

Welcome

Welcome to the February 2007 issue of our free electronic newsletter. Twice a year, Georgia Tech Research Institute's OSHA Training Institute Education Center publishes this newsletter to share issues affecting our industry as well as the latest developments with our program.

In this issue, we examine the ways new technologies and shifting demographics are changing how OSHA regulates workplace health and safety. We also look at the GTRI OSHA consulting program, as well as salute our first premier certificate holder and advanced certificate holders, Robert Holtsford and Gary Toothe.

We appreciate the trust you have placed in the Georgia Tech Research Institute's OSHA Training Institute Education Center and realize its success greatly depends on you.

We encourage you to share our free electronic newsletter with your colleagues. Please forward this link, www.oshacourses.org/news.

Health and Safety Sleuths: Georgia Tech Consultants Hunt for Hazards to Reduce Workplace Injuries and Illnesses

It's no surprise a construction site can be hazardous, but how dangerous can a funeral home be?

Plenty, said Daniel Ortiz, manager of Georgia Tech's Safety & Health Consultation Program, part of Georgia Tech Research Institute's Electronic Systems Laboratory.

Embalmers are exposed to a number of pathogenic microorganisms and chemicals, Ortiz said. Preliminary data from a GTRI occupational health study indicates up to 20 percent of embalmers in Georgia funeral homes may be exposed to formaldehyde levels above regulatory limits.

Other unusual occupational hazards:

- Formaldehyde exposure can be a problem for workers who cut and sew wrinkle-resistant fabric.
- Jewelers making and repairing gold chains may be exposed to cadmium, a toxic metal.
- Nurses face a high risk of contracting blood-borne diseases from needles and other sharp instruments.

Although workplace safety has come a long way since the Industrial Revolution, reducing occupational hazards remains a challenge for employers, especially smaller companies with fewer resources.

In response, Georgia Tech's consultation program provides technical expertise and training to help Georgia companies create cleaner, safer environments for their workers.

In 2005, consultants visited more than 350 companies and identified 3,838 serious hazards, saving employers about \$3.8 million in potential Occupational Safety and Health Administration penalties.

"Yet that's just the tip of the iceberg," Ortiz said. "It's hard to put a number on costs because any accident has far-reaching effects that go beyond workers' compensation and lost time."

Funded by OSHA, Georgia Tech's consultation program is free to companies with fewer than 250 workers and confidential.

"Our only requirement is that companies must agree to correct all hazards and provide written verification of their actions within a reasonable time frame," said Art Wickman, a GTRI research scientist who supervises the consultation program's industrial hygienists.

Georgia Tech's program serves a diverse clientele, from food processors to construction companies to nursing homes. Companies may ask for help with a specific issue or request a broader inspection.

Consultants focus on three key areas:

- *Safety issues*, such as fire protection, emergency response, electrical safety, machine guarding, fall protection, and machines hazards;
- *Health hazards*, including exposure to chemicals and noise and blood-borne pathogens; and
- *Ergonomic* problems that can cause musculoskeletal disorders.

Consultants also evaluate existing safety programs and help strengthen them.

Too often, employers may regard safety as an extraneous cost that doesn't contribute to their business. Yet reducing injuries can make a huge difference in worker's compensation insurance, a significant expense for smaller companies.

OSHA supports more than 50 safety-and-health consultation programs throughout the United States, but most are housed within state agencies.

"Having the program based at Georgia Tech is a real advantage," Ortiz said. "We're able to collaborate with experts in other areas and leverage cutting-edge knowledge and research."

Workplace safety is constantly changing with new technologies and regulations.

For example, a new Occupational Safety and Health Administration regulation lowers the permissible exposure limit for hexavalent chromium, linked to a higher risk of lung cancer, asthma, and skin damage. Metalworkers come in contact with hexavalent chromium through airborne particles emitted from sanding and grinding on painted surfaces, welding, and other tasks, such as chrome plating.

Another hot issue is nanotechnology. Although no regulatory standards exist yet, experts are determining what hazards might be associated with nano manufacturing and assessing the toxicity levels of nanoparticles.

"There are also diseases and exposures that we've known about for a long time but many employers think are no longer an issue," Wickman said. "Silicosis used to be a big threat in mining, and, although things have improved there, exposure to silica exists in other industries."

Those other industries include workers who cut concrete or stone, such as granite kitchen countertops, Wickman said.

Demographic shifts have introduced new challenges for employers, including the increasing number of Hispanic immigrants in Georgia's labor force.

"These are primarily Mexican workers and though many have previously worked in construction, Mexico's regulatory framework isn't comparable to OSHA in the United States," Wickman said. "So the concept of safety standards is new for them and requires a lot of education."

To help increase awareness, Georgia Tech's consultation staff has translated training materials and offers free seminars in Spanish.

"Partnerships and alliances have become an important tool for reaching more workers through the sharing of resources and collaboration among participants," said Paul Schlumper, a GTRI research engineer who supervises the program's safety consultants.

For example, Georgia Tech's safety and health program teamed with Brasfield & Gorrie, the general contractor for the Georgia Aquarium, a \$200 million project with several hundred workers. From May 2004 to late 2005, there were no fatalities.

During the period Georgia Tech consultants worked on the project, the total number of injuries dropped from 7.5 to 2 per 100 workers--with the average cost per injury falling from \$11,000 to \$3,000.

Georgia Tech also works with Atlantic Skanska, a large Atlanta-based construction firm building a new pollution-control plant in Rome, Ga., providing on-site training for workers.

"Partnerships involve repeat visits to a site, which helps our consultants build trust with the workers," said Thomas Dean, a senior technical leader with the safety program. "Also, we're not overwhelming employers with a lot of issues they have to tackle right away."

Partnerships not only help with outreach, but increase chances for successfully reducing injuries and illness.

Feature: Georgia Tech Research Institute's OSHA Program Awards First Premier and Advanced Certificates

Robert Holtsford and Gary Toothe earned the first advanced certificates through Georgia Tech's cross-certificate program that allows trainers and safety and health officers to use elective courses for multiple certificates.

Holtsford, technical director of Crane Safety Associates of America also earned the first premier certificate from Georgia Tech Research Institute's Occupational Safety and Health Division. Toothe is the training manger for Thompson Industrial Services and shares training duties for the construction division.

"The advanced certificate program was developed with the understanding that safety and health practitioners wear several hats and must have a broad knowledge of the workplace that includes their industry, hazardous materials, emergency responses, and safety and health program management," said Daniel Ortiz, division chief of the Occupational Safety and Health Division.

Holtsford took 18 core and elective courses to earn the Occupational Safety and Health Premier Certificate, recognizing those who earn both the Construction and Industrial Safety Advanced certificates plus attendance at two additional required courses. Holtsford educates crane operators nationwide for Crane Safety Associates.

"I became involved because my company is involved in different kinds of training so I need to be versed in everything," Holtsford said. "I need to stay updated on construction and industry guidelines."

Toothe, who earned his Construction Safety and Health Advanced Certificate in August and the Industrial Advanced Certificate in February, now plans to pursue the premier certificate.

"The certificates are a way of putting authority behind my courses," Toothe said of his certificates. "My Georgia Tech training speaks very highly to that. I'm taking the classes to increase my knowledge base and pass the information along to my students."

Holtsford concurred. "It's very seldom that I don't use the training I received in your classes. The main thing I take from your courses is the ability to take the 1926, 1910 and ANSI

specifications to create a better training program for my company. Georgia Tech helped me learn how to interpret those [ANSI] specifications."

"The wonderful thing about the Georgia Tech program is the interaction with the instructor, my peers, and various industry representatives in the class," Toothe said. "There is a wealth of information in your classrooms."

For more information about Georgia Tech Research Institute's OSHA Training Institute Education Center's programs, contact Katie Pyner Takacs, assistant director of client marketing, at 404-385-3544 or katie.pyner@dlpe.gatech.edu.

Certificate Recipients From June through January
Occupational Safety and Health Premier Certificate
Robert P. Holtsford
Industrial Safety and Health Advanced Certificate
Robert P. Holtsford
Construction Safety and Health Advanced Certificate
Robert Holtsford Gary W. Toothe, CET
Industrial Safety and Health Certificate

Vicki Hanrahan Ainslie	Robert P. Holsford
Tony Anderson	Jenny Houlroyd
Shawndolina Arnold-Postell	Bradley M. Ketner
John D. Bloess	John Conrad Lynch
Noel Buitrago	Chris A. Morgan
Terry L. Chapman	Lisa Foster-Morrow
Jeff Churchill	Gustavo Navarro
William Deason	Kevin W. Powell
Michelle L. Dunham	Jason Randles
Peter Herrmann	James C. Rozar
M. Suzette Follette	Hillarie Schubert
Victor M. Fuentes Jr.	George F. Simmons
Donald Wayne Hancock	Brent Stiles
Peter Herrmann	Vince Tentoni Jr.
Gary L. Hill	Tina Tinch
Lance W. Hofmann	Rick Wilson

Construction Safety and Health Certificate

Vicki Hanrahan Ainslie	Michael Priest
Mark Beam	Jason Randles
Daniel A. Brady	Manuel A Rivera Jr
Steven Buck	.Rachel Rutland
Sylvia T. Callender-Carter	Ray E. Sanchez
John D. Crawford	Robert O. Shumate
Michelle Dunham	Dan Smith
Lisa Foster-Morrow	Brent Stiles
Nicholas Kruse	Dennis Stokes
M. Suzette Follette	Frankie Thorpe
Peter Herrmann	Donna Toler
Scott Huber	Deborah Thomas
John Conrad Lynch	Gary W. Toothe, CET
Isodoro Martin Jr.	Samuel M. Wilkerson
Rayes P. Ramos	David M. Williams
Joshua S. Parris	James R. Willis
Joanna Pinto	Stanley Word

Hazardous Materials Management Certificate

David W. Bird	Terry Shook
William G. Foster	Gary W. Toothe, CET
Lance W. Hofmann	Micah Wallace
Robert P. Holtsford	David Williams
Nick Kruse	

Safety and Health Program Management Certificate

Alvin Bonner	James Meola
Adrienne Fontaine	Michelle Palmer
Donald Wayne	Gary W. Toothe, CET
Hancock	Greg Webb
Robert P. Holtsford	Rick Wilson
Deborah McClannahan	

Course Information: Upcoming Courses

OTI 511: Occupational Safety and Health Standards for the General Industry

- April 9-13, 2007 (Atlanta)
- June 4-8, 2007 (Atlanta)
- July 9-13, 2007 (Birmingham, Ala.)

OTI 500: Trainer Course in Occupational Safety and Health Standards for the Construction Industry

- April 2-6, 2007 (Knoxville, Tenn.)
- May 7-11, 2007 (Atlanta)
- June 11-15, 2007 (Nashville, Tenn.)
- July 9-13, 2007 (Ft. Lauderdale, Fla.)

OTI 510: Occupational Safety and Health Standards for the Construction Industry

- April 9-13, 2007 (Atlanta)
- July 9-13, 2007 (Birmingham, Ala.)
- July 16-20, 2007 (Raleigh, N.C.)

OTI 501: Trainer Course in Occupational Safety and Health Standards for the General Industry

- April 2-6, 2007 (Knoxville, Tenn.)
- May 7-11, 2007 (Atlanta)
- June 11-15, 2007 (Nashville, Tenn.)

OTI 7845: OSHA Recordkeeping Rule Course

- April 13, 2007 (Atlanta)

OTI 2045: Machinery and Machine Guarding Standards

- Aug. 20-24, 2007 (Atlanta)

OTI 503: Update for General Industry Outreach Trainers

- April 17-19, 2007 (Atlanta)
- July 10-12, 2007 (Atlanta)

OTI 502: Update for Construction Industry Outreach Trainers

- April 17-19, 2007 (Atlanta)
- May 8-10, 2007 (Ft. Lauderdale, Fla.)
- July 10-12, 2007 (Atlanta)

OTI 3095: Electrical Standards

- April 23-27, 2007 (Atlanta)

EST 7005: NFPA 70E Standard Seminar

- April 27, 2007 (Atlanta)

OTI 7500: Introduction to Safety and Health Program Management

- May 14, 2007 (Atlanta)

OTI 5600: Disaster Site Worker Train-the-Trainer Course

- May 14-18, 2007 (Atlanta)

EST 7001: Advanced Safety Management: Principles and Programs

- May 15-18, 2007 (Atlanta)

OTI 7600: Disaster Site Worker Course

- May 22-24, 2007 (Atlanta)

OTI 7505: Introduction to Accident Investigation

- June 18, 2007 (Atlanta)

EST 7003: Instructional Technology for Occupational Safety and Health Professionals

- June 19-22, 2007 (Atlanta)

OTI 2264: Permit-Required Confined Space Entry

- June 19-22, 2007 (Atlanta)

EST 7000: Scaffolding Safety

- July 23, 2007 (Atlanta)

OTI 3010: Excavation, Trenching, and Soil Mechanics

- July 24-24, 2007 (Atlanta)