Study Shows Chemical Workers Perceive High Risk of Safety Threats

Improved Training Exercises, Materials Recommended

In an analysis of focus group interviews published in a scientific journal this month, a team of scientists found chemical workers perceive a high risk of on-the-job chemical threats, but are resigned to accepting the risks. The study also noted a certain level of distrust of management and health advisors, problems with written safety guides, and the need to include more experienced workers in the development of safety training programs.

“Instead of relying on highly technical fact sheets on toxic risks, many workers turn to the anecdotal experiences of their peers to guide their actions, including choices to wear personal protective equipment such as masks and gloves” said lead author Ramona Hambach of the University of Antwerp in Belgium. Analysis revealed written materials on chemical properties, which often serve as the official guide to industrial hygiene practices at factories, are seldom understood or relied on by workers.

Based on a series of seven focus group interviews the researchers facilitated in Belgium, Europe, it was suggested that workers' perceptions of risk are rarely taken into account when considering workplace prevention programs. Hambach noted workers mentioned it “takes too long” before reported health and safety issues are solved and occupational physicians don’t always take them seriously when complaints of stomach pains, skin problems, and other illnesses are made, or problems with equipment are noted.

The study, entitled "Workers' Perception of Chemical Risks: A Focus Group Study," appears in the February issue of the journal "Risk Analysis" published by the Society for Risk Analysis. The authors include Ramona Hambach, Philippe Mairiaux, Guido François, Lutgart Braeckman, Alain Balsat, Guido Van Hal, Chantal Vandoorne, Paul Van Royen and Marc van Sprundel, from the Universities of Antwerp, Liège and Ghent, all in Belgium.
The workers expressed a certain level of distrust of so-called "prevention advisors" and management when it came to their welfare but often accepted exposures to chemical risks as being "part of the job."

They recommended including more information from experienced workers in training programs. As one subject said, "By passing on information to our colleagues we feel like we're contributing to our own safety, but that feeling soon wears off. . . anyway it's a much better idea to ask those people who are actually doing the job for information rather than just sitting at a desk. The folks working on the shop floor have a different view and have more experience."

According to Hambach, "Our findings suggest training programs intended for prevention advisers should be substantially revised to include topics such as listening to and understanding workers' perceptions, the usefulness of a participatory approach, and various communication and education skills" so they can pass along information on chemical risks in a more worker-friendly manner.

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