



FIREWORKS ARE DANGEROUS!



No matter the size, there is an inherent danger in the use of an explosive. For instance, fire sparklers, a novelty firework typically given to children, burn at 1200°F, that's hotter than needed to melt glass. When placed against clothing or skin, it can cause serious injuries.



Nationally, the U.S. Consumer Product Safety Commission (CSPC) reported an **increase in fireworks-related deaths and injuries in 2013**. According to the CSPC, throughout the United States there were 8 deaths and an estimated 11,400 injuries in 2013, 65% of which occurred in the 30 days surrounding July 4th alone.

Illinois by the Numbers

For the state of Illinois, each year the Office of the State Fire Marshal takes a sample of incidents during the 30 days surrounding the Fourth of July. Below are some figures from the sample:

- There were 116 people injured by fireworks in Illinois during this thirty day period in 2013. The number of people injured is up from 2012 (115), but down from 2011 (155).
- In 2013, the fireworks types that caused the highest number of injuries in the sample were bottle rockets and firecrackers at 14% each. Both bottle rockets and firecrackers are **prohibited** in Illinois and should not have been used even in the case of an approved consumer fireworks use permit.
- Additionally, the “unknown” type of firework was also prominent, causing 17% of injuries in the 2013 sample and 18% of injuries in the 2012 sample.

- ➔ “Unknown” is the usual reference for the type of firework causing injury when the person injured is not the one handling the firework, but has been injured by someone else’s fireworks use.
- ➔ This could be said to act as a proximate figure for the **bystander injury rate**, that is, how often someone not handling fireworks is injured by fireworks. In that case it would be roughly 17% of injury incidents.
- **Illinois has experienced injury rates mirroring the national experience with fireworks.** According to the CSPC report of 2013 fireworks injuries in the United States, hands and fingers were the most often injured parts of the body (36% of total injuries). In Illinois, injuries affecting fingers, hands, and eyes were the most frequent. These areas were affected in roughly half the sample incidents each year.
- Burns were the most common type of injury (64%). In 2013, second degree burns alone were 41% of total injuries.
- In the same CSPC report, children younger than 15 years of age accounted for approximately 40% of the estimated 2013 injuries. In the Illinois 2013 sample, children age 16 and under accounted for 41% of those affected by injuries, with children 6 and under making up about one third of that group. This figure held steady from 2012 (41%) and is slightly less than in 2011 (44%).
 - ➔ In each case, the 16 years of age and under group makes up at least 40% of the injured.

Fireworks Injuries Sample (IL) from 2011 to 2013

	YEAR		
	2011	2012	2013
Number of people injured	155	115	116
Percent of injuries caused by “unknown” firework type	10%	18%	17%
Leading known type of firework causing injury	Bottle Rockets (19%)	Bottle Rockets (17%)	Roman Candles (14%)
2nd Leading known type of firework causing injury	Sparklers (12%)	Roman Candles (13%)	Bottle Rockets (14%)
Leading type of injury	Burns (54%)	Burns (51%)	Burns (64%)
2nd Leading type of injury	Abrasions (14%)	Abrasions (19%)	Lacerations (11%)
Total percentage of injuries affecting fingers, eyes, and hands	49%	51%	44%
Leading body part affected by injury	Eyes (20%)	Fingers (19%)	Eyes (16%)
Percentage of injuries affecting children age 16 and under	44%	41%	41%

Fireworks are not only dangerous for those who handle them, but also for those around them.

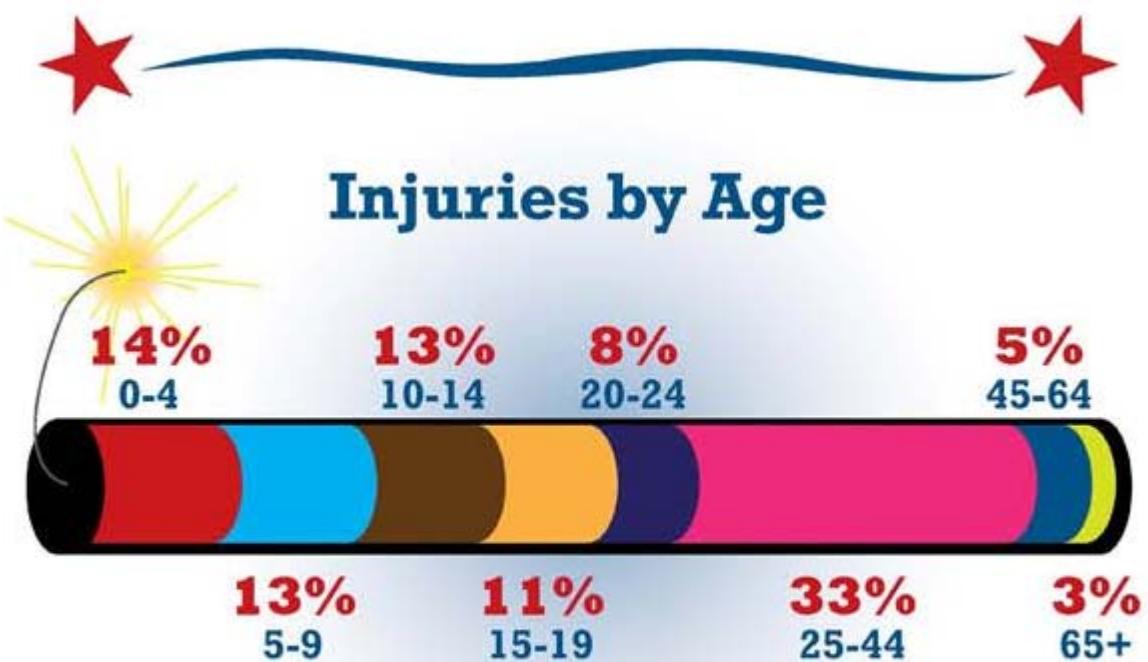
Stray sparks start fires, burn bystanders, and cause damage. That is especially true when handling banned or professional grade fireworks or when those using fireworks are intoxicated. Participants and bystanders alike get hurt.

Headlines Recap

- A 51-year-old St. Charles man is in critical condition after a firework exploded in his hand, injuring his arms, chest, and face. (St. Charles, IL-2014)
- A 16-year old lost his thumb while handling a firework. (Alton, IL-2014)
- Misdirected amateur fireworks started a roof fire on an Orland Park home. (Orland Park, IL-2014)
- On July 4, 2013 two women were severely injured when an amateur fireworks display went wrong and sent a firework directly towards them. One victim's left foot was severed from her leg and her right foot seriously injured as a result. The second victim suffered 4th degree burns and is missing a chunk of her leg. (Chicago, IL-2013)
- Police confiscated more than 350 pounds of illegal fireworks over the Fourth of July weekend, all of it from teens. (Alton, IL-2014)

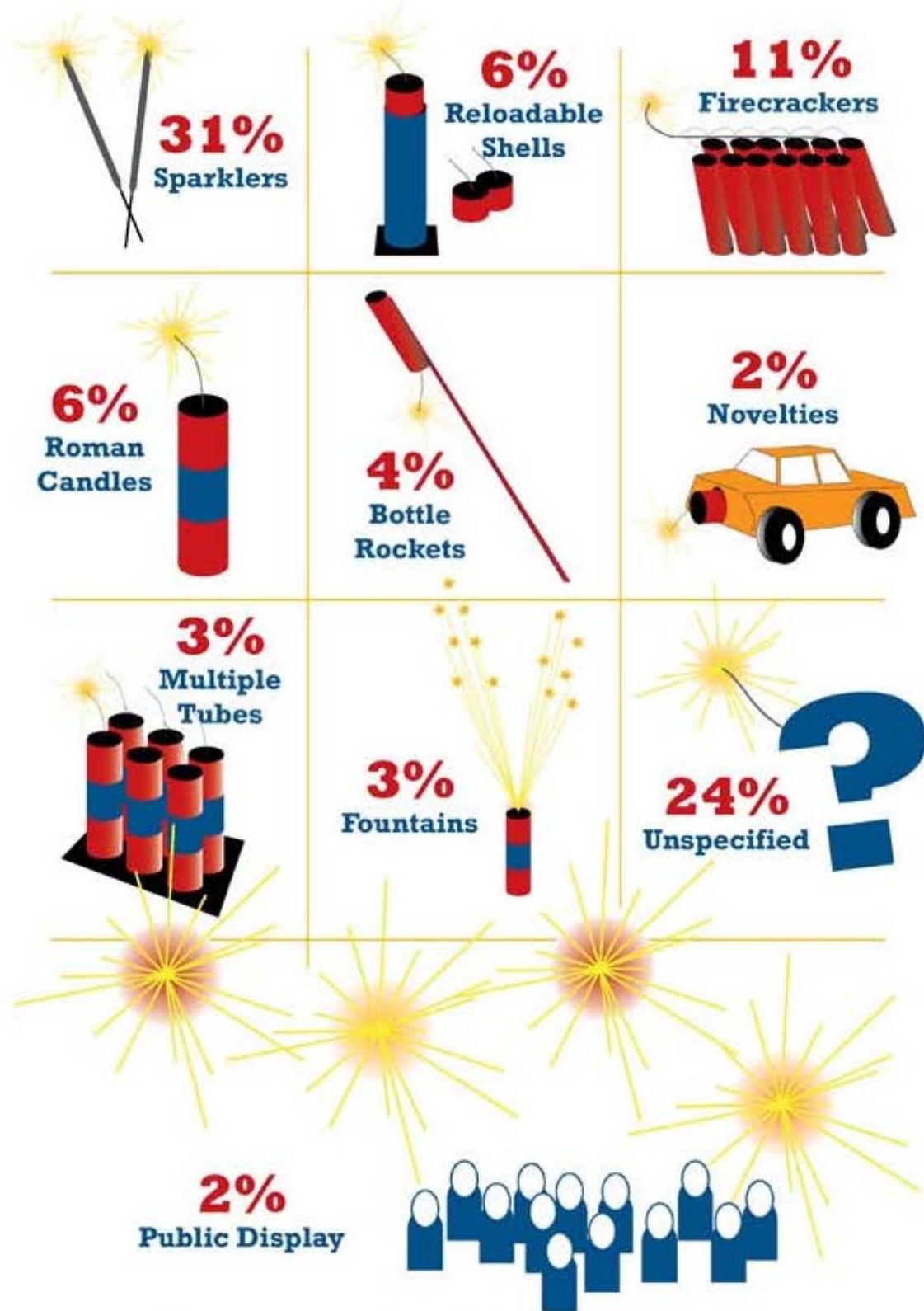
Even the professionals have accidents!

- 12 people reported minor burns or other injuries when a firework shot as part of a professional display launched correctly but exploded later than designed. It exploded while descending over the park's lagoon and getting closer to spectators. (Peoria, IL-2014)



- 40% of injuries affected children age 14 and under in 2013
- More than half of the injuries that occurred (51%) affected people age 19 and under
- The Consumer Product Safety Commission (CPSC) has previously noted that consumers feel comfortable giving children fireworks devices such as sparklers and bottle rockets that are perceived to be less powerful. However, in 2013, sparklers and rockets accounted for 35% of all estimated injuries.

Injuries by Fireworks Type*



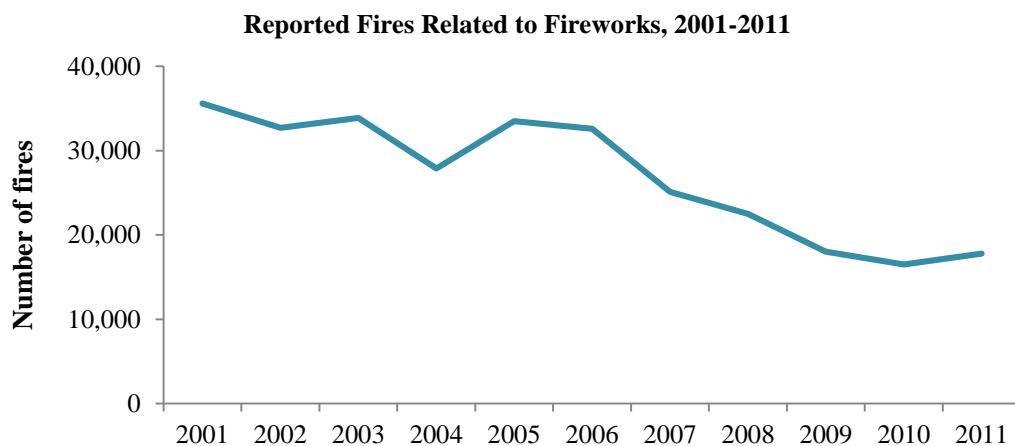
*These percents do not account for how many products are used.



Fireworks Fact Sheet

Size of the Fireworks-Related Fire Problem

- In 2011, fireworks caused an estimated 17,800 reported fires, including 1,200 structure fires, 400 vehicle fires, and 16,300 outside and other fires.
- These fires resulted in an estimated 40 civilian injuries and \$32 million in direct property damage, with no reported fire deaths.
- On Independence Day in a typical year, fireworks account for two out of five of all reported fires, more than any other cause of fire.



Risk of Private Fireworks Use

Using 2000-2010 data, the risk of fire death relative to hours of usage is higher for fireworks than for cigarettes, making fireworks the riskiest consumer product.

- The risks with fireworks are not limited to displays, public or private. Risks also exist wherever fireworks are manufactured, transported, stored or sold.
- “Safe and sane” fireworks are neither. Fountains, novelties, and sparklers are designed to throw off showers of hot sparks. Temperatures may exceed 1200°F.

NFPA is strongly opposed to any consumer use of fireworks.

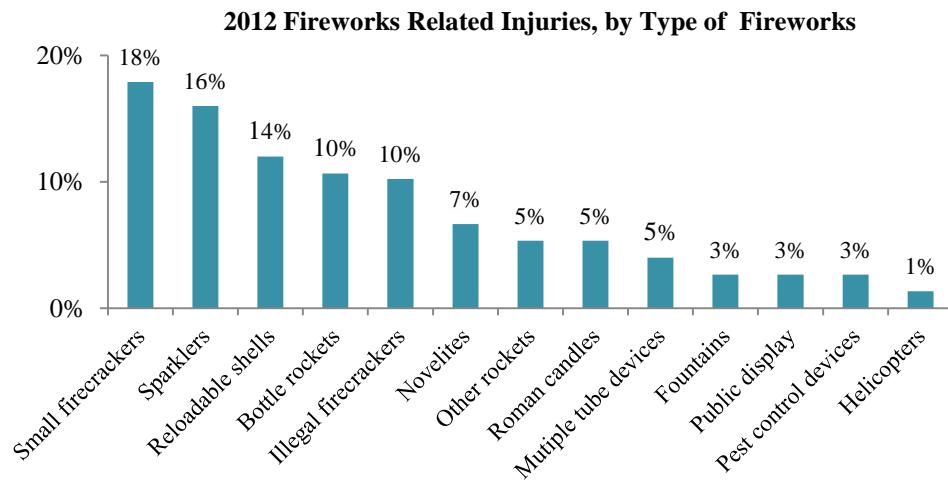
NFPA encourages people to enjoy public displays of fireworks that comply with NFPA 1123.

FACT: The following four states have banned access by the public to all fireworks: **Delaware, Massachusetts, New Jersey and New York**

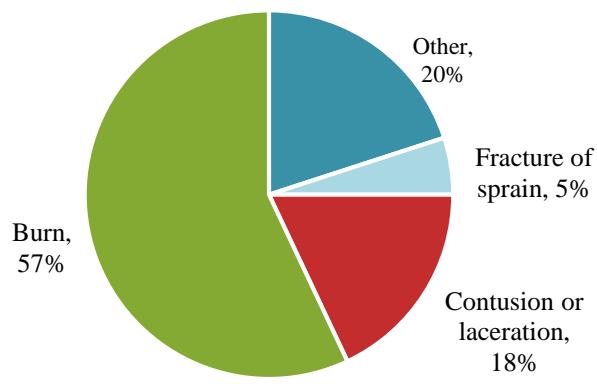
Characteristics of Fireworks Injuries Reported to Emergency Rooms

In 2012, U.S. hospital emergency rooms saw an estimated 8,700 people for fireworks-related injuries. The injury estimates on this page were obtained from the [Consumer Product Safety Commission's 2012 Fireworks Annual Report by Yongling Tu and Demar Granados](#). The detailed statistics below are based only on injuries seen from June 22-July 22, 2012.

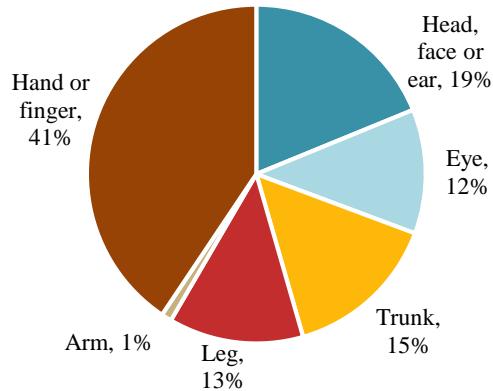
- Almost three out of five (57%) of the 2012 fireworks injuries were burns, while almost one-fifth (18%) were contusions or lacerations.
- Three out of ten (30%) people injured by fireworks were under the age of 15.
- Males accounted for three-quarters (74%) of the injuries.
- The risk of fireworks injury was highest for young people ages 15-24 followed by children under 10.
- Sparklers, fountains and novelties alone accounted for one-quarter (25%) of the emergency room fireworks injuries in 2012.



**2012 Fireworks-Related Injuries
by Type of Injury**



**2012 Fireworks-Related Injuries
By Part of Body Injured**



Note: The reds and browns are extremities (55% of total) and the blues are parts of the head (31%).

Using and Selling Consumer Fireworks in Illinois

The Office of the State Fire Marshal strongly recommends that individuals view public displays put on by professionals instead of using consumer fireworks. Fireworks are never safe and the only thing we can do is mitigate the potential danger.

USE

For those who are interested in using approved consumer fireworks, there is a process to do so. An adult individual is able to use approved consumer fireworks by completing the following steps: obtaining approval from their local authorities, possessing a permit issued by the appropriate unit of local government, attending an OSFM-approved training with local fire department, and following the rules for use in an approved area after a site inspection.

Please see the included sheets from the OSFM (*Fireworks FAQs* and *Approved and Prohibited Fireworks*) or visit our website (<http://www.sfm.illinois.gov/>) for more details about using consumer fireworks.

SALE

For those who wish to sell and/or distribute fireworks there is a process in place for that. The decision to allow the sale and purchase of fireworks can CURRENTLY be conducted on a local basis, coordinated jointly with the rules and efforts of the OSFM.

As noted in the *Fireworks FAQs*, currently, in order to sell consumer fireworks the state of Illinois, one **must** register with the OSFM.

Before attempting to register with the OSFM, one should first determine whether their local governmental authority (City Council, Village Board of Trustees, and/or County Board) permits the sale of consumer fireworks where one desires to sell. One of the documents to be included with the application is,

"A copy of the letter or permit issued by the local governmental authority authorizing the applicant to distribute, sell, offer for sale, exchange for consideration, transfer or provide free of charge consumer fireworks at the locations identified in subsection (b)(4)." [Admin Rules 41, Section 235.110]

After determining whether the local governmental authority would permit the sale of fireworks, then one must apply for a Consumer Distributor or Consumer Retailer Registration through the OSFM. Applications for commercial fireworks activities are available on our website at:

<http://www.sfm.illinois.gov/commercial/pyrotechnicsfireworks/applications.aspx>

If you have any questions, please contact:

Kevin Switzer

Division Manager, Division of Fire Prevention

Office of the State Fire Marshal

Kevin.Switzer@Illinois.gov

217.558.0639

FREQUENTLY ASKED QUESTIONS REGARDING FIREWORKS DISPLAYS IN ILLINOIS

The Illinois Legislature amended the Pyrotechnic Use Act (425 ILCS 35), effective July 29, 2005, and the Pyrotechnic Distributor and Operator Licensing Act (225 ILCS 227), effective January 1, 2006. The Office of the State Fire Marshal (“OSFM”) has posted copies of these Acts, the Emergency Rules implementing these Acts, and applications for the various licenses on its website, www.state.il.us/osfm/. This document answers questions OSFM has received from Professional Distributors and Operators, and from Consumer Operators.

Consumer Distributor/Retailer and Consumer Use

Q: What does the OSFM consider to be Approved Consumer Fireworks?

A: As defined by the Act, all Consumer Fireworks must comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Products Safety Commission, as set forth in 16 C.F.R. Parts 1500 and 1507, and classified as fireworks UN0336 or UN0337 by the United States Department of Transportation under 49 C.F.R. 172.101.

In addition, Consumer Fireworks must meet the following requirements to be approved by OSFM:

1. The Consumer Fireworks must be labeled “1.4G Consumer” or must be 1.4S fireworks classified as UN0337 intended for outdoor consumer use.
2. The American Fireworks Standards Laboratory (AFSL) must have inspected the Consumer Fireworks. It is the Consumer Distributor’s and Consumer Retailer’s responsibility to insure that the Consumer Fireworks he or she distributes, sells, offers for sale, exchanges for consideration, transfers, or provides have been AFSL tested. The Consumer Distributor and the Consumer Retailer shall maintain records verifying that such testing has occurred on the Consumer Fireworks he or she distributes, sells, offers for sale, exchanges for consideration, transfers, or provides.
3. The Consumer Fireworks must be ground mounted. **No hand held Consumer Fireworks shall be approved.**

Q: What do I need to sell consumer fireworks in the state of Illinois?

A: Consumer sales require “registration” with the OSFM. First, you should determine whether your local governmental authority (City Council, Village Board of Trustees, and/or County Board) permits the sale of consumer fireworks where you wish to sell. Second, you must apply for a Consumer Distributor or Consumer Retailer Registration through the OSFM. The link to the application is:
<http://www.sfm.illinois.gov/commercial/pyrotechnicsfireworks/applications.aspx>

Once you complete the Registration application, mail to:

Office of the State Fire Marshal
Attention: Division of Fire Prevention
1035 Stevenson Drive
Springfield, IL 62703-4259

Applications are processed as they are received therefore we cannot process an application “while you wait” if you choose to drop off your application. If your application is approved, a Certificate of Registration will be mailed to your business address.

Q: What do I need to do to have a “consumer display” on my property?

A: Consumer fireworks displays are permitted in Villages, Counties and Municipalities that have passed Ordinances allowing such displays and ONLY in those locations. In order to operate a consumer display, an adult must:

1. Attend training conducted at the local fire department. OSFM sends this Consumer Fireworks Training information to each jurisdiction that permits consumer fireworks displays and has requested the training.
2. Apply for a site inspection by the local fire department.
3. Apply for a permit issued by the appropriate unit of local government. (The OSFM does not issue fireworks permits.) According to the Fireworks Use Act, these applications “shall be made in writing at least 15 days in advance of the date of the display, unless agreed to otherwise by the local jurisdiction issuing the permit and the fire chief of the jurisdiction in which the display will occur.”
4. Once your jurisdiction issues the permit, the Consumer may purchase **approved consumer fireworks** from a registered Consumer Fireworks Distributor/Retailer. This classification of fireworks is not all-inclusive and reference to the approved list published by the OSFM is required. Any sale of consumer fireworks other than on the list is prohibited by law.

Once your jurisdiction has issued a permit, it is not transferable to another person or entity. The sale, possession, use and distribution of consumer fireworks for display are lawful only for the purpose given by your permit. While the Pyrotechnic Use Act does not require insurance coverage for Consumer Displays; your local jurisdiction may require it. Your jurisdiction has the authority to conduct a criminal background check on the applicant as a condition of issuing a permit. In addition, your jurisdiction has the authority to adopt rules regarding Consumer Displays that are more stringent than those adopted by the OSFM.

Q: How can I obtain a copy of the list of approved and prohibited consumer fireworks?

A: OSFM has compiled this list and it is published on our website at:
<http://www.sfm.illinois.gov/commercial/pyrotechnicsfireworks/index.aspx>

Q: Do I need a license if I’m going to have an outdoor fireworks display on my property for a private party?

A: It depends on the type of fireworks you use in the display. If you use only “consumer fireworks,” then the display is a “consumer display,” which does not require you to be licensed. However, you must be permitted by the local authority having jurisdiction. If you use fireworks other than “consumer

fireworks," then the display is pyrotechnic display, which requires the services of a licensed pyrotechnic distributor and a licensed pyrotechnic operator.

Q: Do I need to be fingerprinted if I'm performing a consumer display?

A: No. You do not need to submit your fingerprints to the Illinois State Police in the manner required for applicants for a pyrotechnic distributor or operator license. However, Section 2.2 of the Pyrotechnic Use Act gives the local jurisdiction issuing the display permit the authority to conduct a criminal background check of the applicant as a condition of issuing the permit.

Q: Do I need insurance if I'm doing a private display?

A: If you are applying for a permit for a pyrotechnic display, you must provide proof of liability insurance in the sum of not less than \$1,000,000 to the local governmental entity issuing the permit. If you are applying for a permit for a consumer display, you should check with your local governmental authority (City Council, Village Board of Trustees, and/or County Board) to determine whether they require you to provide proof of insurance.

Q: Do I need anything if I want to purchase Sparklers for a private event?

A: No.

APPROVED AND PROHIBITED CONSUMER FIREWORKS AND UNREGULATED NOVELTIES

Section 1 of the Fireworks Use Act, 425 ILCS 35/1, defines “Consumer Fireworks” as “those fireworks that must comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Products Safety Commission, as set forth in 16 C.F.R. Parts 1500 and 1507, and classified as fireworks UN0336 or UN0337 by the United States Department of Transportation under 49 C.F.R. 172.101.” The United States Department of Transportation assigns the following division numbers to the above-referenced fireworks identification numbers: UN0336 (1.4G) and UN0337 (1.4S). 49 C.F.R. 172.101.

UNREGULATED NOVELTY FIREWORKS

The Fireworks Use Act (Act) expressly excludes the following novelty fireworks from the definition of Consumer Fireworks, 425 ILCS 35/1:

- snake or glow worm pellets;
- smoke devices;
- trick noisemakers known as "party poppers", "booby traps", "snappers", "trick matches", "cigarette loads", and "auto burglar alarms";
- sparklers;
- toy pistols, toy canes, toy guns, or other devices in which paper or plastic caps containing twenty-five hundredths grains or less of explosive compound are used, provided they are so constructed that the hand cannot come in contact with the cap when in place for the explosion; and
- toy pistol paper or plastic caps that contain less than twenty hundredths grains of explosive mixture.

While the Act states that the sale and use of these novelty fireworks are permitted at all times, Section 3.4 of the Act gives municipalities the authority to enact an ordinance prohibiting the sale and use of sparklers on public property.

APPROVED CONSUMER FIREWORKS

As defined by the Act, all Consumer Fireworks must comply with the construction, chemical composition, and labeling regulations of the U.S. Consumer Products Safety Commission, as set forth in 16 C.F.R. Parts 1500 and 1507, and classified as fireworks UN0336 or UN0337 by the United States Department of Transportation under 49 C.F.R. 172.101.

In addition to complying with this definition, the Office of the State Fire Marshal requires Consumer Fireworks meet the following requirements to be approved by this Office:

1. The Consumer Fireworks must be labeled “1.4G Consumer” or must be 1.4S fireworks classified as UN0337 intended for outdoor consumer use.
2. The American Fireworks Standards Laboratory (AFSL) must have inspected the Consumer Fireworks. It is the Consumer Distributor’s and Consumer Retailer’s responsibility to insure that the Consumer Fireworks he or she distributes, sells, offers for sale, exchanges for consideration, transfers, or provides have been AFSL tested. The Consumer Distributor and the Consumer Retailer shall maintain records verifying that such testing has occurred on the Consumer Fireworks he or she distributes, sells, offers for sale, exchanges for consideration, transfers, or provides.
3. The Consumer Fireworks must be ground mounted. No hand held Consumer Fireworks shall be approved.

Approved Consumer Fireworks are limited to the following types of fireworks:

1. Cones including Showers of Sparks, Fountains, and Repeaters (also known as *Cakes)

Single tube fountains must not contain more than 75 grams total of pyrotechnic composition. Cone fountains must not contain more than 50 grams total of pyrotechnic composition. Multiple-tube fountains must not contain more than 200 grams total of pyrotechnic composition.

2. Mines, Comets, Tubes, Shells, Fancy Florals, and Parachutes

These items are firework devices designed to produce low-level aerial effects, which are propelled into the air by a lift charge. Shells will burst at the peak of flight to create a display of stars, reports or other effects or leave a trail of sparks until exhausted. These items contain a maximum of 40 grams of chemical composition and no more than 20 grains of lift charge.

Consumer Fireworks Retailers/Distributors registered with OSFM may sell approved Consumer Fireworks to consumers who have and display a valid Fireworks Permit, issued by the local county or municipality to that consumer.

PROHIBITED CONSUMER FIREWORKS

OSFM prohibits all Consumer Fireworks unless they meet the above-listed approval requirements.

Prohibited Consumer Fireworks include, but are not limited to, the following:

- Hand held fireworks
- Bottle rockets
- Firecrackers of any size or type
- Sky rockets
- Roman candles
- Chasers
- Buzz bombs
- Ground items other than those identified as Approved Consumer Fireworks
- Helicopters
- Missiles
- Pin wheels or any other twirling device whether on the ground or mounted above the ground
- Planes
- Sky Lanterns, the type of balloon which requires fire underneath to propel same

**This is an increase from the previously approved 200 grams to now allowing up to, not to exceed 500 grams.
This was a decision approved by the Consumer Fireworks Review Committee on May 9, 2012.*

Joint Committee on Administrative Rules

ADMINISTRATIVE CODE

TITLE 41: FIRE PROTECTION

CHAPTER I: OFFICE OF THE STATE FIRE MARSHAL

PART 235 PYROTECHNIC AND CONSUMER DISPLAY PERMITTING RULES

SECTION 235.110 CONSUMER DISTRIBUTORS AND RETAILERS

Section 235.110 Consumer Distributors and Retailers

- a) Prior to distributing, selling, transferring or providing free of charge any consumer fireworks, consumer distributors and consumer retailers shall require an individual to provide proof that he/she has been issued a permit in accordance with Section 235.90, or that he/she has registered with OSFM as a consumer distributor or consumer retailer in accordance with this Section.
- b) All consumer distributors and consumer retailers must register with OSFM before distributing, selling, offering for sale, exchanging for consideration, transferring or providing free of charge consumer fireworks in the State of Illinois and before advertising or using any title implying that the person is a consumer distributor or retailer. The applicant shall register on forms provided by OSFM that shall include:
 - 1) The name and address of the business. The address shall be an actual street address and shall include the city, state and zip code. A post office box number is not acceptable as an address.
 - 2) The names, telephone numbers, and personal addresses of all owners or officers of the registering business, including a copy of each person's driver's license or other governmental identification that includes the date of birth and photograph.
 - 3) If the business operates under an assumed name, a copy of the assumed name certificate.
 - 4) The address of each location from which consumer fireworks will be distributed or retailed.
 - 5) The applicant's taxpayer identification number and proof of payment of taxes to the Illinois Department of Revenue (DOR). If the applicant does not pay taxes to DOR, the applicant shall submit a statement, sworn to under penalty of perjury, from the applicant or its tax preparer identifying why taxes are not paid.
 - 6) The fee of \$50 shall be payable by check to the Office of the State Fire Marshal for each location.

- 7) A copy of the letter or permit issued by the local governmental authority authorizing the applicant to distribute, sell, offer for sale, exchange for consideration, transfer or provide free of charge consumer fireworks at the locations identified in subsection (b)(4).
- c) OSFM shall issue a registration to transfer, provide, distribute and/or sell consumer fireworks or shall notify the applicant of the reason for the denial of registration.
- d) Registration shall permit the consumer distributor or consumer retailer to transfer, provide, distribute and/or sell consumer fireworks in Illinois for the calendar year in which registered.
- e) The consumer distributor or consumer retailer shall register each location from which it distributes or retails consumer fireworks separately.
- f) The registrant shall notify OSFM in writing within 10 business days after the change in any of the information it provided to OSFM to obtain registration. Proof that a change in name or address has been done in accordance with the law shall be sent to OSFM, including copies of new assumed name certificates. In the event a business has changed its officers, a sworn statement listing all of the current officers' names and personal addresses, including copies of each officer's driver's license, shall be sent to OSFM.
- g) *No person may sell to a single individual a quantity of consumer fireworks exceeding 499 pounds without prior approval by OSFM. [425 ILCS 35/2.3]* Requests for such approval shall be submitted in writing to OSFM.
- h) OSFM will not accept any applications to register a consumer distributor or retailer or for a new location after June 15 for the current July 4th season.

(Source: Amended at 34 Ill. Reg. 16562, effective October 6, 2010)