

# Understanding Restaurant Cooking Exposures

ACCORDING TO THE NATIONAL Fire Protection Association (NFPA), cooking is the leading cause of all restaurant fires, resulting in over \$153 million in damage per year. Changes in cooking equipment and practices as well as fire-fighting technology have brought about many changes in NFPA standards. There are currently over 300 NFPA codes and standards for fire prevention. For the professional insurance agent, understanding these exposures and the hazards they represent is essential for writing profitable risks.

John Higgins has been inspecting restaurants for MSO for over 40 years. In addition, he has served on several NFPA committees. According to Mr. Higgins, restaurant cooking installation inspections used to be simple. The only information that was needed was the clearance to combustibles for the stove, hood and duct system, and whether or not the installation had an automatic extinguishing system. Recent changes in cooking processes and technology have made the inspection process more complicated.

One major change in automatic extinguishing systems for cooking installations was the switch from a dry powder fire extinguishing system to the wet chemical system, which is similar to a foam system. Deep fat fryer manufacturers brought out new fryers, which were better insulated and held the heat longer. In addition, for health reasons, restaurants stopped using animal fat in fryers and started using vegetable oil. Dry chemical extinguishing systems were not designed for these changes. Deep fat frying operations need wet chemical extinguishing systems.

Initially, restaurant owners and fire safety professionals did not realize that the dry chemical portable extinguishers which worked so well in the past would not be acceptable for the new wet chemi-

**Cooking installations and fire safety continue to be an evolving process.**



cal automatic systems. If the wet chemical automatic extinguishing system actuates and puts out a layer of foam, using a dry chemical portable extinguisher will push away the foam and allow the fire to restart.

Improvements in fire protection technology have brought about other major changes in how restaurants operate. Americans love the taste of barbeque. In the past, barbequeing was done outside. Someone got the idea that since they had a hood, duct and automatic extinguishing system and enough space, they would do the barbequeing inside under the hood. This created other problems, beginning with what happens to the interior of the hood and duct. Now, instead of building up a coating of grease, which can be cleaned away with steam or chemicals, there is a build up of creosote, which is more difficult to clean, and more flammable.

There are other concerns with indoor barbeques. These include proper disposal of the ash accumulation, and storage of the fuel supply for the day as well as storage of the total fuel supply. In addition,

extinguishing a fire in a charcoal or wood cooking installation requires a water hose. A wet chemical extinguisher puts down a layer of foam that does not penetrate into the burning mass.

Cooking installations and fire safety continue to be an evolving process. As John Higgins tells us: "Just as we are starting to understand the standard, we are finding that restaurants, especially some of the ethnic ones, are bringing in unusual cooking appliances and practices which we must evaluate and decide if they are safe and in compliance with the code and safety practices."

Understanding the hazards of cooking exposures and installations is an essential step in the underwriting process. Preventing fire losses through inspection and compliance with recommendations will not only result in a safer operation for the insured, but a more profitable risk for your agency. Educating your clients to the issues and providing proper insurance coverage is the sign of the true insurance professional.

*Previously published in the Insurance Advocate®*

