

June 2017

Theme: Fire Safety and Safe Summer Fun

Week 1: Marina/Boating Electrical safety

Week 2: Outdoor Grilling Safety

Week 3: Campfire Safety

Week 4: Fireworks Safety

Events:

Junior Firefighter Camp June 3 – June 8, 2017

Educator Tip: Fire Safety starts with a simple conversation, get your fire department involved in that conversation at community gatherings, ask to speak at a monthly rotary club or board of education meeting. Make handouts available to people as they walk in or are leaving, so they'll have something to remind them about the information you presented. You can also use these settings to meet people who can make a difference in your community.

National Fire Service History

- June 11, 1805 - Detroit, MI Destroyed by Conflagration
- June 5, 1853 - Oswego, NY Great Fire
- June 19, 1867 - Philadelphia Wall Collapse (9 FF deaths)
- June 5, 1946 - Chicago LaSalle Hotel Fire (61 deaths)
- June 17, 1972 - Boston Hotel Fire (9 FF's Killed)
- June 7, 1997 - Chelsea, MA Conflagration (8 Alarms)
- June 16, 2003 - Memphis Family Dollar Fire (2 FFs Killed)
- June 18, 2007 - Charleston, SC Super Sofa Fire (9 FFs Killed)
- June 30, 2013 - Arizona Wildfire (19 FFs Killed)

West Virginia Fire Service History:

- June 5, 1915: The Old Mill at Rock Springs Park in Chester burned, killing four young people.



Electrical Safety Tips for Marina Owners

Unknowingly, many swimmers and boat and marina operators place themselves in the face of danger by swimming near electric-powered boats and docks. This innocent act of fun can turn tragic as electric shock drowning occurs each year. Raising awareness among marina and boat operators can help prevent electric shock drowning or other electrical injuries while out on the water. Additionally, there are electrical safety precautions boaters must adhere to to ensure the electrical safety of the entire marina.

Learn how to keep marinas and docks safe with these tips from the Electrical Safety Foundation International (ESFI):

- Do not allow swimming in or around your marina. While you cannot prevent individuals from acting on their own accord, posting signs prohibiting swimming is an easy way to help prevent an electric shock drowning incident. Place warning signs in prominent areas around your marina such as: "ELECTRIC SHOCK HAZARD RISK: SWIM AT YOUR OWN RISK."
- Have your dockside electrical system (pedestal) inspected and updated by a qualified electrician annually. If you are thinking of having a new one installed, have it installed by a qualified electrician to be sure it meets the NEC and NFPA safety codes and standards.
- Have Ground Fault Circuit Interrupters (GFCI) installed on the dock and test them once a month. Use portable "UL- Marine Listed" GFCIs when using electricity near water. They will decrease the chances of electrically related injuries and deaths.
- Require boat owners and renters to use only "UL- Marine Listed" shore or marine power cords, plugs, receptacles, and extension cords that have been tested by Underwriters Laboratories (UL), Canadian Standards Association (CSA) or ETL SEMKO (ETL). They are specifically designed to keep people safe when using them near water. Never use cords that are frayed or damaged or that have had the prongs removed or altered. Damaged cords exposed to water could result in electric shock drowning or other electrically-related injuries.
- If you question the safety of your dock's electrical system, immediately turn off the power supply at the electrical panel and do not turn it back on until it has been checked by a certified marine electrician.
- Immediately fix all electrical safety hazards and maintain routine inspections to prevent problems before they occur.
- Never stand or swim in water when turning off electrical devices or switches.
- Plan annual safety events at your marina where owners can learn about boat and dock electrical safety and have their boats inspected by licensed electricians.

What is a circuit breaker?

A circuit breaker is an automatically operated electrical switch designed to protect an electrical circuit from damage caused by an overload or short circuit. Circuit breakers were designed to detect faulty electrical conditions within electrical systems and interrupt current flow.

What is a GFCI?

GFCIs are electrical safety devices that trip electrical circuits when they detect ground faults or leakage currents. These outlets or circuit breakers prevent shock and electrocutions by quickly shutting off power to the circuit if the electricity flowing into the circuit differs by even a slight amount from that returning.

What is a portable GFCI?

While most GFCIs are outlets, a portable GFCI requires no special knowledge or equipment to install. It adds flexibility in using receptacles that are not protected by GFCIs. Portable GFCIs should only be used on a temporary basis and should be tested prior to every use.

What is an ELCI?

Equipment Leakage Circuit Interrupters (ELCIs) are Circuit Breakers that provide protection from current leakage and overcurrent. ELCIs measure current flow within electrical wires and immediately switches electricity off if an imbalance of current flow is detected. ELCIs provide whole-boat protection.

What is a shore power cord or marine power cord?

A shore power cord is a cord designed specifically for use near water to provide shore side electrical power to ships and boats while its main and auxiliary engine is turned off.

What is a pedestal or dockside electrical system?

A pedestal or dockside electrical system is a power box designed with corrosion-resistant materials to provide electricity safely on the dock meeting safety standards for use in marine environments.





5 Tips for Boat Owners:

- **Swimming Safety** - Never allow swimming near the boat, marina, or launching ramp. Residual current could flow into the water from the boat, or the marina's wiring, potentially putting anyone in the water at risk of Electric Shock Drowning.
- **Put It to the Test** - Be sure your boat is properly maintained and consider having it inspected annually. GFCIs and ELCIs should be tested monthly to ensure functionality. Conduct leakage testing to determine if electrical current is escaping the vessel.
- **Use the Right Tool** - Never use household cords near water. Use only portable GFCIs or shore power cords (including "Y" adapters) that are "UL- Marine Listed" when using electricity near water.
- **Know Your Surroundings** - Know where your main breaker(s) are located on both the boat and the shorepower source so that you can respond quickly in case of an emergency. Be aware of any potential electrical hazards by checking for nearby power lines before boating, fishing, or swimming.
- **Learn the Code** - Regularly have your boat's electrical system inspected and upgraded by a certified marine electrician to be sure it meets your local and state NEC, NFPA, and ABYC safety codes and standards.

Safety Device Guide:

What is a circuit breaker?

Circuit breakers are designed to detect faulty electrical conditions within electrical systems and interrupt current flow.

What is a Ground Fault Circuit Interrupter (GFCI)?

These outlets or circuit breakers prevent shock and electrocutions by quickly shutting off power to the circuit if the electricity flowing into the circuit differs by even a slight amount from that returning.

What is a portable GFCI?

A portable GFCI requires no special knowledge or equipment to install. Portable GFCIs should only be used on a temporary basis and should be tested prior to every use.

What is an Equipment Leakage Circuit Interrupter?

ELCIs measure current flow within electrical wires and immediately switches electricity off if an imbalance of current flow is detected.

What is a shore power cord or marine power cord?

Shore power cords and Y-adaptor cords are designed specifically for use near water to provide shore side electrical power to ships and boats while its main and auxiliary engine is turned off.

What is a power pedestal or dockside electrical system?

A power pedestal or dockside electrical system is a power box designed with corrosion-resistant materials to provide electricity safely on the dock.

Electric Shock Drowning:

Electric Shock Drowning occurs when a body makes contact with electrified water and becomes a conductor of electricity leading to the possibility of complete loss of muscle control, rapid or irregular heart beat (ventricular fibrillation), and even electric shock death.

Common Causes:

Docks and boats can carry sources of electricity. Faulty wiring or the use of damaged electrical cords and other devices can cause the surrounding water source to become energized.

How to Avoid:

Obey all "No swimming signs".

NEVER swim near a marina.

NEVER swim near a boat while it is running.

If you feel any tingling sensations while in the water, tell someone and swim back in the direction from which you came. Immediately report it to the dock or marina owner.

How to Respond:

Do not enter the water!

Call 911 or VHF Channel 16 immediately

If possible turn off all nearby power sources

Extreme caution should be taken when removing the victim from the water.

If the victim does not have a pulse and not breathing begin CPR or use (AED) Artificial Electrical Defibrillator if available.

Marina Safety Checklist:

Familiarize yourself with your marina and help prevent electrical hazards. Use this checklist to talk with the marina manager or owner about potential safety concerns.

- Are any cords cracked or frayed?
- Is there corrosion or other damage on any of the power pedestals?
- When was the marina last inspected? Inspections should be performed yearly.
- What edition of the codes (NEC, NFPA, ABYC) does the marina comply with?
- What type of ground fault protection does the marina provide?



WARNING: PREVENT ELECTRIC SHOCK DROWNING FOR MARINA AND DOCK OWNERS AND OPERATORS

Unknowingly, many swimmers and boat operators place themselves in the face of danger by swimming near electric-powered boats and docks. This innocent act of fun can turn tragic as electric shock drowning occurs each year. Help prevent electric shock drowning or other electrical injuries with these tips from ESFI.



For more information on boat and marina electrical safety visit: www.esfi.org

GRILLING *Safety*

No matter what outdoor event you organize this year, food will surely play a major role in the festivities, and when you're away from home, portable grills will most likely be at the center of all the activities. Fortunately, by following some simple safety tips and guidelines you, your family and friends can reduce the risk of injuries.

Consider the following as you head out to the nearest campground, park or beach:

- Certain areas have restrictions regarding campfires and grills. Check if your area has any fire restrictions in place. Choose only those areas where fires are permitted.
- Check the fire danger rating in your area to determine if weather, or other factors make it dangerous to light a fire.

To start charcoal for cooking:

- There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to ignite the charcoal using newspaper as a fuel
- If you use a charcoal chimney, use a long match to avoid burning your fingers when lighting the paper
- If you choose to use lighter fluid, use only fluid intended for charcoal grills
- Never add charcoal starter fluid to coals or kindling that has already been ignited
- Never use gasoline or any other flammable liquid except charcoal starter or lighter fluid to start a charcoal fire

While cooking:

- Place the grill well away from overhanging branches according to the manufacturer's instructions
- Place the grill a safe distance from lawn games, play areas and foot traffic
- Keep children and pets, and anything that can burn like food wrappers, an oven mitt or towel, at least 3-feet away from open flames and the grill
- Use long-handled grilling tools to give the chef plenty of clearance from heat and flames
- Have an adult present at all times when a campfire or grill is burning. Keep the fire small and never leave a fire unattended!

To dispose of charcoal after cooking:

- Before going to sleep or leaving the area, douse the fire with water and make sure the area is cool to the touch.
- Five percent of outside or unclassified grill fires occurred in a lawn, field or open area
- Empty the coals into a metal container with a tight-fitting lid that is used only to collect coals
- Place the container outside and away from anything that can burn

- Never empty coals directly into a trash can
- Store the charcoal starter fluid out of reach of children and away from heat source

Three out of five households own a gas grill, according to NFPA's latest "Home Grill Fires" report, which translates to a lot of tasty meals. But it also means there's an increased risk of home fires. In 2009 - 2013, an annual average of 8,900 home fires involved grills, hibachis or barbecues, and close to half of all injuries involving grills were due to thermal burns. While nearly half of the people who grill do so year-round, July is the peak month for grilling fires followed by May, June and August.

SAFETY TIPS

- » Propane and charcoal BBQ grills should only be used outdoors.
- » The grill should be placed well away from the home, deck railings and out from under eaves and overhanging branches.
- » Keep children and pets at least three feet away from the grill area.
- » Keep your grill clean by removing grease or fat buildup from the grills and in trays below the grill.
- » Never leave your grill unattended.
- » Always make sure your gas grill lid is open before lighting it.

CHARCOAL GRILLS

- » There are several ways to get the charcoal ready to use. Charcoal chimney starters allow you to start the charcoal using newspaper as a fuel.
- » If you use a starter fluid, use only charcoal starter fluid. Never add charcoal fluid or any other flammable liquids to the fire.
- » Keep charcoal fluid out of the reach of children and away from heat sources.
- » There are also electric charcoal starters, which do not use fire. Be sure to use an extension cord for outdoor use.
- » When you are finished grilling, let the coals completely cool before disposing in a metal container.



Your Source for SAFETY Information

NFPA Public Education Division • 1 Batterymarch Park, Quincy, MA 02169

PROPANE Grills

Check the gas tank hose for leaks before using it for the first time each year. Apply a light soap and water solution to the hose. A propane leak will release bubbles. If your grill has a gas leak, by smell or the soapy bubble test, and there is no flame, turn off the gas tank and grill. If the leak stops, get the grill serviced by a professional before using it again. If the leak does not stop, call the fire department. **If you smell gas while cooking, immediately get away from the grill and call the fire department.** Do not move the grill.

If the flame **goes out**, turn the grill and gas off and wait at least **15 minutes** before re-lighting it.

FACTS

- ! July is the peak month for grill fires.
- ! Roughly half of the injuries involving grills are thermal burns.



www.nfpa.org/education





Campfire Safety

Basic campfire safety should be a skill for everyone heading out on a camping adventure. Did you know that more than four out of every five forest fires are started by people? You don't want to start a wildfire. Not only because of the disastrous consequences a wildfire can have for the nature and nearby settlement but also because a wildfire could trap you.

Remember the campfire safety rules:

- Build a fire only on bare rock, sand or mineral soil - clear all vegetation away from your fireplace.
- Use stones to surround your campfire.
- Keep your campfire small.
- Keep water nearby for throwing on the fire if it gets out of control.
- Never leave a campfire unattended

When putting out your campfire:

- Drown the campfire with water.
- Make sure all embers, coals, and sticks are wet.
- Feel all materials with your bare hand. Everything including the stones surrounding the campfire should be cool to the touch.
- When you think you are done add more water - take the time to completely put out your campfire.
- If you don't have water at hand, or if it is scarce, then use dust and dirt to put out your campfire. Check your fireplace even more carefully before leaving.

(from wilderness-survival-skills.com)

BE CONCERNED
about



CAMPFIRE SAFETY

1. Build fire in areas away from overhanging trees and on flat ground
2. Clear area of all leaf & woody debris;
3. Ring your fire area with rocks
4. Keep your fire small
5. NEVER leave fire unattended
6. Have water and shovel on hand
7. Put out fire at first signs of increased winds and change in its direction
8. To Put Out Fire ... drench fire with water, stir and drench again; stir ashes; drench under and around your ring of rocks
9. 'Cold Trail': with the back of your bare hand, touch the entire fire area for heat; drench again until fire is DEAD OUT





Fireworks Safety

Fireworks during the Fourth of July are as American as apple-pie, but did you know that two out of five fires reported on that day are started by fireworks, more than for any other cause? The good news is you can enjoy your holiday and the fireworks, with just a few simple safety tips:

Proceed with caution!

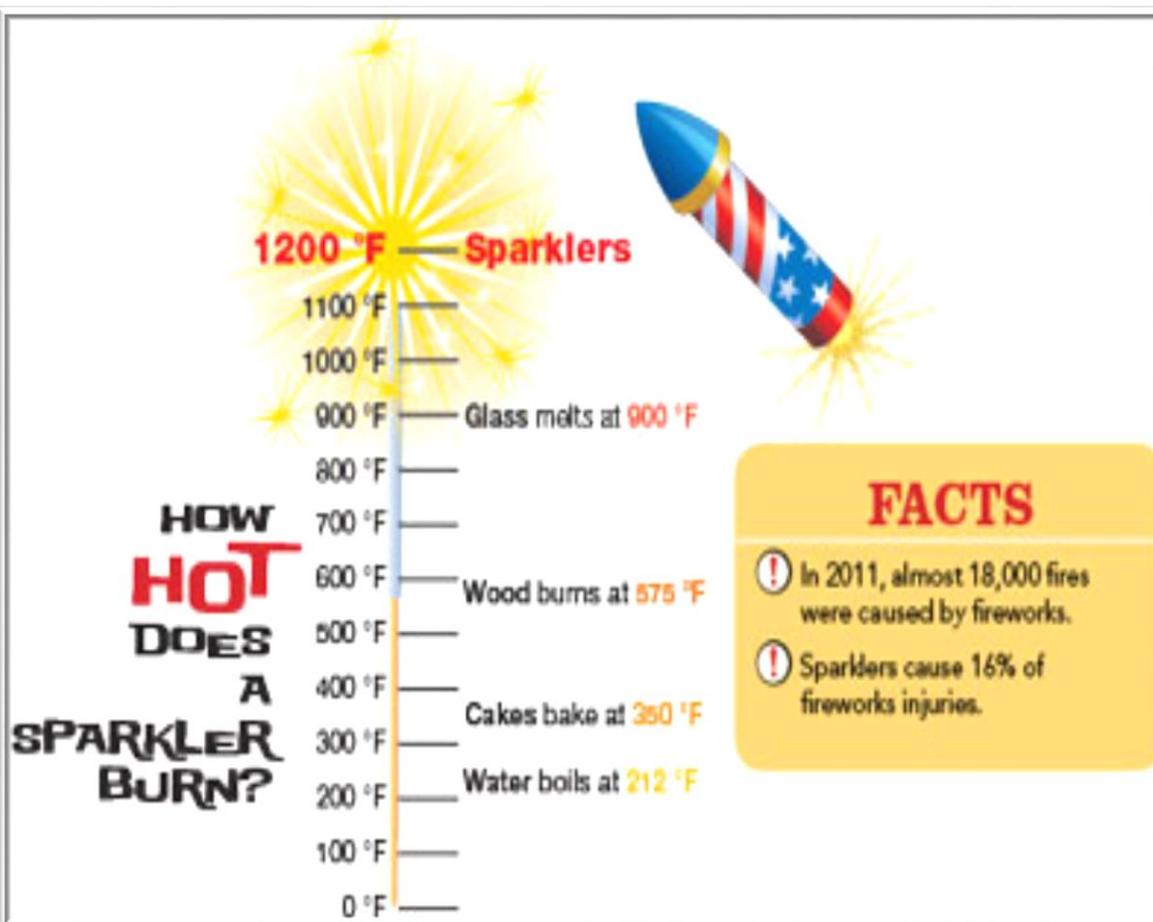
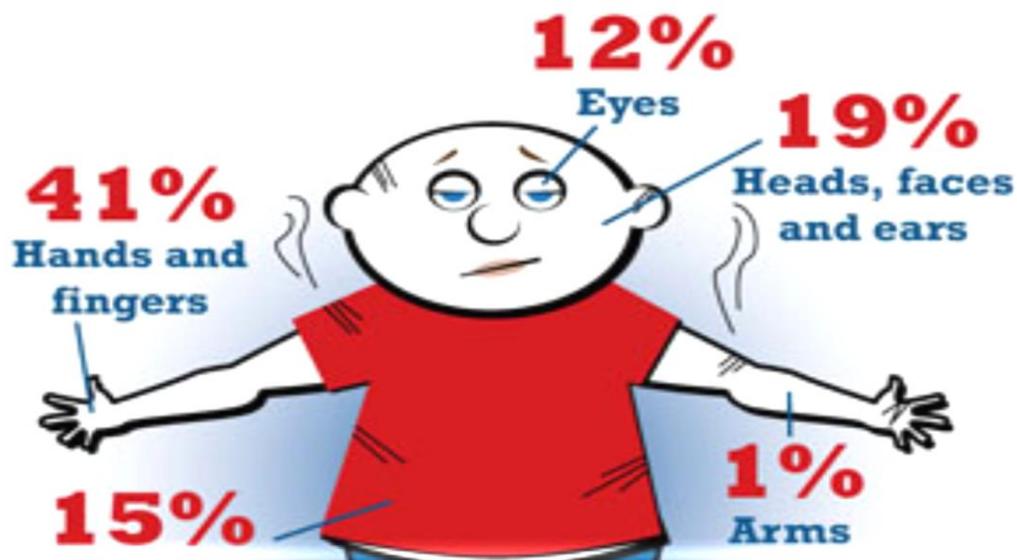
- Leave fireworks to the professionals. Do not use consumer fireworks.
- The safest way to enjoy fireworks is to attend a public display conducted by trained professionals.
- After the firework display, children should never pick up fireworks that may be left over, they may still be active.

Fireworks by the numbers

- From 2009-2013, U.S. fire departments responded to an average of 18,500 fires caused by fireworks. These fires included 1,300 structure fires, 300 vehicle fires and 16,900 outside and other fires. An estimated two people were killed in these fires.
- In 2014, U.S. hospital emergency rooms treated an estimated 10,500 people for fireworks related injuries; 51% of those injuries were to the extremities and 38% were to the head. These injury estimates were obtained or derived from the [Consumer Product Safety Commission's 2014 Fireworks Annual Report by Yongling Tu and Demar Granados](#).
- The risk of fireworks injury is highest for young people ages 5-9, followed by children 10-19.
- More than one-quarter (28%) of fires started by fireworks in 2009-2013 were reported on July 4th. Almost half (47%) of the reported fires on the Fourth of July were started by fireworks.

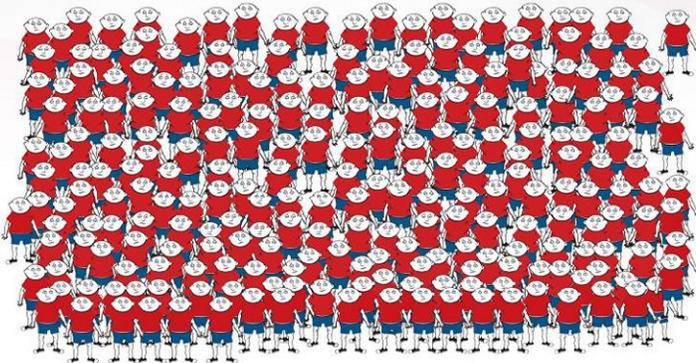


Most Injured Body Parts

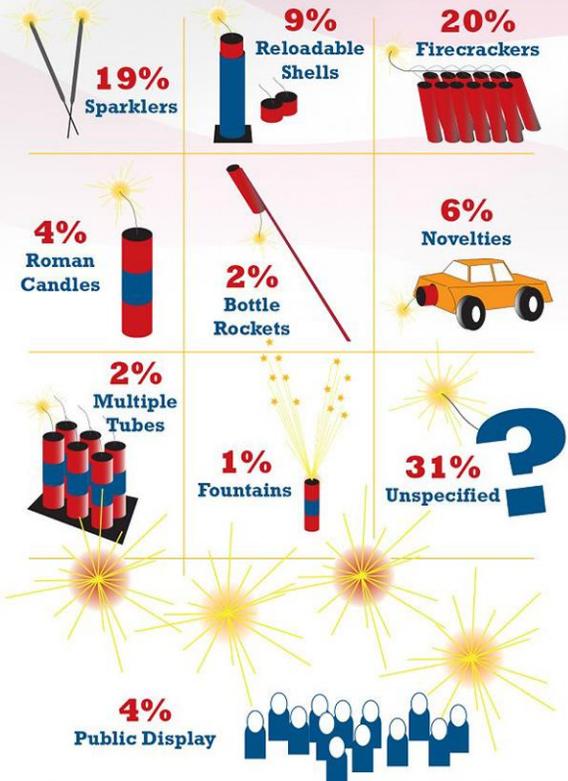


Fireworks Injuries

230 people on average go to the emergency room every day with fireworks-related injuries in the month around the July 4th holiday.



Injuries by Fireworks Type*

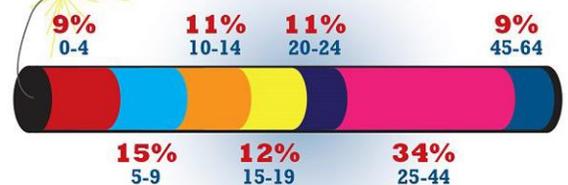


*These percents do not account for how many products are used.

Fireworks Safety Tips

- ★ Never allow **children** to play with or ignite fireworks.
- ★ **Never** try to **re-light** or **pick up** fireworks that have not ignited fully.
- ★ Keep a **bucket of water** or a **garden hose** handy in case of fire or other mishap.
- ★ Make sure fireworks are **legal** in your area before buying or using them.
- ★ Light fireworks **one at a time**, then **move back** quickly.
- ★ More Fireworks Safety Tips – www.cpsc.gov/fireworks

Injuries by Age



Source: U.S. Consumer Product Safety Commission 2013 Fireworks Annual Report



NSN 14-8