



**STEVEN LACEY, PHD, CIH, CSP**, is AIHA's president-elect and chair of Environmental Health Science at the Richard M. Fairbanks School of Public Health at Indiana University-Purdue University Indianapolis. He can be reached at (317) 274-3120 or [slacey@iu.edu](mailto:slacey@iu.edu).



**REBECCA GUERIN, MA**, is coordinator of the NIOSH Safe-Skilled-Ready Workforce Initiative (SSRWI). She can be reached at (513) 533-8435 or [rguerin@cdc.gov](mailto:rguerin@cdc.gov).



**ANDREA OKUN, DrPH**, is Associate Director for Global Collaborations and co-coordinator of SSRWI. She can be reached (513) 533-8377 or [aokun@cdc.gov](mailto:aokun@cdc.gov).

# Bringing Work Safety and Health to Schools

BY STEVEN LACEY, REBECCA GUERIN, AND ANDREA OKUN

**S**tories of young workers being injured, made ill, or killed on the job are distressingly common. Data from the Bureau of Labor Statistics show that approximately 1.5 million teenagers between the ages of 15 and 17 are employed in the United States. Each year, on average, 60,000 of these young workers are injured seriously enough to warrant a trip to the emergency room. The data also show that teenagers are twice as likely as workers age 25 and older to be injured on the job.

Workplace injuries can be devastating for these young people and their families and can have lifelong implications. They are all the more tragic because they can be prevented. Despite this, young people continue to enter the work force with little or no preparation for the risks and hazards that they face. Most efforts to prepare the emerging work force do not include workplace safety and health knowledge and skills. This is a critical gap that must be addressed.

## LIFE SKILLS FOR SAFE AND HEALTHY WORK

The problem is not new, and AIHA members have long sought to address it. Over the years, individual members, either acting alone or through their local sections, have conducted out-

reach at schools to build awareness of occupational health and safety (OHS). Unfortunately, these members have lacked a common source of educational materials—until now.

This month, at AIHA's Fall Conference in Orlando, Fla., NIOSH and AIHA will jointly introduce a new initiative called "Safety Matters." The goal of this program is to equip young people with the skills and knowledge they need to participate in safe and healthy work environments throughout their working lives.

The core of "Safety Matters" is a one-hour interactive teaching module and PowerPoint presentation targeted to students in grades 7 through 12. Volunteers can use the presentation to teach students that all workers can be injured, become sick, or even be killed on the job; that work-related injuries and illnesses are predictable and preventable; and that employers are responsible for, and workers have the right to, safe and healthy work. Students will also learn how to identify hazards at work; how to prevent injury and illness; how to identify emergencies at work and decide on the best ways to address them; and how workers can communicate with others—including people in authority—when they feel unsafe or threatened.

The "Safety Matters" presentation is based on a full curriculum called "Youth@Work-Talking Safety" that NIOSH developed for schools throughout the United States. Already in use in

the Miami-Dade County Public School System, the curriculum is customized for all states, territories, and the District of Columbia and conveys the knowledge, skills, and abilities that students need to stay safe and healthy on the job. While "Talking Safety" is intended for use by trained educators, "Safety Matters" allows volunteers to bring the message of workplace health and safety to school districts that haven't implemented the full curriculum.

## HOW YOU CAN HELP

We are eager to tap into AIHA members' well-known volunteer spirit to help prepare young people for a lifetime of safe and healthy work. The most obvious way that members can become involved is to present "Safety Matters" to students. Members can also volunteer to bring the full "Talking Safety" curriculum into their local school districts or lobby their state legislators to make OHS an integral part of career readiness programming in schools. (Earlier this year, Oklahoma passed a law to provide students in grades 7 to 12 with workplace health and safety information.)

Become a volunteer today, save a life tomorrow! To get started, please visit <http://bit.ly/niosh-safetymatters> to download your free "Safety Matters" presentation. We look forward to working with you to help protect the nation's young workers. ☺

10

LEADERSHIP PERSPECTIVE  
Bringing OHS  
to Schools

20

RISK ASSESSMENT  
Evidence for  
Chemical Hazards

26

FEATURE  
Safety in Confined  
Spaces

30

FEATURE  
Strategic Safety  
Communication

# the synergist

October 2015

## Placement Makes the Poison

**Infection Control  
Lessons from the 2014  
Ebola Outbreak**

\*\*\*\*\*AUTO\*\*5-DIGIT  
163648  
SHARON RONEY  
OHIO BUREAU OF WORK.  
30 W SPRING ST FL 3  
COLUMBUS OH 43215-2241  
11191  
223517  
5  
OCT 19 2015  
BWC LIBRARY

AIHA | Protecting Worker Health. [www.aiha.org](http://www.aiha.org)



**PLACEMENT MAKES THE POISON*****INFECTION CONTROL LESSONS FROM THE 2014 EBOLA OUTBREAK***

The effectiveness of standard infection control programs came into question during the 2014 Ebola outbreak when professional caregivers themselves became infected with the virus.

BY VAL GARNER, ROXY GROSSNICKLE, DEREK NEWCOMER, AND FRED BOLTON

**ABOVE AND BEYOND THE MINIMUMS*****AN OVERVIEW OF NFPA'S NEW GUIDE FOR SAFE CONFINED SPACE ENTRY AND WORK***

NFPA 350 will address gaps in existing standards, minimize confusion about what is required for confined space entry, and provide practical guidance on how to apply requirements in existing standards to improve confined space safety.

BY NANCY PEARCE

**STRATEGIC SAFETY COMMUNICATION: THE GAAMM MODEL*****HOW TO INFORM PEOPLE ABOUT SERIOUS RISKS***

Safety professionals spend much of their time urging employees to work safely—with no safety communication strategy to steer their efforts. Here's one model for informing people about serious risks.

BY PETER M. SANDMAN

**CONTRIBUTORS****VAL GARNER, *FEATURE AUTHOR***

Val Garner, CHMM, CIH, is the vice president of HSE/Risk Management for SWS Environmental Services.

**NANCY PEARCE, *FEATURE AUTHOR***

Nancy Pearce, CIH, is senior fire protection engineer at NFPA and vice chair of AIHA's Confined Spaces Committee.

**FRANK MIRER, *INSIGHT AUTHOR***

Frank Mirer, PhD, CIH, is a professor in the CUNY School of Public Health in New York.

# COLUMNS & DEPARTMENTS

## 7 LETTERS

Outreach and the Future of IH

## 8 PRESIDENT'S MESSAGE

The Process behind the Plan

BY DANIEL H. ANNA

## 10 LEADERSHIP PERSPECTIVE

Bringing Work Safety and Health to Schools

BY STEVEN LACEY, REBECCA GUERIN, AND  
ANDREA OKUN

## 12 NEWSWATCH

OEHS and Industry News

## 19 ADVERTISERS' INDEX

## 20 INSIGHT: RISK ASSESSMENT

Fifty Shades of Gray

BY FRANK MIRER

## 35 PRODUCT FEATURES

Focus: Emergency Response  
Planning and Protective Gear

## 36 COMMUNITY

AIHA News

## 38 BY THE NUMBERS

Work and Breast Cancer



## ➔ IN THE DIGITAL EDITION

See digital-only content at  
[SYNERGIST.AIHA.ORG](http://SYNERGIST.AIHA.ORG)

## ➔ ON AIHA.ORG

Latest news:  
[WWW.AIHA.ORG/SYNERGISTNEWSWATCH](http://WWW.AIHA.ORG/SYNERGISTNEWSWATCH)  
[WWW.AIHA.ORG/SYNERGISTCOMMUNITY](http://WWW.AIHA.ORG/SYNERGISTCOMMUNITY)

## COMING IN NOVEMBER:

Workplace Violence in Healthcare | Formaldehyde and IAQ | Climate Change and Occupational Health

*The Synergist's* mission is to provide AIHA members with news and information about the occupational and environmental health and safety fields and the industrial hygiene profession. *The Synergist* focuses on industry trends and news, government and regulatory activities, key issues facing the profession, appropriate technical information and news on association events and activities.

*The Synergist's* objective is to present information that is newsworthy and of general interest in industrial hygiene. Opinions, claims, conclusions, and positions expressed in this publication are the authors' or persons' quoted and do not necessarily reflect the opinions of the editors, AIHA, or *The Synergist*.

# the synergist®

Volume 24 Number 8

## EDITOR IN CHIEF

Ed Rutkowski: [erutkowski@aiha.org](mailto:erutkowski@aiha.org)

## ASSISTANT EDITOR

Kay Bechtold: [kbechtold@aiha.org](mailto:kbechtold@aiha.org)

## DESIGNER

Janelle Welch, 2 Hounds Productions

## PRODUCTION MANAGER

Jim Myers: [jmyers@aiha.org](mailto:jmyers@aiha.org)

## ADVERTISING REPRESENTATIVE

Network Media Partners  
Meredith Schwartz: [mschwartz@networkmediapartners.com](mailto:mschwartz@networkmediapartners.com)

## EXECUTIVE DIRECTOR

Peter J. O'Neil, CAE: [poneil@aiha.org](mailto:poneil@aiha.org)

*The Synergist*® is a copyrighted publication of the American Industrial Hygiene Association, 3141 Fairview Park Drive, Suite 777, Falls Church, VA 22042; (703) 849-8888; e-mail [synergist@aiha.org](mailto:synergist@aiha.org). No part of *The Synergist* may be reprinted without the express written consent of AIHA. Submission of articles or letters to the editor are welcome, but AIHA and *The Synergist* will determine what to publish and reserve the right to edit all submissions for content, style, length and clarity.

*The Synergist* (USPS #009-332) is published monthly except a combined June/July issue by the American Industrial Hygiene Association, 3141 Fairview Park Drive, Suite 777, Falls Church, VA 22042 for \$50 per year for members; nonmembers may subscribe for \$305/yr. International nonmembers may subscribe for \$405/yr (U.S. funds). Periodicals postage paid at Merrifield, Virginia, and additional mailing offices. POSTMASTER: Send address changes to *The Synergist*, American Industrial Hygiene Association, Attn: Customer Service, 3141 Fairview Park Drive, Suite 777, Falls Church, VA 22042. ISSN 10667660.

Publications Mail Agreement No. 40039445. Return undeliverable Canadian addresses to PO Box 503, RPO West Beaver Creek, Richmond Hill ON L4B 4R6.

## EDITORIAL ADVISORY BOARD MEMBERS

Jeff Behar, California Institute of Technology  
Patricia Crawford, Consultant  
M. Cathy Fehrenbacher, U.S. EPA  
Don Garvey, 3M Co.  
Stephen Hemperly, Hitachi GST  
John Mazur, MACTEC Inc.  
Hank Muranko, Muranko & Associates  
Doris Reid, Goodrich Corporation  
John Rekus, John F. Rekus & Associates Ltd.

 **AIHA**  
Protecting Worker Health