

## Fireworks – Risk Management Concerns

As the long summer weekends approach, many Canadians are looking forward to celebrating with fireworks. They are a way of life and a form of festivity in many parts of the world. A well-run fireworks display can be both enthralling and entertaining for the viewers of the show.

Municipalities recognize the importance of this ritual, and many will be allowing or sponsoring fireworks displays. However, from a Risk Management perspective, there are concerns that should be addressed.

We will discuss three options most regularly used in municipal settings.

### 1. Family Fireworks – Municipal Display

These are the most common and are typically used in small celebrations where municipalities do not have sufficient budget for larger professional displays.

To keep residents safe, we recommend that municipalities:

- Provide residents with single or multiple wheel barrels or metal pails on a stable level surface at least 150' (feet) from combustibles such as dried grass, leaves or buildings.
- Inform the public by providing information about the safe distance and proper trajectory for each family. AT LEAST 150' (feet) clearance from the largest shell you intend to discharge.
- Keep a charged garden hose and fire extinguisher available for potential spot fires.
- Tell residents to keep their unfired product AT LEAST 50' (feet) from the firing area and preferably in a closed container.

### 2. Professional Fireworks – Municipally Fired

Often the Fire Department will choose to fire a show. The supervisor of the display must be licensed to Level 1 or better in order to purchase and/or discharge professional or display fireworks.

This person is also responsible to ensure that the show is operated in a safe manner for both volunteer staff and spectators.

The local Fire Prevention Officer or – in his absence – the display supervisor has the responsibility to stop a display if conditions are not safe.

Licensed supervisors and professional displays are subject to both municipal by-laws and federal regulations. The latter are numerous and cover clearances (which are substantially different from

family fireworks), type and size of permitted shells, and whether or not they can be hand fired or electrically fired.

For more information and contacts on regulations visit the website of Natural Resources Canada – Explosives Regulatory Division at: [http://www.nrcan.gc.ca/mms/explosif/over/conus\\_e.htm](http://www.nrcan.gc.ca/mms/explosif/over/conus_e.htm)

From a Risk Management perspective it is very important that the use of tobacco (smoking) and alcohol be banned from any area or operation involving fireworks displays.

### 3. Professional Fireworks – Professionally Fired

This is becoming more prevalent as the cost of fireworks and the regulations governing their use become more stringent.

If your municipality is contemplating a professional show you should ask to see the current license of the supervisor and proof of liability insurance of at least \$5 million – Inclusive Bodily Injury and Property Damage – with Certificates of Liability filed with the municipality.

#### **Additional Tips – Safety First:**

- Emergency Service's (such as fire, police, ambulance, first aid should be on site at the event).
- Fireworks should only be discharged in a large, open area at least 150' from cars, houses, spectators, trees, etc.
- Use a qualified, licensed individual to set off the fireworks.

#### **For Safe Family Fireworks:**

- Read and follow all label/packaging directions
- Have water on hand, such as in a bucket or running hose
- "Dud" fireworks should be soaked in water for 20 minutes minutes then disposed in a metal garbage can – NEVER try to relight a "dud"
- Light only one firework at a time. Only adults should handle fireworks, never children. Discharge fireworks away from people, cars, buildings and trees.
- Sparklers are hot (1200F/650C) and can cause burns. Children must be supervised by an adult while using sparklers.
- Dispose of all fireworks in a metal garbage can after soaking them 20 minutes in water
- For additional tips contact your local fire department or the Office of the Fire Marshall of your province.