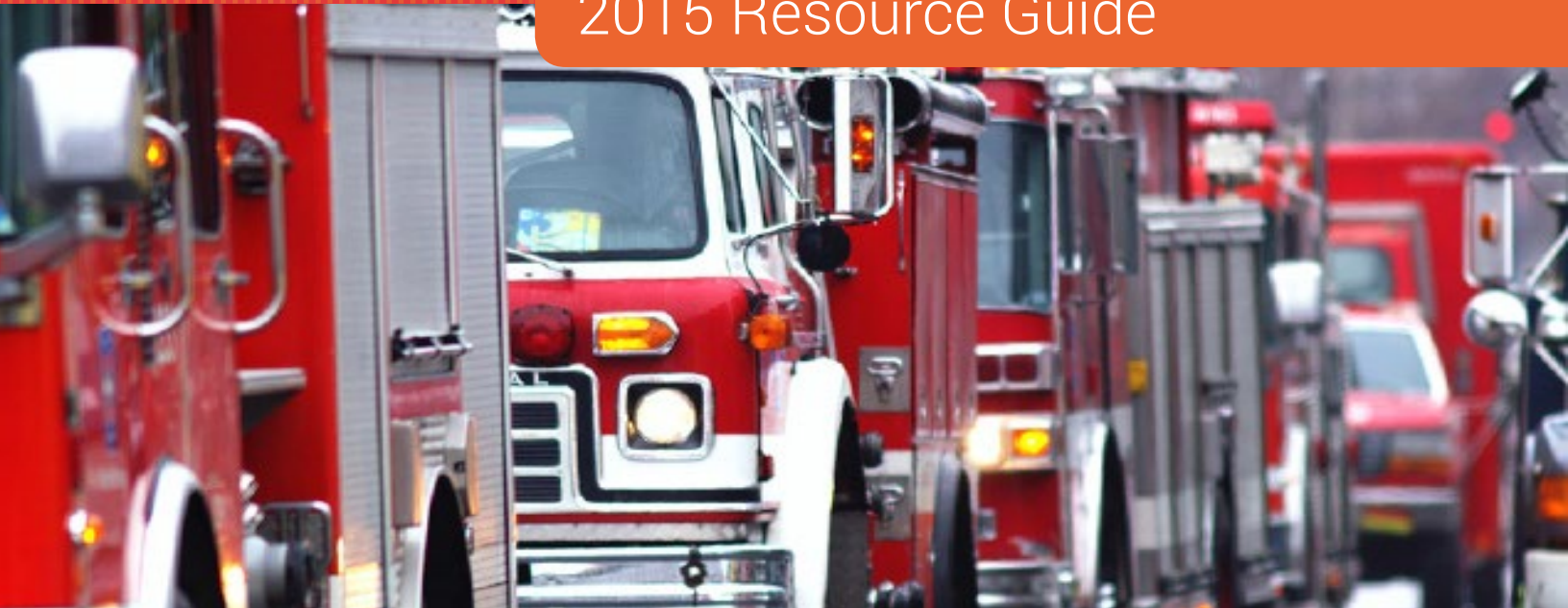




## Fire and Burn Prevention: 2015 Resource Guide



Organizations

Campaigns, Programs, and  
Toolkits

Legislation

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Fire Statistics and Prevention

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In 2013, fires and burns were the fourth leading cause of injury-related deaths to children ages 1-18 in the U.S. (WISQARS). Most of these deaths were caused by residential fires, although a working smoke detector can reduce by half the risk of dying in a home fire (NFPA). In addition, it is important to note that scald burns—burns caused by hot liquids or steam—are especially common among young children, while older children are more likely to be burned by direct contact with flames (CDC).

This resource guide provides links to organizations, programs, publications, and resources focused on fire and burn prevention. It is divided into eight sections: (1) organizations; (2) campaigns, programs, and toolkits; (3) legislation; (4) burns and scalds; (5) fire statistics and prevention; (6) fire setting; (7) resources for children; and (8) resources produced by CSN. Each item in this resource guide includes a short description and a link to the resource itself. Descriptions of reports, guides, toolkits, campaigns, websites, and initiatives are, in most cases, excerpted from the resources themselves while descriptions of research studies are excerpted from the study abstracts.

## **Organizations**

**National Fire Protection Association (NFPA)** develops, publishes, and disseminates consensus codes and standards to minimize the possibility and effects of fire and other risks. The website has information on fire safety for consumers, children, and educators. To view the website, visit: <http://www.nfpa.org>. A children's website, Sparky the Fire Dog, provides games and stories: <http://www.sparky.org>.

**U.S. Fire Administration (USFA)** is part of the U.S. Department of Homeland Security's Federal Emergency Management Agency. The USFA website provides information on fire safety and guides for parents, as well as a library of publications, including coloring books and fire safety activities, for children. To view the website, visit: <http://www.usfa.fema.gov>.

## **Campaigns, Programs, and Toolkits**

### **National**

#### **Community Tool Kits | NFPA**

NFPA has created toolkits for community-wide campaigns on fire safety topics. Topics covered include carbon monoxide alarms, smoke alarms, home fire escape planning, home fire sprinklers, electrical safety, cooking safety, heating safety, and disaster preparation. To learn more, visit: <http://www.nfpa.org/toolkits>.

#### **Fire Is Everyone's Fight | USFA**

Fire Is Everyone's Fight is a national effort led by the U.S. Fire Administration (USFA) to lower the number of home fires and home fire injuries in America. Along with USFA and partner organizations across the country, the fire community is speaking out with a unified message of fire prevention and safety to the public. The goal is to change how people think about fire and fire prevention using social marketing strategies to address the broadest possible audience. This page includes outreach materials, including a video, presentations, handouts, graphics, and a community outreach guide. To access the campaign's webpage and materials, visit: <http://www.usfa.fema.gov/prevention/outreach/fief>.

#### **Keeping Kids Safe from Fire | USFA**

These materials created and collected by USFA can be used in public outreach activities to help keep children safe from fire. Learn more about discussing fire safety for children with parents, teachers, and other caregivers with the resources on this page. To access the materials, visit: <http://www.usfa.fema.gov/prevention/outreach/children.html>.

#### **Learn Not to Burn Program | NFPA**

NFPA has created programs to reach preschoolers through grade 1 students about burn prevention. To access the program, visit: <http://www.nfpa.org/lntb>.

#### **Project Holiday | NFPA**

NFPA's Project Holiday campaign is a comprehensive online toolkit that contains press releases, talking points, tip sheets, reports and more. To access Project Holiday materials, visit: <http://www.nfpa.org/holiday>.



### **Put a Freeze on Winter Fires | NFPA**

The NFPA and USFA campaign, Put a Freeze on Winter Fires, promotes fire safety during the winter months. To access the toolkit, visit: <http://www.nfpa.org/winter>.

### **Smoke Alarm Outreach Materials | USFA**

These free materials are designed to help increase awareness in the community about the life-saving benefits of smoke alarms. These free materials can be used to educate residents about the importance of fire safety and working home smoke alarms. To learn more, visit: [http://www.usfa.fema.gov/prevention/outreach/smoke\\_alarms.html](http://www.usfa.fema.gov/prevention/outreach/smoke_alarms.html).

### **Sparky School House | NFPA**

This interactive website from NFPA allows children, parents, and educators to learn more about fire safety. Sparky School House has downloadable apps, e-books and music for children and interactive guides for parents and teachers. To learn more, visit: <http://sparkyschoolhouse.org>.

### **Start Safe: Fire | Safe Kids Worldwide**

Start Safe: Fire is a free educational program to teach children ages 3 to 6 and their families about fire safety. It provides educators with the tools they need to deliver important fire safety information. Through the program, children learn to identify things that are hot and to stay away, to call a grownup for help when they see something unsafe, and to help their families practice family fire drills. Parents and caregivers learn tips for preventing fire and burn injuries. Safety messages are delivered to children, parents, and caregivers through educators, local Safe Kids coalitions, and the fire service. To learn more, visit: <http://www.safekids.org/start-safe-fire>.

### **Toylike Lighters: Playing with Fire | USFA (2008)**

Toylike or novelty lighters have been responsible for injuries, deaths, and accidents. Children are attracted to novelty lighters because they look like toys. To learn more, visit: [http://www.usfa.fema.gov/downloads/pdf/arson/aaw08\\_media\\_kit.pdf](http://www.usfa.fema.gov/downloads/pdf/arson/aaw08_media_kit.pdf).

### **Vision 20/20**

The Institution of Fire Engineers U.S. Branch has established a steering committee comprised of noted fire service and related agency leaders to guide a national strategic planning process for fire loss prevention that will result in a national plan that will coordinate activities and fire prevention efforts. To learn more, visit: <http://www.strategicfire.org>.

### **Local**

#### **FDNY Smart | New York City Fire Department**

This website and toolkit from the New York City Fire Department (FDNY) has sections geared towards children, parents, and teachers, which include games, videos, and information about fire prevention. To learn more, visit: <http://www.fdnysmart.org>.

### **“Fire Is...” | New Jersey Fire Prevention and Protection**

The “Fire Is” program is the result of a coalition consisting of the Burn Center at Saint Barnabas Medical Center, the New Jersey Fire Prevention and Protection Association, the New Jersey Association of School Administrators, the New Jersey Division of Fire Safety, Safe Kids New Jersey, the New Jersey State Firefighter’s Mutual Benevolent Association, and the Jersey Access Group (JAG), a consortium of public, educational, and government access television stations. The “Fire Is” video series tells stories about residential fires and provides safe messaging for communities. To learn more, visit: <http://www.njfiresafety.com>.

### **S.A.F.E. Program | Massachusetts Department of Fire Services**

The Student Awareness of Fire Education (S.A.F.E.) Program is a state initiative to provide resources to local fire departments to conduct fire and life safety education programs in grades K-12. The mission is to enable students to recognize the dangers of fire and the fire hazards that tobacco products pose.

To learn more, visit:

<http://www.mass.gov/eopss/agencies/dfs/dfs2/osfm/pubed/s-a-f-e/safe-program.html>.



## **Legislation**

### **Hot Tap Water Legislation in the United States | Journal of Burn Care & Research (2010)**

This study reviewed the current state of tap water temperature regulation in the United States, including the model plumbing code standards on which state legislation in this area is based; assessed the level of public awareness regarding the risk, prevalence, and severity of such injuries; and identified specific prevention measures. The study found that public awareness of hot tap water hazards and implementation of preventive measures are limited. To read the full abstract or purchase the article, visit: <http://journals.lww.com/burncareresearch/pages/articleviewer.aspx?year=2010&issue=11000&article=00009&type=abstract>.

### **Smoke and Carbon Monoxide Alarms, State Laws | National Conference of State Legislators**

This webpage covers smoke and carbon monoxide laws for each state. To read the webpage, visit: <http://www.ncsl.org/research/environment-and-natural-resources/smoke-and-carbon-monoxide-alarms-codes.aspx>.

### **Status of Legislation to Ban or Limit the Sale of Novelty and Toylike Lighters | USFA (2013)**

This map from USFA shows the status of legislation to ban or limit the sale of novelty and toylike lighters. To view the map, visit: [http://www.usfa.fema.gov/prevention/outreach/novelty\\_lighters.html](http://www.usfa.fema.gov/prevention/outreach/novelty_lighters.html).



## ***Publications and Research***

### **Educational Messages Desk Reference | NFPA**

The Educational Messages Desk Reference provides fire and life safety educators with accurate and consistent language for use when offering safety information to the public. To learn more, visit:

<http://www.nfpa.org/messaging>.

### **The Impact of Safety Messages on Children | NFPA (2010)**

NFPA contracted with the Johns Hopkins Center for Injury Research and Policy to conduct a study to determine the best way to communicate safety messages to children 4-9 years old. To access the study, visit:

<http://www.nfpa.org/safety-information/for-public-educators/educational-messaging/the-impact-of-safety-messages-on-children>.

### **NFPA Safety Tip Sheets | NFPA**

NFPA offers free safety tip sheets on a variety of fire and life safety topics. Download, print and share these tip sheets to spread the word about fire safety. Select NFPA safety tips sheets can be customized with your fire department or organization's name and contact information/web site. To learn more, visit:

<http://www.nfpa.org/safetytips>.

## ***Burns and Scalds***

### **American Burn Association Scald Injury Prevention Educator's Guide**

This guide from the American Burn Association includes general background info on scald burns, fact sheets for community distribution, sample press releases and PSAs, a PowerPoint presentation with comments, and more.

To view the guide, visit: <http://www.ameriburn.org/Preven/ScaldInjuryEducator'sGuide.pdf>.

### **Behaviors of Young Children around Microwave Ovens | Journal of Trauma and Acute Care Surgery (2011)**

Scald burn injuries are the leading cause of burn-related emergency room visits and hospitalizations for young children. A portion of these injuries occur when children are removing items from microwave ovens. This study, published in The Journal of Trauma - Injury Infection & Critical Care, assessed the ability of typically developing children aged 15 months to 5 years to operate, open, and remove the contents from a microwave oven.

To read the abstract or purchase the article, visit: <http://journals.lww.com/jtrauma/pages/articleviewer.aspx?year=2011&issue=11002&article=00009&type=abstract>.

### **Burn and Scald Prevention Tips | Safe Kids (2013)**

This fact sheet from Safe Kids provides information on burns, scalds and how to prevent them. To read the tip sheet, visit: [http://www.safekids.org/sites/default/files/documents/burn\\_and\\_scald\\_prevention\\_tips\\_0.pdf](http://www.safekids.org/sites/default/files/documents/burn_and_scald_prevention_tips_0.pdf).





### **Burn Injuries in Children with Attention-Deficit/Hyperactivity Disorder | Burns (2004)**

This study was conducted to determine differences in burn injuries between ADHD and non-ADHD children. The study found that the impulsivity and vigilance deficits that characterize ADHD may place these children at higher risk for specific types of burn injuries. To read the full abstract or purchase the study, visit: <http://www.sciencedirect.com/science/article/pii/S0305417903002821>.

### **Burn Prevention Programs for Children: Do They Reduce Burn-Related Hospitalizations? | Burns (2005)**

This study found that injury prevention programs are effective in reducing burn-related hospitalizations among infants and toddlers, especially from more affluent communities, but not among school-aged children. To read the full abstract or purchase the study, visit:

<http://www.sciencedirect.com/science/article/pii/S0305417904003390>.

### **Five-Year Experience with Burns from Glass Fireplace Doors in the Pediatric Population | Journal of Burn Care and Research (2013)**

This study from the Journal of Burn Care and Research found that burns from contact with fireplace glass doors are a recurring problem. Toddlers are most at risk. Directed preventive strategies, including parent education, safety warnings, and design modifications such as temperature sensors and barrier screens could be potentially helpful in reducing the incidence of this injury. To read the full abstract or purchase the study, visit: <http://journals.lww.com/burncaredresearch/pages/articleviewer.aspx?year=2013&issue=11000&article=00005&type=abstract>.

### **Preventing Unintentional Scald Burns: Moving Beyond Tap Water | Pediatrics (2008)**

This article sought to examine in detail the mechanisms of significant scald burns among children <5 years of age, to discover insights into prevention. The article found that Current prevention strategies and messages do not adequately address the most common mechanisms of scald injury requiring hospitalization. Easy access to a microwave oven poses a significant scald risk to children as young as 18 months of age, who can open the door and remove the hot contents. An engineering fix for microwave ovens could help protect young children from this mechanism of scalding. Involvement of older children in a subset of scald injuries is a new finding that may have prevention implications. To purchase the article, visit: <http://pediatrics.aappublications.org/content/122/4/799.abstract>.

### **Scald Prevention Safety Tips | NFPA**

This tip sheet from NFPA has safety tips to prevent scalds. To view the safety sheet, visit: <http://www.nfpa.org/-/media/Files/Safety%20information/Safety%20tip%20sheets/scaldprevention.pdf>.

### **Scalds and Other Hot Liquid Burns among Children 0-4 Years of Age, Oklahoma, 1990-2007 | Injury Prevention Service, Oklahoma State Department of Health | 2010**

From 2004-2006, fire and burn-related injuries were the seventh leading cause of nonfatal injury for children under five years of age in the United States and the fourth leading cause of unintentional injury death. This publication provides facts and information on burns and scalds as well as information on prevention. To read the publication, visit: [http://www.ok.gov/health2/documents/Scalds\\_Among\\_Children\\_2009.pdf](http://www.ok.gov/health2/documents/Scalds_Among_Children_2009.pdf).



### ***Fire Statistics and Prevention***

#### **Burns and Fire Safety Fact Sheet | Safe Kids Worldwide (2015)**

This fact sheet from Safe Kids Worldwide highlights data on burns and fire safety in children. To view the fact sheet, visit: [http://www.safekids.org/sites/default/files/documents/skw\\_burns\\_fact\\_sheet\\_feb\\_2015.pdf](http://www.safekids.org/sites/default/files/documents/skw_burns_fact_sheet_feb_2015.pdf).

#### **Fatal Effects of Fire | NFPA (2011)**

This short report from NFPA provides trend information on burns versus smoke inhalation as fatal effects of fire, including both numbers and shares of fire deaths, with analysis of fire incident reporting versus death certificate reporting on the same topic. To read the full report, visit: <http://www.nfpa.org/research/reports-and-statistics/demographics-and-victim-patterns/fatal-effects-of-fire>.

#### **A Few Facts at the Household Level | NFPA (2009)**

Examples of fire statistics at the individual or household level are presented as a collection of conversation-starters in this short report from NFPA. To read the full report, visit: <http://www.nfpa.org/research/reports-and-statistics/fires-by-property-type/residential/a-few-facts-at-the-household-level>.

#### **Fire Loss in the United States During 2013 | NFPA (2014)**

This report from NFPA contains statistics from the NFPA survey of fire departments on fires, civilian deaths and injuries, and property damage in 2013. The report includes patterns by major property class, region, and community size, as well as information on types of fire department calls and false alarms. To read the full report, visit: <http://www.nfpa.org/research/reports-and-statistics/fires-in-the-us/overall-fire-problem/fire-loss-in-the-united-states>.

#### **Fire Risk to Children in 2010 | USFA (2013)**

This report from USFA found that “the relative risk of children under age 15 dying in a fire was 50 percent lower than the general population. However, when dividing the young into subgroups, fire injuries are highest in the 4 and under age group, decline in the middle years, but rise again in the 10 to 14 age group. This is a different pattern than deaths, which decreased as children aged. Boys were at higher risk of death from fire than girls. African-American children age 4 or younger were at an increased risk of death from fire.” To read the full report, visit: <http://www.usfa.fema.gov/downloads/pdf/statistics/v14i8.pdf>.

### **How Long Do Smoke Alarms Function? A Cross-Sectional Follow-Up Survey of a Smoke Alarm Installation Program | Injury Prevention (2013)**

This study aimed to assess the functionality of lithium-powered smoke alarms that had been installed through a community-based program called Operation Installation (OI). The study concluded that less than a quarter of the originally installed smoke alarms were still present and functioning by year 10. These findings have important implications for smoke alarm installation programs. To read the full abstract access the article, visit: <http://injuryprevention.bmj.com/content/20/2/103.short>.

### **Preventing Deaths and Injuries from House Fires: An Outcome Evaluation of a Community-Based Smoke Alarm Installation Program | Injury Prevention (2013)**

This study examines the impact of community-based smoke alarm (SA) distribution programs on the occurrence of house fire-related deaths and injuries (HF-D/I). The study concluded that the collaborative, community-based SA installation, Operation Installation, program was effective at preventing deaths and injuries from house fires, but the duration of effectiveness was less than 10 years. To read the full abstract and access the article, visit: <http://injuryprevention.bmj.com/content/20/2/97.short>.

### ***Fire Setting***

#### **Children Playing with Fire | NFPA (2010)**

This report from the NFPA details statistics and patterns of youth playing with fire. To read the full report, visit: <http://www.scfirechiefs.com/ChildrenPlayingwithFire.pdf>.

#### **Exposure to Fire Setting Behavior on YouTube | Journal of Adolescent Health (2012)**

This study is a preliminary examination of fire setting behaviors on YouTube. Data are based on a one-day search of YouTube. The results indicate YouTube is replete with inappropriate models of fire setting. The findings have potential implications for intervention with fire setting youth. To read the full study, visit: <http://www.sciencedirect.com/science/article/pii/S1054139X11006513>.

#### **Juvenile Firesetting: A Growing Concern | USFA (2006)**

This publication from the USFA discusses the extent of the problem of firesetting, types of fire setters, intervention strategies, and more. To read the full publication, visit: [http://www.nh.gov/safety/divisions/firesafety/special-operations/pub\\_ed/documents/JuvenileFiresettingArticle-FA-307.pdf](http://www.nh.gov/safety/divisions/firesafety/special-operations/pub_ed/documents/JuvenileFiresettingArticle-FA-307.pdf)





### **Preventing Youth Firesetting | USFA (2012)**

“Each year in this country, fires set by children are responsible for more than 100 fire deaths, nearly 1,000 painful burn injuries, and hundreds of millions of dollars in property loss, according to the U.S. Fire Administration. Children are often the victims in these fires. While curiosity about fire is natural, fires set by children are dangerous and deadly.” To learn more, visit: [http://www.usfa.fema.gov/downloads/pdf/arson/aaw12\\_media\\_kit.pdf](http://www.usfa.fema.gov/downloads/pdf/arson/aaw12_media_kit.pdf)

### **Residential Fire Related Deaths and Injuries among Children: Fireplay, Smoke Alarms, and Prevention | Injury Prevention (2002)**

This study found that residential fire related injuries among children in Dallas occurred predominantly in the youngest ages (<5 years) and in poor neighborhoods. Most of the deaths, especially those in apartments and mobile homes, resulted from fireplay. Smoke alarms appeared to offer no protection against death or injury in fireplay associated fires, possibly from the nature of the child’s behavior in these fires, or from the placement of the smoke alarm. Prevention of childhood residential fire related deaths may require interventions to prevent fireplay. To read the study, visit: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC1730859/>.

### **Retail Availability of Fire-Starting Materials and Their Misuse by Children and Adolescents | Fire Safety Journal (2009)**

This brief research report describes the costs and consequences of the misuse of retail-obtained ignition materials by children and youth. This study shows that almost a fifth (18%) of children and adolescents referred to a specialized juvenile fire-starting program had used ignition materials that they obtained from retail outlets in their fire-starting. Moreover, their fire-starting was extensive and had caused or had the potential to cause significant injuries. In addition, their fire incidents were costly in terms of damage and community resources. Implications for fire safety education for retailers, further research, and legislative action are discussed. To purchase the article, visit: <http://www.sciencedirect.com/science/article/pii/S037971120800060X>.

### **Survey of Primary School Educators Regarding Burn-Risk Behaviors and Fire-Safety Education | Burns (2007)**

The objective of this study was to assess primary school educator knowledge and opinions regarding fire-setting behaviors and burn-injury prevention education. The study found that nearly all primary school educators surveyed agreed that burn injuries and attempting to curb fire-play are important societal issues. There was wide agreement that including a description of the medical and social consequences of burns in a preventive curriculum would enhance its efficacy. The younger students are, the more time teachers require to adequately convey fire safety instruction. To purchase the article, visit: <http://www.sciencedirect.com/science/article/pii/S0305417906002622>.

## **For Children**

### **Kids Firetruck Foldup Activity Sheet | USFA**

This activity sheet contains a fire safety word game and mazes that children navigate to drive a fire truck to a home and practice a home fire escape plan. Upon completion of the activity sheet, it folds into a fire truck.

To view the activity sheet, visit: [http://www.usfa.fema.gov/downloads/pdf/publications/fa\\_327.pdf](http://www.usfa.fema.gov/downloads/pdf/publications/fa_327.pdf).

A Spanish version is available here: [http://www.usfa.fema.gov/downloads/pdf/publications/fa\\_327s.pdf](http://www.usfa.fema.gov/downloads/pdf/publications/fa_327s.pdf).



## Let's Have Fun with Fire Safety: Marty & Jett's Activity Book | USFA

This activity book provides children with valuable learning tools about fire safety and prevention. Activities include coloring pages, connect the dots, word searches, and escape plan mazes.

To view the activity book, visit: <http://www.usfa.fema.gov/downloads/pdf/publications/fa-295-press.pdf>.

A Spanish version is available here: [http://www.usfa.dhs.gov/downloads/pdf/publications/fa\\_295s.pdf](http://www.usfa.dhs.gov/downloads/pdf/publications/fa_295s.pdf).

## Sparky the Fire Dog | NFPA

Sparky's website provides children with hours of fun fire safety activities. Activities include games, e-cards, monthly "Cool to Do", coloring sheets, and more. It also includes a parents' section with fire safety information and activities to do with children. To view the website, visit: <http://www.sparky.org>.

## CSN Resources

### [Publication] Injury Prevention: What Works? (2014)

This publication presents cost-outcome analyses for injuries, including open-flame/burn interventions. On average, a \$48 battery-operated smoke alarm generates \$880 in benefits to society. Childproof cigarette lighters cost \$0.05 per lighter and generate \$3.80 in benefits to society. To read the publication, visit:

<http://www.childrensafetynetwork.org/publications/whatworks2014>.

### [Webinar] SERICN Community of Practice - Sound the Alarm on Fire Safety (2011)

This webinar, presented in February 2011, covers the "Sound the Alarm" campaign, a collaboration between the International Code Council and National Volunteer Fire Council. To view the slides, visit:

<http://www.childrensafetynetwork.org/webinar/sericn-community-practice-%25E2%2580%2593-sound-alarm-fire-safety>.

### [Webinar] Start Safe: Fire and Burn Safety Program for Preschoolers and Their Families (2009)

This webinar, presented in October 2009, was a collaboration of CSN and the Home Safety Council and focused on the Start Safe program. Start Safe is a fire safety program designed to allow preschool educators and safety educators to better reach preschoolers and their families. To view the full webinar with audio or download a PDF of the slides, visit:

<http://www.childrensafetynetwork.org/webinar/safe-start-fire-safety-oct-2009>.



Children's Safety Network  
43 Foundry Avenue  
Waltham, MA 02453  
csninfo@edc.org

**Facebook:** [facebook.com/childrensafetynetwork](https://www.facebook.com/childrensafetynetwork)  
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