



Physical Therapy and Hand Center, L.L.C.

# Prevention of Firework Injuries

Summer in New England is so short that we tend to spend every moment that we can outside at a BBQ, family gathering, or partaking in various water and land sport activities. One seasonal type of condition that we see in the clinic is the hand injury associated with common consumer fireworks. The majority of firework-related injuries occur around the 4<sup>th</sup> of July. It is our hope that increasing the public awareness of how these injuries occur can minimize the devastating effects of these “recreational accidents”.

1. Children are the most likely victims of firework injuries. Statistics have shown that children 14 years of age and younger sustain nearly 50% of the reported injuries.
2. Injuries to the hand and fingers are the most frequently reported. These injuries occur while attempting to light the fuse of the explosive device. The non-dominant hand (usually holding the device) is most likely to be injured. Injured patients often report that the fuse simply burned too quickly and ignited the device before the firework could be released or thrown.
3. Class B Devices- The more powerful explosive devices such as Cherry Bomb, M-80 or M-100 contain more than 130mg of gun powder and can inflict devastating injuries if premature explosion occurs. These injuries may consist of burns, amputations, and contaminated wounds. The gun powder residue, card board filters, and ash are often tattooed into the burn area and very often require surgery to remove. In general, these Class B injuries can lead to permanent loss of hand functioning and will most often require surgeries and rehabilitation to regain functioning.
4. Class C devices contain less gun powder, are more readily available for purchase and although the injuries are less severe, they occur more frequently. Sparklers may seem to be a safe form of patriotic celebration, but statistics show that they too account for a significant number of injuries. The greatest majority of these injuries are burns.

## Firework Safety Rules:

- Unpack fireworks out of doors and away from open flames
- Follow all warning / precautionary labels
- Do not smoke while handling
- Keep all fireworks away from flammable liquids, dry grass or bonfires.
- Take note of sudden wind changes that could cause sparks or debris to move.
- Small children should be kept at a safe distance, older children well supervised.
- Keep buckets of water nearby.
- Never attempt to re-light a fuse.
- Do not use metal or glass to hold fireworks for lighting
- Do not use tightly covered containers to increase the noise or exploding effect
- Do not make your own explosive device. Results are too unpredictable.
- Never make use of mail-order “do-it-yourself” firework kits. Most are unsafe.

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