Whizzer, Cha Cha and Sizzler-type amusement rides

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Purpose

This safety alert is to inform amusement ride operators of hazards associated with the operation of Whizzer-type amusement rides. Control measures to minimise the risk of serious injuries are also included. Photograph 1 shows a view of a Whizzer-type ride.



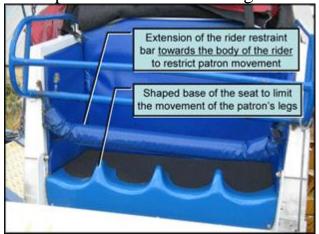
Photograph 1 - View of a Whizzer-type ride
Identified hazards

Several incidents involving this type of ride have occurred in Queensland. The main hazards with these rides are:

- 1. While seated and restrained in the carriage, riders are able to manoeuvre themselves into a position, where they may be ejected from the carriage.
- 2. Riders are able to unlock the rider restraint system and be ejected from the carriage.
- 3. Operating with critical safety components of the carriage removed (e.g. carriage nose cone, which acts as a foot-well), allowing the rider's legs to dangle from the fast moving carriage and to come into contact with stationary parts of the ride.

Control measures

- Modification of rider restraint
 - It is a requirement for rider restraint systems on these rides to be modified to effectively restrain the rider (especially smaller size riders). The goal is to prevent the rider from manoeuvring into a position (e.g. moving the legs up close to the body), where they could be ejected from the carriage. Refer to Photograph 2 for a possible modified configuration.



Photograph 1 - Example of a possible modified configuration on the rider restraint system to restrain the rider during operation of the ride

• Secondary lock

Where the primary locking system can be unlocked by the rider, a secondary locking mechanism must be installed to prevent the rider from unlocking the restraint system while the ride is in motion

• Removal of critical safety components

Amusement rides are not to be operated with critical safety components removed unless the:

- ride manufacturer states in the operator's manual that the specific component/s can be removed when the ride is operating, or a suitably competent person, such as a professional engineer, provides written and signed instructions stating that this can be done, and
- level of risk is not increased in any way for the rider or the operator/s of the ride.



Photograph 3 - Photo showing the removal of the nose cone (which acted as a guard)

from the carriage of a Sizzler-type ride

The hazards and control measures listed in this alert may be applicable to other rides, whose motion is such that ejecting force may be experienced by riders.

More information

More information on the safe design and use of amusement rides is included in the *Plant Code of Practice* 2005 and AS 3533 Amusement Rides and Devices.

For more information on other health and safety issues, visit <u>www.worksafe.qld.gov.au</u> or call the Workplace Health and Safety Infoline on 1300 369 915. Last updated 21 March 2013