigation to be conducted;
- Deaths of individuals while being restrained and while detained in and on the premises of a psychiatric facility within the meaning of the *Mental Health Act* or a hospital within the meaning of Part XX.1 (Mental Disorder) of the *Criminal Code* (Canada);
- Deaths of individuals while being restrained and while committed or admitted to a secure treatment program within the meaning of Part VII of the *Child, Youth and Family Services Act, 2017*;
- Deaths of workers as a result of an accident occurring in the course of the worker's employment at or in a construction project, mining plant or mine, including a pit or quarry.

Appendix 2: Appointment Process for Investigating Coroners

Prepared by the Office of the Auditor General of Ontario

The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) follows Ontario Public Service (OPS) guidelines for appointing new coroners by posting an annual recruitment advertisement on the OPS website. Prospective coroners submit their applications and the Office's human resources department performs an initial screening by eliminating all applicants who are not physicians. The remaining applications are usually forwarded to a deputy chief coroner who creates a short list of applicants to be invited to interview after eliminating applicants in regions that have a sufficient number of coroners.

Regional supervising coroners conduct the interviews of people applying within their regions. The regional supervising coroners are to score the applicants based on the interview and then make a recommendation to the Chief Coroner on whether to accept an application. Ultimately, the Chief Coroner makes the final decision on appointments. In 2018 and 2019, 71% and 58% of coroners who applied and were recommended were accepted, respectively. Reasons for not accepting applicants included concerns about their living patient workload, and whether new physicians would be licensed in time to take the annual coroner's course.

Appendix 3: Topics Covered in New Coroners Course Offered by the Office of the Chief Coroner and Ontario Forensic Pathology Service

Prepared by the Office of the Auditor General of Ontario

- An overview of a death investigation: the purpose of the investigation, which answers the five questions for each death (who, when, where, how, by what means);
- Duties and powers of coroners, including the circumstances of deaths that need to be investigated (non-natural deaths, etc.) as set out under the *Coroners Act*;
- Receiving calls from the Office's Central Provincial Dispatch Unit: how to decide whether a case should be investigated, which generally requires an evaluation of whether a death was natural based on preliminary information available;
- Scene attendance: the requirement to dress appropriately for the scene (for example, wearing boots, jackets, and personal protective equipment based on location and weather), documents (such as warrants to take possession of the body, and brochures for families), ways to gain access to death scenes, initial questions for police (e.g., do they have any reason to believe there are criminal concerns, whether they have identified the deceased person), speaking with family, examination of the body, and completion of warrants;
- Case studies on all manners of deaths: natural, accident, suicide, homicide, and undetermined;
- Process for communicating high-profile cases (i.e., deaths with significant potential risk to the Office and/or criminal justice system if not managed optimally) so that preliminary information can be shared between coroners and pathology service;
- Introduction to autopsy and forensic pathology: how forensic pathologists determine cause of death, describing an autopsy, duties of forensic pathologists, post-mortem changes (pathways to decomposition), and introduction to injuries (e.g., blunt force, sharp force, firearm, strangulation) that may be factors to consider in concluding on deaths;
- Inquests: their purpose, how and when an inquest is called, and when to consider making a suggestion for an inquest to a regional supervising coroner;
- Protocols on identification of unidentified bodies including checking dental records;
- Introduction to toxicology: different types of tests and analyses as well as how to read toxicology reports and results;
- Additional considerations for investigating certain types of deaths such as maternal and pediatric;
- Case documentation requirements, entering death investigation information and generating reports, and submission of reports to the Office; and
- Certifying death.

Appendix 4: Death Review Committees and Expert Panels Supporting the Chief Coroner

Source of data: Office of the Chief Coroner and Ontario Forensic Pathology Service

Committee/Panel	Year Established	Types of Deaths Reviewed
Death Review Committees		
Patient Safety Review Committee	2005	Health-care-related deaths where system-based errors or issues appear to be a major factor
Domestic Violence Death Review Committee	2003	Deaths of persons that occur as a result of domestic violence
Maternal and Perinatal Death Review Committee	1994	Deaths relating to maternal, stillbirths, and neonatal
Geriatric and Long-Term Care Review Committee	1989	Deaths involving geriatric and elderly individuals and others receiving services within long-term care homes
Paediatric Death Review Committee ¹	1989 2014	Deaths of children and youth where care-related concerns have arisen or when a children's aid society has been involved within 12 months of the death.
Expert Panels		
Expert Panel on the Deaths of Children and Youth in Residential Placements	2018	Children and youth under care of children's aid societies or the Indigenous Child Wellbeing Society and died in residential placement.
Winter Sports Death Review	2015	All accidental skiing, snowboarding and tobogganing deaths
Ornge Air Ambulance Transport Related Deaths	2013	Death with concerns related to air ambulance transport identified
Other		
Construction Fatality Review Committee ²	2012	Identifying potential, urgent public safety hazard that may not have already been acted upon by other individuals or organizations (investigating coroner, Ministry of Labour investigation, police investigation, etc.) and suggest recommendations and areas where questions could be asked at inquest

^{1.} This committee was formed in November 2018 after the Deaths Under Five Committee and the previous Pediatric Death Review Committee were merged.

^{2.} Neither a death review committee nor an expert panel, but functions similarly to both.

Appendix 5: Inquiry into Pediatric Forensic Pathology in Ontario, 2008

Prepared by the Office of the Auditor General of Ontario

The Inquiry into Pediatric Forensic Pathology in Ontario, commonly known as the Goudge Inquiry, was a public inquiry ordered by the Government of Ontario following various discoveries of the inaccurate postmortem pediatric work of Dr. Charles Smith. Dr. Smith performed such work on behalf of the Office of the Chief Coroner, and was then the Director of the Ontario Pediatric Forensic Pathology Unit at the Hospital for Sick Children. From 1981 to 2005, due to systemic weaknesses regarding the oversight of forensic pathology services, Dr. Smith performed pediatric forensic pathology despite having no formal training or certification in forensic pathology.

Concerns were being raised at a growing rate about Dr. Smith's competency by court officials, family members of those affected by his work, and the Association in Defence of the Wrongly Convicted. The then-Chief Coroner called a formal review of Dr. Smith's work in 2005, using the services of five international forensic pathologists. They examined all 45 criminally suspicious cases for which Dr. Smith had conducted an autopsy or provided a consultation opinion since 1991. In nine of 45 cases, the reviewers did not agree with "significant facts" that appeared in Dr. Smith's report or his testimony. In 20 of 45 cases, the reviewers had concerns with the opinions expressed in Dr. Smith's reports and/or his testimony, and in 12 of these cases, the legal proceedings had resulted in a guilty verdict (the Inquiry did not indicate how many of Dr. Smith's opinions were used as the basis for a guilty verdict). This report was released on April 19, 2007.

Later in April 2007, a commission was established by the Government of Ontario to review the way pediatric forensic pathology was being practised and overseen in Ontario. The Honourable Stephen T. Goudge was chosen to lead this commission. Justice Goudge was directed to focus on the 20 cases flagged by the formal review, and to make recommendations to correct the system's potential for error and absence of oversight. The Inquiry into Pediatric Forensic Pathology in Ontario released its report on October 1, 2008.

The Inquiry made 169 recommendations with five lead ministries assuming reporting responsibility; 127, or about three quarters of the recommendations were directed to the Ministry of Community Safety and Correctional Services (Ministry)—now the Ministry of the Solicitor General. The Ministry established a project team to act as the co-ordinating body for the recommendations. The implementation of the recommendations from the Inquiry resulted in a general strengthening of the quality assurance processes over autopsies through the *Coroners Amendment Act* (2009). Changes included the introduction of the register for forensic pathologists and pathologists authorized to conduct autopsies that would form part of a death investigation, and the position of Chief Forensic Pathologist to oversee the work of pathologists. The Death Investigation Oversight Council was also created to oversee the operations of the Office of the Chief Coroner and Ontario Forensic Pathology Service.

Appendix 6: Audit Criteria

Prepared by the Office of the Auditor General of Ontario

- The Office of the Chief Coroner and Ontario Forensic Pathology Service (Office) performs death investigations where
 required by legislation.
- 2. All coroners and pathologists used by the Office are competent.
- 3. Death investigations are completed in a timely manner.
- 4. Adequate information to support the rationale for decisions made is documented for all deaths reported to the Office, including those that did not result in a death investigation. The conclusions of death investigations are accurate and evidence-based.
- 5. The value of performing additional death investigation processes, such as autopsies and inquests, is demonstrated.
- 6. Ontario's death investigation model is assessed to determine its cost-effectiveness, for example, by comparing it with other jurisdictions. The resource requirements for coroners and pathologists are assessed and appropriate actions are taken where necessary.
- 7. Recommendations made by the Office are tracked and followed up to help prevent further deaths.
- 8. Meaningful performance measures and targets related to death investigations are established, monitored, and publicly reported.

Appendix 7: Excerpts from the Coroners Investigation Manual on Conflict of Interest

Source: Office of the Chief Coroner and Ontario Forensic Pathology Service

"In most circumstances, a coroner should not accept for investigation a case where there exists, or may be a perception of a conflict of interest. If a conflict becomes apparent during an investigation already started, the coroner should not continue with the investigation, and seek guidance from the RSC [regional supervising coroner].

It is recognized that physician coroners in most communities may have medical staff appointments at their local hospital. Although the potential for a relative conflict of interest may exist, in most situations where there are no serious care concerns, the coroner can conduct an objective and unbiased investigation provided he/she was not involved in the care.

Examples of where conflict of interest may exist include:

- 1. The coroner has had a professional relationship with the deceased or family of the deceased (e.g. as attending physician);
- 2. The deceased was a relative, friend or business associate of the coroner;
- 3. There appear to be questions of quality of care provided to the deceased and the health care professionals in question have a professional affiliation with the coroner (e.g. work in same clinic);
- 4. The coroner is on the professional staff of the hospital or other institution and there are serious questions of the quality of care provided in the institution.

In some circumstances where another coroner is not immediately available, it may be reasonable for the coroner originally contacted to initiate the investigation, to order the post mortem examination (if indicated) and to notify the RSC [regional supervising coroner] for transfer of the case to another coroner for the remainder of the investigation."

Appendix 8: Key Events That Led to Scene Attendance by Forensic Pathologists in Ontario, 2005–2018

Prepared by the Office of the Auditor General of Ontario based on information provided by the Office of the Chief Coroner and Ontario Forensic Pathology Service (Office)

Chief Coroner and Medical Director of the Toronto Forensic Pathology Unit (later made the Chief Forensic Pathologist) send memo to all investigating coroners, forensic pathologists and police services in Toronto specifying the types of death scenes that forensic pathologists should attend, wherever possible. Such death scenes include those related to sexual violence, dismembered or buried bodies and homicides in a concealed location.
As noted in Appendix 5 , the Goudge Inquiry is released and makes a recommendation that addresses scene attendance by forensic pathologists. Justice Goudge recommends that the Office identify the circumstances in which scene attendance by forensic pathologists would be valuable and outline a protocol to be followed at the scene when forensic pathologists are in attendance.
Ministry of Community Safety and Correctional Services (now the Ministry of the Solicitor General) engages a consulting firm to conduct a review of different death investigation systems in and outside of Canada to improve and enhance the death investigation system in Ontario. The report recommends forensic pathologists take over all coroner duties whenever a coroner orders an autopsy.
The Death Investigation Oversight Council (Council), established in 2010, approves several recommendations from the 2012 review, including appointing forensic pathologists as coroners and having them act as coroners in all criminally suspicious deaths.
The Office implements a pilot project, appointing 19 forensic pathologists to act as coroners in criminally suspicious deaths. They start to attend death scenes with experienced coroners.
The Council finalizes a review and provides a final report on the pilot project to the Office that includes surveys and interviews. The Council finds that 46% of coroners, 85% of forensic pathologist-coroners, and 85% of police have favourable views of the project. Positive comments include an increased opportunity for collaboration and learning, and better case continuity from the start of the death investigation to the presentation of its findings in court. Police view the forensic pathologist-coroner as an asset who helps them examine the scene. However, the Council review does not assess whether the pilot has helped improve the quality of death investigations.
The Office terminates the pilot project without assessing the costs and benefits of including forensic pathologists at death scenes. The Office reaffirms the memo that was sent in June 2005, and further notes "there are specific homicide or criminally suspicious scenes where attendance by the forensic pathologist is extremely useful to the death investigation," and extends this memo province-wide, indicating that a method of tracking scene attendance and a key performance indicator for scene attendance will be developed.

Appendix 9: Comparison of Death Investigation System across Canada and Selected Regions in the United States and Australia

Prepared by the Office of the Auditor General of Ontario

	Death Investigation Conclusion Made by ¹		Organization Headed by			Annual Funding or Budget (\$ million) ²	# of Death Investigations	
	Medical	Non- Medical	Chief Coroner	Chief Medical Examiner	Chief Forensic Pathologist	*Actual **Budgeted Amount	Performed Annually ³ (Year)	
ON	✓		✓		✓	47.1 (2018/19*)	17,900 (2018)	
BC		✓	✓			16.9 (2018/19**)	5,700 (2017)	
AB	✓			✓		13.6 (2018/19*)	5,7004 (2018)	
SK		✓	✓			3.0 (2018/19*)	2,200 (2018)	
MB	✓			✓		3.7 (2017/18*)	1,800 (2017)	
QC	✓	✓	✓			9.0 (2017/18**)	5,500 (2018)	
NB		✓	✓			2.6 (2017/18*)	1,700 (2017)	
PE	✓		✓			0.6 (2018/19**)	300 (2018)	
NS	✓			✓		4.6 (2017/18*)	1,200 (2017)	
NL	✓			✓		1.4 (2018/19*)	600 (2018)	
Harris County (Houston)	✓			√		35.7 (USD) (2018/19*)	4,600 (2018)	
Maricopa County (Phoenix)	✓			√		Information is not available ⁵	6,100 (2018)	
Queensland (Australia)	✓	✓	✓		✓	25.6 (AUD) ⁶ annual average	5,800 (2017/18)	

	Remun	Inquest/Inquiry Recommendations Made By ^s			
	Coroner or Medical Examiner (performs death investigation)	Forensic Pathologist/Pathologist (performs autopsies)	Jurors	Judge	Coroner
ON	\$450 per case	\$300-\$1,650 per autopsy	✓		
BC	Part-time coroners: \$32 per hour plus mileage Full-time coroner annual salary: \$75,000-\$85,000	\$1,000 per autopsy (non-complex) \$1,850 per autopsy (complex)	√		
AB	Medical Examiner annual salary: \$145,000 to \$383,000	Fee-for-service		✓	
SK	Lay Coroners:9 \$135 base fee; \$25 per additional hour Full-time coroner annual salary: \$88,500 plus on-call pay or shift differentials	Annual salary: \$299,000 to \$345,000	√		
MB	Medical Examiners: \$72.50 per case	Annual salary ⁵		✓	

	Remuneration ⁷			Inquest/Inquiry Recommendations Made By ^s		
	Coroner or Medical Examiner (performs death investigation)	Forensic Pathologist/Pathologist (performs autopsies)	Jurors	Judge	Coroner	
QC	Medical Coroner: \$347-\$756 per case Legal Coroner: \$336-\$631 per case	Annual salary or fee-for-service ⁵			✓	
NB	Coroners: \$25 per hour plus expenses	Annual salary plus fee-for-service: \$1,200 (forensic)	✓		✓	
PE	Coroners: Fee-for-service ⁵	Fee-for-service ⁵	✓			
NS	Information is not available ⁵	Annual salary plus fee-for-service: \$850 per autopsy (for each additional autopsy, if the pathologist performs more than 200 autopsies per year)		√		
NL	Annual salary ⁵	Annual salary plus fee-for-service: \$200 (external examinations) \$335 (non-complicated autopsies)		✓		
Harris County (Houston)	Information is not available ⁵	Annual salary ⁵	n/a¹º	n/a ¹⁰	n/a¹º	
Maricopa County (Phoenix)	Medical examiner annual salary: \$175,000 and above (USD)	Information is not available ⁵	n/a ¹¹	n/a ¹¹	n/a ¹¹	
Queensland (Australia)	Coroner annual salary: \$361,000 (AUD)	Annual salary: Up to \$335,000 (AUD)			✓	

- In non-medical systems, coroners may be physicians but can also be lawyers, retired law enforcement, other health-care professionals, and in smaller communities, well-known members of the community such as a respected business leader. British Columbia, Saskatchewan, Quebec and New Brunswick supplement the lack of medical expertise with other medical staff.
- 2. In Canadian dollars, unless otherwise specified.
- 3. Rounded to the nearest hundredth.
- 4. The organization indicated it conducted 5,700 death investigations in 2018, taking into consideration comparable types of death investigations conducted in Ontario. Taken together with other unnatural and non-suspicious death cases that it was involved in and its processes to facilitate approvals for cremation, the organization investigated about 20,000 cases in 2018.
- 5. Details are not publicly available and the organization informed us it was confidential and so could not be shared.
- 6. Between 2012/13 and 2016/17, the total cost of the coronial system in this jurisdiction was \$128 million (AUD).
- 7. In some provinces, senior staff, such as the Chief Coroner, Chief Forensic Pathologist and their deputy chiefs, also perform death investigations and autopsies. Their salaries are not included.
- 8. The term inquest or inquiry is used depending on the jurisdiction.
- 9. A lay coroner system is a death investigation system that uses individuals from a variety of backgrounds; for example, nurses, retired police and bankers.
- 10. The organization informed us that it does conduct inquiries/inquests and therefore, this column does not apply.
- 11. The organization referred us to the Arizona Revised Statutes (ARS). There is no reference to inquiries/inquest in the ARS and therefore, this column does not apply.

Appendix 10: Excerpts from the Coroners Act on the Functions of the Death Investigation Oversight Council

Prepared by the Office of the Auditor General of Ontario

Functions of Oversight Council

Advice and recommendations to Chief Coroner and Chief Forensic Pathologist

- **8.1** (1) The Oversight Council shall oversee the Chief Coroner and the Chief Forensic Pathologist by advising and making recommendations to them on the following matters:
 - 1. Financial resource management.
 - 2. Strategic planning.
 - 3. Quality assurance, performance measures and accountability mechanisms.
 - 4. Appointment and dismissal of senior personnel.
 - 5. The exercise of the power to refuse to review complaints under subsection 8.4 (10).
 - 6. Compliance with this Act and the regulations.
 - 7. Any other matter that is prescribed. 2009, c. 15, s. 4.

Reports to Oversight Council

(2) The Chief Coroner and the Chief Forensic Pathologist shall report to the Oversight Council on the matters set out in subsection (1), as may be requested by the Oversight Council. 2009, c. 15, s. 4.

Advice and recommendations to Minister

(3) The Oversight Council shall advise and make recommendations to the Minister on the appointment and dismissal of the Chief Coroner and the Chief Forensic Pathologist. 2009, c. 15, s. 4.

...

- **8.4** (10) Despite subsections (4) and (5), the Chief Coroner and the Chief Forensic Pathologist may refuse to review a complaint referred to him or her if, in his or her opinion,
 - (a) the complaint is trivial or vexatious or not made in good faith;
 - (b) the complaint does not relate to a power or duty of a coroner or a pathologist under this Act; or
 - (c) the complainant was not directly affected by the exercise or performance of, or the failure to exercise or perform, the power or duty to which the complaint relates. 2009, c. 15, s. 4.