



Presentation Title: Saginaw: A Sound Off Success Story

Presented by: Aileen Pettinger, Lieutenant, Saginaw Fire Department, Michigan

I. Formative Evaluation – Planning

According to a poverty study on the welfare information.org website, the poverty rate in Saginaw, Michigan, is a sobering 33.6%, with 1 out of every 3 Saginaw residents living in poverty. Even more staggering, the elementary school-age poverty rate in Saginaw is a shocking 45.6%; more than double the national average of 21%. Poverty is a risk factor for home fire deaths (USFA). When people have to choose between putting food on their table, having heat in their home, or installing smoke alarms, one can see why fire safety is the least of their financial concerns. According to NFPA, 53 percent of home fire fatalities in the United States did not have working smoke alarms. Saginaw Fire Department recognizes that working smoke alarms will reduce the risk of fire-related death in our community, but few households can afford alarms.

Over the years, the Saginaw Fire Department has partnered with the American Red Cross, installing free smoke and carbon monoxide alarms throughout the city. While beneficial, we needed related safety lessons and home safety visits to inform the community and encourage home fire drills. Rather than try to create our own, we wanted an outreach program that had already been tested and proven effective. At a state-wide meeting of the Michigan Prevention Initiative through the Michigan State Fire Marshal's Office, we learned that "Sound Off with the Home Fire Safety Patrol" had a proven track record in other areas of the country, delivering both impressive knowledge gains among participating students and a system to identify and install alarms in homes at highest risk. We were excited to become the first community to implement it in Michigan.

Saginaw firefighters aligned themselves with the "Sound Off with the Home Fire Safety Patrol" goals, which include: educating second- and third-graders and their families about smoke alarms, the need for monthly testing, and the importance of smoke and carbon monoxide alarms. Sound Off training and tools included instruction on conducting a pre/post-test in 2 pilot classrooms to document student knowledge gain – something we had never attempted to do before. This program recognizes the importance of connecting families that don't have enough working smoke alarms in their homes with local firefighters. We were able to attain the free smoke and carbon monoxide alarms and deliver our fire safety messages to entire families while conducting a fire drill and choosing a meeting place.

II. Process Evaluation – Implementation

In the four schools, firefighters presented to 13 classrooms, consisting of seven second-grade classes and six third-grade classes for a total of 282 students reached in the pilot implementation phase. On the first day of presentations, pre-tests ascertained the children's fire safety knowledge. The test was called a "questionnaire," a non-graded and useful learning gauge, to ease testing anxiety.

After the pre-tests, the three Sound Off curriculum lessons were taught, with concepts such as the difference between 'chirping' and 'beeping' smoke alarms, by utilizing sound bites embedded in the PowerPoint and by

using real smoke alarms. The students received a “home safety patrol” assignment to count the smoke alarms in their homes, identify two exits out of every room, and ensure their doors and windows worked sufficiently. Caregivers were encouraged to provide contact information to have firefighters conduct a home safety visit where they would install smoke and carbon monoxide alarms, practice a fire escape plan, and assign a meeting place with the family. Classes that promptly returned their home safety patrol pages to their teacher, completed in full, earned a pizza party. This incentive resulted in a homework return rate of 95%.

III. Impact Evaluation – Short-Term Results

First Year results of Sound Off in Saginaw:

- 64 home visits
- 64 fire drills practiced
- 64 meeting places assigned
- 303 smoke alarms installed
- 64 carbon monoxide alarms installed (28 from Sound Off, 36 from another grant)
- 2 Lifetone Bedside Vibrating Fire Alarms installed
- 51.8% increase in general fire safety knowledge (national average 45.8% in 11 states)
- Test scores increased from an average of 51.8% on the pre-test to 75.5% on the post-test

Anecdotally, we see the effects of Sound Off regularly, including self-reported behavior changes. Students from our pilot schools approach us at community events, correctly shouting out the different sounds smoke alarms make. These kids proudly state they’ve been practicing their home fire escape plan.

Life-changing events happened with this program. We encountered one mother whose son was legally blind and deaf. We installed a tactile notification appliance (bed shaker) to wake this boy in the event of a fire. The mother became emotional, stating that she would never have been able to afford the costly bed shaker.

IV. Outcome Evaluation – Long-Term Results

It is too early to see a marked change in home fire-related injuries and fatalities. Saginaw Fire continues to implement Sound Off as part of a comprehensive CRR strategy.

V. Recommendations

Although we might not be able to solve the poverty issue in Saginaw, we can alleviate the lack of fire protection in the home by continuing to provide free smoke and carbon monoxide alarms and practicing fire drills with families. Through this Sound Off Home Fire Safety Patrol program, it was heartwarming to witness the difference it can make to ease the stress of families that before this program had needed to decide between food and smoke alarms.

We want other fire departments that are struggling with budget cuts and poverty in their community to know that the Sound Off program is there to help ease some of their strife. All curriculum materials and program implementation resources are available free of charge for download at www.ymiclassroom.com/sound-off.