

OCRO

Annual Report 2016





Extra available dive tenders if needed through the use of well-trained OSC staff
UN also has a Dive Officer and Diving Physician



Table of Contents

- 4 2016 Highlights
- 5 Introduction
- 6 Who We Are
- 7 MUN Safe
- 8 Continuing to Ensure the Quality of Water on Campus
- 10 Inspections
- 11 X-Ray Program
- 12 Scientific Diving
- 13 Canadian Association for Underwater Science (CAUS)
- 14 Contractor Safety Management
- 14 Incidents
- 16 Lost Time Injuries
- 17 Near Miss Reporting
- 18 Workplace Health and Safety (WHS) Committees
- 19 Training
- 21 Emergency Evacuation Fire Drills
- 22 Grenfell Exercise
- 22 Campus Engagement
- 24 St. John's Campus Emergency Management Plan Update
- 26 Five-Year History of Emergencies at Memorial
- 27 Assessment and Care Protocol
- 28 CEP Operational Review
- 29 Dispatch Review
- 30 Security Assessments Completed
- 30 CEP and AED's Save a Life
- 30 Continuity Planning
- 31 ERM Policy Approval
- 31 ERM Committee
- 31 CSF OCIP
- 32 Our People

2016 Highlights

- 4300 MUN Safe application downloads in Nov. and Dec. 2016
- 1050 inspections completed, an increase of 76 from 2015
- All campus housing units completed and passed emergency evacuation drills
- 564 dives were logged in 2016
- 1880 hours of construction safety and oversight provided to a total of 73 projects
- 21.2 per cent increase in incident reporting
- 7213 individuals trained in Environment Health and Safety programs in 2016, a 22.7 per cent increase over 2015
- 400 students participated in OCRO student orientation
- 9734 dispatches in 2016
- 41 active intruder sessions held, with 751 attendees
- 43 individuals trained on Incident Command System
- Facilitated completion of 40 continuity plans
- Enterprise Risk Management policy and procedures approved by the board of Regents
- 3 Enterprise Risk Management committee meetings
- Owner controlled insurance program approved for the CORE Science project

Introduction



Kristopher Parsons
Chief Risk Officer

The Office of the Chief Risk Officer (OCRO) is pleased to share our 2016 annual report, outlining the past year's progress in the fields of Environmental Health and Safety, Enterprise Risk Management, Emergency Management, and Campus Enforcement and Patrol.

As we strive to maintain a healthy and safe environment for the university community, 2016 saw upgrades to Memorial's Incident Management System (MIMS), and introduction of a new reporting and mass notification tool (MUN Safe). This innovative tool will continue to foster community safety and engagement, and is critically important in sharing information during emergencies. The application will increase emergency preparedness, health and safety and security of all individuals learning, teaching, living and working on campus.

The Environmental Health and Safety team has continued to advance the university safety culture on all campuses throughout 2016. Development of the drinking water guidelines, upgrades to the inspection program, increased statistical reporting and analysis, and improved training have significantly advanced safety initiatives across the university.

Emergency preparedness was a key priority for 2016, and the framework and plans were modified to better align the resources of the university. We increased education and awareness sessions and implemented a new emergency drill program.

The past year was a busy one for emergencies on campus, regarding the frequency the plan had to be activated as compared to 2015. Ideally, there would be no emergencies, but with each response, our people and plans were tested. These situations provide new learning opportunities to ensure our emergency response program continues to evolve and improve.

Key goals for the 2017 year include expansion of the MUN Safe program, increased engagement from students in safety activities and reporting, and increased near miss reporting.

I would like to thank the OCRO team as well as all of our partner's throughout the university who have continued to support our progress this past year. We look forward to continuing our program advancement throughout 2017.

A handwritten signature in black ink that reads "Kris Parsons". The signature is fluid and cursive, with a long horizontal line extending from the end.

Who We Are

Established in 2013, the Office of the Chief Risk Officer (OCRO) oversees Campus Enforcement and Patrol, Environmental Health and Safety, and Enterprise Risk Management. This includes the development and implementation of an emergency management program; maintaining a risk management framework as well as ensuring the safety and security of people and property.

www.mun.ca/ocro

MISSION

The Office of the Chief Risk Officer works collaboratively with the Memorial University community to provide a safe, secure and healthy environment with a managed, proactive approach to risk through engagement and education that supports learning, teaching, living and working on campus.

VISION

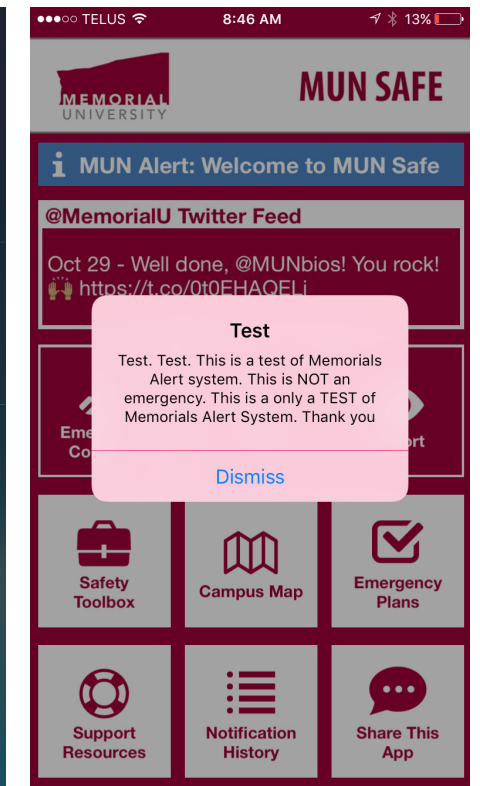
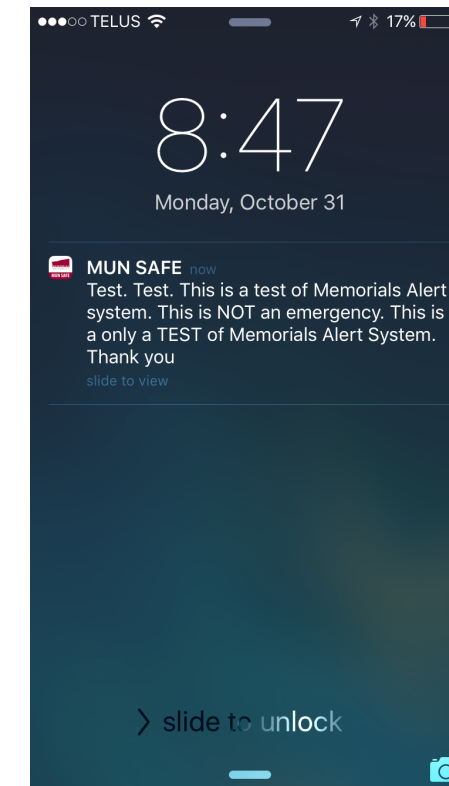
Memorial University's Office of the Chief Risk Officer will be regarded by its peers as a leader in the fields of emergency preparedness, health and safety, security and risk management. We strive to be collaborative and innovative when developing and implementing programs, initiatives and best practices.



MUN Safe

In November of 2016, the Office of the Chief Risk Officer (OCRO) implemented an essential tool to ensure the safety of students, faculty, and staff of Memorial – MUN Safe.

MUN Safe is a mobile application that provides users with immediate health and safety information, including alerts and notifications of emergency situations, emergency contacts, health information and contacts, safety procedures, and incident reporting. The application was successfully launched with over 4,300 downloads in the first two months. 2017 will see continued growth of MUN Safe, including roll out to the Grenfell campus and the Marine Institute.



Continuing to Ensure the Quality of Water on Campus

Environmental Health and Safety (EHS) initiated and led the development of the Campus Drinking Water Committee in 2016. The purpose of the committee is to provide guidance to the University Health and Safety Committee, relating to the evaluation of drinking water quality and the ongoing provision of wholesome drinking water at Memorial.

EHS also developed a drinking water guide and training program for Facilities Management, which focused on the sampling and follow up process. These tools allowed the effective and accurate annual water sampling program to begin in October 2016. This program is led by EHS, in consultation with the Campus Drinking Water Committee and Facilities Management. Since implementation, over 180 water samples were collected from 33 buildings throughout campus. Samples were analyzed by an external accredited laboratory, and results were compared to the Guidelines for Canadian Drinking Water Quality, published by Health Canada. All sample results are posted on the EHS website.

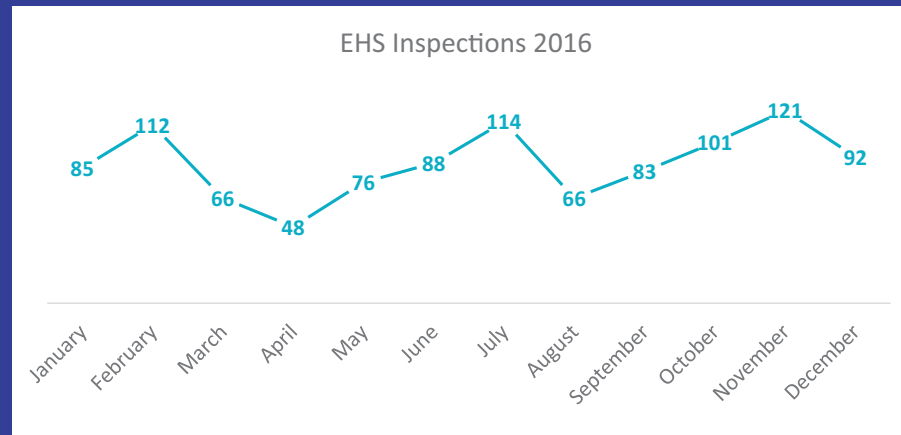
EHS will continue to work to improve Memorial's drinking water quality program through annual sampling and lobbying for increases in the number of chilled and filtered water stations on campus.



Inspections

In 2016 EHS refined its approach to laboratory inspections, which was achieved through continued validation against legislation and standardization of the inspection and follow up schedule. 2016 inspection goals included 380 annual inspections of laboratories and 53 general building inspections (433 total). EHS surpassed these goals by completing 1,050 inspections.

Upon completion of an inspection, a formal report is issued to the supervisor and department head outlining non-compliance issues, recommended corrective actions, the non-compliance owner, and a suggested timeline for completion. This program component has increased hazard awareness and corrective action on behalf of departments, with the goal of preventing accidents and/or injuries.



Memorial is the registered owner of 15 X-ray Emitting Devices (XED) in 2016.

X-Ray Program

A review of Memorial's X-ray safety program was completed in 2016, which resulted in the development and implementation of an X-ray safety manual and safety training program. These program advancements were approved by the university Radiation Safety Committee (URSC).

Scientific Diving

2016 was a banner year for scientific diving safety at Memorial with 15 divers logging 564 dives for science. Memorial's Diving Safety Officer, in collaboration with an external training provider, successfully facilitated Advanced Deep Water Dive training with the Ocean Sciences Center's (OSC) Field Services unit. This advanced certification allows the OSC Field Services unit to collect specimens at the Bonne Bay Marine Station in water that's 120 feet deep.



Canadian Association for Underwater Science (CAUS)

For the first time, Memorial also hosted the Canadian Association for Underwater Science (CAUS) annual general meeting and diving symposium in February. This association, founded in 1983, is a non-profit volunteer organization with a mandate for promoting safe diving practices and developing peer-reviewed standards of practice for scientific diving by its members. Memorial has been a valued member in good standing for over 33 years.

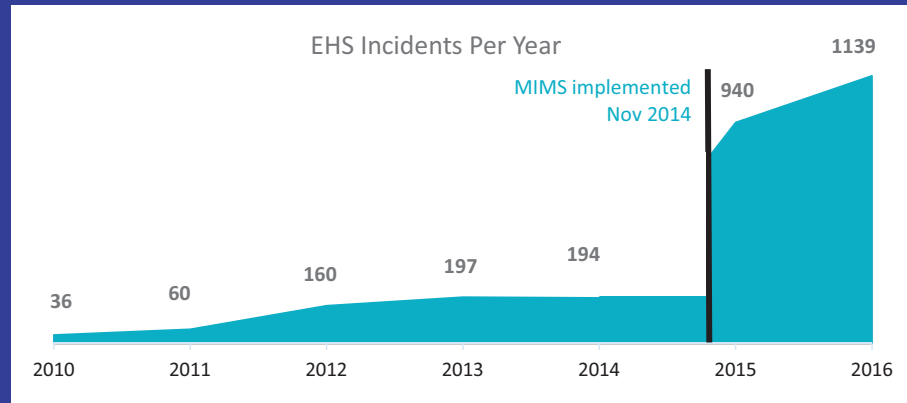
Contractor Safety Management

Construction work at Memorial steadily increased during 2016. Through the contractor safety management program, the EHS team processed 73 construction projects, 274 contractors, and provided over 1,880 hours in construction safety oversight and guidance. All construction projects are inspected regularly to ensure contractors performance aligns with governing legislation, which is strictly enforced by the EHS team. There were no serious contractor incidents in 2016.

Incidents

The number of incidents reported to EHS for 2016 has increased by 21.2% per cent since 2015. The university continues to become more aware of the importance of reporting health and safety concerns, as timely reporting of these concerns has the potential to reduce incidents on campus. In the month of July 2016, the OCRO started to distribute a monthly statistics package to stakeholders to bring awareness to incidents occurring throughout the university.

The number of incidents reported has continued to increase since 2010, with a noted increase following the implementation of the Memorial Incident Management System (MIMS) in November 2014.



Location of faculty and staff injury reports 2016

Lost Time Injuries

A lost time injury (LTI) is a disabling injury when the injured person is unable to report for the next regular shift. Memorial has adopted Occupational Safety and Health Administration's (OSHA) standard to calculate Lost Time Injury Frequency (LTIF) rate. These rates have allowed Memorial to benchmark across comparable university institutions. The LTIF for 2016, was lower than the group average of the previous five years.

Calculation: The standard base rate for the calculations is based on a rate of 200,000 labor hours. This number (200,000) equates to 100 employees, who work 40 hours per week, 50 weeks per year. Using this standardized base rate, any company can calculate their rate(s) and get a percentage per 100 employees.

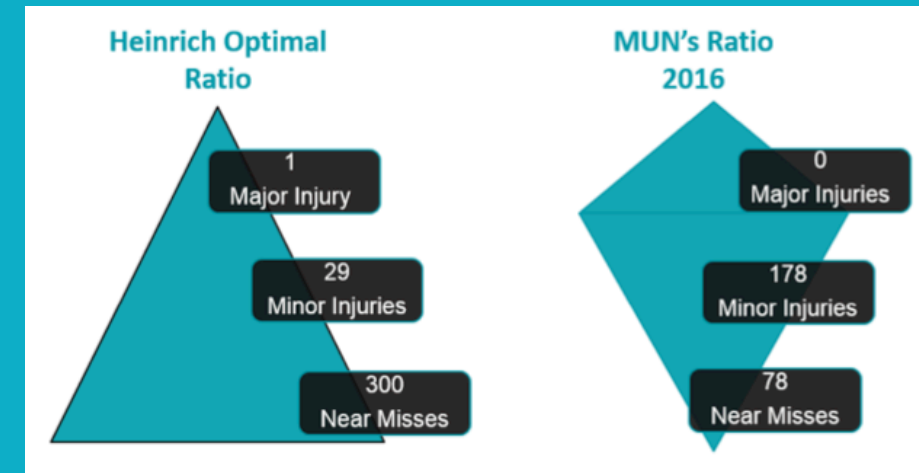
The university had a total of 17 LTI claims in 2016, which result from the following:



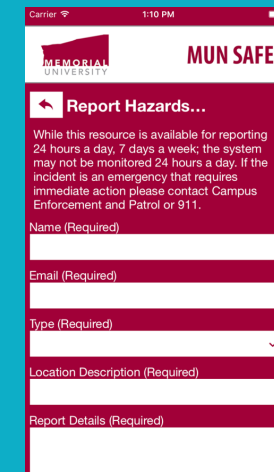
Breakdown of claims

Near Miss Reporting

H.W. Heinrich proposed a theory based on his research into Occupational Health and Safety incidents. For every major injury, there were 29 minor injuries and 300 near miss events where injury was normally avoided. Heinrich's theory has since become a standard ratio to evaluate safety reporting in organizations. While Memorial did not have any major injuries in 2016, near miss reporting should be much greater based on minor injuries.

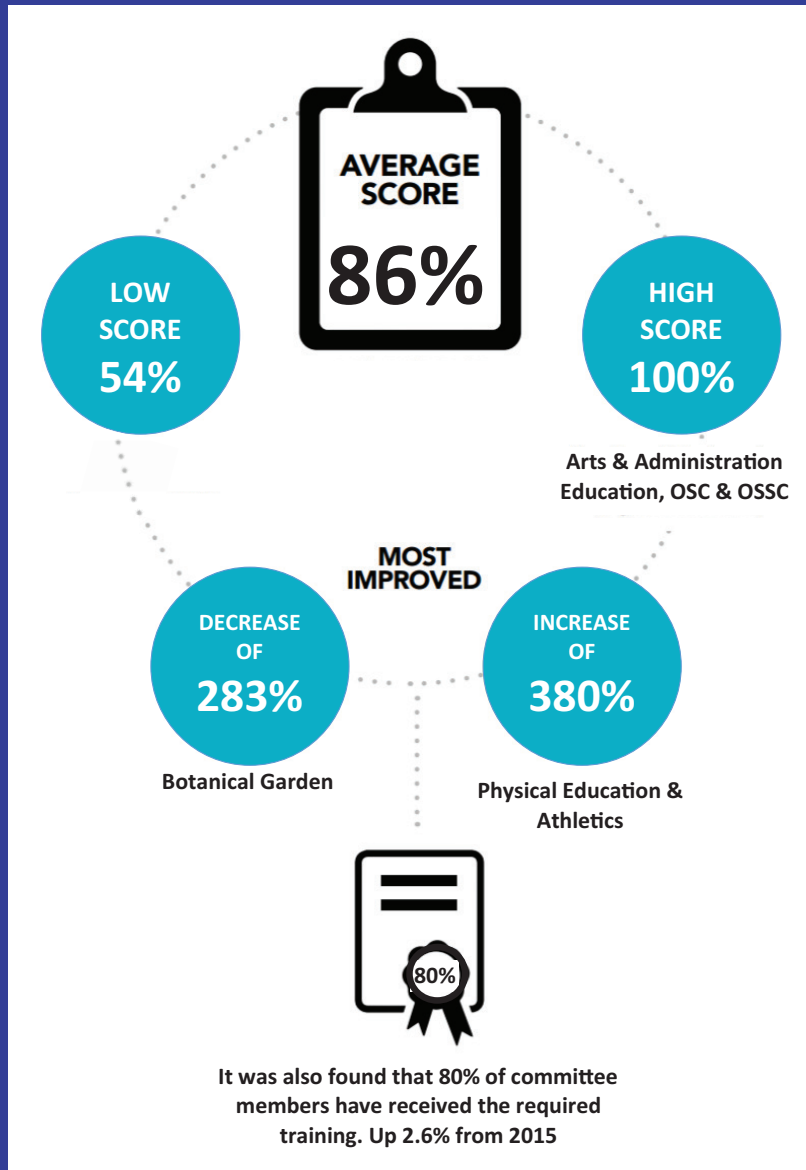


Near miss reporting



A key element for the ability to increase near miss reporting is providing an accessible method for reporting. MUN Safe has provided this for the university, and near miss reporting is expected to increase throughout 2017.

Workplace Health and Safety (WHS) Committees



Memorial University of Newfoundland (Memorial) is committed to developing, maintaining, implementing and continuously improving a safe and healthy work, teaching and learning environment.

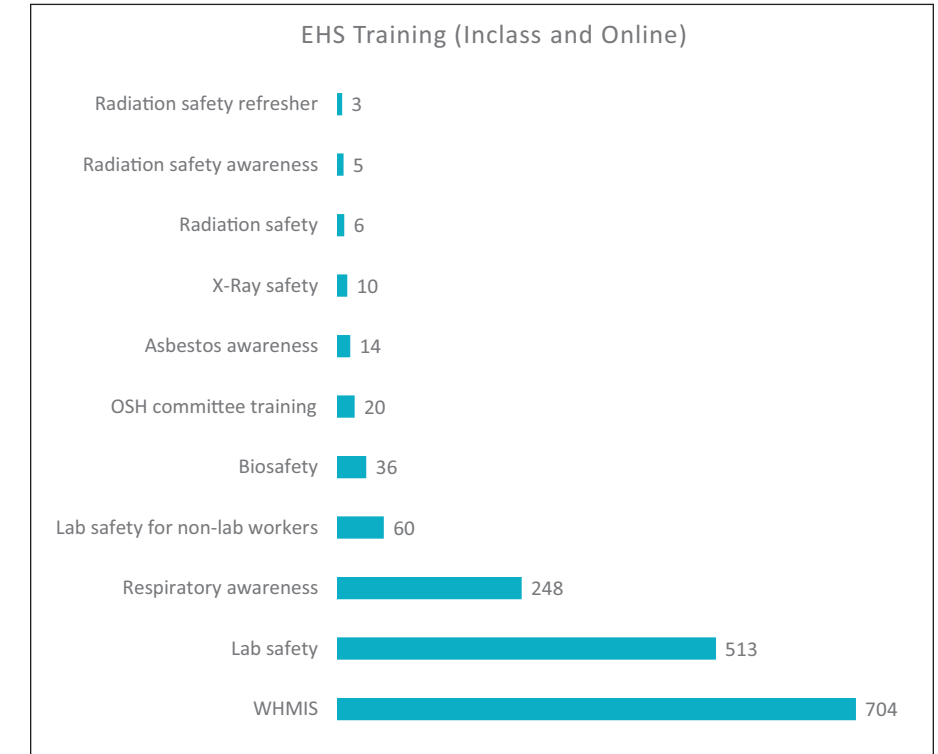
Since 2014 the Office of the Chief Risk Officer (OCRO) has conducted annual compliance audits to evaluate the activity and functionality of the university's 27 Workplace Health and Safety (WHS) committees. WHS committees provide a forum for communication between the employer and the worker to address health and safety concerns in the workplace. They play an important role in developing the health and safety culture in the workplace and its members act as safety champions on behalf of the university.

The average committee audit score has increased consistently from 60 per cent in 2014 to 86 per cent in 2016, with four committees achieving 100 per cent in 2016.

Infographic on the inspection lists

Training

The EHS group currently facilitates safety training at no cost to the participants. In 2016, EHS delivered training to 7,213 individuals, which is an increase of 22.7 per cent over 2015 (5,875 trained). The below chart outlines the various training programs offered:





Students evacuating residence.

Emergency Evacuation Fire Drills

In the fall of 2016, the OCRO successfully carried out emergency evacuation drills in the 14 residential units of Memorial's St. John's Campus. Prior to these drills, EHS improved the drill evaluation criteria, which included a tool for evaluators to rate the success of an evacuation based on:

- Pre-drill preparation;
- Communication during the drill;
- Occupant knowledge of evacuation procedures and assembly points;
- Campus Enforcement and Patrol procedures and response;
- Alarm noise levels; and
- Post-drill follow up.

All residential units were successful in completing the evacuation in under five minutes. Significant improvements over the previous years' drills included the performance of emergency wardens. The warden's enthusiasm and diligence ensured the high pass rate of 2016.

2017 will be an evolving year for emergency preparedness as the OCRO advances into active intruder education and workplace emergency evacuations.

Grenfell Exercise

On May 6, 2016, the OCRO participated as an evaluator in a discussion exercise facilitated by Western Health to determine Grenfell Campus' readiness to respond as a community partner. The exercise involved representatives from multiple community organizations and first response agencies. As the scenario unfolded, the Grenfell team were well prepared and able to answer questions with regards to their response capability.

The exercise was able to provide a high level overview of how the whole community would respond to a multi-jurisdictional incident. The exercise achieved its main objective, which was to bring the community partners together to highlight the relationships and areas for improvement.

Campus Engagement

STUDENT ORIENTATION

During 2016, the OCRO placed emphasis on student engagement and increasing student near miss and incident reporting. The OCRO participated in the 2016 Student Life Welcome Week and delivered interactive training sessions during orientation that focused on the various safety, security, and emergency procedures on campus, in addition to highlighting hazard recognition. Approximately 400 students participated in the training.

RA/RC TRAINING

Each year the OCRO is invited to facilitate a training day with the Residence Life student staff, which includes residence assistants and residence co-ordinators. In 2016, training topics included active intruder response, fire safety, hazard recognition, and CEP response to common incidents in residence. The Residence Life group then had their knowledge tested by participating in the 3rd Annual Office of the Chief Risk Officer Amazing Race competition. Each house competes against one another and has a series of clues that lead them to challenges related to the topics covered. The first house to successfully complete each challenge is crowned the champion for the year.

ACTIVE INTRUDER CAMPAIGN

Every member of the Memorial University community has the right to study, work, and live in a safe and non-threatening environment. Memorial University is committed to providing and maintaining such an environment. An active intruder threat involves a situation where an individual or individuals come on campus with the intention to cause serious harm to others. In the fall of 2016, 41 sessions were held by the OCRO to educate the university community on active intruder response. In total, there were 751 attendees. These sessions will continue throughout 2017 with information available on MUN Safe.



RA/RC training – 2016 Amazing Race winners – Shiwak Hall

St. John's Campus Emergency Management Plan Update

The St. John's Emergency Management Plan (EMP) is broken down into 4 Pillars from the Canadian Emergency Management Framework: preparedness, prevention/mitigation, response, and recovery. In 2016, the OCRO implemented a number of operational changes to the program, including:

1. Changes to the exercise testing cycle. At a minimum, a drill and tabletop exercise will take place each year. A full-scale exercise will be held every three years. The program now focuses on lessons learned from real situations as a testing of the EMP.
2. The EMP was aligned with the university Enterprise Risk Management Framework through the hazard analysis process.
3. The primary change to the plan was to adopt the full standardized Incident Command System (ICS) model. ICS is a standardized on-scene, all-hazard incident management approach. ICS allows first responders to adopt an organizational structure to match the demands of an incident, which operates outside of the normal organizational positions. Canadian municipalities, fire, police, health officials, and many post-secondary institutions have adopted this model. The new model allows the senior executive to provide guidance when required, and operational staff to lead the incident response.

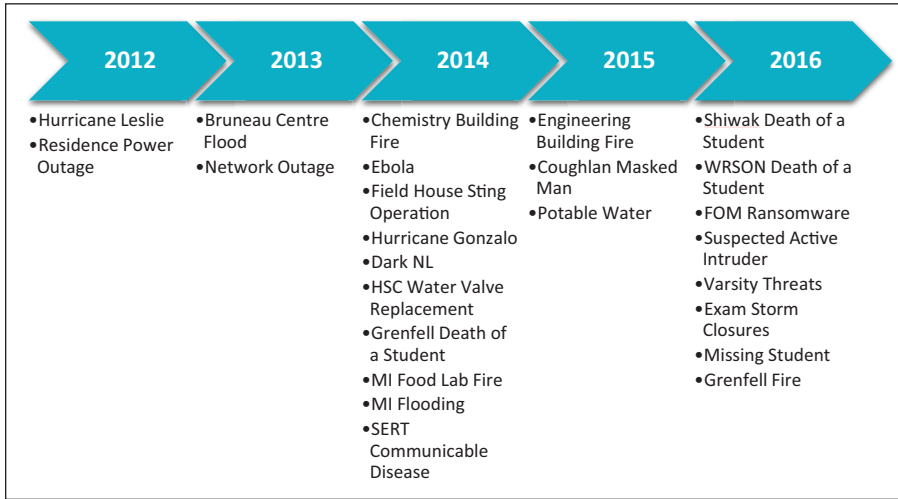


New ICS model

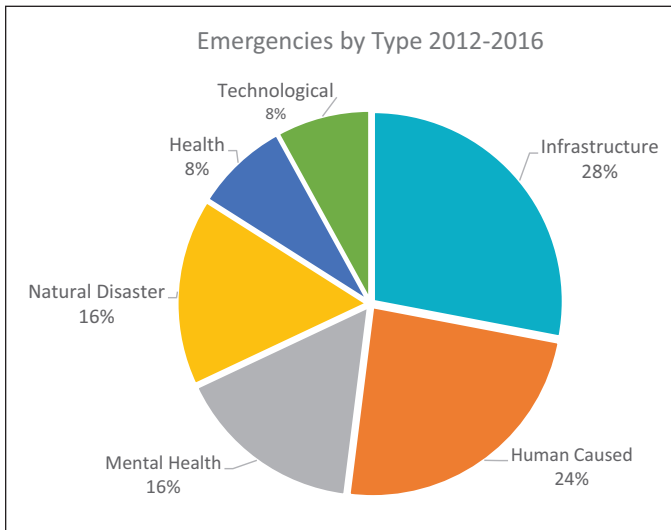
ICS TRAINING

Training sessions reviewing the new ICS model are available through in-person sessions or online. In-person classes are delivered over the course of a day, while the online participants have up to a month to complete them. Upon completion of this training, employees can be called upon to aid in emergency response on campus.

Five-Year History of Emergencies at Memorial



Timeline



Causes of emergencies

Assessment and Care Protocol

The Assessment and Care Protocol is intended to identify and respond to incidents involving disturbing, threatening, or violent behavior. Its purpose is to enhance safety and security by establishing and ensuring a coordinated, timely, high-level, centralized approach for the identification, mitigation, and response to certain behavioral incidents. The following chart depicts how the number of incidents reviewed translates into cases and the level of response required.



2016 ACP statistics

CEP Operational Review

In June of 2016 the OCRO realigned its organizational structure, including the management team within Campus Enforcement and Patrol (CEP). The CEP management team was then tasked to complete an operational review, assessment, and gap analysis of CEP. This process utilized pan-university resources, including CEP staff, the manager of Learning and Development (Human Resources), Facilities Management, and the Centre for Institutional Analysis and Planning.



Dispatch Review

The Communications Control Centre (CCC) was identified as an integral part of the university's safety, security, and emergency response capability.

Similarly, the dispatcher (a CEP officer) plays a critical role as the first point of contact in the case of an emergency, and therefore must assume responsibility for an emergent situation. This officer will respond quickly to the increased risk situations occurring on campus by dispatching appropriate response personnel as required. The dispatcher ensures life safety and security assessments are conducted in a timely manner.

The operational review of the CCC and dispatcher program identified five key areas:

- Human resource composition and competency requirements;
- Roles and responsibilities/procedural direction;
- Current physical space limitations and ergonomic issues;
- Training requirements; and
- Technical requirements, including phone systems, emergency notification methods, cameras, alarms, etc.

Initiatives began in 2016 to implement recommendations outlined in the operational review and will continue in 2017.

Security Assessments Completed

The OCRO was requested to complete security assessments on various locations throughout campus. These assessments were completed using a risk based approach, which is in line with the university's risk framework to identify the security risks. Recommendations have included increased camera coverage, door access controls, vehicular entry routes, decreasing risks for theft, and staff training.

Completed assessments included the Cold-Ocean Deep-Sea Research Facility, Arts and Administration Building, and the Childcare Centre.

CEP and AED's Save a Life

Campus Enforcement and Patrol staff responded to two simultaneous medical emergencies in the University Centre in June 2016. CEP's prompt response, immediate lifesaving actions, and use of the Automated External Defibrillator (AED) ensured both individuals received the medical attention that was needed. The responding officers were recognized by the university, as well as the Canadian Red Cross.

Continuity Planning

In 2016 the Continuity Planning program continued to evolve, resulting in over 40 plans completed on the St. John's Campus. The plan template was finalized and incorporated into Memorial's Incident Management System – which allows for in depth reporting and immediate accessibility during an emergency.

ERM Policy Approval

On December 1, 2016, the Board of Regents approved the Enterprise Risk Management (ERM) policy, along with accompanying procedures for Managing Risk within Units and Administering Risk Registers. The ERM policy serves to formalize the university's risk management program, while providing direction to members of the university community on how to identify, assess, evaluate, and manage risks. Ultimately, the ERM policy supports decision making processes from a risk management perspective.

ERM Committee

The Enterprise Risk Management Committee (ERMC) was formed in late 2015 to serve as a strategic oversight to the Vice-Presidents Council on matters pertaining to risk management at Memorial. It met three times during 2016 to review risk related materials before they were presented to the Board of Regents. The ERMC has also assumed responsibility for reviewing reports related to both Emergency Management and additions to the university's Health and Safety Management System, which will continue in 2017.

CSF OCIP

With the plan to build the Core Science Facility, the Office of the Chief Risk Officer presented the option to implement the Owner Controlled Insurance Program (OCIP) due to the magnitude of the project. While normal practice for Memorial University is to require the contractor to maintain insurance, an OCIP gives far more control to the owner of the project and generally provides broader coverage for reduced premiums. Therefore, the OCIP program was implemented in 2016.

The Audit and Risk Committee of the Board of Regents created a sub-committee to prepare a risk appetite statement for the university.

Our People

Kristopher Parsons, Chief Risk Officer
Mary Beth Delaney, Risk Analyst

CAMPUS ENFORCEMENT AND PATROL

Karen Alexander, Associate Director
Fred Rideout, Assistant Manager
Pam Crane, Finance and Administration Coordinator
Holly Tobin, Emergency Management Analyst
Jake Stanford, Team Commander
John Whelan, Team Commander
Jeff Fifield, Investigator
Marsha McEvoy, Intermediate Clerk Stenographer
Helen Bennett, Secretary

Adam Brookings, Officer
Alex Tucker, Officer
Brian Bambrick, Officer
Colin Lane, Officer
Corina Bartlett, Officer
Courtney Snow, Officer
Craig Stephenson, Officer
Daniel Power, Officer
Darrin Kelly, Officer
Deborah Noseworthy, Officer
Dion Brushett, Officer
Doris Pomroy, Officer
Francis Lockyer, Officer
Geoff Howse, Officer
Gerald Wescott, Officer
Jason Bennett, Officer
John Hatfield, Officer
Joseph Clancey, Officer

Kevin Howard, Officer
Leonard Mullins, Officer
Lynette Wells, Officer
Marsha Hackett, Officer
Melanie Mullett, Officer
Michael Fewer, Officer
Michael Parrott, Officer
Nelson Peddle, Officer
Penny Kennedy, Officer
Robert Hayes, Officer
Robert Wall, Officer
Ryan Fifield, Officer
Ryan Simmons, Officer
Sean Bulger, Officer
Stephen Kennedy, Officer
Terry Gilbert, Officer
Thomas Hennifent, Officer
Wendy Murphy, Officer

ENVIRONMENTAL HEALTH AND SAFETY & ENTERPRISE RISK MANAGEMENT

Barbara Battcock, Associate Director
Mark Bailey, Co-ordinator, Field Services
Darrell Gosse, Advisor
Pat St. Croix, Advisor
Kendra Whelan, Co-ordinator, Chemical Safety Management
Dr. Rod Hobbs, Radiation and Biosafety Control Officer
Kelly Taylor, Industrial Hygienist
Jon Collins, Advisor
Dave Janes, Co-ordinator, Risk and Insurance
Carolyn Lacey, Risk Analyst
Kendra Picco, Senior Risk Analyst
Nicole Devereaux, Administrative Staff Specialist I

OFFICE OF THE CHIEF RISK OFFICER

Memorial University of Newfoundland
208 Elizabeth Avenue
St. John's, NL A1C 5S7

Tel: 709 864 4641
Fax: 709 864 3116

www.mun.ca/ocro