

# Safety and health alert

# 10/01 Safe operation of inflatable amusement structures

---

## Incident

In March 2001 an inflatable amusement structure (jumping castle) that was being operated in South Australia on an apparently fine day was hurled by a strong gust of wind, releasing or breaking the restraining ropes. Twelve children were injured in the incident, one fatally.

Similar incidents have been reported in other parts of Australia and overseas, including one in Tasmania, when a jumping castle's restraining ropes slipped off the anchoring pegs, injuring a mother and two children. In 1992, five children were injured in a similar incident in Dandenong, Victoria.

## Factors

- Inflatable amusement structures are not adequately restrained and anchored to withstand strong winds.
- Tie-down ropes used are not of sufficient breaking strength.
- Anchoring pegs are not sufficiently driven into the ground.
- Tie-down ropes slip off anchor pegs.
- Ballasts used on paved surfaces are not of sufficient mass.
- Structures being operated in strong wind conditions.

## Recommendations

Follow the manufacturer's instructions when erecting or operating amusement devices.

Thoroughly check inflatable structures and accessories including anchor points, tie-down ropes and anchor stakes or ballasts before each use to ensure they are undamaged and safe for use.

Use anchor pegs with top restraints to prevent tie-down ropes from slipping off.

Structures must be operated in accordance with *Occupational Safety and Health Regulations (WA) 1996* Regulation 4.52 and AS 3533 which require:

- Inflatable structures on paved surfaces must be secured, preferably to a permanent structure, or an adequate ballast system shall be used.
- Tie-down ropes to be fastened to a peg or anchorage.
- Each inflatable structure to be operated under the supervision of a person at least 18 years of age who is fully trained and assessed to be competent in all aspects of its safe operation.
- Operators to monitor the weather conditions, holding down requirements and load restrictions to ensure the structure is safe to operate.



- Operations to cease in wind speeds greater than 45 km/h, the structure cleared and deflated.

## Further Information

Further information can be obtained from the WorkSafe internet site [www.worksafe.wa.gov.au](http://www.worksafe.wa.gov.au), or by contacting customer service on 1300 307 877 or email: [safety@docep.wa.gov.au](mailto:safety@docep.wa.gov.au).

Date: April 2001

A413122

