



# SHIFT BRIEFING



## LOW-SPEED VEHICLES BEST PRACTICES

As golf carts zip their way off the golf course and into places like ball fields, beaches, and parks, the number of people hurt in them has more than doubled. Researchers at the Center for Injury Sciences report that from 2002-05, 48,255 utility vehicle injuries occurred. Fractures and head trauma were the most common injuries. Part of the problem is that the carts are faster than they used to be.

They are also being used in ways they were not intended for and are carrying extra people. Many of the injuries were caused by falls, which can occur at speeds as low as 11 MPH when the cart turns. Newer carts can reach speeds of 25 MPH. Older carts often lack safety equipment and the majority do not have seat belts.

Based on CPSC statistics, roughly 35% of utility cart accidents involve a person falling out of the cart. The American National Standards Institute golf cart safety standard, Z130.1, does not require seatbelts for utility carts used on golf courses. As a result, it is prudent for owners to equip their golf cars with passive restraints that will protect unbelted passengers from ejection. In place of seatbelts, golf cart standards require readily accessible handholds and body restraints that prevent the occupants from sliding to the outside of the vehicle. One common scenario for a passenger ejection accident occurs when a cart, traveling near its maximum speed is turned sharply to the left. During a sharp left turn, centrifugal forces move the passenger to his right, which can lead to ejection, often over the top of hand holds.

In addition to ejection accidents, at least 10% of utility cart accidents involve a rollover and such accidents are roughly twice as likely to lead to injuries requiring a hospital stay as non-rollover accidents. Rollovers often occur as a result of a driver losing control of the cart while traveling downhill. One potential source of a downhill loss of control is the current industry practice of manufacturing utility carts with brakes on only the rear axle wheels. It has long been understood that a braked vehicle with skidding rear tires and rolling front tires is directionally unstable. Our organization has carts manufactured by [NAME(S)]. Some may be capable of sustained speeds of \_\_\_ MPH.

I want to review several topics including:

- All Operators must possess a valid state Driver's License and have had training by [WHO & HOW].
- Operators should not exceed \_\_\_ MPH in carts. Limits will be posted near commonly used paths.
- Operators should not operate vehicles outside the grounds of the park or authority property.
- Do not exceed the maximum safe occupancy of the vehicle.
- If the vehicle is equipped with seat belts - the seat belt must be worn at all times.
- Passengers must hold on to seat side rails if the vehicle does not have lap belts.
- Drivers must decelerate to below 10 MPH when making turns, especially lefts.
- Do not exceed the recommended load capacity for the vehicle.
- **Discuss other guidelines applicable to your operation.**