

Impact of the 1975 New York Telephone Company Fire

Consistent with the Department's continued effort to improve the health and safety of our members, the FDNY re-visited and gathered data to measure the effects of the New York Telephone Company fire of 1975 (see *WNYF* 3rd/98). This particular fire was chosen for a number of reasons:

- The by-products of the fire were the result of burning plastics, namely polyvinyl chloride.
- The 239 FDNY members who reported sick (out of approximately 700 firefighters who responded to this fire) represent a defined exposure.
- It has been long enough after the fire to determine the long-term effects of firefighting in New York City.

Deborah Wallace, Ph.D. of the Public Interest Research Group, originally studied the New York Telephone Company fire and her findings were published in May 1982 in the *Journal of Combustion Toxicology*. The most startling finding of her study was that six members--all of whom were relatively young, with the oldest only 52 years old--had developed cancer. Locations of the cancers were unusual--liver, brain and larynx. In 1980, the cases of laryngeal cancer represented six percent of the FDNY cases, but 50 percent of the group came from the New York Telephone Company fire. By 1982, two of the members had died of colon and brain cancer at the ages of 39 and 52, respectively. When the Mount Sinai Report on Occupational Cancer came out in the 1990s, the rumors circulating at the firehouse kitchen table had all the firefighters who responded to this fire dead and buried.

In 1997, under the guidance of Doctors Kerry Kelly and David Prezant and Lieutenant Ed Connelly, we attempted to evaluate the long-term health effects of this group. It was expected that those who suffered the greatest health effects were those who reported sick and were listed on the fire report. This group of 239 members was sub-divided into three groups--181 retired, 40 active and 18 deceased. The retirees and active members were sent questionnaires to elicit information on their health, focusing on cancer, cardiovascular, respiratory and gastrointestinal diseases.

Some of the findings of this study revealed:

- Seven of the 18 deaths were caused by cancer. (Cancer generally kills one in four Americans. In this sample, it was 38 percent.)
- The average age of the cancer victims was younger than 50.2 years.

- The sites of the cancers--especially the liver and brain--are consistent with vinyl chloride exposure. (Vinyl chloride and benzene are two of the 75 by-products of burning PVC.)
- Six of the seven cancer deaths came from four firehouses--Ladder 3, Engine 33, Ladder 9, Rescue 1 and Engine 3.
- Nine of the 18 members died from cardiovascular problems. This is the number-one killer of men in the United States and was 50 percent of the sample population. The prevalence of cardiovascular-related problems was 17 percent of the respondents or 21 of the 121.
- In the respiratory disease category, there were seven cases of chronic obstructive pulmonary disease (COPD) and 10 cases of bronchitis reported in the responding group. Since the major (up to 60%) by-product of PVC is hydrogen chloride, respiratory problems were expected. In fact, 25 of the 121 had complaints.



Commissioner Thomas Von Essen and City-wide Tour Commander Frank P. Cruthers at Command Center at a fully involved commercial building located at 34 Richmond Street, Brooklyn Box 33-1816, on June 29, 1998.

photo by Marc A. Hermann

Manhattan in 1975 and did not report to the New York Telephone Company fire. These members would be used as the control group to compare them to the exposed group. Then, we would have conclusive evidence about this fire. If you are willing to be part of the control group, please get in touch with the Medical Office at 9 MetroTech Center, Brooklyn, NY 11201 or call 718-999-1935.

A future issue of *WNYF* will provide more details about this study and any new information once a control group is studied.

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