

NO: **R018**

COUNCIL **January 24, 2011**
DATE:

REGULAR COUNCIL

TO: **Mayor & Council**

DATE: **January 24, 2011**

FROM: **Fire Chief
Deputy Fire Chief**

FILE: **7320-20**

SUBJECT: **HomeSafe Program and Other Fire Prevention Initiatives**

RECOMMENDATION

The Fire Services Department recommends that Council receive this report as information.

INTENT

The purpose of this report is to advise Council about the HomeSafe program and other fire prevention initiatives that are being undertaken by the Fire Services Department.

BACKGROUND

The City of Surrey regularly uses evidence-based practices to find innovative solutions to public safety challenges. For example, the City's Electrical and Fire Safety Inspection (EFSI) program, initiated in 2005, successfully applied an administrative approach to the dangers associated with marijuana grow operations. This innovative program has since been replicated in many B.C. communities.

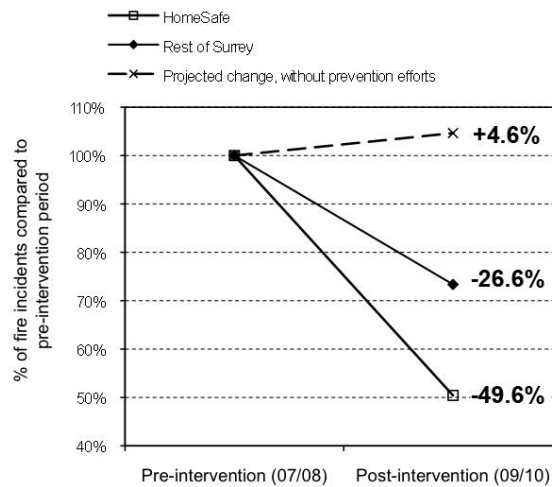
In October 2008, after commissioning the University of the Fraser Valley (UFV) to examine 20 years of local fire data and to research international best practices related to public education for enhancing fire safety, the Surrey Fire Service launched a fire prevention home visitation program called *HomeSafe*. The UFV study identified seven geographic areas in Surrey with significantly higher than average incidences of fire. These neighbourhoods were identified as the target for the first 2 years of the HomeSafe program.

The *HomeSafe* program involves Surrey firefighters going door-to-door in the identified neighbourhoods distributing fire prevention information to the residents and conducting checks to confirm that the homes are fitted with working smoke alarms. Free smoke alarms are installed in homes where the smoke alarms are absent or non-functioning. Residents are also invited to contact the Fire Services Department for a free follow-up Home Safety inspection. To date, 18,473 homes have been visited under the Program representing 14% of all grade level entry homes in Surrey.

DISCUSSION

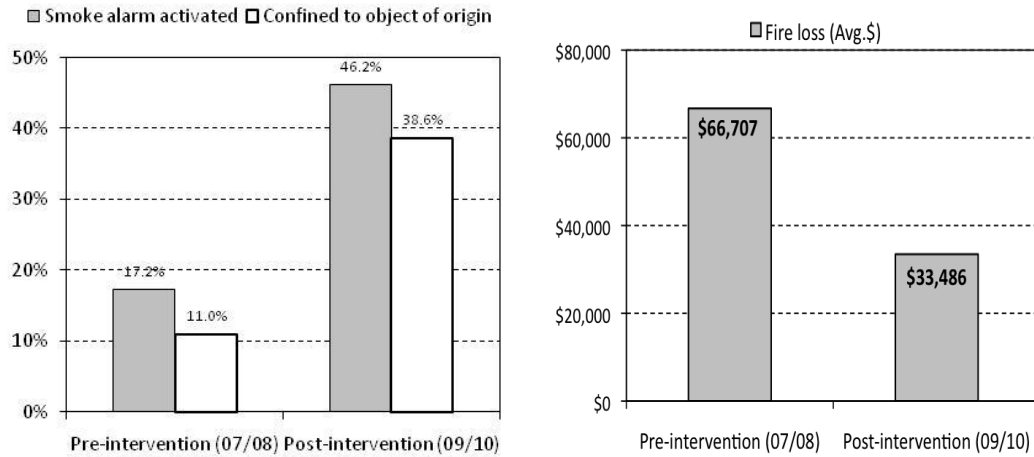
Evaluation of the HomeSafe Program

The *HomeSafe* Program was rolled out over 2 years in the seven target neighbourhoods. To evaluate the impact of the Program, historical fire data was used to estimate how many fires would have occurred in the target neighbourhoods based on the trends that were evident prior to the initiation of the Program and extrapolating these trends. It was estimated that 26 fires would have occurred in the target neighbourhoods over the 2 year intervention period. In fact, only 13 fires occurred in those neighbourhoods or a 50% reduction. Over the same period the remainder of Surrey experienced a decrease in residential fires of 26.6%. It is evident that the decrease in the neighbourhoods where the HomeSafe Program was implemented was 1.86 times greater than the remainder of the City.



Additional analysis comparing the 13 fires that occurred in the HomeSafe areas after the implementation of the Program in comparison to fires in the time period in advance of the Program rollout revealed the following:

- Smoke alarms were activated more frequently after the implementation of the Program than before;
- Fires were confined to the object of origin more frequently in the post-intervention cases; and
- Average loss (\$) per fire was reduced post-intervention (this despite a growth in the average property values over time).



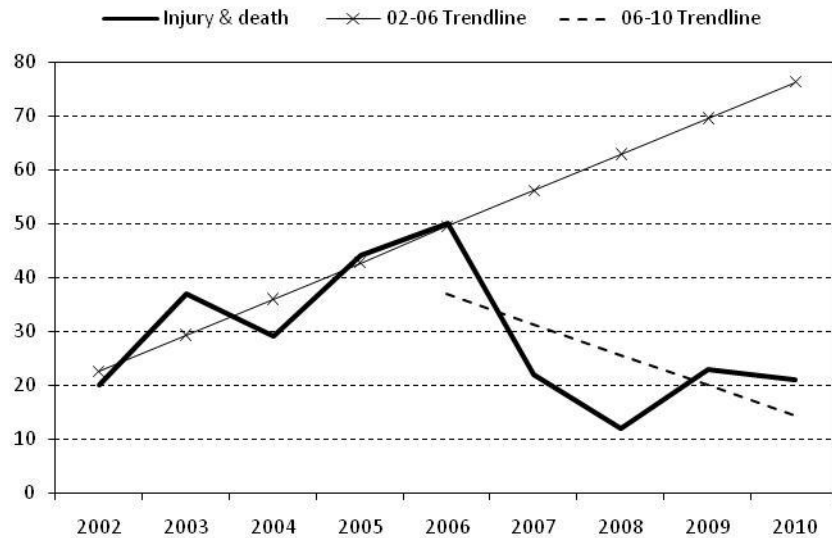
This suggests that the neighbourhoods where the HomeSafe Program was implemented are experiencing fewer and less damaging fires. Conservative extrapolation of these findings suggests that the HomeSafe campaign has prevented almost \$1.3 million in fire-related losses in its first 2 years.

Research evidence from the National Fire Protection Association indicates fires which spread beyond the room of origin account for more than three-quarters of fire deaths. Based on this statement, the HomeSafe campaign has very probably prevented fire-related injuries and deaths in the City.

A research paper on the HomeSafe Program has been written by the Fire Services Department's Strategic Planning Analyst to be submitted to a scientific journal, which will become part of the pool of best practices from which fire safety professionals may draw.

Locating the HomeSafe Results within a Broader Context:

Consistent with the data that has already been discussed in this report that focuses on the most recent 5 years, the City has experienced a decline in residential fire losses over the past decade despite rapid growth. Between 2001 and 2010 there was a 27% increase in the number of residential dwelling units in Surrey. During this same period residential fire losses declined by approximately 10.5%. This represented a decline in the rate of residential fires from 1.9 fires per 1,000 dwelling units in 2001 to 1.7 fires per 1,000 dwellings in 2010. In absolute terms, this represents a reduction of about 57 fires that would have been expected in 2010 if the rate had remained constant across the decade. Concomitantly, the City also experienced an overall 49% decrease in injuries and deaths resulting from residential fires (between 2000 and 2010, as illustrated in the following graph) despite a 24% increase in its population.



This pattern has not been mirrored across the province. Data from the Office of the Fire Commissioner spanning the years 2007 to 2009 revealed that Surrey experienced a 6.5% decrease in residential fires while other municipalities experienced an average 14.7% increase.

The Surrey Fire Services Department attributes this overall pattern of decline in residential fires in Surrey to a range of initiatives that have been undertaken as follows:

- The Electrical Fire Safety Program;
- The HomeSafe Program;
- Becoming more aggressive in relation to boarding up and demolishing vacant and derelict buildings;
- A targeted cooking-fire awareness campaign; and
- Community forums that have been conducted for elderly residents of the City during which the participants are given information about fire prevention.

CONCLUSION

In *Proving Fire Education Works*, a report for the TriData Corporation, Philip Schaenman, Charles Jennings and their colleagues came to the following conclusion: “Public fire education does, indeed work – when done well. There is no question about that anymore.” The HomeSafe program in Surrey acts to confirm this statement. The encouraging results of HomeSafe and other evidence-based prevention initiatives serve as a catalyst for continuing efforts to use data-collection and analysis to enhance public safety and provide innovative solutions for our community.

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