Westshore Fire

Westshore Fireworks Safety Awareness Course

Presented by: Colwood Fire, Langford Fire and View Royal Fire

Objectives

Knowledge of Municipal, Provincial and Federal Regulations

Knowledge of the Safe Handling and Storage of Consumer Fireworks

Knowledge of the Safe Use and Recommended Disposal of Consumer Fireworks

History of Fireworks

In Canada, the popularity of fireworks began in the late 1940's. With transportation methods growing, mass distribution followed. As a result, government and emergency officials pushed for restrictions in the firework industry.



In the 1970's, common firecrackers and skyrockets were met by a complete ban following public outcry. This was due to the violent nature of these devices in the hands of our youth.

In 1979 the Provincial Government of BC created the Firework Act to control the sale of fireworks within the province. This Act was revised in 1996.

Local History of Fireworks

In the 1990's, the use of fireworks became such a large concern to police and municipalities alike, that each municipality drafted its own bylaw regulating their use. The Westshore RCMP had trouble enforcing multiple bylaws in their area of responsibility.

With the intention to draft a common bylaw, the municipalities of Colwood, Langford and View Royal, in conjunction with the Westshore RCMP, formed a regional fireworks group. Together they constructed a common bylaw which was formally adopted in 2006.

Fireworks – What Could Go Wrong

INSERTVIDEO

US Firework Statistics - FIRES



NFPA - National Fire Protection Association reports:

In 2011, fireworks caused an estimated 17,800 reported fires.

- 1,200 total structure fires
- □ 400 vehicle fires
- □ 16,300 outside and other fires

These fires resulted in an estimated 8 reported civilian deaths, 40 civilian injuries and \$32 million in direct property damage.

US Firework Statistics - INJURIES

In 2012, NFPA reports that U.S. hospital emergency rooms treated an estimated 8,700 people for fireworks related injuries;

55% were to the extremities
31% were to the head



The risk of fireworks injury was highest for:
young people ages 15-24
followed by children under 10

Related Injuries



What Caused the Injuries



Canadian Statistics

Due to relatively low numbers, Canada does not keep national statistics on property damage, deaths or injuries specifically related to fireworks.

However, in May 1998 the Canadian Hospitals Injury Reporting and Prevention Program (CHIRPP) reported 175 fireworks related injuries:

Children 10 to 14 years of age sustained 42%

- □77% were to males
 - Halloween accounted for 20%, (all in western Canada)
 - Victoria Day for 15 %, (all in central Canada)
 - 9% of the injuries specific to Canada Day

Fireworks in Canada – 3 Categories

- Display Fireworks are high-hazard firework articles designed for use by professionals
 - These articles include items such as aerial shells, cakes, roman candles, waterfalls, lances and wheels
- Pyrotechnic (Special Effects) are high-hazard pyrotechnics articles designed for use by professionals
- Consumer Fireworks are low-hazard firework articles designed for recreational use by the public
 - These articles include items such as roman candles, sparklers, fountains, wheels, volcanoes, mines and snakes

Fireworks Regulation Bylaw No. 891, 2006

Bylaw 891

This bylaw covers all three classes;

Display Fireworks

Pyrotechnic (Special Effects)

- Both of these classes have special provisions under this bylaw which are not covered in this Fireworks Awareness Safety Course
- For more information on these classes, contact your local municipality or fire department

Consumer Fireworks

 Will be covered in detail throughout this Fireworks Awareness Safety Course

Bylaw No. 891 - Overview



In 2006, the Town of View Royal and Cities of Colwood and Langford adopted a fireworks bylaw to regulate the:

- Sale
- Possession
- Discharge

of consumer fireworks in their respective communities...

Their vision was to reduce personal injury and property damage through the required training and permit process.

Bylaw 891

PERMITS FOR CONSUMER FIREWORKS

- Any person eighteen (18) years of age or older desiring to discharge consumer fireworks must apply for a permit
- Permit applications for Consumer Fireworks must be submitted to the municipality <u>no later than 12:00 p.m. on October 31st</u>. If October 31st falls on a non-business day, then the deadline will be no later than 12:00 p.m. on the last business day prior to October 31st
- Completion of the municipal Fireworks Safety Awareness Courses
 - Course is only valid for three years
- Payment of the permit fee for consumer fireworks \$10
- ** if the consumer fireworks event is to occur on property that is not owned by the applicant or is on property owned or controlled by the municipality, a written agreement of the property owner must be submitted



Bylaw 891 - Section 3 - Prohibitions

- No person may hold, possess, store, discharge or otherwise use consumer fireworks or display fireworks without a permit
- No consumer fireworks or display fireworks permit holder may hold, possess, store, discharge or otherwise use consumer fireworks or display fireworks in contravention of a permit



Bylaw 891 - Section 3 - Prohibitions

- □ No person may <u>sell fireworks</u>
- □ **No person** may discharge consumer fireworks
 - except on October 31st of each year between 5:00 p.m. and 10:00 p.m.
 - or through exceptional circumstances as stated in the municipalities policy
- No person may buy, sell, hold, possess, store, discharge or otherwise
 - use any prohibited fireworks
 - use firecrackers
 - use fireworks in a manner that increases the risk of physical injury to any person or damage to any public or private property



Bylaw 891 - Section 3 - Prohibitions

Regarding Minors:

- No person <u>under the age of eighteen (18)</u> years may hold, possess, store, discharge or otherwise use any fireworks
- No person being the parent or guardian of any person under the age of eighteen (18) years shall allow that person to hold, possess, store, discharge or otherwise use any fireworks

Bylaw 891 - Enforcement & Fines

Every person who possesses or discharges fireworks contrary to the provisions of this bylaw commits an offence and shall when directed to do so, surrender all fireworks in their immediate possession to a peace officer.

Any person guilty of an infraction of this bylaw is liable, on summary conviction, to a fine (or imprisonment not exceeding the maximum allowed by the Offence Act);

- **\$**500 Sale of fireworks
- **\$100 Possess prohibited fireworks**
- \$100 Possess firecrackers
- □ \$100 Possess fireworks without permit
- □ \$100 Underage possession
- □ \$100 Allow underage possession
- **\$100** Sischarge without permit
- □ \$200 Unsafe discharge
- 🗅 \$100 Contravene permit
- □ \$100 Owner/Occupier allowing fireworks
- □ \$250 Obstruction of peace officer

Purchasing, Transporting & Storage

of Fireworks

Purchasing Fireworks

Purchase only from authorized dealers



- You must be <u>at least eighteen (18)</u> years of age to purchase fireworks
- All authorized fireworks will appear in both official languages (English & French)
 - *Please note, bilingual labels do not guarantee the firework is authorized*
- Do not be tempted to smuggle fireworks into Canada from another country

Transporting Fireworks

Do not transport fireworks in the passenger compartment of a vehicle

Always put them in the trunk

In the absence of a trunk (e.g., van or pick-up truck), transport fireworks in a non-sparking container with a lid



Storage of Fireworks

- Always store fireworks in a cool, dry place and keep them away from children
- Check instructions for special handling directions



- The maximum amount of fireworks that can be stored in a dwelling is <u>10 kg gross weight</u>
 - Any amount in excess of this must be stored in a separate, locked building

Set-up & Safe Use

of Fireworks

Site Setup for Fireworks

It is Important that the simple safety procedures are followed:

Read All Instructions

Carefully read all the instructions for each firework ahead of time

Have Water Ready

Keep a charged hose or bucket filled with water close by in case of a malfunction or fire

Keep a separate water bucket or bin for discarded fireworks



Site Set-up for Fireworks

Carefully read all the instructions for each firework ahead of time.

Ground-Based Fireworks

- Always on a hard, flat and level surface to ensure stability of the item
 - Asphalt, concrete, sand, etc...
 - Grass is typically not suitable (for stability) and wood or other combustible bases are not recommended due to the potential of fire

Aerial Fireworks (Roman Candles, etc.)

- Start with a hard flat surface and use a large pail, bin or noncombustible box filled with sand or soil
- Bury (do not pile) the device to half it's length in the sand or soil

Safe Use of Fireworks

Use Fireworks Outdoors

Never use fireworks indoors; they are designed for outdoor use only

Check For Wind

- Check wind direction
- Check wind speed
- Fireworks should be lit with the prevailing wind blowing <u>away</u> from spectators and close dwellings
- NEVER set off aerial fireworks in strong winds



Safe Use of Fireworks

Use Proper Eye Protection and Wear Proper Clothing

- Protect your eyes with safety glasses or safety goggles
- Wear non-flammable clothing such as cotton;
 - NEVER wear synthetic fiber clothing (nylon, polyester) when firing

Keep Children Away From Fireworks

Never let children handle, play with or discharge fireworks under any circumstances

Igniting and Discarding

Understanding How They Work



Igniting of Fireworks

During a fireworks show, store the unused fireworks away from the firing area and keep them covered to prevent stray sparks from prematurely setting them off

Never smoke while handling fireworks



When lighting,
 never put any part of your body or head over the firework

never hand hold them or insert them into other means of containment such as pipes....

never point or throw them at people or other sensitive/flammable targets

Igniting of Fireworks



TOP-WICK or SIDE-WICK FIREWORK

Plant firework at least 3 inches in a bucket of sand or soil
 Tilt 5, to degrees away of audience

Tilt 5 - 10 degrees away of audience

Igniting of Fireworks



CONES, FOUNTAINS, MORTARS or MINE BURTS

Place on flat ground
 Asphalt
 Concrete
 Partially bury the base in sand



- Sparklers can burn as hot as 650 C (1200 F)
- Keep everyone 6 feet apart
- Do not allow anybody to chase or wave sparklers at each other or throw them
- Not for children, keep out of the reach of children

Discarding of Fireworks

Duds or Misfires

Never attempt to re-light fireworks that have misfired (duds)

Wait 30 minutes and then place them in a bucket of water



Clean-Up After the Show

- Wait 30 minutes after the display has finished
- Check the firing area for duds
- Clean up all debris
- Follow up again the next morning

3 Things to Remember



- Never point or throw fireworks at anyone or anything – people, pets, cars or buildings
- Never hold fireworks in your hand while lighting them
- Never attempt to re-light or move fireworks that fail to go off

ExamTime! Follow the link...

https://forms.office.com/Pages/ResponsePage.aspx?id=Rf5N-51kIEKFSXZPIL8F8_vmFsJso-JApOqR2Nsh3WIUNE5RTVRWWENaUoJNOFFCV01aOVRWT1k5Ni4u