

Office of the Chief Coroner

Report for 2009-2011





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Message from the Chief Coroner

I am pleased to present the 2011 Annual Report of the Office of the Chief Coroner for Ontario. This report encapsulates the activities of the office for the years 2009, 2010 and 2011, aligning our annual reporting cycle with the most up-to-date statistics.

Our office has been engaged in a number of exciting initiatives aimed at improving service and enhancing public safety. The investments of the Government of Ontario have enabled us to move forward on a number of transformative projects:

- With our partner, Infrastructure Ontario, we are building a state of the art forensic services complex that will house the Office of the Chief Coroner, the Ontario Forensic Pathology Service and the Centre of Forensic Sciences.
- We are implementing a robust information management system and rolling out a province-wide coroner dispatch system that will greatly improve communications and response levels.
- Telemedicine technology has been acquired to facilitate case conferencing at scenes in remote and northern locations – a significant step forward in delivering high quality service to the people of Ontario.

Our guiding framework has been the recommendations made by the Honourable Stephen T. Goudge, Commissioner of the Inquiry into Pediatric Forensic Pathology in Ontario. This inquiry, announced on April 25, 2007, was the result of an investigation commissioned by former Chief Coroner Dr. Barry McLellan into a series of autopsies conducted by Dr. Charles Smith between 1981 and 2001. Justice Goudge's report was issued in October 2008 and contained 169 recommendations.

While efforts are ongoing to enhance Ontario's death investigation system through the application of new technology and business practices, determining cause and manner of death and preventing premature death in Ontario continues to be our focus. I would like to recognize the commitment of our staff and the approximate 300 physician-coroners who carry out their duties and responsibilities every day with compassion. The people of Ontario and our justice system partners deserve service of the highest calibre and we are dedicated to that end.

I hope that you find the latest information on Canada's biggest and busiest death investigation system useful. For more information on our system, please visit www.ontario.ca/safety.

Andrew McCallum, M.D., FRCPC
Chief Coroner for Ontario



Motto

We speak for the dead to protect the living

The Office of the Chief Coroner for Ontario serves the living through high quality death investigations and inquests to ensure that no death will be overlooked, concealed or ignored. The findings are used to generate recommendations to help improve public safety and prevent deaths in similar circumstances.

Values

Who Are We?

The activities of the Office of the Chief Coroner fall under the jurisdiction of the Community Safety Division of the Ministry of Community Safety and Correctional Services. The ministry is committed to ensuring that Ontario's communities are supported and protected by law enforcement and public safety systems that are safe, secure, effective, efficient and accountable. These systems include emergency management, scientific investigations, coordination of fire safety services and Ontario's death investigation system.

In Ontario, death investigation services are provided by the Office of the Chief Coroner and the Ontario Forensic Pathology Service. The Office of the Chief Coroner works closely with the Ontario Forensic Pathology Service to ensure a coordinated and collaborative approach to death investigation in the public interest with the goal of providing services of the highest calibre. Other death investigation partners include police services, the Centre of Forensic Sciences and the Office of the Fire Marshal.

In Ontario, coroners are medical doctors with specialized training in the principles of death investigation. Coroners investigate approximately 17,000 deaths per year in accordance with section 10 of the Coroners Act . They investigate all unnatural deaths such as those where foul play, suicide, accident, negligence and malpractice are suspected or alleged on a fee-for-service basis. The purpose of a death investigation under these circumstances is to answer the following questions:

- Who the deceased was
- How the death occurred (i.e. the medical cause of death)
- When the death occurred
- Where the death occurred and
- By what means the death occurred (i.e. natural, suicide, accident, homicide or undetermined)
- To determine whether or not an inquest is necessary; and
- To collect and analyze information about the death in order to prevent further deaths in similar circumstances.



Quality Assurance 2009-2011

Ontario is not only the largest medicolegal death jurisdiction in Canada, it is also the largest in North America, and one of the largest in the world. The goal of our quality assurance program is to ensure that death investigation services are delivered to the same high standard across a province which is geographically vast and demographically diverse. Any policy development must take into account that Ontario's landscape ranges from high urban density to remote and sparsely populated communities, and that its population is ethnically and culturally diverse.

Consistent with our commitment to quality, the Office of the Chief Coroner embraces four core values:

Integrity: We remember that the pursuit of truth, honesty and impartiality are the cornerstones of our work.

Responsiveness: We embrace opportunities, change and innovation.

Excellence: We constantly strive towards best practice and best quality.

Accountability: We recognize the importance of our work and will accept responsibility for our actions.

Quality assurance activities of the Office of the Chief Coroner over the report period can be divided into four major areas:

1. Policies & procedures underwent significant review and revision in light of amendments to the Coroners Act and recommendations arising from the Inquiry into Pediatric Forensic Pathology.
2. Investigations were monitored for adherence to policies and procedures and for identifying trends.
3. The development of a new information management database, a major update of Ontario's death investigation database, offers major opportunities for further improvement of consistency, completeness and timeliness of death investigations.
4. Implementation of a complaints tracking system in 2011.

Through these endeavours, we are enhancing the quality and efficiency of our organization and we remain committed to embracing innovation, education and exploration to further advance and position our office for the future.



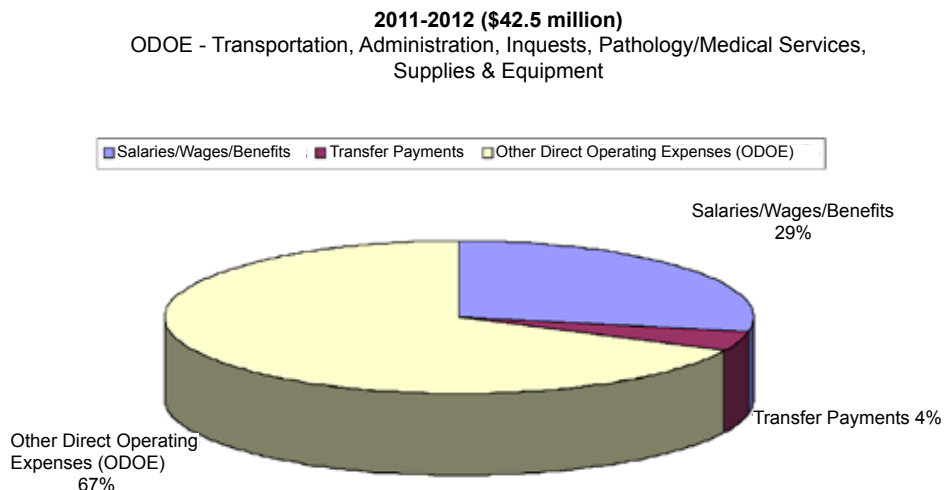
Organizational Structure

In addition to its headquarters in Toronto, the Office of the Chief Coroner has a number of regional offices throughout the province. Each office is managed by a Regional Supervising Coroner with support from administrative staff. The regions and their respective geographic areas are outlined below:

Region	Office Location	Boundaries
East	Peterborough	Haliburton, Hastings, Kawartha Lakes, Northumberland, Peterborough, Renfrew
East	Kingston	Dundas, Glengary, Frontenac, Grenville, Lanark-Leeds, Lennox-Addington, Ottawa, Prescott, Russell, Prince Edward County, Stormont
West	Hamilton	Brant, Dufferin, Haldimand, Hamilton, Niagara, Norfolk, Waterloo
West	London	Bruce, Chatham-Kent, Elgin, Essex, Grey, Huron, Lambton, Middlesex, Oxford, Perth
North	Thunder Bay	Kenora, Rainy River, Thunder Bay
North	Sudbury	Algoma, Cochrane, Manitoulin, Nipissing, Parry Sound, Sudbury, Timiskaming
Central	Guelph	Halton, Peel, Simcoe, Wellington
Central	Toronto East	Toronto (east of Yonge Street)
Central	Toronto West	Toronto (west of Yonge Street)
Central	Brampton	Durham, Muskoka, York



Budgets



*2008-09 \$36.1 million

*2009-10 \$33.1 million

*2010-11 \$34.8 million

Note: Budget expenditures include but are not limited to: Financial support of the Ontario Forensic Pathology Service, the Provincial Forensic Pathology Unit in Toronto, five Regional Pathology Units across Ontario, payments to approximately 300 fee-for-service investigating coroners and payments to approximately 170 fee-for-service pathologists who conduct approximately 6000 autopsies per year under a coroner's warrant.

Investigations

The Coroners Act is the legislative framework for death investigation in Ontario. Sections 10 and 15 of the Act set out the circumstances in which a death should be reported to a coroner, as well as the purpose of a death investigation. The Office of the Chief Coroner investigates approximately 20% of all deaths that occur within the province on an annual basis.

In Ontario, coroners must be licensed medical doctors. There are approximately 300 coroners in Ontario who conduct an average of 17,000 death investigations annually.



The tables below show the number of deaths investigated in the years 2009 and 2010, broken down by manner of death, region and office.

2009 Manner of Death by Region and Office

	Natural	Accident	Suicide	Homicide	Undetermined	Skeletal	Total
Kingston Office - East Region	1700	368	135	17	54	7	2281
Peterborough Office- East Region	802	198	65	8	10	13	1096
Hamilton Office - West Region	1303	594	193	18	63	35	2206
London Office - West Region	1593	443	155	13	88	9	2301
Sudbury Office - North Region	750	224	83	12	21	7	1097
Thunder Bay Office – North Region	305	130	42	14	15	3	509
Toronto East Office – Central Region	1292	434	137	43	60	3	1969
Toronto West Office – Central Region	1132	301	118	24	49	4	1628
Brampton Office - Central Region	1087	329	118	8	39	11	1592
Guelph Office - Central Region	1447	481	186	25	77	31	2247
Total	11411	3500	1232	182	476	123	16926

2010 Manner of Death by Region and Office

	Natural	Accident	Suicide	Homicide	Undetermined	Skeletal	Total
Kingston Office - East Region	1566	377	121	15	29	10	2118
Peterborough Office- East Region	801	210	66	10	13	8	1108
Hamilton Office - West Region	1167	593	160	19	55	48	2042
London Office - West Region	1479	483	175	14	75	9	2235
Sudbury Office - North Region	671	304	75	11	19	7	1087
Thunder Bay Office – North Region	300	125	48	15	7	3	498
Toronto East Office – Central Region	1247	363	136	30	44	3	1823
Toronto West Office – Central Region	1231	327	111	40	58	4	1771
Brampton Office - Central Region	1040	361	103	13	29	7	1553
Guelph Office - Central Region	1359	512	174	11	78	46	2180
Total	10861	3655	1169	178	407	145	16415



Inquests

An inquest is a public hearing conducted by a coroner where the circumstances of a death are presented to a jury by calling witnesses. The evidence is presented by a Crown Attorney who acts as counsel to the coroner. Parties who have an interest in the inquest may also participate by questioning the witnesses or by calling witnesses who have evidence determined to be relevant by the coroner.

The jury must answer five questions after hearing from the witnesses and from the positions of the parties with standing. The questions are:

- What is the identity of the deceased (who)?
- What was the date of death (when)?
- What was the place of death (where)?
- What was the cause of death (how)?
- What was the manner of death (by what means - natural, accident, suicide, homicide or undetermined)?

Inquests are held in the public interest; the purpose is to inform the public fully about a death. If something can be learned from the death, it is hoped the jury will make recommendations to prevent deaths in similar circumstances. No one is on trial at an inquest and the jury cannot make any legal findings or imply any responsibility or blame. The inquest is intended to make the facts of a death public and to identify, if possible, how similar deaths might be prevented in the future.

Some deaths require inquests by law (mandatory inquests). Other deaths may identify public safety concerns that are best identified through an inquest (discretionary inquests).

Recommendations from inquests are distributed by the Chief Coroner to those who may be in a position to consider and implement them (e.g. agencies, employers, organizations, institutions and government ministries).

There is a long history of positive changes that improve public safety for all citizens of Ontario as a result of inquest recommendations. These include changes in areas such as hospital procedures, road safety, construction workplaces, how police and the courts handle incidents of domestic violence, changes to legislation relating to child and family services, pool safety, the medical treatment of patients in psychiatric facilities, and workplace safety.

The following cases illustrate some types of deaths publicly examined through Ontario's inquest process:

Ricardo Wesley and Jamie Goodwin – 2009

This mandatory inquest was conducted in the spring of 2009 in Toronto, Ontario. On January 8, 2006, 22-year-old Ricardo Wesley and 20-year-old Jamie Goodwin were taken to the local jail in Kashechewan First Nation by Nishnawbe-Aski Police in an intoxicated state. They were placed in separate cells. A fire broke out in the jail and efforts by police to free the men were unsuccessful. There was no master key available to unlock the cells, and both men died accidentally due to smoke inhalation.

This inquest lasted 34 days and the jury made 86 recommendations addressing fire safety and inspections, resources, legislation, policing policies and procedures, community health and well being, information sharing and funding.



Dustin King and Donna Bertrand – 2011

This discretionary inquest was conducted in the summer of 2011 in Brockville, Ontario.

Dustin King was a 19-year-old man who lived sporadically with family members but also stayed with acquaintances and friends in Brockville. It was at one of these residences where he ingested alcohol, cocaine and OxyContin on November 20, 2008. He was discovered deceased the next day in the apartment of 41-year-old acquaintance Donna Bertrand. His death was ruled accidental due to an oxycodone overdose.

On December 2, 2008, Donna Bertrand was found deceased at her home. She was found to have had a history of substance abuse, depression and anxiety. The coroner's investigation revealed that she was being prescribed large doses of oxycodone. Her death was ruled a suicide due to mixed drug toxicity.

Both of these deaths highlighted the magnitude of opioid prescription drug addiction in Ontario, a problem of crisis proportions across North America. The inquest jury, through thoughtful and informed deliberations, offered 48 recommendations that, if implemented, could prevent deaths under similar circumstances. This inquest was highlighted in the British Medical Journal.

Matthew Reid – 2010

This discretionary inquest was conducted in the winter of 2010 in St. Catharines, Ontario.

Three-year-old Matthew Reid was in the care of a Children's Aid Society and had been placed in an affiliated foster home. On the day before his death, a 14-year-old female was placed in the same foster home. The next day, Matthew was found with no vital signs and resuscitative efforts were unsuccessful. Police charged the 14-year-old female and she was eventually found guilty of smothering Matthew by placing a pillow over his face. Matthew's death was ruled a homicide caused by smothering.

The jury heard from 30 witnesses over a 12-day period and returned with 45 recommendations related to issues affecting youth, fetal alcohol syndrome, information-sharing among Children's Aid Societies and their partners, and school board practices. This inquest highlighted the necessity to provide fulsome information on children in the care of Children's Aid Societies to ensure proper placement and adequate levels of care.



The following charts depict the types of inquests held from 2009 to 2011:

	2009	2010	2011
Total number of Inquests	72	58	34

Mandatory Inquests	71	56	28
(% of Total # of Inquests)	99%	97%	82%
Custody	49	33	17
	68%	57%	50%
Construction	18	18	10
	25%	31%	29%
Mining	4	5	1
	6%	9%	3%

Discretionary Inquests	1	2	6
(% of Total # of Inquests)	1%	3%	18%
No. of Recommendations	354	282	355
Total number of days	216	189	205
Average number of days	3	3.3	6



Research

The Office of the Chief Coroner is active in research and is pleased to partner with other organizations and government ministries to enhance public safety. Below are some examples of some of the important work that our office has recently participated in:

Canadian Agricultural Injury Reporting Program

Data from our Coroners Information System database (CIS) was used for research into farming-related deaths in Ontario as part of a nationwide study. The data collected was used to help inform the development of injury prevention campaigns and policies.

Sunnybrook Health Sciences Centre and the University of Toronto Department of Psychiatry

A review of 30 years of suicide death data from the Office of the Chief Coroner was used to conduct a study into the relationship between suicide and weather across Ontario. The intent of this study was to better understand in what way seasonal climate and weather variables influence suicide, and to apply this knowledge to future suicide prevention strategies. This study may also have important implications for public policy and the allocation of mental health resources.

Institute for Safe Medication Practices Canada (ISMP Canada)

ISMP Canada and the Office of the Chief Coroner work collaboratively to reduce preventable harm related to medication use. This collaboration has involved the sharing of data from OCC case files in deaths related to medication errors. ISMP Canada applies this data to its work with the health care community; regulatory agencies and policy makers; provincial, national, and international patient safety organizations; the pharmaceutical industry and the public to promote safe medication practices.

The Electrical Safety Authority (ESA)

The ESA is the organization responsible for improving electrical safety in Ontario. The ESA examines all electrical fatality data provided by the Office of the Chief Coroner to improve its ability to reduce electrical-related fatalities.



Death Review Committees

The Office of the Chief Coroner oversees six expert death review committees. The membership of each committee includes individuals representing a range of relevant fields, who provide advice and expertise for investigations and reviews conducted by the Office of the Chief Coroner. The committees include:

- The Domestic Violence Death Review Committee
- The Maternal and Perinatal Death Review Committee
- The Geriatric and Long-Term Care Review Committee
- The Patient Safety Review Committee
- The Paediatric Death Review Committee
- The Deaths under Five Committee

The objectives of these committees are to:

- Offer expert opinion on cause and manner of death.
- Identify the presence or absence of systemic issues which may require follow-up by the Investigating, Regional or Chief Coroner.
- Identify the need to refer to other appropriate bodies for further investigation and/or action, when appropriate.
- Stimulate educational activities through the recognition of systemic issues.
- Promote research where appropriate.
- Undertake random or directed reviews when requested by the Chair.
- Advise the Chief Coroner of cases that may further public safety if examined through the inquest process.

The committees offer specialized knowledge and expertise in complex death investigations within specific subject matter areas. They utilize the services of knowledgeable and experienced individuals representing a variety of medical, social, legal and academic disciplines. They provide a thorough, comprehensive and diverse review of the circumstances and facts surrounding the death(s). They do not make decisions regarding standards of care, but may identify issues relating to standards of care, and may recommend that the Chief Coroner consider a referral to a regulatory body for further examination.

Members of expert death review committees receive modest compensation based upon attendance at committee meetings and preparation of death review reports. Committees meet three to 10 times per year, depending on the volume and urgency of cases to be reviewed.

The committees prepare reports that contain their findings on each case reviewed. In the course of the investigation, the findings may be shared with other interested parties in an effort to generate meaningful dialogue and systemic change, if appropriate. The findings may also be shared with family members of the deceased individuals who are the subjects of reviews.

The committees prepare their own annual reports. To learn more about committees and/or to obtain copies of their reports, see www.ontario.ca/coronersreports.



Cardiac Death Advisory Committee

The Cardiac Death Advisory Committee was established in September 2010 to review the results of investigations into sudden and unexpected deaths of people 40 years of age and under who, in the absence of a definitive cause of death, may have died of a cardiac event.

The goals of this committee include determining how to identify risk factors and developing recommendations to educate, intervene and assist prevention efforts among those in fields who may have contact with young people who are at risk.

The members of the committee include fitness physiology experts, clinicians and cardiac arrhythmia specialists.

A review of cases has been undertaken and a paper on the findings is being prepared for publication. The results will direct further research activities in this area.

Construction Fatality Review Committee

This committee was formally established in 2010. Its goal is to increase the level of safety on construction sites in Ontario through early identification of hazards in the workplace.

The committee focuses on improving the quality of information available for death investigations, the efficiency of inquests, the usefulness of recommendations from inquests into accidental deaths on construction sites and the likelihood of those recommendations being implemented.

The objectives of the committee are:

- To study the circumstances of events leading to death(s). To offer opinion on the prevention of similar occurrences.
- To identify the presence or absence of systemic issues or hazards which require further investigation or follow-up by the Office of the Chief Coroner.
- To stimulate educational activities through the recognition of systemic issues and hazards in the construction industry.
- To assist in identifying experts to testify at inquests.

In 2010, seventeen construction-related workplace deaths were reviewed. Where appropriate, information relating to potential issues and relevant experts was relayed to the Regional Supervising Coroner to assist with inquest preparation.



Technology (Modernization) Initiatives

The OCC and OFPS are investing in a new information management system and related technologies.

Telemedicine

The OCC and OFPS recognized a need for video and telecommunication among head office, regional coroners' offices, Forensic Pathology Units, remote and northern community hospitals and police. This new capability enhances case management and service quality, facilitates teaching and decreases the need to transport bodies across significant distances. It enables coroners and pathologists to virtually attend difficult-to-reach locations and observe and collaborate on cases. This technology produces further costs savings by reducing travel for attendance at meetings.

Video conferencing equipment includes:

- Remote scene cameras to be used by the Ontario Provincial Police which streams real-time video images from remote scenes in Northern Ontario across a secure justice video network (via WiFi or satellite uplink)
- Standard office videoconferencing equipment to enhance peer-to-peer consultation
- Morgue carts to allow pathologists to share video images for consultation and teaching.

The OCC and OFPS telemedicine project won a 2011 Showcase Ontario Merit Award in the category of Innovation.

Provincial Coroner Dispatch

Currently, when a death occurs in Ontario, there is no single mechanism to assess the need for a death investigation under the Coroners Act or to notify an investigating coroner. We believe a communication system ideally should provide real-time information to guide deployment of coroners and allow system management. The existing system did not serve this role.

The OCC and OFPS explored a number of options for a province-wide coroner dispatch process. As a result, the Toronto Coroner Dispatch located at the headquarters of the OCC and OFPS is expanding its scope to provide service to the entire province. This centralized dispatch service will allow creation of a death investigation record at the time of initial contact, a standard process for coroner dispatch and accessibility to details of death investigations across the province. This system is expected to be fully implemented by the summer of 2012.

The Provincial Coroner Dispatch Project won a 2011 Showcase Ontario Merit Award in the category of Service Excellence.



Death Investigation Information System

The Death Investigation System Technology (DIST) will combine and significantly enhance the functionality and features currently available in the present Coroners Information System and Pathology Information Management System. DIST will incorporate all data from the OCC and OFPS into an integrated information management system that spans the entire death investigation system.

A full procurement process resulted in the engagement of a vendor, and the implementation is well under way, with full roll-out expected in early 2013. Coupled with the new integrated dispatch system, the DIST will offer real-time management of the system, enhanced quality assurance features, appropriate and secure information sharing and optimal efficiency.

Forensic Services and Coroner's Complex

Construction of the new Forensic Services and Coroner's Complex (FSCC) at Keele Street and Wilson Avenue in Downsview commenced in August 2010. This will be the future headquarters of the OCC, OFPS and the Centre of Forensic Sciences (CFS). Carillion Secure Solutions, the contractor, has made significant progress with the structure of the building. Equipment and furniture procurement and transition planning are underway with relocation expected in early 2013. The new facility will be the largest, most state-of-the-art facility of its kind in the world, bringing together all aspects of forensic science and medicine.





Public Safety Initiatives

Reviews

Youth Suicides in Pikangikum First Nation

In September 2011, the OCC released a comprehensive review of 16 on-reserve youth suicide deaths in Pikangikum First Nation from 2006 to 2008. This review was initiated after observing the devastating impact the deaths of children 10 to 19 years old were having on the community. The objectives of the review were to:

- Examine the circumstances of each youth suicide.
- Collect and analyze information about the deaths.
- Make recommendations directed toward the avoidance of death in similar circumstances or respecting any other matter arising out of the review.

Led by Deputy Chief Coroner Dr. Bert Lauwers, the multidisciplinary review commenced in March 2010. It included the assistance of several parties, including health care professionals, the Provincial Advocate for Children and Youth, and child welfare providers. A total of 100 recommendations were offered to help prevent youth suicide, not only in Pikangikum First Nation but in communities across Ontario. The recommendations targeted education, policing, child welfare, health care, and, in particular, the creation of suicide prevention strategies.

In response to the report, Dr. Lauwers was invited by the Honourable David C. Onley, Lieutenant Governor of Ontario, to attend a witnessing event and cross-cultural dialogue with the Truth and Reconciliation Commission of Canada. This event, held in September 2011, saw the gathering of residential school survivors, First Nations elders and a number of other prominent Canadians.

Retirement Home Investigations

In October 2011, the OCC released the results of an investigation into the deaths of residents of the In Touch Retirement Home in Toronto that occurred between February and December 2010. Because the first three deaths (between February and July 2010) were not initially reported to the OCC, the investigation of those deaths was limited to medical records. A fourth death that occurred in December 2010 was reported, and a post-mortem examination was conducted. Concerns included the living conditions at the retirement home, the quality and availability of meals, the care provided by staff, allegations of financial impropriety by the home's management, and, in at least one case, allegations of frank neglect and starvation.

Led by Regional Supervising Coroners Dr. Dan Cass and Dr. James Edwards, the investigations revealed no evidence of abuse or neglect. However, a number of issues were identified related to residents of retirement homes. These issues included:

1. The lack of an established complaint mechanism whereby residents, substitute decision makers or members of the public could register a complaint regarding the care provided at a retirement home and be assured of an impartial investigation.
2. The lack of requirements for medical assessment and reassessment of residents of retirement homes, to ensure that as a resident's care needs escalate their needs can be adequately met in the retirement home.
3. The lack of a process whereby residents (or their substitute decision makers) are presented with options when the resident's care needs grow to exceed the capability of the retirement home, including referral to the Community Care Access Centre for application to a long-term care home.



The Retirement Homes Act (RHA) received Royal Assent in June 2010, while the OCC investigation was underway. This legislation contained provisions to address the identified concerns. Therefore, no recommendations were made and no further action was taken by the OCC.

Drowning Review

In June 2011, the OCC released a review of accidental drowning deaths from May to September 2010. The OCC undertook this review as a result of a perceived surge in the number of drowning deaths in Ontario. The purpose of the review was to identify common factors that may have played a role in the deaths and, if necessary, make recommendations to prevent similar deaths.

Led by Deputy Chief Coroner Dr. Bert Lauwers, the review team examined 89 accidental drowning deaths and made 12 recommendations. Highlights of the report included:

- The number of accidental drowning deaths in Ontario has been steadily declining over the years.
- While there was no surge in the number of deaths overall during the time period studied, there was a 260% increase in drowning deaths in children younger than five. Thirteen of the 89 (15%) deaths in this review were children less than five years old.
- Drowning is largely a male-related phenomenon. Seventy-six of 89 (85%) deaths were male.
- 71 of 89 (80%) of the deaths occurred in persons younger than five or between 15-64 years old.
- 55 of 66 (83%) of the deaths related to swimming occurred when the air temperature was higher than 21°C.
- 22 of 23 (96%) of those operating boats who drowned were not wearing life jackets or personal flotation devices.
- Alcohol was a contributing factor in 39 of 58 (67%) of the drowning deaths between 15-64 years of age. Overall, 39 of 89 (44%) of drowning deaths were alcohol related.
- In 2010, for those whose swimming status was known, 24 of 60 (40%) were non-swimmers.
- 20 of 59 (34%) of the drowning victims whose place of birth was known were not born in Canada.

Joint Initiatives

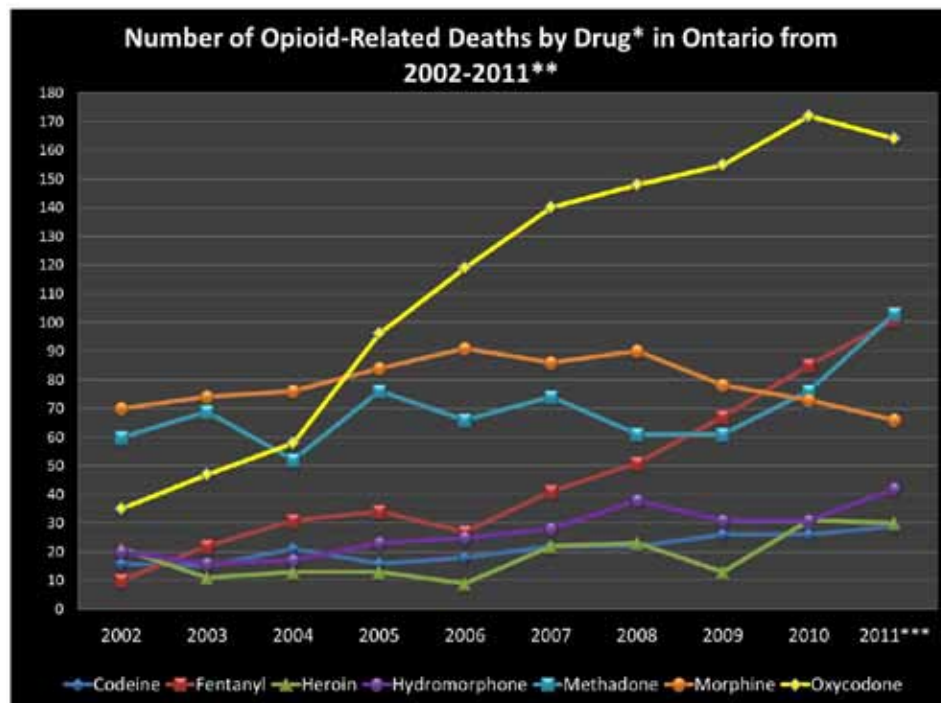
Opioid Working Groups

In response to a consistent increase in opioid-related fatalities, our office was invited to participate on two expert working committees that were tasked with studying the issues surrounding the dispensing of opioid prescriptions, illegal trafficking and abuse. Deputy Chief Coroner Dr. Bert Lauwers joined the Ministry of Health and Long-Term Care's Narcotic Advisory Panel and the Opioid Public Policy Project hosted by the College of Physicians and Surgeons in 2010. Both multi-disciplinary committees generated reports with recommendations targeting legislation, education, awareness and enforcement.

The OCC is actively involved with national stakeholders in an effort to address this significant addition issue which was highlighted by the Dustin King and Donna Bertrand Inquest in 2011 (page 8).



Narcotic-Related Death Statistics in Ontario



*incomplete data

Investigative Initiatives

Newborn Screening Protocol

There are many metabolic disorders that can cause sudden and unexpected death in young children. In an effort to reduce the morbidity and mortality associated with these rare diseases, blood spot samples from all newborns in Ontario are screened for a total of 31 disorders. This testing is completed through Newborn Screening Ontario (NSO). As part of any investigation into the death of a child under the age of five, Ontario coroners must obtain the NSO results and provide them to the examining pathologist.

A successful pilot project was undertaken in 2009 to introduce province-wide metabolic testing of post-mortem blood and bile samples by NSO, and in July 2010 NSO became the sole provider of metabolic testing to the Ontario Forensic Pathology Service (replacing a laboratory service based in the United States). NSO's post-mortem testing is more comprehensive and is a great example of how the Office of the Chief Coroner works cooperatively with other organizations to continually improve death investigations for the people of Ontario.

For more information on the NSO, please visit <http://www.newbornscreening.on.ca>.



Public Safety Alerts

Therapeutic Air Mattress Alert

In February 2011, the OCC issued a public safety alert to all Ontarians to the uncommon but significant risks which may be associated with the use of therapeutic air mattresses. Therapeutic air mattresses are currently used in hospitals and long-term care facilities to prevent bed sores. These air mattresses partially deflate and inflate in a programmed sequence to relieve pressure on the skin. However, our investigations revealed that in certain, albeit uncommon, circumstances, the patient can become trapped between the mattress and the bedrails or bed frame.

In May 2009, an elderly patient in a long-term care facility died after becoming wedged between the air mattress and the bed frame. A coroner's investigation revealed that these air mattresses are sold without frames; they are used in conjunction with other manufacturers' equipment.

The coroner's investigation involved an examination of the equipment by an engineer who determined that these air mattresses should be assessed for compatibility with bed frames as gaps may be present that could pose entrapment dangers to patients, as was the case in the May 2009 death.

In March 2010, the OCC issued five recommendations that were disseminated to a number of stakeholders for the purpose of educating them about the hazards associated with these air mattresses, in order to prevent similar deaths. Two further deaths involving entrapment between bedrails and inflatable mattresses resulted in the office issuing a reminder in 2011 through a public safety alert, so that both professional caregivers and loved ones would be aware of the hazard.

Carbon Monoxide Alert

In March 2009, the OCC issued a public safety alert reminding Ontarians of the dangers associated with carbon monoxide. The alert was prompted by the findings of an investigation into the sudden death from carbon monoxide poisoning of an 84-year-old woman in her home in Sudbury. The source of the carbon monoxide was determined to be the woman's fuel-burning boiler system.

Carbon monoxide is an odourless, colourless gas, produced by the incomplete burning of any fuel, which can cause death even at low concentrations. The boiler, much like most fuel-burning appliances, was passively vented, meaning it drew air from inside the house and discharged exhaust outside through a chimney.

With the assistance of the Technical Standards and Safety Authority (TSSA), the OCC learned that the owner had recently replaced several windows and exterior doors in order to make her home more energy efficient. Further, it was confirmed that there were no mechanical defects evident in the boiler system, and that it was originally installed and vented according to code and operating specifications. Despite this, the airflow had reversed, causing carbon monoxide fumes to enter the home.

Most fuel-burning furnaces, boilers and hot water heaters consume large quantities of air from inside the house, and exhaust it to the outside. The house must therefore be adequately vented so that this air can be replaced, otherwise chimney flow may reverse and fumes may enter the home. Any renovations to a home which make it more airtight, such as new doors or windows, may require the addition of venting to ensure adequate airflow to the furnace, boiler, or hot water heater.



Choking Alert

In August 2011, as the result of the death of a toddler due to choking, the OCC issued a public safety alert reminding Ontarians of the importance of teaching children safe eating habits as well as reminding them of choking hazards.

While most people are generally well aware of the danger that objects such as balloons, batteries, coins and small toys with removable parts pose to children, food is sometimes not recognized as a hazard.

Younger children, especially those under the age of four, are particularly vulnerable as they are still developing safe eating habits, have small airways, have poor chewing and swallowing and often don't understand the dangers associated with consuming food.

The following are examples of some of the foods that should be avoided when children are four years of age and under:

- Hot dogs and sausages
- Grapes
- Hard or rubbery candies
- Raw carrots, peas and celery
- Nuts
- Seeds (watermelon, sunflower)
- Popcorn, especially when there may be unpopped kernels
- Fruit with pits
- Hard fruits (apples, pears)

With children under the age of four, foods should be cut into smaller pieces to minimize the risk of an airway obstruction. Foods such as grapes and hot dogs are of particular concern so these should be cut lengthwise into smaller pieces.

Learning to eat safely is a life skill. Parents and caregivers of children are reminded of the following tips when teaching children to eat safely:

- Children should sit quietly when eating - running or jumping may increase the risk of airway obstruction.
- Teach children to take small bites and chew thoroughly before swallowing.
- Talking and laughing should always be avoided when there is food in a child's mouth.
- Parents and caregivers are encouraged to take a basic cardiac life support or life saving course. Courses are offered by organizations such as the Heart and Stroke Foundation, the Canadian Red Cross, the Lifesaving Society, and St. John Ambulance.

Accidental Asphyxia – Food Bolus of Children 0 to 19 Years Old

Age Group	1999 to 2009
0 to 4 Years Old	16
5 to 9 Years Old	2
10 to 14 Years Old	2
15 to 19 Years Old	3
Total	23

To learn more about choking hazards and prevention, please visit www.kidshealth.org or www.safekidscanada.ca.



All-Terrain Vehicles Alert

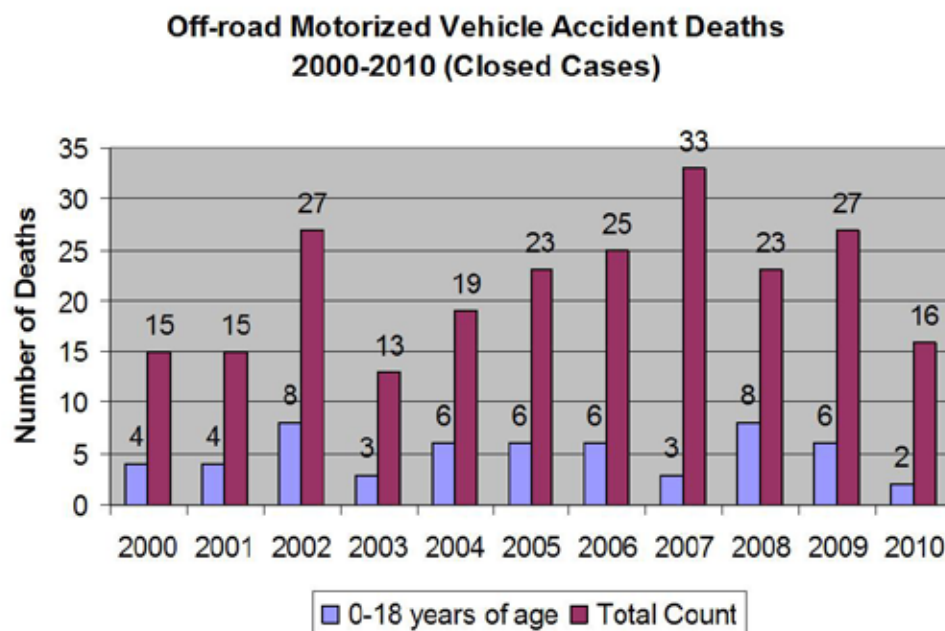
In the summer of 2011, a 10-year-old boy was killed while riding an adult all-terrain vehicle (ATV) alone in Northern Ontario. In response, the OCC issued a public safety alert reminding Ontarians of the dangers these vehicles pose to children under the age of 16.

A number of medical studies have found that drivers and riders of ATVs, particularly children, have high rates of injury and death compared to other off-road vehicle types. Full-size ATVs are large, heavy, and powerful machines that require strength, balance, dexterity, and judgment which children have not yet developed. Children are at risk of driving too fast or driving onto uneven ground, losing control of the machine, and being thrown from the vehicle or crushed in a rollover. The resulting grief for the family is unimaginable.

A coroner's inquest in 2005 examined the death of a seven-year-old boy who died while driving an ATV. Recommendations at that time included mandatory approved safety training, increased public education regarding the safe operation of ATVs, and permission to drive an ATV on approved trails only from age 12-16. The recommendations are equally applicable today.

All ATV drivers should complete a rider safety course in their area or through the Canada Safety Council, and parents, children and teens should be aware of the risk of injury or death when riding an ATV, especially in the absence of adult supervision.

These are preventable deaths. The recommendation from the OCC is that children under the age of 16 should not operate ATVs intended for adults.





Awards

Ovations

The Ovation Award is handed out by the Ministry of Community Safety and Correctional Services on an annual basis in the categories of: Innovation, Outstanding Achievement, Leadership, Partnerships & Greening. Past recipients include the following staff members from the Office of the Chief Coroner and/or the Ontario Forensic Pathology Service:

- Marion Moore and Kathy Sullivan of the Guelph Regional Office received an award for Outstanding Achievement in 2008.
- Doris Hildebrandt: 2010 Ovation Award for Outstanding Achievement for her work and dedication to the Pediatric Death Review Committee and related research projects with the Hospital for Sick Children.
- 2011 Showcase Ontario Awards of Excellence: Dr. David Eden, Ann-Carol Hargreaves, Dr. Dirk Huyer, Dr. Michael Pickup and Jeff Arnold

2 categories:

Innovation – Telemedicine

Service Excellence – Computer Aided Dispatch System Pilot

- Dr. Bonita Porter: Voted one of Canada's Most Powerful Women in the Professional Category by the Women's Executive Network in 2008. She received a 2008 Ovation award in the Leadership Category
- Dr. William Lucas: Ministry Pandemic Plan – 2007 Ovation award in the Partnership Category

Accolades

Awarded to uniform and civilian members of the OPP who make outstanding contributions to the organization.

- Project Resolve Initiative: 2009 Accolade award in the Partnership Category – Tanya Hatton, Kathy McKague and Jeff Arnold

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Chief Coroner for Ontario



Dr. David Eden, MD
Regional Supervising Coroner - Operations



Dr. Bonita Porter, B.Sc., Phm., M.Sc., MD, CCFP
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