

Relevant Legislation

Management of Health and Safety at Work Regulations 1999
HSE Entertainment Sheet No 7

General Information

Establishmentss occasionally use bouncy castles or similar devices for special events, such as fundraising. These devices will nearly always be hired for the occasion.

The equipment generally consists of a large inflated structure made of a flexible fabric on which children experience sensations similar to those of other rebound equipment, like trampolines or trampettes, though with a reduced effect in the height of bouncing. They are kept inflated by one or more blowers and rely on air pressure to maintain their shape.

Like all rebound apparatus, bouncy castles should be used with great care and be supervised by experienced adults who are well aware of the risks and understand how these may be reduced to an acceptable level. This is particularly important with children in early years classes where this experience may be totally new and whose awareness of body position and orientation has not yet developed to the extent that they are able to maintain full positional control when bouncing in this manner.

Hazards and Risks

There are numerous hazards associated with bouncy castles and similar devices, many of which, unfortunately, are not generally perceived. Establishments will need to carry out a risk assessment of their activities to determine the control measures needed to avoid risk or reduce the risk to acceptable levels. Using the manufacturer's information and instructions for safe operation should enable staff to do this.

The following hazards have been known to occur:

- Instability and blowing away in windy conditions
- Situations caused by loss of pressure as a result of:
 - failure of the fabric, zips and seams
 - failure or loss of power to the blower
 - disconnection of the blower
 - litter blocking the air intake and/or vents

- falls from the structure
- tripping (particularly over anchorages)
- injury to users caused by boisterous behaviour, overcrowding or not separating larger users from smaller ones
- access to dangerous parts of machinery (for example inadequately protected, or unguarded, blower units)
- electrical hazards
- inadequate means of escape in case of fire
- lifting injuries caused by manual handling
- injury to users caused by wearing inappropriate clothes and shoes
- suffocation
- entrapment.

Bouncy Castles

High-sided integral padded walls should be provided on three sides to prevent children falling over the edge and onto the ground. The fourth (open) side is for access, egress and observation. On this side the maximum fall-off height should be no greater than 750mm. Any hard landing surface should be covered by a sloping safety apron or soft landing material, such as dense gym mats or equivalent material of at least 25mm thickness but not more than 125mm, extending for a distance of at least 1.2m from the open side. Safety mats used indoors should be fire-resistant.

When it is necessary to have anchorage points near to an entrance/exit, they should be connected in such a way as to minimise the danger of tripping, abrasion or other injuries. Furthermore, a sufficient number of mature 'spotters' should be situated at arms length intervals to assist children climbing on and off and to prevent children falling over the exposed edge when bouncing.

Suppliers and manufacturers have extensive duties to ensure that devices are safe in respect of their design, maintenance, inspection and modification. In addition to the duties placed on the above, HSE guidance places duties on controllers and operators whilst the device is in use. For practical purposes, many of these duties will fall directly on the Establishment manager. To discharge these duties Manager should ensure that:

- equipment is always hired from a reputable supplier or manufacturer
- The number of children bouncing at any one time is kept sufficiently low to reduce the possibility of children colliding with each other

- Beginners bounce only on their feet (seat bounces, for example, are not to be performed)
- Children of similar size should be on the apparatus at any one time
- The length of time spent per bouncing session is not unduly long so that the children do not tire and lose their concentration and bodily control
- Children who are known to experience difficulties with their physical control receive 'one to one' assistance holding hands while bouncing. At such times, the number of participants may need to be reduced accordingly
- Arrangements are in place for the cleaning and sterilisation of the bouncing surface from time to time. When this occurs, the material should be thoroughly dry before the activity recommences
- Onlookers not engaged in the activity do not distract those who are bouncing by shouting or calling out
- No rotational movements in the air take place
- Running from wall to wall is not be permitted
- The equipment should be securely anchored to ensure stability. The permission of the Establishment manager, governors and parents should be obtained before children are allowed to participate in the activity
- The supplier provides paperwork that clearly demonstrates that the equipment is in a good state and subject to a regular inspection and repair programme undertaken by a competent person or organisation

Daily Checks

Checks should be carried out before the initial use making due reference to the advice provided by the manufacturer in the operations manual. These should include checking that:

- the site remains suitable, with crowd control measures in place if appropriate
- anchorages are intact, and ropes not worn or chafed
- the anchor system secures the inflatable device to the ground
- there are no significant holes or rips in the fabric or seams
- the correct blower specified for the device is being used and the air pressure is sufficient to give a reliable and firm footing

- there are no exposed electrical contacts and no wear on electric cables
- plugs, sockets and switches are not damaged
- bolts and screws of the blower are properly secured and that robust guards are secured over the air inlet and outlet
- inblower/inflation tube connection is in good condition and is firmly fixed to the blower
- the blower is positioned correctly, adequately protected or guarded and is not causing a tripping hazard
- The public should not use the inflatable until any defects identified in the daily check have been rectified.

Training

The supplier should ensure that all Managers and nominated persons receive effective training in the working of the device including:

- the method of operating the device
- safe entry and exit for users
- Safe methods of assembly/dismantling, where applicable
- how to make a daily check
- safe anchoring of the inflatable
- crowd control measures and barriers
- measures to be taken in the event of power failure
- procedures for reporting accidents, defects or breakdowns

What to do if Defects are found

If any defect is found the device should be taken out of use immediately and the problem reported to the company hiring out the equipment. The company should then take appropriate remedial action.

Arrangements within the Directorates

Numerous measures need to be taken to ensure that inflatable bouncy devices are used safely.

The main body of this guidance relates to the use of bouncy castles. This is because this type of equipment has a history with respect to the high number of accidents that occur on them, both nationally and in Northumberland establishments.

It is recommended that establishments consider other types of inflatable devices to provide entertainment at events in preference to the traditional bouncy castle. Some of these alternative devices do not pose the same risks, particularly in relation to collision and bouncing out of the structure.

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