The Excluded Workers:
A Case For Universal Workers' Compensation in Manitoba

By

Kari Swarbrick

A Thesis
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Abstract

Twenty-five percent of Manitoba's working population do not have mandatory workers' compensation coverage. The impact of an occupational injury or illness on these particular workers, their families, their employers and society as a whole can be devastating. To protect workers in Manitoba, it is recommended that the province adopt a system of universal workers' compensation.

Through an examination of existing literature, legislation, government documents and interviews, this problem is examined. To effectively control workplace hazard causation, prevention must be a priority and where this is not possible mitigation must be available.

This thesis shows that workers' compensation has developed in Manitoba, to exclude select groups of workers from mandatory compensation coverage. Further it demonstrates that these excluded workers are exposed to many workplace health and safety hazards, which can never entirely be prevented. However as mitigation, in the form of compensation, is not available to these workers, full hazard control is not presently operational in Manitoba.

Manitoba has a long history of proposing to expand workers' compensation coverage, however it has only minimally acted upon these proposals. The Workers' Compensation Board of Manitoba has recommended methods by which compensation coverage might be expanded. One of these proposed methods was used in British Columbia to successfully create a system of universal workers' compensation. Manitoba should adopt the implementation method used in British Columbia, which requires all workers and industries to be automatically covered by workers' compensation, with very few exceptions. This would effectively protect Manitoban workers, employers and society as a whole.

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Introduction

Work is the very essence of who we are as individuals. When a person is introduced to someone new the first question often asked is "What do you do for a living?" or "Where do you work?" The importance of work to individuals in our culture is evident in that historically we even took our names from what we did as work. Mr. Smith could have been the local blacksmith, while Mr. Taylor was likely the local tailor. Names identified people with their occupations. The identification with work is not unusual in Canada considering that nearly one quarter of Canadian workers spend more than "half their waking hours at their places of work and devote many other hours to job-related activities such as . . . travelling to and from work (Cornish and Ritchies 1980, 7).

Work consumes time and energy; however, it is vital to the support of an individual family unit and accordingly to the whole of society (Cornish and Ritchies 1980, 7). Work provides a family unit with resources to purchase the necessities and luxuries of life. It is these purchases which make our economy function. Disruptions in the operation of the economy can have a detrimental impact on society. Disruptions can come in the form of injury or illness to a worker. Therefore, society has a vested interest in preventing workplace injury or illness, which have the potential to harm society as a whole.

1. This thesis will show that workers' compensation has developed in Manitoba, to exclude a select group of workers[1] from the benefits of mandatory compensation coverage. It will show that the primary reason for the exclusion of these particular workers is the difficulty that regulators have in identifying workplace hazards, in particular health hazards, which impact on these workers.

2. Further it will demonstrate that for effective control of workplace hazards, prevention must be the goal and where this is not possible the injured or ill worker should be compensated for the injury or illness in order to mitigate the hazardous consequences.

3. It will demonstrate that while Manitoba has had a long history of proposing to broaden workers' compensation coverage, these proposals have been acted upon only minimally.

4. It will recommend that to effectively control workplace hazards the province of Manitoba should adopt a system of universal compensation. A system of universal workers' compensation would encourage the Workers' Compensation Board to play a more preventive role in workplace injury and illness and would facilitate increased communication between Occupational Safety and Health and the Workers' Compensation Board of Manitoba, thus ultimately effectively protecting workers and society as a whole.

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[1] These workers are referred to in this paper as the excluded workers. The excluded workers are those workers without mandatory workers' compensation coverage however for the purposes of this paper the author will concentrate on workers in the following categories: agricultural workers, teachers, clerical workers and domestics.

When a labourer is injured or dies while at work the brunt of the effects fall on the worker and his or her family. The impact has three features: physical, emotional and economic. With respect to the physical impact, the individual worker and family must deal with the immediate physical pain and suffering and eventually rehabilitation if it is necessary. Moreover, the emotional suffering caused by the injury or illness places additional stress upon the worker and the family unit. In the unfortunate event of death, the family must deal independently with their grief. With injury the family suffers economically from the temporary loss of wages during recuperation and in the event of death permanent loss of wages.

When accident or illness occurs on the job, although the major impact of the incident falls on the worker and his/her family, the employer is also affected. The employer in most cases loses valuable production time and experienced labour. This loss might result in retraining of a replacement worker or in reduced production. The impact could be considerable and could have serious repercussions on the operations of the business. Considering that the impact of an industrial accident or injury is eventually felt by society as a whole, society has a duty to protect workers. In order to remain productive and likewise healthy society should work to prevent injuries and illness occurring in the workplace. Where prevention is not possible society should protect workers and their families from the physical, emotional and economic consequences of such injuries.

The development of Manitoba's policy in occupational safety and health and workers' compensation has to some extent assisted in preventing injuries and illness and in protecting against the consequences.

Fundamentally, workplace health and safety legislation plays a proactive role of prevention in workplace safety and health. This legislation provides for a preventive evaluation of workplaces through an inspectorate and legislation, to eliminate potential hazards that result in accidents and illness. However, these provisions are not one hundred percent effective and often workers are injured or become ill. Where prevention fails, methods of hazard control require mitigation in the form of workers' compensation to redress the injury or illness and likewise protect workers and their families from the consequences of an illness or injury.

Hazard control is not as ideal as this prevention/compensation commentary leads one to believe. In Manitoba, for example, occupational safety and health legislation pertains to one hundred percent of Manitoba's workforce; however only about seventy five percent of the workforce have access to the protective benefits of workers' compensation coverage. Some twenty five percent of Manitoba's close to 590,000[2] workers do not have mandatory workers' compensation coverage. This thesis will focus on these excluded workers.

Chapter two of this thesis will briefly outline the history of the development of the Workers' Compensation industrial coverage in the Province of Manitoba. Particular attention is devoted to the historical trade off which led to the development of the Workers' Compensation Board. The chapter then examines the extension of coverage from the inception of the Board until present day. Finally it concludes with possible reasons for not

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[2] This statistic is from the 1991 Census.

expanding coverage to the entire labour force of Manitoba.

Chapter three will examine the problem of workplace safety and health and the role of workplace hazard control. It begins with a brief discussion on workplace hazards, risks and uncertainty. The chapter will then treat the theory of hazard control, the prevention of hazard events and where this is not possible mitigation of hazard consequences. Further, it will examine the difficulty in identifying health hazards, and the role that confounders[3] and other problems play in hindering hazard identification, thus making workplace hazard prevention difficult. This chapter will conclude with a discussion of the current strategies for hazard control in operation in Manitoba.

Chapter four will begin with an examination of the many potential hazards which the excluded workers in Manitoba do in fact encounter in their workplaces. Particular attention will be devoted to hazards which impact on agricultural workers, teachers, clerical workers and domestics. The chapter will then shift to examine the needs of injured workers when prevention efforts fail. Alternative sources of compensation protection available to workers not protected by workers' compensation will then be presented. This chapter will establish that there is a long history of recommendations for broadening workers' compensation coverage in Manitoba. The chapter will then suggest that Manitoba adopt a system of universal workers' compensation similar to that of British Columbia, where on January 1, 1994 universal workers' compensation came into operation. The chapter will

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[3] Definition to be found in Glossary.

conclude with a discussion of the benefits that a system of universal workers' compensation will have on Manitoba.

Chapter 2
Historical Development of the Workers' Compensation Act of Manitoba and the Excluded Workers

> One of the cardinal tenets [of workers' compensation] is said to have been the aspiration that as time progressed Workers' Compensation might be expanded to cover all employers and employees (Manitoba 1980, 4).

This goal has yet to be fulfilled in Manitoba. In 1994, it is estimated that twenty-five percent of Manitoba's workforce are without the protection of workers' compensation (Workers' Compensation Board of Manitoba 1994, 16).

This chapter will establish that although several extensions of workers' compensation coverage have occurred since its inception in Manitoba, select trades of workers remain without the protection of mandatory coverage. Further investigation will identify those workers who have been excluded from mandatory coverage of workers' compensation and the nature of the industries in which they work. This investigation will begin with the British origins of workers' compensation and the transition to the passage of Manitoba's first full no-fault legislation the *Workmen's Compensation Act 1916.* The chapter will then examine the amendments to the Act, which extended coverage to new areas.

The paper will then identify those industries and the composition of those workers who are not covered by compensation. The chapter will conclude with a discussion of reasons why there has only been limited

expansion in coverage to workers in Manitoba, in spite of several Royal Commissions and reviews which have recommended significant expansions in coverage.

2.1 The British Origin of Workers' Compensation

Legislation relating to worker protection in Manitoba originated in Great Britain as far back as 1349. It was during that year that Europe became engulfed by the Black Plague. As the deadly disease infested the continent, an estimated one-third of the working population perished (Willes 1986, 388). The King, in response to this devastation, felt compelled to pass the *Statute of Labourers, 1349.* This law endeavored to regulate conditions and wages under which individuals were employed. However, this statute was not strictly enforced and other more significant enforceable attempts to regulate working conditions did not develop for close to 500 years (Willes 1986, 388).

Several improvements were made in the nineteenth century as a result of industrialization. Britain led in many of these changes. Prior to industrialization workers led rather agrarian lifestyles, living and working in family units as independent producers. However, with industrialization society was transformed; social structures changed as did residences, culture, transportation and government (Bartrip and Burman 1983, 7). These changes were rapid and were experienced throughout Europe. In Britain, one of the undesirable effects of industrialization was unsafe working conditions for labourers (Bartrip and Burman 1983, 8).

Pressure to reform the working conditions experienced by labourers arose from "a general belief in the existence of a substantial problem, coupled with a clear appreciation of the horror of individual misfortunes" (Bartrip and Burman 1983, 15). The first of many *Factory Acts* was passed in Great Britain in 1802 (Willes 1986, 388). However, it was not until 1844 that British legislation imposed responsibility on factory managers to fence equipment and compensate injured workers (Bartrip and Burman 1983, 15). These early *Factory Acts* were established to release labourers from many of the less pleasant effects of industrialization by regulating certain working conditions in plants and factories, as well as specifying the number of hours of work and the age at which someone might become employed. These Acts authorized the creation of an inspectorate to ensure compliance with the legislation (Bartrip and Burman 1983, 15). However, these early efforts failed to address:

> the equally pressing issues of the worker's loss of income owing to work-related accidents and the sense of financial insecurity that working people, particularly those in hazardous occupations, must have endured for themselves and their families (Guest 1980, 40).

Accidents continued to occur and workers and their families were often left destitute. Working conditions were to remain a concern to labourers. As industrialization continued, accident rates began to rise and injured workers could only seek compensation through the courts and the use of common law.

2.2 Common Law Method of Recovery

Under the common law when an employment contract was in existence, the employer owed a duty to provide for reasonably safe working conditions. The only recourse that a labourer who was injured at work had was to file suit against his/her employer "for breach of contract and prove the employer's negligence in breaching the contractual obligation" (Manitoba 1987, 30). This was no simple task for the employee, as the common law provided employers with many defences which virtually guaranteed that only a select few of the workers' suits would be successful. The defences most frequently used by employers were the following:

> CONTRIBUTORY NEGLIGENCE: if the employer to some degree could prove that the worker was partially negligent, the law suit was prohibited and the worker could not recover for injury.
>
> COMMON EMPLOYMENT: if the employer could prove that the action was committed by the negligence of a fellow employee this defence could be used. It was a direct result of the law of contract, "[s]ince the worker had to sue on his/her contract with the employer, [and] the actions of anyone who was not a party to the contract were irrelevant" (Manitoba 1987, 30).
>
> ASSUMPTION OF RISK: (volenti non fit injuria) when a employee entered freely into a contract of employment with an employer, the worker voluntarily assumed all the risks associated with the execution of his or her duties (Manitoba 1987, 30).

These defenses provided the employer with an advantage in most law suits, as the employer frequently proved that the employee or a fellow employee was negligent and that the injured worker had assumed all the risks.

In the case of worker fatality, the common law method of seeking compensation was not available to the family. Families were often left destitute with no means of support. This obstacle was overcome in 1846 when the British government passed the *Fatal Accidents Act, 1846.* This legislation gave the family of a deceased worker some recovery in certain cases[4] (Bartrip and Burman 1983, 97). This was an important step taken by government in the use of legislation as a method of recovery.

Although government was experimenting with legislation as a method of recovery, the use of the common law remained the sole mechanism of recovery available to injured workers in the majority of cases. As rapid industrial development continued, there was a sudden growth in tort law[5]:

> The staple source of tort litigation was and is the impact of machines-railroad engines, then factory machines, then automobiles - on the human body. During the industrial revolution, the size of the factory labor force increased, the use of machinery in the production of goods became more widespread, and such accidents were inevitably more frequent (Friedman and Ladinsky 1967, 52).

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[4] The family of a deceased worker could obtain compensation if the death of the worker was found to be caused by negligence of a third party.

[5] Tort law deals with breaches of duty rather than with beaches of contract, leading to liability for damages.

As workplace accidents increased, the opportunities for employees to use the tort law also increased. However, tort law often was not exercised, as a worker considering such a legal undertaking faced both economic and psychological barriers.

In economic terms an injured worker was often without sufficient resources to pursue such legal recourse. The hiring of a lawyer could be extremely costly and beyond the means of most labourers of that time. However, in the last few decades of the 1800's a contingent fee system was established so that a labourer had the opportunity to hire a lawyer and try to recover for injuries sustained at work. Although a worker could then resort to the judicial system, this system was inadequate as most injured workers could not manage financially with the long interruption that the process requires, between bringing a legal suit and securing settlement. Moreover, without any form of legal aid the worker was left at the mercy of this time consuming and inefficient method of recovery.

Many psychological barriers or factors are present which make a worker reconsider or grapple with a decision to undertake a lawsuit against his/her employer. Many of these factors are related to the fact that labour was unorganized and unions virtually nonexistent. A worker who pursued a case against an employer in the courts could be labeled a trouble-maker and consequently have difficulty finding employment elsewhere (Bartrip and Burman 1983, 28-29). Furthermore, there was the possibility that a labourer would not succeed in a case against his/her employer, which provided added stress on that individual and his/her family. The understanding that one might fail in an attempt to recover compensation and that employment in

another form might not be possible at the conclusion of a case was intensified by the fact that one could not often jump from job to job and that there was an extremely limited social safety net available (Scott 1993, 12).

2.3 The Emergence of Workers' Compensation

In Britain, the concept of workers' compensation began to emerge. Pressure groups and a newly organized labour movement pursued an intense campaign for the adoption of workers' compensation. By the early 1870's this campaign gained momentum, as the Social Science Association, a reform group concerned with amending inadequate laws, joined the effort. In early 1872, the association presented a petition to the British Parliament to amend the *Mines Regulation Bill*, so as to provide compensation to injured miners or to their families in the event of death of a miner. The Association asked the House of Commons to "amend this great defect, either in this Bill, or by a more general enactment" (Bartrip and Burman 1983, 127).

Momentum for this cause picked up in May of 1872, when a paper was presented to the Association which stressed:

> the injustice of the doctrines of common employment and contributory negligence and advocated that mine owners should be liable to pay compensation for injuries caused by neglect of safety precautions (Bartrip and Burman 1983, 127).

It was argued rather wisely that compensation would lead the move to optimum safety as more inspections of working conditions would be undertaken. It was further stressed that adherence to inspection

recommendations would push down the costs of premiums. Two months later, a Bill adopting the Association's recommendations appeared in Parliament. However there was no debate and the Bill was subsequently withdrawn (Bartrip and Burman 1983, 128).

Nearly a decade passed before there was any progress in the creation of legislation. In 1880, the British election campaign devoted considerable attention to the concerns of workers and working conditions. The Liberal Party's platform focused on extending the liability of employers (Bartrip and Burman 1983, 149). The newly elected British government soon passed the *Employers' Liability Act, 1880*. The Bill initially proposed to hold employers liable for workplace accidents that were caused by their employees in a supervisory position (Bartrip and Burman 1983, 150). When the Act finally came into existence, the strength and influence of employers was clear in the amendments that had taken place. The new Act was significantly scaled down from the initial proposal as it eliminated the defence of the doctrine of common employment in only three precise cases:

> where the accident was caused by the negligence of a fellow-servant exercising the duty of a superintendent; where it was caused by a workman's obedience to orders or directions issued negligently by a fellow-servant whom he was obliged to obey; where it was caused by the act or omission of a fellow-servant who had charge or control of any signal points, locomotive engine, or train upon a railway (Bartrip and Burman 1983, 156).

Essentially, in these specific cases, where a worker once had to prove

negligence by the employer, all he or she now had to do was show that injury had occurred (Guest 1980, 41).

The passage of the British *Employers' Liability Act, 1880* provided for significant changes in the use of common law remedies of recovery. Employers no longer had the upper hand over employees in their attempts to recover for workplace accidents. The impact of these changes in British legislation was soon to influence events in Canada.

2.4 Manitoba: The Historic Trade off and the Development of Workers' Compensation

In Canada, between 1886 and 1911 a number of provinces enacted statutes patterned after the British *Employers' Liability Act, 1880* . Each of these statutes modified the common law defences. In particular, attention was devoted to the doctrine of common employment. Quebec was the only exception to this as its Act of 1909 granted a worker the right to compensation regardless of fault (Labour Canada 1969, 3).

In 1894 the government of Manitoba passed the *Workmen's Compensation for Injury Act, 1894.* Patterned after the British *Employers' Liability Act, 1880,* it established that employers could be held liable for the negligence of their employees and for injuries caused by defects in the "ways, works, machinery, or plant connected with, or used in the employer's business" (Manitoba 1958, 18). This new Act "basically modified and sharply defined the common law defences available to employers, but left unchanged the necessity of suing in court and proving negligence" (Manitoba 1987, 30).

Dissatisfaction with these changes soon became apparent and alternatives to this policy were proposed. In 1904, the Winnipeg labour movement newspaper, *The Voice* reported that the "working class is paying a fearful tax in blood to the rush, scamper and boom spirit that has been imparted" (*The Voice* August 26, 1904). It was suggested that workplace conditions would improve only if the province adopted "a modern compensation law . . . a law [which] would induce employers to be less negligent and would greatly reduce the number of accidents" (*The Voice* August 26, 1904). This concern was raised for the next several years.

In 1909, the Province of Manitoba appointed a Royal Commission to report on the issue of compensation to workers for accidental injury. Drawing upon experiences in other jurisdictions such as Britain, the Commission sought to find a suitable method of providing compensation in Manitoba. The Commission sent out 250 accident circulars to employers in the province. Only 59 responses were returned reporting a total of 124 accidents occurring in these businesses. Six of these accidents were fatal, and in all of the 124 cases no compensation could be recovered for the workers or their families under the law of Manitoba at that time.

The Royal Commission recommended that the government institute a system of compensation that would require all employers with five or more workers to pay compensation. This was to be the foundation of a no-fault workers' compensation program, where labourers would have an alternative to the sole use of the common law to obtain compensation.

The Royal Commission's recommendations were incorporated in the *Workmens' Compensation Act of Manitoba, 1910.* This legislation furnished injured workers with a choice of using the common law to recoup loss or foregoing a lawsuit in return for no-fault benefits under the Act. This new no-fault system was not compulsory as employers were not obliged to insure themselves. When the benefit alternative was selected, the employee would have benefits starting at only 25 percent of his/her gross salary for the first month of incapacity, 40 percent for the second month, and reaching a ceiling of 50 percent thereafter (Manitoba 1987, 31). This system would prove to be short-lived as events unfolding in Ontario at this time would soon impact on Manitoba.

In 1910, the Province of Ontario appointed Sir William Meredith[6] to "enquire into laws relating to the liability of employers to make compensation to their employees for injuries received in the course of their employment" (Labour Canada 1969, 3). In his final report, Chief Justice Meredith ". . . made an exhaustive examination of various systems of Workmen's Compensation Insurance in force throughout the industrial world" (Workers' Compensation Board of Manitoba Annual 1927, 1). The Meredith Commission recommended a system of compulsory mutual insurance under the management of the state. Meredith Commission's recommendations have proven to be the basis for most workers' compensation systems operating in Canada today.

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[6] Sir William Meredith was later appointed as Chief Justice of the Supreme Court of Ontario.

In 1916, Manitoba followed the example set in Ontario with the passage of the Manitoba's first no-fault mandatory workers' compensation system. The existing *Workmen's Compensation Act 1913* [7] and *Employers' Liability Act, 1913* [8] were repealed with the passage of the *Workmen's Compensation Act of 1916.* There was one substantial difference between the Ontario and Manitoba Acts. In Manitoba, the new legislation provided for collective liability on the part of employers; however insurance coverage was to remain underwritten by private insurance companies.

2.5 No-Fault Mandatory Workers' Compensation: The Pursuit of State Run Insurance

The *Workmen's Compensation Act, 1916* [9] established two levels of coverage and was divided into two parts. Part I of the Act dealt entirely with those industries or places of employment for whom mandatory workers' compensation coverage was required. The list of industries which were required to have compensation coverage were set out in Schedule I of the Act. The list of industries in Schedule I, which required mandatory insurance, was based upon the recommendations of the 1909 Royal Commission which stated that the Act "should apply to the so-called dangerous trades . . . [and] to all occupations alike" (Manitoba 1910, 651). Part II of the Act applied to all

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[7] The *Workmen's Compensation Act, 1910* of Manitoba was revised in 1913. Following these revisions the 1910 statute was then referred to as the *Workmen's Compensation Act, 1913.*

[8] The Employers' Liability Act was revised for the last time in 1913 and therefore referred to as the *Employers' Liability Act, 1913.*

[9] The Legislation was referred to as the *Workmen's Compensation Act* until 1974.at which time it changed to the *Workers' Compensation Act.* The Act as it was initially named likely referred to the fact that the board dealt primarily with only male workers (See Appendix II)

industries not designated in Schedule I and provided that the remedy for recovery be available on an optional basis to those industries and places of employment not designated for mandatory coverage.

The new Act of 1916 established the first system of no-fault workers' compensation in Manitoba. This new system of insurance provided for state supervision of the program. The provision of insurance, however would be underwritten by a group of private insurance companies.[10] On March 1st, 1917, the Act became operational as the provisions concerning the payment of compensation became effective. Most of the work of the newly formed Workmen's Compensation Board from September of 1916 until that date had consisted of:

> . . . preparations for putting the law into effect, including the establishment of the Accident Fund . . . the listing and classification of persons or firms said to be carrying on industries, trades or businesses named in Schedule I of the Act, the issuing of instruction to same, the fixing of rates, and securing the necessary statements of employees' earnings and insurance policies from employers (Workmen's Compensation Board of Manitoba Annual 1917, 1).

By far one of the most time consuming duties of the Board, during this first year of operation, was the identification of those employers who were required

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[10] Thirteen insurance companies made application to the Board to write insurance under the Act: Canada Accident Assurance Company; Employers' liability Assurance Corporation, Limited; Law Union and Rock Insurance Company, Limited; London Guarantee and Accident Company, Limited; Maryland Casualty Company; North American Accident Insurance Company, Limited; Norwich Union Fire Insurance Society, Limited; Ocean Accident and Guarantee Corporation, Limited; Railway Passengers' Assurance Company; Security Mutual Casualty Company; The Globe Indemnity Company of Canada; The Guardian Accident and Guarantee Company; Yorkshire Insurance Company.

to carry mandatory compensation coverage. The Board identified 4310 employers who were conducting business in any of the industries or trades named in Schedule I of the new Act. Basically, the list of the industries included lumbering, mining, quarrying, fishing, navigation, milling, manufacturing and construction.[11] Of 4310 employers identified, only 2210 filed policies at the end of the calendar year of 1916. It was determined that "of the remainder a large number had gone out of business, or were not at that time employing workmen, and there are many who have made no response" (Workmen's Compensation Board of Manitoba Annual 1917, 1). This failure to respond and concern that all employers in specified categories be included resulted in the Board's request for officers to be appointed, who would cover the Province and who would "from time to time . . . gather information as to employers and industries, and secure their compliance with the requirements of the Act" (Workmen's Compensation Board of Manitoba Annual 1917, 2).

Aside from the general grouping of employers who were required to carry insurance under Schedule I of the Act, there were ten large employers in the province who were granted permission to administer their own insurance.[12] The Board found that virtually every employer who was required by law to comply with the requirements of the Act did so with a few exceptions. The most notable of these exceptions were the Canadian Northern Railway and allied companies, who argued that the Act was *ultra vires* [13] of

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[11] Schedule I is presented in its entirety in Appendix 1

[12] These employers were: Winnipeg Electric Railway Company, Canadian Pacific Railway Company, Great Northern Railway Company, The Midland Railway Company of Manitoba, City of Winnipeg, City of Brandon, City of Portage la Prairie, City of St. Boniface, Manitoba Government Telephones and Grand Trunk Pacific Railway Company

[13] They believed that the government was acting beyond its scope or authority in requiring that certain

the Legislature of Manitoba, and such being the case, they refused to comply. By the end of 1918, these companies failed in their legal action and accordingly were required to carry coverage under the Act.

At many times during its first year of operation, the Workers' Compensation Board of Manitoba was called upon to determine whether employment, which was not specifically named in Schedule I of the Act, was incidental to an industry under Part I or Part II of the Act. Moreover the Act of 1916, provided under section 70 "that the board shall have jurisdiction and authority to add to the industries mentioned in the schedule to this Part any industry not included in such schedule." This discretionary function of the new board, and the creation of a compliance inspectorate demonstrated that the Board had considerable authority in requiring employers to carry insurance against workplace accidents, in the Province of Manitoba. In subsequent years the Board used this discretion to expand coverage to limited sectors of the Manitoban workforce.

2.6 Amendments and the Expansion of Coverage

According to the Workers' Compensation Act of Manitoba there are basically two methods of coverage available to workers (through employers). The first method is that of mandatory coverage placed upon employers conducting operations in specified areas, and the second method is that of application for coverage and approval by the board.[14] Through the second

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industries carry mandatory workers' compensation insurance.

[14] This optional method became available with a 1919 amendment to the Act which made application possible.

method, employers can apply to the board for coverage of their operations of work, even though such operations are not classified under Schedule I of the Act.

In 1918 the province once again appointed a commission to examine the *Workmen's Compensation Act, 1916* of Manitoba and to enquire into any administrative, executive or judicial acts of the new Board, its officers and employees.[15] The commission concluded that:

> [from] evidence and general expression of opinion, it is apparent that the principles of the Workmen's Compensation Act are highly satisfactory to both the employers and workmen in that the provisions for adjustment and payment of claims tend to improve relations by the removal of controversial points, but naturally the success of the Act depends upon efficient administration[16] (Manitoba 1918, 11).

The commission concluded that the compensation system was operating rather well and that attention must always be given to the administration of the system.

Aside from references to efficient administration, the commission recommended "that as far as possible, workmen engaged in other industries, not at present under the jurisdiction of the Workmen's Compensation Board,

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[15] The main reason for the formation of the commission was concern over the increase in all insurance rates by 10 percent due to an urgent request of insuring companies in the province.

[16] It was recommended that the Board rent a smaller office area as its offices were too large and costly for the work that needed to be performed. Further it was recommended that the Board structure be changed to include a commissioner and two directors

should receive the benefits conferred by the terms of the Act" (Manitoba 1918, 11). This recommendation was mirrored in the Annual Report of the Board for 1918, which stated that the "Board is of the opinion that many of the industries now excluded under Part I of the Act should be included and will, under the powers given it, proceed to the making of an order adding such of same as it may deem advisable" (Workmen's Compensation Board of Manitoba 1918, 1). The recommendation for extension of coverage and its subsequent acknowledgement by the Board were not put into operation or acted upon in 1918. In fact this recommendation was not acted upon to any extent in the following years. By the end of 1918 the Workmen's Compensation Board of Manitoba had been in operation for twenty two months. Expansion of coverage was not actively pursued during this period; however, several administrative recommendations were adopted and implemented by the Board.[17]

One related point of coverage extension occurred with the enactment the *Dominion Compensation Act, 1918.* This Act was passed by the Parliament of Canada, providing for payment of compensation to employees of the Government of Canada in cases where, "had they been in the employ of a private concern, they would have been entitled" (Workmen's Compensation Board Annual 1919). Essentially, any federal employees performing the same duties as a private sector worker, to whom coverage was deemed necessary, would also be covered. This provision was to be administered by the Workmen's Compensation Board of the respective provinces.

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[17] Such recommendations as the changes in the structure of the Board and the relocation of the Board to new offices in the Canada Permanent Mortgage Building on Garry Street.

In January of 1920, the Manitoba Legislature called for a conference with representatives of labour, employers and the legislature to explore concerns of labour.[18] It was announced that the "chief business to be considered will be the amendments to the *Workmen's Compensation Act* and the future status of the act" (*Manitoba Free Press* January 27, 1920, 1). The conference of 1920 concluded with many recommendations,[19] the most significant being that a system of state insurance should be adopted in Manitoba. It also recommended that all non-hazardous corporations including "all banks, trust companies, life insurance companies, mortgage companies, broker's offices, all wholesale and retail stores, theatres etc." should be brought under the act (*Manitoba Free Press* March 13, 1920, 3). Lawyers and farmers, however, were to remain exempt from the provisions of the act. Nevertheless, it was indicated at that time that reports "from the legislative building are to the effect that there never was . . . any real intention on the part of the government to extend the application of the act widely as indicated above" (*Manitoba Free Press* March 13, 1920, 3).

Revisions to the Act in 1920, indicated that some of the recommendations of the conference were instituted, however, any extension of coverage was clearly not to be significant. The Legislature passed a new Act which effectively repealed the Act of 1916. The new Act, which became effective at midnight on December 31st, 1920 included the recommendation

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[18] On May 15, 1919, the Winnipeg General Strike occurred and lasted six weeks. Government was likely responding to the strike of the summer before.

[19] It was further recommended that rates of insurance should be "governed by the degree of danger connected with different kinds of work"(MFP, February 18, 1920). This was to be the beginning of experience rating in the Province. Furthermore, it was suggested that insurance would no longer be with an individual company but rather that "different industries involved would share the burden of compensation"(MFP, March 17, 1920)

that insurance was now to be administered entirely through the state or Board Accident Fund, which was to be provided by assessments on all classified employers. Thus private insurance companies were no longer needed.

Although other recommendations of the conference were included in the new Act,[20] the only extension of coverage introduced was the inclusion of employees of the Province in workers' compensation provided that their work description was similar to that of private sector employees entitled to protection of the Act. In other words, if an employee of the province performed duties similar to those required for mandatory coverage in the private sector, then that job was covered by workers' compensation.

By early 1921, many other changes were occurring at the Board,[21] and once again further consideration was given to the expansion of coverage. In August of 1921, the Board considered other employees for whom coverage should be mandatory. The Board gave consideration to some clerical workers and it was determined that:

> [e]mployees, even though usually engaged in clerical work, whose duties sometimes take them into the factory, works or plant where the industry is carried on, are to be considered workmen under the Act and are to be included in the net payroll, but

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[20] The Act included increases in benefits to injured men, widows and children, increase in funeral bnefits and unlimited medical aid. The waiting period was reduced from six to three days and compensation was raised from 55% to 66 2/3% of average earnings

[21] The Board was once again moving to a new location as the Garry Street offices were found to be inadequate. The new site of the Board was to be in the Notre Dame Investment Company Building on Notre Dame Street

> members of the office staff who may merely go into such premises for their own purposes or otherwise than in the discharge of their duties are not to be considered workmen (Workmen's Compensation Board of Manitoba Annual 1922).

The Board indicated that ascertaining whether office staff venture into the factory (or works) would not be necessary where "there is a general hazard to all employees, arising from the nature of the industry, for example, risk of explosion" (Workmen's Compensation Board of Manitoba Annual 1922). Under such circumstances there would be no clerical exclusion. However, this expansion of coverage was limited, as the majority of clerical workers were to remain without the protective coverage of compensation.

In 1924, the government of Manitoba appointed yet another Special Legislative Committee to review the workers' compensation system. The Committee, which reported in early in 1925, recommended that no drastic changes should occur with respect to the *Workmen's Compensation Act* (*Manitoba Free Press* January 26, 1925, 1). The Committee suggested that children's benefits[22] should be increased and that a "system of vocational training for injured workmen" should also be considered (*Manitoba Free Press* February 7, 1925, 3). However, further expansion of coverage was not considered.

In 1929, another Bill was introduced to amend the *Workmen's*

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[22] Payments made to children of workers who died on the job.

Compensation Act which considered amendments[23] such as coverage changes to "include all workers with the exception of farm labourers and domestic servants" (*Manitoba Free Press* April 11, 1929, 3). This Bill failed to carry in the legislature and the benefits of compensation were not expanded, at that time, to cover these additional workers.

Expansion of coverage over the next few decades proved to be in the form of "cautious amendments to the workers' compensation system. . . even as post-war Manitoba became increasingly urbanized and industrialized" (Manitoba 1987, 34). However, several changes were made throughout the 1950's:

1950: expanded to include as a workman, a 'learner', who is 'any person who, although not under a contract of service or apprenticeship become subject to the hazards of an industry within the scope of Part I" (Workmen's Compensation Board of Manitoba Annual 1950)

1951: expanded to include volunteer firemen (Workmen's Compensation Board of Manitoba Annual 1951)

1952: expanded to include Oil well drilling; operation of farm machinery agencies; bulk oil stations; cold storage plants; wholesale establishments and theatres (Workmen's Compensation Board of Manitoba Annual 1952)

1953: expanded to cover clerical workers in hazardous industries who are not exposed to the hazards of the industry (Workmen's Compensation Board of Manitoba

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[23] The Bill also proposed to increase the level of compensation from 66 2/3 percent to 75 percent of net earnings.

Annual 1953)

Before the end of the 1950's another Royal Commission reviewed Manitoba's workers' compensation system. This one-man commission, the Turgeon Commission, was appointed in 1957. The Hon. W.F.A. Turgeon examined the extension of coverage in several specific classes:

1) All clerical workers
2) Employees of wholesale and retail establishments
3) Employees of hospitals and nursing homes
4) Hotel and restaurant workers
5) Employees of privately-owned radio stations
6) Employees of credit unions

The report examined these classes of employees in the context of Section 69 of the Act which said that "[t]he Board may by regulation include any industry (including [those] previously withdrawn or excluded under section 68) within the application of this part", essentially the "Board may by regulation include any industry within the application of Part I" (Manitoba 1958, 84).

The Turgeon report recommended that the Board include all of the proposed areas of expansion with the exception of two cases: clerical workers and credit union employees. The Turgeon report stated that the nature of these forms of employment were not deemed hazardous and therefore should not be in need of protection under the Act (Manitoba 1958, 85). The recommendations of the commissioner were included, unchanged, in extensive amendments which were made to the Act in 1959.

The expansion of coverage to much of the service sector (restaurant and hotel workers) is reflected in the total number of accidents reported over the period of changes. In 1958 before the amendments were instituted the number of accidents reported totalled 22,736 which increased to 26,371 in 1959 (Appendix 2). Further, the number of employer accounts jumped from 9,150 in 1950 to more than 13,150 in 1960 (Appendix 3). As the number of employers increased, however, the nature of the increased accidents appeared to be less serious. A large percentage of accident claims processed by the Board in 1959 were for medical aid only, indicating that the worker was able to return to work almost immediately (Appendix 2).

While coverage of the Manitoban workforce was substantially expanded in 1959, further expansions were to occur in 1965. On July 1st of that year coverage was "extended to include persons who are ordered under *The Fires Prevention Act,* to assist in extinguishing a forest, brush or grass fire, and also persons assisting in fighting fires under the direction of a fire guardian, conservation officer, or the chief or head of a municipal fire department or brigade" (Workmen's Compensation Board of Manitoba Annual 1965). In the late sixties another serious change to the Act occurred with respect to waiting period. In 1968 it was reduced from three days to the day following the accident (Workmen's Compensation Board of Manitoba Annual 1968).

Since, the extension of coverage in the 1960's, no other amendments have occurred to expand the coverage of the *Workers' Compensation Act* , although there have been several more commissions or reviews which have suggested or indicated expansion of coverage. In 1979, the government once again established a review committee to investigate workers' compensation.

This committee reported "that any recommendation for expansion of coverage merits recognition" (Manitoba 1980, 5). The committee recommended that changes should include:

> agreement in principle that (a) Workers Compensation is a right of all workers and dependents, and a benefit to all employers; and (b) as with any right established by law, Workers Compensation ought to be made as widely and well-known as possible" (Manitoba 1980, 5).

This report gave no further consideration to the extension of coverage.

In September of 1985, another committee was established to make recommendations to the government for improving the workers' compensation system. The public hearing of this new committee lasted from April, 1986 to May, 1987. The committee's final report devoted considerable attention to the expansion of workers' compensation coverage. The committee recommended:

> that workers' compensation coverage should be broadened to include as many employers and workers as possible. This should be done by amending the Act to provide for compulsory coverage, except in situations specifically excluded by Regulation (Manitoba 1987, 145).

However, the recommendations of the committee have yet to be acted upon.

No further reviews have been pursued and likewise further attention has not been given to expanding board coverage to the entire provincial

workforce. From 1916 until the 1959 amendments no significant extensions of mandatory coverage were pursued. Several extensions occurred following the 1959 Royal Commission; however, several sectors of employment were only superficially evaluated. Since the early 1960's there have been no other significant expansions in the mandatory coverage of excluded occupations in Manitoba.

2.7 Who are the Excluded Workers?

It has been suggested that those workers who have not been covered by workers' compensation are mainly Canadian born women and immigrants (Mesman Interview, 1994 ; Wiere Interview, 1993). From those industries and occupations which presently are covered by workers compensation, one can deduce the ones that are not covered. They generally fall under the categories of agricultural workers, clerks, teachers, and domestic workers; however, there are other excluded workers who do not fall under these general categories. On a superficial level we can identify minorities and females as the prime employees in these categories. However a review of Board and Census data will provide for a more specific picture.

Attempting to assess the immigrant component of under-coverage through census and Board data is difficult as workers were not required to indicate whether they were immigrants when applying to the Board.[24] Accordingly one cannot determine from board data whether those occupations

[24] In the early years of operation a worker was asked to indicate ethnicity; however, immigrant status was not required.

in which immigrants are mainly employed were under-covered. However, identifying whether those occupations traditionally filled by females were under-covered is possible as the board from 1920 until the present has required that the worker applying to the board report his/her sex. Further, Manitoba labour force data is available which reports occupational classifications by sex.

A review of labour force activity data[25] and workers' compensation data[26] tends to confirm the hypothesis that female workers are under-covered by the worker' compensation board of Manitoba. An examination of 1921 census data indicates that 14.6 percent of the Manitoban workforce were female, however only 1 percent of the claims accepted by the Board in that year were made by females. By 1951 females comprised over 22 percent of the provincial workforce, yet only 1 percent of claims made by women were accepted by the board. By 1971, census data indicated that although 30 percent of the provincial workforce were women, only 4.5 percent of claims to the Board that year were made by females. By 1991, while females comprised 45 percent of the provincial workforce, only 10 percent of the accepted claims in that year were made by women. Proportionately, the number of claims accepted by the Board does not reflect the number of women in the provincial workforce. Several possible reasons can be deduced to explain these inconsistencies: first, perhaps women do not get injured at work as often as

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[25] Canada Census Data: 1921, 1931, 1941, 1951, 1961, 1971, 1981, 1991. Although the census is conducted every five years, data from 1936, 1946, 1956, 1966, and 1976 were not complete as to occupational listings.

[26] From 1921 to the present time, workers compensation data has presented the number of claims which have been filed by females an processed by the board. For the years 1982 and 1983 the numbers were only presented in bar chart form with no specific figures indicated. From 1985 to present these figures have been reported as complete figures or percentages.

men; second, perhaps women are more safety conscious then men; third, to a certain extent women are employed in safer occupations; and last, many women are employed in occupations which are not required to carry mandatory coverage of workers' compensation and therefore are not considered in the Board's data.

It is the last reason that seems most valid. In 1921 females employed in domestic service, teaching, sales, clerical and agriculture work totalled over 76 percent of the employable female workforce.[27] By 1951 the percentage of women in these sectors remained constant at over 76 percent.[28] By 1971 over 70 percent of females who were employed continued to work in these traditional sectors and that percentage dropped only slightly to 65 percent in 1991.[29] Traditionally these sectors have not been required to carry mandatory workers' compensation coverage and today they still are not required.

Board and Census data indicate that those occupations in which women have traditionally been employed are not required to carry mandatory workers' compensation coverage. However, as the data indicate these non-mandatory covered industries are not filled entirely by females. Many males are employed in these under-covered occupations and as such they are equally exposed to the possible threat of injury and illness from work without the protection of workers' compensation coverage. This paper is concerned about

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[27] In 1921 ,46 percent of the males employed in Manitoba were in the agricultural sector. While only 12 percent were employed in the service and clerical sector.

[28] In 1951, 30 percent of the males employed in the province were in the agricultural sector, while only 11 percent were employed in the service and clerical sector.

[29] By 1971 the percentage of males employed in the agricultural sector had dropped to slightly over 10 percent and has remained rather constant in the two decades since then.

all workers and the need for universal workers' compensation coverage.

2.8 What are the Excluded Occupations?

Western Canada and Manitoba in particular have historically been settled by immigrants from Europe who came to farm. Between "1900 and 1914 nearly 3,000,000 persons entered Canada: well over half of these settled in the west" (McCormack 1985, 117). Many of these immigrants who became part of the workforce of Manitoba in the early part of the century were engaged in agricultural work.[30] Agricultural workers in Manitoba have historically been excluded from mandatory coverage by workers' compensation and remain so today.

There has been a steady decrease in the number of workers engaged in agricultural work. The 1991 census indicated that there were only 40,900 workers engaged in agricultural activities in Manitoba, this number being about 7.3 percent of the province's workforce. Nevertheless, although the percentage of workers engaged in agricultural work has decreased significantly, technological changes in agricultural work have presented the remaining workers in this sector with increased hazards to their health and safety. Automation and the use of chemicals have made farm work more hazardous in recent years (Reasons 1981, 105-108) marking this occupational group for possible mandatory coverage of workers' compensation.

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[30] In 1921 40 percent of Manitoba's workforce were engaged in agricultural work.

Another category of workers who have historically been excluded from workers' compensation coverage are clerical workers. Census data from 1921 until the present shows that women have occupied and continue to occupy these types of positions. On average twenty five percent of women in the workforce are employed in clerical positions. However an equally significant percentage of males have been employed in this occupational grouping.[31] Over the past decade, we have discovered that there are many office and clerical hazards which were not previously identified.[32] Therefore, a considerable proportion of the province's workforce are or will be engaging in work, which has the potential to be hazardous to the health and safety of the worker but which is not required to have mandatory coverage of workers' compensation.

A third segment of the workforce which does not benefit from mandatory coverage of workers' compensation is teachers.[33] The 1921 census indicated 4,325 teachers in the Province of Manitoba constituting 2 percent of the entire labour force. The 1991 census indicated 5,710 elementary school teachers in Manitoba comprising 1 percent of the province's workforce. Teachers are vulnerable to many of the same health hazards as office workers, yet they are not covered by workers' compensation. Further, teachers are exposed to health hazards in activities such as assisting children with contagious childhood diseases and they often participate in physical activities

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[31] Census data from 1921 until present indicate that over five percent of the males employed in Manitoba are employed in clerical positions.

[32] The Ontario Federation of Labour Health and Safety Training Centre has produced a book which outlines office and clerical hazards ranging from job stress, air quality and ventilation, office equipment design and office safety and the use of video display terminals.

[33] Not those employed with universities or colleges.

with the children which could result in injury. Moreover, teachers often experience threats to their personal safety. Nevertheless, these hazards are often not recognized and teachers remain without mandatory coverage of workers' compensation in the event of illness or injury while at work.

A final area of employment which is not covered by mandatory workers' compensation is that of domestic workers. Domestic workers[34] can be classified as those assisting in basic duties of child-care and/or household maintenance. The census labour force data of 1921 indicate that there were 5,388 domestic workers in the province totalling 2.5 percent of the province's workforce. In 1991 there were a total of 5,655 persons engaged in personal service occupations such as housekeeping and child-care, a total greater than one percent of the provincial workforce. Domestic workers face many of the same health hazards as we encounter in our everyday lives, such hazards as the carcinogens in everyday cleaning products. However, domestic workers encounter theses hazards in multiple proportions in the completion of their occupational duties. Yet, the hazards that these workers encounter are seldom recognized and accordingly mandatory workers' compensation coverage is not deemed necessary.

These four categories of employment are not the only exclusions from mandatory coverage in the province. These categories are general classifications which include many different job descriptions. Further, there are many workers who are not covered by mandatory compensation coverage who do not fit into these general classifications. The Workers' Compensation

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[34] For the purposes of this thesis "domestic workers" will be those individuals who receive compensation in exchange for their work.

Board of Manitoba has been estimated that 25 percent of Manitoba's workforce do not have mandatory workers' compensation coverage. Workers' compensation has historically excluded from mandatory coverage[35] those occupations which are not deemed hazardous. However, it is becoming increasingly clearer that these excluded workers face many hazards.

2.9 Manitoba and Mandatory Workers' Compensation Coverage: Why Workers Remain Excluded Today?

Several reasons have been suggested for the exclusion of twenty five percent of the provincial workforce from workers' compensation coverage: These reasons include the following:

1. The basic format of the Act listing those industries required to have mandatory coverage, rather than listing those who are not required.

2. Difficulty that regulators have in assessing hazardous occupations.

3. The unwillingness of recent governments and workers' compensation boards to change the status quo.

4. The availability of other forms of protection for workers who do not have workers' compensation coverage.

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[35] These occupations have not traditionally been seen as hazardous, yet today society is more enlightened to the potentialhazards that workers in these occupations face. Nevertheless, they remain excluded from mandatory workers' compensation coverage.

The Workers' Compensation Review Committee in 1987 suggested that the problem of under-coverage in Manitoba arises from the method of inclusion of industries in the Act (Manitoba 1987, 145). Under the *Workers' Compensation Act* of Manitoba specific industries requiring mandatory coverage are listed in an appended Schedule. All industries not listed in this Schedule are exempt by law from having to provide coverage to their workers. This situation differs from those of other jurisdictions such as the situation in Saskatchewan where the provincial Act lists all those industries which are not legally required to carry coverage. The 1987 Review Committee in Manitoba concluded that "a far greater number of Saskatchewan employers (and workers) are protected by the Act"[36] (Manitoba 1987, 145). Figure 1 presents a break down of the estimated percentage of labourers covered by workers' compensation in Manitoba in 1984. This was the latest year in which an evaluation of this type occurred in Manitoba.

INDUSTRY	PER CENT COVERED
Agriculture	4%
Forestry	66%
Fishing and Trapping	66%
Mines, Quarries and Oil Wells	98%
Manufacturing	90%
Construction	71%
Transporation	69%
Trade	67%
Finance, Insurance, Real Estate	15%
Service Industry	78%
Public Administration	62%
Overall	71%

Figure 1. Workers' Compensation in Manitoba: Coverage in Percentage by Industry

Source: Workers' Compensation Board of Manitoba Report of the Workers' Compensation Review Committee, (Winnipeg, 1987), 145.

[36] This was based upon the fact that in 1985 there were 19,531 Employer Accounts in Manitoba as opposed to 32,743 in Saskatchewan; in 1984 there were 19,097 Employer Accounts in Manitoba as opposed to 32,199 in Saskatchewan; In 1983, there were 18,939 employer accounts in Manitoba as opposed to 31,406 in Saskatchewan

In Figure 1 it is clear that only a small percentage of agricultural and clerical workers (Finance, Insurance, Real Estate) are covered by workers' compensation. It is evident that those industries traditionally viewed as dangerous have a high percentage of coverage. Clearly, there are some industries which are significantly under-covered.

The 1987 review committee presented a recommendation which would correct this flaw in workers compensation coverage, which left many industries without mandatory coverage. The committee recommended that "workers' compensation coverage should be broadened to include as many employers and workers as possible. This should be done by amending the Act to provide for compulsory coverage, except in situations specifically excluded by Regulation" (Manitoba 1987, 145).

A second possible reason for the exclusion of some classifications of workers from mandatory workers' compensation coverage is the failure of policy makers to recognize hidden hazards in the workplace. Many new hazards have been recognized in recent years in such occupations as agricultural and clerical work. Technological changes in processes and the increased use of chemicals have led to new hazards in agricultural work, while office automation and poor ventilation have proved hazardous to many clerical workers. However, those responsible for policy, in some cases, have failed to recognize new hazards and therefore have not undertaken the relevant changes in mandatory coverage.

A third possible reason for not increasing coverage of workers' compensation is the satisfaction with the status quo and likewise the

unwillingness to change. Relatedly, in recent years the Board's concern with other more pressing issues has prevented it from examining changes in coverage. In the 1980's, concern over the Manitoba Workers' Compensation Board's $200 million dollar plus unfunded liability and the unfortunate suicide of individuals in the Board's parking lot on Maryland has focused attention on reducing the unfunded liability and improvement in the quality of service offered to existing clientele. Until these problems are sufficiently solved, there will likely be little attention devoted to the extension of coverage.

A final reason which has been expressed for not expanding coverage is that those workers who do not have the benefit of workers' compensation protection can find protection through the social assistance and income protection mechanisms of government. Unfortunately these forms such as unemployment insurance and disability pensions do not provide the same level or duration of benefits as workers' compensation.[37] Furthermore, many of these alternatives are not insurance but in fact social assistance and were created for an entirely different purpose from that of workers' compensation.

One must consider that regardless of reasons for not expanding coverage, there remains a portion of the Manitoban workforce who are without the protection of workers' compensation. There exists an inherent inequality of protection in Manitoba's workplaces and future consideration should be given to the extension of workers' compensation coverage to these

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[37] These alternative forms of protection will be discussed at length in chapter 4.

excluded workers.

Consideration into the extension of mandatory workers' compensation coverage should begin with an understanding of hazard control and the difficulties faced by regulators. Chapter three will focus on the difficulty of controlling workplace hazards and what can be done when a workplace accident or injury cannot be prevented.

Chapter 3
The Problem of Workplace Safety and Health

> Donald Fawcett was only 56 when he died on Sunday March 20, 1994. On the previous day, Donald a stevedore from Port Colborne Ontario, was working over an open hatch on the ship the Algobay, when he fell close to 12 metres. Donald sustained serious injuries, which resulted in his death (*Winnipeg Free Press* March 21, 1994, A4) .

On any given day workplace accidents such this affect the lives of many Canadians. Although workplace death is not commonplace, often the injuries or illnesses that develop at work are serious, resulting in permanent or temporary disability to workers.[38] Workers in Manitoba are not spared these injuries and illnesses. In 1993, the last year for which complete figures are available, there were 37,581 workplace related accidents and diseases reported in Manitoba (Workers' Compensation Board of Manitoba 1993). Approximately one in every fifteen workers in Manitoba had a workplace injury or illness in 1993.[39]

The inability of regulators to identify hazards accurately has led to the exclusion of some workers from workers' compensation coverage. This exclusion is a problem for regulators who wish to control workplace hazards

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[38] A temporary disability according to the workers compensation board of Manitoba is one that a worker is likely to recover from. A permanent disability is what remains when recovery is complete (Taylor, 1985, 16).

[39] Based on a total Labour Force of 540,000 workers; 294,000 males; 246,000 females (average for 1993) Statistics Canada

and the resulting injury and illness, as strategies for the control of workplace hazards call for prevention efforts and where such prevention is not possible, mitigation in the form of workers' compensation.

This chapter has the following purposes: to give brief definitions of risk, hazards and uncertainly related to the problem of hazard control; to examine the process for controlling hazards with special attention to understanding hazard causation and the process of occurrence; to review strategies for hazard control which essentially are prevention and mitigation in workplace safety and health; to examine the dilemma faced by regulators, in particular the identification and recognition of health hazards; to describe those factors which hinder workplace safety and health prevention in general. From this point the chapter will assess the problem of hazard control in Manitoba paying particular attention to prevention and mitigation activities of Workplace Safety and Health and the Workers' Compensation Board.

Addressing the problem of workplace accidents and disease has become a concern of society as a whole, as the resulting injuries and illness impact directly and indirectly on everyone in society. These effects are basically economic and social in nature. Economically, labourers, employers and society in general encounter losses in wages and production and in the overall negative impact on the economy. Socially, the problem is that society cannot morally permit the continued suffering of labourers from workplace injury or illness. Further, each member of society who toils could potentially fall victim to injury or illness. Hence, the economic and social justifications for regulation to redress workplace injuries and illness.

Most workplace safety and health questions and concerns are addressed promptly in individual workplaces by labourers and employers. Despite these efforts, over this past century government has increasingly played a role in workplace safety and health. Traditionally, this role has been one of economic regulator, with the development of workers' compensation legislation and the operation of the workers' compensation system.[40] In this capacity as regulator of workers' compensation, government is essentially the insurer in the event of workplace injury or illness. However the role that government plays in workplace health and safety has expanded over the last twenty years from an economic one to one that includes the social ramifications of workplace injury or illness (Brown 1982, 90). This has primarily occurred through the introduction of occupational health and safety policy.[41] This policy mandates "government to provide employees with a safe and healthful working environment and with the required occupational health services" (Treasury Board of Canada 1989, 1).

Workplace injuries and illness pose both economic and social problems for society as a whole. In response to these concerns government feels justified in addressing this problem, yet regulators have failed to address the health and safety concerns of all employees. Many workers are excluded in the government attempts to rectify this problem. This failure is best observed and understood in the identification of hazards in the workplace.

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[40] This development is discussed at length in Chapter two.

[41] The first province in Canada to implement workplace safety and health legislation was Saskatchewan which did so in 1972, Manitoba followed in 1976.

3.1 Hazards, Risk and Uncertainty: The Core of the Workplace Problem

At the centre of the problem of workplace safety and health are the concepts of hazards and risk. A large body of literature has been produced on risk and hazards and their role in accident causation. Frequently in this literature, these two terms are used interchangeably, which leads to confusion in understanding their role in the problem of workplace safety and health. There are some fundamental differences between risk and hazards, which can be clarified most effectively through definitions.

Kate (1985 21) defines hazards as "threats to humans and what they value", while risks are defined as "quantitative measures of hazard consequences, usually expressed as conditional probabilities of experiencing harm" (Kates et al. 1985, 68). In more practical terms a possible hazard might be a plank with a nail sticking up through it, and the risk of a worker stepping on it is one in twenty.

Theoretically, the quantification of hazards in terms of risk is a key indicator for regulators in workplaces safety and health. If there is greater risk of injury or illness in one particular occupation as opposed to another, regulators might direct resources to the higher risk occupations in order to reduce the risk to workers. Traditionally, regulators have based their estimation of risk on a trial and error approach and the effect on workers (Whipple 1986, 44). However, where direct human experience is not a guide, management in workplace safety and health becomes more difficult thus uncertainty is present. "Uncertainty" refers to "a lack of definite knowledge, a lack of sureness" and poses quite a problem to those who

regulate (Whipple 1986, 44). Uncertainty poses for regulators a huge dilemma in the identification of hazards, assessing risk and likewise in directing their resources.

Uncertainty evolves from the fact that some risks cannot be estimated through direct human experience. Uncertainty with respect to risk assessment involves asking questions which "lay beyond . . . [a risk assessor's] power to answer" (Weinburg 1986, 9). In these cases regulators (risk assessors) often use assumptions which cannot be tested empirically. "Risk assessors use assumptions to bridge gaps in knowledge" (Whipple 1986, 45). They base their assumptions on information that is gathered through extrapolation:

> Some hazard characteristics may be extrapolated from previous human experience; others require extrapolation from experience with animals; others from analogous events or technologies, and still others may only be calculated theoretically without direct basis in experience (Kates et al. 1985, 50-51).

Accordingly, regulators make many decisions based upon incomplete information which makes the regulation process all the more complex.

Occasionally, regulators or risk assessor can make decisions based on incomplete information, however, where risk assessment is based upon extrapolation, the possibility of error is large. Regulators become reluctant to devote often precious resources to a perceived risk which may or may not be serious. The tendency has been toward avoiding or ignoring those hazards

where risk is based upon extrapolation or assumptions.[42] The result is that some activities which are hazardous are treated as though they were not. For regulation in workplace safety and health, some occupations which are hazardous can be deemed non-hazardous, if there is incomplete information as to the level of risk involved.

3.2 The Process of Hazard Control

Hazard control or management in general and in the field of occupational safety and health is undertaken in three steps. The first step is identification of potential hazards; the second, assessment of the level of risk; the third involves determining how to control the hazard by judging the tolerance of the risk and rationalizing the effort that is made in preventing, reducing and mitigating the hazard (Kates et al. 1985, 51).

This process of hazard control is used in workplace safety and health programs throughout the country. There are significant limitations to the entire process. The difficulty in identifying potential hazards and assessing risk has already been touched upon. These two steps are important to determining the method of hazard control.

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[42] This is evident, that only select occupational disease are recognized as compensible and likewise acknowledged in the *Workers' Compensation Act of Manitoba.*

3.3 Causal Anatomy of Hazards

An essential element in the control of hazards is an understanding of how workplace accidents and injuries occur. Most workplace accidents are the result of a causal sequence of events. Essentially, events induce consequences. These events are linked to consequences through a series of causal pathways. For example where the event is cooking, and the elements are a stove element, butter and a cooking pot, one possible consequence could be that of a burnt hand.

Seven stages of the causal sequence have been identified (Kates et al. 1985, 27). These stages are:

(1) Human needs
(2) Human wants
(3) Choice of technology
(4) Initiating events
(5) Outcomes
(6) Exposure
(7) Consequences

The first three stages are invisible in the chain of events. However the four remaining stages of the causal structure are best understood in terms of an example presented in Figure 2.

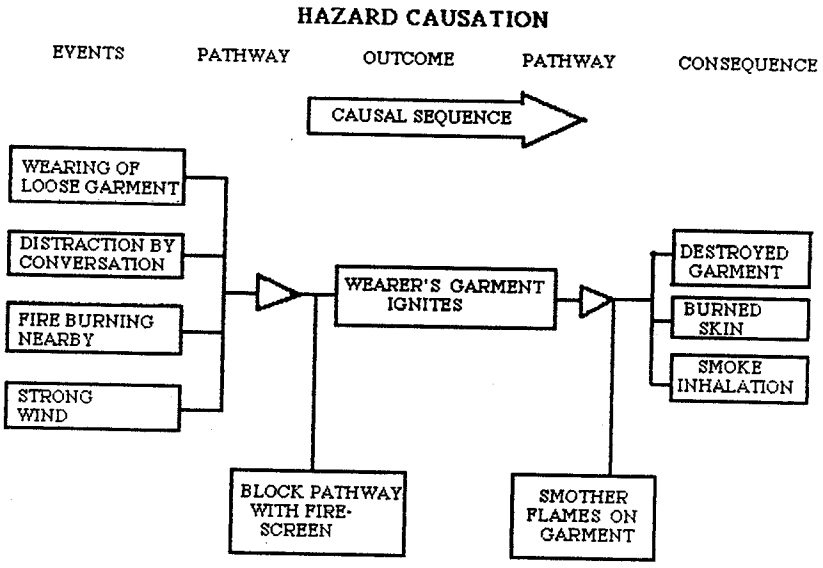

Figure 2. Stages of Hazard Causation
Events and consequences contributing to a fireplace accident. Note that several events contribute to the ignition of the wearer's garment and that this leads to several consequences. Coping with the hazard may be achieved by outcome prevention, illustrated here by a fireplace screen; and consequence prevention, illustrated by actions to smother the flames on the garment.

Source: Kates, Robert W. and Christoph Hohenemser and Jeanne X. Kasperson eds. Perilous Progress: Managing the Hazards of Technology. Boulder, Colorado: Westview Press, 1985, 28.

Through an examination of the causal anatomy and the stages of hazard causation, potential hazards are identified and risk can then be assessed. Once this has occurred a method for controlling the hazard can be developed.

3.4 Strategies for Control

Once the causal structure or anatomy is realized, potential hazards have been identified, and the degree of risk has been calculated, there are

three strategies which have been developed to control a hazard:

(1) Prevention of hazard events;

(2) Prevention of hazard consequences once events have taken place;

(3) Mitigation of consequences once these have occurred (Kates et al. 1985, 25).

Key to hazard control is a thorough understanding of the causal pathway. Prevention or control can occur only when the causal pathway is blocked. If one were to look at the fireplace example (figure 2), prevention at the hazard events stage would consist of using a screen to block the fire, to remove loose garments, or to stand further away from the fire. Prevention of hazard consequences could consist of smothering the flames with water or an extinguisher. In either case prevention occurs at specific points along the causal pathway.

Prevention is a fundamental element in the control of hazards (Kates et al. 1985, 25). Hazard control is substantially limited as "society as a whole cannot reduce all hazards or reduce any hazard to zero risk" (Kates 1986, 211). Thus it is not possible entirely to prevent the onset of hazards. Yet it is possible to reduce their impact as well as risk by devoting attention to the prevention of events in the causal sequence. Here efforts are made to reduce the seriousness of the consequences, thus controlling the hazard and lessening the consequences and likewise the effects on a particular worker.

Where prevention is not possible, hazard control strategies suggest the mitigation of consequences or the lessening of the impact of the these hazards. Mitigation in workplace safety and health is generally in the form of workers'

compensation or insurance. Mitigation "is often an initial societal response when risks have not been anticipated or when the causal chain of hazard is poorly understood" (Kates et al. 1985, 57).

In Canada strategies for the control of workplace injuries and illness are regulated by workplace safety and health branches of labour departments and by workers' compensation boards. While prevention is the primary responsibility of workplace safety and health, workers' compensation is charged with the responsibility of mitigation. There also exists are area of dual responsibility where both work together to prevent hazardous consequences once events have taken place (Figure 3). Workplace safety and health accomplishes this prevention through health and safety training, while workers' compensation performs this prevention function through rehabilitation and retraining.

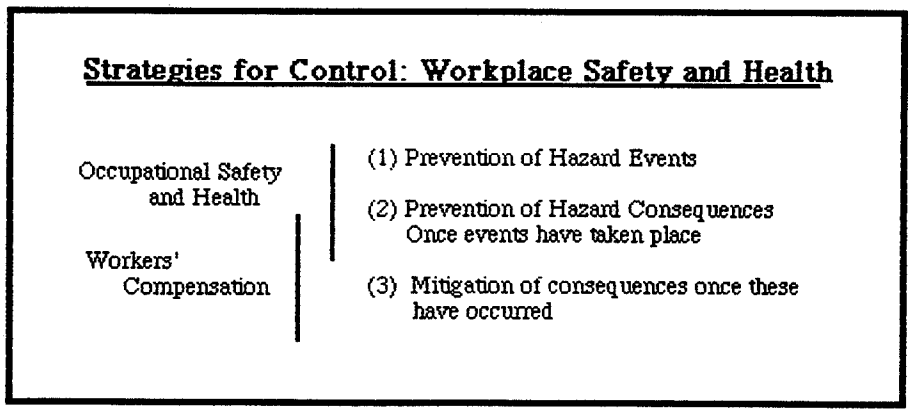

Figure 3. Strategies for Hazard Control: A Dual Regulatory Responsibility

These two organizational bodies, although essentially operating independently of each other, fundamentally work together to control the onset of workplace hazards and their consequences.

3.5 Controlling Hazards in the Workplace: The Regulators Dilemma

Regulators working to achieve the fundamental goal of eliminating workplace injuries and illness through the prevention of workplace hazards face a serious problem in fulfilling this goal. Hazard control basically involves the interruption of hazards at some point in the causal sequence. Interruptions at any stage in this sequence would either prevent or reduce the hazard consequences. Thus this interruption reduces the seriousness of the impact. However, the problem faced by workplace regulators is that the causal anatomy of some hazards does not necessarily unfold as the causal sequence suggests. In some cases this flow is inappropriate as "a hazard is first recognized through an experience release or consequence" (Kates et al. 1985, 33). In this case the causal sequence is missing leaving the hazard control manager in a perplexing situation of identifying the causal sequence that might have taken place. In other words, we do not know how the hazard occurred, yet we know that a problem exists.[43]

The interruption of the causal sequence as a form of hazard control is not to be discarded as having no use. In fact this method of control has been in the past an excellent method of preventing or reducing the impact of a particular hazard. This method is most suited when applied to safety hazards. A safety hazard emerges from a situation in which workers may die or become injured from such problems as scaffolding defects, substandard electrical wiring, excavations without side wall supports and unprotected cutting

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[43] For an example of this one need only look at a particular occupation or place of work, ,where workers are diagnosed with a rare form of cancer. How they got this cancer is not known, however the fact that an extraordinary number of workers have this cancer is indication of a potential hazard.

mechanisms. Safety hazards often have a clear cause and effect, the duration of the causal sequence is often swift, and the hazards tangible or evident to the eye. In such cases interruptions in the causal sequence or the event stage are often easily assessed and implemented. For example, keeping a construction site clear of debris or placing a protective shield over rotating blades would prevent some serious consequences.

The causal interruption method of preventing workplace accidents and injuries is the most common method and is the traditional form of hazard control. This method is primarily used by those concerned with workplace safety and health such as inspectors and workplace safety and health committees.[44]

Where a workplace hazard is identified through an experience release or a consequence, prevention through causal interruption is not an available option. This is not available as the causal sequence is not known. This problem generally occurs with workplace health hazards. Occupational health hazards "unlike safety hazards . . . are more difficult to identify" (Manga et al 1981, 37). These hazards often do not have an immediate cause and effect reaction and they do not follow the general causal sequence. Four general types of occupational health hazards have been identified:

Biological - bacteria, fungi and insects

Chemical - dusts, poisonous fumes, gases, toxic materials and carcinogens

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[44] These committees are required under most provincial workplace safety and health statutes; they require the cooperation of both labour and management to inspect their workplaces and likewise prevent workplace injury or illness.

Physical - noise, heat, vibration and radiation

Stress - as induced by physical, chemical psychological and ergonomic factors (Ashford 1976, 73).

This list of examples is not exhaustive; however, it helps the reader to appreciate these particular categories.

Since most health hazards do not follow the general causal sequence and are identified through their consequence or experience release, the problem of identifying the health hazard becomes a detective game. Often health hazards are missed entirely, even when a particular consequence is identified. Sometimes a work-related illness has the same symptoms as a non work-related illness thus leaving the work connection unnoticed. In such cases, the particular hazard can easily be missed and workplace causality not considered.

Workplace illness causality is difficult to recognize. Where immediate cause and effect are not evident, the identification of health hazards and the way they are related to work can be problematic. The dilemma for regulators is that although "it may often be suspected that the source of a given health problem is in the workplace, current research methods and measures may be unable to link the two conclusively" (Messing 1991, 23). This creates a mystery as one is unable to identify, with absolute certainty, the direct cause of a particular disease in an individual.

There are many factors which influence and likewise make the identification of health hazards difficult. These factors are referred to as

confounders, as they make risk assessment and hazard identification difficult. Further confounders ultimately make hazard control extremely complicated.

3.6 Confounders: an Added Dimension to the Problem

A confounder is defined as a perplexity or the inability to identify with absolute certainty if the cause of disease in an individual is occupationally related (McCormick 1993). In other words, the problem involves distinguishing the occupational illness from those which result from other causes outside of work influence. Accordingly, confounders produce an added dimension to the problem of identifying many workplace health hazards.

A particularly troubling problem with workplace health hazard identification or confounders is that "unlike safety hazards, the effects of health hazards may be slow, cumulative, irreversible, and complicated by non-occupational factors" (Ashford 1976, 9). Often the cause of a particular health hazard is multiform, thus further complicating the problem faced by regulators and/or inspectors in its identification. Essentially, confounders increase the level of uncertainty in the identification of health hazards.

Many different types of confounders have been considered as they relate to the identification of health hazards. Some of the most notable confounders are latency periods, frequent employment changes, symptoms identical to those of non-occupational origin and multiple causation. Explanation of these confounders demonstrates the perplexity that these phenomena add to

the identification of health hazards.

One serious problem with the identification of potential occupational health hazards is that of a latency period. A latency period is essentially an extension or lengthening of the causal sequence period to an undetermined degree. Latency periods have been known to range anywhere from a few days to many years. Essentially, during these latency periods many changes occur which make identification of hazards complicated. For example, a worker who has contracted a work-related cancer might experience the symptoms many years after exposure. During the interval the worker may have moved, changed jobs, altered his/her lifestyle[45] or come into contact with other potentially carcinogenic substances. These changes would make precise identification of the cause extremely difficult.

The problem with latency period is prominent in chemicals. As we know, one health hazard classification is chemicals. Chemicals often create uncertainty in the identification of health hazards as the "effects of chronic chemical exposure become evident only after a latency period of many years" (Nelkin and Brown 1984, xv). The length of the latency period can vary from worker to worker, and depending upon the disease, it can range from a few days to many years from initial exposure to the appearance of the first symptoms of the disease:

> Metal fume fever . . . often occurs after a delay of several hours from the initial exposure and lasts 24 to 48 hours with apparently no long term

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[45] He/she started smoking, drinking, changed diet or is stressed.

> consequence. Leukemias have been associated with exposures to benzene, ionizing radiation and radium as many as 20-30 years following exposure (McCormick 1993)

During this latency period many other factors may come into play between the initial exposure and the first sign of symptoms. These factors further complicate the problem of health hazard identification.

One consequence of latency periods is that workers often undertake risks where a potential hazard is not visible, so that exposure or contamination increases the latency period, thus spreading the impact of the particular hazard and endangering the health of many more workers.

Frequent changes in employment is another confounder which complicates the identification of occupational health hazards. This problem is especially prevalent today, where a particular worker might occupy many employment positions over the course of his/her lifetime. This frequency of change only confuses those trying to identify a potential occupational health hazard. Identifying the initial hazardous event becomes increasingly more difficult, as those workers who were exposed at one particular point have moved on to other jobs and do not associate their illness with the related job.

Another confounder in the identification of workplace health hazards is the similarity of symptoms of most occupational diseases to those of non-occupational origin. Doctors investigating the cause of an illness are often not aware of possible occupational origins. "At most medical schools students receive only a few hours or less of instruction in occupational problems.

Rarely are they trained to identify workplace sources of disease" (Nelkin and Brown 1984, 136). In some cases, a worker having experienced certain symptoms, might explain them to a health care professional only to have these symptoms confused with more common ailments.

A fourth confounder in occupational health hazard identification is that many occupational diseases result from multiple factor causation (McCormick 1993). Essentially, exposure need not be to a specific chemical at a specific time, but rather exposure can be to a combination of chemicals over a prolonged period of time. In the working world hazards are not isolated and they are restricted to the workplace. In many cases workplace exposure combines with non-occupational factors to cause disease. An example of such a combination is the "effect of two known carcinogens - asbestos and tobacco - which cause an extremely high risk of lung cancer to those exposed to both" (McCormick 1993). Accordingly, many workplace and outside factors have the potential to affect the health and safety of workers. One result of multiple factor causation is that "not all workers will be affected in the same way or to the same degree . . . making the association between a particular job and a symptom or illness . . . complicated" (Messing 1991, 24).

Confounders make the identification of workplace health hazards extremely difficult. In most cases "many workers, their employers, and even their personal physicians are unaware of the workplace origins of many illness and diseases" (Hilliard 1991, 163). For regulators, the problem becomes one of trying to identify and prevent workplace hazards where there are no immediate cause and effect and further where many factors make hazard identification difficult. The list of confounders presented is not exhaustive;

there are potentially many others, adding to the extreme difficulty that workplace safety and health regulators and inspectors face in identifying workplace health hazards.

Prevention is a fundamental goal in the regulation of workplace safety and health and is a basic element in hazard control. However, a good knowledge of the causal sequence of hazard and the ability to identify hazards is essential to the prevention of workplace illness and injury. Prevention has been relatively successful in the control of safety hazards; however, prevention has not been very effective in health hazard control. With health hazards, the causal sequence if often unknown and the identification of hazards is difficult to determine as confounders complicate this process. Prevention of workplace injury or illness in general is compounded by many other problems. Regulators must also address these problems in preventing workplace injury and illness.

3.7 Factors Compounding the Problem of Workplace Safety And Health

The problem of workplace safety and health, in general, is often compounded by many other factors, which makes the prevention of workplace safety and health hazards increasingly more difficult to accomplish. Such factors as the age of a worker, the workplace environment, familiarity with equipment, shift work, heredity, and the general human element of accident causation make prevention difficult even in the case of safety hazards. Compounding all these elements is technology, which is constantly changing and altering the prevention efforts of regulators in workplace safety

and health. An examination of some of these factors will show how they impair efforts at preventing workplace injury and illness.

One factor which compounds the problem of workplace safety and health is that of the age of a worker. This factor will become more prevalent as Canada's workforce grows progressively older. As workers grow older, their mobility decreases so that the probability of their experiencing accidents grows greater. One study concluded that older workers or "those age 65 or older appear more likely to suffer work-related permanent disabilities and fatalities on the job" (Mitchell 1988, 12). Therefore, as Canada's workforce continues to grow older, the likelihood is that more workplace accidents and fatalities will occur and prevention efforts of regulators will be stretched.

A second factor which impacts on workplace safety and health is the workplace environment and surroundings. The environment often contributes to the causation of hazards thus magnifying the hazard consequences. Studies have indicated that the temperature of the workplace has significant impact on the health and safety of workers. Hot and moderate temperatures may have different effects on workers required to lift weights. (Messing 1991, 30). Cold working conditions have been known to adversely affect the general health of labourers and can increase menstrual cramps in female workers. Other factors such noise, lighting and poor ventilation might also effect the health and safety of workers. As workplace environments evolve, more and more factors can be identified which make prevention more difficult.

Familiarity with equipment is believed to compound the problem of workplace safety and health. In other words, the repetitive routine tasks on equipment can impact on workplace safety and health. A worker might become careless and not devote attention to the job task, thus inviting an accident. This is particularly relevant in the case of drivers who "tend to underestimate the dangers" (Nelkin and Brown 1984, xiv). Familiarity makes prevention difficult as it increases the potential for an accident.

Another factor which impacts on safety and health of workers is natural predisposition, or heredity. Some argue that "differences in heredity (genes) may predispose workers to some diseases [such as cancer]" (Messing 1991, 37). Further, others argue that one labourer might be more clumsy or awkward than other workers as a result of a natural predisposition, resulting in increased accidents and possible injury or illness. In either case the natural predisposition places another element into hazard causation thus complicating prevention efforts.

Prevention efforts in the past have not often focused on the element of shift work in hazard causation, but shift work has been determined to be a factor. Dr. Lawrence Smith and his colleagues at the University of Sheffield in the United Kingdom have ". . . found clear evidence that night workers are at higher risk of injury than colleagues on day shifts" (*Winnipeg Free Press*, October 22, 1994, A5). Moreover the same study found that risk of injury at night increased toward the end of the work week. This study leads one to believe that it is a combination of fatigue and shift work which causes increased risk of injury. Accordingly, there is an increased potential for injury to the shift worker.

Many other physiological and environmental factors affect workplace safety and health. Anxiety or fear, excess weight, hypertension, poor air quality or workplace design and equipment (ergonomic factors) can increase the risk of injury or illness. These conditions increase elements in the causal sequence of events thus complicating prevention efforts. However, there is one factor which serves as a major barrier in the prevention of workplace injury and illness. This factor is technology.

Overshadowing all these compounding factors is the problem of technology. It is one of the most troublesome factors which impacts on workplace safety and health. Rapidly evolving technology is creating many new workplace problems, which often impact negatively on the health and safety of workers. Technological changes to methods of production add new chemicals, machinery, and technical processes with which prevention efforts must keep pace. Yet prevention efforts cannot always keep up.

Although technology has had a negative impact in workplace safety and health prevention, it has also played a positive role in its efforts to engineer prevention and likewise make work less hazardous. Yet even these positive changes have been altered by human ingenuity to once again create hazardous working conditions

Consider the case of technological changes which resulted in the creation of "the two-hand punch button response to activate a punch press" (Margolis and Kroes 1975, 4). This modification was developed to prevent injury to workers' hands by ensuring that both hands were away from the press at the time of cutting books for binding. This change, which was

designed to prevent accidents, actually failed as human ingenuity worked around the design:

> All too frequently workers circumvented the two-button operation by jamming one button permanently, thus permitting machine activation by only one hand with the other free to be caught in the machinery and mutilated or severed (Margolis and Kroes 1975, 4).

Thus, efforts at prevention through technology are sometimes rendered hazardous by the actions of workers.

The many problems faced by regulators in workplace safety and health prove to be a challenge to those attempting to prevent injury and illness. It is likely that new problems are developing even now. Moreover, technology and human ingenuity are further hindering prevention efforts.

It is evident that prevention efforts are limited in what they might or might not accomplish. Unfortunately, there are limits to preventing hazards, as "society as a whole cannot reduce all hazards or reduce any hazard to zero risk" (Kates 1986, 211). The many obstacles faced by regulators and the fact that risk can never be eliminated makes their mission all the more difficult.

3.8 Consequence of the Regulation Dilemma

Many health and safety hazards are present in workplaces today. Strategies for control of these hazards call for prevention and mitigation of the

events or consequences. However, prevention efforts are limited and what is accomplished can only be effective where the causal sequence is understood and hazards are identified. The limitations of these prevention efforts are most obvious in the case of health hazards where hazard identification is difficult to assess. Many confounders make this identification difficult and add to the regulator's dilemma. Furthermore, overall prevention of workplace injury or illness is complicated by many other factors. The resulting situation faced by regulators is essentially two-fold in nature.

As health hazards are difficult to assess and accordingly prevent, regulators tend to devote more time to the identification and prevention of safety hazards (Ashford 1976, 72). There is relative ease in identification and prevention of safety hazards through blocking the causal sequence. As such, occupational safety and health regulators devote more attention to workplace safety hazards. There is more visible success with prevention efforts which focus on safety hazards. Thus, occupational safety and health regulators can prove to society that they are actually accomplishing the goal of preventing the undesirable effects of work through the control of workplace hazards.

The second dimension of this problem is that the inability to identify those health hazardous occupations has often led regulators to view some of these occupations as safe where in fact they might not be. Health hazard confounders divert health hazard assessors away from these potentially hazardous occupations, leading one to assume that they are safe. Thus workers in these occupations are not protected by the prevention mechanism, which is fundamental to hazard control. In addition, overall prevention of workplace injury and illness is becoming increasingly more difficult. Yet, for

purposes of hazard control, where prevention is not possible, mitigation should occur. In workplace safety and health, mitigation usually takes the form of workers' compensation. However, in Manitoba all workers do not have the benefit of workers' compensation.[46]

Therefore regulation to prevent injury and illness is only protecting a portion of the workers in society. For some workers, particularly those facing health hazards, the goal of prevention is not being met. Where prevention is not accomplished, strategies for hazard control suggest mitigation or compensation. However, in most jurisdiction in Canada compensation is not mandatory for all workers.[47] In many cases the strategies for the control of hazards is not achieved by either prevention or mitigation. These consequences are evident in the activities of Workplace Safety and Health and the Workers' Compensation Board in Manitoba.

3.9 The Strategies for Control in Manitoba

Prevention

Workers, employers and government make efforts toward the prevention of workplace accidents.[48] All three parties have genuine interest

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[46] This was discovered in Chapter two, where we learned that twenty-five percent of Manitoba's workforce do not have mandatory workers' compensation coverage. Agriculture workers, teachers, clerks and domestic service workers generally comprise the excluded workers. However, many other workers remain excluded from this coverage.

[47] This is evident in the development of workers compensation in Manitoba; workers compensation coverage in mandatory only in those hazardous industries. An exception being the farming industry.

[48] Workers and employers work at the individual firm level towards the prevention of workplace accidents and injuries. The bulk of the prevention activity takes place at this level. This is referred to as the internal responsibility system ; as inspections cannot occur in every workplace the onus of maintaining safety is placed upon the employer through workplace safety and health committees. The effort made by workers and the employers is a crucial ingredient .

in preventing workplace injury or illness. The prevention efforts of government, in Manitoba, are basically carried out by the Occupational Safety and Health branch of the Department of Labour under the *Workplace Safety and Health Act.* [49] The goal of workplace safety and health is to reduce workplace injuries and illness in Manitoba. The *Workplace Safety and Health Act* applies to every provincial government agency, every worker, every employer and every self-employed person whose workplace safety, health and welfare standards are under the exclusive jurisdiction of the province.[50] Essentially this jurisdiction encompasses the entire provincial workforce.

In Manitoba workplace safety and health legislation is based upon internal responsibility, the primary responsibility for prevention being the employer's. This added dimension of workplace safety and health legislation is beneficial, considering that "it is well recognized that no amount of law making itself prevents accidents" (Alberta 1975, 82). Efforts must be made by all parties to assist in preventing workplace injury and illness. The effort is assisted through the creation of rights such as, the right to access information, the right to know and the right to refuse unsafe work, and responsibilities such as, education for workers, health and safety committees, and mechanisms of inspection and enforcement.

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[49] In Manitoba the *Workplace Safety and Health Act* is essentially the consolidation of legislation previously referred to as *The Building Trades Protection Act, The Steam and Pressure Plants Act, The Gas and Oil Burner Act* and *The Fires Prevention Act* to name a few. These and other pieces of legislation were integrated into one omnibus piece of legislation.

[50] Part II of the Canada Labour Code deals with occupational health and safety in federal jurisdictions. The philosophy of this legislation is a mirror image of provincial legislation, in that its goal is to reduce workplace injuries and illness. The federal jurisdiction is that of interprovincial and international industries: railways, highway transport, pipelines, canals, airports, radio, television broadcasting and cable systems.

Access to information is a common element in most modern occupational health and safety statutes. When such legislation first came into existence, workers were not expected to have an important role in identifying workplace hazards. However, during the last few years the importance of workers in preventing workplace injury and illness has grown.[51] Workers now use their legal access to information to improve working conditions in their own workplace environment (Nash 1983, 23). Allowing employees to accompany government inspectors when they inspect their workplace and making these reports available to employees have given workers a new role, actively involving them in the prevention of workplace injury and illness.

The right-to-know has also improved the position of workers in health and safety. In Manitoba this right became legal in January of 1988 (Hilliard 1991, 157). The relevant legislation essentially establishes that workers have the right to know of any potentially harmful or hazardous materials to which they may be exposed. The onus of notification is placed upon the employer. This right allows workers to assess potential hazards within the environment in which they work.

A more recent addition to the legislation in most jurisdictions is the statutory right to refuse unsafe work. Most legislation permits workers to refuse any task or job that they believe may be hazardous to their health and safety. In most cases this is a right; however, along with this right comes the responsibility to avoid hazards that may be dangerous to others in a particular workplace. This law encourages joint participation between the employee and

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[51] This is in response to the internal responsibility system.

employer to identify and solve potential problems of safety and health. Although the right to refuse unsafe work is fundamentally an enormous shift toward prevention of work related illness or injury, it is basically a useless right, when one is dealing with non-visible health hazards, which are not recognizable by the affected worker.

The requirement of employee education in Manitoba is an important addition to workplace safety and health legislation. Construction projects which employ five or more workers, for example, must establish an educational program at the worksite. All workers are required to attend a 30 minute educational period every two weeks, without loss of pay or benefits (Hildebrand 1994). Every other employer in the province must grant educational leave of two working days to members of the workplace safety and health committee so that they may attend seminars, programs or courses in workplace safety and health. This emphasis on education constitutes a major attempt to prevent injury and illness in the workplace.

The formation of joint health and safety committees is required in most jurisdictions. Whether a particular workplace is required to have a committee is determined by the number of employees or a general government directive. A workplace safety and health committee "enables employers and employees to work together to identify and solve safety and health problems in the workplace" (Labour Canada 1988, 1). It is believed that "alert and careful employees, preferably with a good safety committee, can assure much greater freedom from industrial accidents than a large force of inspectors" (Manitoba 1958, 45). Moreover these committees give employees the opportunity to become active in making recommendations on conditions that affect them

directly. It is hoped that the workplace will thus become healthier and safer for everyone.

The inspectorate is another important aspect of health and safety. Inspection of a workplace is an essential and integral part of a health and safety program. Inspections, which are required by law on a regular basis, should be conducted to identify and record potential and actual hazards associated with buildings, equipment, environment, processes and practices. These inspections should identify any hazards which demand urgent attention, whether they are unsafe conditions or acts. They should ensure that existing hazard controls are operating properly, and where suitable, suggest corrective action. Inspections must always be followed up to ensure compliance (Labour Canada 1993, 6).

One essential element of workplace safety and health legislation is the inclusion of an enforcement mechanism. The most common method of enforcement is fines. The amount of a particular fine depends primarily upon the seriousness of the offence. In most jurisdictions there is also the enforcement option of imprisonment; however, in practice imprisonment rarely occurs.

Workplace safety and health legislation endeavours to prevent workplace injury and illness through rights and responsibilities. Yet provincial legislation is not the sole prevention endeavor; many other efforts are undertaken. The federal government, labour organizations and academia

assist in the prevention of workplace injury and illness.[52]

Many different efforts by many different parties are devoted to the prevention of workplace injury and illness. These prevention efforts must never be undervalued. Prevention as a strategy of hazard control is fundamental to reducing the impact of an injury or an illness. In Manitoba these efforts have been somewhat successful in the identification and prevention of safety hazards.

Yet there are some weaknesses in the system. The traditional safety bias is evident in workplace safety and health efforts in Manitoba. Government inspection focuses on traditional hazardous industries. Inspections conducted by workplace safety and health are based upon information supplied by workers' compensation. Workplace safety and health officers[53] are assigned inspections based on the workers' compensation classification (Hildebrand 1994). Essentially this means that those occupations perceived as non-hazardous are entirely ignored by workplace safety and health inspectors. This leaves only the internal responsibility system to monitor safety and health in workplaces not seen as traditionally hazardous. Yet we know that health hazards are present in many different workplaces. Further we know health hazard identification is difficult and as such prevention efforts in this area are

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[52] The federal government instituted WHMIS (Workplace Hazardous Material Information System) which provides information on hazardous materials used in the workplace). The Manitoba Federation of Labour created an occupational health center to assist workers, employers, health care professionals and government in the prevention of injury and illness. The center provides workplace inspections, education programs and medical examination all aimed at prevention. Academia is another effort aimed at preventing workplace injury and illness. Those studying such disciplines as health care, economics, sociology, labour and public policy have all devoted considerable time and energy to the problem of workplace safety and health.

[53] This is the official title for inspectors in the workplace safety and health branch.

rather limited. Therefore prevention efforts as a whole are significantly limited.

Total prevention of workplace injury and illness will never be achieved, as risk can never be reduced to zero (Kates 1986, 211). Thus strategies for the control of hazards and likewise injury and illness dictate the implementation of mitigation. Mitigation workplace safety and health is provided through workers' compensation.

Mitigation

The primary form of mitigation in workplace safety and health is that of workers' compensation. We have seen that in Manitoba workers' compensation has developed out of a historical trade off between workers and employers. Further compensation coverage in Manitoba has expanded to cover approximately seventy five percent of the Manitoban workforce. Not surprising is the fact that the remaining twenty five percent of the workforce is employed in industries not deemed hazardous.

The Workers' Compensation Board of Manitoba provides for two tiers of coverage for workers in the province: mandatory coverage for those employed in traditionally hazardous industries; and optional coverage[54] for those who wish to apply to the board. Those labourers who are not included in mandatory coverage are basically excluded by the failure of regulators to recognize health hazardous industries and assess risk. Yet the non-

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[54] This determination is at the discretion of the employer.

identification of a hazard does not mean that that occupation is not hazardous. Risk can never be zero; therefore to some degree all workers can possibly be injured or become ill at work.

In those industries with non-mandatory coverage where risk is not evident or where hazards are not seen, the option for coverage of workers' compensation will likely not be taken. Take the example of a person purchasing insurance. If one does not live in an area prone to earthquakes, one is not likely to purchase earthquake insurance. Accordingly, where an employer is conducting operations in an industry not accurately assessed for hazards, in particular health hazards, that employer will probably not take up the option of carrying insurance. Yet the potential for accident and injury is present in that particular occupation.

Strategies for hazard control suggest prevention and mitigation, yet total prevention can never be possible; therefore mitigation should be available to control the hazard. The inability to assess risk thoroughly means that some workers, though facing hazards, do not have the benefits that workers' compensation provides.[55] In Manitoba this mandatory workers' compensation protection is not available to all workers, and the option for coverage is often left beyond the control of these excluded workers.

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[55] Workers compensation basically provides income protection and rehabilitation.

Chapter 4
Universal Workers' Compensation in Manitoba

Preventing work-related injury and illness is a significant challenge and concern of most provinces in Canada. Despite technological and scientific advances in understanding and controlling workplace hazards and risks, work-related death, disease and injury continue to occur (Rest and Ashford 1992, 1). Efforts to control workplace hazards stress prevention and where this is not possible mitigation in the form of compensation. Preventative measures have proven to be limited, particularly in the case of workplace health hazards, where the hazard events or sources are difficult to identify.

When prevention efforts are unsuccessful, many workers fall victim to these injuries and illnesses. Workers suffer the pain of the injury or illness and often struggle with rehabilitation and loss of work. Furthermore many workers also endure the difficulty of income loss. Fortunately for many workers, these concerns are addressed promptly by workers' compensation coverage. Yet for a select group of excluded workers[56] in Manitoba, workers' compensation coverage is not available. These individuals are often left with physical pain, emotional suffering and no source of income. Often, these effects impact directly on the worker's family, compounding the problem.

This chapter proposes that Manitoba adopt a system of universal[57]

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[56] This is the term used by the author to refer to those workers who do not have the benefit of mandatory workers compensation coverage. In Manitoba the excluded workers are primarily employed in clerical, teaching, domestic service and agricultural professions.

[57] The term universal refers to the extension of workers compensation coverage to the entire Manitoban labour force.

workers' compensation. This extension of coverage would fulfill the twofold strategy of hazard control, that being prevention and, where this is not possible, mitigation or compensation. The chapter will establish that the excluded workers of Manitoba do in fact encounter many potential hazards in their workplaces; Then the discussion will examine the requirements of injured workers when prevention is not possible; explore alternative mechanisms to workers' compensation protection available to workers in Manitoba; show that there is a long history of recommendations for extension of coverage in Manitoba; and suggest that Manitoba should draw upon the example established in British Columbia.

4.1 Hazards Impacting on the Health of the Excluded Workers

The traditional view of such occupations as domestic service, teaching and clerical work is that they are not hazardous but safe. However, considerable research, conducted particularly over the past twenty years, reveals that workers in these industries do in fact encounter many potential hazards. Also many of these hazards are known to have a definite etiological role in the development of disease. Furthermore, currently workers face new hazards which were not considered when workers' compensation first came into existence.

Those excluded are basically agricultural workers, teachers, domestics and clerical workers. In recent years considerable research has been conducted into the potential hazards affecting these excluded workers, and labour in

general. An examination of some of the potential hazards affecting the excluded workers will provide the reader with an understanding of the health and safety problems that these workers confront.

Agricultural Workers

Agriculture is the foundation of Manitoban industry. The work is laborious. Farming has been labelled the third most dangerous occupation in Canada, surpassing construction and equalling mining in fatal accidents (Messing 1991, 75; Smith 1969, 2). The magnitude of this danger is evident in Saskatchewan, where it has been estimated that a member of one in every four farming families will at some time suffer an accident (Messing 1991, 75; Smith 1969, 2). The fear of injury from accident is further aggravated by limited access to heath care in rural settings (Messing 1991, 78). Farm workers and their families are often some distance from emergency health care services, thus prolonging treatment and intensifying the impact of the injury.

The safety hazards associated with farm work have long been readily evident (Reasons 1981, 105). Agricultural workers are often over-exposed to heat or cold, scorching sun, temperature swings between day and night, harsh winds and driving rains, compounding the difficulty of the work (Jasso 1984,92). "Farmwork involves the various tasks connected with planting and harvesting, including irrigation, fertilizing, pruning, weeding, pest control and harvesting" (Jasso 1984, 87). These tasks often involve the use of equipment which has the potential to harm. Agricultural workers employ a wide variety of equipment and tools which present many possible hazards. "Tractors, spray rigs, irrigation poles, movable bins, conveyor belts, hauling

trucks, ladders, hoes, scissors, knives and saws are all used routinely by farmworkers" (Jasso 1984, 92). As many different types of equipment are used by these workers the potential for accident grows:

> Many farm machines such as balers, slathers, combines and rock-pickers are used only during certain seasons of the year when a great deal of work has to be accomplished in a minimum of time. As a result, there are often not enough operating hours to become thoroughly familiar with the machines' potential hazards, and haste and unsafe practices lead to injuries (Messing 1991, 77).

The nature of agricultural work exposes these workers to many safety hazards which have the potential to harm.

The role that safety hazards play in endangering agricultural workers is evident; however, the role that health hazards play is particularly difficult to identify. Farm workers face a host of health hazards which are associated with many farm duties such as animal care, building and grounds maintenance, milling, equipment cleaning, stable cleaning, office work and harvesting. All of these duties have the potential adversely to affect the health of workers when they are exposed to many chemicals, possible infections and allergy causing dusts.

Chemical innovation in the farming industry has introduced a wide variety of chemicals such as pesticides, fertilizers, insecticides, herbicides and fungicides to assist with production. However, "these chemicals are not target-specific -- they poison the workers in the fields as easily as the plants

they are aimed at" (Jasso 1984, 93). In recent years some of these chemicals have been identified with nervous system disorders as they "may be absorbed and transported in the blood and may sometimes attack the nervous system" (Messing 1991, 75). Chemicals have the potential seriously to harm the health of agricultural workers who come into contact with them.

Aside from chemicals, farm workers can come into contact with possible infections and disease when they work directly with livestock. Some diseases and infections carried by livestock can be transmitted to humans. Recently, the journal Science reported that scientists at the Commonwealth Scientific and Industrial Research Organization - Animal Health Laboratory in Australia had identified a disease known as equine morbillivirus or EM. This "strange virus kill[ed] 14 Australian racehorses and their trainer" (*The Globe and Mail* April 7, 1995, A15). The trainer had contacted this disease from the horses with which he had worked. The possibility remains that a farm worker may become seriously ill as a result of his/her direct work with farm animals.

Direct contact with chemicals and farm animals is not the only ways in which agricultural work can harm the health of workers. Sometimes the harvesting of crops can impact on the health of individuals workers. Those working in cereals or hay sometimes develop an ailment referred to as Farmers' Lung, which is an inflammation of the nasal mucous membrane (Messing 1991, 75). Farmers' Lung causes the worker to have difficulty breathing and impairs overall health.

Agricultural workers encounter many hazards which have the potential to mangle or poison, injure or even kill. The hazards to which

agricultural workers are exposed are becoming increasingly more evident. Technology has presented farm workers with innovative methods of production; however, it has also presented these workers with threats to their safety and health.

Teachers

Traditionally teaching has been regarded as a safe occupation, but some teachers are infected with unwelcome occupational illness or injury. Recent research has identified many workplace hazards which are present in schools and which have the potential to affect the health and safety of teachers.

Although most research on hazards to teachers focuses on health hazards, many safety hazards have also been identified. The most evident safety hazard is that of possible risk to a teacher's musculo-skeletal system, associated with lifting children (Messing 1991, 78). This hazard is particularly evident in day care centers and elementary schools where teachers need to be constantly available for children. A further safety hazard associated with teaching is the possibility of sprains and strains from bending and stretching. Bending and stretching can occur when teachers write on the board and repeatedly turn to stress particular points to students or bend to the level of students' desks to observe their work.

Surprisingly, noise and lighting problems are the source of many other safety hazard complaints made by teachers. Fluorescent lights which are used in most schools cause frequent headaches and excessive fatigue amongst teachers (Armstrong and Armstrong 1983, 185). Moreover, excessive noise

produced by students not only causes headaches but when prolonged can result in hearing loss.

The major source of potential health hazards to teachers[58] is the classroom environment and indoor air pollution. Indoor air pollution which is often associated with office buildings is also present in some schools. Teachers have experienced excessive sleepiness, nausea, dizziness, eye irritation, poor concentration, unpleasant odors, and recurring illness (Greenfield 1987, 6). Most of these symptoms have been found to be associated with a number of substances in the air and classroom. Concerns have been expressed by teachers over PCB's, carpet glues, indoor air contaminants, photocopier chemicals and asbestos in schools[59] (Quint, Handley and Cummings 1990,202). PCB's, Asbestos and Nitropyrene, a chemical used in photocopiers, are well known as potential carcinogens, and asbestos has also been known to cause restrictive lung disease and further pulmonary hypertension[60] (Manitoba Federation of Labour, 1985, 36; Ontario Federation of Labour). Formaldehyde, a chemical released from industrial carpet glues, is known to cause respiratory and skin, nose, throat and eye irritations (Ontario Federation of Labour). Furthermore, indoor air is sometimes contaminated by all these chemicals mentioned above. These substances and possibly others have the potential to damage the health of teachers.

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[58] This also has the potential to harm the health of students. However students rotate through the school system, whereas teachers often remain in the same classroom for school for many consecutive years, thus intensifying their exposure.

[59] These concerns were recorded in a telephone occupational health hotline to the state of California. However, many of these hazardous agents can equally be applicable in Manitoba.

[60] Pulmonary hypertension can develop as result of lung damage thus making it difficult for the right side of the heart to pump blood through the lungs..

Another potential danger to the health of teachers is infectious diseases. Infectious disease is a particularly serious problem among younger children, who are likely to carry viral infections as they have yet to be immunized (Remis et al. 1987, 1186; Canadian Advisory Council on the Status of Women 1987, 86). Individuals, such as teachers, who look after children are frequently exposed to many childhood diseases (Faber 1991, 51). To adults who have not been previously exposed to many such diseases, the possibility of contacting one or more of them is great. Furthermore, many childhood diseases, when caught by an adult can have more serious complications. One childhood disease which has been particularly devastating to workers who have come into contact with it is German measles. In one case a staff member at a daycare centre had to have an abortion as a result of her contact with the disease, as German measles can seriously harm an unborn child (Armstrong and Armstrong 1983, 184). The potential dangers to health associated with teaching are becoming increasingly more evident to those in and outside the profession.

One health hazard for teachers which has been given considerable attention is stress and burnout. Teachers experience many sources of stress; however, a particularly common source of stress today is the threat of personal injury (Faber 1991, 51). This problem is particularly acute in inner-city schools or other areas where there are problems with discipline or apathetic students (Messing 1991, 78). Teachers continue to worry about these threats and eventually experience burnout, so that they are no longer able to work. As society changes, more and more sources of stress may arise.

Clerical Workers

Clerical workers are secretaries, typists, clerks, and word processor operators to name a few. Such workers are exposed to many health and safety hazards while they work. The major hazards sources tend to be poor lighting, excessive noise, toxic substances, poor ventilation and office air quality, poor work station design and video display terminals. Poor lighting has been found to cause excessive fatigue, especially when equipment is crowded into a windowless, fluorescent-lit space (Armstrong and Armstrong 1983, 185). One source of toxic substances with which many clerical workers labour is photocopier fluids. Many photocopiers produce high levels of VOC's or Volatile Organic Compounds, which have the potential to seriously harm individuals exposed to them (Canadian Advisory Council on the Status of Women 1987, 86). Many of these chemicals are known carcinogens (Ontario Federation of Labour). Thus, when a clerical worker is continually exposed to photocopiers the possibility of health problems arising in that worker are great.

The design of the work station[61] also poses potential danger to the health of clerical workers, as many spend long hours sitting on poorly designed furniture, working in routine, monotonous jobs (Canadian Advisory Council on the Status of Women 1987, 86). As such, repetitive strain injuries are a serious problem in these workplaces particularly with data entry clerks or typists who perform high-speed work in these poorly designed office settings (Messing 1991, 44). A related problem is the widespread introduction

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[61] This is referred to as ergonomics.

of video display terminals (VDTs) which have produced new health-related problems. Many clerical workers who spend large blocks of time working at these terminals suffer from eyestrain, headaches, back, neck, or wrist pain (Canadian Advisory Council on the Status of Women 1987, 86).

Another serious workplace hazard impacting on the health of clerical workers is sealed building syndrome. There are many thousand chemicals both synthetic and natural, which, when in high enough concentration in the air can harm the health of clerical workers (Health Canada 1994, 21). The problem of sealed building syndrome generally arises in part from the continued recirculation of pollutants in the office or building because of insufficient air changes. Many workers who are employed in these poorly ventilated buildings suffer from headaches, respiratory problems, and increased fatigue (Canadian Advisory Council on the Status of Women 1987, 86). Further problems are skin rashes, irritability, blood diseases, cancer, office allergies, dizziness, lethargy and "flu" epidemics (Ontario Federation of Labour). For a considerable time sealed building syndrome " was blamed on poor worker attitudes; it is now a well-documented physical phenomenon that has been linked directly to the presence of chemicals, dusts and bacteria in the [office] air" (Ontario Federation of Labour). Sealed building syndrome is now a documented problem, impacting on the health of many office workers.

As noted with sealed building syndrome there are potentially many thousand chemicals which can enter the office and adversely affect the health of its workers. Of these chemicals a select group is found in many office buildings and similar workplaces. A list of the most common air contaminants has been produced by the Ontario Federation of Labour

(Appendix 5). This list identifies common office contaminants and the possible effects of exposure to them. It is a startling list giving cause for great concern over the health of clerical workers and all office workers in general. Nitrophyrene, Trinitrofluorenone, Benzene and Trichlorethylene are common chemicals used in photocopiers and known cancer-causing agents. Many other chemicals and gases such as Ozone, Formaldehyde, PCB's, Carbon monoxide are also present in offices and are known to produce headaches, nausea, lung irritation and depress immune function in humans. These and other contaminants have the potential to adversely affect the health of office and clerical workers.

Domestic Service Workers

Domestic service workers are employed in our homes to carry out a variety of duties that range from babysitting and house keeping to making minor home repairs, or deliveries. Domestics for the purpose of this paper are employees who perform these duties in homes different from their own in exchange for financial compensation.[62]

The health and safety hazards present in homes have long been recognized. To the average person, flues, rashes, falls, cuts or burns are quite common. However to those labouring in an unfamiliar home, the incidence of injury or the possibility of coming into contact with a potential health hazard is greater. To most individuals a home is not considered a workplace. However to domestic service workers this is their workplace, a place where

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[62] Reported taxable income.

the potential for harm is ever present.

Domestic service workers face many safety hazards. Unfamiliarity with the home presents many hazards which could jeopardize their safety (Wiere 1993). Work in homes presents the hazards which often cannot be anticipated. The possible safety hazards are as numerous as there are homes. The possibility of injury is as great as there are hazards. Yet domestic service workers continue to labour in these potentially hazardous workplaces in order to make a living.

Safety hazards are not the only hazards that confront domestic service workers. In recent years many sources of health hazards in homes have become apparent. Many common household products that we once deemed safe are frequently being identified as unsafe. Household cleaners often contain many toxic substances which when used occasionally by the average homeowner have low degrees of risk associated with its use; however, when frequently used by an individual such as a house cleaner in many different homes, these products have a high potential to harm the worker seriously.

Many potentially hazardous substances used regularly in homes are not identified, monitored or controlled, leaving domestic workers largely unprotected. Yet many domestic service workers are exposed to these substances when they come into direct contact with them in carrying out their work (Messing 1991, 79). These workers are frequently exposed to toxic substances found in many household cleaning products such as detergents, soaps, polishes, waxes, and removers (See Figure 4). Some pesticides and insecticides commonly tracked in from the garden or used inside the house in

the form of ant traps or pest strips also contain toxic substances (Canadian Advisory Council on the Status of Women 1987, 86).

Many household products can harm the health and safety of individuals in general and particularly domestic workers who are exposed to these products on a continual basis. A detailed examination of some these common toxic substances found in household products will help one appreciate the potential health hazards which affect domestic workers on a daily basis (See Figure 4).

TOXIC HOUSEHOLD SUBSTANCES

Product Type	Common Ingredients
Window cleaner	Ammonia; ammonium hydroxide; Ethylene glycol; Isopropyl alcohol; Sodium nitrate
Drain cleaner	Petroleum distillates; sodium hydroxide (lye); Tricholoroethane
Spot remover/ Upholstery cleaner	Ammonia hydroxide; Benzene; Carbon tetrachloride; Methanol; Toluene; Naphthalene; Percholoethylene; Sodium hypochlorite; Trichloroethylene
Prewash treatment	Perchloroethylene; Petroleum distillates
Polishing cleanser	Chlorine
Oven cleaner	Hydrozethyl cellulose; Polyoxyethylene fatty ethers; Sodium hydroxide (lye)
Furniture Polish/ Dusting sprays	Dinitrobenzene; Petroleum distillates; Silicone; Trichloroethane; Wax morpholine
Tile cleaner	Tetrasodiumethylenediamine
Disinfectant (Lysol)	Carbolic acid; O-phenylphenol; N-alkyl-N-ethyl morpholinium Ethyl Sulfates
Disinfectant sprays	Triisopropanolamine morpholine
Bleach (Clorox)	4-Chloro-2-cyclopentylphenol; Diethanolamide-lauric acide amide
Air Fresheners	Cresol; Ethanol; Propylene glycol morpholine

Figure 4. Toxic Household Substances
Common Ingredients may vary from brand to brand with more or fewer ingredients than those listed.

Source: Greenfield, Ellen J. House Dangerous: Indoor Pollution In Your Home and Office - and What You Can Do About It. New York: Interlink Books, 1987, 18.

Research conducted on these household products has found many to contain such chemicals as benzene and carbon tetrachloride. Both of these agents have been identified as causing or enhancing cardiac arrythmia or palpitations in workers and as such have the potential to seriously harm the health of workers (Manitoba Federation of Labour 1985, 37). Furthermore, other chemicals found in household products, benzene, methylene chloride and chlordane, are mucous-membrane irritants and are known human carcinogens. (Greenfield 1987, 19). Methylene chloride is also known to cause increased carboxyhemoglobin levels in the blood. Increased carboxyhemoglobin decreases the blood's ability to carry life-giving oxygen to the cells and has been reported to cause brain damage (Greenfield 1987, 19).

The notion that domestic service work is free of health and safety hazards has been altered in recent years. Today one can appreciate that housekeepers, babysitters, handypersons and other domestic workers face many threats to their safety and health on a daily basis.

Excluded Workers in General

Many of the excluded workers in Manitoba have frequent contact with the public and accordingly are faced with yet another escalating workplace hazard, that being occupational homicide. This hazard has garnered increased attention of researchers in recent years. One study indicates that in Maryland, British Columbia, Oklahoma, Texas and California work-related homicides cause from 7 to 30 per cent of work injury deaths (Kraus 1987, 1285). Although we like to think that this is a problem only for our American neighbours to the south, there unfortunately remains here in Manitoba, the potential that

individuals employed could be killed while at work.

The threats can come in the form of disgruntled fellow workers[63] or unknown individuals. As unemployment and competition for jobs or promotions become more serious, the potential for work-related homicide develops. Furthermore, as violence in society continues to grow, the risk of harm to workers will also increase.

Another problem which is common to virtually all workers including the excluded workers is that of excess noise. While teachers and clerical workers have indicated concern for noise level, the problem is not restricted to these occupations. The adverse health effects of noise have long been a problem in workplaces, and there is a large body of literature on this subject.

The auditory effect of noise has long been known to cause either permanent or temporary hearing loss (Ontario Federation of Labour, 11). Many office and clerical workers often endure high levels of noise:

> Typewriters, keypunches, ringing telephones, general conversation levels, printers and copiers all add to the general cacophony of noise in the office. Typewriters create on the average 70 dB (decibels) of noise each; when several typewriters operate, they double or even triple the noise (Ontario Federation of Labour, 11).

Although the human ear can hear sounds ranging in loudness from 10 to 140 decibels, sounds over 100 decibels become painful with potential for

[63] This problem is particularly apparent amongst U.S. postal workers, however evidence of this can be seen in the case of a Concordia University professor who killed fellow academics over refusal or tenure.

permanent hearing loss. Although the many auditory effects of noise are well recognized, many non-auditory effects have been associated with noise.

That there are non-auditory effects of noise is increasingly coming to light in research on health and safety of workers. For example, a great deal of information has been generated about the effects of noise on the cardiovascular system. Noise can effect the blood pressure of workers as well as cause hormonal changes, plasma cholesterol and platelet aggregation. Although the full effect of hormonal changes are not really known, plasma cholesterol, is reported to increase when an individual is exposed to noise levels at 80-90 dB for several weeks, and in the long run could cause cardiovascular disease. Another effect of noise is platelet aggregation, which can also result in cardiovascular disease in workers exposed to levels exceeding 90 dB for a prolonged period of time (Manitoba Federation of Labour 1985, 33-36). That noise can effect the health of workers is many occupations including those of the excluded workers is becoming increasingly clearer, as further research is conducted (Ontario Federation of Labour).

This examination of hazards which effect the health of workers in the excluded occupations and in most occupations in general is by no means exhaustive. It was presented to provide for an overview of the many health and safety hazards which effect the major groups of excluded workers in Manitoba. What we can conclude is that workers in these occupations do in fact face many hazards, in particular health hazards. However, what we also know is that prevention of many health hazards is extremely difficult and time consuming. As such, hazard control techniques call for the mitigation of hazardous consequences, where prevention is not possible. Mitigation of

workplace health hazards comes in the form of workers' compensation in Manitoba. However, the excluded workers do not have the benefit of workers' compensation coverage and as such hazard control in workplace safety and health is incomplete in Manitoba.

4.2 The Needs of Ill or Injured Workers

When a worker becomes ill or is injured as a result of a workplace hazard, there are three things that he/she needs (Mesman 1993):

1. Income replacement
2. Medical attention
3. Rehabilitation

As we know, one method for recovering these three items is through common law actions. However, presently this method of recovery is rarely utilized. Moreover, we also know that the most common method of obtaining these three items is through workers' compensation. Workers' compensation provides that workers who becomes ill or injured as a result of their employment are entitled to compensation, medical aid and physical and vocational rehabilitation.

In theory workers' compensation provides injured or ill workers with quick recovery of medical aid, compensation (income replacement) and where necessary rehabilitation. In Manitoba, a work-related injury or an

occupational illness[64] entitles many workers to payment of lost wages at ninety percent of net loss earning capacity, costs of prescriptions, prosthetic devices, permanent impairment awards (lump sum payment in addition to lost wages benefits), survivor benefits, vocational rehabilitation services as well as transportation expenses depending upon the distance to treatment. They are therefore protected against much of the hardship that one encounters when injury or illness occurs on the job. The family of the worker is also protected as when a worker dies as a result of workplace illness or injury, compensation is payable to the worker's dependents. Essentially workers' compensation provides workers and their families with three required needs and other benefits.

4.3 Provisions Available to the Excluded Workers When Prevention is not Possible

The picture of workplace hazard control and of the workers' compensation system in Manitoba is not quite as ideal as the proceeding section may indicate. In Manitoba, workers' compensation covers only about seventy-five percent of the provincial workforce (Fox-Decent 1994). The remaining twenty-five percent of the workforce do not reap the benefits that workers' compensation coverage presents.[65] The impact of workplace injuries and illness on these workers and their families is in some cases alarming.

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[64] Those which are accepted and classified by the Workers' Compensation Board.

[65] The percentage of the workforce which is not covered is significant considering that the 1991 Census reported that Manitoba had a total labour force of 567,665. This figure indicates that in 1991 approximately 150,000 workers in the province of Manitoba were not covered by workers compensation. Another disturbing problem associated with the excluded workers is that the Workers Compensation Board which generates statistics concerning the magnitude of the workplace safety and health problem, does not consider these workers in their statistics. Thus the excluded workers might be employed in a potentially hazardous industry; however, it is not indicated in the statistics.

When these workers are disabled for a lengthy period of time, they must find alternative forms of recovery for lost wages, rehabilitation and medical services.

Income Replacement

When an individual worker has become ill or has been injured as a direct result of work and workers' compensation coverage is not available, the individual worker may obtain financial assistance through such mechanisms as income security programs: unemployment sick benefits; unemployment regular benefits; Canada Pension Plan disability pension; and Canada Pension Plan retirement pension. When an individual worker is not eligible for income security programs, social service programs - - such as provincial social allowances, City of Winnipeg Social Assistance, Child Related Income Support Program (C.R.I.S.P.), and 55 Plus - -, a Manitoba Income Supplement is available. Each of these methods has different eligibility requirements and limits to the duration and amount of recovery.

When legislation was first passed in Manitoba to compensate workers for workplace injury or illness, these other forms of government assistance were not available to injured or ill workers. Consequently, when workers were injured or became ill and were not covered by workers' compensation they were left destitute. Social assistance in Canada provides a less adequate alternative to workers' compensation. Yet these other forms of assistance have likely hindered efforts to extend workers' compensation coverage.

One method of recovering wages available to an injured worker is unemployment insurance sick benefits. These benefits are available at levels

which are less adequate than workers' compensation. Nevertheless, they are one method of recovering lost wages. This method is not particularly efficient for immediate receipt of funds, as there is a waiting period in which the workers' cases are reviewed. To be eligible for this program, workers must have worked a minimum of twenty insurable weeks in the past 12 months. Moreover, they must have medical certificates from their doctors and have jobs to return to once they have recovered. Furthermore, they receive only approximately fifty-five percent of wages. The maximum benefit is $429.00 per week based on earnings of $780.00 per week or greater.[66] This amount is significantly lower than the workers' compensation level of ninety percent of net earnings. Also, with unemployment insurance sick benefits there is a maximum number of weeks during which a particular worker may be eligible to collect. At present a worker may collect these benefits for only 15 weeks. In the event of long term disability, this option would cease to be of assistance after a short period and is therefore not adequate.

If an injured worker is able to return to work, and he or she finds that the former job is no longer available, that worker might be able to collect regular unemployment insurance benefits. In such a case the worker must have been employed for at least the minimum work period in the area in which he/she resides. This period fluctuates with changes in the Manitoba rate of unemployment which is presently 10.5%. The minimum work period is usually between ten and twenty weeks of insurable work. At present someone who worked a full 52 weeks in the past year can collect for a maximum of only 46 weeks. The maximum rate is identical to that of the

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[66] Recent data was collected by telephone from employment and immigration in November, 1994.

sick benefits, presently $429.00 per week based on weekly earning of $780.00 or more.[67] Any amount below the maximum is calculated at fifty five percent of the average amount for insurable weeks of earnings. Once again this is not entirely efficient as there is a limit to the number of weeks one might collect.

Another option to workers' compensation is the Canada Pension Plan - Disability Pension. Eligibility requirements are that the individual be between eighteen and sixty-five and have contributed to the Canada Pension Plan in two of the last three years or five of the last ten years of the contribution period. For a worker to obtain this pension, the disability must be either physical or mental and be both prolonged and severe. Once again this is not an efficient method of recovering lost wages as the maximum monthly benefit in 1994 is $839.09. This maximum monthly benefit is significantly lower than the amount workers could recover at 90% of their net earnings from workers' compensation.

For workers who are at least sixty years of age another option is Canada pension retirement benefits. Workers between sixty and sixty four who have stopped working must have been credited with contributions during at least one year of their working life. The maximum monthly benefit in 1994 is $694.44. This amount is somewhat lower than the disability pension and does not come close to the available levels of income replacement through workers' compensation.

When a worker is not eligible for income security programs as those

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[67] This data was obtained from Employment and Immigration in November 1994.

listed above, some social service programs are available to them through the provincial government. One possible social service is Provincial Social Allowance. This is available to residents of Manitoba who are eligible for assistance under the *Social Allowances Act.* These individuals must demonstrate a need for financial assistance. Another program sponsored by the Province of Manitoba is C.R.I.S.P. or the Child Related Income Support Program. This program provides monthly benefits to low income families to help with the cost of raising children. Once again there is a long list of eligibility requirements, although primary eligibility is based upon family income and assets. Another program similar to C.R.I.S.P. as an income supplement is that of 55 Plus. This program is a provincial income supplement program which provides quarterly benefits to residents of Manitoba aged fifty five and over, whose income falls within a certain allowable income range. Another possible method of assistance is available for individuals who live in the City of Winnipeg, if the individuals are eighteen years of age or older and are considered to be without adequate means of support. Eligibility in this case is determined by comparing available resources with current social assistance levels. In each of these cases the level of support is significantly lower than that available through workers' compensation. In many of these cases workers who have been injured or become ill on the job would not qualify for these programs as they would likely have too many assets. In some cases workers would have to sacrifice their assets first and then apply for these benefits. Eventually a worker who is unable to return to the workforce would be left destitute with a reduced standard of living.

Non-financial Support

Although some income security and social service programs are available to workers who do not have the benefit of workers' compensation, these programs fail to meet the many social needs that arise as a result of workplace injury or illness. Often a worker will experience mental and physical pain as a result of a workplace injury or illness. Worries about paying bills and rehabilitation often add stress to the lives of workers when income replacement is not at an adequate level. The resulting despair could lead to further trauma and even result in suicide. In such unfortunate cases many community organizations are available to assist. In Winnipeg, organizations such as Klinic and the Salvation Army are available to help. Throughout the province family doctors or church organizations are often there to assist. Nevertheless, most crises such as these would not arise if income replacement and rehabilitation services were available to these workers, at levels near those of the compensation board.

Regardless of the general makeup of the body of excluded workers, they remain twenty five percent of Manitoba's workforce. They are labouring in workplaces in which many hazards are present which could harm their health. Although considerable effort is made to prevent workplace illness or injury, workers continue to become ill or injured in Manitoba's workplaces on a daily basis. When illness or injury occurs, most of the province's workforce have workers' compensation to protect them from the unfortunate effects of the illness or injury. However the excluded workers are not afforded the protection that workers' compensation provides. The only recourse available to them is through income security programs or social

assistance. In both these cases the level of protection is substandard to that of workers' compensation. Moreover, there tend to be long waiting periods and a limit to the length of time that these benefits may be paid. The resulting future of the excluded worker is quite bleak.

4.4 History of the Call for Universal Coverage

Although there has been only limited extension of mandatory workers' compensation coverage in Manitoba,[68] the question of universal workers' compensation has long been voiced throughout the province. Even before workers' compensation came into existence in Manitoba, the question as to which occupations should and should not be covered has been a concern.

In theory, workers' compensation is a compulsory insurance system covering those employed in the paid labour force. However, in each province or territory, several categories of employees are excluded from coverage. Those who have traditionally been covered, have been industries engaged in hazardous activities, often facing safety hazards. Accordingly, those who have been excluded tend to be workers in occupations which are not deemed as facing safety hazards (Canadian Advisory Council on the Status of Women 1987, 121). These industries which are not covered comprise the excluded workers. However, whether for moral or scientific reasons[69] there has been a call for increased mandatory workers' compensation coverage for the

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[68] This is evident in Chapter Two.

[69] Essentially the moral reasons tend to comprise the need to protect workers from the tragedy of occupational illness or injury, while the scientific reasons have been the slow recognition of health hazards and their effects over time.

excluded workers in Manitoba.

As we know, a cardinal tenet of one of the first workers' compensation laws in Canada, and the one on which most modern day compensation laws are based, has been "the aspiration that as time progressed Workers' Compensation might be expanded to cover all employers and employees" (Manitoba 1980, 7). Time has dictated much consideration of this expansion of coverage to a universal workforce.

In 1910,[70] the question as to whether farmers should be covered by mandatory workers' compensation was pondered in Manitoba:

> Why should a capitalist farmer who employs as many men as a manufacturer be exempt from paying compensation for injuries received by his workmen? . . . From a humanitarian standpoint all workmen should be compensated . . . H.N. Baker, on behalf of the farm laborers, presented an argument together with three petitions including over 200 names of farm laborers desirous of having that class included in the [workers compensation] bill . . . In comparison with other trades Mr. Baker submitted that farming was as hazardous and dangerous as any [other industry] (*Manitoba Free Press* January 12, 1910, 7).

As early as 1910, as at present excluded agricultural workers expressed their desire for mandatory coverage by workers' compensation.

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[70] The Meredith report, which proposed the suggestion of expansion to all employers and employees, was released in 1913; however, this question had long been a concern prior to 1913.

It was also in 1910 that the Royal Commission on Workmen's compensation made the recommendation that "the [Workmens' Compensation] Act apply to all employers who usually employ five or more workmen . . . [and that] . . . after the Act has been in force for a time, this provision may be perhaps, extended" (Manitoba 1910, 652). The 1918 Royal Commission Report on Workmens' Compensation made a similar suggestion:

> It would appear desirable that as far as possible, workmen engaged in other industries, not at present under jurisdiction of the Workmen's Compensation Board, should receive the benefits conferred by the terms of the Act and it is to be hoped that satisfactory arrangements can be made to include the workers employed on the railways operated by the Dominion Government, who at the present time are not afforded this protection (Manitoba 1918, 11).

In April 1929, a bill introduced in the legislature proposed "widening of the scope of the Workmen's Compensation Act to include all workers with the exception of farm laborers and domestic servants" (*Manitoba Free Press* Thursday April 11, 1929, 3). Although this bill maintained the exclusion of agricultural workers and domestics, it embraced the concept of extending coverage. Unfortunately, this bill was not passed and a large number of Manitoban workers were to remain without the protection of mandatory workers' compensation coverage.

In 1958, the quest for extending coverage to a greater portion of the workforce was significantly answered with the Turgeon Commission's recommendations and likewise extension of coverage to further occupational groupings. Although, universal workers' compensation was not given serious consideration, many new categories of workers were granted mandatory workers' compensation coverage. However, Mr. Turgeon did not recognize the potential hazards which many clerical workers encounter in the workplace and accordingly they were not granted the protection of mandatory coverage at this time (Manitoba 1958, 85).

It was not until the 1980's that the serious push for universal workers' compensation came about in Manitoba. Many reports began to surface suggesting the extension of mandatory workers' compensation coverage to the entire provincial labour force. In 1980, the Royal Commission suggested that the "expansion of coverage merits recognition." In 1987, the Royal Commission recommended that compensation coverage "should be broadened to include as many employers and workers as possible"[71] and that farm labourers or agricultural workers should not be excluded from coverage by workers' compensation. [72] More attention was being devoted to the concept of universal coverage of the provincial workforce.

By 1993, the workers' compensation board was generating considerable

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[71] Except in those cases where situations are specifically excluded by Regulation.

[72] Farm labourers should not be excluded from coverage by workers' compensation. Individual self-employed farmers should retain the right to take out voluntary coverage (Royal Commission 1980).

information on the desire to extend coverage. The 1993 Five Year Operating Plan indicated that according to statistics Canada, 182 industries were excluded from mandatory workers' compensation coverage in Manitoba. Of all the provinces and territories in Canada this jurisdiction had the second highest number of excluded industries, the Province of Nova Scotia being highest (Figure 5).

NUMBER OF EXCLUDED INDUSTRIES BY PROVINCE

NF	PE	NS	NB	PQ	ON	MB	SK	AB	BC	YK	NT
21	51	188	9	5	178	182	49	172	134	9	20

Figure 5. Excluded Industries By Province/Territory
These figures reflect the situation as of 1993. The figure for British Columbia would likely be dramatically lower, as universal workers' compensation came into effect there on January 1, 1994.
Source: Workers' Compensation Board of Manitoba, 1993

It becomes clear that a large portion of Manitoba's workforce are without the benefit of workers' compensation (Figure 5). This information has permitted the board to consider the extension of coverage. The Five Year Operating Plan stated that "the Board, at its planning retreat recognized as a general principle the importance of providing workers with the protection of workers' compensation unless there is some reason to exclude them" (Workers' Compensation Board of Manitoba 1993). Accordingly, the possibility of extending coverage remained a topic of concern for the board.

The 1994 Five Year Operating Plan mirrored the concerns of the 1993 Plan when it noted "that the optimum long-term solution is to have all employers and workers included in compensation coverage, unless excluded for specific reasons" (Workers' Compensation Board of Manitoba 1994, 17). Accordingly, the extension of workers' compensation to a virtual universal

coverage has been and remains a desire of many labourers and the Workers' Compensation Board in Manitoba. Recently this same objective has been achieved in the Province of British Columbia where universal workers' compensation became a reality on January 1, 1994. This is one example which Manitoba may draw upon in establishing a system of universal workers' compensation.

4.5 Universal Workers' Compensation: The British Columbia Experience

The workers' compensation system in British Columbia is responsible for legislation and regulation relating to occupational health and safety as well as compensation for workplace injury and illness (Rest and Ashford 1992, 3). "The Workers' Compensation Board of British Columbia does not simply provide compensation for work-related injury and illness; it also has a major occupational safety and health function" (Rest and Ashford 1992, 1) The ultimate goal of the board is the prevention of work-related injury and disease; however, changes in the province in 1993 made compensation available to virtually all workers,[73] where prevention is not possible.

In July of 1993, the Legislature of British Columbia approved the passage of Bill 63, the *Workers Compensation Amendment Act, 1993.* This law established several amendments to the workers' compensation act, the most serious being the introduction of universal workers' compensation in that province. These amendments which became law on January 1, 1994 essentially established a system of universal workers' compensation in the

[73] These exceptions are noted in footnote number 74.

Province of British Columbia, which was accomplished through the legislation which made all excluded industries carry mandatory coverage.

Manitoba can draw upon the experiences in British Columbia with the expansion of coverage to virtually the entire workforce. In British Columbia, prior to Bill 63, the *Workers' Compensation Act* omitted certain industries and occupations from compulsory coverage[74] and further the Act specifically excluded other occupations.[75] The percentage of workers not covered by mandatory coverage prior to Bill 63, comprised approximately fifteen percent of the province's workforce (Wiere 1993). Bill 63 provided for full coverage, as the new Act then applied to practically "all employers . . . and all workers in British Columbia." What this meant was that "virtually all the industries, workers and employers in British Columbia previously excluded by the Workers' Compensation Act would be covered [under the new Act]" (Workers' Compensation Board of British Columbia 1993). In discussions prior to the passage of the Bill concern was voiced over whether there was justification to exclude certain industries:

> The exclusions from the Act prior to Bill 63 appear to be based on historical reasons which may have little or no current validity . . . There has been no process of assessing on the merits whether any of these exclusions were justified. (Workers' Compensation Board of British Columbia 1993).

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74 For example, Banks, insurance companies and other financial institutions, law and accounting offices, medical and dental practices, Management and other consultants, domestic workers and non-industrial building construction with a value less than 5,000 Dollars.

75 Such workers who were specifically excluded were casual workers employed otherwise than for the employer's business; Players, performers and artists; Outworkers; Employers' spouses and members of their family under 19 years; and employers who, having no place of business in the province, temporarily carry on business in the province but hire no resident workers.

To overcome the exclusion obstacle the province provided for a detailed system of evaluating excluded industries.

The new criterion for considering requests for exemption after the passage of Bill 63 was to be based upon the "basic assumption . . . that coverage should be as universal as possible. Exemption should be granted only in exceptional situations where it is demonstrated that coverage would be inconsistent with the overall scheme and intent of the *Workers Compensation Act* " (Workers' Compensation Board of British Columbia 1993). When considering exemption the Board stated that the size of an employer's operations, coverage through private disability plans, wishes of employers and workers and the degree of risk of injury in a particular occupation would not be valid grounds for exemption from universal workers' compensation. The Board strived to include virtually the entire workforce.[76]

The province further suggested that the process for exemption must involve persons other than those who initiate the exemption. The process must be "fair and open, ensuring that all parties have a complete opportunity to state their views" (Workers' Compensation Board of British Columbia 1993). The process, was to be conducted by a combination of single board officers and a committee. The single officer might screen initial requests dealing with those industries covered by prior exemption orders. The officer might refer to the committee requests to exempt industries not previously

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[76] Exemptions from mandatory coverage were only made in five specific areas: High risk occupations in the sports and entertainment industries; Indian bands; persons employed in private residences for less than a certain minimum hours (eight working hours per week); businesses operated by spouses; and non-resident workers temporarily working in the province.

considered. Appeals against assessment decisions by Board officers as to which industries are covered under the Act and whether an employer must register with the Board currently go to the Appeal Division.

British Columbia implemented these amendments to the Workers' Compensation Act, on January 1, 1994. These amendments secured workers' compensation coverage for close to 150,000 workers and thousands more employers who were previously without coverage, essentially instituting a system of universal workers' compensation.

4.6 The Expansion of Coverage: Implementation in Manitoba

The broadening of coverage to more of the provincial workforce is and has long been a goal of the Workers' Compensation Board of Manitoba. Furthermore universal workers' compensation has become reality in British Columbia. Yet how might coverage be expanded in Manitoba? Surprisingly, the Workers' Compensation Board of Manitoba, answered this question in its *1993 Five Year Operating Plan.* The Plan indicated four methods by which the board can increase the scope of mandatory coverage.

The first method presented in the plan is that the Board should identify those industries presently excluded from mandatory coverage. The Board should then meet and discuss coverage with each industry and, where the industry's employer representatives agree, prepare recommendations to the cabinet for inclusion of those industries in mandatory coverage by the act. This approach would result in only those industries giving permission being

included in mandatory coverage. This process would require a series of individual negotiations which might lead to a very complex coverage system with a number of industry specific agreements.

This approach would essentially be an extension of provisions for coverage that are already available. Some hazards present in workplaces are not readily identifiable to employers, workers or regulators. As it is difficult to assess some hazards, many employers would not see the necessity for coverage. If the employer has not yet applied for coverage or seen the need for coverage, then he/she would likely not find it necessary for mandatory coverage even with negotiations. Furthermore, employers might question the extension of coverage as they have other concerns such as the requirement to pay fees, the belief that their workers are not at risk, the small number of their workers or that they already have private disability insurance.

The second approach presented is that the Board again identify those industries which are presently excluded from mandatory coverage and then meet and discuss coverage with each industry. Where the Board believes that compulsory inclusion is desirable, the board would prepare regulations to include those industries under mandatory coverage. Nevertheless this extension of coverage would be subject to government approval. This approach would require minimal negotiation, but it would require up to 182 individual regulations to be considered by the government.

This approach would put the onus for inclusion on the Board. This method is essentially identical to that presently used by the Board as this discretion rests with the board. Since its inception the Board has expanded

coverage only minimally. We know that there are many hazards in occupations, previously viewed as safe and we also know that regulators at the Board do not have special powers which would enable them to spot these potential hazard, so that they might not identify industries which are in need of inclusion. Furthermore the pressures of business on the operations of the Board could prevent it from considering an extension of coverage. Placing the onus on the Board could prove to be a relatively ineffective method of making large increases in coverage.

A third approach would be to the have the government introduce legislation in which excluded industries were exempted from compulsory inclusion, but that all new industries would be included automatically unless named as an excluded entity after due consideration. This approach would eliminate future exclusions by default without interfering in any existing relationships.

This method would prove ineffective in protecting many of the excluded workers who are presently employed within industries that carry no protection in the province. We know from hazard control that where prevention is not possible, mitigation is needed. Many workers employed in potentially hazardous industries at present, however, would not have the benefit of coverage. This would not be a particularly beneficial approach to expanding the scope of coverage as only a relatively few of the excluded workers would receive coverage. Furthermore, hazard control goals would not be attained.

A fourth approach is that of the government introducing legislation

which establishes the principle that all workers and industries would be automatically included, without any historical exemptions, unless named as an exclusion after due consideration. That is the legislative approach adopted by eight of the twelve jurisdictions in Canada and was the method implemented by British Columbia in January 1994.

This approach would prove beneficial to many of the excluded workers. It would permit those excluded workers to receive the protection of workers' compensation, an essential element in hazard control. The only cause for concern tends to arise with the statement "unless named as an exclusion after due consideration." What would due consideration consist of? Would employer influence[77] still dominate and would their particular industries remain excluded from mandatory coverage?

Due consideration in the Province of Manitoba should mirror the the criteria for exclusion adopted in British Columbia in January 1994. If this criteria was to be implemented, employer influence would be significantly limited and accordingly those workers who are presently excluded and in need of compensation would receive coverage.

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[77] Most boards are directed by individuals representing labour, employers and public interest. External groups compete and pressure regulatory bodies "to act in a favourable manner toward their position" (Scott 156) Depending upon the party in power "[t]he policy direction of the W.C..B. generally reflects the ideology of the governing provincial political party which in the Manitoba context means that it is generally aligned closely with either of those same business or labour interests (Scott, 157).

4.7 Universal Workers' Compensation in Manitoba: Future Goals for Expanding Coverage

Universal workers' compensation would achieve the full hazard control objective in the Province of Manitoba. This would be accomplished by protecting all workers with compensation where prevention efforts fail. Universal workers' compensation would alleviate much of the uncertainty associated with control of many occupational health hazards, as mitigation would be provided to the entire workforce, including the present excluded workers.

A system of universal workers' compensation would facilitate increased communication between the Occupational Safety and Health and the Workers' Compensation Board. Further it could lead to the eventual amalgamation of Workplace Safety and Health with the Workers' Compensation Board. This is already in existence in four jurisdictions New Brunswick, Quebec, the North West Territories and British Columbia. This in creased communication and the possibility of amalgamation would sanction the Workers' Compensation Board to place more emphasis on prevention.[78]

Theoretically this could assist the board with its unfunded liabilities, as we know that "compensation budget may be balanced in two ways; rates may be increased or accidents may be prevented" (Workers' Compensation Board of Manitoba Annual 1927). With the expansion of coverage to potentially less dangerous occupations, there would likely be an expansion in the amount of

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[78] Relatedly, this could indirectly help the Board to control its budget, through reducing the number of accidents and likewise claims.

fees recovered; allowing the Board to effectively control unfunded liabilities. Further, enhanced communication and a new emphasis on prevention would theoretically assist in reducing accidents and injuries, thus freeing funds to assist in reducing the boards unfunded liabilities.

These new goals of the Workers' Compensation Board of Manitoba are not beyond attainment. Under section 51 (2) of the *Workers' Compensation Act* the Workers' Compensation Board has "a narrow statutory mandate for addressing prevention-related activities" (Manitoba 1986, 3). Although this function is basically performed through the board's funding of workplace safety and health, it could be expanded in other ways such as increased research and health and safety education to all workers in the province. In the past the Board questioned "the advisability of supporting educational activities aimed at the prevention of back injuries, even though this problem accounts for a significant disbursement of funds in compensation awards" (Manitoba 1986, 3). A further preventative function would assist the board in many ways, such as budget control as well as relieving some workers from the pain and suffering of workplace injury or illness.

Third and relatedly, the expansion of coverage to the entire workforce would provide regulators with a more complete picture of hazardous occupations and industries in Manitoba. The reporting of workplace injuries and illness to the WCB would provide Occupational Safety and Health with more detailed information on occupational hazards and the consequences of such hazards. This would assist inspectors in identification; educators in relaying potential hazards to workers; and it would provide for the possible overall reduction in some occupational hazards and events.

The expansion of workers' compensation to the entire provincial workforce might not be the only future target. Considerable literature on the topic of twenty-four hour coverage or a universal disability insurance system has been generated in recent years. In theory such a system would protect every individual within the province and around the clock. Regardless if an accident occurred in the home, in the car or at work compensation would be available. Debate has focussed on the level of benefits and exceptions to coverage. Nevertheless, future consideration might be given to such a system.

Overall Manitoba's adoption of a system of universal workers' compensation would be beneficial to the economic and social well being of the province as a whole. It would provide for income maintenance of workers without making many of these workers rely on social assistance. Moreover their income would continue to move through the system. It would provide for a more productive labour force, which is not hampered by as many hazards as it has a stronger prevention effort.

Universal workers' compensation through the expansion of mandatory coverage to presently excluded industries has long been a goal of workers' compensation in Manitoba. Today we recognize that many different forms of health and safety hazards are present in our workplaces. Furthermore, we appreciate that workers who were once considered safe are no longer so considered. So now is an appropriate time for the province to pursue the goal of universal workers' compensation.

Chapter 5
Conclusion

The first no-fault system of workers' compensation in Manitoba came to life with the passage of the *Workmen's Compensation Act, 1916.* This new piece of legislation provided for mandatory workers' compensation coverage to the "so-called dangerous trades". These "dangerous trades" were listed in Schedule I of the act and were required to carry mandatory workers' compensation coverage.

Those industries not deemed as dangerous had the option of applying to the board for coverage. Workers' Compensation coverage in the Province of Manitoba has developed, since its inception, to exclude select trades of workers. Extensions of mandatory coverage, since the beginning of no-fault insurance in Manitoba, have been minimal. This is surprising since there have been many recommendations over the years for extension of mandatory coverage to different industries. There is one exception to this minimal extension of coverage. This began with the 1958 Royal Commission, which was a one man Royal Commission.

The Commission recommended the mandatory extension of coverage to several classifications of employment which were previously excluded. All of the Commission's recommendations were included, unchanged, in extensive amendments to the Act in 1959. This one exception aside, there have been only minimal extensions in coverage before and since. Today it is estimated that twenty-five percent of Manitoba's workforce do not benefit from mandatory workers' compensation coverage. Within this twenty-five

percent, four distinct groups of workers can be identified. They are agricultural workers, domestics, teachers and clerks.

These excluded workers likely remain without mandatory workers' compensation coverage for four basic reasons:

1. The basic format of the Act which lists those industries required to have mandatory coverage, rather than listing those who are not.

2. The difficulty that regulators have in assessing hazardous occupations.

3. The unwillingness of recent government to change the status quo.

4. The availability of other forms of protection for workers who do not have compensation coverage.

The one reason which dominates is the difficulty in assessing hazardous occupations. When regulators cannot identify potential hazards, they determine that occupation safe and accordingly do not see the necessity for compensation coverage.

Hazard identification can be divided into two classifications: safety and health hazards. Safety hazards are those which have a tangible or visible causal sequence. This is not the case for health hazards where the causal sequence is often difficult to identify. Methods of hazard control have been developed which require prevention or interruption of the causal sequence of events and mitigation if the causal sequence cannot be interrupted. In the case of health hazards, the causal sequence if often unknown and the health hazard not clearly identified as a result of many confounders and outside

factors. Accordingly health hazard control at the prevention stage is extremely difficult.

The process of hazard control in Manitoba is fundamentally carried out by three parties with genuine interest in prevention: workers, employers and government. The government of Manitoba controls workplace hazards through two different bodies. Essentially, prevention efforts are conducted by the Occupational Safety and Health branch of the Department of Labour and mitigation is administered by the Workers' Compensation Board. As methods of hazard control require prevention and since this is not always possible mitigation, full hazard control is not being accomplished in Manitoba as some workers do not have the benefit of mitigation through workers compensation.

Traditionally the excluded workers were seen as being safe from workplace safety and health hazards. However, research over the past twenty years reveals that these workers do, in fact, encounter many potential hazards in their workplaces. Furthermore, prevention efforts are not entirely effective as risk to worker's health and safety can never be reduced to zero. In cases where hazards can not be prevented, effective hazard control requires mitigation. For the excluded workers mitigation, in the form of workers' compensation, is not necessarily available. Therefore, other means must be utilized effectively to meet the needs of the ill or injured excluded workers. These needs include medical attention, income replacement and rehabilitation.

In the Province of Manitoba, the excluded workers receive medical

attention through the system of universal health care. However, the needs for income replacement and rehabilitation are not so well met. Income replacement is available through such means as income security programs and social assistance. However, eligibility requirements, duration of benefits and level of benefits make these alternative methods of income replacement substandard to the benefits of workers' compensation. Furthermore, as rehabilitation is not generally available to the excluded workers, the length of time away from work could be considerable, thus making the future for the excluded worker appear quite bleak.

A system of universal workers' compensation would help Manitoba to effectively control workplace hazards, while improving the future for the excluded workers who are injured or become ill while at work. A system of universal workers' compensation has been considered at many times in the province's history and has been mentioned in the Workers' Compensation Board's *Five Year Operating Plan* as recently as 1994. A universal system of workers' compensation has been discussed for the province's future and such a system would achieve optimal workplace hazard control. Such a proposal should be pursued as it would also improve the future outlook of presently excluded workers who might become ill or injury while on the job.

In the *1993 Five Year Operating Plan* , the Workers' Compensation Board of Manitoba indicated four possible methods by which the board can increase the scope of mandatory coverage. One particular method stands out; government should introduce legislation which establishes that all workers and industries would automatically be included in mandatory coverage. The other proposed methods of the plan would maintain the exclusion of many

workers from mandatory coverage.

It is further recommended that Manitoba draw upon the experiences of British Columbia which used this all inclusive method to achieve universal workers' compensation.[79] On January 1, 1994 a system of universal workers' compensation became effective in British Columbia when the government provided for an extension of mandatory coverage to all excluded industries. Exemptions from the act were minimized through a new strict criteria for exemption, thus only in exceptional cases would exemption from coverage be granted. As a result, British Columbia has effectively controlled workplace hazards by securing compensation coverage to those employers and employees, in previously excluded industries.

A system of universal workers' compensation in Manitoba would achieve the objective of full workplace hazard control, while improving the futures of the excluded workers who become injured or ill while at work. Such a system would facilitate more effective communication between Occupational Safety and Health and the Workers' Compensation Board by providing a more complete picture of workplace injury and illness in provincial workplaces. This system would help the Workers' Compensation Board to place more emphasis on prevention through budget control, thus creating a unified system of effectively controlling workplace hazards.

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[79] The implementation of this recommendation will depend upon which party is leading the Manitoba government at the time. The changes in British Columbia were made by a N.D.P. government; while a P.C. government is in power in Manitoba.

The adoption of a system of universal workers' compensation in Manitoba would provide for a more productive labour force, a more effective system of hazard control and brighter futures for workers who become ill or injured while at work. Now is the time for the Province to act, so that future generations of Manitoban workers will be protected.[80]

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[80] Once again this implementation will depend upon the party in power in Manitoba.

Glossary

Arrhythmia. Abnormal heart action characterized by a loss of rhythm.

Carbon Monoxide. A toxic gas that combines readily with hemoglobin to form a relatively stable compound; CO.

Confounder. A perplexity or the inability to identify with absolute certainty if the cause of disease in an individual is occupationally related.

Equine Morbillivirus. A disease infecting horses and and capable of transferring to humans. Found in the same viral group as measles and distemper.

Hazards. Are threats to humans and what they value.

Musculo-skeletal. System of the body composed of muscles and bones.

Risks. Are quantitative measures of hazard consequences, usually expressed as conditional probabilities of experiencing harm.

Tort law. This division of law deals with breaches of duty rather than than breaches of contract, leading to liability for damages. Legal responsibility lies with the offender.

Ultra-viras. Beyond one's legal power or authority.

Volatile Organic Compounds. Unstable compounds capable of affecting human organs.

Volenti non fit injura. Voluntary assumption of risk associated with a particular occupation or job.

Appendix 1
Schedule 1: *Workmen's Compensation Act 1916*

SCHEDULE 1.—(SECTION 81.)

INDUSTRIES THE EMPLOYERS IN WHICH ARE LIABLE TO PAY COMPENSATION.

Class 1.—Lumbering; logging, river-driving, rafting, booming, saw-mills, shingle-mills, lath-mills; manufacture of veneer, excelsior, staves, spokes, or headings; lumber yards (including the delivery of lumber) carried on in connection with saw-mills; the creosoting of timbers.

Class 2.—Pulp and paper mills.

Class 3.—Manufacture of furniture, interior woodwork, organs, piano actions, pianos, canoes, small boats, coffins, wicker and rattan ware, mattresses, bed-springs, artificial limbs, cork articles, cork carpets or linoleum, upholstering, picture framing and cabinet work.

Class 4.—Planing mills, sash and door factories, manufacture of wooden and corrugated paper boxes, cheese boxes, mouldings, window and door screens, window shades, carpet sweepers, wooden toys, articles and wares or baskets, matches or shade rollers; lumber yards, (including the delivery of lumber) carried on in connection with planing mills or sash and door factories; cooperage, not including the making of staves or headings.

Class 5.—Mining; reduction of ores and smelting; preparation of metals or minerals; boring and drilling, including sinking of artesian wells, (except when done by an employer coming under Class 13); manufacture of calcium carbide, carborundum or aloundum.

Class 6.—Sand, shale, clay or gravel pits; marble works, stone cutting or dressing; manufacture of brick, tile, terra-cotta, fire-proofing, paving blocks, sewer pipe, roof tile, plaster blocks, plaster board, slate or artificial stone.

Sub-Class A of Class 6.—Quarries, stone crushing, lime kilns; manufacture of cement.

Class 7.—Manufacture of glass, glass products, glassware, porcelain or pottery.

Class 8.—Iron, steel, or metal foundries; rolling mills; manufacture of castings, forgings, heavy engines, locomotives, machinery, safes, anchors, cables, rails, shafting, wires, tubing, pipes, shot, sheet metal, boilers furnaces, stoves, structural steel, iron or metal.

Class 10.—Manufacture of small castings or forgings, metal wares, instruments, utensils and articles, hardware, nails, wire goods, screens, bolts, metal beds, sanitary, water, gas, or electric fixtures, light machines, typewriters, cash registers, adding machines, carriage mountings, bicycles, metal toys, tools, cutlery, instruments, sheet metal products, buttons of metal, ivory, pearl, or horn, dry batteries, cameras, sporting goods, firearms, windmills, ivory articles, rubber stamps, pads or stencils, machine shops, not elsewhere included in Schedule 1, the industry of carrying on a blacksmith shop.

Class 11. Manufacture of agricultural implements, threshing machines, traction engines, wagons, carriages, sleighs, vehicles, automobiles, motor trucks, toy wagons, sleighs or baby carriages; car shops.

Class 12.—Manufacture of gold or silverware, plateware, watches, watch-cases, clocks, jewellery or musical instruments.

Class 13.—Manufacture of chemicals, corrosive acids, or salts ammonia, gasoline, petroleum, petroleum products, celluloid, gas, charcoal, artificial ice, including the handling and delivery thereof; wood alcohol, celluloid articles; the manufacture, transmission and distribution of natural or artificial gas and operations connected therewith; the cutting, storing, handling and delivery of natural ice.

Sub-Class A of Class 13. The manufacture of fireworks gunpowder, ammunition, nitro glycerine, dynamite, gun-cotton or other high explosives.

Class 14. - Manufacture of paint, color, varnish, oil, japans, turpentine, printing ink, printers' rollers, tar, tarred, pitched or asphalted paper.

Class 15. Distilleries, breweries; manufacture of spirituous or malt liquors, malt, alcohol, wine, vinegar, cider, mineral water, soda waters, or methylated spirits.

Class 16. - Manufacture of non-hazardous chemicals, drugs, medicines, dyes, extracts, pharmaceutical or toilet preparations, soaps, candles, perfumes, non-corrosive acids or chemical preparations; shoe-blacking or polish, yeast, baking powder or mucilage.

Class 17.— Milling; manufacture of cereals or cattle foods, warehousing or handling of grain or operation of grain elevators, threshing machines, clover mills, or ensilage cutters.

Class 18.—Manufacture or preparation and distribution of meats or meat products or glue.

Sub-Class A of Class 18.- Packing houses, abattoirs, manufacture of fertilizers and all work incidental thereto (not incidental to any other industry).

Class 19.—Tanneries.

Class 20. Manufacture of leather goods and products, belting, whips, saddlery, harness, trunks, valises, trousers, imitation leather, boots, shoes, gloves, umbrellas, rubber goods, rubber shoes, tubing, tires, or hose.

Class 22.—Sugar refineries; manufacture of dairy products, butter, cheese, condensed milk or cream, biscuits, confectionery, spices, condiments, salt or any kind of starch; bakeries.

Sub-Class A of Class 22.—Canning or preparation of fruit, vegetables, fish or food-stuffs; pickle factories.

Class 24.—Manufacture of tobacco, cigars, cigarettes or tobacco products.

Class 25.—Flax mills, manufacture of textiles or fabrics, spinning, weaving, and knitting manufactories; manufacture of yarn, thread, hosiery, cloth, blankets, carpets, canvas, bags, shoddy, felt, cordage, ropes, fibre, brooms or brushes; asbestos goods, hair cloth and other hair goods; work in manilla or hemp; tents, awnings and articles not otherwise specified made from fabrics or cordage; the erection of awnings by the manufacturer.

Class 27.—Manufacture of men's or women's clothing, whitewear, shirts, collars, corsets, hats, caps, furs, robes, feathers or artificial flowers.

Class 28. - Power laundries, dyeing, cleaning or bleaching.

Class 29.—Printing, photo-engraving, engraving, lithographing, bookbinding, embossing, manufacture of stationery, paper, cardboard boxes, bags, wall-paper, or papier-mache.

Class 30.— Heavy teaming or cartage; safe-moving or moving of boilers heavy machinery, building stone and the like; warehousing, storage teaming and cartage; including the hauling for hire by means of any vehicle, however drawn or propelled, of any commodity or material, scavenging, street cleaning or removal of snow or ice.

Class 32.—Steel building and bridge construction; installation of elevators, fire escapes, boilers, engines or heavy machinery; bridge building, not included elsewhere in Schedule I, erection of windmills.

Class 33.—Bricklaying, mason work, stone setting, concrete work, plastering; manufacture of concrete blocks; structural carpentry, lathing, the installation of pipe organs; house wrecking or house moving.

Class 35.—Painting, decorating or renovating; sheet metal work and roofing.

Class 36.—Plumbing, sanitary or heating engineering, gas and steam fitting; operation of theatre stage or moving pictures; operation of passenger or freight elevators, where workmen are specially employed therefor and which are not operated in connection with an industry included in another class, including the operation of elevators used in connection with an industry to which this schedule does not apply or in connection with a warehouse or shop or an office or other building or premises.

Class 37.—Sewer construction, tunnelling, shaft-sinking and well digging, the maintenance and operation of a waterworks system; excavation work for cellars, foundations and canals; trenching less than six feet deep, for gas pipes, water-pipes or wire conduits; and all excavation work where the depth is more than six feet and the width is less than half the depth.

Class 38.—Construction, installation or operation of electric power lines or appliances and power transmission lines, electric wiring of buildings and installation of lighting fixtures; construction or operation of an electric light system, construction or operation of an electric light work not included elsewhere in Schedule I, construction or operation of telegraph or telephone lines, construction or operation of telephone lines and works for the purposes of the business of a telephone company or used or to be used in connection with its business when constructed or operated by the company, except where such telephone lines or works are within the legislative authority of the Parliament of Canada.

Class 41.—Construction or operation of railways, road making or repair of roads with machinery; making and repairing of roads of all kinds not included elsewhere in Schedule I, manufacture of asphalt material and paving material.

Class 43.—Ship-building, dredging, subaqueous construction or pile-driving, fishing, stevedoring, operation of coal work upon wharves, operation of dry docks not included elsewhere in Schedule I.

Class 44.—If not included elsewhere any trade or business connected with the industries of:—

Lumbering, mining, quarrying, fishing, manufacturing, building, construction, engineering, transportation, operation of electric power lines, waterworks, and other public utilities, navigation, operation of boats, ships, tugs and dredges, operation of grain elevators and warehouses, teaming, scavenging and street cleaning, painting, decorating and renovating, dyeing and cleaning, or any occupation incidental thereto or immediately connected therewith.

Class 45.—The trade or business, as defined by sub-section 2 of section 2, of a municipal corporation, a public utilities commission, any other commission having the management and conduct of any work or service owned by or operated for a municipal corporation, a board of trustees of a police village and a school board.

Class 46. The construction or operation of railways operated by steam, electric or other motive power, street railways and incline railways, but not their construction when constructed by any person other than the company which owns or operates the railway.

Class 47.- The construction or operation of car shops, machine shops, steam and power plants and other works for the purposes of any such railway or used or to be used in connection with it when constructed or operated by the company which owns or operates the railway.

Class 48.—The construction or operation of telephone lines and works within the legislative authority of the Parliament of Canada, for the purposes of the business of a telephone company or used or to be used in connection with its business when constructed or operated by the company.

Class 49.—The construction or operation of telegraph lines and works for the purposes of the business of a telegraph company or used or to be used in connection with its business when constructed or operated by the company.

Class 50.—The construction or operation of steam vessels and works for the purposes of the business of a navigation company or used or to be used in connection with its business when constructed or operated by the company, and all other navigation, towing, operation of vessels, and marine wrecking.

Class 51. The operation of the business of an express company which operates on or in conjunction with a railway, or of sleeping, parlor or dining cars, whether operated by the railway company or by an express, sleeping, parlor or dining car company.

Class 52.—The operation otherwise than on tracks, on streets, highways or elsewhere of cars, trucks, wagons or other vehicles and rollers and engines propelled by steam, gas, gasoline, electric, mechanical or other power or drawn by horses or mules.

Appendix 2

Manitoba Workers' Compensation Board Statistics 1916-1994

Year	Total Accidents Reported	Medical Aid Only	Temporary Disability	Permanent Disability	Fatalities	Female Temporary Disability	Female Permanent Disability	Female Fatality	Industrial Diseases
1916 1917	2,404		964	29	12				
1918	2,695		1,643	71	42				
1919	2,895		1,581	70	33				9
1920	3,854		1,653	109	43	41	0	0	8
1921	3,705		2,340	146	23	38	1	0	6
1922	4,315		2,672	160	17	43	2	0	1
1923	9,747	1,962	3,305	174	39	56	1	0	4
1924		1,959	3,297	176	37			0	1
1925	9,042	2,022	3,258	167	19	51	3	0	12
1926	9,023	2,315	3,378	169	31	52	2	0	24
1927	10,982	2,902	4,496	202	35	67	2	1	11
1928	13,282	3,029	4,406	253	38	64	3	0	19
1929	13,340	4,157	5,097	289	48	86	2	0	29
1930	10,329	4,817	5,278	283	71	74	2	0	32
1931	8,219	3,488	4,488	295	39	65	2	0	42
1932	6,968	3,132	3,310	196	33	63	3	0	6
1933	6,858	2,558	2,939	175	23	81	1	0	12
1934	6,608	2,655	2,680	160	10	70	3	0	3
1935	7,956	3,205	3,168	190	15	76	2	0	15
1936	9,895	4,274	3,732	210	21	94	0	0	19
1937	11,050	4,860	4,186	216	37	82	3	0	13
1938	10,890	4,781	4,120	232	20	89	3	0	7
1939	11,433	5,089	4,004	205	33	78	1	0	10
1940	13,168	5,128	4,044	196	33	75	3	0	8
1941	15,812	5,900	5,055	208	39	127	1	0	9
1942	16,228	7,294	5,789	249	46	206	7	0	10
1943	16,387	7,546	5,929	265	45	341	11	0	9
1944	16,229	7,287	6,369	244	48	551	19	0	7
1945	16,196	7,182	6,163	251	34	621	14	0	15
1946	18,074	7,277	5,885	284	31	478	13	1	6
1947	19,105	8,021	6,461	279	34	358	16	0	0
1948	20,152	8,936	6,482	299	29	305	12	0	0
1949	20,909	10,019	6,414	320	30	272	9	0	1
1950	20,134	10,654	6,132	308	31	248	8	1	2
1951	20,441	10,516	5,652	316	29	199	11	0	0

Manitoba Workers' Compensation Board Statistics 1916-1994

Year	Total Accidents Reported	Medical Aid Only	Temporary Disability	Permanent Disability	Fatalities	Female Temporary Disability	Female Permanent Disability	Female Fatality	Industrial Diseases
1952	21,113	11,249	5,577	349	37	238	9	0	6
1953	20,879	11,351	5,522	337	36	233	12	0	9
1954	20,339	11,759	5,268	382	37	228	12	0	7
1955	20,811	11,421	4,998	367	41	227	19	0	4
1956	22,025	11,661	5,521	121	29	247	4	0	4
1957	22,321	NA	5,650	226	30	253	8	0	3
1958	22,736	12,983	5,314	259	32	276	6	0	15
1959	26,371	15,461	6,560	294	33	281	11	0	6
1960	27,426	12,787	8,931	331	22	626	10	0	14
1961	26,605	12,375	9,019	415	28	774	18	0	40
1962	27,727	12,713	9,467	378	31	852	14	0	47
1963	29,166	13,601	10,083	387	28	936	14	0	73
1964	31,818	14,364	11,042	452	39	979	19	0	105
1965	32,581	14,738	11,627	358	45	1,179	25	2	76
1966	35,171	15,208	13,217	490	39	1,393	27	0	43
1967	36,544	15,615	13,570	532	43	1,473	32	0	49
1968	36,021	16,142	12,822	444	39	1,424	24	0	26
1969	36,890	16,807	14,231	416	67	1,479	23	2	32
1970	35,868	15,901	14,149	503	34	1,625	30	0	45
1971	34,960	15,421	13,903	541	33	1,567	30	0	47
1972	38,230	14,289	16,085	433	37	1,885	28	0	50
1973	41,021	14,533	16,995	467	46	2,046	26	1	42
1974	45,874	16,371	18,778	477	42	2,289	35	0	90
1975	45,924	17,693	17,934	506	41	2,224	33	1	92
1976	44,413	16,760	18,286	586	35	2,307	48	1	61
1977	43,256	16,236	17,666	578	34	2,413	45	0	52
1978	42,418	16,166	17,201	580	34	2,496	41	0	42
1979	46,463	17,411	18,720	580	37	2,782	40	0	74
1980	46,627	17,898	20,701	526	38	3,197	35	0	46
1981	48,904	18,847	19,645	539	29	3,435	28	0	67
1982	44,737	17,021	19,712	604	21	3,500*	30*	0	NA
1983	44,133	16,916	18,560	654	31	3,500*	60*	1	NA
1984	48,685	23,162	20,590	619	27	4,047	57	3	483
1985	50,380	15,610	21,769	826	30	[4,646 Total Loss Time]			263
1986	54,228	17,327	22,893	664	35	[4,756 Total Loss Time]			350

Manitoba Workers' Compensation Board Statistics 1916-1994

Year	Total Accidents Reported	Medical Aid Only	Temporary Disability	Permanent Disability	Fatalities	Female Temporary Disability	Female Permanent Disability	Female Fatality	Industrial Diseases
1987	53,709	17,453	22,070	654	27	NA	NA		319
1988	52,872	18,121	19,813	616	25	NA	NA		184
1989	51,029	17,573	21,148	443	20	NA	NA		225
1990	51,312	15,883	21,566	629	29	[5,269 Total Loss Time]			
1991	44,587	12,317	18,271	543	8	[4,893 Total Loss Time]			64
1992	42,203	16,103	16,993	742	13	[4,513 Total Loss Time]			34
1993	37,581	13,923	15,509	684	25	NA	NA		

Appendix 3

Manitoba Workers' Compensation Board
Employer Registry 1916-1993
General Class Employers

Year	Number of Employers Assessed	Special Coverage Employers
1917	2,210	NA
1918	NA	NA
1919	NA	20
1920	NA	NA
1921	3,705	34
1922	4,315	24
1923	4,116	19
1924	3,701	17
1925	3,911	37
1926	4,158	17
1927	4,431	63
1928	4,788	48
1929	5,002	51
1930	5,145	92
1931	5,261	79
1932	5,112	47
1933	5,072	NA
1934	5,163	NA
1935	NA	NA
1936	NA	NA
1937	NA	NA
1938	NA	NA
1939	NA	NA
1940	NA	NA
1941	NA	NA
1942	NA	NA
1943	NA	NA
1944	NA	NA
1945	NA	NA
1946	NA	NA
1947	NA	NA
1948	NA	NA
1949	NA	NA
1950	NA	NA
1951	NA	NA
1952	NA	NA
1953	NA	NA
1954	NA	NA
1955	8,485	NA
1956	NA	NA
1957	NA	NA
1958	9,150	NA
1959	NA	NA
1960	13,150	4,432*
1961	NA	NA
1962	NA	NA
1963	NA	NA
1964	NA	NA
1965	13,762	NA
1966	13,997	NA

NA = Data is presented only in Actual Payroll or Dollar value
* = The number represents change from amendments (not optional for employer)

Manitoba Workers' Compensation Board
Employer Registry 1916-1993
General Class Employers

Year	Number of Employers Assessed	Special Coverage Employers
1967	13,931	NA
1968	14,031	*229 / 58 Farming
1969	13,832	NA
1970	NA	205 / 40 Farming
1971	13,836	164 / 40 Farming
1972	14,210	240 / 39 Farming
1973	14,789	435 / 55 Farming
1974	15,093	580 / 82 Farming
1975	15,463	644 / 126 Farming
1976	15,727	662/125 Farming
1977	16,610	862/130 Farming
1978	17,114	1,008/147 Farming
1979	18,069	963/184 Farming
1980	18,375	1,042/157 Farming
1981	18,921	1,393/166 Farming
1982	18,891	1,413/176 Farming
1983	18,939	1,071/128 Farming
1984	19,097	1,552/94 Farming
1985	19,531	1,015/ 96 Farming
1986	19,900	1,021/ 91 Farming
1987	20,104	783/ 54 Farming
1988	19,813	551/ 56 Farming
1989	19,624	962/ 65 Farming
1990	19,751	1,050/ 78 Farming
1991	19,295	3,899(3,709 Executive Officer Coverage)
1992	19,200	1,829/76 Farming
1993	19,350	1,186/57 Farming

NA = Data is presented only in Actual Payroll or Dollar value
*= First figure indicates number of optional coverage second figure indicates of which are farming

Appendix 4

Census Data: Manitoba Labour Force

1921

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	184,961	100.0	31,682	100.0
Agriculture	85,634	46.3	1,270	4.0
Fishing & Trapping	448	0.2	3	0.1
Logging	265	0.1		
Mining	309	0.2		
Manufacturing	14,002	7.6	2,441	7.7
Construction	9,774	5.3		
Transportation	14,608	7.9	1,001	3.2
Commercial&Financial	19,545	10.6	3,847	12.1
Service	10,665	5.8	15,348	48.5
Clerical	10,881	5.8	7,600	24.0
Labourers	15,206	8.2	16	0.1
Not Stated	265	0.1	61	0.2

1931

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	224,861	100.0	44,822	100.0
Managerial	13,940	6.2	490	1.1
Professional	8,295	3.7	7,824	17.5
Clerical	12,046	5.4	9,315	20.8
Sales	10,455	4.6	3,421	7.6
Service	9,816	4.4	17,226	38.4
Transportation	12,134	5.4	885	2.0
Agriculture	90,761	40.4	1,855	4.1
Logging	516	0.2	---	---
Fishing & Trapping	3,928	1.7	52	0.1
Mining	1,193	0.5	---	---
Construction & Manufacturing	34,502	15.3	3,447	7.7
Labourers	27,169	12.1	276	0.6
Not Stated	106	0.0	31	0.1

1941

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	215,861	100.0	49,764	100.0
Managerial	14,234	6.6	725	1.5
Professional	8,881	4.1	7,708	15.5
Clerical	11,072	5.1	10,271	20.6
Sales	8,619	4.0	3,843	7.7
Service	9,610	4.5	19,886	40.0
Transportation	12.071	5.6	831	1.7
Agriculture	90,287	42.0	1,497	3.0
Logging	1,493	0.7	---	---
Fishing & Trapping	5,081	2.4	49	0.1
Mining	2,119	1.0	---	---
Construction & Manufacturing	39,414	18.3	4,641	9.3
Labourers	11,992	5.6	264	0.5
Not Stated	307	0.1	49	0.1

1951

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	231,889	100.0	66,135	100.0
Managerial	21,031	9.1	1,707	2.6
Professional	10,414	4.5	8,620	13.0
Clerical	15,152	6.5	20,098	30.4
Sales	9,815	4.2	6,207	9.4
Service	15,307	6.6	14,913	22.5
Transportation	16,259	7.0	1,548	2.3
Agriculture	70,210	30.3	3,366	5.1
Logging	1,288	0.6	---	---
Fishing & Trapping	1,534	0.7	12	0.0
Mining	2,089	0.9	---	---
Construction & Manufacturing	50,211	21.7	8,386	12.7
Labourers	16,827	7.3	738	1.1
Not Stated	1,762	0.8	540	0.8

1961

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	246,198	100.0	96,444	100.0
Managerial	23,316	9.5	2,347	2.4
Professional	15,790	6.4	13,538	14.0
Clerical	17,400	7.1	27,888	28.9
Sales	12,533	5.1	8,395	8.7
Service	22,346	9.1	23,046	23.9
Transportation	17,728	7.2	2,198	2.3
Agriculture	52,501	21.3	7,423	7.7
Logging	873	0.4	3	0.0
Fishing & Trapping	1,240	0.5	13	0.0
Mining	3,686	1.3	---	---
Construction & Manufacturing	64,037	22.7	7,264	5.3
Labourers	20,104	7.1	---	---
Not Stated	19,724	7.0	13,566	9.9

1971

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	281,726	100.0	122,615	100.0
Managerial	31,387	11.1	2,543	1.9
Professional	25,640	9.1	21,913	16.1
Clerical	15,680	5.6	36,786	27.0
Sales	15,689	5.6	9,821	7.2
Service	21,914	7.8	32,038	23.5
Transportation	23,037	8.2	2,214	1.6
Agriculture	39,623	14.1	9,194	6.7
Logging	---	---	---	---
Fishing & Trapping	---	---	---	---
Mining	3,686	1.3	---	---
Construction & Manufacturing	64,037	22.7	7,264	5.3
Labourers	20,104	7.1	---	---
Not Stated	19,724	7.0	13,566	9.9

1986

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	303,850	100.0	229,275	100.0
Managerial	35,600	11.7	14,870	6.5
Professional	36,955	12.2	51,935	22.7
Clerical	20,255	6.7	72,545	31.6
Sales	25,475	8.4	21,310	9.3
Service	29,455	9.7	40,070	17.5
Transportation	19,155	6.3	1,610	0.7
Agriculture	34,430	11.3	9,585	4.2
Logging	1,370	0.5	80	0.0
Fishing & Trapping	920	0.3	40	0.0
Mining	2,990	0.9	70	0.0
Processing/Machining	45,655	15.0	11,960	5.2
Construction	32,005	10.5	800	0.3
Not Stated	19,575	6.4	4,400	1.9

1991

Occupational Group	Males		Females	
	Number	Percent	Number	Percent
All Occupations	306,750	100.0	252,555	100.0
Managerial	35,810	11.7	19,515	7.7
Professional	40,360	13.0	58,920	23.33
Clerical	21,150	6.9	75,700	30.0
Sales	27,765	9.1	22,440	8.9
Service	31,730	10.3	46,775	18.5
Transportation	19,440	6.3	1,525	0.6
Agriculture	30,480	9.9	10,415	4.1
Logging	1,475	0.5	140	0.1
Fishing & Trapping	1,045	0.3	125	0.1
Mining	2,580	0.8	85	0.0
Processing/Machining	44,565	14.5	11,555	4.57
Construction	30,975	10.1	750	0.3
Not Stated	19,375	6.3	4,610	1.8

Appendix 5

AIR CONTAMINANTS IN THE WORKPLACE

Ozone: is emitted by photocopiers and by most electrical equipment. Very low levels cause depression, headaches, drowsiness and irritation to the eyes, nose, throat and lungs. Permanent lung damage may result from long-term exposure.

Nitropyrene: is a chemical used in Xerox toners and is a potential cancer-causing agent. Levels of Nitropyrene have been reduced, but the chemical may still be found on shelves.

Trinitrofluorenone: is a substance that is used to coat some photo-copying drums and is a suspected cancer-causing agent.

Solvents: vapours from different substances used in glues, rubber cement and film cleaners may contain toxic solvents that cause dizziness, fatigue, eye irritations, heart palpitations,confusion, etc. Some solvents such as trichlorethylene (TCE) and benzene are cancer-causing. Toluene is a powerful narcotic.

Vinyl Chloride: gas can be emitted by plastic materials. This gas is a known carcinogen.

Formaldehyde: is given off from a variety of materials such as particle boards, industrial glues in carpets, carbonless paper, fire retardants, Urea Formaldehyde insulation (UFFI). This substance causes respiratory and eye, nose, throat and skin irritations.

PCB's: are still found in buildings where old transformers are in use. This chemical can produce skin rashes, headaches and fatigue from short-term exposure, and it has been linked to cancer in animals and to depressed immune function in humans.

Asbestos: may be found in acoustical tile, ducts and pipes in the ventilation systems, and lining the steel beams of the structure of the building. Asbestos is linked to various forms of cancer of the lung, stomach and bowel.

Carbonmonoxide, sulphur dioxide gas and nitrogen oxides: are often present in office buildings. These result from smoking, car exhaust fumes and heating fuels. These chemicals produce headaches, nausea, eye, nose and throat irritations.

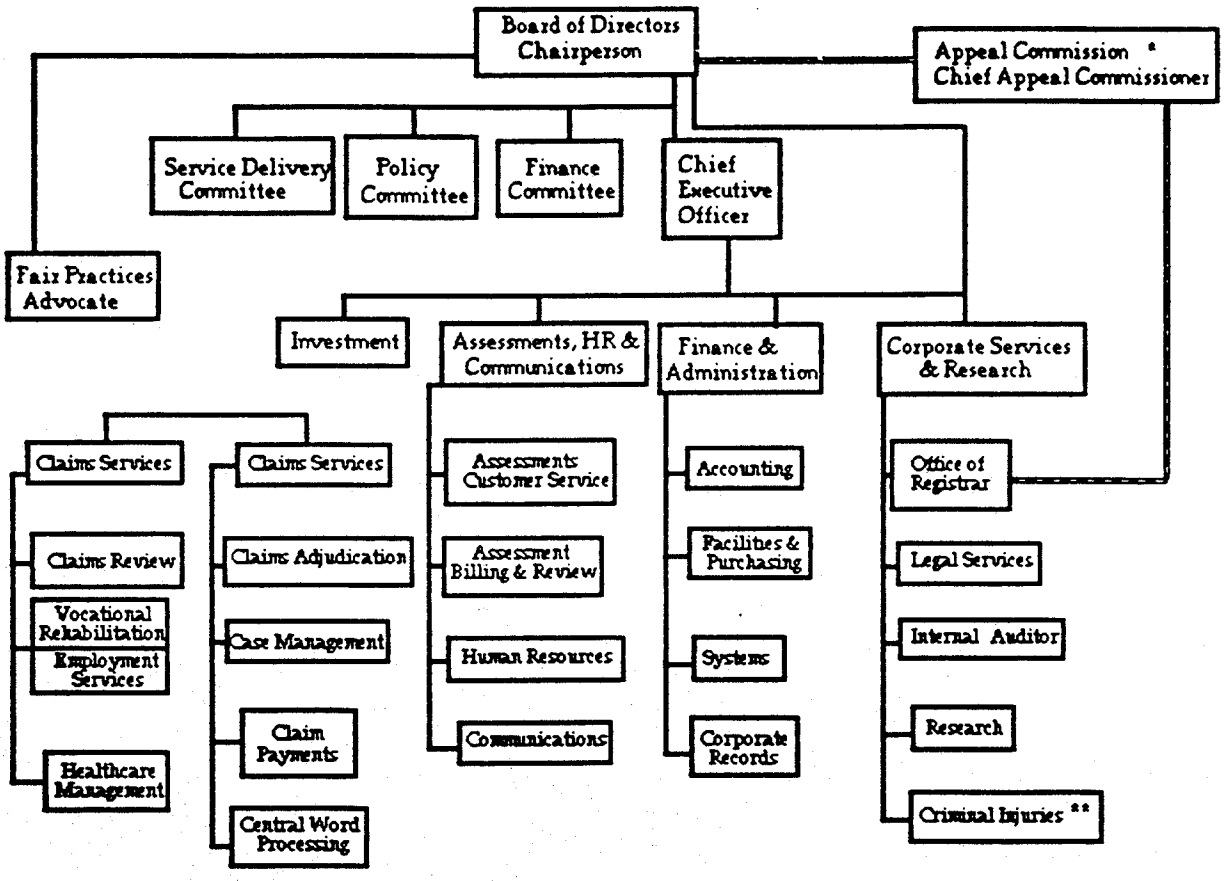
Microbes (fungus and bacteris): may grow in the air conditioning systems, humidifiers and in dust. These can lead to allergies, infectious diseases and skin problems.

Ultra-violet radiation: is emitted by photocopiers. This can cause painful eye damage which is self-repairing if the exposure is short-term. Even so, headaches and sore eyes are common symptoms.

Source: Ontario Federation of Labour Occupational Health and Safety Training Centre. Office and Clerical Hazards. 6-7.

Appendix 6

Organizational Chart for Workers' Compensation Board (1994)

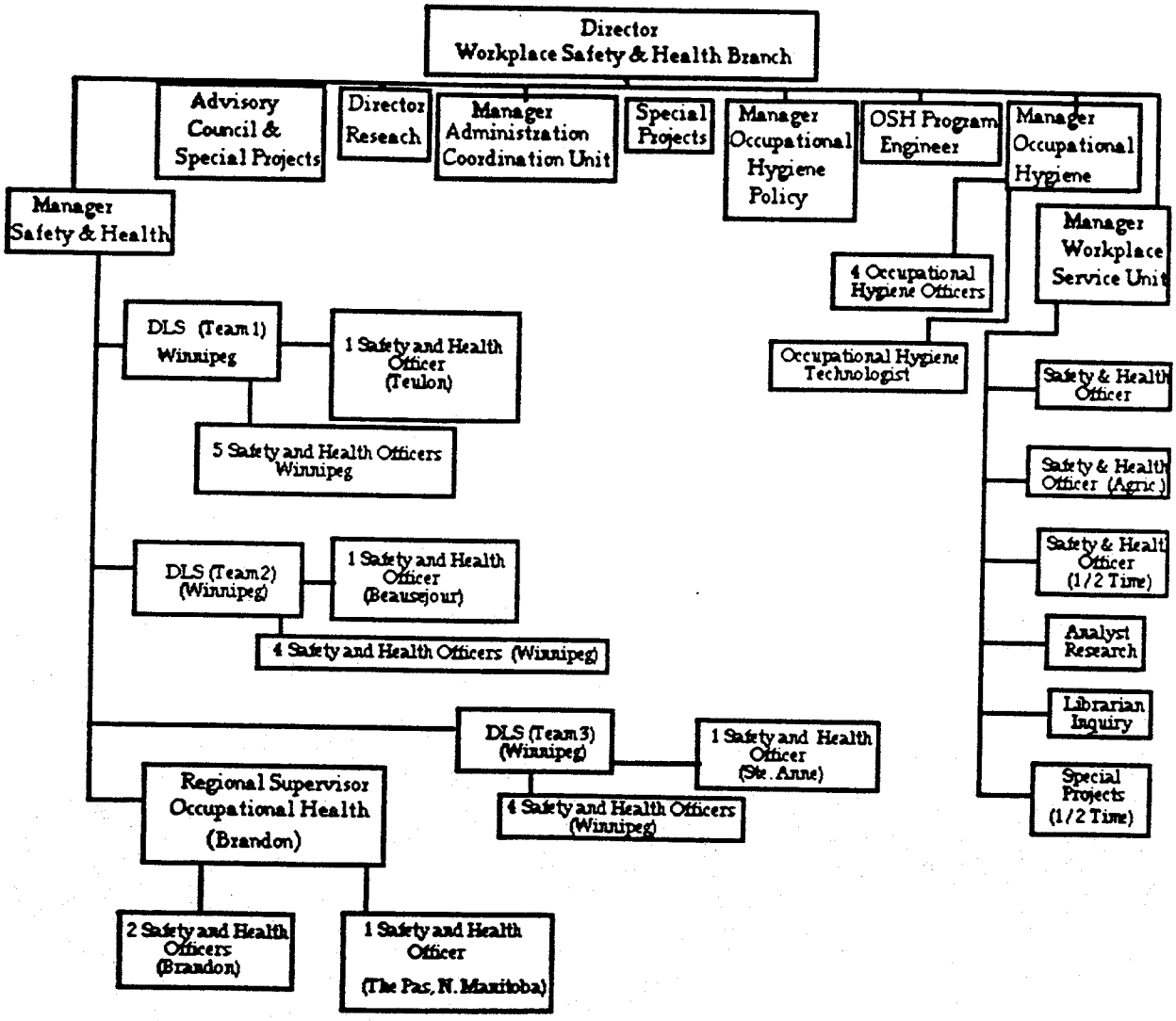


* Bound by Policies of the Board

** Separate entity administered on behalf of Provincial Government

Appendix 7

Organizational Chart for Workplace Safety & Health (1994)



Bibliography

Abella, Irving and David Millar eds. The Canadian Worker in the Twentieth Century. Toronto: Oxford University Press, 1978.

Alberta. Report of the Industrial Health and Safety Commission 1975. Edmonton Alberta: Industrial Health and Safety Commission, 1975.

Andrews, John B. Labor Problems and Labor Legislation. New York: American Association for Labor Legislation, 1932.

Armstrong, Pat and Hugh Armstrong. A Working Majority: What Women Must Do For Pay. Ottawa: Supply and Services Canada, 1983.

Ashford, Nicholas A. Crisis in the Workplace: Occupational Disease and Injury. Cambridge, Massachusetts: MIT Press, 1976.

Bartrip, P.W.J. and S.B. Burman. The Wounded Soldiers of Industry: Industrial Compensation Policy 1833-1897. Oxford: Clarendon Press, 1983.

Berkowitz, Monroe. Workmen's Compensation: The New Jersey Experience. New Brunswick, New Jersey: Rutgers University Press, 1960.

Bezold, Clement and Rick J. Carlson and Jonathan C. Peck. The future of Work and Health. Dover, Massachusetts: Auburn House Publishing,1986.

Brown, Richard M. "Canadian Occupational Health and Safety Legislation" Osgoode Hall Law Journal. 90-118, Vol. 20 No. 1, 1982.

Burton, John F. ed. New Perspectives in Workers' Compensation. Ithaca, New York: Cornell University, 1988.

Canada. Working Paper on Social Security in Canada. Ottawa, April 18, 1973.

Canadian Advisory Council on the Status of Women, Integration and Participation: Women's Work in the Home and in the Labour Force. Ottawa: Supply and Services, 1987.

Canadian Auto Workers. Egronomics in the Work Environment. C.A.W. Health and Safety and Communication Departments, 1993.

Chelius, James Robert. Workplace Safety and Health: The Role of Workers' Compensation. Washington: American Enterprise Institute for Public Policy Research, 1977.

Conley, Kevin.Workers' Compensation Officer, United Steel Workers of America, Local 6500. Interview by author, 20 December 1993, Sudbury, Ontario.

Cornish, Mary and Lavrell Ritchies. Getting Organized: Building A Union. Toronto:The Women's Press, 1980.

Cross, Michael S. ed. The Workingman in the Nineteenth Century. Toronto: Oxford University Press, 1974.

Dalla Chiesa, E. Insurance for Self-Employed Persons Against Employment Accidents and Occupational Diseases. Leningrad: International Social Security Association General Assembly, May 1967.

Darling-Hammond, Linda and Thomas J. Kniesner. The Law and Economics of Workers' Compensation. Santa Monica, California: Rand, 1980.

Davis, Otto A. and Morton I. Kamien. "Externalities, Information and Alternative Collective Action." In Public Expenditures and Policy Analysis, 74-95. Robert H. Haveman and Julius Margolis, eds. Chicago: Markham, 1970.

Dee, Garth and Nick McCombie and Gary Newhouse. Workers' Compensation in Ontario. Toronto: Butterworths, 1987.

Dewis, M. The Law on Health and Safety at Work. London: Butler and Tanner, 1978.

Drake, Charles D. and Frank B. Wright. Law of Health and Safety at Work: The New Approach. New York: Oceana, 1983.

Dwivedi, O. P.The Administrative State in Canada: Essays For J. E. Hodgetts. Toronto: University of Toronto Press, 1982.

Elling, Ray H. The Struggle for Workers'Health: A Study of Six Industrialized Countries. Farmingdale, New York: Baywood Publishing Company, 1986.

Faber, Barry A. Crisis in Education: Stress and Burnout in the American Teacher. San Francisco: Jossey-Bass, 1991.

Fairclough, Celia. Hazards at Work: Law and the Workplace. Proceedings of a National Seminar Toronto, November 1977.

Fox-Decent, W. Chairman - Workers' Compensation Board of Manitoba. Interview by author, 23 March 1994, Winnipeg.

Friedman, Lawrence M. and Jack Ladinsky. "Social Change and The Law of Industrial Accidents" Columbia Law Review, 50-82, 1967.

Gibson, Mary. Workers' Rights. Totowa, New Jersey: Rowman and Allanheld, 1983.

Goldsmith, Smith and Lorin E. Kerr. Occupational Safety and Health: The Prevention and Control of Work-related Hazards. New York: Human Science Press, 1982.

Greenfield, Ellen J. House Dangerous: Indoor Pollution In Your Home and Office - and What You Can Do About It. New York: Interlink Books, 1987.

Gronas, Kirsti. Unsafe Work: The Right To Refuse in Ontario. Kingston, Ontario: Industrial Relations Centre, Queen's University, 1992.

Grossman, Michael. The Law of Occupational Health and Safety in Ontario. Toronto: Butterworths, 1988.

Guest, Dennis. The Emergence of Social Security in Canada. Vancouver, University of B.C. Press, 1980.

Gunningham, Neil. Safeguarding The Worker. Agincourt, Ontario: Carswell Company Ltd., 1984.

Health Canada. Office Air: A Worker's Guide to Air Quality in Offices, Schools,and Hospitals. Ottawa: Supply and Service Canada, 1994.

Health and Welfare Canada. Health and Safety of Laboratory Workers in Canada - A Review of the Literature. Ottawa: Minister of National Health and Welfare, 1982.

Heron, Craig and Robert Storey eds. On The Job: Confronting the Labour Process in Canada. Kingston: McGill-Queen's University Press, 1986.

Health and Welfare Canada. Health Risk Determination: The Challenge of Health Protection. Ottawa: Minister of Supply and Services Canada, 1990.

Hildebrand, Gary. Manager of Occupational Health and Safety. Interview by author, 21 March 1994, Winnipeg.

Hilliard, Rob "Occupational Health and Safety." In Hard Bargains: The Manitoba Labour Movement Confronts the 1990's, 155-170. Errol Black and Jim Silver, eds. Winnipeg: Labour History Series, 1991.

Hood, Jack B. and Benjamin A. Hardy. Workers' Compensation and Employee Protection Laws. St. Paul, Minnesota: West Publishing Company, 1983.

Hushion, Ogilvie Associates. Technical Report No. 5 An Assessment of the Effectiveness of Government Decision-Making Processes in the Field of Occupational Health and Safety. Ottawa: Economic Council of Canada, 1981.

Industrial Relations Centre Queen's University. Labour Law: Cases, Materials and Commentary. Kingston, Ontario: Industrial Relations Center, Queen's University, 1986.

Ison, Terence G. Workers' Compensation in Canada. Toronto: Butterworths, 1983.

Jasso, Sonia and Maria Mazorra. "Following the Harvest: The Health Hazards of Migrant and Seasonal Farmworking Women." In Double Exposure: Women's Health Hazards on the Job and at Home, 86-99. Wendy Chavkin, ed. New York: Monthly Review Press, 1984.

Jerome-Forget, Monique. "Workers' Compensation in Crisis" Options Politique 14 No.6 54-59.

Jones-Lee, M.W. ed. The Value of Life and Safety. New York: North-Holland Publishing Company, 1981.

Justice Society (U.K.). Compensation For Accidents at Work: A Memorandum of the Committee on No-Fault Insurance. London, June 1974.

Kates, Robert W. "Managing Technological Hazards: Success, Strain, Surprise."In Hazards: Technology and Fairness, 206-220. National Academy of Engineering, Washington: National Academy Press, 1986.

Kates, Robert W. and Christoph Hohenemser and Jeanne X. Kasperson eds. Perilous Progress: Managing the Hazards of Technology. Boulder, Colorado: Westview Press, 1985.

Kochan, Thomas A. and Lee Dyer and David B. Lipsky. The Effectiveness of Union-Management Safety and Health Committees. Kalamazoo, Michigan: W.E. Upjohn Institute, 1977.

Kraus, Jess F. "Homicide While at Work: Persons, Industries and Occupations at High Risk." American Journal of Public Health 77, no. 10 (October 1987), 1285-9.

Labour Canada. 1984 Canadian Women and Job Related Laws. Ottawa: Minister of Supply and Services Canada, 1985.

Labour Canada. A Guide to the Canada Labour Code: Occupational Safety and Health. Ottawa: Minister of Supply and Services Canada, 1992.

Labour Canada. Occupational Safety and Health Concerns of Canadian Women: A Background Paper. Ottawa: Minister of Supply and Services Canada, 1991.

Labour Canada. Safety and Health Committees: Occupational Safety and Health. Ottawa: Minister of Supply and Services Canada, 1988.

Labour Canada. Workmen's Compensation in Canada. Ottawa: Information Canada, 1969.

Labour Canada. Workplace Inspections: Four Steps to Safety and Health. Ottawa: Minister of Supply and Services Canada, 1993.

Legge, B.J. The Canadian System of Workmen's Compensation. Toronto: January 10, 1972.

Lowe, Graham S. and Harvey J. Krahn eds. Working Canadians: Readings in the Sociology of Work and Industry. Toronto: Methuen, 1984.

Manga, Pran and Robert Broyles and Gil Reschenthaler. Technical Report No. 6 Occupational Health and Safety: Issues and Alternatives. Ottawa: Economic Council of Canada, 1981.

Manitoba. Report of the Royal Commission on Workmen's Compensation. Winnipeg, 1910.

Manitoba. Report of the Royal Commission on Workmen's Compensation. Winnipeg, 1918.

Manitoba. Report of the Royal Commission on Workmen's Compensation. (Turgeon Report) Winnipeg, 1959.

Manitoba. Workers Compensation in Manitoba: Opportunities for Consolidation and Enrichment 1980. (Lampe Report) Winnipeg, 1980.

Manitoba. A Report on the Workers Compensation Board of Manitoba. Winnipeg, 1982.

Manitoba. Brief Presented to the Workers Compensation Act Legislative Review Committee by the Planning, Research and Evaluation Branch Manitoba Environment and Workplace Safety and Health. Winnipeg, 1986.

Manitoba. Report of the Workers Compensation Review Committee. (King Report) Winnipeg, May 1987.

Manitoba Federation of Labour. Occupational and Environmental Factors in Cardiovascular Diseases. Winnipeg, 1985.

Manzer, Ronald. Public Policies and Political Development In Canada. Toronto: University of Toronto Press, 1985.

Margolis, Bruce L. and William H. Kroes. The Human Side of Accident Prevention: Psycological Concepts and Principles Which Bear on Industrial Safety. Springfield, Illinois: Charles C. Thomas Publishers, 1975.

Marsh, Leonard. Report on Social Security for Canada. Toronto: University of Toronto Press, 1975.

Mashaw, Jerry L. Due Process in the Administrative State. New Haven: Yale University Press, 1985.

Mashaw, Jerry L. Bureaucratic Justice. Westford, Massachusetts: Murray Printing, 1983.

Mashaw, Jerry L. and Richard A. Merrill and Peter M. Shane. Administrative Law: The American Public Law System. St. Paul, Minnesota: West Publishing Company, 1992.

McCormack, A. Ross. "The Western Working-Class Experience." In Lectures in Canadian Labour and Working-Class History. 115-126. W.J.C. Cherwinski and Gregory S. Kealey, eds. St. John's: Committee on Canadian Labour History, 1985.

McCormick, Norma. M.L.A. Osborne - Liberal Workers' Compensation Critic. Interview by author, 22 October 1993, Winnipeg.

Mendeloff, John. Regulating Safety: An Economic and Political Analysis of Occupational Safety and Health Policy. Cambridge, Massachusetts: M.I.T. Press, 1979.

Mesman, Harry. "Is Justice Served? Workers' Compensation in Mantioba." In Hard Bargains: The Manitoba Labour Movement Confronts the 1990's, 171-183. Errol Black and Jim Silver, eds. Winnipeg: Labour History Series, 1991.

Mesman, Harry. Manitoba Federation of Labour Workers' Compensation Officer. Interview by author, 2 March 1994, Winnipeg.

Messing, Karen. Occupational Safety and Health Concerns of Canadian Women: A Background Paper. Ottawa: Supply and Services Canada, 1991.

Mitchel, Olivia S. "The relation of age to workplace injuries" Monthly Labor Review, July, No.8, 1988.

Moore, Michael J. and W. Kip Viscusi. Compensation Mechanisms for Job Risks. Princeton, New Jersey: Princeton University Press, 1990.

Nash, Michael Izumi. Canadian Occupational Health and Safety Law Handbook. Ottawa: C.C.H. Canadian Limited, 1983.

Nelkin, Dorthy and Michael S. Brown. Workers At Risk: Voices from the Workplace. Chicago: University of Chicago Press, 1984.

Ontario Federation of Labour. Office and Clerical Hazards. Toronto: Occupational Health and Safety Training Centre.

Piva, Michael J. "The Workmen's Compensation Movement in Ontario" Ontario History, LXVII, No.1, 1975.

Praznick, Darren. Minister of Labour, Province of Manitoba. Interview by author, 2 March 1994, Winnipeg.

Pringle, Jim. United We Stand: A History of Winnipeg's Civic Workers. Winnipeg: Manitoba Labour Education Centre, 1991.

Quint, Julia and Margaret Handley and Kate Cummings. "Workplace Health Hazards: Anaylsis of Hotline Call Over a Six-Year Period" American Journal of Public Health 80 No.2 202-204, 1990.

Reasons, Charles E. and Lois L. Ross and Craig Paterson. Assault on the Worker: Occupational Health and Safety in Canada. Toronto: Butterworths, 1981.

Remis, R.S. and M.A. Rossignol and M.A. Kane. "Hepatitis B Infection in a Day School for Mentally Retarded Students: Transmission from Students to Staff." American Journal of Public Health. 77, (1987), 1183-1186.

Reschenthaler, G. B. Occupational Health and Safety in Canada. Montreal: Institute for Research on Public Policy, 1979.

Rest, Kathleen M. and Nicholas A. Ashford. Occupational Safety and Health in British Columbia. Cambridge, Massachusetts: Ashford Associates, 1992.

Ried, Darryl. M.L.A. N.D.P. Workers' Compensation Critic. Interview by author, 10 December 1993, Winnipeg.

Scott, David. "The Workers Compensation Board of Manitoba: Environment, Structure, and Process" M.A. thesis, University of Manitoba, 1993.

Smith, Doug. Journalist (Workers' Compensation and Occupational Health and Safety - History). Interview by telephone, 4 March 1994, Winnipeg.

Smith, Doug. Let Us Rise: An Illustrated History of the Manitoba Labour Movement. Vancouver: New Start Books Ltd., 1985.

Smith, Doug. A History of the Manitoba Occupational Health and Safety Legislation. Winnipeg (Unpublished) Manitoba Federation of Labour, 1994.

Smith, Neal. Farming: The Third Most Dangerous Occupation. Washington: Congressional Record, 1969.

Taylor, Timothy N. An Advocate's Guide to Workers Compensation in Manitoba. Winnipeg: Manitoba Federation of Labour, 1985.

Thompson, Mark. Is There a New Canadian Industrial Relations? Proceedings of the 23rd Annual Meeting of the Canadian Industrial Relations Association. Winnipeg: University of Manitoba, May 29-31, 1986.

Treasury Board of Canada. Handbook of Occupational Safety and Health 4th Edition. Ottawa: Supply and Services Canada, 1989.

Tucker, Eric. Administering Danger in the Workplace: The Law and Politics of Occupational Health and Safety Regulation in Ontario 1850-1914. Toronto: University of Toronto Press, 1990.

Victor, Richard B. Workers' Compensation and Workplace Safety: The Nature of Employer Financial Incentives. Santa Monica, California: Rand, 1982.

Victor, Richard B. and Linda R. Cohen and Charles E. Phelps. Workers' Compensation and Workplace Safety: Some Lessons from Economic Theory. Santa Monica, California: Rand, 1982.

Weiler, Paul C. Reshaping Workers' Compensation for Ontario. A Report Submitted to Robert G. Elgie, Minister of Labour, November, 1980.

Whipple, Chris G. "Dealing With Uncertainty About Risk in Risk Management."In Hazards: Technology and Fairness, 44-59. National Academy of Engineering, Washington: National Academy Press, 1986.

Wiere, John. Workers' Compensation Officer - British Columbia Federation of Labour. Interview by author, 25 November 1993, Vancouver.

Willes, John A. Contemporary Canadian Business Law. Toronto: McGraw-Hill, 1986.

Williams, Jack. The Story of Unions in Canada. Canada: J. M. Dent & Sons, 1975.

Woloshen, Richard. Workers' Compensation Board of British Columbia. Interview by author, 26 November 1993, Vancouver.

Workers' Compensation Board of British Columbia. Review of Organization and Administration. Vancouver: P.S. Ross and Partners, 1976.

Workers' Compensation Board of British Columbia. Discussion Paper. Vancouver: October 6, 1993.

Workmen's Compensation Board of Manitoba. Report of The Workmen's Compensation Board. (Annual Reports 1917 to 1973). Winnipeg, Manitoba.

Workers' Compensation Board of Manitoba. Report of the Workers' Compensation Board. (Annual Reports 1974 to 1993). Winnipeg, Manitoba.

Workers' Compensation Board of Manitoba. Employer's Guide to Workers Compensation. Winnipeg, Manitoba, 1993.

Workers' Compensation Board of Manitoba. Five Year Operating Plan 1993. Winnipeg, Manitoba, 1993.

Workers' Compensation Board of Manitoba. Five Year Operating Plan 1994. Winnipeg, Manitoba, 1994.

Workers' Compensation Board of Manitoba. A Study of Claims Costs During the 1980-1988 Period. Winnipeg: Peat Marwick Stevenson and Kellogg, Management Consultants. 1990.

Worrall, John D. ed. Safety and the Workforce. Ithaca, New York: Cornell University, 1983.

Worrall, John D. and David Appel eds. Workers' Compensation Benefits: Adequacy, Equity, and Efficiency. Ithaca, New York: Cornell University, 1985.

Young, Dallas M. Understanding Labor Problems. Toronto: McGraw-Hill, 1959.

Zeckhauser, Richard. "Uncertainty and the Need for Collective Action." In Public Expenditures and Policy Analysis, 96-116. Robert H. Haveman and Julius Margolis, eds. Chicago: Markham, 1970.