



Mining operations on ports

Issued June 2018

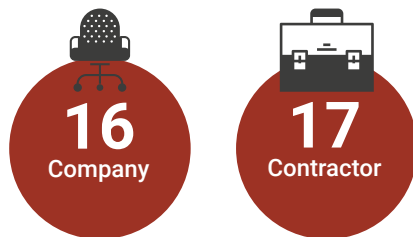
Western Australia has the largest network of ports in the nation. Port operations have the potential to cause serious and fatal injuries due to their proximity to water, traffic movement (cranes, freight containers, trucks) and potential structural damage (corrosion from salt).

This snapshot covers the period from 1 March 2017 to 28 February 2018 when there were 1,197 injuries and 2,479 notifiable incidents (specific reporting categories). Of these, 33 injuries and 102 notifiable incidents took place on mining operations in port facilities.

@DMIRS_WA

Department of Mines, Industry Regulation and Safety

Injuries by employment type



Injuries by part of body



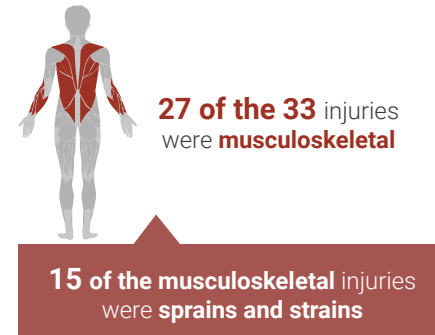
Injuries by occupation



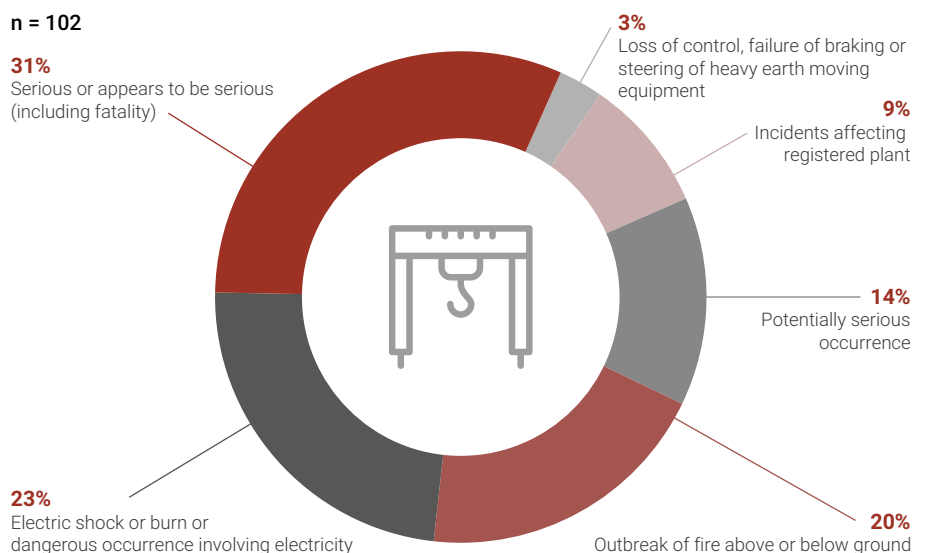
Injuries by severity



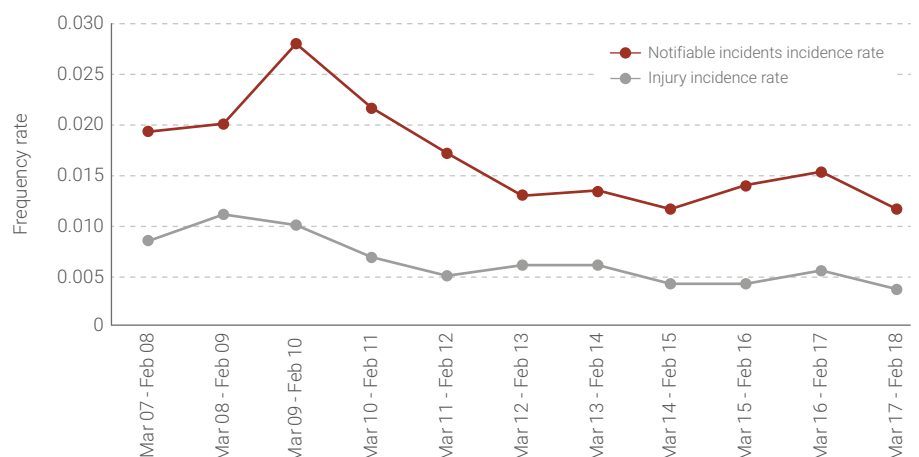
Injuries by nature



Notifiable incidents by reporting category



Port operations by incidence rate (number of injuries and notifiable incidents per number of employees)



Spotlight on Mines Safety Significant Incident Report No. 184

Shiploader rail clamps fail after original parts modified in unsuccessful attempt to overcome problem of rail misalignment

1 July 2013



Photographs showing rail clamp as designed by original equipment manufacturer (top) and modified rail clamp (bottom) with open-ended slots and welded nuts and bolts

Key message

Before making repairs, a competent person should determine the root cause of the failure and how to address the underlying problem. Alternate or modified parts should be assessed by a competent person as meeting the original equipment manufacturer's performance specifications.

Spotlight on Mines Safety Bulletin No. 103

Failure of maintenance jacking points on stackers, reclaimers and shiploaders during replacement of slew bearings

22 January 2013

During the exchange of a reclaimer slew bearing, it was noticed that one of the three jacking points was yielding. Jacking ceased immediately and the original equipment manufacturer was contacted. If the jacking operation had not been terminated, major structural collapse would have resulted.

Contributory causes

- The design was a duplicate of that for another reclaimer but the "park" or "service" position had been moved for operational reasons.
- The implications of changing the design details and whether it was still fit-for-purpose had not been recognised by any party.
- The necessary stiffeners or webs situated under the jacking points had not been installed in the appropriate locations in the modified configuration.

Incident example



Falling object 07/09/2016

A maintenance technician was cleaning a fire extinguisher sign at a port facility when the sign fell from the slew deck. The sign, weighing 1.5 kg fell 10 m onto the road below.



Fatigue 13/11/2015

The driver of a light vehicle (LV) fell asleep at the wheel while travelling on a port facility causeway adjacent to a conveyor. As a result the LV veered to the right and across the oncoming lane, before coming into contact with a light pole and the structure of the conveyor.



Procedure not followed 05/04/2016

During an electrical isolation at a port facility the correct procedure was not followed. The power supply had been fully isolated using a lockable isolator and tested for dead; however, the lock and tag used were not compliant with the site's procedure.

Safe work practices

Examples include:



Always follow safe working procedures and the original equipment manufacturer design, specifications and instructions



All maintenance work needs to be regularly monitored and supervised throughout the shift to verify compliance with safety requirements



Where there is the potential to fall into water, ensure workers wear an approved personal flotation device (PFD) at all times. Always confirm that the PFDs are functional prior to use



Identify and control stored energy hazards for any work being undertaken and always follow isolation procedures

Fatalities on port operations

Examples include:

- Mines Safety Significant Incident Report No. 171 *Fall from cantilevered scaffold platform*
- Mines Safety Significant Incident Report No. 151 *Crushed in a pinch point of fixed elevating work platform (EWP)*