

# General Workplace Inspectorate

*Promoting Safety and Health in the Workplace*

## ACCIDENT/INCIDENT ALERT

3 December 2003

### Vehicle Wheelchair Hoist Accident

#### Incident

An elderly rest home resident fell 750 mm to the ground in a wheelchair when the vehicle wheelchair hoist that she was being wheeled on to was not in the up position to receive her wheelchair.

A Ford Transit Customer van was being used to transport residents to and from the rest home.

Generally, only the recreation officer disembarked residents, but, on this occasion, a relief nurse had taken a resident off the lowered hoist and was taking her into the rest home. Normally, the hoist would be returned to the horizontal up position level with the van floor as soon as a resident had been wheeled off the hoist. On this occasion, this had not been done, resulting in the recreation officer pushing the next resident's wheelchair backwards out of the van. As a result the resident fell 750 mm to the ground in the wheelchair.

The resident died 3 days after the incident, which was potentially a contributory factor, but other health issues were recorded as the cause of death by the hospital.

#### Circumstances

The wheelchairs were embarked and disembarked from the customized van via a hydraulic hoist, (Model L900 AARS) supplied by Braun Corporation.

When the hoist was not in use it was in a vertical position in the back of the van, creating a barrier to exit via the back of the van.



**Above:** Hoist in horizontal position ready to receive a wheelchair



**Above:** Hoist in down position – no guard to prevent inadvertent egress.

When the hoist was in the horizontal position, at floor level there was a short platform to bridge the gap between the vehicle and hoist. At this level or when lowered approximately 750 mm to the ground it was possible to exit via the back of the van, because there was no barrier to prevent inadvertent egress either for wheelchairs or residents who were able to walk.

## Investigation

The investigation uncovered the following causation factors:

1. There was no specific safe operating procedure for this operation.
2. On the day of the incident the routine had been changed. Instead of one person disembarking residents from the van and returning them to the rest home, a relief nurse was helping with the operation. There was poor communication between the recreation officer and the relief nurse in carrying out the task.
3. When the recreation officer had carried out this task on her own, regular practice had been to return the hoist to the up horizontal position before taking the resident inside the rest home. On this occasion, this was not done, and the recreation officer assumed that the hoist was in the horizontal position when in fact it was not.
4. While the hoist was in good condition, there was no physical barrier to prevent an exit from the van before the hoist was in place.

## Recommendations:

1. This task needs to be included in the Rest Home Hazard Identification System. Good procedures would indicate that two people should do this operation with specific tasks, not only for disembarking wheelchairs but to ensure the safety of residents left waiting in the van for their turn to disembark, either by wheelchair onto the hoist or via the door for more able residents.
2. A better option, in addition to the procedure above, would be an isolating barrier preventing residents exiting from the rear of the van when the hoist is in the down position.
3. The barrier needs to be sufficiently sturdy to prevent inadvertent wheelchair egress.

4. Care would need to be taken to ensure that the integral design and safe operation of the hoist is not compromised, or egress from the van is not restricted.
5. Preferably the physical barrier should be linked in some form to the operation of the platform of the hoist. This could be either hydraulically or electrically, to ensure exit cannot be made without the hoist in the up horizontal position.
6. The photos below show one solution (there may be others on the market), which is available for attachment to certain hoists. This is the Watchdog Lift Barrier System, and provides an isolating barrier until the hoist is returned to the up horizontal position.

