



ISLE OF WIGHT FIRE AND RESCUE SERVICE

Fire Safety – Public Advice Bonfires, Fireworks & Firework Displays

Introduction

Fireworks are a traditional part of enjoying celebrations such as Bonfire Night or New Year but they are the cause of many hundreds of serious accidents every year, it should be remembered that they are dangerous explosives. The safest way to enjoy them is to go to a professionally organised event.

Firework Curfews

Fireworks may NOT be used during the night hours of 11pm and 7am. However on designated fireworks nights the restrictions are as follows:

	Curfew Operates Between
5 November	Midnight and 7a.m.
First day of Chinese New Year	1a.m. and 7a.m.
Diwali	1a.m. and 7a.m.
31 December	1a.m. and 7a.m.

Note: The curfew does not apply to local authorities when they put on displays for national public celebrations or national commemorative events.

Organisations to be Notified

Inform the local fire station, Police and first aid organisations. A leaflet regarding fireworks displays is published by the Department for Trade and Industry and should be available free from local authorities and Fire Service Headquarters.

Private Displays

A firework display should be an enjoyable occasion for everyone, but the hazards of fireworks and bonfires should not be underestimated. Follow these rules for a safe display.

Before your Firework Display

- Do not buy fireworks from anywhere you're not sure about, like a van or a temporary, unlicensed market stall.
- Only buy fireworks marked BS7114 or with a CE mark – this shows that the firework meets British or European safety standards (a reputable shop will know this).
- Follow the instructions on each firework – read them in daylight or by torchlight, never by a naked flame.
- Make suitable supports and launchers if you're setting off Catherine Wheels or rockets.

Note: It is an offence to discharge a firework in a street or public place. (The Explosives Act 1875 (Section 80) and the Town Police Clauses Act 1847 (Section 28)).

Things you will Need on the Night

It's easy to get a few household things together, these are:

- A closed metal box to store the fireworks – take them out one at a time.
- A bucket of water to cool sparklers and put out any small fires.
- Eye protection and gloves.
- A bucket of earth to stick fireworks in.

Lighting Fireworks

Follow these simple guidelines to stay safe:

- Only one person should be responsible for letting off fireworks.
- Do not drink alcohol if you are setting off fireworks.
- Light fireworks at arms length, using a taper
- Make sure everyone stands well back.
- Never go to a firework that has been lit – even if it hasn't gone off it could still explode.

Dud Fireworks

Follow this simple guideline to stay safe:

- Do not approach and leave alone for one hour.
- Then holding at arms length pointed away from you and with a gloved hand, place in a bucket of water overnight.
- Contact the supplier or manufacturer who will advise on safe disposal.

Sparklers

Sparklers are fun, but always:

- Supervise children with sparklers and never give them to a child under five.
- Light sparklers one at a time and wear gloves.
- Put used sparklers hot end down into a bucket of sand or water.

Other Tips on the Night

Finally, follow these other rules for a safe night:

- Keep pets indoors – most animals get very scared by the lights and noise from fireworks.
- Never put fireworks in your pocket or throw them.
- Never throw spent fireworks on a bonfire.
- Take care around bonfires – all clothes, even those labelled 'low flammability' – can catch fire.

Bonfire Safety (Private Displays)

If you intend to have a bonfire as well, it should not be lit before the firework display is finished unless the firework display is sufficiently far away to ensure that stray sparks from the bonfire cannot fall into the firework area.

- Warn your neighbours beforehand – they are much less likely to complain.
- Light the bonfire at a time least likely to affect your neighbours – e.g. not on a warm day when people will be in their garden.
- Only burn dry material not damp, which causes more smoke.
- Don't light in windy conditions.
- Don't leave it unattended. Someone should have the time to supervise it until it has burned out - if it has to be left dampen it down.
- Build it well clear of buildings, garden sheds, the firework display area, fences and hedges (at least 18 metres (60ft)).
- Check there are no cables, like telephone wires, above the bonfire.
- Keep a fire beater and a bucket of water or hosepipe handy just in case.
- Never put fireworks onto bonfires even if they are dead.
- Check construction before lighting to ensure no animal or child is inside.
- Never burn dangerous rubbish - aerosols, paint tins, bottles, batteries, tyres or foam furniture.
- Use domestic firelighters to start the bonfire.
- Never use flammable liquids like petrol or paraffin to start the fire – it could get out of control quickly.

NB: PETROL WILL IGNITE WITH EXPLOSIVE FORCE AND FLASHBACK INSTANTANEOUSLY TO THE CONTAINER FROM WHICH IT WAS DISPENSED. PETROL IS EXCEEDINGLY DANGEROUS.

Once the bonfire is lit, make sure you:

- Keep a bucket of water or a garden hose nearby, in case of emergencies.
- Do not leave the bonfire unattended.
- Keep children and pets away from the bonfire.
- Do not throw any fireworks into the fire.
- Do not burn aerosols, tyres, canisters or anything containing foam or paint – many produce toxic fumes and some containers may explode, causing injury.
- Once the bonfire has died down, spray the embers with water to stop it reigniting.

Public Displays – Fireworks

It is recommended that Category 4 Fireworks which are suitable for use by professionals only are marked with the warning;

“This device must not be sold to, or used by a member of the public”

These types of firework will not be marked with any reference to BS7114.

A small committee should be set up to organise the event. One competent member of the committee should have direct responsibility for safety arrangements before, during and after the display. If possible try and obtain the help of a person who has had previous experience of this type of event.

(a) Location and Size of Display Area:

Allow at least 50m x 20m for a firing area. Beyond this a dropping zone will be required for spent fireworks of 100m x 50m in the downwind direction. The firing area and dropping zone must be kept clear during the display by the use of a zone barrier.

Site the display area so that the spectators are positioned a minimum of 25m away with their backs to the prevailing wind. Keep clear of buildings, trees and any overhead cables. Any undergrowth or long grass should be cleared. The site should have as many entrances/exits as possible, which should be well lit, clearly signed and kept free from obstructions.

(b) Car Parking Facilities:

Any car parking facilities provided should be well away and upwind of the display area. They should be clearly signed and the vehicular access separated from the pedestrian access to the site.

(c) Advance Precautions:

Well in advance of the display the Fire Service, Police and First Aid organisations should be notified of the event and kept informed of any alterations to the schedule. Fire extinguishers, buckets of sand and water should be made available and all stewards instructed in their use.

The organiser of the event should also ensure that there is adequate insurance to cover personal injury and damage. Any stalls or other traders on site should have their own insurance.

The fireworks will probably be delivered in advance. They should be kept sealed in the manufacturer's packaging and carefully packed into a metal or wooden closed container, such as a metal dustbin with a metal lid.

No smoking should be permitted in the vicinity of fireworks.

Clearly signposted first aid posts should be set up and attended by qualified helpers.

Arrange some form of public address system - as a safety measure, not just for commentary.

A loud hailer will do as a bare minimum.

(d) Operators:

The number of operators should be kept to a minimum and should preferably have had some previous experience of firework displays. They should be provided with electric torches on the night and must carefully study the manufacturer's instructions well before the display. Smoking must not be allowed during the display. Fireworks should be unpacked carefully away from any naked flames, and be kept in a closed wooden or metal box until required.

(e) Lighting of Fireworks:

Prior to lighting, the instructions on each firework should be studied carefully.

A sudden change of wind can cause sparks and spent rockets to fall among spectators and smoke to obscure the display.

In very windy conditions consider postponing or cancelling the display.

All fireworks with aerial effects should be angled away from spectators to ensure that remnants fall into the dropping zone. Fireworks should never be fired over the heads of spectators.

A specially designed device called a port fire is usually provided by the manufacturer for lighting larger fireworks. Fireworks should be lit at arm's length. Port fires should not be carried in pockets, and should be kept in a closed container at a convenient place on the firing site.

Should a firework fail to go off, under no circumstances should anyone return to it. (See 'After the Display' for disposal of live fireworks).

(f) Spectator Control:

Good arrangements for crowd control are essential. Arrange for a number of stewards to be responsible solely for crowd control - at least one for every 250 spectators. They should be easily identifiable (they might wear fluorescent jackets), and should be on constant watch for emergencies. It is essential that they should stay until the end of the display to keep spectators off the site and ensure that it is made safe.

Make sure that all of the organising staff know what they have to do if it becomes necessary to clear the site. Work out a drill for calling the Police, Fire or Ambulance Service. Locate the nearest telephone boxes.

Particular attention should be given to keeping spectators out of the display area. Be careful not to allow any overcrowding. Should spectators break through the barrier into the display area, stop the display immediately.

No spectators should be admitted to the display with their own fireworks, even sparklers and proper notice of this should be published in advance and at all entrances.

Fireworks and alcohol don't mix. This will make crowd control more difficult.

None of the organisers should have alcoholic drinks.

(g) After the Display:

After the display, all the firework cases should be carefully collected. Any that look as if they have not gone off should be totally immersed in a bucket of water for 24 hours to allow the cardboard to soften and let water into the pyrotechnic composition powder. Once the oxidants in the powder are dissolved in the water, the firework will no longer pose a risk. A stick may be used to speed up the underwater break up of the softened cardboard tube and its contents.

Larger type display fireworks designed for professional use only should be immersed in water and returned to the importer or manufacturer for destruction.

(h) Bonfires:

If you intend to have a bonfire as well as the firework display, the guidance in West Yorkshire Fire & Rescue Service Public Advice Note FS-PAN002 "Bonfires and Fire Safety" should be followed.

Any bonfire should not be lit before the firework display is finished unless the firework display is sufficiently far away to ensure that stray sparks from the bonfire cannot fall into the firework area.

Further Advice

In addition to this Public Advice Note, the following guidance can be taken into account when organising a firework display;

Fireworks, a guide for organising public displays, free leaflet available from the Department of Trade and Industry.

Giving Your Own Firework Display (How to run and fire it safely). Available from the Health and Safety Executive, HSE Books, Tel: 01787 881165. ISBN 0-7176-0836-0.

Working Together on Firework Displays (A guide to safety for firework display organisers and operators). Available from the Health and Safety Executive, HSE Books, Tel: 01787 881165. ISBN 0-7176-0835-2.

You may also wish to obtain a special training video 'Celebrate Safely' for display organisers, which is available from the Firework Makers Guild, PO Box 29, Hove, East Sussex, BN3 5NP