

# PREPARATION GUIDE FOR BONFIRE AND FIREWORKS DISPLAYS



Advice on running a successful bonfire or firework night



# Preparation Guide for Bonfire and Fireworks Displays

## ADVICE ON RUNNING A SUCCESSFUL BONFIRE OR FIREWORK NIGHT

Bonfire and Fireworks nights can be spectacular occasions and great fun for families in your community. Along with the celebrations before Christmas though, fireworks night is the busiest time for our Fire and Rescue services, preventable accidents do happen at displays and there is a big responsibility on event organisers to ensure a safe environment and sensible precautions.

This document provides some advice on how to run a successful bonfire or firework event. Whether you are organising the event as a one off or part of a wider community group, we will outline some of the safety issues that you will want to address.

It is not a comprehensive risk management tool and is designed only to stimulate thought about some of the issues that bonfire and fireworks event organisers face. Professional health and safety advice may be appropriate for your group, particularly larger displays. We would certainly also recommend the Health and safety Executive document [‘Giving your Own Firework Display’](#) and the [UK Fireworks Review](#) site. You also need to get a copy of the Department of Trade and Industry document [‘Firework Safety Campaign’](#)

## PREPARATION

Planning for any community event is essential and it is the planning process that the safety success of an event is likely determined. In regards to the event, have a clear management structure. Ultimately, one person needs to assume responsibility for the event being safe, this clarity creates responsibility.

In preparing, consider the build up to the night, the evening itself and also the clear up operation. Have a wet weather plan and an emergency plan and consult widely with local organisations and any other relevant bodies.

If you are having a fireworks event, an important consideration is who is actually going to operate the display. Fireworks are graded into four categories and only professional fireworks contractors can operate category 4 fireworks. The training and certification required to fire this grade of firework is not generally available to the public.

You must remember though that lower category fireworks are also dangerous. In the wrong hands, powerful fireworks are fatal. The easiest option is always for a professional third party to fire your fireworks display. It is also much harder to find insurance for 'self-fired' events.

If you are using a third party to fire your display, you still need to prepare with them. A professional might massively reduce the risks involved but accidents can still occur. What is the plan for when something goes wrong? If using a third party provider, ensure that they can supply you with a current public liability insurance certificate, any reputable supplier will be able to provide this and you need to acquire it in writing confirming the policy number and the limit of indemnity. You should also check that all premiums are paid and the policy is current and has not been cancelled.

The reason for this being important is that your own insurer is unlikely to step in and defend and cover the costs of a claim that your contractor is responsible for. Thus, if the contractor is not fully insured, you may find yourself without any protection in the event that somebody seeks redress for an injury at your fireworks event.

Make sure it is clear to all spectators that they cannot bring their own fireworks. You need to make sure that stewards ensure this is the case on the night too.

## THE VOLUNTEERS

Plan also for the various jobs that need to be done on the evening. This way, volunteers can come suitable dressed for their roles, whether in hi-vis clothing in the car park or in the case of the bonfire lighter, suitable thick, lower flammable clothing. Your risk assessment should plan for a low and high attendance and ensure enough marshals are helping. Procedures should be created and clear responsibility should be allocated to people for;

- The firing area – Ideally someone with fireworks experience
- The bonfire
- Car parks
- Emergencies and first aid

Prepare any volunteers well for these roles, make sure they are clear on their responsibilities and capable of discharging them. Also make sure all volunteers know the emergency plan. As far as numbers are concerned, as a rule, most events will need a minimum of 4 people (for small events) and add an extra person for every 150 attendees. Make sure you have prepared these volunteers in the right dress and with lights and communications.

Plan as well for suitable first aid stations with trained first aid volunteers. The larger display the more seriously this will need to be taken. Signpost clearly any facilities you have set up.

Finally, make sure you liaise with any relevant parties such as your local fire service, St John's ambulance or local authorities. You may require licenses and you will need to make sure your group meets their requirements.

### ASSESSING AND PREPARING THE SITE

In reviewing the site you wish to use for your bonfire and fireworks display, there are a number of things to review. The irresistible force of gravity will mean that your fireworks will go up and then return to Earth. When they come down, you want to be sure that they are not landing in spectator areas or onto other buildings. Having a big enough landing area is important and ensuring it is well marked out on the night and marshaled accordingly.

It is also worth considering what your fireworks might strike. Check for overhead obstructions such as power and telephone lines. If you are near an airport, contact them and make sure your event is safe. Trees and vegetation are also a consideration; you need to be well clear of these as well as any roads, railways and rights of way.

Consider your neighbours; make sure they know the display is happening so they can make any preparations they wish too. Have a set time for the display and consider the appropriate noise level too (see next section).

Your risk assessment and preparation should consider how people arrive and depart safely from the site. You should have the areas of the site very clearly marked and stewards should ensure that people cannot stray into areas that are sensitive. These would include getting too close to the bonfire, the lighting area for any fireworks and the zone you should mark out for falling fireworks.

Ideally, pedestrians and cars should arrive separately to the site. You should also consider how emergency services would get to the site in the worst-case scenario. Make sure car parks are suitably distant from the firing area and the firework drop zone. Make sure that lighting is adequate too in these public areas.

## BUYING AND STORING QUALITY FIREWORKS

If you are firing your own display, you need to acquire and store the stock.

Always use a good supplier for any fireworks. Not only will the fireworks be of better quality (more thrilling to the crowd!); they will also be more reliable and therefore safer. Furthermore, a good retailer of fireworks will be an invaluable source of advice on such issues as noise. You might want some volume to the display but considerations of noise are important, consider the neighbours and their pets and buy appropriate fireworks accordingly.

Any quality supplier will only provide fireworks that comply to British Standards

It might be worth discussing with your firework supplier the post event clean up. Ask if they would take any waste fireworks, as their safe disposal is an issue we will come to.

The purchase of fireworks is the easier part. A much greater consideration is their storage. Put frankly, this is the reason many community groups would want a professional to run their fireworks display as it removes the complexities of storage before the night. You must conduct a good risk assessment for storing fireworks and check with any relevant insurance company that they are happy for fireworks to be stored in the building.

If you are going to store fireworks, the obvious consideration is how a fire might start and spread to the fireworks themselves. On the night, there are sensible precautions you can take but prior to the night, ensure you have a safe space for the stock. Take advice from the retailer of your fireworks too but as a rule.

Obviously you should make sure there are no ignition sources anywhere in the vicinity of the stored fireworks, as well as obvious things like cookers and smokers, portable heaters should be kept separate too and any other combustibles.

You must avoid storing fireworks alongside any combustible substances such as paint thinners, drain cleaning chemicals and many preservatives, fertilisers, white spirit, petrol and peroxide based products. These are only examples; anything that can burn should be removed from the area. It is also a good idea to use make sure your fire maintenance is up to date.

Access should also be considered; fireworks should be in a highly secure area with only authorised individuals being able to get to them. The area needs to be dry too.

Keep any fireworks in the packaging they were sold in, do not be tempted to open it all up for examination before the night. It is a good idea to avoid handling them as much as possible before the event.

The storage of fireworks has legal implications. The UK Firework Review team has a more detailed article about the [storage of fireworks here](#).

## ALCOHOL AT THE DISPLAY

Running a bar is something that many community groups consider as a potential fundraiser at their fireworks display. Either running a bar or allowing spectators to bring alcohol onto the site adds complications and risk to the event and for community family fireworks displays, it is something that you might wish, on reflection, to avoid.

## CONTROLLING THE FIRING AREA AND LIGHTING FIREWORKS

Check the prevailing winds at the forecast stage, at the start of the event and during the event. Knowing the weather to expect is an important part of your preparation.

In assessing the site, you will have planned the area in which fireworks will fall. Make sure that the general public is not able to stray into this area or indeed into the safety area you should mark out around the launch area. This needs to be marked out (as does any landing and safety zones) with good perimeter tape and sturdy stakes.

A designated adult (a firing controller) should be responsible for the lighting area and the operations within. They should have control of the storage, siting and lighting of any fireworks. Clearly this might be a third party if a contractor has been engaged but if it is being done by your group, ensure clarity over who is in charge of this part of the event. If it is a member of your group, they need to be highly proficient in the safety documents we have recommended reading. The most common sense items are concerned with things like never relighting fireworks and not approaching fireworks that did not light properly.

Appropriate safety clothing, headgear, gloves and goggles are essential for the persons responsible for lighting any bonfire or fireworks. Low flammability and hi visibility is key.

Any fireworks not for immediate use are to be kept in a lidded metal box, well away from the firing and spectator areas, and in the permanent custody of the firing controller or an adult assistant.

This individual will also want to make sure the right equipment is on site. This will include all of the stakes, posts, tape hammers, ties, cutters and labels required to set the area up. Windproof lighters (seek advice from your supplier on the right lighting tools) are essential and good lighting is also important. There is also plenty of bending and kneeling in setting up, use knee pads for comfort and have a seat for the long periods of waiting before the display starts! Make sure you also have enough food and drink for the night yourself and you have considered how you might 'spend a penny' while leaving the area properly supervised!

Your display probably has a firing list, make sure it is waterproof and to hand.

Fire extinguishers are very important. Buckets of water and sand are highly useful.

You might have a first aid station for the event itself but also make sure there is a first aid kit available at the lighting area. Part of the preparation for the lighter should be a risk assessment for if something goes wrong. Who will handle communication? Make sure you have mobile phones in this area. How would a burn be treated? To be fair, most injuries will not be burn related, a sore thumb from an accident hammering a stake in is just as likely.

## THE BONFIRE AREA

Ensure that a safe area around the bonfire is clearly marked.

Make sure the structure of the bonfire is solid, you do not want it collapsing and spreading. It is said that hedgehogs in particular like bonfire stacks as suitable homes and so check yours carefully before lighting for this and other wildlife and even children.

This person should also have been responsible for the materials used to build the bonfire. A final check should be made to ensure it remains safe but the stack should be clear of any foam, plastics, aerosols, paint tins, cans and bottles amongst other things.

Do not use flammable spirits such as petrol to light the fire. Quantity is easy to misjudge and having such chemicals on the site presents another risk.

If you have prepared well, the person responsible for lighting the stack will have known their role. This is an important part of preparation and planning.

They should be suitably attired, covered and in low flammable clothing, such as wool. Make sure there are suitable fire fighting measures at this point in the site. You will not be able to extinguish a bonfire once it is going but small fires that break out unexpectedly, lit from sparks or collapsing materials might be controllable with buckets of water and or sand.

## CLEARING UP

Hopefully the event was a fantastic success and everyone had a great time and got home safely. Clearing up the site on the following morning is important. As part of your preparation, this should be an operation that your volunteers are ready for. Make sure you have the right equipment.

We have written a [document concerning general litter picking](#) and the equipment and thought necessary for conducting these activities. Clearly, there are additional considerations after a fireworks display.

First of all, leave plenty of time. Often it is best, once the site is clear of spectators, to check the site for any obvious problems with car or van lights. Get any waste materials off site that night as long as you can do so safely. Do not leave fireworks behind.

Douse the bonfire with adequate water. This will require an element of planning.

The final clear up and site shutdown should wait until there is daylight.

County House, Waterside Business Park, Dinnington, Sheffield S25 3QA

Tel: 01909 565858 | Web: [www.ladbrook.co.uk](http://www.ladbrook.co.uk) | Email: [enquiries@ladbrook.co.uk](mailto:enquiries@ladbrook.co.uk)

**Ladbrook**  
— insurance —

Dispose of burned or used fireworks very carefully, it is possible some did not discharge or only partially burned and you may have highly combustible material. You should never burn these; in fact they need to be carefully handled. Even seemingly spent fireworks may fire still from a bonfire, burning explosives in a contained area is just as dangerous; you should never burn firework debris this way.

Without doubt, soak any firework waste in water as a start.

There is no really good advice for disposing of fireworks. If you bought from a reputable supplier, see if they will take your waste, the best time to do this of course is when you are buying the fireworks! After that, contact your local fire service; ask what they would like you to do in clearing up the site and disposing of any firework debris.

## INSURANCE

Insurance is not legality for a fireworks display but we would say that it is essential for any reputable community group. Claims can be bought against fireworks displays and even if unsuccessful, the cost of defending your group could be ruinous.

Not many insurance companies are prepared to insure fireworks events. If you are already insured, it is worth starting with your current provider and seeing if they are automatically covering your event or can extend your policy to provide cover.

If you want advice on [bonfire or firework event insurance](#), follow the link or call us during office hours on 01909 565858. We wish you good luck for a spectacular and safe event.