



**“Your Connection for Workplace Safety”**  
**Phone: 920-208-7520**

*We're about service, commitment, results, and accountability!*

## *Weekly Safety Tip*

*Life Is All About Choices!*<sup>®</sup>

March 16, 2015

### **SCI Safety Tip: What You Think You Know About Industrial Fire Really Can Hurt You (Part 2)**

Source: <https://www.hsb.com>

By: *Dominique Dieken, P.E., CFPS*

Date: 2015



#### **Sprinklers Can Reduce Fire Losses**

The required water flow alarm notifies fire department and plant personnel so that sprinklers can be secured after the fire department has established the fire is out. In the majority of cases where sprinklers actuate during fires, the fire damage can be expected to be small, and water damage would be confined to approximately 400 square feet. Often, total damages due to sprinkler discharge are less than \$5,000 and go unreported. In contrast, fires can easily result in multimillion-dollar losses where sprinklers are absent.

According to a U.S. government fire loss history study through 1991, the average loss in computer rooms without a fire suppression system was about \$38,000. By comparison, the average loss due to fires controlled by sprinklers was about \$3,000. Fires extinguished by halon systems had an average loss of about \$6,000, including the replacement cost of the halon.

***SCI Safety Slogan***

**Safety Starts with  
YOU!**

***James Lehrke-SCI***

**Myth #4 - Sprinklers Go Off Accidentally**

The failure rates for sprinkler heads are extremely small — approximately 1 in 16 million or a probability of  $6.25 \times 10^{-8}$ . Inadvertent discharge of sprinklers is extremely rare and is usually attributed to mechanical damage or poor system design. It is so rare, in fact, that there is not enough data to be more precise. It is estimated that 1 in 2.5 million installed sprinkler systems will discharge inadvertently (probability of  $4.0 \times 10^{-7}$ ).

To ensure reliability and performance, sprinkler system components, design and installation are meticulously controlled by the National Fire Protection Association standard NFPA 13, "Installation of Sprinkler Systems." It is the nation's foremost design and installation standard on sprinkler systems and has been adopted as a code by virtually all jurisdictions in the United States. The proper selection and location of sprinkler heads, and proper system design, will minimize the possibility of inadvertent discharges.

**Myth #5 - My Plant Has Sprinklers, Therefore I'm Safe**

The mere presence of a sprinkler system does not mean that the sprinklers can adequately deal with a fire. This is especially true in industrial buildings and warehouses due to the higher and often changing hazards. Sprinkler systems are matched to the occupancy of a building. The higher the expected heat release of a fire, the more water a sprinkler system must be able to deliver.

The density, or water flow over a unit area, is a balance between the available water supply (flow and pressure) and friction resistance of the sprinkler piping. Engineering calculations are used in the sprinkler system layout and the pipe selection. A sprinkler system that was adequate 10 years ago may not necessarily offer adequate protection today.

**Inspections Are Not Enough - Evaluate Your Current Needs**

For example: a building constructed as a metal assembly plant has a sprinkler system approved and installed to adequately protect this occupancy. The original company moves out and a plastics manufacturing company moves in. Their raw materials consist of thermoplastics stored in racks. The heat release of a fire involving plastics in a rack storage arrangement is many times higher than a fire involving metal production operations. The hazard has just been increased to the point where the existing sprinkler system would be ineffective.

This deficiency would not likely be picked up during a fire prevention inspection, nor would it be by the technician who performs the routine testing of the sprinkler system. The proper evaluation of a fire protection system necessitates information about the occupancy, the sprinkler system design and the water supply.

**Summary**

Sprinklers have an excellent record of protecting people and buildings from fire. It is true that no amount of fire protection can guarantee absolute protection. But understanding the hazards, and the careful selection and application of sprinklers and other fire protection systems, can sharply reduce the potential for fire damage. Don't let myths and misconceptions keep you from including sprinklers as part of the fire protection system in your plant or facility.

## SCI OSHA Compliance: OSHA is paying attention to safety whistleblowers—are you? (Part 1)

Source: <http://www.blr.com>

Date: March 12, 2015

Recent decisions in favor of employees who speak up about unsafe working conditions are a reminder that OSHA is taking whistleblower complaints quite seriously these days. Read more here, and make sure you and your employees are fully aware of their rights under the law.

Two recent whistleblower cases are typical of those brought to OSHA's attention. OSHA has the authority to protect workers from retaliations under the Occupational Safety and Health (OSH) Act and other laws. The law states that an employer cannot retaliate against workers who report injuries, safety concerns, or other protected activity.

OSHA also oversees whistleblower protection under 21 other federal laws. These protect workers in industries including airlines, nuclear power, public transportation, railroad, and consumer products, among others.





**Aurora Health Care®**

**Quick Tips for Healthy Living**

**How to Add Whole Grains to Your Diet**

Adding more whole grains to your family's meals is a smart move. Not only do they provide the vitamins, nutrients and minerals needed to keep your family healthy and strong, but whole grains also contain dietary fiber, which may help reduce your risk of heart disease, cancer, diabetes and other health complications.

Grains are divided into two subgroups: whole grains and refined grains. Whole grains contain the entire kernel — the bran, germ and endosperm. The *Dietary Guidelines for Americans* recommend making half of the grains you eat whole, so use whole grains instead of a refined-grain product.

**How to Find Whole Grains**

Remember, being brown doesn't make bread whole wheat and being white may not mean that bread is made with just refined white flour. Finding whole-grain breads takes some label reading skills. Any bread labeled "whole wheat" must be made with 100-percent whole-wheat flour.

Also, did you know that even if bread labels advertise "seven-grain" or "multigrain," they are not necessarily whole-grain products? Check the Nutrition Facts Panel to make sure whole-wheat flour is listed as the first ingredient and find loaves made mostly with whole-wheat or other whole-grain flour.

**Add Whole Grains to Your Meals**

Want to add more whole grains to your meals? Change your cooking style to include more whole grains and boost the fiber content of meals. Partner whole grains — brown rice and vegetable stir-fry or a whole-wheat pita stuffed with salad. Fortify mixed dishes with high-fiber ingredients — try adding bran or oatmeal to meat loaf.

Looking for other ways to make half your family's grains whole?

- Start with breakfast. Choose a fiber-rich, whole-grain breakfast cereal, oatmeal or toast. Check the grams of fiber per serving; more fiber will keep you feeling fuller, longer.
- Choose whole grains over refined items when selecting breads, buns, bagels, tortillas, pastas and other grains.
- Experiment with different grains such as buckwheat, bulgur, millet, quinoa, sorghum, whole rye or barley. To save time, cook extra bulgur or barley and freeze half to heat and serve later as a quick side dish.
- Enjoy whole grains as a snack. Three cups of whole-grain, air-popped popcorn contains 3.5 grams of fiber and only 95 calories. Also, try 100-percent whole-wheat or rye crackers.

In one recent case, OSHA decided that an employee who raised concerns about a truck driver exceeding the legal maximum of driving hours should be reinstated and paid more than \$230,000 in back wages and damages. The case was brought under the Department of Transportation's Federal Motor Carrier Safety Administration. Noted OSHA Regional Administrator Barbara Goto, "An employee's right to report safety concerns without fear of reprisal contributes to maintain a safe and healthy workplace for all workers."

Another case, currently in court, involves a whistleblower who was fired after raising concerns about asbestos removal at a school where the employee worked. OSHA sued the Idaho Falls School District on behalf of the employee, alleging that the district's dismissal violated the law. This case was brought under the Asbestos Hazard Emergency Response Act, which requires schools to inspect for and address asbestos. OSHA is seeking more than \$300,000 for the employee and job reinstatement.

OSHA says that after expressing concerns about the safety of the asbestos removal project, the employee's supervisor reacted in a hostile manner before the employee was fired. An OSHA official commented, "Protecting children, teachers, and others who care for them at school should be appreciated, not condemned for any reason."

*Continued next week*

you are  
**amaZing**  
you are  
**amaZing**  
you are  
**amaZing**



*What do you think?  
Send us an email at: [jlconnections@aol.com](mailto:jlconnections@aol.com)  
See our bold new look  
@ <http://www.safetyconnections.com/>  
In Loving Memory of Jessica Lehrke*

