PDC 101: Electrical Safety I: Basic Principles & Engineering Controls-New!

Introduction | Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 35

**Topic:** Safety
**Keyword(s):** Emerging Issues, Risk Assessment, Safety

**Description:** This course provides an introduction to the fundamental principles of electrical safety. It is assumed that participants have little or no experience in this subject area. Principles needed to protect the worker to voltages greater than 50 V through engineering control will be covered. This course will examine how-to issues using a participant hands-on approach to comprehend and demonstrate concepts learned in the lecture portions. Content will cover the basic principles required, the OSHA's top ten electrical safety violations, the NEC (2017 edition) and other NFPA electrical safety standards. To build upon concepts learned in this course and for an overview of safe work practices for energized work/NFPA 70E, participants should also enroll in Electrical Safety II: Energized Work Practices/Arc Flash/NFPA 70E (2015 Edition).

*Registration includes boxed luncheon.

**Learning Aids:**
Participants must bring a: Laptop
PDC 102: Transportation of Dangerous Goods-New!

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

Topic: Hazardous Chemicals

Description: This course will address the classification, hazard communication, packing & packaging, documentation, handling, segregation and carriage of dangerous goods by all modes of transport. Compliance with the U.S. Department of Transportation’s Hazardous Materials Regulations and the international regulations for the transport of dangerous goods by air, land and sea will be discussed. Emphasis will be given to the proper classification of dangerous goods based on the physical and chemical properties, and international classification system. Students will then be able to identify the required packaging, marking, labeling and placarding and prepare dangerous goods declarations that conform to the international and domestic standards. This course is for those persons that are responsible of the preparation of Safety Data Sheets including the Transportation Information in Section 14.

*Registration includes boxed luncheon.

PDC 103: Practical Applications of Useful OEHS Equations

Intermediate | Early Career Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

Topic: Careers & Professional Development
Keyword(s): Engineering, Indoor Environmental Quality/Indoor Air Quality, Workplace Inspections

Description: ABIH publishes a list of useful equations that all OEHS professionals should know how to use and apply. This course covers about fifty often-used equations and how they are applied to solve practical problems. Topic coverage includes: general IH, ventilation, sound and noise, thermal stress, indoor environmental quality, and cost estimating.

*Registration includes boxed luncheon.

Prerequisites: Participants should have background in OEHS professions.

Learning Aids:

Participants must bring a: Scientific Calculator, Laptop
PDC 105: Strengthening EHS Leadership and Teamwork

Introductory | Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

**Topic:** Management
**Keyword(s):** Management, Management Systems

**Description:** Surveys from business and organizational executives confirm that employers want strong leadership and communication skills in their EHS professionals in addition to sound technical/scientific attributes. Understanding key principles and building leadership skills are what make the difference in achieving organizational and individual success. This PDC will focus on strengthening leadership skills and attributes critical to leading teams, programs and business. The PDC workshops will focus on increasing the leadership, communications and organizational alignment skills of the EHS professional at any point in their career. These skills are critical to optimize individual effectiveness and be a valued member of your enterprise. These are the skills necessary to make good things happen in a demanding, complex work environment and to be seen by management, peers and subordinates as an exceptional leader.

*Registration includes boxed luncheon.*

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PDC 106: Management of Health Hazard Exposures in Construction-New!

Intermediate | Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

**Topic:** Construction
**Keyword(s):** Hazard Recognition and Evaluation, Management, Total Worker Exposure

**Description:** In the construction industry, health hazard exposures may often be unrecognized, poorly managed or dismissed as not being significant when compared to the immediate impact of injuries caused by incidents. Attending this PDC will assist all construction industry OHS professionals in anticipating and recognizing exposures to health hazards in various construction work environments and in the development of effective control strategies. In this course, examples of occupational health exposures will be presented from case studies in the Oil & Gas, Pipeline, Chemical Process, Heavy Civil, and Mining Sectors. This PDC will illustrate that combining a health hazard inventory into an overall project hazard registry will assist in the development of an effective risk management plan. Attendees will practice their skills based on information given from a case study and then discuss, share, and learn risk management strategies to intervene and prevent occupational health hazard exposures.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have a general understanding of industrial hygiene principles, occupational safety, and the construction industry.
PDC 107: Exposure Judgment: Improving Inhalation Assessments

Introductory | Student/Intern, Early Career Professional, Professional, Senior Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

**Topic:** Exposure Assessment  
**Keyword(s):** Exposure Assessment, Exposure Banding/OEL Process

**Description:** Industrial hygienists (IHs) need strategies and tools to make effective and efficient decisions in rapidly evolving domestic and international environments. New international regulations such as REACH, CEPA and the proposed overhaul of the Toxic Substances Control Act (TSCA) in the US are impacting large and small businesses alike. Consequent pressure from stakeholders has motivated many IHs and their organizations to identify more efficient, comprehensive methods for assessing and managing exposure risk including cases where quantitative measurements have not or cannot be collected. By developing and integrating new semi-quantitative tools such as environmental determinant heuristics, and exposure models, with existing tools using a Bayesian data analysis, the strategy empowers IHs to make more accurate, efficient exposure risk judgments. Participants will learn how to apply these user-friendly tools through a series of interactive workshops. Participants will learn how to make more accurate exposure judgments (exposure control category), and how to apply these new skills and tools within their organization. The capstone of the workshop will be a facilitated discussion reviewing the results and lessons, providing direct feedback to each participant.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants MUST bring a computer with Microsoft Excel (macro-enabled 2003 or newer) installed.

**Learning Aids:**

Participants must bring a: Laptop
**PDC 108: Laboratory Hood and Exhaust Ventilation: Ensure You Are Prepared to Help**
Design, Select, Operate and Manage Different Systems

**Intermediate | Early Career Professional, Professional**
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

**Topic:** Laboratories
**Keyword(s):** Engineering Controls & Ventilation, Laboratories

**Description:** Laboratory hoods and ventilation systems are the primary means of protecting people working in laboratories with potentially hazardous materials. The EH&S professional must be involved and play a significant role in ensuring proper selection, design, installation and long-term operation of the systems. The systems can be comprised on many components from different laboratory hoods to complex variable air volume controls and sensors. This course will provide EH&S personnel with the understanding and knowledge of laboratory ventilation systems to contribute in all phases of design and operation to ensure safe, dependable and energy efficient operation.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have basic knowledge of the local exhaust system and its elements.

**Learning Aids:**
Participants must bring a: Laptop or Tablet/iPad

**PDC 109: An IH Introduction to Environmental Rules & Regulations**

**Intermediate | Student/Intern, Early Career Professional, Professional**
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

**Topic:** Regulation & Legislation
**Keyword(s):** Environmental Issues (Sustainability), Regulation & Legislation, Regulation & Public Policy

**Description:** As you progress into EHS management, as corporate departments streamline, as you incorporate risk management techniques into your IH practice, or as you simply advance in your career and expand your knowledge, an understanding of environmental laws and regulations is necessary. OSHA and health and safety laws in general are dwarfed by the sheer enormity of the numerous federal, state and local environmental laws and regulations which exist and cover a vast array of topics. Additionally, liabilities on the environmental side of EHS exceed the health and safety side generally by one or more orders of magnitude. This seminar will focus on some of the largest and most relevant of federal laws and regulations; these are: Clean Air Act; Clean Water Act; Resource Conservation and Recovery Act; Emergency and Community Right to Know Act; Toxic Substance Control Act; and the Federal Insecticide, Fungicide and Rodenticide Act.

*Registration includes boxed luncheon.*
PDC 110: Noise Exposure Assessment: Sampling Strategy & Data Acquisition

Intermediate | Student/Intern, Early Career Professional, Professional
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

**Topic:** Noise
**Keyword(s):** Big Data: Data Management & Interpretation, Exposure Assessment, Noise

**Description:** This PDC discusses effective design and management of noise exposure assessment campaigns, facilitates appropriate selection of hearing-conservation program enrollees, and promotes effective application of noise control resources. This course will describe protocol and instrumentation selection, statistical applications for data analysis, appropriate sample selection strategy, and data application to promote effective hearing loss prevention.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have an understanding of decibel calculation and basic operation of noise measurement equipment recommended.

**Learning Aids:**

Participants must bring a: Laptop
**PDC 111: Theory and Application of the 4 Gas/PID Sensor Technology**

**Intermediate | Early Career Professional, Professional, Senior Professional**  
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM  
Credits: 8 CM Credit Hours  
Limit: 45

**Topic:** Real-Time Detection Systems  
**Keyword(s):** Exposure Assessment, Real-Time Detection Systems, Sensor Technologies

**Description:** This PDC provides an advanced knowledge of the use and limitations of the 4-Gas/PID portable gas-detection instrumentation. This PDC is designed to enhance the working knowledge of current users of the most popular real-time gas-detection instrument, 4-Gas or Multi-Gas meter. The belief is that if the user has a better understanding of how the instrument works including its limitations, the application of this instrument in the field and in emergency situations will greatly improve. This PDC is perfect for industrial hygienists who want to further their knowledge in the applications and limitations of direct-read instrumentation as well as for first responders who rely on this technology to make decisions in emergency situations.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should be familiar and comfortable with the use and operation of a 4 Gas/PID Real Time detection systems instrument.

**Learning Aids:**

Participants must bring a: Laptop or Tablet/iPad
PDC 112: The Fundamentals of an Effective Respirator Program - New!

Introductory | Student/Intern, Early Career Professional, Professional  
Saturday, June 3, 2017 | 8:00 AM - 5:00 PM  
Credits: 8 CM Credit Hours  
Limit: 35

**Topic:** Respiratory Protection  
**Keyword(s):** Respiratory Protection

**Description:** Respiratory protection can be used for reducing respiratory exposure on the job when engineering and administrative controls are not adequate or feasible. The use of respirators in the workplace requires the employer to have a site specific respiratory protection program. The written respirator program includes the following elements: a. proper selection, b. medical evaluations.c. fit testing, d. respirator use cleaning, storing, inspection and repair, e. air quality, quantity, and flow, f. training and g. program evaluation. Participants in this course will understand the elements of a respiratory protection program through interactive discussion, examples, and workshops (fit testing, selection, maintenance and selection). Additional topics will include respirator classification, the importance of respirator fit, and tools for improving worksite specific training in order to implement a more effective respiratory protection program.

*Registration includes boxed luncheon.*
PDC 113: The “Worst Plant” – A Virtual H&S Audit

Intermediate | Early Career Professional, Professional, Student/Intern
Saturday, June 3, 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

Topic: Safety
Keyword(s): Safety, Work Site Hazards, Workplace Inspections

Description: Thousands of companies around the world currently utilize internal, external or a combination of technical and management resources to conduct regulatory compliance audits, inspections, and assessments of their operations with the results being used as one of the company's many health and safety performance metrics. This highly audience participative seminar has been presented at national and local section AIHA conferences and seminars since 2014 and takes attendees through a photographic tour of "the worst plant in the world"; an assemblage of digital photographs of various regulatory compliance issues noted during the speakers’ 85+ years of regulatory compliance audits and assessments. As photos are shown, the instructors quiz attendees on the various issues noted and where they might be found in the OSHA regulations. In addition, instructors provide case histories and group activities for select photos. The full-range of OHS topics is covered - from abrasive wheels to Subpart Z.

Prerequisites: While all attendees, regardless of their experience level will learn something, the course is structured as an introduction/intermediate level seminar. Students should have fundamental knowledge of IH and safety.

Learning Aids: Students are advise to bring a laptop or similar to conduct regulatory research.

*Registration includes boxed luncheon.
PDC 201: Anticipation & Recognition of Non-Ionizing Radiation Hazards in the Workplace - New!

**Introductory | Student/Intern, Early Career Professional, Professional, Senior Professional**
**Saturday, June 3, 2017 | 8:00 AM - 12:00 PM**
**Credits: 4 CM Credit Hours**
**Limit: 35**

**Topic:** Radiation  
**Keyword(s):** Hazard Recognition and Evaluation, Nonionizing Radiation, Work Site Hazards

**Description:** What do you need to know about RF, UV or Microwave radiation? Is exposure to sunlight harmful on the job? Can you be at risk with your pacemaker or other medical device in your workplace? Do your facility engineers have a surprise waiting for you on the next set of plans? Has a whole department just read something on the internet about cell towers and is worried about their location? Do you have any or all of these issues? Then this course is for you. After a general and informative introduction, we will use the case study method to illustrate the types of problems possible and identify resources to enable you to construct an action plan. Small groups will be coached by the instructors in dealing with and building action plans for an interactive experience. Specific scenarios will deal with implanted medical devices and potential interferences, new processes in industry and other business that involve potential NIR hazards, and the communications issues that arise when the media or the internet lights up with non-ionizing radiation in the headlines.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*
**PDC 202: Ebola & Other Infectious Diseases of Public Health Significance for the IH-New!**

**Introductory | Early Career Professional, Professional, Senior Professional**  
Saturday, June 3, 2017 | 8:00 AM - 12:00 PM  
**Credits:** 4 CM Credit Hours  
**Limit:** 35

**Topic:** Biosafety  
**Keyword(s):** Biosafety, Personal Protective Clothing & Equipment (PPE), Work Site Hazards

**Description:** The Biosafety and Infectious Disease Training Initiative (BIDTI) is funded by the National Institute of Environmental Health Sciences (NIEHS) Worker Training Program (WTP) Ebola Biosafety and Infectious Disease Response program. This BIDTI Awareness Level training will delve into the content of infectious diseases of public health significance, education on disease transmission and the environmental persistence of organisms. The purpose of this course is to prevent and reduce the work exposures to the Ebola virus and other infectious diseases using direct training and the train-the-trainer model. The specific content of the presentation will include: infectious disease of public health significance, an overview of the 2014-2015 Ebola outbreak and lessons learned, occupational exposure scenarios, and worker protection and infection control measures.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*
PDC 203: Introduction to the Recognition, Evaluation and Control of Legionella in Building Water Systems

Introductory | Student/Intern, Early Career Professional, Professional  
Saturday, June 3, 2017 | 8:00 AM - 12:00 PM  
Credits: 4 CM Credit Hours  
Limit: 60

Topic: Indoor Environmental Quality/Indoor Air Quality  
Keyword(s): Biological Hazards, Indoor Environmental Quality/Indoor Air Quality, Sampling & Analysis

Description: This PDC will provide the basic framework for understanding the principles of the recognition, evaluation and control of Legionella in various building water systems for the purposes of infection prevention. The main emphasis of the course will be on technical strategies for environmental exposure and risk assessment in order to provide an understanding of data collection and interpretation in support of environmental source identification. Fundamental core competencies, including basic knowledge of Legionella sources, environmental sampling and appropriate control measures for Legionella amplification sources. A combination of lecture and case study reviews will equip the attendees with a breadth of resources to meet learning objectives. Published standards and guidelines will also be covered.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: Past general microbiology coursework is preferred.

Learning Aids:

Participants must bring a: Laptop or Tablet/iPad
**PDC 204:** Climate Change and Occupational Health: A Global Problem with Real Impacts—New!

**Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional**

**Saturday, June 3, 2017 | 8:00 AM - 12:00 PM**

**Credits:** 4 CM Credit Hours

**Limit:** 35

**Topic:** Changing Workforce Demographics/Environment

**Keyword(s):** Emerging Issues, Physical Hazards, Thermal Stressors

**Description:** Climate change is an exceptional global environmental crisis primarily driven by anthropogenic activities with adverse consequences on ecological and life systems. This course will provide students an overview of the driving forces and mechanics of climate change and a comprehensive analysis of the implications on Earth's natural/human ecosystems and health in a local, regional and global scale. The concepts, approaches and uncertainties of methods applied to assess and monitor the health impacts of climate change will be presented and specific disease cases will be discussed. Lastly, ongoing efforts to cope/adapt, mitigate or reduce the impacts and the mechanisms to develop these tools will be examined.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*
Description: The "Redbook" is the standard in industry for hazards analyses. "The Guidelines for Hazard Evaluation Procedures", 3rd Edition is published by the Center for Chemical Process Safety (CCPS). The course will provide an overview of the Redbook methodologies for performing hazards analyses. Hazard Analysis is a systematic approach to identifying, analyzing, and controlling hazards. Some Hazard Analysis techniques also integrate the element of risk to further evaluate the effectiveness of controls and the levels of both unmitigated and residual risk. Because there are many different applications for Hazard Analysis, it is not surprising the Hazard Analysis process comes in many different shapes and sizes. A common thread between all Hazard Analysis techniques is the integration of two fundamental elements: 1) Hazard Identification, and 2) Hazard Evaluation. Just as the Hazard Analysis process is varied, so are the resources that outline and discuss this discipline. This presentation will provide a high-level overview of the Hazard Analysis concept, outline several commonly used Hazard Analysis techniques, and give selection criteria on how to choose an appropriate Hazard Analysis technique.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: Participants should ideally have/bring a copy of the Redbook.
PDC 301: NIOSH Aerosol Sampling Methods Update-New!

Intermediate | Professional  
Saturday, June 3, 2017 | 1:00 PM - 5:00 PM  
Credits: 4 CM Credit Hours  
Limit: 60

Topic: Aerosols  
Keyword(s): Aerosols, Airborne Particles, Sampling & Analysis

Description: NIOSH has been working on revising existing aerosol sampling and analysis methods and adding new methods to the Manual of Analytical Methods (NMAM). This effort is supported by a comprehensive program of laboratory and field work, which will be described in detail. The update is a work-in-progress, but substantial changes have already been made and more are coming. This Course will present the state of affairs concerning what has been done and what is intended for the near future so industrial hygiene practitioners and laboratory analysts will be able to respond appropriately. The current and future evolution of sampling and analytical methods will be placed in context in the progression of theoretical and technical advances.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*
PDC 302: Implementing a Water Management Plan to Control Legionella in Building Water Systems

Intermediate | Professional, Senior Professional
Saturday, June 3, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 60

Topic: Indoor Environmental Quality/Indoor Air Quality

Description: This PDC will provide an advanced understanding of the design and implementation of a water management plan including the use of environmental samples to validate the effective control of Legionella in various building water systems. The main emphasis of the course will be on using the findings of a risk assessment to develop a monitoring and validation plan for Legionella control and prevention. Interpretation of measurement and environmental sampling results for Legionella to monitor the effectiveness of remediation and control measures will be covered. A combination of lecture and case study reviews will equip the attendees with a breadth of resources to meet learning objectives. Published standards and guidelines will also be covered.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: Participants should have experience with general microbiology coursework. It’s also recommended that participants have either taken the 2016 course PDC 108: Legionella and Other Waterborne Pathogens: Recognition, Evaluation and Control, or enroll in this

Learning Aids:

Participants must bring: Laptop or Tablet/iPad
PDC 303: Death To Death By Powerpoint: Highly Effective Training Through Storytelling-New!

Intermediate | Early Career Professional  
Saturday, June 3, 2017 | 1:00 PM - 5:00 PM  
Credits: 4 CM Credit Hours  
Limit: 35

**Topic:** Communication and Training  
**Keyword(s):** Communication & Training, Compliance, Management

**Description:** You can get workers to your training, but you can't force them to listen. Effective worker training requires Health & Safety professionals who can foster engagement, create ownership, and craft compelling learning experiences that modify worker behavior in a positive way. In this PDC, we will provide participants with skills to maximize the effectiveness of their health & safety training through storytelling and improvisation. Each of your workers possesses life experiences and stories that reinforce the training objectives you aim to achieve. How can you get them to be an active part of your training effort? This unique training combines the technical know-how and field experiences of a PhD-trained Industrial Hygienist and former military trainer with the improvisational and storytelling skills of a noted Second City (Chicago) actor, writer, and corporate trainer. Expect to be engaged, to participate, and to be taken out of your comfort zone. You will leave with new insight into maximizing training retention, boosting worker buy-in, and keeping your people safe, healthy, and productive.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*

**Learning Aids:**

Participants must bring a: Laptop, Smartphone
PDC 304: Comparative Ethics-New!

Intermediate | Professional, Senior Professional
Saturday, June 3, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 60

Topic: Ethics
Keyword(s): Emerging Issues, Ethics, Hazardous Waste

Description: This course will be presented in a case study format, where participants will choose one of ten professions (i.e. Senator to Journalist to Engineer to Industrial Hygienist), then view the case study through their professional lens. Next participants will be asked to act out the ethical issues and react based on the professional code of ethics for their adopted profession.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

PDC 305: Redbook Hazards Analysis Techniques: What-If/Checklist from Guidelines for Hazard Evaluation Procedures-New!

Intermediate | Professional
Saturday, June 3, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 60

Topic: Risk Assessment
Keyword(s): Controls, Hazard Recognition and Evaluation, Risk Management

Description: The course is based on the principles and methodologies presented in the Redbook, “The Guidelines for Hazard Evaluation Procedures”, 3rd Edition for using the What-If/Checklist hazards analysis method. The Redbook is a standard industry reference for hazard evaluation procedures published by the Center for Chemical Process Safety (CCPS). The What-If/Checklist Analysis technique combines the creative, brainstorming features of the What-If analysis method with the systematic features of the Checklist Analysis method. The course will use interactive discussions coupled with videos presented by the Chemical Safety Board and Discovery Channel's Engineering Disasters. The instructors will provide lessons learned reflecting a combines 40 years experience with performing hazards analysis.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: It's preferred that participants take this course in conjunction with PDC 205: Redbook
Overview: Guidelines for Hazard Evaluation Procedures.
**PDC 401:** Electrical Safety II: Energized Work Practices/Arc Flash/NFPA 70E

**Intermediate | Professional**
**Sunday, June 4, 2017 | 8:00 AM - 5:00 PM**
**Credits: 8 CM Credit Hours**
**Limit: 35**

**Topic:** Safety
**Keyword(s):** Emerging Issues, Risk Assessment, Safety

**Description:** This course builds upon PDC 101: Electrical Safety I: Basic Principles & Engineering Controls. It covers principles needed to protect the worker during energized work from shock and arc flash hazards through personnel protection. A chronological sequence will also be provided for implementing an electrical hazard control and program management through hands-on and team exercises. Also covered are updated requirements and interpretation of the 2015 Edition of NFPA 70E Standard for Electrical Safety in the Workplace.

*Registration includes boxed luncheon.*

**Prerequisites:** Electrical Safety I or Basic Electrical Safety at previous AlHce or general knowledge of electrical hazards.

**Learning Aids:**

Participants must bring a: Laptop
PDC 402: Welding: Identifying Exposures and Controls

Introductory | Early Career Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

**Topic:** Construction
**Keyword(s):** Construction, Engineering Controls & Ventilation, Exposure Assessment

**Description:** This course describes common welding and thermal cutting processes and the health/safety hazards associated with these processes. Terminology used in the welding industry is incorporated throughout the PDC as a means of familiarizing participants with the vocabulary used in the workplace. Materials, thermal processes and scenarios associated with potential for overexposures are described. Emphasis is placed on manganese and hexavalent chromium exposures as well as many other health and safety hazards. Suggestions for improving the quality of monitoring data are provided as are suggestions for prioritizing exposure assessments. Ventilation techniques and respiratory protection options are also described.

*Registration includes boxed luncheon.*
PDC 403: Advanced Topics in Exposure Control Ventilation

Intermediate | Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

Topic: Hazardous Chemicals
Keyword(s): Engineering Controls & Ventilation, Indoor Environmental Quality/Indoor Air Quality, Standards

Description: This PDC covers advanced topics related to industrial and HVAC ventilation systems used for the control of chemical exposures and thermal conditions in employee occupancies. Whatever other controls are utilized, ventilation is always one of the controls required and is always present. This PDC will expand beyond fundamentals so that participants can better apply, measure and troubleshoot exposure control ventilation systems. The PDC provides advanced examples and applications of troubleshooting existing ventilation systems, airflow measurements labs, ventilation equipment evaluations, and specific applications of standards, codes, and good practices. Specific topics include: (1) ventilation measurements, (2) troubleshooting, (3) reading plans and specifications,(4) equipment,and (5) standards and codes.

*Registration includes boxed luncheon.

Prerequisites: A course in or knowledge of ventilation fundamentals.

Learning Aids:

Participants must bring a: Scientific Calculator, Laptop
PDC 404: Methods and Applications for Chemical Detection in Real Time

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

Topic: Real-Time Detection Systems
Keyword(s): IH Instrumentation, Real-Time Detection Systems, Sensor Technologies

Description: The PDC is targeted towards IH, safety, and emergency response personnel who use or may be called on to use field-portable detection and identification tools, or professionals who may need to understand data produced by such tools. The expert case studies presented will demonstrate how real-time chemical detection has been effectively used to answer important human exposure questions. The hands-on part of the PDC will give participants experience beyond typical classroom delivery of information. The didactic training portion will show instrumentation and data from both lab and field settings. The PDC will cover how such instruments may be integrated into emergency response protocols required by the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) standard. The hands-on portion of the PDC will include various instruments and associated data processing systems.

*Registration includes boxed luncheon.

Prerequisites: Participants should have IH-level knowledge of chemistry, interest in field-portable detection tools and the exposure assessment process.
PDC 405: Confined Spaces 2017: Utilizing Regulations and Consensus Standards Used to Ensure Safe Entry - New!

Intermediate | Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 35

Topic: Confined Spaces
Keyword(s): Confined Spaces, Hazard Recognition and Evaluation, Work Site Hazards

Description: Although OSHA’s 1910.146 standard has been in effect for over 20 years, there is a lot happening in confined space entry. OSHA has a new Construction standard, NFPA has a new Guide for Safe Confined Space Entry & Work and ASSE has revised Z117.1. You may be wondering what standards you should be applying for safe confined space entry. This session will compare and contrast the four key documents used for confined space entry in the U.S. We will look at common elements, comparing differences and determining how to best apply the information in these documents to confined spaces. The class will provide in depth, interactive case studies and workshops designed to help you identify and classify some complex spaces. Expect some lively debate and discussion about confined spaces.

*Registration includes boxed luncheon.

Prerequisites: It is recommend all participants have either electronic or hard copies of “1910.146, OSHA Subpart AA Confined Spaces in Construction” Standard, ASSE “Z117.1-2016” and NFPA “350-2016”.
Intermediate  | Professional
Sunday, June 4, 2017  | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

Topic: Careers & Professional Development
Keyword(s): Careers & Professional Development, Healthcare, Occupational Medicine

Description: Be smart! Enroll now to boost your intelligence quotient. This day-long course will arm you with the information you need to leverage strengths and correct weaknesses in your company's injury prevention and management system. It will be taught by occupational medicine physicians and allied clinicians, industrial hygiene and safety professionals, and workers' compensation experts. The course will be divided into eight segments: 1) anatomy of common physical complaints; 2) workers' compensation tricks of the trade; 3) benefits of early intervention and return to work; 4) selecting qualified medical providers; 5) evaluating fitness for work; 6) understanding psycho-social aspects of injury and delayed recovery; 7) leveraging case management strategies; and 8) deploying meaningful metrics to identify opportunities for positive change. The course will incorporate real-life case studies and interactive discussion.

*Registration includes boxed luncheon.
**PDC 407: The Proposed OSHA Beryllium Standard & Guidance for Compliance**

**Intermediate | Professional**  
**Sunday, June 4, 2017 | 8:00 AM - 5:00 PM**  
**Credits: 8 CM Credit Hours**  
**Limit: 50**

**Topic:** Emerging Issues  
**Keyword(s):** Engineering Controls & Ventilation, Exposure Assessment, Hazard Recognition and Evaluation

**Description:** The prevention of chronic beryllium disease (CBD) and other health effects continues to be the focus in industries involved with the production and fabrication of beryllium and beryllium-containing materials. In August 2015, OSHA issued a proposed substance specific standard for beryllium. This PDC will present the key provisions of the proposed OSHA Beryllium Standard and provide attendees with the tools and information in preparation for the issuance of the final standard. One of the elements to be discussed will be Beryllium Worker Protection Model which has been developed and is being successfully. This Beryllium Worker Protection Model focuses on the control of multiple exposure pathways and monitoring the effectiveness of these controls using leading measures. Attendance at this PDC will be beneficial to occupational health practitioners involved with the prevention of CBD and control of occupational exposure to beryllium.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have knowledge of industrial hygiene practice, exposure assessment, controls, personal protective equipment, medical surveillance, toxicology, and epidemiology.

**Learning Aids:**  
Participants must bring a: Scientific Calculator, and Laptop or Tablet/iPad
PDC 408: Tools for Compliance with the OSHA Silica Standard-New!

Intermediate | Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 35

Topic: Exposure Assessment
Keyword(s): Exposure Assessment, OSHA (Occupational Health & Safety Administration), Silica

Description: This PDC will provide attendees with information to use to comply with the OSHA Silica Standard. This course will be presented as a scenario in which the attendees work for an organization that just acquired a company that produces crystalline silica-containing products. The attendees will learn the steps needed to identify, evaluate and control crystalline silica exposure in their newly acquired company. The course will cover: industries with exposure to crystalline silica, silica polymorphs, acute and chronic health effects, components of 1910.1053, using descriptive statistics, objective data to estimate exposures, sampling for crystalline silica, lab analytical method issues and exposure control plan development.

*Registration includes boxed luncheon.

Prerequisites: Participants should have an understanding of fundamental statistics, experience measuring employee exposure and qualitative risk assessment.

Learning Aids:

Participants must bring a: Scientific Calculator
PDC 409: Legal Issues & Exposures in Your IH Practice—New!

Advanced | Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 35

Topic: Emerging Issues
Keyword(s): Emerging Issues, IH Profession & AIHA, Risk Management

Description: While you are watching out for the health & safety of your organization and its personnel, do you ever wonder if you are being exposed to legal liability? Do you ever wonder about what might happen to your employer if you or your staff make a mistake or perhaps intentionally take an action which leads to unexpected consequences? Even if you don't make mistakes and you can achieve compliance; legal liabilities may still arise. Litigation of disputes is commonplace and your best defense is being aware of this risk. In the last decade we have experienced an increasing trend toward criminal liability after accidents or egregious EHS failures. In this seminar, you will learn how to identify and assess legal risks and protect yourself. Using recent real life EHS examples, you will learn civil and criminal liabilities for which a practicing EHS Professional may find in the normal course of their practice.

*Registration includes boxed luncheon.
PDC 410: Basic Building Blocks of Biosafety - New!

Intermediate | Early Career Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

**Topic:** Biosafety

**Keyword(s):** Bacteria & Viruses, Biosafety, Risk Assessment

**Description:** This course is NOT a formal introduction to biological safety, but a course that will provide guidance for performing many of the core job responsibilities of the modern biosafety professional in the laboratory and/or research settings. It has been designed for the EHS professional with training in biological safety who is looking for practical assistance in performing biosafety duties. The class will provide ideas, approaches, sample forms and checklists and sample training slides to provide a solid foundation for participants to use to initiate site-specific approaches in their host locations. This is a how to class and the goal is to help show participants some successful approaches to performing the central duties of biosafety officers in research settings. The class will focus on the duties and responsibilities of a biosafety professional, including the review of projects involving biohazards and regulated biological materials, conducting training and laboratory inspections, and evaluating biohazard exposures and other incidents. Although designed for the laboratory setting, the course may be of interest to those responsible for biosafety in other domains.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have previously taken a Fundamentals of Biosafety, Introduction to Biosafety Course, and/or have a general working knowledge of biosafety principles and procedures.

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

**Topic:** Exposure Assessment

**Keyword(s):** Epidemiology, Exposure Assessment, Hazard Recognition and Evaluation

**Description:** Many times, industrial hygienists are asked to estimate and assess past exposures that may be associated with health risks and adverse outcomes. These situations require retrospective exposure assessments. This means they are conducted after a disease or illness has been identified or reported. The retrospective exposure assessment may occur many years after the exposure occurred and the opportunity to collect additional measurements has passed. These exposures must be reconstructed from existing data, interviews with current and past workers, and professional judgment. This process is called occupational exposure reconstruction. This PDC provides a thorough introduction to occupational exposure reconstruction and the importance of IH data collection for better exposure assessments. Using four actual studies that used exposure reconstruction techniques and procedures described in the AIHA guideline, Occupational Exposure Reconstruction, participants will apply these principles to practice scenarios.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have basic exposure assessment skills.

**Learning Aids:**

Participants must bring a: Laptop or Tablet/iPad
PDC 412: Ergonomics Assessment Tools and Techniques for the Practitioner

Intermediate | Early Career Professional, Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 35

**Topic:** Ergonomics
**Keyword(s):** Ergonomics, Hazard Recognition and Evaluation, Risk Assessment

**Description:** This course will cover a number of different ergonomic assessment tools and techniques available, most of which are found in the Ergonomic Toolkit put together by AIHA's Ergonomics Committee. The focus of the course will be how to choose the correct tool for your situation, how to perform the assessment, how to interpret the results, and how to mitigate the ergonomic risk. Demonstrations and hands-on practice will be utilized to learn each assessment tool/technique. Most of the tools covered will focus on industrial environments but we will also cover the office environment and some assessment options for less traditional work environments. Participants will be provided with electronic versions of the assessment tools as well as background information. Participants will be encouraged to submit pictures or video of a problem area at their worksite to be assessed during the course, including validation studies for the assessment tools.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have completed a basic ergonomics assessment course.

**Learning Aids:**

Participants must bring a: Laptop or Tablet/iPad
PDC 413: Noise Control Engineering

Intermediate | Early Career Professional, Professional
Sunday, June 4, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

Topic: Noise
Keyword(s): Noise

Description: The most effective way to prevent occupational noise-induced hearing loss is through effective implementation of engineering noise controls. With some advanced education and training, it is feasible for industrial hygienists with a basic knowledge of the fundamentals of noise to develop noise control solutions; establish noise control priorities; identify and select optimum products for retrofitting equipment; work effectively with design engineers to implement a pro-active approach to noise control; and predict the impact new equipment will have on the existing noise levels.

*Registration includes boxed luncheon.

Prerequisites: Participants must be familiar with the fundamentals of noise and basic terminology, such as A-weighted sound levels, decibel addition, octave-band frequencies, noise dose, and employee time-weighted average noise exposure.
PDC 501: The Ethics of Workplace Violence: Understanding the Problem and Creating Solutions

Intermediate | Professional
Sunday, June 4, 2017 | 8:00 AM - 12:00 PM
Credits: 4 CM Credit Hours
Limit: 45

Topic: Safety
Keyword(s): Ethics, Stress Related Disorders, Workplace Violence

Description: In 2010, assaults and violent acts in the workplace comprised 17.7 percent of workplace fatalities. It was second only to transportation incidents. Each year, nearly 2 million Americans are victims of workplace violence, including murder, physical assault, harassment, intimidation, and verbal abuse. Violence and harassment identification and prevention programs are often lacking, in many of even the most forward-thinking organizations. The practicing industrial hygienist has an ethical responsibility to be involved and aware of these timely and important issues. This PDC will provide resources, information, and case studies in which participants will learn how to recognize different forms of violence and harassment. Participants will be equipped with a continuum of effective ethical preventive tools that address workplace violence, and opportunities to apply these tools to hypothetical situations, during small breakout groups and discussions.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*
PDC 502: Nanotechnology: Old Theories and New Concepts

Introductory | Professional
Sunday, June 4, 2017 | 8:00 AM - 12:00 PM
Credits: 4 CM Credit Hours
Limit: 50

**Topic:** Nanotechnology
**Keyword(s):** Engineering Controls & Ventilation, Exposure Assessment, Nanotechnology

**Description:** This course is designed to introduce the practicing occupational hygienist to fundamental issues involved in the evaluation and control of exposures to engineered nanoparticles (ENPs) and the latest scientific studies. The course will cover five topics, i.e., brief overview of ENP toxicity and toxicology case studies, fundamentals of aerosols, evaluation of nanoparticle exposure, engineering control of nanoparticle exposure, and the use of respirators and other PPE. Experts from the NTWG and the Aerosol, Engineering, and PPE committees will discuss how each of their areas of expertise can be applied to evaluate and reduce exposures to ENPs. The attendees will build on their fundamental knowledge of occupational hygiene and apply that knowledge to the special issues presented by nanotechnology. After course completion, attendees will have basic knowledge regarding methods to evaluate and control ENP exposures. This class may be taken alone or as a complimentary class to the course How to Assess and Manage Nanomaterial Risks.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*

**Prerequisites:** Participants to this program should be practicing occupational health professionals with elementary knowledge in fundamental occupational hygiene concepts including properties of aerosols, aerosol measurement methods, exposure control techniques, respiratory deposition of aerosols, and exposure regulations.
PDC 503: Flood Disaster Response and Resiliency - New!

Introductory | Student/Intern, Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 12:00 PM
Credits: 4 CM Credit Hours
Limit: 50

Topic: Emergency Response
Keyword(s): Asbestos, Emergency Preparedness & Response, Mold

Description: This course will start with a role playing game that gives participants a taste of what it takes to build community resilience in the face of disaster – flooding in the City. Players work together to make decisions and solve problems during an engaging, fast-paced disaster simulation. Following the game, case histories will be used to illustrate environmental issues that must be addressed in disaster response. Resources available to the IH community to help employers, communities, and the nation build resilience to extreme events, save lives, and reduce the physical and economic costs of disasters will be provided.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.
PDC 504: Prevention through Design (PtD): Actually DO it!-New!

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 8:00 AM - 12:00 PM
Credits: 4 CM Credit Hours
Limit: 45

Topic: Emerging Issues
Keyword(s): Management, Prevention through Design, ROI & Budgets

Description: We all love clever designs that solve problems, and that is part of PtD. But not a required part, and not even the main part. In this PDC you will be provided with a thorough understanding of PtD, many case studies, and then see and practice how to actually "DO" PtD yourself, in your business. You will use the process of the ASSE/ANSI z590.3 PtD standard to do mock Design Safety Reviews, and then you will practice selling your PtD approach to your management by using a Business Case Developer tool designed specifically for PtD. You will also be given plenty of tips on how to actually get started – on that first Monday morning after the AIHce.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.
PDC 601: How to Assess and Manage Nanomaterial Risks

Advanced | Early Career Professional, Professional, Senior Professional
Sunday, June 4, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 45

**Topic:** Nanotechnology  
**Keyword(s):** Emerging Issues, Nanotechnology, Sampling & Analysis

**Description:** This class will provide a disciplined process for the responsible management of nanomaterials, which includes: anticipating where nanomaterials may be in the workplace, recognizing the potential for occupational exposures, evaluation of the exposures using a variety of sampling equipment, control based on prevention through design and control banding tools, and confirmation and continual reevaluation of the risk management plan. An example will guide participants through creating a sampling plan, evaluating data, and control recommendation. Using nanomaterial exposure scenarios, breakout groups will create a sampling plan, analyze provided data, and decide if engineering controls should be added to the risk management plan. Participants will be provided information to understand how to apply hazard and control banding for a nanomaterial. This half day class may be taken alone or as a complimentary class to PDC 502: Nanotechnology: Old Theories and New Concepts.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*

**Prerequisites:** Participants should have a basic understanding of what constitutes an engineered nanomaterial, industrial hygiene sampling techniques including aerosol sampling equipment, familiarity with the NIOSH Manual of Analytical Methods, and the hierarchy of controls.
PDC 602: Exposure Monitoring for VOCs, Utilizing Thermal Desorption Tubes, Both Passively and Actively-New!

Introductory | Student/Intern, Early Career Professional, Professional
Sunday, June 4, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 35

Topic: Sampling and Analysis
Keyword(s): Sampling & Analysis

Description: Many techniques are available for the sampling and measurement of Volatile Organic Compounds (VOC) in air. Sampling using charcoal tubes followed by solvent extraction is the most widely used technique for monitoring VOCs in the breathing zone of personnel in the USA. However, the solvent used to extract the compounds of interest is often more hazardous than the compounds themselves, thus perpetuating an even greater risk to the analysts performing the analysis and further increasing laboratory solvent waste in the process. A greener and less hazardous option is the use of thermal desorption sorbent tubes. They are very versatile, require no solvent to extract compounds and can be reused multiple times. Depending on the sampling situation various techniques can be used to retain VOCs on the media. This course will cover the various options available for sampling a variety of VOCs in a range of situations, and discuss the advantages and disadvantages of each technique. Canister sampling will not be covered as this is already offered as a full day course. The correct use of thermal desorption techniques, with tips and tricks for successful measurement will be presented.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Learning Aids:

Participants must bring a: Scientific Calculator

PDC 603: Scanning for Safety: How to Recognize Hazards

Introductory | Student/Intern, Early Career Professional
Sunday, June 4, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 35

Topic: Safety
Keyword(s): Hazard Recognition and Evaluation, Safety, Work Site Hazards

Description: This interactive PDC will utilize hundreds of worksite slides from construction and industrial sites to help participants improve safety scanning abilities and see potential hazards around them. Like a driver learning to scan for roadway hazards, people can be trained to take their blinders off and scan for safety hazards during everyday activities, improving their safety and that of others. Many IHs have a good understanding of hygiene but not a high level of safety expertise or hazard recognition. This PDC will take participants through a training program and hands-on practice in setting up a safety scanning program at their own worksite.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: Participants should have a basic understanding of fundamental safety concepts.

Note: this session is not intended for people already at a high level of safety expertise unless wanting to learn how safety scanning works.
PDC 604: Information & Causation for Health Risk Assessment-New!

Introductory | Professional
Sunday, June 4, 2017 | 1:00 PM - 5:00 PM
Credits: 4 CM Credit Hours
Limit: 60

**Topic:** Epidemiology

**Keyword(s):** Epidemiology, Risk Assessment

**Description:** This course will introduce practical methods for drawing valid causal conclusions from observational data about health effects caused by exposures. It will teach participants to use the Causal Analytics Toolkit (CAT), an Excel add-in, developed with support from the GW Regulatory Studies Center. The toolkit provides simple, powerful commands and a point-and-click interface for doing advanced analytics and causal modeling from Excel using R packages. CAT gives simplified access to the analytics power of a vast array of R packages for detecting, analyzing, quantifying, and visualizing associations and other relations in data sets using standardized, well-documented, and well-supported algorithms. For advanced users, CAT provides a convenient way to integrate R programming directly into Excel. For health effects risk analysts, CAT allows relatively objective analysis of multivariate data, using principles such as that causes should be informative about, and should help to predict, their effects, to identify and quantify potential causal relations directly from relevant data. The ability to discover causal relations in data, rather than only to model hypothesized causal relations using data, opens the door to more objective and replicable scientific analysis of the health effects caused by exposures.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.*

**Learning Aids:**

Participants must bring a: Laptop
PDC 701: Exposure Assessment Strategy & Statistics For Managing Occupational Exposures

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Saturday & Sunday, June 3-4, 2017 | 8:00 AM - 5:00 PM
Credits: 16 CM Credit Hours
Limit: 60

Topic: Exposure Assessment
Keyword(s): Exposure Assessment, IH Program Management, Statistics

Description: This course was formerly Exposure Assessment Strategies and Statistics. This two-day course is designed to provide participants with exposure assessment strategies for judgments of exposure prior to and following the collection and interpretation of occupational exposure monitoring data. Based on the concepts contained in AIHA’s Strategy for Assessing and Managing Occupational Exposures, 4th edition, this course will provide the skills and techniques for developing strategies for effectively judging and managing workplace exposures and monitoring data. This course is the foundation of exposure assessment strategies and is a great refresher or gateway to other topics in exposure assessment strategies.

*Registration includes boxed luncheon.

Prerequisites: Participants should have a working knowledge of exposure assessment, hands on experience with exposure monitoring and fundamental knowledge of statistics.

Learning Aids:

Participants must bring a: Laptop
PDC 702: Application of Industrial Hygiene in an Emergency Response-New!

**Intermediate | Professional**  
Saturday & Sunday, June 3-4, 2017 | 8:00 AM - 5:00 PM  
Credit(s): 16 CM Credit Hours  
Limit: 45

**Topic:** Emergency Response  
**Keyword(s):** Controls, Emergency Preparedness

**Description:** AIHA’s whitepaper “Industrial Hygienists’ Role and Responsibilities in Emergency Response: states that industrial hygienists are a vital resource in all stages of emergency planning and response. Industrial hygienists must be prepared for the unique hazards that occur in a disaster situation, be able to "speak the language" of emergency response, and use emergency response tools effectively. This course is intended to familiarize the industrial hygienists with hazards they may encounter in a disaster site, psychosocial stressors that may impact the health and safety of responders as well as incident command staff, and review elements of the incident command system applicable to an industrial hygienists serving in the role of a Safety Officer, Assistant Safety Officer, or technical staff. Participants will practice using ICS methodology to review and/or develop Form 206 Safety Medical Plans, Form 208 Safety Message, and Form 215A Incident Action Plan Safety Analysis, for an incident scenario. Participants will have an opportunity to practice providing input on incident planning forms developed for a scenario, comparable to an actual situation using the Incident Command System.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should complete IS 100 and IS 200 (Can be taken online through https://training.fema.gov/is/crslist.aspx) and have at least a basic level of knowledge in safety or industrial hygiene.
PDC 703: OHS Management System Auditor

Intermediate | Professional  
Saturday & Sunday, June 3-4, 2017 | 8:00 AM - 5:00 PM  
Credits: 16 CM Credit Hours  
Limit: 30  

**Topic:** Management  
**Keyword(s):** IH Program Management, Management, Management Systems  

**Description:** Individuals performing management system audits are required to be competent. This 2-day PDC provides two distinct sets of knowledge and skills needed by OHSMS auditors – audit skills and an understanding of occupational health and safety management system requirements. Course will focus on understanding OHSMS requirements, as set out in ANSI Z10, OHSAS 18001 and the new ISO 45001 (scheduled for publication in 2017). It will compare the similarities and differences between these standards and how a management system approach will help an organization better manage risk and maintain regulatory compliance. The knowledge and skills needed to perform effective OHSMS audits will be presented.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have a general understanding of occupational health and safety topics and regulatory requirements.

**Learning Aids:**

Participants must bring a: Laptop or Tablet/iPad
PDC 704: Registry Preparation: SDS and Label Authoring

Advanced | Professional, Senior Professional
Saturday & Sunday, June 3-4, 2017 | 8:00 AM - 5:00 PM
Credits: 16 CM Credit Hours
Limit: 60

Topic: Hazardous Chemicals
Keyword(s): Product Stewardship

Description: This PDC is designed to assist hazard communication professionals preparing to sit for the AIHA Registry’s Competency Assessment for the SDS and Label Authoring Registry. This course will address both the knowledge and skills portions of the assessment by focusing on the eight rubrics defined as the body of knowledge for SDS and label authoring and by incorporating workshop activities for each rubric. This is not intended to be an introductory course. Rather, participants should have much of the education, training and experience expected by the AIHA Registry. Participants can use this course as a final "tune-up" prior to sitting for the Competency Assessment or as an initial assessment of their knowledge and skills within a comprehensive Assessment preparation strategy.

*Registration includes boxed luncheon.

Prerequisites: Participants should have experience in SDS and label authoring and a working knowledge of the GHS (Globally Harmonized System) for the classification and labeling of chemicals.

Learning Aids:

Participants must bring a: Scientific Calculator, Laptop or Tablet/iPad
**PDC 801: Risk Assessment Boot Camp for IHs: Asbestos, Silica, Metals & Organic Compounds**

**Intermediate | Early Career Professional, Professional, Senior Professional**

**Thursday, June 8, 2017 | 8:00 AM - 5:00 PM**

**Credits: 8 CM Credit Hours**

**Limit: 60**

**Topic:** Risk Assessment  
**Keyword(s):** Asbestos, Lead, Silica

**Description:** This PDC will take participants for an intensive ride! We will begin by reviewing the basics and methodology of risk assessment related to typical hazards industrial hygienists face at workplaces and in community exposure situations. During the course, approaches for a health risk assessment will be demonstrated on the examples of asbestos, crystalline silica, lead, and benzo(a)pyrene. Structural components of the risk assessment paradigm (hazard identification, exposure assessment, dose-response assessment, and risk characterization) will be reviewed from a practical point of view. Participants will learn how to apply various risk calculation methods and models to evaluate probabilities of disease in exposed cohorts and populations, as well as other important estimators of a risk level. Various factors influencing risk values will be explored, along with different health endpoints.

*Registration includes boxed luncheon.*

**Prerequisites:** Participants should have familiarity with the fundamentals of IH, and the basic concepts of mathematical statistics.

**Learning Aids:**

Participants must bring a: Laptop
**PDC 802: Occupational Exposure Banding in the Workplace including Emergency Response Applications**

**Intermediate | Professional**  
**Thursday, June 8, 2017 | 8:00 AM - 5:00 PM**  
**Credits: 8 CM Credit Hours**  
**Limit: 35**

**Topic:** Exposure Banding/OEL Process  
**Keyword(s):** Exposure Banding/OEL Process

**Description:** Practitioners often rely on authoritative Occupational Exposure Limits (OELs) to support the implementation of the hierarchy of controls, for identifying chemicals for elimination or substitution, and for targeting necessary engineering controls. However, chemicals are being introduced into commerce at a rate that significantly outpaces the development of authoritative OELs. Occupational Exposure Banding is a process that uses available toxicological data to create a range of concentrations, called an Occupational Exposure Band (OEB), to support decisions about exposure control strategies. The objective of this session is to examine: 1) The proposed NIOSH approach to derive an OEB, 2) application of the OEB in the workplace, and 3) adjustments and applications to banding strategies for emergency response scenarios. This course will highlight the array of different information sources and types of OEBs, their uses and limitations, and the linkage between them. This course will also provide user guides and hands-on training on resources available for IH professionals, including training in small groups facilitated by experts and designers of the OEB and Control Banding methodology.

*Registration includes boxed luncheon.*

**Learning Aids:**

Participants must bring a: Laptop or Tablet/iPad
PDC 803: Understanding the WELL Building Standard™-New!

Introductory | Student/Intern, Early Career Professional, Professional, Senior Professional
Thursday, June 8, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 60

**Topic:** Sustainability
**Keyword(s):** Indoor Environmental Quality/Indoor Air Quality, Lighting, Standards

**Description:** The time has come to elevate human health and comfort to the forefront of building practices and reinvent buildings that are not only better for the planet-but also for people. This workshop will teach you how to do this using the WELL Building Standard as the framework. The ideology and structure of the program are covered in depth as well as the certification process. Case studies of WELL pilot projects and other projects actively implementing the Standard are highlighted. The WELL Building Standard marries best practices in design and construction with evidence-based health and wellness interventions. In this workshop, attendees learn how to harness the built environment as a vehicle to support human health, wellbeing, and comfort. Strategies for improving the nutrition, fitness, mood, sleep patterns and performance of occupants through design and construction practices are explored in detail. This intensive workshop helps building professionals and owners understand their role as public health practitioners. It also helps medical professionals understand the critical role that the built environment plays in a person's health and wellbeing. For those wishing to become amongst the WELL Accredited Professionals, this workshop serves as a critical step in the preparation for the exam.

*Registration includes boxed luncheon.*
PDC 804: Hearing Protection, Communication, and Hearing Loss Prevention

Intermediate | Professional
Thursday, June 8, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 45

Topic: Noise
Keyword(s): Noise, Personal Protective Clothing & Equipment (PPE), Physical Hazards

Description: Hearing protection is the primary method for reducing noise exposure on the job when engineering noise controls and administrative controls are not adequate. Participants in this course will learn how Hearing Protection Devices (HPDs) are tested and rated, key considerations for selecting devices, and how new fit testing technologies enhance program success. Participants will develop a greater understanding of the challenges of communicating in noise with conventional HPDs. HPDs can function effectively only within a comprehensive, well-managed hearing conservation program. Participants will learn how monitoring both workplace noise and employee audiometric data is critical to determining the work-relatedness and recordability of hearing loss. Techniques for enhancing worker training and motivation will be shared with participants. Participants will be actively involved in solving practical hearing protection and communication challenges. A hands-on fitting practicum will provide experience in fitting today’s most popular styles of earplugs and earmuffs.

*Registration includes boxed luncheon.*

Prerequisites: Participants should have experience with hearing conservation practices, noise measurement, noise regulations, and hearing protectors. Participants should read *Attitudes toward Use of Hearing Protection Devices and Effects of an Intervention on Fit-Testing Results*. Suggested readings also include *Hearing Protection for Impulse Noise*, *The Ardent Hearing Conservationist*, and *EARlog* (articles 3, 7, 13, 19, and 20).
PDC 805: Practical Application of Whole Air Sampling

Introductory | Student/Intern, Early Career Professional, Professional, Senior Professional
Thursday, June 8, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit: 50

**Topic:** Sampling and Analysis
**Keyword(s):** Exposure Assessment, IH Instrumentation, Sampling & Analysis

**Description:** Participants will learn why whole air sampling is an excellent alternative to traditional exposure sampling scenarios, by understanding the benefits of this technique. Whole air sampling provides more options to address varying sampling locations, conditions and objectives. Other benefits include: 1) the ability to vary the air sample collection times and 2) the ability to obtain more information from each sample collected. Through the use of hands-on experiential demonstrations and illustrative case studies, this course will train the IH to learn the techniques and information necessary to make the transition to whole air sampling and use it effectively. Instructors will compare techniques by discussing advantages and disadvantages of each type of sampler to aide in selecting the proper technique for a variety of sampling scenarios. Understanding the laboratory analysis of whole air samples, how to read and evaluate the QC data and results in a laboratory report and how regulatory agencies (such as OSHA) view and use whole air sampling data will also be covered.

*Registration includes boxed luncheon.*

**Prerequisites:** Basic IH mechanical, computation and evaluation skills required.

**Learning Aids:**

Participants must bring: Scientific Calculator
PDC 806: Exposure Decision Analysis Toolkit

Intermediate | Student/Intern, Early Career Professional, Professional, Senior Professional
Thursday, June 8, 2017 | 8:00 AM - 5:00 PM
Credits: 8 CM Credit Hours
Limit:

**Topic:** Exposure Assessment  
**Keyword(s):** Exposure Assessment

**Description:** Are you a student or university educator who has struggled to understand or communicate exposure assessment data analysis skills? Our experts in this Exposure Decision Analysis (EDA) workshop are opening their “Top Secret” toolboxes to share their skills, knowledge, and techniques with you. Through this dynamic course, you’ll find your own educational competencies in this demanding IH/OH practice elevated to a level that gives you the confidence and authority to transfer that knowledge and understanding to others in your classrooms or student peer groups.

Using a mix of slides, hands-on exercises, analysis tools, technology, and personal experiences, our experts will prepare young IHs and their educators for the demanding expectations found in consulting, industry, academia, and government. At the end of this workshop, attendees will have a full toolkit—including presentations, case studies, workshop ideas, and eTools—for use in their classrooms or their first steps into the larger workforce. Walk in a novice; walk out an EDA expert!

*Registration includes boxed luncheon.

**Learning Aids:**

Participants must bring a: Windows-based laptop to run the software. It will not run on a Macintosh computer without an emulator.
PDC 901: Practical Approaches to Troubleshooting Common Ventilation Complaints and Problems

Intermediate | Early Career Professional, Professional, Senior Professional  
Thursday, June 8, 2017 | 8:00 AM - 12:00 PM  
Credits: 4 CM Credit Hours  
Limit: 60

Topic: Careers & Professional Development  
Keyword(s): Administrative Controls, Engineering Controls & Ventilation, Indoor Environmental Quality/Indoor Air Quality

Description: Comfort and airborne chemical exposure control of every human occupancy always requires ventilation as one of the controls. IHs and other OHS professionals must know how to (1) respond to ventilation complaints and problems, (2) compare existing conditions to desired conditions as described in relevant standards of good practice (SGP), (3) conduct, order, and/or oversee testing of ventilation systems, and (4) provide or propose cost-effective corrective actions. This PDC explores common complaints and deficiencies found in various types of ventilation systems, how to measure or quantify the deficiency, and how to correct the problem.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.

Prerequisites: Familiarity with OEHS topics.

Learning Aids:

Participants must bring a: Scientific Calculator

PDC 902: Risk Assessment During An Incident Response-New!

Introductory | Student/Intern, Early Career Professional  
Thursday, June 8, 2017 | 8:00 AM - 12:00 PM  
Credits: 4 CM Credit Hours  
Limit: 35

Topic: Emergency Response

Description: Incident (Emergency) Response requires professionals to make timely health and safety decisions in order to allow operations in order to accomplish a mission. The mission in incident response include life safety, the prevention of environmental impact, and the prevention of negative financial impact. Conducting a risk assessment and communicating the risk to the Incident Commander (IC) is essential for the safety and health professional in order to protect the responders and public. Often you are unable to receive all the information you would like in order to make a decision so therefore it is essential that you conduct a risk assessment and only accept the level of risk appropriate for the mission.

*Please note: Only participants registering for two (2) half-day PDCs on the same day will receive a box lunch.