

Tractor and Trailer Rides

Incidents involving Tractor and Trailer rides are uncommon, but when they occur, depending on the trailer capacity, they involve a number of people at once. Some passengers may be infirm, special needs, or be young persons. There are however management steps which if applied, may prevent a number of those incident occurring, apart from operator error or public not following advice whilst the ride is in motion.

The failures that do occur are usually caused by poorly designed or maintained equipment, failure of the trackway caused instability or tyre failure, poor inspection before use, and not ensuring equipment has been inspected by an external engineer in accordance with statutory duties.

Like all equipment we use in our industry, the design and manufacture are a key component. That is supported by thorough inspections before each use and structure/integrity inspections by a competent person at least 3 monthly.

It makes no difference whether the attraction purchases a Trailer from a supplier, or whether they make them themselves, they still must be built to a standard that prevents failure or instability when in use. The person who designs or makes the Trailer is responsible for making sure they are designed and manufactured so they are safe and stable. They must ensure they have considered what can fail, what circumstances will cause the failure, and ensure the resultant effect is contained so the passenger is not put at risk. They must also ensure they are fitted with the correct safety equipment to ensure the passenger is safe when getting in, when the ride is in motion, and when the passenger is getting out. Legislation is very clear on these requirements and prohibition from use will be applied if the Trailer is not compliant.

These rides are very popular, and it is not the intention of this alert to stop the activity from happening, just to ensure members have sufficient information to ensure they have effective controls in place.

Like all operations on your attraction, you must ensure you have a properly considered risk assessment in place and your controls measures properly introduced. Staff training and monitoring are most vital to ensure those controls are followed.

1. The structure, design and stability of the ride **MUST** be risk assessed before the operation of the ride. The structure and stability risk assessment should be completed by the designer or manufacturer and advice given to the operator regarding any limitations that should be imposed due to the design.
2. Likewise, the track and the suitability of the track for the ride experience you are wanting to achieve must also be risk assessed before the ride commences, and the risk assessments reviewed periodically. Weather conditions and ground stability will also be part of that assessment. .
3. There are not actual published standards that apply to Passenger Trailers, however that does not negate the duty on the designer and manufacturer. The general legislation duties still apply and, which given there are no published standards, puts addition onus on the Design and Manufacture risk assessment and advice provisions to the Operator.
4. There is however advice available from HSE in their published guidance AIS36 [rev1] dated 2012. This advice should be followed and will be referred to by enforcing authorities when inspections occur. Additional general guidance is given in HSE Guidance L22, which is the

- ACOP for all work equipment. Designers and Manufacturers should also refer to Health and Safety at Work etc Act 1974 – section 6.
5. Make sure your Trailer complies at the point of manufacture and supply, that you complete the maintenance inspections at least every 3 months to ensure the fitting and structure are consistent with the manufacturer's information. By following the steps below, you can be sure you are able to demonstrate compliance. If you are unsure of the standard the equipment was designed under, ask your supplier for assurance.
 6. Ensure you have a copy of, and you are following, the manufacturer's guidance on inspection and maintenance at all times.
 7. Do not exceed their recommendation's regarding speed, numbers of occupants or stability of the ride.
 8. The seat supports, the tyres and the Trailer must be checked before each ride.
 9. Ensure a member of staff, properly trained, inspects the ride and the route before you start a day's operations.
 10. Tractors designed and fitted with the correct tow bar and fitted with rear view mirrors to give the driver full view of the conduct of the ride, are considered the most effective method of towing. They offer better stability options, together with the driver having full vision of what is happening, plus it allows them to look fully where they are going.
 11. The ride should not exceed 6 miles an hour or where the ground is unstable or hard due to frost, at a suitable speed for the conditions. Although some passengers like the thrill of going faster, it is very difficult to stop the ride quickly if a passenger shows signs of discomfort or distress.
 12. During extremely busy operating times, consider providing a Driver's Assistant, whose sole purpose is to maintain visual contact with the Passengers.
 13. Driver's and Driver's Assistants must be over 18 years of age and the Driver must hold a current driving licence as well as training proof for the vehicle being used for towing. Proof of monitoring/supervision will also apply to ensure the ride is being operated to the desired standard.
 14. It is very difficult to know sometimes how some Passengers are going to react if they have special needs. A carer who knows the Passenger must accompany them and alert staff if the need for help is apparent. Where this uncertainty arises, the Driver should consider starting their ride at a slower speed for a short distance to give the occupants the feel for the ride in motion.
 15. Speed control is vital and, together with the terrain and tightness of turn, will be the most common reason for the cars overturning.
 16. Weather conditions will also cause the ride to operate differently. The speed and turning circle must be adjusted if the ride is not responding as it should.
 17. Avoid using rough terrain or excessive slopes. These again will cause the train to become unstable. Properly designed roller coaster type slopes, properly located and approved, can be used but under controlled circumstances. Likewise, metal gates laid on grass for additional sensation is also permitted, the metal structure must be regularly checked to ensure the metal has not deteriorated and cause a tyre to puncture. Further information concerning this message can also be obtained from:

<https://www.hse.gov.uk/pubns/ais36.htm>

<https://www.hse.gov.uk/pubns/books/l22.htm>

<https://www.legislation.gov.uk/ukpga/1974/37/section/6>