



Case Study: Home Fire Prevention Program – Kankakee, Illinois

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Project Description

The Red Cross has contracted with NORC at the University of Chicago (NORC) for the past six years to evaluate the Red Cross’s Home Fire Campaign. As part of the evaluation, the research team identified Kankakee, Illinois as an exemplary case study location for the Home Fire Campaign due to the relatively high saturation of services in this community. To further explore the program’s success in Kankakee, NORC conducted interviews with local Red Cross staff and the Kankakee Fire Department, surveyed a sample of households that participated in the program as well a control sample within the same geographic area to determine fire safety information retention, and analyzed fire incident data to determine other potential measurable outcomes.

Background

Home fires are a leading cause of disaster in the United States, causing approximately seven deaths per day and over \$7 billion in property damage each year.¹ To mitigate fire-related deaths and injuries, the American Red Cross launched its Home Fire Campaign in October 2014. The campaign focuses on fire prevention and preparedness, such as installing smoke alarms and educating families about fire safety, in at-risk neighborhoods. With the help of local fire departments and community stakeholders, the Red Cross has installed 2,197,904 smoke alarms and made 914,602 households safer through the program at the time of this report.¹

In particular, the Home Fire Campaign in Kankakee, Illinois has been an exemplary model for community fire preparedness. Located approximately 60 miles south of Chicago, Kankakee is home to an estimated 26,000 residents.^{2,3} Kankakee’s median household income is \$37,894 and approximately 28.9% of the town’s population lives in poverty.³

The Kankakee campaign was led by the Kankakee Fire Department and was carried out in partnership with the American Red Cross. The fire department employs approximately 50 firefighters to operate four stations 24 hours a day, seven days a week.⁴



The Kankakee Fire Department started its free smoke alarm installation program in 2015 with a Federal Emergency Management Agency (FEMA) Fire Prevention and Safety grant that enabled the purchase of 10,000 smoke alarms. In the wake of a tragic fire that claimed the life of a local child, the Kankakee Fire Department was particularly motivated to take action in their community. As the campaign began, a partnership developed between the Kankakee Fire Department and the local Red Cross chapter. This arrangement utilized the city’s firefighters to



install smoke alarms by request as well as through door-to-door canvassing efforts while the Red Cross provided fire safety education materials, installation tools, and volunteers to support the fire department's goal of reaching every household in the community. The Red Cross also supplied additional smoke alarms to ensure sufficient supplies were on hand to meet community needs.

Within two years, the Kankakee Fire Department had visited over 90% of homes in the community with an offer to inspect and install smoke alarms. The program's success is further evidenced by way of at least one family that was saved thanks to the free smoke alarms and fire safety education they received. In 2018, the Kankakee Fire Department's Captain Michael Casagrande, an instrumental leader for the campaign, was honored by the American Red Cross as a Firefighter Hero. The Kankakee Fire Department's dedication to the program, along with support from the Red Cross, considerably improved fire preparedness and access to fire safety resources in the community.

Keys to Success

In interviews with representatives from the American Red Cross and the Kankakee Fire Department, NORC learned about the origins of this local campaign effort and the following specific characteristics of this community risk reduction project that contributed to its overall success:

- **Strong Leadership**
- **Canvassing and Community Outreach**
- **Effective Data Collection and Tracking of Progress**

STRONG LEADERSHIP

The success of the Kankakee campaign relied heavily on effective leadership and was shepherded by Captain Michael Casagrande and Inspector Don Fordahl. As members of the fire department and broader Kankakee community, they were deeply affected by the preventable home fire deaths that had occurred in recent years and were motivated to help their community prevent further tragedy.

“[Captain Casagrande’s] passion for the initiative was really the driving force.”

- Red Cross representative, speaking about Kankakee Fire Department leadership

Leaders within the Kankakee Fire Department rallied around the cause of fire prevention and education and dedicated significant time, effort, and resources to making their community safer. This leadership, combined with

commitment and dedication from the firefighters, led to a team approach that resulted in the success of the program.

CANVASSING AND COMMUNITY OUTREACH

The Kankakee Fire Department built trust with the citizens and created interest in the program through far reaching canvassing and community outreach efforts. They developed flyers and worked with local media partners to promote their program to install free smoke alarms. All outreach materials were available in both English and Spanish.

As firefighters began to talk with members of the community, they realized they had the opportunity to promote fire prevention education, in addition to the smoke alarm installations. The Red Cross supported the efforts of the Kankakee Fire Department by providing outreach and education materials and by helping to spread the word in the community. The local Red Cross chapter helped gather volunteers to canvass neighborhoods ahead of fire fighter visits, while the firefighters went door-to-door to install smoke alarms and talk about fire prevention education. Together, they created an effective partnership that worked for the Kankakee community.

“[The Fire Department is] the face of the community on fire prevention – especially in smaller communities, they have strong connections with the community. [There is a] trust factor when a firefighter shows up at your door.”

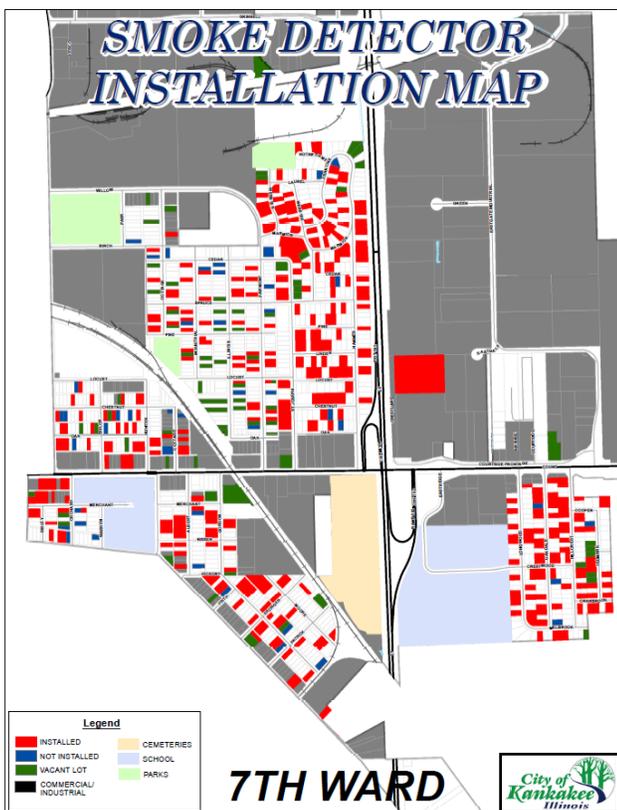
- Red Cross representative

The fire department recognized the importance of having a visible presence in the community and did all they could to ensure the community knew they were dedicated to helping everyone with fire prevention.



EFFECTIVE DATA COLLECTION AND TRACKING OF PROGRESS

To implement this program with the goal of reaching every household in Kankakee, the fire department came up with a systematic way to keep track of which houses they had visited and which they had not. Using a geographic information system (GIS), the Kankakee Fire Department created maps of their city and tracked which houses they had visited, including those that received installations, those that declined, and those that requested installations at a later date in addition to the houses they had not yet visited. After conducting their visits, the fire department shared their data with the Red Cross to help track the national Home Fire Campaign program's overall impact.



Program Outcomes

The impact of the free smoke alarm installation program in Kankakee has been notable, in terms of the number of alarms installed and the fire safety behaviors and preparedness in the community, fire incidents, and documented case in which 4 individuals were saved as a result of participating in the program.

ALARMS INSTALLED

Since the beginning of the program in 2015, the fire department has installed over 10,000 smoke alarms across the city of Kankakee. When discussing the outcomes of the program with representatives from the Red Cross, one described how impressed they are with the saturation level reached in Kankakee. The Kankakee Fire Department, with support from the Red Cross, installed smoke alarms in over 3,300 households, which represents over one-third of all households in the city of Kankakee.

"[The] mere volume of alarms installed is amazing to me. That may sound simple, but I have only seen one other city in my area that has attempted to approach those numbers. It speaks to the commitment level they have."

- Red Cross representative

FIRE SAFETY BEHAVIORS AND PREPAREDNESS

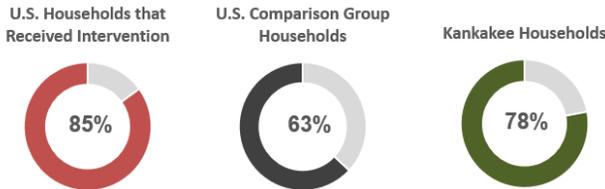
As a part of the evaluation of the Red Cross Home Fire Campaign, NORC implemented a national survey to compare households that had received an in-home visit and households that had not received a visit. The survey was also sent to households in Kankakee. Findings from this survey show the impact of the program in Kankakee on residents' fire safety behaviors and preparedness.

The survey included questions about **home fire escape plans**. A home fire escape plan is a plan for how to escape the home in the event of a fire, including where to meet family members safely outside of the home. Among all survey respondents in Kankakee, **59%** reported that their household had a fire escape plan. In comparison, of the households across the country that had not received an in-home visit, **47%** reported having a fire escape plan.* Additionally, **59%** of participants that created a plan reported having practiced their plan within the last 6 months, compared to only **41%** of Kankakee households that did not report having an in-home visit and **37%** of households across the country who did not receive an in-home visit.

Survey respondents were also asked about how prepared they currently feel to respond to a fire in their home. Among Kankakee residents, **78%** said they feel prepared or somewhat prepared, compared to **63%** of households across the country who did not receive an in-home visit.*

*These differences are statistically significant (Chi-square test; p<0.05).

% of respondents that feel prepared or somewhat prepared to respond to a fire in their home^



^Kankakee households includes all households surveyed in Kankakee, regardless of whether they indicated that they had received an in-home visit. This percentage is likely lower than the U.S. intervention group because most of the Kankakee households received the intervention over five years ago, whereas the U.S. intervention group received the intervention in the past year.

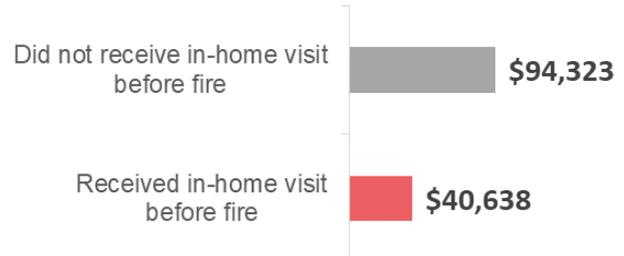
FIRE INCIDENTS

Fire departments across the United States submit fire incident data into the National Fire Incident Reporting System (NFIRS). With support from the Red Cross and Kankakee Fire Department, NORC analyzed National Fire Incident Reporting System (NFIRS) data from Kankakee to determine the impact of the free smoke alarm installation program. Using Red Cross data on addresses that participated in the Kankakee program, we identified whether households had received an in-home visit prior to fire incidents. We determined that this program had a notable impact in Kankakee.

First, between 2016 and 2019, households that did not receive an in-home visit experienced fires at a rate that was **73% higher** than households that participated in the program. There were 26.7 fires per 1,000 households among those that had not received an in-home visit, compared to 15.4 fires per 1,000 households among those that had received an in-home visit.

Additionally, households that did not receive an in-home visit had a severe fire rate that was **70% higher** than the severe fire rate among households that did receive a visit before the fire. When severe fires occurred, the average total amount of combined property and content loss was **over two times greater** for households that did not receive an in-home visit before the fire. For the purposes of this study, a severe fire was defined as a fire in which any of the following criteria were met: one or more

Severe Fire Average Total (Property + Content) Loss



civilian fatality; one or more civilian injury; and/or \$25,000 or more in total damages to the structure and its contents.

Lastly, no deaths were reported in homes confirmed to have received an in-home visit before the fire. Sadly, there were 15 injuries and 4 deaths as a result of home fires in Kankakee between 2016 and 2019 in households that had not participated in the program. There were 4 injuries that occurred in households that had participated in the program. Three of these injuries occurred in households that had received the intervention 4 years prior to the home fire.

LIVES SAVED

Finally, one of the most important impacts of the campaign in Kankakee is the documented lives saved. Working closely with the Kankakee Fire Department, the Red Cross has established that the free smoke alarms installed through this partnership helped to save lives on at least two separate occasions. After one of these fires, the Kankakee Fire Department was able to recover the smoke alarm that alerted the family, pictured here, and saved the melted alarm to show the impact of this critical life-saving program. As reported in a Red Cross press release from 2018:



“In January of 2017, 24-year-old Marsean Harris found herself standing outside her Kankakee home with her children watching as their house went up in flames. Early that morning, the loud and clear beeping sound of their smoke alarm alerted everyone that a fire had broken out somewhere inside. Harris, her 21-year-old boyfriend and her two children, quickly got out of the house through the front door and a window. Harris says she is thankful for those smoke alarms for saving her entire family. Their four lives were saved that day, as well as her unborn baby. At the time of the fire, Harris was unaware that she was expecting a baby girl.”⁵

Conclusion

The Kankakee program resulted in several positive outcomes, including the installation of over 10,000 free smoke alarms across the community and improving residents' knowledge of fire safety and preparedness through one-on-one education. These efforts resulted in fewer and less severe fire incidents and helped save the lives of at least one very thankful family. Undoubtedly this program and others like it will continue to save lives and reduce loss in other communities in the years to come.

Other communities looking to improve home fire prevention and education may find useful examples from the success of the Kankakee program, but ultimately, every community must adapt the program in a way that best suits their unique needs and environment.

Methodology

QUALITATIVE INTERVIEWS

NORC conducted five interviews that informed this case study. The interviewees all had some involvement with the program in Kankakee.

SURVEY DATA

For each of the past several years, NORC has conducted an evaluation of the Red Cross Home Fire Campaign. The most recent evaluation included a survey with three main sample groups: 3,250 households across the country that had received the intervention in the past year (intervention group), 3,750 households across the country that had not received the intervention (comparison group), and 2,000 households in Kankakee (half of which received the intervention). The survey was fielded from September through November 2020. Respondents had the option to complete the survey either online or on paper.

FIRE INCIDENT DATA

With support from Red Cross staff and the Kankakee Fire Department, NORC analyzed NFIRS data from 2010 through 2019. The data presented in this case study includes incidents between 2016 and 2019, as the majority of the in-home visits in Kankakee occurred in 2015. The data includes incident codes 111, 113, 114, 116, 118, 121 and 122.

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For more information on the Red Cross Home Fire Campaign, please visit: [redcross.org/homefires](https://www.redcross.org/homefires)

For more information on the Kankakee Fire Department and their efforts, please contact the Kankakee Fire Division at (815) 933-0458 or email Captain Casagrande (mdcasagrande@citykankakee-il.gov).

For more information about this project, please contact Megan Heffernan (Heffernan-megan@norc.org).

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