

Enterprise Risk Services



ANNUAL REPORT

FY 2015

Oregon State
UNIVERSITY

REPORT CONTRIBUTORS

Enterprise Risk Services

Risk Management

Environmental Health and Safety

Emergency Management

Human Resources

Workers' Compensation

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LETTER FROM THE CHIEF RISK OFFICER

Enterprise Risk Services offers an extensive range of support services; all keenly focused and designed to protect the Oregon State University student body, faculty, employees, and the University's property and resources. Enterprise Risk Services is comprised of the University's Risk Management, Environmental Health & Safety, and Emergency Management functions. By combining these key support service areas, Oregon State University is embracing a risk management leadership role and is allowing an increased breadth of risk identification, analysis, and control actions to protect the students, employees, and the University.

The FY15 Enterprise Risk Services Report highlights and summarizes the varied programs which Enterprise Risk Services provides to the University, including:

- Risk management processes of risk identification, assessment, risk control, insurance procurement and claims management;
- Education and safety training regarding chemical and lab safety, biological safety, radiation safety, occupational safety, environmental protection and hazardous waste; and,
- Emergency Management, offering support to departments and the University regarding emergency plans, disaster planning, and training.

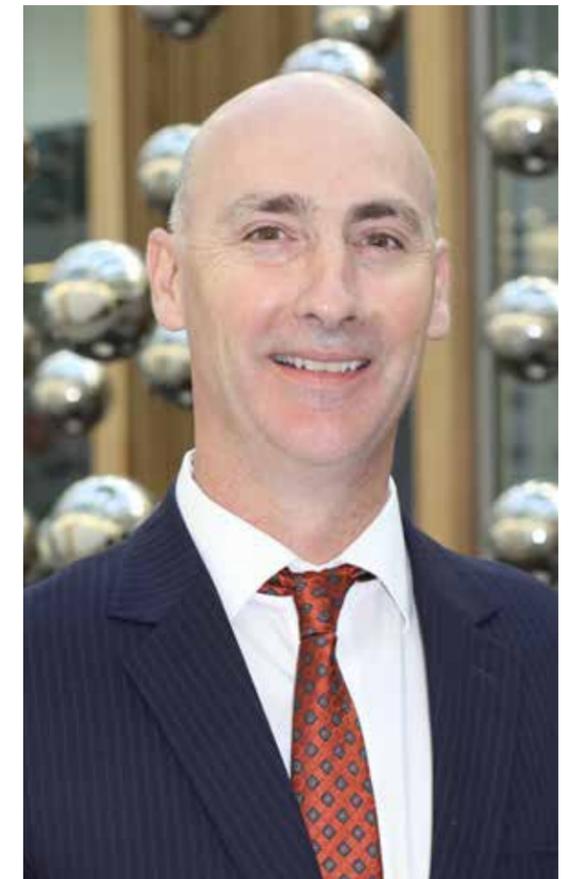
This year has brought significant changes in the University's risk management landscape. Over the past three years, Oregon State University has transitioned from a self-insurance program via the Oregon Department of Administrative Services, to the purchase of commercial insurance with the Oregon University System (OUS). From our recent affiliation with OUS, Oregon State University has now transitioned to its own Board of Trustees, and University insurance is purchased and managed through the Public Universities Risk Management and Insurance Trust (PURMIT). These changes place additional weight on risk identification and controls, proper claims management, and the formation of broad internal risk partnerships to lessen the University's exposures and increase safety across

all functions of the University. Additionally, significant emphasis has been placed on increasing lab safety, proper chemical handling and disposal, and raising the University's preparedness level for management of emergencies.

With change comes concurrent challenges, especially with large changes. I am honored and thankful to work with a group of excellent, professional, and knowledgeable staff here in Enterprise Risk Services. Each of them thrives on advising, problem solving, adapting, and offering multiple services to the OSU community. My hat is off to them, and I am positive that if you have utilized their services, you will agree wholeheartedly with me.

Enterprise Risk Services is excited to share with you this Annual Report, which highlights many of the key services we offer to OSU, and the accomplishments of our past year. Have a great year as you move forward. Go Beavs!

Patrick Hughes
Chief Risk Officer, Enterprise Risk Services



RISK MANAGEMENT & INSURANCE



GENERAL LIABILITY



General Liability insurance provides protection from third party claims for bodily injury and associated medical costs if injuries occur due to negligence on the part of the University and/or if damages are caused by OSU employees to the property of others resulting from wrongful or negligent acts.

Under the General Liability program, OSU is self-insured as a member of Public Universities Risk Management and Insurance Trust (PURMIT), formally OUS Risk Management Fund, up to \$1 million per occurrence. Additional layers of insurance through United Educators and Great American provide limits of liability up to \$50 million. During FY14, OSU had a \$5,000 deductible per occurrence. In FY15, the deductible was raised to \$100,000 per occurrence and OSU has the same deductible for FY16.

EXPOSURE

Bodily injury and property damage liability, which includes:

- premises and operations liability.
- products and completed operations liability.
- personal and advertising injury liability.
- medical payments.

Potential claims may come from members of the general public, students and visitors.

ISSUES IDENTIFIED

Utilization of risk assessments can reduce the risks of different events and activities on and off campus.

Risk mitigation strategies resulted in a direct reduction in claims caused by errant baseballs.

CLAIMS

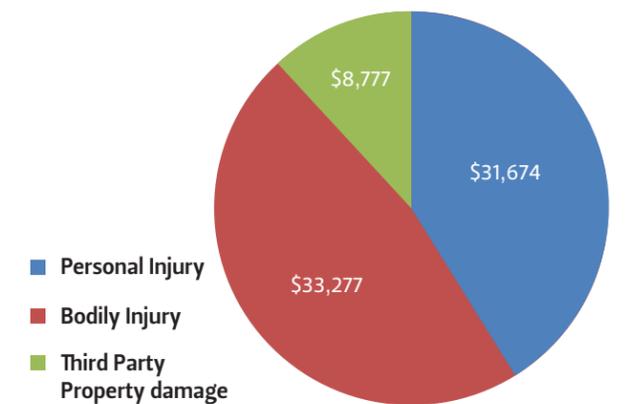
Between FY13-FY15, there were 31 General Liability claims with a total incurred cost of \$73,728. The total incurred cost is the estimated final cost of the claim, and is the sum of the paid costs plus the outstanding reserve. Only 3 of 31 claims exceeded \$5,000. Since 2011, there has been a downward trend in the number of general liability claims. With the exception of one claim that incurred \$25,000, there would not have been a spike in total incurred in FY13.

The FY13 \$25,000 claim was in response to an unauthorized data breach of a ticketing vendor used by OSU. PURMIT is negotiating with the ticketing vendor to recover the insurance expenditures. In response to this instance and the growing risk of cyber crime, the University subsequently purchased a cyber liability policy in October 2014.

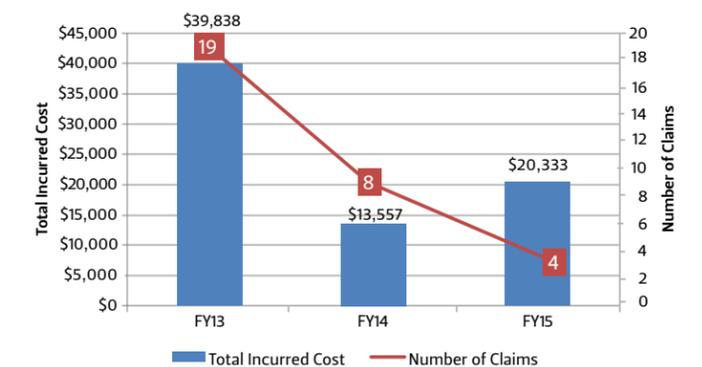
NEXT STEPS OR RISK CONTROL

- Continue with education of risk assessment tool utilization by event/activity coordinators.
- Effective claims management resulted in timely closure of claims and reduced financial impact.
- Increase use of Liability Waivers for activities that present a higher level of risk.
- Require contractors or events occurring on OSU property to have the appropriate insurance coverage.

Cause of General Liability Claims FY13 – FY15 valued as of 6.30.15



Frequency and Severity of General Liability Claims FY13 – FY15 valued as of 6.30.15



- Educate OSU units regarding use of the Conditions of Volunteer Service Form.
- Monitoring of event registration to ensure alcohol registration for events is conducted.
- Increase the use of background checks for personnel in sensitive positions.



EDUCATORS LEGAL LIABILITY



The Educators Legal Liability insurance policy provides coverage for the University's errors and omissions and employment practices liability. This coverage protects against potential claims related to discrimination, retaliation, employment practices, tenure denial, educational malpractice, and violation of intellectual property rights.

Under the Educators Legal Liability program, OSU is a self-insured member of PURMIT for up to \$1 million per occurrence. Additional layers of insurance through United Educators and Great American provide limits of liability up to \$50 million. During FY14, OSU had a \$5,000 deductible per occurrence. In FY15, the deductible was raised to \$100,000 per occurrence and OSU has the same deductible for FY16. In FY15, the policy was extended to cover the OSU Board of Trustees and the PURMIT Board of Trustees.

EXPOSURE

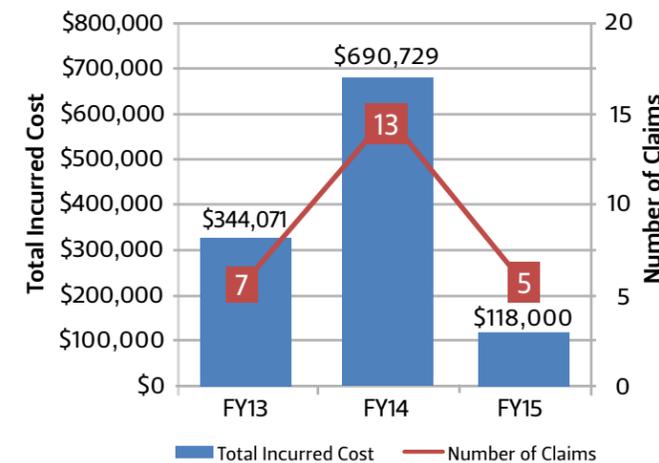
Claims may result when a faculty member, employee or student employee files a formal complaint, tort claim or lawsuit.



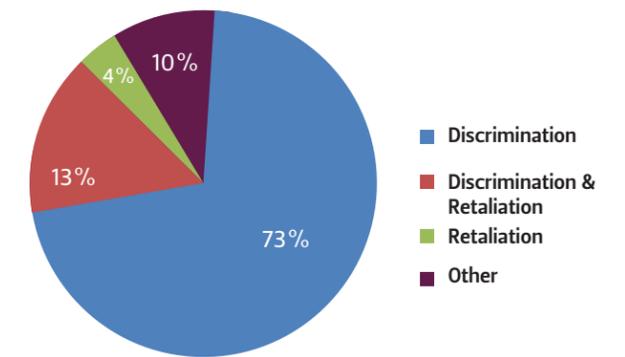
CLAIMS

Between FY13-FY15, there were 25 Educators Legal Liability Claims with a total incurred cost of \$1,152,800. Claims filed with allegations of discrimination and/or retaliation are the most costly claims, representing 90% of the total incurred costs. These costs are inclusive of any settlement and outside legal counsel, but do not include costs incurred in payroll hours out of the OSU Office of General Counsel. It should be noted though many claims came to a resolution without incurring actual dollar claim costs, significant time and payroll were spent to defend and/or resolve the matters.

Frequency and Severity of Educators Legal Liability Claims
FY13 – FY15 valued as of 6.30.15



Cause of Educators Legal Liability Claims
FY13 – FY15 valued as of 6.30.15



ISSUES IDENTIFIED

Additional supervisor/manager training on appropriate and lawful employment practices would be beneficial and training regarding when particular scenarios may bring rise to a claim.

Need for additional communication tools to make resources easily accessible.

NEXT STEPS OR RISK CONTROL

Provide additional resources for faculty/staff including training, in collaboration with University departments to include the Office of Equity and Inclusion. United Educators, one of University insurers, has training available for students and employees, which is now accessible through the Risk Management website. The Office of Equity and Inclusion also offers a number of training courses and programs.

AUTOMOBILE LIABILITY



Automobile Liability provides coverage for bodily injury and property damage caused by the use of owned, hired and non-owned vehicles while on University business.

Under the Auto Liability program, OSU is self-insured as a member of PURMIT for up to \$1 million per occurrence. Additional layers of insurance through United Educators and Great American provide limits of liability up to \$50 million. During FY14, OSU had a \$5,000 deductible per occurrence. In FY15, OSU increased that deductible to \$100,000 self-insured retention to PURMIT and has the same deductible for FY16.

EXPOSURE

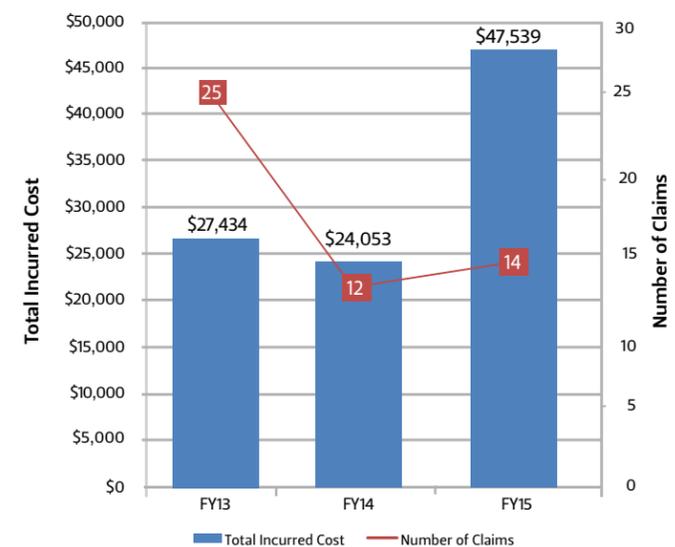
Claims can result when another party incurs bodily injury from an accident/collision caused by an OSU employee or when another party's property (typically another vehicle) is damaged by OSU.



CLAIMS

Between FY13-FY15, there were 51 auto liability claims with a total incurred cost of \$99,026. Third party property damage represents 94% of the auto liability claims.

**Frequency and Severity of Automobile Liability Claims
FY13 – FY15 valued as of 6.30.15**



ISSUES IDENTIFIED

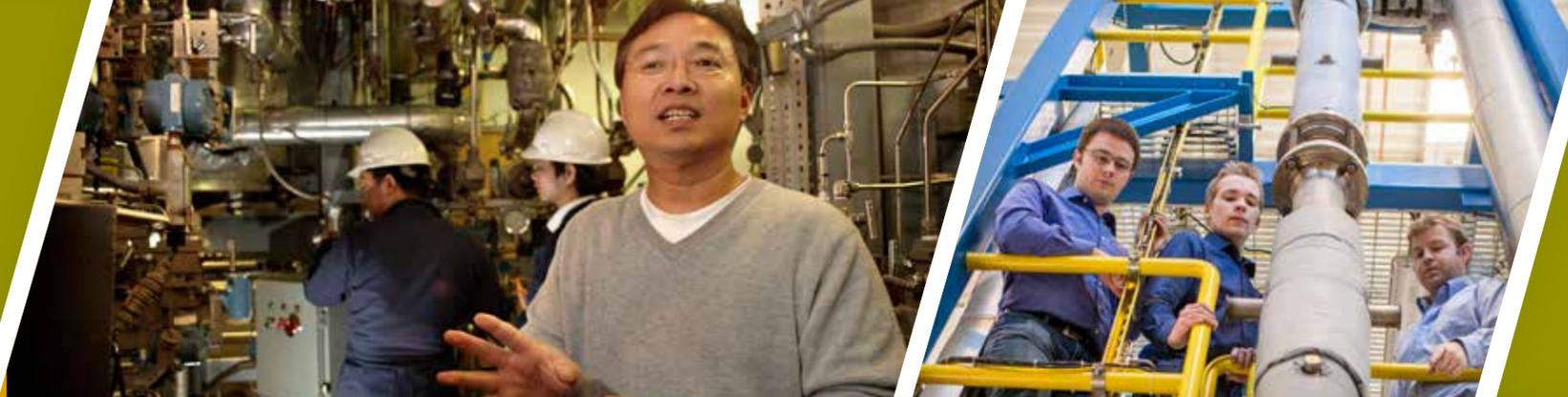
Increase insurance education to employees on vehicle usage for University business and the protection of personal property while in a University vehicle.

Provide education on actions to take at the scene of an accident/collision to aid in the claim investigation (e.g. take photos, obtain drivers' insurance information, collect witness contact information).

NEXT STEPS OR RISK CONTROL

- Continue to complete Motor Vehicle Checks, when appropriate.
- Driver authorization required to be eligible to rent a University vehicle.
- Van safety training requirement for 8 or 12 passenger vans.
- Requiring contractors to have appropriate insurance coverage.
- Develop claims training to place on the Risk Management website explaining the steps to take in the event of an accident/collision.

LICENSED PROFESSIONAL LIABILITY



Licensed Professional Liability insurance provides protection for employed licensed professionals providing services and/or products under a professional license such as veterinarians, medical professionals*, architects, and engineers; this insurance covers claims filed for negligence, misrepresentation, and errors or omissions.

Under the Licensed Professional Liability policy, OSU is self-insured as a member of PURMIT up to \$250,000 per occurrence. Additional layers of insurance through United Educators and Great American provide limits of liability up to \$50 million. During FY14, OSU had a \$5,000 deductible per occurrence. In FY15, the deductible was raised to \$100,000 per occurrence and OSU has the same deductible for FY16.

EXPOSURE

Potential claims can arise out of professional services performed for the University:

- at the Veterinary Hospital;
- by employed architects and engineers;
- by medical professionals*.

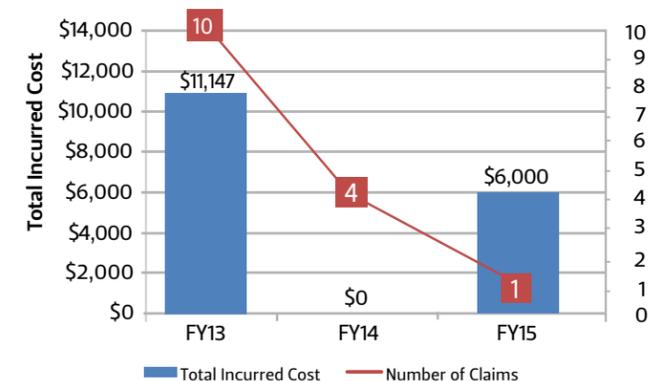
* Depending on whether the medical professional is serving the public or serving the OSU community only, different policies were in effect (e.g. general liability, licensed professional liability and student practicum)



CLAIMS

Between FY13-FY15, there were 15 licensed professional liability claims with a total incurred cost of \$17,147. Only five of these claims were payable.

Frequency and Severity of Licensed Professional Liability Claims FY13 – FY15 valued as of 6.30.15



ISSUES IDENTIFIED

Training and risk assessments needed at department level to ensure understanding of risk exposure and claim management.

NEXT STEPS OR RISK CONTROL

Risk Management now collaborates with departments to review cases in an effort to improve processes and procedures to ensure claims are filed, adjusted, and settled appropriately.

Provide additional training on policy specific coverages and risk control options.

Risk assessments with departments.

PROPERTY INSURANCE



Property insurance provides protection against risks of physical loss or damage to University property. It is activated when there is a loss or damage caused by fire, water, flood, wind, earthquake, severe weather, vandalism, and other specified events. The definition of “property” includes physical items such as buildings, building contents, vehicles, mobile equipment and research animals; and/or lost income and business interruption due to a physical loss or damage.

OSU is self-insured as a member of PURMIT. The property program has \$500 million in coverage with lower sub-limits for earthquake and flood damages. During FY14, OSU had a \$5,000 deductible per occurrence, which was increased to \$100,000 for FY15 and FY16

EXPOSURE

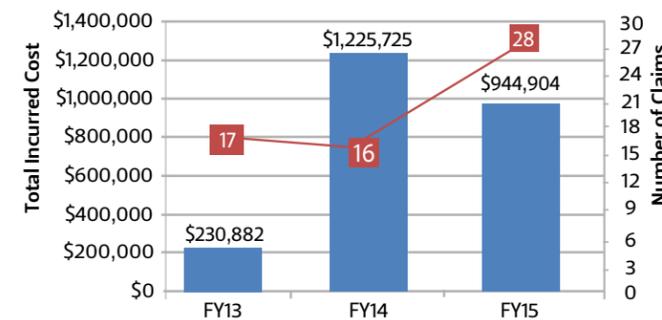
- \$2.837 billion in total insurable value for building and contents (property).
- 651 vehicles, 237 pieces of mobile equipment and 439 motorcycles and scooters.
- \$3.3 million in research animals.



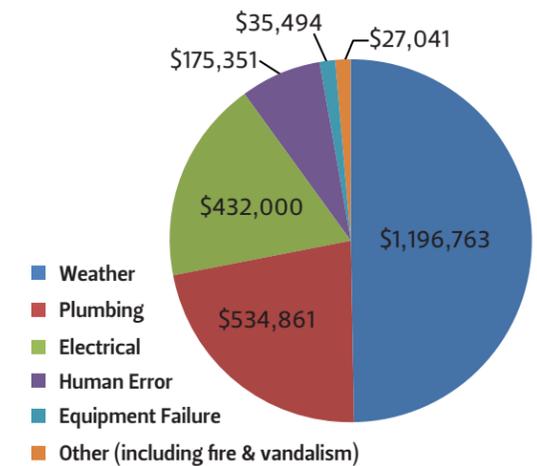
CLAIMS

Between FY13-FY15, there were 61 property claims with a total incurred cost just below \$2,401,511. The top two causes of property claims were weather and plumbing failures. These claims represent 39% of the number of claims and 86% of the cost.

Frequency & Severity of Property Claims
FY13 – FY15 valued as of 6.30.15



Cause of Property Claims
FY13 – FY15 valued as of 6.30.15



ISSUES IDENTIFIED

A particularly cold winter was the driving force of 90% of the claims costs in FY14. The winter storm in December 2013 caused property damage to 16 buildings across campus, with ALS and Richardson sustaining the most significant damage. The extent of the damage identified the need for pre-storm prevention efforts in potential future loss scenarios.

Immediate action was taken on these prevention efforts, which was the extensive collaboration between Risk Management, Emergency Management, EH&S and Facilities during the February 2014 storm. Actions taken by these departments resulted in the campus being prepared for the event, and property damages from the February storm were extremely minimal.

NEXT STEPS OR RISK CONTROL

Formalizing the procedures to prepare for a severe winter storm and testing such procedures will ready staff to respond quickly to prevent property damage.

Since June 2014, sixty-three (63) seismic gas shutoff valves were installed on 60 buildings to automatically stop the flow of natural gas into buildings in the event of an earthquake. Installation of these valves greatly reduces the likelihood of a fire/explosion following an earthquake. The installation of these valves reduces the maximum foreseeable loss on the buildings and contents by over \$1 billion.

SPECIALTY INSURANCE



Oregon State University purchases a number of additional lines of insurance coverage, some of which are considered specialty lines. Though not all are mentioned in this report, key policies include: Cyber, Intercollegiate Sports, Fine Art, Marine, Marine Subsea (Over-the-Side), Non-owned and Owned Aviation, Nuclear, Camps and Clinics and coverage for Team Oregon. The limits of liability vary per policy.

FINE ART

Fine Art insurance provides protection from damage to artwork, such as paintings, sculptures, prints, and manuscripts. The insurance covers fine art while in a permanent location, such as a museum, library or building, as well as in transit or while loaned to others. In FY15, no claims were filed.



NUCLEAR

The Radiation Center is home to the OSU TRIGA Reactor. OSU has nuclear liability coverage for bodily injury or offsite property damage caused by a nuclear energy hazard release. In addition, OSU has nuclear workers' compensation coverage which insures for employee bodily injury due to a nuclear energy hazard exposure at the nuclear facility. In FY15, there were no claims filed against either policy.

CYBER

As of 10/14/2014, OSU purchased a policy that covers cyber, privacy and network liabilities, inclusive of data breaches and any required notification, credit monitoring, defense, fines and penalties. In FY15, there was 1 claim for \$1,525 and University was reimbursed for this by the carrier.

FOREIGN

Foreign Liability insurance provides commercial general liability insurance, employee benefits liability and contingent excess auto liability for claims occurring outside of the United States. In FY15, no claims were filed.

MARINE

Four separate policies provide protection for the 25 scheduled marine vessels. The policies cover physical damage, liability and pollution while in the water. One policy also provides protection for damage to OSU Crew racing shells. In FY15, there were no claims.

MARINE SUBSEA

The Marine Subsea (Over-the-Side) policy covers scientific instruments and equipment that are aboard a vessel and those submersed into water as part of a research expedition. This policy is deployment specific and departments or programs must register with OSU Risk Management for the coverage in advance of each deployment, as the insurance carrier must approve coverage. In FY15, there were 19 deployments and one claim for a lost piston core valued at \$70,351.

TEAM OREGON

A separate educator's professional liability policy and excess policy is purchased for Team Oregon. Team Oregon provides motorcycle safety training for Oregon residents who are seeking a motorcycle endorsement or who are interested in building better riding skills. In FY15, the program had 10,683 participants who enrolled in one of the five offered classes. In FY15, there were 6 claims with reserves of \$16,223.

DAYCARE

OSU has three daycare facilities across campus that provide child care services for 176 children. A daycare accident policy has been purchased to provide protection for this exposure. In FY15, there were no claims filed.

CAMPS & CLINICS

Camps and clinics insurance is a primary insurance policy that covers accident medical expense benefits for participants, who are generally not affiliated with the University, of short-term events, activities and camps. Examples may include sports or science camps, student club outings and OSU trips or tours for adults. In FY15, there were 107 camps with 7,006 participants.

STUDENT PRACTICUM

A liability policy is purchased to protect students who are rendering professional services under University supervision and enrolled and engaged in the University healthcare curriculum with the intent of receiving a professional designation. In FY15, there were no claims filed against this policy.

INTERCOLLEGIATE ATHLETICS

Intercollegiate Athletics insurance provides medical coverage for injuries sustained by intercollegiate athletes during play, practice or transit. These claims are adjusted by the insurance carrier and managed by OSU Athletics.



NON-OWNED & OWNED AVIATION

Non-owned aviation liability insurance covers claims arising out of the use of rented or chartered aircraft (aircraft not owned by the university). The university owns two aircraft, a Cessna 182P and Cessna T-210, for which OSU has aviation liability coverage. In FY15, there were no claims filed against either policy.

RISK CONTROL

Continue to identify procedures to provide ways to mitigate or transfer risk and allow special programs, events and activities to occur safely.

INTERNATIONAL TRAVEL



Faculty, staff and graduate students traveling on behalf of the University as employees must register their international trip with Risk Management.

Risk Management highly recommends employees purchase a Travel Accident and Sickness Plan (also known as a supplemental insurance), which provides a comprehensive travel insurance policy. This policy offers \$200,000 lifetime medical maximum per covered accident/sickness; evacuation due to security/political unrest, natural disasters, emergency medical situations; trip interruption and cancellation benefits; and 24/7-travel, safety and security assistance services. This coverage is available at \$2.00 per person per day.

EXPOSURE

- Claims can result when an employee who is traveling internationally has an accident, becomes ill, or needs to be evacuated due to security/political unrest or a natural disaster.

REGISTERED TRAVELERS* & COUNTRIES VISITED

Registered Travelers & Countries Visited		
	# Of Employees Who Registered International Trip	Purchased Supplemental Insurance
FY13	386	310
FY14	372	283
FY15	573	494

Top 5 Most Visited Countries in FY15*	
Brazil	49
Canada	26
China	65
Germany	35
India	34

*by number of travelers

* This data does not incorporate the number of travelers who purchase the Travel Accident and Sickness Plan through the OSU Division of International Programs.

ISSUES IDENTIFIED

- Not all employees traveling internationally register their trip with Risk Management.
- Some employees travel to locations for which the U.S. Department of State and Centers for Disease Control and Prevention (CDC) have issued a travel warning without a thorough risk assessment or risk management plan.
- A small number of employees travel to countries that are specifically excluded from the Travel Accident and Sickness Plan. Travel insurance for such countries may be available for an additional premium.
- Employees are traveling to remote and/or unpredictable locations without an emergency plan.
- A University guideline needs to be developed for all international travel.

NEXT STEPS OR RISK CONTROL

- Employees are advised to consult the U.S. Department of State website for travel alerts/warnings, enroll in the Smart Traveler Enrollment Program (STEP) and obtain immunizations and documents for the country of travel.
- Risk Management recommends that all employees traveling internationally purchase the Travel Accident and Sickness Plan for its comprehensive coverage, particularly the evacuation coverage and the medical coverage limits.
- Risk Management contacts employees traveling internationally who will be visiting countries on the travel warning list and discusses the risks and the importance of an emergency plan.
- Risk Management collaborates with General Counsel and Export Control & International Compliance when travel is planned to countries on government watch lists or when export control issues may exist.
- In FY16, the University intends to create an International Travel Program that encompasses all international travel and provides guidelines and procedures.

WORKERS' COMPENSATION



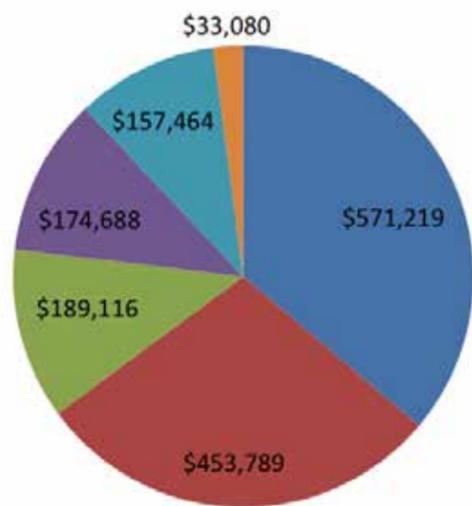
Workers' Compensation protects workers by paying for medical treatment and lost wages that arise out of or in the course of employment. It also protects employers by shielding them from liability lawsuits that could result from work related injuries or illnesses to employees and subject workers. OSU's Workers' Compensation coverage is provided by the State Accident Insurance Fund (SAIF) and has a four-part test for eligibility.

EXPOSURE

- All employees, inclusive of faculty, classified staff, graduate assistants, student employees and OSU temporary employees.

CLAIMS

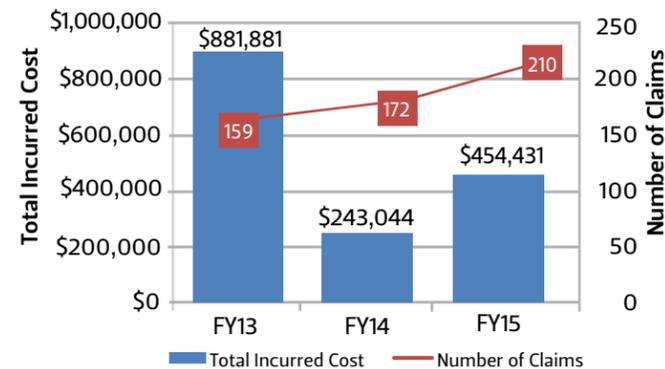
Cause of Workers' Compensation Claims
FY13-FY15 valued as of 6.30.15



■ Strain ■ Fall/Slip ■ Motor ■ Struck ■ Misc ■ Other

Frequency and Severity of
Workers' Compensation Claims
FY13-FY15 valued as of 6.30.15

Total # Of Claims	# Time Loss Claims	Total Incurred Cost
541	92	\$1,579,356



SUCCESSSES

Assigned NCCI class codes to all employee job classifications, which resulted in significant savings in annual premium for FY15.

SAIF recognized OSU as having one of the highest Employer-at-Injury Program (EAIP) wage reimbursement agencies in the state, with OSU being reimbursed for \$313,927 as of 6.30.15 for the claims filed between FY13-FY15.

EAIP is an early return to work program to encourage employers to bring injured employees back into the workplace through transitional work. OSU is eligible to receive up to 45% return of wages when the employee returns to work in a modified work assignment.

Roll out of HR Advocate, an online incident and injury reporting tool, which allows for tracking of information in a central location.

Each month, the members of the University Health and Safety Committee review claims and incidents to identify trends and discuss injury prevention solutions.

ISSUES IDENTIFIED

FY15 claims are "green" and are expected to increase as claims mature.



NEXT STEPS OR RISK CONTROL

- Continue to adjust NCCI class codes to ensure accurate reporting of employee job classifications to insurers.
- Conduct focused review of claims to identify trends and develop focused claim reduction strategies.
- Share Workers' Compensation data and injury prevention tools with Departments and Colleges.
- Greater utilization of the EAIP assistance as it relates to the purchase of tools, equipment and other work site modifications to facilitate employee early return to work.
- Increase available training to target known injury causes.

ENVIRONMENTAL HEALTH & SAFETY



BIOLOGICAL SAFETY PROGRAM



Biological Safety provides guidance on practices to minimize health and environmental consequences related to biological agents used in research and teaching within the university community. Programs implementing University policy and recognized best practices have been established to protect the health and safety of students, faculty, and staff; protect managed and natural ecosystems; and to meet regulatory requirements of Occupational Safety and Health Administration, the Centers for Disease Control and Prevention, USDA Animal and Plant Health Inspection Service, and the National Institutes of Health.

Biological Safety supports the Institutional Biosafety Committee by serving as the administrator, the Institutional Animal Care and Use Committee as a voting member, and the Institutional Review Board. Programs have been established to provide a central registry of potentially hazardous microbial agents and other hazardous biological materials, oversight of recombinant and synthetic nucleic acid research, and to control exposures to blood-borne pathogens, zoonotic and other agents of disease.

EXPOSURE



- All personnel handling infectious agents, human source materials or recombinant nucleic acids are required to receive training.
- All autoclaves are required to be tested for efficacy to ensure proper infectious waste sterilization.
- The RAIL facility is a Biosafety Level 3 (BSL-3) facility with stringent operational requirements to meet federal regulations.
- All research with recombinant or synthetic nucleic acids, infectious agents, and human source materials must meet various requirements for review, training, safe work practices and facility requirements. Biological Safety oversees this compliance.

SUCCESSSES

- 403 Research workers trained in laboratory biosafety.
- 308 Faculty, Staff and student workers trained in blood-borne pathogen recognition and protection.
- 190 Students trained on safety topics specific to Veterinary Medicine and College of Public Health.
- 90 Campus autoclaves tested.
- 43 Laboratory assessments conducted & 112 laboratory inspections, and 4 BSL-3 spaces.
- 30 New program registrations were reviewed and approved by the IBC.
- 12 Room sterilizations using vaporized-hydrogen peroxide (VHP) technology in various buildings on campus.

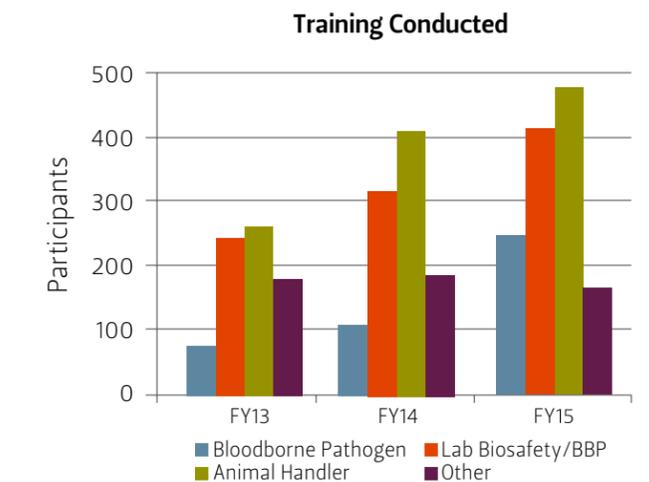
ISSUES IDENTIFIED

EH&S support is crucial in assisting biological laboratories with regulatory and safety compliance.

Laboratory inspections have identified an opportunity to improve practices related to personal protective equipment use, waste management and working safely in OSU laboratories.

There is a need to retrofit and/or renovate some of the aging infrastructure in many OSU labs.

In February of 2015 the Biological Safety Officer was invited to attend a meeting with officials in the Obama Administration's Office of Science and Technology Policy at the White House in Washington, DC. The purpose of the meeting was to discuss the impact of the Select Agent Regulations on science and registered entities.



NEXT STEPS OR RISK CONTROL

- Continue to partner with OSU Occupational Medicine to conduct risk assessments for persons subject to Animal Exposure Occupational Health Program.
- Increase autoclave inspection awareness to ensure compliance with Oregon Public Health regulations.
- Conduct an audit of biological safety oversight, training resources, and coordinate a campus-wide inventory as requested by federal initiatives.
- Target biological laboratory assessments to meet expectations of federal authorities.

CHEMICAL & LABORATORY SAFETY



The chemical and laboratory safety program seeks to minimize chemical hazards to faculty, staff, and students while facilitating laboratory operations, research and teaching efforts, and maintaining compliance with federal, state, and local regulations. While most chemical safety regulations were written for industrial or manufacturing environments, the University's diverse research and teaching settings create unique operational challenges. Due to a diverse array of chemicals and work settings, EH&S staff must work creatively to assist the campus community to ensure the health and safety of personnel and to maintain compliance with regulations.

EXPOSURE

- OSU has approximately 1,618 laboratory spaces that use or store hazardous chemicals.
- Chemicals used or stored range from relatively non-hazardous to potentially life-threatening.
- Methods of storage, how chemicals are used and disposed of can carry significant health and regulatory implications.
- Actual or potential releases of hazardous chemicals pose safety risks to laboratory personnel if not adequately controlled and mitigated.
- Improper management of chemicals can also carry regulatory liability for the University in the form of monetary penalties and citations, jeopardizing operating permits, loss of grant funding, and negative publicity and its associated impacts.

Oregon OSHA revised its Hazard Communication Standard to align with the United Nations' Globally Harmonized System of Classification and Labeling of Chemicals, which requires employers to implement specific requirements between December 1, 2013 and June 1, 2016.

SUCCESSSES

- 759 emergency eyewash/drench hose units and 406 safety showers inspected.
- 904 chemical fume hoods inspected.
- 15 laboratory spaces cleaned out.
- 297 laboratory spaces received the new laboratory safety assessment evaluation.
- 5 carcinogen laboratory audits performed.

A chemical hygiene plan (CHP) template was developed for laboratory investigator use.

A chemical barcoding system was developed for use by the Department of Chemistry.

Developed on-line web interface for recording laboratory assessment tool corrections.

Provided on-line training modules for hazardous waste and lab safety.

Delivered on-line training on safety data sheets and labeling requirements as required by Oregon OSHA and expanded on-line access to safety data sheets through MSDS Online.

Developed guidelines for chemical inventories and chemical labeling.

ISSUES IDENTIFIED

Approximately 800 laboratory spaces need annual assessments based on hazard level; the remaining spaces require assessments every 2-3 years due to lower hazard levels.

The large numbers of laboratory spaces require re-tasking EH&S personnel resources to perform safety inspections.

Laboratory supervisors should implement regular self-assessments of their laboratory spaces to assist in evaluating safe practices of OSU laboratory space.

Maintaining accurate chemical inventories, labeling, and storage are important compliance areas for laboratory personnel that need improvement.

Increased coordination between the Principal Investigator's (PI) home department and EH&S is needed when a PI is vacating a laboratory in order to avoid hazardous waste disposal violations.

Improve laboratory safe worker practices through increased participation in EH&S taught laboratory safety training.

Policy creation requiring all lab personnel obtain appropriate training.

The current laboratory safety equipment funding model presents challenges.

NEXT STEPS OR RISK CONTROL

EH&S will continue to implement several strategies to provide adequate coverage for laboratory assessments:

- Continue risk ranking of laboratories;
- Increase staffing dedicated for laboratory safety;
- Promote laboratory self-assessments.

Increase on-line training modules for chemical and laboratory safety topics.

Pursue policies for laboratory safety training.

Continue to support departments under the current laboratory safety equipment funding model, but look for opportunities that can assist with meeting compliance with operating regulations.

ENVIRONMENTAL PROTECTION PROGRAM



Environmental resource protection is an important goal of Oregon State University. Environmental Health & Safety (EH&S) serves the campus community and helps preserve the surrounding environment by managing air discharges, storm water runoff, above ground and underground fuel storage, performing environmental surveys, overseeing site cleanups, and wetland mitigation. EH&S assists the campus in compliance with local, state, and federal regulations related to the Clean Water Act, the Clean Air Act, and many other environmental regulations.

EXPOSURE

The environmental protection field is highly regulated within the following subprograms, with each program possessing specific regulations and permitting agencies:

- Air emissions permitting
- Underground storage tanks
- Spill prevention planning
- Site remediation
- Waste discharge permitting
- Storm water/waste water protection
- Education and Interdisciplinary Research review
- Due Diligence surveys

In addition to regulatory exposure, public health protection is key to a successful environmental resource protection program. Discharges from OSU facilities as well as existing environmental conditions are mitigated to minimize or eliminate public health issues.



SUCCESSSES



OSU Energy Center's state air discharge permit is in full compliance with regulations.

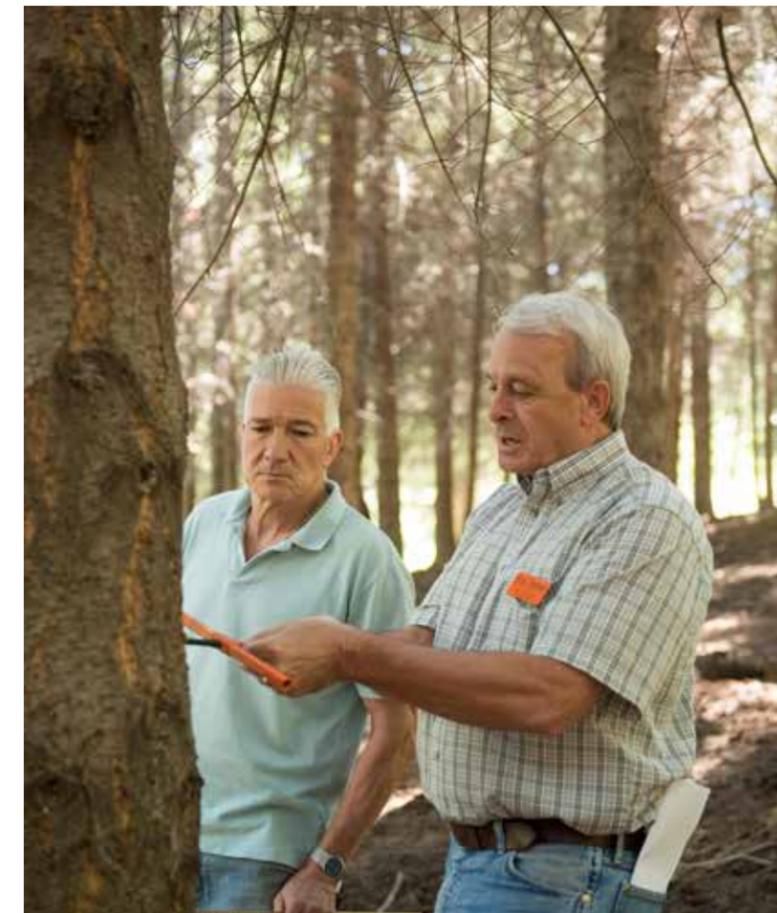


EH&S continues to support OSU's capital construction program with environmental site surveys.



Recent environmental project work performed by EH&S occurred for the following sites:

- Learning Innovation Center
- Johnson Hall
- Black Cultural Center
- OSU Heat Plant
- Medford Station site
- Pocket Park
- Poultry Barn and other potential properties



ISSUES IDENTIFIED

Increase documentation of all environmental sites and storage tanks and collaborate with Department of Environmental Quality for best practices.

Site cleanups are addressed on a case by case basis and, when feasible, are incorporated into existing capital projects.

Continuing need for environmental surveys.

NEXT STEPS OR RISK CONTROL

- Continual collaboration in the capital planning process to identify environmental risk exposures for projects.
- Maintain close working relationships with OSU facility operators.

FIRE & LIFE SAFETY



The fire and life safety program at OSU seeks to protect the safety of people and property across the University. Programs and policies are implemented to ensure the Oregon Fire and Building codes are complied with, as well as both federal and state OSHA codes. Program implementation requires daily effort from EH&S staff and work consists of routine and construction inspections, training of personnel, and equipment maintenance and installation.

EXPOSURE

- The fire and life safety program touches every aspect of campus life. All OSU faculty, staff, and students are exposed to unsafe conditions if fire prevention is not properly managed. Additionally, approximately 8 million square feet of Corvallis campus buildings are exposed to greater loss without a viable fire and life safety management program.



SUCCESSSES

The fire and life safety program relies on extensive site visits and collaborating with building occupants and campus departments. Below are some of the EH&S staff's last year's accomplishments:

- 2059 Fire extinguishers were inspected monthly.
- 350 Fire extinguishers were hydrostatically tested.
- 11 Kitchen fire suppression systems maintained.
- 139 Laboratory fire suppression systems maintained.
- 25 AED units inspected monthly.
- 100 Building fire prevention inspections were conducted.
- 125 Building fire prevention re-inspections were conducted.
- 5 Off-campus fire prevention inspections conducted.
- 35 Fire prevention permits issued for campus events.
- 11 Permits issued for new fire protection systems.
-  Provide fire safety training to Residence Hall Assistants each fall.
- 150 UHDS staff members trained on fire prevention topics.
- 10 Hosted fire safety booth for 10 freshman START sessions.
-  Worked with Athletics to provide fire safety management of all home football games.
-  Provided fire and life safety management during the annual Commencement ceremonies.
- 63 Installed 63 seismic natural gas shutoff valves on 60 buildings.

ISSUES IDENTIFIED

Corrections made by the building occupants and departments after a fire prevention inspection are improving but could improve further. EH&S will continue to work with all responsible parties to develop a more rapid follow-up process.

10 buildings on the core campus need an upgrade and/or load test of the exterior fire escapes.

Chemical storage in some buildings has exceeded the mandated occupancy limits.

NEXT STEPS OR RISK CONTROL

- Continue EH&S follow-up inspections after the initial building fire prevention inspections to ensure the necessary corrections are made.
- Fire escape upgrades for 10 buildings on the campus core will be completed by Fall 2016.
- Practice fire drills and emergency evacuations.
- Focused building fire inspections on chemical storage areas that exceed the occupancy limits for controlled areas.

HAZARDOUS WASTE



Extensive teaching and research conducted at OSU results in the generation of chemical, biological or radiological wastes. Disposal of this waste is required to be in compliance with all federal, state and local regulations. EH&S is notified of and removes these wastes from various locations on campus. Chemical waste is recycled on-site or packaged and shipped off campus for disposal in licensed hazardous waste disposal facilities. While there exists a myriad of complex laws and regulations governing hazardous waste disposal, EH&S' goal is to assist the campus community in safely handling hazardous wastes while allowing for efficient work flow.

EXPOSURE

OSU has approximately 1,618 laboratory spaces that generate and/or store hazardous wastes.

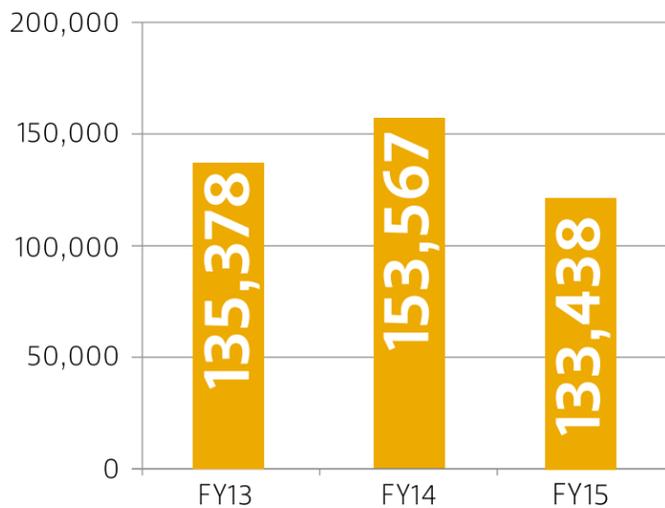
Most wastes must be removed and shipped from campus every 90 days.

Wastes are picked up by EH&S staff directly from the point of generation.

Wastes can include everything from spent solvents, acids, or gases to used syringes, oil or batteries.

As new buildings are constructed and as teaching and research functions increase at OSU, waste generation increases.

**Pounds of Disposed Hazardous Waste
FY13 – FY15 as of 6.30.15**



SUCCESSSES

- After proper characterization at the point of generation, wastes are directly removed by EH&S staff, safely transported to the EH&S Waste Facility, sorted, documented, and shipped for final disposal via our waste contractor.
- Customers are able to request a waste pick-up on-line with most wastes being removed within 3 business days.
- Safety is increased in the workplace by proper handling and disposal of hazardous wastes by EH&S trained personnel.

ISSUES IDENTIFIED

OSU generates a wide variety of hazardous wastes due to the diverse materials used within teaching and research settings.

Annual disposal costs fluctuate due to the variable type and volume of wastes generated.

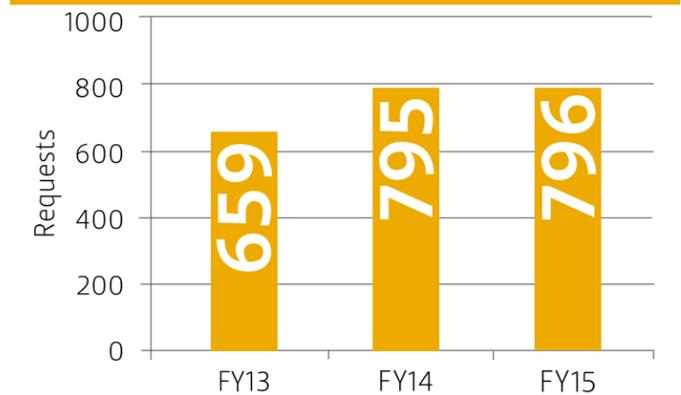
While FY15 costs were \$211,000, future costs may be higher or lower depending on many factors, such as the type of wastes, volume, and location.

Increased regulatory oversight by state and federal agencies that regulate hazardous waste will continue.

Need to conduct waste determination in the labs.

Additional education on labeling of wastes for PI's is needed and PI's will need to be more diligent in labeling and storing wastes properly.

**Number of Requests for Waste Disposal
FY13 – FY15 as of 6.30.15**



NEXT STEPS OR RISK CONTROL

- EH&S will be seeking expanded and mandatory training for lab staff.
- EH&S offers training in hazardous waste and labeling requirements for OSU faculty and staff.
- EH&S implemented an on-line training module for hazardous waste handling.
- Weekly audits of the OSU waste handling facility were commenced.
- Instituted a Chemical ReUse Exchange Program for OSU faculty and staff to recycle unused chemicals versus placing them into the waste system.
- Compliance efforts will be focused on OSU's waste handling facility and laboratory spaces where hazardous wastes are generated.
- Waste determinations are now being conducted at or near the point of generation.

RADIATION SAFETY



The Radiation Safety Program (RSP) manages all aspects of the use of radioactive materials (RAM) under OSU's Oregon Radioactive Materials License, all registered radiation generating machines (x-ray machines), and oversees OSU's Laser Safety Program for Class 3B and Class 4 lasers. RSP manages these programs under the direction of the OSU Radiation Safety Committee. Our goal is to provide safety and control measures in accordance with OSU's philosophy to keep personnel, public and environmental exposures as low as reasonably achievable (ALARA), and to comply with local, state and federal regulations. RSP staff are an integrated part of the EH&S team, and committed to an effective and comprehensive safety culture at OSU.

OSU's TRIGA nuclear reactor is under a separate federal license, and is managed by the Reactor Operations Committee (ROC) and Radiation Center staff. RSP maintains a seat on the ROC, to facilitate cooperation and coordination between these two separate programs.

INSPECTIONS

Radiation Safety Program conducts annual inspections of all OSU labs using radioactive material. Compliance checks include contamination surveys, proper postings, security, and safety training of lab personnel.

All x-ray units are inspected every year. Each machine is checked for shielding integrity and operational checks on safety interlocks, and required postings and operator training is verified. In addition to Radiation Safety surveys, medical diagnostic machines in Student Health Services and Veterinary Medicine are surveyed annually by an outside contractor to verify machine performance is within specifications required by regulations.

Safety assessments for labs using Class 3b or Class 4 lasers are part of the new Laser Safety Program. Assessments include verifying protective eye wear for each type of laser radiation used in the lab, operator training, and lab postings.

SUCCESSSES

- 31 New or amended radiation use authorizations processed
- 5 Authorizations for radioactive material use on board research ships
- 52 ft³ of radioactive waste shipped for disposal
- 81 Programs audited
- 176 Rooms surveyed for radioactive contamination
- 36 Sealed sources tested as part of the semi-annual leak test program
- 21 Faculty, staff, and students trained for use of radioactive material (non-sealed sources)
- 129 Faculty, staff, and students trained online for use of lasers, x-ray machines and sealed radioactive sources
- 4 Online courses developed and maintained by Radiation Safety staff

Efficiencies gained:

Dosimetry program: Radiation Safety determined about 90% of the personnel radiation dosimeters in the analytical research x-ray program were redundant and removing them resulted in significant reduction of administrative time for Radiation Safety staff and researchers. A careful analysis was conducted to assure radiation exposure risk to these users remained very low without these extra dosimeters.

Audit program: Combining the radiation lab inspections with program audits resulted in increased oversight of licensed activities in the labs, and clearer communication with lab managers regarding program responsibilities.

NEXT STEPS OR RISK CONTROL

The Radiation Safety Program continues to realign programs to reflect the changing research environment. Radiation Safety staff are streamlining administrative processes for managing programs less frequently used in today's research environment, such as unsealed radioisotopes, and focusing on growing programs that need more attention such as laser safety, x-ray machines, and working with EH&S on the laboratory safety assessment program.

The OSU Radiation Safety Committee was designated the oversight committee for the OSU Laser Safety Program, which was developed in response to increased use of research tools utilizing hazardous laser radiation, recognition of the need for guidance on laser safety for researchers using this potentially very hazardous technology, and in anticipation of increased oversight by the State of Oregon of laser safety programs. The OSU Laser Safety Manual and Laser Safety Checklist were written to support this program. Radiation Safety has begun assessing laser safety in OSU labs.



OCCUPATIONAL SAFETY



The Occupational Safety Program is responsible for the development and management of programs consistent with general industry standards, best practices, and regulations put in place to reduce work-related injuries and illnesses.

The program assists departments in implementing health and safety programs by advising unit safety committees and personnel, assessing hazards, investigating reports of unsafe conditions, and assisting in training, instruction, and document development.

In addition, the program investigates work-related incidents, provides review and development of University Safety Policies and Procedures, serves as liaison to regulators and the workers' compensation insurance carrier, and analyzes trends in an overall effort to pro-actively mitigate occupational hazards.

EXPOSURE

All personnel are required to receive a minimum of initial and recurring duty-specific training.

All power tools and industrial-scale equipment are to be regularly inspected and maintained.

Musculoskeletal disorders resulting from overuse and repetitive motion, and general wear and tear from daily activities, both industrial and non-industrial.

Falls from heights, uncontrolled de-energizing of equipment, unguarded machinery, extreme environments, welding & related activities and improper use/adoption of personal protective equipment.

ISSUES IDENTIFIED

Last extensive inventory and assessment of cranes and hoists conducted in 2003, new assessment is currently in progress.

Current inventory and assessment of powered industrial trucks is underway to ascertain locations and training needs.

University policy on Hot Work guidelines have been updated and implemented.

University policy on remote site/field work safety planning and emergency response is underway.

A comprehensive program for accessing building roofs is required.

Development of a University policy and Shop Safety program has been initiated.

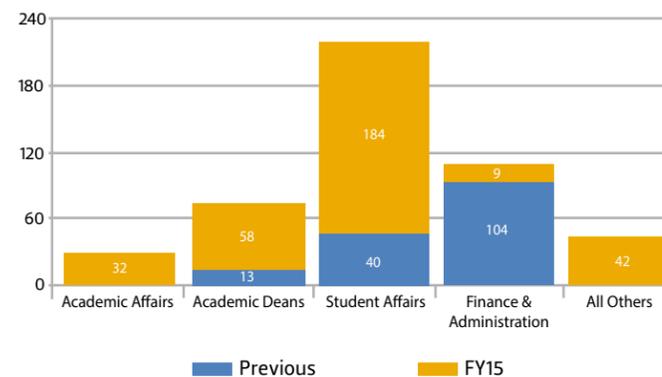
Develop and integrate departmental and College level safety advisory groups with the University Health & Safety Committee.

SUCCESSSES

EH&S, in partnership with SAIF Corp., is now offering Safety In Motion[®] (SIM4[®]) training FREE to all campus employees. SIM4[®] techniques are proven to reduce physical stress and strain, boost balance and strength, and improve productivity. Participants learn to make simple, practical changes in the way they reach, lift, carry, push, or pull. These changes make most tasks both easier and safer, on or off the job, and improve our quality of life.

Area	# of SIM4 [®] Trainers
UHDS	8
Finance & Administration	4
Vet Med	3
Outreach & Engagement	2
Student Health Services	2
Memorial Union	1
Rec Sports	1
Library	1
Total	22

Number of Employees Trained in Safety In Motion[®] /SIM4[®]



Launch of Ergonomics web site.

ehs.oregonstate.edu/ergonomics

- 124 employees and students trained in principles of ergonomics and space design.
- 283 employees Safety In Motion[®] /SIM4[®] trained.
- 70 ergonomic assessments of employee workstations completed.
- 23 Safety In Motion[®] /SIM4[®] Trainers certified.

NEXT STEPS OR RISK CONTROL

- Continue to support the University Health & Safety Committee, as well as provide training opportunities for committee members.
- Champion full integration of local safety ownership through committees and/or meetings.
- Finalize and implement outstanding policies and programs for high risk activities.
- Present data analysis to departments in order to better determine effective mitigation strategies.
- Recruit additional Safety In Motion[®] /SIM4[®] Trainers.

EDUCATION & TRAINING RESOURCES



The diversity of teaching, research, and public service that occurs within Oregon State University is both significant and extensive. The people that create this diverse activity includes thousands of employees engaged in a variety of working environments, often using highly specialized tools and equipment. To support faculty and staff in these endeavors, Environmental Health and Safety (EH&S) provides education and training resources related to the working environments and needs.

EXPOSURE

- OSU employees participate in a variety of potentially hazardous activities in the field, laboratory, and industrial settings, where lack of adequate training could cause personal injury or damage to property or equipment.
- Federal and State environmental health and safety regulations require initial and refresher training for all employees.
- Many University permits and licenses, government agencies and non-government organizations require employee training and proficiency.
- In order to accomplish the University's mission of teaching, research, and public service, employees must be trained in areas related to environmental health and safety.

SUCCESSSES

EH&S provides a variety of education and training resources for OSU faculty and staff. Education and training highlights for FY15 include in-person presentations, seminars, guest-lectures, and on-line training offerings to engage a variety of learning modalities.

Program Specific Trainings

Topic	# of employees trained
Biohazards	666
Hazardous Materials Shipping	30
Laboratory Safety	713
Occupational Health	576
Occupational/General Safety	1263
Radiation Safety	383
Hazard Communication	979
Animal Handler	487
Respirator	158
Hazardous Waste	430

Other unique training offerings included:

- Department Safety Coordinator's seminars.
- Biosecurity drills.
- Guest lectures for Public Health and College of Agricultural Sciences.
- Emergency response team training.
- OSU Training Days.

NEXT STEPS OR RISK CONTROL

- Improve existing and develop additional courses to meet the growing training needs of OSU's employee population.
- Utilize new PI Lab Registration Tool and Training Needs Tool to identify and prioritize training needs for department programs.
- Expand online delivery of courses to allow flexibility and increase accessibility for employees receiving the training.
- Educate supervisors on mandatory training requirements as defined in employees' job description and ensure completion of training is documented.

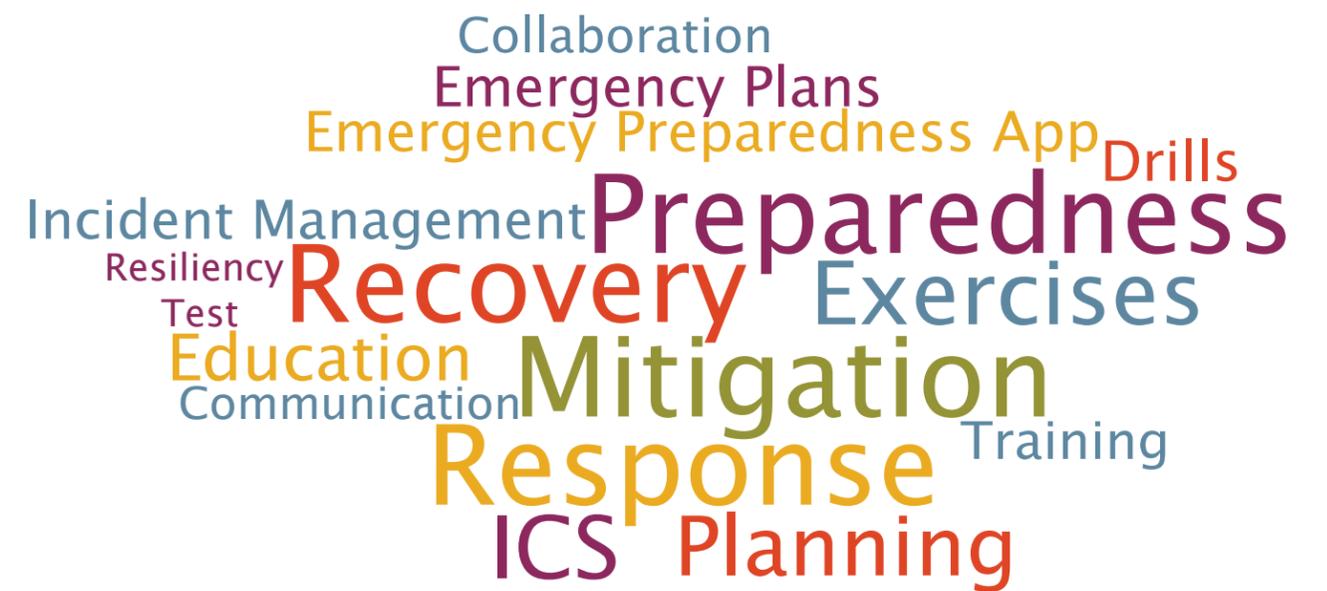
ISSUES IDENTIFIED

Supervisors need to identify work tasks and associated training requirements of their employees and consult with EH&S when appropriate.

Opportunity to increase utilization of EH&S training resources, especially in the area of laboratory safety.



EMERGENCY MANAGEMENT



A word cloud of emergency management terms. The words are arranged in a roughly rectangular shape, with 'Preparedness' and 'Recovery' being the largest and most prominent. Other words include 'Mitigation', 'Response', 'Exercises', 'Incident Management', 'Education', 'Communication', 'ICS', 'Planning', 'Collaboration', 'Emergency Plans', 'Emergency Preparedness App', 'Drills', 'Resiliency', 'Test', and 'Training'. The colors of the words vary, including shades of purple, blue, green, yellow, and red.

Collaboration
Emergency Plans
Emergency Preparedness App
Drills
Incident Management
Preparedness
Resiliency
Recovery
Exercises
Test
Education
Communication
Mitigation
Response
Training
ICS
Planning

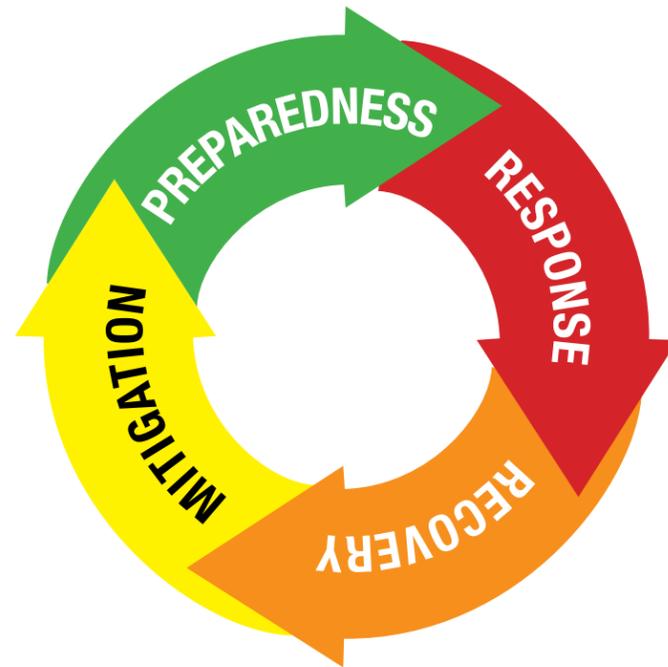
EMERGENCY MANAGEMENT



The Emergency Management Program coordinates the integrated preparedness for crisis response of University incidents and the management of consequences resulting from the incidents.

Working with Colleges/Departments, plans and localized programs are developed to implement the four phases of emergency management - preparedness, response, recovery and mitigation - for each entity, thereby increasing the resiliency of each program.

Periodic drills and exercises are conducted to train, test, and improve personnel capabilities and systemic plans.



EXPOSURE

- 9,986 Faculty/Staff (headcount)
- 26,599 Students
- Multiple events with public participation (athletic events, conferences, concerts, lectures, camps)



SUCCESSSES

- ⚡ Monthly Emergency Preparedness Topic education campaign established
- 20 Departmental Emergency Plans completed
- 25 Emergency Preparedness presentations conducted
- 13 Exercises conducted
- 3 Campus Clery Drills completed
- 300 OSU radios upgraded and standardized to allow routine and emergency communication
- 📄 OSU Flood response plan completed
- 🌀 Awarded a FEMA Natural Hazard Planning grant to conduct hazard and risk evaluation

Evacuation drills & OSU exercises conducted - FY15	
Drill - Evacuation	84*
Exercise - Tabletop	5
Exercise - Team	7
Exercise - Field	1

* Residence halls

ISSUES IDENTIFIED

- Finalization of University Emergency Operation Plan Development of University level response team to support field response teams.
- Upgrade of OSU Alert emergency communication (emailing, phoning, texting) system.
- Review of Emergency Preparedness components of Clery Act program to ensure compliance.
- Conduct a University hazard analysis to identify OSU building risk to natural hazards in the region.

NEXT STEPS OR RISK CONTROL

- Implementation of FEMA Natural Hazard Planning grant to conduct hazard and risk evaluation.
- Complete vendor selection and implementation of OSU Alert upgrade.
- Finalize University Emergency Operation Plan.
- Identify and begin training Emergency Operation Center response capability.



FY15 SUCCESSIONS

NEXT STEPS



Reduction in Workers' Compensation insurance premium based on NCCI class code assignments.



Continued utilization of the Risk Assessment Tool developed in FY14, and invited to deliver a presentation on Risk Assessments at the RIMS national conference in 2016.



Sixty three seismic gas shutoff valves of 60 buildings protecting the buildings and contents against the maximum foreseeable loss for these particular buildings of over \$1 billion.



Conducted a significant number of radiological, biological, and occupational safety classes for students, faculty and staff to impart knowledge and outline safety expectations.



Emergency Management was awarded a FEMA Natural Hazard Planning grant to conduct hazard and risk evaluation.



Acquired and promoted a "just-in-time" emergency reference for phones/mobile devices.



Launch of Ergonomics web site.



SAIF recognized OSU has one of the highest Employer-at-Injury Program (EAIP) wage reimbursement agencies in the state.



Increased personnel in Enterprise Risk Services to support the University's needs related to safety, risk management and emergency management.



Risk Management was awarded a \$4,000 grant to fund a student intern in Risk Management.

Programmatic assessment and risk reduction tools were developed to assist University departments and units with planning, risk management and regulatory compliance:

- Risk Assessment Tool
- Emergency Management Template
- Laboratory Assessment and inspection database
- Chemical handling and management program
- Obtaining insurance endorsements to existing insurance to support unique University needs
- Subsea/Over the Side Insurance Program

Enterprise Risk Services endeavors to support the University's mission through building a comprehensive risk management culture that begins with risk identification, risk assessment and risk control with the overall intent of protecting students, faculty, employees, and University property and resources.

Risk Management will be fully supporting and a key element in OSU's Enterprise Risk Initiative, via our risk assessment data, creation of risk registers to identify and prioritize University risks, and further by preparing quarterly risk/claims reports which identify current exposures and significant ongoing trends facing the University. Such efforts will lead to viable solutions and risk controls being placed to reduce the University's risk.

The issues identified throughout this report, and specifically laboratory safety, chemical handling and disposal and emergency management, will remain a high priority. Assessment tools, such as the Risk Assessment and the Laboratory Assessment, will continue to be used at a greater frequency to reduce the University's exposure and increase safety. Students, faculty and employees will be encouraged to use self-assessment tools, will have access to training and educational tools, and will be reminded that everyone has accountability in risk management and the safety of one another and one's self.

Enterprise Risk Services looks forward to working with the University community in this coming year.

