Health, Safety and Wellness
2011 Annual Report

Occupational Health & Safety
and
Rehabilitation Services

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Year in Review

Prevention and safety were a major focus of both the Occupational Health and Safety and Rehabilitation Services Teams during 2011. A number of new initiatives related to training and the expansion of existing training and prevention programs for workers at Western were implemented.

The Muscloskeletal Disorders Program (MSD) was introduced in 2010 and expanded in 2011 and a number of worksite recommendations have been successfully implemented. The goal of the MSD Program is to increase ergonomic awareness through education with an overall goal to decrease muscloskeletal disorders. Since the beginning of the Program, a total of 26 recommendations, that included alternative equipment and additional training, have been implemented in Facilities Management. In Hospitality Services, over 86 recommendations have been made with 67 fully implemented. Recommendations in Hospitality Services included tooling changes, work re-organization and working height modifications.

Rehabilitation Services hosted a successful Wellness Fair in 2011 with approximately 90 people attending. Participating units and organizations provided information on a number of health and wellness services available to Western employees. These services included the following topics: group benefit plans; fitness programs; ergonomic information on working comfortably and safely; nutritional advice; and, training and safety programs. Our Employee Assistance Program provided information on the confidential services provided to employees which include; counselling, childcare and eldercare consultations, programs to assist in daily life and access to community resources.

The Policy covering Working in Hot Weather or Hot Workplace Environments was developed and introduced at Western in 2011. This protocol is for faculty, staff and students when working outdoors and in hot places, either on campus or across the country when travelling and working as part of their academic programs or field trips.

A number of inspections and certifications occurred during 2011. The Level 3 facility was successfully re-certified, the PCB Storage Facility underwent a successful inspection, and Western's Nuclear Substances and Radiation Devices Licence was successfully renewed by the Canadian Nuclear Safety Commission for another five years.

During 2011, Occupational Health and Safety (OHS) was involved in the development of a number of new Standard Operating Procedures for Animal Care and Veterinary Services (ACVS). In addition, a number of staffing changes that occurred in ACVS during 2011 increased the workload for the OHS team. The Animal Use Protocol review process was changed by the Animal Use Subcommittee and this impacted OHS

significantly because of the need to adapt to the new processes and procedures and the new timelines.

A number of internal policy statements have been developed through the work of the subcommittees of the University Health and Safety committee including a change to the lab inspection process to effect a change of full compliance of the lab safety program.

The Occupational Health and Safety team, through the continuous training and increased support to Principal Investigators, Faculties and units across Western are shifting the culture across the campus towards safety and well-being. The subcommittees of the University Health and Safety Committee are fully engaged, and through the work of their members, have contributed to the awareness and compliance of health and safety regulations. In addition, several Departmental/Unit safety committees have been formed and function at the local level in promoting awareness and safety.

The implementation of a number of on-line training courses allows members of the University community to easily access and complete a number of courses on-line including: Accessibility for Ontarians with Disabilities; Safe Campus Community: Preventing Harassment, Violence, and Domestic Violence at Western; and WHMIS. The introduction of the Employee Health and Safety Orientation, a mandatory program for all employees, from a classroom based course to an online/e-learning based course was an important success. The other significant advantage of on-line training is the University E-Learning Tracking System which allows the Health & Safety team and Academic and Administrative leaders the ability to monitor and report on compliance of training.

The accomplishments and achievements of 2011 provide an excellent opportunity for the Occupational Health and Safety and Rehabilitation Services Teams to continue to introduce and implement positive changes at Western to maintain and improve the safety and well being of employees.

Priorities 2012

Priorities and activities for the Occupational Health and Safety and Rehabilitation Services Teams for 2012 will continue to focus and build on the important work and accomplishments of 2011. Major emphasis will be to continue to increase the awareness of prevention and safety – through education and training. In addition, concentrated efforts will continue in obtaining full compliance to safety programs, implementing legislative changes and preparing for inspections and reviews. The Safety Team will lead over 50 Joint Occupational Health inspections in 2012 with assistance from community members.

The Occupational Health and Safety team will continue its work with the University community to comply with training requirements and to advocate for awareness and recognition of the importance of health and safety at Western.

The Supervisor-Faculty Health & Safety Responsibilities Seminar is being developed as an e-learning module for implementation in 2012 and the Animal Care Training on WebCT will be updated. In addition, the University E-Learning Tracking System will be expanded to include registration and tracking for these and other training programs. These initiatives provide an additional advantage by positioning Western well in complying with the new Ministry of Labour training requirements that will be introduced in 2012. These requirements are the result of reforms to the Occupational Health and Safety System in Ontario.

A major priority for the Laboratory Safety Program is to continue the roll-out of the Laboratory Safety improvement plan developed in 2011 with the intent to achieve full compliance at Western.

The Biosafety Program will be reviewing the implications to Western associated with the expansion of animal work to labs outside the control of Animal Care and Veterinary Services (ACVS) and will continue with the implementation of the new Standard Operating Procedures developed for ACVS in 2011. It is anticipated changes in the Human Pathogens and Toxins Act will impact Biosafety in areas including inventory, licensing and security requirements.

A Tri-Council review of Western will occur in 2013 requiring OHS to begin preparations for the audit during the coming year with all principal investigators who use biohazards in their labs. Currently there are approximately 250.

The Radiation Safety Program will be preparing and submitting a renewal to the Canadian Nuclear Safety Commission for its Tritium Import Licence.

In 2012, the Rehabilitation Services Team, working with colleagues in Learning and Development, will review the existing Mental Health First-Aid Training program to assess if it can be delivered on-line or in a combination of on-line/in-class learning. This is to meet the needs of participants by reducing the current 2-day time commitment to complete the program.

The Rehabilitation Services Team will also continue their efforts in implementing the Musculoskeletal Disorders Program and focussing on awareness and prevention. Plans to host another Wellness Fair are in place for 2012. The team will continue to follow their successful practice of case management by focussing on early and safe return to work for employees.

Programs

Biosafety Program

The Biosafety Program has responsibility for ensuring all matters pertaining to Biosafety, including verifying that all work with biohazardous agents conducted by Western and its affiliates, is done in accordance with the safety practices outlined in the Public Health Agency of Canada Laboratory Biosafety Guidelines. The Biosafety Program is citywide and oversees all research involving biohazards conducted by faculty, staff and students at Western and affiliated Research Institutes.

During 2011, Occupational Health and Safety (OHS) has spent considerable time working with ACVS developing Standard Operating Procedures (SOPs), which are being finalized and implemented in 2012. The Animal Use Protocol review process was changed by the Animal Use Subcommittee which meant OHS was required to adapt to the new process, procedures and timelines. Recently animal work has started to expand beyond the animal care facilities controlled by ACVS to laboratories, and the Biosafety Program is conducting a review of the implications of this change. It is expected to involve facility inspections and development, review and implementation of SOPs for the new areas. In addition, the Sheep containment unit was decontaminated and re-certified in 2011.

The Level 3 facility used for HIV research, including work relating to the HIV/AIDS vaccine, received a one-year recertification in 2011. This is an annual process and requires a complete decommissioning and recommissioning of the entire space and equipment. Access to this facility was expanded to include 5 new employees. In addition, a re-training session, which included a mock spill emergency with Western's Hazardous Materials Emergency Response team, was held for all employees with Level 3 access.

Biosafety continues to be an evolving program with many legislative changes. The Human Pathogens and Toxins Act was passed in June 2009 and consultation on Phase II of the Act commenced in 2011 and continues into 2012. Phase II implementation will impact biosafety in several ways, including inventory requirements, licensing, and security requirements. Also, the Public Health Agency of Canada (PHAC) and the Canadian Food Inspection Agency (CFIA) are coming together to create one standard pertaining to human and terrestrial animal pathogens called the Canadian Biosafety Standards and Guidelines (CBSG). They are currently consulting on the requirements and the impact of the changes on the Biosafety Program are not known at this time.

The Biosafety Committee reviewed and approved five internal policies and guidelines, including the standard operating procedure for Tamoxifen, a Procedure for the Safe Use

of Biological Safety Cabinets, and standard operating procedures and training for the project involving Vaccinia.

In 2011, there were 250 biosafety laboratories at Western and its off-campus affiliates. Figure 1 below provides a breakdown of the number of permits by containment level. The Biohazards Subcommittee reviewed and approved 119 research projects involving biohazards in 2011. This is down from 145 in 2010. Given the review of projects is conducted every 3 years this number is consistent to what was reviewed in 2008.

Fifteen new compliances letters and/or permits were issued from the Public Health Agency of Canada and the Canadian Food Inspection Agency to Western researchers in 2011 and 102 grants involving biohazards were approved by the Biosafety Officer.

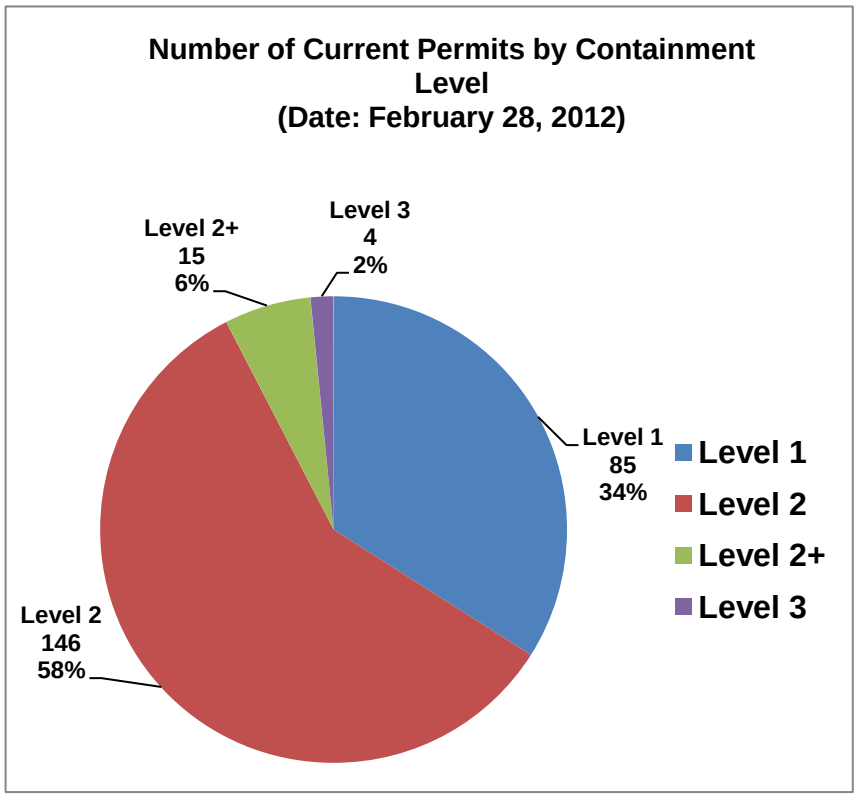

Figure 1 – Current Permits by Containment Level

Environmental Safety Program

In 2011, the use of the Hazardous Waste disposal program has continued to expand to support the needs of teaching and research at Western. Reasons for this increase include:

- Western's focus on increased research activity and increased graduate student enrollment (with a corresponding increase in waste)
- Increased awareness of Western's environmental programs (with an increase in participation by all Western employees and students).

Western continues to maintain a status of 'In Good Standing' for its waste generator license.

HazMat Storage Facility

As specified in the Certificate of Approval from the Ministry of the Environment an Annual Report for the HazMat Facility was submitted prior to March 31st and no concerns were raised.

Occupational Health and Safety (OHS) recognizes there is risk associated with the collection and storage of hazardous materials on campus and works closely with our external waste contractor and Internal Audit to develop procedures and programs to effectively manage that risk and comply with legislative requirements. It is equally important that our waste management program continue to meet the needs of Western's teaching and research community.

In 2011, OHS designed, and began, a pilot program that collects hazardous chemical waste and removes it from campus every week. This removes the risk of storing chemical waste and hence removes the need, and cost of having a HazMat facility. There is no impact to the users.

In 2012, OHS will analyze and review how this program impacts risk, safety, convenience, operating costs and capital costs.

PCB Storage Facility

An Annual Report, as required for the PCB Facility was submitted to the Ontario Ministry of the Environment and no concerns were raised.

In July 2011, two inspectors from the Ministry of the Environment visited Western for an inspection of the facility, the procedures and the documentation of the program. Their written report followed with no issues identified.

Western's main source of PCBs are light ballasts which, as a result of Western's program to replace them, are being removed during renovations and maintenance.

Radioactive Waste Program

The Radioactive Waste program continues to operate to meet all the requirements of the Candian Nuclear Safety Committee (CNSC).

An annual inspection by the CNSC reported no issues of non-compliance.

Facilities Safety Program

During 2011 the Facilities Safety Program addressed issues relating to construction work activities, pedestrian safety, the design of facilities, and hazard control in buildings. Monitoring of work activities in and around construction and renovation sites was performed regularly to reduce the impact on the University community. In situations where hazardous situations were anticipated, the immediate participation of various stake holders was encouraged to implement reasonable corrective measures before a situation occurred.

The focus of the Facilities Safety Program is the prevention of accidents and injuries and the strategy in addressing risks is constantly evaluated by monitoring behaviours and adherence to procedures and protocols. To accomplish this Occupational Health and Safety provides ongoing focussed training, education and support to the staff of Facilities Management relating to Construction and Maintenance Projects as well as Facilities Management internal policies and work procedures. These policies and procedures were monitored and enforced through a structured daily inspection program. As well the University adopted "The Safety Reminder Program". The Safety Reminder Program addresses instances of non compliance through a process of documenting the violation with reference to the applicable section in the regulations and distributing to the affected internal and external administrative units. The Facilities Safety Program also conducts scheduled post bid meetings with outside contractors prior to the commencement of any project activities on University property.

In 2011 a new protocol was developed and introduced at Western called, **Working in Hot Weather or Hot Workplace Environments**. This protocol was written in response to an order from the Ontario Ministry of Labour to Western during the summer of 2010. The order was prompted after a Graduate Student who was conducting research outside in Sudbury, Ontario suffered a heat stroke. In the Spring of 2011, a large awareness campaign was launched by Occupational Health and Safety across Western targeting workers and graduate students who work outdoors in the summer or who work in hot places such as steam tunnels. This protocol is to be implemented by the Western community when the humidex reaches or exceeds 35, or, when air temperature reaches 32 ^{o}C or higher. The document identifies the training for recognizing hazards of working in hot weather as well as the process and controls for determining a hazard and how to mitigate the risk.

To monitor regional heat alerts, OHS in conjunction with Human Resources - Communications developed a "Procedure for Campus Community Notification of Heat and Humidity Alerts". The procedure reaches leaders and individuals at Western who may be at risk from extreme heat and humidity via targeted emails and broad warnings to the entire community via the Western home page. This protocol requires OHS to monitor Environment Canada and the Middlesex Health Unit regularly.

Occupational Hygiene

The Health & Safety Team responded and resolved over 120 occupational hygiene concerns. The issues involved indoor air quality, dust, mold, noise, and lighting concerns. In all of the situations, thorough investigations were conducted and corrective measures were adopted in compliance with Ontario Industrial Regulations 851.

Emergency Preparedness

The Health & Safety Team is part of the group of first responders to an emergency incident on campus.

The Western Hazardous Materials Emergency Response (HAZMAT) Team conducted eleven training sessions for its responders. The ten team members were trained in the "Disciplined Approach to Emergency Response" and are capable of handling small to medium size spills or releases of chemical, nuclear, and biological material.

In 2011, team members were recertified in confined space rescue, see Figure 2. This was required under Ontario Regulations 632/05 to have internal capabilities ready for immediate rescue should an emergency happen in any of Western's 1,200 confined spaces.

Figure 2 – Certification in Confined Space Rescue

In conducting its training, the team maintains a very close relationship with the London Fire Department Hazardous Materials Team. This has proven to facilitate better coordinated responses to emergency situations at Western.

Several tours to the Level 3 Biosafety Facility and other potentially hazardous locations on campus were conducted. The objective of the tours was to familiarize the internal and external teams with the access routes and physical structures at the University.

Laboratory Safety Program

In 2011, the Laboratory Safety Committee and the University Health and Safety Committee approved a policy change in the lab inspection process to effect a change in compliance with the lab safety program. A program improvement plan was developed that includes consequences for labs that do not correct non-compliance issues identified during an inspection.

The inspection program itself will focus on reducing the risk from serious non-compliance issues and communicating with Principal Investigators on lab hazards. Labs with non-compliance issues will be re-inspected and failure to meet compliance will result in the closure of the lab until corrective action is completed. The changes in the inspection process were discussed and supported by Academic Leaders, Deans and Chairs.

A priority for 2012 will be to continue to meet full compliance through the ongoing implementation of the policy changes identified above as well as providing increased awareness and training and education in laboratory safety.

Currently there are 230 Principal Investigators (PI) covering 350 laboratories in the Laboratory Safety Program which has been in place since 2005. The labs in the program include those that have high or medium risk hazards and are inspected by the Lab Safety Consultant annually. Labs that are low risk and have met requirements in previous inspections were removed from the program in 2010, however, they are inspected at least once a year under other OHS inspection programs.

With this change in focus, although there was an increase in compliance between 2010 and 2011 those PIs that met or exceeded requirements had greatly decreased in 2011. In response to this the program was reviewed. The policy change to meet full compliance was approved in 2011 to be implemented in 2012. Figure 3 shows the compliance of laboratory safety for 2010 and 2011.

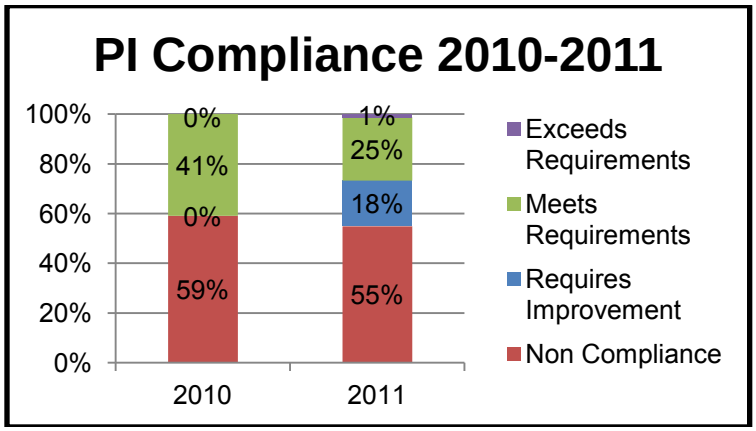

Figure 3 – Principal Investigator Compliance

Musculoskeletal Disorders Program

The Musculoskeletal Disorders (MSD) Program was introduced two years ago to address injuries and disorders that affect the musculoskeletal system (i.e. muscles, tendons, ligaments, nerves, discs, blood vessels, etc.). The goal of the program is to increase ergonomic awareness through education regarding better and healthier work techniques with an overall goal to decrease MSDs, their risk factors and eliminate ergonomic related injury costs. It is based on a process utilizing Occupational Health and Safety Council (OHSCO) guidelines.

The program was introduced to Facilities Management in 2010 and the first cycle of the prevention program was completed in 2011. Eleven recommendations were implemented within Caretaking as well as 15 recommendations implemented in the Trades area. The recommendations that were implemented included alternative equipment and additional training sessions.

The MSD program was also introduced in Hospitality Services during 2010. In 2011, there were a total of 36 recommendations and of these 17 have been fully implemented into the units and 19 are in various stages of implementation. These recommendations include tooling changes, work re-organization and working height modifications. This follows more than 50 solutions that were executed in Hospitality Services in 2010.

In 2011 the program was introduced in Animal Care and Veterinarian Services with 2 of 6 recommendations implemented by year's end.

The success of the program relies on communication from the employees through anonymous worker feedback forms. The forms elaborate on personal discomfort experiences in the course of performing daily tasks in the workplace and by identification of risks during regular workplace inspections. The program also provides opportunities for employees to participate in the resolution to safety concerns which has benefited both adoption and participation.

Many staff members have been coached to address physical discomfort issues affecting them. New material handling equipment has also been purchased to alleviate discomfort symptoms. During this process, many safety concerns were also resolved, thus reducing accidents in the workplace.

Mental Health Program

Mental Health First Aid Canada Certification Program

Nine training sessions were delivered in 2011 for a total of 24 since the inception of the program, with a total of 278 individuals completing training. In addition, focussed courses have been delivered to groups such as Social Science, the Staff Association, and Engineering with requests for additional focussed courses from other Faculties and units.

The majority of participants to date in the 2-day Mental Health First Aid certification program have been administrative and academic leaders, and those individuals who provide direct support to students. The program provides information to participants on how to help someone showing signs of a mental health problem or experiencing a mental health crisis. The first aid is given until appropriate professional treatment is received or until the crisis is resolved. The concept is based on the model of medical first aid and includes modules on: Substance-Related Disorders, Mood Disorders (Depression & Suicide), Anxiety Disorders and Psychosis.

The 2 day time commitment to participate in the program has been identified as a potential barrier for academic leaders and faculty, therefore the program will be reviewed during 2012 to assess if alternate forms of program delivery, on-line and/or a combination of on-line and in-class learning, can be developed.

Mental Health for Leaders At Western

Three courses were delivered in 2011 for a total of 13 since the program began.

This additional half day session is offered as a follow up to the Mental Health First Aid certification to leaders responsible for managing the performance of others. The session provides practical information to leaders in dealing with mental health and potentially intertwined performance issues in Western's work environment. Participants learn effective communication strategies, gain understanding of their role in supporting an employee with a mental health condition, and to recognize resources available to support the employee, the leader and the team (includes accommodation of Mental Health issues). This session is jointly presented by Human Resources Consultants and Rehabilitation Services Case Managers.

Radiation Safety Program

The Radiation Safety Program is comprised of Nuclear Radiation, X-Ray and Laser Safety. The Radiation Safety is mandated under the Canadian Nuclear Safety Commission regulations. The committee is composed of members with expertise or a stake in ionizing and non-ionizing radiation safety matters to provide advice on all matters of radiation safety including nuclear substances, radiation devices, particle accelerators, X-ray equipment, lasers/laser systems and other non-ionizing radiation sources.

As a requirement of the Canadian Nuclear Safety Commission (CNSC) , Western underwent a successful renewal process for its CNSC nuclear substances and radiation devices licence in 2011. This renewal occurs every 5 years, and the current license is valid from March 1, 2012 to February 28, 2017. This is Western's second licence renewal without an audit which can be directly attributed to our good annual inspection records with the CNSC during the past 10 years. This licence authorizes Western to possess, transfer, import, export, use and store the nuclear substances and radiation devices listed in the licence and to conduct licensed activities in 19 buildings on and off campus with 23 licence conditions.

In addition, the Radiation Safety Program successfully underwent two routine Canadian Nuclear Safety Commission inspections successfully and submitted three annual compliance reports. The Nuclear Safety and Control Act and Canadian Nuclear Safety Commission (CNSC) mandate the regulatory requirements of the Radiation Safety Program. CNSC inspects all licensed buildings at Western a minimum of once a year.

The continued success rate in inspections and renewals is a evidence of ongoing training as well as record keeping and adherence to standard operating procedures. Over 400 participants attended Radiation, X-ray and Laser Safety Training in 2011. As of June 30, 2011 (data to December 31, 2011 not yet available), all TLD badges are within Western's and the CNSC exposure limits. For the safety of our workers, Western has set its standard for exposure at ten times less than the legal limit which is set by CNSC.

A total of 125 permits covering 187 designated rooms in the area of radiation, x-ray and laser were inspected by the Radiation Safety Coordinator in 2011. **There was over 82 % compliance in all three of these programs.** The compliance performance of each area is shown in Figure 4.

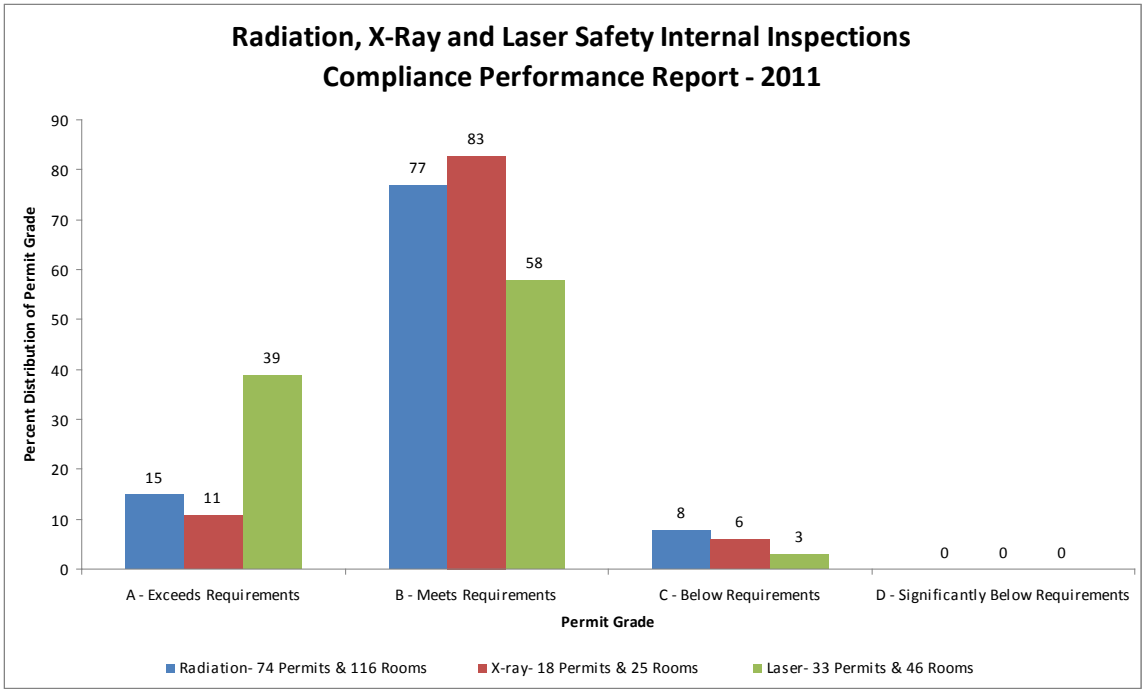

Figure 4 – Compliance Report of Radiation, X-ray and Laser Inspections

In 2011, the Ontario Ministry of Labour approved two new, non-medical x-ray machines for use at Museum of Archaeology which is located away from main campus on Attawandaron Road in London. In total, Western now has 18 X-ray permits, 25 designated X-ray rooms and 39 non-medical X-ray machines including the new X-ray machine installed at the Biotron and the new class 4 laser installed at Robarts.

Safety Committees

Joint Occupational Health and Safety Committee

The Joint Occupational Health and Safety Committee (JOHSC) is the health and safety committee required under the Occupational Health and Safety Act. It is an advisory group of worker and management representatives that must meet regularly to discuss health and safety concerns, review progress and make recommendations.

In addition to any special concerns the committee reviews and assesses trends in the following areas:

- Accidents and Injuries
- Critical Injuries
- Work Refusals
- Workplace Inspections

Western's JOHSC is comprised of worker representatives from all employee groups and management representatives across campus. The Committee met eight times in 2011. A requirement of the Act is that at least one worker and one management representative be certified. Western exceeds the requirement and provides training to all members for certification. Currently six members of the JOHSC are certified. In 2011, eight additional members completed Part I of the training with the intent to complete Part II in 2012 to complete the certification. The goal is to have as members of the committee certified as possible.

The current organizational structure for Safety committees at Western can be seen in Figure 5.

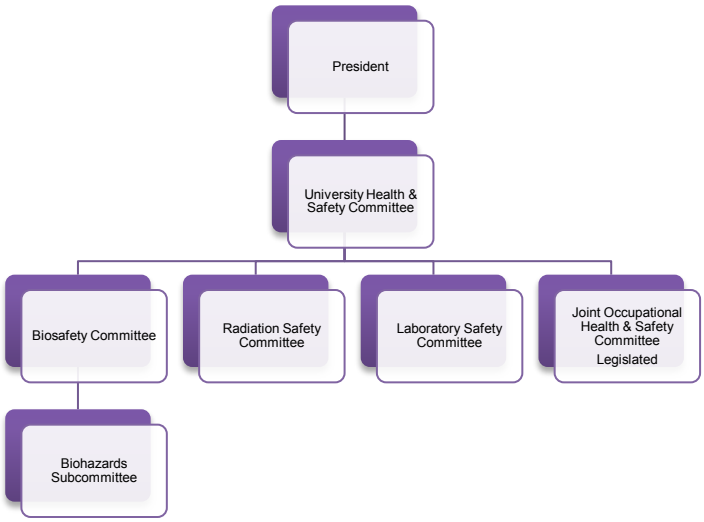

Figure 5 – Safety Committee Organizational Structure

Inspections

Joint Occupational Health and Safety Committee Inspections of the Workplace

The Occupational Health and Safety Act requires members of the Joint Occupational Health and Safety Committee (JOHSC) to inspect the physical condition of the workplace at least once a year and inspecting at least an area of the workplace in each month. Occupational Health and Safety coordinates this program for JOHSC which includes Western's off-site workplaces as well. Inspections are structured such that each of the members conducts, on average, six inspections per year.

In 2011, 680 compliance orders were issued by the JOHSC during workplace inspections and 100 of these were completed by year end. This represents a significant increase in Compliance Orders of 50% over the previous year. See Figure 6 for areas of compliance orders in 2011.

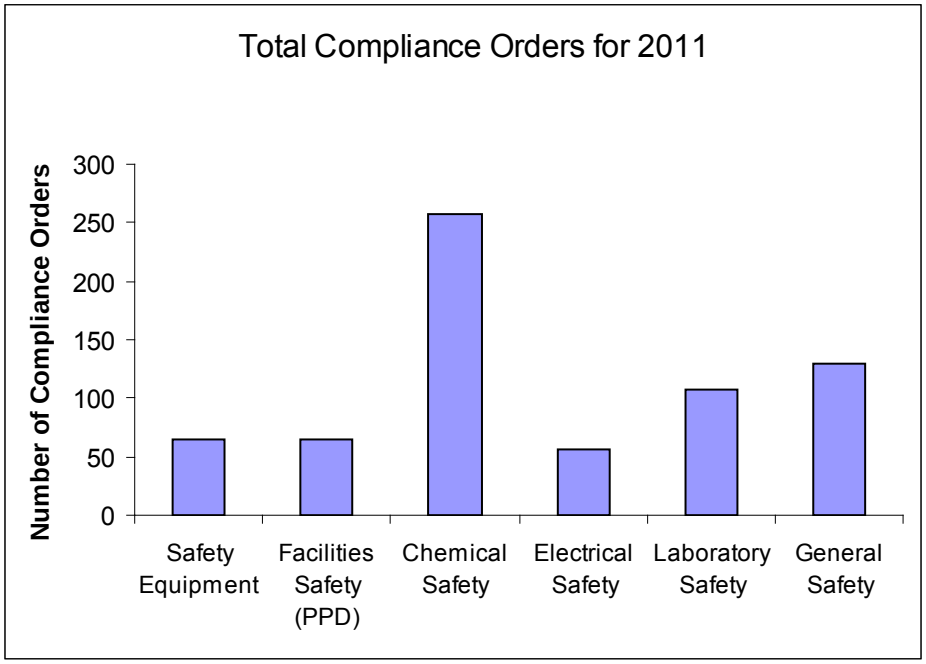

Figure 6 – Areas of Compliance Orders

The success of the JOHSC inspection program and the high level of compliance can be attributed to an effective inspections program, cooperative efforts of the committee members, the area safety representatives and the workers.

In addition, the departmental and unit safety committees also provide significant contributions in the inspection and compliance requirements across campus. Many of these committees have their own inspection programs. Currently internal safety committees at Western include but are not limited to:

- Biology Safety Committee
- Chemistry Safety Committee
- Earth Sciences Committee
- Engineering Safety Committee
- Facilities Management Safety Committee
- Hospitality Services Safety Committee
- Libraries Safety Committee
- Physiology & Pharmacology
- Visual Arts Safety Committee
- Western Retail Services Safety Committee

Training

Safety Training

Training is the cornerstone of any safety program and is instrumental in establishing a positive safety culture. The safety training program at Western has heightened awareness of the importance of working in a safe manner and has reinforced how all members of the university are both responsible and accountable.

Occupational Health and Safety carefully monitors legislated training requirements and the training needs of Western faculty, staff, students, volunteers and visitors. These courses and seminars are offered throughout the year and participants can register on-line at the Human Resources website.

In 2011, Occupational Health and Safety worked with Learning and Development colleagues to convert the "Employee Health and Safety Orientation" from a classroom based course to an online/e-learning based course. This course is mandatory for all workers at Western and the content is easily understood so it was an ideal starting point for the conversion.

The University E-Learning Tracking System was implemented to manage registration and tracking of the Hazardous Waste Management workshop, Laboratory Safety and WHMIS. The records are available on-line for faculties and business units to allow monitoring of compliance at a local level.

Over 15 training courses were provided by the Facilities Safety Coordinator where the majority of the participants were workers of Facilities Management, ITS, Engineering Machine Shop, and graduate students from the engineering school. Training courses range from broad based programs like asbestos awareness, personal protective equipment and ladder safety to job specific training of snow shovelling and elevating work platforms.

The training courses are a mandatory requirement under the Occupational Health and Safety Act. It has been apparent that an increasing number of graduate students, mainly from the Engineering Department, have been attending these industrial safety courses. This is a reflection of the required industrial health and safety training under the OHSC Act at the current and newly built research facilities.

There are a number of initiatives and priorities planned in 2012 for training programs. The Supervisor-Faculty Health & Safety Responsibilities Seminar is under development as an e-learning module. In addition, the University E-Learning Tracking System will be expanded to include registration and tracking for other OHS training programs. The Animal Care Training which is available on WebCT will be updated.

Both the Employee Health & Safety Orientation and the Supervisor – Faculty Responsibilities E-learning modules position Western well in complying with the new Ministry of Labour training requirements that will be introduced in 2012.

Reforms to the Occupational Health and Safety System in Ontario were brought about by an amendment to the Occupational Health and Safety Act in 2011 (Bill 160). Some of the changes occurring in 2012 include:

- standardized, mandatory worker and supervisor training
- mandatory specialized training for workers participating in high risk activities such as working at heights and driving forklifts.

First Aid Program

The First Aid program continues the ongoing task of ensuring that Western is in full compliance with WSIB Regulation 1101. Trained representatives are in place for all departments in all buildings on campus. A current list of all representatives and kit locations is maintained on the Human Resources website.

OHS continues to partner with Western's Student Emergency Response Team to provide Red Cross First Aid and CPR training.

There are approximately 250 trained and certified first aid representative on campus. They are responsible for first aid in their area, conducting and documenting monthly kit inspections, refilling their kits with required materials kits.

Incident and Critical Injuries Reports

Environmental Incident

During February 2011, a crude oil spill at the Institute for Chemicals and Fuels from Alternative Resources (ICFAR) occurred at the ICFAR location approximately 13 km north of London. The incident was reported to the Ontario Ministry of the Environment who arrived at the site to assess the extent of the contamination. The Occupational Health and Safety Team made immediate arrangements to clean the site and removal of the contaminated soil. We were obligated to report back to the MOE Spills Action Centre that the clean-up was completed on the day it was reported. The cause of the spill was believed to have resulted from two 45 gallon oil drums being ruptured by a snow plow.

Critical Injuries

There were four Critical Injuries last year. Critical injuries are those injuries that due to their nature meet criteria that must be reported to the Ministry of Labour. All were reported immediately to the Ministry of Labour which chose, in all cases, not to visit the site.

1. January 10, 2011. Student was struck in the head by a 'shot put' at Thompson Arena during track practice, lost consciousness, fell to the ground, was transported to hospital and was treated for a concussion.

2. January 14, 2011. Student was struck by a 'hockey puck' at the Thompson Arena during a game, lost consciousness, was transported to hospital and treated.

3. February 1, 2011. Employee slipped on snow while entering workplace, hit head, lost consciousness, was transported to hospital and treated.

4. December 22, 2011. Employee slipped on the wet grass while taking a short cut, on a hill, to the parking lot and sustained a fractured right leg, was transported to hospital and treated.

Rehabilitation Services Case/Claims Management

Figure 7 shows the number of cases managed by Rehabilitation Services for the last 5 years and Figure 8 shows the number of cases managed for the last 5 years by employee group. In 2011, the total number of cases seen involved 810 employees although employees may have had multiple cases resulting in an increased number of cases. The total number of cases increased in 2011 by 10%.

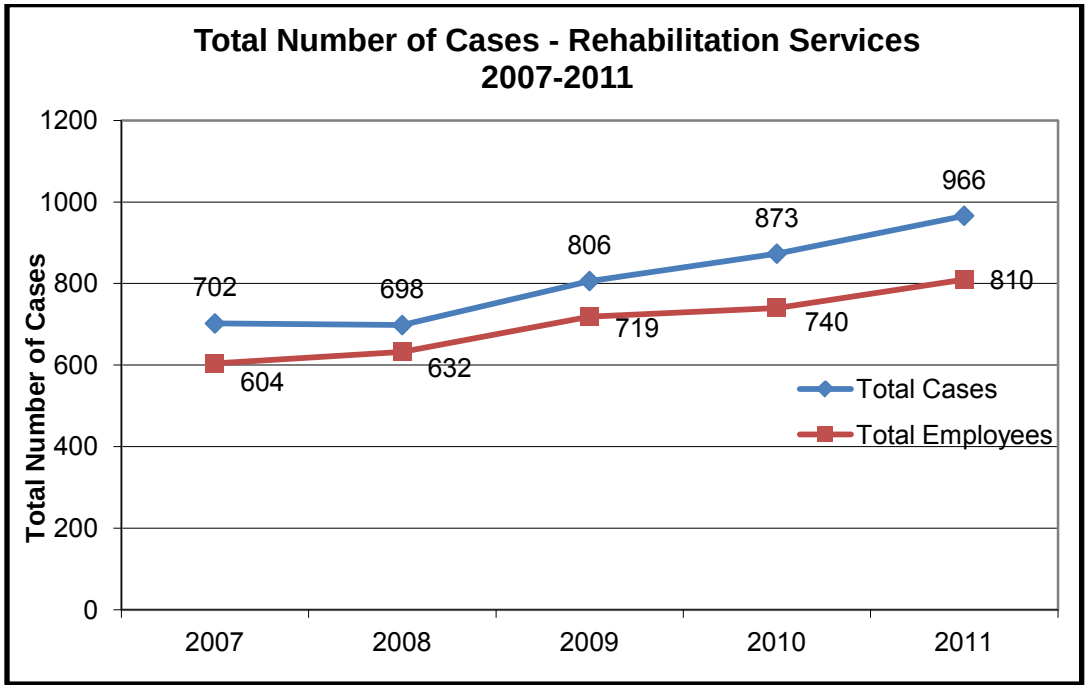

Figure 7 – Total Cases Managed by Rehabilitation Services

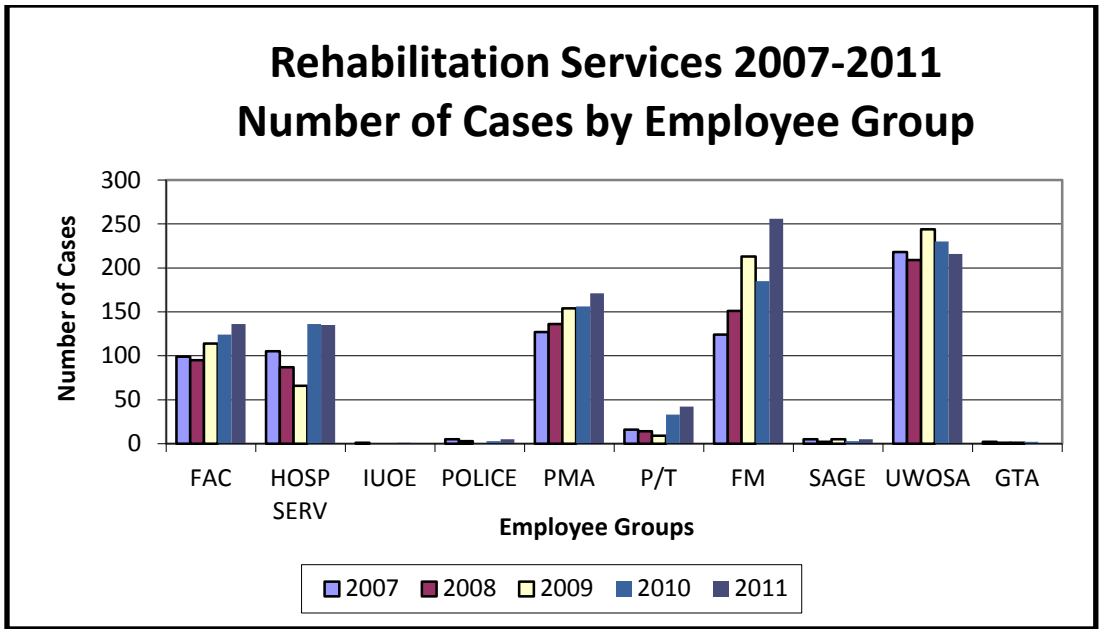

Figure 8 – Number of Cases Managed by Rehabilitation Services by Employee Group

There has been an increase in the use of services offered by Rehabilitation Services. This may be the result of the increased awareness of services offered, as well as the implementation of the Musculoskeletal Skeletal Disorders preventation program and the Mental Health Program where awareness may have resulted in earlier referrals. It should also be noted, that within the cases managed, there are multiple episodes per employee. In Facilities Management and Hospitality Services approximately 20% of the cases are multiple episodes. Figure 9 shows the Number of Employees of the Total Employee Population for Select Employee Groups.

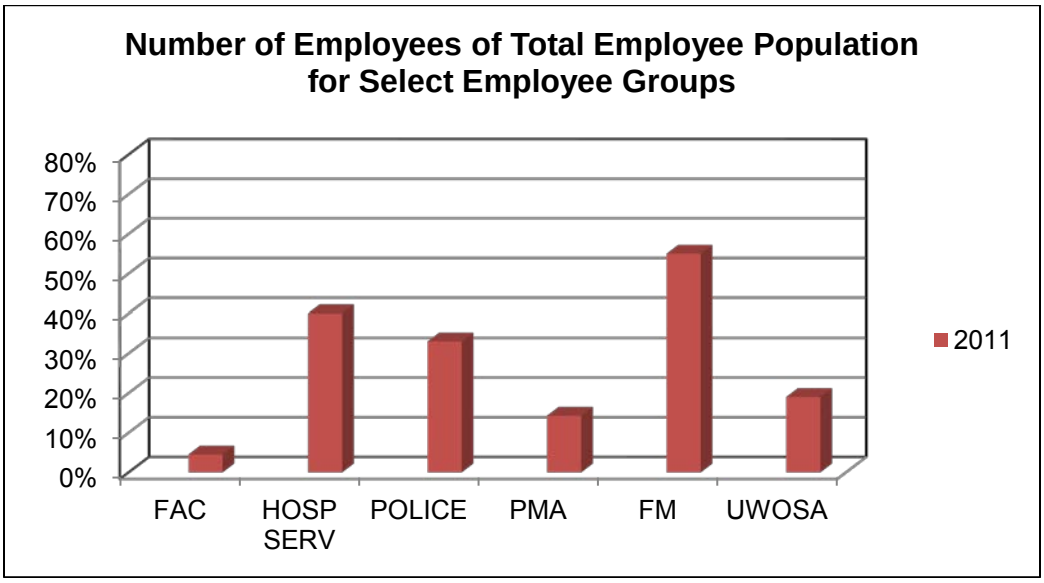

Figure 9 – Number of Employees of Total Employee Population for Select Employee Groups

As seen in Figure 10, Musculoskeletal System Disorders remain as the number one diagnosis seen in Rehabilitation Services with Mental Disorders ranking number two, followed by injury (motor vehicle accident, falls, etc.). The trend for LTD claims, both by Western and Industry are Mental and Nervous Disorders and this is shown in Figure 11.

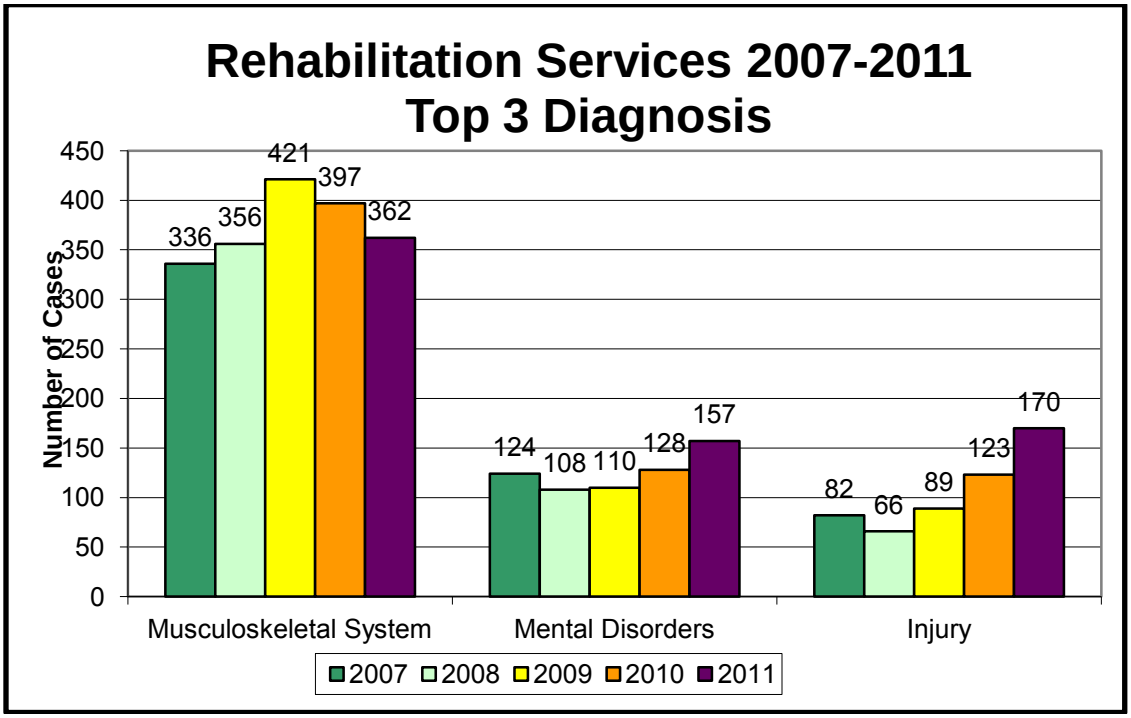

Figure 10 – Top 3 Diagnosis in Cases Managed by Rehabilitation Services

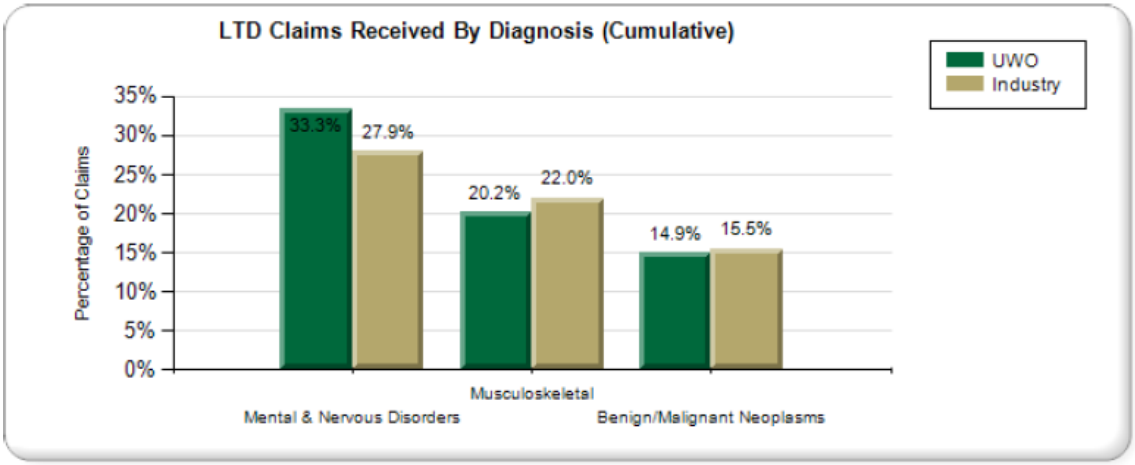

Figure 11 – UWO LTD Claims by Diagnosis and Industry
Reprinted from LTD Trend Analysis Report, Manulife Financial, Reporting Period Jan 1/09 to Dec 31/11

Workplace Safety and Insurance Board (WSIB) Claims Management

WSIB and Long Term Disability (LTD) statistics for 2011 demonstrate positive trends with respect to workplace accommodation and disability management. This may be reflective of Western's culture and ability to provide workplace accommodation to employees.

The September 2011 NEER Statement (Figure 12) shows Western costs as of September 30, 2011 and is trending very well. Our current performance index rating is better than average. This is due in part to the reduced WSIB claims and Western's success in meeting WSIB expectations with respect to early and safe return to work (early & sustained accommodation of injured workers). It should be noted, however, the projections are based on current status with the potential to change with 1 or 2 serious claims. The cost limit of 1 claim is currently $398,000. In 2011, WSIB changed our financial liability for claims from 3 years to 4 years. This will require Western to continue to be diligent in our case management and prevention for WSIB claims.

NEER (WSIB Cost Statement) - As of September 30, 2011			
Year	Total Number of Claims	Total NEER Costs	Performance Index**
2011*	29	$ 47,733.87	0.12
2010	45	$ 227,514.88	0.49
2009	75	$ 388,540.96	0.88
2008	87	$ 744,896.44	1.61

**** 9 months of Data***
***** >1=Surcharge, <1=Rebate, 1=Break Even***

Figure 12 – NEER Statement

Figure 13 shows the trend of WSIB claims at Western over the last 4 years and Figure 14 shows the WSIB vs. Non-Occupational cases by Employee group for 2011. The trend in the reduction of WSIB claims at Western is positive. Lost-time claims are going down, however health care claims need to continue to be monitored. To assist in the management of health care claims, Western provides additional supports and resources such as physiotherapy and other health care to eliminate overhead.

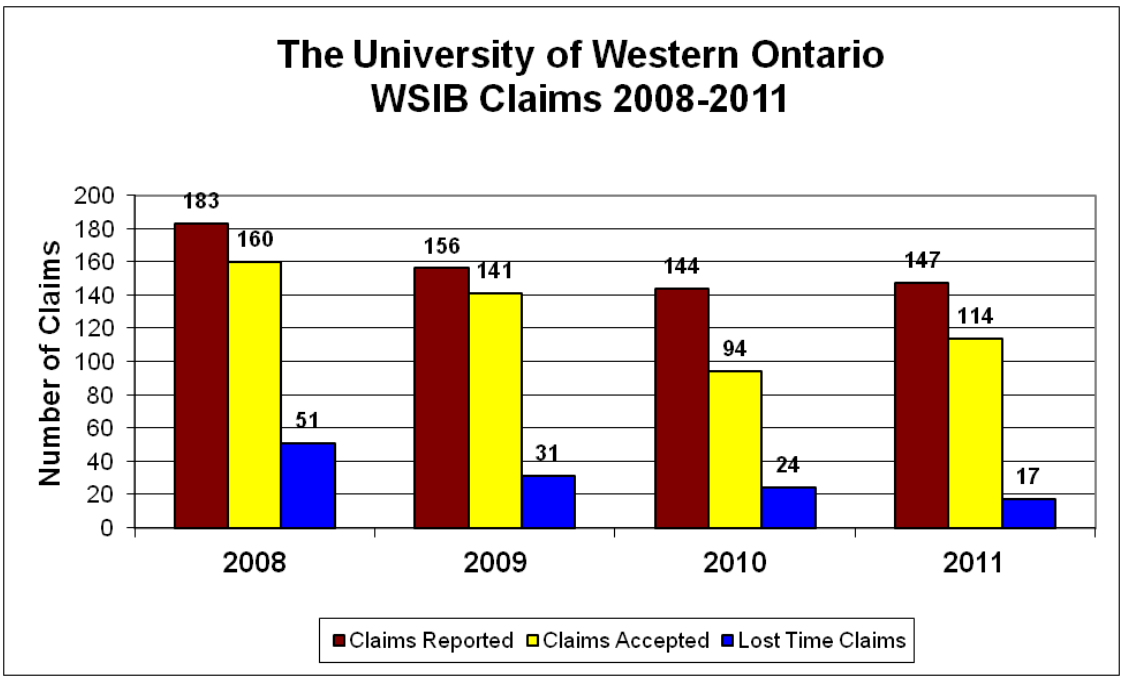

Figure 13 – Western WSIB Claims

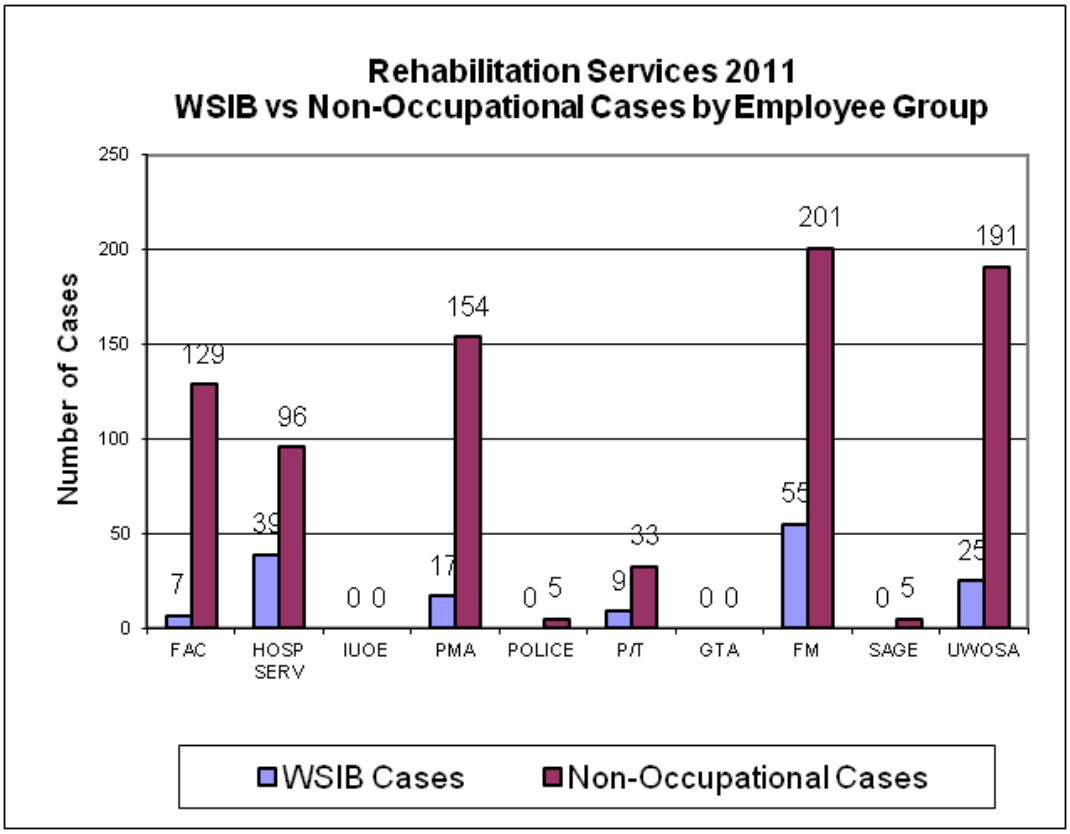

Figure 14 –WSIB vs Non-Occupational Cases by Employee Group

Facilities Management accounts for the greatest number of cases seen in Rehabilitation Services and the greatest number of WSIB cases. As stated earlier, the number of cases seen may include multiple episodes per employee. Multiple episodes reflect the complexity of cases being managed.

Figure 15 shows the average duration for LTD claims over the last 3 years for Western was 15.7 months, which is well below the industry average of 24.6 months.

	Duration in Months	
Diagnosis Category	**UWO**	**Industry**
Mental & Nervous Disorders	13.9	24.6
Musculoskeletal	12.7	27.2
Benign/Malignant Neoplasms	12.6	18.4
Overall Duration (All Diagnoses)	**15.7**	**26.2**

Figure 15 – Duration of LTD Claims
Reprinted from LTD Trend Analysis Report, Manulife Financial, Reporting Period Jan 1/09 to Dec 31/11

Figure 16 shows the total number of WSIB and Non-Occupational Cases managed by Rehabilitation Services over the last 5 years.

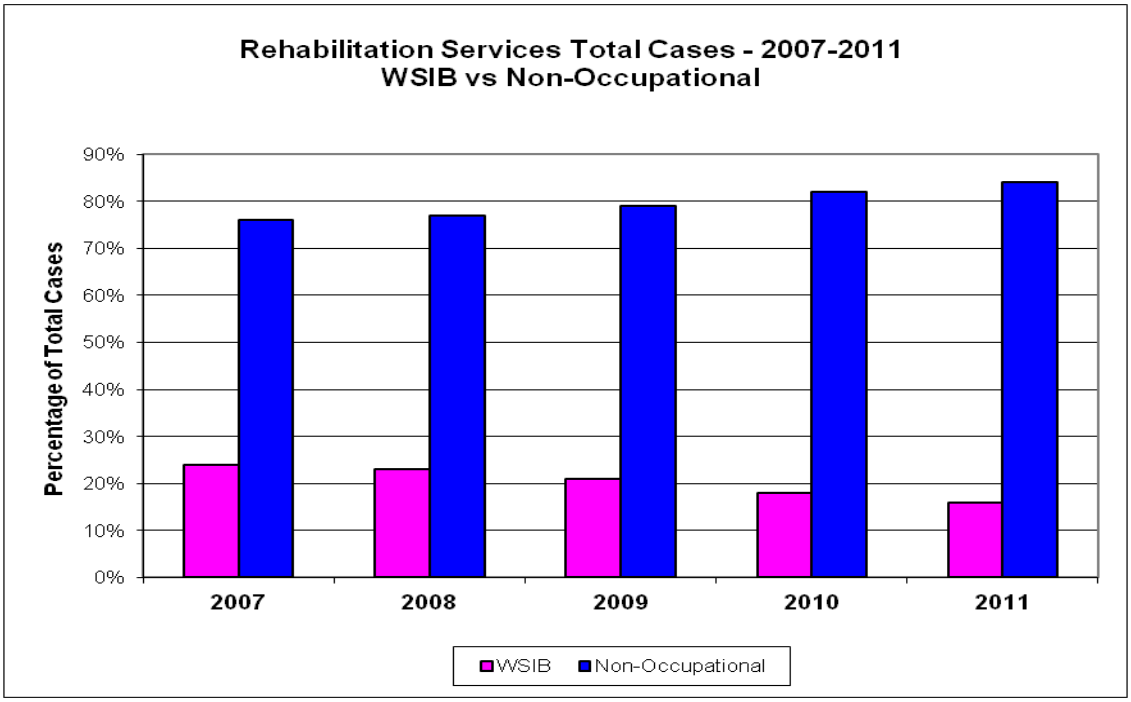

Figure 16 – Rehabilitation Services WSIB vs Non-Occupational Cases

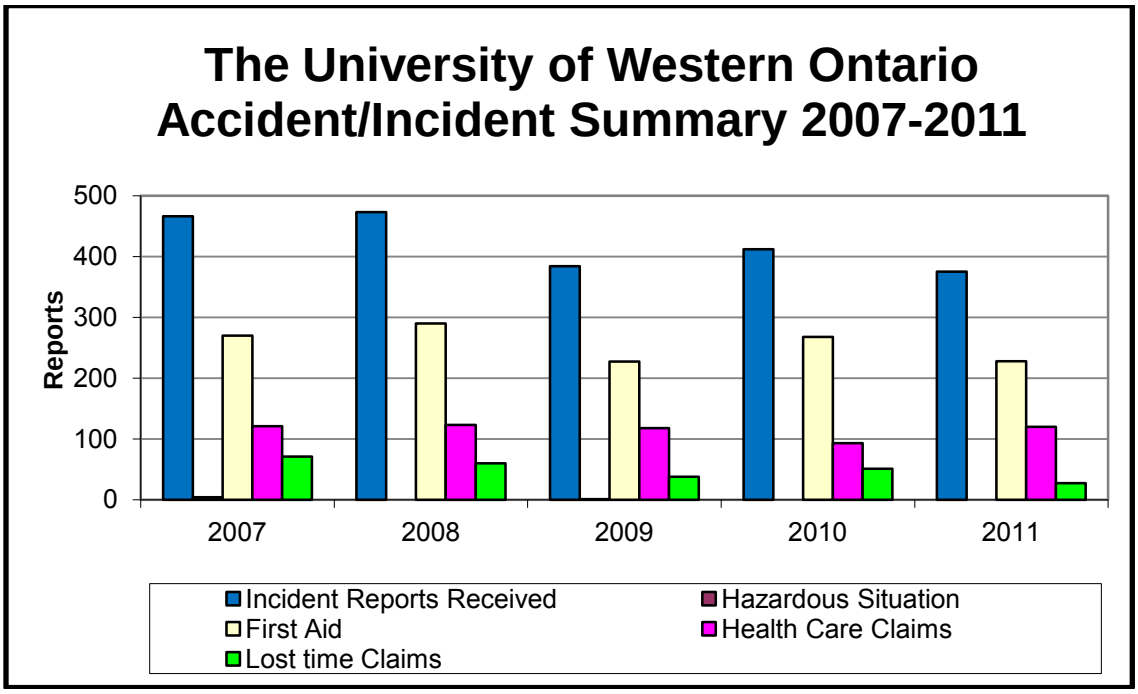

Figure 17 - Accident/Incident Summary

The number of Accident and Incidents Reports for employees remained fairly stable as seen in Figure 17.

Health, Safety and Wellness Teams

Occupational Health and Safety Team

Rehabilitation Services Team

Appendix A

Public Health Agency of Canada: Definitions of Biosafety Levels

Level 1 (low individual and community risk)	Any biological agent that is unlikely to cause disease in healthy workers or animals.
Level 2 (moderate individual risk, low community risk)	Any pathogen that can cause human disease but, under normal circumstances, is unlikely to be a serious hazard to laboratory workers, the community, livestock or the environment. Laboratory exposures rarely cause infection leading to serious disease; effective treatment and preventative measures are available, and the risk of spread is limited.
Level 2 plus	According to Health Canada, Level 2 plus agents require additional requirements, or Level 3 operations, an example of this are lentiviral vectors. Projects that may require these measures are assessed on a case-by-case basis with the Biosafety officer, Biohazards Subcommittee and the Public Health Agency of Canada.
Level 3 (high individual risk, low community risk)	Any pathogen that usually causes serious human diseases or can result in serious economic consequences but does not ordinarily spread by casual contact from one individual to another, or that causes diseases treatable by antimicrobial or antiparasitic agents.

Appendix B

Health and Safety Legislative Compliance Requirements

Prepared by the Council of Environmental Health and Safety Officers and Reprinted with Permission.

Environmental Health & Safety Legislation List: *International*

International Legislation	Summary of Requirements	Sources of Information About Current Legislation
IATA- (International Air Transport Association)	Classification of dangerous goods for shipping, documentation, standards and markings for international air shipments.	http://www.iata.org/Pages/default.aspx
IAEA (International Atomic Energy Agency)	Enhances Patient Radiation Safety in Medical Diagnosis and Treatment.	http://www.iaea.org/
National Institute of Health	Research grants from NIH involving recombinant stem cells and embryonic stem cells.	http://nih.gov/
UN Security Council	To define export controls in association with Export Control list.	http://www.un.org/Docs/sc/
Wassenaar Agreement	Established in order to contribute to regional and international security and stability, by promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies, thus preventing destabilising accumulations.	http://www.wassenaar.org/

Environmental Health & Safety Legislation List: *Federal*

Federal Legislation	Summary of Requirements	Sources of Information About Current Legislation
Biological and Toxin Weapons Convention Implementation Act	The purpose of this Act is to implement the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on their Destruction.	http://laws.justice.gc.ca/en/B-5.3/index.html
Canada Labour Code (Part II)	An Act which regulates the health & safety of federal or inter-provincial workplaces.	http://www.hrsdc.gc.ca/eng/labour/health_safety/overview.shtml
Canada Transportation Act	This Act applies in respect of transportation matters under the legislative authority of parliament.	http://laws.justice.gc.ca/PDF/Statute/C/C-10.4.pdf
Canadian Centre for Occupational Health and Safety Act	The purpose of this Act is to promote health and safety in the workplace in Canada and the physical and mental health of working people in Canada.	http://laws.justice.gc.ca/PDF/Statute/C/C-13.pdf http://www.ccohs.ca
Canadian Environmental Assessment Act	The purpose of this Act is to establish a federal environmental assessment process: to achieve sustainable development, integrate environmental factors into planning, prevent the degradation of environmental quality, and facilitate public participation in the environmental assessment.	http://laws.justice.gc.ca/en/C-15.2/
Canadian Environmental Protection Act	The purpose of this Act is to respect pollution prevention and the protection of the environment and human health in order to contribute to sustainable development.	http://laws.justice.gc.ca/en/C-15.31/
Chemical Weapons Convention Implementation Act	The purpose of this Act was to implement the Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction.	http://laws.justice.gc.ca/en/C-27.6/index.html
Criminal Code of Canada	The purpose of this Act is to set out criminal offences, and prescribes the procedure for the conduct of criminal law proceedings.	http://laws-lois.justice.gc.ca/PDF/Statute/C/C-46.pdf
Defence Production Act	Imposes restrictions on the use, storage and handling of designated materials and products. Security restrictions applied if required. Of special Note is the Controlled Goods Program.	http://laws.justice.gc.ca/en/d-1/
Department of Health Act	The purpose of this Act is to establish the Department of Health and to amend and repeal certain Acts	http://laws.justice.gc.ca/en/H-3.2/

Federal Legislation	Summary of Requirements	Sources of Information About Current Legislation
Emergency Management Act	This Act reinforces efforts to ensure that Canada is well prepared to mitigate, prepare for, respond to and recover from natural and human-induced risks to the safety and security of Canadians.	http://www.publicsafety.gc.ca/media/nr/2007/bk20070807-eng.aspx
Export and Import Permits Act	The Export and Import Permits Act and regulations are used for a number of purposes, including the imposition of trade sanctions on goods.	http://www.international.gc.ca/sanctions/eipa-llei.aspx?lang=eng&view=d
Fisheries Act	Prevents the deposit of a deleterious substance into a water body that may contain fish.	http://laws-lois.justice.gc.ca/eng/acts/F-14/
Food Inspection Agency/Health of Animal Act	Public health risks associated with the food supply and transmission of animal disease to humans are minimized and managed.	http://www.inspection.gc.ca/english/reg/rege.shtml
Hazardous Products Act	An Act to prohibit the advertising, sale and importation of hazardous products.	http://laws-lois.justice.gc.ca/PDF/Statute/H/H-3.pdf
Human Pathogens and Toxins Act	An Act to promote safety and security with respect to human pathogens and toxins.	http://laws.justice.gc.ca/PDF/Statute/H/H-5.67.pdf
Navigable Waters Protection Act	This is an Act respecting the protection of navigable waters. Regulates any work in or near water bodies.	http://laws.justice.gc.ca/en/N-22/
Nuclear Safety and Control Act	The purpose of this Act is to establish the Canadian Nuclear Safety Commission and to make consequential amendments to other Acts: regulate the development, production and use of nuclear energy, and control of Nuclear Substances and protection of works.	http://laws.justice.gc.ca/en/N-28.3/index.html
Radiation Emitting Devices Act	An Act respecting the sale and importation of certain radiation emitting devices.	http://laws.justice.gc.ca/PDF/Statute/R/R-1.pdf
Human Pathogens and Toxins Act	The purpose of this Act is to promote safety and security with respect to human pathogens and toxins.	http://www2.parl.gc.ca/Sites/LOP/LegislativeSummaries/Bills_ls.asp?lang=E&ls=c11&source=library_prb&Parl=40&Ses=2
Transportation of Dangerous Goods Act	An Act to promote public safety in the transportation of dangerous goods.	http://laws.justice.gc.ca/PDF/Statute/T/T-19.01.pdf

Environmental Health & Safety Legislation List: *Provincial*

Provincial Legislation	Summary of Requirements	Sources of Information About Current Legislation
Anatomy Act	Sets of the requirements for the disposition of a body, by a school, and regulations of recording keeping and inspections.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90a21_e.htm
Animal Health Act	Responsible for the protection of animal health and regulation of activities that may affect animal and/or human health.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_09a31_e.htm
Animal Welfare Act	Recognize our responsibility to protect animals in Ontario; Appreciate that an effective and progressive approach is required to continue to provide the best possible protection of animals in Ontario.	http://www.e-laws.gov.on.ca /html/source/statutes/english/2008/elaws_src_s08016_e.htm
Animals for Research Act	Registration of research facility, provision of proper care and handling of animals, submission of reports.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90a22_e.htm
Building Code Act	Parameters for safe construction of buildings, including fire protection, emergency exit requirements and general standards.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_92b23_e.htm
Clean Water Act	Purpose of this Act is to protect existing and future sources of drinking water.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_06c22_e.htm
Dangerous Goods Transportation Act	Sets out the guidelines for the transportation of any dangerous goods in a vehicle on a highway.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90d01_e.htm
Electricity Act	Purpose of this Act is to protect the interests of consumers with respect to prices and the adequacy, reliability and quality of electricity service.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_98e15_e.htm
Emergency Management & Civil Protection Act	The purpose of this Act is to promote the public good by protecting the health, safety and welfare of the people of Ontario in times of declared emergencies in a manner that is subject to the *Canadian Charter of Rights and Freedoms.*	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90e09_e.htm
Environmental Assessment Act	The purpose of this Act is the betterment of the people of the whole or any part of Ontario by providing for the protection, conservation and wise management of the environment.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90e18_e.htm
Environmental Bill of Rights	This Bill allows citizens to help protect and restore the natural environment. The bill provides every resident with formal rights to play a more effective role.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_93e28_e.htm

Provincial Legislation	Summary of Requirements	Sources of Information About Current Legislation
Environmental Protection Act (EPA)	Establishment and regulation of waste management systems and disposal sites; disposal of hazardous wastes and equipment.	http://www.e-laws.gov.on.ca/ html/statutes/english/elaws_statutes_90e19_e.htm
Fire Protection and Prevention Act	Fire safety standards for buildings, emergency exits and occupant loading.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_97f04_e.htm
Fish and Wildlife Conservation Act	Main provincial law regulating fishing, hunting and trapping.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_97f41_e.htm
Food Safety & Quality Act	The purpose of this Act is to provide for the quality and safety of food and the management, control and regulation of food safety risks.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_01f20_e.htm
Good Samaritan Act	Protection from liability when a person provides emergency first aid assistance to a person who is ill, injured or unconscious as a result of an accident.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_01g02_e.htm
Health Protection and Promotion Act	Health and safety requirements for food premises and public swimming pools.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90h07_e.htm
Highway Traffic Act	Applies to the provisional use of commercial and non-commercial motor vehicles on the roads and highways of Ontario.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90h08_e.htm
Human Rights Code, 1990	Provincial law that gives everybody equal rights and opportunities without discrimination in specific areas such as jobs, housing and services. The *Code* 's goal is to prevent discrimination and harassment.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90h19_e.htm
Occupational Health and Safety Act (OHSA)	Occupational health and safety regulations, use and control of hazardous chemicals and toxic substances (i.e. Designated Substances, Control of Exposure to Biological and Chemical Agents, Confined Spaces, Critical Injury, etc.).	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90o01_e.htm
Occupiers' Liability Act	Duty to take such care as in all the circumstances of the case is reasonable to see that persons entering on the premises, and the property brought on the premises by those persons are reasonably safe.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90o02_e.htm
Off-Road Vehicles Act	Applies to vehicles propelled or driven otherwise than by muscular power or wind and designed to travel, (a) on not more than three wheels, or (b) on more than three wheels and being of a prescribed class of vehicle.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90o04_e.htm
Pesticides Act	Sets out the guidelines and regulations of proper use and handling of pesticides.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90p11_e.htm

Provincial Legislation	Summary of Requirements	Sources of Information About Current Legislation
Private Security and Investigative Services Act	Applies to private investigators within the meaning of subsection (2) and to security guards within the meaning of subsection (4). 2005, c. 34, s. 2 (1).	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_05p34_e.htm
Safe Drinking Water Act	To provide for the protection of human health and the prevention of drinking water health hazards through the control and regulation of drinking water systems and testing.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_02s32_e.htm
Smoke Free Ontario Act	Sets out the guidelines in regards to the selling, purchase and use of tobacco products in and around the workplace.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_94t10_e.htm
Technical Standards and Safety Act	The purpose of this Act is to enhance public safety by providing the efficient and flexible administration of technical standards with respect to: amusement devices, boilers and pressure vessels, elevating devices, fuels, operating engineers and upholstered or stuffed articles.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_00t16_e.htm
Toxics Reduction Act, 2009	Requires facility owners and operators to provide the public with information submitted in annual toxics reduction reports.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_09t19_e.htm
Veterinarians Act	The regulation of the practice of veterinary medicine and to govern its members in accordance with this Act, and the regulations and the by-laws in order that the public interest may be served and protected.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_90v03_e.htm
Waste Diversion Act	The purpose of this Act is to promote the reduction, reuse and recycling of waste and to provide for the development, implementation and operation of waste diversion programs.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_02w06_e.htm
Water Resources Act	Discharge of materials and spill notification.	http://www.e-laws.gov.on.ca /html/regs/english/elaws_regs_040129_e.htm
Workplace Safety and Insurance Act	The purpose of this Act is to promote health and safety in workplaces and to prevent and reduce the occurrence of workplace injuries and occupational diseases. To facilitate the return to work and recovery of workers and the re-entry into the labour market.	http://www.e-laws.gov.on.ca /html/statutes/english/elaws_statutes_97w16_e.htm

Environmental Health & Safety Legislation List: *Municipal* *(specific to each Municipality)*

Municipal Legislation	Summary of Requirements
Fire Departments - Fire Service User Fees By-law	Sets out the guidelines of user fees for services provided by the city in regards to Vehicle response, foam used, false alarms and failure to advise of testing.
Noise By-Law	Sets out limits on noise levels within the community.
Public Halls	Governs the licensing of buildings for over 100 persons that are offered for use or used for public assembly.
Smoking By-law	Sets out the regulations regarding the smoking of, and use of tobacco products, in public places and work places within the Municipality.
Waste Discharge to Municipal Sewers By-Laws	A by-law to prohibit, regulate and control the discharge of waters and wastes into bodies of water within the Regional Area or into the Regional Sanitary Trunk Sewers.
Landfill Waste Management By-Laws	Sets out guidleines on the materials that are accepted in landfill facilitites.

Environmental Health & Safety Guidelines: *Canadian Safety Association (CSA) Standards*

CSA Standard	Standard Overview
Fume Hoods and Associated Exhaust Systems - CSA Z316.5.04	This Standard applies to all types of laboratory fume hoods, except for recirculating fume hoods and specifies safety requirements for fume hoods; test methods for assessing fume hood performance; requirements for the selection, use, and maintenance of fume hoods; requirements for the education of fume hood users and maintenance personnel.
Nanotechnologies (DRAFT) - CSA Z12885	This Standard provides guidance on exposure control programs for engineered nanomaterials in occupational settings.
Occupational Health and Safety Management - CAN/CSA Z1000-06	This Standard specifies requirements for an occupational health and safety management system (OHSMS). This Standard is applicable to an organization of any size or type. This Standard is intended to address occupational health and safety. It is not intended to address product and services safety.
Psychological Health and Safety in the Workplace - CSA Z1003/BNQ 9700 (DRAFT)	This Standard will provide methods to businesses of any size that will lead to measurable improvements in psychological health and safety in the workplace. The main objectives targeted by the standard are: to improve the cost-profit index in Canadian businesses, to improve risk management and to promote a sense of social responsibility among businesses.
Risk Management Principles and Guidelines - CAN/CSA ISO 31000-10	This International Standard provides principles and generic guidelines on risk management that can be applied to any type of risk, whatever its nature, whether having positive or negative consequences.
Selection Use & Care of Respirators - CSA Z94.4-02	This Standard sets out requirements for the proper selection, use, and care of respirators and for the administration of an effective respiratory protection program in the workplace.
Workplace Electrical Safety - CSA Z462-08	This Standard provides guidance on the assessment of electrical hazards and design of safe work spaces around electrical power systems. It stipulates requirements for identifying hazardous equipment and for the development of safe work procedures around this equipment. This Standard also gives guidance to electrical workers on the selection of personal protective equipment and protective clothing.