

American Society of Safety Engineers



Direction for NORA's Second Decade

NORA Town Hall Meeting

Chicago, Illinois

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My name is Phil Colleran. I am a Certified Safety Professional (CSP) who has worked in the construction industry for more than 30 years and a member of the Construction Practice Specialty of the American Society of Safety Engineers (ASSE). I am pleased to be here today on behalf of the 30,000 member safety, health and environmental professionals of ASSE who are committed to helping in this unprecedented proactive effort by the National Occupational Research Agenda (NORA) to engage those of us with a real stake in this nation's occupational safety and health research. We commend NORA and the National Institute for Occupational Safety and Health (NIOSH) for this effort.

ASSE's Construction Practice Specialty, with 3500 members, is one of ASSE's largest and most active specialties. ASSE also is the Secretariat of the ANSI A10 Standard, "Safety Requirements for Construction and Demolition Operations." There are 44 different voluntary consensus

standards and projects under the A10 banner, each of which relate to an separate aspect of the protection of employees and the public from hazards arising out of, or associated with, construction and demolition operations. The A10 standard is so important to the construction industry, ASSE urges that the Chair of the A10 Committee chair the Construction Sector Research Council. ASSE is also Secretariat of the ANSI Z15 Standard, which sets forth safety requirements for the operation of motor vehicles, another key safety issue in the construction industry. The Chair of the Z15 Committee should also lead the Transportation Sector Research Council.

Given our members' expertise and experience in construction, their hopes and desires of our members for research in construction safety and health issues are plentiful. But, based on our members' expertise in the field of construction and demolition, we hope that NORA seriously considers at least three issues we believe are in most need of research now.

Cultural ambiguity – The Occupational Safety and Health Administration (OSHA), the Mine Safety and Health Administration (MSHA), state safety and health agencies, unions, employers and SH&E professionals are all working diligently to communicate better with and to educate Spanish-speaking workers to help keep them safe and healthy on the job. Even when we develop appropriate language documents, use effective visuals, even build language proficiency in our supervisors, there is still a hurdle in the cultural differences we experience in working with a Spanish-speaking workforce. It is time to go a step further in our efforts and support research that fully examines the cultural ambiguities that exist

within the framework of what the construction industry currently uses as its methods for communicating and reinforcing information about hazards. If, for example, Spanish-speaking workers have an approach to authority that is different than the typical U.S. approach and may lead to them saying, "Yes," when they mean, "No," we should know as much as we can to understand that orientation. A better understanding of both worker and employer cultural assumptions should be the next frontier of research in improving safety and health in the multi-cultural worksite.

Injury and illness source database -- The stakeholders in construction safety and health have worked well together to develop a fairly good database of injury and illness information. From the perspective of an SH&E professional out in the field trying to use that data, what is missing is injury and illness information that goes beyond generic information like falls, crushed/struck-by, strains/sprains to include a better injury-source model with which we can more precisely collect substantive data on the nature of construction accidents. For example, we know only anecdotally that all falls in the residential construction sector are caused by the three specific operations of joisting, trussing and sheeting. Yet, when we read accident data, it merely says, "Fall from height." That is not specific enough. How specific we can make that data base is a question for research to determine, but I can tell you from the construction site, more specific data is needed.

Greater focus on silica – We hear much about good intentions to protect workers from silica but see little action. I can tell you the

construction industry is in a quandary about this issue. The industry knows workers are exposed to silica, and construction companies take measures to help protect them. But the industry is also fearful that the protections they use are wrong or insufficient. Without adequate exposure limits, each worker becomes a test case. For every employee, medical evaluations are required, with medical exams possible. Then respirator fit tests are required. Even with these efforts, though, employers believe regulators can easily find unique situations affected by weather, moisture or employee work practices that can quickly change, which no quantity of preparation will take into account. Without an exposure limit, employers are in the impossible situation of proving a negative.

ASSE urges that, at the very least, research immediately be undertaken on the most typical silica-producing activities that the industry engages in daily such block cutting, brick cutting, concrete breaking, sweeping up after these events, and tile cutting. For these activities, acceptable risk factors are needed for (1) cutting small amounts dry; (2) cutting small amounts wet; (3) cutting in a normal day without a respirator (outdoors); and (4) cutting in a normal day with a fit-tested respirator.

No matter the difficulty of the task in setting these exposure limits, it is time for some national leadership to make determinations on silica exposure, for the benefit of workers, certainly, but employers as well.

Conclusion

ASSE's members know that many of the tools they use to address or head off workplace hazards comes from the research efforts that NIOSH

undertakes and this NORA effort spurs on. They also know, though, that many of their tools come from the practical need to deal with risks in their day-to-day experience on the job floor. Our members are masters of the practical. Ways to save lives, prevent injuries, and keep workers healthy come from many sources. That is why ASSE is pleased to be a partner with NIOSH in its Research to Practice (r2p) initiative to close the gap between the job floor and the research NIOSH so ably accomplishes. And, again, that is why we are pleased to be here today to participate in that common effort. Thank you for this opportunity.

Additional Research Directions in Construction

1. Use of body belts as a work-positioning device.
2. Confined space incidents with sewer/tunneling exposures and hazards.
3. Lockout/tagout challenges on construction and demolition sites.
4. Multi-language worksites
5. Ergonomics on worksites.
6. Excavation – the impact of water and other liquids on trench related incidents.
7. The effectiveness of tool-box safety training for construction and demolition operations.
8. Study of the relationship between fatality/injury/illness rates with multi-employer worksites for construction and demolition operations.
9. The relationship between PELs and TLVs for construction and demolition sites.
10. Value of anchorage points for fall arrest equipment on construction and demolition sites as well as part of maintenance strategies and project design.

11. Illness rates addressing exposure to hot mix asphalt during road construction.
12. Personal protection equipment usage statistics on construction and demolition sites.
13. Study of correlations for effective SH&E management programs.
14. The integration of environmental management by construction companies on construction and demolition sites.
15. Comparison of the SH&E performance of US construction employers versus employers in other countries.
16. Identification of common business elements or attributes of construction companies with excellent safety records.