

THE CONSTANT OF IGNORANCE

One of the very sad things about Fireworks Safety is the fact that almost nothing ever changes, at least not quickly. As in Fireworks Building, things progress very slowly. Essentially, the Fireworks Shell is a device which has not changed much in 6,000 or 7,000 years. Yes, Manufacturing Technique has improved, we constantly refine chemical formulae. We now use modern-styled quickmatch with quick-connect terminals on it. We E-fire many more shows. We have vastly improved equipment to Shoot with, and have things like pasting machines to make the process quicker, easier, and safer. However, it is by and large the same product.

So to is it with Safety. We know that by imparting Safety Information to more people, the numbers of incidents have STATISTICALLY declined. 5 or 6 decades ago, our usage was around 9 million pounds of Fireworks where now it is in excess of 300 million pounds, but the NUMBERS of injured and killed remain almost static. In any given year, we can expect to see an average of 6 people killed (generally 3 to 11), and around 6,000 injured (5,000 to 9,000 usually).

These number have remained fairly constant for more than 60 years of Government tracking, and as far as I can go back, they hold anecdotally as well. To date in ALL of known History, there have been a Grand Total of 267 (yes - less than 300 People killed in all known "Fireworks-Related incidents). I have often semi-jokingly referred to this fact as a part of the proofs of a mathematical constant. This seems to me to be the constant of ignorance.

My thinking goes something like this: As the Population of the World increases, a certain portion of the Populace (usually young adults, but not always), thinks it "cool" to do things like hold a lit Device in their hand while it goes off, maybe even holding a Mortar above their head. Or place Rockets and other devices into various parts of their anatomy and light it. Place Cakes on their heads - upside down mind you - and light them, etc. Then - you have the plain "victim", who do nothing but fall victim to other peoples actions.

From the Statistics (now Legally Mandated to be Reported), we know that this portion of the Population is growing in roughly the same proportion as the growth of the Population. Hence the "constant of ignorance". No matter how much the Population grows, or how many People learn new ways - there will always be roughly the same gross number of people being killed and/or injured from Fireworks.

We have gotten SO consistent in our Manufacturing Techniques, that true Fireworks Malfunctions are a true rarity now. We have very, very few reports of true Malfunctions, so we know (if you really read the back-stories of these supposed "accidents"), that these Fireworks involved in these "accidents", are in reality mostly being abused and/or misused by untrained/unthinking people.

So little by little, we attempt to reach these ignorant folk and attempt to get them to think about the consequences of their actions. If you plan to have a Roman Candle "War" inside your Apartment for instance, plain logic should tell anyone who really thinks about it first, that there is a very high likelihood that a bit of burning, chemical debris is very likely to hit a highly flammable fuel source (like an overstuffed chair or a couch, or a pillow, or...), and that you will very likely cause a Fire. Furthermore, you may or may not be able to escape and if you not able to get out, you are very likely to die. Great plan - huh? Yet this very same previously-described scenario plays out every single year - over and over again.

I am Passionate about Fireworks and Fireworks Safety. Because of this, I become very frustrated that Fireworks are almost always scapegoated and used as the "cause" of these "accidents". It does NOT take an Einstein to think these things through first. Maybe it's "dodging a bullet" which makes these (yes - I'll say it) stupid things appealing to some people. Perhaps they are just hopeless adrenaline junkies and have to have a "fix". My guess though is that it is some combination of getting caught up in the moment, Peer Pressure, a need to "fit in" with the crowd you are with, and/or plain-old lack of forethought which causes the vast majority of these so-called "accidents".

Blaming Fireworks - which operate correctly and as designed - for a "Fireworks-Related" injury or death, is the same as blaming a properly functioning firearm for "Gun-Related" Accidents. That is purely stupid, and does not (or should not), compute properly in anyone's head - ever. The reports of these incidents are truly mind-boggling. I have been party to numerous Site Inspections of other people's either proposed, or active Shoot Sites, Fireworks "Accident" Investigations, etc over the years, and the ONE common thread to all but ONE "accident" in 60 years has been due to "the constant of ignorance".

Friends have often told me that I sound like a broken record (yes I have Friends old enough to remember, and I do remember those). I am accused of repeating the same Safety Information over and over. Well, my answer to that is that they aren't making any new Safety Information. We have the same products, which you can only use Safely one way being used in a manner that they were never intended to be used in, by People who aren't thinking about what might happen by using them that way. When this happens year after year, over and over, people such as myself are going to sound like a "broken record".

What you call "Government Suppression of your Rights", is a vain attempt to regulate **stupidity**. It is an attempt to "protect us from ourselves". When I hear someone complain that "great - now we have to do it that way!", it is invariably followed by a great explanation of how it really should be done. **These people get it**. These kinds of people think of the consequences before they do something. These people are not part of the "constant of ignorance". They know you can't "fix stupid". Sadly, that is what NFPA Code is: an attempt to fix stupid. It's a "Damned if you do, and Damned if you don't" scenario though. We have NFPA mandated rules because if we didn't have NFPA Code - mandated - many more people wouldn't do things the Safe way - but - more stringent regulation is NOT the answer - **Training IS**.

I can tell you that if you use an "x" device in a "y" manner, that "z" is *likely* to happen. I can tell you that if you use an "x" product, that you should always do "y" and if you do, you'll *likely* be Safe (z). Based on the latest in Safety Technique, I can give you information that *might* keep you Safe (things you should or should not do). I can do nothing more, and nothing less. Then - as they say - the Ball is in your court. It then falls to you to either listen, or not. If not, I'll *likely* report on your Misuse/Abuse of Fireworks in a future Fireworks Safety Report. Please however, don't be one of the unthinking.

There is truly Safety in Numbers. What I urge you to do is to become a Member of your Local, Regional, State, and/or National Fireworks Clubs, learn the proper techniques, and never stop learning or thinking Safely.

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