



Presentation Title: Effective Community Risk Reduction through Marketing and Leveraging Community Resources

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I. Program/Project Overview:

The Merrimac (MA) Fire Department conducted a quantitative risk assessment based on NFIRS data from 1995 - 2000. The assessment revealed that children between the ages of 4 and 14 years of age were not evacuating their home and assembling at their predetermined meeting place when the smoke alarm activated. In 2003, five teenagers died after falling through the ice on the Merrimack River in a neighboring community. It was determined that other injury prevention programs and messages needed to be developed and delivered to the children and parents residing in the town of Merrimac throughout the year, focusing on the consequences of risk-taking behavior.

II. Formative Evaluation – Planning – (Needs/Risk Assessment):

- Quantitative risk assessment conducted of Merrimac FD from 1995 – 2000.
- Findings revealed children 4 – 14 were not evacuating their homes and going to meeting place when smoke alarm activated.
- In 2003, five teens died after falling through ice in neighboring community.

What were the project/program goal and objectives?

- Leverage community resources in order to sustain year round community risk reduction programs.
- Form a task force with the local media.
- Deliver year round fire and life safety programs to the students within the Merrimac schools.
- Increase fire and life safety knowledge to the students and their parents or caregivers.
- Reduce deaths and injuries to the citizens within the town of Merrimac.

III. Process Evaluation - Implementation

- 95% of elementary children ages 4 – 14 successfully attended fire & life safety education courses in the schools from 2002 - 2010.
- Media outreach expanded to include web-based fire safety educational quizzes.
- The public education officer met with school faculty quarterly to obtain their input and make changes as necessary.
- In 2010, the community at-large completed the online BeFireSmart.com 10 question fire / injury prevention quiz.
- Merrimac FD won the \$10,000 grant from Liberty Mutual, obtained the most votes of any U.S. FD - 3,051 votes - 50% of the community voted.

- 93% of school aged children were reached by fire and life safety education during 2010-2011 within the Town of Merrimac. The total enrollment was 1,016 students from the two elementary schools.

IV. Impact Evaluation – Short Term Results

- In 2010, 3,051 people (50% of the population of Merrimac) completed the online quiz. The percentile of correct answers was 95% out of 100%.
- School aged children completed 20 question age appropriate quiz after fire safety lesson plan was delivered in the classroom with a 93% average correct score.
- Of the 6,300 Merrimac residents, 93% who participated in an online fire/injury prevention quiz stated:
 - they extinguished candles when they left the room
 - kept space heaters at least 3-feet from combustibles
 - secured lighters and matches from young children as a result of public awareness campaign on Cable Access TV and radio.

V. Outcome Evaluation – Long Term Results

- In 2004, 14 year old male student correctly evacuated his home and lead his family outside, during a building fire, and reassembled at the driveway awaiting the fire department arrival.
- In 2004, 7 year old male student called 911 when his mother was having an allergic reaction to a hornet sting.
- In 2007, an 8 year old girl quickly took her 4 year old brother and herself outside during a stove fire to the tree in the front yard.
- In 2007, a 4 year old boy lead his family outside, crawling under smoke, going to the family meeting place (tree in the front yard).

Recommendations for others:

- Build rapport with the community leaders and communicate the needs.
- Collaborate with the community to leverage and sustain community resources and alternative funding.

Conclusions:

- Both career and volunteer fire departments care about their residents but often lack training, sustainable funding and resources to be effective.
- Effective community risk reduction programs delivered throughout the year lead to a safer and more prepared community to prevent injury or illness or respond correctly to an emergency situation.