

Ergonomic Task Analysis

Truck Driving

Concern Details

Truck drivers spend extended periods of time sitting in their trucks. Occupational drivers have also been shown to increase risk for developing musculoskeletal disorders, particularly, for low back pain (LBP). Truck drivers are exposure to the following concerns:

- Prolonged static postures while driving
- Some trucks have poor adjustability of seats, steering wheels and pedals which do not accommodate all potential drivers and results in awkward postures for others.
- Exposure to whole body vibration.
- Cab design where gauges maybe difficult to see and controls which are hard to reach.
- Seats do not always line up with steering wheel.
- Repetitive gear shifting with manual transmissions.



Countermeasures

- **Driver:**
 - o Adjust seat for comfort and neutral postures.
 - o Adjust mirrors for good visibility.
 - o Take breaks which include walking and stretching.
- **Company:**
 - o Reduce to Cab Design Spec Sheet when purchasing a truck.
 - o Provide automatic trucks for drivers who drive predominately in the city to reduce repetitive manual shifting.
- **Manufacturer:**
 - o Design seats with suspension. Ensure seats have adjustment for vertical height, lumbar support, seat cushion front and back tilt, back recline, armrest height and angle.
 - o Design seatbelts with height adjustable shoulder straps.
 - o Steering wheel tilt and telescoping adjustments.
 - o Design pedal adjustability.
 - o Ensure pedals, driver seat and steering wheel align.
 - o Design cab so cup holders, gear shifter, air horn, and main controls are within easy reach. Angle dash to bring controls closer to driver.
 - o Design dashboard so key displays are easily visible. Angle dash so it is closer to driver.

