

A REFLECTIVE LOOK AT NURSING HOME FIRES

By Marvette Lowrie-Morris, RN, MS, LNHA, CLNC



Overview of Nursing Home Fires

I still shudder as I recall the headlines of the May 20, 1980 Eventide (Residential) Home fire which resulted in the deaths of more than 150 elderly women in Kingston, Jamaica. A year later, while a student nurse at Kingston School of Nursing, I visited the site with members of a youth group from my church. We talked with survivors, some too traumatized to be able to articulate their experience; many with multiple scars from extensive full thickness burns. The sight of scars on the survivors, and the charred walls, once home to the elderly, hangs like a tapestry in my memory. I had no idea that several years later, elder care would become my vocation.

Fast forward to February 2003 when a skilled nursing facility in Hartford, Connecticut was engulfed in flames; 16 of 148 residents were killed, and several staff and residents were injured when a mentally disabled woman allegedly set her privacy curtain on fire. The nursing home had no automatic sprinkler system, and staff allegedly tried to evacuate the residents.

Months later, the company I worked for hosted a seminar regarding fire prevention. The presenter asked us to close our eyes. He then told us to keep our eyes closed and picture our nursing homes – everything that we liked about it, including our favorite residents and favorite areas. Unknown to us, he had turned the lights off. Then he told us to open our eyes. On a huge screen was the very familiar picture of a typical nursing unit, juxtaposed with a resident's room, except **everything was burnt** – privacy curtains, mattresses, urinals, bedpans, tube-feed bags. Our gasps were audible as some of us tried to hold back tears. I left the presentation that day acutely aware that a nursing home fire can happen anytime, and wondered whether my staff and I were equipped to make a difference in the outcome.

Prevention is the First Step

An essential component of a nursing home's Emergency Preparedness Plan is the protocol for dealing with fires. The best and most effective fire safety measures involve prevention, so it is important that nursing homes have a clearly defined fire plan, and that staff is trained to execute the plan. Well trained staff will be able to recognize and address dangers, and will be able to properly execute the facility's Fire Plan.

Potential fire threats include faulty wiring, damaged electrical outlets and smoking materials in facilities that still allow smoking on the premises. When threats occur, they must be fixed immediately; therefore, every nursing home employee should know that his or her response matters. Nursing home workers also must ensure that residents' clothing, bedding and other flammable materials are kept away from potential fire sources.

Staff Training

Holding regular training sessions and performing fire drills is the best way to instill and reinforce confident fire safety practices among nursing home staff. When possible, enlist the help of a local firehouse to observe and assist with your drills. Typically, fire drills are done quarterly on each shift. Vary the times of these drills so they are not predictable.

- Every facility should have written fire procedures that are understood and practiced by all staff. Staff should be responsible for knowing and carrying out their part of the plan. This includes doctors, nursing staff, kitchen staff, maintenance staff, volunteers and others.
- Response procedures should be practiced regularly.
- There should be a clear "code word" agreed upon beforehand for the facility to alert other staff in case of fire

While some staff may find fire drills "disruptive," the administrative staff should ensure that all staff on duty at the time of the drill participates. This means that an employee cannot elect to continue his or her routine task oblivious to the drill.



R.A.C.E. if a Fire Starts

The acronym **R.A.C.E.** stands for **Rescue or Remove, Alarm or Alert, Contain or Confine and Extinguish**. These actions must be taken by nursing home staff as soon someone detects a fire. It is vital that nursing homes have guidelines designating who does what, should there be a facility fire. Some staff members might help remove patients from areas of danger, while other staff members alert local authorities that there is a fire on the premises by using the fire emergency call box or dialing 911 for emergency services. Workers should be taught to contain the fire by closing windows and doors in the area of the fire's origin. At times, it may be difficult to close windows, and the worker should do this only if it is safe.

Fire Extinguishers

Nursing homes have fire extinguishers appropriate for most types of fires throughout the building, and each staff member should be trained regarding proper use. Staff members are not firefighters, and should therefore, activate the fire alarms, and not try to extinguish fires by themselves, as a small fire may quickly spiral out of control.

Elevators should never be used when there is a fire. Use the stairs instead.



Deciding if or When to Evacuate

The decision to evacuate whether internally (horizontally or vertically), or externally is often determined by the Fire Marshall for the town in which the nursing home is located. At several of the facilities where I worked, the local Fire Marshall reviewed our Fire Plan, and established that the staff's best response is to activate the fire alarms, and the Fire Department would make the decision whether to evacuate.

State Regulatory Agencies and Fire Prevention

The annual Re-Certification Survey to determine whether a facility continues to meet the Federal Guidelines for operation of nursing homes also includes a Life Safety Survey where representatives of the Department of Health conduct a (concurrent) Physical Plant survey. The Life Safety section of the annual survey is just as important as the "nursing" section because K-Tags that are left unabated, may lead to Civil Monetary Penalties, and the facility's license may be jeopardized. On an ongoing basis, the nursing home should inspect the sprinkler systems; ensure that fire compartments do not have voids, and that the required fire rating is maintained throughout. Means of egress must be clearly marked, well lit, and free of obstacles. The Maintenance Director

or designee must maintain an accurate log of all preventive maintenance, as well as a log of fire drills on each shift.

Resident Smoking

Regardless of your views on smoking, if your facility is not “Smoke Free,” and residents smoke, ensure that there are protocols for the following:

- Initial and periodic smoking assessment
- Independent smokers – How is this determined?
- Supervised smokers – Who supervises and when?
- Designated smoke area – Location, accessibility, any local state guidelines
- Availability of a fire extinguisher within 50 feet of the designated smoke area
- Availability of fire blankets
- Availability and/or use of smoking aprons
- Use of cigarette extenders
- E-Cigarettes

Case Study 1

A 56-year-old female resident was admitted to a nursing home. On admission, she told staff that she stopped smoking while she was in the hospital, and had no intention of ever smoking again. The admitting nurse did not complete a smoking assessment and alternatives to smoking, such as a Nicotine patch, were not discussed.

Several days into her stay, a social worker observed the resident smoking a cigarette. The resident told her that her sister brought her a cigarette. The social worker wrote a note, and the recreation aide, who was assigned to do Smoking Assessments, completed an assessment. There was no entry of the occurrence on the 24-hour shift report, and it was not discussed at the morning meeting the next day.

A month later, the resident wheeled herself to a back patio where she lit a cigarette, which subsequently fell on her lap, and her clothing caught fire. A housekeeper tried to extinguish the fire by placing her coat over the resident. By the time help was summoned, the resident had sustained multiple 3rd degree burns. Her family succeeded in a negligent suit against the nursing home. Interestingly, although this woman was

assessed as being capable of independently lighting a cigarette, her MDS showed that she needed assistance of one care-giver with meals and in addition to a brain tumor, her BIMS* score indicated possible dementia.

This case underscores the importance of having protocols in place for resident smoking, staff training and adherence to the smoking policy.

Case Study 2

The fire at **Greenwood Manor** (Hartford, Connecticut) was allegedly started by a mentally disabled female resident who lit her privacy curtain. The article states that the staff on duty tried to evacuate the facility, all risking their own lives, and many receiving personal injuries. Smoke inhalation was the primary cause of death for a majority of the 16 residents who perished. The Department of Health found that the facility did not have sprinklers, and fire drills were not conducted according to the required guidelines.

Most people think the danger from fire is the flames; however, it is the smoke that can travel quickly to areas far from the fire. It is important to realize that people living in nursing homes may not be able to evacuate because of mobility or other disabilities. Proper planning, training, and practice of all staff are essential in order to provide for the safety of residents and themselves.



Stop and Act

Every minute of a caregiver's day is necessary for the completion of the myriad of expected and unexpected tasks. At times, the last thing a busy nursing home care giver wants to hear are fire alarms; however, as I've often admonished staff who appear upset, it is imperative that these mandatory drills are conducted on each shift at different times, and that staff demonstrate competence in every aspect of the R.A.C.E protocol to ensure accurate execution in the event of a nursing home fire.

Historical Data of Nursing Home Fires

Table 1

Deadliest Fires in U.S. Facilities for Older Adults Since 1950

	Type of Home	Location	Date	Total # Killed	Total # of Patients
1	Katie Jane Nursing Home	Warrenton, Missouri	Feb. 17, 1957	72	149
2	Golden Age Nursing Home	Fitchville, Ohio	Nov. 23, 1963	63	84
3	Nursing Home	Largo, Florida	March 29, 1953	33 (32 patients)	45
4	Harmer House Convalescent Home	Marietta, Ohio	Jan. 9, 1970	31	46
5	Rest Home (sheltered care facility)	Keansburg, New Jersey	Jan. 9, 1981	31	Unreported
6	Nursing Home (intermediate care type)	Chicago, Illinois	Jan. 30, 1976	24	83
7	Boarding Home	Bradley Beach, New Jersey	July 26, 1980	24	36
8	Convalescent Home	Hoquiam, Washington	Jan. 30, 1951	21	29
9	Nursing Home	Hillsboro, Missouri	Oct. 31, 1952	20	70
10	Nursing Home	Hartford, Connecticut	Feb. 26, 2003	16	148

Source: NFPA files on major fire incidents.

Table 2

Deadliest Fires in Foreign Facilities for Older Adults Since 1950

	Type of Home	Location	Date	Total # Killed	Total # of Patients
1	Home for older adults (residential custodial care facility – not a nursing home)	Kingston, Jamaica	May 20, 1980	146	211
2	Home for older adults (not a nursing home)	Yokohama, Japan	Feb. 17, 1955	99 (98 patients)	143
3	Home for older adults (not a nursing home)	Notre Dame du Lac, Quebec, Canada	Dec. 2, 1969	40	67 (20 were bedridden)
4	Home for older adults (not a nursing home)	Virrat, Finland	Jan. 22, 1979	26	Mostly bedridden
5	Nursing Home	Mississauga,	July 14, 1980	25 (all patients)	198

		Ontario, Canada		in one wing)	
6	Retirement Home	Saint Jean de Losne, France	April 23, 1980	24	Unreported
7	Nursing Home	Grandvilliers, France	Jan. 9, 1985	24	180
8	Rest Home	Gander, Newfoundland, Canada	Dec. 26, 1976	21	Unreported
9	Home for older adults	Nottinghamshire, UK	Dec. 15, 1974	18	Unreported
10	Retirement Home	Higashimurayama, Japan	June 6, 1987	17	74
11	Nursing Home	Costa Rica	July 19, 2000	17	41
12	Convalescent Home	Pointe aux Trembles, Quebec, Canada	April 14, 1957	17	27

Source: NFPA files on major fire incidents.

Disclaimer: Death tolls are based on information in NFPA's records

References

1. <http://www.nfpa.org/safety-information/for-consumers/occupancies/nursing-homes>
2. <http://www.nfpa.org/safety-information/for-consumers/occupancies/nursing-homes/deadliest-fires-in-facilities-for-older-adults>
3. <http://www.nfpa.org/safety-information/for-consumers/occupancies/nursing-homes/nursing-home-safety>