

LATINO CONSTRUCTION WORKER

RESOURCES COLLECTION

2014



INTRODUCTION

This collection is part of an ongoing CPWR effort to look at projects and research efforts that aim to identify the disparate safety and health risks affecting Latino construction workers, as well as promising strategies to address these disparities. The collection includes:

- x Background
- x Case Examples
- x Project, Research, and Resource Highlights
- x Thematic Challenges
- x Potential Areas for Future Research
- x Additional Latino Construction Worker Articles and Reports

BACKGROUND

In 2008 more than 2 million Latino construction workers were estimated to be foreign-born (CPWR Data Center 2009). The construction industry is one of the most dangerous industries for all workers in the United States (Brunette 2004; Abudayyeh 2006; Bureau of Labor Statistics Census of Fatal Occupational Injuries 2012), but Latino workers in particular have higher work-related fatality rates (Dong 2009, 2013) and are more likely than non-Latino construction workers to suffer work-related injuries, including those severe enough to cause lost workdays (Dong 2010b). Latino construction workers are 30% more likely than white non-Latino construction workers to have medical conditions due to work-related injuries, and those injuries are likely to be more severe (Dong 2010a). Latino construction workers lack access to health care coverage and have significantly lower rates of workers compensation coverage compared to white, non-Latino construction workers (Dong 2007).

CASE EXAMPLES

Day Laborer Construction Safety Liaison Project

New Labor, a membership-based worker center in Newark, NJ, implemented an innovative program to train immigrant day laborers and to involve leaders as construction safety liaisons.

The RESEARCH: Day laborers are commonly defined as individuals who work for different employers and get paid on a daily basis. [1] Although day laborers can be quite diverse, they are frequently male undocumented workers from Latin America, with limited educational skills. [2] Approximately 43% of day laborers are given employment by construction contractors, but many have limited construction experience. [2, 3] Construction contractors often classify day laborers as independent contractors, meaning they may not have the same protections under OSHA as regular workers do. There is persistent evidence that few immigrant day laborers receive safety and health training, nor information about conditions at construction sites being generally unsafe. [4] Sadly, most day laborers refuse to speak up or ask for information because they fear losing their job and/or deportation. [2, 3]

Taking ACTION: In June 2010 New Labor, in conjunction with university researchers from Rutgers University Occupational Training and Education Consortium (OTEC) and labor educators from Laborers International Union of North America (LIUNA), implemented a construction safety-training program targeting immigrant day laborers. The project focused on developing peer safety leaders, or "safety liaisons," to recognize safety and health hazards at the workplace, communicate concerns with coworkers and supervisors, file OSHA complaints for serious hazards, and facilitate OSHA 10-hour construction health and safety trainings. The specially adapted 10-hour course is a Spanish-language training to help workers protect themselves and others on the job. The training was developed through a previous New Labor project and resulted in a broader nationwide effort as the training model gained traction and similar approaches were used across the nation.

The safety liaison project trained enough workers to maintain an ongoing group of 10-15 selected construction workers as liaisons. The New Labor and Rutgers University project staff as well as OSHAauthorized trainers supported the liaisons. Project staff also organized regularly scheduled meetings with the safety liaisons to discuss any concerns and to

RESOURCES

further develop their skills. Each safety liaison decided whether or not to tell employers about their project role, share information with co-workers, or engage with supervisors about unsafe conditions. [4]

The RESULTS: The project included a three-year study to evaluate the effectiveness of the safety liaison approach. The ongoing collection of both quantitative and qualitative data allowed project staff to assess the development of the safety liaisons and make necessary adjustments to strengthen the outcomes. Based on the results of the first year, a more concerted effort was made to build liaisons' knowledge base, as well as their communication, networking and leadership skills. Project staff also developed written protocols for liaisons, such

Promoting Adoption of Fall Prevention Measures

Researchers in both California and Philadelphia conducted focus groups and key informant interviews with Latino construction workers and small residential contractors to assess attitudes and perceived barriers toward fall prevention.

The RESEARCH: Researchers from the Labor Occupational Health Program (LOHP) at the University of California, Berkeley, and from the Philadelphia Area Project on **Taking ACTION:** Based on their formative research PhilaPOSH worked to develop partnerships among various stakeholders including residential contractors, employer associations, and organizations supporting Latino immigrant workers. They offered trainings to workers and contractors on fall protection and other health and safety topics, including OSHA 10-hour construction safety classes. The collaboration with employers and employer association groups provided an incentive for workers to participate in the trainings, as they could pursue possible employment opportunities. The involvement of small contractor associations added credibility to the trainings and increased the likelihood of members participating. PhilaPOSH's outreach to organizations that support immigrant workers, including faith-based organizations and immigrant justice groups, was key in involving workers not associated with contractors or contractor associations.

LOHP worked with the State Compensation Insurance Fund (SCIF), the workers' compensation insurer for many residential roofing contractors, to develop a frame for a partnership around fall protection. SCIF recruited the Bay Area Roofers' Association and the Roofers' and Waterproofers' Union to participate in meetings, along with agencies that form part of the Labor Enforcement Task Force (LETF). Meetings were held to explore areas of collaboration.

LESSONS Learned: A number of lessons learned can be gleaned from these efforts in both the San Francisco Bay Area and Philadelphia. It is important that similar fall prevention training worker-focused interventions take an integrated approach and address the cultural, language, and social factors that influence Latino workers' attitudes and experiences while on the job. Such training should include information on worker and immigrant rights, as well as guidance on how to assert these rights. In addition to training it is important to identify promising partners and link with other groups that could further fall prevention efforts.

Interventions targeting residential contractors should include a variety of incentives for contractors to address fall prevention issues. For example, stronger enforcement of safety regulations by state or federal OSHA could serve as an effective motivator for improving employer compliance. This, however, could be challenging where shortages of inspection staff and/or changing interpretations of regulations in the residential sector occur. Another incentive could involve the disclosure of contractor safety records, including the linkage of a strong safety record to increased business. Workers' compensation carriers could also provide third party incentives by requiring contractors to take specific safety measures before establishing or renewing policies, or offering rebates to contractors who comply with best practices. Finally, there may be potential for homeowners and contractor associations to support and reinforce safer work practices among residential contractors.

In summary, the following lessons can serve as a foundation for future projects aimed at promoting the adoption of fall prevention measures among Latino immigrant construction workers and residential contractors.

- " Contractors are the most critical target group in the effort to reduce falls among Latino workers, because they control the workplace
- " In addition to standardized training efforts, strong incentives are needed to offset forces and attitudes causing contractors to opt out of fall protection measures
- " It takes time, resources, and trust among workers and contractors to build sustainable partnerships
- " Fall protection training targeting Latino workers is most effective when integrated into a larger training program that includes information on worker and immigrant rights

The Telenovela Project

A government agency, research and training center, health storyline program, and Spanish language television network collaborated to develop and evaluate a television show with imbedded ladder safety messaging.

The RESEARCH: Falls from ladders, scaffolds or rooftops are the most common cause of construction worker fatalities. Using ladders more safely is one way to prevent falls at construction worksites.

Although OSHA requires ladder safety training for all construction workers, research studies show that up to half of Latino construction workers receive little or no training. [2] Furthermore, the training that is given is largely ineffective due to language barriers, limited literacy, and cultural differences.[3] Experts tested a mass media approach known as "entertainment-education" in an effort to effectively raise the awareness of a large number of Latino construction workers regarding ladder safety, education, and communication.

Taking ACTION: Entertainment-education involves embedding an educational message in an entertainment channel such as television. Among the Latino population, the medium used to convey the educational message was the Spanish-language telenovela, which is similar to a soap opera. In April 2008, the popular telenovela Pecados Ajenos featured a series of episodes that highlighted the causes, consequences, and ways to prevent falls from ladders. The series specifically targeted Latino construction workers in the United States.

The development of the telenovela series, and the follow-up evaluation, were a joint effort between the National Institute of Occupational Safety and Health (NIOSH), the Center for Construction Research and Training (CPWR), Hollywood Health and Society (HHS), and the Spanish-language television network Telemundo. The dramatic storyline contained three key safety messages regarding the proper use of ladders at the worksite: 1) choose the right ladder for the job; 2) always secure an extension ladder at the top and bottom before climbing the ladder; and 3) never carry tools or anything else in your hands as you climb a ladder.

The storyline was accompanied by a PSA message and a Spanish-language website where construction workers or their families could get additional construction safety information. The PSA aired over a two-week period during the same time slot as the telenovela. It reiterated the ladder safety messages and encouraged viewers to obtain more information from the Spanish-language website.

The RESULTS: Online pre- and post- series surveys were completed by members of the telenovela's fan group who received emails inviting them to share their opinions through a website hosted by SurveyMonkey. The recruitment emails for pre- and post- surveys did not menti

sde alwollow-upp

follow instructions in Spanish and took approximately 20 to 30 minutes to complete. A potential bias existed; participants were able to access and felt comfortable taking the online survey may not be representative of the target population: Latino construction workers and their families.

The results showed no significant differences in pre- and post-survey responses with regard to perceptions and behavioral intentions. However the telenovela was effective in increasing audience knowledge of the three specific construction workplace safety messages. Further analysis revealed that the telenovela was particularly effective among viewers with a personal connection to construction work, for example friends of construction workers or workers themselves, versus those who had no such connection. Researchers concluded that the use of culturally relevant communication interventions such as the telenovela could be an effective way of reaching and educating audiences about specific worksite safety information.

The PSA message and Spanish-language informational website added another dimension to the entertainmenteducation intervention. Data showing spikes in website traffic suggests that a multipronged approach combining entertainment-education with other outreach strategies and informational resources can be an effective means of encouraging the target population to seek further information.[3]

LESSONS Learned: Telenovelas can be an effective entertainment-education medium with the potential of reaching millions of Spanish-speaking Latinos living in the United States. The following are some lessons learned to help future education and communication experts carry out a successful entertainment-education intervention targeting Latino workers.

- " It takes considerable human and financial resources to implement and produce an effective entertainment-education strategy
- " Presenting ideas to a network of entertainment media contacts can help sharpen both the storyline and educational messages before formally presenting them to an entertainment media network
- " It may be necessary to make some compromises with entertainment writers with regard to the ideal balance between entertainment and education
- " A multipronged approach that combines an entertainment-education intervention with other complementary educational activities can help increase the effectiveness of the entertainment-education

Workers Defense Project

Workers Defense Project (WDP) is a grassroots organization based in Austin, Texas, dedicated to promoting fair and safe working conditions for the estimated 950,000 construction workers in Texas -- the majority (60%) of whom are Latino [1]. Their tactics include research, policy, education, and training.

The RESEARCH: A construction worker dies in Texas every 2½ days. Texas is a state with one of the highest rates of construction-related deaths, 142 fatalities reported in 2007 and 138 fatalities reported in 2009.

In June 2009 WDP partnered with faculty from the University of Texas at Austin and the University of Illinois at Chicago to study working conditions in Austin's construction industry. The Build a Better Austin initiative included a study—Building Austin, Building Injustice—that surveyed 312 construction workers, 83% of whom were Latino. In the study 41% of workers reported that their employer did not give them rest breaks and 27% said they were not provided with drinking water.

woshowg Ina 4.2(ey5.2(te%ocluakssen Au)5in a)5tino [1pop.2(eyulio

The RESULTS: The new city ordinance—the first of its kind in Texas—guaranteed all construction workers in Austin the right to paid rest breaks of at least 10 minutes for every four hours worked. The ordinance also required that all construction worksites prominently feature a bilingual sign explaining the rest break requirement. Employers not complying could face criminal penalties and fines of up to \$500 per day.

The Workers Defense Project continues to raise public awareness and draw media attention in its efforts to achieve other health and safety policy victories for Austin's construction workers. Twice a year, WDP organizes a "Day of the Fallen" march and rally to call for safe jobs and living wages for Texas construction workers. These regular rallies serve to remind the public and elected officials that the construction industry in Texas has one of the highest fatality rates in the country.

LESSONS Learned: Policy development is increasingly being used as a tool for community change. Grassroots groups, like WDP, are taking their own agendas to city hall and the state house, and proactivelya year, WI

t andadvocacay of consruction safeypo oliiest thatduircntlya fectLastiotimmigarann

workers

areness xplye nsimpforrannroles inbuilo policyaintgnworking cndi(tiortf)5.50e trywheno r(esenting oe public)5.50ffl tinrshorhled ccoforrt

likercity

Additional Projects, Research, & Resources

Below are brief synopses of additional efforts to reach and influence Latino construction workers' safety and health knowledge, conditions, and practices. Select resources are provided.

Associated Builders and Contractors, Mid-Gulf Chapter Susan Harwood Training Grant to Provide Safety Training to Hispanic Workers

The Associated Builders and Contractor's Mid-Gulf Chapter developed a construction safety and English language training for Latino workers in Mobile, Alabama. Trainings were conducted on worksites, instead of transporting workers to a classroom, and taught workers commonly used English words and phrases in the construction industry. Educational tools and materials such as crossword puzzles, Wheel of Fortune, and Concentration were developed.

x OSHA Region IV Success Story Showcase https://www.osha.gov/dcsp/succ ess_stories/compliance_assista nce/reg4 hispanic training.html

Heat Illness Campaign – California & National

UC Berkeley's Labor Occupational Health Program developed a social marketing campaign to raise awareness of the hazards of working outdoors and to promote safe practices (e.g. water, rest, shade) for the state of California. A network of community organizations helped to carry out the effort and make it a success. The campaign was later adapted and implemented nationwide by federal OSHA. Both the California and national campaigns involved a multi-lingual approach, targeting Latino Workers in agriculture and construction, and reached over 10.7 million people nationally through factsheets, posters, quick cards, training guides, and wallet cards.

xCalifornia Heat Illness Campaign Website

http://www.99calor.org/english.ht ml

xOSHA's Heat Illness Campaign Website

https://www.osha.gov/SLTC/heatil Iness/index.html

xEducational Resources

https://www.osha.gov/SLTC/heatil Iness/edresources.html

xSpanish Website and Resources

https://www.osha.gov/SLTC/heatil Iness/spanish/index_sp.html

Micro-Processes of Latino Construction Worker Health: Feasibility of CATS Researchers at Center for Worker Health, Wake Forest School of Medicine and Virginia Polytechnic Institute and State University conducted a research study to examine the feasibility of using completely automated telephone surveys (CATS) as a tool to collect daily data from Latino construction workers over a 21-day period. Research looked at: 1) participation rates 2) determining the quality of data collected 3) identifying design modifications that might improve the effectiveness of the technology among foreign-born Latino construction workers. Findings indicated the technology could be used to better understand health behaviors among Latino residential construction workers.	x CATS Project Overview http://www.oshrc.centers.vt.edu/p rojects/descriptions/LatinoWorker sHealthCATS.html
Protección en Construcción: "Leaders in Safe Construction" (LISC) A community-university-labor partnership, called "Protección en Construcción" (PenC), conducted a participatory research project. Input from over 100 construction workers and contractors went into the development of the LISC program. The 12-month program aimed to address fall prevention and silica dust exposure among Latino construction workers. The program targeted small contractors and conducted trainings at their worksites. Community groups led recruitment efforts, designed questions, and ran a media campaign.	x NIOSH Project Portfolio http://www.cdc.gov/niosh/progr ams/const/noragoals/projects/0 0000028.html
Silicosis Prevention Education NIOSH developed silicosis prevention educational materials in Spanish. These materials were originally in English and later translated into Spanish. A Spanish survey was developed to evaluate the effectiveness of targeting the silicosis prevention message to Latino construction workers. These materials are housed on The Electronic Library for Construction Occupational Safety and Health (eLCOSH). Silica-specific training materials for use by trainers, contractors, and safety and health professionals are also available through the Work Safely with Silica website.	xSpanish Silicosis Alert http://elcosh.org/document/2279/d 000487/Advertencia%2Bde%2Bsil icosis.html xWork Safely with Silica - Comprehensive Source & Planning Tool www.silica-safe.org
Bi-lingual Communication and Safety Training Program Torcon Inc, a general building contractor, developed a bi-lingual component to their existing comprehensive safety program. Torcon Inc. instituted a policy that supervisors at sites with Latino workers must be bi-lingual and required safety trainings on the site to be conducted in English and Spanish. English and Spanish versions of educational materials, safety posters, emergency evacuation procedures, and videos were all developed. The Company policy also requires contractors to host, and workers to attend, weekly "Tool Box Safety Talks," providing documentation that they have been held and attended.	x OSHA Success Stories: Hispanic Outreach https://www.osha.gov/dcsp/succe ss_stories/hispanic/torcon.html

Thematic Issues Affecting Lati

Potential Areas for Future Research

- 1. Consolidate and identify gaps in knowledge regarding effective communication tools for Spanishspeaking construction workers. Develop a tool/checklist for systematic evaluation and a process for active dissemination.
- 2. Consolidate and identify gaps in knowledge regarding effective training programs for Spanishspeaking construction workers. Explore models for evaluating, spreading, and sustaining effective training.
- 3. Assess, refine, and broadly disseminate peer-to-peer models for reaching day laborers and other Latino construction workers.
- 4. Characterize employers of Latino construction workers and the incentives/disincentives that influence safety and health practices. Test creative new incentives for contractors to adopt best practices.
- 5. Look at the intersection between risks for Latino workers and risks associated with working for small contractors.
- 6. Explore the potential for community-based organizations (CBOs) to develop sustainable platforms for workers to become educated about protecting their safety and their workplace rights.
 - xWhat types of organizations are most promising in terms of building a broad network worker centers, faith based orgs, immigrant service centers, community health clinics, etc.
 - xWhat skills do these organizations need in order to be able to perform that service? How could capacity be built?
 - xWhat sustainable funding models would allow CBOs to play this role?
 - xHow can researchers and/or agencies develop meaningful and sustainable partnerships with CBOs?
- 7. Explore the potential role of intermediary groups to reach contractors who employ Latino workers, including:
 - x Development Corporations
 - x Hispanic Chambers of Commerce, Hispanic Builders Associations
 - x Workers compensation insurers
 - x Construction equipment and supply houses

- 8. Look at the potential for project owners as intermediaries to influence health and safety:
 - x Homeowners, homeowner associations
 - x Municipalities, other public project owners
- 9. Develop and evaluate outreach strategies for specific construction sectors (e.g. new home building, roofing, home remodeling/repair, etc.)
- 10. Consider the implications of multiple levels of subcontracting on occupational safety and health conditions for Latino workers.
- 11. Study "worker voice" or worker empowerment what are the conditions under which Latino workers are better able to use information and act on it in the workplace?
- 12. Consider differences in outcomes between disparate groups of Latino workers:
 - x US born and foreign-born
 - x Organized (union) and non-organized (nonunion)
 - x New settlement communities and older settlement communities
 - x Right to work" states and states with strong labor laws

Additional Latino Construction Worker Articles and Reports

Acosta-Leon AL, Grote BP, Salem S, Daraiseh N. 2006. Risk factors associated with adverse health and safety outcomes in the US Hispanic workforce. Theoretical Issues in Ergonomics Science 7(3): 299-310. Anderson JT, Hunting KL, Welch LS.2000. Injury and Employment Patterns Among Hispanic Construction Workers.

Dong XS, Men Y, Ringen K. 2010b. Work-related injuries among Hispanic construction workers—Evidence from the medical expenditure panel survey. Am J Ind Med 53:561–569.

Dong XS, Fujimoto A, CPWR Data Center. 2010c. Health Insurance among Hispanic Construction Workers. CPWR Data Brief 2(1): 1–15.

http://www.cpwr.com/sites/default/files/publications/CPWR%20 Data%20Brief_Hispanics%20and%20Healthcare.pdf (Accessed 30 November 2014.)

Dong XS, Choi SD, Borchard

REFERENCES FOR BACKGROUND

- Abudayyeh, O., Fredericks, T. K., Butt, S. E., & Shaar, A. (2006). "An investigation of management's commitment to construction safety." International Journal of Project Management, 24(2), 167-174.
- Acosta-Leon, A. L., Grote, B. P., Salem, S., & Daraiseh, N. (2006). Risk factors associated with adverse health and safety outcomes in the US Hispanic workforce. Theoretical Issues in Ergonomics Science, 7(3), 299–310.
- Arcury TA, Mills T, Marín AJ, Summers P, Quandt SA, Rushing J, Lang W, Grzywacz JG. 2012. Work safety climate and safety practices among immigrant Latino residential construction workers. Am J Ind Med 55:736–745.
- Brunette, M.J., 2004. Construction safety research in the United States: targeting the Hispanic workforce. Injury Prevention 10 (4), 244e248.
- Brunette, M.J., 2005. Development of educational and training materials on safety and health: targeting Hispanic workers in the construction industry. Family & Community Health 28 (3), 253e266.
- Bureau of Labor Statistics Census of Fatal Occupational Injuries (CFOI) 2012 http://www.bls.gov/iif/oshcfoi1.htm
- Dong X, Platner JW: Occupational fatalities of Hispanic construction workers from 1992 to 2000. 2004. Am J Ind Med 45:45-54.
- Dong XS, Fujimoto A, Ringen K, Men Y. 2009. Fatal falls among Hispanic construction workers. Accid Anal Prev 31:1047– 1052.
- Dong XS, Wang X, Daw C, CPWR Data Center. 2010a. Fatal and nonfatal injuries among Hispanic construction workers. CPWR Data Brief 2(2):1–19. http://www.cpwr.com/pdfs/Hispanic_Data_Brief3.pdf

- Richardson DB, Loomis D, Bena J, Bailer AJ: Fatal occupational injury rates in southern and non-southern States, by race and Hispanic ethnicity. Am J Public Health 2004, 94:1756-1761.
- Roelofs C, Sprague-Martinez L, Brunette M, Azaroff L. 2011. A qualitative investigation of Hispanic construction worker perspectives on factors impacting worksite safety and risk. Environ Health 10:84.
- Saucedo 2010.Masculinities Narratives and Latino Immigrant Workers: a Case Study of the Las Vegas Residential Construction Trades (co-authored with Cristina Morales), 33 Harvard Journal of Law and Gender 625.
- Thompson P, Siddiqi K. 2007. Best Practices for Improving Safety among Hispanic Construction Workers, published in Proceedings of 43rd ASC Annual International Conference, Northern Arizona University in Flagstaff, Arizona, April 12-14.
- U.S. Census Bureau. 2010 American Community Survey. Calculations by CPWR Data Center http://www.cpwr.com/sites/default/files/publications/CB%20page%2016.pdf