

Fire Investigation Summary

Board and Care

Arlington, Washington

April 27, 1998



A fire in a board and care facility claimed the lives of 8 people. This is another fire in this type of occupancy where some of the same common factors are being seen-notably, the lack of a sprinkler system and open doors that allowed the fire to spread to the second floor.



National Fire Protection Association
Fire Investigations Department

On April 27, 1998, a fire occurred in an occupied board and care facility in Arlington, Washington. This fire killed eight of the building's 32 residents.

The facility was a two-story, wood-frame structure that had originally been built as a hospital in 1908. Since that time, it had undergone several renovations and changes in usage. The building was not equipped with an automatic fire sprinkler system. A local fire alarm system was installed with hardwired, AC powered smoke detectors and heat detectors located in the corridors and common areas. Manual pull stations were located adjacent to the exterior exit doors. One audible device was located on each floor.

The upper level had three means of egress: a stairwell on the north end that discharged to the exterior, an exterior door on the south end that led to an exterior handicapped ramp, and an interior stairway in the middle of the floor area that discharged into the corridor on the first floor. This interior stairway had a solid core door that was equipped with an automatic door closer located on a landing between levels. It was determined that at the time of the fire the door was held open by a 10-pound block.

The building was wood frame structure. The interior wall and ceiling finish was either gypsum wallboard or plaster and lathe. The floor finish throughout the building was either linoleum or tile.

Thirty-two residents and two staff members were in the building at the time of the fire. The residents were mentally challenged and had varying degrees of physical handicaps.

At approximately 11:00 p.m., a fire broke out in a first floor room occupied by three woman. The fire was discovered by a staff member who opened the door to the room of origin while she was conducting a routine bed check. She advanced into the room several steps, but the fire was too severe for her to attempt any action. She retreated back into the corridor, leaving the door to the room open. She then yelled out for the other employee, who was in the basement. The second staff member came up to the first floor and observed the fire, which had not yet extended into the corridor.

The second staff member then proceeded up to the second floor to begin evacuating the residents on that level. She reported that at approximately this time the fire alarm, which was a local system, began to sound.

Assisted by a female resident, she began to wake the residents on the second floor.

The fire extended from the room of origin, through the open door, into the first floor corridor. Immediately adjacent to this room was the interior stairway between the first and second floors. The fire then extended up this

stairway, to the second floor. The door had been blocked open and did not impede the movement of the smoke and fire to the second level.

The Arlington Fire Department was notified of the fire when the staff member who discovered the fire called 911. The fire fighters responded from a station located 1/2 mile (0.8 km) away. Upon arrival, they extended a hoseline in the north entrance to the room of origin and extinguished the fire with approximately 200 gallons (750 L) of water.



Room of Origin. It was determined that the fire started in the bed.

Eight residents were killed-the three occupants in the room of origin, three women in a second floor bedroom that was directly opposite the interior stairway that served as a path of travel for the fire, and two women who were found in a second-floor bathroom adjacent to the interior stairway.

At least one of the women in the second-floor bedroom who was killed had stopped to begin getting dressed. The two women found in the bathroom had been in their room on the north end of the floor, immediately adjacent to an exit stairway. Apparently, they were attempting to travel south to the handicapped ramp to exit the building when they either became disoriented or attempted to take refuge in the bathroom, where they subsequently were killed.

The fire was determined by the Snohomish Fire Marshal's office to be incendiary in nature. The area of origin was a bed in the first floor room where it is believed that the resident ignited her bedding material using either a lighter or matches.

Based on the NFPA's investigation and analysis of this fire, the following significant factors are considered as having contributed to the loss of life and property in this incident:

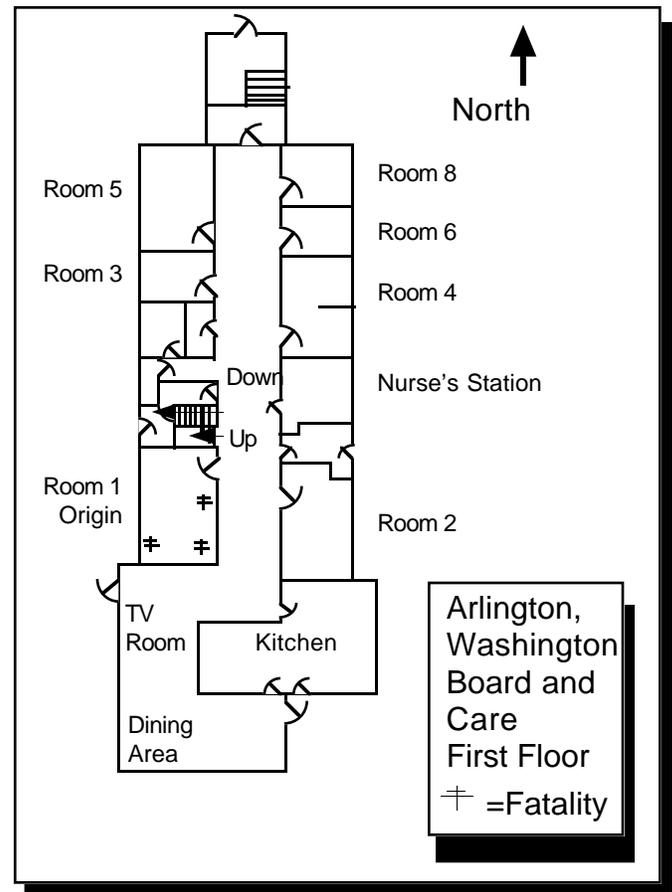
- Ignition of bedding material
- Lack of an automatic fire sprinkler system
- Lack of system smoke detectors in the room of origin
- An open door to the room of origin that allowed the fire to spread into the corridor
- An open fire door that allowed the fire to spread from the first floor to the second floor
- An open door on the second-floor bedroom that was directly in the line with the stairway where the fire extended to the second floor
- Failure of two second-floor residents to use the exit stairway immediately adjacent to their room
- An open door to the room of origin that allowed the fire to spread into the corridor
- An open fire door that allowed the fire to spread from the first floor to the second floor

- An open door on the second-floor bedroom that was directly in the line with the stairway where the fire extended to the second floor
- Failure of two second-floor residents to use the exit stairway immediately adjacent to their room

Abstracts from these incidents are including in an appendix to this report. Copies of the full reports can be ordered from the NFPA Library.

This fire is the seventh fatal board and care fire investigated by NFPA since December, 1984. These seven incidents have resulted in a total of 50 fatalities over a period of 3-1/2 years. The other six incidents include:

Broward County, FL	5 Fatalities
Mississauga, Ontario	8 fatalities
Laurinburg, North Carolina	8 fatalities
Shelby County, Tennessee	4 fatalities
Ste. Genevieve, Quebec	7 fatalities
Harveys Lake, Pennsylvania	10 fatalities



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The National Fire Protection Association's Fire Investigations Department documents some of the most significant fires and incidents throughout the world. The objective of these investigations is to determine what lessons can be learned from these incidents. This information is then made available to the fire safety community to be used in developing future codes and standards. A complete listing of reports is available, either upon request or can be viewed on our web page.

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Related reports published by the NFPA Fire Investigations Department include:

Broward County, FL
Mississauga, Ontario
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