

Welcome

Safety directly impacts your company's success.

In these tough economic times, recognizing the value of safety is critical for keeping your organization's costs low. [Download the Occupational Safety and Health course catalog](#) to see how Georgia Tech can help you keep your employees safe and your company successful.

Take advantage of the benefits that Georgia Tech Occupational Safety and Health courses offer your business, including:

- Keeping you up-to-date on OSHA standards
- Giving you practical, hands-on experience
- Providing training from industry experts to develop or improve your safety program
- Creating network opportunities with colleagues

Don't overlook the importance of safety in your professional development. Georgia Tech certificate programs provide industry-recognized credentials to give you a competitive edge in the marketplace. [Learn more](#) about the certificates.

In this issue:

- Discover the many ways that Georgia Tech has been helping organizations remain safety compliant for more than 30 years. [View article](#)
- Learn how to keep your outdoor workers safe from skin cancer and other sun-exposure related diseases. [View article](#)
- Find out how program participant Warren Jones built a safety program from the ground up and significantly reduced his organization's loss and restricted days. [View article](#)
- See our recent [certificate recipients](#).
- View [upcoming courses](#).

Safety First: Health and Safety Program Marks 30 Years of Service to Georgia Business

Georgia can commemorate a significant milestone in public-private cooperation this fall. It's been 30 years since the Georgia Institute of Technology began providing occupational health and safety consulting services to businesses throughout the state.

Each year, the Occupational Health and Safety Program helps hundreds of Georgia businesses keep the workplace safe by complying with the requirements of the federal Occupational Safety and Health Administration (OSHA). The program is located in the Human Systems Integration Division of the Georgia Tech Research Institute (GTRI).

"Reaching our 30th year of OSHA-related activity is a significant milestone," said Dennis Folds, GTRI chief scientist and head of the Human Systems Integration Division in the Electronic Systems Laboratory (ELSYS). "It

underscores both the state of Georgia's need for OSHA programs and the quality of GTRI's handling of those programs."

Science and engineering consultants from GTRI currently provide two separate services to business:

- The OSHA 21D Consultation Program provides free, on-site safety and health consulting to smaller Georgia companies - those with fewer than 500 employees.
- The OSHA Training Institute Education Center offers safety and health courses in more than 20 topics, principally through Georgia Tech Distance Learning and Professional Education. GTRI partners with other regional educational organizations to provide fee-based, OSHA-approved courses in Georgia and other southeastern states.

"It can be challenging for smaller businesses to deal with OSHA and state requirements, and we're here to help them comply fully and stay safe," said Daniel Ortiz, a GTRI principal research scientist who directs the OSHA programs at Georgia Tech. "We have a dedicated staff of 17, comprised mainly of research scientists and engineers. They do a great deal of fact-finding and development of new ideas in the field to help businesses increase health and safety in the workplace."

The consultation program is funded mainly by OSHA, which provides 90 percent of the program's \$1.38 million annual budget; the state of Georgia provides the balance. GTRI consultants provide on-site services to more than 200 Georgia manufacturing and other businesses each year, making some 450 visits to factory floors and job sites.

The education program, under which Georgia Tech teaches OSHA courses to the private sector, is paid for by the students themselves or by their employers. Occupational Health and Safety Program instructors train about 2,500 people yearly in these courses, most of which are taught through Georgia Tech Distance Learning and Professional Education, located on Georgia Tech's Atlanta campus. The courses are typically taught by the same consultants who work with industry.

Students can take a range of courses that cover a wide variety of subjects and industries, from hazardous materials and machine safety to the prevention of falls and respiratory problems. By taking several courses, participants can earn OSHA certificates in areas such as industrial safety and health, construction safety and health, safety and health program management and hazardous materials management.

"Our researchers wear both hats - consultant and instructor," Ortiz said. "And that's an advantage, because we can take our experience from the field and share it in the classroom."

GTRI's health and safety consultants are continually looking for ways to develop new and useful ways to promote safety, Ortiz says. One important new strategic area for the health and safety program involves teaching courses to high school students who are preparing for the workplace by taking vocational courses.

The aim is to help young workers grasp job-safety basics before they ever reach the job site. Those graduating from the course receive the OSHA 10-hour card, a qualification that can give them an advantage with employers mindful of complying with OSHA regulations.

"We want to make it automatic for young people joining the workforce to take safety precautions like putting on hard hats and safety glasses - the same way they always put on a seatbelt in a car because that's what they've grown up doing," said Michelle L. Dunham, a GTRI research scientist who works with the health and safety program.

The 30-year history of the GTRI health and safety effort reaches all the way back to the days of the Engineering Experiment Station, the original name for the organization that became GTRI. The health and safety group was initially managed by the late Bill Howard; Ortiz has been director since 2000.

"We believe that Georgia Tech, as a great engineering school, needs to promote safety awareness in everything our engineers do," said Terry Tibbitts, director of ELSYS. "A safety and health management system needs to be implemented at the very beginning of every project or process - it's cost-effective to operate that way, and beneficial for everyone."

Safety from the Ground Up

2006	2008
36 Loss Days	0 Loss Days
267 Restricted Days	35 Restricted Days

When Warren Jones accepted the position of safety director at Mitchell Mechanical three years ago, he had his work cut out for him.

The management of Mitchell Mechanical, a commercial construction company with offices in five states, was concerned about workers' injuries and the costs associated with them. The company had an average of 36 loss days and 267 restricted days, which resulted in high insurance premiums for the organization. The company's management was eager to devise a strategy to lower their loss and restricted work days.

Since 2006, the safety training program designed by Jones has made a tremendous impact on the organization. In 2008, Mitchell Mechanical achieved zero loss days, 35 restricted days, and 27 percent lower insurance costs.

Jones' initial evaluation of Mitchell Mechanical's safety plan revealed that it was not robust enough to meet the needs of the organization. Building from the ground up, he was interested in developing a safety program to ensure safety and impact the organization's bottom line.

According to Jones, for the safety program to work, there had to be an organization-wide focus on safety, starting with top management.

"A lot of organizations struggle with recognizing that safety must be a team effort; instead, they make it one person's responsibility," he said.

Using practices he learned from Georgia Tech safety training programs, especially OTI 7500: Safety and Health Program Management, Jones wanted to create a safety program that emphasized teamwork. He envisioned the safety trainer acting as an educator, as opposed to the traditional role of enforcer. In this environment, supervisors and workers would be responsible for implementing safety standards at job sites.

Because cost was also a factor, Jones worked closely with top management to develop a strategy that aligned the safety program with the business objectives of the organization.

Since developing the program in July 2006, Jones has implemented a well-defined safety training program that positions safety as a primary component of job performance evaluations, along with quality and productivity.

The safety program includes new employee orientation on safety standards, participation in a 10-hour construction safety course for all employees (taught in Spanish and English) to receive an OSHA card, weekly toolbox talks to remind employees about safety standards, periodic safety inspections of job sites, and job

performance evaluations. Additionally, Jones' training at Georgia Tech taught him to use annual audits of safety records to determine what issues and practices the organization should focus on for safety trainings.

For Jones, networking was an excellent benefit of Georgia Tech's professional education programs.

"Networking with other safety professionals has helped us improve our safety program immensely; we have benefited from relationships through their diverse experience and resources," he said.

During his safety courses at Georgia Tech, Jones learned the benefits of job site collaboration from his instructor, Pamela Fisher of PROSAFE Solutions. He also met professionals from RJ Griffin & Company, a member of the JE Dunn Construction Group, and learned how to build relationships to ensure safety standards are achieved at job sites where different organizations work together.

"The education and networking opportunities at Georgia Tech are invaluable," Jones said.

As the safety training program at Mitchell Mechanical improves, Jones continues to rely on offerings from Georgia Tech's professional education program to stay abreast of changes and best practices and to network with other safety professionals.

Here Comes the Sun: Legal Obligations and Practical Considerations for Employers of Outdoor Workers

Tiffani Hiudt Casey, Esq.
Fisher & Phillips, LLP
April 2009

There are more than one million new cases of skin cancer reported each year in the United States according to the National Cancer Institute (NCI). According to these estimates, 40 to 50 percent of Americans who live to age 65 will have skin cancer at least once. Overexposure to the sun is the leading cause of skin cancer, and there are higher rates of skin cancer reported in states where the sun is stronger.

Outdoor workers' chances of developing some type of skin cancer, or other sun-exposure related disease, in their lifetime is much greater than the average person because of the potential overexposure of sun from being outside the majority of each day. If an employee smokes, his or her chances of developing a squamous cancer or facing poorer prognoses for surviving a melanoma¹ also increase, especially in men. Laborers, who smoke at twice the national average and primarily work outside, have a significantly higher risk of developing skin cancer. There are additional occupational factors that can increase the likelihood of skin cancer as well, including exposure to radiation, coal tar, pitch, creosote, and arsenic.

Some examples of jobs involving a significant amount of outdoor activity include, but are certainly not limited to, laborers in construction and transportation; athletic field and golf course maintenance; hotel and country club pool staff; restaurant patio servers; landscapers; messengers; fishermen; and certain environmental jobs.

Legal Obligations

The Occupational Safety and Health Act does not specifically have a regulation addressing an employer's obligation to protect employees from the hazards created by sun exposure. Such a requirement, however, is addressed indirectly by the Act's Personal Protective Equipment (PPE) rule that states:

Protective equipment, including personal protective equipment for eyes, face, head, and extremities, protective clothing, respiratory devices, and protective shields and barriers, shall be provided, used, and maintained in a sanitary and reliable condition wherever it is necessary by reason of hazards of processes or environment,

chemical hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any part of the body through absorption, inhalation or physical contact. See 29 C.F.R. 1910.132(a).

And further, that the employer shall provide training to each employee who is required by this section to use PPE. See 29 C.F.R. 1910.132(f)(1).

At least one OSHA Standard Interpretation of 29 C.F.R. 1910.132(a) supports such a requirement, stating that employers have a duty to protect their employees from overexposure of the sun's radiation. For a compliance officer to issue a citation to an employer for not providing employees with protective equipment from the sun's radiation, however, there must be documented evidence that employees are overexposed, which would be difficult to prove since sun exposure is not easily measured. Further, OSHA does not have established exposure limits for radiation from the sun. While the new clarification on PPE, stating that OSHA can issue separate citations and impose penalties for each employee who is neither trained nor provided PPE (which could be significant for a large outdoor crew), may also give some employers cause for concern, there must be evidence of a flagrant violation upon review by a senior OSHA official for separate violations to be issued.

OSHA's general duty clause, which requires employers to furnish a hazardous-free workplace environment, is also a potential source of violation. See 29 U.S.C. § 654. Overexposure that violates the general duty clause is one that could cause death or serious physical harm; but again, proof of overexposure in these cases is extremely difficult.

Practical Considerations

Beyond the requirements of OSHA, there are practical issues for employers to consider if they employ individuals to work outdoors.

The World Health Organization estimates that as many as 60,000 people a year worldwide die from too much sun, most from malignant skin cancer. Of these deaths, 48,000 are from melanoma and 12,000 are from other skin cancers. Approximately 90 percent of these cancers are caused by ultraviolet light from the sun. Treatment for any type of melanoma can be expensive and involve surgery, radiation therapy, chemotherapy, and photodynamic therapy. In 2004², the total direct cost associated with the treatment for non-melanoma skin cancer was \$1.5 billion, while the total direct cost associated with the treatment of melanoma skin cancer was \$291 million. Of course, employers foot most of the bill associated with these treatments through their employee health plans. The costs associated with an employee's lost work time for treatment and recuperation is also noteworthy. It is also a possibility that an employee could file a workers' compensation claim for skin cancer.

¹There are three types of skin cancer: squamous cell carcinoma, basal cell carcinoma, and melanoma (the most deadly).

² According to the most recent data from the American Melanoma Foundation, 2007 statistics.

Employer Action

While the likelihood of an OSHA visit due to sun exposure is minimal, the costs associated with illness, treatment, and absence due to skin cancers can be significant. Furthermore, for a little time and money, an employer can invest in helping its employees to live healthier lives, which also leads to better productivity and higher morale in the workplace. Acknowledging these benefits, many employers have instituted wellness programs based on the same philosophy. A general sun protection program is an essential part of any comprehensive wellness program.

While addressing the issue of exposure varies from job to job, below are some recommendations for minimizing employees' overexposure to the sun:

- Removing the job from the sun is an ideal option, although it is impractical in most cases. Alternatively, employers may want to consider (1) scheduling shifts to avoid the high sun times between 10 a.m. and 4 p.m. (2) rotating employees out of non-shaded areas frequently to minimize each employee's total length of exposure or (3) at least providing shaded areas for breaks.
- Employers should require employees to use PPE that will protect them from the sun's ultraviolet rays when the job necessitates it. NCI recommends the use of protective clothing and eyewear (eyes can get overexposed, too), such as wide-brim hats, hat extensions, long sleeves, and sun block (at least SPF 15) all over the body, including the lips, to reduce the chances of overexposure. Training employees to properly use these types of PPE can be as important as requiring its use to make it effective. For example, most individuals only use about one-third of the amount of sunscreen necessary to provide adequate protection, fail to put it on 30 minutes before exposure to allow the chemical to work, and fail to reapply after a few hours.
- Educate outdoor workers who are exposed to the sun's radiation in overall skin cancer prevention and identification, the importance of self-checks, and the importance of regular visits with a dermatologist. Skin cancers that are caught and treated early are associated with less cost and a greater chance of overall survival.

Before the summer months set in, evaluate your company's need for a sun smart program and take the steps to implement such a program if you have employees regularly exposed to the sun.

Helpful Links

American Academy of Dermatology – Free Skin Cancer Screenings
<http://www.aad.org>

National Cancer Institute's Booklets: What You Need to Know about Skin Cancer and What You Need to Know about Melanoma
<http://www.cancer.gov/cancertopics/wyntk/skin>

Melanoma Research Foundation
<http://www.melanoma.org>

If you have questions about this article, contact the author at thiudt@laborlawyers.com or 404-240-4238.

Certificate Details: Learn more about the Safety and Health Certificates

Georgia Tech OSHA certificates emphasize practical safety skills—ones that help you keep your company safe. Build the technical expertise you need to quickly adapt and effectively work in an ever-changing field. Learn more about each certificate:

- [Industrial Safety and Health Certificate](#)
- [Construction Safety and Health Certificate](#)
- [Safety and Health Program Management Certificate](#)
- [Hazardous Materials Management Certificate](#)
- [ADVANCED Industrial Safety and Health Certificate](#)
- [ADVANCED Construction Safety and Health Certificate](#)
- [PREMIER Occupational Safety and Health Certificate](#)

Certificate Recipients: Georgia Tech Research Institute's OSHA Program Certificate Recipients

Congratulations to the following OSHA certificate recipients from October 2008 through March 2009:

PREMIER Occupational Safety and Health Certificate

Eldridge D. Brown
William G. Foster
Lisa Foster-Morrow
Deborah Ann McClanahan
Brian A. Vick

ADVANCED Industrial Safety and Health Certificate

Eldridge D. Brown
Deborah Ann McClanahan

ADVANCED Construction Safety and Health Certificate

Eldridge D. Brown
Deborah Ann McClanahan
Brian A. Vick

Industrial Safety and Health Certificate

Patty Akin
Melissa D. Ballard
George Graham Batchelder
Timothy M. Bussey
Jeremey Caher
Steve Cain
Jerry F. Daniels
Chuck Easterling
Nneoma Ehimiaghe
Monica Diane Franklin

Robert Hendry
Ronda Hill
Marsha L. Mammenga
Isodoro Martin, Jr
Lee Mathes
Ruth Nyamanza
William L. Richey
Beverley Rodgers
Tim Rogers
Ray E. Sanchez
Robert L. Valenza

Construction Safety and Health Certificate

Patty Akin
Ramces Alejo
Carman Bailey
George Graham Batchelder
Eddie Bennett
James M. Bircheat
James M. Butler
Jeremy Caher
Randall Clendenning
Harley Davis

Juan Dumler
Chuck Easterling
Daniel Evans
Lakeisha Gammage
Randy Glover
Ronda Hill
Harlow Hunt
Kevin L. Johnson
Jana C. Jones
Daniel Krautheimer

Anthony J. Nix
Randy Patterson
Melvin A. Pierce
Beverley C. Rodgers
James C. Rozar

Larry Wayne Stewart
William D. Thomposon
Brian Vick
Michael Walochik
Kethley Wyner

Hazardous Materials Management Certificate

Eldridge D. Brown
Ernest D. Dorsey
Louise Murray
James Nissley
Danny Priest
Tudor Samoila

Safety and Health Program Management Certificate

Robert Blaine Ashburn
Eldridge D. Brown
Tauron Farley
Joseph A. Heilbroun
David A. Pickerell
Joel T. Stephens

Course Information: Upcoming Courses

OTI 7505: Introduction to Accident Investigation

- May 1-19 • Online
- June 15 • Atlanta
- Aug. 3-21 • Online
- Sept. 21 • Atlanta

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

- May 4-8 • Atlanta
- June 8-12 • Nashville, Tenn.
- July 6-10 • Destin, Fla.
- July 6-10 • Ft. Lauderdale, Fla.
- Aug. 10-14 • Atlanta
- Sept. 14-18 • Jacksonville, Fla.

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

- May 4-8 • Atlanta
- June 8-12 • Nashville, Tenn.
- July 6-10 • Destin, Fla.
- Aug. 10-14 • Atlanta
- Sept. 14-18 • Jacksonville, Fla.
- Sept. 21-25 • Charleston, S.C.

OTI 502: Update for Construction Industry Outreach Trainers

- May 5-7 • Ft. Lauderdale, Fla.
- July 14-16 • Atlanta
- Oct. 13-15 • Atlanta

OTI 7845: OSHA Recordkeeping Rule Course

- May 8 • Atlanta

- Aug. 14 • Atlanta
- OTI 5600: Disaster Site Worker Train-the-Trainer
 - May 11-15 • Atlanta
- OTI 5400: Train-the-Trainer Course in Maritime Standards
 - May 11-14 • Savannah, Ga.
 - July 20-23 • Charleston, S.C.
- OTI 7500: Introduction to Safety and Health Program Management
 - May 11 • Atlanta
 - June 29-July 17 • Online
- EST 7001: Advanced Safety Management: Principles & Programs
 - May 12-15 • Atlanta
- OTI 510: Occupational Safety and Health Standards for the Construction Industry
 - June 1-5 • Atlanta
 - June 22-26 • Birmingham, Ala.
 - Aug. 3-7 • Atlanta
 - Oct. 5-9 • Atlanta
- OTI 511: Occupational Safety and Health Standards for General Industry
 - June 1-5 • Atlanta
 - June 22-26 • Birmingham, Ala.
 - Aug. 3-7 • Atlanta
 - Oct. 5-9 • Atlanta
- HAZ 1000: 24-Hour Hazmat Technician-Level Emergency Response Course: Industrial Spill and Disaster Response
 - June 2-4 • Smyrna, Ga.
- HAZ 1002: 8-Hour Annual HAZWOPER Refresher
 - June 9 • Smyrna, Ga.
 - Sept. 10 • Smyrna, Ga.
- OTI 2264: Permit-Required Confined Space Entry
 - June 16-19 • Atlanta
 - Aug. 31-Sept. 18 • Online
- EST 7003: Instructional Technology for Occupational Safety and Health Professionals
 - June 16-19 • Atlanta
 - Oct. 5-9 • Atlanta
- OTI 503: Update for General Industry Outreach Trainers
 - July 14-16 • Atlanta
 - Oct. 13-15 • Atlanta
- EST 7000: Scaffolding Safety
 - July 20 • Atlanta
 - Aug. 3-21 • Online
- HAZ 1006: Advanced Hazmat School
 - July 20-24 • Smyrna, Ga.
- OTI 3010: Excavation, Trenching, and Soil Mechanics
 - July 21-24 • Atlanta
- OTI 521: OSHA Guide to Industrial Hygiene
 - July 27-31 • Atlanta
- OTI 2045: Machinery and Machine Guarding Standards
 - Aug. 17-21 • Atlanta
- OTI 2015: Hazardous Materials
 - Aug. 17-21 • Atlanta
- OTI 3110: Fall Arrest Systems
 - Sept. 22-25 • Atlanta
- HAZ 1004: 40-Hour Hazardous Waste Site Worker Course (HAZWOPER)
 - Oct. 12-16 • Smyrna, Ga.
- EST 6000: Managing Environmental Compliance
 - Oct. 27-29 • Atlanta