

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 May 23, 2001

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. 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.

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

A March 14th 2001 "Hazard Alert" from the South Australian Department of Administrative and Information Services addresses operation, set-up and safety related aspects of Inflatable Amusement Structures (Attached). The CPSC requests all owners, operators, state safety officials and those firms that rent inflatables to private parties, to closely follow manufacturers' instructions and guidelines for operation. 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. However, the Commission's primary concerns are as follows:

- Minimum number of operators on an inflatable slide is two (2)
- Minimum number of operators on an inflatable bounce is one (1)
- Maximum recommended weight per passenger is 250 lbs
- DO NOT exceed manufacturer's requirements for maximum loads for individual rides
- ALWAYS anchor rides per manufacturer's requirements
- 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.
- The on-ground anchor weight used for various inflatable rides 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.

- Place and use anchors at all of the manufacturer's required positions. These anchors can be straight stakes, screw stakes, ground weights or sandbag ground anchors.
- Ground stakes should be a minimum of 40" with 10" exposed above ground (Depending on surface where set up)
- 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.
 Recommend ½ solid-braided Polypropylene rope with a tensile strength of 3700 or 370 lb test rated
- 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 & deflate any inflatable ride if the windspeed exceeds 25 mph.
- Identify, specify and use the number and locations of tie-downs needed for each particular inflatable ride. DO NOT use non-load bearing positioning loops as tie-downs or anchor points.
- 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.

In addition, rental companies should 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 signed release statement by the renter that he has received and understands the ride operating procedures

Since concluding its investigation, CPSC requests 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 critical steps of inspection.

For further information contact:
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