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SIEP **HSE**

2005/12/001

Seatbelts in buses

December 2005

2 recent bus incidents: 13 fatalities & 37 injured

An Arabian Drilling Company (ADC - JV with Schlumberger) bus collided with a 3rd-party trailer, leading to 11 fatalities and 9 seriously injured. The trailer driver had worked over 24 hours without rest, not all passengers used seatbelts. Journey Management was not applied and the Emergency Response Plan was not adequate.



An SPDC seismic contractor truck conveying 30 staff collided head on with a 3rd-party truck, which was overtaking a minibus at high speed. Two staff in the front seat of the passenger department died, one was seriously

injured and 5 had broken jaws, mostly due to striking the low-back seat in front. All passengers used seatbelts, IVMS showed adherence to the speed limit, the driver drove defensively, and emergency response was professional.

What we learned:

- Seatbelts save lives! If all the ADC passengers had worn seatbelts, fatalities/injuries would have been reduced. The 3 pt seatbelts used by driver and front seat passengers in Nigeria probably saved 3 lives
- Bus seats with 2 pt lap seatbelt, facing a low-back seat in front, can result in fatal head injuries and broken jaws
- Alertness, good rest cycles and accommodation for drivers is vital.
- Journey Management and emergency response need to be in place

Could this have happened to you or your colleague?

Do you use a seatbelt in a bus and intervene if someone else is not?

What to do to prevent these incidents:

- Comply with EP standard, specially:
 - buses have 3pt inertia reel seatbelts for driver and front row and 2pt inertia reel seatbelts for all other forward-facing seats;
 - fixtures in front of seats to be padded with no sharp edges;
 - authorise/ensure drivers check seat belts are worn and tightened!
- Seats facing a low-back seat or fixture should only be used if they have a 3 pt inertia reel seatbelt.
- Ensure bus drivers passed Defensive Driving test with good results

Ensure drivers have good accommodation to enable sufficient rest.

References and other information:

Seismic is investigating new specifications for trucks having cargo areas modified to transport people. For more information, contact Monique de Wit (EPS-HSE) or Eelco Sixma (EPT-SCOE)

HSE alert on Arabian drilling company bus incident SPDC level 2 report

EP road transport standard EP2005-0261

Group HSE Golden rules: You & I:

- Comply with the law, standards & procedures
- · Intervene on unsafe or noncompliant actions
- Respect our neighbours

EP house rule nr 7:

I do use a seatbelt and do not use a mobile phone whilst driving

EP standard:

4.1 Drivers... are also responsible for ensuring that all passengers ... and themselves are wearing seatbelts and that loads are safely secured. 4.2 Drivers who on average exceed 100 km or 4 hours / week shall undertake .. a defensive driving course

Drivers shall comply with the driver hours and rest break regulations as specified – e.g. 4.5 hours followed by a 30-minute break.

4.3 .. only seats fitted with three-point inertia-reel type seatbelts shall be used. By exception, inertia reel lap type seatbelts may be used in buses on any forward-facing passenger seats which have another seat or similar barrier in front of them.

Vehicle specification:

4.3 All Owned, Contracted or Leased Light and Heavy buses shall: 3a)....be fitted with a 3-point inertia reel type seatbelt for the Driver, and the front seat Passengers 4c) Not to be fitted with any in/outward facing or folding seats; 4d) Seats to be fitted with headrests;

4f) Seatbacks and any wall panel or fixture in front of any Passenger seat to be smooth and padded with no sharp edges.