

Up After Dark: Let's Talk Disaster Response

Are you:

From the West Coast and having trouble adjusting to the time change?

A night owl who tends to absorb information better at night?

Looking to maximize your professional development intake?

Every year, we make changes and improvements to the AIHce EXP program based on your feedback. This year, we're excited to continue our Late Night Sessions, which debuted last year in Seattle. Starting at 8:00 pm on Sunday, these sessions will have a more relaxed environment, informal but of course, still an educational session.

Natural disasters are an inevitable part of our reality: From hurricanes in the southern states to California wildfires, 2017 was a particularly devastating year for these instances. For all of these organizations (state, local, and private) that responded to these disasters, managing responder health and safety and protecting the public and the environment posed numerous challenges. In our Late Night Session, "[Safety and Industrial Hygiene Efforts in Response to Recent Disasters](#)," our panel of experts will discuss the challenges and lessons learned from Safety and Health Professionals who responded.

Laura Weems, CIH, CSP, CHMM is an industrial hygienist with the U.S. Army Corps of Engineers. We spoke with her about her background, the current landscape of disaster response, and the session she's co-presenting.

AIHA: Could you tell me a little bit about your personal and professional background?

Weems: My interest in industrial hygiene started over 25 years ago when I took a college course in hazardous materials and then spent a summer while at the Coast Guard Academy as a beach clean-up monitor in Alaska in response to the Exxon Valdez spill. I spent the next 20 years of my Coast Guard career either focusing on how I could become an IH to actually becoming one through the Coast Guard's graduate school program. The Exxon Valdez experience led me to concentrate on how an IH functions to support emergency response and recovery operations.

Although I have an MS in Industrial Hygiene from the University of Massachusetts, Lowell, I found myself after the Boston Marathon bombing in 2013 wanting to learn more about how emergency management works at all levels of government. I have since earned another MS degree in Emergency Management and Homeland Security from Arkansas Tech. I am now working to use my experiences and education to help the Incident Response and Preparedness Working Group (IPRWG) develop materials that other safety and occupational health professionals can use when needed. To this effort, AIHA published the working group's second edition of the Incident Safety and Health Management Handbook, co-edited by myself and Ed Primeau.

AIHA: What's the extent of your experience and involvement with AIHA?

Weems: Although I earned my certification 15 years ago, it wasn't really until about 10 years ago that I became active with AIHA. At that time I started working with Joselito Ignacio and Leslie Holland who not only were incredible mentors, but were already holding leadership positions in local and national committees. From them, I learned what volunteer opportunities there were and how they related to my interests. Through AIHA's

committees and working groups, I have met other incredible professionals who are also interested in continued personal growth as well as educating other professionals on IH specialty areas.

When I first joined the IPRWG, I realized that the niche I had focused on my entire career was not a common one. I have since begun to volunteer as much as possible to learn more about how AIHA works and spread the word on how vital IHS are to all phases of emergency management. I found serving as an officer in working group an excellent way to learn firsthand how the organization functions. As an officer I helped shape the technical sessions and develop a new PDC ([902: Risk Assessment During an Incident Response](#)) – achievements that would not have been possible without the support of the working group and AIHA.

I have also found outreach opportunities by co-sponsoring educational sessions with committees such as the Students and Early Career Professionals and developing AIHA content material in collaboration with several other committees to address [Health and Safety Issues in Natural Disasters](#). I'm excited that this year I will be co-instructing a PDC ([802: Preparing for the Crisis – OHS Planning and Risk Communication](#)) on how IHS can assist their own organizations in preparing for a disaster.

"Additionally, as a community, I think IHS have learned how to prioritize risk and narrow in on the key issues when addressing their audience, whether that be the responders, command, public, or media."

AIHA: What are some of the biggest challenges facing those organizations responding to natural disasters around the country?

Weems: I have seen from my own experiences that the core challenges tend to be universal, but the impact they have on the response varies. The challenges that come up time and time again are communication (at all levels), worker safety, risk communication (to workers and public), and public safety and health. For example, during the Hurricane Katrina response operations as a Coast Guard Safety Officer, we were initially without landlines, cellular service, and Internet. Communications were severely limited, which made providing safety and health support sporadic at best. We overcame that issue as the response continued, but the inability for our responders to reach their families who had evacuated affected their well-being and led to heightened stress-levels. More recently, during the initial Hurricane Maria recovery work in Puerto Rico, many cellular communication towers were down or out of service, hindering coordination between responders and safety personnel. Although the same challenge was faced, the impacts were completely different. The size of the island and the recovery activities required enabled safety personnel work side by side with the operational personnel. The largest issue in Puerto Rico, at least in my opinion, was public safety and health.

Organizations cannot eliminate all challenges but can plan for them and develop strategies to mitigate or reduce the risk when they do occur. That is why I'm so excited about the Late Night Learning Session and the IPRWG PDCs – through planning and operational risk management, IHS all over can support organizational preparedness efforts.

AIHA: How have we improved strategies for effectively understanding and communicating risk over the past decade?

Weems: Industrial hygienists, in my opinion, are some of the best at learning and applying risk management skills. Not only are we taught from early on how to assess risk accurately using many different types of methods, we then learn how to apply that knowledge. Additionally, as a community, I think IHS have learned how to prioritize risk and narrow in on the key issues when addressing their audience, whether that be the responders, command, public, or media. Moreover, as consumers of massive amounts of information

ourselves (through the news, social media, reading, at work, etc.), I think that we have seen how too much information can overload us and prevent or hinder understanding. I think that from our own experiences we are learning how to provide complex information and data in understandable terms.

For IHs who support emergency response and recovery efforts, this skill set is critical. The ability to understand the hazards and properly assess the risk post-disaster is only as good as the IH's ability to convey that information to those who need to know or take action. I have seen what happens when the information is correct but does not clearly answer the questions being posed – there is a loss of trust and panic may ensue. What we do as IHs in support of emergency response is incredibly important; now we just need to present it in an effective manner. Maybe if we could figure out how to fit it all into 140 characters or less? Maybe IH emojis?

Let's get to work! Like us, Weems is excited about the Late Night Sessions at AIHce EXP this year in Philadelphia. You can [join her and five other experts on Monday, May 21](#) for the interactive and fun roundtable:

“Our speakers come with a wealth of experience and knowledge on how IHs support emergency preparedness, response, and recovery efforts and what they have learned from recent disasters. Unlike a typical educational session, the focus of this session will be to both learn and share strategies on how the IH community can improve the health the safety of responders and address the concerns of the impacted communities.”