Construction Research to Practice [r2p] Partnership Toolkit

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CPWR

Introduction

Construction r2p Partnership Toolkit

Construction is one of the most dangerous industries, with high rates of injuries and illnesses. Research-based safety and health work practices and equipment are making construction work safer. However, to further reduce the risk for injuries and illnesses, there needs to be broader acceptance and use of these safety and health solutions, as well as development of new ones.

In 2010, CPWR initiated a project to identify the barriers to using safer work practices and equipment, the steps needed to overcome these barriers, and ways to increase the use of solutions – in other words – move research to practice. We found that in addition to a lack of worker and contractor awareness of available research-based solutions, these solutions may not reflect industry priorities or fully incorporate workers' and contractors' knowledge and expertise.

An in-depth review of new and existing construction partnerships documented the critical role partnerships can play in addressing these barriers: raising awareness of effective solutions, increasing their use, as well as creating demand for high-quality safety and health research, information, tools, programs, and practices. As a result, CPWR's research to practice initiative emphasizes the importance of using partnerships to involve "end users" – workers and contractors – at every stage, from identifying research needs to promoting action based on new findings.

What is an r2p partnership?

A research to practice, or r2p, partnership is a collaborative effort among stakeholders to identify and solve safety and health problems by promoting the use of available research-based solutions and identifying new research needs. Such partnerships can be organized around solving a specific problem or improving the overall safety and health practices of a particular industry segment. The following are examples of collaborations that CPWR studied in an effort to learn what makes a successful r2p partnership:

The Asphalt Paving Partnership drastically reduced workers' exposure to asphalt fumes through an innovative voluntary agreement between manufacturers, government, and industry stakeholders to install engineering controls on all new equipment. They continue to improve on their success by actively promoting the broad uptake of warm-mix asphalt to further reduce emissions at the source, and engaging in other safety and health efforts related to work-zone safety, silica in milling operations, and dermal exposures.

The Masonry r2p Partnership, established to help CPWR develop a model industry-wide partnership, demonstrates how such a partnership can leverage the influence of its core partners over industry practices across the country. A key finding from working with this partnership is the importance of having stakeholders establish safety and health priorities and identify practical solutions. The Partnership is working with researchers and other industry representatives on an array of initiatives. They have focused their attention on ergonomic solutions involving mast scaffolding and hand tools, preventing contact dermatitis, and developing and broadly disseminating education and communication products. To assess their progress in disseminating these solutions, the Partnership has also embarked on a nationwide evaluation, using worker and contractor surveys.

The SafeBuild Alliance (formerly the Greater Portland Construction Partnership) uses a regional approach to improve the industry's safety culture and achieve zero injuries. The Alliance holds quarterly meetings focusing on safety for its broad membership, which includes general contractors, subcontractors, owners, labor unions, designers, safety and health professionals, and other stakeholders. Their innovative Prequalification Assessment Certification Program helps to streamline the safety prequalification process by allowing general contractors to access information on the safety performance of participating subcontractors.

The Massachusetts Floor Finishing Safety Task Force was established as a statewide partnership in response to a specific hazard facing a vulnerable population within the state's construction industry. During 2004 and 2005, three Vietnamese immigrant workers died while using highly flammable lacquer-based sealants to finish floors. This partnership used a strategy of research, education, outreach, and advocacy to build support for the enactment of state legislation banning the sale of the types of products responsible for these deaths.

The Electrical Transmission and Distribution Partnership, formed as part of the Occupational Safety and Health Administration's (OSHA) Strategic Partnership Program, has consistently recorded injury and illness rates below the industry average. They have achieved these results through a combination of targeted data analysis, causal factor identification, and the development and dissemination of best practices for prevention. As part of their effort, the Partnership developed industry-specific OSHA 10-hour and 20-hour training programs, which in just one year reached over 30,000 workers and over 2,400 supervisors.

The Roofing r2p Partnership was established to explore the replicability of the partnership model, piloted in the masonry industry (see Masonry r2p Partnership above), with industry partners representing both union and non-union segments of the industry: the United Union of Roofers, Waterproofers and Allied Workers and the National Roofing Contractors Association, which represents union and non-union contractors in residential, commercial and industrial construction. This partnership provided important insights into how partners who may have different positions on some topics can work collaboratively to use their collective influence to raise awareness of safety and health hazards and promote use of interventions. The Partnership formed a coalition with other labor and management representatives in the construction industry to address an emerging hazard and works with researchers to address hazards specific to the roofing industry as well as ones with broad

application in the construction industry. It has focused attention on topics such as radio frequency (RF) radiation hazards, fall prevention, and mental health issues, and developed an ongoing coordinated national social media campaign -- #roofersafety365 to disseminate information on these issues.

Latino Falls Prevention Partnerships: UC Berkeley's Labor Occupational Health Program (LOHP) and the Philadelphia Area Project on Occupational Safety and Health (PhilaPOSH) each used local partnership models with labor, community, employer, government, and other partners to develop targeted strategies to prevent falls among Latino construction workers.

- **LOHP** used this partnership approach in Northern California to support the development of concepts and messages for a social marketing-based strategy to prevent falls from roofs. Working with the California state workers' compensation insurer, the Associated Roofing Contractors of the Bay Area, the United Union of Roofers, Waterproofers and Allied Workers, and state agencies, LOHP used focus groups to test and recommend fall prevention messages and materials.

- **PhilaPOSH** explored potential partnerships in the Philadelphia area to support training and education strategies that address falls among Latino workers in residential construction. By convening meetings and training sessions and providing technical assistance, the group developed connections with Latino workers, local Latino contractor associations, OSHA, and the Philadelphia Power and Electric Company.

The OSHA•NIOSH•CPWR Interagency r2p Working Group coordinates research to practice efforts among leading agencies in construction safety and health. The Working Group aims to learn about and improve the r2p process by conducting, documenting, and evaluating r2p efforts, comparing lessons learned, and compiling useful tools. Since its inception in 2010, the group has undertaken the following initiatives:

- the broad dissemination of nail gun safety information
- the creation of a database of industry contacts to facilitate the dissemination of construction safety and health solutions
- collaboration on a National Falls Campaign
- the development of a one-stop web resource on silica safety
- exploration of the best ways to reach residential contractors
- dissemination planning related to noise control resources
- a workshop and subsequent material development on technology transfer
- a workshop, and material and webpage development on the topics of safety culture and safety climate
- the development of a report on career technical education

What is the purpose of the partnership toolkit?

Recognizing that partnerships play a pivotal role in moving research to practice, we designed this toolkit to help a range of audiences, from groups interested in establishing a new r2p partnership to those interested in strengthening an existing one.

The toolkit is organized into sections based on partnership best practices and includes lessons learned from successful collaborations, examples from case studies, partnership activities, ideas for how to move solutions from research to practice, as well as additional resources and background information. It is not necessary to go through each section in the order presented or to use every section and tool. Since each partnership is unique, this toolkit is designed so that your partnership can easily identify and find the topics and tools that are most appropriate and helpful.

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