Technology Transfer: Bringing Safety and Health Innovations to the Market

Best practices for health and safety technology transfer in construction

Laura Welch, Dustin Russell, Deborah Weinstock and Eileen Betit. American Journal of Industrial Medicine, August 2015.

Overview

New technologies discovered through research can only make construction work safer if they are translated to commercial production and adopted in the field. CPWR recruited participants with experience and insight into effective technology transfer for a symposium. Researchers collected session notes and grouped recommendations into thirteen major themes.

Key Findings

- Usability testing and subsequent adjustment in design is necessary to ensure that tools work as desired, but requires the cooperation of contractors and workers in the field. One successful transfer, the inverted drill press, underwent 5 rounds of testing by 100 workers at 80 sites before its final design.
- Technology transfer takes time and funding; those seeking to develop and introduce new tools and technologies into the construction market should not expect to do so quickly. The highly successful Asphalt Partnership required 12 years to secure implementation of asphalt fume controls on all new highway-class pavers.
- Participants agreed that historically government regulations and standards have played a significant role in spurring adoption of workplace health solutions. OSHA's exploration of a permissible exposure limit for asphalt fume helped drive adoption of controls by stakeholders in the paving industry; the California silica standard helped inspire interest in the inverted drill press.

For more information, contact:
Laura Welch: lwelch@cpwr.com

See abstract:
http://bit.ly/1hsoz69

©2015, CPWR – The Center for Construction Research and Training. All rights reserved. CPWR is the research, training, and service arm of North America's Building Trades Unions, and works to reduce or eliminate safety and health hazards construction workers face on the job. Production of this Key Finding was supported by Grant OH009762 from the National Institute for Occupational Safety and Health (NIOSH). The contents are solely the responsibility of the authors and do not necessarily represent the official views of NIOSH.

CPWR
THE CENTER FOR CONSTRUCTION
RESEARCH AND TRAINING
WWW.CPWR.COM