



Environmental Health and Safety
Annual Report
of the Vice-President (Finance and Administration)
2014

To the Building Program Committee
of the Board of Governors

May 25 2015

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Executive Summary

The Annual Report on Environmental Health and Safety (EHS) profiles the effectiveness of Carleton's efforts in addressing our responsibilities in managing the operational risks of a research and educational intensive university.

The Environmental Health and Safety Office is a critical partner in support of Carleton's mission through developing, promoting and implementing best practices in prevention strategies while balancing there with responsible risk taking:

- By establishing structures, policies, standards and programs
- By managing Carleton's response to regulatory affairs in health and safety
- By identifying opportunities to influence change in safety awareness
- By fostering and strengthening a culture of collaborative prevention and resolution of health and safety concerns

Carleton is subject to increasing numbers and complexity in health and safety legislation, all of which require differing intensity of activities, program development, training and documentation for compliance. As such, these require a strong, cohesive and inclusive internal responsibility system to ensure we support Carleton's core pillar of innovation in research and education, while ensuring that Carleton is managing its risks responsibly.

2014 Achievements and Successes

- Development and implementation of online H&S Awareness training in response to new legislative requirements,
 - overall completion rate of 62% achieved; permanent staff were over 85% completion, with Faculty at 74% completion rate, an achievement that no other Ontario university have been able to accomplish
- Development of WHMIS/GHS training in anticipation of GHS legislation in 2015 and incorporation into all 1st year chemistry courses.
 - Just under 2000 1st year students completed
- Development and implementation of Laser Safety training and development of laser inventory
- Completion of campus wide chemical inventory
- Further strengthened Fire and Life Safety Prevention activities
 - Decreased incidence of false alarms on campus by 68% since 2011
- Successful transition of Fire Safety training to online delivery format

- Completed needs assessment, work flow analysis and requested proposals for EHS data management software. Acquisition through ISSC expected late 2015
- Developed preliminary framework to enhance effectiveness of Controlled Goods Program
- Developed early strategy to reduce risks related to unpaid learners in response to regulatory changes
- EHS included in Employee Customer Satisfaction survey
 - significant increase in effectiveness of EHS program and corresponding satisfaction reported

Looking Forward to 2015 and Beyond

- Complete the acquisition of an EHS data management software system and implement Phase 1 rollout
- Further enhance Controlled Goods framework to ensure the university effectively responds to anticipated Regulatory changes (Bill 51)
- Ensure seamless implementation of the Human Pathogens and Toxins Regulations across the university through a collaborative approach, leveraging the CURO cuResearch portal
- Develop and implement an effective Workshop Safety program to assist faculties in delivering experiential learning opportunities in accordance with best practices across the industry
- Participate in the 2015 provincial WSIB Rate Framework review through CEHSO as well as with Carleton Human Resources and identify opportunities to limit impacts.
- Introduce inaugural week long campaign to promote awareness of Health and Safety, Emergency Planning and Mental Health
- Submit application for Canada's Safest Employer 2015 – Psychological Health and Safety division.

2014 Strategic Priorities – What drove us?

Assessing Needs – Internal forces

2014 continued the implementation of activities and programs aimed at further strengthening Carleton's environmental health and safety performance and positioning Carleton as a responsive organization, capable of readily adapting to changes in both the regulatory environment and with the ability to reduce risk while supporting our teaching and research activities.

Staged implementation of the six recommendations of the EHS Benchmarking report continued in 2014. The Chemical Inventory was fully implemented across campus. Combined with other data sources, this facilitated a campus wide signage initiative linking hazards and risks to the individual laboratories, permitting informed emergency response, as well as ensuring compliance. Significant effort was invested to pursue another recommendation, namely the acquisition of an integrated EHS data management system to reduce manual interventions and ensure compliance efforts across campus are easily tracked. A RFP for the system was issued in January 2015. This will be pursued through the ISSC strategic route during 2015.

The development of a strategy to implement the CSA standards on workplace psychological safety continued during 2014 as the working group comprised of Healthy Workplace, the AVP University Services, EHS and HR, as well as the multidisciplinary advisory committee developed a strong roadmap which included participation in a Canada wide research project, the Mental Health Commission of Canada's National Case Study. Carleton is the only university invited to participate.

Regulatory Requirements

Legislative Drivers – External Forces

Reform of the Occupational Health and Safety Act - Health and Safety Awareness Training

November 15, 2013, further to the recommendations¹ of the Expert Advisory Panel on Occupational Health and Safety² (The Tory Dean Report, 2010), the government of

¹ http://www.labour.gov.on.ca/english/hs/prevention/score_card.php

² http://www.labour.gov.on.ca/english/hs/pdf/eap_report.pdf

Ontario introduced new legislation requiring all Ontario Workplaces to provide basic Health and Safety Awareness training for workers and for supervisors.

Under the amendment to the Occupational Health and Safety Act, all workers were to be trained by July 1st 2014, with supervisors to be trained within one week of becoming supervisors.

Given the magnitude of the challenge (approximately 6000 full and part time employees) and the short development/implementation timelines (content finalized by the MOL in March 2014), Human Resources (HR), Computer and Communications Services (CCS) and the Educational Development Centre (EDC) were approached to partner with EHS to develop a common platform and methodology to meet the imminent legislation and the CSA Z1001 - Occupational Health and Safety Training Standard. Already in use across the university, the CuLearn platform was selected as it would not only meet the currently identified requirements, but would fully support the learning and development strategy for professional services under the Office of Quality Initiatives (OQI). In addition to the above, the Joint Health and Safety Committee, the Paul Menton Center, and the department of Communications participated in the content and format review.

Two independent training courses (Worker Health and Safety Awareness and Supervisor Health and Safety Awareness) were developed and launched to the community 3 months prior to the “in effect” date of the Regulation. This permitted use of a strong communication strategy to sensitize the community and acclimate staff to the new learning platform. By the compliance date, Carleton was the only post-secondary institution to have launched their compliance solution and we were already evidencing strong buy-in for participation.

To support these compliance initiatives, mandatory training elements were incorporated into letters of offer for Contract Instructors, and were embedded into collective agreements.

Reform of the Occupational Health and Safety Act - Working at Heights Legislation - CU Building Rooftop Access (signage, rekeying, training)

Falls from heights are a major hazard for workers and are one of the leading causes of critical injuries and fatalities in Ontario workplaces. In response, the Ministry of Labour has introduced new legislative standards and requirements for working at heights on construction projects. This includes new OHS working at heights training legislation. To comply with the legislative requirement and meet due diligence CU completed a project involving installation of warning signs at all building rooftop access locations on Campus. The rooftop access signage contains specific requirements for working on roof tops including easy access for all rooftop workers to roof anchor location, inspection and testing data. A new key access procedure has also been implemented to restrict access to roof top areas to qualified trained workers.

Reform of the Occupational Health and Safety Act – Bill 18 and Bill 22 (Greater Protection for Vulnerable Workers)

Vulnerable workers as a sector of the Ontario population has been identified as a strategic priority by the Chief Prevention Officer. Youth between the ages of 18 and 25 are more likely to be injured or killed on the job than a more mature worker, particularly in the first four weeks of work. This has resulted in the introduction of two separate pieces of legislation (Bill 18, the *Stronger Workplaces for a Stronger Economy Act*, and the anticipated enactment of Bill 22 the *Greater Protection for Interns and Vulnerable Workers Act*). Bill 18 amends the definition of a worker under the Occupational Health and Safety Act, and guarantees protection for unpaid learners, students and trainees in the workplace. High school students who attend the University as co-op students are also now defined as workers under the Act. The Bill was enacted extremely rapidly, leaving most workplaces struggling to provide the oversight required. Carleton had previously developed a “Young Worker Awareness” program such that an early strategy was already in development through creation of a working group (EHS, Risk Management, Student Affairs, Registrar’s office, FGPA). As the impacts continue to be evaluated across the university sector, there will continue to be refinement to our programs.

Globally Harmonized System of Classification & Labeling of Chemicals (GHS)

In June 2014, the Hazardous Products Act was amended to enable Canada to implement the GHS, which will replace WHMIS for workplace chemicals. In August 2014, the proposed Hazardous Products Regulations were published for consultation, and were finally passed into legislation on February 11, 2015.

While not completely replacing WHMIS, GHS requires significant changes to existing hazardous materials management programs to meet the new Regulations.

In anticipation of this requirement, and to leverage synergies from the development of the two new H&S Awareness online training programs, a WHMIS/GHS online training program was developed, and launched in May 2014.

The new WHMIS/GHS online training has ensured that Carleton is fully compliant with the incoming regulatory requirements and will thus seamlessly transition to the new framework. In addition to serving the needs of the staff at Carleton, the new content offered a unique opportunity to enhance the undergraduate curriculum for first year Science and Engineering students. Replacing an older WHMIS segment in the CHEM1001 courses, this became a mandatory learning for the students. Just under 2000 students have successfully completed the training.

In addition to developing an in house solution to meet Carleton’s own compliance needs, Carleton has been the lead institution in exploring development of a standardized GHS

training package platform for all Ontario Universities. This single training package would be cost effective, customizable and fully integrable with existing Learning Management Systems across the universities. A partnership proposal with the Education Sector Health and Safety Association (PSHSA) was submitted to the CSAO for development funding in January 2015.

Human Pathogens and Toxins Act (HPTA)

In 2014, the draft Human Pathogens and Toxins Regulations were published (The Human Pathogens and Toxins Act received royal assent in 2009). The regulations establish national requirements to improve oversight and maintain a risk based approach to safety. Carleton provided feedback on the draft as well as the 1st edition of the Canadian Biosafety Standards and Guidelines both as an individual organization as well as a member of the Ontario Universities Biosafety Officers group. The feedback was incorporated into both the latest version of the regulations and the Canadian Biosafety Standards.

Participation in various outreach webinars hosted by the Public Health Agency of Canada has also been essential to clarify the new requirements under the regulations.

These new Regulations while requiring additional administrative oversight will facilitate importation and acquisition of regulated biological material for researchers involved in these activities.

Managing Risk

To assist in managing risks that affect the university, a risk review process has been undertaken which includes regulatory compliance elements as well as program identification and gap analysis, particularly with regard to the infrastructure elements. Severity and frequency dimensions were incorporated to establish a risk ranking. This risk exercise will continue into 2015 with expansion of operational program elements.

1) Campus Risk Review

Asbestos Management Program (AMP)

Following the updated campus ACM survey which highlighted areas for improvement, a hazard risk priority tool was developed using eight risk categories based on ACM type, condition, and location. This facilitated a systematic approach to abating and/or repairing damaged ACM. A two-phase ACM work project was initiated. In the spring of 2014 all poor condition ACM was abated or repaired (excluding one building). This involved approximately 40m², 15 LM, and 420 glove bags. Phase 2 of the project with the intention

of completing abating/repairing of the remaining poor condition ACM was initiated in November 2014 and completed in January 2015. A total of 1443 fittings and 998 linear meters of damaged asbestos was abated or repaired to be in good standing.

Eight (8) Standard Operating Procedures (SOPs) for select asbestos abatement, repair and cleanup work were developed and extensively reviewed and approved by FMP Managers. The training course and timeline for the roll out of these SOPs are expected to be completed in 2015. This will allow for select Type 1 and Type 2 abatement activities to be completed safely in house.

Fume Hood Inspection Program

The annual fume hood inspection process was enhanced in 2014 to be in accordance with ANSI standards which introduced additional rigour in the process; ensuring opportunities for potential failures were identified and could be remedied prior to failure. The 2015 activities will focus on expanding and streamlining this process as fume hoods are a significant component to engineered safety.

Fire and Life Safety Prevention Activities

To decrease the potential generation of false fire alarms from construction/renovation activities, an enhanced hot work and dust producing permit process was developed through discussion with stakeholders and introduced to FMP units and contractors, early in 2014. We have experienced a significant decrease in false alarms since the permit process was introduced.

In collaboration with Risk Management, Conference Services, DUS and the Manager for Special Events for the City of Ottawa, EHS introduced a revised Special Event Permit Application. Combined with education, inspections and enforcement elements, this new process has been favourably acknowledged by the City of Ottawa as a significant tool creating a safe and prepared structure and process for fire, life safety, and evacuation at events. This facilitated expedited acceptance of permits for major 2014 events such as the Ottawa Fury soccer, Ottawa Red Blacks pre-season events, Gymnastics Canada National Championships, Carleton varsity football and student Orientation events.

The Fire Safety Warden Program was enhanced with the introduction of an online training program accessed through CU Learn. While all of the fire safety wardens had been previously trained, over 20% chose to renew their knowledge using the new online tool. In addition to the fire safety wardens, the overwhelming majority of the res fellows completed training, enhancing their response capabilities. A total of 206 individuals had completed the training since the introduction in the 4th quarter of 2014.

In support of Carleton's commitment to ensuring an accessible campus for all staff and students, enhanced training in safe evacuation procedures for clients was provided to staff and clients of the Attendant Services Program.

In 2014 Carleton was approached to partner with Ottawa Fire Services to provide recruit and reclassification training opportunities on campus. Dining Services, Housing and Residence Life Services and the Athletics Department facilitated use of a commercial kitchen environment, a residential high-rise environment and different fire suppression rooms for training and for inspection orientation. This active inclusion into a real work environment not only enhanced the training received by the OFS but further cemented an excellent working relationship with Senior Management in the Ottawa Fire Services. This was further evidenced by the Fire Prevention Officer being asked to become an Adjunct Training Officer (Inspector level) in the Training Division of the Ottawa Fire Services.

Implementation of enhanced risk assessment services

Under the Canadian Standards Association, the use of a respirator to protect against inhalation hazards requires a fit test to ensure a proper seal. In 2014, employee groups from across campus were fit tested for respirator use due to the nature of their work. These included, Department of University Safety and Health and Counseling Services through an external contractor. A total of 99 staff whose job functions could expose them to potentially infectious agents were thus protected. The EHS office also conducted qualitative fit testing for staff of Animal Care and Veterinary Services where there is exposure to animal allergens.

Comprehensive analysis of WSIB frequency and severity injury data confirmed that the majority of lost time claims are due to musculoskeletal disorders. The objective of the Carleton University Ergonomics Program is to provide service by qualified professionals to identify ergonomic hazard risks factors and provide assistance in implementing effective prevention measures and avoid MSD injuries. The program was further strengthened in 2014 through a collaborative initiative with Purchasing and Human Resources to assess office chairs, keyboard trays and adjustable monitor arms with the goal of standardizing and identifying cost effective ergonomically designed equipment recommendations.

In 2014, EHS carried out sixty six (66) ergonomic assessments, over a twofold increase from 2013, including staff hands-on training and consultations. Of these, thirty (30) staff members were already utilizing paramedical services to help alleviate the symptoms they were experiencing.

Near Miss Events

Introduced as a new concept in 2013, near misses offer the opportunity to identify a hazardous situation before an injury or incident occurs, and implement pro-active preventive actions. Near miss reporting expanded the target population from a strictly staff centric approach to a campus wide approach, when the webportal report was transformed with the introduction of a CU app on the CU-Safety platform.

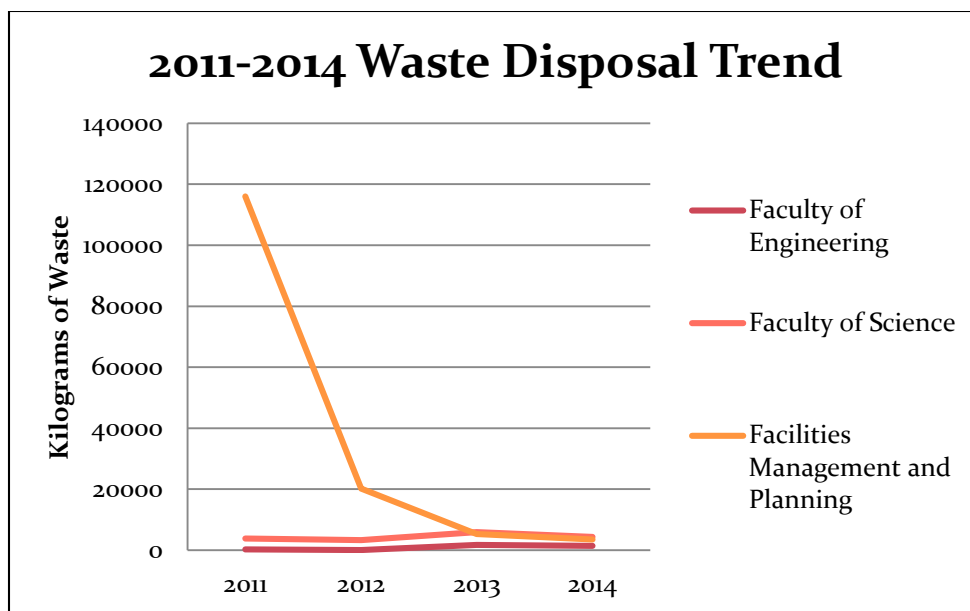
A number of locations were identified through near miss reporting which permitted the development of a prioritized registry of slip/trip/fall hazards for corrective actions.

Laboratory and Academic Safety Programs

A comprehensive assessment of chemical hazards within all labs and workshops was completed to determine signage requirements. This was achieved by leveraging the information housed within the chemical inventory system and harmonizing it with NFPA 704: Standard System for the Identification of the Hazards of Materials for Emergency Response. This allows for conveyance of accurate and relative risk of the hazards within to individuals accessing these areas including emergency response personnel.

The implementation of the Chemical Inventory Management System in all departments across campus was completed in 2014. This has enabled us to have a more robust data set upon which to base our annual Chemical Weapons compliance report. Last year we reported only the presence and use of Schedule 3 Chemical Weapons within our research laboratories, and all in very limited quantities. For the 2014 report, the inventory database has already yielded information that we have more Schedule 3 items than previously identified, and that we also have a number of the Schedule 2 Chemical Weapons (higher risk). This allowed for gains such as increased accuracy of compliance reporting and to conduct informed assessments of the actual risks. Next steps will focus on enhancing the management of these materials and the spaces where they are being used.

Hazardous Waste Management



Upon centralization of the Hazardous Waste Program and the completion of Phase 1 (Chemistry Dept.) of the Chemical inventory management system in 2013, disposal of hazardous waste across the university has steadied in 2014. EHS continues to manage disposal to reduce storage of chemicals and to ensure compliance with MOE regulations.

2) Policy Strengthening as Risk Reduction Strategy

Fall of 2014 saw the renewal of the Smoking on Campus policy. The opportunity was leveraged to include verbatim prohibition regarding the use of electronic cigarettes on campus, as there had been recent challenges within classroom, library and residence settings.

A similar opportunity was gained with the renewal of the Rooftop and Service Area Access policy. Not only did this afford increased safety measures, it streamlined existing processes, and aligned with incoming Working at Heights Regulations.

Collective agreements negotiated in 2014 with CUPE4600 1&2 included specific clauses to facilitate completion of the mandatory training which greatly enhanced the uptake and penetration of the training.

Two procedures were developed in response to incidents that occurred in 2014. In addition to risk reduction across campus, they will also serve to elevate the safety culture among students, staff, and faculty. A decommissioning procedure was drafted to address specific concerns including improper disposal of hazardous material and indirect exposure to harmful materials originating from laboratory or workshop spaces. The

second document is the Working Alone Procedure that introduces a hazard assessment tool to allow for risk based decisions regarding activities undertaken alone. Feedback provided by various stakeholders including deans, chairs and directors have confirmed that the development of such guidelines are fundamentally valuable to the entire University.

3) Safety and Compliance Committees

Joint Health and Safety Committee

The primary objective of the JHSC is to oversee the internal responsibility system and is comprised of worker and management representatives working together to promote a co-operative, positive and progressive approach to dealing with health and safety issues. The committee met five times in 2014 (January, March, June, September and November). A major focus for the committee was the incoming Health and safety awareness training, as it became a unique opportunity to enhance safety culture.

Radiation Safety Committee

The Radiation Safety Committee reports to the Vice President Finance and Administration and is chaired by the Dean of Science. The Committee met twice in 2014 (July and December). Applications to renew Carleton's licenses that authorize use and import of Nuclear Substances and Radiation Devices were approved by the Canadian Nuclear Safety Commission. These licences are valid for 3-year and 1-year terms respectively. An annual compliance report has also been submitted to the CNSC as required under our consolidated license.

Animal Care Committee

The Animal Care Committee reports to the Office of the Vice-President (Research and International). The EHS representative on the committee actively participates in the assessment of Animal Use protocols in regards to animal welfare and occupational health, performs mandated inspections of animal holding spaces and in particular during 2014, assisted in the preparation for the Canadian Council for Animal Care assessment of the facility. Certification was awarded. The Committee met monthly during 2014.

Biohazards Committee

The Biohazards Committee reports to the Office of the Vice-President (Research and International). The Committee met in December 2014. A briefing on the Human Pathogens and Toxins Regulations was prepared by the Biosafety Officer and delivered to the Associate VP Research, AVP Facilities Management and Planning and to the members of the Biohazards committee to clarify impact on Carleton as they come into force in December 2015. There were no significant items, other than further trending towards increased research activity involving biological materials across multiple departments

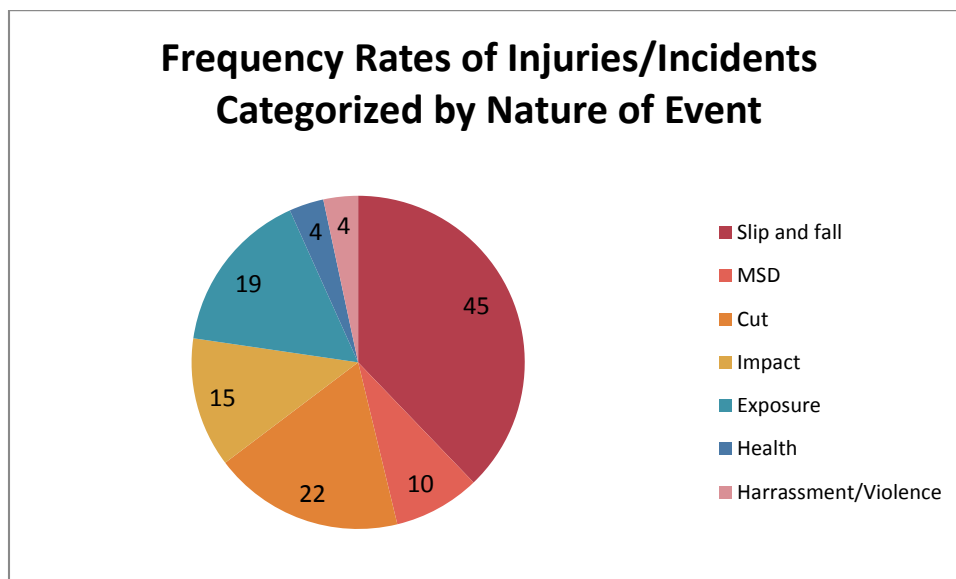
including the newly established Department of Health Sciences. 8 biohazard applications were critically assessed and approved in 2014.

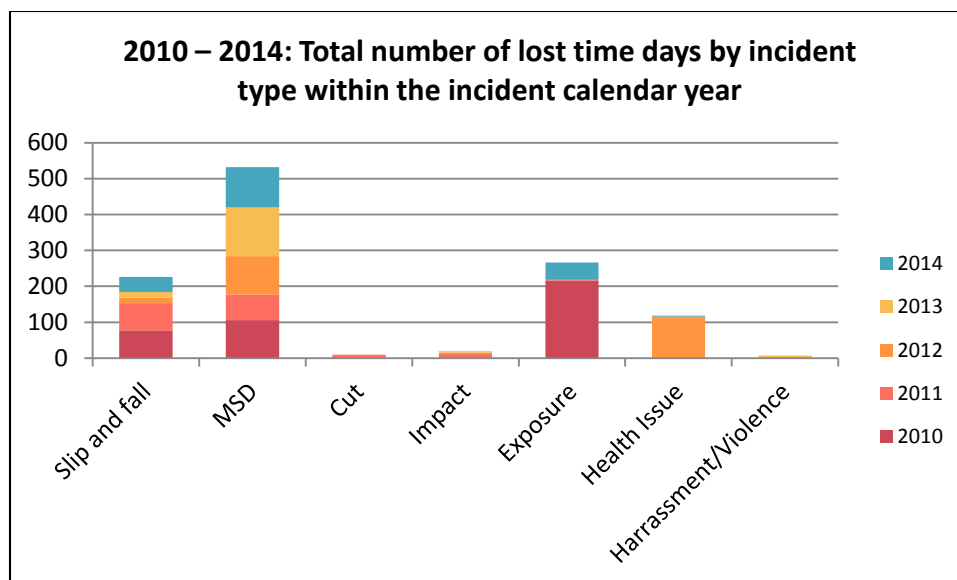
Performance Indicators

1) WSIB Indicators

Similar to last year's annual report, the injury indicators such as injury frequency, the number of incidents requiring medical attention (i.e., health care), and the number of lost time days accrued have been added to the injury data starting from 2010. This grouping of data is to help gain on-going clarity on the types of injuries that pose the greatest risk, without being skewed by specific cases. The WSIB numbers used in this report were provided by Human Resources.

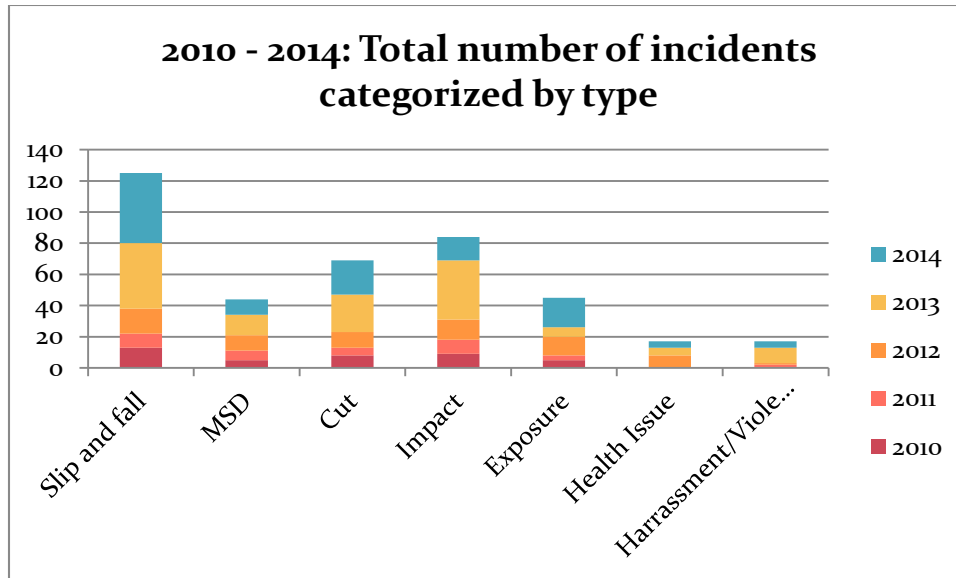
In 2014, there were 199 incidents/accidents in the workplace (130 accidents, 11 incidents, and 69 Good Catch reports). Of these, there were 34 WSIB claims submitted with 11 of the injuries severe enough to warrant lost time. In 2014, there were 204 lost time days attributed to those 11 claims. There were also 5 critical injuries reported to the MOL.





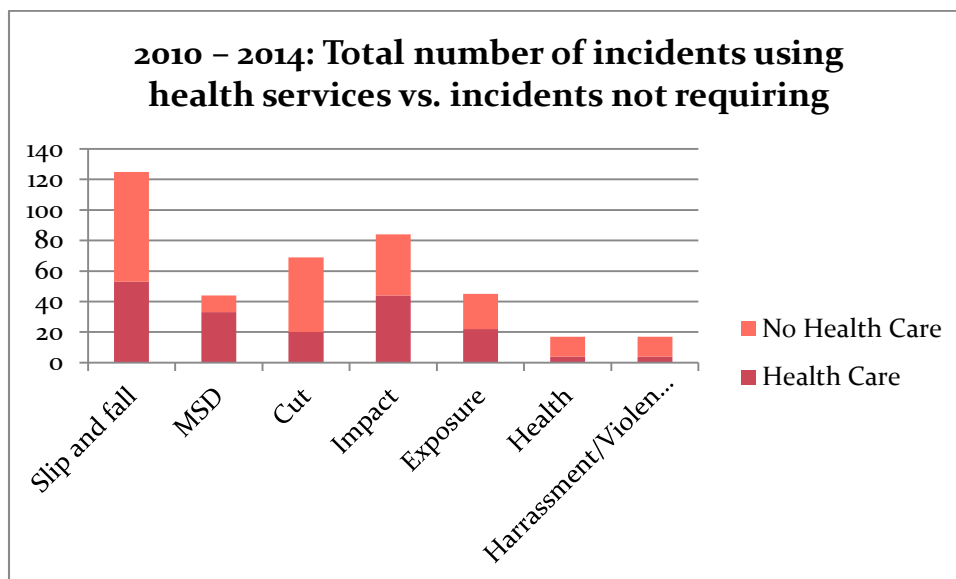
As reported previously, there continues to be an increased trend in lost time days from MSD or ergonomic injury. The 10 incidents reported in 2014 resulted in 112 lost time days. Of these, a single carpal tunnel injury resulted in 67 days of lost time. With increased outreach, awareness and communication across the university regarding correct workstation setup (there were 66 workstation assessments completed in 2014) it is anticipated that staff will increasingly utilize self-help strategies to prevent the injuries from occurring. In addition to increased awareness to prevent keyboard related ergonomic injury, outreach and education continues in regards to lifting, twisting and bending.

Lost time injury days reported to date reflect injury days during the calendar year. A more in depth review of the WSIB data provides a more comprehensive approach to the evaluation of the injury from both a financial impact and the corresponding effect when a worker is not within the workplace. While 204 lost days were reported for 2014, in fact, approximately 971 days of lost time occurred during 2014 from individuals who were injured in prior years. Similar trends with approximately 1000 days of non-captured lost time are seen for the past four years. Facilities Management and Planning will work with Human Resources to assist in the development of a strategy to address this area of risk.



Slip/Trip/Fall incidents continue to be the largest number of incidents reported, and fortunately offers the most significant opportunity to reduce risk before injury occurs. Combined with the Good Catch reports received, a hot spot matrix of slip trip areas has been established and will be mitigated over the summer/fall 2015. Seven of the slip/trip/fall reports resulted from icy surfaces, with one resulting in a fracture injury.

The trend to report incidents of harassment and violence continues as increasingly staff recognizes and report inappropriate behavior and instances of aggression including punching and/or verbal exchanges. The incidents were equally distributed between DUS and Athletics staff.



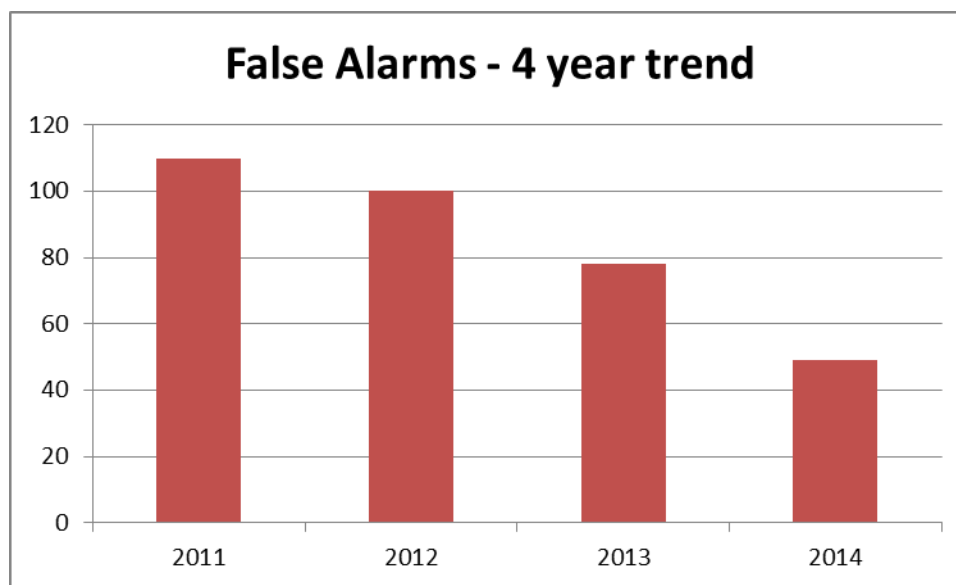
WSIB and CU Workplace Incident and Injury Data

In addition to the one hundred and nineteen (119) injuries that occurred in 2014, eleven (11) incidents were noted to have occurred while no injuries were documented. Incidents such as: Liquid Natural Gas leak, ammonia leak during decommissioning, light cover falling down within occupant space, concrete block dropped while being moved. Meanwhile, sixty nine (69) Good Catch instances were reported in 2014 many of which resulted in initiating safety improvements and preventing potential incidents or injuries to workers, staff, faculty and students.

2) Fire Alarm Statistics

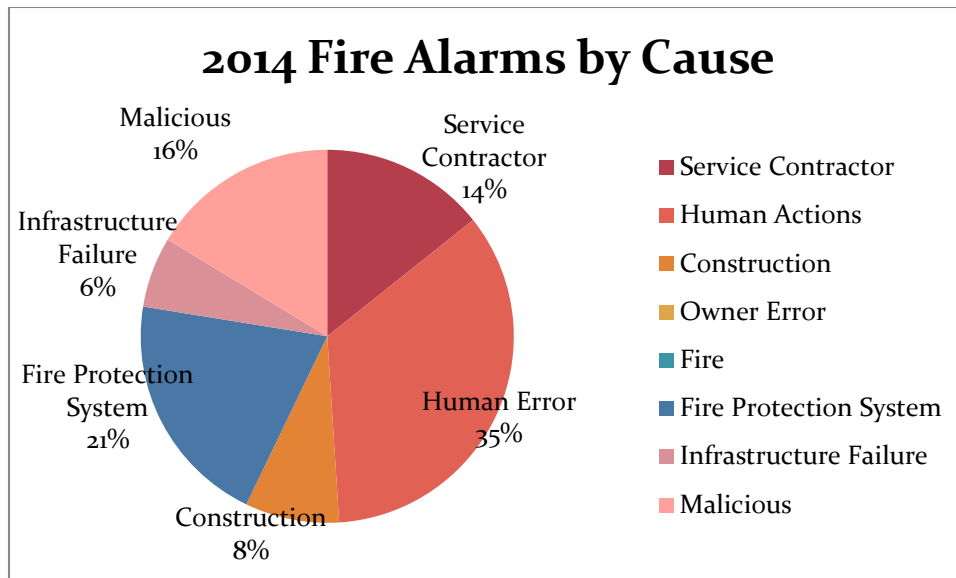
Fire Alarms

As with last year, EHS continued their strategy to decrease the generation of false fire alarms on campus.



These efforts yielded positive results, as there were only 49 calls for response by the Ottawa Fire Services. This represents a decrease of 37% in responses as compared to 2013, and continues a downward trend, decreasing by almost 60% from the high of 110 false alarms seen in 2011.

In addition to the overall reduction in false alarms, the number alarms generated by construction, renovation or third party service providers continued to decrease. This positive result was due in large part to enhancements to the Hot Work program as well as increased communication and education to our partners. This significant reduction has been well received and specifically commented on by the Ottawa Fire Services.



Unfortunately, the reduction in false alarms resulting from occupant (residence) actions seen in 2013 was not maintained in 2014, instead an almost 50% increase in false alarms was observed. While many of these false alarms were from burning food, others were the result of lack of awareness. Increases in education and awareness in residence have been planned for 2015.

3) Enforcement by Legislative Authorities

Ministry of Labour- Inspections and enforcement

The Ministry of Labour visited once in 2014 (October):

- Further to an anonymous complaint regarding air quality concerns and cleanliness in Minto Case, the MOL inspected the facilities, reviewed the policy on hazard reporting, and reviewed communications regarding air handling work being performed.
 - The MOL recognized that Carleton had appropriate policies in place, and that communications had been provided when an air handling unit failed and was undergoing repair. This confirmed that the statutory requirement was met. No orders or other negative findings resulted.

Ministry of Labour- Notifications

The following were reported in 2014:

- February 2014: A student tripped and fell, losing consciousness walking down the steps in Dundas House, stairwell A between the 1st level and the tunnel access. The stairwell had recently been mopped.
- February 2014: The mother of a student slipped and fell, fracturing an ankle, when she stepped on ice, and turned her ankle in a depression in the walkway outside of

Glengarry House. Weather conditions as well as the condition of the walkway contributed.

- May 2014: A 20 month old child was slightly injured when she fell from the second floor to the first floor, falling through a 7 inch gap by the windows of Paterson Hall. There was no loss of consciousness, and no critical injury, however the incident was reported to the MOL given a response from Police.
- August 2014: A graduate student suffered fractures to his spine while working on research in Nunavut. He was struck by a large boulder and required air transportation to Winnipeg.
- August 2014: A third party electrician received an electric shock while replacing an electrical lighting circuit in the CTTC building. A previous non Carleton electrician had mis-wired the circuit. Ottawa Emergency Services contacted the MOL.
- December 2014: A construction worker suffered a fractured leg when he fell from a ladder on the construction site for the Solar House. While not a Carleton employee, the critical injury occurred on Carleton property, therefore requiring us to advise the MOL.

No orders were received for any of the above, and the MOL attended only for the August 2014 injury with a third party electrician, further to being contacted by Ottawa Police.

Ministry of the Environment- Inspections and enforcement

There were no enforcement or inspection activities in 2014.

Canadian Nuclear Safety Commission (CNSC) – Inspections

There were no inspections in 2014, as Carleton activities were deemed in full compliance and licencing was renewed.

Canadian Food Inspection Agency (CFIA) - Inspections

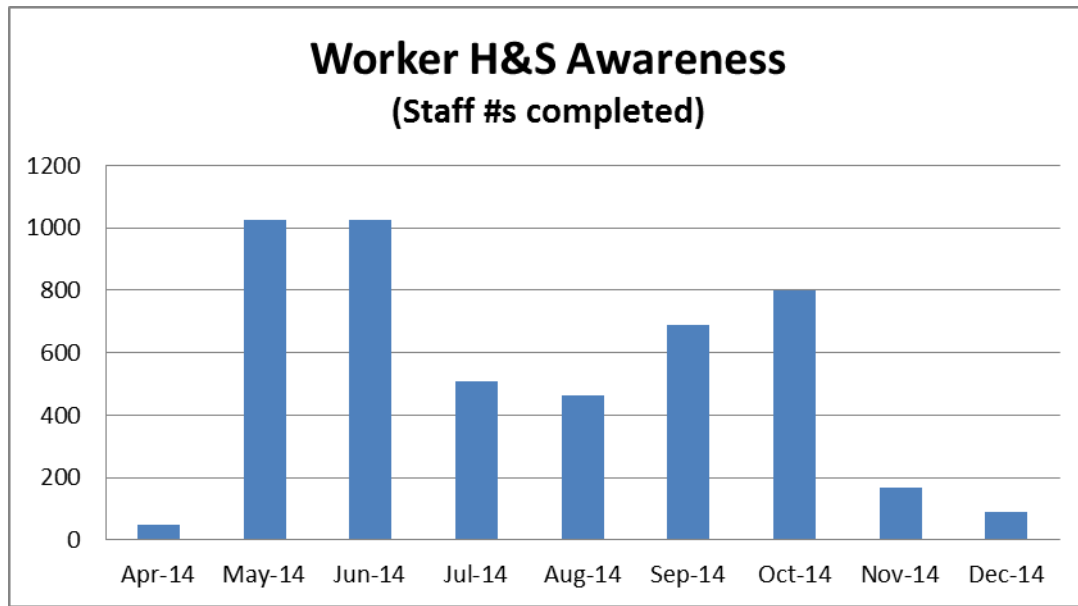
In November 2014, inspections by the Biohazard Containment and Safety Science Branch of the CFIA were conducted in pursuance to a Plant Pest Containment- 1 Certification of 2 laboratories within the Department of Biology. Following a faultless inspection report, an import permit was issued to allow the researcher to collect specimens from another country and bring them back to the laboratory to continue their research.

4) Training Performance Indicators

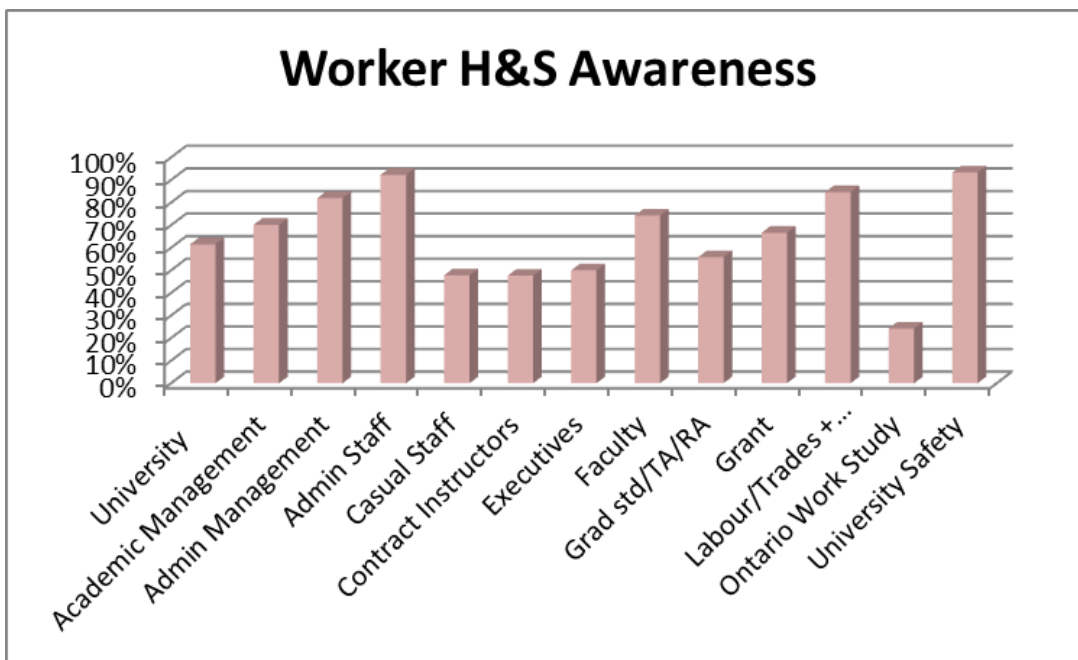
Worker and Supervisor Health and Safety Awareness Training

In order to meet the requirement for Health and Safety Awareness training to be completed by July 1st, the online modules for Worker H&S Awareness and the Supervisor

H&S awareness training were developed and launched April 28th. The following graph demonstrates the significant uptake.



By July 1st, more than 2000 staff had completed the online training on this new training platform. By the end of the year, over 4800 individuals had completed the required training



By Year End, an overall completion rate of 62% was achieved, with over 85% of full time permanent staff having completed the training. Faculty achieved a 74% completion rate, an achievement that no other Ontario university could claim. The high compliance levels were due in large part to ongoing support from the Senior Leadership, as well as the Deans and Directors who actively promoted the training completion.

By Year End, over 1558 supervisors had likewise completed the second module, the Supervisor H&S Awareness training.

The introduction of these two online training modules replaces the previous Young Worker Awareness training program, as well as the predominant workshop format for the previous supervisor awareness training. Despite the above, opportunities remain available for delivery of in class learning when requested.

Workplace Violence and Harassment Prevention Training

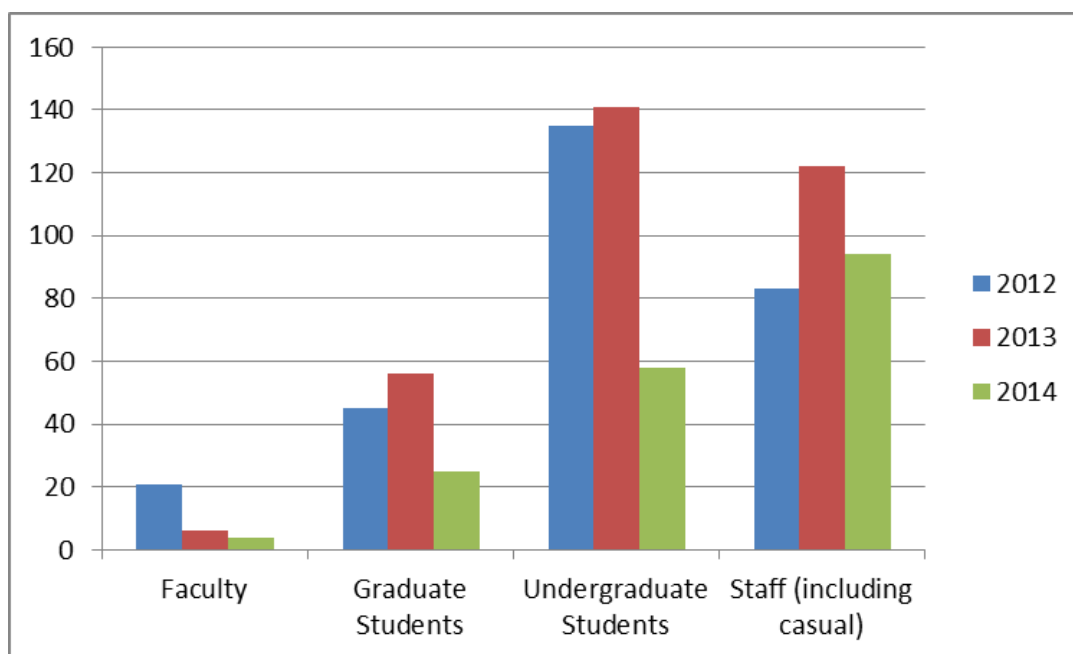
With the introduction of the new awareness training programs, the opportunity to build upon success was seized and reminders sent to staff regarding a mandatory health and safety compliance package suite of training.

Combined with renewed interest in preventing Workplace Violence and Harassment generated by the 2014 Panel Discussion on Prevention, almost 3000 additional individuals were trained, bringing the total number of individuals trained since 2011 to 6270 staff. The overall training compliance was 68%, with core employee groups (administrative management, academic management, professional staff, and faculty) trending at well over 90% compliance.



Laboratory Safety

With 181 total attendees in 2014, Labsafety Training attendance has decreased as compared to the 2 previous years. This was not unexpected as technical staff, graduate students and faculty members who require the specialized training have become trained. On the other hand, casual staff, specifically recipients of the NSERC Undergraduate Student Research Awards and the Faculty of Science Dean's Summer Research Internships has increased as evidenced by the popularity of the May training opportunities. A 4-year refresher cycle for labsafety has been established to adhere to CSA standards for safety training.



Fire Safety

Commensurate with the development of online training for worker awareness, an online version of fire safety training was developed to expand the reach of training, and ensure timely delivery among both the designated Fire Safety Wardens, and the broader community. For specialized groups such as Housing and Conference Services, the training combined the new online component, a classroom to cover the responsibilities of the Residence Fellows in the context of fire safety, and site specific evacuation training to ensure the safe destinations were well understood. Training was completed by 100% of staff (81 Residence Fellows and 6 Residence Managers). Additional special interest groups included Conference Services – Special Events.

Additional Health and Safety Training

Training development and delivery continues to be tailored and responsive to the needs of the organization, with the majority of the training being developed and provided by EHS staff. The use of some third-party service-providers remains the most effective solution for highly specialized areas where the expertise is best acquired externally.

Training	Sessions Delivered	Participants	Facilitator
Biosafety Awareness	6	61	EHS
Emergency First Aid and CPR	4	41	External Service Provider
Fire Safety Warden	In class /online	206	EHS
Health & Safety for Supervisors	1	15	EHS
Laboratory Safety	10	81	EHS
Radiation Safety	4	16	EHS
Transportation of Dangerous Goods	4	15	EHS
WHMIS	In class and online	1207 (+2000 1 st year chemistry students)	EHS
Workplace Violence and Harassment Prevention	online	3211	EHS
Laser Safety	1	13	EHS

Looking to the Future

Looking Forward to 2015 and Beyond

The upcoming year will continue to see significant change in safety culture across the organization, with further implementation of the benchmarking recommendations, responding to new legislation, and closing program gaps.

EHS Benchmarking Recommendations

During 2015, EHS will complete the acquisition of an EHS management software system and implement a Phase 1 rollout over the fall. Having selected a product in early 2015, the charter and approvals should be obtained by the ISSC over the course of the summer, with rollout commencing thereafter.

Human Pathogens and Toxins Regulations

The coming into force of these regulations will be Dec 1, 2015. As a result, the focus in 2015 is the preparation of the university community to ensure compliance. This will include the development of a biosafety manual, university specific procedures and programs, including autoclave safety and medical surveillance. Biohazardous material inventories will be verified and inspections will also be undertaken to ensure laboratories are in compliance with the Canadian Biosafety Standards. Meeting these standards is a condition of Carleton's future consolidated licence.

Risk Reduction – Workshop Safety

An effective workshop safety program will be developed to assist faculties in delivering experiential learning opportunities to students. The program will be developed upon collaborative principles including with external partners to reflect industry best practices.

Risk Reduction – Engineering Controls

2015 will see an increasingly robust strategy to ensure engineering safety controls such as fumehoods and other exhaust devices operate as effectively as possible to reduce any potential exposures, as well as decrease the operational demands.

WSIB Integrated Rate Framework Review

2015 will see the largest reform in WSIB history. The proposed reforms are expected to change the way employers are classified and the way premium rates are set. Given the current financial liabilities faced by the WSIB plan, the reform may add additional costs to current premiums, particularly if the four year window for claims is extended.

Increased Engagement in Health and Safety

2014 saw the launch of the first NAOSH (North American Occupational Safety and Health) week at Carleton. 2015 will focus on a combined banner of NAOSH/Emergency Planning and Mental Health event which unites three integrated concepts and leverages the services of multiple units on campus. An additional engagement initiative will be the application as Canada's Safest Employer, in the Psychological Health and Safety division which leverage the efforts of the Carleton Workplace Mental Health and Well-Being Strategy and Advisory Committee.