



## ***TOPIC: Inflatable Amusement Rides***

The popularity of “inflatable amusement rides” as entertainment for children and young adults at volunteer fire department events has been on the rise in the past decade.

However, with their rise in popularity has come increasing concern for user safety. The information in this risk management alert is adapted from the U.S. Consumer Product Safety Commission (CPSC, 2001\*) *Amusement Ride Safety Bulletin! RE: Inflatable Amusement Rides*, as well as CPSC statistics through 2005, and includes recommendations from Utica National’s Loss Control specialists.

**Examples of “inflatable amusement rides” include, but are not limited to:**

- Moonwalks**
- Inflatable Slides**
- Inflatable Rock-Climbing Walls**
- Animals/Structures as “Bounces” or “Bounce Houses”**
- Inflatable Castles**

According to U.S. Consumer Product Safety Commission statistics, the rise in injuries associated with inflatable amusement ride usage has shown a “statistically significant” trend from 1997 to 2004.

Specifically, CPSC statistics estimate 1,300 injuries in 1997, while 2004 estimates reveal approximately 4,900 injuries associated with use of this equipment. The CPSC also reported four fatalities associated with the use of inflatable amusement rides from 2002 to 2005 (CPSC, 2005\*\*).

Tragically, news media reported an eight-year-old child killed on May 3, 2007, when gusty winds carried away an inflatable bounce-house that he and other children were playing in. Improper anchoring and set-up contributed to this particular incident.

Most incidents occur as a result of improper anchoring, high winds (in excess of 20 mph), improper set-up of equipment, rapid deflation/collapse caused by power-source interruption, improper/inadequate supervision, and mismatching passengers by age group and/or size. Traumatic head and neck injuries were documented as the cause of fatalities. Other injuries ranged from bruises to broken bones and, in a few instances, paralysis.

**How can volunteer fire departments protect children from injuries, and mitigate their liability exposure?**

**Utica National’s Loss Control professionals recommend the following:**

- **Require the vendor to be responsible** for setting up and taking down all inflatable amusement rides.
- **Require the vendor to provide, at a minimum, one representative** to operate and supervise equipment use. Supplement this with properly trained representatives while equipment is on site. (If the institution owns and operates the equipment, always follow manufacturer’s guidelines, and ensure that trained and authorized personnel set up and operate equipment.)

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- **Do not sign any hold-harmless agreements with the vendor**, and do not agree to indemnify the vendor for any liability actions that might be brought against them. Also, do not name the vendor as an additional insured on the insurance policies.
- **You should require the vendor to provide proof of in-force liability insurance**, with adequate limits, and name the fire department as an additional insured on the vendor's policy. ***On matters of certificates of insurance, coverage, and acceptable limits of the vendor's insurance policy, seek the advice of a professional independent insurance agent.***
- **Consider the suitability and safety of the site** where the ride(s) will be set up and operated. To minimize collisions, take into consideration traffic patterns and proximity to other activities like sports, playgrounds, etc. Also consider proximity to trees, power lines, and bodies of water that may traverse the property. Ensure that equipment is set up on level ground.
- **Group children on multi-user equipment** according to grade level, size, and weight. ***The risk of injury is greatly increased when there are significant differences in the age and size of children using equipment simultaneously.***
- **Follow all manufacturer's instructions and safety precautions**, and consider implementing additional regulations, such as: maximum number of passengers at one time; no horseplay or jewelry/accessories; and appropriate attire/footwear.
- **Communicate safety regulations** to operators prior to equipment use.
- **Always inform parents of activities that pose a risk to children**, and seek parental permission when warranted.

**Also consider the following precautions offered by the CPSC:**

- **Always anchor rides** per manufacturer's requirements and instructions.
- **For large inflatable slides (over 15 feet), require a minimum of two operators.** For small slides or inflatable "bounces," a minimum of one operator is required.
- **Recommended maximum weight per passenger is 200 lbs.**, or per manufacturer's guidelines. ***Do not exceed manufacturer's maximum-load restrictions for individual rides.***
- **Follow the owner/operator's manual** for site layout; inflation procedures; ropes, tethers, tie-downs, and anchors; temperature range; maximum number of passengers; size/age of riders; electrical codes; daily operation, deflation, and inspection; cleaning and drying; repair; and storage and transportation.

\* Amusement Ride Safety Bulletin! Re: Inflatable Amusement Rides (CPSC, 2001)

\*\* Amusement Ride-Related Injuries and Deaths in the United States (CPSC, 2005 Update)

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