



Health and Safety Bulletin No. 10

Fatalities caused by falling trailer ramps

Date: 9 August 2023

Summary of incident

There have been multiple fatalities in separate incidents at Western Australian workplaces as a result of crush injuries from falling trailer ramps. The trailer ramps were operated by a sealed hydraulic system to raise and lower the ramps.

In both incidents, the ramps had earlier been raised by other mechanical means. In one incident the ramps had been pushed up by a forklift, and in the other by a front-end loader. This created a vacuum in the sealed hydraulic system, causing the ramps to fall down suddenly when the safety chains were removed.

Contributory factors

- Raising hydraulic ramps by other mechanical means, such as a forklift, front-end loader or crane, creates a vacuum in the sealed hydraulic system.
- People too close to or in the fall zone of a ramp.
- No information or training to truck drivers, maintenance and other relevant workers about the risk of ramps falling down when a vacuum has been created in the sealed hydraulic system after raising ramps by external means.
- Inadequate reporting system for hazards associated with inoperable ramps.
- No functional testing after ramp has been raised by external means to ensure the vacuum is removed from the sealed hydraulic system.

Action required

- Avoid raising hydraulic ramps by external means such as a forklift, front-end loader or crane where possible.
- Never stand in or near the fall zone of any unsecured trailer ramp.
- Develop and implement a procedure for dealing with inoperable ramps, for example:
 - if the ramp is stuck in down position, find the cause and make repairs before raising the ramps normally
 - if the ramp is stuck in down position and has to be raised by external means, ensure the ramp is immediately secured, tagged-out and inspected and tested by a competent person before returning it to operation.
- Provide information and training to truck drivers, yard, maintenance and other relevant

workers about:

- the risk of ramps falling down when there is a vacuum in the hydraulic system, for example, after raising ramps by external means
- the procedure to follow when the ramp is inoperable.
- Develop a reporting system for hazards associated with ramps, and deal with these reports with high priority.
- Ensure causal factors of hydraulic failure, such as a flat battery or hydraulic oil leak, are identified and controlled.
- Conduct appropriate pre-start checks of trailers, including a visual inspection of the hydraulic system, and where practicable, test the operation of the hydraulic system.
- Display signage on trailer warning people to remain clear of ramps at all times.

To prevent ramps falling down in other situations, such as hydraulic hose failure, fit appropriate safety devices, such as an over centre valve, to hydraulic systems.

Further information

Note, this Health and Safety Bulletin has been reissued and replaces the *WorkSafe Safety Alert 09/2016*.