Use and Misuse of Material Safety Data Sheets in Workers’ Compensation Appeals Involving Neurotoxic Chemical Exposures

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As part of our research program on neurotoxic substances in the workplace, we have been analyzing decisions rendered by Quebec’s Commission d’appel en matière de lésions professionnelles (CALP) from 1992 to 1998 and by Commission des lésions professionnelles (CLP) in 1998 and 1999, which provided a bank 76 decisions relating to recognition of occupational disease as a consequence of exposure to neurotoxic chemicals in the workplace. Most of these illnesses develop gradually, and the relationship between the disease and the exposure is often difficult to establish. As part of this analysis we have looked at the use of Material Safety Data Sheets (MSDSs) as evidence in these appeals.

Although under WHMIS the supplier by law is required to disclose in the MSDS information regarding hazardous ingredients, there have been recent reports in the literature suggesting that suppliers do not always disclose. An OSHA sponsored study, reported in 1993, examined the accuracy of information in five specific areas considered most crucial to health of potentially exposed workers: chemical identification of reported ingredients, reported health effects, appropriate personal protective equipment, necessary first aid procedures, and regulations and guidelines on workplace exposures, found that while most provided an identifiable chemical name, health effects data were frequently incomplete, and chronic data were more often incorrect or less complete than acute data.

MSDS have been used in CALP cases involving neurotoxic chemical exposures in a variety of ways, thus the accuracy and completeness of the information in an MSDS is important. Case examples will be given to illustrate the following ways in which MSDSs have been used in evidence.

Since by law the employer is required to provide accessible MSDS for controlled products in the workplace, the hazardous ingredients section of the MSDS has been used to establish both presence and absence of specific neurotoxic chemicals in the workplace. This is particularly important with proprietary solvent mixtures in Québec, as it can affect the burden of proof required for the linkage of the neurotoxic exposure to the illness.

The reactivity section of the MSDS is used as evidence to establish the nature of hazardous products which may be formed under certain conditions of use, and hence establish potential for exposure. The health effects/toxicological properties section of the MSDS may be used to support the linkage between the chemical and the illness if the symptoms of the worker, and the diagnosis of the physician, match the toxicological information on acute and chronic health effects and symptoms supplied on the MSDS. Equally, the MSDS are sometimes used to counterargue any linkage between the illness and chemical exposure if the worker symptoms and medical diagnosis do not match the toxicological information on the MSDS, or, if the symptoms match, but are of a nonspecific nature: e.g. headache, dizziness, nausea.

The MSDS has also been used in conjunction with detailed job and workplace description to establish that conditions of use were inappropriate, hence overexposure was likely, or conversely, that conditions were appropriate and thus there was no potential for overexposure.
Voluntary Surveillance of Occupational Disease – Can it work in Canada?

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In the UK a comprehensive voluntary reporting system for occupational disease, ODIN (Occupational Disease Intelligence Network), provides information on new cases of work related disease seen by physicians in 7 specialties - occupational medicine (OPRA), respiratory medicine (SWORD), dermatology (EPIDERM), infectious disease (SIDAW), audiological medicine (OSSA), musculoskeletal disease (MOSS) and psychiatry (SOSMI)*. More than 3000 physicians contribute to these schemes, run from the University of Manchester. A participating physician completes a simple card, either for one month, allocated randomly each year, or every month (depending on the scheme), to give details of each new case seen, specifying diagnosis, exposure, agent or task, occupation, industry, gender, date of birth and postcode. The essence of the scheme is that it is simple, voluntary and confidential. The reporters are specialist physicians who make their best judgement about the work relatedness of the disorder.

There has been much interest in the scheme worldwide with a number of countries attempting to put in place a local version of the scheme, starting with that for respiratory disease, SWORD, devised by Corbett McDonald in the UK in 1989; in Canada, both Quebec and British Columbia have, at some point, had such a scheme for respiratory disease. In most jurisdictions that have introduced such a scheme, however, it has faltered, and nowhere except the UK has voluntary reporting across such a wide range of disease taken root successfully.

In Canada there is currently a welcome move towards more effective surveillance of occupational disease and injury and it is timely to consider whether voluntary physician reporting could contribute to this. The presentation will consider both the important features of any successful reporting scheme (including simplicity, timeliness, responsiveness feedback and continuity of funding) and differences between Canada and the UK that may help or hinder the introduction of voluntary physician reporting.

Enjeux de santé et de sécurité au travail dans la transmission des savoirs professionnels : le cas des usineurs

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L’apprentissage d’un métier est un long processus alliant une formation formelle et pratique. Des études statistiques récentes menées au Québec ont montré qu’une main-d’œuvre âgée et par le fait expérimentée semble constituer un atout indéniable en terme de protection vis-à-vis des risques puisque le taux d’incidence des lésions professionnelles décroît en fonction de l’âge (Cloutier, Duguay, 1996). En outre, une étude exploratoire dans le secteur de la santé et des services sociaux montre que les auxiliaires familiales et sociales expérimentées élaborent de nombreuses stratégies qui leur permettent de faire face aux multiples contraintes rencontrées dans l’exercice de leur travail et ainsi de se protéger des risques (Cloutier et coll., 1998). Ces stratégies semblent efficaces puisque les travailleuses plus âgées sont victimes de moins d’accidents que leurs jeunes collègues. Or, ces savoirs acquis avec l’expérience pratique de travail sont-ils transmis entre travailleurs experts et novices ?

Une étude exploratoire a donc été réalisée dans une usine de fabrication de pièces de train d’atterrissage afin d’étudier cette problématique. Des entrevues et des observations de travailleurs expérimentés, d’âges et d’expériences différents, en interaction avec des apprentis ont été réalisées afin de documenter les types de savoirs transmis ainsi que les modes de transmission.

Il semble que le niveau d’expérience du travailleur formateur se traduit par l’intégration plus ou moins grande des savoirs de métier dans le contexte de la production et de l’organisation du travail. Les savoirs de prudence sont aussi de plus en plus imbriqués dans les savoirs de métier eux-mêmes.

D’après cette étude de cas, le formateur le moins expérimenté insiste sur des savoirs de métiers centrés sur les opérations en cours mais informe également les novices des ressources disponibles dans l’entreprise en termes de diversité des compétences. C’est aussi lui qui aborde la question des stratégies collectives de travail visant à préserver les travailleurs plus âgés. À l’opposé, le travailleur plus expérimenté transmet des connaissances très fines sur le métier simultanément à des savoirs plus vastes portant sur le contexte de production qui ont une influence sur la tâche en cours et sur la SST. Il transmet donc plus de savoirs concernant l’impact de l’organisation du travail sur la SST. Entre les deux, les travailleurs ayant 10 à 15 ans d’expérience transmettent plus de stratégies de prudence qui relèvent davantage d’une responsabilité individuelle qu’organisationnelle. Cette étude exploratoire fournit donc des pistes permettant de tirer parti des savoirs accumulés avec l’expérience qui pourront faciliter l’intégration compétente et sécuritaire des jeunes sur le marché du travail.
The Privatization of Ontario’s Rehabilitation Health Sector: 
Roots in Past Policy Change, and Future Implications for the Injured Working-Aged

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In 1985, working-aged Ontarians with acquired injuries received rehabilitation health services largely through the public health care system, regardless of how they had been injured. Yet by 1999, “how” had become the crucial question. Though not always easily accessed, arrays of benefits were legislated for individuals injured in car accidents or during work, and an eager private market had developed to supply them. Yet individuals with the very same injuries, but sustained neither on the roads nor at work, were faced with greatly-reduced public rehabilitation resources.

This comparative case study traces the policy changes that created, virtually without public awareness, this rapid privatization of the sector, while also examining a conceptual framework for understanding privatization. It analyzes the decisionmaking of three ministries responsible for rehabilitation-relevant public policy – Health (public health insurance), Finance (auto casualty insurance), and Labour (workplace injury insurance) – across three very different administrations (Liberal, NDP, and Conservative):

- **Peterson Liberal administration (1985-1990):**
  - Health – baseline policy framework for rehabilitation health services

- **Rae NDP administration (1990-1995):**
  - Health – Regulated Health Professions Act, 1991; hospital downsizing, early 1990s
  - Finance – Insurance Statute Law Amendment Act, 1993
  - Labour – Workers’ Compensation Amendment Act, 1994

- **Harris PC administration (first, 1995-1999):**
  - Finance – Automobile Insurance Rate Stability Act, 1996

These policy changes, which created the trajectory of change in public and private roles in rehabilitation health services, are tracked against the background of a labour market and broader economy being extensively restructured.

This trajectory has a number of implications for working-aged Ontarians who become injured. While empirical data about outcomes have not been collected yet – one of the study findings is that it will become increasingly difficult to acquire relevant data for those defining the public interest and pursuing public policy – the trajectory suggests:

- the shift of benefits for rehabilitation into private insurance may create “job lock” for individuals with benefits, and will have profound impacts for those without them, as for those social programs that remain to break their fall from the labour market;
- the widespread labour-market changes that occurred during the period mean not only rising income insecurity for anybody who experiences a work disruption due to injury, but potential long-term dislocation if both responsibilities for providing rehabilitation, and capacity to play a role in determining it, increasingly diminish the likelihood that full, long-term rehabilitation will be achieved;
- this could have particular implications for rehabilitation of those in lower income brackets and more tenuous employment situations. As such services come increasingly to be found outside the basket of the public health care system, their coverage will be a matter of whether and which companies include them in benefit packages, and for which of their workers.
Scientific Evidence and Proof of Causation in Workers' Compensation Cases

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Access to workers' compensation for occupational disease is predicated on a determination by a compensation board or an administrative appeal tribunal as to the work relatedness of the disease for which the worker is claiming compensation. In Québec, as in all Canadian provinces, legislation includes provisions governing what are termed as «scheduled» diseases, diseases that are recognised to be of occupational origin. Legislation also allows for claims for diseases not designated in the legislative schedules, if there is preponderant evidence that, in a specific case, the disease is of an occupational nature.

In this presentation we will address issues arising when scientific data is relied upon by an administrative tribunal for the purpose of determining causation between work and disease. Drawing examples from several studies by our interdisciplinary research team regarding case law of the Commission d'appel en matière de lésions professionnelles (C.A.L.P.) and the Commission des lésions professionnelles (C.L.P.), we will illustrate how scientific studies are used and sometimes misused in adjudication of disease claims. We will illustrate by cases regarding musculo-skeletal disease, disease attributed by the worker to exposure to neurotoxic substances and occupational cancer in order to shed light on difficulties arising when epidemiological data is used to justify a medico-legal finding.

Among the issues to be addressed will be the difficulties arising when arguments based on the existence of scientific uncertainty are used to undermine legislative policy, fundamental differences between the legal and scientific notions of proof, the importance of promoting understanding by scientists of the use that is being made of their studies, and the importance of educating decision makers as to the relevance and limits of scientific data as tools to determine causation in a specific case.
Historically, workers have been written into regimes of occupational health and safety regulation in a variety of ways. These can be analyzed along at least two dimensions: 1) the internal control system of the employer and 2) the external control system created by the state. The first part of the paper provides a model that assists us in understanding the different ways in which workers have been written in, as market actors, as public citizens, as private industrial citizens and as public industrial citizens.

Beginning in the 1970s, all Canadian jurisdictions moved toward a model of mandated partial self-regulation. This meant that workers were written in to internal control systems through the rights to know, participate and refuse unsafe work. Simultaneously, they were also better written in to the external control system both through the strengthening of substantive protections and by being given more opportunities to influence standard setting and enforcement. All jurisdictions were moving in the same direction, although they often arrived at different positions on the spectrum.

This wave of regulation was largely driven by the demands of an active grassroots health and safety movement. Governments and employers were on the defensive, reacting to the demands of workers that they be more strongly written in as public industrial citizens.

In the past fifteen years, there has been a noticeable shift in Canadian occupational health and safety regulation. The health and safety movement has simultaneously become institutionalized and marginalized, so that many health and safety activists feel that workers are less able to influence OHS, whether in internal or external control systems. As well, while all jurisdictions remain firmly within the orbit of mandated partial self-regulation, there is growing divergence between them. Many are moving toward more self-regulation, but only in some jurisdictions has this been accompanied by writing workers in to the internal control system more fully.

This paper will map the changing trajectories of OHS regulation in five Canadian jurisdictions: Alberta, British Columbia, the federal jurisdiction, Nova Scotia and Ontario. It will place these changes within the context of the rise of neo-liberalism and examine a number of variables that explain, in part, the reasons for the differences that are observed. Finally, it will offer an assessment of the impact of these changes, based largely on a series of interviews conducted with worker health and safety activists, and speculate on strategies for enhancing protection for workers under conditions that are not propitious for strengthening workers’ rights.
Evidence Based Decision Making Within a Bipartite Occupational Health and Safety Agency for Healthcare Workers In British Columbia

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Objectives:
Our aim is to explore how the Occupational Health and Safety Agency for Healthcare (OHSAH), a jointly labor-management governed agency in British Columbia (BC), Canada, was able to use evidence to implement initiatives to reduce injuries in healthcare workers.

Methods:
Four interconnected examples of joint labor management collaboration in the generation and use of evidence to guide decisions are presented. The first is a province-wide needs assessment survey, consisting of 256 questions, across 12 dimensions, administered to a labor and management representative in each healthcare institution in BC. Likert scales were used to rate existing programs. The results were linked to Workers’ Compensation Board (WCB) data to help prioritize program development. The second consists of the development of guidelines for safe patient handling based on local “best practice” evidence as well as world knowledge. The third is the conducting of a rigorous evaluation of effectiveness and cost-benefit of a workplace intervention to promote safe patient handling (including the installation of ceiling lifts). The fourth is the creation of a “stakeholder driven initiative” program with funding dispensed based on demonstrated joint labor-management cooperation as well as scientific validity.

Results:
Half of the 512 institutions reported the capacity to code and track injuries, over 40 percent had no return-to-work programs, and training of joint labor-management committees was lacking. Linkage to WCB data showed that both duration and incidence of injury were higher in long-term care and home support agencies than in acute care hospitals. Programs were consequently developed to target these areas. Highly rated local practices were integrated with published evidence to formulate province-wide guidelines. Rigorous epidemiological, statistical and economic evaluation techniques used to evaluate a major intervention to decrease patient handling injuries were effective in convincing decision-makers to invest in prevention. Millions of dollars are now being allotted to implement and evaluate evidence-based intervention with strong labor-management support.

Conclusions:
The experience at OHSAH illustrates that an agency jointly governed by unions and employees, and with a strong partnership with the research community, can be a highly successful model for addressing workplace health and safety issues.
Abstracts:
Policy Session