### 2017 Annual Report

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The Honourable Hugh J. A. (Ted) Flemming, Q.C. Department of Public Safety Fredericton New Brunswick

Dear Minister:

Pursuant to Section 43 of the *Coroners Act*, I have the honour to submit the Forty-Sixth Annual Report of the Chief Coroner for the period January 1, 2017 to December 31, 2017.

Yours very truly,

JÉRÔME OUELLETTE Acting Chief Coroner Province of New Brunswick

Table of Contents	Page
Mission Statement	5
Historical Background	5
Origin of the Office of the Coroner	5
The New Brunswick Coroner System	6
Organizational Structure	6
Notification Requirement	6
Investigative Capacity of Coroner Services	6
Purpose of Coroner's Investigation	7
The Inquest Decision	7
Summary	8
Statistical Summary of Investigated Deaths	8
Schedule "A.1" - Total Deaths by Classification	10
Schedule "A.2" - Total Deaths by Month	11
Schedule "A.3" - Total Deaths by Judicial District	12
Schedule "B.1" - Accidental Deaths by Age Group, Gender and Judicial District	13
Schedule "B.2" - Accidental Deaths by Age Group, Gender and Death Factor	14
Schedule "B.3" - Accidental Deaths by Age Group, Gender and Environment	17
Schedule "C.1" - Suicide Deaths by Age Group, Gender and Judicial District	21
Schedule "C.2" - Suicide Deaths by Age Group, Gender and Death Factor	22

Schedule "C.3" - Suicide Deaths by Age Group, Gender and Environment	24
Schedule "D.1" - Homicide Deaths by Age Group, Gender and Judicial District	26
Schedule "D.2" - Homicide Deaths by Age Group, Gender and Death	27
Schedule "D.3" - Homicide Deaths by Age Group, Gender and Environment	
Schedule "E.1" - Natural Deaths by Age Group, Gender and Judicial District	29
Schedule "E.2" - Natural Deaths by Age Group, Gender and Death Factor	
Schedule "E.3" - Natural Deaths by Age Group, Gender and Environment	31
Schedule "F.1" – Undetermined Deaths by Age Group, Gender and Judicial District	35
Schedule "F.2" – Undetermined Deaths by Age Group, Gender and Death Factor	
Schedule "F.3" – Undetermined Deaths by Age Group, Gender and Environment	
Schedule "F" – Undetermined Deaths	
ummary of Inquests and Other Recommendations	40

### **Our Mission**

Coroner Services is an independent and publicly accountable investigation of death agency. Coroner Services is mandated by statute to review all suspicious or questionable deaths in New Brunswick, conduct inquests as may be required in the public interest and does not have a vested interest of any kind in the outcome of death investigations.

### **Historical Background**

### Origin of the Office of the Coroner

The office of the coroner is one of the oldest institutions known to English law.

One of the early functions of the office was to enquire into sudden and unexpected deaths. It was the duty of the coroner to establish the facts relating to the death. The coroner used a jury to enable him to ascertain this and to determine whether foul play was involved in the death; if so, the town or village was liable for an additional fine if no felon could be found responsible for this death. This particular function of the office of coroner (to determine the facts surrounding a death), as modified throughout the years, survives as the basis for all coroner systems, which are presently existing in common law jurisdictions.

In the ensuing seven hundred years, no improvement has been made upon the basic questions and they remain: "who was the deceased? How, when, where and by what means did he die?"

An inquest is not a forum to resolve civil disputes nor to conduct prosecutions. An inquest is not a trial and a coroner is not a judge. The proceedings are inquisitional as opposed to accusatory or adversarial.

Coroners in New Brunswick have been instructed to protect the civil rights of all persons who may have had some connection with the death of the deceased and to ensure that the coroner's jury has not expressed any conclusion of civil or criminal responsibility or named any person or persons responsible for any act or omission which may have contributed to the death.

### The New Brunswick Coroner System

### **Organizational Structure**

In New Brunswick, Coroner Services falls under the Department of Public Safety for administrative purposes. Supervision of the service is the responsibility of the Chief Coroner who is assisted by a full time Deputy Chief Coroner.

The five full time staff who serve as Regional Coroners in Fredericton/Woodstock, Moncton/Miramichi, Saint John, Bathurst/Campbellton and Edmundston, report to the Chief Coroner.

In addition to the five Regional Coroners, experienced investigative staff from other branches with the Department of Public Safety serve as Investigating Coroners. This group provides services primarily on nights and weekends.

Fee-For-Service Coroners continue to provide additional investigative capacity and geographic coverage.

The Regional Coroners provide guidance to the Investigating Coroners and Fee-For-Service Coroners and participate in the development and delivery of training.

### **Notification Requirement**

In New Brunswick the only death exempt from notification to a coroner is one where the person dies of disease or sickness while under treatment of a duly qualified medical practitioner (as long as the death: (i) did not occur during or as a result of pregnancy; (ii) was not sudden and unexpected; and (iii) was not under circumstances which may require an investigation). Coroner Services is responsible for the investigation of all reported deaths in order to determine for each case the identity of the deceased and the facts as to how, when, where and by what means the deceased came to his/her death. The system, therefore, is a vital part of public safety in initially determining whether such reported deaths are due to natural causes, accident, suicide or homicide.

### **Investigative Capacity of Coroner Services**

For investigational purposes Coroner Services has available on request the services of the Royal Canadian Mounted Police or municipal police acting within their respective jurisdictions. Also available to Coroner Services are the services of pathologists located at Regional Laboratories situated at Fredericton, Saint John, Moncton, Campbellton, Bathurst and Edmundston and also the services of the Provincial Forensic Toxicologist located at Saint John and Moncton.

The identification of a death as a "Type II" case, which needs the special consideration of a forensic pathologist, results in the utilization of the forensic service and requires that the body be transported to Saint John or Moncton for the autopsy.

Where circumstances warrant, specialized expertise may be provided from outside the Province on complex cases for evidentiary or identification purposes.

### **Purpose of Coroner's Investigation**

The purpose of the coroner's investigation for many years was directed towards the investigation of the actual medical cause of death. Now the medical cause of death is only one of many factors to be considered. The non-medical factors causing death are equally important, and in many cases, call for remedial measures to correct conditions hazardous to public safety.

### **The Inquest Decision**

One of the most difficult decisions a coroner has to make is whether or not to hold an inquest.

The Chief Coroner may order an inquest into a death. In some circumstances, a coroner may hold an inquest when required to do so in writing by a Judge of The Court of Queen's Bench of New Brunswick, a member of the Executive Council or the Chief Coroner

In September 2008, the *Coroners Act* was amended to require a coroner to hold an inquest when a worker dies as a result of an accident occurring in the course of his or her employment at or in a woodland operation, sawmill, lumber processing plant, food processing plant, fish processing plant, construction project site, mining plant or mine including a pit or quarry.

The holding of an inquest has the effect of drawing public attention to the many contributing causes of sudden and unexpected deaths. It is expected that the Coroners Jury will make recommendations directed toward the avoidance of death in similar circumstances.

The Chief Coroner is responsible for bringing the findings and recommendations arising out of inquests to the attention of appropriate persons, agencies and government departments.

### Summary

Coroner Services investigates about 21.4 percent of the total of approximately 7,500 deaths per year in the Province. A high percentage of the investigated deaths are determined to be from natural causes. The coroner, in approximately 30.0 percent of the cases, orders autopsies and inquests are ordered in slightly less than one percent of all investigated deaths.

For the period covered by this Report, the Registrar of Vital Statistics recorded 7,530 deaths in the Province of which 1,602 or 21.3% were reported to a coroner. By comparison in the previous year there were 7,217 deaths in the Province of which 1,612 or 22.3% were reported to a coroner.

Appreciation is expressed to all law enforcement agencies and to all other related agencies who have, through the year, co-operated and assisted in the investigations which have been processed through Coroner Services. Also, gratitude is expressed to all coroners who have shown, once again, a high level of dedication and professionalism, frequently under adverse conditions.

The Chief Coroner invites comments or suggestions for modifying or improving any part of the report or regarding any aspect of the overall delivery of coroner services in the Province.

Comments should be directed to:

### The Office of the Chief Coroner

P. O. Box 6000 Fredericton, New Brunswick E3B 5H1 Phone (506) 453-3604 Fax (506) 453-7124

### **Statistical Summary of Investigated Deaths**

The information provided in this Annual Report is presented for the calendar year 2017.

Annual Reports of the Chief Coroner were presented by calendar year from 1972 to 1992. In 1992/93, the Chief Coroner changed the reporting period to fiscal year to coincide with the implementation of a new computer system. In 2005, the Chief Coroner made the decision to revert to calendar year to coincide with statistical reporting by other Coroner and Medical Examiners across Canada. This will facilitate data sharing and comparison with other provincial and federal government agencies.

Since January 1, 1987 deaths reported to and investigated by Coroner Services have been classified in five distinct categories: natural, accident, suicide, homicide and undetermined.

The **natural** category covers all deaths by disease or illness of natural origins.

The **accident** category includes deaths due to unintentional or unexpected injury. It includes deaths resulting from complications reasonably attributed to the accident.

The **suicide** category covers all cases where the deceased intentionally caused their own death.

The **homicide** category covers all cases where a person intentionally causes another's death.

The **undetermined** category covers any death where it is impossible to determine whether the death was accidental, suicide, homicide or natural. Coroners are instructed to make all possible efforts to classify deaths in one of the other categories before considering this category. An example of a difficult case, which might fall in this category, is that of drug overdose where it is impossible to determine whether death was accidental, suicide or homicide.

The tables included in this report identify the **Environment**, that is the principal **location** of where the death occurred and the **Death Factor**, that is an action, force, instrument or disease which led directly toward death.

### PROVINCIAL SUMMARY - SCHEDULE A-1

Classification	No. of Deaths	% of Deaths	Rate per 100,000 Population	Autopsy Performed	% of classification
Natural	1,228	76.7	160.5	318	25.9
Accident	252	15.7	32.9	113	44.8
Suicide	101	6.3	13.2	30	29.7
Homicide	10	0.6	1.3	10	100.0
Undetermined	<u>    11</u>	0.7	1.4	9	81.8
Total	1,602	100.0		480	

from 2017.01.01 to 2017.12.31

Based on a population of 766,762

### PROVINCIAL SUMMARY - SCHEDULE A-1 from 2017.01.01 to 2017.12.31



NOTE : Based upon Statistics Canada postcensal population estimates for N. B. census divisions (released February 13, 2020). Sub-county estimates are based on the 2016 Census population share of the county.

Schedule A-2	
sification, by Month -	7.12.31
<b>Deaths Investigated by Clas</b>	from 2017.01.01 to 201
Provincial Summary - I	

Total	1,228	252	101	10	11	1,602
Dec	115	15	2	0	0	137
Nov	88	33	15	2	7	140
Oct	93	21	7	7	~	124
Sept	86	22	7	-	0	116
Aug	105	24	8	٢	7	140
July	95	22	4	~	7	124
June	98	13	œ	0	7	121
May	104	23	9	0	0	133
April	88	25	18	0	0	131
Mar	137	15	8	0	~	161
Feb	111	14	7	-	0	133
Jan	108	25	9	Ν	~	142
Classification	Natural	Accident	Suicide	Homicide	Undetermined	Total

DEATHS INVESTIGATED BY JUDICIAL DISTRICT - SCHEDULE A-3 from 2017.01.01 to 2017.12.31

	John Woodstock Province	459 48 1,228   57 7 252   16 4 101   1 0 10   1 0 11	534 59 1,602	33.4 3.7 100	436 37,067 766,762	86.2 129.5 160.2 13.1 129.5 160.2 13.1 18.9 32.9 9.3 10.8 13.2 0.6 0.0 1.3 0.6 0.0 1.4	74 11 363	
	ni Moncton Saint.	249 613 313	345	21.5	216,401 172,	115.1 28.2 14.3 0.5 1.4	6	43.0 4
l Districts	redericton Miramich	161 42 17 27 6 27 6 0 2 2 2 2 2	227 114	14.2 7.1	142,759 45,588	112.8 29.4 11.9 13.2 1.4 0.0 3.5 4.4	61 33	42.7 72.4
Judicial	Edmundston	0 1 1 9 82	103	6.4	41,596	197.1 21.6 26.4 2.4 0.0	21	50.4
	Campbellton	0 5 3 8 0 5 3 8 0 5 9	72	4.5	31,304	156.5 57.5 9.6 6.4 0.0	23	73.5
	Bathurst	101 33 33 33 0	148	6	79,611	126.5 38.5 3.8 3.8	ide) 47	59.0
		Natural Accident Suicide Homicide Undetermined	Total	% of Provincial Total	Population	Death Rate per 100,000 population Natural Accident Suicide Homicide Undetermined	Total deaths by trauma (accident, suicide, homic	

PROVINCIAL SUMMARY ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND JUDICIAL DISTRICT - SCHEDULE B-1 from 2017.01.01 to 2017.12.31

	0 - 19	20 - 30	31 - 40	41 - 50	51 - 60	61 - 70	Over 70	Total	Total	Total	% of Classification	Autopsies	% of Classification
Judicial Districts	LL ∑	L ∑	L ∑	ц Σ	L ∑	LL ∑	L Z	Marco			Classification		Qassillation
Bathurst	0 0	3 0	0 0	2 1	3 1	4 0	8	20	11	31	12.3	6	8.0
Campbellton	0 0	0	1	1 0	1 3	0	2	9	12	18	7.1	5	4.4
Edmundston	1 0	0	0	1 0	2	0	2	9	т	6	3.6	5	4.4
Fredericton	3 0	4	3 1	1	1 3	3 1	9 10	24	18	42	16.7	22	19.5
Miramichi	0 0	2	5 2	3 1	7	2	5 2	19	ω	27	10.7	12	10.6
Moncton	1	3 1	7 2	4	10 3	0 6	8	42	19	61	24.2	23	20.4
Saint John	0 0	4	2	4 8	ς α	2	9 17	29	28	57	22.6	31	27.4
Woodstock	0	0	0	2 0	<del>ر</del>	0	0	ю	4	7	2.8	Q	5.3
Males	ى	17	18	18	28	20	43	149					
% Total - Males	2.0	6.7	7.1	7.1	11.1	7.9	17.1	59.0		252	100.0	113	100.0
Females	4	З	7	ω	16	ω	57		103				
% Total -Females	1.6	1.2	2.8	3.2	6.3	3.2	22.6		41.0				
Total for Age Group	6	20	25	26	44	28	100						
% of Classification Total	3.6	7.9	6.6 0	10.3	17.5	11.1	39.7						

# PROVINCIAL SUMMARY ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE B-2 from 2017.01.01 to 2017.12.31

th Factor cription	0 - 19 M F		- <u>-</u> 30	31 - 40 M F	41 - 50 M F	<u>ح</u> م	1 - 60 F	61 - 7 M F	<u> </u>	Over 7( M	A Male	es =	Total emales	Total	% of Classification	Autopsies	% of Classification
- Open	1	0	0	0	0 0	-	-	0		0		~	-	ო	1.2	ĸ	2.7
of Vehicle	1 3	£	-	7 2	8	m	7	-		7	27	~	12	39	15.7	14	12.4
of Vehicle ollover	-	7	0	0 0	1 0	7	0	3 1		0		6	2	11	4.5	7	6.2
of Pedestrian	0	0	0	0	0	r	-	1		- 1		6	4	10	4.2	2	1.8
of onal Vehicle	0	N	0	0	0	~	0	1 0		0		4	0	4	1.5	7	1.8
of ional Vehicle ollover	0	0	0	0	2	0	-	0		0		m	N	ى م	2.0	~	6.0
l and/or	0 0	0	0	0 0	1 0	0	0	0 0		2			0	з	1.2	-	0.9
abs	0	0	0	1 0	0 0	0	0	0 0		0			Ţ	2	0.8	L	0.9
ases and	0	0	0	0 0	0 0	0	-	0 0		0	0	0	L	1	0.4	Ļ	0.9

# PROVINCIAL SUMMARY ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE B-2 from 2017.01.01 to 2017.12.31

Death Factor Description	0 - 19 M F	- 20 -	 30 Е	31 - 40 M F	41 - 50 M F	51 - 60 M F	61 - 70 M F	§ ∑	er 70 F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Carbon Monoxide Poisoning	0	0	0	0	0	6	1	0	-	5	2	4	1.5	4	3.5
Exposure to cold	0	2	0	0	0	0	3 3	0	0	5	0	ى ا	2.0	5 2	4.4
Fire – Structural	0	ο	0	0	0	ю Т	1	-	~	5	2	7	2.9	7	6.2
Fire - Self	0	0	0	0	0	0	0	~	0	~	0	-	0.4	0	0.0
Fall or jump – same level	0 0	0	0	0 1	0 0	3 2	5 2	32	45	40	50	06	35.9	11	9.7
Fall or jump – different level height; eg. bridge, building	0	0	0	0 0	6	0	0	0	٢	-	-	2	0.8	1	0.0
Blunt Trauma, Accidental	0 0	0	0	0 0	0 0	2 0	1	-	0	4	0	4	1.5	2	1.8
Asphyxia	1 0	0	0	0 1	0 0	3 1	0 0	0	-	4	З	7	2.9	9	5.3
Sexual Asphyxia	0	0	0	0	0	0	0	0	0	~	0	-	0.4	0	0.0

PROVINCIAL SUMMARY	ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE B-2	from 2017.01.01 to 2017.12.31
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Death Factor Description	0 - 19 M F	20 - 30 M F	31 - 40 M F	41 - 50 M F	51-60 M F	61 - 70 M F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Object Caught in Throat	0 0	0 0	1 0	0 0	0 0	0 1	1 0	2	Ļ	3	1.2	0	0.0
Alcohol Intoxication	0	6	0	0	0	0	0	~	0	-	0.4	-	0.0
Alcohol and Drug	0	0	0	0	0	0	0	0	~	-	0.4	-	0.0
Drug	-	4	4 3	5 4	4 5	2 3	1	21	18	39	15.7	37	32.6
Drug (street)	0 0	1	2 0	0 0	1	0	0 0	4	2	Q	2.5	9	5.3
Males	5	17	18	18	28	20	43	149		252	000	133	0 001
Females	4	ы	7	ω	16	ø	51		103				
Total for Age Group	6	20	25	26	44	28	94						

PROVINCIAL SUMMARY	ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE B-3	from 2017.01.01 to 2017.12.31
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Environment Description	0 - 19 M F	20 - 30 M F	31 - 40 M F	41 - 50 M F	51 - 60 M F	61 - 70 M F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Work Place	0	0 0	0 0	2 0	0	0 0	1 0	3	0	3	1.2	٢	0.9
Open water (river, lake, stream, brook)	1 0	0	0	0 0	۲ ۲	0 0	0 0	7	1	ю	1.2	e	2.7
Ocean	0	0 0	0	0	1	0 0	0 0	٢	0	۲	0.4	F	0.0
Camping / Tenting	0	0 0	0	0	0	0 1	0 0	0	۲	۲	0.4	F	0.0
Hospital Other (ward, ICU, etc.)	0	0	0	0	0	0 0	1 3	1	с	4	1.6	0	0.0
Hospital Emergency – NON DOA	0 0	6	6	0	2 0	1 0	0 0	Q	0	9	2.2	9	4.8
Psychiatric Hospital	0	0 0	0 0	0 0	0	0 0	0 1	0	-	۲	0.4	0	0.0
Non Public Road – Driver	0 0	1	0 0	0 0	0	0 0	0 0	٢	0	۲	0.4	٢	0.9

PROVINCIAL SUMMARY ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE B-3 from 2017.01.01 to 2017.12.31

% of Classification	9.6	4.4	1.8	1.8	0.0	0.9	0.0	0.9	0.0
Autopsies	11	Q	Ν	N	0	~	~	-	0
% of Classification	11.4	3.5	2.7	а.1	0.4	5.0	12	0.4	0.4
Total	29	o	7	ω	-	Q	ю	-	~
Total Females	6	7	ю	4	0	0	0	-	-
Total Males	20	2	4	4	~	5	e	0	0
Over 70 M F	1 0	1 0	0	0 3	0 0	0 0	0 0	0	0
61 - 70 M F	3 2	0	0	0	0	0	0	0	0
51 - 60 M F	0 8	-	0	с Т	0 0	0	5	0 0	0
41 - 50 M F	5 1	3 1	0 0	0	0 0	1 0	1 0	0 0	0
31-40 M F	3 2	2 0	2 0	1 0	0 0	1 0	0 0	0 0	0 0
20 - 30 M F	5 0	0	-	0	0	2	0	0	0
м 0 - 19 П	0 4	0	- 0	0	0	0	0	0	0
Environment Description	Public Road - Driver	Public Road – motorcycle driver	Public Road - passenger	Public Road - pedestrian	Public Road – bicycle (not motorized vehicle)	ATV driver – on public road	ATV driver – off public road	ATV passenger – off public road	Snowmobiling (anywhere off public road) – passenger

PROVINCIAL SUMMARY	ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE B-3	from 2017.01.01 to 2017.12.31	
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% of Classification	6.0	60.1	0.0	0.0	6.0	0.0	2:2
Autopsies	~	68	0	0	<del>.</del>	0	ĸ
% of Classification	0.4	49.3	4 1 2	2.3	4.2	4.2	1.2
Total	-	127	£	9	11	11	ε
Total Females	0	55	0	9	8	9	٢
Total Males	~	72	Э	0	б	£	2
r 70 F	0	28	0	9	7	9	0
ove Nove	0	29	-	0	с	5	0
6 г	0	4	0	0	-	0	0
6 <u>5</u>	0	10	0	0	0	0	0
- 60 -	0	10	0	0	0	0	-
ح ∽	0	14	-	0	0	0	0
- 50	0	9	0	0	0	0	0
<u>4</u>	0	9	0	0	0	0	0
Р 40	0	2ı	0	0	0	0	0
- M	0	2	-	0	0	0	-
0 1		0	0	0		0	0
20 - 3 M F	0	2 2	0	0	0	0	0
0 - 15 I	-	-	0	0	0	0	1
Environment Description	Off Road Motorcycling (motocross, dirt bike, etc.)	Living inside, residence or on property	Inside, Other than Residence (mall, restaurant, other public building)	Seniors Complex	Homes for Special Care	Nursing Home	Hotel / Motel

# PROVINCIAL SUMMARY ACCIDENTAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE B-3 from 2017.01.01 to 2017.12.31

% of Classification	0.9	5.2	2.7	0.001		
Autopsies	t	9	ю	113	2	
% of Classification	0.4	2.7	1.2	000		
Total	-	2	m	752		
Total Females	0	0	0		103	
Total Males	۲	2	n	149		
Over 70 M F	0 0	6	0	43	51	94
61 - 70 M F	0 0	4 0	0	20	8	28
51 - 60 Л Г	1 0	1 0	0 0	28	16	44
41 - 50 M F	0 0	0 0	0	18	8	26
31 - 40 M F	0 0	0	0	18	7	25
20 - 30 M F	0 0	1 0	2 0	17	ю	20
А П П П	0 0	0	0	ъ	4	σ
Environment Description	Rooming/Boarding House/Halfway House/Group Home	Urban Outdoors – public place & other (not residence)	Rural Outdoors (not built up place or near residence)	Males	Females	Total for Age Group

PROVINCIAL SUMMARY SUICIDE DEATHS BY AGE GROUP, GENDER AND JUDICIAL DISTRICT - SCHEDULE C-1 from 2017.01.01 to 2017.12.31

	0 - 19	20 - 30	31 - 40	41 - 50	51 - 60	61 - 70	Over 70	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Judicial Districts	LL ∑	LL ∑	L ∑	L ∑	L ∑	LL ∑	L ∑	2	2				000000
Bathurst	0 0	1 0	0 0	3 0	4 1	3 1	0 0	1	2	13	12.9	-	3.3
Campbellton	0	1	0	0 0	-	0	0	2	~	т	3.0	-	3.3
Edmundston	0	2	1	2	1 0	2 0	1	6	2	11	10.9	0	0.0
Fredericton	0 1	1	3 0 8	4	3	-	0	12	ъ	17	16.8	5	16.7
Miramichi	0	0	2	2 0	1	0	1	9	0	9	5.9	-	3.3
Moncton	2	6 2	3 0	5 0	3 2	3 2	2	24	7	31	30.7	8	26.7
Saint John	0	3 Э	0 0	3 0	5 1	0	3	14	2	16	15.8	12	40.0
Woodstock	0 0	0 0	1 0	1 0	0 0	1 0	1 0	4	0	4	4.0	2	6.7
Males	2	14	10	20	18	10	8	82					
% Total - Males	2.0	13.9	9.9	19.8	17.8	9.9	6.7	81.2					
Females	2	ĸ	0	2	9	5	~		19	101	100.0	30	100.0
% Total - Females	2.0	3.0	0.0	2.0	5.9	5.0	1.0		18.9				
Total for Age Group	4	17	10	22	24	15	თ						
% of Classification Total	4.0	16.8	6.9	21.8	23.8	14.9	8.9						

## PROVINCIAL SUMMARY SUICIDE DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE C-2 from 2017.01.01 to 2017.12.31

Death Factor Description	А-19 П		20 - 30   F	31 - 4( M F	2 - 1 - 5 - 1	 Сд. ц.	51 - 60 M F	61 - 70 M F		Ver 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Hanging	2 2		} 2	5 0	13 、		5 2	2 0		0 (	35	7	42	41.5	£	16.7
Burns - Heat	0 0		0 (	0 0	) 0	0	1 0	0 0	)	0 (	1	0	٢	1.0	0	0.0
Cuts, Stabs	0 0		0 (	0 0	1	0	2	1		0 (	4	1	5	5.0	4	13.4
Drowning - Open Water	0 0	<u>,-</u>	0	0 0	) 0	0	0	0 0	0	0	-	0	-	1.0	0	0.0
Drowning - Bathtub	0 0		0	0 0	) 0	0	0	0 0	0	0	٢	0	+	1.0	٢	3.3
Asphyxia	0 0	£	0	0 0	) 0	0	1 0	0 0	-	0	3	0	З	3.0	1	3.3
Carbon Monoxide Poisoning - Vehicle Exhaust	0 0	9	0 (	0 0	1	0	0	0 0	0	0	2	0	2	2.0	1	3.3
Carbon Monoxide Poisoning	0 0		0	1	0	0	0	0	0	0	-	0	۲	1.0	0	0.0
Ethylene Glycol	0	0	0	0	-	-	0	0	0	0	-	0	~	1.0	٢	3.3

## PROVINCIAL SUMMARY SUICIDE DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE C-2 from 2017.01.01 to 2017.12.31

	0 - 19	20 - 30	31 - 40	41 - 50	51 - 60	61 - 70	Over 70	Total	Total	Total	% of	Autopsies	% of
Death Factor Description	LL ∑	ц Х	L ∑	ш Х	ш 2	L Z	⊥ ∑	Males	remales		Classification		Classification
Shooting - Rifle	0 0	1 0	0 0	2 0	5 0	5 0	5 0	18	0	18	17.7	4	13.4
Shooting - Shotgun	0	0 0	1 0	1	1 0	0 0	1 0	4	0	4	4.0	1	3.3
Shooting - Handgun	0	0	0 8	0	6	-	0	Q	£	2	0.0	2	6.7
Alcohol and Drug	0	0	0	0 0	6	0	0	~	0	-	1.0	-	3.3
Drug	0	1 1	0 0	1	0 3	1 4	۲	4	Ø	13	12.9	8	26.7
Fall or jump – different level, eg. bridge, bldg.	0 0	0 0	0 0	0	0 0	0 0	0 0	0	-	-	1.0	1	3.3
Males	N	41	10	20	8	0	ω	82		101	100.0	30	100.0
Females	5	e	0	2	9	'n	-		19				
Total for Age Group	4	17	10	22	24	15	o						

PROVINCIAL SUMMARY SUICIDE DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE C-3 from 2017.01.01 to 2017.12.31	
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	SUICIDE DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE C-3	from 2017.01.01 to 2017.12.31
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Environment	0 - 15 4	 20 - 30 M F	≤ 3	Р 40	41 - 50 M F	51-6 F	0	61 - 70 A F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Federal Institution	0	0 0	-	0	0	0	0	0	0	~	0	-	1.0	+	3.3
Living inside, residence or on property	5	6	ω	0	18	13 (	G	പ	8	67	17	84	83.0	22	73.3
Inside, Other than Residence (mall, restaurant, other public building)	0	0	0	0	0	-	0	0	0	~	0	~	1.0	o	0.0
Homes for Special Care	0	0 0	0	0	0 0	0	0	0	0 0	-	0	٢	1.0	0	0.0
Hote//Motel	0	0	0	0	0 0	1	0	0 (	0 0	2	0	2	2.0	2	6.7
Work Place	0	 0 0	0	0	1	0	0	0	0 0	-	0	٢	1.0	0	0.0

## PROVINCIAL SUMMARY SUICIDE DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE C-3 from 2017.01.01 to 2017.12.31

-	0-19 И F	20 - 30 M F	31 - 40 M F	41 - 50 M F	51 - 60 M F	61 - 70 M F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
- - -	- C		0	0	0	0	c	-	c	-	1.0	c	0.0
0 0 0 0	0 0		0 0		0 0 5 0			<u>م</u>	) O	ى .	5.0	· -	9 6. 6
0 0	- -		0 0	<del>.</del>	-	0	0	m	2	ى ك	5.0	4	13.4
5	4	1	0	20	8	6	∞	8					
										101	100.0	30	100.0
3	т		0	N	ى	ъ	-		19				
4 17	17		10	22	24	15	6						

PROVINCIAL SUMMARY HOMICIDE DEATHS BY AGE GROUP, GENDER AND JUDICIAL DISTRICT - SCHEDULE D-1 from 2017.01.01 to 2017.12.31

% of	Classification	30.0	20.0	10.0	20.0	10.0	10.0		100.0				
Autopsies		ю	7	-	2	-	۲		10				
% of	Classification	30.0	20.0	10.0	20.0	10.0	10.0		100.0				
Total		3	2	-	2	-	-		10				
Total	Females	1	~	0	0	0	۲			£	30.0		
Total	Males	2	۲	۲	2	4	0	7	70.0				
Over 70	L 	0 1	0	0 0	0	0 0	0	0	0.0	~	10.0	~	10.0
61 - 70	2 ⊥ 	0 0	1	0 0	0 0	0 0	0 0	-	10.0	0	0.0	~	10.0
51 - 60	} ⊥ 	0 0	0	0 0	0 0	0 0	0	0	0.0	0	0.0	0	0.0
41 - 50	} ⊥ 	1 0	0	1	1	1	0	4	40.0	0	0.0	4	40.0
31 - 40	2 ⊥ 	0 0	0	0 0	0	0 0	0 0	-	10.0	-	10.0	2	20.0
20 - 30	3 ⊥ 2 ≥	1 0	0 0	0 0	0 0	0 0	0	-	10.0	۲	10.0	5	20.0
0 - 19	р Ц 2 Х	0 0	0	0	0	0 0	0 0	0	0.0	0	0.0	0	0.0
	Judicial Districts	Bathurst	Campbellton	Edmundston	Fredericton	Moncton	Saint John	Males	% Total - Males	Females	% Total - Females	Total for Age Group	% of Classification Total

## PROVINCIAL SUMMARY HOMICIDE DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE D-2 from 2017.01.01 to 2017.12.31

	0 - 19	20 - 30	31 - 40	41 - 50	51 - 60	61 - 70	Over 70	Total	Total	Total	% of	Autopsies	% of
Death Factor Description	⊥ ⊻	L Z	⊥ ∑	L Z	L N	⊥ ∑	⊥ ∑	Males	Females		Classification		Classification
Blunt Trauma, Beating	0 0	1	0 0	0 0	0 0	0 0	0 0	-	0	1	10.0	-	10.0
Cuts, Stabs	0 0	0 0	0 0	1 0	0 0	0 0	0 0	-	0	٢	10.0	-	10.0
Shooting – Handgun	0 0	0	0 0	0 0	0	0	0	0	-	۲	10.0	<del>.</del>	10.0
Shooting - Unspecified	0	0	۲- ۲-	5	0 0	1	0	4	L	5	50.0	ى ا	50.0
Fire - Structural	0 0	0 0	0 0	1 0	0 0	0	0	٢	L	2	20.0	2	20.0
Males	0	Ł	٢	4	0	Ł	0	2					
Females	0	~	-	0	0	0	-		в	10	100.0	10	100.00
Total for Age Group	0	N	N	4	0	~	-						

PROVINCIAL SUMMARY HOMICIDE DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE D-3 from 2017.01.01 to 2017.12.31

PROVINCIAL SUMMARY NATURAL DEATHS BY AGE GROUP, GENDER AND JUDICIAL DISTRICT - SCHEDULE E-1 from 2017.01.01 to 2017.12.31

Judicial Districts	0 - 19 М F	20-30 M F	31 - 40 M F	41 - 50 M F	51 - 60 M F	61 - 70 M F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Bathurst	0 0	0	1 0	1	10 5	13 11	30 29	55	46	101	8.2	22	6.9
Campbellton	0	0	0 0	1 2	6 2	9 1	22 6	38	11	49	4.0	12	3.8
Edmundston	0	0	2	3 0	6 4	14 4	32 15	57	25	82	6.7	13	4.1
Fredericton	7	1	1 2	63	15 4	24 11	46 45	95	66	161	13.1	61	19.2
Miramichi	1	0	2	4 3	65	15 6	22 14	50	29	79	6.4	19	6.0
Moncton	1	1	4	6 4	31 12	37 21	74 57	154	95	249	20.3	75	23.5
Saint John	5 3	5 0	4 3	10 5	31 18	87 29	151 108	293	166	459	37.4	102	32.1
Woodstock	0	0	0	0 Ю	4 4	8	17 5	32	16	48	3.9	14	4.4
Males	თ	~	4	34	109	207	394	774					
% Total - Males	0.7	0.6	£.	2.8	8.9	16.9	32.1	63.1		800 1	000	210	000
Females	Q	с	œ	18	54	87	279		454	044	2.20	5	0.000
% Total - Females	0.4	0.2	0.7	1.5	4.4	7.1	22.7		37.0				
Total for Age Group	14	10	22	52	163	294	673						
% of Classification Total	1.1	0.8	1.8	4.2	13.3	23.9	54.8						

% of Classification	0.3	99.4	0.3	100.0		
Autopsies	-	316	۲	318		
% of Classification	0.1	9.66	0.1	100.0		
Total	-	1226	٦	1,228		
Total Females	0	454	0		454	
Total Males	۲	772	1	774		
Over 70 M F	0 0	393 279	1 0	394	279	673
61 - 70 M F	0 0	207 87	0 0	207	28	294
51 - 60 M F	1 0	108 54	0 0	109	54	163
41 - 50 M F	0 0	34 18	0 0	34	18	52
31 - 40 M F	0 0	14 8	0 0	14	8	22
20 - 30 M F	0 0	7 3	0 0	2	ε	10
M F	0 0	95	0 0	6	5	14
Death Factor Description	Epilepsy	Natural Disease	Chronic Use of Alcohol	Males	Females	Total for Age Group

## PROVINCIAL SUMMARY NATURAL DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE E-2 from 2017.01.01 to 2017.12.31

## PROVINCIAL SUMMARY NATURAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE E-3 from 2017.01.01 to 2017.12.31

2 7 7 0 0		
o 9 0 0	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	0 0 0 0 0   0 3 0 0 1 0   0 3 3 0 0 0

PROVINCIAL SUMMARY	NATURAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE E-3	from 2017.01.01 to 2017.12.31
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	% of Classification	6.0	0.9	2.0	0.0	0.0	0.0	0.3	0.0	0.3
	Autopsies	m	ю	9	0	0	0	Ļ	0	L
	% of Classification	0.4	0.5	2.4	0.1	0.3	0.1	0.1	0.1	0.2
	Total	ى ك	Q	29	1	4	-	1	1	2
	Total Females	0	0	7	0	0	0	0	0	1
-0-7	T otal Males	Q	Q	22	٢	4	-	L	L	1
	er 70 F	0	0	4	0	0	0	0	0	0
2	ŏ≥	7	7	12	٢	4	-	0	0	1
· · · · ·	31 - 70 1 F	0	0	۲	0	0	0	0	0	0
	- <u> </u>	N	7	4	0	0	0	0	-	0
	- 60 F	0	0	7	0	0	0	0	0	~
=	₹ 2	0	-	-	0	0	0	0	0	0
	- 50 F	0	0	0	0	0	0	0	0	0
	<u>4</u>	0	0	0	0	0	0	0	0	0
	1 - 40 F	0	0	0	0	0	0	0	0	0
		0	-	0	0	0	0	۲	0	0
	- 30 -	0	0	0	0	0	0	0	0	0
	Z0 ■	-	0	0	0	0	0	0	0	0
	- 19 Т	0	0	0	0	0	0	0	0	0
	∘ ∑	0	0	5	0	0	0	0	0	0
	Environment Description	Inside, other than residence (mall, restaurant, other public building)	Hotel / Motel	Hospital Other (ward, ICU, etc.)	Hospital Operating Room	Psychiatric Hospital	Doctor's Office	Rehabilitation Facility	Custody Provincial Institution	Aircraft – on Board

## PROVINCIAL SUMMARY NATURAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE E-3 from 2017.01.01 to 2017.12.31

% of Classification	0.3	0.3	0.3	0.3	0.0	1.6	0.3	0.6	0.0
Autopsies	-	-	<del>.</del>	~	0	ى	٢	2	0
% of Classification	0.1	0.1	0.1	0.2	0.1	0.7	0.3	0.2	0.1
Total	<del>.</del>	-	-	7	-	თ	4	ĸ	~
Total Females	0	0	0	~	0	0	3	0	0
Total Males	~	-	-	~	٢	6	1	с	~
/er 70 F	0	0	0	0	0	0	1	0	0
őΣ	0	0	0	-	ſ	7	0	7	0
61 - 70 M F	0	۲ 0	0	0	0 0	3	1 0	0	0
51 - 60 M F	0 0	0 0	1 0	0 0	0 0	4 0	0 1	1 0	0
41 - 50 M F	0	0	0	000	0 0	0	0 1	0	0
33 - 4	0	0	0	0	0	0	0	0	0
20-30 M F	0 0	00	0 0	0 0	0 0	00	0 0	0 0	0
					)		)		-
0 - 19 M F	0	0	0 0	0	0	0	0 0	0 0	0
Environment Description	Swimming – private pool	Ocean	Open Water (river, lake, stream, brook)	Camping / Tenting	Other Outdoor recreation	Public Road – Driver	Public Road - Passenger	Public Road - Pedestrian	Public Road – bicycle (not motorized vehicle)

PROVINCIAL SUMMARY NATURAL DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE E-3 from 2017.01.01 to 2017.12.31

	0 - 19	- 50	- 30	31 - 40	-	41 - 50	51 -	60	61 - 70	Over 70	Total	Total	Total	% of	Autopsies	% of
Environment Description	L ∑	Σ	ш	u ∑	2	⊥ ⋝	Σ	ш	⊥ ∑	⊥ ∑	Males	remales		Classification		Classification
Public Road – Motorcycle Driver	0	0	0	0		0	-	0	0	0	~	0	-	0.1	-	0.3
ATV passenger – off public road	0	0	0	0		0	0	0	0	0	~	0	-	0.1	-	0.3
Non Public Road - Driver	0	0	0	0 0		0	0	0	0 0	- 0	~	0	-	0.1	<del>.</del>	0.3
Snowmobiling (anywhere off public road) - driver	0	0	0	0		6	0	0	0	0	~	0	-	0.1	4	0.3
Construction	0 0	0	0	0 0		0	0	0	0	0 0	~	0	٢	0.1	0	0.0
Urban Outdoors- public place and other (not residence)	0 0	0	0	1		с Т	5	0	0	2 1	12	5	14	<del>.</del>	10	3.2
Rural Outdoors (not built up place or near residence)	0	0	0	0		0	-	0	-	0	ĸ	-	4	0.3	۲	0.3
Males	6		7	14		34		60	207	394	774					
Females	5		з	8		18		54	87	279		454	1,228	100.0	318	100.0
Total for Age Group	14		10	22		52	-	63	294	673						

Judicial Districts	M F	20 - 30 M F	31 - 40 M F	41 - 50 M F	51 - 60 M F	61 - 70 M F	Over 70 M F	Total Males	Total Females	Total	% of Classification	Autopsies	% of Classification
Fredericton	0	1 0	0	1 2	0 0	0 0	0	2	ю	£	45.4	4	44.5
Miramichi	0 0	0	0	0	0	1	1 0	2	0	7	18.2	7	22.2
Moncton	0 0	0	0	0 0	1 0	0 0	0	-	7	ю	27.3	7	22.2
Saint John	0	0	0	0	0	0	0	0	<del>.</del>	~	9.1	4	11.1
Males	0	~	0	~	~	~	~	£					
% Total - Males	0.0	9.1	0.0	9.1	9.1	9.1	9.1	45.5		11	100.0	6	100.0
Females	2	0	-	5	0	0	~		9				
% Total - Females	18.2	0.0	9.1	18.2	0.0	0.0	9.1		54.6				
Total for Age Group	2	~	~	n	-	~	5						
% of Classification Total	18.2	9.1	9.1	27.3	9.1	9.1	18.2						

% of Classification	11.1	11.1	77.8			
Autopsies	-	L I	7	c	D	
% of Classification	9.1	9.1	81.8	0.001	0.00	
Total	-	۲	6	Ť	=	
Total Females	0	0	9		9	
Total Males	٢	٢	3	2		
Over 70 M F	0	0	1 1	-	-	5
61 - 70 M F	6	0 0	0 0	Ļ	0	٢
51 - 60 M F	0	0 0	1 0	۲	0	٢
41 - 50 M F	0	0 0	1 2	F	2	З
31 - 40 M F	0	0 0	0	0	٢	-
20 - 30 M F	0	1 0	0 0	-	0	~
0 - 19 M F	0	0	0 2	0	5	5
Death Factor Description	Drowning – Open Water	Fire - Self	Undetermined	Males	Females	Total for Age Group

# PROVINCIAL SUMMARY UNDETERMINED DEATHS BY AGE GROUP, GENDER AND DEATH FACTOR - SCHEDULE F-2 from 2017.01.01 to 2017.12.31

PROVINCIAL SUMMARY UNDETERMINED DEATHS BY AGE GROUP, GENDER AND ENVIRONMENT - SCHEDULE F-3 from 2017.01.01 to 2017.12.31

% of Classification	11.1	22.2	44.5	0.0	11.1	11.1	000	0.000	
Autopsies	←	2	4	0	٢	۲	c	D	
% of Classification	9.1	18.2	45.4	9.1	9.1	9.1	500 0	0.00	
Total	~	2	ى ۲	1	1	1	Ţ	Ξ	
Total Females	0	-	4	٢	0	0		9	
Total Males	۲	4	-	0	1	1	5		
Over 70 M F	0 0	0 1	0 0	0 1	0 0	0 0	1	1	2
61 - 70 M F	0	0	0	0 0	0 0	1 0	Ļ	0	<del>.</del>
51 - 60 M F	0	0	0	0 0	0 0	0 0	1	0	-
41 - 50 M F	0	-	-	0 0	0 0	0 0	٦	2	ო
31 - 40 M F	0	0	0	0 0	0 0	0 0	0	-	<del>.</del>
20 - 30 M F	0 0	0 0	0 0	0 0	1 0	0	1	0	<del>.</del>
0 - 19 М П	0 0	0 0	0 2	0 0	0 0	0 0	0	7	8
Environment Description	Urban Outdoors - public place and other (not residence)	Rural Outdoors (not built up place or near residence)	Living inside, residence or on property	Nursing Home	Public Road - Driver	Beach / Shoreline	Males	Females	Total for Age Group

### Schedule F

### Undetermined Deaths (Means of death impossible to determine)

There were eleven deaths classified as Undetermined.

### Five were in the Fredericton Judicial District:

### Case #1

Death Factor:	Undetermined
Environment:	Living Inside, Residence or on Property
Age Group:	0 - 10
Sex:	Female
An autopsy was per	formed.

### Case #2

Death Factor:	Fire - Self
Environment:	Public Road - Driver
Age Group:	20 - 30
Sex:	Male
An autopsy was per	formed.

### Case #3

Death Factor:UndeterminedEnvironment:Rural Outdoors (not built up place or near residence)Age Group:40 - 50Sex:FemaleAn autopsy was performed.

### Case #4

Death Factor:	Undetermined
Environment:	Living Inside, Residence or on Property
Age Group:	40 - 50
Sex:	Female
An autopsy was p	erformed.

### Undetermined Deaths (Means of death impossible to determine)

### Case #5

Death Factor:UndetermineedEnvironment:Living Inside, Residence or on PropertyAge Group:40 - 50Sex:MaleNo autopsy was performed.

### Two were in the Miramichi Judicial District:

### Case #1

Death Factor:Drowning – Open WaterEnvironment:Beach / ShorelineAge Group:60 - 70Sex:MaleAn autopsy was performed.

### Case #2

Death Factor:UndeterminedEnvironment:Rural Outdoors (not built up place or near residence)Age Group:80 - 90Sex:MaleAn autopsy was performed.

### Three were in the Moncton Judicial District:

### Case #1

Death Factor:	Undetermined
Environment:	Living Inside, Residence or on Property
Age Group:	30 - 40
Sex:	Female
An autopsy was per	formed.

### Undetermined Deaths (continued) (Means of death impossible to determine)

### Case #2

Death Factor:UndeterminedEnvironment:Urban Outdoors – public place and other (not residence)Age Group:50 - 60Sex:MaleAn autopsy was performed.

### Case #3

Death Factor:	Undetermined
Environment:	Nursing Home
Age Group:	80 - 90
Sex:	Female
No autopsy was per	rformed.

### One was in the Saint John Judicial District:

Death Factor:UndeterminedEnvironment:Living Inside, Residence or on PropertyAge Group:0 - 10Sex:FemaleAn autopsy was performed

### **Summary of Inquests and Recommendations**

One inquest was held during the reporting period. This report mentions the replies received by the Office of the Chief Coroner in response to the recommendations on the inquest conducted.

### Valdor Michaud

Mr. Valdor Michaud was a semi-retired gravel truck driver for his brother's company, Ray's Paving Inc. On Friday, July 10, 2015, he went to work but there was not a lot to do so he decided to transport gravel in the ditch so it would be closer for processing. To do this, he drove the truck up a hill and on the top of the hill there was a flat area on which he was backing up his truck to empty the load near the edge of a cliff, which allowed him to move the gravel closer to the processing site. Mr. Michaud was trying to ensure that his entire load slid down the cliff to avoid having to push it back with a loader.

With his first load, there was some gravel that stayed on the edge, so with his second load, it seems he tried to back up even closer to the edge, but this time he was too close and the gravel yielded under the weight of the loaded truck. The truck and its cargo rolled down the hill. The truck overturned a full turn backwards and landed on the driver's side about 30 feet down. No one was a direct witness to the tragedy, but the loader operator spotted the overturned truck on its side; he went to see Mr. Michaud, and then called emergency services. Mr. Michaud was freed from the truck and transported to Grand Falls Hospital, but all attempts to revive him were unsuccessful and he was pronounced dead.

An inquest under 7(b) of the N.B. *Coroners Act* was held in Edmundston on December 20 and 21, 2017.

The jury determined that Mr. Michaud died accidentally following multiple injuries caused by impacts. They made the following recommendations:

- 1. That subsection 193(2) of *Regulation 91-191* under the *Occupational Health and Safety Act* be amended to include:
  - Stop the vehicle at least 5 meters from the edge of the pile.
  - Ensure that the unloading surface is slightly sloping towards the edge of the pile.
  - Ensure the unloading surface is perfectly equal on both sides.
  - Install orange safety cones at least 5 meters from the edge of the pile.
- 2. That dump trucks be equipped with a rear-view camera.
- 3. Recommends that the company's occupational health and safety policies and procedures be read and signed by each employee on an annual basis.
- 4. That WorkSafeNB Hazard Alert documents be included in the policies and procedures of each N.B. company that uses dump trucks.

The recommendations were forwarded to the Department of Public Safety and the President and CEO of WorkSafeNB.

### Recommendation #1

That subsection 193(2) of *Regulation 91-191* under the *Occupational Health and Safety Act* be amended to include:

- Stop the vehicle at least 5 meters from the edge of the pile.
- Ensure that the unloading surface is slightly sloping towards the edge of the pile.
- Ensure the unloading surface is perfectly equal on both sides.
- Install orange safety cones at least 5 meters from the edge of the pile.

The President and CEO of WorkSafeNB advises that WorkSafeNB's policy for proposed amendments to occupational health and safety legislation requires consultation with affected stakeholders, followed by approval of WorkSafeNB's Board of Directors, then proposals proceed to government for the change(s) to occur.

While WorkSafeNB agrees in principle that a safer environment is desirable when operating vehicles and powered mobile equipment near the edge of pits, a comprehensive analysis of the issues and consultation with affected stakeholders would have to be undertaken before making a recommendation to the Board of Directors and government for a regulatory amendment as noted above.

In the interim, while legislative amendments are being pursued, WorkSafeNB commits to reviewing the jury's recommendations with industry stakeholders for their feedback and, if feasible, work with industry to voluntarily adopt any best practices for work being carried out near pits.

### Recommendation #2

### That dump trucks be equipped with a rear-view camera.

The President and CEO of WorkSafeNB advises that research has shown that back-up cameras are helpful in giving dump truck operators a view of what is behind them. However, this same research has also found that they work best in combination with a radar system that beeps louder or faster when closing in on an obstacle behind the truck and alerts the driver to look at the display screen. Although these types of systems are effective, one of the limitations is that the camera must be clean and in inclement weather it is not always practical to keep the camera clean. An additional limitation is that the system relies on the operator to look at the monitor.

Measures required in other jurisdictions for safe back-up may include the use of manual signalers that can alert dump truck and other vehicle operators of the potential dangers behind them and when signalers are not available the use of devices such as cameras. The requirement for signalers can be found in New Brunswick legislation but it is silent on the use of cameras.

Therefore, based on the above, WorkSafeNB will add this topic for consultation with affected stakeholders for possible regulatory amendment. In the interim, WorkSafeNB will communicate to affected industries the possible benefits of using back-up cameras to supplement the other measures required for safe backing up.

The Minister of Justice and Public Safety advised that the federal government, through its Motor Vehicle Safety Standards, determines what safety equipment is required on vehicles including dump trucks. These standards would apply to any vehicle manufactured for sale or imported into Canada.

Back-up cameras are currently not included in the standards and are considered primarily a backing aid to help you park your vehicle. These systems can be impacted by weather and road conditions and should not be relied on to replace careful driving by motorist.

Making rear-view cameras mandatory would also impact dump truck operators involved in other industries that may only operate on a seasonal basis and with trucks that often having a long lifespan.

The Minister advised that he will forward our correspondence to the Federal Department of Transportation for their consideration when reviewing the safety standards for dump trucks.

### **Recommendation #3**

### Recommends that the company's occupational health and safety policies and procedures be read and signed by each employee on an annual basis.

The President and CEO of WorkSafeNB advises that there are numerous provisions in both the *Occupational Health and Safety Act* and the regulations requiring employers to develop policies, procedures and codes of practice to ensure the health and safety of employees. It is also the employers' responsibility to ensure that the employees are knowledgeable and follow the policies, procedures and codes of practice.

While the legislative provisions do not specify the frequency to which employees should read procedures, policies and codes of practice and sign them to confirm that they have read the procedure, workplaces (with input from the Joint Health and Safety Committee or when none exists, the affected employees) can establish review schedules that meet the needs of the workplace. In some circumstances it may be necessary for the employees to review policies, procedures or codes of practice more frequently due to the nature of the work. Such a provision could therefore impede a more frequent review at a workplace.

As a result, WorkSafeNB believes that current New Brunswick occupational health and safety legislation meets the intent of this recommendation and no further action is required at this time. A review of this decision will be conducted by WorkSafeNB if circumstances change.

### **Recommendation #4**

### That WorkSafeNB Hazard Alert documents be included in the policies and procedures of each N.B. company that uses dump trucks.

The President and CEO of WorkSafeNB advises that WorkSafeNB agrees that incorporating guidance documents such as hazard alerts in a company's health and safety policies and procedures manual can enhance the health and safety of workers. However, there are other ways where the intent of this recommendation can be met.

Web-based access of documents (http://www.worksafenb.ca/docs/HA\_Safe-drivingtechniques-around-stockpiles.pdf) may be an effective way of retrieving and sharing documents with workers at a workplace or on a project site. One key advantage of accessing these documents through WorkSafeNB's web-based system is that users can rely on them to be the current version of the document. WorkSafeNB also continues to develop more effective mediums for providing access to health and safety resources through technology.

The OHS Guide to the Legislation (http://ohsguide.worksafenb.ca/index.html) is the most recent example. The content of the guide is readily available through a mobile application for ease of access at a workplace allowing them to choose the most effective way for sharing and using this information. WorkSafeNB continues to promote all of its resources through numerous channels to ensure that workplaces know how and where to access advice and guidance relevant to the hazards that exists in their workplace and include them in their policies and procedures.