



U.S. CONSUMER PRODUCT SAFETY COMMISSION
WASHINGTON, D.C. 20207-0001

**TO: ALL AMUSEMENT RIDE SAFETY OFFICIALS
IMPORTANT
AMUSEMENT RIDE SAFETY BULLETIN!
RE: Inflatable Amusement Rides**

**Issued May 23, 2001
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The U.S. Consumer Product Safety Commission (CPSC), in cooperation with the states of Florida, Wisconsin, California and the Commonwealth of Kentucky has investigated several incidents nationally which involved inflatable amusement rides. The incidents occurred between March 1999 and February 2001 and involved broken bones, head injuries, contusions, abrasions and sprains. Additionally, the Commission is aware of 3 deaths in previous years, involving inflatable rides. These mobile inflatable rides are customarily used at fairs, carnivals and festivals, but are also operated at private fairs and parties through rental agencies. Riders on inflatables vary in age from children to adult.

The Commission is aware of 9 incidents, which resulted in 21 injuries, on large slide-type inflatables and 33 incidents, which resulted in 33 injuries, with bounce-type inflatables. These incidents were primarily attributable to improper operation, anchoring and set-up. Due to the number of injuries and incidents involving inflatable rides and to reduce the number of injuries through a more consistent industry-wide operation of all inflatable amusement rides, the Commission staff is issuing this Safety Bulletin.

The "Hazard Alert", dated March 14, 2001 from the South Australian Department of Administrative and Information Services addresses operation, set-up and safety related aspects of Inflatable Amusement Structures. We request all owners, operators, state safety officials and those firms that rent inflatables to private parties, to closely follow manufacturers' instructions and guidelines for operation and set-up. In addition, the following recommendations should be adhered to:

Inspection procedures and guidelines for safe set-up and operation of inflatable rides may vary from ride to ride or from manufacturer to manufacturer, please follow manufacturer's requirements. The CPSC staff recommends the following additional guidance:

- Minimum number of operators on a large inflatable slide is two (2), for slides over 15 feet tall.
- Minimum number of operators on an inflatable bounce or small slide, under 15 feet, is one (1).
- Maximum recommended weight per passenger is 200 lbs; or per manufacturer's recommendation.
- DO NOT exceed manufacturer's requirements for maximum loads for individual rides.
- Follow the owner/operator's manual for site layout, inflation procedures, ropes, tethers, tie-downs, anchors, use temperature range, maximum number of riders, size of riders, electrical codes, daily operation, daily inspection, washing, repair, deflation, drying, storage, and transportation.

- ALWAYS anchor rides per manufacturer's requirements and instructions.
- The on-ground anchor weight used for various inflatable ride range from 75-pounds (for bounce-type rides) to 500-pounds (for slide-type rides) for each recommended anchor position. This weight range strongly indicates that an inflatable ride's operator should follow the ride manufacturer's recommendations for proper anchoring and placement or certain type stakes.
- Place and use anchors at all of the manufacturer's required positions, at all times, for both indoor and outdoor use. These anchors can be straight stakes, screw stakes, ground weights or sandbag ground anchors. Straight stakes to be used range from 30 inches to 42 inches in length with at least 75% or more of the length in the ground (this length will be dependent on surface where set up). The ends of the stakes should be covered to prevent a tripping hazard.
- Anchor ropes, tethers, or tie-downs should be attached to a secure device or permanent structure and attached so that they cannot slip off the top of their stake during use. DO NOT attach anchors to motor vehicles.
- Ropes, tethers, and tie-downs should be sufficiently strong to resist breakage during use. CPSC staff recommends that the buyer purchase ½ inch diameter solid-braided polypropylene rope with a minimum tensile strength of 3700 lbs. tensile strength or 370 lbs. safe working load and follow manufacturer's requirements; whichever is greater.
- Identify and use the number and location of tie-downs specified by the manufacturer. DO NOT use non-load bearing positioning loops as tie-downs or anchor points.
- Do not use the inflatable ride above windspeeds that exceed the manufacturer's recommendation. Various manufacturers recommend maximum windspeeds from 15 to 25 mph depending on the ride. However, unload and deflate any inflatable ride when the wind speed exceeds 25 mph.
- Manufacturers and operators should consider that the inflatable ride should not collapse onto the riders if the power to the blower(s) inflating the ride should unexpectedly fail. Inflatable rides need a sealed chamber to prevent the rapid collapse of ceilings and walls onto the riders if the electric power to the blower(s) fails. Inflatable slides over 15 feet tall should not deflate and collapse, so that they dump riders to the ground.

In addition, we recommend that state inspectors provide this bulletin on inflatable rides to rental companies within their state and that rental companies provide renters with the following materials:

1. A training program for the renter for the proper operation of the inflatable ride.
2. A copy of the operation manual (and/or videos, training manuals) for each rental period.
3. A copy of this Safety Bulletin.
4. A release statement signed by the renter documenting that he has received and understands the ride operating procedures.

We request all state and local amusement ride safety inspectors, insurance inspectors and private contract inspectors, as well as owners and operators of "Inflatable Amusement Rides" to follow and adhere to the above guidance during inspection.

For further information contact:

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