

Entering the Smoky Room

Hands-on fire safety training at St. Joseph Hospital

It's critical that health care workers know what to do in a fire emergency. And they do, at least theoretically. But how many have extinguished a real fire? How many have performed a rescue from a smoky room?

Thanks to Nassau County Fire Service Academy and members of the Nassau County Fire Marshals, health care workers at St. Joseph Hospital in Bethpage, New York, have done both. During Fire Prevention Month, local fire marshals conduct training-in-action for both clinical and nonclinical staff of Nassau County's major health care facilities, including St. Joseph, a 203-bed community hospital that provides comprehensive inpatient and outpatient care.

The idea for this kind of training originally came from health care workers who wanted more than classroom and video instruction. "We were very interested in having this training for our staff," says Steve Monty, who has been at St. Joseph for 15 years and is director of security, safety, and emergency management. "We want our people to know what it's like to be in a building with smoke, what it's like to actually use a fire extinguisher." Monty himself has taken the training seven or eight times to keep up his own skills.

Bill Ghanev, director of engineering at St. Joseph, has also taken the course many times because, as a building engineer, he knows he needs proficiency in the full range of problems that can arise in his facility, including fires. "If there's one place to learn hands-on how to respond to a fire, it's the Nassau County Fire Academy," Ghanev says.

Every year, the Academy sends a notice with the training dates, and St. Joseph in turn notifies staff. "We usually get 20 to 30 volunteers, including engineers, support services, and clinical



Fire safety trainees emerge safely from a smoke-filled room in a simulated patient rescue.

personnel," says Monty. "It's a diverse group." The training is conducted at the Fire Service Academy, just up the road. It's a half-day course, offered over a three-day period, so staff can attend as their schedules allow.

Why health care needs active learning

"When there's fire in a building, the normal instinct is to get out," says Thomas Tsaktsirlis, Fire Marshal, County of Nassau. "But in health care, you have to stay put because patient care has to continue." Tsaktsirlis has been doing this training for about 17 years and is very tuned in to the unique situation of health care workers.

"I tell them, 'You're the only type of employee getting fire training. Everyone else evacuates—those who work in schools, restaurants, department stores.' That's why codes are the most stringent in health care." Hospitals, he notes, are among the safest places to be in a fire because they have the benefit of smoke doors, self-contained stairwells, and corridor doors that compartmentalize the environment. "People worry about burning in a fire, but nine out of ten times, smoke is what gets you," Tsaktsirlis says.

"Hospitals are designed to contain and compartmentalize smoke."

In the classroom

The training was developed around the RACE acronym—a series of actions for individuals who are present at a fire's source. Here's what RACE stands for:

- **Rescue**—Move anyone who is in immediate danger.
- **Alarm**—Sound the fire alarm.
- **Contain**—Close doors to contain the fire.
- **Extinguish or Evacuate**—If it is safe to do so, use a fire extinguisher to extinguish the fire. Otherwise, evacuate to an area behind closed smoke barrier doors.

"The acronym is intended to be a quick way to remember things, but the steps may not always occur in that order," Tsaktsirlis clarifies. For example, if more than one person is present, one person can pull the alarm while another calls the operator and a third person closes doors. If a fire occurs near a nursing station, staff respond one way. If it occurs in a patient's room, it's a different story. "You can mix and match, but you need to know the four aspects," he says.

The other acronym students learn is

PASS, which applies to using a fire extinguisher. PASS stands for the following:

- **Pull** the pin between the extinguisher's handles.
- **Aim** the nozzle at the base of the fire.
- **Squeeze** the handles together.
- **Sweep** from side to side.

In the classroom, students also learn about the "fire triangle." "The triangle consists of oxygen, fuel, and heat—the three things a fire needs to burn. You extinguish a fire by taking away one side of the triangle," Tsaktsirlis explains. "For example, at home, when you put the top on a [flaming] frying pan, you take away the oxygen. In the health care setting, when you put water on a fire, you take away the heat. When you shut off a gas line, you take away the fuel."

Participants also learn the three most common types of fire, categorized by the fuel they burn:

- A. Ordinary combustibles such as wood, paper, and most kinds of trash
- B. Flammable or combustible liquid or gas
- C. Electrical

There are also grease fires, but these usually don't happen in a health care setting except in a kitchen.

With basic classroom guidelines in mind, participants move into the hands-on phases of the training, with firefighters or trainers beside them at every step.

In action

It's natural for some individuals to feel nervous facing the hands-on portion of the training for the first time. But Tsaktsirlis knows how to motivate people. "At 2 A.M., I'm not going to be there to help you," he reminds them. "Practice here where it's controlled, so that at your facility, you'll be able to do what's needed." Usually, one or two people volunteer, which encourages others. "We've been teaching this for 40 years and we've never had an injury," he assures them. Students take turns at three stations, the length of time spent at each depending on the number of participants. Here's



Hands-on experience with a real fire extinguisher gives trainees practice and confidence.

what happens at each of the three stations.

Operating fire extinguishers. At this station, participants extinguish both Type A and Type B fires with the proper extinguishers, supplied by the health care organizations. "For most participants, it's the first time they've used an extinguisher," says Monty. "They get a sense of how heavy one is, what noise it makes, and, most important, how it feels to use it on a real fire."

Performing rescue from a smoky room. Participants enter a room, and Fire Academy instructors set wooden skids on fire in an adjoining room. The students' job is to simulate a rescue; in this case, they have to remove a dummy. As Monty says, "They get to see the difference between the smoky air and the clean air, that the cleaner air is closer to the ground. They get the true feeling of what it's like to be in a smoke-filled room, how much time you have to get yourself and a patient to safety."

Dealing with bed and wastebasket fires. In the 1980s, health care facilities banned smoking. Tsaktsirlis explains that while this was good for overall health, it has increased the incidence of fires because of "sneaky smokers" who light cigarettes under the blankets or in the bathroom, or throw butts into the wastebasket. "So about an hour later, you've got a fire," says Tsaktsirlis. "The fire extinguisher may be down the hall, and you don't have time to get it. What

do you have in the room to control the flames?"

So participants, with fire marshals by their side, learn to use what they do have: sheets, blankets, pillows, maybe newspapers. "You can put out a fire in a bed with a sheet, and you can put one out in a wastebasket with a newspaper drawn tight to deplete the oxygen supply," Monty says. "Frankly, that surprised me. You would think a newspaper would catch fire. But it doesn't."

"You have to cover it fully, all in one shot," says Tsaktsirlis. "People's instinct is to try to fight a fire from a distance," he adds. "Unfortunately, with fire, you have to get close." Once staff members see for themselves what they can do up close, they not only have the knowledge, they also have the confidence.

Health care staff form the first line of defense in fire safety. But many never have the opportunity to practice managing a fire in a safe, controlled environment. Such training increases confidence, and confidence can make the difference in saving lives. "The first time someone faces a real fire, you don't want them to panic," says Monty. "You want them to realize they can draw on their experience."

"We don't push anyone into it," he says. "But we've had participants tell us they had a fire in their house and remembered the training. The house was smoky, they say, but they knew they could get out." 