Safety and Health Snapshot

for the Western Australian minerals sector

Fall from heights

Issued December 2019

Mining operations in Western Australia frequently require workers to perform duties at height, or where there is a risk of falling from one level to another or into openings. This may be on the surface or underground, with each situation offering its own unique set of circumstances.

The snapshot covers the period from June 2018 to May 2019 (unless stated otherwise), when there were 36 injuries and 34 notifiable incidents identified as fall from heights.

For more information about occupational safety and health, visit our website www.dmirs.wa.gov.au



@DMIRS_WA



Department of Mines, Industry Regulation and Safety

Injuries by area

33 of the 36 injuries occurred during **surface operations**



3 of the 36 injuries occurred during **underground operations**



Injuries by employment type





Injuries by severity



identified as fall from height injuries were **classified as serious**



20 of the 36 injuries were **lost time injuries**

Injuries by nature



10 of the 36 injuries were **sprains**



8 were fractures

Injuries by occupation

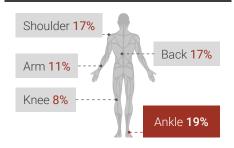


Processing plant operators had the highest proportion of injuries at 14%



Fitters had the 2nd highest at 11%

Part of body (top 5)



Injuries by days lost



104 work days lost



159 work days on alternative duties

Injuries by activity

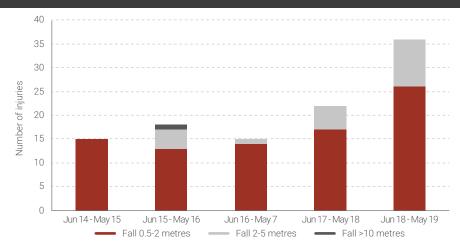


Operations had the highest proportion of injuries at 56%



Maintenance was the 2nd highest at 28%

Fall from height injuries over 5-year period from June 2014 to May 2019



Some recent incidents



Dislodged panel 20/05/19

A worker fell approximately 3.5 metres to the level below of a tower when the panel he was standing on dislodged. The worker was replacing expanded mesh panels. At the time of the fall, he was relocating his position and had detached his fall protection lanyard from an overhead static line. The worker was treated for a broken ankle.



Step broke 01/07/18

At the end of the shift the drilling team arrived back at camp and parked the support truck. As one of the crew exited the cab, the vehicle step broke at one of the top mounting points causing the step to give way. The worker fell to the ground (approximately 1.5 metres), landing on their feet then fell onto their side using their arm to break the fall.



Fall into void 05/06/18

A boilermaker was scoping work to be completed on the top deck of an excavator. The boilermaker moved around two fitters on the right hand side of the excavator's main walkway to access the other side of the top deck. The boilermaker did not see that a hatch had been opened and stepped into the void between the engines and battery box, falling approximately 2.4 metres.



Useful online resources

- 'Down to Earth' hazard awareness video series
- Prevention of falls at workplaces code of practice
- Managing the risk of falls at workplaces - model code of practice (Safe Work Australia)
- FAQs on working at height
- Department of Employment, Skills, Small and Family Business

Spotlight on Mines Safety Significant Incident Report No. 271

Near miss when latch fails and gate swings open on a haul truck

23 November 2018



Contributory causes

- The site's routine maintenance program and prestart inspection regime for the plant didn't prompt workers to inspect the latch.
- The original equipment manufacturer (OEM) released a service bulletin in April 2017 relating to the latch; however, the recommended works were not actioned on this vehicle.
- The OEM's service bulletin didn't identify the hazard relating to a failure of the latch. Nor did it communicate this as a mandatory improvement or a priority for the recommended works.

Safe work practices



Provide safe means of access and exit from any workplace and area from which a person could fall.



If it is not reasonably practicable to eliminate the risk of a fall, minimise the risk of falls by using a fall prevention device, work positioning system or fall arrest system. Be mindful that fall restraint systems are not suitable if:

- a person can reach fall position
- the slope is $> 15^{\circ}$
- a person can fall through the surface (e.g. roof).

Spotlight on Mines Safety Significant Incident Report No. 276

Fall from height after failure of retractable type lanyard

28 May 2019



Contributory causes

- Higher level risk mitigation measures (e.g. a stairway) were not in use.
- The fall arrest equipment was not used in a way to reduce, so far as is practicable, the possibility of injury to the user.
- The anchor point selection was incorrect for the application and outside the maximum of 30° offset recommended in AS/NZS 1891.4:2009, Part 5.1.2.
- The lanyard integrity was compromised at the connection between the inertia reel and the shock absorber with the webbing material worn and/or damaged.
- The scaffolder's lateral swing (the pendulum effect) extended the fall distance, likely exceeding free fall limits, before the lanyard took up the load.



Assess work area and take proper precautions. Conduct risk assessments (e.g. JSA) prior to work when necessary.



Ensure workers undergo working at heights training.



Maintain equipment in good working order. Always inspect anchorages and equipment before use.