

# Firework Safety Information



## **Fireworks are not toys, they are explosives and the injuries they can cause can be devastating.**

Fireworks are great fun, whatever your age, but it's important to remember that they are not toys. They are explosives and the injuries they can cause, especially to the eyes, can be devastating. Nearly 1,000 people, half of them children, received hospital treatment for a firework-related injury in the four weeks around bonfire night in 2005. About 48% of those injuries occurred at family or private parties. Here are some facts about fireworks and potential risks of not using them properly.



- A sparkler can reach temperatures of up to **2,000°C**. That's **20 times hotter than the boiling point of water** and **five times hotter than the heat produced by a bonfire**.
- A rocket can reach speeds of **150mph**.
- A firework shell can reach as high as 200 metres.
- **Three sparklers burning together generate the same heat as a blowtorch.**
- You see the explosion of a firework before hearing it because sound travels at 742mph, but light travels at 670,616,625.6mph.
- **The highest numbers of firework-related injuries happen, at family or private parties.**
- **Around half of all injuries happen to children under the age of 17.**
- The most common injuries are to hands, followed by eyes and faces.
- Fireworks are safer now than they have been in the past thanks to safety standards. Make sure your fireworks are marked with **BS 7114**, which means they conform to British safety standards.

**Although adults tend to handle fireworks at home, half of the firework-related injuries are to children.** Follow this easy checklist for a safe home firework display.

### **Before the display**

- Only buy fireworks from a legitimate retailer.
- Inform neighbours' and be aware of their concerns.
- Check the fireworks you buy are suitable for the size of the garden and that they are marked **BS 7114**, which means they conform to British safety standards.
- Read the instructions in daylight or with a torch. Never use a match, lighter or candle flame.
- Only one person should be responsible for letting off the fireworks.

### **Things you will need on the night**

- A torch for checking instructions.
- A bucket of water.
- **Eye protection and gloves.**
- A bucket of soft earth to stick fireworks in.

- Suitable supports for Catherine wheels and proper launchers for rockets (check whether the launchers are included in the sale of these types of fireworks or whether you would have to buy them separately).



### **During the display**

- Don't drink alcohol if you're setting off fireworks.
- Light fireworks at arm's length with a taper.
- Stand well back and keep others away from the fireworks.
- Never go back to a firework after it has been lit. Even if it hasn't gone off it could still explode.
- Never throw fireworks or put them in your pocket.
- Always supervise children around fireworks.
- Store fireworks in a metal box and keep it closed between use.
- Keep pets indoors.

### **After the display**

- Wear strong gloves and use tongs to dispose of used fireworks.
- Never throw used fireworks on a bonfire.

### **Sparklers**

- Don't give sparklers to children under five years old.
- Light sparklers one at a time.
- **Hold sparklers at arm's length and wear gloves.**
- Put used sparklers hot end first into a bucket of sand or water.

### **Bonfires**

- Bonfires should be at least 18m (60 feet) away from houses, trees, hedges, fences or sheds.
- Use domestic firelighters when lighting a bonfire.
- Never use petrol, paraffin or other flammable liquids

# Fireworks first aid

(This is for information only and is not a substitute for first aid training.)



If you are organising a firework display, however small, you should ensure there is a **fully stocked first aid kit** close by – just in case of accidents.

## For ALL burns

- **DO NOT Use lotions, ointments and creams**
- **DO NOT Use adhesive dressings**
- **DO NOT Break blisters.**
- **DO NOT remove burnt clothing that is next to the skin (it may act as a barrier and keep out infection while awaiting professional medical assistance)**

## Minor burns

A minor burn is red and painful and sometimes results in a blister - for instance when a child picks up an old sparkler that hasn't cooled down.

- Hold the affected area under cold, running water for at least 10 minutes. Remove any jewellery while you are cooling. Once it is cool cover the burn with a sterile dressing or clean, non-fluffy material to protect from infection. Kitchen film or a clean plastic bag make a good alternative dressing
- If the burn is larger than the palm of the casualty's hand it will require medical attention
- Special care should be taken if the burn is on a young child or an elderly person. All deep burns of any size will require urgent hospital treatment.

## **If clothing is on fire**

Remember these four key things: stop, drop, wrap and roll.

- **Stop** the casualty panicking or running – any movement or breeze will fan the flames
- **Drop** the casualty to the ground and **wrap** them in a blanket, coat, or rug. Ensure they are made from inflammable fabrics such as wool
- **Roll** the casualty along the ground until the flames have been smothered.

## Severe burns

If clothing has caught on fire it is more than likely that the burn will be severe. A severe burn is deep and doesn't hurt as much as a minor one due to damaged nerve endings.

- Start cooling the burn immediately under running water for at least 10 minutes. Use a shower or hose if the burns are large. Keep cooling the burn while waiting for professional help to arrive
- **Instruct a helper to dial 999 for an ambulance**
- Make the casualty as comfortable as possible, ideally lie them down
- Continue to pour copious amounts of cold water over the burn until the pain is relieved. If the burn covers a large area of the body, watch that you don't induce hypothermia (see below)
- Whilst cooling, remove any constricting items such as jewellery or clothing from the affected area unless they are stuck to the burn. Wear disposable gloves if they are available
- Cover the burn with a sterile dressing or clean, non-fluffy material to protect from infection. Kitchen film or a clean plastic bag make a good alternative dressing, (**fold in pleats as this allows for expansion should the burnt area swell**).
- Treat for shock (see below).

## Shock

If someone has a near miss with a firework and is feeling weak and looking pale

- Lay the casualty down on a blanket or coat to insulate them from the cold ground. Constantly reassure them and raise and support their legs to improve the blood supply to their vital organs
- Take care if you suspect a fracture
- With permission, loosen any tight clothing at the neck, chest and waist
- Keep the casualty warm by covering them with a coat or blanket. Give lots of comfort and reassurance
- **DO NOT GIVE THEM ANYTHING TO EAT, DRINK OR SMOKE** as this will cause their blood to be redirected away from their vital organs.

## Hypothermia

This can be caused by standing around in the cold while improperly dressed. Symptoms include shivering, cold skin, disorientation, lethargy and slow breathing.

- Take the casualty to a sheltered place as soon as possible.
- Replace any wet clothing with dry and shield them from the wind. Insulate them with clothing or blankets and cover their head
- If you cannot get the casualty indoors, protect them from the ground and put them in a sleeping bag (well away from any flames/sparks), if available. You can also cover them with blankets or newspapers and enclose them in a plastic or foil survival bag, if one is to hand
- To help re-warm a casualty who is conscious, give them warm drinks and high energy foods such as chocolate
- **DO NOT** leave the casualty alone. If you are at all concerned seek medical aid.