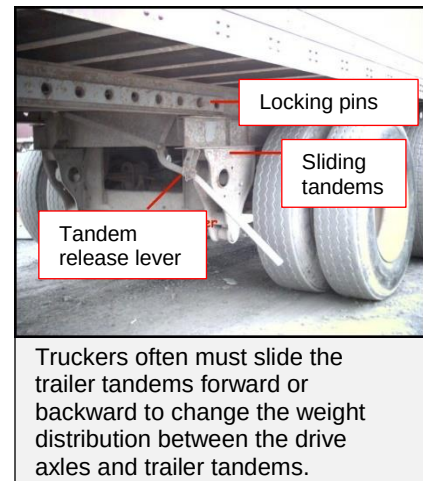


Improving Tandem Safety in the Trucking Industry

A semi-truck driver (coworker) and fellow team driver (victim) were working to properly adjust a semi trailer's load over the tandem axle, a practice referred to as 'tandem sliding'. To do this, the mechanism that locks the trailer to the tandem was disengaged, allowing the trailer to slide, and the tandem axle brake was applied. Next, the coworker drove the truck slightly forward and backward to precisely distribute the weight over the trailer's tandem axle, while the victim had his head positioned between the trailer and the trailer tire to monitor alignment. The coworker heard a bang and felt the trailer shift. He immediately exited the cab and found the victim with his head pinned between the tire and the bottom of the trailer. The coworker ran to get help at a nearby restaurant. EMS was contacted and arrived at the scene immediately. Unfortunately, the victim died at the scene before air transportation could arrive.



The Challenge

According to the U.S. Bureau of Labor Statistics, in 2014 there were 22.7 fatal transportation-related injury cases per 100,000 FTE workers in the U.S. trucking industry, nearly 7 times higher than the fatality rate for U.S. workers, overall. Truck driver injuries are not limited to on-the-road incidents, and often occur when performing non-driving related tasks. Tandem sliding places a driver at unique risk for injury.

The Response

The Kentucky Fatality Assessment and Control Evaluation (KY FACE) program investigated the fatality of a truck driver who suffered fatal cranial crushing injuries when attempting to adjust trailer tandems with a coworker. A KY FACE report (#14KY064) was produced with three injury prevention recommendations: 1) provide extension rods for the manual adjustment of tandems; 2) establish a policy where only one person performs tandem-adjusting activities, to avoid miscommunication; and 3) provide a tandem stopper tool to reduce the likelihood of the driver needing the help of a second person.

The Impact

The Kentucky Occupational Safety and Health Surveillance program (KOSHS) was contacted by a Safety Defect Investigator with the National Highway Traffic Safety Administration Office of Defects Investigation—Med/Heavy Duty Vehicles Division. Due to growing concern for potential tandem-related deaths, the Safety Defect Investigator assembled a committee to consider a redesign for tandems that would be used in future trailer models, warning labels for existing tandem systems, and design of new safety protocols. KOSHS was asked for permission to use the KY FACE report as a key case for the committee efforts.

For more information, visit: www.mc.uky.edu/kiprc/programs/koshs.html