



CENTRE FOR
ENVIRONMENTAL HEALTH,
SAFETY & SECURITY
MANAGEMENT

“Due diligence is what we promote, risk management is what we support”

Environmental Health and Safety (EHS)

2010 Annual Report to the Board of Governors

(Draft April 1, 2011 revised)

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EXECUTIVE SUMMARY

The Annual Report on Environmental Health and Safety (EHS), prepared by the Centre for Environmental Health, Safety and Security Management (the Centre), is the means by which the University profiles the effectiveness of Ryerson's efforts in addressing its spectrum of related liability, operational, environmental, research, security, public health and reputation risk.

With a strong strategic focus, these efforts have established a climate of responsible risk taking through the actions of a cohesive and inclusive internal responsibility system. With over 100 pieces of health and safety legislation to address, our goal is relevant due diligence, focused on advancing innovation in support of Ryerson's mission and Academic Plan.

With this goal in mind, the objective of providing the information outlined in the Annual Report on EHS is to enable each Board Member to scrutinize critical aspects of Ryerson's due diligence, in accordance with their personal duties set out under the Ontario Occupational Health and Safety (OHS) Act and within the Criminal Code of Canada.

By reviewing the information detailed in the Annual Report on EHS, each Board Member should be satisfied that:

1. systems are in place to ensure the capacity and viability of the internal responsibility system¹;
2. the university's risk management system and supporting programs are comprehensive, adaptable and adequately resourced;
3. due diligence has been demonstrated through vigilant audit and documentation; and
4. system performance has been benchmarked against similar institutions.

While the 2010 report details the status of these four critical success factors in the ongoing evolution of our overall risk management strategy, this past year in particular noted significant external and internal milestones. From the introduction of a complex piece of provincial legislation (Bill 168, addressing workplace violence and harassment) and reform of Ontario's Occupational Health and Safety system, to our initiative to propose an integrated centre of expertise in multi-vector risk and threat assessment, Ryerson has strengthened its ability to

¹ The legal concept underlying the Ontario OHS Act, whereby every individual in a workplace has shared responsibility and accountability for identifying and addressing health and safety hazards.

take more intelligent risk taking in support of innovation, organizational development and academic freedom.

Important developments to note in 2010 included:

- Following a comprehensive review of the legal and organizational impacts of Bill 168, both internally and with our partners in the Council of Ontario Universities, our expanded due diligence parameters were identified.
- With the accelerating growth of research at the University and associated health and safety demands on principle investigators, we developed a consolidated online health and safety management database service.
- The integration of security and EHS threat and risk assessment and management expertise within a centralized service was proposed. This service would enhance collection, analysis and dissemination of a rich source of internal and external information, to strengthen objective decision-making across the university.
- An EHS management system audit of all Civil Engineering labs, representing areas with a significant spectrum of hazards, was initiated.

Routine activity focused on radiation safety, bio-safety, regulatory affairs, workplace inspections and audits, incident response, prevention program development, EHS document control and records management, risk assessment and training. In monitoring our performance, a broad range of quantifiable performance indicators demonstrated the integrity of Ryerson's IRS, community commitment to risk management and effectiveness of the Centre's actions. Most notable, was our low lost time injury frequency rate of 0.20 (# lost time injury claims/100 workers), which continued to position Ryerson as a sector leader in prevention.

While our health and safety efforts are impressive, ultimately, our overall performance is measured by our WSIB performance index, which is an indicator of both the frequency and severity of injury claims. Although Ryerson has taken great pride in having one of the best performance index for the most number of years, of any Ontario university, our elevated 2010 index signals a vulnerability to increasing repetitive strain injury claims.

To conclude, the 2010 experience also marked an important juncture in the Centre's capacity to meet the needs of a maturing academic and research mandate. The Centre's second three-year strategic plan will conclude in December 2011. As a result, a new phase of organizational development will emerge as an essential platform for advancing EHS and security and emergency services to align with Ryerson's overall transformation. The University's response to developments over the past reporting year, have positive momentum and a great outlook is expected for 2011.

STRATEGIC PRIORITIES

The year 2010 can be characterized as “transformational.” It involved significant initiatives associated with regulatory reform and internal capacity response. The following are highlights of those initiatives and strategic priorities.

RESPONSE TO WORKPLACE VIOLENCE PREVENTION LEGISLATION

In June 2010, Bill 168 introduced profound amendments to the Ontario OHS Act to incorporate workplace violence and harassment prevention provisions, including prevention of domestic violence which may enter the workplace.

In addressing this complex legislation, Ryerson took a leadership role with the Council of Ontario Universities (COU) to define sector-relevant compliance strategies.

This process made it apparent that Ryerson had a diversity of best practices currently in place to address workplace violence and harassment prevention. However, it also became clear that much effort was needed to integrate and refine related policies, guidelines, internal measures and expertise within a focused program. Subsequently, an internal compliance working group was established, representing Security and Emergency Services, Human Resources, Student Services, Academic Integrity and Discrimination and Harassment Prevention. This group will complete its work by April 2011.

ENABLING RISK-TAKING IN SUPPORT OF INNOVATION

The Centre’s goal is to continue to ensure that internal systems are in place to manage (not eliminate) risk, and to influence regulatory bodies and enforcement officials to acknowledge these systems as alternative approaches to meeting the intent of health and safety legislation within distinct research and learning environments. We have had significant success in this regard and, as such, have been proactive in building Ryerson’s health and safety infrastructure to anticipate a broad spectrum of risk. Regulations, however, continue to grow in complexity and rigor, with increasing enforcement attention paid to conformance with Canadian Standards Association (CSA) standards.

Recently, there has been a tremendous surge at Ryerson in research grant proposals that, prior to the release of funds, require risk assessments to determine health and safety infrastructure needs. These needs include licences and permits to use radioisotopes and infectious agents; security clearances and technologies to comply with national security protection requirements on controlled goods; mandated control program development and training; inspection; and reporting regimes and audits.

The information collection and dissemination demands associated with these risk assessment activities have become substantial. In 2010, however, the Centre initiated development of an online database that will give principle investigators single-point access to a consolidated risk assessment process. Facilitating rapid and streamlined accessibility, this service will be ready to launch in mid 2011.

INTEGRATING ALL THREAT AND RISK ASSESSMENTS FOR INFORMED DECISION MAKING

Security obligations are increasingly being incorporated within several pieces of EHS legislation, from workplace violence and harassment prevention, to use of controlled goods (devices and materials listed as posing a national security risk). Ryerson's regulatory EHS accountability has expanded from responsibility to respond to hazardous physical conditions, to now include managing risks from potentially threatening behaviours, thus intensifying the complexity of the factors we must consider in planning and decision-making across the University.

Compelled by this broader standard of due diligence, organizational complexities and demand to support increasing opportunities for innovation and academic expression, the Centre proposed a centralized integrated threat and risk assessment service. Established as a centre of expertise in security and EHS threat and risk analysis, this centre will enhance the collection and dissemination of diverse risk management information aimed at strengthening informed decision-making.

Demand for such information is increasing at a rapid rate throughout the University, with over 600 assessments performed in 2010, through our current Security and EHS services. This represents an increase of close to 50% from 2009 and over 300% from 2008.

REFORM OF THE EXTERNAL OHS SYSTEM

In late 2010, an expert panel on health and safety, appointed by Ontario's Minister of Labour released its report on best practices to improve worker health and safety. The panel recommended reforms (currently under review) to the broader OHS system in Ontario, including a shift toward mandatory, prescribed training in EHS rights and responsibilities (essentially for all employees) and specialized training for employees involved in high risk

activities. While Ryerson provides such training, employees, with the exception of those involved in certain high risk activity, are not forced to participate. We continue to monitor the status of the reform recommendations.

Other changes proposed by the panel include shifting coordination of prevention program delivery, formally overseen by the Workplace Safety and Insurance Board (WSIB), to the Ontario Ministry of Labour. A new Prevention Council on Occupational Health and Safety would ensure effective health and safety services and enforcement rigor (note: appointment of an interim council was announced on Feb. 14, 2011).

In early 2010, the WSIB safety association system was renewed to amalgamate sectors, resulting in a new rate group (Public Health Sector) for Ontario universities. As a result, Ryerson's WSIB premium rates fell from 0.31/\$100 payroll to 0.11/\$100 payroll. This represents a direct annual cost savings of approximately \$500,000 for the University.

DEMONSTRATING DUE DILIGENCE

Ongoing refinement of Ryerson's EHS Management System policy, endorsed by the Ryerson Board of Governors in 1992, has included the integration of security-related community care and the EHS rights and responsibilities of every community member within an inclusive and cohesive *internal responsibility system (IRS)*. As the cornerstone of the Centre's prevention and risk management efforts, the IRS and our continued development of policies, performance guidelines and prevention programs sets the foundation for personal actions and shared accountability for ensuring due diligence.

In 2010, the EHS Management System policy was amended (in accordance with Bill 168) to include "concerning behaviours" as workplace hazards. Such behaviours range from "uncivil" and "harassing" to "disturbing" and "threatening" in their potential to escalate into workplace violence. Due diligence was expanded to include the need to demonstrate that an effective workplace violence prevention program is in place. Ryerson established a compliance plan for implementation in 2011.

Expanding research activities, greater regulatory pressure and emerging injury claim profiles influenced other due diligence program priorities in 2010. Development work focused on radiation safety, bio-safety, training, EHS records and document management, musculoskeletal injury (MSI) prevention, workplace inspections and EHS management system auditing.

An increasing number of Ryerson community members in 2010 adopted an integrated risk management approach to planning and decision-making. Risk assessment and management are becoming part of Ryerson's accountability landscape, featuring in activities such as planning student-run events, preparing for international travel, administering research funding, designing infrastructure, delivering curricula and defining performance expectations. In 2010, 443 EHS risk assessments were submitted to the Centre for review, a year-over-year increase of 18%.

During the last three years at Ryerson there has been a substantial increase in the number and complexity of laboratory and shop activities involving hazardous devices, materials, experimental processes and equipment; field research; experiential learning; and international travel. All of these activities require more program development, oversight and performance auditing. As a result, the Centre is increasingly confronted by competing priorities, in its efforts to support the needs of the IRS. The University is reviewing how to ensure there is sufficient capacity to meet these new and on going pressures.

PERFORMANCE INDICATORS

While the Centre's risk management efforts are impressive, their effectiveness is measured, in part, by Ryerson's lost-time injury claims frequency rate (# of lost-time injury claims/100 workers). We are pleased to report that Ryerson's rate of 0.20 continues to position the institution as a leader in prevention within Ontario's university sector.

The second annual EHS performance ranking report, prepared by the WSIB Public Sector Safety Association, was released to the COU in 2010. This report compiles ranking comparisons for annual lost-time injury frequency rates among 19 Ontario universities. In 2010, Ryerson was ranked second in lowest rate among universities with more than 4,000 employees, and third overall of 19 Ontario universities. Further, as depicted in Figure 1, Ryerson continues to have a lost-time injury frequency rate that is lower than both the education sector and Ontario university group averages.

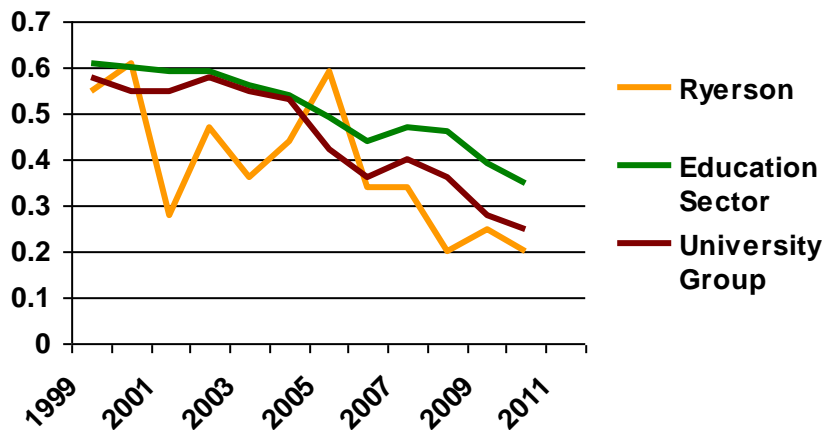


Figure 1: Lost-time injury frequency rates from 1999-2010

Although Ryerson has consistently achieved one of the lowest combined lost-time injury frequency and severity rates (WSIB performance index: ratio of actual claims costs to expected costs for similar institutions) of Ontario universities for over a decade, our WSIB performance index for 2010 was elevated: it stood at 1.58.² This rise was due to two severe repetitive strain injury claims, both of which were associated with computer use. The projected ongoing treatment claims cost of \$356,000 represents 90% of all claims costs in 2010. At this point in time, should ongoing costs continue, the University could incur a premium surcharge of \$66,000.

Key WSIB claim indicator changes to note, are the following:

- The number of critical injury reports (2) remained static.
- The number of total lost-time injury claims in 2010 (9) decreased 28% from 2009 (11).
- The total number of days lost due to claims in 2010 (145) increased 16% from 2009 (125).
- The number of MSI claims in 2010 (3) tripled from 2009 (1).

As noted in Figure 2, musculoskeletal injuries (MSI) remain the most common type of injury claim. The majority of these have occurred during materials handling by Campus Planning and Facilities staff, followed by slips and falls occurring from Food Services-related activities. Over the past few years, however, the Centre introduced targeted EHS training programs in these two areas, resulting in fewer injuries. What has emerged in 2010 is an increase in MSI, specifically repetitive strain injuries, associated with computer use.

² The WSIB performance index is the ratio of actual claims costs to expected costs for similar institutions.

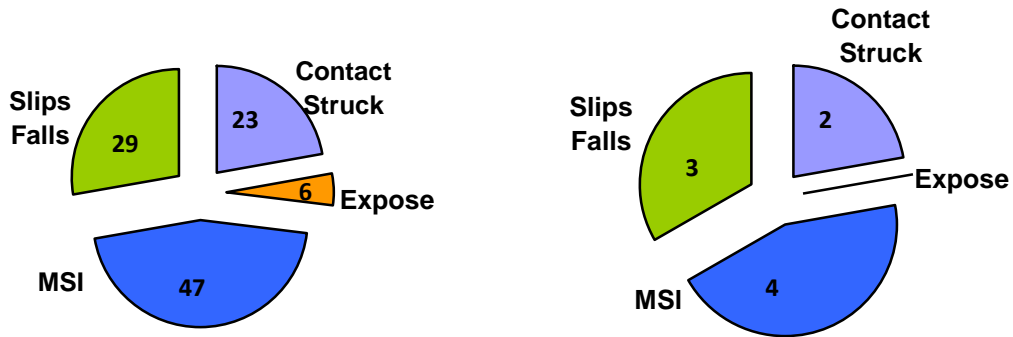


Figure 2: Types of lost-time injuries for all claims (118) from 2005 – 2009 and for all 2010 claims (9)

Notwithstanding the debilitating outcome of injuries, from a WSIB claims cost perspective, there is good news. Figure 3 outlines the cost of premiums Ryerson pays for workplace safety insurance, the actual costs of claims and the subsequent rebates or surcharges awarded/charged over the past six years.

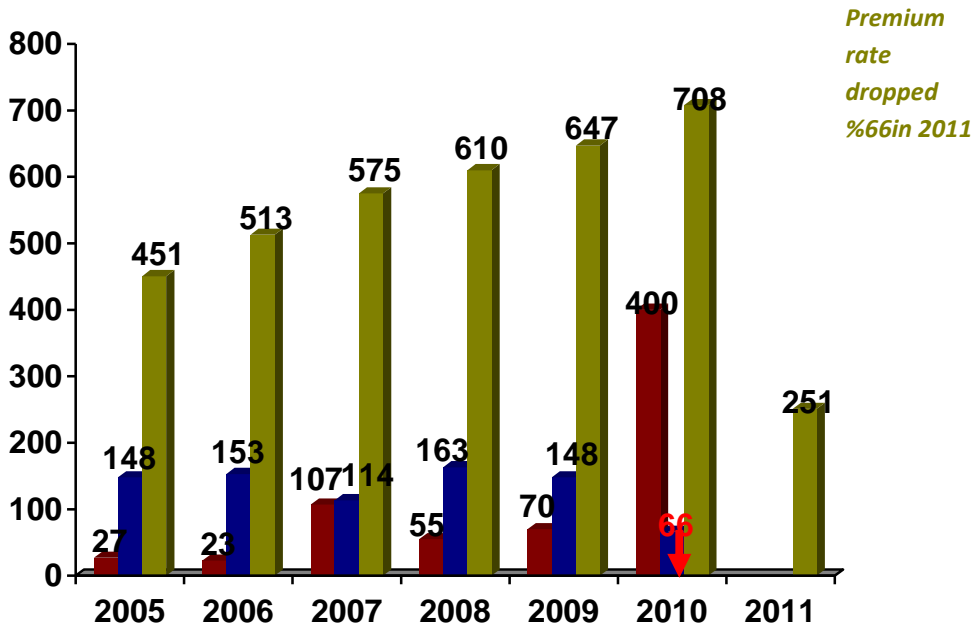


Figure 4: Cost (\$1,000s) of WSIB claims, rebates and annual premiums for 2005-2010 (surcharge)

Cost recovery is an important aspect of our WSIB claims management because it brings into sharp focus early return to work initiatives that contribute significantly to injured workers' overall well-being, by getting them back into the workplace as soon as possible.

While our WSIB profile indicates good performance, with attention to MSI prevention, our focus must continue to be on high risk activity. This was reiterated in light of a serious hazard which was reported in late 2010 which involved an engineering student not wearing fall arrest equipment (a safety device) while working at an elevated height. In recognizing an increasing number of health and safety concerns reported in this Engineering area, a comprehensive internal EHS Management System audit was initiated by the Centre. This audit is on going and will be completed by April, 2011.

Additional indicators present a quick overview of the impact of various activities on our due diligence profile. Essentially, they indicate the integrity of Ryerson's IRS, community commitment to risk management and the effectiveness of our actions.

- No Ministry of Labour fines or penalties were issued.
- No refusal to work situations occurred.
- The degree of hazard reported through the University Workplace Inspection Program were all low-risk (housekeeping); however, only 68% of the campus was inspected through the program (areas not inspected were primarily classroom spaces).
- EHS risk assessment submissions increased over 18%, with a total of 422 submitted to the Centre for review.
- Security threat and risk assessments increased by over 200%, with 220 completed.
- In the Faculty of Engineering and Applied Science, the faculty in which the highest risk activities occur, 40% of Chairs completed EHS performance indicator reviews.
- Over 4,000 staff, faculty and students received formal EHS training/orientation.
- Requests for ergonomic assessments increased by 34%.
- Centre staff held external leadership roles.
- The scope of professional/certified expertise offered by Centre staff increased.
- Internal joint partnership initiatives increased.
- Results of all external radiation inspections met legal licence conditions.
- Tri-Council audit endorsed best practices in bio-safety.
- The Centre's website received over 66,000 hits in 2010. By contrast, in its first year (2005), the website received only 1,600 hits.

These achievements have positioned us well to move forward with positive momentum into 2011, as we address the significant 2010 developments.