

January 28, 2013

I'm writing this note to express my thoughts regarding the cause(s) of the July 3, 2012 fireworks accident at my home, the potential banning of mortar shells and "spinners" in New Hampshire and the effects on my family resulting from the incident. I'm hopeful that what I have to say will help to protect others from suffering the many continuing medical, emotional and financial consequences my family has dealt with as a result of this accident.

I believe that mortar shells are inherently much more dangerous than the other types of fireworks that have been legal in NH for many years. Prior to the accident in July of 2012, I've used most of the legal fireworks products available in the state for approximately 40 years, without any accidents or injuries. The reason I believe mortar shells present such an increased risk of damage and injury is that once removed from the packaging (typically containing anywhere from 6 to 48 individual shells) you are left with a pile of explosives consisting of gunpowder covered by a thin layer of highly flammable paper. Unlike the larger "cake" style fireworks, where the explosive powder is still covered by the box-like cover after unwrapping, and the shells are contained within individual tubes, the mortar shells are completely exposed, without any intervening material or packaging, vulnerable to any spark, fireworks that move in unpredictable directions (such as the spinners I mention above) or any other source that generates sufficient heat or flame to ignite them.

I was shocked by how rapidly the mortar shells on my deck exploded. As I mentioned to the Fire Marshall, it was as if the shells were coated with gasoline and gunpowder. I believe the outer coating of the shells is so thin that the shells which exploded on my deck were not ignited by a fuse. Instead, they were almost instantly ignited but some other kind of firework which came into contact with the exterior of the exposed shells.

I'm generally opposed to banning things. The mortar shells had been unpacked and I was about to box them when I was momentarily distracted. (I've learned that life can completely change in a matter of seconds.) Based on my experience the current way mortar shells are packaged and sold is not safe. I believe that they should be pre-loaded individually into a mortar tube prior to sale - this way the outside of the shell would not be exposed, and the likelihood of a large number of shells being ignited simultaneously would be significantly reduced. I believe the "spinner" type fireworks should be banned outright - they're just too unpredictable and erratic to be used safely in any situation. While my suggestion about individual shell tubes would surely be more expensive for the manufacturers and retailers of mortar shell products, I feel this method of packaging wouldn't make them any more dangerous than the other fireworks products sold over many years in New Hampshire.

I was asked to explain the various types of injuries I sustained by the mortar shells and the effect on myself and my family.

I've had numerous skin grafts on both legs - maybe 17-18 total. (It's difficult to tell as some run into another.) The most significant damage occurred to my left leg and foot. While I had

substantial 3rd degree burns on my left leg, the more problematical injuries were puncture wounds caused by individual shells. One shell went through my leg below the knee, exposing muscle and bone. A second shell penetrated the left side of my foot, going under the bones on the top of the foot, lodging somewhere under the bridge of the foot near my big toe. This shell severed & damaged nerves, muscle and bone on the way through, while burning internal tissue and leaving shrapnel like remnants in my foot. Eventually this injury resulted in a severe infection, where the amputation of my leg and foot may have resulted. According to other doctors I've consulted with, the surgeons at MGH saved my leg from amputation. I had three additional wounds caused by the shells, one ripping through the skin and muscle on my shin, exposing bone, with another penetrating the lower left side of my foot near the Achilles tendon. Another shell either tore off, or burned through the muscle on the left side of my calf. While anybody who has had a burn can attest to how painful it is, I don't have the proper words to express how excruciating the penetrations wounds were - screaming level pain is about the best I can do.

While this event has receded in the memories of most people, my family still deals with the physical, financial, medical and emotional trauma associated with this on a daily basis. While all involved have made substantial progress since the accident, for some of us there will be years of additional medical treatment needed, possible future surgeries, and need for counseling, medication and therapy for the very significant emotional & psychological damage we sustained as a family. Close friends were also injured and traumatized by this event. I have no doubt the suffering caused has changed their lives forever. On the positive side, we have become closer as a family, helping each other get through this. We've also learned who our true friends are, and how kind and decent people we don't even know can be.

My most sincere wish, whatever legislation may or may not result because of this and similar incidents, is that no other person or family will have to deal with the severe emotional and physical pain suffered by my family and friends. To see those you love most hurt, confused, fearful and anxious, while being unable to provide help of any significance is incredibly difficult emotionally. Intolerable at times. If something positive, protecting others, can result from this accident I wholeheartedly support it.

Sincerely,

Chris Pappathan