

A GUIDE TO
ORGANISING SAFE BONFIRE
AND
FIREWORKS DISPLAYS



INTRODUCTON

This guide is for organisers of fireworks displays to help make them safe.

It covers most types of display, including displays where the fireworks are set off by the organisers. These events are often put on by organisers like parent/teacher associations, sports clubs and public houses for their customers.

This guide also covers larger displays organised by voluntary organisations where professional display operators are used.

Please bear in mind that this is only a guide and not a definitive document.

PLANNING THE DISPLAY

ORGANISATION

- Organise the display as early as possible.
- Form a committee (no matter how informal) with responsibility for the operation of the display, with one person in overall charge.
- One person should be solely responsible for safety matters. They should not be engaged in any other duties or activities which would prevent them carrying out this responsibility.
- All people with a specific responsibility before and during the display should be named. All hazards should be identified; precautions specified and everyone appropriately trained.
- Everyone assisting during the course of the display should be properly instructed in their responsibilities and what action to take in the event of an emergency.
- It is suggested that this is set down in writing.



WHO TO CONTACT

It is advisable to contact the following people well before the display. Where necessary keep in touch with them as your plans proceed:

POLICE

Contact the Police Station local to the site. Tell them the location of the display and its layout, including entrances and exits. They can advise you and may be able to assist with crowd control; public order; emergency access and local traffic management and parking.

LOCAL AUTHORITY

At an early stage of your planning contact the Council's Public Protection department for advice about:

- Your arrangements for storing fireworks before the display
- About your duties under the health and safety legislation
- If food is going to be sold at the display
- On the possible need for a Temporary Event Notice (TEN) i.e. where the display accompanies a music concert; but not normally where music is played at a display.

FIRE AUTHORITY

Contact Shropshire Fire Service to ensure that the capacity of the grounds being used will allow for the expected number of people attending. You will also need to have a fire risk assessment undertaken.

NEIGHBOURS

Contact neighbours or neighbouring landowners about the event, so they can keep animals indoors where necessary. In the interests of good public relations, inform nearby hospitals, homes for the elderly etc.

INSURANCE

Public Liability Insurance: You, the organisers, could be held legally liable for the costs or damages for any injuries, etc, which may occur during the event.

It is possible to insure this risk via a public liability insurance policy and it is recommended that this insurance be arranged with a minimum limit of indemnity of £2 million, although in many instances, through advice from insurance companies and brokers, a greater level of



cover may be needed. Remember, without cover the claim would be made against all the organisers and their private finances. Council schools, youth clubs and other Council establishments proposing to hold a display should contact the Council's insurance section to ensure that they are adequately insured. PTA's and other voluntary groups will require their own separate insurance cover.

Contractors Insurance:- Where organisers are using specialist fire display contractors, they should check that the contractor has their own public liability insurance and that the contractor complies with any policy terms and conditions.

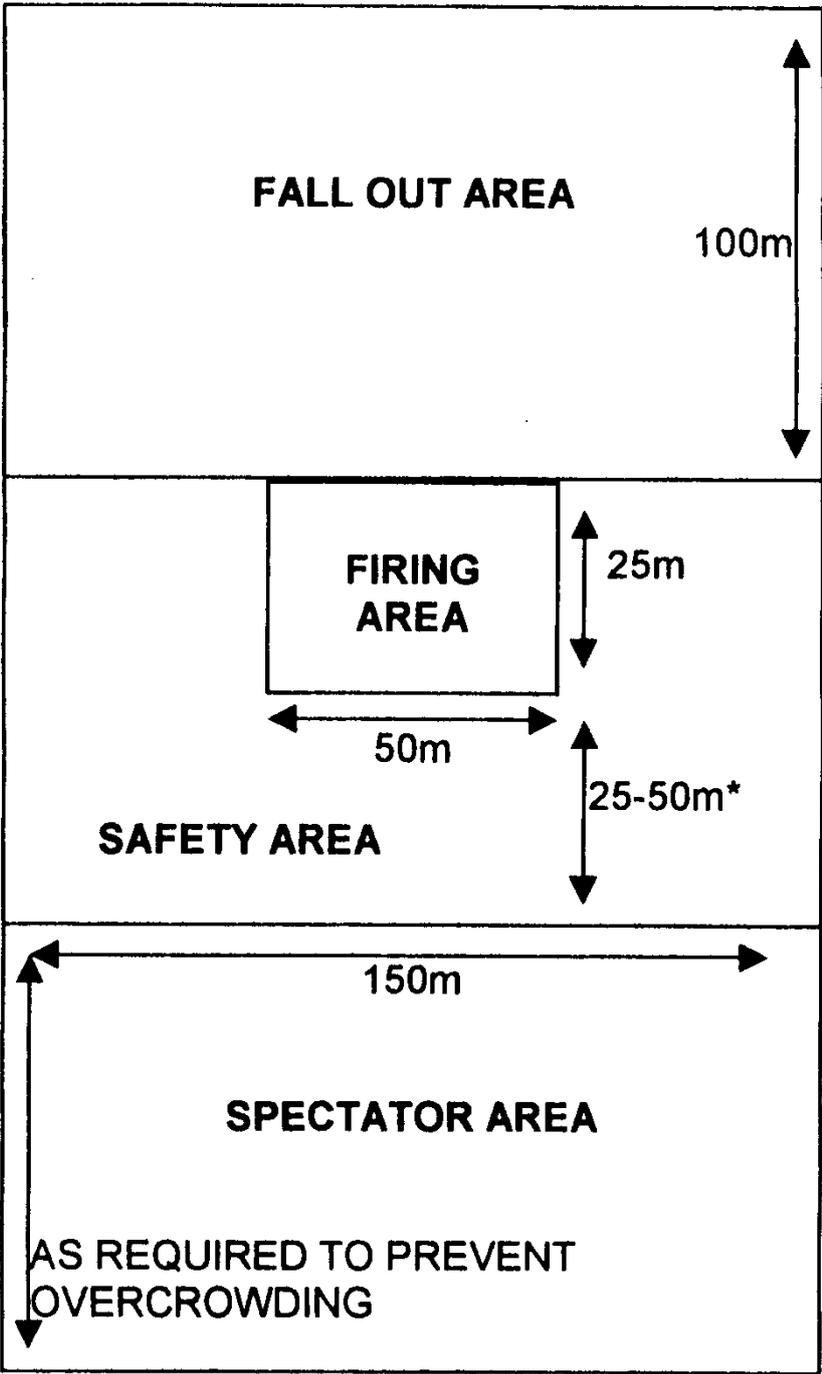
Insurance Claims:- In the event of any injury or damage to property, ensure that full details of the incident are written down and that the matter is reported to your insurers without delay. Never admit liability as it may invalidate your cover.

SITE LAYOUT

- Set out the site as indicated on the DISPLAY SITE DIAGRAM below
- The site should be as large as possible for public safety, bearing in mind the types of fireworks to be used and the expected number of spectators.
- Ensure that the site is free of dry, cut grass and other easily combustible material.
- Check the site in daylight for obstructions, i.e. trees, overhead power lines, adjoining buildings, entrances/exits and parked vehicles. Locate firing and fall out areas which are clear of obstructions.



DISPLAY SITE DIAGRAM



* Will depend on the types of fireworks being used



SITE FACILITIES

ACCOMMODATION

- Allow an area of at least 0.5 square metres per person
- Overcrowding should not be allowed
- Consider providing an area and facilities for spectators with disabilities.

SPECTATORS FIREWORKS

- Do not admit spectators to the display with their own fireworks or sparklers. Publish notice of this in advance and at all entrances on the night.
- Do not sell fireworks at the site.

EXITS

- Provide a least 2 spectator exits from the site; large enough, spaced well apart, clearly marked, kept free from obstructions and well lit.

SAFETY BARRIERS

- Provide sufficient physical barriers to prevent spectators entering the safety, display drop zones and bonfire areas.

FIRE FIGHTING

- Provide equipment for putting out small fires (e.g. fire extinguishers, buckets of water/sand, fire blankets) throughout the site.
- Ensure that an adequate number of stewards know how to use this equipment. Tell them not to attempt to fight major fires.

FIRST AID

Contact St John's Ambulance, British Red Cross or another voluntary First Aid society to arrange attendance at larger displays at an early stage in your planning.

- At smaller displays where voluntary first aid societies are not able to be in attendance, ensure that a qualified first aider is present. This person should be readily identifiable. A well lit facility suitable for first aid treatment should be made available, provided with a plentiful supply of water for the treatment of burns; eyewash and eyebaths and a selection of sterile dressings.



- You should be aware that any burn deeper than the surface of the skin or larger than 25mm in diameter must be referred to a doctor or hospital.
- Clearly signpost the First Aid post and provide clear and easy access for spectators and an ambulance at all times. Where an ambulance is required provide a parking area adjacent to the First Aid post and maintain a clear exit from the site.
- Ensure that all persons assisting at the display are aware of the location of the First Aid Post, or where appropriate the identity and location of the first aider.

EMERGENCY ACCESS

Keep the agreed emergency service routes clear of obstruction and readily accessible at all times.

PUBLIC ADDRESS

Provide a small public address system or portable loud hailer so that announcements and instructions can be heard by all spectators.

REFRESHMENTS

Refreshment facilities should be located away from the spectator area and pedestrian and vehicle access/egress points.

Locate any bar selling alcohol well away from the display site and do not allow drink to be taken from the bar. Do not allow spectators to bring alcohol into the display site. No one involved in the running of the display should be under the influence of intoxicating substances.

Any food vendors attending the display should be registered with their relevant authority and have the necessary checks in place to ensure food safety. Event organisers should inform the Food and Health and Safety team in Public Protection of the names of the food vendors attending.

LITTER

Provide suitable litter bins throughout the spectator area.

CAR PARKING

Site any car parking well away from the display and fall out areas and up wind of them.

Clearly signpost the parking area.



Vehicle and pedestrian entrances should be separate.

Do not allow car parking anywhere else.

CROWD SAFETY

Provide an adequate number of stewards who are responsible solely for crowd safety. There should be no fewer than 2 stewards for up to 500 people plus 1 for each additional 250 people expected to attend.

Make the stewards easily identifiable i.e. wearing fluorescent jackets and provided with torches (have additional torches available for other staff and a supply of spare batteries)

Instruct stewards to be on constant watch for emergencies. Make sure they know what actions to take, paying particular attention to controlling entry to the spectator areas, avoiding overcrowding and keeping spectators out of safety, firing and drop out zones.

Make every effort to start the display on time. Crowd control becomes difficult the longer people are kept waiting. If a delay is unavoidable, tell the spectators at an early stage, and keep them updated.

EMERGENCY PLANNING

When planning the event, consider what could go wrong on the day and draw up a plan to deal with each emergency or contingency, to include what action will be taken and who will take the action.

The following paragraphs highlight some of the problems that may arise and actions that could be taken. The list is not exhaustive, but should help you plan ahead for emergencies.

Stopping the display/cancelling due to adverse weather conditions

You will have based the site layout on the prevailing wind conditions. If the wind direction is different on the day of the display, consideration may have to be given to altering the layout to ensure people's safety. If this is not possible or inadvisable as it may interfere with exits, you may have to consider the actions for high winds described in the following paragraph.

In high winds it may be necessary to modify the display (i.e. eliminate aerial fireworks) or, in extreme conditions, cancel it or finish early. The firers should be involved in these decisions and if they wish to stop or cancel the display, they should not be overruled by the organisers.



Spectators in safety, firing or fallout areas.

If spectators break through the barrier into the safety, firing or fall out areas ensure that firing of fireworks stops as soon as practicable.

Bonfire out of control/fire started by firework debris/etc

If you cannot deal with the fire using first aid fire fighting equipment, call the fire brigade without delay and suspend firing of the display until the fire is extinguished or the fire brigade advises it is under control. If fire threatens fireworks, move them only if it is safe to do so. If spectators have to be moved away from the fire ensure that access for fire appliances is maintained at all times.

Disorderly behaviour by spectators

If trouble seems to be developing consider calling the Police rather than dealing with the matter yourselves.

Communications

Two way radios should be provided between the display operator/firers and other people with key responsibility for emergency action.



THE BONFIRE

Make one person responsible

SITING

- Locate the bonfire at least 15m away from other areas, buildings, roads, railways and public rights of way.
- Downwind of spectators, to prevent their view being obscured by smoke and burning ashes being blown into the firework team.
- A safe distance from flammable or otherwise dangerous materials (e.g. petrol, liquefied petroleum gas – lpg) and overhead power lines.

CONSTRUCTION

- Use dry material with heavy bulk items forming the core of the fire, arranged so that the bonfire collapses inwards
- Do **NOT** burn dangerous rubbish like foam filled furniture, old tyres, aerosols, bottles, tins of paint etc
- Avoid light materials such as corrugated cardboard which is liable to blow about when burning and/or burnt.
- Tie the guy securely to the top of the bonfire
- Cover the bonfire to keep materials dry

BEFORE LIGHTING

- During daylight, check that the construction is stable and remove any unsuitable materials that may have been added. Look for fireworks, aerosols and highly flammable materials or containers containing such materials.
- Check during daylight and **immediately** before lighting that there are no children or animals inside.

LIGHTING

- One person should be responsible for lighting the bonfire
- **Never** use petrol, paraffin or other flammable liquids to start the fire.
- Use paper and solid firelighters from two or three places to ensure an even burn
- The person looking after the bonfire should not wear lightweight clothing which could ignite relatively easily. They are recommended to wear a substantial outer garment of wool or other material of low flammability and stout boots or shoes.



They need to know what to do in the event of a burn injury or a person's clothing catching fire. They need to have a fire blanket ready in the bonfire area.

- It is preferable not to light the bonfire before setting off the fireworks as stray sparks may accidentally set them off.

THE FIREWORK DISPLAY

FIREWORKS

- Bulk purchases of fireworks for larger displays should be made from reputable manufacturers and should comply to BS7114.
- Fireworks for smaller displays may be purchased (but only by people over 18 years of age) in boxed sets from local shops which are registered for the sale of fireworks by the Council.
- Size and weight limits apply to a range of firework types (e.g. air bombs, mines, rockets, roman candles and wheels).
- Do **not** use damaged fireworks or fireworks left over from previous years.
- Sparklers are **not** to be given to children under 5 years of age.

STORAGE

- Fireworks should not be stored within a domestic house, but in an outbuilding which offers security and protection from damp.
- Store fireworks in the transportation containers in which they are supplied, and store loose fireworks in closed metal containers e.g. dustbins.

HANDLING/SETTING UP

- Unpack carefully in a dry place away from open fires and flammable materials.
- Do not smoke when handling fireworks
- Study the manufacturer's instructions about the fireworks before the event, preferably in daylight. This will give time to prepare any firework supports and train firers.
- Seek clarification from the manufacturers if the instructions are not clear.
- Read and observe the instructions on each firework using a torch and not a naked flame.
- Set fireworks in accordance with the manufacturers instructions.
- Angle them away from spectators and place stakes used to support rockets, roman candles or similar fireworks on the spectator's side of the firework. This will ensure



that in the event of a stake collapsing or the firework becoming detached the firework will fall away from the spectators.

- Only set up fireworks in the firing area.

LIGHTING

- Allow only firers into the firing area and restrict their numbers to the minimum necessary – two will normally be sufficient. If there is no radio link, appoint one person to relay messages between the firers and the person in overall charge of the display.
- Firers should wear suitable protective clothing. This could consist of stout footwear and outer clothing of wool or other fire resistant material and a protective hat, eye and ear protection and gloves. Lightweight flammable clothing should be avoided.
- Each firer should carry a torch and a whistle to attract attention in case of difficulty.
- For lighting display fireworks a device called a port fire is usually provided by the manufacturer and it is essential this is used. Port fires should not be carried in pockets but should be kept in a closed container when not in use.
- For lighting garden fireworks use the fuse wick supplied in boxed sets.

Never use matches

FAULTY FIREWORKS

- Leave a firework which fails to go off until the end of the display or for at least 30 minutes, whichever is longer, before placing it in a bucket of water, preferably overnight. Seek the manufacturer's advice on safe disposal.
- Do **not** attempt to relight faulty fireworks
- Do **not** attempt to put them on the bonfire for disposal.

AFTER THE DISPLAY

- Keep spectators out of the safety, firing and fall out areas until the firers have checked and made the site safe, locating and dealing with any fireworks that have misfired.
- **Never** put fireworks, including fully spent ones, on the bonfire or dispose of them by burying.
- Place fully spent fireworks (but not misfired or partly spent) in refuse receptacles.
- Soak misfired or partly spent fireworks in a container of water in an area where they cannot be tampered with. Contact the manufacturer or supplier for advice on safe disposal.



- Keep spectators out of the bonfire area until the fire has been properly extinguished. Cool it down before leaving the site.
- Return to the site at first light to check that the area is clear of partly spent fireworks and other hazardous remains.

VIEWING AND READING

The following videos and publications provide additional information on organising and setting up a bonfire/firework display.

Safer Displays – A Guide to Firework Safety Selling Fireworks – Some things you should know

Firework Displays – A Guide for Organisers.

Giving your own Firework Display

Working together on Firework Displays.

FIREWORKS

What about firework noise?

The law relating to fireworks changed with the Fireworks Act 2003 placing new restrictions on the use of fireworks. Other than this, there is no specific law to deal with noise nuisance caused by fireworks.

The ordinary noise nuisance laws, under the Environmental Protection Act 1990, are not applicable to firework noise. A firework event, held maybe once a year for an hour or so, is not ongoing. Fireworks are often used to celebrate a significant cultural or religious ceremony and this would be the view taken by any court in relation to fireworks used during such periods; it would be difficult to prove beyond all reasonable doubt that any one event or person is solely causing the noise problem when there may be scores of similar events in the locality.

Telford covers a large geographical area with thousands of buildings and gardens, to pin point which premises is hosting the event (in the dark) from an explosion occurring in the night sky and identifying the person responsible, which may be different from the owner even if access to the premises is near impossible; by virtue of the cost of fireworks, few firework events last long enough to allow any out of hours officer to reach them before they are over.



It should be noted that Telford and Wrekin do not offer a reactive out of hours service, although we do carry out some pre-arranged out of hours work (for more information contact Public Protection on 01952 381818).

Certain prolonged or repeated use of fireworks at the same address may however be covered.

What controls do exist on use of fireworks?

Fireworks as part of a controlled event can be an enjoyable and spectacular experience. However, if misused, fireworks can be very disturbing or worse dangerous. In 2004 the Firework Regulations came into force in an attempt to better control the sale to, and use of, by the general public. The Regulations state:

- No member of the public under the age of 18 shall be allowed to possess an adult firework in a public place.
- No member of the public shall possess a category 4 firework
- No person shall use an adult firework during night hours (11pm to 7am) except for permitted displays, displays for local authorities or national public celebrations.

Except:-

- 11pm to 1am on Chinese New Year
- 11pm to 12pm on 5th November
- 11pm to 1am on Diwali
- 11pm to 1am on New Year's Eve

- There shall be no category 3 fireworks which, when used, produces a maximum A weighted impulse sound level exceeding 120 decibels.
- Suppliers of fireworks who supply them all year round will require a licence. Other retailers may sell fireworks subject to registration:-
 - 3 days before Chinese New Year
 - 3 days before Diwali
 - 15th October to 10th November
 - 26th December to 31st December

A few simple rules:

- 1. Be safe** – if you are having a fireworks party, make sure you follow all the instructions given on the packaging, if in ANY doubt, don't use the firework.
- 2. Be considerate** – not everyone enjoys fireworks, some people and most animals can be seriously distressed by the loud explosions. Remember that you may only have a



few fireworks, but so might your neighbour, and theirs and so on. Try to make sure that you finish using fireworks as early as possible in the evening and certainly well before 11pm.

- 3. Be sensible** – even the most expensive fireworks pack will only have a limited number and type of fireworks. It is often more spectacular, more impressive and certainly safer to go to an organised display.
- 4. Be happy** – enjoy the fireworks on Bonfire Night, and all the other activities that might go with it and follow the rules.

Who do I contact if there are problems?

If you believe that someone is using fireworks and they are under age (i.e. under 18) the matter should be referred to the Police; similarly if anyone is using fireworks irresponsibly in a manner likely to cause damage or injury, again the Police should be informed.

What can I do to prevent my pets being disturbed by fireworks?

Fireworks can be an exciting and spectacular experience for people, but animals can be distressed by the loud bangs and flashing lights. If you are concerned about your pet being disturbed due to fireworks, you should consider the following:

Dogs

Exercise your dog during the day

Never walk your dog while fireworks are being let off

Keep your dog indoors and close the curtains

Let your dog hide if it wants to take refuge under furniture.

Cats

Keep your cat indoors

Close all windows and close curtains

Leave your cat to take refuge in the corner if it wishes and do not try to tempt it out as this could cause more stress

Make sure your cat is micro chipped to ensure that it can be returned to you if it escapes and becomes lost.



You may consider asking your vet for advice. If your dog gets very distressed when fireworks are let off, your vet may suggest something such as dog-appeasing pheromone. This is a synthetic version of a chemical produced by a bitch shortly after giving birth which reassures newborn puppies and naturally calms them down.

It is also possible to de-sensitise your cat or dog by playing the sounds of fireworks through a Hi-Fi and giving positive re-assurance to your pet. Again contact your vet for further advice.

Do not forget dogs and other animals kept outside, and consider bringing them indoors or making sure they have a safe place to go.

Hutches, cages and aviaries should be loosely covered where possible i.e. polythene sheeting, making sure that air can circulate inside the sheeting.

CONTACT TELEPHONE NUMBERS

POLICE STATION: 0300 333 3000

TRADING STANDARDS: 01952 381818

ENVIRONMENTAL HEALTH: 01952 381818

LICENSING: 01952 381818



THE FIREWORKS CODE

- **KEEP FIREWORKS IN A CLOSED BOX**
- **TAKE THEM OUT ONE AT A TIME AND PUT THE TOP BACK AT ONCE** – when the box is open, keep it well away from fire and cigarettes.
- **FOLLOW THE INSTRUCTIONS ON EACH FIREWORK CAREFULLY**
- **READ THEM BY TORCHLIGHT NEVER WITH A NAKED FLAME**
- **LIGHT THE TIP OF A FIREWORK FUSE AT ARMS LENGTH**
- **STAND WELL BACK**
- **NEVER RETURN TO A FIREWORK ONCE LIT-** it may go off in your face.
- **NEVER THROW FIREWORKS**
- **NEVER PUT FIREWORKS IN YOUR POCKET**
- **KEEP PETS INDOORS**
- **NEVER FOOL WITH FIREWORKS**

A BONFIRE CHECKLIST

- **DO NOT PUT BONFIRES NEAR BUILDINGS**
- **DO NOT BUILD DENS INSIDE A BONFIRE**
- **DO NOT USE PETROL TO LIGHT A BONFIRE**
- **DO NOT PUT AEROSOLS OR BOTTLES ON BONFIRES**
- **DO NOT THROW FIREWORKS ONTO A BONFIRE**

REMEMBER IF YOUR CLOTHES CATCH FIRE:

STOP – do not run, DROP to the ground ROLL OVER to put the flames out.



Please give this information to people who will be attending your firework display. To be useful, it should be issued before the event.

STOP!!!!

Before you leave.....

IS YOUR HOME SAFE? Here are some home safety tips:

Do: lock all your doors and windows when you go out. Pay particular attention to the back of your premises – a popular entry point for burglars

Do: keep your shed and/or garage doors locked. If your garage has a door which goes directly into the house, make sure it is securely locked.

Do: close your curtains and leave a light on in the room (not the hall) when you are out for the evening.

Do not: leave door keys in hiding places such as under a door mat or in a flower pot. Thieves know all the hiding places.

Do not: leave a window open a few inches for the cat to get in or out. Burglars find this very useful too.

Do not: leave ladders around. If you must leave them outside make sure they are padlocked to something secure.

