

# Make Safety A Tradition

*Deck the Halls Safely for All*



The Electrical Safety Foundation International's  
2013 Holiday Toolkit

ESFi

# How to Use this Toolkit

As with many of your holiday activities, advanced planning and preparation will help you manage the season safely and effectively. In this toolkit, provided by the **Electrical Safety Foundation International (ESFI)**, you will find a collection of new and updated safety materials to help you *Make Safety a Tradition* of the holiday season. The 2013 theme, “*Deck the Halls Safely for All,*” will focus on electrical safety issues associated with holiday decorations. Included in the toolkit are safety tip sheets that cover all aspects of holiday decorating to help you plan, purchase, assemble and preserve your holiday decorations safely. We also provide in-depth advice regarding heating equipment, holiday lighting and cord safety to further protect you, your loved ones, and your home. Lastly, you will find additional information regarding Tamper Resistant Receptacles (TRRs) and Ground Fault Circuit Interrupters (GFCIs), safety devices that help prevent electrical injuries, deaths, or property damage.

Would you like to help spread the message of holiday safety in your community, company, school or social group? Check out **ESFI’s *Make Safety a Tradition*** community outreach kit on our website [www.holidaysafety.org](http://www.holidaysafety.org) for instructions and additional campaign tools, including press release templates, newsletter articles, and social media outreach ideas.

## Table of Contents:

Campaign Introduction		Page 2
Naughty or Nice Holiday Safety List		Page 3
Buyer’s Guide: Purchasing Tip Sheet		Page 4
Prepare with Care: Pre-Holiday Tips		Page 5
The Right Light: Holiday Lighting Safety Tips		Page 6
Connect to Safety: Cord Safety Tip Sheet		Page 7
Warm Wishes: Space Heater Safety Tips		Page 8
Childproofing Your Holidays		Page 9
Childproofing Your Holidays: Tamper Resistant Receptacles (TRRs)		Page 10
Ground Fault Circuit Interrupters (GFCIs) Protect Against the Elements		Page 11
Wrapping Up the Holiday Season		Page 12

## Campaign Introduction



The **Electrical Safety Foundation International** would like to extend to you our warmest holiday greetings. The holidays are hectic with seasonal festivities and events, a lengthy shopping list, and extra social engagements making it easy to forget or fall behind on routine safety practices. With that in mind, **ESFI** invites you to *Make Safety a Tradition* each winter with a toolkit addressing seasonal electrical hazards. This year's theme, "*Deck the Halls Safely for All*," will help you decorate safely and avoid electrical hazards that are common during this time of year.

For many families, decorating is an essential component of holiday celebrations. Holiday lighting, boughs of holly, Christmas trees and other seasonal decor may be a part of your holiday decorating plan, but no matter what products you use all of your decorating should demonstrate a common element: electrical safety. According to the National Fire Protection Association (NFPA) decorative lights with line voltage or holiday lights were involved in an estimated average of 160 reported home structure fires per year and Christmas trees account for an additional 230 fires each year. Together, fires beginning with holiday lighting or Christmas trees resulted in an average of 13 civilian deaths, 34 civilian injuries, and \$26.3 million in direct property damage per year. This year's *Make Safety a Tradition: "Deck the Halls Safely for All"* toolkit will help you create a holiday home with all the trimmings, including safety.



Did  
you  
know..?

*50% of home Christmas tree structure fires occurred on the 15 days from December 22 through January 5 according to NFPA.*

### Who is ESFI?

The **Electrical Safety Foundation International (ESFI)** is a non-profit organization dedicated exclusively to providing unbiased information regarding electrical safety. **ESFI** proudly executes a variety of awareness campaigns to address emerging and seasonal electrical safety issues, including National Electrical Safety Month each May. These efforts aim to educate the public and help prevent fatalities, injuries, and property damage resulting from electrical fires in the home, school, and workplace. Additionally, all of our high-quality resources are available at no cost on our website at [www.esfi.org](http://www.esfi.org). We invite you to copy and distribute our resources, but not otherwise revise or alter the material.





## Naughty or Nice Holiday Safety List

As you make your lists and check them twice, here is one to keep your holiday celebrations safe and nice.

### *Naughty*

- Never attempt to extend the length of an extension cord by connecting it with another extension cord. Use an extension cord that is long enough to meet your needs.
- Never nail or staple light strings or extension cords. Use the appropriate hardware to avoid damaging the wire insulation.
- Never run an extension cord under a rug or positioned so that it is pinched by furniture.
- Do not connect more than three incandescent holiday light strings together.
- Never decorate a tree that is in contact with a power line.

### *Nice*

- Water your Christmas tree daily to keep it hydrated and reduce your risk of fire.
  - Keep all decorations, including Christmas trees, at least three feet away from heating equipment or an open flame, such as a candle or fireplace.
  - Turn off all indoor and outdoor electrical decorations and heating equipment before leaving home or going to bed.
  - Always unplug electrical decorations before replacing bulbs or fuses.
  - Plug outdoor electric lights and decorations into ground-fault circuit interrupter (GFCI) receptacles (or portable GFCIs) to prevent electric shock.
  - Always follow manufacturers' instructions and use products as they were intended regarding indoor or outdoor use.
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# Buyer's Guide: Purchasing Tip Sheet

Give your loved ones and yourself the gift of safety. If you plan to add to or replace some of your holiday decorations this season, follow this tip sheet to be sure you purchase safe electrical products.

## *Purchasing Tips*

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- ❖ Always buy electrical equipment that displays a label indicating it has undergone independent testing by a nationally recognized testing laboratory such as Underwriters Laboratories (UL), Intertek (ETL), or Canadian Standards Association (CSA).
  - ❖ Only make purchases from trusted retailers to avoid the risk of purchasing counterfeit products.
  - ❖ Be sure to buy decorations according to your intended use outdoors or indoors.
  - ❖ Send warranty and product registration forms to manufacturers in order to be notified promptly in the event of a product recall.

## *Natural and Artificial Trees*

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- ❖ When buying a natural tree, look for one that is well-hydrated with vibrant green needles that are hard to pluck and don't break easily from its branches.
  - ❖ Look for a trunk sticky with sap when purchasing a natural tree.
  - ❖ For natural trees, be sure your tree stand holds plenty of water so you can keep it hydrated.
  - ❖ According to the American Christmas Tree Association, artificial trees cost 70% less over 10 years.
  - ❖ If you use an artificial tree, choose one that is tested and labeled as fire resistant.

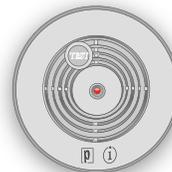
## *Light-Emitting Diode (LED) vs. Incandescent Holiday Lights*

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- ❖ LED lights last up to 20 times longer than traditional incandescent lights.
  - ❖ LEDs generate less heat—which translates into greater energy-efficiency.
  - ❖ LEDs are made with epoxy lenses, not glass and are much more durable.
  - ❖ LEDs are initially more expensive, but will recover some of the cost through energy savings.
  - ❖ Incandescent holiday lights burn more brightly than LEDs.

## Prepare with Care: Pre-Holiday Tips

Planning and preparation is essential to reducing your stress during the holiday season. While we can't help you manage your budgets, guests, and travel arrangements, we can help you plan and arrange for safe holiday decorations.

- ❖ If you haven't already done so this month, test all smoke alarms. Replace the batteries, or smoke alarm if it is not working properly.
- ❖ Inspect all electrical decorations and replace any that are cracked, frayed, or have other breaks in the insulation of any wires.
- ❖ Plan out the placement of your holiday lighting so that no more than three strands are strung together (unless using LEDs).
- ❖ Outdoor electric lights and decorations should be plugged into circuits protected by ground fault circuit interrupters (GFCIs). If circuits are not GFCI-protected, portable outdoor GFCIs can be purchased where electrical supplies are sold and require no special knowledge or equipment to install.
- ❖ Be sure to check each product label or packaging to determine whether it is intended for use indoors or outdoors and utilize accordingly.
- ❖ Arrange your decorations so that no outlet is overloaded and no cords will be pinched by furniture or positioned under rugs.
- ❖ Be sure all heating sources or open flames, such as a candle or fireplace, are given a three foot buffer from any decorations.



Visit [www.esfi.org](http://www.esfi.org) for a instructions on how to test the safety devices in your home.

It's beginning to look a lot like **danger**. Can you spot the decorating safety hazards in the image below?



## The Right Light: Holiday Lighting Safety Tips



There are a variety of ways to brighten up your season with holiday lighting arrangements. However, according to the National Fire Protection Association holiday lights and other decorative lighting with line voltage are involved in an estimated average of 160 home structure fires each year which caused an average of nine civilian deaths, 13 civilian injuries, and \$9 million in direct property damage. Electrical failures or malfunctions were factors in two-thirds of those fires. In addition, 12% of home candle fires occurred in December; 1.5 times the monthly average.

When planning and implementing your lighting design, keep these holiday lighting safety tips in mind to help reduce your risk of property damage, injury or death.

- ❖ Unlike incandescent bulbs which generate most of their energy in heat, LEDs are cool to the touch—which also results in greater energy-efficiency.
- ❖ LEDs are made with epoxy lenses, not glass and are much more durable.
- ❖ When hanging lights outdoors, use a wooden or fiberglass ladder.
- ❖ Turn off all indoor and outdoor holiday lighting before leaving the house or going to bed.
- ❖ Never drape anything over a light bulb or lamp shade.
- ❖ Avoid using candles when possible. Consider using battery-operated candles in place of traditional candles.
- ❖ Place lighted candles away from combustible material and areas where they might be knocked over.
- ❖ Never leave an open flame unattended. Keep burning candles within sight and extinguish them before you leave the room or go to bed.



Did  
you  
know..?

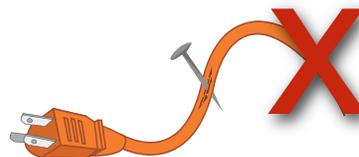
*The top three days for home candle fires are Christmas Eve, Christmas, and New Year's Day.*

## Connect to Safety: Cord Safety Tip Sheet



It's likely that when you think of cords, your main concern is hiding them from view in your holiday decorations. However, cords of all kinds need to be properly inspected, used and stored to reduce your risk of a fire. Follow these tips to help you keep cords out of sight but also safely on your mind.

- ❖ When using an extension cord, select a cord that is long enough to meet your needs. Never attempt to extend the length of an extension cord by connecting it with another extension cord.
- ❖ Check that all electrical items, including extension cords, are certified by a nationally recognized independent testing lab, such as Underwriters Laboratories (UL), Intertek (ETL), or Canadian Standards Association (CSA).
- ❖ Extension cords should only be used on a temporary basis.
- ❖ Do not place power cords and extension cords in high traffic areas or under carpets, rugs or furniture.
- ❖ Be sure a cord is not placed at a sharp angle or positioned in a way that pinches the cord.
- ❖ Never nail or staple cords to the wall or baseboard which can damage the wire insulation.
- ❖ Never remove the ground pin (the third prong) to make a three-prong plug fit a two-prong outlet.
- ❖ Make sure extension cords are properly rated for their intended use, indoor or outdoor, and meet or exceed the power needs of the item being used.
- ❖ Do not run extension cords through walls or ceilings. This may cause the cord to overheat, creating a fire hazard.
- ❖ Insert plugs fully so that no part of the prongs is exposed when the extension cord is in use.



## Warm Wishes: Space Heater Safety Tips

For many people, the holiday season falls during the coldest months of the year. To help stay warm, you may opt to use additional heating equipment throughout the house. Though effective, these devices can increase the risk of fire in your home. According to a report by the National Fire Protection Association, space heaters are one of the leading causes of home fire deaths, responsible for an estimated 412 in 2010. In addition, it is estimated that heating equipment was involved in 57,100 reported U.S. home structure fires resulting in 1,062 civilian injuries and over \$477 million in direct property damage.

The leading factors contributing to ignition in home heating equipment fires were failure to clean the device, the heat source being too close to combustibles, and a mechanical failure or malfunction of the equipment. With proper installation, use and maintenance you can reduce your risk of property loss, injury or death resulting from the use of heating equipment.

Gas-fueled heating devices pose additional danger, as they are the primary heating source responsible for non-fire carbon monoxide poisonings. Carbon monoxide is odorless, invisible and potentially deadly. Be sure to continue testing your carbon monoxide alarms and smoke alarms each month to help keep you and your loved ones safe.

### More Safe Heating Tips:

- ❖ All heaters need space. Keep things that can burn at least three feet away from heating equipment.
- ❖ Make sure you use only equipment that displays a label indicating it has undergone independent testing by a nationally recognized testing laboratory such as Underwriters Laboratories (UL), Intertek (ETL), or Canadian Standards Association (CSA).
- ❖ Make sure all fuel-burning equipment is vented to the outside to avoid carbon monoxide poisoning. Also be sure to remove snow or fallen leaves around the outlet to the outside to ensure proper venting of exhaust.
- ❖ Test all smoke alarms and carbon monoxide alarms before using additional heating equipment.
- ❖ Plug portable space heaters directly into an outlet; do not use an extension cord.

Visit [www.esfi.org](http://www.esfi.org) for more information about carbon monoxide alarms.



# Childproofing Your Holidays



The holidays are a magical time for children and adults to enjoy family traditions and create fond memories. The holidays also present additional safety hazards for homes with children or homes that may have children visiting. Take a moment and review these reminders to help keep your little ones safe during the holidays.

## Prepare Your Home:

- ❖ If you haven't already done so, have Tamper Resistant Receptacles (TRRs) installed or use safety covers on all unused electrical outlets, including those on extension cords.
- ❖ Avoid putting Christmas tree lights, ornaments, metal hooks, and other small, "mouth-sized" decorations near the ground or on lower limbs where they may be easily reached by young children.
- ❖ If small children will be present, try to avoid using decorations that are sharp or breakable. Otherwise, remember to place glass and breakable ornaments out of the reach of children.
- ❖ Hot tap water scalds can be prevented by lowering the setting on water heater thermostats to 120 degrees Fahrenheit or below and by installing anti-scald devices in water faucets.

## Practice Electrical Safety:

- ❖ Never allow children to play with lights, electrical decorations or cords.
- ❖ Watch children closely in the kitchen. They must be supervised at all times when an electric or gas stove is within reach.
- ❖ Keep children at least three feet away from all cooking appliances and heating equipment.
- ❖ Never hold a child while cooking or when removing hot food from the microwave, oven or stove.
- ❖ Toys with small, detachable pieces can present serious choking hazards. Avoid giving these gifts to small children.
- ❖ If gifts require batteries, exercise the same caution as you would with toys containing small parts. Many batteries, especially small button cells, pose choking risks if children are able to open the battery covers.

**Did  
you  
know..?**

*Each year, nearly 2,000 people of all ages in the U.S. unintentionally swallow "button" batteries used to power many electronics including hearing aids, watches and remote controls.*

# Childproofing Your Holidays: Tamper Resistant Receptacles (TRRs)

Located in practically every room in every home, electrical outlets and receptacles represent a constant and real danger wherever young children are found. Tamper resistant receptacle (TRR) technology provides a simple, affordable, permanent solution to help prevent childhood shock and burn injuries caused by tampering with wall outlets.

## What are Tamper Resistant Receptacles, or TRRs?

TRRs replace standard outlets to protect children from injury. They include a built-in shutter system that prevents foreign objects from being inserted. When equal pressure is simultaneously applied to both sides, the receptacle cover plates open, allowing a standard plug to make contact with the receptacle contact points. Without this synchronized pressure, the cover plates remain closed, preventing the insertion of foreign objects.

## Why do I need TRRs?

- ❖ Each year, approximately 2,400 children suffer severe shock and burns resulting from inserting objects into the slots of electrical receptacles – that is nearly seven children a day.

## How much do TRRs cost?

- ❖ The cost of installing a TRR in a newly constructed home is only about \$0.50 more than a traditional receptacle.
- ❖ Existing homes can be easily retrofitted with tamper resistant receptacles for as little as \$2.00 per outlet.

## Can I install them myself?



Serious injuries result when common household objects are pushed into the slots for testing.



Though they look like standard outlets, TRRs have a built-in shutter system that prevents the insertion of foreign objects.



Plugs can still be easily inserted when equal pressure is applied to both slots.



Unlike removable outlet caps, TRRs provide a permanent solution.



TRRs replace standard outlets to protect children from injury.

*Be sure to purchase TRRs that have been certified by a nationally recognized independent testing lab (i.e. Underwriters Laboratories (UL), Intertek (ETL), or Canadian Standards Association (CSA)).*

# Ground Fault Circuit Interrupters (GFCIs) Protect Against the Elements

Water and electricity don't mix. However, outdoor electrical devices are exposed to the elements which can include rain, snow, sleet, and the resulting standing water. To reduce your risk of injury or death related to these hazards, GFCIs should be used where outlets and devices may be exposed to water.

## What is a ground fault?

- ❖ A ground fault is an unintentional electrical path between a power source and a grounded surface.
- ❖ These leakage currents usually occur when an electrical appliance is damaged or the electrical parts are wet, causing electrical current to flow outside of the circuit conductors.
- ❖ If your body provides a path to the ground for this current, you could be burned, severely shocked, or electrocuted.

## What are ground fault circuit interrupters, or GFCIs?

- ❖ GFCIs are electrical safety devices that are designed to protect people from electric shock and electrocution.
- ❖ GFCIs prevent deadly shock by quickly shutting off power to the circuit if the electricity flowing into the circuit differs by even a slight amount from that returning, indicating a loss of current.
- ❖ Typically, GFCIs are installed in areas where water and electricity are in close proximity, such as the bathroom, kitchen, garage, basement, and outdoors.
- ❖ They are especially useful for cord-connected appliances and equipment used outdoors or near water.
- ❖ If your outdoor receptacles are not outfitted with GFCIs, portable outdoor GFCIs can be purchased where electrical supplies are sold.

## How much do GFCIs cost?

- ❖ GFCI outlets are fairly inexpensive, starting under \$15.
- ❖ Portable GFCIs can be purchased for under \$30.

## Can I install them myself?

- ❖ GFCIs should only be installed by a licensed, qualified electrician.
- ❖ However, portable GFCIs require no tools or specialized knowledge to install.

*Follow these simple steps to test your GFCIs every month to be sure they are properly functioning:*



1. Push the "reset" button on the GFCI to prepare the outlet



2. Plug an ordinary nightlight into the GFCI and turn it ON. The light should now be on.



3. Push the "test" button of the GFCI. The nightlight should turn OFF.



4. Push the "reset" button again. The nightlight should now go ON again.



5. If the nightlight does not turn off when the "test" button is pushed, then the GFCI is not properly protecting you from shock or electrocution. Contact a licensed electrician to check the GFCI and correct the problem.

# Wrapping Up the Holiday Season



The **Electrical Safety Foundation International** hopes your holiday season is filled with friends, family, and safety. To help keep safety a holiday tradition in your home in the future, **ESFI** is reminding you of these post-holiday tips:

- ❖ Holiday decorations are meant for temporary use. Leaving your decorations up for extended periods leaves wires unnecessarily exposed to the elements, which can decrease the product's shelf life and increase the risk of electrical hazards.
- ❖ With time, Christmas trees continue to dry out making them increasingly flammable. Trees decorated with holiday lights have an increased risk because they're in direct contact with an electrical source. Check with your local community to find a recycling program through which to dispose of your tree early in the new year.
- ❖ Always unplug decorations by using the gripping area. Pulling on the cord could damage the wire and present a shock or fire hazard.
- ❖ As you take down holiday lights, inspect the wiring and discard any that have cracked, frayed, or appear to have damaged wire insulation.
- ❖ Make sure to label or store indoor decorations separate from those intended for outdoor use.
- ❖ Store electrical decorations in a dry area that is not accessible by children or pets.



For more information on how to safely wrap up the holidays and other electrical safety resources for use throughout the year, visit [www.esfi.org](http://www.esfi.org). or contact us at [info@esfi.org](mailto:info@esfi.org) or (703) 841-3229.