



23-S-07

## SAFETY ALERT • JULY 2023

## BACKGROUND

On a winter afternoon in the Southeastern US, a truck driver had just arrived at the reload yard to transfer a load of crossties on rail cars for transport to a treatment facility. The crossties were processed from mixed hardwood logs and were approximately 8 ft. 6 in. long by 7 - 8 in. in width. Each crosstie bundle was stacked five wide and four high. Weather was not a determining factor. The driver had served less than one year in his position at the time of the accident.

# **UNSAFE ACTS AND CONDITIONS**

The driver ignored existing safety protocols for unbinding cargo, and failed to recognize that the pack strapping was loose thereby creating a fall hazard during the unloading process.

#### ACCIDENT

The driver began to unbind his fully loaded trailer of crossties, beginning with the binding straps at the front of the trailer. The driver failed to notice that a polyester strap (3/4 in. wide), which was initially binding the top pack of crossties to the pack underneath, was no longer in place. The reload yard operator typically loads and unloads trucks, and the company always adheres to a safety practice of placing the forklift between the load and the truck driver during the unbinding process. As the yard operator exited his office heading toward the loaded truck, he heard crossties falling from the far side of the truck and hitting the pavement. He heard the driver yell and found him lying on the pavement underneath three crossties: one across his head, one across his chest, and the third across his waist. The injured driver was conscious and alert. The yard operator physically removed the crossties and called 911. The responding EMS personnel transported the injured driver to a local hospital. He was subsequently transferred to a larger regional hospital for further treatment.



A post-accident investigation and review of security camera video footage revealed that all packs of crossties had a polyester strap completely around them when they were initially loaded on the trailer. It was theorized that the crossties may have shifted during the loading process, causing the polyester strap to become loose. Vibrations and wind pressure while traveling at highway speeds likely exacerbated the problem, eventually pulling the polyester strapping from the buckles.

## **INJURY**

The driver suffered multiple internal and external injuries and was hospitalized for an extended period of time in an ICU.

## **RECOMMENDATIONS FOR CORRECTION**

- Always follow existing safety protocols to avoid injury while unbinding a load.
- Always check for loose binding straps and perform a visual inspection to see if cargo has shifted during transport.
- Double strap bundles and tie a knot to prevent polyester straps from backing out of buckles.



This Safety Alert analyzes an injury in accordance with the chain of events represented by the five dominoes above. Pioneer industry safety experts H.W. Heinrich and Alfred Lateiner developed this accident analysis system to provide a graphic sense of how injuries can be avoided. Their methodology has been accepted by safety professionals worldwide.

Safety Meeting Report Date: Topic(s) Discussed:

Company:

Names of Employees Attending:

Meeting Conducted by:

Comments / Recommendations: