WASHINGTON State FACE Program
Fatality Assessment & Control Evaluation

AGRICULTURE
FATALITY NARRATIVE

FACE

INCIDENT FACTS

REPORT #:
71-241-2023

REPORT DATE:
June 26, 2023

INCIDENT DATE:
November 11, 2022

WORKER:
59 years old

INDUSTRY:
Farm Supplies Merchant Wholesalers

OCCUPATION:
Floor sweeper

SCENE:
Hay processing plant

EVENT TYPE:
Crush - Caught in or between

Pinch point between the lowered bale elevator on right and output platform on left.

For a slideshow version, click here.

Sweeper Crushed in Hay Press Bale Elevator

SUMMARY

A 59-year-old floor sweeper died when he was crushed in a hay press bale elevator. He worked for his employer, a hay and straw exporter, for three years on the night shift sweeping the floor of the hay processing plant.

When the incident occurred, the sweeper was performing his usual duty of cleaning up hay that fell on the floor around the hay press. He was using a broom with an extended handle that allowed him to sweep at a safe distance from moving parts of the press. However, just after midnight, the sweeper entered a 10-foot wide opening under the press operator's station toward the hay bale elevator. During normal operation, the elevator lowered finished bales from the press and used a pusher to slide them across an output platform for removal and packing.

Hay press bale elevator with output platform and pusher in foreground. Arrow shows elevator and yellow table that came off it when the worker was crushed. Warning signs are on the machine frame above the elevator. The worker entered the area from the back.

The elevator was in full upward position over five feet above the floor when the sweeper walked under it. Seconds later, the elevator came down and pinned his legs on the floor and his torso on the output platform in front of him. Then, a 1,000-pound bale fell onto the elevator from the ejector above and crushed him facedown for 18 seconds before the pusher slid the bale out across his torso. Three co-workers heard a scream and ran to the elevator. The press operator saw the crushed sweeper and shut off the machine. First responders had the workers pull him from the press, but he died at the scene. Workers told investigators the sweeper knew about the machine's hazards and did not know why he entered the machine.

Following the incident, investigators found:

- The hay press had no physical barrier to stop workers from entering the elevator while the machine was running. The employer stated no barriers were installed because the sweeper would not be able to keep the area clean.
- A manufacturer's warning sign above the output platform stated, "Do not enter unless elevator is on the floor" in English and Spanish. The employer's hay press safety training was more protective in instructing workers to never enter the press when it was not locked out. No sign was posted on the machine where the worker entered.
- The employer did not ensure their hay press safety training program was effective and enforced.

REQUIREMENTS

- Protect employees from hazards created by the point of operation by using one or more safeguarding methods. See WAC 296-806-20028.
- Develop, supervise, implement, and enforce training programs to improve the skill, awareness, and competency of all your employees in the field of occupational safety and health. See WAC 296-800-14020.

RECOMMENDATIONS

FACE investigators concluded that to help prevent similar occurrences, employers should:

- Supervise, evaluate, and enforce worker performance of lockout/tagout (LOTO) procedure requirements according to hay press safety training and machine manufacturer's safety manual.
- Perform risk assessments with the machine manufacturer to improve safeguarding features, such as barrier fencing, fixed guards, interlocking gates, light curtains, and emergency stops (E-Stop) locations.

RESOURCES

Hay Press Operator Struck by Machine's Guillotine Blade WA FACE Fatality Investigation Report

SHARP Safety & Health Assessment & Research for Prevention

Washington State Department of Labor & Industries

This narrative was developed to alert employers and workers of a tragic incident and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or the cause of the injury. Developed by WA State Fatality Assessment and Control Evaluation (WA FACE) and the Division of Occupational Safety and Health (DOSH), WA State Dept. of Labor & Industries. WA FACE is supported in part by a grant from the National Institute for Occupational Safety and Health (NIOSH grant# 5U60OH008487). For more information visit www.lni.wa.gov/safety-health/safety-research/ongoing-projects/work-related-fatalities-face.