



FATAL FACTS

Hazards to Truck Drivers and other Workers while Loading and Unloading Trucks and Trailers



Loading and unloading materials, goods, and products from trucks are daily activities in many businesses. These activities are also a regular and frequent source of workplace injuries and fatalities.

In Washington State from years 2005-2010:

- 12 workplace fatalities occurred during truck loading or unloading.
- Six of the 12 incidents involved machinery including forklifts and cranes.
- Five incidents involved truck drivers, 3 involved laborers, 2 involved supervisors, 1 involved a landscaper and 1 involved a crane operator.

Some of the incidents that happened during truck loading and unloading in Washington State are described here:



On January 15, 2010, a freight operations supervisor was assisting a forklift driver secure freight on a storage rack inside a trailer. The supervisor reached up and grabbed a piece of freight to steady himself when the 500 lb. pallet of freight shifted and fell on him.



On June 25, 2007, a truck driver was unloading a delivery of a 2-ton manufactured piece of steel. He was standing beside the truck unfastening a securing strap when the piece of steel, which was improperly secured, fell off the truck and crushed him.



On March 24, 2006, three workers were securing a load on the deck of a boom truck. The load came in contact with the levers of the boom crane, causing it to elevate and come into contact with an overhead high voltage power line. One worker was electrocuted. The other two received severe electrical shocks and were hospitalized.



On December 6, 2005, a truck driver was picking up waste drums of cooking oil at a restaurant. He was using the truck's hydraulic lift gate to lift the drums when he was crushed between the truck's bed and the lift gate.

HOW TO PREVENT TRUCK LOADING AND UNLOADING INCIDENTS

- Restrict personnel on foot from the loading zone during operations.
- Train loaders and drivers to identify hazards and apply safe work practices.
- Secure loads on trucks, forklifts and cranes properly.
- Establish procedures to assure workers are clear of trailers/wheels before moving.



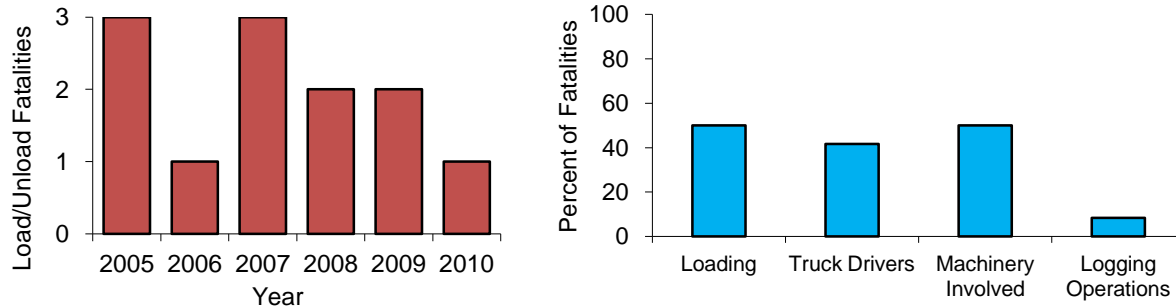
Release date: January 20, 2011
Report #: 47-20-2011



How can these Fatal Facts be used?

The purpose of this Fatal Facts is to alert people to the hazards of truck loading/unloading and to prevent future deaths when performing these jobs. The first page of this report can be posted on a bulletin board. The additional pages describe the recommendations in further detail and provide resource contacts.

On the left is a breakdown of fatal incidents for years 2005-2010 and on the right is a breakdown by incident characteristics.



How can these deaths be prevented?

These fatalities point to many of the hazards and help to identify many of the situations and risks encountered daily by workers loading and unloading material and equipment. These fatalities and serious injuries while loading and unloading trucks are preventable by following recommended procedures and the use of proper equipment.

Additional Controls for Prevention

- **Protect all gaps and drop-offs on loading docks and lift gates.**
- **Assure appropriate forklift and machinery equipment and training.**
- **Never be downhill of a moving load.**
- **Implement safer sheeting and tarping equipment or procedures.**
- **Use wheel chocks and other vehicle restraint devices.**
- **See other resources for hazards specific to logging trucks like [Fatal Facts: Logging Fatalities 1998 to 2008](#).**

Tips for Employers

Employers have a responsibility to ensure the safety of their trucks, drivers and other workers. Here are some suggestions for establishing safe work procedures.

1. Analyze company injury data to determine where and how injuries are happening. Target your safety program to address these problems.
2. Establish safe procedures for all types of loading and unloading.
3. Train all workers involved in the operations or in the area of loading and unloading. Refresher training, periodic toolbox talks, or information sheets can help provide reinforcement.
4. Supervise workers and provide feedback for proper and improper procedures.
5. Maintain vehicles and equipment in safe operating condition. Failure of straps or anything securing a load can result in an incident. Communication between maintenance and management should occur regularly.
6. Conduct regular safety meetings that include management and other representatives.
7. Address "macho attitudes" or hasty work habits that may lead to unsafe conditions for people around trucks.
8. Encourage workers to report hazards encountered on the job.

Primary Hazard Controls

All personnel on foot must be clear of the loading zone during all mechanized loading or unloading operations

Material and equipment can shift or break free during any location transfer.

- Workers on foot should never be on the opposite side of a truck from a forklift while it is loading or unloading material.
- Do not allow workers on foot in trailers while a forklift is involved in loading/unloading operations.
- Provide drivers a place to wait away from the truck.

Identify hazards before loading or unloading

All personnel involved with a loading or unloading operation should assess the potential hazards before the operation begins. A clear understanding of the procedures and communication between workers must be established.

- Site and freight specific knowledge is important.
- Avoid overhead power lines or steep grades.
- Visiting drivers should be made aware of their responsibilities.

Document and enforce standard operating procedures

Proper loading and unloading procedures should be established by the company.

- All workers in the loading zones should be trained on these safe work practices and given refresher trainings periodically.
- Corrections and enforcement of company procedures, if necessary, should be carried out for any observed hazardous deviations in procedure.

Properly secure loads on trucks, forklifts and cranes

All loads must be secured to the truck, container, or trailer to prevent shifting of material and equipment during transport. Equipment such as load bars, vertical supports, and load straps should be used to assure that the load arrives in the same orientation as when it departed.

Follow correct procedures any time a load is raised and transferred

- During transfer of any load, all personnel must stay clear of the path of travel.
- When moving multiple items or loads that may shift, properly secure them with straps, bands or other means.
- When raising and moving loads with a boom or crane, ensure that the path of travel is clear of hazards.

Implement safer sheeting and tarping equipment or procedures

Securing loads with tarps and sheeting presents a frequent hazard to drivers and other workers. Implement procedures or mechanical tarping/sheeting systems to assure workers are not exposed to hazards that increase the likelihood of an incident.

Institute procedures to assure people are clear of trucks and trailers before moving

Companies should have procedures in place to make sure that any truck, trailer or container being moved is empty of all personnel and all workers on-foot are clear.

- Drivers should visually inspect and secure any truck or trailer and the area around it before moving it to assure all workers are clear.
- A visual sign indicating workers are in a trailer should be visible from the truck mirrors anytime personnel are working in or on a truck at a loading dock.
- Truck keys may be placed on a board by the loader during operations and returned to the driver once completed.

Protect all drop-offs, gaps, and pinch points on loading docks and lift gates

All loading docks should be equipped with dock-plates and physical barriers around any gaps that present fall hazards to workers or equipment. Use dock levelers to provide safe access to trailers. When using a hydraulic lift gate, block or avoid gaps and pinch points or install a safety trip bar.

Assure appropriate forklift and machinery equipment and training

Forklift and machinery operators are responsible for the safety of ground personnel at the site as well as themselves. Operators must be trained on safe operation of the equipment, load limits, loading procedures, and communication with other personnel.

Never be downhill of a moving load

Personnel should never be downhill of any load or cart being moved. Heavy or unstable loads or equipment failure could cause a cart or lift to move downhill and crush others. Care should be taken by equipment operators and by all personnel on-site to avoid locations that place them below a moving load.

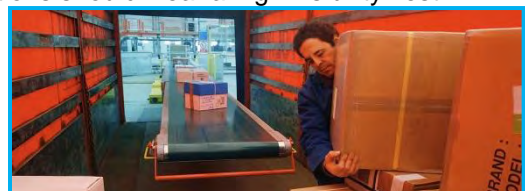
Use wheel chocks and other vehicle restraint devices

All vehicles should be parked with a fully operational parking brake engaged during loading and unloading.

- Wheel chocks should be used in addition to the brake, particularly if any slope is present.

Wear a High Visibility Vest

Truck drivers should wear a high visibility vest whenever they exit their vehicle at their company yard or dock, a customer delivery site, or on the side of the road. All personnel working around moving vehicles and mechanized equipment during loading and unloading operations should wear a high visibility vest.



Logging Trucks Require Specific Attention

Many serious injuries and fatalities occur while loading and unloading logs. A separate Washington FACE report details logging truck hazards. Please refer to [Logging Fatalities 1998 to 2008](#), for detailed recommendations specific to logging trucks.



Getting Help

L&I Consultation Program

Washington State

Department of Labor and Industries

<http://www.LNI.wa.gov/Safety/KeepSafe/Assistance/Consultation>

Everett (Region 1, Northwest Washington)

425-290-1300

Seattle (Region 2, King County)

206-515-2800

Tacoma (Region 3, Pierce, Kitsap, Clallam, and Jefferson Counties)

253-596-3800

Olympia (Region 4, Southwest Washington)

360-902-5799

East Wenatchee (Region 5, Central and Southeastern Washington)

509-886-6500

Spokane (Region 6, Eastern Washington)

509-324-2600

WISHA Policy & Technical Services

Tumwater Central Office – Safety

360-902-5460

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Other Resources

- Trucking Injury Reduction Emphasis (TIRES)
<http://www.keeptruckingsafe.org/>
- OSHA loading / unloading resources
http://www.osha.gov/SLTC/trucking_industry/loading_unloading.html
- Forklift Safety and Injury/Fatality Prevention
<http://www.osha.gov/SLTC/poweredindustrialtrucks/index.html>
<http://www.cdc.gov/niosh/2001-109.html>
- Safety Standards – Powered Industrial Trucks: WAC 296-863.
<http://www.lni.wa.gov/wisha/Rules/pits/default.htm>
- Safety Standards – Logging Operations: WAC 296-54.
<http://www.lni.wa.gov/wisha/rules/loggingoperations/default.htm>

FACE Fatal Facts

Produced by the Washington State Fatality Assessment & Control Evaluation (FACE) Program
<http://www.LNI.wa.gov/Safety/Research/FACE>

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The Safety and Health Assessment and Research for Prevention (SHARP) Program at the Washington State Department of Labor and Industries is funded in part by the National Institute for Occupational Safety and Health (NIOSH) to run a Fatality Assessment and Control Evaluation (FACE) Program in Washington State (Cooperative Agreement No.: 1 U60 OH008336-1). The FACE Program collects information on all work-related fatalities in Washington State, investigates select incidents using a safety systems/root-cause approach, and develops reports and other outreach activities. The FACE Program is not compliance-oriented. Its goal is to reduce the number of work-related acute trauma injuries and deaths.