

TEN MAJOR FIREWORKS MYTHS THAT KILL PEOPLE OR ARE FALSE

1: Fireworks are Dangerous. (“Death due to Fireworks”)

This is the big one. While any explosive device has the potential to kill, any modern-day Fireworks device must (as per Law) undergo a variety of stringent safety tests by the AFSL (American Fireworks Safety Laboratory). Given our current level of Manufacturing Technique, the chances of a true “defect” is very slim. If you really look at, and analyze the vast majority (like 99.99%), of Emergency Room level Injuries, they are from something OTHER than Fireworks! In Fact, “Fireworks-related” accidents are almost ALWAYS caused by gross negligence, misuse, improper use, or plain ABUSE of the Firework in question.

If you’ve ever read something like “the victim tightly bound multiple devices together....”, or anything remotely similar, it is REMANUFACTURING of a device! This is illegal, expressly forbidden, and NOT an accident. If you’ve ever read anything like “The device went off while he/she was holding it...., or “He was over the top of the device...., or “...while the mortar was on his head... This is MISUSE. And; if you ever read something like “This is what happened when I lit it from between my....” (insert favorite body part here), this is just Reckless ABUSE. None of these is “caused” by the Firework device. All of these are “caused” by the PERSON.

Blaming the device is like blaming a gun for shooting people. Sadly, these types of scenarios play out over and over again. Absolutely NONE of these are “caused” by the device. I am sorry for anyone who loses someone due to their own actions, but none of these were “fireworks-related” in any way except that a Firework device was somehow involved. Going back at least 62 years, US Government safety figures prove these are anything but “accidents” – the Firework is only the means.

For the entire time, the US Government has been keeping the factual data (6+ Decades), the yearly average for injuries has remained between 6,000 and 7,000 people, and actual deaths attributed to Fireworks has been between 6 & 11 People. No other “consumer product” tracked can match that record of Safe Use. Pencils, Ovens, Bicycles, Stairs, Skateboards, Roller-skates, Fences, Fishing, BB Guns, TV sets, Bookcases, playing Baseball, Mini-bikes, ATVs, Mopeds, Motorcycles, and Cars among many others are all activities or “consumer products” with much higher injury rates than Fireworks .

2. Proximate Fireworks are “Cold” Fireworks.

NO Fireworks are “Cold” Fireworks. This Myth was propagated by the Fact that you can both stand near these, AND pass a body part quickly through the effect without harm. Nothing could be further from the truth however. Yes, due to their design, and their nature, Proximate Fireworks may “seem” to be safe, but ANY Firework, of ANY classification, will kill under the right circumstances. Even the “innocent little Firecracker”, and those “Safe and Sane” Sparklers have caused death (even though the circumstances were very extreme).

3. It’s OK to look down a Tube to see why a Shell did not Fire.

It is NEVER OK to look down a tube (or place anything over it). Next to Remanufacturing or Abuse, this is probably the Number One Reason for the “Death–due–to–Fireworks” Myth. If a Device Fails to Lift, treat it very carefully. Mark the Tube it is in as “Do Not Use”, by placing a flare, chem.–stick, or some other VERY visible item in front of it. Let your crew know this Tube is not to be used. If it hasn’t already gone off yet, after the Display, wait an additional 30–45 Minutes (just leave it alone – you’ll live), Carefully Turn the Tube over GENTLY dumping the Shell. Following all DOT rules/regs, return the Shell to your vendor.

4. If you are back 70’ per inch of Shell from the crowd, you are good to go.

Simply having 70’ per inch of Shell to the Crowd is good, but to make it “official” you need 70’ per inch of Shell Distance MINIMUM, and ALL the way around. If you need 210’ for a 3” Shell to the Crowd in Front of your Display, you also need 210’ to that Food Vendor on the Midway behind your Shoot Site as well. Simply put, you need 420’ of clear distance, to Fire a 3” Shell. Everyone wants to “be close” to the action, but fact is Fireworks look best from a distance. Move back – it is Safer, and the view is better.

Remember: The Distance is Per Inch of the Shell DIAMETER, RADIUSED around the location of your largest Shell!

5. The Fire Department is only a 911 call away.

Per NFPA Code 1123, you MUST have a FD and/or EMT crew ON-SITE during your Show. If you do not have one on hand, you have not met Code, and your Insurance may be Null and Void. YOU may be “on-the-hook” for any damages and/or injuries. There are only two Insurance Companies who cover Firework Displays (but many agents). Both of these state in your policy that you MUST follow NFPA Code 1123 (even if your State follows its own Code – you have to follow 1123 too) – so be careful. It is up to you to find ALL Laws, rules and regulations which apply in your area. Ignorance is no excuse – you WILL be held liable if you do not follow all of them.

6. Electrical Firing is “Safer”

No, it isn't. E-Firing a Fireworks Show, during the actual Firing, is only Safer in that the Crew is somewhat removed from the Display – that's it. Every other danger is still present – AND – you are faced with others that are not present in traditional Hand-Firing. You have every danger presented by “traditionally-fired” Fireworks – plus you have the most dangerous part – the actual matching.

During matching, you could also be posed with the risk of an accidental ignition while inserting the e-match. E-matches are slightly friction sensitive (like strike-anywhere matches), plus they COULD (under the right conditions) be accidentally ignited by static electricity or by stray RF in the area.

Remember: They are Friction-sensitive and may accidentally ignite due to friction.

Never “pull” the shroud. Every E-match comes with a small, plastic, protective cover over the actual pyrogen. When this is “pulled back” to aid in insertion into a device, it becomes up to 10 times more likely to accidentally fire. Your wires (if run in a straight path), becomes an “antenna” of sorts and under the right circumstances, could and has triggered e-match. Accidental Firings from the Panel although rare – can happen. Never arm a Panel with Crew in the Display Site Proper. E-Firing is Risk Transference only.

7. Hand-firing is "Safer".

Again, No, it isn't. Hand-firing has the risk of damage to the shell due to rough handling or abuse. It may deflagrate (explode) due to dropping, striking, or other rough treatment. If not lit in the correct place (the end of the black-match), it can deflagrate unexpectedly. Quick-match (or Piped-match if you prefer), will burn almost instantly (like 30' per second). Once the quick-match is lit, it cannot be stopped easily. If a Shell "breaks low", at the top of the Tube, you may be peppered with burning Stars because of your proximity to the Tube.

As mentioned before - Fireworks look best from a distance.

On a Hand-fired Show (if done correctly), the only people not getting a Good Look at the Show, are the Hand-Lighters, and Spotters. Hand-firing (as is E-firing), is Risk Transference - nothing more.

8. Lance-work (and other Specialties), aren't really Fireworks and can't hurt you.

Wrong! Lance pieces are small Flare-like devices. About the size of an average cigarette, they produce a small, colored, flame. These devices are used to make signage like "Welcome", "Drive Safely", and pictures of anything you can imagine. These signs or pictures may be small or huge, simple or elaborate and all of them are deceptive. While the risk of deflagration is very low, the risk of burns is very real if you're too close to these while lit. Like a Road-flares/Fussees, burning "Slag" drips from the ends, and is extremely hot (like 2,000 degrees), or more.

This burning slag does not stop burning until the composition of chemicals is gone.

By Code, these Lance-sets and individual pieces are to be treated exactly like any other Firework. While they may be setup in the "in-field" of your display (typically they need only 70' of minimum distance), while on-site they SHALL NOT be left unattended for ANY reason. Other Specialties like Pin-wheels, Fountains, Cones, Waterfalls, Candles, etc. pose the same risks as Lance-pieces, (even more with hot, airborne, flying debris), and should be treated the same.

9. Display Operators use PVC (or – “Any Plastic Pipe Will Do”).

NO Fireworks tubes are PVC. The closest Tube to PVC is HDPE, and HDPE is NOT even closely related to PVC. They are completely different, and should never be interchanged. PVC is a hard and brittle plastic used for water-pipe. Generally white in color. It cannot handle the stresses of use by Fireworks Shells.

It will shatter, and when it does, guess who is Standing next to the Tube?

HDPE has “flex” to absorb the Forces a Fireworks Shell will exert upon it, and will “mushroom” or shred when a Shell deflagrates inside. HDPE is almost ALWAYS black in color, is relatively thick (like 1/8 to 1/4 inch). HDPE has been approved by the NFPA for re-loading up to seven times during a Show.

10. “Anyone” can use Fireworks.

As with anything at all (but especially with something that may kill you), it is essential to have some knowledge or background in Fireworks usage. Common-sense goes a LONG way with Fireworks, but we HIGHLY recommend being trained in the uses, and the dangers of misuses.

(Check out some of the great .ppt files on this Site – they’re free, you can go through them at your own pace, and save them for future use).

Please think about the consequences of your actions BEFORE you act. When things go wrong with Fireworks, they go wrong FAST, and in a permanent way. There are no second chances. Join a Club. Learn what you can. Never stop learning. Always follow all Federal, State, and Local Codes. Be Legal, be Aware and be Safe.