



Construction Workers and Nanotechnology Awareness

Nanotechnology: Assessing Awareness and Training Needs Among California Construction Trades

Laura Boatman and Debra Chaplan. CPWR Report, May 2018.

Overview

A growing number of construction products incorporate engineered nanoparticles, but little is known about their long-term health effects on exposed workers. The study explored the current understanding and use of nanotechnology applications in heavy industrial/commercial construction among union leaders, apprenticeship program staff and construction contractors. Researchers surveyed 253 contacts representing 24 construction crafts to learn about their knowledge, attitudes and beliefs concerning nano-enabled construction products and about existing health and safety training addressing nanotechnology in construction. Researchers then conducted 21 follow-up interviews with survey respondents and 5 key interviews with California state agency employees.

Key Findings

- **Study Participants knew very little about nanotechnology in construction.** Nearly one in five survey respondents said they had never heard of “nanotechnology” and “nanoparticles.” Only 25% were aware of their use in construction materials.
- **Construction workers are being exposed to nano-enabled construction products without knowing it.** When study participants were shown a list of nano-enabled construction products from CPWR’s eLCOSH NANO Inventory, 44% found products they recognized or used on the job.
- **Construction workers are not being trained about nanomaterials.** Only 2% of the survey participants had received training regarding nanomaterials.
- **Study Participants wanted to learn more about nanomaterials and construction safety and health.** The level of interest generated by the survey surprised the research team, which received more than twice as many survey responses as anticipated. Among respondents aware of nanotechnology, 75% wanted new training materials on the topic.

For more information, contact:

Laura Boatman: lboatman@sbctc.org

Read full report:

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