Four years ago, Juan Rodriguez had a brush with death. Working as a lead carpenter at a construction site in Sandy Springs, Ga., Rodriguez bent down to take a measurement when another worker dropped a 12-foot steel bar that had been improperly tied. The steel bar struck the back of Rodriguez’s head, knocking off his hard hat and missing his neck by about an inch.

“I already had some safety training, but that prompted me to pursue it full time,” says Rodriguez, now a safety specialist with Archer Western Contractors.

Safety training for construction workers is critical. Yet recent changes in labor demographics have made accident prevention more challenging.

During the past decade, the number of Hispanic workers in Georgia has increased dramatically. Resulting language barriers, and the practice among recent immigrants of accepting jobs where they have no experience or understanding of hazards, puts Hispanic workers at greater risk for injury.

In 2001, 41 percent of Georgia’s construction-related deaths occurred among Hispanic workers. The numbers were even more dramatic in Atlanta, where 61 percent of construction fatalities in 2001 occurred among Hispanic workers.

“In the construction industry, education really is a matter of life and death,” says Daniel Ortiz, associate director of the Safety, Health and Environmental Technology Division at the Georgia Tech Research Institute (GTRI). “Employees need to be able to recognize hazardous conditions — and point them out to supervisors.”

With that in mind, GTRI has created training materials entirely in Spanish to educate Hispanic construction workers on regulations from the Occupational Safety and Health Administration (OSHA).

The majority of existing safety standards and programs are written and delivered in English, which creates a problem for Hispanic workers who read or speak little English, says Art Wickman, project director and head of the Health Sciences Branch in GTRI’s Safety, Health and Environmental Technology Division. Even when materials are available in Spanish, there is typically so much technical jargon that the content is difficult to grasp.

“Hispanic construction workers may receive safety papers, but often have no idea what they’re signing,” says Rodriguez, who collaborated with GTRI on the project. Workers who need jobs often won’t admit they don’t understand the content of safety materials, Rodriguez points out: “They’re going to nod their heads and say, ‘Sure.’”

That means that protective equipment and procedures can be futile if workers don’t understand how to use them. For example, 10 workers might try to use a fall-protection cable that can only support two workers.

The new GTRI safety curriculum focuses on five areas where the greatest number of injuries and deaths occur among construction workers: fall protection, scaffolding, trenching and excavation, electrical hazard and material handling. To accommodate workers with varying degrees of education and language skills, GTRI created a wide range of materials:

- Computer presentations for formal job orientations.
- Detailed presentations geared to supervisors and trainers who already possess a certain degree of safety expertise.
• Workplace posters and hazard bulletins that use colloquial Spanish and convey safety messages graphically for workers with poor reading skills.
• Pamphlets for foremen and supervisors to use during “toolbox” meetings (informal safety meetings).

Translating the OSHA safety information from English to Spanish was more challenging than expected. “A lot of regulatory language is unique to our English vocabulary,” Wickman explains. Idiom was also an obstacle. For example, there may be three different ways to refer to a piece of equipment, depending on whether workers are from Mexico, South America or Central America.

GTRI is distributing the training materials through building associations, statewide and regional OSHA offices and the Hispanic Chamber of Commerce. The materials can also be downloaded from www.oshainfo.gatech.edu.

“Even though the materials are free, it’s still an ongoing challenge to get them in the hands of people who need them,” Wickman says.

With that in mind, GTRI is promoting two training initiatives. The first will be carried out through Georgia Tech’s OSHA Safety and Health Consultation Project in the form of a free seminar from 9 a.m. to 4 p.m. on April 8 at Armstrong Atlantic State University in Savannah.

The second training initiative will be an OSHA 10-hour Voluntary Compliance Outreach Training course, using materials developed by the Hispanic Training Safety Agency (HSTA) in Lawrenceville, Ga., and conducted entirely in Spanish. This course will be co-sponsored by the Georgia Tech OSHA Training Institute and Education Center and the HSTA.

An important hallmark of this course is its focus on workers. “Instead of being targeted to superintendents, this program will be a real outreach for field workers,” says Victoria Chacon, president of HSTA.

The OSHA 10-hour course is slated for April 27-28, 2004 in Norcross, Ga. For more information, call 1-800-653-3629. To register, call Margaret Chase at 404-385-3515 or register for OSHA training courses online at www.pe.gatech.edu. RH

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In Atlanta, 61 percent of construction fatalities in 2001 occurred among Hispanic workers.