





Potential Fatal Event: Employee Struck by Hand Railing

Preliminary Incident Details	
Operation	Morenci
Date / Time	March 8, 2023 / 2:00 p.m.
Type	Injury
Summary	An employee was using an overhead crane to move a dumpster. The employee leaned over the cab railing to check for clearance and hit their head on adjacent plant equipment railing. The employee's head became pinned between the cab and railing, resulting in a laceration to the head when the employee's hard hat came off.
Fatal Risk	Lifting Operations
Risk Category	Actionable
Pre / Post Rating	Significant (3) Likely (3)
Findings / Missing Controls	<ul style="list-style-type: none">• Missing guarding• Failure to follow spotter instructions• Lack of positional awareness
Applicable Policies / Procedures	<ul style="list-style-type: none">• Job Execution• Guiding Principles-Safety
Employee Condition	Employee received stitches on his head.
Contact	Jacob Sweet, Manager-Health and Safety


Photos / Links



- *Overhead extension cleaner crane*



- *Dramatization of how the employee was pinned in between the railing and the crane cabin.*



- *Railing*



Potential Fatal Event Learnings: Employee Struck by Hand Railing

Causal Factors

- While operating overhead crane, employee leaned over crane platform to check for clearance/avoid structures below.
- Employee did not follow the spotter's instructions.

Action Items	Hierarchy of Controls
Install flotation crane cab(s) with larger mesh grating to prevent employees from reaching/looking beyond without impacting visibility.	CA-1 Engineering
Develop crane mentoring program to reinforce the use of a spotter for maintenance and operations employees.	CA-3 Administrative
Develop work standards specific to overhead cranes and place inside cabs.	CA-2 Administrative

Failed Safeguards / Additional Learnings

- Remove abandoned structure near crane cab.
- Review all cranes at Morenci mill operation for similar hazards.
- Develop crane training, to include Morenci mill's unique 1940-style cab cranes.

Fatal Risk Management Insufficient Controls

- All controls were in place**
- Crew teamwork needs improvement**
- Even though an experienced spotter was in place and the crane operator was given the all clear, the employee still opted to check clearance below the crane due to use of larger dumpster. Sticking his head out of the crane was the **behavioral based decision**.
- Pre-Shift Inspection – SUFFICIENT**
- Pre-lift Meeting – SUFFICIENT**
- Barriers & Segregation – SUFFICIENT**
- Operator Competency – SUFFICIENT**
- Communication – SUFFICIENT**
- Lifting Execution – SUFFICIENT**
- Lifting – SUFFICIENT**