

18th Annual
CONSTRUCTION SAFETY

EXPOSITION CONFERENCE & EXPOSITION CONFERENCE & EXPOSITION CONFERENCE & EXPOSITION

FEBRUARY 12-14-2008

DONALD E. STEPHENS CONVENTION CENTER • ROSEMONT, ILLINOIS

CONSTRUCTION
Safety
&
Health
by design



CONSTRUCTION Safety & Health *by design*

Watercolor Illustrations
courtesy of
Grace Lai, On Site Artist

All of the beautiful water colors throughout this piece were painted by Grace Lai, 80. She has been doing on-site artwork on construction sites for twenty years. Born and raised in Chicago, Grace taught for almost 40 years at Chinese Christian Union Church. After her husband passed away, she enrolled in the American Academy of Art...

Continued on page 3

CONFERENCE AT A GLANCE...

Tuesday, February 12

	7:30	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15
REGISTRATION	OPENING KEYNOTE ADDRESS						1A	Ten Key Elements of Safety						1B	NEW Confined Space Standard					
							2A	Ladder Falls and Ways to Stop Them						VISIT	2B Using Design to Stop Falls					
	PETER FURST - TECHNICAL DIRECTOR						3A	Noise and Dust: Reducing Silica Hazards						SAFETY	3B Reducing Silica Exposure with Tool Design and Laws					
	LIBERTY MUTUAL						4A	Become a Back Coach for your Company						EXPO	4B Common Hand Disorders					
							5A	Lessons Learned About Training						5B	Of Course They Can Train People, They're Supervisors					
6:30 - 7:30 AM	EXHIBITS OPEN AND						6A	Building a VPP Culture on a Construction Site												
	CONTINENTAL BREAKFAST						7A	Engineering Principles for Safer Design and Build						VISIT						
	HALL G, DONALD E. STEPHENS						8A	Industrial Hygiene on Construction Sites						SAFETY						
	CONVENTION CENTER						9A	Avoiding Equipment-Related Injuries in Work Zones						EXPO						
							10A	Electrical Myths												

Wednesday, February 13

	7:00	7:30	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15
	7:00 - 8:45 AM						1E	Edwin S. Rearick Construction Safety Forum						1F	Edwin S. Rearick Construction Safety Forum						
	CONSTRUCTION SAFETY INFORMATION						2E	Competent Person: Takes One to Know One						2F	Effective Presentations: More than Just Power						
	EXCHANGE OPEN FORUM (SEE PAGE 9)						3E	Innovative Ways to Reach Immigrant Workers						3F	Health & Safety Performance Metrics for Cons						
							4E	Applying Ergonomics in Highway Construction						10:15 - 11:15	4F Construction and the Aging Workforce: Saving						
	8:00 AM						5E	From Bland to Grand: Rev Up Your Training						DEDICATED	5F Cranes and Derricks: How Time Flies						
	EXHIBITS OPEN &						6E	Measuring Safety: Really!						EXPO TIME	6F Quick Disconnect Failures on Backhoe Buckets						
	CONTINENTAL BREAKFAST,						7E	Fall Safe						7F ANSI Z359 Fall Protection Standards - What i							
	HALL G, DONALD E. STEPHENS						8E	Hidden CANCELLED Pipeline Work						8F The Role of Safety and Health Training for Res							
	CONVENTION CENTER						9E	Non-Owned & Hired Auto Expense						9F Workzone Safety and the Construction Worker							
							10E	Inadequate and Unsafe Temporary Lighting						10F Hydrogen Sulfide Gas - A Toxic Killer							

THURSDAY, February 14

	7:00	7:30	7:45	8:00	8:15	8:30	8:45	9:00	9:15	9:30	9:45	10:00	10:15	10:30	10:45	11:00	11:15	11:30	11:45	12:00	12:15		
NIOSH NORA SECTOR COUNCIL MEETING																							
Opening Sessions						5 break-outs						Short break						5 break-outs					
Professional Development Seminars																							
P1 Improving Your Presentation Skills(8-12)																							
P2 Post Tension Safety Course (8-5)																							

Join us for an evening of fun and entertainment!

TUESDAY, FEBRUARY 12, 2008: 4:30 - 6:00 PM - EXHIBITORS' RECEPTION

Immediately following the last session, join us for an informal reception held in *Expo 2008*. Sponsored by our exhibitors, this is a great opportunity to casually see the exhibits, enjoy some refreshments and network with fellow participants, presenters and exhibitors. Great prizes will also be given away.

Sponsored by



THE CENTER FOR CONSTRUCTION RESEARCH AND TRAINING



12:30	12:45	1:00	1:15	1:30	1:45	2:00	2:15	2:30	2:45	3:00	3:15	3:30	3:45	4:00	4:15	4:30	4:45	5:00	5:15	5:30
12:00 — 1:30 PM						1C	Construction Safety & Health Data Review						1D	Safety Issues in Residential Construction						
LUNCH						2C	Changes in the Fall Protection Standards						VISIT	2D Why are Construction Workers Falling?						
TOM VILLANOVA – PRESIDENT						3C	Hexavalent Chromium: New Standards						SAFETY	3D Hearing Conservation in Construction						
CHICAGO & COOK COUNTY						VISIT	4C Build it Right the First Time						EXPO	4D W.C. Challenges in Orthopedics						
BUILDING AND CONSTRUCTION						SAFETY	5C Empowering Safety at the Project Level						5D OSHA's Training Requirements and How to Comply							
TRADES COUNCIL						EXPO	6C Fall Protection Solutions Roundtable						4:30 – 6:00 PM							
ROBERT MALOOLY						7C	The Future of Design for Construction Safety*						VISIT	EXHIBITOR'S RECEPTION						
ASSISTANT DIRECTOR FOR						8C	International Safety Opportunities – A Long Journey						SAFETY	– HALL G,						
INSURANCE SERVICES DIV.						9C	Roadway Safety Program						EXPO	DONALD E. STEPHENS						
DEPARTMENT OF LABOR AND INDUSTRIES						10C	Hospital Construction Safety Boot Camp						CONVENTION CENTER							

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12:30 – 1:45 PM						1G	Edwin S. Rearick Construction Safety Forum						1H	Edwin S. Rearick Construction Safety Forum					
LUNCHEON/KEYNOTE						2G	ANSI/ASSE A10 Standards - A10 Forum						VISIT	2H Soft Tissue Injury Prevention Program					
ADDRESS						3G	Changes in Safety Attitudes						SAFETY	3H Managing Existing Underground Utility Risks					
THOMAS ZARGES						4G	New Interventions in Masonry						EXPO	4H Why Do I need a Safety Culture and How Do I get One?					
SENIOR EXECUTIVE VICE PRESIDENT						5G	Supervisory Civil and Criminal Liability						5H Multi-Employer Worksites: A Contractor's Perspective						
OF OPERATIONS						6G	Why Concrete Formwork Fails?												
WASHINGTON GROUP INTERNATIONAL						7G	Eliminating Falls Out of the Equation – Best Practices						VISIT						
VISIT						8G	Emergency & Disaster Planning for Construction Sites						SAFETY						
SAFETY						9G	The Reality of Work Zone Liability						EXPO						
EXPO						10G	Struck-By & Caught-In-Between Hazards												

*Sponsored by Construction Institute and are eligible to receive maintenance points from the American Society of Civil Engineers

12:30	12:45	1:00	1:15	1:30	1:45	2:00	2:15	2:30	2:45	3:00	3:15	3:30	3:45	4:00	4:15	4:30	4:45	5:00	
LUNCH						"NORA" Plenary Session, Closing, wrap up													
Keynote — John Howard, Director, NIOSH																			

A NIGHT OF BULLS BASKETBALL — TUESDAY, FEBRUARY 12, 2008

The NBA is more exciting than ever! Join us on Tuesday, February 12 as The Chicago Bulls take on the New Orleans Hornets at the United Center. Attendees will take a tour bus down to the United Center. The game starts at 7:30 p.m. The bus will leave the Embassy Suites O'Hare at 6:30 p.m. Cost is \$50 and includes game tickets and transportation.



Continued from page 2

...to gain "better perspective" – a promise she kept for her late husband. She has made many friends in the Chicago construction community and has won many local awards, some presented by Chicago's Mayor Daley. Many of Grace's original works adorn the offices of the Construction Safety Center, located in Hillside, IL as well as at various art galleries and events throughout Chicagoland.



KEYNOTE SESSIONS

KEYNOTE MORNING:
TUESDAY, FEBRUARY 12 — PETER FURST
SAFETY EXCELLENCE BY DESIGN
7:30 - 8:30 AM



Mr. Furst has been the Technical Director of Contracting Services for Liberty Mutual's National Technical Center in Pleasanton, California since 1995. He is responsible for the Western US & the Pacific Rim countries served by Liberty Mutual's International Division. As Technical Director, he provides specialist support in the Contracting Service areas. He works with field loss prevention consultants & contracting customers to enhance the quality of service provided. He has been instrumental in implementing strategic organizational solutions resulting in operational efficiencies and substantial reductions in the cost of risk.

Mr. Furst has over 20 years of construction experience with a multinational general contractor serving as estimator, superintendent, & project manager on numerous projects varying in size from \$10 - \$500 million, involving hundreds of craftsmen & subcontractors. He also had overall safety responsibility for projects amounting to over 450 million dollars annually with resultant EMRs under 0.50.

He also has over 10 years of design experience with various architecture firms. He is a Registered Architect, Certified Safety Professional, Associate Risk Manager & a Registered Environmental Assessor. Mr. Furst has a Masters in Business Administration with emphasis in management, a Bachelor of Architecture, & a Bachelor of Science in Construction. He has taught business & management as well as construction management & safety courses for over 25 years at different times at UC Berkeley, UCLA, USC, Cal Poly Pomona, Cal State Long Beach, at East Bay Universities. He was elected an Honored Instructor in 2005 at UC Berkeley.

LUNCH
TUESDAY, FEBRUARY 12 —
TOM VILLANOVA - PRESIDENT
CHICAGO & COOK COUNTY
BUILDING AND CONSTRUCTION TRADES COUNCIL



Since March 2004 Tom Villanova has served as the president of the Chicago & Cook County Building and Construction Trades Council. Mr. Villanova is a long-time union leader with a broad background in the labor movement. He started work in the construction industry in 1972 as an apprentice with IBEW Local 134. He served Local 134 as a full-time apprentice program instructor and as business agent for many years. He has a degree in labor studies from Antioch University with a special emphasis on labor law, contract law, and collective bargaining.

KEYNOTE ADDRESS: ROBERT J. MALOOLY
12:00 - 2:00 PM
ASSISTANT DIRECTOR FOR INSURANCE SERVICES DIV.
DEPARTMENT OF LABOR AND INDUSTRIES



Robert J. Malooly has been Assistant Director for the Insurance Services division since February 2003.

Mr. Malooly has worked in the insurance industry for 30 years, rising from claims adjudicator to chairman and chief executive officer of the Industrial Commission of Illinois.

As head of the Industrial Commission of Illinois under Gov. James Thompson, he worked to implement a broad package of legislative reforms to the Illinois workers' compensation system. Before directing the Industrial Commission, he was part of the executive management team that restructured the Illinois Department of Employment Security.

KEYNOTE SESSIONS

KEYNOTE ADDRESS LUNCH:
WEDNESDAY, FEBRUARY 13 — THOMAS ZARGES
SENIOR EXECUTIVE VICE PRESIDENT OF OPERATIONS
WASHINGTON GROUP INTERNATIONAL
12:30 - 1:45 PM



Thomas Zarges was named to his current position as senior executive vice president of operations for Washington Group International in October 2002. He is a member of the senior leadership team, which is responsible for Washington Group's overall growth strategy, employee development, operational excellence, and financial results.

Mr. Zarges joined the company in 1991 and has 37 years of experience in the global engineering and construction industry.

Prior to his current role, he served as president of multiple Washington Group business units including the Power, Industrial/Manufacturing, Engineering/Construction, and Industrial/Process business units.

In addition, Mr. Zarges served for 20 years with Washington Group heritage company United Engineers & Constructors, where his most recent position was vice president of business development. Earlier, he served in supervisory and management positions in field construction, engineering, and project management.

His experience includes heavy civil construction, high-technology projects in the steel and process industries, industrial manufacturing, and major nuclear- and fossil-power projects.

Mr. Zarges is an engineering graduate of the Virginia Military Institute in Lexington, Virginia.

KEYNOTE ADDRESS:
THURSDAY, FEBRUARY 14 — JOHN HOWARD, M.D.
DIRECTOR, NATIONAL INSTITUTE FOR OCCUPATIONAL
SAFETY AND HEALTH



John Howard is the Director of the National Institute for Occupational Safety and Health in the U.S. Department of Health and Human Services in Washington, D.C.

Prior to his appointment as Director of NIOSH, Dr. Howard served as Chief of the Division of Occupational Safety and Health in the California Department of Industrial Relations from 1991 through 2002.

Dr. Howard received his Doctor of Medicine from Loyola University of Chicago in 1974, his Master of Public Health from the Harvard School of Public Health in 1982, his Doctor of Law from the University of California at Los Angeles in 1986, and his Master of Law in Administrative Law from the George Washington University in Washington, D.C., in 1987.

Dr. Howard is board-certified in internal medicine and occupational medicine. He is admitted to the practice of medicine and law in the State of California and in the District of Columbia, and he is a member U.S. Supreme Court bar. He has written numerous articles on occupational health law and policy.

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1A TEN KEY ELEMENTS OF A WORLD CLASS SAFETY INITIATIVE (INTERMEDIATE/ADVANCED)

Peter Furst – Liberty Mutual

This presentation will identify limitations in existing safety programs and management techniques, discuss effective elements of excellence in safety performance and integration of safety into organizational internal business systems.

In this session we will explore the key fundamental elements of a highly effective safety program. We will address technical, management and innovative aspects of the issues involved. The attendee will be able to take away effective tools and techniques that will enable them to address the varying needs of the stakeholders within their organization.

2A LATEST RESEARCH: LADDER FALLS AND WAYS TO STOP THEM (INTERMEDIATE)

Melanye Brennan – Liberty Mutual
Jack Dennerlein – Harvard School of Public Health
Peter Simeonov – NIOSH

Falls are the leading cause of death among construction workers. Ladder falls take their toll in injuries as well, especially among older workers. Three presenters cover different topics on ladder safety: initial findings on ladder-related injuries from ER visits, the development of a tool to assess the safety of portable ladders, and an overview of a four-year study to improve extension ladder safety.

3A NOISE AND DUST: REDUCING SILICA HAZARDS IN CUTTING (AND DESTROYING) CONCRETE (BASIC)

Susan Shepherd – Univ. of Mass-Lowell
Custodio Muianga – Univ. of Cincinnati

Part one of this session examines noise levels produced by five different saw blades in a gas-powered, handheld concrete saw, then shows dramatic results of “wet cutting,” or use of a 3-gallon water tank spray, to reduce dust and exposure to silica. Part two also examines silica exposure during small-scale interior demolitions. Work practices and worker materials are examined, and presenter a task-based control guidance sheet on the subject for supervisors and employees will be distributed.

4A BECOME A BACK COACH FOR YOUR COMPANY (BASIC)

Loren Wolf – MSIC, Inc.

Professional athletes go through the rigors of their job under the watchful eye of the coach and trainer, practicing patterns of movement until they become second nature. Construction workers’ bodies move in the same way as an athlete’s. What does it take to become a back coach for your company? Learn how the back works when lifting and carrying loads and how to spot and correct detrimental patterns of movement. Learn how to remove the barriers to physical performance and coach your crew to score manual material handling success.

5A LESSONS LEARNED ABOUT TRAINING (BASIC)

John Rosecrance – Colorado State University
George Newman – CPWR

Hear about an innovative approach to help build a proactive safety climate on construction sites. “New Tools for Hard Hats” features Safe Talk training for workers, Proactive Management workshop for foremen, Proactive Dissemination and Campaigns for organizations, and Driving Force workshop for superintendents. Lessons learned: collaboration with insurance companies, contractors, and other stakeholders including workers, instructors, union officers. Part two profiles the development of over 3,500 “peer trainers” in the construction trades to deliver training on HAZWOPER, Lead Abatement, Asbestos Abatement, Permit-Required Confined Space Entry, Disaster Response, and OSHA 10s and 30s.

6A BUILDING A VPP CULTURE ON A CONSTRUCTION SITE (INTERMEDIATE)

Patrick Ostrenga – USDOL – OSHA

A description of the process of creating a VPP safety culture on a power plant construction site will be discussed. The interaction of the owner, organized labor (there is a project labor agreement,) and Washington Group as the controlling contractor and how they worked to foster good relations between all parties. These entities worked together to create a safety environment that reduced injuries and costs. The innovative use of a mix of leading indicators with a focus on safe behaviors was one of the keys to the success. Monitoring of work practices resulted in the setting of the priorities

for site inspections and focus items. The openness of the program allowed information to freely flow in all directions. An extensive mentoring program at all levels encouraged personal responsibility and provided safety education to the union employees. One of the components of the mentoring program was including craft workers on safety inspections along with managers. Employee participation in the process is evident at all levels. Extensive site inspections were conducted by supervision and craft with an emphasis on immediate response. The flexibility of the program allowed a rapid response to negative trends, unexpected events and new regulations including the hexavalent chrome standard. The presentation will include information from the contractor and owner and labor.

7A ENGINEERING PRINCIPLES FOR SAFER DESIGN AND BUILD (ADVANCED)

David MacCollum – Hazard Information Foundation, Inc. (HIFI)

This session offers the five engineering principles of safer design and construction planning. The presenter will give examples of safer design alternatives, construction methods and equipment – and its end result: safer operation during the entire life cycle of the project.

8A INDUSTRIAL HYGIENE ON CONSTRUCTION SITES (BASIC)

Eugene Satrun – Exxon Mobil Corp.

Health hazards are often difficult to immediately recognize and may develop over time. With existing and anticipated regulatory standards, it's clear that safety and health professionals must address health hazards in their construction site safety plan. This session will give participants the basics for site industrial hygiene (IH) hazard analysis, and how to implement that in your safety and health policies and procedures.

9A AVOIDING EQUIPMENT-RELATED INJURIES IN WORK ZONES (BASIC)

David Fosbroke and Jenifer Beaupre – NIOSH Division of Safety Research

Learn practical applications of NIOSH safety research results to injury prevention in roadway construction work zones. NIOSH is completing an evaluation of prevention methods to limit workers expo-

sure to being struck by operating construction equipment. Based on results of three years of field work, this presentation will provide information on proximity warning systems and internal traffic control plans used during hot-mix asphalt paving operations.

10A ELECTRICAL MYTHS (INTERMEDIATE)

Bob LoMastro – LoMastro & Associates

If you have fond recollections of a science teacher who made a subject come alive and crackle with excitement, then you will enjoy this class. Experience the snap and sizzle of electricity dropped right into your lap. Office workers and electricians will learn more about this deadly force we depend on, in a few hours, than they have learned in a lifetime. Using live demonstrations & actual accident videos, Bob not only covers the pertinent standards but demonstrates why those standards are necessary. Bob's classes are informative and fun.

1B NEW CONFINED SPACE STANDARD (BASIC)

Frank Perrino – OSHA

The existing construction standard for confined spaces has been updated and comprehensively revised to better protect construction employees from atmospheric and physical hazards. Assistant Secretary of Labor for OSHA Edwin G. Foulke, Jr. has indicated that, "This rule will reduce the number of construction injuries and fatalities and greatly improve safety and health in the workplace." The proposed rule addresses construction-specific issues and uses a comprehensive, step-by-step approach to confined space safety by setting out how to assess the hazards, classify the space, and implement effective procedures to protect employees. The proposed rule would require controlling contractors to coordinate confined space operations among a site's multiple employers. This session will provide an overview of the new standard and answer questions from the construction community about it.

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2B USING DESIGN TO STOP FALLS (INTERMEDIATE)

Ivan Mutis – Univ. of Southern Mississippi
Thomas Bobick – NIOSH
Janie Gittleman – CPWR

Unprotected edges and overlooked hazards are often sites of fatal falls. One presenter will exhibit a unique, patent-pending design of an adjustable roof bracket that includes a guardrail system. The second presentation will show how Virtual Environment (or computer-simulated) technologies can help assess fall-related hazards, integrate fall protection systems and help implement fall prevention management protocols. CPWR will discuss an intervention project on ladder fall prevention for the construction industry called Don't Fall For It. The intervention, includes a short film and fact sheets based on OSHA standards in Part 1926 Subpart X of Safety and Health Regulations for the Construction industry serves as training that can be used for in many settings including toolbox talks, jobsite safety meetings, and training classes.

3B REDUCING SILICA EXPOSURE WITH TOOL DESIGN AND LAWS (BASIC)

David Valiante – NJ Department of Health
Pam Susi – CPWR
Dan Lefkowitz – NJ Department of Health

In 2004, New Jersey passed a law prohibiting the dry cutting and grinding of masonry. Find out how effective the law has been in reducing worker exposure to silica dust, as well as contractor awareness (and compliance) with the law. The second part will show results of engineering controls to reduce silica exposure while cutting block, then discuss regulations, specs and even collective bargaining agreements that require use of controls.

4B COMMON HAND DISORDERS (INTERMEDIATE/ADVANCED)

Peter Hoepfner, MD. – Northwestern Memorial Faculty Foundation

This presentation covers basic anatomy involved in upper extremities as well as examples of common upper extremity workplace injuries, their treatment protocols, and expected return to work standard outcomes.

5B OF COURSE THEY CAN TRAIN PEOPLE – THEY'RE SUPERVISORS! (BASIC)

Don Bradway – Monarch-Kneis Insurance Services

How many times have you seen tailgate or toolbox sessions that were just plain awful? The type of sessions where you wonder why anyone even bothered to show up? How many of those supervisors have been given any kind of instructions on how to be an effective trainer? Attend this session to learn some methods that will help you or your supervisory team become better construction safety trainers so your crews will look forward to your tailgate/toolbox sessions, instead of trying to hide from them!

1C CONSTRUCTION SAFETY AND HEALTH DATA AND OUTREACH (BASIC)

Sue Dong, Janie Gittleman, Mary Watters – CPWR

This three-part session will introduce the just-published U.S. Construction Chart Book, with the latest economic, demographic, employment/income, and safety and health statistics and trends in the construction industry, with special emphasis on the surge of Hispanic workers. The marketing strategy used to promote the book will be described. Closing the session is a presentation on the use of social marketing to reach out to residential contractors.

2C CHANGES IN THE FALL PROTECTION STANDARDS (BASIC)

Daniel M. Paine – Innovative Safety, LLC.

This session will discuss the new changes to the ANSI Industrial Fall Protection Code Z-359 and the proposed new Construction Standard for Fall Protection ANSI A.10.32. The presenter will discuss the need for a site specific plan, hazard analysis, and the impact on the means and methods. It will discuss the new product requirements as well as the new training and installation requirements.

3C CONTROLLING HEXCHROME: NEW STANDARDS, NEW TOOLS (INTERMEDIATE)

Chris Trahan and Pam Susi – CPWR

How can we protect workers from hexchrome, a heavy metal released in welding fumes and present in portland cement? Get an overview of OSHA's hexavalent chromium standard (emphasis on welding) and the OSHA/BCTD settlement agreement covering port-

TUESDAY AFTERNOON SESSIONS – FEBRUARY 12

land cement. Next, take in the results of hexchrome exposure during stainless steel welding with and without local exhaust ventilation. Recommendations for reducing exposures will be given.

4C BUILD IT RIGHT THE FIRST TIME – THE ELEMENTS OF SUCCESSFUL QUALITY ASSURANCE PROGRAMS (INTERMEDIATE)

Felipe Devora and Eric Turner – Zurich

This session will focus on key elements of implementing or improving a Quality Assurance Program, The difference between Quality Assurance and Quality Control, the role of the “inspection,” quality defined and saving the planet by “Building It Right the First Time.”

5C EMPOWERING SAFETY AT THE PROJECT LEVEL – FACTORS INVOLVED IN THE SAFETY TRAINED SUPERVISOR (STS) CERTIFICATION EFFECTIVENESS (BASIC)

Pat Conroy – Council on Certification of Health, Environmental and Safety Technologies (CHEST)

While virtually all contractors espouse the need for effective safety programs, some go the extra mile to make injury-free workplaces a reality. When all is said and done, the key to a successful safety program is the leadership. How well is it communicated, how well is it modeled, and how much authority supervisors and workers are provided to implement it are all the function of leadership. In this breakout session attendees will see and hear the successes that are possible when safety is empowered at the project level.

6C ROUNDTABLE: FALL PROTECTION SOLUTIONS (INTERMEDIATE)

Kelley Edmier, Regina McMichael and Marko Kaar – Zurich
Mark Miner – Miron Construction

As the construction industry grows, and more equipment, technology, and focus is brought to bear on common fall issues in the construction industry, the need to discuss “best practices” increases. It is not simply enough to mandate “6 foot fall protection,” projects need to be coordinated and logistics planned with fall protection as an integral part of the process.

This will be a lively, fast-paced presentation that will get beyond compliance and into fall management systems as a key component of the construction process.

The presenters will lead a focused discussion intended to determine best practices, common pitfalls, and success stories. Come to the program and share your “secrets,” challenges, and concerns for the future, leave with solid recommendations for success. Bring your own photos, forms, or work practices to share on a USB flash drive!

A white paper summarizing this presentation and issues discussed will be provided to all attendees within 30 days of conference.

7C THE FUTURE OF DESIGN FOR CONSTRUCTION SAFETY (INTERMEDIATE)

Mike Toole – Bucknell University
John Gambatese – University of Oregon

Design for Construction Safety (also known as prevention through design in construction) is a process in which engineers and architects explicitly consider the safety of construction workers during the design process. Although the process has been required in the UK since 1995 and the initiative is gaining momentum in the U.S. on a voluntary basis, there has been little theory to date to predict or guide the evolution of Design for Construction Safety. This presentation will discuss four trajectories along which Design for Construction Safety will likely evolve. The session will also cover what changes will be needed in engineering education and practice due to the growth of Design for Construction Safety in general.

8C INTERNATIONAL SAFETY OPPORTUNITIES – A LONG JOURNEY (BASIC)

Tim Galarnyk – Construction Risk Management Services, Inc.

Venturing outside of the U.S. to provide construction safety consulting, training and/or public speaking can prove more challenging than just concerns over language barriers. This speaker will address some of these challenges and provide some practical solutions. Another preconceived notion that many domestic construction industry professionals have is that foreign countries are way behind the U.S. in technology. This notion will be explored by the introduction of “better mouse traps” that have been developed in other countries. We are seeing more imported construction technologies used on our sites and they are often safer and more productive than traditional means and/or methods of building.

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9C ROADWAY SAFETY PROGRAM (INTERMEDIATE)

Brad Sant – American Road & Transportation Builders Association (ARTBA)

The labor/management partnership of ARTBA, NAPA, Laborers and Operating Engineers developed, refined and expanded an award winning “Roadway Safety” training program for workers involved in roadway construction and work zone safety. Presentations on this program have been received with acclaim across the country, and thousands of free copies have been distributed in multiple formats. With new funding from the U.S. Federal Highway Administration and additional partners including the American Association of State Highway and Transportation Officials (AASHTO), the Texas Transportation Institute (TTI), and CNA insurance, the Roadway Safety Program has been expanded into a comprehensive training tool including the basics of temporary traffic control and expanded sections on Nightwork and Runovers/Backovers.

10C HOSPITAL CONSTRUCTION SAFETY BOOT CAMP (INTERMEDIATE)

Dave Murphy – Pepper Construction Company of Indiana

This will be a presentation on construction safety in a functioning hospital environment. Topics will include Interim Life Safety Measures, Infection Control, and best practices/lessons learned.

1D HOME ALONE? SAFETY ISSUES IN RESIDENTIAL CONSTRUCTION (BASIC/INTERMEDIATE)

Hester Lipscomb – Duke University Medical Center
Richard Rabin – Massachusetts Dept. of Labor
Takis Mitropolis – Arizona State University

Residential construction has its own pitfalls when it comes to safety. This session starts with Massachusetts, where 60% of housing units have lead paint. Find out how a unique program gets house painters to have their blood lead-levels tested (and the results). You’ll also hear about error-proofing tasks involved in residential framing injuries and hear a presentation on using the General Duty Clause as a way to hold employers accountable for nail gun injuries.

2D WHY ARE CONSTRUCTION WORKERS FALLING? (INTERMEDIATE)

Brian Clish – Rex Electric

A pictorial view of how and why construction workers are falling. Plus a hands-on exercise setting up a horizontal life line.

3D HEARING CONSERVATION IN CONSTRUCTION (INTERMEDIATE)

Don Garvey – 3M Company

Noise is the most pervasive occupational health contaminant on construction job sites. In one study 44% of carpenters and 48% of plumbers reported a perceived hearing loss. This session will review several things that the safety professional can use to aid in improving their hearing conservation program. These include current federal and state OSHA regulations, options for worker’s exposure measurement in the field, better PPE selections to increase proper usage, and more effective hearing conservation training. Presenters will also briefly discuss the issue of off work noise exposure and some of the research done in this area.



TUESDAY AFTERNOON SESSIONS – FEBRUARY 12

4D WORKERS' COMPENSATION: CHALLENGES & OPPORTUNITIES IN ORTHOPEDICS (INTERMEDIATE)

John Cherf, MD – Neurologic and Orthopedic Institute of Chicago

The US Workers' Compensation system (WC) is a micro economy estimated at over one trillion dollars in both direct and indirect costs. The cost of WC care continues to increase at a rate higher than inflation, the Medicare Economic Index, and private health costs. The changing demographic of our workforce will put additional pressures on the WC system. Future successful providers will need to efficiently manage new technology, episodic treatments, site of care, and local policy/regulation. This will occur in a new health care landscape that demands transparency in cost, patient satisfaction and quality. One of the most important attributes of premier WC providers is to understand and manage the interests of all stakeholders with an emphasis on rapid, aggressive, scientifically proven treatment to ensure optimal short and long-term recovery. Following

these principals can help compress the timeline of treatment and create significant savings. This is particularly important for orthopedic providers since approximately two thirds of WC claims involve the musculoskeletal system.

5D OSHA'S TRAINING REQUIREMENTS AND HOW TO COMPLY (BASIC)

Ken Koroll – OSHA
Scott Brooks – MA Mortenson

This session will cover what OSHA training requirements apply to construction. Topics discussed will include; is the training that employees receive at the union enough; can you rely on training received through another employer; and does having trained employees mean OSHA can't cite you? A safety manager for a construction company will explain how they go about meeting OSHA training requirements.

WEDNESDAY MORNING SESSIONS – FEBRUARY 13

CONSTRUCTION SAFETY INFORMATION EXCHANGE (BASIC) (7:00 – 9:00 AM)

Facilitator: Robert Smith, Safety Director – The Levy Company

Join us for this lively exchange of thoughts, ideas, policies and procedures utilized by participants to solve specific safety issues. Audience participation is critical to the success of the exchange with participants encouraged to submit a topic of interest prior to the session. The moderator then facilitates discussion of those topics.

1E EDWIN S. REARICK CONSTRUCTION SAFETY FORUM (BASIC)

MATERIAL HOIST COLLAPSE

Karen Preskar (Columbus, OH)

WORKING ON IT

John Schauster (St Louis, MO)

FORMWORK COLLAPSE AT BAL HARBOUR

Anthony Campos (Plantation, FL)

Always very popular, this forum presents a selection of real-life, unique or eventful OSHA construction case studies from across the country. This is a great opportunity to gain valuable abatement methodologies and lessons learned and to ask questions to those OSHA

officials directly involved with the case studies. Edwin S. Rearick, Jr. was a compliance officer for over 20 years with the Calumet City Area Office of OSHA. "Eddie," as most people knew him, was a staunch supporter and advocate for worker safety and health, and worked closely with the Construction Safety Council. This Forum is dedicated to his memory.

2E COMPETENT PERSON: TAKES ONE TO KNOW ONE (INTERMEDIATE)

T.J. Lentz and Matt Gillen – NIOSH

In theory, the "competent person" on a construction site should have heightened safety knowledge and target priority hazards. In practice, the person's training and scope of responsibility can be less clear. This session addresses these inconsistencies and focuses on what characteristics define a competent person. Participants will be encouraged to contribute.

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3E INNOVATIVE WAYS TO REACH OUT TO IMMIGRANT WORKERS (INTERMEDIATE)

Robin Baker – Labor Occupational Health Project, UC Berkeley

Immigrant workers have higher rates of fatalities and injuries than other workers on construction sites, and that challenges safety professionals and others to develop ways to reach them. Many unions have responded with new initiatives and innovative strategies. This session provides examples of what unions are doing to reach out, train and protect these vulnerable workers.

4E APPLYING ERGONOMICS IN HIGHWAY CONSTRUCTION (ADVANCED)

Sang Choi, PhD – University of Wisconsin-Whitewater, Occupational & Environmental Safety & Health Department

Techniques to assess ergonomic issues related to work-related musculoskeletal disorders (WMSDs) in highway construction will be explained. The ergonomic assessment tools include BodyMap instrument for measuring potential ergonomic concerns, and handgrip dynamometer for measuring the maximum voluntary contraction and applied grip force of the rebar-tying tasks. The operations comprise excessive applied grip forces and extremely awkward body postures, and this can result in damage and fatigue in the upper extremities and back of the workers. The presenter will demonstrate how to mitigate the risks of work related musculoskeletal disorders for different body regions for specific construction jobs/tasks. Methods for preventing work related musculoskeletal injuries in highway construction will be discussed.

5E FROM BLAND TO GRAND: REV UP YOUR TRAINING SESSIONS! (INTERMEDIATE)

Benjamin Mangan – MANCOMM/American Safety Training, Inc.

If a tree fell in the woods and nobody heard it, did it make a sound? If you delivered a training session and nobody paid attention, did it have any impact? Inefficient training wastes time and money. And, if employees aren't learning effectively, their safety is severely compromised. Safety trainers need to do more than train – they need to facilitate the learning process. They must motivate trainees so they want to learn. Ensuring an effective educational experience for trainees is a challenge that all trainers need to address. This presentation will reveal ways to improve the impact of safety training.

6E MEASURING SAFETY: REALLY! (BASIC)

Ron Witt – American Infrastructure

Safety has always been measured the same since it became a “science” of sorts. Tremendous progress has been made relative to your view of it all. Yet, with all we’ve learned about safety, the technology, the training, each year the same exact accidents occur. In recent years, “Zero Injury” or “Injury Free” workplace terms have been used. Is that practical? Are they just “Good” goals to shoot for? This presentation is designed to provide discussion and some examples of “the way you measure safety” provides those results, good or bad.

7E FALL-SAFE SYSTEM HELPING CONTRACTORS PREVENT FALLS (BASIC)

Mark Fullen, Paul Becker – West Virginia University

The Fall-Safe fall hazard management program has been shown to improve the management of fall hazards on construction sites. This session will present the fall management program, research results that show that the program works, and demonstration of the computerized audit tool that is responsible for the program's success.

8E HIDDEN HAZARDS OF SEWER AND PIPELINE WORK (INTERMEDIATE)

Daniel O'Connell – Safetran – CSRS, LLC

Despite OSHA standards to specify safe work practices, fatalities involving trench collapse, confined space entry and other excavation hazards continue to occur. Many workers lack proper training and may have poor English skills. This presentation addresses critical hazards of sewer and pipeline construction: how to instruct workers to test the atmosphere, toxic sewer gas, explosive atmospheres, oxygen deficiency, basic emergency response, trench fall protection, self rescue, recognizing exposure symptoms, and when you should call in the advance standby rescue team.

9E NON-OWNED & HIRED AUTO EXPENSES: DO YOUR CONTROLS PROVIDE SUFFICIENT PROTECTION? (INTERMEDIATE)

Don Taylor – Zurich

In the construction industry, these types of fleets are common and, by their nature, expose companies to significant risk in the

event of a crash. Company liability is not necessarily “transferred” to the vehicle owner when these types of fleets are used. After attending this course, you’ll have a better understanding of what some of the exposures are with these types of “fleets” and how to better protect your company’s interests in the event of a crash involving a non-owned or hired auto.

10E INADEQUATE AND UNSAFE TEMPORARY LIGHTING: CHALLENGES, RISKS, & SOLUTIONS (INTERMEDIATE)

Bruce Smith – Auburn University

The use of temporary lighting in buildings under construction is necessary for the safety and productivity of the workers. OSHA sets minimum guidelines for temporary lighting, but an examination of thirty-three randomly chosen construction sites showed that most work areas did not meet the minimum OSHA standards. Construction sites are dynamic environments. With the constant change in environment, proper and consistent illumination is a challenge. The presentation will examine some of the problems and challenges, look at the risks, discuss current lighting methods, and propose possible solutions to create a safe working environment.

1F EDWIN S. REARICK CONSTRUCTION SAFETY FORUM (BASIC)

DON’T HANG WITH CHICKENS

Thomas Briggs (St. Louis, MO)

HIDDEN DANGER: HAZARDS ASSOCIATED WITH REPLACING A LIGHT WEIGHT CONCRETE ROOF

Dimitrios Critopolous (Mobile, AL)

SO WHO’S RESPONSIBILITY IS IT ANYWAY?

Sandra Harris (Overland Park, KS)

Always very popular, this forum presents a selection of real-life, unique or eventful OSHA construction case studies from across the country. This is a great opportunity to gain valuable abatement methodologies and lessons learned and to ask questions to those OSHA officials directly involved with the case studies. Edwin S. Rearick, Jr. was a compliance officer for over 20 years with the Calumet City Area Office of OSHA. “Eddie,” as most people knew him, was a staunch supporter and advocate for worker safety and health, and worked closely with the Construction Safety Council. This Forum is dedicated to his memory.

2F EFFECTIVE PRESENTATIONS: MORE THAN JUST POWER POINT & DONUTS (INTERMEDIATE)

Regina McMichael and Kelley Edmier – Zurich

This interactive, exciting program will help you supercharge your safety training, not with flashy Power Points, but with proven methodologies that have been used by great trainers for years! Everyone agrees safety training is critical, but are you designing and developing a program your employees can understand and will actually learn? Join us to hear how to stop talking safety to your employees and actually change their behaviors permanently. Leave this program with some tools you can take back to your company and implement right away.

3F HEALTH & SAFETY PERFORMANCE METRICS IN THE CONSTRUCTION INDUSTRY (INTERMEDIATE)

Janie Gittleman – CPWR

Performance metrics are a way of measuring an organization’s effectiveness in reaching critical goals. Metrics are designed to drive improvement and characterize progress made. NIOSH, in collaboration with CPWR and MNOSHA Consultation, conducted a pilot study to identify qualitative and quantitative performance metrics on safety and health for the construction industry, which were then rated by small-to-large construction firms. The presentation gives the process and results – a starting point for development of metrics for construction safety and health.

4F CONSTRUCTION AND THE AGING WORKFORCE: SAVING BODIES AND MONEY USING ERGONOMICS (BASIC)

Cindy Roth – ETC

Construction jobs are difficult enough. Now we have to add our aging workforce, language barriers, poor tools and equipment. What do we have....a money pit. Applied Ergonomics is the science of saving people and money. Attend this interactive seminar and see how to immediately reduce risk factors, find easy solutions and reduce workers’ compensation claims and lost work time. How to include ergonomics in bids and assist your employees and your subs in efficiency and time saving fixes will be discussed.

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5F CRANES AND DERRICKS: HOW TIME FLIES (BASIC)

John Rahilly – Construction Safety Council

Cranes are the workhorses of our industry. While most of us find them fascinating to watch on a jobsite, we recognize that certain conditions with a crane can add up to big trouble in a hurry. The industry has followed the guidance of an OSHA crane standard promulgated in the 70's with references to an ANSI/ASME standard written in the 60's. A new crane standard, developed under a negotiated rulemaking process designed to streamline standards promulgation, has been in the works for a half dozen years or so. This session will highlight the work of the negotiated rulemaking committee, changes that will occur in crane usage when the standard is published and enforceable, and an update on the progress of OSHA to make it so.

6F QUICK DISCONNECTS ON BACKHOE BUCKETS (BASIC)

Brian Sturtecki – OSHA

In 2004, OSHA recognized that unintended release of hydraulic excavator buckets attached with "quick couplers" had caused a statistically significant number of incidents that resulted in serious injuries and deaths. A Safety and Health Information Bulletin (SHIB) was released in August of 2004 identifying the problem and providing solutions to prevent these occurrences. Unfortunately, despite the work done by OSHA, NIOSH, manufacturers, and the safety and health community, these incidents continue to occur resulting in additional injuries and deaths. This session will outline the basic - and simple - safeguards that contractors should use to prevent these unnecessary incidents.

7F ANSI Z359 FALL PROTECTION STANDARDS – WHAT IT MEANS TO YOU (INTERMEDIATE)

Matt Burkhart – Aegis Corp.

ANSI Z359 standards for fall protection, while developed as General Industry Standards, can and will affect construction operations. These new standards went into effect in November 2007 and involve new procedures, equipment and requirements. It is not likely that manufacturers will continue to manufacture existing fall protection equipment for construction. These standards go far beyond any construction fall protection standards and OSHA requirements. They will affect your bottom line, as well as present challenges most companies are unaware of. Industrial customers will use them. Learn about these new standards and what they mean to you.

8F DURING THE DISASTER, THE ROLE OF SAFETY AND HEALTH TRAINING FOR RESPONDERS (INTERMEDIATE)

Joseph "Chip" Hughes – NIEHS

The role of disaster response workers have increased, broadening into an 'all-hazards' approach, involving an active role in both man-made and natural disasters. This increased role brings challenges that the worker health community must address through increased education and training, as well as improved communication and collaboration with and among local, regional, and state organizations, local hospitals, and the community. The Worker Education and Training Program (WETP) of the National Institute of Environmental Health Sciences (NIEHS/NIH/DHHS) has developed numerous models for curricula development, training delivery, and program evaluation to support worker health preparedness efforts at the local level. Key to the success of these efforts is the development of local training partnerships between hazmat emergency responders, environmental cleanup workers, and safety and health professionals. The goal of this panel will be to provide guidance in developing local training partnerships for developing health and safety training programs for all-hazards disaster preparedness.

9F WORKZONE SAFETY AND THE CONSTRUCTION WORKER (INTERMEDIATE)

Dulcy Abraham, MD. – Purdue University

Workzone safety has become a major concern for state transportation agencies due to the increase in the number of workzone fatalities. This presentation will discuss the findings of research studies funded by the National Institute for Occupational Safety and Health (NIOSH) and the Joint Transportation research program in three major areas: a) causes of fatal occupational accidents in workzones; b) speed control strategies and c) use of high-visibility personal protective equipment (PPE). The presentation will include an interactive component that explores the use of new technologies for improving workzone safety.

10F HYDROGEN SULFIDE (H₂S GAS): A TOXIC KILLER (BASIC)

Charles “Lewis” Raymond – The Gray Insurance Company

Hydrogen sulfide, also known as H₂S, is one of the most dangerous gases encountered in industry. Hydrogen sulfide is a toxic gas that occurs naturally due to the bacterial decomposition of organic material, or occurs as a product, byproduct, or waste material resulting from industrial processes. Construction activities that could be impacted by hydrogen sulfide include projects in oil refineries, chemical plants, pulp mills, landfills, and sewerage treatment facilities. The purpose of this presentation is to provide attendees with an overview of hydrogen sulfide, its chemical and physical properties, sources of H₂S, work practices, methods of detection, personal protective equipment, contingency planning, rescue and first aid.

1G EDWIN S. REARICK CONSTRUCTION SAFETY FORUM (BASIC)

TERRIBLE USE OF TOE BOARDS

Matthew Thurlby (Omaha, NE)

AMPUTATIONS, CAVE-IN IS NOT THE ONLY HAZARD IN AN EXCAVATION

Harold Ciancio (Birmingham, AL)

MAST-CLIMBING WORK PLATFORMS

Eric Jones (Braintree, MA)

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2G ANSI/ASSE A10 STANDARDS – A10 FORUM (INTERMEDIATE)

Tim Fisher – ASSE

How can we use A10 ASC voluntary national consensus standards to move safety and health/environmental programs forward on construction and demolition? Participants will receive technical information addressing best practices in the SH&E standards, then leave with the knowledge and skills to improve their own safety and health programs. This session, organized by the A10 Committee, serves as a format for discussion of the technical concerns, issues, opportunities, and implementation strategies involved with the use of A10 ASC voluntary national consensus standards.

3G BEYOND COMPLIANCE: CHANGES IN SAFETY ATTITUDES (ADVANCED)

Rosemary Sokas – Univ. of Illinois Chicago

Panagiotis “Takis” Mitropoulos – Arizona State University

Tariq Sami Abdelhamid – Michigan State University

Three researchers present findings on the way workers approach hazards and make (or reject) safe decisions. One presenter shows the results of a safety climate survey on a worksite three months after workers took the SmartMark Hazard Awareness 10-Hour program. A second presenter proposes a cognitive approach to construction safety and identifies new directions for accident prevention. A third uses a theory to assess worker response to (and recognition of) hazards, depending on the worker’s orientation to risk.

4G PROBLEM SOLVED: NEW INTERVENTIONS IN MASONRY (BASIC/INTERMEDIATE)

David Rempel – Univ. of California

Jim Platner – CPWR

Dan Anton – Eastern Washington University

This session will include three presentations on new developments in Masonry. The first, Construction Solutions, is a free, online database launching at this conference that will give contractors and workers instant access to construction hazards and ways to reduce or eliminate them. The second is a new device for overhead drilling into concrete to reduce MSDs – and results of testing for usability, productivity, and fatigue. The third presentation is a review of existing tools, materials and work practices in masonry to reduce MSDs, how decisions are made to use tools and disseminate best practices.



5G SUPERVISORY CIVIL AND CRIMINAL LIABILITY AT THE WORKPLACE (INTERMEDIATE)

Mark Lies – Seyfarth Shaw LLP

The program will cover the potential civil liability of supervisors for personal monetary judgments under state and federal law for safety and health violations, as well as personal criminal liability under federal and state law. It will also provide recommendations on how to avoid such liabilities.

6G WHY CONCRETE FORMWORK FAILS? (INTERMEDIATE)

Mohammad Ayub – OSHA

OSHA has investigated over a dozen cases of formwork failures leading to injuries and fatalities. The presentation will discuss the root causes of such failures and provide remedial measures. Actual incident cases will be discussed and abatement methods suggested. Requirements of the OSHA and ANSI standards relating to concrete formwork will be discussed. Significance of preparing formwork drawings, constructing the formwork as per plans, receiving concurrence of any deviation, and inspecting the formwork before concrete is placed will be presented. Examples of common errors in constructing formwork leading to serious hazards will be given.

7G ELIMINATING FALLS OUT OF THE EQUATION – BEST PRACTICES (BASIC)

Brian Gawlik, Paul Kendall, Tom Kerns, John Ferguson – Bovis Lend Lease

This session covers best practices that are currently in use on jobsites across the nation. All topics will address fall protection methods that reduce the likelihood of people and/or material from falling off the building. Topics include: perimeter protection, shaft protection, high wind protection, safe access to working floors, site access safety, high rise safety, steel & concrete safety and hole covers to name a few. Please join us for this most serious and relevant subject.

8G EMERGENCY AND DISASTER PLANNING FOR CONSTRUCTION SITES (INTERMEDIATE)

Mike McCann and Chris Trahan – CPWR

A 2.5-hour roundtable discussion on what is needed to develop and execute an emergency and disaster plan at a construction site. For discussion: site preplanning and development of an Emergency Response Plan, coordination with outside authorities, training/drills of a site emergency management team, stress management, handling the press, the National Incident Management System, and CPWR's National Disaster Response Training Initiative.

9G THE REALITY OF WORK ZONE LIABILITY (BASIC)

Greg Stefan – Arch Insurance Group

The focus of this presentation is on the realities of lawsuits, general liability claims, and associated settlements of work zone incidents involving the traveling public who becomes involved in an accident in or near a contractor's roadway work zone. Presenter will go through several real-life work zone cases and large settlements to illustrate the reality of how severe these cases can be if the contractor is not able to defend themselves against allegations of improper work zone setup, traffic control mgmt, etc. A big message to the contractor is the necessity for consistent documentation of work zone inspection, correction, and overall work zone mgmt, including the message of why videotaping of lane closures, daily traffic control setup, and correction of deficiencies goes a long way to provide defense in these claims.

10G STRUCK-BY & CAUGHT-IN-BETWEEN HAZARDS (BASIC/INTERMEDIATE)

Bob Emmerich – Safe-Con, LLC

This interactive 2½ hour session will discuss the hazards that account for the greatest number of preventable fatalities and injuries caused by struck-by and caught-in-between incidents. The session will discuss fatality & statistical data, falling objects, vehicle and equipment strikes, flying objects, crane tip-overs and failures, rigging equipment failure, heavy equipment, highway equipment related fatalities, power tools, causes of crushing fatalities and maintenance hazards. The presenters use real life examples and accident statistics to show where construction's greatest hazards exist. Best practices to abate identified hazards are also discussed.

WEDNESDAY AFTERNOON SESSIONS – FEBRUARY 13

1H EDWIN S. REARICK CONSTRUCTION SAFETY FORUM (BASIC)

FALSE SENSE OF SECURITY

Scott Wasilevich (Milwaukee, WI)

LET'S ALL PULL TOGETHER

Scott Maloney (Kansas City, KS)

TICK CONSTRUCTION - WHAT IS THE HAZARD?

Presenter: Dean Peal (Wichita, KS)

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2H SOFT TISSUE INJURY PREVENTION PROGRAM

Marko Kaar – Zurich Services Corp.

Matt Mckeen – Hill Mechanical

Musculoskeletal disorders or soft-tissue injuries continue to be a major loss leader in construction, contributing to a majority of claims costs, lost time, and human pain and suffering in our industry. Learn what the risks are from an insurance perspective, and hear from a construction industry professional about the successful program they have implemented to minimize those risks, control costs, and keep people working and in good health. At the end of this program, attendees will be able to identify potential musculoskeletal disorders (MSDs) and exposures. Recognize types of MSD injuries. Reduce construction risk factors through pre-task planning. Implement a program to reduce exposures and use field-tested methods to reduce costs and keep your workforce healthier.

3H MANAGING EXISTING UNDERGROUND UTILITY RISKS ON PROJECTS (INTERMEDIATE)

Jim Anspach & Dave Cole – So-Deep, Inc.

The National Academies, NTSB, and other organizations recognize that existing underground utilities create safety and economic risks for construction projects. Past practices of managing utility data were inconsistent with that risk. CI/ASCE 38-02 is increasingly used throughout Illinois and the rest of the country as a means for project owners and their engineers to develop a scope of work regarding utility depictions on plans. It is also referenced in several state One-Call policies or statues, including Illinois. The Illinois DOT uses this standard on its significant projects. This session will focus on 38-02 and its use on a DOT project.



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WEDNESDAY AFTERNOON SESSIONS – FEBRUARY 13

4H WHY DO I NEED A SAFETY CULTURE AND HOW DO I GET ONE? (INTERMEDIATE/ADVANCED)

Bruce Thompson – Lockton Companies, LLC

Compliance safety programs will give you little gains in controlling your losses because the focus is on unsafe conditions and having just a few individuals concerned and focused on preventing losses. Shifting from a production culture to a safety culture where everyone is held accountable for activities, compliance and results will have huge benefits in reducing losses when everyone is involved and has “skin” in the game.

5H MULTI-EMPLOYER WORKSITES: A CONTRACTOR’S PERSPECTIVE (BASIC)

Jane Williams – A-Z Safety Resources

Whether you are pro or con, OSHA’s enforcement of their multi-employer policy is alive and is utilized to cite general contractors and their subcontractors. This session reviews the OSHA Compliance Directive to impart the issues and actions necessary to keep your company out of the citation process. She will include the update of the Summit decision and the 9th Circuit Appeal if heard by then.

THURSDAY SESSIONS (HELD AT CROWNE PLAZA O'HARE) – FEBRUARY 14

PROFESSIONAL DEVELOPMENT SEMINARS

P1 IMPROVING YOUR PRESENTATION SKILLS (INTERMEDIATE) (8:00 – 12:00)

Curtis Childress – Zurich

Whether conducting training, or speaking to customers, co-workers, or management- we all make presentations. This program reviews key principles in presenting to groups small or large, including planning your presentation, effective use of A-V equipment, personal presentation skills, dealing with butterflies, and managing your audience.

P2 POST-TENSION SAFETY COURSE (INTERMEDIATE) (8:00 – 5:00)

Ed Penna & Jim Rogers

– Local 846/405 Evaluation & Certification Services

This comprehensive Post-Tension Safety Course will cover the safety factors of Post-Tension forces, various types of Post-Tension systems, and the proper document control responsibilities of the ironworker, contractor and safety personnel. Proper stressing procedures that should be followed by all involved will be discussed. The proper operating and safety procedures for performing all types of detensioning and lift off operations will be discussed. The importance of training and Ironworker Post-Tension certification will also be covered.

THURSDAY SESSIONS (HELD AT CROWNE PLAZA O'HARE) — FEBRUARY 14

NIOSH NORA SECTOR COUNCIL MEETING (8:00 – 4:00)

OPENING SESSION 8:00 – 8:30

WORKSHOPS - 8:45 – 10:15

- 1) Traumatic injury
- 2) Design for construction safety
- 3) Construction culture
- 4) Musculoskeletal disorders and
- 5) Construction safety and health management

WORKSHOPS - 10:45 – 12:15

- 1) Improving surveillance
- 2) Training issues
- 3) Vulnerable workers
- 4) Construction industry and work organization
- 5) Health hazards

LUNCH – JOHN HOWARD KEYNOTE 12:30 – 2:00

PLENARY SESSION AND WRAP UP 2:00 – 4:00

TOP CONSTRUCTION PROBLEMS AND A NATIONAL AGENDA TO ADDRESS THEM

A construction stakeholder council has been working over the last two years to identify top construction problems and develop a “National Construction Agenda” to address them. The agenda is intended to answer the question:

“What information do we need to be more effective in preventing injuries and illnesses in construction?”

Please join us Thursday, February 13 to discuss these topics and the draft goals developed to respond to them. You, as an attendee, will be able to provide input on these draft goals before they are finalized.

WHAT IS NORA AND THE NORA CONSTRUCTION SECTOR COUNCIL?

NORA is the National Occupational Research Agenda (NORA) initiative. It

provides a framework for diverse parties to collaborate in identifying the most critical issues in workplace safety and health. NIOSH is the steward of NORA and facilitates the work of the NORA Construction Sector Council, which develops and helps implement the agenda goals. This is a 10 year effort, stretching from 2006 to 2016.

IS THIS JUST ABOUT RESEARCH?

No. Research needs and information gaps are the foundation for the agenda but it does not stop there. It goes beyond research to address how the findings can be converted into tools and guidance and other end products for use by construction safety and health practitioners. This is called “Research to Practice” or R2P.

Everyone in construction has a stake in converting knowledge into tools and products to make construction safer and healthier. We are asking everyone who attends our Feb. 14 meeting to bring questions and issues you face on the job that you wish you had better answers for – or tools and guidance that you wish were available. We value your input. If you are a researcher, you should also attend to provide input and to hear, first hand, about construction user needs.

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HOW WILL THE MEETING WORK?

The meeting will include a plenary session followed by breakout sessions so attendees can discuss and provide input on the specific topics and goals. Dr. John Howard of NIOSH will be the lunch speaker. The groups will report back in the afternoon to conclude the meeting.

WHAT ARE THE TOP PROBLEM TOPICS?

Short descriptions follow to help you select the most appropriate topic and breakout session to attend.

1. REDUCE MAJOR SOURCES OF TRAUMATIC INJURIES AND FATALITIES. Specific sources that need to be targeted include: a) falls, b) electrocution, and c) struck by and caught between incidents. Examples of research needs include developing additional fall prevention options for residential construction, targeting “live” electrical work hazards, evaluating injury risks associated with the expanded use of night work in the road construction industry, and getting a better handle on risk factors associated with some types of struck by hazards. An example of a Research to Practice (R2P) need is to identify aggressive options for improving implementation of fall prevention. This would include working with construction partners to develop and implement a national campaign to reduce fatal and severe injuries associated with falls to a lower level.

2. REDUCE MAJOR HEALTH EXPOSURES/ILLNESSES OF CONCERN. Specific sources that need to be targeted include: a) silica, b) noise, and c) welding fumes. Research needs range from improving measurement of impact noise, filling data gaps about welding fume health effects, and developing options for “portable” records for audiometric tests to be used across multiple employers. R2P needs include such examples as piloting “buy quiet” efforts for lower noise emitting tools and developing standardized pre-job planning health hazard approaches for silica, noise, or welding fumes that can be used by competent persons on construction sites. This would potentially encourage the use of controls.

3. REDUCE MAJOR SOURCES OF MUSCULOSKELETAL DISORDERS. Additional identified research needs include more accurately estimating the prevalence and rates of work-related musculoskeletal disorders among trades and industry divisions, and systematically

identifying high risk tasks where no existing interventions are available. This is important so that options can be developed and evaluated in partnership with industry stakeholders. R2P needs include overcoming obstacles to recognizing musculoskeletal problems and how best to improve the buy-in, adoption, and diffusion of solutions by contractors, owners, and workers.

4. CONSTRUCTION CULTURE. The risk of injury on a construction site is greatly affected by the atmosphere on the site. Do workers feel like safety is important and feel comfortable raising safety concerns? Research in this area could help reduce the risk of injury by understanding how might construction culture be defined and measured in relation to safety and health? What are the factors that most affect construction safety culture and what are the ways we can effectively improve it?

5. CONSTRUCTION SAFETY AND HEALTH MANAGEMENT. While it is clear that management practices are essential to safety performance, how much do we know about the effectiveness of various management practices? Does current practice sufficiently support management of health hazards or musculoskeletal disorders? Most importantly, how might practices that are known to work for large firms be scaled down to provide relevant alternatives and benefits for the majority of small firms and their workers?

6. ORGANIZATION OF CONSTRUCTION WORK AND THE CONSTRUCTION INDUSTRY. Work on construction projects involves complex relationships across numerous firms, trades and disciplines. Unclear safety roles and accountability among project participants are likely root causes for safety and health problems. Risk-shifting and cost-shifting among parties can also occur. What research might help improve understanding of this fragmentation and identify systems interventions? Do systems like low-bid contracts increase the risk of injuries? How can procurement be changed to improve safety efforts? Other questions might address factors such as understanding the growth of the informal part of the industry and self-employed contractors.

7. TRAINING ISSUES. Training is fundamental to construction safety and health practice, and significant resources are devoted to both general competence and safety and health training. Important training needs and gaps include: the need for developing an inventory of existing training resources, improving our understanding of

THURSDAY SESSIONS (HELD AT CROWNE PLAZA O'HARE) – FEBRUARY 14

training effectiveness and impact on reducing injuries and illnesses, and exploring how best to get training to underserved worker and contractor groups.

8. VULNERABLE WORKERS. Construction is undergoing rapid demographic changes. Certain sub-populations, such as immigrant workers, young workers, and day laborers, are at higher risk of injury or illness. Risk factors for these groups include language proficiency, literacy, inexperience, and group culture. There is a need to identify ways that will reduce risks to these workers and figure out how to encourage adoption of these methods by the whole industry.

9. DESIGN FOR CONSTRUCTION SAFETY. Increasing the consideration of occupational safety and health at the design phase of construction holds enormous transformational promise for cost effective improvements in safety and health measures. “Green design” (incorporating changes in design to improve environmental performance) provides a model of what can be achieved with this approach. Research can be done to evaluate the effectiveness of design interventions such as built-in anchorages for fall prevention or higher load skylights. Research can also pilot specification templates to bridge the gap between the safety and health and architecture/design communities. The scope of “Prevention through Design” provides a life-cycle perspective to construction design and can encompass materials, equipment and tools, and work organization/sequence. Research is needed to address how to increase use of prevention through design by overcoming obstacles to its adoption.

10. IMPROVING SURVEILLANCE OF HAZARDS AND OUTCOMES IN CONSTRUCTION. Surveillance is the public health term used to describe the systematic collection, analysis, and interpretation of occupational safety and health data. Until we know the true numbers of construction workers who are injured or get sick from work each year, and how they got hurt, we cannot design the most effective strategies for reducing those risks. Also if we want to show improvements, e.g. more people using safer methods or reductions in exposure levels, we need a baseline to show exposure levels or how many are using safer methods today. Our traditional systems are vital for tracking performance, and there is strong interest in finding ways to fill gaps in these systems. Examples of suggested focus areas include expanding the concept of surveillance by experimenting

with shared exposure databases for health hazards (e.g. for silica or noise) or by survey research for identifying leading indicators such as good practices or use of controls. There is also interest in expanding surveillance practices among construction stakeholders and in finding ways to share such information.

WHY IS THIS IMPORTANT?

With many different hazards and safety and health issues in construction, the National Construction Agenda provides a way to identify a subset of shared priority topics that we can all work together on as an industry. It will encourage dialog and partnering on these issues to make an impact in reducing injuries and illnesses among construction workers. Please join us!



CONSTRUCTION
**Safety
&
Health**
by design

CONFERENCE FEE SCHEDULE - REGISTER EARLY AND SAVE!

Early Bird Registration: On or before January 30, 2008

Late Registration: After January 30, 2008

(Discounts for multiple registrations will not apply for late registrants.)

Tue/Wed Sessions: Participants may choose from any sessions listed for Tuesday, February 12th and Wednesday, February 13th. Registrations are for two days only. Badge sharing will be allowed, however, no new name badges will be printed.

Thursday Sessions: Participants may choose from any of the Professional Development Seminars on February 14th.

SESSIONS (PRICE PER PERSON)*	EARLY BIRD REGISTRATION (ON OR BEFORE 1/30/2008)	LATE REGISTRATION (after 1/30/2008)	ONSITE REGISTRATION
Tuesday/Wednesday Sessions	\$395	\$445	\$495
Professional Development Seminars	\$245	\$295	\$365
All Three Days (your best value)	\$545	\$595	\$645

HOTEL & TRAVEL INFORMATION

CROWNE PLAZA CHICAGO O'HARE

5440 N. River Road, Rosemont, IL
1-888-642-7344 (USE CODE CS8)
 \$155 Single/Double
 Parking \$6.00
 Cut-off date: 02/01/2008

EMBASSY SUITES O'HARE

5500 N. RIVER ROAD, ROSEMONT, IL
 KING SUITES: \$155 KING/\$160 DOUBLE
1-800-EMBASSY (1-800-362-2779)
 Parking \$11.00
 Cut-off date: 01/14/2008

Each day both hotels include full breakfast and managers reception.

All hotels have a complimentary shuttle to and from O'Hare Airport. Embassy Suites is connected to the Convention Center, via a pedestrian walkway. Shuttle provided by Crowne Plaza.

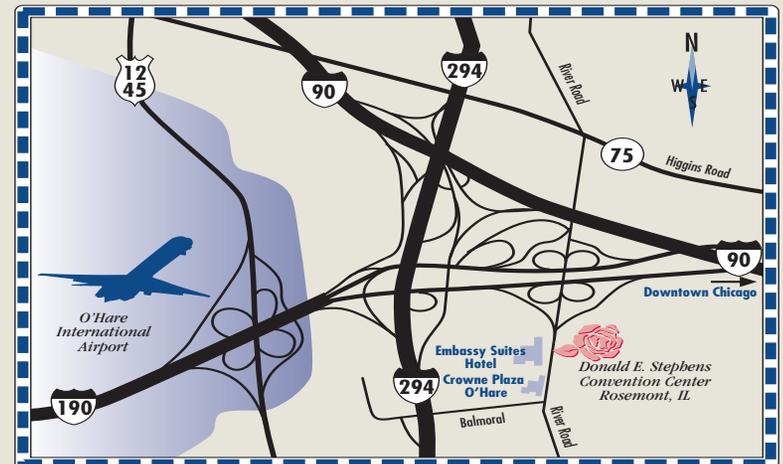
If you are driving to Stevens Convention Center please note the parking is \$11 per day.

* Quantity discounts will apply for 5 or more people. Call for discount breakdowns.

All fees include conference sessions, conference proceedings, lunches, continental breakfasts, refreshments, and entrance to Safety Expo 2008. **NO REFUNDS WILL BE GIVEN FOR CANCELLATIONS RECEIVED AFTER January 30, 2008**

CONTINUING EDUCATION UNITS (CEU'S) WILL BE AWARDED BY THE NORTHERN ILLINOIS UNIVERSITY. MAINTENANCE POINTS WILL BE AWARDED BY THE AMERICAN BOARD OF INDUSTRIAL HYGIENE (ABIH). FORMS FOR CEU'S AND MAINTENANCE POINTS WILL BE INCLUDED IN YOUR ON-SITE REGISTRATION PACKET.

Participants interested in the Safety Expo ONLY, may attend for \$40/day.





YOUR HOSTS

CHICAGOLAND CONSTRUCTION SAFETY COUNCIL
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 CPWR – CENTER FOR CONSTRUCTION RESEARCH AND TRAINING
 NIOSH – NATIONAL INSTITUTE FOR OCCUPATIONAL SAFETY & HEALTH

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