



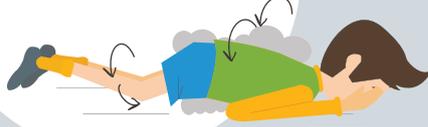


## Mid-Term Impact Evaluation – Key Findings

### BEHAVIORAL IMPACT



**90%** Know that they should follow STOP, DROP and ROLL drill if their clothes catch fire.



**79%**



Do not use electrical appliances if their hands, clothes or shoes are wet.

**82%**



Use running tap water for 10 minutes to treat minor burns.

**82%**



Extinguish candles and oil lamps before going to sleep.

**75%**



Do not light a firecracker in their hands.

### BEHAVIORAL IMPACT



**67%**



Do not hold a child while cooking.

**51%**



Use running tap water for 10 minutes to treat minor burns.

**51%**



Keep larger utensils on the back burners of the gas.

**47%**

Avoid overloading electric sockets.



**44%**



Extinguish candles and oil lamps before going to sleep.

## EXECUTIVE SUMMARY

Per a World Health Organization (WHO) report, the lives of more than 2,000 families globally are torn apart by the loss of a child to an unintentional injury or preventable accident.<sup>i</sup> Children, by nature, are curious and eager to explore their surroundings and play with new objects as soon as they start crawling. In this process, the chances of coming in contact with hot objects are high and can result in burns. Fire-related burns are the 11<sup>th</sup> leading cause of death among children between the ages of one and nine years.<sup>ii</sup> Often these fire and burn injuries occur due to lack of awareness on the part of adults. Per a 2015 research conducted by Safe Kids Foundation and Honeywell India to assess the incidences of physical injuries children under 14 years of age suffer at home, burn and scald injuries ranked second in occurrence and topmost in severity. The key findings of the baseline study<sup>iii</sup> were:

### KEY RESEARCH FINDINGS

- 76,000 children under the age of 14 suffered burn or scald injuries in one year, i.e., 2014.
- 38% of children required medical attention & around 2,980 children suffered third degree burns.
- 64% of burn injuries occur in the safest environment – ‘home’.
- 44% of burn injuries occur when the child was alone, in the absence of a parent or adult.
- Highest number of child injuries reported among children 7-10 years of age.
- Only 20% of schools’ conduct prevention and safety trainings as part of their curriculum.

*Safe Kids at Home* program was launched in Pune in 2015 to help prevent and reduce burns and scalds among children under 14 years old in Pune. The program aims to spread awareness through training in schools, communities, and among caregivers, and aspires to bring together citizens and civic bodies who can lead the way in making Pune a model *Safe Kids at Home* city.

Safe Kids Foundation hired Kantar IMRB International in 2016 to assess the impact of the yearlong implementation of the *Safe Kids at Home* program. The study covered more than 900 respondents, including students, parents and teachers from all four zones of Pune Municipal Corporation (PMC), keeping equitable distribution across age, gender, geographic outreach, type of school, and socio-economic classification.

The key objective of the mid-term evaluation was to measure program impact, relevance, effectiveness and sustainability through qualitative and quantitative assessment. Special emphasis was also laid on gauging knowledge retention among students, including recall of classroom and community sessions and behavioral change among both students and parents. The research also reports the uniqueness, usefulness and likability of the sessions and the effectiveness of program resources.

Highlights of the research findings across different respondents are summarized in the section below.

#### Students

- **90%** know that they should follow STOP, DROP and ROLL drill if their clothes catch fire.
- **82%** use running tap water for 10 minutes to treat minor burns.
- **82%** extinguish candles and oil lamps before going to sleep.
- **79%** do not use electrical appliances if their hands, clothes or shoes are wet.
- **75%** do not light a firecracker in their hand.

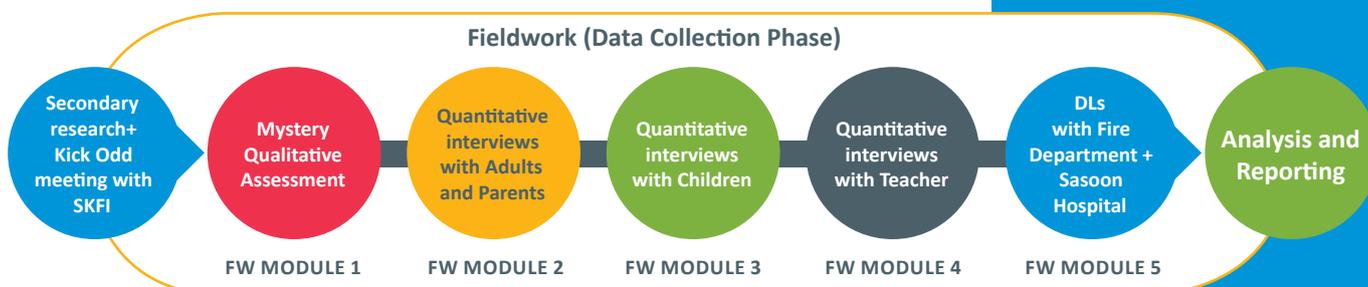
#### Parents

- **67%** do not hold a child while cooking.
- **51%** use running tap water to treat minor burns.
- **51%** keep large utensils on the back burners of the gas stove.
- **47%** avoid overloading electric sockets.
- **44%** extinguish candles and oil lamps before going to sleep.

The research revealed an increase in the number of schools that underwent fire safety training: 71% as against 20% in the baseline study. Respondents also appreciated the pioneering of 100 model fire safe schools and 20 model fire safe communities as a first step to make Pune safer. Additionally, government stakeholders have recognized the significance of the program.

## METHODOLOGY

The effectiveness of the *Safe Kids at Home* program has been assessed through qualitative and quantitative tools. The assessment consisted of a structured questionnaire administered to more than 900 students, teachers and parents, as well as an examination of pre-test and post-test scores obtained by respondents.



## Respondents

### Students

400 students of grades five through eight were randomly selected from among 70 schools where *Safe Kids at Home* sessions had been conducted. The sample included a mix of PMC, private and Zilla Parishad schools from across all four zones in Pune. Respondents represented boys', girls' and co-educational schools.

### Parents

Kantar IMRB collected 260 attendance sheets of parents' sessions and selected 426 parents from across four zones, to cover at least one parent per session. The survey ensured respondents from across socio-economic classification, different age groups, household income levels, and gender were selected.

### Teachers

32 teachers – male and female – were selected from various categories of schools and equitably selected from all four zones.



The number of incidents of fire during Diwali were about 7 or 8 in the last year (2016), whereas, it was closer to 13 to 15 in the previous year, suggesting more than 40% drop in incidents handled by the Fire Department.

## KEY FINDINGS

### Program Outreach

The research findings reveal that the program has exceeded the outreach target by 9% in schools and 81% in communities by reaching more than 1,90,000 students and 1,36,000 parents against a target of 1,75,000 and 75,000 respectively, till the end of March, 2017. (Figures 1 & 2).

Figure 1 - Students Outreach



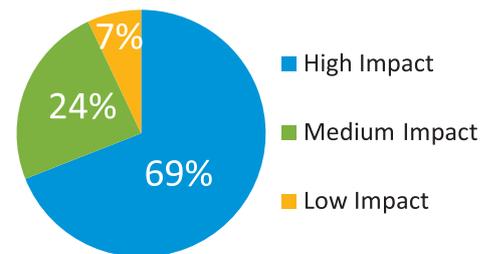
Figure 2 - Parents Outreach



### Program Impact on Students

More than 69% students reported that the *Safe Kids at Home* program has made a high impact on them (Figure 3). These students indicated that after attending the classroom session on fire safety, their approach and outlook has changed drastically and that they are more aware of the dangers of fire and burn injuries.

Figure 3 - Program Impact on Students

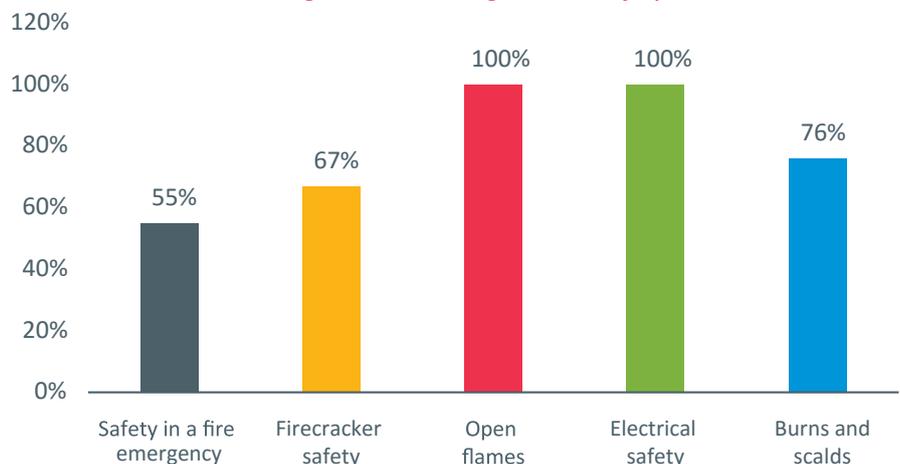


The study also reveals that there were fewer burn injuries reported at the Sassoon Hospital during Diwali, as compared to previous years. In addition, media reports suggest that bursting of fire crackers has reduced by as much as 20%.<sup>iv</sup>

### Knowledge on fire safety

The quantitative pre- and post-test results indicate that there is a substantial increase in the knowledge level of children.

Figure 4 - Knowledge on Fire Safety



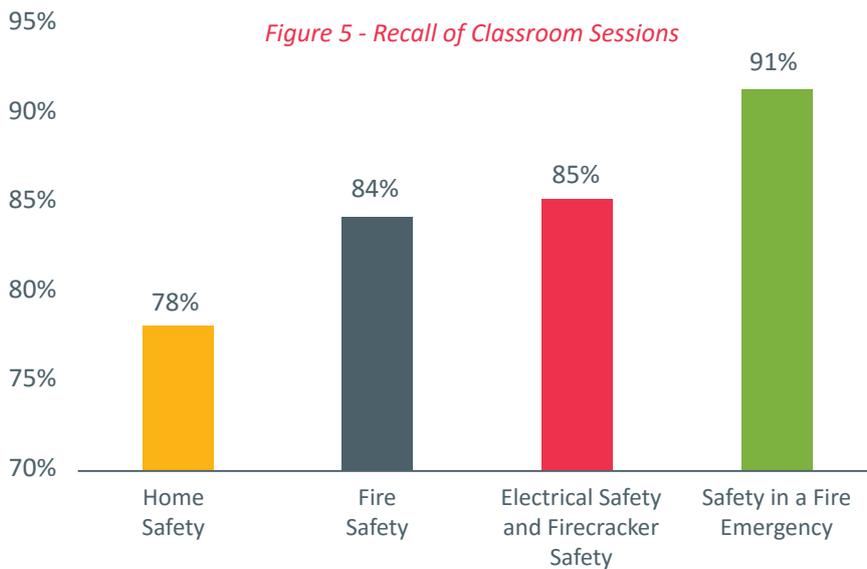
# 75%

students do not light a firecracker in their hand.

The knowledge uptake was highest for electrical safety and open flames, with 100% students answering questions correctly (Figure 4). Around 76% respondents correctly answered questions related to the treatment of burns and scalds.

### Recall of classroom sessions

The study revealed that the highest level of spontaneous recall occurred for the lesson, “Escaping from fire” (Figure 5). This lesson involves action songs, role play and group activities. The study also found that 86% students remember the emergency contact numbers of the fire brigade (101) and ambulance (108).



Among several awareness activities conducted during classroom sessions, the action song on what one should do if one’s clothes catch fire (“Stop, Drop and Roll”) ranked first in recall at 54%, followed by the story on Rahul’s Diwali at 53% (Figure 6).



**99%**

of students found the training material and training methodology unique and useful.



82%

of students use running tap water for 10 minutes to treat minor burns.

### Uniqueness, usefulness and likeability of classroom sessions

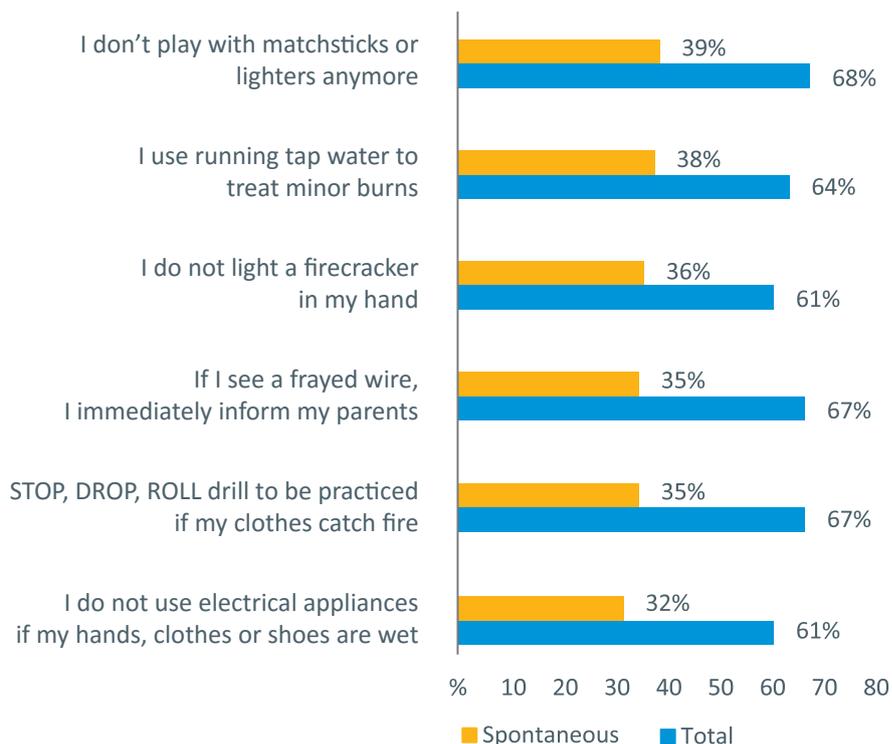
99% students liked the program and classroom sessions and found the training materials and training methodology unique and useful. Younger students found the training content to be more relevant, as compared to older students (75% vs 24%, respectively).

### Behavioral impact on students

68% students reported behavioral change through reduction in playing with matchsticks and lighters. For each of the behaviors explored, nearly 60% students reported change in behaviors to help reduce the risk of burn injuries. (Figure 7) shows the spontaneous and total scores for safe behaviors reported by students.

The most common behavioral changes were related to playing with matchsticks and lighters (68%), reporting frayed wires (67%), and knowing what to do if their clothes catch fire (67%).

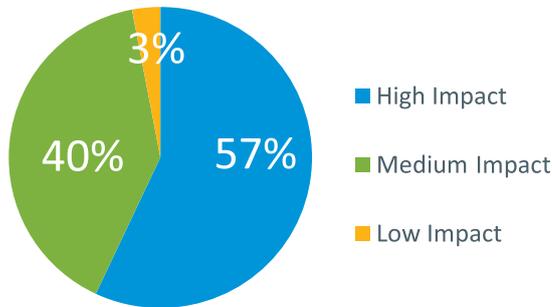
Figure 7 - Safe Behaviors Observed by Students



### Program Impact on Parents

57% parents indicated the program had a high impact (Figure 8). In addition, parents below the age of 35 years and women between 18-35 years reported higher engagement in the program. More than 65% parents reported increased awareness around firecracker safety and fire emergencies.

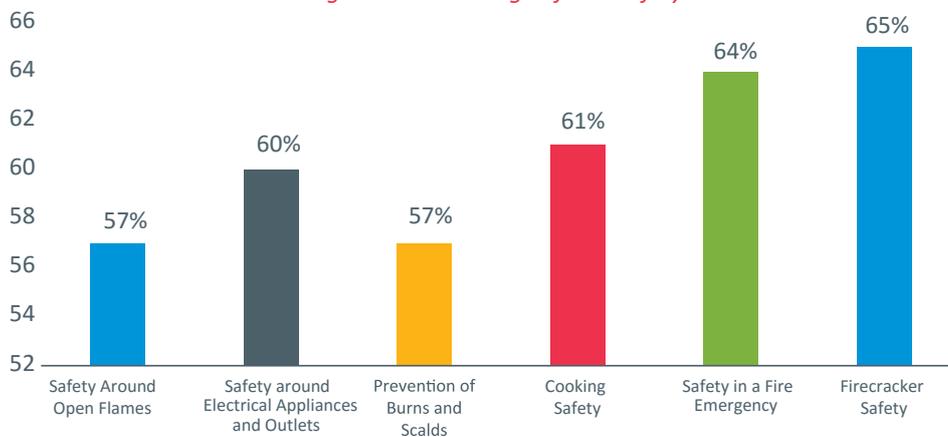
Figure 8 - Program Impact on Parents



### Knowledge on fire safety

Parents identified *Safe Kids at Home* program as one of the only sources of information on unintentional injury prevention, with a focus on fire and burn prevention. The knowledge level was highest at 65% on firecracker safety, followed by safety in a fire emergency at 64%, cooking safety at 61%, and safety around electrical appliances at 60%.

Figure 9 - Knowledge of Fire Safety



### Recall of community sessions

There is a notable increase in the awareness levels among parents who have completed the *Safe Kids at Home* training. Female respondents between 18-35 years were more likely to report that they remember fire safety tips as compared to their male counterparts (63% vs 43% respectively).



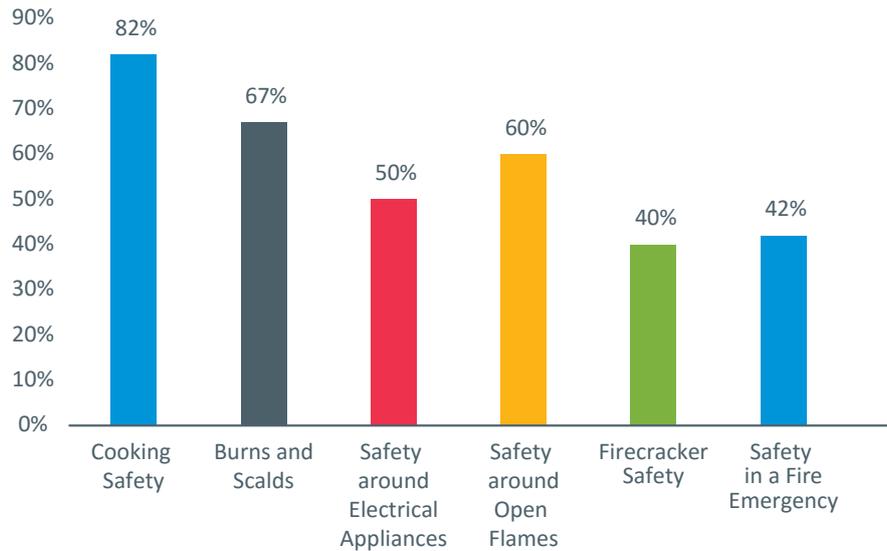
**97%**  
parents reported medium to high impact of the fire safety sessions.

# 74%

parents spontaneously recall fire safety sessions and corner meetings.



Figure 10 - Recall of Community Sessions



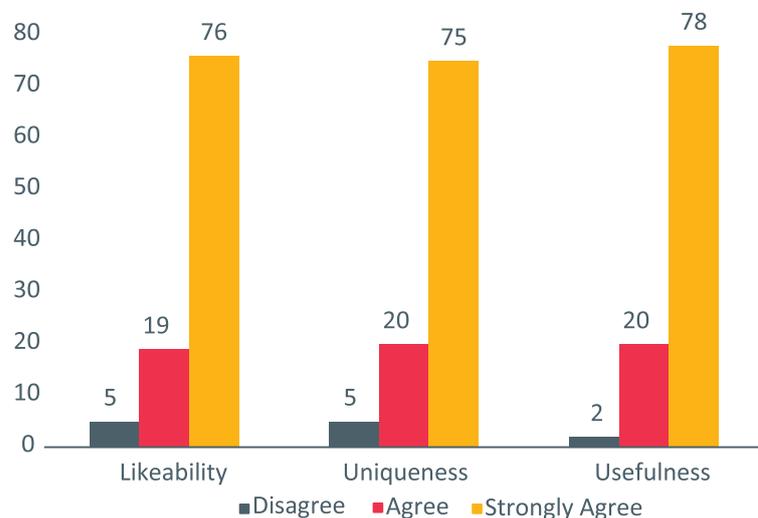
82% parents recalled cooking safety messages. 67% parents recalled most of the topics covered under prevention of burns and scalds. More than 50% parents were able to list key messages associated with safety around electrical appliances. 60% parents reported being more cautious about safety around open flames and reported blowing out candles and oil lamps. Only 42% reported remembering key safety measures to be taken in a fire emergency.

### Uniqueness, usefulness and likeability of community sessions

In terms of likeability and uniqueness, parents rated the training sessions relatively high at 76% and 75% respectively, agreeing that the sessions were useful and unique.

Nearly 8 out of 10 parents strongly agreed that the training was more useful for them and their families. Fire safety knowledge among families and the ability to recall the dos and don'ts among children and parents established the uniqueness and the significance of the program.

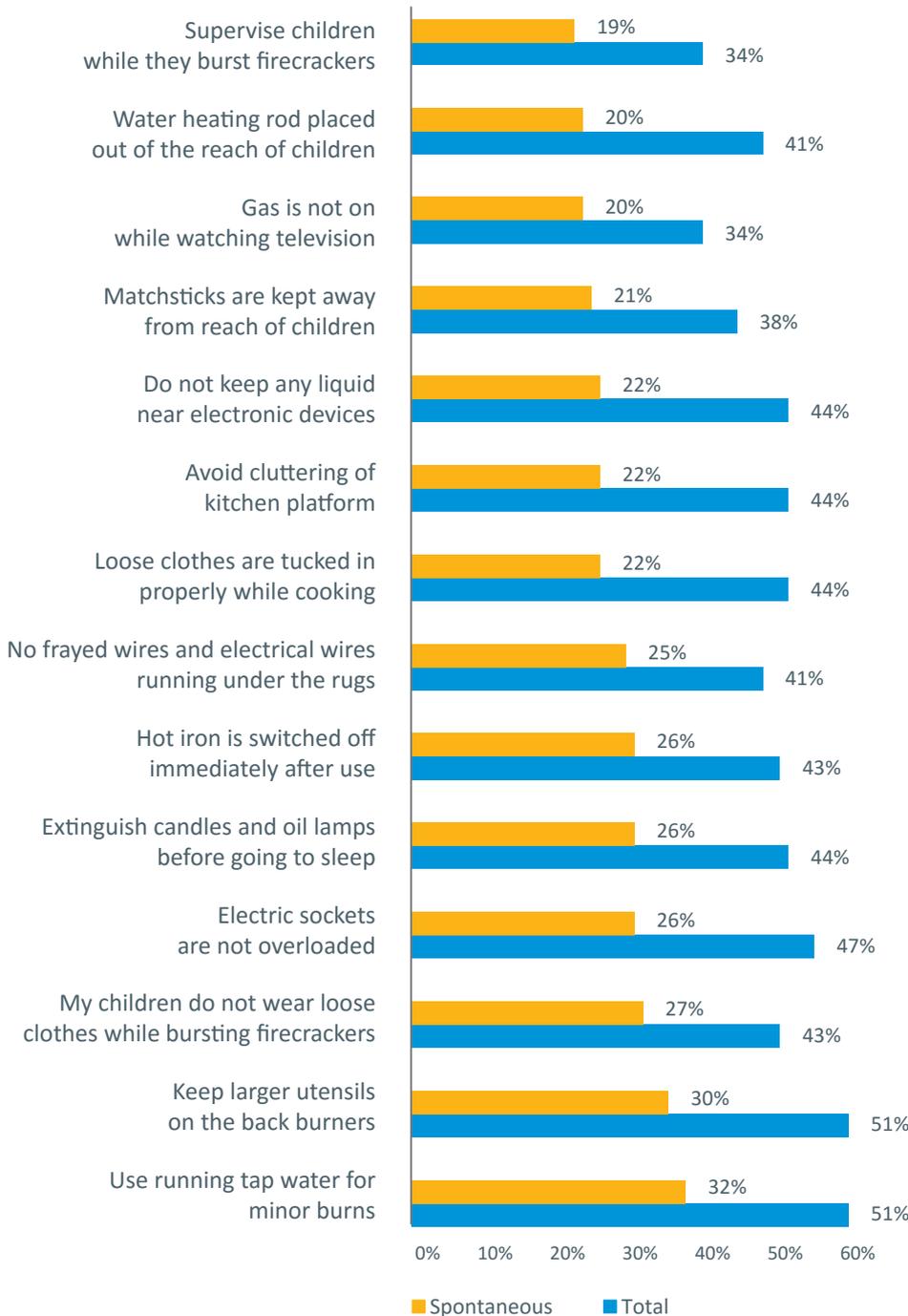
Figure - 11 Uniqueness, Usefulness and Likeability of Community Sessions



### Behavioral impact on parents

More than 51% parents recounted change in behavior in treating minor burns with running tap water for ten minutes. They also recall that keeping large and hot utensils on the back burners of gas stove will keep children away from accidents. More than 44% parents reported that they now tuck in their clothes while cooking, and close to 47% parents reported that they check electrical appliances to prevent overloads and ensure that multiple devices or plugs are not connected. (Figure 12) depicts spontaneous vs. total score of the behavioral impact on parents and more than half of the parents recalled a change in their behaviors owing to the program.

Figure 12 - Behavioral Impact - Parents



# 67%

mothers keep their children away from a bucket of water which has a heating rod immersed in it.



68%

of teachers feel the program is unique.



## Honeywell Employee Engagement Support

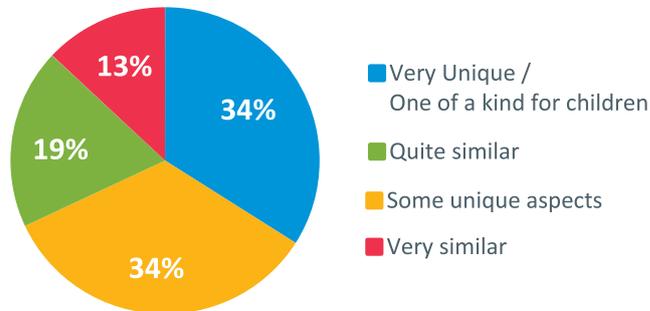
More than 150 Honeywell employees have dedicated over 700 hours for Safe Kids at Home Program through various activities both in schools and communities.

### Teachers

#### Uniqueness and delivery of the program

34% teachers felt that the program was very useful and impactful for students while 68% teachers felt that the program was unique.

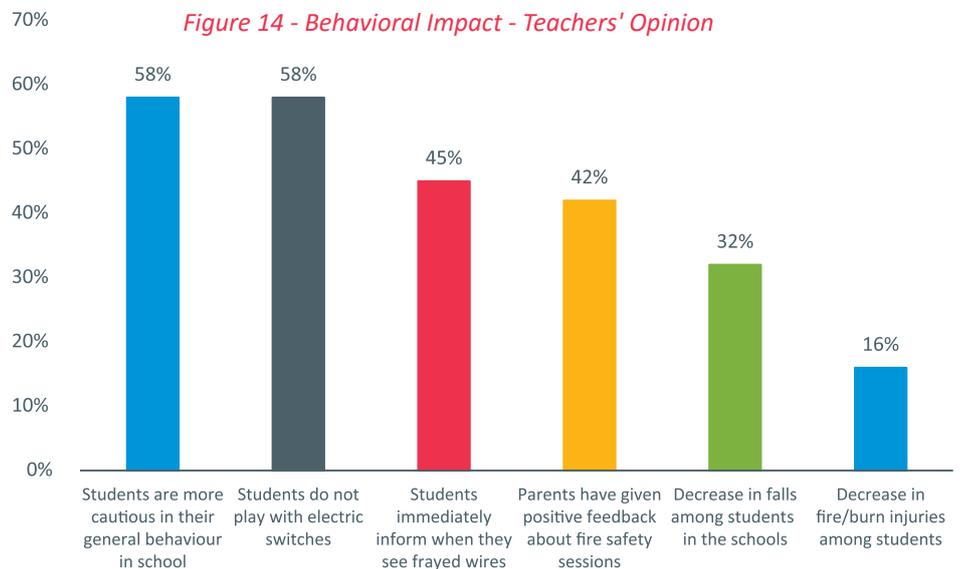
Figure 13 - Uniqueness of the Program



#### Teachers view – behavioral impact on students

58% teachers indicated that the students have become cautious after attending classroom sessions, and that they do not play with electricity switches in school anymore. 45% said that the students proactively inform them in case they spot loose and hanging wires. More than 4 out of 10 teachers indicated that they have come across parents who were happy with the *Safe Kids at Home* program and had seen transformation in their child's behavior.

Figure 14 - Behavioral Impact - Teachers' Opinion



## Program Resources

Safe Kids Foundation helps every parent and child expand their knowledge on fire safety, ensuring a safe environment for children to enable healthy and safe upbringing. The program deploys cutting-edge, experiential sessions, including interactive classroom activities, lesson plans, home assignments, games, videos and songs to drive fire safety awareness among children under 14 years old in Pune.

## Media Coverage

Owing to a variety of events conducted throughout the year, the program was covered in several leading national and regional publications, including broadcast media. Publications such as *Sakal Times*, *Indian Express*, *Saamana*, *Navbharat Times*, *Aaj Ka Anand*, and *Yashobhumi* covered large-scale activities, classroom sessions, and community level events. Notable online portals such as *India CSR*, *India Education Society*, *City News for You*, *NRI News 24x7* carried the details of the program. It was extensively promoted on social media channels such as Twitter and Facebook.

## Conclusion

The results of the mid-term impact evaluation suggest that *Safe Kids at Home* program had a meaningfully contributed in increasing fire safety awareness and knowledge, and helped in behavioral transformation among students and parents. The curriculum of the program received endorsement from key government officials and decision makers, including Mr. D.K. Shami, Fire Advisor to Government of India, Mr. Kunal Kumar, IAS, Commissioner, Pune Municipal Corporation and Mr. Prashant Ranpise, Chief Fire Officer, Fire Department, Pune.

In order to reach grassroots, Safe Kid Foundation continues to drive media coverage and transit advertising to create citywide awareness for large-scale campaigns. The integration of pamphlets and danglers in school buses, auto rickshaws, and public transport, and short videos on fire safety will intensify the impact of the program.

Based on the results of the mid-term impact evaluation, Safe Kids Foundation recommends that *Safe Kids at Home* program should be incorporated into the school curriculum in India.

## References

- i. Chan Margaret, Veneman Ann M, Forward, World Report on Child Injury Prevention, WHO Press, 2008, p. VII.
- ii. Ibid, P. 81
- iii. Safe Kids Foundation, How safe is your Home? Protecting children from fire and burns in Pune, 2015
- iv. The Associate Chamber of Commerce and Industry of India, (ASSOCHAM), Firecracker report on Firecracker consumption, 2016 - <http://www.assocham.org/newsdetail.php?id=6005>
- v. Dr. Vinita Puri, Ed., Indian Journal of Burns, Vol. 23, December 2015

## Program Resources



# Testimonials

“The curricula in these books comprehensively cover fire and burn safety awareness, and has been designed keeping age-specific content on child safety in mind.”

– Mr. D. K. Shami, Fire Advisor, Directorate General Fire Service, Civil Defense & Home Guards (fire cell), Ministry of Home Affairs, Government of India

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“It is a symbiotic and mutually beneficial relationship between Safe Kids Foundation and Fire Department, Pune. It has helped bridge the manpower gap that we face. We are now able to provide trainings to schools, colleges, communities, corporate establishments, and so on and so forth.”

– Mr. Prashant Ranpise, Chief Fire Officer, Pune Municipal Corporation

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“The program is exhaustive. Several initiatives like road shows, community sessions, children sessions, as well as special events, have helped propagate fire and home safety tips for children to a wider audience.”

– Dr. Minakshi Bhosale, Pediatric Surgeon / Associate Professor- Sassoon Hospital / B.J. Medical College

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“We are thankful to Safe Kids Foundation and Honeywell for conducting a training program at our school for educating students and parents on fire safety. Besides awareness programs, the fire drills involving the Fire Department was highly interesting for children and offered a new experience.”

– Headmistress, Urdu medium PMC school

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“Representatives from Safe Kids Foundation were present with the children, and nicely explained fire hazards and safety measures to the students. We thank Safe Kids Foundation and wish them all the best for the future endeavors.”

– Teacher at Marathi medium PMC school





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