



Facilitator — October/November 2012



Change Language: Choose



Text Size A | A | A

All translations are provided for your convenience by the Google Translate Tool. The publishers, authors, and digital providers of this publication are not responsible for any errors that may occur during the translation process. If you intend on relying upon the translation for any purpose other than your own casual enjoyment, you should have this publication professionally translated at your own expense.

In the Face of Danger

Susan Daywitt

Are you making these common fire suppression mistakes?

A Constant Threat

A commercial kitchen is at constant threat for a potential fire. The volume of activity, coupled with the use of high heat, open flames and combustibles for cooking, creates ripe conditions for a catastrophic fire, especially when combined with highly flammable waste such as fats, oil and grease.

These volatile conditions in a confined and populated public place make it critical that the fire suppression system be able to detect and suppress a fire quickly.

The challenge with adequate fire safety in restaurants today is that the basics are well known but often ignored. Most general managers already know what needs to be done (at least at a high level), and yet day-to-day tasks often get in the way, leaving the restaurant and the bottom-line in jeopardy.

Regulations and Compliance

The fastest path to restaurant closure without actually having a fire is lack of compliance with regulations. The National Fire Protection Association (NFPA) is the governing body for fire safety related codes and standards. Selecting equipment that meets requirements is one thing. More important is that the equipment needs to be reliable throughout its useful life. This can only be ensured by using the equipment as intended and maintaining it properly.

Here's a quick overview of what you need to know. NFPA 10 is the comprehensive code for all portable fire extinguishers. Since commercial kitchens are filled with cooking oil or fat, you've got your own class of fire, Class K. Wet chemical extinguishers are required to do the job. Water does not do the job; it makes things worse.

Automated ventilation and fire suppression systems are required to quickly detect and suppress any cooking-related fires. For specifics, refer to the following:

NFPA 96 — Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations

NFPA 13 — Standard for the Installation of Sprinkler Systems

NFPA 17 — Standard for Dry Chemical Extinguishing Systems

NFPA 17A — Standard for Wet Chemical Extinguishing Systems

Equipment must be UL 300 Standard compliant. The equipment and its actual use must be flexible enough to accommodate varied activities and equipment underneath the hood. The evolution of new cooking trends calls for appliances that operate at higher temperatures for longer hours and must always be monitored.

Compliance with regulations begins with selection of proper equipment and is met over time through qualified, timely maintenance and copious documentation of maintenance.

Fire vendors have seen it all. It seems inconceivable that these common high-risk mistakes even happen, but regular operational routines, coupled with pressure to cut costs, raise the stakes with fire safety and increase the potential for devastating loss. Here are the top things experienced vendors see on a regular basis and how you can fix them.

Cooking equipment moved outside the fire suppression system

Most large commercial kitchens have mobile appliances on wheels to accommodate cleaning and operational activities. Cleaning crews often move the equipment to clean and sweep and then do not realign the equipment properly when they put it back. This means that while you may have a top-of-the-line suppression system in place, it isn't actually protecting you as you thought. When equipment is not aligned properly, the very systems designed to protect your most vulnerable areas (such as fryers and high-heat cooking equipment) instead protect nothing at all. Having nozzles pointed at floors, walls and other non-cooking surfaces protects nothing.

Even with on-time inspections every six months, if you do not align appliances each and every time they are moved, you could be cooking for days, weeks or months totally unprotected.

Solution: One fail-safe solution is to install wheel dock safety set brackets for all cooking equipment. With these systems, you can guarantee that your staff returns the equipment to its proper alignment because the wheels lock down only when precisely relocated under the exhaust hood.

Cleanliness of floors and walls

This seems obvious, but one vendor recently explained that it is not uncommon for him to find hardened shortening inches deep on floors, walls and outlets, particularly in restaurants that fry a lot of fish, chicken or other food. The fire suppression system is only designed to extinguish a fire on the actual cooking surface. Once the floors, walls and vents are involved, it is another story. Then you are relying on portable fire extinguishers to handle what could be large flare-ups that rapidly spread. Build-up in the exhaust ducts of the stainless steel hood and filters behind it can also be a problem. Since the grease is sucked through a roof blower, it too requires proper maintenance.

Solution: Clean regularly, and clean thoroughly. Fire safety requires more than just a surface clean. Any grease build-up is highly flammable and needs to be minimized on an ongoing basis, not just at inspection time.

Kitchen expansion

As a restaurant grows and expands, inevitably the kitchen grows with it. Suddenly the fryers aren't of a large enough capacity, or additional cooking surface is required. So, restaurants will go out, buy new equipment and simply start using it. But if your existing fire suppression system is not designed to handle it or not set up for the new configuration of equipment, you essentially have zero or inaccurate fire protection.

Solution: Before putting any new kitchen equipment into service, evaluate, inspect and configure your fire suppression system to properly handle the additional demand.

Common sense

Common sense and knowledge of codes and regulations does not always translate into common practice. Actions are what keep your business running safely. Don't be like the worst-case tale a vendor shared with me recently. He had been inspecting a fried chicken restaurant and disassembling the fryer and filters when he heard a loud noise. The fryer was suddenly ablaze with 3 to 4 foot flames. As the staff rushed to put out the fire with a garden hose (if you don't see the futility in this, refer back to NPFA 10), they explained that they do this two to three times per week on average—all because the fryer vat had a hole in it that dropped directly through the burner, igniting whatever was nearby.

Solution: Put your knowledge into action by making common sense common practice in your facility.

Stepping Up to the Plate

The general manager is most often the one responsible for overall coordination. Most fire vendors will come for an inspection either first thing in the morning or just after lunch to minimize disruptions in operations. As a result, many of the findings they communicate to the GM need to be further communicated to other shift staff that may perform the service (for example, those moving and cleaning the kitchen appliances). It is never just "business as usual" when it comes to minimizing risk and enhancing fire safety.

No other risk-managed activity can shut you down faster than noncompliance with fire regulations or a devastating kitchen fire. Be your own proactive first responder and evaluate your fire safety compliance and management today.

[View All Articles](#)