



Safe and successful firework displays

These tips are intended for those organisers who are mounting firework displays for the general public. There is also important information about your responsibilities to the public and your staff.

Remember – the ten minutes it takes to read this could make the difference between a successful event and a tragedy.

Planning Ahead

- Running a display takes a lot of work, so try to share the load by planning ahead.
 - Set up a committee whose members can each take responsibility for a particular task (including one person to be in charge of all safety arrangements).
 - Be clear on who will do what and when.
 - Be sure each member has a photocopy of this guide and follows its advice.
 - If possible, try to recruit at least one person with previous experience of firework displays.
 - Remember – fireworks not marked with 'Complies with BS 7114 Part 2 1988' are suitable for use only by professionals.
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Contacting the Right People

- It is very important to keep the authorities informed of your plans.
- November 5th is always a busy time for them, so please give them plenty of warning about your plans.

- You should contact:
The Fire Service
The Police
First Aid organisations
Local Authority*
HM Coastguard†

*Check if you need a storage licence. †If display is taking place within 5 miles of the coast.

Be Prepared

- As well as liaising with the Local Authority, Police, Fire Service, HM Coastguard† and First Aid organisations, you or your appropriate team member should:
- Arrange for your fireworks to be delivered and stored securely (and circulate the manufacturers' general instructions to your team).
- Animals can be terrified by fireworks. Warn your neighbours and any local farmers, stables and kennels etc in advance so they can keep pets indoors and take other necessary precautions.
- Arrange for you and your team to be trained in the various tasks for the night, including all emergency drills.
- Arrange for first aid posts to be manned by qualified people. Borrow or hire special clothing (bibs, jackets etc) to identify you and your team on the night.
- Arrange some form of public address system – as a safety measure, not just for commentary. A loud hailer will do as a bare minimum.
- Arrange for fire extinguishers, buckets of water, buckets of sand and metal litter bins to be available on the night.
- Check that plenty of electric torches will be available on the night, with full batteries.
- Publicise the fact that spectators are not allowed to bring their own fireworks (including sparklers) and will not be admitted if they do so.
- Prepare all necessary signs.
- Make absolutely sure that you'll have enough people available to help you on the night (including some cover for illness).

- Draw up a detailed checklist of tasks and indicate who is to be responsible for each one.
- Check whether you are adequately insured to cover any firework-related injuries to those present at the display.
- Vet any traders you intend to allow on the site.

†If display is taking place within 5 miles of the coast.

Picking the Right Location

You should choose a large, clear and well-mown area free from obstructions, well away from any buildings, trees and hazards like overhead cables, with as many safe entrances and exits as possible. These must be away from the firing area and dropping zone.

Make sure that all entrances are well lit, clearly signposted and kept free from obstructions. Clear away any undergrowth or very long grass. Have plenty of (metal) litter bins around the site. Make sure you can cater properly for disabled spectators. Watch out for any animals likely to be housed nearby.

The display site needs to be large enough to cope with the types of fireworks to be used, a change in wind direction or strength, and the expected number of spectators. As a minimum:

- **Allow at least 50m x 20m for your firing area.**
- **Beyond this you will need a dropping zone for spent fireworks of 100m x 50m in the downwind direction.**
- **Spectators should be kept back on the opposite side to the dropping zone at least 25m from the firing area.**

Greater safety distances will be required for certain sizes or types of fireworks. Displays fired from unusual sites such as a roof of a building or a barge on a river may require different safety distances.

Safe Car Parking is Essential

Falling fireworks can cause damage, so site any designated car parking well away from your display area and dropping zone and upwind of the display. Signpost any car park clearly and make sure that the entrance is quite separate from pedestrian access. **Do not permit parking anywhere else.**

Keeping in Control

Proper crowd control is essential and needs good planning.

- Arrange for some stewards to be responsible for just this – at least one steward for every 250 spectators. Their job won't be finished until the display is over, the site is cleared and made safe. Your stewards should be easy to identify, perhaps with fluorescent bibs or jackets.
 - Be certain that your team know what to do in an emergency and have practised safety drills.
 - Spectators must not be allowed into your display area. If they do encroach, stop the display immediately. Prepare and erect signs to clearly show the area.
 - Beware of overcrowding – seek advice from the police and follow it.
 - None of the organisers should drink alcoholic drinks before or during the display.
 - Do not allow spectators to enter the site with their own fireworks – even sparklers. Make sure that there are signs explaining this at all entrances, and in publicity prior to the display.
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Experience Counts

- Take great care at all times. Plan your display in advance, make sure you know which fireworks are going to be let off and in what order. Take the fireworks from a secure container only when they are to be let off.
- Recruit people with previous experience of firework displays. Have as few people as possible actually involved with the fireworks.
- Do not allow smoking by your team when fireworks are being handled, or at any time during the display.
- Unpack fireworks with great care and well away from any open fire, naked flame or flammable material. Remember that they are fragile and can easily be broken. **Keep fireworks in a secure box which is kept closed.**
- Before lighting any firework, read the instructions on it carefully (by torchlight).
- Make sure that the wind blows away from spectators. The display should be angled away from spectators.

- For lighting display type fireworks, a device called a Portfire is often provided by the manufacturer. Use Portfires when available and always light fireworks at arm's length. Keep unused Portfires **in a secure box and never carry them in pockets.**
- Alternative forms of safety lighters, such as a slow match, are often available.
- Never use matches or lighters for lighting fireworks at a display. If any firework fails to go off, don't go back to it. It could still be live and could go off in your face. Half an hour is the absolute minimum time to wait before you consider approaching it again.
- A sudden change of wind direction or strength could cause aerial fireworks to fall dangerously among spectators. In very windy weather, you should consider putting off the display altogether, however disappointing that might be.

Bonfires Need Planning Too

Bonfires need a lot of organising and can be a hazard. Many displays are a great success without one.

- If, after careful consideration, you do decide to have a bonfire, make one person responsible for it, from early planning to final clearing up, and make sure it is the appropriate size for the space you have.
- People looking after the bonfire are advised to wear substantial outer garments, not lightweight clothing which could ignite relatively easily.
- Don't site it too near your display or firework storage area. And don't site it anywhere near fences or trees.
- Never use flammable liquids like paraffin or petrol to get it going as this can result in uncontrolled spread of fire or explosion.
- Check immediately before lighting that there's no animal or even a young child hidden inside.
- Disposing of the spent cases is potentially dangerous and should be done with great care only after all your spectators have gone. Never put fireworks on a bonfire, even if they're dud.
- Don't burn dangerous rubbish (e.g. aerosols, gas cylinders, paint tins, foam-filled furniture, tyres and bottles).

- Remove any rubbish from your bonfire area in advance so there's nothing that can be thrown onto the fire on the night.
 - Materials producing light ash which could also blow about (such as corrugated cardboard) are unsuitable for burning.
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After the Event

- The work for you and your team doesn't finish when the last firework goes off.
- Spectators need to be cleared safely from the site.
- The bonfire needs to be put out completely.
- Spent firework cases must be gathered. Look for used fireworks with a torch and use tongs or some other suitable tool, and wear strong gloves.
- Don't allow any children to collect firework cases.
- If any fireworks look as if they haven't gone off after at least half an hour, soak them in a bucket of water and ask the Fire Service for advice.

You can order more copies of this factsheet. Ideally, a copy should be supplied to every member of the team involved in your display. Feel free to copy the material too.

Further information

For further information and guidance please see the HSE website at www.hse.gov.uk/explosives/fireworks/using.htm or contact their infoline on 0845 345 0055.

