Don’t Let Risk Take the Air Out of Your Inflatable Amusement Ride Events  
By Dan Foster, ARM-

Inflatable amusement rides, such as bounce houses and inflatable slides, have grown in popularity over the years. They provide a fun and healthy activity for young children and can be a powerful draw to a community event. Sadly, if not properly managed, tragedy can occur turning what should be a day of fun into a “house of horrors.”

The Consumer Products Safety Commission reports 31,069 emergency room visits from inflatable amusement rides occurred between 2003 and 2007. Injuries from bounce houses accounted for 91 percent of those visits. During this same time there were four deaths related to inflatables. It is not difficult to find incidents involving inflatable amusement rides in the media. Here are a few recent tragedies.

(May 7, 2011) – At a festival in Encino, Calif., four children suffered minor injuries when an inflatable slide collapsed. According to the Los Angeles Fire Department, too many children were on the slide, and there was no adult supervision at the time of the accident.

(April 29, 2011) – At an elementary school in Clovis, Calif., five children were injured when a wind gust toppled an inflatable slide.

(April 2, 2011) – In Tucson, Arizona, two children suffered serious injuries after a bounce house was blown into the air by a sudden gust of wind while they were inside the ride. According to Tucson police, the inflatable blew across three lanes of traffic before it landed on the side of a road. The children were hospitalized.

Regulatory Changes
The rise in deaths and accidents over the years has led many states to enact laws regulating the use of inflatable rides. Most require rides to comply with ASTM F2374 - Standard Practice for Design, Manufacture, Operation, and Maintenance of Inflatable Amusement Devices. These states also require ride operators to be licensed and insured. Many require that rides be inspected and permits secured to ensure operational and electrical sufficiency.

What are the common problems that lead to injuries?
There are several conditions that every entity needs to consider when planning inflatable ride events. The following are some of the specific conditions that lead to accidents if not properly addressed:

1. Location, location, location. Rides set up over concrete or pavement can result in serious injuries if a fall occurs. Slides and climbing walls require a substantial amount of fall zone (at least six feet in all directions). Many of the catastrophic injuries over the years have been the result of the user falling onto pavement.

2. Ride not secured properly. This is the most common cause of ride accidents. A gust of wind can easily pick up a ride with children inside and blow it away. Rides require proper anchoring into the ground with stakes or secured to sand bags. It’s not unheard of for an inflatable slide to require 2,000 lbs or more of sandbags as proper anchorage. Ride manufacturers specify how much...
anchoring is required. Inflatable ride activities should be suspended if wind is predicted during the event.

3. **Improper use.** Too many children, size disparity among children, roughhousing and poor supervision are common problems with inflatable rides. In 2007, a three-year-old suffered a broken neck and died when teenagers riding down a slide landed on him. Every ride has a maximum capacity of users allowed and should be supervised at all times. Rough play, body contact, flips, kicks and other behaviors should be prohibited. Operators of the ride need to make sure that the rules are followed by all participants.

4. **Sudden inflatable collapse.** Blowers are the life-blood of inflatable rides. They are usually powered by gas or electricity. It only takes seconds for a ride to collapse once a blower fails. Rides should be inspected for tears and defects. Blowers must be maintained and in good working condition with backups on site in case of problems. The power supply to the blowers should be capable of supporting the energy draw required to operate the rides.

**Know Your Ride Provider**

The vendor you select should have the experience, service and resources to properly set up control and service the rides they provide. Avoid using a provider who simply drops off the rides and “hands the keys” over to you to set up and manage. As we have seen so far, this activity requires a high level of care, control and supervision. Additionally, your state may have requirements that need to be followed for inflatable rides. Here are a few things to consider when looking for an inflatable amusement ride vendor:

- Are they licensed in your state?
- Do they have the current, required operating permits?
- Do they have the appropriate insurance coverage and the limits necessary to protect your entity?
- Are the rides inspected by a qualified inspector?
- Are ride rules posted and warning decals present on all rides?
- Are the rides properly set up and anchored?
- Does the vendor stay on premises to supervise the use of their equipment?

Ensure they set up all rides, and when possible, stay on site during the event to manage the mechanical and electrical equipment.

**Ride Selection**

Consider your users when selecting rides. Giant slides and climbing walls may not be appropriate for toddlers and small children. Bounce houses are not designed for teenagers. Users with special needs may also have physical limitations that should be considered when selecting rides. Consult the ride manufacturer requirements for appropriate users and match it with the users you are serving. Limit the number of rides to the level of supervision you can provide and the space you have allocated for the event. It is better to have a few fun activities than to be understaffed and unable to properly supervise.

**Ride Set Up**

Work with the appropriate staff at your organization to ensure proper placement of the equipment. Grassy fields away from other structures and equipment is ideal for setting up inflatable rides. Watch for overhead electrical wires. Maintain a minimum clearance of 20 feet from wires. Avoid setting up inflatables near roads, ponds, large trees or hazardous conditions.

**Training and Supervision**

A sufficient number of trained operators need to be on hand to adequately supervise the rides. A minimum of one operator per ride is needed, but always consult the manufacturer’s recommendations for ride supervision. Ideally, it is best if the inflatable rental company provides the operators for the ride. In the
event that your employees are tapped as operators then the rental company should provide training with regard to their rides. The training must be documented. Be sure to have adequate first aid responders, first aid supplies and a communication plan for emergency calls.

As the host, you should consider the following conditions with regard to supervision:
- Is the operator taking care to ensure that users are appropriately protected?
- Is the operator paying close attention when the ride is in use?
- Is the operator observing restrictions about user size?
- Is the operator strictly limiting the number of people on the ride at one time?
- Does the inflatable ride appear to be overloaded or unstable?
- Does the ride appear to be securely anchored?
- Could the blower inflating the ride become accidentally unplugged causing ride collapse leading to possible injury?

**Inflatable Ride Contracts and Insurance**

Most inflatable ride rental companies will require you to sign a contract. It will outline the scope of services provided as well as liability and insurance conditions. Never sign this agreement without reviewing the language carefully. The vendor may ask your organization to be held to a very high standard of care (ensuring the safety of the equipment for example). Avoid contracts that require the public entity to indemnify the vendor for all claims arising from their own (the vendor's) negligence. Such an agreement puts your organization at a great disadvantage because it agrees to release the vendor of any liability for any damage as a result of any acts, omissions or negligence of theirs even in the event of sole negligence of the vendor.

The inflatable rental company must insure its products, services and its staff. Obtain a Certificate of Insurance from the vendor showing a minimum of $1 million single limit commercial liability coverage. It should also include Products and Completed Operations Coverage and Medical Expense Coverage. It is strongly recommend that you be named as an additional insured on their policy with regard to the event. This allows your organization to receive protection from the vendor’s insurance company in the event of a claim naming your entity. Consult with your insurance provider and legal counsel if necessary for clarification on how to protect your organization.

For private events, such as a school carnival, parental permission slips should be secured for all users. The permission slip should include a description of the events and the inherent risks associated with the rides.

Risk exposure doesn't have to take the air out of your event. Keep your event pumped up with thorough planning, appropriate rides and excellent supervision. Doing so can ensure your inflatable ride event is a memorable experience for all.

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