

## OCCUPATIONAL HEALTH AND SAFETY IN CANADA, REGULATORY REFORM, AND EMPLOYER RESPONSE: AN OVERVIEW OF PAST, PRESENT, AND FUTURE CONCERNS

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### ABSTRACT

From the perspective of what has been successful, this paper provides an overview of occupational health and safety regulatory reform in Canada.

It begins with a review of the past enabling legislation and the employer response. Both workers' compensation and occupational health and safety are reviewed.

It then examines for the present some current enforcement strategies and the case of GM Canada as an employer that has gone beyond such an administrative managerial approach to develop a culture of safety. From a soft law or incentive perspective the current controversy of experience rating is also critically assessed.

With regards to the future the paper argues that globalization is eroding the socio-economic conditions that gave rise to this regulatory schema. Issues such as atypical work, the increase in white collar jobs, and the use of temporary foreign workers will require unique regulatory responses that are only beginning to be developed.

**Key Words:** occupational health and safety, regulation, Canada, employer response

### 1. INTRODUCTION

In the Canadian context the role of economics has been a key factor in understanding health and safety regulation. Among such key economic factors

are the following: the loss of production due to work-related illness and injury; the increasing costs to employers of providing compensation to the victims of accidents and occupational disease; and, increasing costs to the state for providing health care (Walters 1983).

These costs for workplace accidents have been classed generally as direct, those that are more readily quantifiable and indirect costs. The former costs include: additional medical treatment for a worker; fines; increased workers compensation premiums; damage to property; and, immediate loss of production. Indirect costs could include: the costs of recruitment of a new employee; training; the additional costs of investigating an accident and managing a worker's return to work; and, overall reduced efficiency due to lower employee morale and commitment (Reschenthaler 1979).

In 2006 total costs for one workplace injury average an estimated CAD \$98,000 with about 20 per cent being direct costs. A business operating at a profit margin of 6% would have to incur an increased CAD 1.5 million in additional sales to pay cover costs of a workplace accident (WSIB 2009). In short from a cost perspective alone there is a lot at stake for the individual firm to effectively manage occupational health and safety.

Despite this compelling case, segments of the employer community in Canada still do not implement effective occupational health and safety programs. Given this employer reluctance, occupational health and safety regulation<sup>1</sup> attempts to achieve the following: minimum standards and best practices for an accident prevention program; the legal obligations and rights of the workplace parties; provisions for worker compensation and rehabilitation as a result of losses incurred in workplace accidents; and, sanctions and incentives for employer compliance.<sup>2</sup>

As a descriptive statement, in a capitalist society such as Canada it is the employer that has ultimate control over workplace programs such as occupational health and safety. Whereas not to underestimate worker input, without employer leadership effective occupational health and safety programs are unlikely to exist. Therefore this paper examines from a limited perspective not just regulatory reform but also the employer response to the regulatory process with a view of what is working and ultimately achieves legislated objectives.

Part 2 outlines from **the past** the enabling legislation and employer response governing both workplace safety and insurance, and accident prevention. In both instances Canada looked to Europe for solutions— the Meredith Commission on workers' compensation borrows from Germany, and the Ham Commission on accident prevention looked to Robens in the United Kingdom.

Part 3 moves from the enabling legislation to **the present** regulatory reform and discusses two compliance strategies and employer responses. From a 'hard

law' perspective an innovative enforcement strategy is examined. Whereas some employers only respond to an administrative approach and the prospect of legal sanctions, some large employers such as GM Canada are going beyond mere minimal compliance to develop a safety culture with world class results.

From a 'soft law', or incentive strategy, some current evidence in employer accident insurance experience ratings are reviewed, and argues that the current employer response would appear to be some instances of non-compliance.

Part 4 looks at the **future**. It argues that the socio-economic conditions that have given rise to the current regulatory regime in Canada are breaking down. Given labour market changes and the breakdown of standard work new regulatory strategies will be needed.

The paper concludes with some observations about employer regulatory response to occupational health and safety legislation, and makes specific reference to overall effectiveness.

## **2. REGULATORY REFORM IN THE PAST—THE ENABLING LEGISLATION AND EMPLOYER RESPONSE**

### **2.1 Workers' Compensation—the Meredith Commission**

The origins of workers' compensation legislation in Canada can be located in the social upheaval created by the rapid and intense industrialization the province of Ontario experienced between 1870 and 1910. Working hours were long, sanitation limited, and machines tended to be unguarded (Kybartas, 1984:46).

These conditions gave rise to an increasing number of workplace accidents and labour unrest. Compensation for workplace accidents was available, but was based upon English common law and the ability of a worker to successfully sue his or her employer for negligence. In order to establish employer liability, however, a worker would have to prove the following about the workplace accident: the employer was in fact negligent; the worker did not contribute through his own negligence to the accident in any way; that it was not the result of another worker's negligence; and, that it was not an assumed risk. All were formidable obstacles to obtain compensation.

In response to increasing labour demands, in 1910 the government of Ontario established a tripartite Royal Commission on "Laws Relating to the Liability of Employers to Make Compensation to their Employees for Injuries Received in the Course of their Employment which are in Force in Other Countries". In 1914 based on Meredith's recommendations, the Workman's Compensation Act was passed.

Meredith himself suggested the act be named An Act to Provide Employer Liability in the Case of Workplace Accidents. In fact the act was both. In what has been called the historic trade-off, workers were guaranteed payment for losses incurred as a result of workplace injury in exchange for giving up the right to sue an employer.

Based to a great extent on the system in Germany at the time, Meredith's recommendations were enshrined in five principles that continue to be operative in all jurisdictions in Canada today:

- No-fault compensation: Workplace injuries are compensated regardless of fault. The worker and employer waive the right to sue. There is no argument over responsibility or liability for an injury. Fault becomes irrelevant, and providing compensation becomes the focus.
- Collective liability: Employer's are no longer individually liable. The total cost of the compensation system is shared by all employers grouped according to their risk. All employers contribute to a common fund. Financial liability becomes their collective responsibility.
- Security of payment: A fund is established to guarantee that compensation monies will be available. Injured workers are assured of prompt compensation for present and future benefits.
- Exclusive jurisdiction: All compensation claims are directed solely to the compensation board. The board is the decision-maker and final authority for all claims. The board is not bound by legal precedent; it has the power and authority to judge each case on its individual merits.
- Administration by and independent board: The governing board is both autonomous and non-political. The board is financially independent of government or any special interest group. The administration of the system is focused on the needs of its employer and worker clients, providing service with efficiency and impartiality.

In the case of workplace injury, the key worker benefits are as follows: payment for loss of earnings; compensation for permanent disability; and provision of medical, social and vocational rehabilitation.

Although given scant reference in his report, Meredith also makes reference to accident prevention. Employer premiums were to be based on the accident rate of the particular industry, and it was argued that lower accident premiums would act as an incentive for fewer accidents (Meredith 1913).

Employer response to the legislation was mixed. Some employers welcomed the legislation as an opportunity to regularize costs. Submissions were made

also on humanitarian grounds that the existing system was unworkable, and that workers were entitled to compensation for workplace accidents.

On the other hand, the Canadian Manufacturers Association opposed the legislation on basically four grounds: the level of benefits; payment for compensation as a result of an Act of God, or caused by a fellow worker; compensation for partial disability during a worker's lifetime; and, finally compensation for industrial disease. Nonetheless, the system that Meredith founded has survived the tests of time and remains essentially intact some 90 years later.

## 2.2 Occupational Health and Safety—the Ham Commission

As was the case with Meredith, the Ham Commission arose out of a specific period of labour unrest— more specifically illegal labour wild cat strikes over occupational health and safety among uranium miners in Elliott Lake, Ontario. Such protest is not entirely surprising. Not only are uranium miners exposed to hazardous working conditions common to all hard rock mining, they are additionally exposed to carcinogenic radon, both in its pure form, and as radon daughters when attached to dust particles.

In response to an increasingly embarrassing situation, in 1974 the Government of Ontario<sup>3</sup> called upon James Ham, a Professor of Electrical Engineering at the University of Toronto, to chair the Ontario Royal Commission on Health and Safety of Workers in Mines. In 1978 Ham's recommendations were to form the basis for the first comprehensive legislation in occupational health and safety in Canada.

Adopted from the Robens Commission in the UK, was Ham's innovative core belief that labour be guaranteed basic rights including participation in the creation of a safe workplace. This notion was to form the basis of the Internal Responsibility System that guarantees workers the following:

**the right to participate.** This is facilitated through a Joint Health and Safety Committee comprised equally of management and worker representatives.

**the right to know.** Workers need to know how to safely handle whatever toxic material is in the workplace. In order to address this right in a standardized fashion, the Workplace Hazardous Materials Information System was created.

**the right to refuse unsafe work.** With slight variation, these rights are now common to legislation in all Canadian jurisdictions. As well as spelling out how these rights become operative, and disputes resolved, Canadian legislation also includes what is referred to as a due diligence, or general purpose clause, that obligates employers to take all steps necessary, given the circumstances, to ensure health and safety in the workplace.<sup>4</sup>

Employer responses to the Ham Commission were quite predictable. Whereas almost all employer submissions made at least token reference to the need for improving occupational health and safety, none espoused the comprehensive legislation Ham proposed. In short, management argued for flexibility, the need to keep managerial authority intact, and spoke to costs so there would be no threat to profits (Kybartas, 1983:89).

For instance, the submission of the Canadian Foundry Association spoke not only to the prospect of occupational health and safety as a cost of doing business, but in reference to foreign competition suggestive of social dumping (Ontario Legislative Assembly 1974):

*Ontario foundries are justifiably apprehensive about the emphasis on the internal environment which will require additional expenditures.*

*All Canadian foundries are being faced with increasing competition from Third World countries such as India, Taiwan, etc who needless to say have no restrictions on external and internal environments relative to their industries.*

Furthermore the perennial problem of industrial disease was again raised by the Ontario Mining Association and others. Management wanted proof that industrial exposure was the attributable cause, and did not want to pay for instances of industrial disease that also had a non-industrial exposure. Ham would be called upon ten years later to solve some of these problems when he was asked to Chair the Industrial Disease Standards Panel.

Having looked at initial regulatory reform from a legislation perspective in the past, the discussion now turns to the present, and some attempts by regulators to get the desired results. Two compliance strategies are now highlighted.

### **3. REGULATORY REFORM IN THE PRESENT AND TWO COMPLIANCE STRATEGIES**

In their foundational work on regulation theory, Ayres and Braithwaite (1992) begin with the premise that not all employers respond to legislation in the same fashion. Most employers obey the law simply because it is the law—the internal and external hard and soft costs for non-compliance are too great. However, there remain irrational actors who refuse to obey the law even though it may be in their best interests, and societal best interests, to do so. The secret of successful regulation, then, is to find the right balance hard law (enforcement) and soft law (incentive) strategies that can best address this diversity of response.<sup>5</sup> As the following examples illustrate, Canadian jurisdictions attempt to achieve this balance:

### **3.1 Regulatory enforcement strategies: compliance to minimum standards and beyond.**

#### **3.1.1 Ontario's enforcement strategy to reduce workplace injuries<sup>6</sup>**

Beginning in 2004 Ontario implemented an intervention strategy in occupational health and safety with the intent of reducing lost-time injuries by 20 per cent in 2008. At the core of the Ontario strategy was the enforcement of existing legislative standards. This involved targeting and inspecting firms who, when compared to their firms in the same industry sector, had the following characteristics: workers who are injured more often; calculated or projected compensation costs are higher; and, workplace injuries are more costly.

This results in a list of 6,000 firms who are "highest risk". These firms could be subject to up to four inspections a year. The next-highest at risk firms are identified as priority firms, some of which are selected to receive a mandatory inspection each year.

In order to help carry out these inspections, as of 2007 Ontario doubled the size of the inspectorate and hired an additional 200 inspectors to bring the total complement to approximately 430. As a result, the number of field service visits by inspectors went from 52, 673 in 2004 to 101,275 in 2008 and the number of convictions during the same period went from 386 to 1, 191.<sup>7</sup>

The inspector focus is concentrated on examining the following:

- compliance with the Occupational Health and Safety Act
- injuries that contributed to the firm's high risk status
- workplace-specific sector hazards
- health and safety program and policy
- Internal Responsibility System—self reliance
- training requirements/deficiencies
- if appropriate, young worker health and safety.

As a result, Lost-Time-Injury (LTI) rates have improved since the strategy began in 2004:

LTI rate in 2003: 2.2 per 100 workers  
In 2004: 2.1 per 100 workers  
In 2005: 2.0 per 100 workers  
Goal for 2008: reached at 1.8 LTIs per 100 workers

The end result was a world class low accident rate. Moreover, as result of these increased and targeted inspections, some \$CAD 1 billion in accident costs were avoided.

It has been argued that there is a direct inverse correlation in Canada between the number of inspectors and accident rates (O'Grady 1999). This recent Ontario experience would tend to further confirm the importance of an adequately staffed inspectorate in order to reduce lost time injuries.

### **3.1.1 Beyond minimum regulatory compliance— health and safety at GM Canada<sup>8</sup>**

The Oshawa Ontario Truck Assembly Centre is one of the six GM truck assembly plants in North America. This facility occupies approximately 3.4 million square feet of space, and as of 2006 employed some 3,700 workers while producing some 1,300 trucks a day.

As of the early 1990s management of the Centre felt they had a good health and safety program that certainly met the minimum legislative requirements including: good procedures and standards; extensive safety training and, safety talk programs.

Nonetheless, there were the following reasons for concern: the Centre had a high injury frequency that had remained stable over a number of years; workers' compensation costs at the Centre were increasing; and, workers at the Centre frequently expressed health and safety concerns. Given legislative compliance, management felt that occupational health and safety was managed well administratively; however, what was needed was the creation of a health and safety culture.

As an internal report prepared for GM suggests, creating a safety culture often takes place over a series of years, yet involves the following steps that were eventually taken:

- to initiate the culture change, leadership needs to be a champion and role model for the desired culture and its new values;
- then, agreement and consistency from the rest of the management team must be obtained; and,
- next, the safety messages need to be communicated effectively to workers and workers need to be given opportunities to participate in the development and improvement of safety systems. This process leads workers to assume proprietorship for the improved systems and a belief in a personal responsibility for safety. The partnership between labour and management that this process fosters is very important to improving the safety culture.

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At General Motors, the cultural change that was driven from the top, and involved two significant principles that enshrined the new change: safety is the overriding priority; and, all accidents can be prevented (or all incidents are preventable).

Built upon this foundation were five core structural elements: a plant safety review board and plant safety committees; safety observation tours; incident investigations; safe operating practices; and, an employee safety concern process.

The end results have spoken for themselves. As of 2008 the Oshawa Truck Assembly Centre achieved the lowest lost time accident rate in Ontario in the automotive industry for the past three years in a row. Furthermore, according to the U.S. National Safety Council, the Oshawa Truck Assembly Centre is world class in safety and is in the top 10% of its industry.

### **3.2 Regulatory incentive-based compliance strategies—the crisis in accident insurance experience rating**

Beginning in the mid-1980s, experience rating programs for occupational accident insurance were introduced in Canada so that there are now in effect in every jurisdiction.<sup>9</sup> In its very basic form, experience rating attempts to compare the accident experience of a particular employer in terms of frequency and costs with that of other firms of a similar function that share similar risk. Under such a scheme, employers who have a better accident experience than others in their rate group get a rebate. Those that have a poorer accident experience get a surcharge.

For some time the complaint from organized labour and injured workers groups has been that experience rating tends to focus employer efforts on managing a particular claim rather than instituting an effective health and safety policy in the first place (O'Grady 1999). Given possible rebates, employers spend more time appealing claims, seek cost relief for pre-existing conditions, speed up rehabilitation, or do not report a claim in the first place. Employers, on the other hand, maintain that experience rating has been an effective tool in reducing accident rates (IWH 2006).

In 2008 the debate in the press over experience rating has risen embarrassingly again—some large employers have been given rebates, despite having a fatality. In response, the claim has been made that rewarding employers with such an accident experience runs counter to fundamental social justice. As an immediate response, those employers who have a fatality cannot claim a rebate in the year such occurs.

Among findings in a study done in response to this crisis (Moneau Sobeco 2008),<sup>10</sup> are data that suggest an under-reporting of workers' compensation claims. Although not directly linked to experience rating, the critique of labour appears to be supported here at least in part.

Evidence also suggests that some employers convicted for violations of the Occupational Health and Safety Act and Workplace Safety and Insurance are receiving premiums from experience rating. Of course this tends to undermine the stated purpose of experience rating; that is, good performers are rewarded with premium reductions and poor performers receive premium increases.

Finally understating, perhaps, serious deficiencies in the program, the claim is made that Ontario does not yet have a world class system when it comes to experience rating. Among the new directions cited is the need to better reward employers for their accident prevention efforts, rather than their actual experience rating.

#### **4. NEW PROBLEMS AND REGULATORY REFORM FOR THE FUTURE**

One can readily argue that the socio-economic conditions of the 1970s that gave rise to the Ham Commission have changed radically in the last thirty years or so. Occupational health and safety regulation in Canada emerged during the later stages of a post-war economic boom. Work then was primarily white male dominated, conducted under regular hours with a well-defined employer, taking place in a primary or secondary industry, and likely unionized under a large employer.

Here three key differences in the present world of work will be highlighted, each with a set of new problems: the move to atypical, precarious or non-standard work; a move to service and white collar jobs; and, finally, the globalization of labour and the use of temporary foreign workers.

##### **4.1 The Rise of Atypical Work<sup>11</sup>**

In response to globalization, Canadian employers have demanded more and more numerical flexibility—the quantity of labour required given varying levels of demand and production. This has given rise to more part-time work; agency work; self-employment and contract work; contracting out; and, home workers. Employment no longer readily takes place in a fixed workplace with a well-defined employment relationship. This gives rise to at least three problems:

First, under the new world of work, there is often a changed employment relationship with increasing impetus for the worker to be an independent contractor and/or and have him or her take on the responsibility of health and safety. This is often done in an ineffectual fashion, and is difficult to regulate. Moreover, as an independent contractor he or she often declines to take out public accident insurance.

Second, even if the traditional employment relationship exists, with the temporary nature of atypical work employers are less willing to invest sufficient worker training.

Finally, given the precarious nature of such work, workers are reluctant to exercise their rights and more willingly expose themselves to hazardous conditions. Regulators in Canada are only now becoming aware of the implications of this new world of work and how to regulate it.<sup>12</sup>

#### **4.2 The Increase in White Collar Jobs<sup>13</sup>**

Like other industrialized countries, Canada has seen a decline in the percentage of workers employed in manufacturing, agriculture and mining and forestry. Interestingly enough, even the mines that gave rise to Ham's regulations closed down some 20 years ago. The blue collar jobs of the 1970s have been replaced by the white collar jobs of the new millennium.

Among the new white collar jobs there is a well-defined bifurcation of the workforce into high paying knowledge worker jobs such as those at Blackberry's RIM, and low paying white collar jobs in the service industry such as those found in such industries as call centres. With this change in the labour force have come new problems for regulating health and safety. The hazards of white collar employment shift the regulatory agenda to problems involving issues such as ergonomics, indoor air, and workplace stress. All are fraught with regulatory difficulties.

Given these new conditions of work, the current concern is an epidemic of repetitive strain injuries. In response, only two jurisdictions have established minimum ergonomic requirements.

Standards for indoor air quality still rely upon industrial models that are often found to be inadequate for office workers. Moreover, there remains the problem of getting adequate testing.

Workplace stress also places a unique strain on the regulatory machinery. First, there is the problem of medically diagnosing workplace stress. Second there is the problem of attributing its source, given an individual response and likely contributions from outside the workplace. Even if these two problems can be solved what would the legislation look like, and could employers afford to cover the expense.

#### **4.3 The Increasing Use of Temporary Foreign Workers<sup>14</sup>**

Initially the Canadian TFW program involved mostly farm labourers and domestics. Unfortunately for these groups derogations in existing legislation give them few legislated employment rights. Furthermore, although employers

are obligated to give hazard identification and control training as outlined in the employment contract, there is no monitoring in place to determine whether this actually takes place.

More recently the program has expanded to include workers in manufacturing and the service industries. In such instances existing legislation would protect such workers. Nonetheless, it is unrealistic to expect a worker from Mexico, for example, to start in a Canadian workplace without extensive health and safety training. This should be considered a mandatory minimum.

Employers have on occasion tended to be haphazard in their treatment of TFWs. Without effective legislation directed specifically to TFWs in the future Canada could well be subject to the shame of the international community.

## 5. CONCLUDING OBSERVATIONS

Occupational accident insurance has now been in Canada for about 100 years, and comprehensive health and safety regulation for the last 30 years. Given the foregoing, the discussion now attempts to access this experience:

- In general the five principles of workers' compensation, or accident insurance for workplace injuries, have served employers and workers well. Neither the government, nor the workplace parties would like the right to pursue claims for negligence.
- Nonetheless, the problem of industrial disease has been a regulatory problem for the insurance system since the beginning. These problems include how is industrial disease diagnosed, how can work-relatedness be established, and who is responsible for payment.
- With an emphasis on co-management there is no doubt that the Ham Commission recommended an effective set of best practices that has pushed the employer community in Canada forward. Ham was ahead of his time both in occupational health and in management theory.
- Some employers, however, are still reluctant to establish good occupational health and safety programs. Given that employers do not self-regulate as a whole, an adequately staffed inspectorate is still needed with dissuasive hard law enforcement power to change behaviour for the irrational actors.
- Other employers such as GM Canada are going beyond the legislated minimum to create a culture of safety, and world class programs. This further suggests that management commitment to

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occupational health and safety is among the best predictors of an effective program<sup>15</sup>

- The jury remains out on experience rating as there is evidence to support both the claims of employers and labour. An effective way forward may be to reward employer efforts more on accident prevention and away from accident experience.
- For the most part Canada has historically been an exponent of free trade with an economy exposed to the currents of globalization. However, in the last 30 years the intensity of globalization has begun to seriously erode the traditional employment relationship upon which legislated protection and entitlement has been based. There are outstanding issues emerging from atypical work, the move to white collar employment, and the use of temporary foreign workers that need to be addressed, and require a new regulatory response.

When one reads the proceedings of both the Ham and Meredith Commissions, one is struck at how they avoided any ideological commitments on behalf of employers or on behalf of labour. Like many Canadians they were moderates who were seeking fairness in the workplace. With regard to occupational health and safety, this enlightened pragmatism has generally served Canadians well, and will do so in the future.,

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## END NOTES

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<sup>1</sup> Here we are defining regulatory reform as a three stage process as follows: first there is stakeholder participation and the passing of legislation; second, the creation of policies and practices that detail the substantive content of the

legislation; and, third, compliance strategies that aim to achieve the desired changes in behaviour envisaged by the legislation.

<sup>2</sup> For a more complete analysis, see Gallina, P.L.; Thompson, M. Employer monitoring and compliance models, practices and initiatives in Canada. Ottawa: Human Resources and Social Development Canada, 2008. 76 p.

<sup>3</sup> Canada's most populous province including the capital of Toronto.

<sup>4</sup> For a more detailed description of what is at stake with due diligence, please see the Canadian Centre for Occupational Health and Safety "Due Diligence" <http://www.ccohs.ca/oshanswers/legisl/diligence.html>

<sup>5</sup> For a more complete discussion see, Gallina, P.L. New compliance strategies: 'Hard law approach'/ Nouvelles stratégies d'amélioration de la conformité : méthode du « droit dur » . Ottawa: Human Resources and Social Development Canada/ Ressources humaines et développement des compétences Canada, 2005. [http://www.hrsdc.gc.ca/eng/labour/employment\\_standards/fls/research/research20/page00.shtml](http://www.hrsdc.gc.ca/eng/labour/employment_standards/fls/research/research20/page00.shtml)

<sup>6</sup> For more detail, see Government of Ontario. Ontario Ministry of Labour [http://www.labour.gov.on.ca/english/hs/highrisk\\_1.html](http://www.labour.gov.on.ca/english/hs/highrisk_1.html)

<sup>7</sup> For further data see Ontario Ministry of Labour. Statistics. < <http://www.labour.gov.on.ca/english/hs/stats/index.html>>

<sup>8</sup> The following is freely adapted from my colleague Rosen, Marc A. General Motors: Achieving and Maintaining World-Class Leadership in Worker Health and Safety in the Automotive Industry. Toronto, ON: Minerva Canada, 2008. <[http://www.safetymanagementeducation.com/en/data/files/download/Documents/Case\\_Study\\_GM\\_Truck\\_Plant\\_Case\\_study.pdf](http://www.safetymanagementeducation.com/en/data/files/download/Documents/Case_Study_GM_Truck_Plant_Case_study.pdf)>

<sup>9</sup> For a comparative program delivery, see Association of Workers' Compensation Boards in Canada. Summary of experience rating programs in Canada. 2009. <[http://www.awcbc.org/common/assets/assessment/experience\\_rating.pdf](http://www.awcbc.org/common/assets/assessment/experience_rating.pdf)>

<sup>10</sup> The full discussion can be found in Morneau Sobeco. Recommendations for Experience Rating. [Toronto ON: WSIB, 2008] < [www.wsib.on.ca/](http://www.wsib.on.ca/)>

<sup>11</sup> For a more expanded discussion of this issue, see: Quinlan, M., et al. "The global expansion of precarious employment, work disorganization, and consequences for occupational health: A review of recent research" International Journal of Health Services (2001). Vol 31, no. 2., pp 335-414.

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<sup>12</sup> For instance, independent contractors in the construction industry in Ontario are only recently required to take out public accident insurance

<sup>13</sup> For an expanded version of this argument, see O'Grady (1999).

<sup>14</sup> See Gallina, P.L.; Thompson, M. (2008) *op cit*.

<sup>15</sup> For a further discussion, see Shannon, H.S.; Mayer, J.; Haines, T. "Overview of the relationship between organizational and workplace factors and injury rates". *Safety Science* , Vol. 26, no. 3 (1997), pp. 201-217.