2021 Report on Work Fatality and Injury Rates in Canada

October 21, 2021

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Acknowledgements

Thank you to J.D. Bell (University of Regina), Bob Barnetson (Athabasca University), Bruce Cielen (Workers' Compensation Board of Manitoba), Jilal Jemal (Association of Workers' Compensation Boards of Canada), Gabrielle Klass (Saskatchewan Workers' Compensation Board), Noah Li (University of Regina), Esther Mass (University of British Columbia), Eagleclaw Thom (Regina), Barry Warrack (Workers' Compensation Board of Manitoba), and Jessica Wood (Queen's University) for their assistance with this research. Special thanks to Jessica Antonini, Janelle Gerard, Lucas Mack, and Shandi Van De Sype (University of Regina) for helping to prepare past reports.

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Executive Summary

Canadian workers compensation boards reported that 925 workers died due to workrelated causes in 2019. This report provides a jurisdictional comparison of work-related injury and fatality rates in Canada between 2015 and 2019 using data from the Association of Workers' Compensation Boards of Canada (AWCBC).

A comparison of fatality rates is important for identifying trends over time both within and between provinces and territories.

Job-related fatalities are classified as *injury* (e.g., death due to job-related electrocution) or *occupational disease* related (e.g., death from mesothelioma due to work-related exposure to asbestos).

Important Data Limitations

Several factors affect the accuracy, reliability, and jurisdictional comparability of fatality and injury rates within Canada. Readers should consider several factors (e.g., industry mix, jurisdictional size, injury under-reporting, differences in legislation among jurisdictions) when interpreting and comparing fatality and injury rates.

Comparable 2020 provincial and territorial fatality statistics will not be available through the AWCBC until early 2022.

Injury-Related Fatality Rate

Northwest Territories and Nunavut had the highest 5-year average injury fatality rate (7.6 deaths per 100,000). Among provinces with over 100,000 workers, Saskatchewan's 5-year average injury fatality rate ranks highest (4.6 per 100,000) followed by Alberta (3.9 per 100,000).

Five of 12 jurisdictions experienced an increase in their 2019 injury fatality rate compared to their 2016-2018 average rate. Among jurisdictions with over 100,000 full-time equivalent employees, Newfoundland and Labrador (116%), New Brunswick (43%), and Alberta (9%) showed the greatest percentage increase in their 2019 injury fatality rate.

Occupational Disease-Related Fatality Rate

Among provinces with over 100,000 workers, Newfoundland and Labrador had the highest five year average occupational disease fatality rate (8.5 deaths per 100,000), followed by Nova Scotia (5.2 deaths per 100,000) and Ontario (4.0 deaths per 100,000).

In 2019, occupational disease fatality rates decreased in all but three jurisdictions. A comparison of the 2016-2018 average rates to the 2019 rates showed that among provinces with over 100,000 workers, Manitoba (20%) and British Columbia (1%) increased, while there was no change in Alberta.

Lost-Time Injury Rate

Among provinces with over 100,000 workers, Manitoba continues to have the highest 5year lost-time injury rate (2.76 per 100), followed by British Columbia (2.20 per 100), and Saskatchewan (2.05 per 100).

In 2019, five of 12 jurisdictions reported higher injury rates. A comparison of the 2016-2018 average rates to the 2019 rates showed that among provinces with 100,000 employees, Alberta (11%), New Brunswick (10%), and Quebec (9%) showed the greatest increase in lost-time injury rate.

Work-Related COVID-19 Claims in 2020

In 2020, there were approximately 32,742 accepted injury claims and 39 fatality claims for work-related exposures to COVID-19.

Recommendations to Address Data Limitations

The following recommendations would strengthen the accuracy and comparability of the data for future analyses, as well as foster improved awareness and prevention of work-related injuries, diseases, and fatalities in Canada.

- 1. Release previous year's injury and fatality statistics by March 31
- 2. Harmonize data collection and reporting within and across jurisdictions
- 3. Explore creative solutions to address the problem of under-reporting
- 4. Enhance primary prevention activities

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Dedication

To those who died because of their work



Arlene Reid, age 51, a mother and grandmother, died April 2020 from COVID-19 contracted at work as a Personal Support Worker. Photo from CBC News Toronto.



Hiep Bui, age 67, wife, died April 2020 from COVID-19 contracted at work. Photo from CBC News Calgary.



Sharon Roberts, age 59, died April 2020 from COVID-19 contracted at work as a Personal Support Worker. Photo from CBC News Calgary.



Benito Quesada, age 51, husband and father of four, died May 2020 from COVID-19 contracted at work. Photo from CBC News Calgary.



Jasvinder Riar, age 31, husband and new father, died on the job June 2020. Photo from CTV News BC.



John Martens, age 21, boyfriend and brother to 10 siblings, died on the job December 2020. Photo from the London Free Press.



Christine Mandegarian, age 54, wife and mother, died April 2020 from COVID-19 contracted at work as a Personal Support Worker. Photo from CBC News Calgary.



Henry Harder, age 26, husband and father of a newborn daughter, died on the job December 2020. Photo from CTV News London.



Capt. Jennifer Casey, age 33, daughter, died on the job May 2020. Photo from CTV News Nova Scotia.



Andrew Orfanakos, age 48, husband and grandson, died on the job December 2020. Photo from Daily Commercial News.



Mike Patterson, age 55, husband, father of two children, died on the job December 2020. Photo from CTV News Ottawa.



Claude Fontaine, age 58, father and brother, died on the job December 2020. Photo from CBC News North.

1.0 Introduction

Canadian workers compensation boards reported that 925 workers died due to work-related causes in 2019.

This report uses publicly available data from the Association of Workers' Compensation Boards of Canada (AWCBC) to estimate the injury and occupational disease-related fatality rates across Canadian provinces and territories over the past five years (i.e., between 2015 and 2019, inclusive). For comparison purposes, provincial and territorial work-related lost-time injury rates from 2015 to 2019 are also provided. We also provide COVID-19 claims data for related injuries and fatalities in 2020.

A comparison of fatality rates is important for identifying trends over time within and between jurisdictions. Such comparisons not only shed light on where the greatest need is for targeted injury prevention but also help to identify potential changes to educational, regulatory and enforcement regimes. Furthermore, differentiating between the rates of *occupational injury* and *occupational disease* fatalities provides insight into the types of policy changes that may be required.

This report is organized into five sections.

- Section 1 introduces the report.
- <u>Section 2</u> describes the methodology and highlights important limitations associated with AWCBC data.
- <u>Section 3</u> compares fatality and injury rates across provinces and territories between 2015 and 2019.
- <u>Section 4</u> graphically illustrates provincial fatality and injury rates between 2010 and 2019.
- <u>Section 5</u> presents recommendations to address some of the data limitations identified in the report, to strengthen the accuracy and comparability of the data for future analyses, and to foster improved prevention of work-related injuries, diseases, and fatalities in Canada.

2.0 Methodology

The AWCBC (2020) defines a workplace fatality as "a death resulting from a work-related incident (including disease) that has been accepted for compensation by a Board/Commission." Such fatalities are classified as being related to injury (for example, a death due to job-related electrocution) or occupational disease (for example, death from mesothelioma due to work-related exposure to asbestos).¹

Each year provincial and territorial workers' compensation boards and commissions submit injury, fatality, and other data to the AWCBC (Figure 1). Not surprisingly, data available through the AWCBC's website show that provinces with a relatively large labour force also report a higher number of work-related fatalities than smaller jurisdictions. While the AWCBC and research studies (e.g., Morassaei et al., 2013) focus on workplace injury *rates* (and thus take into account jurisdictional differences in labour force size), the AWCBC and other publications do not report provincial and territorial work-related fatality rates.



Figure 1: The AWCBC and Provincial and Territorial WCBs

¹ In 2010, the AWCBC began differentiating between the number of injury and occupational diseaserelated fatalities in its publicly posted data.

In this report, work-related injury and occupational disease fatality rates were calculated by dividing the total number of fatalities in each jurisdiction by the estimated number of full-time equivalent (FTE) workers in the corresponding jurisdiction, and then multiplying the result by 100,000 to arrive at a fatality rate per 100,000 workers.²

Related data for the period 2010 to 2019 were downloaded from the AWCBC website on March 5, 2021 and are available upon request.

There are three important caveats about the fatality and injury rates summarized in this report.

- Compensation boards report aggregate injury and fatality data by calendar year. However, there is a significant time-lag between the end of administrative data collection, reporting of injury and fatality statistics in provincial and territorial WCB annual reports, and the posting of comparable aggregate data to the AWCBC's website. At the time this report was written, no 2020 injury and fatality data were available on the AWCBC website. Comparable 2020 provincial and territorial fatality statistics will be available in early 2022.
- 2. It is important to note that AWCBC data are based on when a claim was accepted by a WCB, not when the incident occurred.
- 3. Work-related injury and fatality claims data, like other health-related data, have limitations related to accuracy and comparability that need be taken into account.

2.1 Important Data Limitations

Researchers and journalists have identified several factors that affect the accuracy, reliability, and jurisdictional comparability of occupational fatality and injury rates in Canada (e.g., Bittle et al., 2018; Barnetson, Foster & Matsunaga-Turnbull, 2018; Sharpe & Hardt, 2006; Thompson, 2007). Grant's (2017a-c) reporting provides an overview of many of these factors and related solutions.

Taking into account under-reporting and other factors (e.g., work-related commuting related fatalities, stress-related suicides), Bittle and colleagues (2018) estimated that the annual total number of work-related fatalities in Canada is likely *ten times higher* than reported by the AWCBC.

² The number of FTEs reflects the estimated total number of employees covered by a compensation board (based on employer payroll estimates) as opposed to the total number of people employed in a jurisdiction. Given that the AWCBC uses the total estimated number of FTEs for calculating lost-time injury rates, this same approach was used for calculating fatality rates in this report. An alternative approach, used by Sharpe and Hardte (2006), uses Statistics Canada Labour Force Survey estimates of the total number of employed workers (instead of the estimated total number of FTE).

Readers should consider the factors discussed below when interpreting provincial fatality and injury rates.³ Later in this report, we provide suggestions for addressing limitations associated with injury and fatality data (see <u>section 5.0</u>).

 Injury and fatality under-reporting. For a variety of reasons (e.g., injury severity, claim suppression, use of alternative insurance policies to cover an injured worker's expenses, lack of awareness amongst workers and primary care physicians that workplace exposures can cause occupational diseases), workers and employers may not report eligible work-related injuries to a compensation board.

Estimates of work-related injury under-reporting (sometimes referred to as "under claiming") in Canada vary. For example, Shannon and Lowe's (2002) study found that 40% of eligible claims were not reported to a compensation board or commission. A 2013 study of injury under-reporting in Manitoba concluded: "There appears to be significant under-claiming of WCB benefits in Manitoba. Survey evidence suggests that around 30.1% of workers who experienced a work-related injury that involved more than 5 days of lost working time may not have claimed WCB Lost Earnings Benefits" (Prism Economics and Analysis, 2013, p. 2). Finally, a recent study of workers in British Columbia found that 53.7% of workers who had experienced a work-related injury that resulted in two or more days off work did not report their injury to WorkSafeBC (Saunders, O'Grady, & Cardoso, 2020). The researchers also noted that employer pressure not to claim ranged between 4-13% among unreported injuries.

There is also evidence that under-reporting extends to compensation board workrelated fatality data. Koehoorn et al.'s (2015) comparison of British Columbia workers' compensation data and external data sources (coroner, hospital, and vital statistics data) estimated that 7% to 24% of work-related fatalities (*depending* upon the data source), between 1991 and 2009, were not captured by the workers compensation system in BC. The authors note that they could not determine what proportion of unreported cases involved deceased workers not covered by compensation board insurance (see point two below).

CAREX⁴ Canada has estimated the prevalence of occupational exposure to a wide range of known and suspected carcinogens in Canada. For instance, it estimates that 235,000 Canadian workers are currently exposed to asbestos (CAREX, 2021). However, fatalities due to occupational disease, such as mesothelioma, are not always diagnosed and recorded as such (i.e., as being caused by occupational exposure) by attending doctors, and thus go unreported in WCB and AWCBC data. Indeed, investigative reporting by Mojtehedzadeh (2016, 2017) revealed that Ontario's Workplace Safety Insurance Board (WSIB) has reviewed (and overturned) a significant number of previously denied occupational disease claims linked to

³ With respect to data limitations, the AWCBC provides this general cautionary note: "Differences in population, industry mixes, coverage and legislation/policy may affect comparability between jurisdictions. These measures use standard definitions that may differ from WCB reports. Please contact the WCB directly with any inquiries about an individual jurisdiction. Additional measures and explanatory footnotes for the above measures can be found in the Detailed Key Statistical Measures Report."

⁴ CAREX is the acronym for CARcinogen Exposure.

occupational exposure to several carcinogens at the former General Electric factory in Peterborough, Ontario.

 Jurisdictional differences in the proportion of workers insured. In Canada, responsibility for workplace health and safety is laid out in labour legislation, which primarily falls under provincial authority. Generally, this legislation includes the Occupational Health and Safety Act⁵ and Workers' Compensation Act⁶, along with their related regulations (CANOSH, 2020).

Each province, territory and the federal government has its own labour legislation. At the federal level, the legislation applies to workers in the federal government, federal corporations, and federally-regulated industries (e.g., inter-provincial and international transportation, shipping, telephone and cable systems). Provincial or territorial legislation applies to approximately 90% of workplaces; however, there are some notable exceptions, which create gaps in coverage that have implications for the comparability of data across jurisdictions. For example, most agricultural workers are not covered by compensation boards and agricultural-related fatalities are reported separately (e.g., Shah et al., 2011). More generally, as shown in Table 1, WCB coverage rates in 2019 vary by jurisdiction from a high of 100% in Yukon to a low of 73% in Nova Scotia (AWCBC, 2021). Injuries and deaths that occur in workplaces not covered by compensation board insurance are not counted in AWCBC data. Moreover, lower coverage rates can skew fatality and injury rates when the proportion of uncovered workers is employed in relatively more (or relatively less) dangerous industries.

	% of workforce covered (2019)
Alberta	82
British Columbia	98
Manitoba	78
New Brunswick	91
Newfoundland and Labrador	97
Nova Scotia	73
NWT/Nunavut	97
Ontario	77
Prince Edward Island	98
Quebec	93
Saskatchewan	76
Yukon	100

Table 1: Scope of Coverage, by Jurisdiction	(AWCBC, 2021)
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⁵ OHS legislation generally sets out the rights and duties of all workplace parties, as well as how workers are to be protected from health and safety hazards (i.e., prescriptive or performance-based procedures; education and training programs; inspection and monitoring requirements; and how laws and regulations are enforced in the absence of voluntary compliance).

⁶ Workers' compensation legislation delegates authority for the delivery of workers compensation programs and sets out responsibilities in the spheres of prevention, rehabilitation, and compensation.

- 3. Increasing use of workplace accommodation practices. Increasing knowledge and use of job accommodation practices among employers can reduce the number of lost-time injury claims to a compensation board. An injury that likely led to one day off work in the past may result in no time lost in the same workplace today due to availability of modified duties to the injured worker on the day of their injury. In this way, a reduction in the number of lost-time injury claims may not reflect an equal reduction in the actual number of workplace injuries.
- 4. Jurisdictional differences in injury and fatality definitions. Provinces and territories define work-related lost-time injuries differently. For instance, some compensation boards count a lost-time injury when a worker misses their next scheduled shift due to their injury, whereas some other boards count lost-time injuries when an injured worker leaves their current shift (AWCBC, 2018).

In terms of fatalities, five compensation boards have "found dead" clauses in their legislation (i.e., Saskatchewan, Alberta, Nova Scotia (coal miners only), Northwest Territories and Nunavut). These boards are more likely to accept all fatalities that occur in a workplace even when there is uncertainty about the link between a workplace incident and the cause of death (e.g., a heart attack).

Further, some jurisdictions have "right to elect" clauses that allow workers who, for example, are injured in a vehicle collision while working, to seek compensation from an auto insurer instead of a compensation board (see, for example, Manitoba). Similarly, spouses of deceased workers may elect to seek benefits from an auto insurer instead of a compensation board. Work-related fatalities and injuries that are compensated outside of a WCB system may not be counted in AWCBC statistics.⁷

There are also differences in how jurisdictions define, assess and count occupational disease claims. For instance, six jurisdictions in Canada have "presumptions" that establish causation for occupational diseases where there is sufficient evidence that the disease is specific to a particular exposure, process, or condition of employment (e.g., certain cancers and the occupation of firefighting).⁸ However, across these jurisdictions, there is a wide variation in the number of occupational diseases recognized, as well as in the exposures/working conditions associated with them. This affects the types of cancers and other illnesses (e.g., PTSD) that are compensated across the country. Finally, some compensation boards do not report injury and illness statistics for self-insured employers, yet the AWCBC includes these data in their reporting.

⁷ In relatively rare cases, the family of a deceased worker, who is killed by faulty product or equipment, may decide not to accept WCB benefits and, instead, sue a product manufacturer. These fatalities may not be included in WCB fatality counts.

⁸ These presumptions appear either in schedules to the governing statute or in supporting regulations. Their goal is to streamline the adjudicative process by avoiding the repeated effort of producing and analyzing medical and other evidence of work-relatedness for each individual case.

- 5. Missing and incomplete data. Occasionally, a compensation board's data submission to the AWCBC may be incomplete or may not conform to AWCBC definitions. In these cases, the AWCBC provides explanatory notes for missing and non-comparable provincial and territorial data. A list of these exceptions for the years 2010 to 2019, for jurisdictions with such data limitations, is shown in the Appendix at the end of this report.
- 6. Jurisdictional differences in current and past industry mix. Differences in the types of industry operating in a jurisdiction can influence injury rates and the number of work-related fatalities (Berriault et al., 2017). Moreover, past industry mixes may influence the present rate of occupational disease, such as the impact of extracting, processing, and manufacturing asbestos between the 1950s and 1970s on current claims for asbestos-related mesothelioma (e.g., Bianco & Demers, 2013).
- 7. Jurisdictional differences in labour force size. While fatality rates take into account workforce size (based on coverage rates), small jurisdictions can experience dramatic changes in their rates due to relatively small changes in the number of fatality claims each year. For this reason, this report highlights work fatality rates in provinces with more than 100,000 workers.

3.0 Work-Related Fatality and Injury Rates by Jurisdiction, 2014-2019

In 2019, the AWCBC reported 335 injury and 590 occupational disease-related fatalities in Canada. Alberta had the highest number of injury-related fatalities (n = 85), while Ontario reported the greatest number of occupational disease-related deaths (n = 226). In that same year, 271,806 lost-time injury claims were accepted by provincial and territorial WCBs, with Quebec reporting the highest number of these claims (n = 82,821).

	Number of Lost- Time Injuries	Number of Injury- Related Fatalities	Number of Occupational Disease- Related Fatalities
Alberta	29,142	85	80
British Columbia	55,232	57	84
Manitoba	12,871	4	15
New Brunswick	5,314	14	4
Newfoundland and Labrador	3,700	10	16
Nova Scotia	5,844	6	15
NWT/Nunavut	919	4	0
Ontario	65,664	79	226
Prince Edward Island	1,092	0	0
Quebec	82,821	57	133
Saskatchewan	8,754	19	17
Yukon	453	0	0
Total	271,806	335	590

Table 2: Number of Work-Related Fatalities and Lost-Time Injuries in 2019

3.1 Provincial and Territorial Work-Related Injury Fatality Rates

Table 3 compares the 2019 injury-related fatality rate to the average 2016 to 2018 rate for each jurisdiction.⁹

Among jurisdictions with over 100,000 full-time equivalent employees, Newfoundland (116%), New Brunswick (43%), and Alberta (9%) showed the greatest percentage increase in their 2019 injury fatality rate. Whereas, Manitoba (-40%), Nova Scotia (-26%), and Quebec (-19%) showed the greatest decline.

	Average 2016-2018 Rate	2019 Rate	Percentage Change
Alberta	4.1	4.4	9%
British Columbia	2.7	2.3	-17%
Manitoba	1.3	0.8	-40%
New Brunswick	3.0	4.3	43%
Newfoundland and Labrador	2.1	4.5	116%
Nova Scotia	2.4	1.8	-26%
NWT/Nunavut*	8.0	9.3	16%
Ontario	1.3	1.4	8%
Prince Edward Island*	1.4	0.0	-100%
Quebec	1.8	1.4	-19%
Saskatchewan	4.5	4.3	-4%
Yukon*	5.7	0.0	-100%

Table 3: Percentage Change in Injury Fatality Rate (per 100,000), 2019 vs. 2016-2018

* Fewer than 100,000 FTEs

⁹ The results shown in Tables 3-11 are based on an analysis of AWCBC data by the report's lead author.

Given the relatively small labour force size and relatively small number of fatalities in some jurisdictions, three-year moving average rates may provide a more accurate picture of general trends in injury-related fatality rates.

Table 4 compares the average injury fatality rate between 2014 and 2016 to the average rate between 2017 and 2019. Among provinces with over 100,000 workers, Manitoba (90%), Alberta (27%), and Ontario (14%) had the greatest percentage injury fatality rate increase. Newfoundland and Labrador showed the greatest decline (-18%), followed by Quebec (-16%), and Saskatchewan (-10%).

	Average 2014-2016 Rate	Average 2017-2019 Rate	Percentage Change
Alberta	3.4	4.4	27%
British Columbia	2.7	2.6	-4%
Manitoba	0.7	1.3	90%
New Brunswick	3.2	3.1	-3%
Newfoundland and Labrador	3.5	2.9	-18%
Nova Scotia	2.1	2.1	0%
NWT/Nunavut	6.3	10.3	62%
Ontario	1.2	1.4	14%
Prince Edward Island	0.9	0.9	-2%
Quebec	1.8	1.5	-16%
Saskatchewan	5.3	4.7	-10%
Yukon	7.7	4.2	-46%

Table 4: Percentage Change in Injury Fatality Rate (per 100,000), 2014-2016 vs.2017-2019

Table 5 shows the average injury-related fatality rate between 2015 and 2019 by jurisdiction. Considering provinces with over 100,000 workers, Saskatchewan ranks highest (4.6 deaths per 100,000), followed by Alberta (3.9 deaths per 100,000) and New Brunswick (3.5 deaths per 100,000).

	Average 5-year Rate
Alberta	3.9
British Columbia	2.5
Manitoba	1.1
New Brunswick	3.5
Newfoundland and Labrador	2.8
Nova Scotia	2.1
NWT/Nunavut	7.6
Ontario	1.3
Prince Edward Island	1.1
Quebec	1.7
Saskatchewan	4.6
Yukon	4.3

Table 5: Five-year Average Injury Fatality Rate (per 100,000), 2015-2019

3.2 Provincial and Territorial Work-Related Occupational Disease Fatality Rates

Table 6 compares the 2019 occupational disease-related fatality rate to the average rate between 2016 and 2018. Among provinces with over 100,000 workers, Manitoba showed the greatest percentage increase (20%) in occupational disease fatality rate. In contrast, New Brunswick (-58%), Newfoundland (-20%), and Quebec (-18%) showed the greatest percentage decreases.

	Average 2016-2018 Rate	2019 Rate	Percentage Change
Alberta	4.2	4.2	0%
British Columbia	3.3	3.3	1%
Manitoba	2.5	2.9	20%
New Brunswick	2.9	1.2	-58%
Newfoundland and Labrador	9.1	7.3	-20%
Nova Scotia	4.7	4.4	-7%
NWT/Nunavut	0.8	0.0	-100%
Ontario	4.3	3.9	-9%
Prince Edward Island	0.9	0.0	-100%
Quebec	4.0	3.3	-18%
Saskatchewan	4.0	3.8	-4%
Yukon	5.8	0.0	-100%

Table 6: Percentage Change in Occupational Disease Fatality Rate (per 100,000),2019 vs. 2016-2018 Average Rate

Table 7 compares the percentage change in occupational disease-related fatality rates by jurisdiction. Again, given the small labour force size in some jurisdictions and relatively small number of fatalities in these jurisdictions, three-year averages rates were compared (i.e., average 2014 to 2016 rate compared to the average 2017 to 2019 rate) to identify general trends over recent years.

Considering provinces with over 100,000 workers, Newfoundland (56%), Saskatchewan (34%), and New Brunswick (21%) showed the greatest percentage increase in occupational disease fatality rate. In contrast, British Columbia had the greatest percentage decline (-14%), followed by Nova Scotia (-9%) and Manitoba (-5%).

	Average 2014-2016 Rate	Average 2017-2019 Rate	Percentage Change
Alberta	3.6	4.2	17%
British Columbia	3.8	3.2	-14%
Manitoba	2.8	2.6	-5%
New Brunswick	2.1	2.6	21%
Newfoundland and Labrador	6.6	10.3	56%
Nova Scotia	5.2	4.7	-9%
NWT/Nunavut	0.8	0.8	0%
Ontario	3.8	4.2	10%
Prince Edward Island	0.9	0.4	-53%
Quebec	3.3	3.9	20%
Saskatchewan	2.9	3.9	34%
Yukon	4.6	2.8	-39%

Table 7: Percentage Change in Occupational Disease Fatality Rate (per 100,000),2014-2016 Average Rate vs. 2017-2019 Average Rate

Table 8 shows the average occupational disease fatality rate between 2015 and 2019 by jurisdiction.

Overall, Newfoundland and Labrador had the highest rate (8.5 deaths per 100,000), followed by Ontario (4.1 deaths per 100,000) and Alberta (4.0 deaths per 100,000).

Table 8: Average Occupational Disease Fatality Rate (per 100,000), 2015-2019

	Average 5-year Rate
Alberta	4.0
British Columbia	3.3
Manitoba	2.7
New Brunswick	2.4
Newfoundland and Labrador	8.5
Nova Scotia	5.2
NWT/Nunavut	1.0
Ontario	4.1
Prince Edward Island	0.6
Quebec	3.7
Saskatchewan	3.6
Yukon	3.5

3.3 Provincial and Territorial Work-Related Lost-Time Injury Rates

Table 9 compares the 2019 lost-time injury rate (per 100 full-time equivalent employees) to the average rate between 2016 and 2018.

Limited to jurisdictions with over 100,000 employees, Alberta showed the greatest increase (11%) in lost-time injury rate, followed by New Brunswick (10%) and Quebec (9%). Manitoba (-9%), Saskatchewan (-5%), and Nova Scotia (-5%) showed the greatest percentage decline in injury rate.

	Average 2016-2018 Rate	2019 Rate	Percentage Change
Alberta	1.4	1.5	11%
British Columbia	2.2	2.2	0%
Manitoba	2.8	2.5	-9%
New Brunswick	1.5	1.6	10%
Newfoundland and Labrador	1.6	1.7	7%
Nova Scotia	1.8	1.7	-5%
NWT/Nunavut	2.2	2.1	-1%
Ontario	1.1	1.1	3%
Prince Edward Island	1.5	1.4	-3%
Quebec	1.9	2.1	9%
Saskatchewan	2.1	2.0	-5%
Yukon	2.0	1.8	-9%

Table 9: Percentage Change in Lost Time Injury Rate (per 100), 2019 vs. 2016-2018

Table 10 compares the percentage change in lost-time injury rate by jurisdiction. Threeyear averages rates were compared (i.e., the average 2014 to 2016 injury rate was compared to the average 2017 to 2019 injury rate).

Among jurisdictions with over 100,000 workers, New Brunswick (24%), Ontario (19%), and Alberta (14%) showed the greatest increase in lost-time injury rate. Manitoba showed the greatest decrease (-13%), followed by Saskatchewan (-5%) and Nova Scotia (-5%).

Table 10: Change in Lost Time Inj 2017-	ury Rate (per 10 2019 Average R		Average Rate	e vs.
	Average	Average	Porcontago	

	Average 2014-2016 Rate	Average 2017-2019 Rate	Percentage Change
Alberta	1.28	1.46	14%
British Columbia	2.23	2.19	-2%
Manitoba	3.03	2.64	-13%
New Brunswick	1.25	1.55	24%
Newfoundland and Labrador	1.67	1.61	-4%
Nova Scotia	1.88	1.79	-5%
NWT/Nunavut	2.13	2.18	3%
Ontario	0.95	1.13	19%
Prince Edward Island	1.37	1.47	8%
Quebec	1.78	1.98	11%
Saskatchewan	2.13	2.03	-5%
Yukon	2.06	1.87	-9%

Table 11 shows the average lost-time injury rate over the past 5 years (i.e., between 2015 and 2019) by jurisdiction. Among provinces with over 100,000 workers, Manitoba had the highest rate (2.76 per 100), followed by British Columbia (2.20 per 100), and Saskatchewan (2.05 per 100).

	Average 5-year Rate
Alberta	1.38
British Columbia	2.20
Manitoba	2.76
New Brunswick	1.45
Newfoundland and Labrador	1.62
Nova Scotia	1.82
NWT/Nunavut	2.12
Ontario	1.06
Prince Edward Island	1.43
Quebec	1.90
Saskatchewan	2.05
Yukon	1.94

Table 11: Average Lost Time Injury Rate (per 100), 2015-2019

4.0 Provincial Work-Related Fatality and Injury Rate Graphs, 2010-2019

The graphs in this section provide a visual representation of fatality and lost-time injury rates by jurisdiction between 2010 and 2019. Due to relatively high yearly variability in rates in smaller jurisdictions, graphs for NWT/Nunavut, PEI, and the Yukon are omitted.

What is noteworthy in these graphs is that in most jurisdictions, the occupational disease fatality rate has surpassed (or is close to surpassing) the injury fatality rate. This trend aligns with findings reported in 2013 by the Occupational Cancer Research Centre that the number of compensated claims for deaths from occupational cancer in Canada had dramatically increased since 1997 and that it had surpassed the number of traumatic injuries in approximately 2005 (Del Bianco and Demers, 2013). The exceptions are Saskatchewan, Alberta, and New Brunswick where the injury fatality rate is higher than the occupational disease fatality rate in some years.

In jurisdictions across Canada, the occupational disease fatality rate appears to be trending upwards over time. This is consistent with what has been previously reported in the literature (Del Bianco and Demers, 2013; Sharpe and Hardt, 2006) and what we expect to happen as more workers are diagnosed with long-latency diseases. However, as these graphs illustrate, the rates fluctuate from year to year. There could be several reasons for these fluctuations, including changes to policy that expand (or restrict) coverage, as well as heightened awareness and media attention within specific workplaces that result in more claims being filed and compensated (as happened at the GE plant in Peterborough, Ontario. See Mojtehedzadeh, 2017).

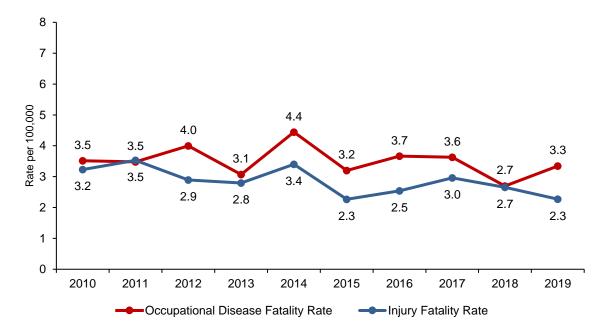
For example, the recent spike in the occupational disease fatality rate in Newfoundland and Labrador may reflect the impact of a policy change on occupational disease claims. In 2016, the province's *Workplace Health, Safety and Compensation Act* was amended to provide presumptive coverage for eleven cancers to career firefighters (retroactive to December 14, 2015) and to volunteer firefighters (effective January 1, 2017) (Government of Newfoundland and Labrador, 2016). The occupational disease fatality rate in NL increased from 3.5 per 100,000 (2016) to 14.6 (2018) and then declined to 7.3 (2019). A similar pattern may be seen in Saskatchewan in the next few years as the provincial government expanded presumptive coverage for firefighters in 2019 to include six cancers not previously covered.

4.1 Provincial Work-Related Fatality Rate Graphs



Figure 2: Alberta Work-Related Fatality Rates, 2010-2019





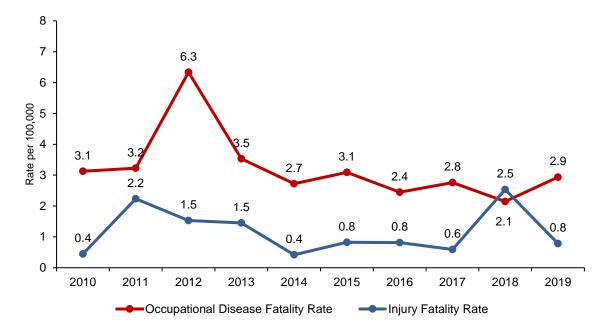
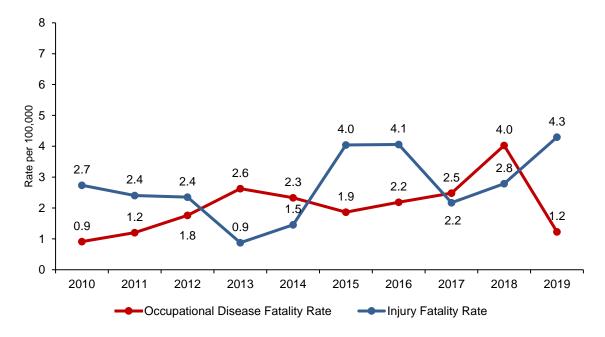


Figure 4: Manitoba Work-Related Fatality Rates, 2010-2019





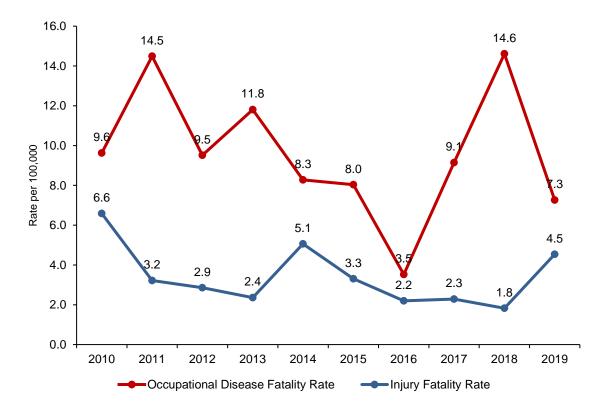


Figure 6: Newfoundland and Labrador Work-Related Fatality Rates, 2010-2019

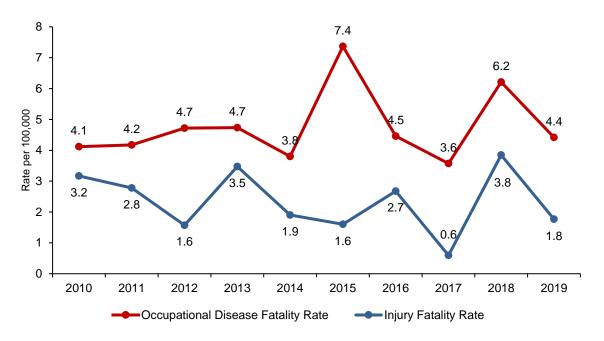
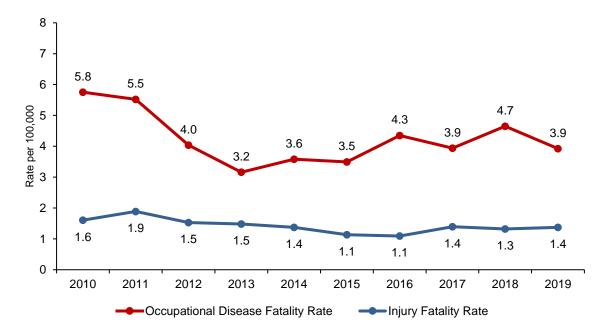


Figure 7: Nova Scotia Work-Related Fatality Rates, 2010-2019





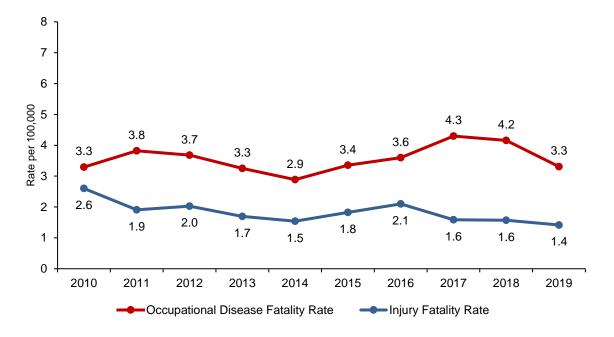
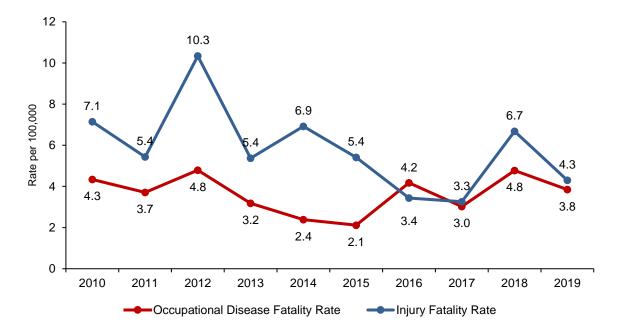


Figure 9: Quebec Work-Related Fatality Rates, 2010-2019





4.2 Provincial Work-Related Injury Rate Graphs

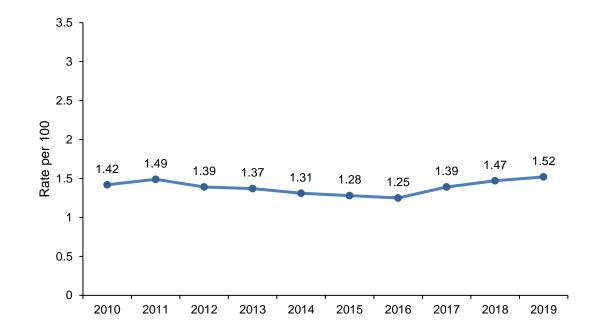
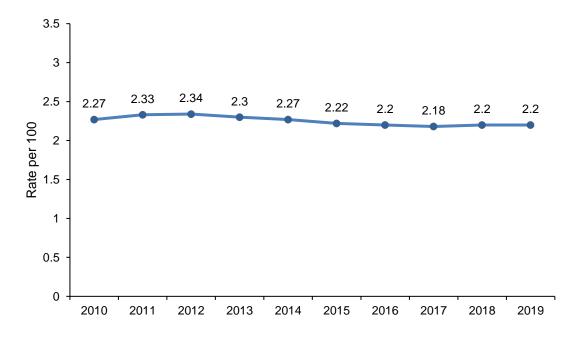


Figure 11: Alberta Work-Related Injury Rate, 2010-2019

Figure 12: British Columbia Work-Related Injury Rate, 2010-2019



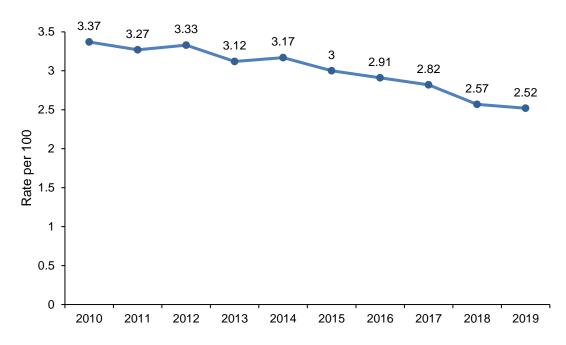
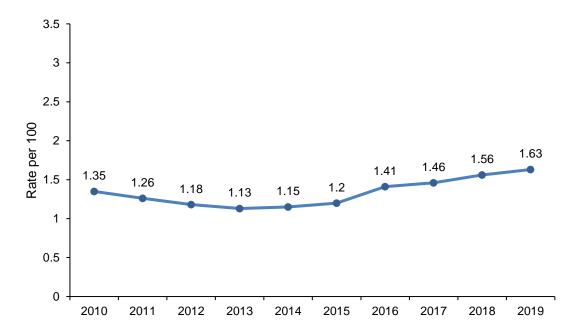


Figure 13: Manitoba Work-Related Injury Rate, 2010-2019

Figure 14: New Brunswick Work-Related Injury Rate, 2010-2019



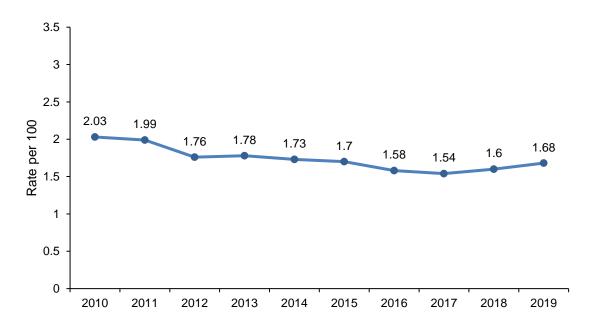
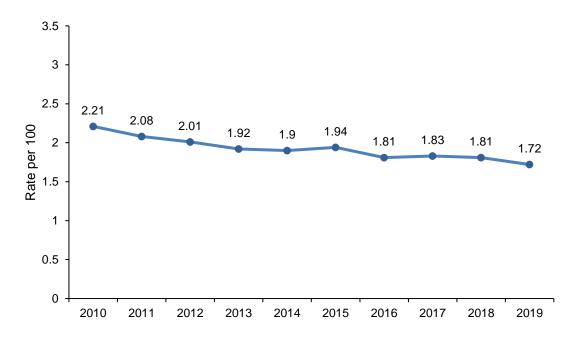


Figure 15: Newfoundland and Labrador Work-Related Injury Rate, 2010-2019

Figure 16: Nova Scotia Work-Related Injury Rate, 2010-2019



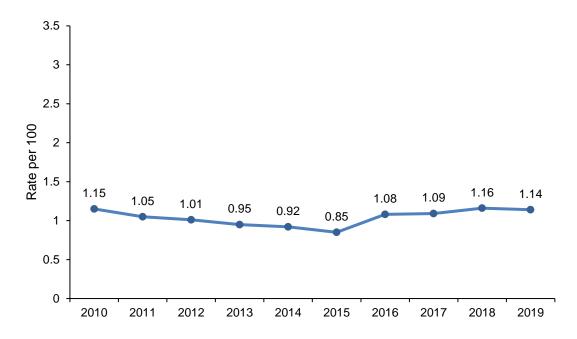


Figure 17: Ontario Work-Related Injury Rate, 2010-2019

Figure 18: Quebec Work-Related Injury Rate, 2010-2019

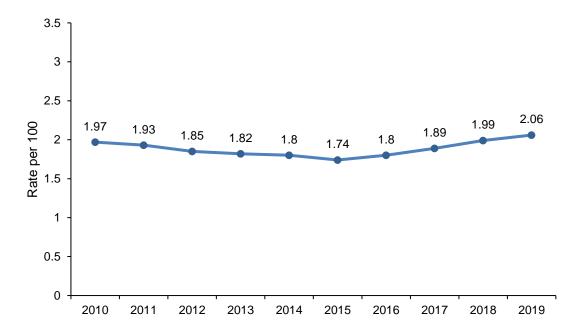




Figure 19: Saskatchewan Work-Related Injury Rate, 2010-2021

5.0 COVID-19 WCB Claims in 2020

In this year's report, we include the number of accepted COVID-19 related injury and fatality claims for 2020. These data were obtained through each workers compensation board.

The previously mentioned data limitations are relevant to COVID-related claims (jurisdictional differences in policies and industry, for example). There is evidence that under reporting of illness and fatalities caused by work-related exposure to COVID-19 may be particularly salient (Marotta, 2021; Singh, Seglins, & Wesley, 2020; Stephenson, 2020).

Table 12 provides a summary of accepted COVID-19 injury and fatality claims in 2020. The vast majority of the injury claims are lost time claims. In next year's report, we will include a summary of 2021 COVID-19 claims statistics, and elaborate on policy and reporting differences.

	Number of Accepted COVID-19 Injury Claims*	Number of Accepted COVID-19 Fatality Claims
Alberta	4,800	<5
British Columbia	1,189	1
Manitoba	980	0
New Brunswick	10	0
Newfoundland and Labrador	3	0
Nova Scotia	46	0
NWT/Nunavut**	-	-
Ontario	8,762	28
Prince Edward Island	0	0
Quebec	16,614	8
Saskatchewan	334	0
Yukon	4	0
Total	32,742	39***

Table 12: Summary of Provincial and Territorial COVID-19 WCB Claims

* Includes accepted lost time and non-lost time claims

** Data not provided at the time of publication

*** Estimated total assuming two fatalities in Alberta in 2020

6.0 Recommendations

The following recommendations are principally aimed at addressing some of the data limitations identified in Section 2.1 of this report. If implemented, they could strengthen the accuracy and comparability of the data for future analyses, as well as foster greater awareness and improved prevention of work-related injuries, diseases, and fatalities in Canada.

1. Release previous year's injury and fatality statistics by March 31

As noted earlier, there is a one-year lag between the end of year recording of injury and fatality claims and the public release of comparable provincial and territorial data by the AWCBC. The AWCBC releases information on 39 variables. We recommend that the WCBs and AWCBC expedite the release of provincial and territorial data for four variables – including, accepted lost time claims, non-lost time claims, and fatalities – by March 31 each year. Having this information available in time for the National Day of Mourning in late April will help raise public awareness of work-related injuries and fatalities and facilitate more timely comparisons of injury and fatality rates among jurisdictions.

2. Harmonize data collection and reporting within and across jurisdictions

Efforts should be undertaken to harmonize data collection and reporting amongst the systems responsible for occupational injury/disease prevention and workers' compensation in Canada. A review of the workers' compensation system in Alberta, conducted in 2016-2017, illustrated that there is an appetite for improved collection and sharing of data, both within and across jurisdictions.¹⁰ In its final report, the WCB Review Panel recommended that:

OHS and WCB jointly establish a working group featuring representation from employers, workers, the WCB and OHS, to examine issues and make improvements to the collection and use of data related to workplace injuries and illnesses.

Among its efforts, the working group should develop and implement solutions related to:

- The use of data for purposes other than those for which it was collected;
- The harmonization of data among the WCB, OHS, other entities, and other public agencies, boards and commissions in Alberta;
- The timeliness of data that is gathered; and
- Addressing privacy implications that might attend the gathering of data regarding workplace injuries and illnesses and the sharing of that data among the WCB, OHS and other entities.

Recommendation 59

¹⁰Working Together. Report and Recommendations of the Alberta Workers' Compensation Board Review Panel (June 2017) is available online at https://www.alberta.ca/assets/documents/WCB-Review-Final-Report.pdf.

If organizations and agencies responsible for prevention and workers' compensation across Canada came together to harmonize the definitions, the coding, and the categorization of the data they collected, it would not only facilitate more timely interjurisdictional comparisons, but it would also be helpful for identifying opportunities for workplaces to improve – both of which would be particularly advantageous for employers that operate in multiple provinces. Harmonization could be achieved either prospectively (i.e., by jurisdictions agreeing to collect exactly the same information on a go-forward basis) or retrospectively (i.e., pre-existing data collected by each jurisdiction is processed to make sure that it is compatible). Statistics Canada could take a lead role in harmonizing injury and fatality data in Canada (Grant, 2017a). Australia's National Data Set for Compensation-based Statistics provides an instructive example and useful model for how such an initiative could be accomplished.

3. Explore creative solutions to address the problem of under-reporting

Efforts should be undertaken to develop, implement and evaluate methods to ensure that all work-related injuries, diseases, and fatalities recognized by legislation, regulation and/or policy are captured – and appropriately compensated – by workers' compensation systems across the country. Some options that could be considered are:

- Estimating the prevalence of lost time injury (Prism Economics and Analysis, 2013), non-lost time injury, and fatality under-reporting (Koehoorn et al., 2015) in each jurisdiction.
- Fostering the linkage of population-based administrative datasets with the workers' compensation administrative datasets (using, for example, British Columbia's repository of linked administrative data, Population Data BC¹¹, or the Partnership for Work, Health and Safety¹² as a model);
- Creating population-based exposure and/or injury/disease/fatality surveillance systems and link them with primary prevention activities (Ontario's Occupational Disease Surveillance System¹³ provides a model that could be adapted and expanded to other jurisdictions); and,
- Designing tools, resources and awareness campaigns for health care providers to facilitate contact between their patients and the workers' compensation system (like, for example, an initiative that was undertaken by the BC Cancer Registry to advise physicians that their patients with mesothelioma may be eligible for workers' compensation benefits¹⁴).

¹¹See <u>https://www.popdata.bc.ca/</u>.

¹²See <u>http://pwhs.ubc.ca/</u>.

¹³The Occupational Disease Surveillance System (ODSS), which was created by the Occupational Cancer Research Centre in 2016, is now available online at <u>https://www.odsp-ocrc.ca/projects/odss/</u>. The system provides a means to examine disease trends and patterns and to detect changes in disease risk over time. Results for a subset of diseases examined (asbestosis, asthma, breast cancer, dermatitis, idiopathic pulmonary fibrosis, lung cancer, mesothelioma, prostate cancer, and silicosis) are currently available online, with more to be added in the future.

¹⁴See Hurrell, AC et al. (2013) for a description of this initiative.

4. Enhance primary prevention activities

Efforts should be undertaken to enhance primary prevention activities within and across jurisdictions. These efforts could include:

- Targeting high-risk industries and occupations
- Ensuring compliance with existing occupational health and safety regulatory frameworks
- Improving enforcement activities (e.g., focussed inspections, targeted programs and initiatives)
- Creating multi-pronged primary prevention initiatives that combine consultation, education, and enforcement activities
- Developing public awareness campaigns, partnerships, and community outreach.

7.0 Selected Research and Media Reporting on Workplace Fatalities in Canada

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Appendix: AWCBC Explanatory Notes (2010-2019)

Manitoba

Variable	Year	Note
Injury Frequency	2010	The 2010 Annual Report states that the 2010 preliminary time loss injury rate is 3.3%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic.
Injury Frequency	2011	The 2011 Annual Report states that the 2011 preliminary time loss injury rate is 3.3%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic.
Injury Frequency	2012	The 2012 Annual Report states that the 2012 preliminary time loss injury rate is 3.3%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic.
Injury Frequency	2013	The 2012 Annual Report states that the 2012 preliminary time loss injury rate is 3.3%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic. The 2013 Annual Report states that the 2013 preliminary time loss injury rate is 3.2%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic.
Injury Frequency	2014	The 2014 Annual Report states that the 2014 preliminary time loss injury rate is 3.2%. The Annual Report's approach differs slightly from the AWCBC approach to this statistic.

New Brunswick

Variable	Year	Note
Total Number of Lost-Time Claims	2010	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,971 lost-time claims (including day of accident) in total in 2010.
Total Number of Lost-Time Claims	2011	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,688 lost-time claims (including day of accident) in total in 2011.
Total Number of Lost-Time Claims	2012	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,302 lost-time claims (including day of accident) in total in 2012.
Total Number of Lost-Time Claims	2013	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,276 lost-time claims (including day of accident) in total in 2013.
Total Number of Lost-Time Claims	2014	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,349 lost-time claims (including day of accident) in total in 2014.
Total Number of Lost-Time Claims	2015	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,152 lost-time claims (including day of accident) in total in 2015.
Total Number of Lost-Time Claims	2017	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,550 lost-time claims (including day of accident) in total in 2017.
Total Number of Lost-Time Claims	2018	NB has a 3 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,862 lost-time claims (including day of accident) in total in 2018.
Total Number of Lost-Time Claims	2019	NB has a waiting period. The number of LT claims in this measure reflects all LT claims including the waiting period. If the waiting period is excluded, NB accepted 4213 lost time claims only in 2019.
Injury Frequency	2010	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,971 lost-time claims (including day of accident) in total in 2010.
Injury Frequency	2011	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,688 lost-time claims (including day of accident) in total in 2011.
Injury Frequency	2012	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,302 lost-time claims (including day of accident) in total in 2012.
Injury Frequency	2013	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,276 lost-time claims (including day of accident) in total in 2013.
Injury Frequency	2014	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,349 lost-time claims (including day of accident) in total in 2014.

Injury Frequency	2015	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,152 lost-time claims (including day of accident) in total in 2015.
Injury Frequency	2016	NB has a 3-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,698 lost-time claims (including day of accident) in total in 2016.
Injury Frequency	2017	NB has a 3 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,550 lost-time claims (including day of accident) in total in 2017.
Injury Frequency	2018	NB has a 3 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,862 lost-time claims (including day of accident) in total in 2018.
Injury Frequency	2019	The process for calculating lost time claims was adjusted in for the 2019 submission.

Nova Scotia

Variable	Year	Note
Total Number of Lost-Time Claims	2010	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2010 annual report is 6,921.
Total Number of Lost-Time Claims	2011	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2011 annual report is 6,616.
Total Number of Lost-Time Claims	2012	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2012 annual report is 6,341.
Total Number of Lost-Time Claims	2013	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2013 annual report is 6,034.
Total Number of Lost-Time Claims	2014	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2014 annual report is 5,953.
Total Number of Lost-Time Claims	2015	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2015 annual report is 6,014.
Total Number of Lost-Time Claims	2016	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2016 annual report is 5,847. This annual report figure does not include permanent disability claims.

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Total Number of Lost-Time Claims	2017	NB has a 3 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,550 lost-time claims (including day of accident) in total in 2017.
Total Number of Lost-Time Claims	2018	NB has a 3 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. NB accepted 5,862 lost-time claims (including day of accident) in total in 2018.
Total Number of Lost-Time Claims	2019	NS has a 2 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2019 annual report is 5,663. This annual report figure does not include permanent disability claims.
Injury Frequency	2010	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2010 annual report is 6,921.
Injury Frequency	2011	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2011 annual report is 6,616.
Injury Frequency	2012	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2012 annual report is 6,341.
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Injury Frequency	2015	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2015 annual report is 6,014.
Injury Frequency	2016	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2016 annual report is 5,847. This annual report figure does not include permanent disability claims.
Injury Frequency	2017	NS has a 2-day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2017 annual report is 5,906. This annual report figure does not include permanent disability claims.

Injury Frequency	2018	NS has a 2 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2018 annual report is 5,819. This annual report figure does not include permanent disability claims.
Injury Frequency	2019	NS has a 2 day waiting period therefore, the number of lost time claims listed in this report may not reflect every lost time injury for this province. The total number of lost-time claims published in the WCB of Nova Scotia's 2019 annual report is 5,663. This annual report figure does not include permanent disability claims.

Northwest Territories/Nunavut

Variable	Year	Note
Injury Frequency	2010	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2011	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2012	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2013	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2014	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2015	NT/NU allows self-employed individuals with no assessable payroll to opt out of personal coverage, should they so choose.
Injury Frequency	2016	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2017	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2018	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.
Injury Frequency	2019	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury frequency being overestimated due to the characteristics of the data.

Ontario

Variable	Year	Note
Number of Fatalities Accepted - Occupational Disease	2015	Prescribed cancer legislation allowing coverage of firefighter presumptive occupational disease claims are included - Cancers in Firefighters and Fire Investigators Legislation (Policy 23-02-01).
Number of Fatalities Accepted - Occupational Disease	2017	Prescribed cancer legislation allowing coverage of firefighter presumptive occupational disease claims are included - Cancers in Firefighters and Fire Investigators Legislation (Policy 23-02-01).
Number of Fatalities Accepted - Occupational Disease	2018	Prescribed cancer legislation allowing coverage of firefighter presumptive occupational disease claims are included - Cancers in Firefighters and Fire Investigators Legislation (Policy 23-02-01).
Number of Fatalities Accepted - Occupational Disease	2019	Prescribed cancer legislation allowing coverage of firefighter presumptive occupational disease claims are included - Cancers in Firefighters and Fire Investigators Legislation (Policy 23-02-01).
Number of Fatalities Accepted - Injury	2012	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Number of Fatalities Accepted - Injury	2013	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Number of Fatalities Accepted - Injury	2014	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Number of Fatalities Accepted - Injury	2015	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Number of Fatalities Accepted - Injury	2017	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.

Number of Fatalities Accepted - Injury	2018	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Number of Fatalities Accepted - Injury	2019	This KSM will not match By the Numbers (BTN) as the traumatic fatality count in BTN is by year of death, whereas this KSM represents traumatic fatalities by year accepted, regardless of year of death.
Injury Frequency	2010	Ontario Board is no longer publishing harmonized LTI rate.
Injury Frequency	2011	Ontario Board is no longer publishing harmonized LTI rate.
Injury Frequency	2017	As requested from AWCBC starting in 2017 this KSM includes both assessable and self-insured employers.
Injury Frequency	2018	As requested from AWCBC starting in 2017 this KSM includes both assessable and self-insured employers.
Injury Frequency	2019	As requested from AWCBC starting in 2017 this KSM includes both assessable and self-insured employers.
Percentage of Workforce Covered	2011	2011 Labour Force Survey (LFS) estimates are based on 2006 Census population estimates, whereas prior years were based on 2001 Census population estimates.
Percentage of Workforce Covered	2012	2012 and 2011 Labour Force Survey (LFS) estimates are based on 2006 Census population estimates, whereas prior years were based on 2001 Census population estimates.
Percentage of Workforce Covered	2013	2013 Labour Force Survey (LFS) estimates are based on 2006 Census population estimates, whereas years prior to 2011 were based on 2001 Census population estimates.
Percentage of Workforce Covered	2014	2014 Labour Force Survey (LFS) estimates are based on 2006 Census population estimates, whereas years prior to 2011 were based on 2001 Census population estimates.
Percentage of Workforce Covered	2015	2014 Labour Force Survey (LFS) estimates are based on 2006 Census population estimates, whereas years prior to 2011 were based on 2001 Census population estimates.

Prince Edward Island

Variable	Year	Note

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Total Number of Loss-Time Claims	2010	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Total Number of Loss-Time Claims	2011	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Total Number of Loss-Time Claims	2012	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Total Number of Loss-Time Claims	2013	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Total Number of Loss-Time Claims	2014	As of January 1, 2014, PEI has a waiting period equivalent to 40% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Total Number of Loss-Time Claims	2015	Data has not yet been published. It is currently in a pre- approval state.
Number of Fatalities Accepted - Occupational Disease	2015	Data has not yet been published. It is currently in a pre- approval state.
Injury Frequency	2010	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Injury Frequency	2011	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.

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Injury Frequency	2012	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Injury Frequency	2013	As of April 1, 2002, PEI has a waiting period equivalent to 60% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Injury Frequency	2014	As of January 1, 2014, PEI has a waiting period equivalent to 40% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Injury Frequency	2015	As of January 1, 2014, PEI has a waiting period equivalent to 40% of weekly compensation being required before compensation is payable; therefore, the number of lost time claims listed in this report may not reflect every lost time injury for PEI as of March 31 of the following year.
Percentage of Workforce Covered	2010	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.
Percentage of Workforce Covered	2011	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.
Percentage of Workforce Covered	2012	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.
Percentage of Workforce Covered	2013	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.
Percentage of Workforce Covered	2014	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.
Percentage of Workforce Covered	2015	The province of PEI became assessed and as such costs and revenues are now included. Liabilities of the province for past claims have been assumed by the WCB of PEI.

Yukon

Variable	Year	Note
Number of Fatalities Accepted - Injury	2015	No note
Lost Time Injury Frequency	2017	For injury frequency and workforce covered calculations, NT/NU uses SEPH data, which are 3% to 6% lower than labour force data. This methodology results in the injury

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		frequency being overestimated due to the characteristics of the data.
Total Lost Time Claims	2018	Preliminary.