

Unrecognized Occupational Diseases

**Comments on *The Workers Compensation Act*.
Submitted to The Workers Compensation Act
Review Committee 2016 of Manitoba**

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Letter to the Committee

The Workers Compensation Act Legislative Review Committee 2016:

We are pleased to respond to your request for comments on *The Workers Compensation Act*. We are particularly pleased to see your emphasis on Current trends, Up-to-date health knowledge, and Prevention.

Our concern is that the traditional metrics used to assess the incidence of occupational health related diseases and deaths have been compensation data. For many years it has been accepted that these metrics underestimate occupational illness and occupational disease deaths. This underestimation can be orders of magnitude.

As a result of this error, present emphasis is placed first on safe workplaces and not on healthy workplaces. Secondly emphasis is placed on treating workers made sick in their workplace rather than making healthy workplaces.

Current trends in workplace health related illnesses and deaths are moving away from using WCB data. This has resulted in a new perspective on the impact of unhealthy workplaces on the health of workers and the wealth of the province.

We recommend that the WCB adopt these new up-to-date methods for estimating workplace illnesses and deaths and develop new programs to address them.

If there are any questions Mr. Elias can be contacted at jelias@mts.net or 204-996-0234.

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David Fritz, BSc, CIH, ROH

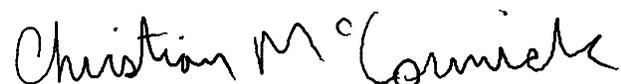
Ed Gatey, BSc, CIH, ROH, CRSP

Peter Griffin, BSc, MBA, CIH, CRSP

Alison Reineke, BSc, BHEc, CIH, ROH, CRSP



John Elias, MPH, CIH, ROH, CRSP
Occupational Hygienist



Christian McCormick, CRSP
President
Manitoba Section AIHA

Executive Summary

Statistical analysis is commonly used to gain a better understanding of how conditions in the workplace affect workers so that appropriate Workplace Safety and Health Prevention Programs can be designed. However, the Manitoba Local Section of the American Industrial Hygiene Association is concerned that the current system of collecting and analyzing statistics at the Workers Compensation Board of Manitoba is not adequately recognizing the real workplace conditions that contribute to the development of Occupational Diseases in our society. This paper provides evidence to support the stated concern and provides additional supporting information for the following actions that we recommend to correct the problem:

1. We recommend that WCB Manitoba move from the traditional approach of identifying high risk conditions for Occupational Illnesses by analyzing awarded claims statistics for the frequency of illnesses and deaths and adopt newer and more accurate methods of analysis such as attributable fractions and self-reporting.
2. We recommend that a Healthy Work Program be designed and implemented to:
 - a. Allow Manitoba to transition from the traditional statistical methods to the newer and more accurate methods of analysis necessary to develop healthier workplaces which would include:
 - i. Estimating the incidence of deaths caused by work related disease by the attributable fractions method.
 - ii. Estimating lost-time due to unhealthy workplaces through a self-reporting methodology.
 - b. Enable the risks identified by the program to be reviewed and assessed by competent professionals so that the best work practices for the reduction and/or elimination of unacceptable risks to worker health and well-being are identified and applied before ill health or death occurs.
3. We recommend that the Healthy Work Program be initiated as a research program with the goal of transitioning to a prevention program as knowledge becomes available.
4. We recommend that a Healthy Work program be implemented as a stand-alone program to minimize friction between philosophies of the traditional safety oriented model currently used, and the up-to-date philosophies needed to address health related issues.
5. We recommend that since a Healthy Work Program is essentially a risk reduction program relying on the traditional tools of Occupational Hygiene (anticipation, recognition, evaluation, and control) the implementation strategy should include early partnering with Professional Occupational Hygienists during the design and development phases of the Program and that the scope of the partnership be expanded during the action phase as soon as relevant data becomes available.

Introduction

We are the Manitoba Section of the American Industrial Hygiene Association (AIHA). We have been representing occupational hygienists in Manitoba for more than 30 years.

Occupational hygiene is that science and art devoted to the anticipation, recognition, evaluation, and control of those environmental factors and stresses, arising in or from the workplace, and which may cause sickness, impaired health and well-being, or significant discomfort and inefficiency among workers or among citizens of the community. Our objective is to prevent illness and deaths due to exposure to chemicals and physical hazards in the workplace. Emphasis here is on using up – to – date methods for anticipating and controlling risks before workers are affected.

The following information is based on excerpts from our *Review of the Tools Used to Assess Workplace Illness Prevention*, comments on the Five year Plan submitted to the Manitoba Minister of Labour and Immigration in December 2015. Another Manitoba resource was the paper prepared by Dr. Kraut and Andrew Cutz, *Prevention of Occupational Diseases - An ounce of prevention is worth a pound of cure*, on behalf of the *MFL Occupational Health Center, Inc.* for the 'Legislative Review Hearings' back in May 2002

As occupational hygienists we are pleased to see that the Review Committee is placing emphasis on:

1. Workplace injuries;
2. Injury prevention;
3. Return to work;
4. Mental health; and
5. Medical practices.

These are all areas requiring continuing review and assessment to ensure that current practices reflect the best science. However healthy work and healthy workplaces appears to be overlooked.

At the same time we are pleased with your emphasis on:

1. Current trends;
2. Up-to-date health knowledge; and
3. Prevention.

These topics are important to our members and are the main areas we wish to build on in this submission.

In the following sections we will mention “healthy work” and “healthy workplaces”. We define these terms as work practices or workplaces that do not result in workplace related illnesses. Healthy work and healthy workplaces are the result applying occupational hygiene methods to control workplace risks. Such controls include engineering controls, administrative controls, and personal protective equipment. We are not referring to individual healthy workers, although healthy work and healthy workplaces will contribute to the goal of healthy workers. We will not be addressing new

methods of diagnosing sick workers, curing them, and then sending them back to sick workplaces to start the cycle over again.

The Problem

Traditionally our knowledge of workplace injuries and occupational diseases is based on injuries and diseases as defined by the WCB. In this definition, workplace illnesses are illnesses for which the WCB was notified and that were accepted as claims by the WCB. While such data is a fair estimate of workplace safety injuries it misses 70% - 90% of illnesses. In 1994 Dr. Kraut concluded that occupational diseases are a significant and underestimated cause of morbidity and mortality in Canada. These are workers who die in hospitals or at home after a long illness. They do not die in the workplace that gave them the illness. This measurement error can result in a misunderstanding of workplace safety and health, leading to misplaced resources and misdirected activities that can have adverse effects on workers, industry, and society as a whole.

For example, it was noted that from 2007-2013 the Manitoba Workplace Safety and Health Branch annual work inspections increased by 120%, funding increased by 30%, and stop work orders increased by 190%, while in the same time period workplace disease (reported as deaths) also increased by as much as 40% and time-loss illness increased by 7%. Why? Because health related issues appear insignificant when the WCB data is used, and therefore are given a low priority. According to the WCB data for that time period, the number of lost-time illnesses are about 1/10th that of lost-time due to safety. Deaths due to illnesses are usually seen as less frequent than those due to safety issues, and usually occur after the worker left the workforce. This is not a problem only in Manitoba. All jurisdictions that base their lost - time and workplace death data WCB claims underestimate health data.

Because of the apparent under - reporting of health related lost – time and deaths the current trend globally, including Canada, in viewing health related illnesses and deaths are moving away from using WCB type data. This has resulted in a new perspective on the impact of unhealthy workplaces on the health of workers and the wealth of the province.

Fatal work related diseases

At this time the WCB defines an occupational disease death as a work-related fatality that occurs when a worker develops a disease or illness as the result of a long-term exposure to a hazardous substance or contact with a disease-causing agent. In such cases, the worker normally dies after months or years have passed. This category also includes traumatic or single events that have precipitated a functional failure such as a myocardial infarction. Only those occupational disease fatalities accepted by the WCB are included in the WCB data. The average number of occupational disease deaths/year for the time period 2000 – 2013 as reported by the WCB was 15.6.

The current trend within the occupational health and safety community is often referred to as “work-related disease”. Work-related disease covers a broader range of diseases than occupational disease; it encompasses all diseases where work is a contributory cause. In some cases, a work-related factor may be the only cause of the disease, but it is much more common for work-related aspects to increase the risk of disease together with other non-occupational factors. In addition, work-related factors often aggravate an already existing disease. The work-related factors may not be the sole or even the main cause of illness or death, but they are contributory and affect the wellbeing of workers.

One method that has been used in other provinces and countries of estimating work-related disease is to use the attributable fraction (AF) of work-related diseases. The AF is a percentage of those negative outcomes of issues (mortality) that can be attributed to work. The AF represents the portion of cases of a disease among exposed individuals that can be attributed to that exposure. The AF is then applied to disease rates in the local population.

For example, CancerCare Manitoba reports that there are 2500 cancer deaths/year in Manitoba. If the AF for cancer is 8.4%, then 8.4% of all cancer deaths are work-related. This suggests that there would be an estimated 210 fatal work-related cancer cases/year in Manitoba. Current methods suggest that there are more than 10 times as many deaths due to work-related cancer alone than WCB statistics suggest were due to of all causes. The International Labour Organization estimates that there are 11,300 fatal work – related diseases in Canada/year. Manitoba’s portion of this would be 415 fatal work related diseases per year due to chronic exposures. More than one/day.

Current trends such as AF suggest that there are more than 25 times as many deaths due to all workplace exposures (cancerous and noncancerous) than are recognized by traditional WCB data. This means that most workplace deaths are not recognized by the WCB and therefore are not addressed in prevention programs.

Time-loss injury

The time-loss injury rate for illnesses, like that for occupational disease fatalities is defined by their acceptance by the WCB under their regulatory definition. Here as well, the historic methods used by WCB will underestimate occupational illnesses. The Manitoba Workplace Injury Statistics Report for 2000-2013 showed that there were 13,440 time - loss traumatic injuries, and 1,492 time-loss occupational illnesses reported by Manitoba WCB. In other words, using traditional methods, time-loss occupational illnesses are about 1/10th that of time-loss traumatic injuries.

The current trend for estimating time-loss illnesses is the self-reported work related illnesses method as used in Europe. This method addresses the under reporting problem of the WCB time-loss occupational illness statistics.

“Self-reported work - related illnesses” includes illnesses, disabilities, or other physical and psychic health problems, apart from accidental injuries. The main inclusion criterion

is that the person considers this health problem as caused or made worse by work (past or current). This means that the problems asked for are not restricted to cases reported as an accepted insurance claim. The European study found that 3.2% of workers (approximately 7 million workers) had accidents at work and 8.6% of workers (approximately 20 million workers) had work-related health problems. In other words, time-loss due to self-reported illnesses occur three times more frequently than time-loss due to traumatic injuries, instead of 1/10th the frequency. A separate UK study using similar up-to-date methods found that the frequency of lost-time due to health related issues was twice the frequency of lost-time due to safety related issues.

Conclusions

The traditional methods used by Manitoba WCB to identify health based workplace illnesses and deaths underestimates the frequency and severity by orders of magnitude when compared to more up – to – date methods. This has been shown in Europe, Australia, and Alberta when the newer methods for estimating illness and deaths have been applied.

The traditional methods which underestimate the impact of health related illnesses and deaths have resulted in prevention programs that do not recognize the major contributors to workplace illness and death. The result is misplaced or insufficient resources and over – addressing workplace acute injuries and under – addressing workplace diseases. Provincial Workplace Safety and Health Branch has four occupational hygienists in the field and forty safety officers to enforce legislation although safety is a minor issue when compared to health related issues estimated using up – to – date methodologies. WCB has a large prevention program, Safe Work, with only two occupational hygienists on staff.

For all practical purposes, the Workplace Safety and Health Branch no longer has the capability to collect the data needed to determine if a workplace is safe. The inability to identify, assess and respond to unhealthy workplaces has had a significant impact on health related costs to the Manitoba economy. In 2015 the WCB estimated the average cost per disease related fatality to be about \$220,000, which equals \$91 million/year when the unrecognized occupational deaths are recognized. Another way of looking at this is that since 2002 when Dr. Kraut and Andrew Cutz prepared their paper the failure to act at that time cost the Manitoba economy \$1.3 billion.

We do not mean to imply that in those 14 years the problem could have been resolved. But if the number of deaths could be reduced by 1% there would be enough savings to fund a basic prevention study program.

It is important that Manitoba start an up-to-date prevention program using current technologies to identify and control workplace conditions that can lead to chronic diseases so that they can be prevented.

Recommendations

Although some jurisdictions have been studying and developing current trends such as attributable fractions and self-reporting for over twenty years, Manitoba has yet to acknowledge that we may be failing to address the problem of unrecognized occupational diseases, and their roots in unhealthy workplaces.

1. AIHA Manitoba recommends that Manitoba move from the traditional public health approach of identifying high risk conditions using the frequency of illnesses and deaths and adopt the occupational hygiene approach of identifying high risk workplace conditions that could lead to workplace illness and death, and correcting those conditions before illness or death occurs.

At this time Manitoba only has knowledge of the number of workers who were made ill or died as a result of unhealthy workplaces as cases accepted by WCB. There is insufficient knowledge of actual worker exposures, illnesses or deaths. The tools to determine these essential factors do not exist. At best we can only assume our rates of workplace illnesses and deaths are similar to other jurisdictions who have started using the new methods and have up-to-date workplace health knowledge for their jurisdictions.

2. AIHA Manitoba recommends that a program be implemented to collect the data necessary to allow Manitoba to transition from the current traditional method of estimating worker wellbeing to up – to – date methods necessary to develop healthy workplaces. This program should be started as a research program with the goal of transitioning to a prevention program as knowledge becomes available.

To plan a prevention program it is necessary to know what diseases exist in Manitoba, what the causes are, what industries they would be found in, and what the exposure levels are. This information allows prevention programs to be based on risk rather than the number of sick workers. We recommend that the following activities be implemented to develop a data base necessary to design a program which would produce healthy workplaces.

3. AIHA Manitoba recommends that the incidence of deaths caused by work related disease be accurately estimated using attributable fractions. Work-related disease covers a broader range of diseases than occupational disease as defined and reported in compensation statistics; it encompasses all diseases where work is a contributory cause. At this time there are several estimates of occurrence of deaths caused by chronic occupational exposures. Either Manitoba must develop its own unique work related factors, or adopt an existing work related factor that is a good estimate of chronic occupational deaths.
4. AIHA Manitoba recommends that lost-time due to unhealthy workplaces be accurately estimated. For example, the Health and Safety Executive (HSE) in the

UK has used self-reporting as a method to estimate lost time due to occupational exposures. They have tested it for accuracy and found it acceptable. Another system being used is the Australian Work Exposures Study (AWES) a telephone survey of the working population regarding occupational exposures.

5. AIHA Manitoba recommends that exposure levels in different workplaces and best work practices be identified. At this time the Province has very little data on worker exposures. For example, Carex Canada reported that in the period from 1953 to 2012 there were only 23 surveys in the construction industry with exposure data of high enough quality that they could be of use, yet construction workers are estimated to have 30 - 40% of all occupational cancers. It is essential that workplace exposures are known so that priorities can be established.

A Healthy Work program is quite different than the traditional safety oriented model used in Manitoba. The science and philosophy are quite different. For example:

- Contributory cause vs Dominant cause. The work-related factors may not be the sole or even the main cause of illness or death, but they are contributory and affect the wellbeing of workers.
- Occupational Hygiene approach vs Public Health approach. The Occupational Hygiene approach is preventative based on risk, while the Public Health reactive approach is based on frequency of illness or death with emphasis on return to work activities.
- Attributable Fractions/Self Reporting vs WCB Data. Attributable Fractions and Self Reporting are an estimate of workplace factors that affect the health of a workplace instead of claims accepted by the WCB.
- Prevention vs Return to Work. The aim of the healthy workplace approach is to have programs that minimize workplace illnesses instead of treating sick workers so they can return to their work.

6. AIHA Manitoba recommends that a Healthy Work program be implemented as a stand-alone program so that there will be minimal friction between existing safety related philosophies and those needed to bring about healthier workplaces.

A Healthy Work program would require staff with an occupational hygiene background familiar with the anticipation, recognition, evaluation, and control of those environmental factors and stresses arising in or from the work place. At this time, staffing at the WCB and the Workplace Safety and Health Branch are based on the needs as defined by current WCB data. As a result there are very few professionals among the WCB/WS&HB staff that meet these criteria. In fact, based on data from the WCB and the Minister's Five Year Plan, current staffing does not meet the current needs of addressing illnesses and deaths arising from unhealthy workplaces.

7. AIHA Manitoba recommends that a team of occupational hygienists should be assembled to design and implement the Healthy Work program since a Healthy Work program is essentially a risk reduction program using the tools of

anticipation, recognition, evaluation, and control. It should be kept in mind that this is a Healthy Work Program, not medical program addressing the health of workers.

We believe that the above seven recommendations will assist the Review Committee to:

1. Align the Act with the prevention initiatives outlined in the 5year plan:
2. Ensure the WCB is current with emerging trends in injury and illnesses: and
3. Ensure the WCB is up-to-date with current health-and-safety knowledge.

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