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Feature Article

Right-to-Know vs. Right-to-Understand

Flaws in the HazCom Standard must be resolved to prevent needless injuries and loss of life.

by John Rooney

On the heels of yet another federal investigation attributing chemical-related deaths and injuries to defective hazard communications systems in the workplace, few would question that a public health crisis is afoot. More than 30 million American workers are exposed each day to hazardous chemicals at the workplace, with upwards of a half-million chemicals being stored and used in today's hospitals, manufacturing plants, and industrial facilities.

The acute and chronic effects of exposure have contributed to increasing rates of asthma and other respiratory diseases diagnosed at occupational health clinics, as well as injury and death from chemical spills, fires, explosions, and other workplace incidents. Each year, more than 65,000 American workers are diagnosed with illnesses that are directly related to exposure to hazardous chemicals. Such shocking data would seemingly prompt a quick and effective response from the federal government, with so many American lives at risk each day.

"Don't just stand there, do something!" We've heard that call before when prompt action is required. However, in response to this specific crisis, OSHA has decided to simply adopt a *"Don't just do something, stand there"* approach. The consequences of this decision are far-reaching, and more lives will be lost until the flaws inherent in the federal Hazard Communication Standard are resolved.

The current "Right-to-Know" regulations, implemented more than two decades ago, require facilities that use chemicals to develop and maintain a plan to communicate the potential hazards of chemicals to employees. That is the good news. The bad news is that the tools most widely used in today's workplaces to communicate these hazards are actually contributing to the problem they were designed to solve. These tools, known as Material Safety Data Sheets (MSDSs), are developed by chemical manufacturers with information on the health hazards and other risks associated with each chemical. Unfortunately, there is no standard format for these documents, which are often maintained by facilities in an unwieldy series of binders and are published in a range of competing formats with language that stretches even the most highly educated toxicologist's capacity to interpret them.

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Consequently, in the case of a chemical spill or other incident, the ability for workers to respond quickly and effectively is significantly compromised. This is especially true considering that one-third of the U.S. workforce reads at or below the eighth grade level, and 22 percent is functionally illiterate. The language and content of most MSDSs is literally a foreign language for most employees.

Case in point: The recent federal investigation into an explosion at a Corbin, Ky., manufacturing plant concluded the inability to effectively identify and respond to the inherent hazards of phenolic resin, the chemical in the explosion, caused the deaths of seven workers and injuries to more than 30. According to the report, the MSDS for phenolic resin dust simply did not clearly highlight that the chemical was explosive--more evidence that validates the widely held claim that a majority of today's MSDSs are inaccurate and incomprehensible.

Chemical Categorization

Recognizing the central role that MSDSs play in the current HazCom standard, what specific solutions are recommended to make the current standard more accountable? The solution lies in chemical categorization and a series of associated guides that translate the MSDS information on the risks and usage of chemicals into language that all workers can understand.

This is a wholesale change; it challenges those who argue the solution is simply keeping MSDSs more current and accessible. Expecting MSDS currency and access to maximize workplace safety is like expecting an infant to be able to swim simply because a lifeguard is on duty. It misses the point entirely. Effective categorization promotes a level of accuracy, comprehensiveness, and simplicity in chemical management and training that the MSDS alone simply cannot.

In addition to standardizing the MSDS format by assigning chemicals to specific categories based on risk level, physical and health hazards, target organs, and routes of entry, other recommendations for reform include:

1. Development of standardized phrases that could be translated into all of the major world languages.
2. Minimum levels of testing for acute hazards such as corrosiveness, flammability, and toxicity.
3. Harnessing the energy that has been put into building consensus for the Globally Harmonized System for classification and labeling of chemicals and transforming it into a more accountable and reliable framework.

It is one thing for employees to know about chemical hazards in the workplace, but to understand and act on them when time is critical is a different issue. Only by addressing the core problems of workforce illiteracy, lack of regulatory standardization, and reliability of MSDSs can future chemical-related injuries and deaths be prevented. That is the call to action. The health and safety of the American worker will continue to be in the balance until that call is answered.

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