



American Fire Artists, LLC

Dedicated to Safety and Reliable Coverage!

FIRE PERFORMANCE SAFETY **FROM START TO FINISH**

This is an overview of our safety workshop. Many of the things we discuss here are not a requirement to follow for membership to American Fire Artists though it is suggested to help make the art of fire performance as safe and fun for everyone as possible! For more details on safety requirements, please visit www.americanfireartists.com

I.) Clothing and You

All clothing worn by both the performers, and spotters should be:

- a.) Made of natural materials, such as cotton, hemp, or leather. The fabric should be of a tight weave (We prefer Denim and leather) **NO SYNTHETICS!**
- b.) Should fit properly. Loose and baggy clothing may get caught in equipment and catch fire more easily. This includes flowing items such as skirts, capes, and blouses. While these may seem like a cool costume idea, they are not practical, and watching you get treated for major burns is less impressive to most patrons.
- c.) Check your clothing for strays. This includes frays on jeans that could easily be caught, to drawstrings, as well as buckles that stick out etc...

Check your feet. Are you wearing shoes you can spin in? Flip flops and loose sandals, can cause you to loose footing while dancing, and sometimes barefoot is better. This subject goes into the "Spin Zone" which we will get into later.

Check your head. Long hair should be braided or fastened back. Also learn from our mistakes, buns are not the best idea. If a poi chain hits them they can wrap and cause bigger issues. Also wet hair is best prevents fly always or loose bits from catching. We also suggest a wrap, either a cotton cap/hat, bandana, or do-rag.

II.) Spin Zone

There are several things to consider here. Once you choose your area look at all sides.

THE AREA

Will your on audience be far enough away? Will you be able to maintain your radius as you move? (Most insurance recommends 15 foot radius)

Is there anything overhead, including but not limited to tree limbs or overhangs?

Is the ground smooth and unobstructed? Check for slipping hazards, including stray limbs, holes hidden by grass, etc. Is it level? Will you be able to move around?

Is your foot wear appropriate for your area, if your on blacktop or concrete you should have shoes that can withstand stepping on loose gravel etc... Sometimes in grass or sand barefoot is better and sandals can be slick and rock in sneakers can be distracting.

Where will your fuel station be? It needs to be away from the fire area and audience, but easy to get in and out of as your hands may be full with equipment as you exit the fuel area to the spin zone.

Is there a good place to spin off excess fuel? (we will get into this more during Fuel)

Do you have any kind of perimeter markings? Often the safety buckets work well for this. Which leads us into...

AREA SAFETY SET-UP

Do you have all your safety equipment in place?

You will need:

- a.) **Water buckets**- Set these near the spin zone where each spotter will be, as well as one in the fuel station. The one in the fuel station is important for rinsing hands of excess fuel and in case of ignition in that area.
- b.) **Towels*** - There should be at least one towel* with EVERY bucket. This includes the fuel station bucket. These towels* are used to smother flames. During performances the towels* in the spin zone should be rung out and held ready by spotters.
- c.) **Fire extinguishers**- Make sure these are full and stationed along with the water buckets. Read the instructions and know how to use them. They are useless unless the spotters know how to use them. On that note, **NEVER SPRAY AN EXTINGUISHER ON A PERSON OR ANIMAL!** These are meant for surfaces or materials that catch fire, such as trees or such. Many local fire departments will give you a quick and easy fire extinguisher training, and are happy to do it, especially if you go as a group. Some even give you a fire extinguisher training certificate.
- d.) **1st Aide Kit**- You should have a kit with gauze, cold compress, burn cream, aloe, eyewash, activated charcoal tablets, dry cotton towel, as well as a phone to reach Emergency services if necessary. You should also have the **MSDS** for all fuels and chemicals in use. This is crucial in treatment if EMS must be called and will help the doctors in treatment.

III.)Equipment

Make sure you have a list of everything you need. This includes your performance tools, as well as the safety checklist above.

ALWAYS check your equipment. You should be checking each link of chain, grips, fraying of wicks, etc. all moving parts should be checked for debris and/or weakness. You should also be checking for debris that could fling from wicks or get in the way of tricks.

IV.)Fuel

Know your fuel. You should know how it burns, the proper way to store it, as well as have a copy of the **MSDS** (Material Safety Data Sheet). You can find this information online. <http://www.nafaa.org/> is a good place to find safety and other information. The MSDS is not only for your information, but is good incase of an emergency to give to medical professionals.

Your fuel station should be a safe distance from the Spin Zone. We suggest that it be out of any high traffic area. There should be no lighters, candles, Cigarettes, or other ignition sources in the Fuel station. If you can not seclude the fuel station, then you should post signs. "Flammables", "no smoking", "performers only"

Also be aware of how you spin off your fuel. We suggest either using spin cans or zipper baggies to catch and save excess fuel. While spinning of in a secluded area is convenient some fuels can be bad for the environment and wild life, as well as domestic pets that may also end up in these areas. Also many fuels can leave a slick or oily surface that can cause a walking hazard.

** to make reusable durable spin cans, simple clean out empty tin cans (I like the size of the Bush's baked bean cans) punch a hole on opposite sides near the top of the can. Run a string from one hole to the other, long enough to hold your tool and the can with your wick inside the can but not touching the bottom.

V.)Spotting

There are several parts to this, so we will break it down a bit.

- a.) **Communication**- It is important to have open communication between performer and spotter. You should discuss any new tricks that may be attempted, or any unusual or advance tricks, which include but are not limited to: contact work, body taps, ground or other intentional fires. In these cases let the spotter know how long to wait before alerting the performer. Last but not lease, know each others names. It comes in very useful.
- b.) **Attention**- It is important that the spotter be alert and prepared for anything. The spotter should know where the water bucket and fire extinguisher are, as well as how to use them. Also should have a damp towel* in hands at all times. We suggest either in a standing or crouching, if in front of a crowd. **DO NOT SIT**. In case of an emergency it can take precious seconds of your reaction time.
- c.) **Posture**- I know this seems to be what your mother always told you when you were slouching at the dinner table, but this is also important when spotting. This goes hand in hand with Attention. You should be standing or crouched in a "ready to go" posture, you should be holding the towel* in both hands with your palms up underneath the towel. If you are dangling the towel* with your fingertips, or are holding it wadded in one hand, then you are not ready for a quick response.

- d.) **Priorities**- You have 3 priorities and they go in this order
- 1.) Audience- they came for a show not a life threatening injury
 - 2.) Venue- the property around you is your responsibility not to destroy, weather it be woods, a business or a home.
 - 3.) Performer- while you should have your focus on the performer at all times you should be aware 1st of all if a flaming tool flies into another person or property, and yes you should be concerned about the performer. If no one else is in harms way absolutely take care of the performer. However, the reason they are your 3rd priority is because they know what they are getting into. They know they are playing a dangerous game, and they should also know how to put them selves out by either using the *STOP, DROP, & ROLL* technique or approaching a water bucket.
- e.) **Orange**- Orange is a unique word that sounds unlike any other word in the English language. It is also one of the colors associated with fire. We use the word orange to alert a performer of a danger area. For example: Jenny is spinning her poi and catches the back of her left leg on fire. The spotter should yell, "Orange, left leg, Jenny" This is why it is important to know your performers name. Especially if you have 2 performers at once.
- After orange is called the performer should check the area and extinguish flames if they are able. If they cannot, they should say "Help" and then hold their tools away from their body with a gentle swinging motion so that the flames dont burn your hands and hold them away from the area the problem exists.
- e.) **Hold**- Hold is the term you use when there are multiple problems and you need all action to Stop at once. This can be used by either the performer or the spotter. Hold means all performance stops and all flames are to be extinguished. As a performer you should hold your tools at arms length, if at all possible do it out of the way so your spotter can get to you 1st then go deal with the tools.
- f.) **Incoming**- Before coming in to douse the flames, the spotter should say "Incoming" this lets all performers know that someone is entering the immediate area and to be aware of the spotter so as not to hurt them while they are helping one of the performers.
- g.) **Extinguishing Tools**- It is important that you know how to extinguish a lit tool before you start a performance. Sometimes a performer may be done before their tool is. For the majority of tools, we have found it best to lay the damp towel* in the ground and set the tool in the center and wrap it like a burrito, folding over one side of the towel* and then the other. Then press the towel* in around the wick in a "tucking in the baby" fashion, in an effort to eliminate all the air. During this process do not lean over the top of this as there can some times be flash back and wicks may relight them selves if not fully extinguished once they are re-exposed to oxygen.

VI.)Clean-up

It is as important as everything else. Make sure that all fuel and/or chemicals are in approved tightly sealed containers. Wipe down each or your containers for excess spilled fuel. It is your responsibility to clean up any and all fuel spills. Most fuels should be stored in a cool dry place out of direct sun, but read your MSDS for storage and transport instructions. You should always leave your spin, fuel and all other areas as good or better than you found them. Remember to go through your audience area for trash and debris.

VII.)First Aide

This is certainly an important topic to know and be aware of. You should be able to recognize and treat the different degree's of burns, as well as chemical contacts.

Recognize:

1st DEGREE- redness in area, mild discomfort, may have mild blistering. Much like a sunburn.

2nd DEGREE-bright redness, moderate to severe, blistering.

3rd DEGREE-The most serious burns are painless and involve all layers of the skin. Fat, muscle and even bone may be affected. Areas may be charred black or appear dry and white.

Treatment:

MINOR BURNS- including second-degree burns limited to an area no larger than 2 to 3 inches in diameter, take the following action:

Cool the burn. Hold the burned area under cold running water for at least 5 minutes, or until the pain subsides. If this is impractical, immerse the burn in cold water or cool it with cold compresses. Cooling the burn reduces swelling by conducting heat away from the skin. Don't put ice on the burn.

Cover the burn with a sterile gauze bandage. Don't use fluffy cotton, which may irritate the skin. Wrap the gauze loosely to avoid putting pressure on burned skin. Bandaging keeps air off the burned skin, reduces pain and protects blistered skin. 1st degree burns may be treated with a light application of Aloe. While a burn cream or aloe may reduce stinging in 2nd degree burns. Do not use large amount of either of these.

Take an over-the-counter pain reliever. These include aspirin, ibuprofen (Advil, Motrin, others), naproxen (Aleve) or acetaminophen (Tylenol, others). Never give aspirin to children or teenagers.

MAJOR BURNS- Call 911 or Emergency Services

Do not remove burnt clothing. However, do make sure the victim is no longer in contact with smoldering materials or exposed to smoke or heat.

Don't immerse severe large burns in cold water. Doing so could cause shock.

Check for signs of circulation (breathing, coughing or movement). If there is no breathing or other sign of circulation, begin cardiopulmonary resuscitation (CPR).

Cover the area of the burn. Use a cool, moist, sterile bandage; clean, moist cloth; or moist towels.

SKIN CONTACT- Most fuels will not immediately effect the skin, but should be rinsed off immediately.

EYE CONTACT- Flush immediately with eyewash or cool clean water. If there is ANY discomfort or pain, seek medical attention immediately.

INGESTION- If fuel is swallowed **take activated charcoal** and go immediately to the nearest Emergency Room. Take all MSDS sheets and the Charcoal tabs with you. This will allow the ER to know what you ingested and how it was initially treated.

Quick Reference

What you should have:

1st Aide Kit:

Gauze
Cold compress
Burn cream
Aloe
Eyewash
Activated Charcoal
Clean cotton towel/blanket
MSDS of fuels & chemicals
Working Phone

Safety:

Water Buckets
Towels / Fire Blanket
Fire Extinguisher
Hair cover
Proper clothing and foot wear

Foot notes

Where we got our info

Much of our information is based on conversation with a number of what we regard as experts and/or elders in the field and of the fire performance community. These include but are not limited to Kevin Wiley, & Fox Fire.

Other sources include:

www.mayoclinic.com
www.homeofpoi.com
www.fireandstrings.com
www.nafaa.org

Insurance-Most areas now encourage or even require performer liability insurance.

*Towel – A fire blanket is another alternative to a wet 100% cotton towel. A water bucket should still be kept nearby. Fire blankets are not kept damp and are typically made out of tightly woven wool.