

Annual Report for Fiscal Year 2012 – 2013

ENVIRONMENTAL HEALTH & SAFETY

Introduction

The Office of Environmental Health and Safety was created in 1987 to consolidate related program areas. The Department is responsible for meeting the requirements of several regulatory agencies and for ensuring a safe work environment for all University staff, students, faculty and visitors. The Department serves as resource center for other departments regarding regulatory requirements and as liaison with regulatory agencies.

Mission

The Service Mission of the Office of Environmental Health and Safety is to provide to our customers: services that are courteous, high quality and expeditious.

The Department is dedicated to preserving and protecting the health and safety of students, faculty, staff and visitors as well as the assets of the University. The Department is dedicated to preserving the overall environment by minimizing the impact the University has on the external environment while enhancing the quality of the University's environment.

Vision

Our vision at IUPUI is to be recognized as one of the nation's best urban universities. IUPUI will not be recognized as such, unless the University demonstrates a strong commitment to protecting the health and safety of employees, students and the public as well as protecting the environment. Our goals are to have a workplace free of injuries and hazardous exposures, to prevent or minimize any adverse impact to the environment, to provide services of the highest quality to all associated institutions and to be recognized as leaders in the areas of environmental protection, health, safety and fire protection.

Strategy

The mission is accomplished by departmental staff providing technical guidance, compliance assistance, quality assurance, remediation oversight, and training to the campus community, associated institutions and the general public when appropriate. Departmental staff strives to manage environmental, health, and safety issues by giving them the highest priority, utilizing best management practices and adhering to departmental values.

Department Values

Staff will practice their profession by following recognized scientific principles and management practices, factually informing affected parties of their findings in an honest, straightforward manner, exhibiting the highest level of integrity, honesty and empathy, while never compromising the public's welfare. Staff will strive to be involved in continual education and professional development, to provide superior customer service in all areas, to perform service only in the areas of their competence and maintain information as confidential when appropriate.

Department responsibilities include:

Chemical waste management

Infectious waste management

Community right-to-know

Emergency response for hazardous materials releases

Management of asbestos

Compliance with environmental regulations

Biological Safety

Laboratory safety

Worker's health and safety

Hazardous material spill cleanup

Investigation of complaints regarding building air quality

Wishard Hospital compliance

IU Health Partners, Inc. compliance

Summary of Activities for 2012-2013

Overview

All areas continue to provide services at an acceptable level. As new university space is added, new demands are created and new resources are needed. A process is in place to fund additional services to meet the growing needs.

The Department web page continues to be updated and improved to provide campus personnel easy access to information.

Staff served on the campus Sustainability Advisory Committee as Co-chair and three subcommittee co-chairs: Land Air and Water, Public Health, Transportation and Waste Minimization and Recycling.

For the last fifteen years, the Department has provided services to Indiana University Health Partners through a contract. Most services this department previously provided to University and Riley Hospitals are now provided to University, Riley and Methodist Hospitals, IU Health Beltway facilities and other clinics and hospitals as requested. The contract has been successful for both IUPUI and Indiana University Health and is expected to continue.

Fiscal Year 2012-2013

The Department continued to provide services to Wishard Hospital for the seventeenth year under a contractual agreement.

The Department continued to provide services to IU Emerging Technology Center for the 4th year under a contractual agreement.

During this year, staff attended various training seminars and conferences to advance their technical knowledge and continued leadership roles in professional organizations.

Rich Strong co-chairs the Sustainability Steering Committee, chairs the Transportation subcommittee and co-chairs the Recycling and Waste Minimization subcommittee.

Rich Strong chairs the Quality Physical Environment task force.

Rich Strong served on the Board of Directors of the Campus Safety Health and Environmental Management Association (CSHEMA).

Most department staff members participate in monthly Hazardous Material Response training and members of Radiation Safety, IUPUI Police and Fire Protections Services are also invited and regularly attend the sessions.

Fiscal Year 2012-2013 Continued

Department staff provided regularly scheduled training in: New Employee Safety Orientation (weekly), Bloodborne Pathogen (bi-weekly), Laboratory Safety (monthly) and Biosafety (monthly). Number of employees trained by class:

New Employee Orientation	279
Bloodborne Pathogen	1944 (includes on-line)
Laboratory Safety	583 (includes on-line)
Biosafety	80
Shipment of Biological Materials	132 (includes on-line)
Total	2711

Several other training courses were conducted throughout the year. The class type and quantity of people trained are listed in the appropriate program.

Asbestos Management

The Environmental Health and Safety Asbestos Program (EHS) is mainly responsible for performing asbestos building surveys, mold and asbestos area inspections and professionally consulting CFS Maintenance activities, University Architect projects and Contractors who might encounter asbestos-containing materials during the course of their work. When necessary the EHS Program coordinates and designs the safe procurement of said hazardous materials. The In-House EHS Program saves substantial money by not having to contract subject work.

Assessment of Objectives for Fiscal Year 2012-2013

The EHS Asbestos Program completed 75 asbestos abatement projects during Fiscal Year 2012-2013. Additionally the Program performed 21 mold remediation projects, hydraulic oil capture/disposals and several construction containment-buildings and cleaning projects. The Program completed said projects on several different sites, which include; IUPUI, IU Bloomington, IU Columbus, IU East (Richmond), IU Health in Lafayette, IU Kokomo, and in both Wishard and Methodist Hospitals.

Subject work generated 34.25 tons of asbestos waste and 9.78 tons on non-hazardous waste. A total of 255 air samples were taken. Several projects were inspected by The Indiana Department of Environmental Management (IDEM) and there were no citation issued.

Biosafety Management

Maintained and further developed the IUPUI Biosafety Program into a respected and widely available resource, e.g., EHS Biosafety representation on 15 committees and the Biosafety Manager serves as Subject Matter Expert on Biosafety for the Office of Research Compliance as well as the Indianapolis FBI Field Office.

Served as the Chair of the VAMC BL3 Safety Subcommittee.

Bloodborne Pathogen training was given to 1944 new and existing IUPUI employees. This included staff participation in the online Bloodborne Pathogen Training module and represents a small decrease of trainees over last year. Training sessions were scheduled twice per month and were also presented at other sites by request. Specialized Bloodborne Pathogen Training for CFS was presented to 54 staff. The IUPUI Biosafety Training session was given to 80 IUPUI employees which is a decrease from the past year. This may be attributed to the lack of an annual refresher requirement. IATA/DOT Biological Shipping Training was presented to 20 staff. The total number of IUPUI employees trained this year was 2098.

Biosafety inspections were completed for 176 laboratories awaiting final approval for Institutional Biosafety Committee submissions. These were performed to ascertain compliance of NIH Biosafety Level 2, 2+ BL3 precautions, or 3 compliance guidelines. On an annual basis, IUPUI's annual biosafety lab inspections continued as planned and the Inspection Summary Reports were again utilized. A database listing the laboratories using biological materials was maintained. Laboratories were characterized as Biosafety Level 1, 2, 2+, or 3. The number of laboratories inspected this year was 386. The total number of laboratory and IBC inspections was 562.

The Biosafety Program Staff engaged as active voting members of the Institutional Biosafety Committee, the VAMC Research Safety Committee, the VAMC Research and Development Service Safety Subcommittee, the VAMC BL3 subcommittee (Chair), the School of Medicine Institutional Animal Care and Use Committee (IACUC), the School of Science IACUC, the Dental School IACUC, The Methodist Research Institute Animal Research Committee, the Biohazard Compliance Committee, the IUSOM Security Planning Committee, the Methodist Research Institute Institutional Biosafety Committee, the IUPUI Laboratory Safety Committee, and as a staff of three Biosafety Professionals 598 research proposals or amendments were read and/or reviewed.

Jim Klenner served as the Team Leader of the Membership Leadership Team for the American Biological Safety Association and was active in the Affiliate Relations Committee.

Maintained communication with the Special Agent at the Indianapolis Field Office acting as the WMD Coordinator as well as several counter-intelligence analysts. The Biosafety Manager continued to serve as the Subject Matter Expert for the FBI in the Central Indiana area. Serves as the official liaison between the FBI and the American Biological Safety Association.

Biosafety Management Continued

Continued working with the Office of Research Compliance, the Biosafety Program reviewed and offered revisions to current protocol submission forms for the Institutional Biosafety Committee.

Continue to present bloodborne pathogen training to IU School of Nursing incoming students during orientation programs.

The Biosafety Manager continued to serve as the First Vice President on the IUPUI Staff Council Executive Committee. He also participated in the IUPUI 2025 Strategic Plan and helped lead the streamed Town Hall.

The Biosafety Manager participated in a “Twinning” project and travelled to Antalya, Turkey. The purpose was to mentor a biosafety professional from another country and this was fully funded by Sandia National Laboratories.

The biosafety staff wrote and published an article for the quarterly Lab Notes distributed to the IUPUI research community.

Assessment of Objectives for Fiscal Year 2012-2013

The Biosafety Program will be revising and updating the IUPUI Biosafety Manual.

New sections were completed and further revisions may continue as future needs develop.

The Biosafety Program will create and promote the following university wide training modules for E-Train: Bloodborne Pathogens for Research and Clinical Staff, Bloodborne Pathogen Training for Non-Laboratory Staff, Institutional Biosafety Committee Training for Principal Investigators and Research Staff.

Completed both bloodborne modules for E-Training. The bloodborne pathogen module for research staff was updated during the year as well. Institutional Biosafety Committee training for research personnel is in final production from the Office of Research Compliance for E-Training.

Develop a Memorandum of Understanding between the RLR VA medical Center and the IUPUI Biosafety Program.

Initiated and evaluation through upper management continues.

Investigate available or IUPUI developed database(s) that allow for more interactive and user-friendly processes. The database would contain data such as Principal Investigator names, labs, biosafety levels, biohazards, etc. The spreadsheet currently in use is quite large and can be cumbersome to update and maintain.

Ongoing as the database development continues to evolve as needs arise.

Objectives for 2013-2014

The Biosafety Program will collaborate with the Office of Research Administration and assist with refining and possibly providing the narration for the IBC staff training to become available on E-Training.

The Biosafety Program will work closely with the Office of Research Administration to develop a better means of tracking other training requirements, i.e., Biological Shipment and IBC training for staff, beyond Bloodborne Pathogen Training compliance, utilizing E-Training and as a prerequisite for protocol approval.

The Biosafety Program will develop a comprehensive policy of biological waste disposal. This will apply to research labs of all biosafety levels.

Continue to revise and potentially add sections to the IUPUI Biosafety Manual.

Create training for implementation on E-Training on autoclave use and safety.

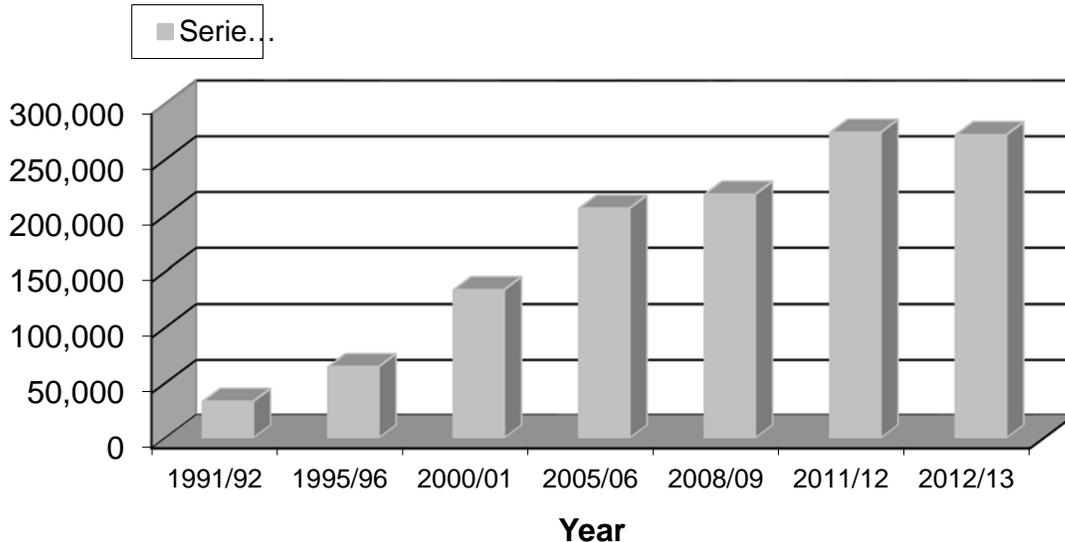
Initiate routine evaluation of training evaluations as a metric for monthly and annual reporting.

Environmental Compliance Program

Environmental Compliance Program

Staff coordinated the collection and disposal of 272,043 pounds of chemical-related materials.

Figure 1 Chemical Waste Managed by Fiscal Year



Environmental Compliance Program Continued

Staff conducted numerous field investigations, including response to chemical spills, for the University, Indiana University Health Inc. and Wishard Hospital.

Staff pursued a broad-based environmental compliance program. The program strives to ensure continued compliance with federal, state and local regulations in the following areas:

- Air pollution compliance
- Biomedical waste management
- Chemical waste disposal
- Environmental health compliance
- Emergency planning for hazardous materials releases
- Emergency response for hazardous materials releases
- Hazardous materials transportation compliance
- Municipal solid waste
- PCB compliance
- Storm and wastewater compliance
- Underground and aboveground storage tank compliance
- Wellfield Protection

IUPUI

Staff continued with measures to upgrade the 1200 Waterway Boulevard Building to serve as the primary interim campus hazardous waste accumulation area. Staff secured privacy screening for the space, worked with Campus Facility Services to enhance ventilation in the area and increased security at the 1200 Waterway and Campus Services #4 facilities.

Staff facilitated a Request for Proposals for the campus, Indiana University Health and Wishard hazardous waste needs. Staff secured a two year contract with a new hazardous waste disposal vendor resulting in an estimated 10% savings over the previous campus contract. Staff facilitated the transfer of services to the new contractor.

The campus underwent a comprehensive hazardous waste inspection by the Indiana Department of Environmental Management during the reporting period. While the departmental hazardous waste operations were found to be compliant, a number of in-laboratory deficiencies were noted by the agency. Staff worked in partnership with the departmental laboratory safety program on measures to correct the noted deficiencies including weekly compliance inspections in the departments where the deficiencies were noted, school-wide refresher training sessions, consultation with the campus Laboratory Safety Committee and educational articles in the campus laboratory safety newsletter, *LabNotes*.

Staff completed a comprehensive mercury evaluation of the Dental School complex in preparation for the School's triennial accreditation survey. Staff evaluated sewer and air discharges as well as other mercury handling practices in the facility.

Environmental Compliance Program Continued - IUPUI Campus Continued

Staff maintained a comprehensive air pollution permit for the campus. All sources of air pollution associated with campus activities are identified and potential emission estimates calculated and updated annually. Staff evaluated the application and impact of the Reciprocating Internal Combustion Engine (RICE) and Boiler rules for the campus. Staff worked with Campus Facility Services to develop a long-term strategy for the campus' emergency generators to ensure continuing compliance with the RICE rules.

The campus underwent a comprehensive air pollution compliance inspection by the Indiana Department of Environmental Management during the reporting period. No deficiencies were noted. Staff initiated discussions with appropriate University officials to include the Wishard Hospital complex emission sources into the campus air pollution strategy. Staff continues to monitor the addition of emission units on campus and will upgrade the permit as appropriate.

Staff evaluated a prototype biomass gasifier device for general safety and air pollution permitting requirements for the Richard G. Lugar Center for Renewable Energy. Staff assisted the Lugar Center in presenting information on the unit to nearby building occupants and in addressing safety and pollution concerns pertaining to the device.

Staff fully implemented an in-house biological shipment training program for campus personnel involved in the shipment of infectious substances and other biological materials. Staff fully implemented an on-line refresher training program for those employees previously completing classroom training. Two hundred and one (201) University, Indiana University Health and Wishard personnel successfully completed classroom or on-line training during FY 2012/13. In addition to 8 quarterly training sessions, staff facilitated 6 department-specific training sessions at the trainee's location.

Staff worked with IU Real Estate, Risk Management and Campus Facility Services in the evaluation and on-going compliance monitoring of a semi-public swimming pool located at the Chancellor's residence on Sunset Lane; a historic but antiquated swimming pool.

Staff ensured environmental compliance services for the Columbus Campus by providing biannual waste chemical disposal services and consultation as needed.

Staff assisted the University of Southern Indiana (USI) in addressing hazardous waste compliance deficiencies which had a direct effect on IU School of Medicine facilities/operations located on the USI Campus.

Staff provided support services for campus expansion and renovation projects. Staff facilitated chemical cleanouts of abandoned laboratories scheduled for renovation, and the move of laboratory chemical inventories to newly completed or renovated research buildings on campus.

Staff provided technical consultative services related to the Science, Engineering Laboratory Building and Stark Neurosciences construction projects.

Environmental Compliance Program Continued - IUPUI Campus Continued

Staff trained, instructed and otherwise provided guidance to campus personnel on the proper handling, transportation and disposal of biohazardous, chemical reagent and chemical wastes.

Staff coordinated campus Phase II Stormwater compliance efforts and reporting for the IUPUI campus.

Staff continually monitored campus special events for compliance with the campus Food Service Policy including student fund raiser events involving the sale of food on campus. Staff worked with University Architect's Office on the conversion of the University Hotel and Conference Center food operations.

Staff maintained an active, participating-role with the Marion County Hazardous Materials Planning Committee (MCHMPC). Staff served on the Metalworking Lubricants Odor Workgroups of the MCHMPC.

Staff continued the complete computerized management of chemical wastes derived from contractual entities which provides the ability to track each chemical waste item throughout the disposal process.

Staff utilized the services of two School of Public Health students during the review period. The students were provided comprehensive training on the transportation and the management of hazardous materials as well as other campus safety considerations. The students were afforded internship opportunities. Staff provided services as requested for the Indiana University Emerging Technologies.

Staff continued implementation of the campus Mercury Elimination policy for the campus formally adopted at the June 2006 meeting of the Laboratory Safety Committee and began full implementation on December 31, 2007. Staff continued the evaluation of requests for exceptions to the policy.

Staff continued co-chairmanship of the Sustainability Subcommittee on Air, Land and Water and reactivated the subcommittee. Staff reviewed, updated and finalized the following policies toward a sustainability campus: Mercury Reduction and Elimination, Waste Minimization and Pollution Prevention and Idling of Engines.

Staff served on the campus Staff Council and Staff Affairs Committee of the Staff Council.

Staff served on the Board of Directors for the Environmental Management Institute, a local environmental and safety training academy founded initially as part of the School of Public and Environmental Affairs.

Environmental Compliance Program Continued

INDIANA UNIVERSITY HEALTH, INC.

Staff served on the Environment of Care (EOC) Hazardous Materials and Waste Subcommittee.

Staff developed a comprehensive fluorescent lamp/ballast and battery disposal protocol/policy which was formally adopted as an institution-wide policy by Indiana University Health (IUH). Staff facilitated training of IUH maintenance staff. Staff was delegated responsibility for coordinating and facilitating monthly lamp, ballast and battery collections throughout the Indianapolis IUH system as well as the distribution of equipment and supplies.

Staff represented IUH environmental concerns during a mock Joint Commission accreditation survey in preparation for a September 2013 Joint Commission survey. No deficiencies were noted.

Staff served as a technical consultant to IUH regarding an outstanding underground storage tank concern at University Hospital dating back to 1989. The concern surfaced in 2012 in the form of an enforcement letter by the Indiana Department of Environmental Management. Staff researched and developed a formal response to IDEM on behalf of IUH and the campus. As a result of the response, IDEM dropped enforcement actions and closed the case.

Staff further refined a system-wide comprehensive Pharmacy waste disposal program for the Indiana University Health system. Staff continues to work with Indiana University Health to achieve an appropriate level of compliance within the various Indiana University Health facilities served by EHS. Staff incorporated the service needs of the IUH Saxony facility.

WISHARD HEALTH SERVICES, INC.

Staff served on the Environment of Care (EOC) Hazardous Materials and Waste Subcommittee.

Staff responded to chemical spills, performed other emergency response operations, investigated chemical odor complaints, and performed other general environmental investigations as needed.

Staff managed hazardous chemical waste from multiple Wishard-related facilities throughout Marion County, including the main campus.

Staff facilitated take-back pharmaceutical collections at 9 satellite Wishard healthcare clinics across Marion County

Environmental Compliance Program Continued – Wishard Health Services Continued

Staff assisted Wishard in evaluating air pollution permitting options for the existing hospital complex as well as the hospital facility. Staff assisted with quarterly reporting required for the facility's current air pollution permit.

Staff trained Wishard Pathology personnel in the proper shipment of infectious substances and diagnostic specimens.

Staff provided technical assistance to Wishard Pathology personnel in preparation for a Pathology Department accreditation inspection.

Assessment of Environmental Compliance Objectives for Fiscal Year 2012 - 2013

Incorporate service needs of the IU Health Saxony facility.

- Ongoing/completed. Staff providing services to Saxony as requested.

Continue the evaluation of the campus air permitting needs in preparation of the campus acquiring the existing Wishard campus and its various air pollution sources.

- Ongoing. Awaiting additional feedback from University officials on which portions of Wishard will remain operational after the University assumes possession of the Wishard campus.

Continue to pursue funding for tank retrofit projects for the ES, PE and IP facilities.

- Ongoing. Capital funding secured by Campus Facility Services to retrofit tanks at all three facilities. Tank evaluations and retrofits scheduled to take place during FY 2013/2014. Staff working with the University Architect's Office and Campus Facility Services on the project and will oversee environmental aspects of the project.

Revise Campus Waste Disposal Guidelines.

- Tabled due to staffing and other priorities. On-line training module was updated.

Develop ground and stormwater components for Departmental website under the Environmental Management section.

- Tabled due to staffing and other priorities.

Conduct quarterly meetings at a minimum of the Land, Air and Water Subcommittee of the campus Sustainability Committee. Develop policies, educational materials, etc. as appropriate.

- Ongoing.

Assessment of Environmental Compliance Objectives for Fiscal Year 2012 – 2013 Continued

Facilitate system-wide training of IU Health maintenance personnel on new Lamp/Ballast/Battery disposal protocol/policy.

- Completed. Four training sessions were facilitated at each of four IU Health metropolitan facilities. In addition to facilitating training, staff was delegated responsibility for coordinating and facilitating monthly lamp, ballast and battery collections throughout the Indianapolis IUH system as well as the distribution of equipment and supplies.

Environmental Compliance Objectives for 2013 – 2014

Facilitate survey of Wishard complex for chemical wastes and other hazardous materials and physical hazards. Facilitate disposal of all remaining hazardous materials on behalf of Wishard.

Incorporate enhanced Indiana University Health pharmaceutical waste program into IUH service needs if selected by IUH to manage this waste stream.

Continue the evaluation of the campus air permitting needs in preparation of the campus acquiring the existing Wishard campus and its various air pollution sources.

Pursue funding for the additional of one full time technician employee.

Secure new box truck.

Revise Campus Waste Disposal Guidelines.

Complete six department-wide chemical waste training sessions complete with laboratory tours.

Develop ground and stormwater components for Departmental website under the Environmental Management section.

Industrial Hygiene/Occupational Health and Safety Program

Industrial Hygiene is the science of anticipating, recognizing, evaluating, and controlling workplace conditions that may cause workers' injury or illness. Industrial hygienists use environmental monitoring and analytical methods to detect the extent of employee exposure and employ engineering, work practice controls, and other methods to control potential health hazards.

The IUPUI Industrial Hygiene/Occupational Health and Safety program can be categorized into the following areas; personal exposure monitoring, indoor air quality, ergonomics, noise monitoring, air monitoring for known and unknown contaminants, respirator fit testing, hearing conservation, safety audits, construction safety, and training. Industrial hygiene/occupational health and safety staff includes a manager, one full-time employee and three part-time employees.

PERSONAL EXPOSURE MONITORING

The Industrial Hygiene staff completed fifty (50) personal exposure monitoring assessments for formaldehyde, glutaraldehyde, xylene, waste anesthetic gases, phenol, nitrous oxide, and/or silica dust for IUPUI, IU Health, and Wishard Health Services.

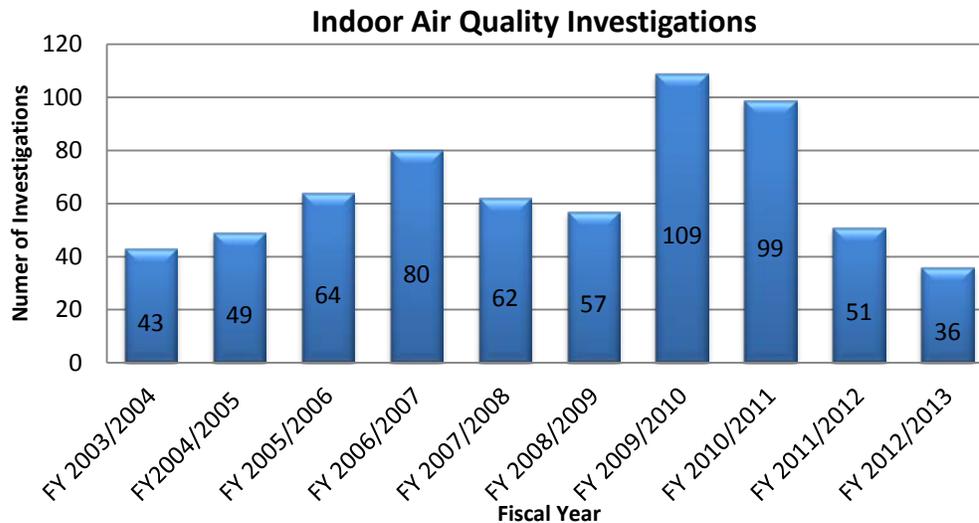
The evaluations and monitoring were completed to ensure compliance with federal regulations and consensus standards.

INDOOR AIR QUALITY

Indoor air pollution is caused by an accumulation of contaminants that come primarily from inside the building, although some originate outdoors. These pollutants may be generated by a specific, limited source or several sources over a wide area, and may be generated periodically or continuously. Common sources of indoor air pollution include tobacco smoke, biological organisms, building materials and furnishings, cleaning agents, copy machines, and pesticides.

Twenty-seven employees (27) completed the online Indoor Air Quality Questionnaire. Thirty-six (36) indoor air quality investigations were conducted within IUPUI, IU Health, and Wishard Health Services.

Methods of gathering information included employee questionnaires, interviews, air monitoring, and ventilation testing. Air monitoring included bioaerosol, carbon dioxide, temperature, relative humidity, particulate, and volatile organic compounds. Recommendations for improving air quality were made to those affected and to Campus Facility Services, IU Health Facilities or Wishard Hospital Facilities personnel.

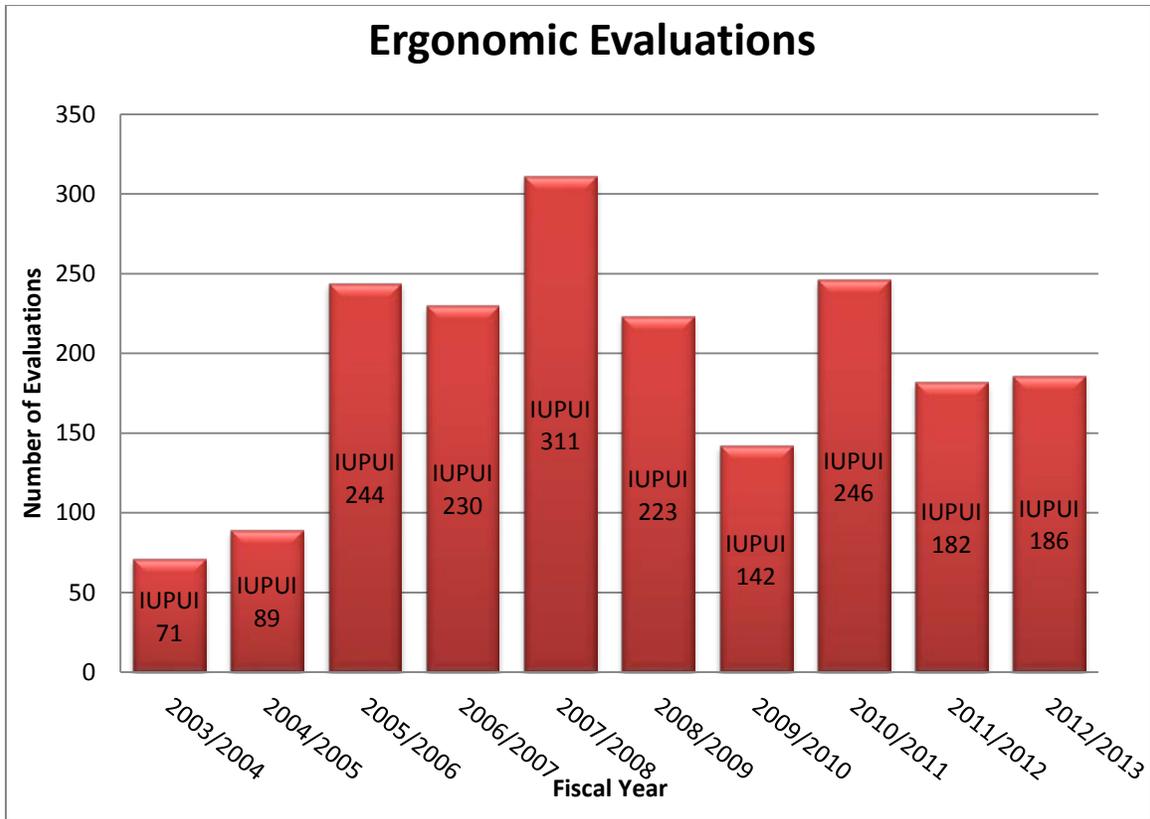


Industrial Hygiene staff provided support for approximately twenty-five (25) water intrusion situations within IUPUI and IU Health. Evaluations for the extent of water damage and the need to remove materials that were wet longer than guidelines allow were made in order to minimize or prevent mold contamination within buildings. Visual evaluations, moisture meter testing, and infrared camera readings were involved in these determinations. In some cases, air samples were collected to determine the presence of airborne mold contamination in the area.

The Indoor Air Quality Committee continued to meet monthly to discuss indoor air quality issues as they arise in buildings and how to best remediate those issues. Members of the committee include EHS, Campus Facilities Services and the School of Medicine.

ERGONOMICS

Ergonomic evaluations, including computer workstation and laboratory evaluations, and material handling/lifting were conducted and recommendations were made to limit ergonomic stressors for one-hundred eighty-six (186) reported instances. Devices for lifting and computer use were recommended. Training was also provided to the employees during the evaluations.



EHS continues to discuss ergonomics during New Employee Orientation. Employees are given the tools to assess their computer workstation. If needed, they are asked to contact EHS for assistance. EHS also received requests to conduct ergonomic assessments for entire departments as a proactive approach to ergonomics within the department.

The EHS ergonomic display room continues to grow and allows employees to view twenty (22) different chairs prior to purchasing. Examples of keyboard trays, monitor arms, and height adjustable workstations are also available in the display room. EHS began to collaborate with University Architects Office and Purchasing for both the IU Bloomington and IUPUI campuses to develop ergonomic program for new construction and renovation projects requiring the purchase of new office furniture and ergonomic equipment. EHS reviewed and approved approximately 15 chairs that meet the qualifications of an ergonomic chair to be specified during project design. The committee continues to work together to identify other approved ergonomic products.

Industrial Hygiene/Occupational Safety Program Continued

TRAINING

During FY 2012-2013, IH staff began to work with the Office of the Executive Vice President for University Regional Affairs, Planning, and Policy to implement the web-based training program; E-Training. Approximately twenty-five (25) training programs were reviewed and updated to Captivate. A new program for GHS Hazard Communications was developed for E-Train. Three-hundred eighty-four (384) Industrial Hygiene and Occupational Safety related training courses were taken on E Training during FY 2012-2013.

Industrial Hygiene staff conducted classroom training for Asbestos Awareness, Hearing Conservation, GHS Hazard Communications General Safety, Ergonomics, Forklifts (Classroom and Hands-On sessions), Aerial Lifts (Classroom and Hands-On sessions), Air-Purifying Respirators, Asbestos Awareness, N95 Respirators, Confined Space Entry, Lockout/Tagout, Hazard Communications, Back Safety, Slips, Trips, and Falls, and Personal Protective Equipment. Nine-hundred ninety (990) employees were trained during classroom sessions.

EHS staff continues to participate in the Campus Facilities Services New Employee Orientation Training Program. Training is conducted on a monthly basis for all new employees. Current employees attend as a refresher for topics which include general safety training, hazard communications, lockout/tagout, personal protective equipment, asbestos, bloodborne pathogens, back safety, and laboratory safety.

EHS continues to participate in the weekly IUPUI Benefits New Employee Orientation training. All new employees are trained on the services provided by EHS, ergonomics, back safety, emergency procedures, hazard communications, accident and injury procedures, and campus safety policies.

Industrial Hygiene/Occupational Safety Program Continued
 Training Conducted

Industrial Hygiene and Occupational Safety Courses Classroom Training	
Course Title	Employees Trained
Asbestos Safety Training for CFS Employee NEO	15
Aerial Lift Training	82
Back Safety Training for CFS Employee NEO	16
Ergonomics	187
Forklift Classroom	13
Forklift Hands-On	13
General Safety Training CFS Employee NEO	19
Global Harmonization System for CFS Employee NEO	16
Hazard Communication (GHS) Classroom Sessions	382
Hearing Conservation Training	115
Lockout/Tagout Training for CFS Employee NEO	8
New Employee General Safety Orientation - Classroom Sessions	279
Powered Air Purifying Respirators	8
PPE for CFS Employee NEO	15
Slips, Trips & Falls CFS Employee NEO	5
Skid Steer Loader – Classroom	4

Industrial Hygiene and Occupational Safety Courses Online E Training	
Course Title	Employees Trained
Anesthetic Gas Safety	17
Arc Flash Training	11
Back Safety Training	50
Contractor Safety	6
Electrical Safety - Working Around Live Circuits	8
Electrical Safety for the Qualified Worker	6
Formaldehyde Hazard Communication Training	26
GHS Hazard Communication Online Training	9
Hazard Communication Training	22
Hearing Conservation Training	21
Laboratory Animal Allergen Safety	21
LARC Ethylene Oxide Safety Training	9
Mold Awareness	7
Mower Safety	4
N95 Respirator Training	73
Portable Ladder Safety	7
Powered Air-Purifying Respirators	4
Respiratory Safety Training	5

Slips, Trips and Falls	15
Utility Cart Safety Training	69

RESPIRATOR FIT TESTING

Respirator training and fit testing was completed for EHS, Campus Facilities Services, Researchers, Indiana State Department of Health, IUPUI Police Department, and Lab and Animal Facility (LARC) employees. Employee training/fit testing sessions were completed for approximately two-hundred fifty (250) employees from IUPUI and IU Health. EHS staff assisted in fit testing residents and School of Medicine students for IUPUI Health Services.

INJURY AND ILLNESS REPORTING

Industrial Hygiene staff reviewed approximately three hundred (300) Illness/Injury Reports provided by IUPUI Health Services to determine if there were health and safety issues to be addressed. An investigation was conducted for seventy-five (75) of the reported incidents and recommendations were made.

OCCUPATIONAL HEALTH AND SAFETY PROGRAM

Four (4) lead-based paint surveys were conducted related to construction activity. IH staff conducted noise evaluations for Student Involvement related to various outdoor concert events that took place on campus.

IH staff conducted safety audits for the IUPUI Columbus Campus, Herron School of Art, Parking Services attendant booths, and NIFS. Deficiencies were identified and recommendations were made based on the audit.

IH staff, with the assistance of the Occupational Safety and Health for Animal Users Committee, completed the written program and web-based system for collected data. Approximately 1030 risk assessment forms were submitted and reviewed by IH Staff. In conjunction with the review of the risk assessments and medical questionnaires, IH staff has begun to conduct exposure assessments for animal allergens when requested by IUPUI Campus Health.

A complete hazard assessment for personal protective equipment was conducted for the Herron School of Art. The hazard assessments were conducted to identify personal protective equipment requirements for all job tasks within those departments. Hazard assessments were reviewed and updated as necessary for CFS Building Services, CFS Maintenance, and Dental School.

CONSTRUCTION SAFETY

EHS was involved in reviewing specifications for CFS and UAO construction projects. EHS attended seventeen (17) construction project kick-off meetings and conducted eighteen (18) construction site visits.

Industrial Hygiene/Occupational Safety Program Continued

COMMITTEES

Rebecca Bratt chairs the Campus Health and Safety Committee that continued to meet quarterly and address campus wide health and safety issues.

Rebecca Bratt chairs the Indoor Air Quality Committee that meets monthly.

Chris Mahalek chairs the Pedestrian Safety Committee that meets quarterly and serves on IU Health's Health and Safety Committee that meets monthly.

Staff members meet monthly with Dr. Wintermeyer, IUPUI Occupational Health Physician, to discuss health issues related to occupational exposures, complaints or injuries.

IH Staff also assist The Herron School of Art with a departmental safety committee to address safety issues within the school.

Assessment of IH/OS Objectives for Fiscal Year 2012 - 2013

1. New training for E-Train
 - a. PPE – *In progress*
 - b. Cold Stress – *In progress*
 - c. Heat Stress (to include Sun Exposure) – *In progress*
 - d. Asbestos – *In progress*
 - e. Hearing Conservation Specific for Police
 - f. Cryogenics Training
2. Develop an Accident Investigation and Near Miss Program – *In progress*
3. Establish acceptable noise levels for outdoor events, develop a written program, and implement. – *In progress*
4. Develop a Program for the Safe Handling and use of cryogenics. – *In progress*
5. Update current hazard communication program to be consistent with GHS system. – *Complete*
6. Train all required staff of the new hazard communication program by 12-1-2013. – *In progress*
7. Conduct Audits of the Campus Facility Services maintenance shops. – *In progress*
8. Continue to work with Columbus Campus Facility Services to ensure compliance with training requirements and audit findings. – *On going*
9. Conduct anesthetic gas monitoring for campus locations. – *On going*

Assessment of IH/OS Objectives for Fiscal Year 2012 – 2013 Continued

10. Implement EHS training into the E-Train system and begin to use the system. – *On going*
11. Continue to develop and conduct hazard assessments for Personal Protective Equipment (PPE) for various departments on campus. – *On going*
12. Conduct a safety audit for Parking Services Booths and Booth Attendants. - Completed

GOALS 2013-2014

1. Continue to make progress with ongoing goals from FY 2012-2013.
2. Continue to work with Columbus Campus Facility Services to ensure compliance with training requirements and audit findings.
3. Develop a Hazard Communication training program specific to the Herron School of Art and train all Faculty and Staff.
4. Develop a Safety in the Art webpage to be hosted on the Herron School of Art homepage.
5. Assist with the acquisition of the old Wishard property by conducting occupant safety assessments of spaces to be occupied by IUPUI staff.

Laboratory Safety Annual Report 2012

1192 labs were inspected. 90% of laboratories inspected received an A grade or better with 71% receiving a perfect score after the inspection. Out of the 353 laboratories with noted deficiencies a follow-up inspection was performed on all of the laboratories with D or F grades by the Laboratory Safety Technicians and a random selection of 138 labs were inspected by the Laboratory Safety Manager for quality control and compliance purposes. There were only 2 laboratories found in such a condition to receive a D or F grade. This data is outlined in the table and chart below.

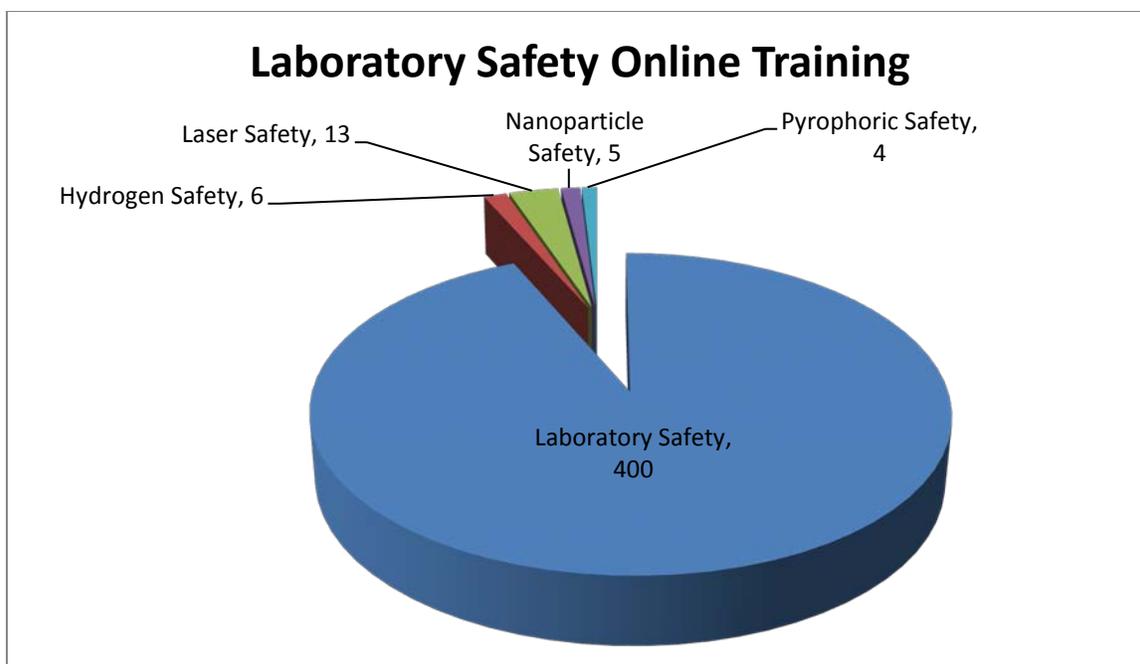
2012 Summary	
A+ Grade Labs	71.0%
A Grade Labs	19%
B Grade Labs	8%
C Grade Labs	2%
D Grade Labs	<1%
F Grade Labs	0.0%

We have seen our laboratories improve over the years and have stabilized when compared to the previous year. Only 2 labs this year received a D grade with this being the second year that no laboratory received an F.

A license was continued through MSDS online which provides access to MSDS sheets for all workers on campus. A corporate license was created in collaboration with IU Bloomington Environmental Health and Safety so all campuses have access to MSDS online.

A total of 684 fume hoods were tested and certified using established protocol by the Laboratory Safety staff and all 644 Emergency showers were flushed and certified as operational by the Laboratory Safety staff. Deficiencies were reported to the laboratory contacts and/or Campus Facility Services.

Lab Safety training was provided to 183 new and existing employees. Training sessions were also performed for graduate students in the School of Medicine, School of Science, School of Dentistry and occupants in the Indiana University Innovation Center. Over 400 employees have taken a Laboratory Safety Training class online. A summary of the number of participants broken down by class type is shown in the following graph.



The IUPUI Laboratory Safety Handbook was revised. This new revision contains updated information on the new Globally Harmonized System of Classification and Labeling of Chemicals. This handbook provides guidance to our laboratory personnel on how to work with hazardous chemicals safely.

Participated in Emergency Response training.

The Lab Notes newsletter was revised to include links to recent laboratory safety articles and events. Lab Notes was published quarterly.

Reviewed architectural plans for construction and renovation of laboratory facilities.

Reviewed Department of Defense grant applications and inspected labs to ensure environmental compliance.

Completed the Facility Safety Plan Status Report Annual Update for the Department of Defense.

Reviewed the Chemical Hygiene Plan and the Laboratory Safety Handbook.

Participated in biannual inspections for The School of Medicine IACUC and reviewed over 100 IACUC amendments and protocols to ensure compliance with the Chemical Hygiene Plan.

Program Manager, Lee Stone served as Chairman of the Laboratory Safety Committee, served on the School of Medicine IACUC, the Campus Safety Committee, the Land Air and Water sustainability committee, the Energy sustainability committee, the IUPUI Staff Council and IUPUI Executive Council and was appointed as Chairman of the Faculty Relations Committee and served as President of the IUPUI Staff Council.

Assessment of Laboratory Safety Objectives for Fiscal Year 2012 - 2013

Develop additional laboratory safety training for faculty, staff and students.-Completed

Develop policy for the use of corridors and unassigned space.-Completed

Revise the IUPUI Laboratory Safety Handbook.-Completed

Create a building inspection team with monthly building walkthroughs.-In Process

Edit Lab Notes and continue to distribute quarterly.-Completed

Continue communications with IU School of Medicine off campus laboratories to verify compliance.-Completed

Continue the expanded laboratory inspection process.-Completed

Renew an annual campus-wide license through MSDS online.-Completed

Assist the laboratories in manifesting expired and unused chemicals.-Completed

Continue to actively serve on various committees as the Environmental Health & Safety representative.-Completed

Provide lab inspections for all laboratories on campus and perform follow-up for the labs with the most safety violations.-Completed

Complete fume hood certification for all locations on campus.-Completed

Inspect and flush all emergency showers on campus.-Completed

Make additional lab safety information available on the departmental website.-Completed

Present Lab Safety Training to new and existing IUPUI employees in accordance with OSHA regulations.-Completed

Review the Chemical Hygiene Plan.-Completed

Continue to provide Laser Safety Training on-line.-Completed

Establish a method for tracking new employees on campus and ensuring they are being provided the appropriate training.-In Progress

Continue an active Laboratory Safety Committee.-Completed

Continue to manage the Laser Safety Program.-Completed

Laboratory Safety Continued

Goals for 2013-2014:

Develop additional laboratory safety training for faculty, staff and students.

Revise the Laboratory Safety Training to contain GHS training.

Provide GHS training to laboratories.

Edit Lab Notes and continue to distribute quarterly.

Inspect IU School of Medicine off campus laboratories to verify compliance.

Continue the expanded laboratory inspection process.

Renew an annual campus-wide license through MSDS online.

Assist the laboratories in manifesting expired and unused chemicals.

Continue to actively serve on various committees as the Environmental Health & Safety representative.

Provide lab inspections for all laboratories on campus and perform follow-up for the labs with the most safety violations.

Inspect 10% of laboratories. Complete fume hood certification for all locations on campus for quality control and compliance purposes.

Complete fume hood certification for all locations on campus.

Inspect and flush all emergency showers on campus.

Make additional lab safety information available on the departmental website.

Present Lab Safety Training to new and existing IUPUI employees in accordance with OSHA regulations.

Review the Chemical Hygiene Plan.

Continue to provide Laser Safety, Hydrogen Safety, Pyrophoric Safety, Laboratory Safety and Nanoparticle safety on-line training.

Continue an active Laboratory Safety Committee.

Continue to manage the Laser Safety Program.