

DOSH Hazard Alert Helping employers prevent workplace injuries

March 2021

Safety Shields Causing Shoulder Injuries to Bus Drivers

Attention: Employers of bus drivers

Repeated Movement Causing Shoulder Injuries

Bus drivers from several transit agencies in Washington State have suffered symptoms of shoulder injuries from repeatedly opening and closing manually-operated, safety shields installed as a COVID-19 prevention measure.

Bus drivers must reach out to their sides, back behind their bodies, and use force to move the safety shield. This places the shoulder joint at the very end of its range of motion. Repeatedly making this awkward motion throughout a work shift can damage the joint over time. The rotator cuff is especially prone to injury from repeated movements such as this.

Shoulder injuries in general are one of the most severe types of workplace injuries, with an average lost work time of more than four months and costing about \$28,000 per injured worker. See SHARP publication — www.Lni.wa.gov/safety-health/safety-research/ files/2019/wmsdclaimssnapshot_shoulder.pdf — for more information.

How to Prevent Injuries

The best solution is to automate the safety shields so that bus drivers can open and close them without overreaching and using awkward repetitive motions. This would not only eliminate the movement that is causing shoulder injuries, it could also ensure proper use at every stop.

If automation is not possible at this time, you can make temporary modifications to manually-operated shields, such as:

- Move the handle on the shield to a position that allows the driver to open and close the shield with less overreaching. Mount the handle in a vertical orientation, so that the driver can grasp it with their hand in a natural, "handshake" position.
- Attach a strap to the shield and hang the other end close to the driver's body to prevent overreach and awkward movement.
- Make sure that the magnet or other devices used to secure the shield requires the minimum amount of force necessary to operate while still reliably holding the shield in place.

Division of Occupational Safety and Health







Repeatedly reaching out to the side and back to operate safety shields on buses, as shown here, puts drivers at risk for shoulder injuries. *Photo courtesy of King County Metro*.



Automated safety shields, like this one, can prevent shoulder injuries. To see how this type of shield works, watch this video: www.youtube.com/watch?v=_052f_g60ag. Photo and video courtesy of King County Metro.



Other resources you can access

To find an **electronic** copy of this Hazard Alert, go to **www.Lni.wa.gov/HazardAlerts**.

L&I Safety web page: www.Lni.wa.gov/safety-health.

For other related rules, contact your local L&I office or visit the safety rules webpage: www.Lni.wa.gov/SafetyRules.

To find the nearest L&I office, visit www.Lni.wa.gov/Offices.

How can I get help from Labor & Industries?

The Department of Labor & Industries provides consultations, training, and technical assistance at no cost to employers. Call today to schedule a free confidential consultation or go to www.Lni.wa.gov/ SafetyConsultants for more information.

You may also call 1-800-423-7233 or visit a local L&I office and ask for the Consultation Manager.

This alert was developed by L&I's Division of Occupational Safety and Health (DOSH) to alert employers, labor groups, and employees to potential hazards associated with work activities. **This is not a rule and creates no new legal obligations**. The information provided includes suggested guidance on how to avoid workplace hazards and describes relevant mandatory safety and health rules. DOSH recommends you also check the related rules for additional requirements.