The Five-Step Planning Process

National Fire Protection Association and the Philadelphia Fire Department

Step 1: Conduct a Community Analysis

The Philadelphia Fire Department (PFD) is the fifth-largest fire department in the United States, protecting 1.5 million people. The PFD has 2,292 uniformed members, 60 fire stations, 82 fire companies, 2 marine units, and 50 emergency medical service (EMS) units.

In 2010, the PFD recorded 33 fire deaths, up from 30 the previous year. This is a fire death rate of 23.6 fire deaths per million population. This was very concerning for the PFD, as Philadelphia’s fire death rate for 2010 was almost double the national average of 13.2 fire deaths per million population.

PFD staff was determined to reduce these tragic deaths, so they undertook a comprehensive review of their fire losses. They wanted to see who was dying in these fires, what the causes were, if there were any similar characteristics associated with these fires and fire deaths and what could the department do to stop or prevent these fires from occurring. After extensive analysis, the PFD determined that adults over 60 years of age, living in one- or two-family dwellings accounted for almost 50% of the fire fatalities over the past two years. The majority of these fires were the result of careless cooking and careless smoking, and the majority of the homes were not protected by working smoke alarms.

The PFD felt that it was essential to ensure that all homes in high-risk areas were protected by working smoke alarms. Therefore, they decided to launch a comprehensive smoke alarm installation program, along with a community outreach program, to provide a home fire safety checklist and other fire safety information to homes in specific high-risk areas. The program was called “Operation Staying Alive.”

Step 2: Develop Community Partnerships

When there is a fire fatality in Philadelphia, the PFD canvasses the neighborhood where the fatality occurred and offers to install smoke alarms and provide fire safety information to the residents. The residents are usually aware that a fire has occurred, and they are interested in finding out how to protect themselves and their families from fire. These fire prevention activities are part of the duties of the firefighting crews. The smoke alarms and batteries are provided to the fire department through donations and grants from the community.

Operation Staying Alive was a logical extension of this program and would provide life-saving smoke alarms to high-risk residents before a fire occurred. As with any successful program, community partnerships were essential. The PFD partnered with a fire safety organization called Vision 20/20, Energizer, the American Red Cross, and local media outlets and dignitaries to help ensure the success of the program.

Vision 20/20 is an organization working to support activities directed toward a comprehensive national strategy for fire prevention. For this program, it provided the fire department with 7,000 tamper-proof,
10-year smoke alarms with a hush feature. Energizer provided all of the replacement batteries needed for the program, and the Red Cross helped the PFD hand out fire safety literature in the high-risk districts selected.

The PFD also partnered with media outlets and conducted a news conference to kick off the program and to make the residents of the entire city aware of the importance of having working smoke alarms in the home. The kick off was held at a senior center, and the city’s mayor, members of City Council, the fire commissioner, and other dignitaries took part to demonstrate the importance of installing and maintaining working smoke alarms in every home.

Operation Staying Alive was designed to reduce further fire losses in Philadelphia. The Philadelphia fire commissioner held a meeting of all deputy and battalion chiefs to explain and emphasize the importance of the program. Strong internal leadership and support is essential for a successful program.

**Step 3: Create a Strategy**

The goal of Operation Staying Alive was to install 7,000 long-life smoke alarms in high-risk homes and to provide a home fire safety checklist along with other fire safety materials. The PFD committed to using every engine and truck company to complete the visits and installations within four weeks. Operation Staying Alive was designed to be a comprehensive smoke alarm installation program to quickly get life saving devices into homes not currently protected. Two firefighters would visit homes in a high-risk area their company served; this area was selected after careful analysis by the company’s fire captain. The firefighters conducting the visits were trained in the proper installation of smoke alarms, and fire prevention staff assisted them when required. The firefighters also reviewed the fire safety checklist with the occupants.

**Step 4: Implement the Strategy**

It was decided that the firefighters would make their visits on Friday, Saturday, and Sunday, when people were more likely to be at home. Fire companies circulated notices about the visits and the opportunity to receive a smoke alarm the day before they visited the neighborhood. They left one leaflet in each home to be visited to give the residents prior notification of their visit and information on the program.

Firefighters who conducted the visits introduced themselves and explained what they were doing. They asked to test the smoke alarms in the home, replace batteries as needed, and replace any smoke alarm that was over 10 years old. They also installed smoke alarms on every level of the home to ensure the occupants were adequately protected and to meet local code requirements.

The firefighters completed a smoke alarm data form to document the status of smoke alarms in the home before and after the visit. This enabled them to keep track of the number of batteries and smoke alarms they installed in each home. They answered any question the occupants had and gave them a home fire safety checklist, which they reviewed with them. They also provided other home fire safety material.
The visits, including installing the smoke alarms and completing the tracking forms, took approximately 20 minutes per home. Initially, there was some concern about the amount of time it took to complete the visits, but that quickly subsided when the fire department saw how much the residents appreciated the visits. There was positive feedback from the public on the visits, the installation of the batteries and smoke alarms, and the fire safety concern of the department.

**Step 5: Evaluate the Results**

PFD fire prevention staff picked up the completed smoke alarm installation forms from each station weekly and compiled the number of homes visited and the number of batteries and smoke alarms installed. The battalion chiefs used this information to monitor the program and help ensure the program was on track. The data was then forwarded to the geographic information system specialist in the Office of Emergency Management, who produced a visual display of all the locations that received alarms.

Operation Staying Alive met its original goal by visiting 8,000 homes in targeted high-risk areas and installing 7,000 smoke alarms and 773 batteries within four weeks. Vision 20/20 was so pleased with the results of the program that it provided the PFD with an additional 3,000 smoke alarms.

Among the many factors contributing to the successful completion of this potentially life-saving program were:

- Internal support and leadership from the top (fire commissioner, mayor, and members of City Council)
- Full departmental participation
- Co-ordination by the battalion chiefs
- Community partnerships
- Appreciation of the program by the public
- Feedback received by the fire department