

Advice Leaflet 3 Fireworks & Firework Displays

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West Yorkshire Fire & Rescue Service
Fire Safety Group
Oakroyd Hall
Birkenshaw
West Yorkshire
BD11 2DY

Tel: 01274 682311
Fax: 01274 655888

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 | 12pm and 7am following day |
| First day of Chinese New Year | 1am and 7am following day |
| Diwali | 1am and 7am following day |
| 31 December | 1am and 7am following day |

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.

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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.

The Firework Code:

1. Buy fireworks marked BS 7114.
2. Keep fireworks in A CLOSED BOX, e.g., a biscuit tin. Take them out one at a time and put the lid back on at once.
3. Follow the instructions on each firework carefully - read them by torchlight. Never a naked flame!
4. Light end of firework fuse at arms length - preferably with a safety firework lighter or fuse wick.
5. Never throw fireworks!
6. Stand well back.
7. Never return to a firework once lit - it may go off in your face!
8. Never put fireworks in your pocket!
9. Light sparklers one at a time and wear gloves.
10. Never give sparklers to a child under five.
11. Keep pets indoors.

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)).

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.

- 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 (60 ft)).
- 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 to start the fire.

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

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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.

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(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 the organising staff know what they have to do if it should become 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.

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(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, price £5.75.

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, price £8.75.

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.