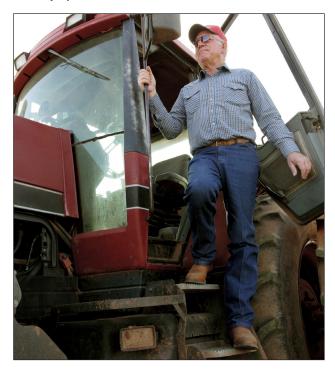
## State Fund Safety Sheet

## **Impact Stress**

Injuries resulting from exiting trucks, tractors, and vans represent a substantial cost to businesses. Although many of these vehicles have aids such as steps and grab rails, drivers and other workers fail to make use of them.

The impact stress or forces on the lower body are a result of jumping from the cab or a lower step rather than maintaining contact with the steps and grab rails throughout the entire exiting process. These forces can be as high as 10 to 12 times the weight of the individual. Keep in mind that the higher the distance, the greater the impact forces on the body. Uneven exit surfaces; wet, muddy, or icy conditions; and haste to get the job done increase the risk of injury.



Workers may feel that they are saving time by ignoring these recommendations, but in the long run they will cost themselves and their employer money and lost time due to injury. Addressing design issues, such as size and location, of assist devices to make them easily accessible is the best way to address this feeling.

In order to obtain the most impact from the devices and methods mentioned above, training must be emphasized in order to achieve the least amount of impact on the individual's lower body.

The same results can be experienced jumping down from a truck trailer or bed, a loading dock, drilling equipment, or other elevated surfaces. The ankles, knees, and lower back can all be affected by this high-impact stress. In order to minimize these risk factors consider the following:

- Rails should run vertically along the exit path so there is continuous access to grab hold.
- Maintain three points of contact at all times. This
  refers to the use of two hands and one foot, or two
  feet and one hand. This is not always possible when
  there is only one grab rail or the driver is carrying
  an object.
- When exiting, the driver should face the cab or vehicle, allowing the optimum opportunity to maintain the three points of contact.
- Make sure that the surfaces of the steps are free of mud, grease, and ice that increase the risk of falling.
   The ground surface, uneven terrain, and discarded objects can also contribute to the risk of falling.
- Make use of stairs, stepladders, or other devices that allow you to climb down rather than jump from other elevated surfaces.



In California, all employers must have an Injury and Illness Prevention Program that includes employee training in safe work practices. To enable its insured employers to fulfill their workplace safety and health training responsibilities, State Fund has produced an extensive selection of Safety Sheet topics in English with Spanish translations. The informative topics are intended for use in on-the-job safety training meetings (best held at the beginning of the shift, right after lunch, or after a break) to educate employees on potential hazards and prevent work-related injuries and illnesses. A record of the safety meeting—stating the date, safety topic, attendees, and recommendations or additional comments—should be kept on file for the duration of each attendee's employment.