

# 2008 National Healthy Homes Conference

## Home Electrical Safety

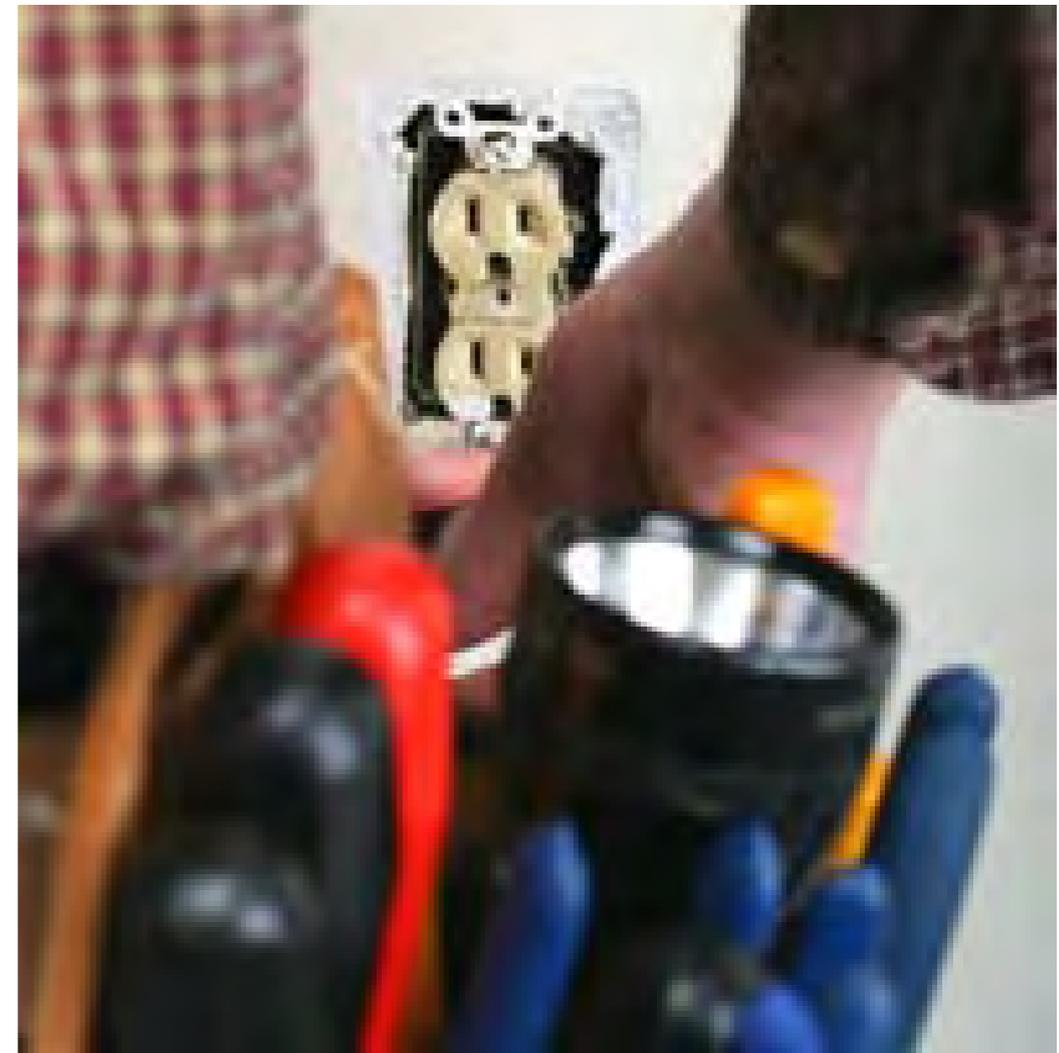




# Who is ESFI?

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- **The Electrical Safety Foundation International (ESFI) was established in 1994.**
- **Founders include the Consumer Products Safety Commission, National Electrical Manufacturers Association, and Underwriters Laboratories Inc.**
- **Dedicated exclusively to promoting electrical safety in the home, school and workplace.**



# Corporate Partners



Pass & Seymour



SIEMENS



# Government & Agency Partners

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Consumer Product Safety Commission



Occupational Safety & Health Administration



National Institute for Occupational Safety & Health



# ESFI's Main Areas of Focus

- **National Electrical Safety Month**



- **Disasters**



- **Fire Prevention**



- **Holiday Safety**



# Media

- Experience running national electrical safety campaigns
- 4.4 million people reached per press release
- 107,000,000 media impressions through May 2008's campaign

The logo for Yahoo!, featuring the word "YAHOO!" in a bold, red, sans-serif font with a registered trademark symbol.The logo for YouTube, featuring the word "You" in black and "Tube" in white inside a red rounded rectangle, with the tagline "Broadcast Yourself™" below it.The logo for Google, featuring the word "Google" in its signature multi-colored font with a trademark symbol.



# Why is ESFI here today?



Home electrical fires



Shocks & electrocutions

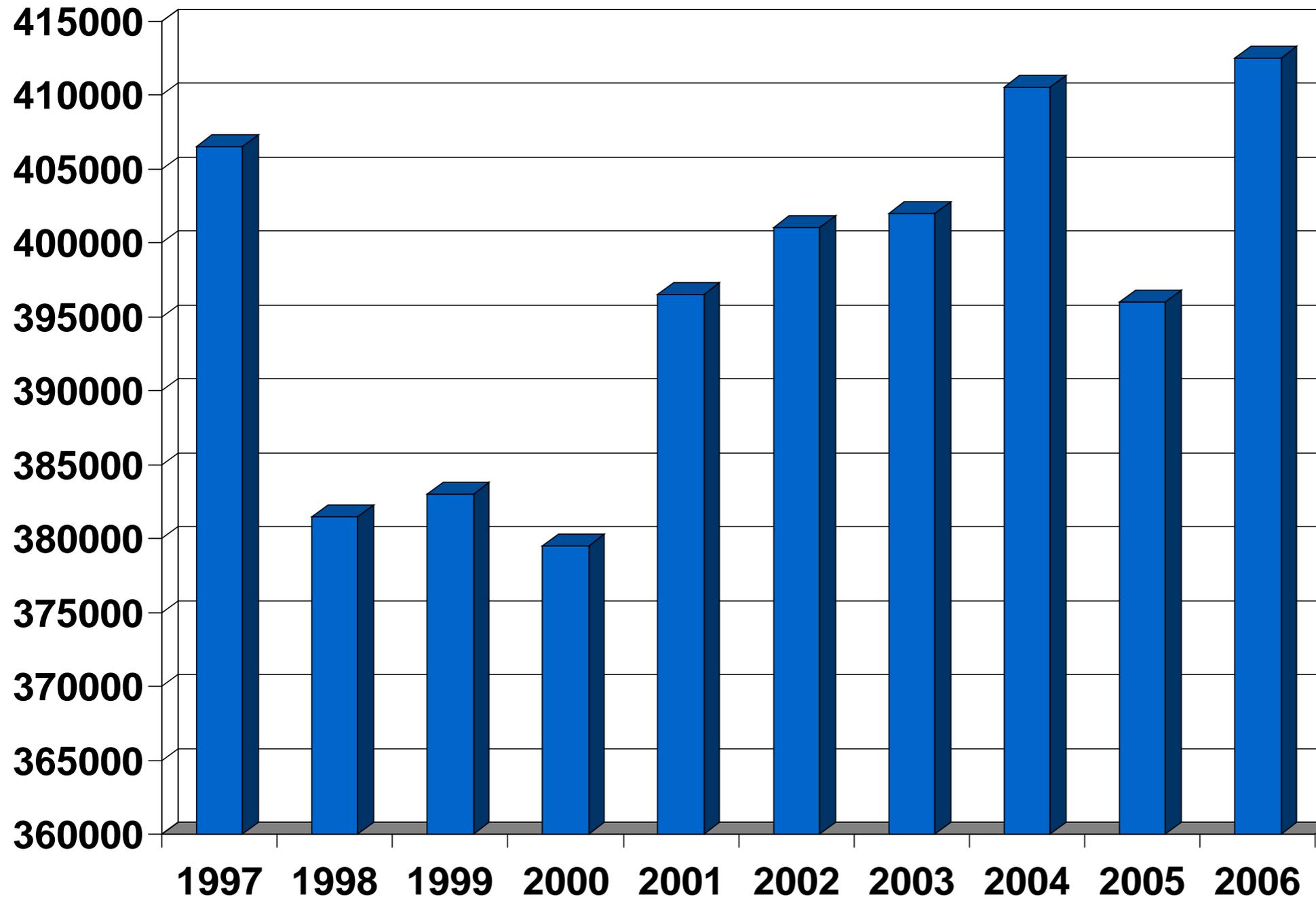


Counterfeit Electrical Products

Electrical dangers facing U.S. homes and their inhabitants – some old, some new



# Home Fires: A 10 year look



**30,905  
Civilian  
Fatalities**

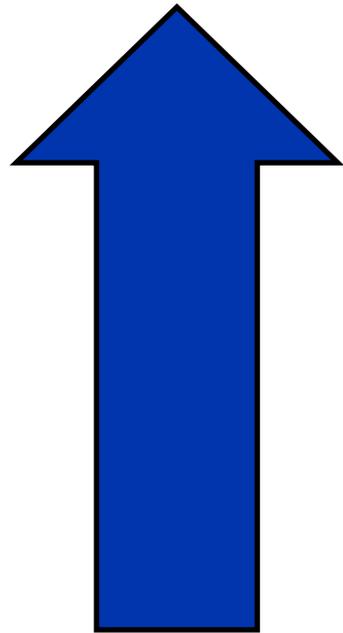
**153,400  
Injuries**

**\$57 billion  
Direct  
Property  
Damage**

Source: National Fire Protection Association Fire Loss in the U.S. During 2006

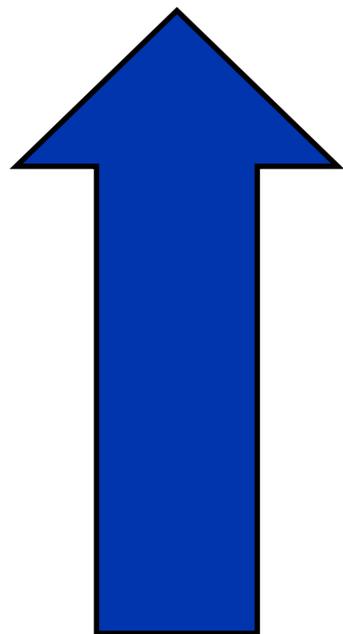


# Other Factors to Consider



## Older Home population

Average age of home has jumped from 30 years in 1997 to 35 years in 2005



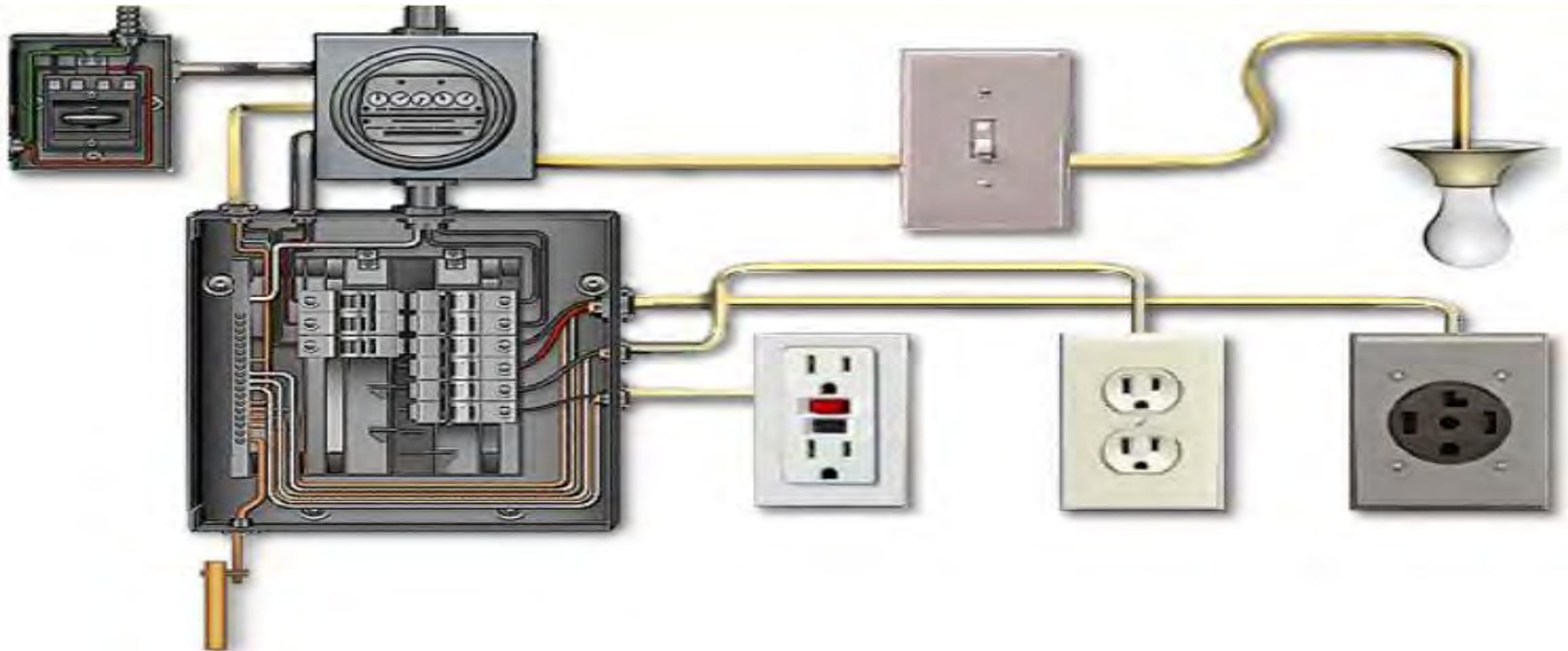
## Use of Energy per Household

Average monthly consumption has increased from 830 (kWh) in 1993 to 920 (kWh) in 2006



*Source: U.S. Census & U.S. Department of Energy*

# Home Electrical Distribution Systems



Most consumers are unfamiliar with their system and with devices such as AFCIs, GFCIs, and TRRs. There is a need for resources to educate consumers on ways they can protect themselves.

# Residential Electrical Fires

2002-2005 there were an average of **53,600** home fires annually involving some sort of electrical malfunction or issue

- 2,000+ deaths & injuries
- \$1.4 billion in property damage

An annual average of more than **30,000** home fires involved arcing of home electrical equipment

- 1,000+ deaths & injuries
- \$759 million in property damage



Source:

National Fire Incident Reporting (NFIRS system)

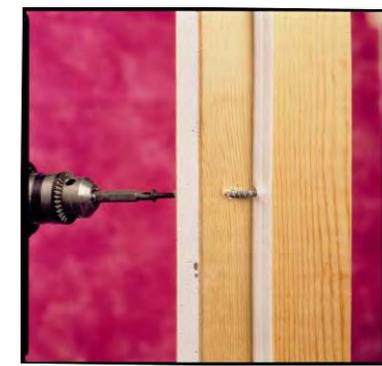
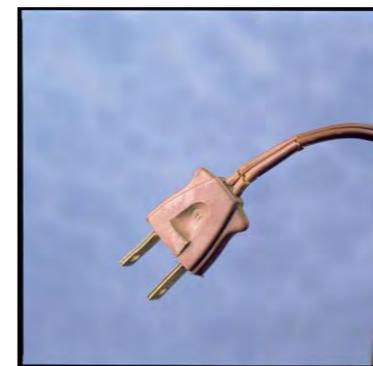
US Fire Administration

US Department of Homeland Security



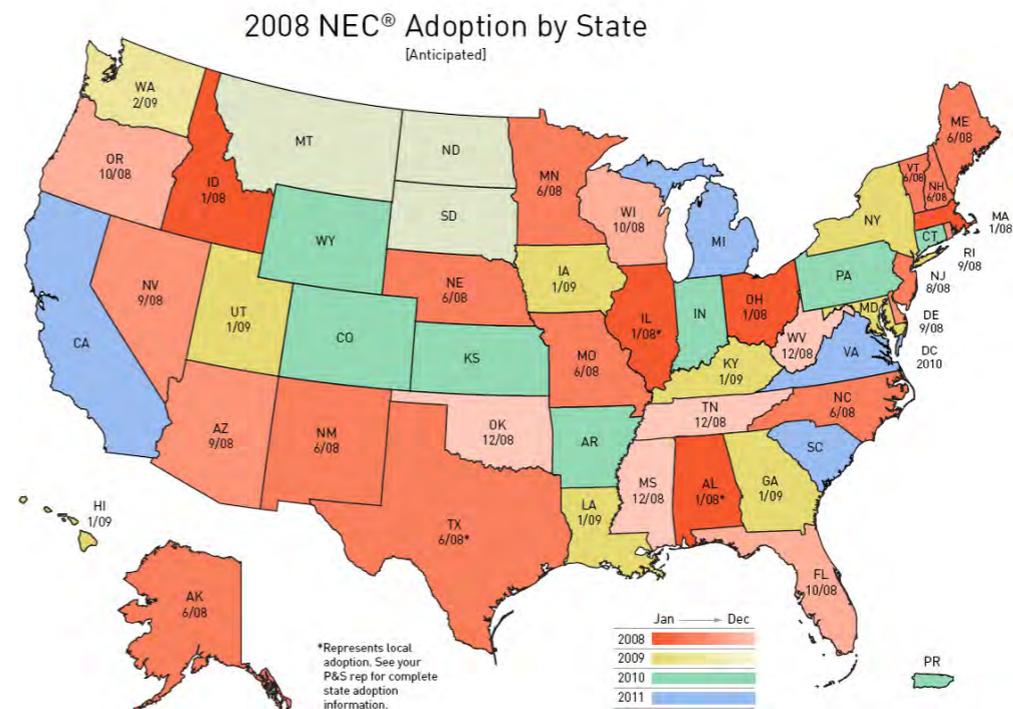
# Common Causes of Arcing Faults

- Loose or improper connections, such as electrical wires to outlets or switches
- Frayed appliance or extension cords
- Pinched or pierced wire insulation
- Cracked wire insulation stemming from age, heat, corrosion, or bending stress



# NEC Adoption: New homes will be protected

- 1999 NEC required AFCI protection on 125 V single phase, 15-20 A bedroom branch circuits
- 2002 NEC required AFCI protection on all bedroom circuits
- 2005 NEC required **combination** AFCI protection on all bedroom circuits (technology upgrade)
- 2008 NEC expands AFCI protection to 120-V, single phase 15-20 A branch circuits in other areas of the home, including:
  - ✓ Bedrooms
  - ✓ Dens
  - ✓ Dining rooms
  - ✓ Family rooms
  - ✓ Hallways
  - ✓ Living rooms

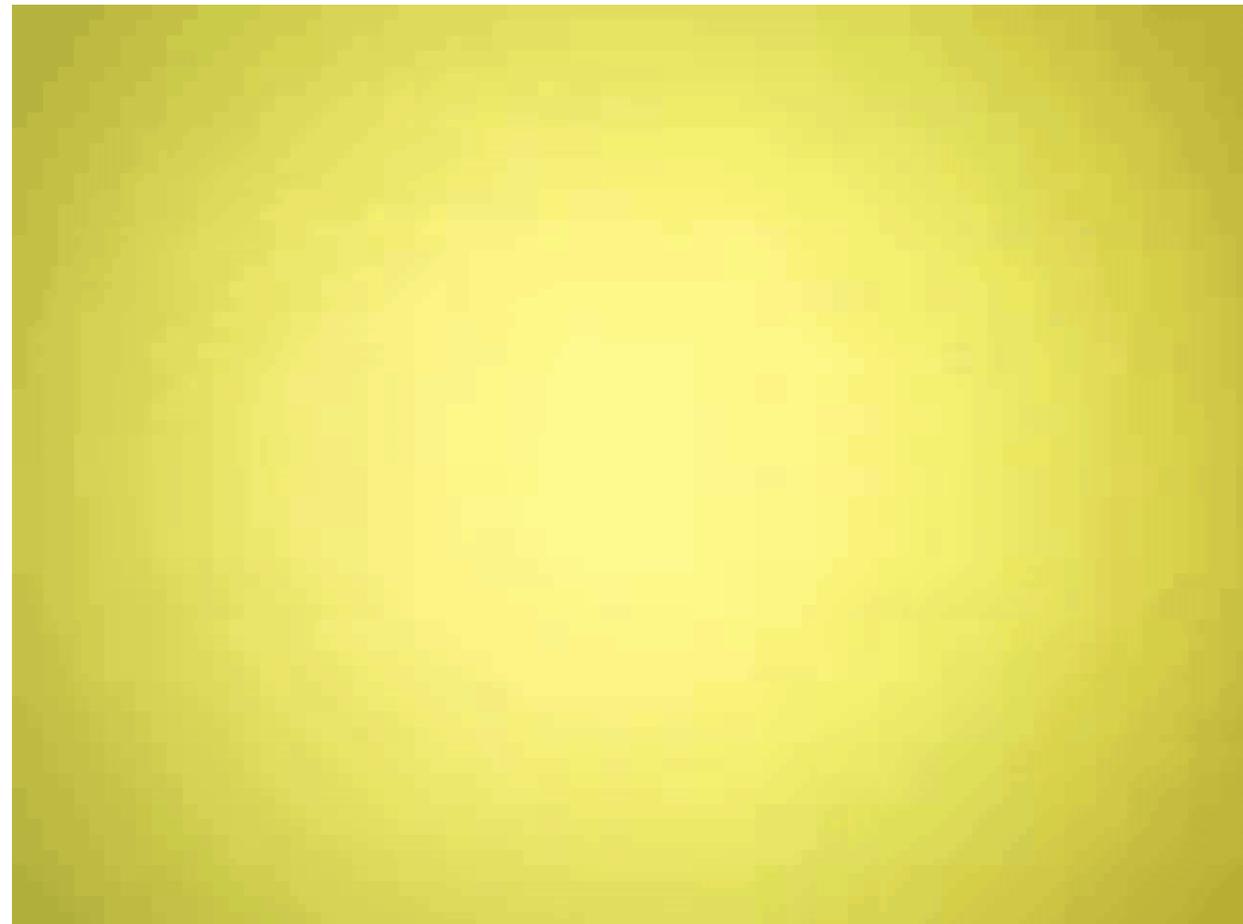


# Broad Support for AFCIs

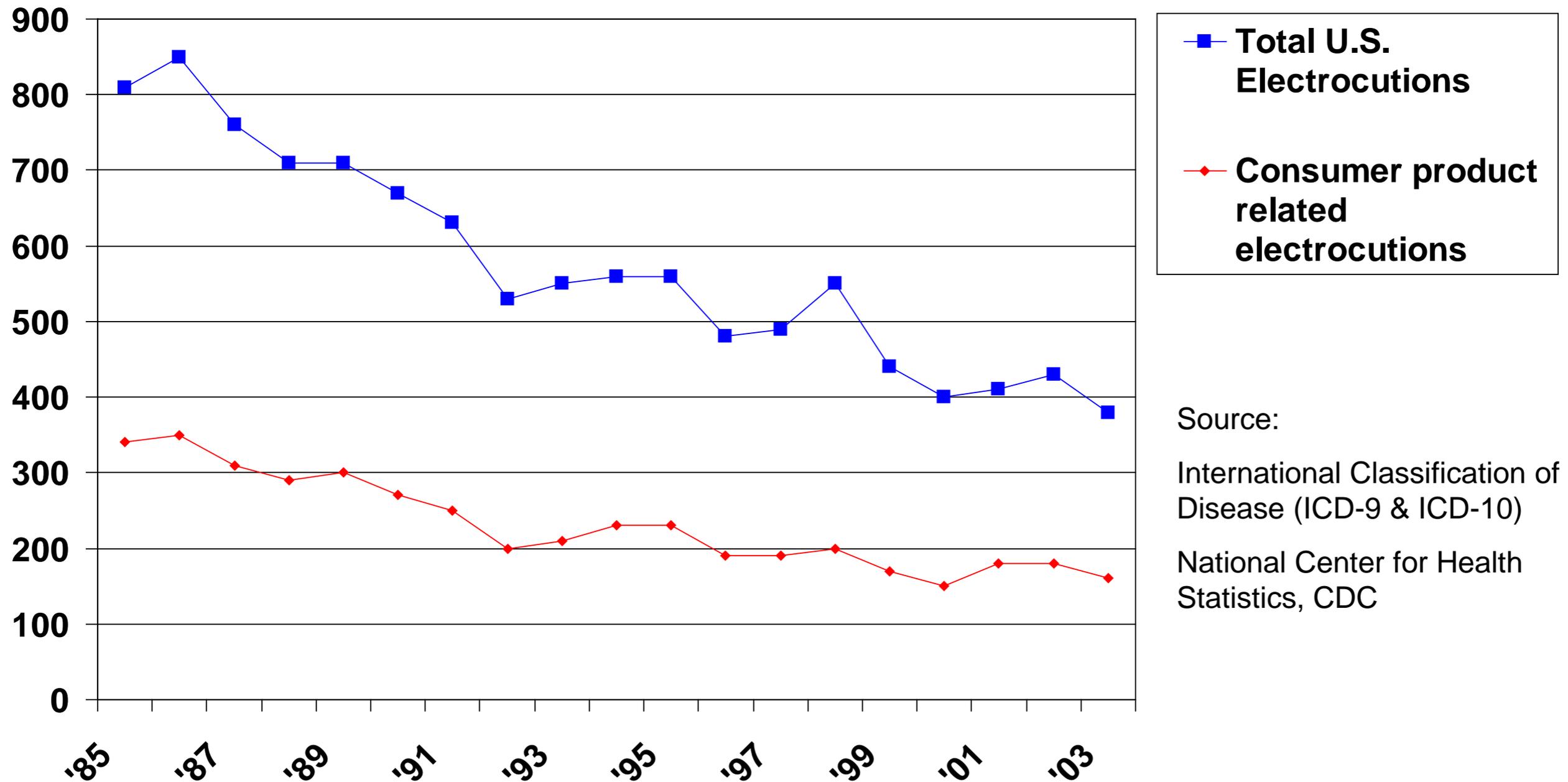
- US Department of Housing and Urban Development issued a *Healthy Homes Report* in March 2006. The report found that the primary residential hazards associated with burns and fire-related injuries are:
  - *Lack of functional smoke alarms near or inside bedrooms and on every floor of the house;*
  - *Lack of fire extinguishers*
  - ***Lack of Arc Fault Circuit Interrupters...***
- Other organizations endorsing AFCI technology:
  - National Association of State Fire Marshals
  - International Association of Electrical Inspectors
  - Independent Electrical Contractors Association
  - U.S. Consumer Product Safety Commission (CPSC)
  - National Electrical Contractors Association



# Educational Efforts



# Electrocutions

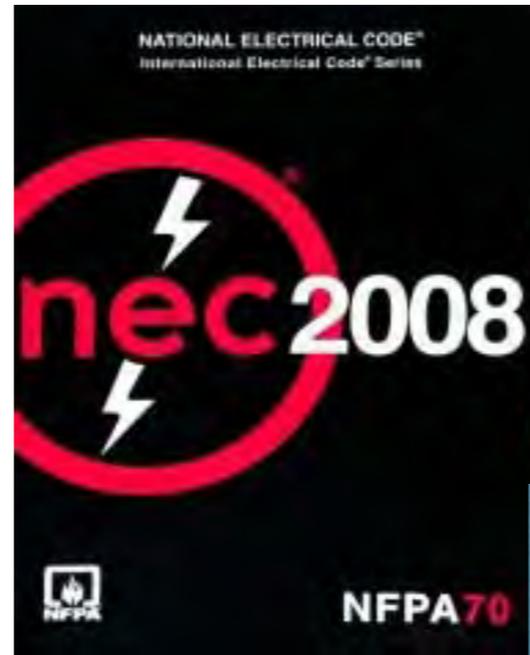


Source:  
International Classification of Disease (ICD-9 & ICD-10)  
National Center for Health Statistics, CDC

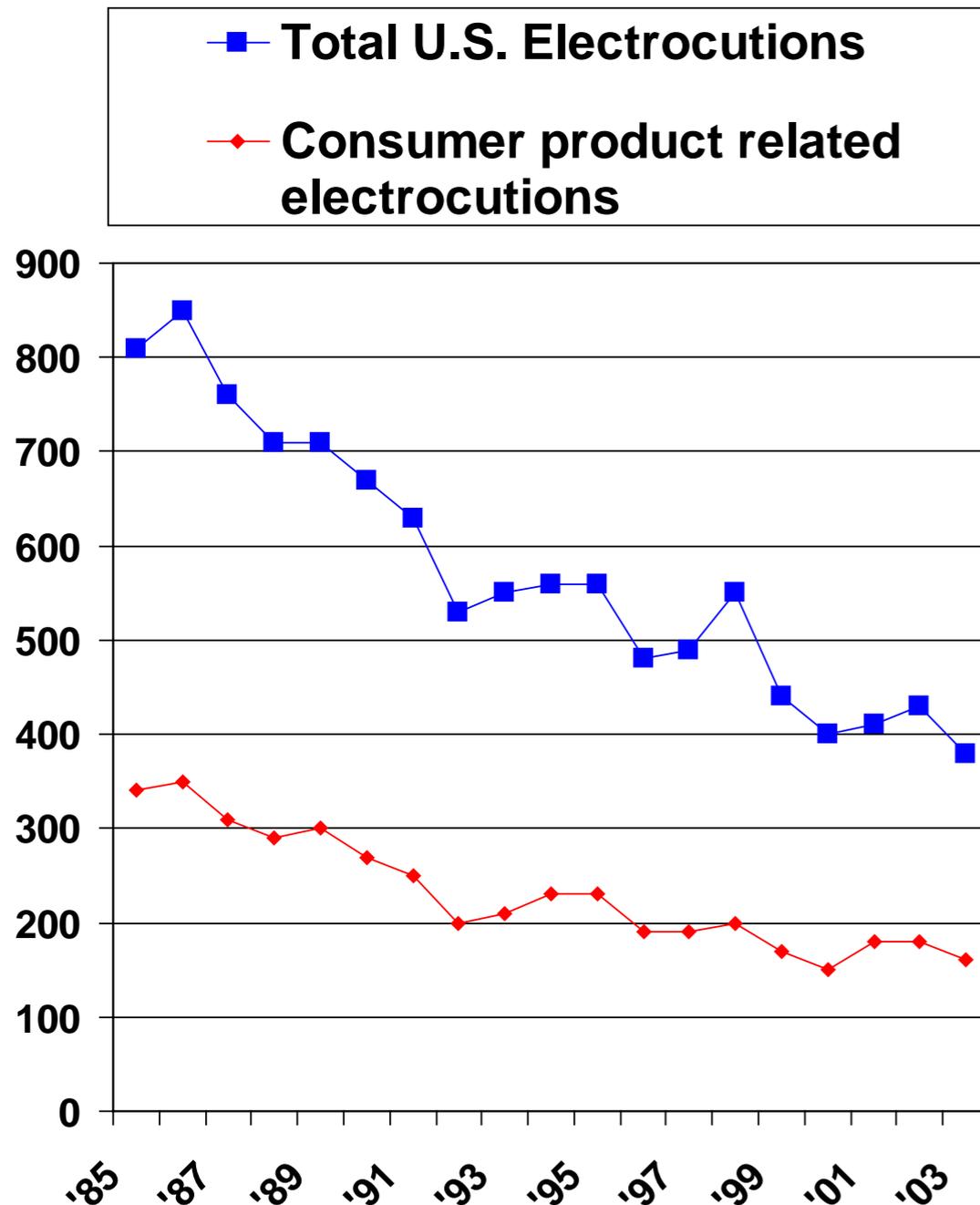


# NEC Timeline: GFCI Adoption

- 1973 – Outdoor receptacles
- 1975 – Bathrooms
- 1978 – Garages
- 1987 – Kitchens
- 1990 – Unfinished basements
- 1990 – 2008 – Expansion continues



# Points to Consider



- Total electrocutions decreased by more 55% since 1985
- Consumer product related electrocutions fell by 54% since 1985
- CPSC in a 1996 study concluded that 2/3 of home electrocutions that had occurred that year could have been prevented if there had been GFCI protection
- GFCIs are preventing occupational fatalities too!



# Tamper-Resistant Receptacles

Consumer Product Safety Commission  
Study: 10 year period (1991-2001)

Found that:

- 24,000+ children were treated in Emergency Rooms for incidences related to electrical receptacles – about 7 children per day
- 89% are under 6 years old
- 50% are 2 to 3 – the highest risk group
- Boys are at higher risk regardless of age





# Tamper-Resistant Receptacles



Objects inserted are everyday, easily accessible household items:

Hairpin – 32%

Keys – 17%

Finger – 12%

Pin, wire, screw or nail – 11%

Plug – 11%

Unidentified – 8%

Paperclip or staple – 5%

Tool (tweezer, file, or knife) – 3%

Jewelry – 1%

# Tamper-Resistant Receptacles

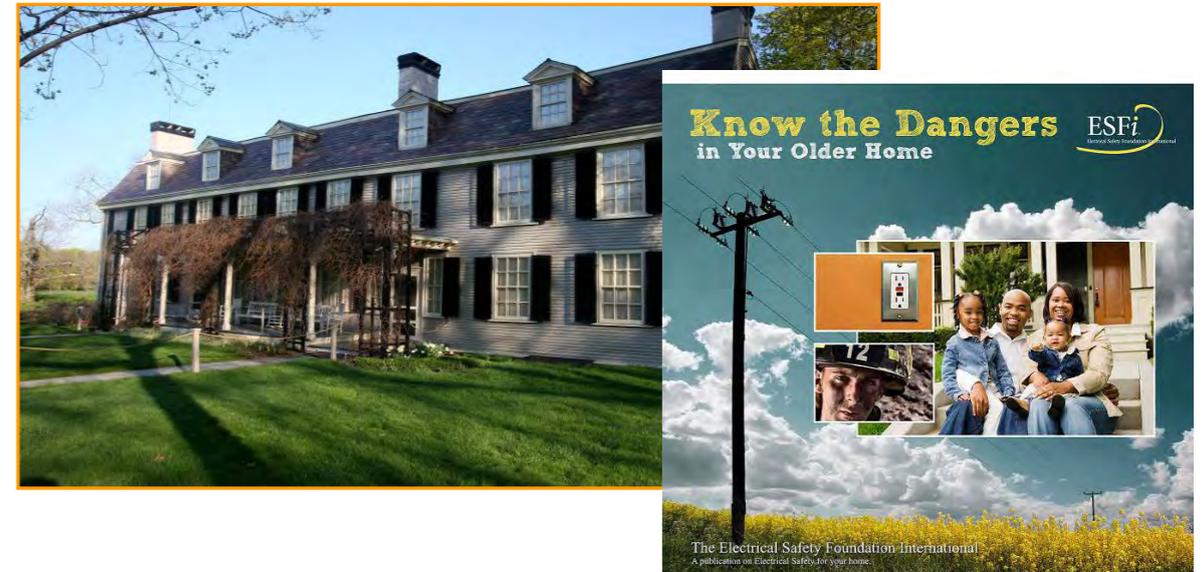
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2008 NEC requires TRRs in all areas specified in 210.52 where 125-volt, 15- and 20- ampere receptacles are located.

# Electrical Safety Month 2008



- Theme: *Know the Dangers in your Older Home*
- Focused on home inspections, AFCIs, GFCIs, etc.
- Electrical Safety CD to all US Fire Departments



## MEDIA:

- Press Kits
- Press Releases
- PSAs & B-roll
- Checklists





# Counterfeit Electrical Products

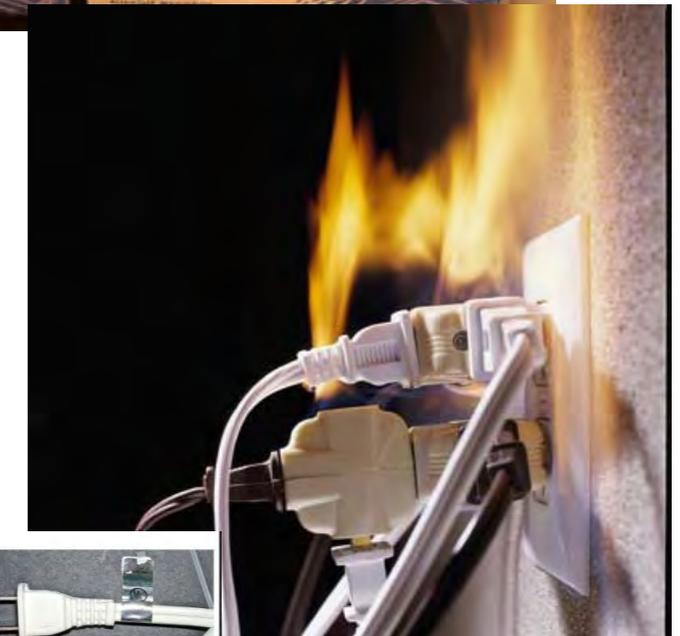
- In FY 2007, U.S. Customs and Border Protection (CBP) seized nearly \$200 million worth of counterfeit products in 13,600 seizures at U.S. ports – that is the equivalent of 37 seizures a day.
- At mid-year FY 2008, CBP had already seized 796 shipments of counterfeit goods with a domestic value of \$24.8 million – 28% increase in seizures and 30% increase in domestic value compared to mid-year FY 2007.
- Less than one-third of Americans realize that electrical products like batteries, and extension cords are counterfeited





# Counterfeit Electrical Products

- Number of counterfeit electrical goods is growing. In FY 2007, these products represented 8% of total seizures by U.S. Customs and Border Protection more than doubling the previous year.
- 64.2% of counterfeit electrical goods were purchased at legitimate shops and retailers – higher than any other product type.
- In a 2007 ESFI survey, 60% of Americans admitted that they would not be able to distinguish a counterfeit electrical product from a genuine one.



# Online Resources



The screenshot shows the ESFi website homepage. At the top, there is a navigation bar with the ESFi logo and tagline 'Your Electrical Safety Resource at Home and Work'. Below this are logos for HUBBELL, EMERSON, ABB, and a 'TRIPLE PART WARRANTY' logo. A search bar is prominently displayed with the text 'What Are YOU Looking For?'. A left sidebar contains navigation links: Home Safety, Workplace, Educators, News Media, Library, and Knowledge Base. The main content area features three articles: 'Summer Storms Causing Havoc across the U.S.', 'National Electrical Safety Month a Huge Success!', and 'Electrical Safety Feature Stories'. The 'Feature Stories' section includes a sub-section for 'AFCIs' with the headline 'Is Your Home Safe?' and an image of a man and woman looking at an electrical panel.

Knowledge base –  
a Wikipedia type  
tool

# Online Resources



Enter query to search

**ESFi**  
Electrical Safety Foundation International

HUBBELL EMERSON ABB

Your Electrical Safety Resource at Home and Work  
Contact ESFi | Our Sponsors | En Espanol

Home Safety  
Workplace  
Educators  
News Media  
Library  
Knowledge Base

## What Are YOU Looking For?

### Tamper-Resistant Outlets

**Your child could be at risk**

Approximately 2,400 children receive emergency room treatment every year for injuries caused by inserting objects into electrical receptacles, according to a 10-year report released by the U.S. Consumer Product Safety Commission (CPSC). This equates to about seven children each day. Even more alarming is that the report found that over 70% of these electrical incidents occur at home, with adult supervision typically present.

Objects children insert are everyday, easily accessible household items:

			
Hairpin - 32%	Keys - 17%	Finger - 12%	Pin, wire, screw or nail - 11%
Plug - 11%	Unidentified - 8%	Paper clip or staple - 5%	Tool (i.e., tweezers, file or knife) - 3%
		Jewelry or belt buckle - 1%	

**How serious are the injuries?**

CPSC reported almost 95 percent of injuries involve burns. These range in severity, but a significant number of serious and fatal incidents result-and even minor injuries can leave emotional trauma. Pediatric burns can be particularly serious, because the skin is thin and offers little resistance to electric flow or heat. With infants and toddlers, burns and scars are even more severe.

**These injuries can be prevented**

Using a plastic outlet cap is a common solution to prevent children from sticking objects into outlets. Unfortunately, plastic caps are not the safest option and can be easily removed by a young child. A safer solution is installing tamper resistant outlets. These specialized outlets have been so effective in preventing injuries to children that the 2008

**E-Safety Tips**  
Sign up to receive weekly announcements and important safety alerts.  
Subscribe

**ESFi Blog**  
Electrical Safety Foundation International

Search results include: definitions, statistics, brochures, and links to other multimedia resources

# Virtual Home



The screenshot shows the "virtual home" interface. At the top left, it says "virtual home" and "electrical safety foundation international". In the top right corner, it says "sound: on". The main area is split into two panels. The left panel shows a 3D rendering of a two-story house with a "Welcome! Click the house to start" button. The right panel shows a 3D cutaway of the house's interior with a "HOME" button. At the bottom, there is a "FEATURED VIDEOS" section with three video thumbnails: "GFCI Ground Fault Circuit Interrupters 02:55", "AFCI Arc Fault Circuit Interrupters 01:39", and "TR Outlets Tamper Resistant Outlets 00:54". The ESFi logo is in the bottom right corner of the interface.

Room by room tour of a home that provides safety information, statistics, energy generation resources, etc.



# Virtual Home – Family Room

Flashing circles indicate clickable items



# Virtual Home - Kitchen



X CLOSE

## Kitchen

Dish Washers



Dishwashers made since 1994 have reduced hot water use by about 30 percent, to only 7 to 10 gallons per load. In fact, replacing a 10-year old dishwasher with an EnergyStar-qualified model can save you more than \$30 a year in energy costs!

The most important feature to look for in a new dishwasher is a booster water heater. Models with these built-in heaters bring the water temperature to the 140-160 degrees recommended by manufacturers. This allows you to keep your primary water heater at an energy-saving 120 degrees and still get your dishes sparkling clean.

Another new technology available from many brands is "smart sensors" that detect the amount of food left on the

**KITCHEN ITEMS**

- GFCI
- Dish Washers
- Electric Ranges
- TR Outlet
- Refrigerators
- Toasters
- Overhead Lighting

By selecting a clickable item, a popup screen appears with safety information, energy efficiency tips, etc.

# Final Thoughts

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- **Creating Educational Resources** – *National Electrical Safety Month, Fire Prevention Month, Holiday Safety Campaigns, etc.*
- **Code Adoption** – *Advocating for the Adoption of TRRs, AFCIs, and GFCIs so new generations of homes will automatically be protected*
- **Engaging the Public when they are likely to be “electrically-minded** – *Disseminating safety messages through retailers, utilities, electricians, etc.*



**2008 National Healthy Homes Conference  
Baltimore, MD  
September 17, 2008**

**Home Safety Education**

**Angela Mickalide, Ph.D, CHES  
Director of Education and Outreach**

# Home Safety Council

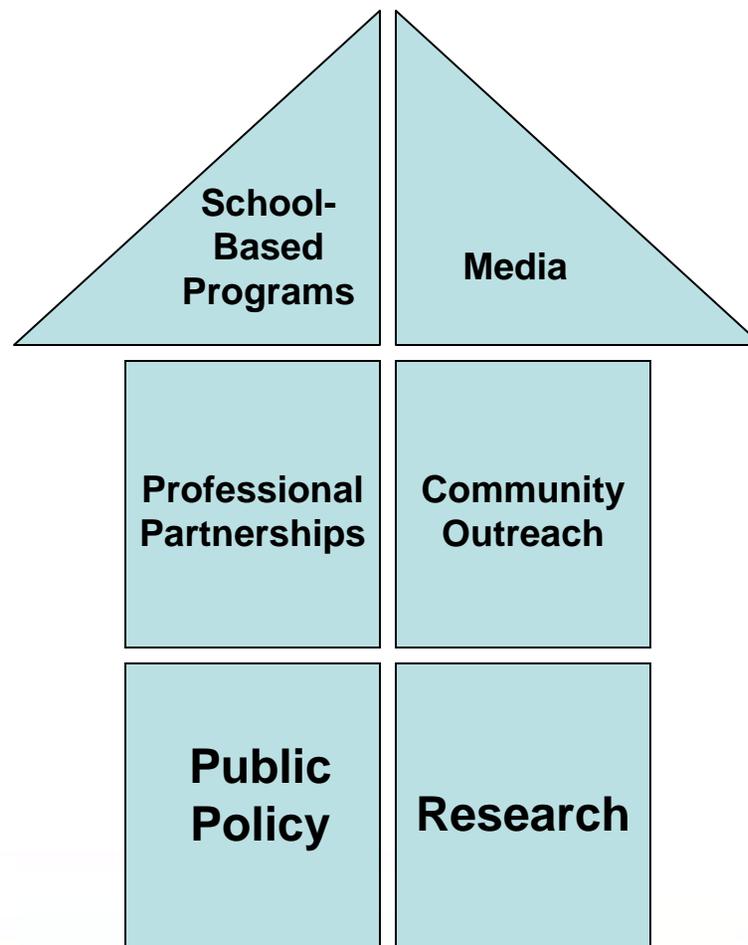


The Home Safety Council (HSC) is the only national non-profit organization solely dedicated to preventing home related injuries that result in nearly 20,000 deaths and 21 million medical visits on average each year. Through national programs, partnerships and the support of volunteers, HSC educates people of all ages to be safer in and around their homes.

- Founded in 1993 as the Lowe's Home Safety Council
- Became an independent nonprofit in 2002
- HSC reaches **millions of families** through innovative injury prevention and disaster preparedness programs each year.
- Safety programs target children, caregivers, employees, safety advocates, at risk communities, public educators and community leaders.



# Home Safety Council Mission Based Programming





Why Home Safety?

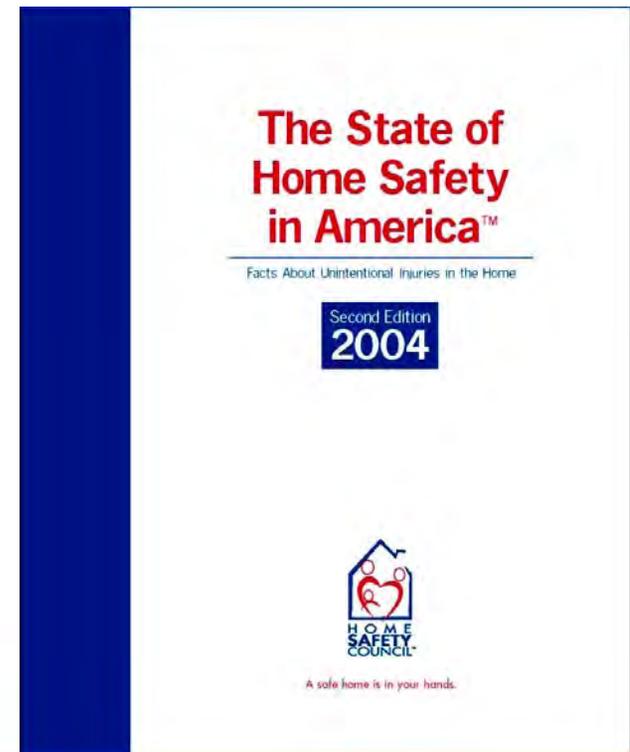
# Home Safety Research

Commissioned the largest and most comprehensive study of injuries at home – the ***State of Home Safety in America™***

Each year, preventable injuries are the fifth leading cause of death overall

Each year, preventable injuries specifically in the home:

- Are 2.5 times more likely to cause injury than car crashes
- Cost our nation up to \$380 billion



# Home Safety Research

## State of Home Safety in America™

- Leading Causes of Home Injury Death:
  - Falls
  - Poisonings
  - Fires and Burns
  - Choking
  - Drowning

Table 1.1. Unintentional Home Injury Deaths. Average Annual Number, Percentage and Rate (per 100,000 persons), All Causes, U.S., 1992-1999.

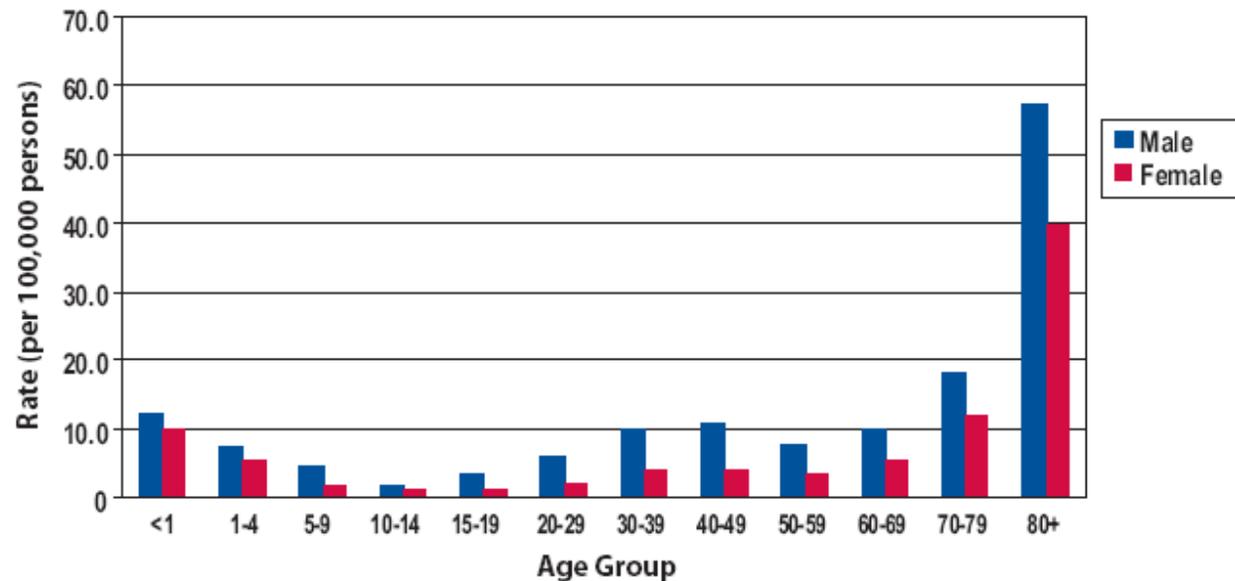
Cause of Death	Number	Percentage	Rate
Fall	5,961	33.0	2.25
Poisoning	4,833	26.8	1.83
Fire/Burn	3,402	18.8	1.29
Choking/Suffocation	1,092	6.1	0.41
Drowning/Submersion	823	4.6	0.31
Firearm	590	3.3	0.22
Natural/Environmental	427	2.4	0.16
Struck By/Against	285	1.6	0.11
Miscellaneous	230	1.3	0.09
Unspecified	215	1.2	0.08
Machinery	127	0.7	0.05
Cut/Pierce	60	0.3	0.02
Overexertion	3	<0.1	<0.01
Motor Vehicle	0	0.0	0.00
Pedal Cyclist, Other	0	0.0	0.00
Pedestrian, Other	0	0.0	0.00
Transport, Other	0	0.0	0.00
<b>TOTAL</b>	<b>18,048</b>	<b>100.0</b>	<b>6.83</b>

Data Source: National Vital Statistics System, 1992-1999.

Conducted by the University of North  
Carolina Injury Prevention Research Center

# Overall Home Injury Deaths

Figure 1.2. Unintentional Home Injury Deaths. Average Annual Rate (per 100,000 persons), by Age Group and Sex, U.S., 1992-1999.



Data Source: National Vital Statistics System, 1992-1999.

- Older adults experienced highest rates of unintentional home injury death.
- Males had higher rates than females across all age groups.



# Cost of Home Injury

**Table 7.1. Cost of Injury by Cause and the Portion Resulting from Home Injury, U.S., 1997-2001 (inflation-adjusted to year 2000 dollars, in billions of dollars).**

Cause	1997	1998	1999	2000	2001	Average across all years
Unintentional Definitely at Home	252	214	195	214	231	222
Unintentional Possibly at Home	211	165	126	137	187	165
Motor Vehicle	277	258	251	230	238	251
Suicide Acts	96	100	91	95	98	96
Violence	109	101	97	87	95	98
Other Unintentional	257	375	435	346	311	345
<b>TOTAL (\$, billions)</b>	<b>1,203</b>	<b>1,213</b>	<b>1,194</b>	<b>1,109</b>	<b>1,161</b>	<b>1,176</b>

Data Sources: National Vital Statistics System; National Hospital Discharge Survey; National Health Interview Survey; National Electronic Injury Surveillance System - All Injury Program.

- Home injuries cost society an average of at least \$380 billion in medical costs and costs to society.
- Annual medical costs exceeded those of violence- and suicide-related injuries





# Home Safety Outreach for Children

# Home Safety Council

## Safety Education for America's Schools

### The Great Safety Adventure

A "FIELD TRIP ON WHEELS"



- 1,000 square foot home (2) that shows kids and their families how to avoid the five most common household dangers including: **falls, poisoning, fires and burns, choking and suffocation and drowning**
- Celebrating its **tenth anniversary** on the road and **visiting local schools** and Lowe's stores throughout the nation
- More than **1 million children** and their families have experienced the Great Safety Adventure
- GSA visits elementary schools, YMCA's, Boy's and Girl's Clubs and Community events, as well as Lowe's stores.



# Youth Safety Outreach

## *Great Safety Adventure Curriculum Kit*

Includes injury prevention and disaster preparedness materials for schools and communities where the Great Safety Adventure was requested but unable to visit.



# Youth Safety Outreach

## *Unintentional Injury Outreach*

**“Safety Rangers Say No to Dangers” and “Code Red Rover, Grownup Come Over and video.**

Addresses the top five home injury risks for children: falls, fires/burns, poisonings, choking/suffocation and drowning.

Reach: 131,223 teachers (print) and 95,000 teachers and parents (video)



# Youth Safety Outreach

## *Disaster Preparedness Outreach*

Focuses on creating an emergency preparedness plan and “Ready-to-Go” and “Ready-to-Stay” kits.

Includes 8-page “**Get Ready with Freddie**” activity book and video sent to 13,000 third and fourth grade teachers in August 2006.

Program and contest materials were distributed to 65,000 third and fourth grade teachers in September 2007 and reached more than 15 million students, teachers, and family members.

Ten Kids Prepare America contest winners, parents and teachers came to Washington, DC for Home Safety Council activities in June 2008.



# The Kids Prepare America Contest

**Teachers • Families • Kids • Expert Network**

## The Kids Prepare America Contest

**Are You Ready?**

When it comes to an emergency or disaster, most families are not ready. The Home Safety Council thinks it's time to have kids take the lead in emergency preparedness by entering the national Kids Prepare America Student Contest!

Inspire a 3<sup>rd</sup> or 4<sup>th</sup> grade student you know to enter the Kids Prepare America contest. Ten Grand Prize winners from across the nation will be selected to travel to Washington, D.C., for an awards dinner on June 5, 2008. Each student will be accompanied by his or her teacher, an adult family member, and a safety partner from the community. Interested? [★ Click here to learn more and enter! ★](#)

**Ideas that worked!**  
Have you helped Kids Prepare America? Share your story and you could win great prizes!

**Get Ready with Freddie!**  
Learn how to be ready with Freddie Flashlight and HSC's other official mascots!

**Are You Ready?**  
Find out what you need to do to be ready!

Play the "Get Ready with Freddie!" song

Read the Latest Contest News

Brought to you by:

Sponsored by:



About HSC | The Great Safety Adventure Tour | Visit [coderedrover.org](#)  
Privacy Policy/Terms And Conditions Of Use | Site Map | Contest Rules and Regulations  
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# June 2008 Awards Dinner





# Home Safety Literacy Project



# Home Safety Literacy Project

- More than **93 million adults** in the U.S. with **limited reading ability**
- The Project is the **first national home safety outreach program** specifically designed to reach **adults with low reading skills**



# Home Safety Literacy Project

- **National Partners:**
  - ProLiteracy Worldwide
  - Oklahoma State University's Fire Protection Publications
  - Supported with 2003 and 2004 Fire Prevention and Safety Act funding through the U.S. Department of Homeland Security
- The project effectively connects two strong community forces – **fire service and literacy providers** – who share a parallel interest in enhancing the lives of high risk communities and provides them with safety teaching tools designed specifically to reach adults with low literacy skills.



# Key Messages

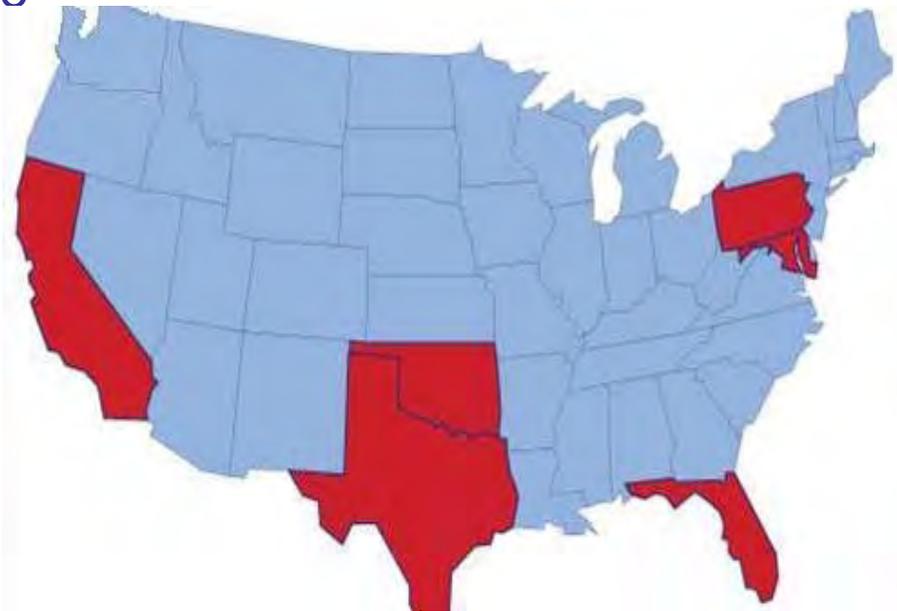
- Installing and maintaining smoke alarms
- Creating and practicing a home fire escape plan
- Developing a communications plan for disasters
- Assembling “Ready-to-Go” and “Ready-to-Stay” kits



# Pilot Tests

Seven urban and rural areas of the U.S. conducted a pilot test of the Home Safety Literacy Project:

- San Bernardino, CA
- Washington, DC
- Palm Beach, FL
- Montgomery County, MD
- Poteau, OK
- Philadelphia, PA
- Plano, TX



# Formative Evaluation Results

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- Literacy providers and fire service members from the seven pilot sites were trained in 2004 to implement and evaluate the project's instructional approach and specialized materials
- Results from pilot test were evaluated through an independent formative evaluation process immediately following the conclusion of the pilot/field test.
- Conclusion: focus on a few key messages and develop different materials for various reading levels



# HSLP Components

- Overview video and computer slide show
- Pictographs
- Readers – 2 levels
- Tabloid, “News for You”
- Posters
- Tearpads
- Pencils
- Community Leaders Guide
- Literacy Teachers Users Manual

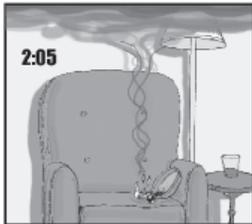


# Home Safety Literacy Project Kit

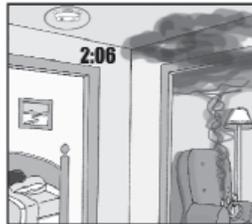


# HSLP Pictograph

Have smoke alarms that work.



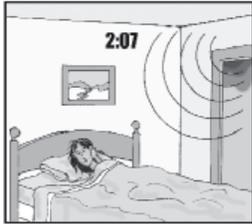
1) A cigarette is burning.



2) The smoke alarm works.



3) It makes a loud noise.



4) It wakes up the people.



5) They go to the meeting place.



6) They call 9-1-1. They are safe.

Artist: John Bonwell, contributing concept credit to LloydWarfo Advertising, Inc., TWBR

## English

Hable con su familia acerca de los desastres.



1) Hable de las diferentes clases de desastres que pueden ocurrir en donde ustedes viven.



2) Haga planes para que todos sepan qué hacer.



3) Escoja lugares seguros dentro de su casa donde puedan refugiarse en caso de que haya un tornado.



4) Escoja lugares donde se puedan cubrir rápidamente en caso de un terremoto.



5) Aprendanse los números de teléfono adonde llamar en caso de que su familia no se encuentre junta.



6) Tenga un número de teléfono de alguna persona que no viva en la misma ciudad a quien puedan llamar en caso de que su familia se encuentre separada.

## Spanish

# HSLP Reader – English

Reader 1A

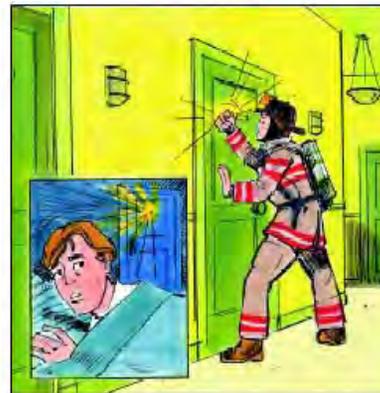


[www.homesafetyliteracy.org](http://www.homesafetyliteracy.org)

The Home Safety Literacy Project is supported by the Home Safety Council along with 2003 and 2004 Fire Prevention and Safety Grant funding through the U.S. Department of Homeland Security/Office of Domestic Preparedness.

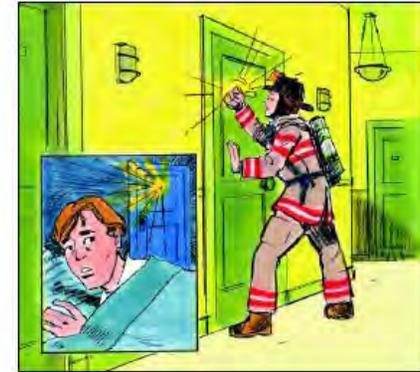
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[www.homesafetycouncil.org](http://www.homesafetycouncil.org)



## Get Out Alive: Have Smoke Alarms That Work

By Cynthia Nye



### Chapter 1 Get Out Fast

It is the middle of the night.  
Ben is sleeping.  
Bang! Bang! Bang!  
Someone bangs on Ben's door.

A woman yells, "Fire! Fire! Wake up!  
Get out! Get out fast!"

Ben wakes up fast.  
He goes to the door and opens it.  
He sees a firefighter in the hall.  
She is banging on another door.  
She is yelling,  
"Wake up! Get out! Get out fast!  
There is a fire!  
There is a fire in the building next door!"

Ben gets out fast.  
He walks down the hall and out the front door.

- **Illustrated, high-interest, limited vocabulary reader about smoke alarm installation in English**

# HSLP Reader – Spanish



- Illustrated easy-to-read, smoke alarm reader in Spanish



# HSLP Newsletter

- Home safety articles prepared in partnership with ProLiteracy Worldwide Newsletter, *News for You*, and written at reading levels 4-6

**News for You** An easy-to-read newspaper published by New Readers Press  
This guide brought to you by News for You as part of the Home Safety Literacy Project

## Protect Yourself From Fire



**H**ome is a place where you should feel safe. But your risk of dying in a fire is greatest in your own home.

Would you know what to do if a fire started in your home? Would you have a good chance of surviving?

Most fire deaths occur at home. Thousands of people die from home fires every year in the U.S. and many more are injured. In fact, fires and burns are the third leading cause of home injury deaths in the U.S.

The good news is you can protect yourself from fires in your home. You can prepare to get out safely if there is a fire. Best of all, you can act to prevent a fire from starting.

This guide provides some basic fire safety tips. The information was provided by the Home Safety Council.

### Keys to Fire Safety

**T**hese are the most important points to remember when it comes to your fire safety.

**Smoke can kill.** People often assume that most fire deaths are due to flames. In fact, most fire deaths are caused by smoke and poison gases.

Smoke and poison gases are fast, silent killers. They are very hot. They creep up on you quickly. If you breathe them in, you may pass out before you can escape the fire.

**Smoke alarms can save your life.** Every home should have working smoke alarms on each level. They cut your chances of dying in half if you have a fire. They alert family members throughout your home when smoke begins to spread.

**You have to install and maintain smoke alarms so they work right.** Smoke alarms are an easy and cheap way to protect against fire. But buying smoke alarms isn't enough. You have to install them the right way. You have to make sure they keep working. The next page of this safety guide will tell you how.

**You should create and practice a fire escape plan.** Suppose your smoke alarms go off. Family members need to know how to escape quickly and where to meet outside. Your family should practice your plan. That will help everyone act quickly and correctly in a real fire.

**Learn what to do in a real fire.** Usually your most important task is to get outside as fast as you can. If you live in a high-rise building, follow your building's escape plan.

**You can prevent a fire.** Cooking and smoking cause many home fires. Space heaters and candles also pose special dangers. By controlling all sources of heat and fire and checking your home for dangers, you can prevent common types of household fires.



### Smoke Can Kill

**M**any people are afraid of fire. They worry about hot flames, but they don't think about the quiet killers: the smoke and poison gases that cause most fire deaths.

**Fires make smoke.** A fire doesn't only produce flames. It also makes lots of thick, black smoke. The smoke has poisons in it.

**Smoke is dark.** The flames of a fire are bright. But the smoke from the fire is very dark. You might not be able to see anything through the smoke.

**Smoke is fast.** A small flame can turn into a major fire in seconds. It takes only minutes for thick, black, hot smoke to fill a home. Smoke rises quickly from floor to ceiling and moves from room to room.

**Smoke is silent.** You won't hear smoke. Smoke moves quietly. It won't wake you if you're sleeping.

**Smoke is sneaky.** Smoke and poison gases spread easily throughout a home. They can slip through vents and door cracks. Breathing in the smoke and fumes can make you drowsy. Even a small amount can put you in a deeper sleep or knock you out if you're awake. Then you could not get out without being rescued.

### Heat Can Kill Too

**T**he heat from a fire is another quiet threat.

**Heat rises.** In a fire, the room temperature increases quickly as the fire grows and spreads. At first, the air is cooler at floor level. At eye level, the heat can reach 600 degrees.

**Heat burns.** Breathing in the hot smoke and surrounding air will burn your lungs. The heat can melt clothes to your skin. Stay low to the floor, below smoke and high heat, as you escape.

**Heat causes flames.** In only a few minutes, a room can get so hot that everything inside it bursts into flames. This is called flashover.



# HSLP Tearpad

Talk about disasters with your family.



1 Talk about the kinds of disasters that can happen where you live.

Make plans so everyone will know what to do.



3 Pick safe places in your home where you can go if there is a tornado.

Pick safe places to take cover fast if there is an earthquake.



5 Learn the phone numbers to call if your family is not together.

Make a copy of the phone numbers to call for each person to keep with them.



7 Pick someone out of town to call if you get separated.

Put together the things you will need for an emergency.



9 Be prepared to stay or to go in an emergency.

[www.homesafetyliteracy.org](http://www.homesafetyliteracy.org)

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# HSLP Community Leaders Guide

## Home Safety Literacy Project Community Leader's Guide



### Table of Contents

INTRODUCTION .....	1-5
Purpose of the Project .....	1,2
Background .....	2,3
The Home Safety Literacy Project Materials .....	4,5
The National Partners .....	5
<b>PART I: FOR THE SAFETY PARTNER .....</b>	<b>6-17</b>
The Project .....	6
Reason for Your Involvement .....	6,7
Your Role As Safety Partner in the Project .....	7,8
Strengthening the Partnership .....	9
What You Should Know about Adult Literacy and Literacy Learners .....	10-12
Doing Community Education with Adult Learners .....	12-14
Home Smoke Alarm Installation Visits .....	14-17
<b>PART II: FOR THE LITERACY PARTNER .....</b>	<b>18-26</b>
Reasons for Your Involvement .....	18
Your Role in the Project .....	18,19
What You Should Know about Fire and Disaster in the U.S. ....	19-26
<b>PART III: CASE STUDIES .....</b>	<b>27-30</b>
Plano, TX .....	27-29
Palm Beach County, FL .....	29,30
<b>PART IV: WORKING IN PARTNERSHIP .....</b>	<b>31-36</b>
10 Steps to Success .....	31,32
ACKNOWLEDGMENTS .....	33-35



# HSLP Teacher's Manual

## Home Safety Literacy Project Teacher's Manual

For use with

*Get Out Alive: Have Smoke Alarms That Work*  
*Rashan's Escape Plan*  
*Are We Ready?*



By Cynthia Nye



## Home Safety Literacy Project Teacher's Manual

For use with

*Get Out Alive: Have Smoke Alarms That Work*  
*Rashan's Escape Plan*  
*Are We Ready?*



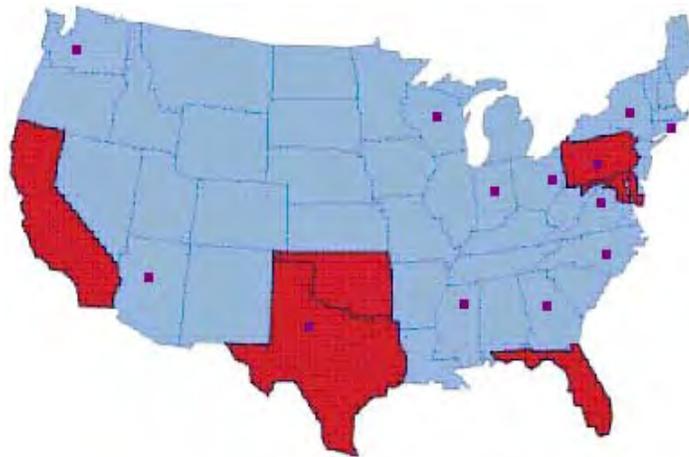
By Cynthia Nye



# Summative Evaluation Sites

Fifteen urban and rural areas of the U.S. were selected to help the Home Safety Council conduct a summative evaluation of the Home Safety Literacy Project. An additional 15 communities served as control sites. Experimental sites included:

- Camp Verde, AZ
- DeKalb County, GA
- Wabash County, IN
- Columbus, MS
- Tunica, MS
- Hickory, NC
- Wilson, NC
- Rochester, NY
- Lima, OH
- Chambersburg, PA
- Westerly, RI
- College Station, TX
- Prince William County, VA
- Tacoma, WA
- Jamesville, WI



# Summative Evaluation Results

- Adult students who participated in the *Home Safety Literacy Project* **learned more fire safety messages** than adult students who did not participate in the project.
- A greater number and percent of adult students who participated in the *Home Safety Literacy Project* **had smoke alarms installed** in their homes than adult students who did not participate in the project.
- A greater number and percent of adult students who participated in the *Home Safety Literacy Project* **created fire escape plans** for their homes than adult students who did not participate in the project.



# HSLP Poisoning Prevention Expansion

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- Goals
  - Reaches low-literacy adults learning to read or improving their English reading skills
  - Teaches the learners basic poisoning prevention methods for themselves and their families
  - Accomplishes both without impacting the poisoning prevention educators' or the adult literacy providers' budgets
- Funded by HRSA, in partnership with ProLiteracy Worldwide, to help often hard-to-reach families



# HSLP Poisoning Prevention Expansion

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- Components Available
  - Poisoning prevention brochure, highly illustrated, in English and Spanish
  - Tear pads with easy-to-read safety tips
  - Two posters for use in the classroom setting
  - Community leaders guide for poison prevention educators and adult literacy teachers
  - Flash program
  - Pencils





# All-Ways Fire Safe at Home Program

# AWFSAH Toolbox





# Safe Steps: A Falls Prevention Program for Older Adults



# Safe Steps Falls Prevention Program

Promotes three proven falls prevention strategies in one multifaceted program:

- home modifications
- medication tracking
- promotion of physical activity

Includes an educational video, wall poster and falls prevention activities



**SAFE STEPS**  
FALLS PREVENTION FOR SENIORS

A SAFER HOME AND A HEALTHIER LIFESTYLE ARE IN YOUR HANDS.

**EXERCISE DAILY**  
Using your muscles helps maintain balance, strength, and flexibility. Try Tai Chi, walking, water aerobics, or dancing.

**BATHROOM SAFETY**  
Install grab bars in your bathtub or shower stall and near a toilet. Never use towel racks for balance—they can easily come loose, causing a fall.

**NON-SKID RUGS**  
Remove throw rugs, or use rubber backing or apply double-faced adhesive carpet tape to the backs of all area rugs and runners to prevent slipping, or remove them.

**HANDRAILS**  
Install handrails on both sides of all stairways—making sure they extend the full length of the stairway. Also make sure you have lights at the top and bottom of the stairs.

**REVIEW MEDICATIONS**  
The medications you take—and even the foods you eat—can affect your balance. Check with your doctor or pharmacist annually to review your medications and diet plan.

**FOOTWEAR**  
It's best to wear thin, non-slip soled shoes, not thick-soled jogging shoes.

EMERGENCY PREPAREDNESS™ Lifetime Learning Systems, Inc. A Division of Wiley-Blackwell



# Scald Burn Prevention

# Hot Tap Water Scald Burn Statistics

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- According to the U.S. Consumer Product Safety Commission (CPSC), approximately 3,800 injuries and 34 deaths occur in the home each year due to scalding from excessively hot tap water.
- The majority of these accidents involve older adults and children under the age of five.
- Children under age five can receive third degree burns from 140 degree water in only one second.



# Hot Tap Water Scald Burn Prevention Campaign



- The Home Safety Council is partnering with H2otStop to educate families on the dangers of hot tap water scald burns and what they can do to prevent them.
- Elements include:
  - Survey Research
  - Media Outreach
  - Professional Partnerships
  - National Public Education Campaign



# Research Aims and Methodology

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- Gauge awareness of hot water burn dangers
- Measure whether adults are taking safety steps to prevent hot water burn injuries
- Commissioned Kelton Research
- Polled 1,000 adults across the United States
- Completed September 2007



# Low Perception of Risk

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- Nearly **one in seven** (14 percent) respondents stated that they or one of their family members have been burned while bathing.
- More than **75 percent** of adults have little or no concern about hot tap water as a home danger.



# Families Uninformed about Serious Risk of Hot Water Burns

- While it can take only seconds for a child to be injured by 140 degree Fahrenheit water, nearly half (**49 percent**) of respondents underestimate how fast a scald can happen.



# Families Uninformed about Serious Risk of Hot Water Burns

- Despite the increased threat of injury to young children, nearly **80 percent** of parents surveyed with young children have not turned their hot water heaters to the correct temperature setting.



# Families Uninformed about Serious Risk of Hot Water Burns

- When asked about the correct temperature for their hot water heater, only **38 percent** of adults were able to cite the proper setting of 120 degrees Fahrenheit. Nearly **40 percent** claimed to have no idea what the correct temperature would be.



# Households Engage in Dangerous Hot Water Practices

- While **81 percent** of respondents say they feel water with their hand before entering a shower or bath, very few respondents follow all necessary safety measures to prevent burns, including:
  - Turning the hot water heater down below 120 degrees Fahrenheit (**17 percent**)
  - Installing an anti-scald device (**4 percent**)
  - Testing hot water temperature with a candy thermometer (**4 percent**)



# Hot Tap Water Scald Prevention Tips

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- Set your water heater at 120 degrees Fahrenheit or lower (just below the medium setting).
- Consider using an anti-scald device, such as a HotStop tub spout or shower head, which will help prevent scald burns in the tub and shower.
- Test the water temperature before you or your children get in the tub.
- When children are in the tub, watch them closely.
- Use heavy pot holders when cooking.



# Hot Tap Water Scald Prevention Tips

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- Keep children away from the range when you are cooking.
- Turn pot handles toward the back of the range.
- Test micro-waved and heated food for heat before feeding young children.
- When drinking hot drinks, keep them out of the reach of children, away from the edge of counters and off low tables.
- Never carry a child with a hot drink in your hand. Using a “commuter mug” with a tight-fitting lid helps reduce a hot spill if the beverage tips over.



# H2otStop – Anti Scald Products

- The Home Safety Council and H2otStop, a new product from American Valve, are partnering to educate families on the dangers of hot water burns and what they can do to them.
- When hot water reaches an unsafe temperature, H2otStop quickly reduces the flow of water from the faucet to a trickle to prevent scald burns in the tub and shower.
- Consider using an anti-scald device, such as a H2otStop tub spout or shower head to help prevent scald burns in the tub and shower.
- For more scald burn prevention tips, visit:  
[www.homesafetycouncil.org](http://www.homesafetycouncil.org)



**hot stop**



ANTI-SCALD products  
safe water temperature every time





Home Safety Month

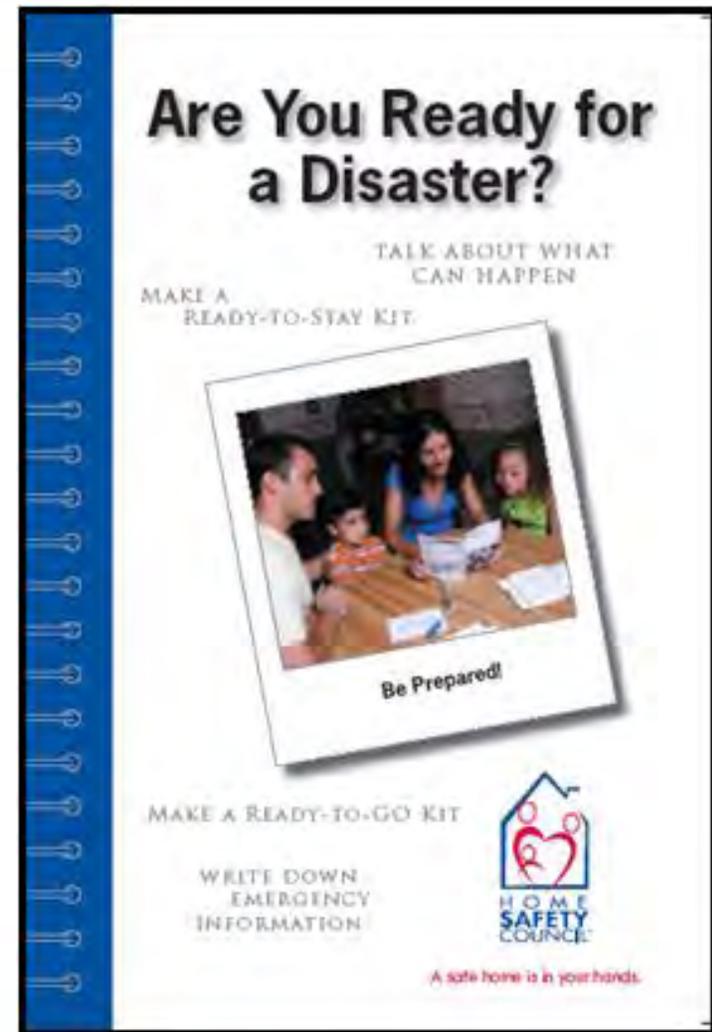
# June is Home Safety Month

- **Annual *Hands on Home Safety* Campaign**
- Home Safety Council debuted **three new resources** for the 2008 campaign:
  - ***New Are You Ready for a Disaster?* Booklet**
  - **Good Housekeeping special section**
  - **MySafeHome.org**
- **Goal: To get families to take a room-by-room approach to making their homes safer and protecting against the leading causes of home injury.**
- **Reaching out to Different Audience Groups:**
  - Employers
  - Safety Experts
  - Media
  - Public Policy



# **New Resource – *Are You Ready for a Disaster?* Booklet**

- **Step-by-step guide to help families make sure they are prepared for an emergency situation.**
- **This "flip book style" resource includes instructional photographs and checklists, in English and in Spanish, as it walks families through four simple actions they can take to help make sure they will be safe in the case of disaster.**



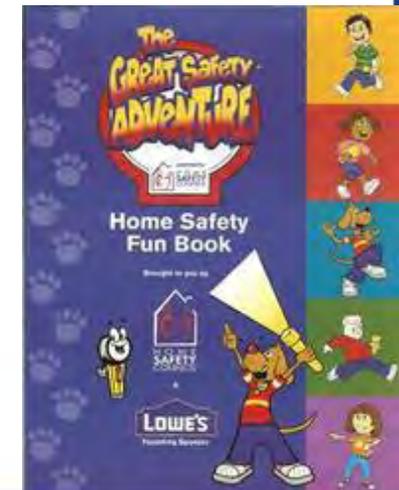
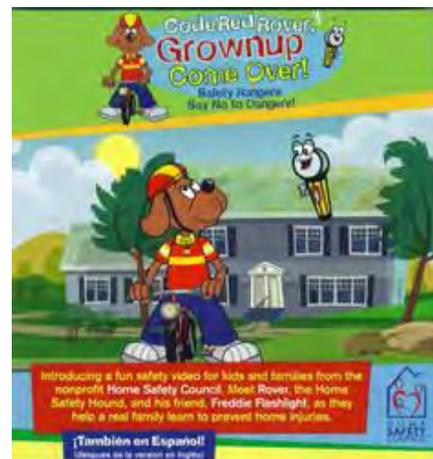
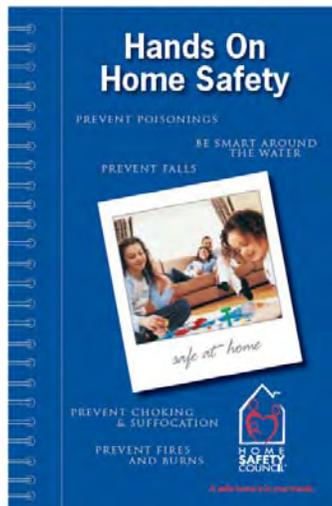
# Good Housekeeping Special Section

- HSC partnered with *Good Housekeeping* to bring home safety messages to its **26 million readers**.
- The special section features **key home safety advice** and the **latest home safety product innovations**.
- Included in the **June issue of *Good Housekeeping*** and distributed at Lowe's stores throughout Home Safety Month.



# Additional Resources

- Visit the Home Safety Council E-Store to order the following materials – [www.homesafetycouncil.org/store](http://www.homesafetycouncil.org/store):
  - **Hands on Home Safety Flipbook:**
    - Bi-lingual “flip book” style resource covering the top 5 causes of home injury.
  - **Code Red Rover DVD:**
    - Animated/live action DVD to help children identify home dangers and work with their caregivers to fix them.
  - **Great Safety Adventure Fun Book:**
    - Official activity book of the award-winning program – The Great Safety Adventure





[MySafeHome.org](https://www.MySafeHome.org)

# MySafe Home.org

- With primary funding from the **National Fire Sprinkler Association** and **Lowe's** ***MySafeHome.org*** is a dynamic new tool ***designed to help you*** in your efforts to ***educate the public.***
- The new interactive Web site lets users explore a virtual home so they can understand where dangers may be present in their own home
- Using 3-D graphics animation, MySafeHome.org presents the safety devices and preparedness plans needed to make every home safe.





Expert Network

# The Expert Network – Outreach through Fire Service, Public Health

The Expert Network provides:

- **Free or low cost** high-quality home injury prevention educational materials to safety educators
- More than 6,000 members – 70% from **local fire departments.**
- Additional educators include **nurses, public health educators, literacy teachers** and **community safety advocates.**
- **No fee to members!**
- [www.homesafetycouncil.org/expertnetwork](http://www.homesafetycouncil.org/expertnetwork)



# Additional Information

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