







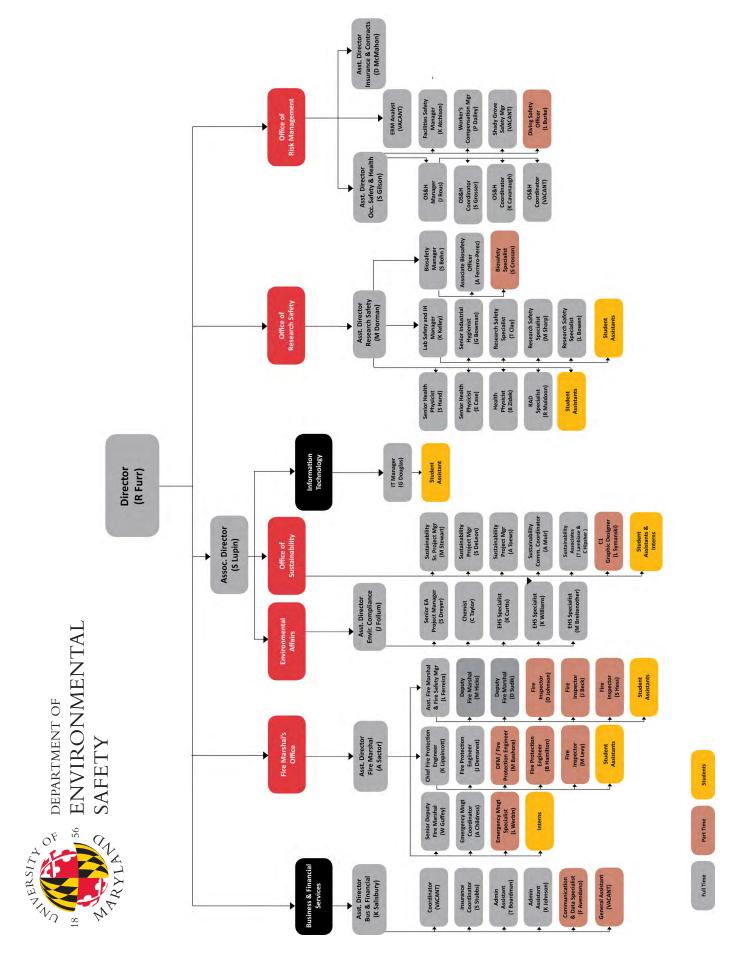




ANNUAL REPORT 2014

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DEPARTMENT OF ENVIRONMENTAL SAFETY

Our Vision

Our vision is a campus where safety and sustainability are core values at every level of the university.

Our Mission

Our Mission is to provide leadership in the identification and management of safety and environmental risks and to foster excellence in safety and sustainability through our technical expertise, our quality of work, and our professional integrity.

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The Department of Environmental Safety (DES) holds these Values as intrinsic to our mission —

Protect People and the Environment

We put the highest priority in returning people home the same or better than they arrived. Through education, training, and knowledge sharing, we promote a culture of safety and sustainability.

Excellence

We expect state-of-the-art competencies of ourselves and others in all areas of workplace safety, environmental management, and sustainability. We deliver critical, high quality programs and services to the campus community.

Leadership

Our people at all levels, have ownership and take initiative in their areas of responsibility, and demonstrate the safe, sustainable, and environmentally friendly behaviors we expect of others.

Service

We provide professional services to the University of Maryland community. We are a resource for those we support and we follow through on our commitments in a timely manner.

Diversity

We acknowledge and honor the fundamental value and dignity of all individuals. We are committed to inclusiveness and actively seeking and encouraging discussion and participation from a diverse group with different perspectives and experiences.

Collaboration

We are committed to building partnerships and working together to find the best solutions to collectively achieve our goals. We are open to new ideas and creative solutions. We seek to engage and motivate the campus community to accept ownership of the university's safety and

sustainability culture.

The UMD Emergency Management (EM) Program, led by the Emergency Management Coordinator in the Fire Marshal's Office, continues to grow. During 2014, the program diversified the types of exercises and trainings offered, developed new preparedness materials, enhanced relationships, and increased its community outreach.

Plan Development

As emergency management awareness grows across campus and needs arise, the UMD EM program assists departments in developing emergency plans. Key efforts by the Emergency Management Coordinator this year included helping develop the Maryland Fire and Rescue Institute (MFRI) Departmental Emergency Operations Plan (DEOP), Facilities Management (FM) Emergency Operations Plan, and the new Campus Infectious Disease Management Plan (CIDMP).

To respond to the global threat of the Ebola virus, it was necessary to develop the new CIDMP in real time. The Emergency Management Coordinator facilitated an aggressive timeline set by the Director of the University Health Center.

Training and Exercises

The emergency management team has facilitated and evaluated exercises to help UMD departments and offices, as well as external partners, identify strengths and areas for improvement when planning and responding to emergencies. The exercises have focused on providing participants the opportunity to review and discuss emergency response plans, policies, and

UMD EM Team members Captain Kenneth Ecker and Fire Marshal Al Sactor



procedures; review and discuss the decision-making process; identify resource and facility access limitations; increase the understanding of the interrelatedness and dependencies between university departments and external partners; and to identify and make suggestions to improve the perceived shortfalls during the exercises. To build on the December 2013 Eppley Recreation Center (ERC) Active Shooter Tabletop Exercise (TTX), UMD and local first responders participated in the ERC Indoor Active Shooter Drill. Other exercises and trainings in 2014 included: Planning and Construction Earthquake TTX, Virtual Tabletop Exercise (VTTX), Stadium/Arena Focus Structural Collapse, Great Shakeout earthquake drill, Resident Assistant Training, and the University Communicator's Reputation Management exercise (sexual assault scenario).



FEMA VTTX - Stadium/Arena Focus Structural Collapse



ERC Indoor Active Shooter Drill

Community Outreach and Education

It is important for our community to be able to access and share preparedness tips and best practices. The UMD EM Team participates in several events throughout the year in effort to reach a broad representation of the campus community. This year the UMD EM Program participated in the following events: Maryland Day, Good Neighbor Day, The Protect Your Shell Fair, First Look Fair, Hispanic Festival, Benefits Fair, and Good Morning Commuters.

Internships

The EM Intern Program continues. Internships are not only a benefit for the program, they also provide an opportunity for the students to gain real world experience in the growing field of emergency management. This year's intern projects included Content Management Language (developing consistent language for



UMD student holding the new Emergency Preparedness Pocket Guide

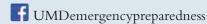
UMD SOS app and Emergency Preparedness website), drafting the Emergency Operations Center manual, and developing the Emergency Preparedness Pocket Guide.

First Aid/CPR/AED

The demand for First Aid/CPR/AED instruction continues to grow. Training was provided to 44 people in the Division of Administration and Finance, as well as other members of the community. DES provides campus-wide consultation on the State's public access AED program and associated regulations, as well the purchasing and maintenance of AEDs.

Social Media

UMD EM Program continues to share preparedness tips and network with the community.







UMD departments and partner agencies in the GDOC

Game Day Operations Center

This was the inaugural year for the Big Ten conference, as well as the inaugural year for the Game Day Operations Center (GDOC). On home football game days, UMD departments such as FM, Athletics, University of Maryland Police Department (UMPD), DES, Transportation Services and local agencies such as Prince George's County Police Department and Fire Department, Prince George's Office of Homeland Security and Emergency Management, and the City of College Park meet in the GDOC to communicate and coordinate quick and timely responses to incidents.

Meet Emergency Management Coordinator Alisha Childress

In 2013, Alisha Childress became the university's first full-time Emergency Management Coordinator. She brought her experience as an emergency management consultant for universities and government and hit the ground running. She immediately began evaluating preparedness at UMD and establishing goals for the emergency management program. Alisha utilizes detailed and energetic approaches to



facilitating complex emergency exercises and promotes creative ways to provide preparedness education to the community. One of her favorite things about working at the university is the relationships that she has built with colleagues and students. In addition to her job responsibilities, Alisha teaches emergency management courses at University of Maryland University College (UMUC) and is completing a Master's Degree in Management. She also serves as a Staff Advisor for the Alternative Breaks Program.

Environmental Affairs (EA) facilitates compliance with federal and State environmental regulations. EA manages environmental risk by developing policies, procedures, training, and consulting. EA supports faculty, staff and students in labs, offices, and maintenance shops. EA manages the university's compliance programs in the following environmental regulatory arenas: universal waste management, air quality (Title V) permits, fuel and oil storage tank management, water quality permits, environmental assessments, and real estate initiatives.

Emergency Spill Response & Scheduled Remediation Projects

EA responds to all HAZMAT incidents, oil spills, and environmental concerns on campus, with the goal of mitigating any potential hazards to human health or the environment. EA collaborates closely with other DES units and emergency response units, including but not limited to the UMPD and Prince George's Fire/EMS Department, to accomplish this role. EA personnel responded to 29 spills or incidents in 2014.

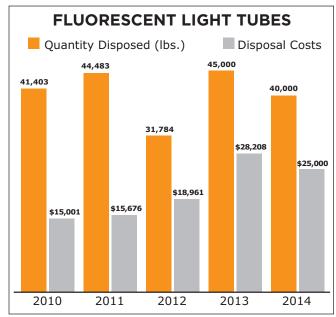
For situations that require more resources, EA is the primary point of contact with the university's Emergency Response Contractor. EA coordinates all activities to ensure that potential hazards to human health and the environment are mitigated.

The EA group often provides consultation on numerous environmental projects, providing remediation services, as well as cost-saving techniques.

Regulated and Universal Waste Management Programs

The Regulated Waste Program pertains to the management and disposal of all chemical, biological, and radioactive waste generated at UMD and its satellite facilities. The Program has been scrutinized by both federal and State environmental regulatory





agencies without any Notice of Violations and monetary fines issued. EA operates one of only two fully permitted treatment, storage, and disposal facilities (TSDF) at a Maryland college or university. The UMD TSDF building was designed in 1981 and is currently being renovated and upgraded to better reflect safe practices for the handling of regulated waste as well as to address deficiencies in the building site design.

- Regulated Waste EA processed 9,272
 Regulated Waste containers in 2014, equating to 69,117 pounds of regulated waste and total disposal costs of \$104,558.
- Universal Waste EA, UMD's Recycling and Solid Waste Management group, and the Office of Terrapin Trader and Surplus Property continue to collect and recycle various batteries, electronic waste (televisions, computers, and computer monitors), and spent intact fluorescent light tubes. DES periodically audits recyclers who process UMD's Universal Waste for compliance.

Air Quality Permitting and Reporting

The university is subject to the requirements of the Clean Air Act and considered a major source of emissions primarily due to nitrogen oxide (NOx)

emissions from the Central Heating Plant. The Maryland Public Service Commission (MPSC) has issued a Certificate of Public Convenience and Necessity authorizing and imposing operating conditions at the Central Heating Plant. EA collaborates with other departments on campus to ensure that these requirements are being met. EA is working with the Maryland Department of the Environment (MDE) to complete a new Title V Permit expected in the Winter of 2015. Permit tasks include:



Monitoring emissions from UMD fuel burning equipment

- **Reporting Requirements** EA collects, analyzes, and submits emission and compliance certification reports to MDE and EPA.
- **Testing Fuel-burning Equipment** EA oversees the annual testing of the exhaust gases from registered fuel-burning equipment.
- Permitting of Fuel-burning Equipment

 EA prepares and submits permit applications
 and notifications to MDE, MPSC, and the local electrical distributor, PEPCO.
- **Greenhouse Gas (GHG) Monitoring** Federal regulations require the university to monitor GHG emissions data from fuel-burning equipment on campus and the Central Heating Plant.

Tank Replacements

EA conducted a successful tank replacement program during 2014 to assist the College of Agriculture and Natural Resources with ongoing efforts to protect the environment from harm. The College's Maryland Research and Education Centers (MREC) located throughout the state found themselves with aging infrastructure for the containment of oil used at their many farms. The aging tanks posed an environmental threat if one had leaked oil into the environment.

EA aided MREC to identify, prioritize and dispose of the aging tanks — 19 in all — and aided in the design criteria to install new ones. The new tanks were installed with regard to current best practices in managing oil transfers and oil storage.

Fuel and Oil Storage Tank Program and Training

Under the federal Clean Water
Act (CWA), EA has developed and
implemented a Spill Prevention Control
and Countermeasure (SPCC) Plan to
prevent and clean-up oil spills on campus
and maintains two Oil Operations Permits
with MDE. EA is responsible for tank and
piping testing, monthly tank inspections,
SPCC Plan revisions and Permit renewals,
personnel training, and above ground
fuel storage tank projects. EA trained 166
people in three separate SPCC classroom

training courses during 2014. This includes special classes held for HVAC, Landscape Services and FM. Our online training course was taken by 80 people from various departments.

Surface Water Quality and Storm Water Management

To protect surface water quality and to ensure compliance with federal and state regulations, EA manages the Storm Water Management Program.

Storm water and wastewater discharges are generated at the university through a number of point sources. These discharges could affect the quality of the receiving water and are controlled and regulated under the federal CWA-National Pollutant Discharge Elimination System (NPDES) program, promulgated by EPA and MDE. EA currently maintains two NPDES permits

for the university: an Individual Industrial Permit that is specifically tailored to controlling the university's discharge of wastewater to surrounding surface waters, and an NPDES Phase II General Permit that covers the discharge of storm water run-off from land, pavement, building rooftops and construction sites on campus.



Water quality protection

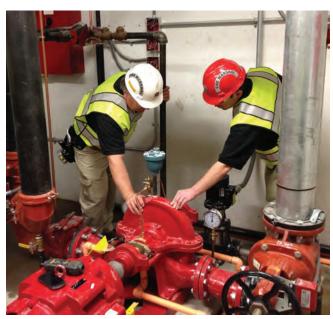
The Fire Marshal's Office (FMO) works to preserve and protect life and property from fire, explosion, and natural hazards. This is accomplished through enforcement of the State Fire Prevention Code, fire protection engineering, training, public education, fire investigation, and emergency response and preparedness. FMO is the Authority Having Jurisdiction (AHJ) for the University of Maryland. Fire Marshals are delegated legal authority by the Maryland State Fire Marshal.

Fire Inspections

Fire Marshals annually inspect hundreds of university facilities in College Park and throughout the state in order to identify hazardous conditions and practices that could cause a loss due to fire or explosion. Residential occupancies — the places where people live and sleep — are always a primary concern. Over 10,000 rooms in 156 residence halls, apartment buildings, and fraternity and sorority houses were inspected.

During 2014, Fire Marshal staff performed 523 laboratory inspections, which is 89 more than last year. The program continues to provide the benefit of improved communication between the FMO and laboratory staff. More researchers are now asking for assistance when planning work involving hazardous materials and processes.

Overall, FMO performed 1,355 fire inspections and re-inspections of UMD facilities.



Inspecting a new fire pump

Plan Review and Construction

Fire protection engineers in the Fire Marshal's Office review plans, conduct inspections, and provide occupancy approval for capital, campus, and department construction projects. Through the UMD Service Center, this AHJ service is provided for capital projects at other USM institutions including Salisbury University, Frostburg State University, University of Maryland Eastern Shore, and Bowie State University. The FMO is also the AHJ for UMUC. In 2014, there were 135 plans reviewed and 180 inspections performed for capital projects. The total value of capital projects worked on was in excess of \$1.2 billion. Many smaller campus projects (value less than \$1 million) were also reviewed and inspected.

Meet Deputy Fire Marshal Derrick Johnson

Derrick Johnson's part-time job carries serious responsibility. Derrick works nights, weekends and holidays. He's often the fire inspector behind the scene at



most large events where he's responsible for assuring life safety for thousands of attendees. Arriving several hours beforehand, Derrick checks exits, set-ups, and fire/life safety systems. He monitors conditions during the event and is prepared to initiate an evacuation if necessary. He is also proficient in the operation of the highly specialized safety equipment in place for large events. Derrick also fills in on the evening shift where he inspects campus buildings and responds to all safety related emergencies. Derrick started working for the department as a student employee in 1997. His dedication carried through several positions, including working in OSH and full-time with EA — all while pursuing bachelor's and master's degrees in speech and hearing for a career as a licensed audiologist. Among Derrick's most memorable moments in the FMO are working with the U.S. Secret Service during presidential visits and meeting President Obama.



Comcast Center becomes a dental clinic

Event Management

Fire Marshals plan for, and stand-by at, all major events to assure that life safety objectives are met and to function as part of the emergency management leadership.

There were 120 events worked in 2014 accounting for 1,764 work hours, a 13% increase from 2013. Fire Marshals often work at night, on weekends, and during holidays to provide this service.

Events during 2014 included the Maryland Democratic Gubernatorial Debate and a rally for Lt. Governor Anthony Brown featuring Hillary Clinton.

The Mid-Atlantic Mission of Mercy (MOM) Festival transformed Comcast Center into a huge dental clinic. Over 100 dental chairs were set up for 1,200 dentists, dental hygienists, and other volunteers to provide free dental services to thousands of people. FMO worked with MOM, UMD Athletics, and UMPD to assure a safe environment.

As UMD Athletics joined the Big 10 Conference, new challenges had to be met — larger crowds, more tailgating, fireworks, and increased homeland security activity. FMO coordinated exercises (Emergency Management), and worked with many campus departments and outside agencies to plan for anticipated changes. As part of the City Multi-Agency Services Team, FMO took a leadership role in coordinating a large tail gate event for UMD fraternities. The event, intended to reduce large parties in city residential neighborhoods, provided a safe, secured location on campus for fraternity and sorority members to gather prior to home football games.

Fire Marshal Evening Shift

The evening shift extends regular FMO coverage and provides a DES presence on campus until 11 pm. The Fire Marshal working the evening shift conducts fire inspections, provides assistance with fire alarm and sprinkler issues, inspects events and other evening operations, responds to fire and hazardous materials incidents, and is the point of contact for all safety-related concerns.

A Uniform Look

The Fire Marshal's Office has an updated look in 2014 with the debut of new uniforms. The traditional uniforms provide a professional appearance and identify fire marshals to the campus community, general public, and other agencies.



Fire Marshal Alan Sactor and Assistant Fire Marshal Luisa Ferreira

The Office of Research Safety (ORS) was formed to bring together the Biological Safety, Laboratory Safety, and Radiation Safety groups. ORS supports the UMD research community by helping researchers manage the inherent risks of their research. Research often involves multiple health and safety concerns and regulatory and compliance requirements. By combining the efforts and expertise of the Research Safety team members, we have created a seamless and comprehensive resource for researchers, enabling them to achieve their goals in a safe manner.

New/Revised Training

Training is one of the most important functions of the Office of Research Safety. Relevant and effective training helps those who work in or enter our laboratories perform their work safely, minimizing the risk of injuries and protecting research.

In 2014 the Biosafety group added two new classes for researchers. The Animal Biosafety Level 2 class is offered monthly for researchers and animal care staff who work with animals infected

with infectious agents. The Hands-on Biosafety Practices class is offered on request and includes in-lab instruction for personnel who work in BSL-1 and/or BSL-2 labs. The class includes practical information on biosafety work practices, use of personal protective equipment, use of disinfectants, use of the biological safety cabinet, biological spill procedures, post-exposure procedures, and treatment and disposal of biological waste.

The Laboratory Safety group in conjunction with Occupational Safety and Health (OSH), created a new safety training program, Respiratory Protection for Animal Handlers, which focuses on animal allergen hazard recognition and exposure control. The Radiation Safety group initiated Accelerator Refresher Training for researchers using the Linear Accelerator at the Radiation Facility.

The Laboratory Safety group also made significant revisions to the online Chemical Hygiene Training (CHT) and the classroom New Researcher Training (NRT) in 2014. Much of the specific chemical safety information was moved from the NRT into the CHT and information about the new Globally Harmonized System format for safety data sheets and labeling was added to the CHT. The hazard identification and risk assessment section of the NRT was expanded



USDA Select Agent Program uses UMD facility to train inspectors

and a section focusing on the Expectations for Conducting Safe Research was added.

Interactive audience response technology was added to the NRT and the Safety Orientation for Graduate and Teaching Assistant training programs to engage attendees and enhance their learning experience.

Members of ORS were invited as guest lecturers in both undergraduate and graduate level classes.

Biosafety Stewardship Month

As a result of several lapses in biosafety practices at Federal laboratories in 2014, the NIH initiated September as National Biosafety Stewardship month. The Biosafety group enlisted the help of the Vice President for Research to request all researchers previously registered with UMD's Institutional Biosafety Committee review their inventories, reexamine their biosafety procedures, and reinforce biosafety training. In addition, the Biosafety group provided these researchers with a list of their active research registrations to compare with their current inventory to ensure that all infectious agents and toxins are registered.

Inspections

As part of the 3-year renewal process for the university's Select Agent Registration, the Biosafety group worked with the Department of Veterinary Medicine to prepare for and facilitate an intensive 2-day site inspection by USDA Select Agent Program. UMD was commended for having a very solid program, including our training, drills, facility, and record keeping. This positive achievement is notable as these inspections are known for being rigorous and difficult.

MDE inspected UMD's Radioactive Material License in August 2014, and our Irradiator License and Irradiator Security Program in October 2014. All three inspections were successful and resulted in no violations.

DES Support for Association for Assessment and Accreditation of Laboratory Animal Care International (AAALAC) Accreditation

Laboratory Safety, Biosafety, and OSH groups assisted the Institutional Animal Care and Use Committee in a thorough review of safety and exposure control practices within the animal care and research facilities in preparation for the university's triennial AAALAC inspection. This process fostered stronger ties between DES and the research and animal care faculty and staff, and resulted in development of The Laboratory Animal Allergen Exposure Control Plan. The inspection process was successful, and resulted in a full AAALAC accreditation.

UMD Hosted USDA Inspectors-In-Training

In spring of 2014 the USDA Select Agent Program asked for permission to use UMD's select agent facility as part of their new inspector training program. The Biosafety group worked with USDA and the Department of Veterinary Medicine to coordinate access to their high containment laboratory as well as a BSL-2 lab and other areas of the building for training approximately 30 inspectors.

Safety Culture Initiatives

In March 2014, the Provost, the Vice President and Chief Research Officer, and the Vice President for Administration and Finance sent a letter to the research community outlining the university's expectations for conducting safe research. ORS staff was invited to several departmental meetings, including the Institute for Research in Electronics and Applied Physics, Plant Science and Landscape Architecture, and Mechanical Engineering, to discuss the expectations and the resources available from DES to help the research community meet these expectations.



New initiative to increase graduate student involvement in laboratory safety

The Office of Research Safety assisted the UMD Division of Research in conducting a research safety survey aimed at assessing laboratory safety practices, perceptions and attitudes within the UMD research community. The survey was approved by the Institutional Review Board and was rolled out in conjunction with the expectations letter. A total of 224 principal investigators and researchers completed the survey. The results were presented to the Vice President and Chief Research Officer in October 2014, and will be available to the university community in early 2015.

Additions to the Office of Research Safety

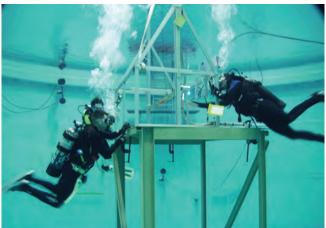
In 2014, ORS added two new members to its team — Sherry Bohn, PhD, CBSP, as Biosafety Manager and Institutional Biosafety Officer, and Miriam Sharp, PhD, as Research Safety Specialist in the Laboratory Safety group.

Retirement

ORS would like to thank Janet Peterson, Senior Biosafety Officer, for her 18 years of dedicated service to the university and its researchers, and wish her a very happy and healthy retirement! **The Office of Risk Management (ORM)** provides support and consultation regarding the risk naturally encountered in the course of research, service, and teaching mission of the university. ORM works to reduce the chance and severity of loss to the university's financial and reputational assets, and physical and human resources through identification of these hazards and development of controls. Both compliance-based and targeted programs are utilized by OSH, Diving Safety, Worker's Compensation, and Risk Management to accomplish this goal. At the 25th Annual State Employee Risk Management Administration (SERMA) Conference in May 2014, ORM/ Workers' Compensation was presented the SERMA Injury Reduction Award for the University of Maryland College Park achieving a 17% reduction in injuries for calendar year 2013.

Diving Safety

The Diving Safety Program at UMD focuses on supporting excellence in underwater research. During 2014, the program worked closely with the Space Systems Lab, which conducts robotic and astronaut experiments in a zero gravity environment, and the Paynter Lab, which plants, studies and protects oyster beds in the Chesapeake Bay estuaries. In 2014, these two laboratories safely conducted 427 dives, amounting to 10,403 minutes or 173.5 hours spent underwater. In a new effort to promote diving safety and research opportunities, Kinesiology and Marine Estuarine & Environment Science departments offered instructional SCUBA classes in Eppley.



Final adjustments on the test rig

Insurance & Contracts

ORM administers various insurance programs for the university that are purchased on behalf of State agencies by the State Treasurer's Office. These programs include General Liability, Property Insurance, Automobile Insurance, Workers' Compensation, Professional Liability, and Fine Art On-Loan. Commercial insurance programs administered by ORM include Employers' Liability Insurance, Crop Insurance, and Defense Base Act Insurance. In 2014, Media Liability Insurance was purchased for the College of Journalism and we began the process of working with the Office of International

Affairs to purchase International Travel Health Insurance for Faculty and Staff.

International Travel

With numerous Education Aboard, Alternative Break and Community Learning opportunities, as well as extensive faculty, staff, and student international travel, ORM worked with the Office of International Affairs to evaluate travel abroad programs to El Salvador, Ghana, Bosnia and Herzegovina, Haiti, Kenya, Israel, Greece, Turkey, Bulgaria and Cuba. ORM also worked with Business Services to conduct an analysis of current insurance coverage for international travel.

Community Outreach

ORM chairs the annual University Risk Management and Insurance Association (URMIA) Mid-Atlantic Regional Risk Management Conference in Baltimore.

ORM also administers the criminal background check program for personnel working with minors at over 50 summer camps and other youth program events.

Indoor Air Quality Concerns

OSH staff investigated over 30 Indoor Air Quality complaints relating to concerns regarding water intrusion, mold, poor air circulation, and noxious odors. OSH began working jointly with the FM HVAC and Central Control and Monitoring Systems shops to ensure the best possible outcomes. In one space, the joint team identified an occupancy sensor that was not connected, meaning the room was not receiving adequate air supply. After the sensor was connected to the HVAC system, employees noticed room comfort improvements. In other locations, sources of moisture were identified and specialized contractors removed water damaged materials eliminating concerns with mold and associated odors.



Behind the hand rails above center court in the Xfinity Center

Fall Protection Controls in Support of Athletics

Go Terps! UMD's move to the Big 10 has generated a lot of excitement on campus. For the Athletics Department, it also required some facilities upgrades. Did you notice the running scoreboard at Byrd Stadium? Or perhaps experienced better cell phone connectivity while enjoying a game there? Or maybe you noticed the catwalk with the lights shining on the court in Xfinity Center? All these improvements required workers to be exposed to a fall hazard. OSH staff evaluated several fall protection control plans including anchor points for workers installing antennas at Byrd Stadium and installation of elevated guard rails on the catwalks at Xfinity Center.

Employee Engagement

In an effort to pursue excellence in Safety & Health competency areas and bring employees and management together to solve safety related problems, the FM Safety Committee structure has been expanded. In addition to the long-standing FM Employee Work Group Liaison Safety Team, a Job Hazard Analysis

Team, an Incident Investigation Team and a Training Team have been initiated, organized under an Executive Safety Committee chaired by the FM Associate Vice President. DES plans to use this model to work with other UMD departments and establish Safety Committees that work for their organizations.

Slips, Trips and Falls

In 2013, slips, trips and falls were identified as one of the major hazards experienced by UMD employees. In response, DES developed a new training program designed to engage employees in anticipating fall hazards and employing various methods to avoid them. This training program was initiated in 2014, with favorable response from the target audiences.

Snow Injury Loss Control

Winter of 2013-2014 was not one UMD staff is quick to forget! Especially those on snow shoveling duty.

Based on the numbers of workplace injuries sustained last year, the FM Safety Committee suggested an action plan to help prevent these injuries this winter.



Practicing proper lifting techiniques

UMD invited Dr. Naomi Abrams OTR/L, CEAS to present a hands on "Ergonomic Training for Winter/Snow Duties" to 195 employees and supervisors. She reminded us to: 1) Think, 2) Keep it close, 3) Stay square, and 4) Use large muscles.

Ongoing Needs and Challenges

Student Activity Risk Management: ORM continues to review and conduct risk assessments of over 300 student activities every year. Increases in experiential learning and a more engaged student population continue to change UMD's risk profile and risk management challenges.

Injury Prevention and Return to Work: UMD continues to work to eliminate hazards and prevent workplace injuries. Ongoing analysis of injury trends will focus on targeted loss control efforts, such as 2014's training programs on Snow Shoveling; Slips, Trips and Falls; and Back Safety. Additionally, efforts continue to expand support for employees with injuries returning to work.

The Office of Sustainability (OS) is responsible for facilitating campus-wide sustainability initiatives in support of the President's Climate Commitment, environmental performance, and the university's strategic commitment to become a model of a green university.

OS educates, provides tools, and facilitates action involving a range of stakeholders including students, staff and faculty. The unit partners with operating units such as FM, Resident Life, and Dining Services on the design, implementation and marketing of campus-wide sustainability focused programs.

OS develops programs that encourage greater awareness of sustainability issues, supports behavior change that improve campus performance, and communicates sustainability matters via print and electronic formats.

University Sustainability Council

UMD established the University Sustainability Council in 2009 to advise the president on sustainability policy and performance. The Director of OS is a permanent member and the Office serves as supporting staff to the Council. In 2014, the Council focused its efforts on the following projects:

President's Energy Initiatives – After their creation and approval by the Council, the President's Energy Conservation Initiatives were launched by President Wallace Loh on Earth Day 2014.

Sustainable Water Use and Watershed

Report – This report was presented to the Council in fall 2013 and recommendations were accepted in spring 2014. To implement the plan, 13 work groups have been established.

Education for Sustainability Work Group

Report – This group presented its report and recommendations to the Council in 2014. The Office of the Provost approved most of the work group's recommendations including:

 Incentivize the development of new sustainability courses, especially General Education courses

- Integrate sustainability into other high level academic initiatives including the Academy of Innovation & Entrepreneurship and the First Year Innovation & Research Experience
- Conduct a sustainability literacy assessment every three years

The University Sustainability Council approved the disbursement of \$68,000 from the University Sustainability Fund in December 2014 to support campus sustainability projects. The Office works with students to review and recommend proposals to the Council for funding. In 2014, they recommended the following projects:

Campus Creek Restoration - \$50,000 – The university received a \$1.5M grant from the Maryland Department of Natural Resources to reduce erosion and enhance stormwater management along Campus Creek. The \$50,000 grant approved by the Council will contribute toward the design costs of the project.

Student Affairs Recycling & Compost Enhancement and Expansion - A Landfill
Diversion Assessment - \$18,000 - The Division
of Student Affairs will implement a waste audit to
identify strategies to improve recycling and compost
collection rates.



UMD's first three Gold-level Green Offices



Students congratulate President Loh on launching the President's Energy Initiatives

Outreach & Communications

Our on-campus outreach includes participating in special events such as Maryland Day, Earth Day, First Look Fair and Stamp Fest to build a culture of sustainability. OS also deploys the LEAF Outreach Team, a group of trained and dedicated students who support and reward sustainable actions at events, gatherings, residence and dining halls. The OS communications team profiles and promotes campus initiatives and success stories via print and social media vehicles including:

- University sustainability website (www.sustainability.umd.edu);
- Sustainability newsletters (www.sustainability.umd. edu/content/resources/listserv.php);
- SustainableUMD magazine (http://issuu.com/ umaryland/docs/sustainableumd_mag14_final); and,
- Facebook, Twitter and YouTube.

In October 2014, the Office of Sustainability hosted "Raise High the Black, Gold and Green: A Celebration of Campus Sustainability." The event, attended by 130 sustainability stakeholders, launched the 2014 *SustainableUMD* magazine and featured Colin Beavan, No Impact Man, as keynote speaker.

OS also hosted the national Smart and Sustainable Campuses Conference. This professional development event was held in March 2014 and drew over 300 college and university professionals from across North America.



Keynote speaker, Colin Beaven at the Sustainable UMD Celebration

Program Development

To further sustainable practices and behaviors on campus, OS develops and manages initiatives including:

The Chesapeake Project – Now in its seventh year, this two-day workshop has introduced sustainability issues to 138 professors in each of the university's 13 colleges/schools. These professors have integrated sustainability into more than 140 courses across the curriculum.

Sustainability Advisors – Also in its seventh year, this program trains students to teach a one-hour lesson on sustainability in freshmen seminar classes. The Sustainability Advisors introduced sustainability to roughly 1,400 students in fall 2014.

The Green Office Program – This program supports offices as they integrate sustainability into the workplace. To date, nearly 150 offices and more than 2,300 staff, students and faculty are program participants. Seven offices achieved Gold-level status in 2014.

Development of a "Green Labs" Program -

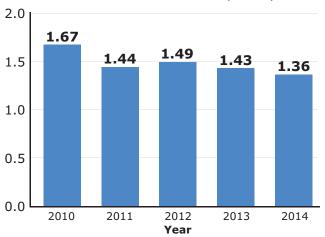
Modeled after the Green Office program, OS, in partnership with Research Safety and a campus-wide work group, are developing a certification program that enhances safe and sustainable practices within laboratories.

Measurement & Performance

A key function of OS is measuring and reporting on UMD's environmental performance. OS is responsible for conducting the annual campus greenhouse gas inventory; establishing and measuring annual performance metrics and reporting campus performance to external rating organizations including the Princeton Review, Sierra Club and the Association for the Advancement of Sustainability in Higher Education. OS also prepares the sustainability progress report in the fall of each year and is currently analyzing the university's performance under the national Sustainability Tracking, Assessment, and Rating System.

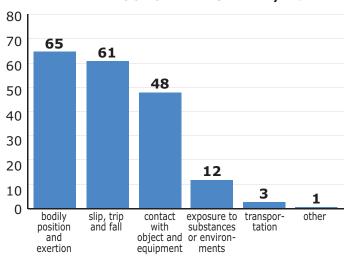
UMD LOSSES AND INCIDENT RATES

OSHA TOTAL RECORDABLE INCIDENT RATES (TRIR)



TRIR = # of injuries x 200,000 ÷ total # hours worked. The TRIR for colleges and universities in 2012 was 2.8, according to the US Department of Labor, Bureau of Labor Statistics.

2014 UMD RECORDABLE INJURIES AND ILLNESSES BY INCIDENT/EVENT

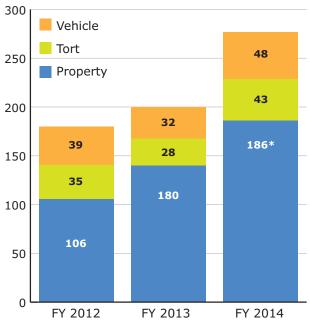


2014 PROPERTY CLAIMS			
Type of Claim	Number of Claims	Damages	
Broken Pipes - Flood	18	\$131,553	
Explosion or Fire Damage	5	\$92,638	
Contractor-related Damage	7	\$30,837	
Other Property Damage	8	\$23,460	
Electrical Damage	4	\$12,631	
Weather-related Damage	6	\$10,268	
Totals	48	\$301,387	

2014 GENERAL	. LIABILITY
Type of Claim	Number of Claims
Vehicle Damage	17
Slip and Falls (Non-emplo	oyee) 8
General Liability - Other	6
Road Hazards	5
Property Damage	5
Assault, Battery	2
Totals	43

2014 STATE VEHI	CLE CLAIMS
Type of Claim	Number of Claims
Not at Fault accidents	119
Struck another vehicle	32
Struck fixed object	24
Rental vehicle	7
Struck another State vehic	cle 4
Totals	186

INSURANCE PROCESSING CLAIMS Total Claims: FY12-FY14



*Beginning in FY14, incidents that were less than the \$1,000 deductible have been included in the total number of vehicle claims.

TRAINING

DES offers over 70 training classes in the classroom and online. Our training is free to all UMD faculty, staff, and students. The table below provides a broad summary of people we trained in 2014. For a complete listing of the classes we offer, visit our web site at www.essr.umd.edu.

PEOPLE TRAINED IN CLASSRO	OOM AND ONLINI	Ξ
Type of Training	Number of People Trained in Classroom	Number of People Trained Online
PHYSICAL AND ELECTRICAL	583	
Electrical Safety; Ergonomics; Slips, Trips and Falls; Fall Protection; Hearing Conservation		
CHEMICAL HAZARDS	1633	1769
Hazard Communication; Lead and Asbestos Awareness; Laboratory Safety; New Researcher Training; Chemical Hygier	ne	
OPERATIONAL SAFETY	239	
PPE; Respiratory Protection; OSHA 10 Hour; Forklift and Ladder Safety		
ENVIRONMENTAL PROTECTION	223	1940
SPCC; Chemical, Radioactive and Universal Waste Generator; Sustainability		
RADIATION	44	588
Radiation Safety; Laser Safety		
INFECTIOUS MATERIALS	721	1513
Biosafety; Bloodborne Pathogens		
FIRE AND LIFE SAFETY	940	
First Aid/CPR/AED; Crowd Manager; Floor Marshal; Cooking/Kitchen Safety; Resident Assistant/Fire Emergencies; New Employee Orientation		
TOTAL PEOPLE TRAINED	4383	5810

INSPECTIONS

INTERNAL INSPECTIONS			
Type of Inspection	Number of Inspections		
Asbestos Re-inspections (whole building)	15		
Biosafety (BSL1, BSL2 and BSL3)	60		
Electrical/Mechanical Inspections	23		
Initial Fire inspections Total	952		
Fire Re-inspections	478		
Fire Inspections - Off-Campus Greek Houses	30		
Laboratory Safety Inspections	194		
National Pollutant Discharge Elimination System (NPDES) Inspections	46		
Plan Review and Construction - Site Inspection/Testing	180		
Safety & Compliance Audit Radioactive Material	434		
Safety & Compliance Audit Radiation Producing Machines	31		
Spill Prevention, Control, and Countermeasure (SPCC) Tank Inspections	866		

INSPECTIONS AND AUDITS FROM EXTERNAL	AGENCIES
Type of Inspection	Number of Inspections
MDE Radioactive Material License and Security Inspections	3
Radiation Producing Machine State Inspections	6
USDA/Animal and Plant Health Inspection Services (APHIS)	2
USM Internal Audit of UMD Camp Programs	7



DEPARTMENT OF ENVIRONMENTAL SAFETY

www.des.umd.edu 301.405.3960