

**By Jessica Carella**

This year marks the 50th anniversary of one of the most tragic school fires to ever take place in the United States. On December 1, 1958, 95 people lost their lives in the Our Lady of the Angels Roman Catholic grade school in Chicago, Illinois. It was the deadliest school fire in U.S. history and the first in decades that resulted in a large death toll. Not only did it remind Americans of some major uncorrected fire hazards in U.S. schools, but it also shone a light on other hazards that had not been widely recognized before.<sup>1</sup> It is one of the reasons many fire and life safety codes and standards are enforced in schools across the country today.

On the day of the fire, students were just finishing their afternoon lessons and counting down the minutes until the final bell rang at 3 p.m. At 2:25 p.m., a teacher asked two of her students to dump a waste barrel in the basement boiler room.<sup>2</sup> When the students returned, they reported that they smelled smoke. It was the first hint of the fire, which started in combustible material in the basement under the stairs of the north wing. The stairwell and basement were open to each other without any separating door.

The teacher told her students to remain calm as she went to tell another teacher, both of whom decided to evacuate their students from the building. The two classes were sent to the church next door, and one of the teachers ran back into the school to sound the alarm, sending the first-floor classes out of the building through five available staircases.

At the same time, the school janitor, who was returning to the school from several blocks away, noticed the smoke and told one of the housekeepers to contact the fire department. The housekeeper did so at 2:42 p.m., and the fire department dispatched one engine, one ladder truck, one rescue squad, and a battalion chief.<sup>3</sup>

According to several reports, teachers took different precautions toward getting their students to safety. Some students on the second floor refused to leave, and their teacher insisted that they crawl to the stairs under the smoke. As the timid students approached the staircase, some refused to go down, so the teacher rolled and pushed them down the stairs. Another teacher ordered her students to cover cracks in the walls and between the doorway with books and desks to keep the smoke from entering the room. Another teacher told her students to stay in their seats and pray.

Meanwhile, as the blaze spread quickly up the stairs from the basement to the upper floors, the severe heat broke windows, providing the fire with a supply of oxygen. The heat also broke the transom windows above the classroom doors, allowing smoke and gasses to enter the rooms, and the fire spread to the roof through a ventilation grill in the corridor.

Anxious students abandoned the prayer as they rushed to the windows for fresh air. Some students were able to shimmy down pipes and jump from windows to adjacent roofs, breaking their fall. Others just jumped from a window to the ground.<sup>4</sup>

Because of the repeated phone calls to the fire department, additional firefighters were dispatched, until a total of 22 engine companies, seven ladder companies, five rescue squads, one fire insurance patrol, three department ambulances, seven chiefs, and two commissioners arrived at the scene. Although these men were responsible for saving the lives of 160 people, they could not get everyone out. Ninety-two children and three nuns died in the fire.

### **What went wrong?**

From the outside, the Our Lady of the Angels building looked safe. As originally built in 1910, it was a two-story structure with a church on the first floor and classrooms on the second. In 1949, a new church was built next to the original building, allowing the old church to transform completely into classrooms. Another two-story brick building was connected to the classroom building in 1953, resulting in a U-shaped structure.<sup>5</sup> Though the outside of the building was brick, the building had combustible interior construction finishes, wood trim, and combustible ceiling tiles. It was also unsprinklered.

Unfortunately, the building failed to meet numerous codes and standards requirements available at the time. The number of people in the building was estimated between 1,200 and 1,300, and the building's exits did not meet those capacity requirements as specified in the Building Exits Code, now known as NFPA 101, Life Safe Code. Nor did they meet the enclosure requirements of the Illinois Building Exits Code, which called for enclosed stairways in all

schools. There were five interior and one exterior stairways distributed throughout the Our Lady of the Angels school. Of the five interior stairways, only two in the front of the north wing were enclosed.

All the classrooms' ceilings were finished with combustible cellulose fiber acoustical tiles, which were also used in the corridors of the north wing and the school annex. In addition, wood was found throughout the building in many different forms, including doors and door frames, mops, coat hook boards, furniture, and pressed paperboard blackboards. Children's clothing hung from hooks along both sides of the main corridor. All these materials provided fuel for the fire, allowing it to spread quickly.

Automatic detection of the fire would also have made a difference, since it would have alerted the occupants sooner and notified the fire department. However, the school had only a manually operated fire alarm system that allowed a large amount of time to pass before occupants of the building were alerted. The two manual alarms looked like ordinary light switches and were not labeled as fire alarms. As they were located 6 feet (2 meters) above the floor, they were too high for some people to reach.

Since the fire

The Our Lady of the Angels school fire opened the eyes of Americans to the fire hazards in the U.S. school systems. Following the blaze, communities across the nation were determined not to let an event such as this happen to them. A year after the fire, the NFPA conducted a survey that showed 68 percent of all U.S. communities had made physical improvements of some kind toward school safety.

In the 50 years since the fire at Our Lady of the Angels, no other school fire has killed more than 10 people.<sup>6</sup> And according to NFPA statistics, an average of 1.5 people died per year in educational property fires reported to U.S. fire departments in the 26 years from 1980 to 2005. What's more, most if not all of those fatalities were either adult employees or juvenile firesetters who were in the school after hours. It has been a very long time since any student, from kindergartners to high school seniors, has died in a school fire during the school day.

Today, fire drills are still a regular part of the school experience, allowing teachers and students to learn what the fire alarm sounds like and practice a safe exit. Schools can also take advantage of NFPA's Ready for Risk Watch, a program dedicated to making teachers and children aware of fire safety. You can visit the program's website, <http://www.riskwatch.org>, to learn how to prevent fires and injury and to download lesson plans for teachers. During Fire Prevention Week, the week of October in which the anniversary of the Great Chicago Fire of 1871 falls each year, many schools invite firefighters to visit their students to teach them about fire behavior, escape planning, and evacuation methods. The website for this program is [www.firepreventionweek.org](http://www.firepreventionweek.org).

## References

1. Quarterly of the NFPA January 1959.
2. Although some sources place the start of the fire closer to 2:40 p.m., the January 1959 issue of the NFPA Quarterly says that it began sometime before 2:25 p.m. in combustible material in the basement under the stairs in the north wing of the school.
3. Op. Cit.
4. Ibid.
5. "Our Lady of the Angels Fire," NFPA Journal, January/February, 1996.
6. Quarterly of the NFPA January 1959.
7. Flynn, Jennifer D., "U.S. Structure Fires in Educational Properties," NFPA, Quincy MA, August 2007.