

Latino Workers in the Construction Industry

Overcoming the language barrier improves safety

By R. Fernando Vázquez and C. Keith Stalnaker

REMARKABLE IMPROVEMENTS have been made in occupational safety and health over the past 10 years. Overall private-industry injury and illness incidence rates dropped 35 percent between 1992 and 2001 (BLS). During the same period, the construction industry fared even better, reducing incidence rates nearly 40 percent. Latino workers, however, have not enjoyed similar improvements. Fatalities among this population increased 67 percent between 1992 and 2001 (AFL-CIO 9) and 22 percent since 1999. Even worse, these grim statistics may underestimate the problem because of underreporting when illegal immigrants are involved (Greenhouse). Although fatalities among this population decreased six percent in 2002, the 840 deaths

represent the second highest annual total of Latino worker fatalities recorded to date (BLS).

Latino immigrants make up a higher percentage of work-related fatalities than any other ethnic group (Maier). Construction has a higher Latino fatality risk than any industry except mining, and it is the industry division with the most Latino nonfatal injuries (National Research Council). OSHA has initiated several efforts to provide safety resources and assistance to Latinos, who now represent approximately 15 percent of the construction workforce in the U.S. (Henshaw).

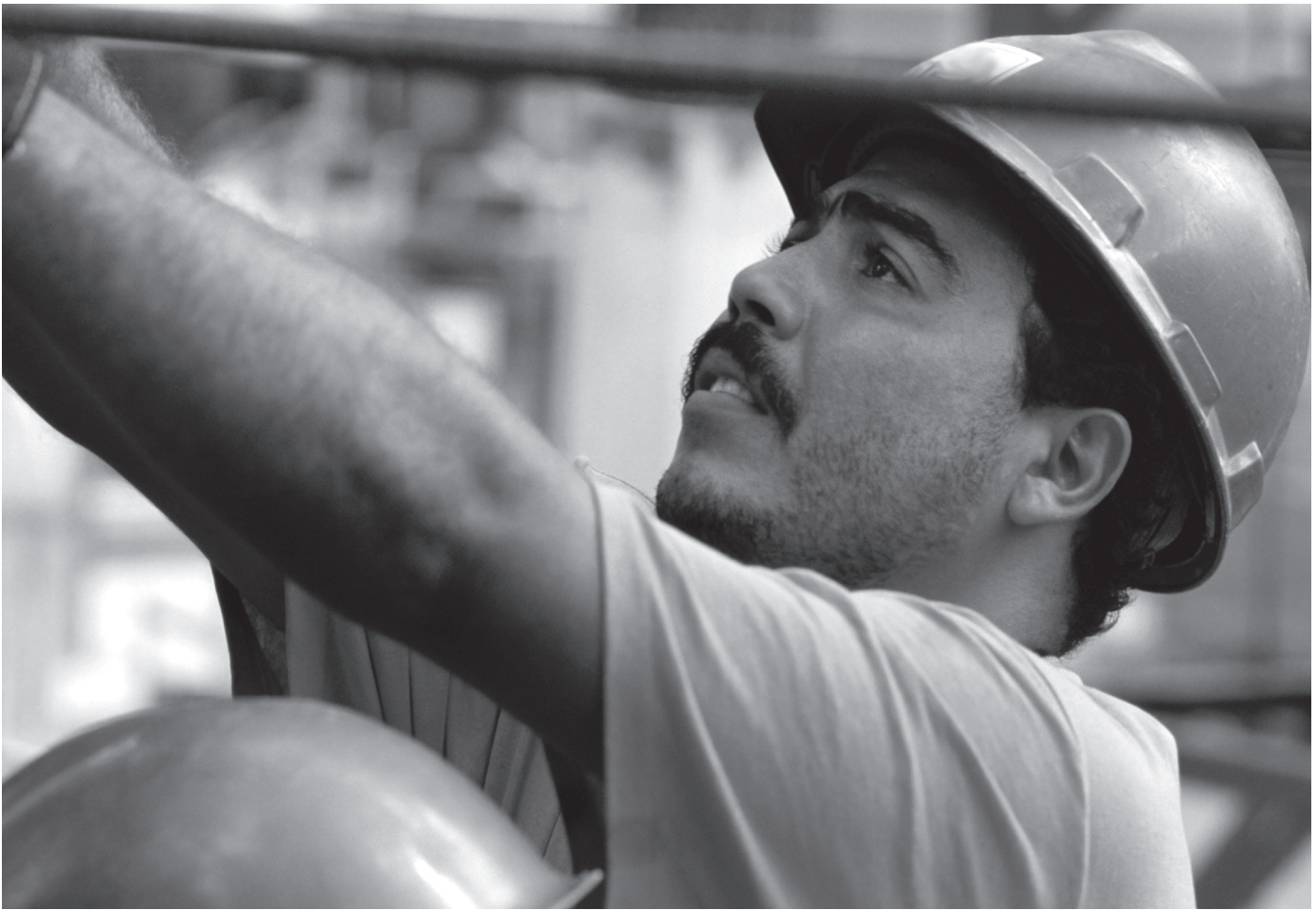
Latino language, literacy and culture must be understood in order to overcome the problems that are causing high rates of death and injury among the Hispanic workforce. This article provides background information important to understanding Latino workers and reviews some techniques that have been shown effective in overcoming the language barrier for Latino construction workers who do not speak English or do not speak it well.

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The Growing Latino Workforce

Throughout the late 20th and early 21st centuries, the number of Latinos in the workplace has steadily increased. According to the 2000 census, Latinos represent 13 percent of the total U.S. population (U.S. Census Bureau 3). States with the largest growth are North Carolina, South Carolina, Georgia, Alabama, Virginia, Arkansas and Mississippi. Northern states



also have significant numbers of Latino workers; for example, in New York, Latinos represent 15 percent of the population (OSHA). The U.S. Census Bureau has projected that by the year 2050 one of four workers will be Latino, making it the fastest growing sector of the workforce.

Growth of the Latino workforce has been especially significant in the construction industry. Construction is second only to agriculture as the industry having the highest proportion of Latino workers [NSC(a)]. In 2000, California had the most construction workers, followed by Texas. Approximately 40 percent of the construction workers who rebuilt the Pentagon following the Sept. 11, 2001, attack were Latino (Sheridan). In one division of a nationwide construction firm, Latinos comprise approximately 45 percent of the workforce. The growing number of Latinos in the construction industry carries a burden as well: a rise in work-related injuries and fatalities, contrasted with a decrease in work-related injuries and fatalities among English-speaking employees.

Transportation incidents, contact (i.e., being struck) with objects and equipment, and falls are the most frequent categories of fatal accidents experienced by Latinos. In construction, the primary fatal injury category is falls to a lower level, comprising 37 percent of all Latino construction fatalities. Between 1995 and 2000, 28 percent of all Latino work-related deaths were in the construction industry, occurring at a rate of 18.3 per 100,000. By comparison, the fatal work injury rate in manufacturing was 3.1 during the same period (National Research Council).

The most frequent Latino nonfatal work injury is being struck with objects and equipment, compris-

ing almost 38 percent (1998 to 2000) of Latino injuries. Bodily reaction/exertion and falls are the second and third most frequent injury types, respectively. Nonfatal injuries of Latinos occur more frequently in construction than in any other industry (National Research Council).

Latino Culture & Values

Latino is a word used to describe a person from Mexico, Puerto Rico, Cuba and other Central and South American countries. Although often described as an ethnic group, Latinos can be further described based on race, language variations and culture. Many Latinos come to the U.S. to escape political and socioeconomic problems in their native countries. Like large numbers of Europeans who came to the U.S. in centuries past, Latinos come in search of a better life. They consider it an honor to have a job, but their desire and need to earn wages can lead to safety problems. The culture of many Latinos can contribute to these problems.

Although a diverse group, some important values are shared by many Latinos:

- Latino culture teaches that authority figures (e.g., a worksite supervisor or classroom trainer) are to be shown exceptional respect (Hispanic Ministry in the Southeast). Latinos rarely disagree with persons in positions of authority (NC Health Education Centers), even when those persons are wrong. As a result, Latinos are unlikely to challenge or ask questions of a supervisor or instructor.

- Latinos tend to do as they are told. Latino workers usually say yes, regardless of whether or not they understand.

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- Eagerness is not considered appropriate. Latino nature is not to follow the clock or to fill the day with a long list of things to do. Latinos are more likely to accommodate the passage of time to their needs, rather than to let time control them (Pajewski and Enriquez).

- Latinos revere their jobs and fear employer punishment for any reason. They do not like to “rock the boat” and tend not to report workplace incidents or injuries, unsafe acts or conditions, potential hazards or harassment. Most would rather remain silent and keep their jobs than report problems that could cause them to be viewed negatively by their employer. In addition to job loss, illegal immigrants fear deportation, which further reduces their likelihood to report safety and health problems (NC Health Education Centers).

- Latinos place high value on family. Strong and close bonds characterize the typical Latino family. The “family unit” often includes not only parents and children but also nonfamily members who are treated as extended family (Hispanic Ministry in the Southeast). In the workplace, Latinos often view other Latinos as extended family and are likely to talk to each other about issues that they are unwilling to discuss with supervisors and non-Latinos.

- Developing trust requires time and depends on the development of personal relationships. A Latino who is frequently shuffled between construction sites and supervisors is unlikely to develop trust in an employer.

The Language Barrier

Few Latinos speak English when they enter the U.S. According to National Safety Council’s “2003 Salary Survey,” more than 71 percent of companies employ people whose native language is not English or who do not speak English [NSC(b)]. Traditional safety training has been termed “useless” for immigrants who do not speak English (“Construction Classes”), and Centers for Disease Control and Prevention has indicated that few resources are available to help Spanish-speaking workers and their employers learn about occupational safety and health (CDC).

Most traditional safety training is delivered using the transmission method—the trainer attempts to transmit information to the student, who is expected to receive it, understand it and use it (Machles). As many SH&E managers know, this method has produced marginal results even among English-speaking employees. With language-burdened Latinos, the training transmission breaks down and results are even less successful.

The transmission method of training also presumes a level of education in the recipient that often does not exist among Latinos. Even when training is conducted in Spanish, Latinos with low literacy skills may not comprehend the message. The typical Mexican immigrant has completed less than nine years of education and only about half of Hispanics in the western U.S. possess a high-school education (Morrison Institute 10). The U.S. Census Bureau reported that 27.3 percent of adult Latinos have less

than a ninth-grade education (U.S. Census Bureau). Combined with an inability to communicate well, high illiteracy rates compromise the safety of both Latinos and their English-speaking coworkers.

English-speaking workers enjoy the benefits of learning from each other on the jobsite. Work briefings, safety meetings, and especially worker-to-worker observation and discussion help supplement formal classroom safety training. For Latinos, these learning opportunities are not as productive when the knowledgeable and experienced construction workers and supervisors speak only English.

When employees cannot communicate efficiently and are unable to perform their duties because of the language barrier, coworkers must take up the slack. This can have a detrimental impact on workplace morale, adversely affecting production and profits. For example, on a construction site where several systems had been turned over to operations, a lockout/tagout was needed to isolate a petroleum tank vent line before welding. Due in part to a language barrier, the isolation valve was not shut, resulting in an explosion and significant damage to the tank. Investigation found a breakdown in communication between English-speaking operators and Spanish-speaking construction workers to be a contributing cause.

The inability to communicate properly also affects advancement opportunities. If an employer does not know an employee’s capabilities, and the employee cannot communicate them, s/he will likely be overlooked for advancement or given assignments below his/her level of capability.

The lack of written safety and health materials is another concern. Although MSDS are increasingly available in Spanish, most manufacturers provide them only for their highest-volume chemicals. Similarly, Spanish safety signage is becoming available, but concerns over double posting and sign congestion have limited their use. A limited number of equipment manufacturers offer technical, operating and service manuals in Spanish—usually at an additional cost.

Public-Sector Initiatives

OSHA has expanded its outreach to Latino workers. In August 2001, the agency created a Hispanic task force. Its efforts and resources to date include:

- OSHA en Espanol, a Spanish-language web page (www.osha.gov/as/opa/spanish/index.html);
- Spanish versions of publications, videos and training materials including federal rules, employee rights and workers’ compensation laws;
- a toll-free number with Spanish options (800-321-OSHA);
- changing reporting of fatalities to monitor those that include language barriers;

Furthermore, OSHA’s Advisory Committee on Construction Safety and Health (ACCSH) provides advice and assistance on construction standards and policy matters. One of its workgroups is Multilingual Issues in Construction. As a result of increas-

Techniques for Reducing Injuries Among Latino Workers

- 1) Provide safety and health training in Spanish. When possible, have a Latino conduct the training.
- 2) Provide relevant and linguistically appropriate safety information and materials that address specific workplace hazards.
- 3) Be judicious about the SH&E training offered. Do not provide training that will not be needed on the job.
- 4) Maintain a low student-to-trainer ratio.
- 5) Revamp training programs to be culturally sensitive. Do not assume that Spanish-speaking employees understand training unless demonstrated.
- 6) Provide financial and other support to encourage Latinos to continue their education.
- 7) Conduct on-the-job safety meetings and job briefings in Spanish if Latino workers do not understand English.
- 8) Convince Latinos that it is not acceptable to be injured on the job and that completing a job is not as important as completing it safely.

ing fatalities among Latino workers, the workgroup announced that it would focus its efforts on Spanish-speaking workers and has established several goals for improving occupational safety and health among this work population.

In addition, the Oregon Occupational Safety and Health Div. (OR-OSHA) website has English-to-Spanish and Spanish-to-English dictionaries of occupational safety and health terms (www.orosha.org/pdf/dictionary/spanish-english.pdf).

NIOSH and CDC are involved as well. The NIOSH en Espanol website (www.cdc.gov/spanish/niosh) provides translations of select NIOSH publications and links to other Spanish-language materials on occupational safety and health.

Language Barrier Solutions

According to Margaret Cordova, an attorney specializing in civil litigation with emphasis on healthcare and employment disputes, efficient communication with Spanish-speaking employees results in fewer workplace injuries and fatalities, noncompliance issues and employer liability. Some companies use innovative techniques to overcome language barriers and improve communication. One construction company uses a "blue hardhat program." Bilingual employees wear a blue hardhat for easy identification in the field. They translate or enable communication between Spanish- and English-speaking employees, which facilitates safe job performance and minimizes misunderstandings. The employer provides a monetary incentive to those in the program.

Bilingual testing programs (BTP) are also being used. These programs allow employees to demonstrate proficiency and the ability to communicate effectively in their non-native language. One BTP provides employees who demonstrate language proficiency an achievement award of \$1,000. In that program, employees must pass a series of tests (English for Spanish-speaking employees and Spanish for English-speaking employees) in four focus areas—human resources, safety, general and customer service. Skill may be demonstrated at five proficiency levels—elementary, limited working, general professional, advanced professional and functionally native. Tests are administered by an independent company. To qualify for the achievement award, the employee must achieve general professional proficiency and be able to communicate (speak, not write) with sufficient vocabulary and structure.

Although some companies have had success with English as a Second Language (ESL) or Spanish as a Second Language courses, others have not. Because of overtime and work schedules, many construction employees miss sessions—meaning some never finish the course. BTP programs say to employees, "If you put in the time and effort to study in your spare time and pass the required exam, then we will reward you." Churches, community organizations and other groups offer language assistance to those in such self-study programs, and to those who desire a more structured approach.

Both BTP and ESL programs must accommodate

low literacy. It may even be necessary to teach some Latinos formal Spanish before attempting to teach English. A Latino who desires to learn English but does not have a good understanding of the Spanish language may find the challenge overwhelming.

Many Latinos believe that training must be provided in Spanish in order for it to be effective. For years, these workers have been trained in English, then sent to construction sites without full knowledge of the safety risks or hazards they will encounter. To ensure that Latinos understand training, some employers use a Latino instructor who relates to and can help trainees relax and be comfortable in the classroom. Employees are more likely to accept training presented by someone who can relate to their circumstances. This comfort level fosters participation, including questions and sharing past experiences. When this occurs, trainees are more likely to gain safety knowledge and understanding—and to develop a questioning attitude.

Due to low literacy, classroom training—even in Spanish—is often not effective. Using hands-on training that requires demonstration of understanding is an effective way to overcome literacy and language barriers. Called the kinesthetic or outcome-based training method, it focuses on activities the worker must perform on a regular basis. Workers are shown, not told, how to work safely. After demonstration, each trainee must duplicate the activity accurately (Halcarz). Combined with positive reinforcement, hands-on training is a powerful way to increase safety understanding and reduce injuries. Both training comprehension and retention are increased. Due to the need for demonstration and individual evaluation, outcome-based training demands low student-to-instructor ratios (typically about seven to one).

Like English-speaking workers, Latinos should be taught only the job skills and safety information they need. Due to time and expense, outcome-based training forces many employers to carefully evaluate and identify true training needs. By focusing training on what is important, students quickly learn the value of attending class and paying attention. If a regulation must be presented, teaching application, not the regulation itself, improves reception by the student. In addition to improving safety, learning

For More Information

BLS

Latino injury/illness/fatality data.
www.bls.gov/iif/home.htm

Centers for Disease Control & Prevention

Electronic Library of Construction Occupational Safety and Health in Spanish and English.
www.cdc.gov/elcosh/Spanish/index.html

Congressional Hispanic Caucus.

Legislative issues affecting Hispanics in the U.S. and Puerto Rico.
<http://rodriguez.house.gov/chc/index.asp>

EPA

National Hispanic Outreach Strategy offers opportunities in EPA program development and delivery, education, funding and employment through partnerships with Latino stakeholders.
www.epa.gov/oarmhome

National Academies Press

Safety Is Seguridad: A Workshop Summary.
<http://books.nap.edu/books/0309087066/html/5.html>

New York Committee for Occupational Safety and Health

Links to safety and health news items about immigrant workers.
www.nycosh.org/linktopics/immigrant-vulnerable.html#anchor161478

Pan American Health Assn.

www.paho.org

The Center to Protect Workers' Rights

Construction industry safety and health, economics, technology and training information.
www.cpw.com

U.S. Census Bureau

Information on the Hispanic population, including employment, income and poverty data.
www.census.gov/population/www/socdemo/hispanic.html

English and increasing education provide Latinos better job opportunities. Data from 1999 show that Latino men are twice as likely to be employed in unskilled labor as non-Latino whites. Only eight percent of Latino men work in professional and managerial positions, compared to 32 percent of non-Latino white workers. Latino hourly wages are 40 percent lower than their non-Latino white counterparts (Morrison Institute 16). As their job skills and communication abilities improve, Latinos will likely find improved job opportunities.

Companies in construction and other industries are using various initiatives to improve safety and health among Latino workers (see "Techniques" sidebar pg. 27). Several websites (at left) also offer information to help SH&E professionals better understand the Latino workforce.

Conclusion

During the next few years, the U.S. should begin to see

the results of the commitment, effort and dedication of government agencies and the private sector to reducing work-related injuries and fatalities among Latino employees. These efforts are challenging traditional methods of training and worksite management, and some of the lessons being learned may extend well beyond the Latino workforce.

Based on encouraging results from 2002, the trend of increasing Latino work-related deaths may have begun to reverse. ■

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