



101 Critical Days of Summer



Safety Tip #6 – Fireworks



The 4th of July is coming up soon and a lot of people will be celebrating by shooting off fireworks or watching a good fireworks display. When done right, fireworks create a dramatic and spectacular display of colored lights and/or loud booms in the night sky. However, they are dangerous and many people get injured by them each year. In fact, they are generally considered more hazardous than our military explosives and ammunition.

Before you plan on having a big fireworks party at your home, you might want to check if fireworks are legal in your area. Check out the National Council of Fireworks Safety site (<http://www.fireworksafety.com>) and your local Fire and Police departments to be sure there is no burn ban because of dry weather.

Be sure that you have and are using legal fireworks. The illegal fireworks may be more hazardous to use due to lack of quality control during the manufacturing process. Legal fireworks are normally packaged in bright colored packages, have safety warnings and show the country of origin. Illegal fireworks such as M-80s, M-100s, blockbusters, etc., have been banned since 1996, but illegal fireworks are still responsible for one-third of all fireworks injuries.

Sparklers account for over half of the injuries to children under the age of 14. They can reach temperatures of 1,800 degrees Fahrenheit so be sure children are old enough to understand how to use them safely.



Safety is very important whether it's a big commercial show or the backyard use of fireworks with family and friends. No one wants a fun time to be spoiled by an accident. Some generally accepted safety rules are:

- Maintain adult supervision while fireworks are being used.
- Only persons over the age of 12 should be allowed to handle sparklers of any type. Do not allow any running or horseplay.
- Light fireworks at arm's length using a taper or a firework lighter.
- Stand well back and NEVER return to a firework after it has been lit, it could explode in your face.
- Alcohol and fireworks are not a good mix. Have a designated "Shooter".
- Use eye protection when shooting fireworks and do not let any part of your body get over the fireworks.
- Fireworks should be used outdoors.
- Never throw or point fireworks at another person.
- Do not handle or try and relight "duds". Wait 20 or 30 minutes, soak the duds in water and then properly dispose of them.
- Read and follow the instructions on how to use the item.
- Keep a bucket of water or garden hose handy in case of fires.
- Take care of sparklers, wear gloves to hold them and dispose of sparklers in a bucket of water as soon as they are finished.
- Keep all pets and animals indoors. Pets get very frightened on fireworks night, so keep all your pets indoors and close all the curtains to make things calmer.

Remember to use good common sense. Follow safety rules and be careful so you and family members do not become a fireworks statistic.

Now some fun stuff:



Have you ever wondered what makes those pretty colors when a skyrocket blows up? There are a lot of different chemicals used, but some of the most common are “aluminum & magnesium (produces silver and white flames and sparks), barium salts (green color), copper salts (blue color), strontium salts (red color) and sodium salts (yellow color).



How large are skyrockets? The small bottle rockets are around a quarter of an inch in diameter but commercial skyrockets or shells can be 12 inches in diameter and weigh around 30 pounds.

What is the safe distance that the public should be kept away from the firing point of large skyrockets/ shells? The minimum distance is 75 feet, but for a 12-inch shell the distance is 1,680 feet.

The first fireworks recorded in America were set off by an Englishman, Captain John Smith, famous in the story of Pocahontas.

Three sparklers burning together generate the same heat as a blowtorch.

The world’s largest single firework was set off at a festival in Japan in 1988. The shell weighed over half a ton and the burst was over a kilometer across.



A Guide to Fireworks:

- **Split Comet** – Sparkling, the comets split to create a golden Milky Way effect
- **Willow** – Like a weeping willow tree, long trails of color fall slowly earthward.
- **Palm Tree** – The shell leaves a trail as it goes up, forming the tree trunk. Reaching its apex, the shell bursts open, revealing the leaves of the palm.
- **Chrysanthemum** – Perfect, symmetrically round breaks forming the shape of a flower.
- **Salute** – Flash of bright light and a loud BOOM.



Audience Viewing Firework Etiquette:

1. Obey police, respect public and private property
2. Bring chairs, blankets, and most importantly, bring your manners
3. Bring a litter bag to clean up and take home your own refuse.
4. Remember, first in, last out, so wait patiently for your turn and drive carefully.
5. Don’t bring any of your own fireworks – they are illegal and very dangerous.

PARENTS SHOULD SUPERVISE THE ORDERING AND USE OF MAIL-ORDER "MAKE YOUR OWN" FIREWORK KITS AND COMPONENTS. MAIL-ORDER KITS AND COMPONENTS DESIGNED TO BUILD BANNED FIREWORKS ARE PROHIBITED

Some sights with more info.....

<http://www.usacitylink.com/usa/safety.html>

<http://www.woodlands-junior.kent.sch.uk/customs/guy/fireworks/index.htm>

Excellent Safety Video.....

http://www.fireworksafety.com/safety_video.html

Fireworks Safety Quiz....

http://preventblindness.org/resources/factsheets/NC_MK23_08-106_Firewks_Qz.pdf



This document was derived from multiple sources. Sources are available upon request in the 157 ARW/SE Office.