



Fireworks

Publication #12



The American traditions of parades, cookouts, and fireworks help us celebrate the summer season, especially our nation's birthday on the Fourth of July. However, fireworks can turn a joyful celebration into a painful memory when children and adults are injured or killed while using fireworks. Although legal consumer fireworks that comply with U.S. Consumer Product Safety Commission (CPSC) regulations can be relatively safe when used responsibly, all fireworks, by their nature, are hazardous and can cause injuries. Fireworks are classified as hazardous substances under the Federal Hazardous Substances Act (FHSA). Some fireworks, such as illegal firecracker-type devices (M-80s, quarter sticks) and professional display fireworks should never be handled by consumers, due to the risk of serious injury and death.

Following are a few examples of recent deaths caused by legal and illegal fireworks:

A 47-year-old male died of blunt trauma to the back of his head. According to witnesses and officials, the victim placed a consumer mortar type firework—1-1/4" in diameter and 4" to 5" tall—in a tube to light it. The victim lit the fuse and placed the tube on top of his head. The firework exploded and the victim fell to the ground. The victim was pronounced dead on the scene. The victim had been consuming alcohol prior to the incident.

A 12-year-old boy was with other juveniles and an adult shooting bottle rockets and Roman candles in a neighborhood street. The adult saw one juvenile take a canister shell and walk away. The victim was asked to retrieve the shell. The police were told that the shell was tossed at the victim. It was not known if the shell hit the ground. It was reported that the shell was torn and a brown substance was leaking from the shell. The victim was holding the mortar tube at chest level when the incident shell was put in the tube and ignited. Witnesses reported hearing a

“strange sound” after the shell was lit. Police believed the sound was the shell firing upside down in the mortar tube. The device went off, and there was a blowout in the tube. The debris hit the victim in the chest area near the breast bone. The victim was taken to a hospital where he died.

A 41-year-old male set off fireworks in a parking lot in front of a crowd of roughly 150 people. The victim lit an artillery shell in a mortar as the grand finale for his fireworks show. The shell failed to detonate. The victim then went over the mortar and looked down into the tube. The firework device ignited. The shell struck the victim in the face, with part of the shell casing becoming lodged in his left eye cavity. The victim died shortly after being transported to a local hospital. The cause of death was blunt force trauma to the head.

A 25-year-old male died in a residential fire, which was caused by manufacturing homemade illegal fireworks. Several other people were also injured in the incident. According to police, the victim used various aliases/names and accounts to acquire an unknown amount of explosive powder from the internet. While manufacturing the homemade fireworks, the victim apparently ignited the explosive powder that led to an explosion and subsequent fire in the dwelling where he lived. This incident is still under investigation.

To help prevent incidents like these, the federal government, under the FHSA, prohibits the sale to consumers of the most dangerous types of fireworks. These banned fireworks include: large reloadable mortar shells, cherry bombs, aerial bombs, M-80 salutes, and larger firecrackers containing more than two grains of powder. Mail-order kits designed to build these fireworks are also banned.

The CPSC lowered the permissible charge in firecrackers to no more than 50 milligrams of powder in a regulation that went into effect on Dec. 6, 1976. In addition, CPSC regulations provide

performance requirements for fireworks other than firecrackers intended for consumer use, including a requirement that fuses burn at least three seconds, but no longer than nine seconds. All fireworks must carry a warning label describing necessary safety precautions and instructions for safe use.

CPSC estimates that in 2015, about 11,900 people were treated in hospital emergency rooms for injuries associated with fireworks. Sixty-seven percent of these estimated injuries occurred in a one-month special study period (June 19, 2015 – July 19, 2015) around July 4. Most of the injuries involved hands and fingers, the head (including face, eyes, and ears), legs and arms. Children under the age of 15 years old accounted for 38 percent of the estimated injuries. Fireworks should be used only with extreme caution. Older children should be closely supervised, and younger children should not be allowed to play with fireworks, including sparklers.

Before using fireworks, make sure they are permitted in your state or local area. Regardless of location, consumers who intend to use fireworks have to comply with federal regulations. Many state and local governments also prohibit or limit consumer fireworks, formerly known as “class C fireworks,” which are common fireworks, and firecrackers sold for consumer use. Consumer fireworks include: shells and mortars, multiple tube devices, Roman candles, rockets, sparklers, firecrackers with no more than 50 milligrams of powder, and novelty items, such as snakes, airplanes, ground spinners, helicopters, fountains, and party poppers.

To help consumers use fireworks more safely, the CPSC offers these recommendations:

-- Do not allow young children to play with fireworks. Sparklers, a firework often considered by many to be the ideal “safe” device for the young, burn at very high temperatures and should be not be handled by young children. Children may not understand the danger involved with fireworks and may not act appropriately while using the devices or in case of emergency.

-- Older children should be permitted to use fireworks only under close adult supervision. Do not allow any running or horseplay.

-- Set off fireworks outdoors in a clear area, away from houses, dry leaves, or grass and other flammable materials.

-- Keep a bucket of water nearby for emergencies and for pouring on fireworks that fail to ignite or explode.

-- Do not try to relight or handle malfunctioning fireworks. Soak them with water and throw them away.

-- Be sure other people are out of range before lighting fireworks.

-- Never light fireworks in a container, especially a glass or metal container.

-- Keep unused fireworks away from firing areas.

-- Store fireworks in a cool, dry place.

-- Check instructions for special storage directions.

-- Observe local laws.

-- Never have any portion of your body directly over a firework while lighting.

-- Do not experiment with homemade fireworks.

**MAIL-ORDER “MAKE- YOUR-OWN”
FIREWORKS KITS AND COMPONENTS --
DESIGNED TO BUILD BANNED FIREWORKS
-- ARE PROHIBITED BY LAW.**

Following is a summary of state regulations as of June 1, 2016, according to the [American Pyrotechnics Association](#).

Fireworks are regulated by both states and local jurisdictions. To ensure full compliance with state and local laws, check with your local government (such as your police or fire department) for detailed requirements. Please note that local requirements may supersede state laws.

I. STATES THAT ALLOW SOME OR ALL TYPES OF CONSUMER FIREWORKS (formerly known as class C fireworks), **APPROVED BY ENFORCING AUTHORITY, OR AS SPECIFIED IN LAW** (43 states, [District of Columbia](#) and Puerto Rico):

Alabama	Montana
Alaska	Nebraska
Arizona	New Hampshire
Arkansas	New Mexico
California	New York
Colorado	Nevada
Connecticut	North Carolina
Florida	North Dakota
Georgia	Oklahoma
Hawaii	Oregon
Idaho	Pennsylvania
Indiana	Rhode Island
Kansas	South Carolina
Kentucky	South Dakota
Louisiana	Tennessee
Maine	Texas
Maryland	Utah
Michigan	Virginia
Minnesota	Washington
Mississippi	West Virginia
Missouri	Wisconsin
	Wyoming

(The [District of Columbia](#) and Puerto Rico, in addition to the above states, enforce the federal regulations and applicable state restrictions.)

II. STATES THAT ALLOW ONLY SPARKLERS AND/OR OTHER NOVELTIES (Total of 4 states):

Illinois	Ohio
Iowa	Vermont

III. STATES THAT BAN ALL CONSUMER FIREWORKS (including those that are allowed by CPSC regulations) (Total of 3 states):

Delaware	Massachusetts
New Jersey	

To report a dangerous product or a product-related injury, log on to: www.saferproducts.gov, or call CPSC's hotline at (800) 638-2772, or CPSC's teletypewriter at (800) 638-8270, or e-mail info@cpsc.gov.

Consumers can obtain press releases and recall information at CPSC's website at: www.cpsc.gov. This document is in the public domain. It may be reproduced in whole, or in part, by an individual or organization without permission. If it is reproduced, however, the Commission would appreciate knowing how it is used. Please provide this information by writing to the U.S. Consumer Product Safety Commission, Office of Communications, 4330 East West Highway, Bethesda MD 20814.

06/16