



## Line-of-fire

Issued January 2018

You are in the line-of-fire if something falls, swings, or is ejected and, it could hit, crush or cut you. Unfortunately, fatal and serious injuries can result when people are caught in the line-of-fire. It is important to understand where this could happen in your workplace.

This snapshot covers the period from 1 October 2016 to 30 September 2017 when there were a total of 1,139 injuries and 2,333 notifiable incidents (specific reporting categories). Of these, 253 injuries and 120 notifiable incidents involved line-of-fire scenarios.

@DMIRS\_WA

Department of Mines, Industry Regulation and Safety

### Injuries by employment type



### Injuries by occupation

**Fitters** had the highest proportion of injuries at **24%**

**Processing plant operators** had the 2nd highest proportion of injuries at **11%**

### Injuries by body part

**71% of the 253 injuries** were to **hands**

### Injuries by nature



**53% of the 253 injuries** were **high-consequence injuries** (amputations, fractures and crushing)

**62 of these high-consequence injuries** were **crushing**

### Injuries by location

**Heavy equipment workshop** had the highest proportion of injuries at **12%**

**Crushing, screening and conveyor** had the 2nd highest proportion of injuries at **9%**

### Injuries by severity



identified as line-of-fire injuries were **classified as serious**

**73 of the serious injuries** were **lost time injuries**

### Notifiable incidents

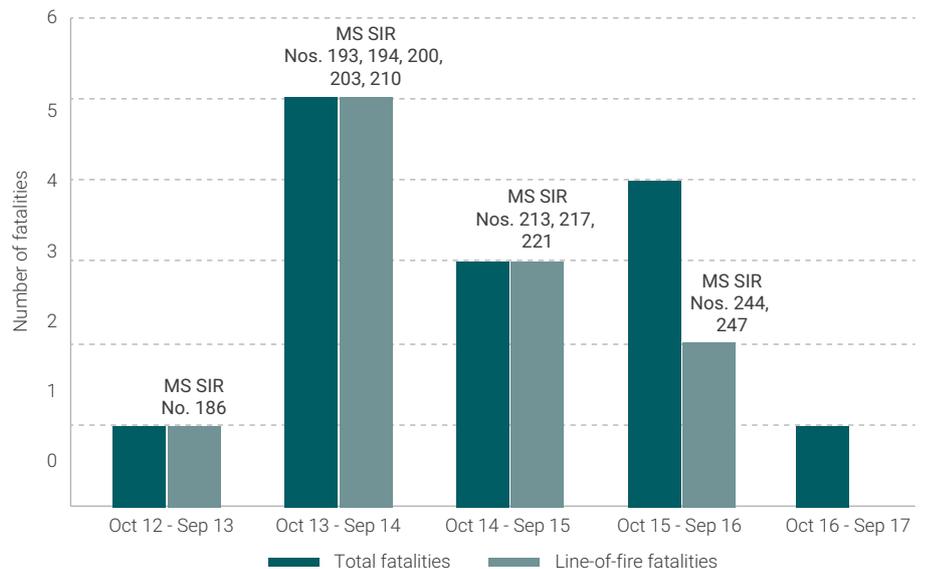
**118 of the 120** notifiable incidents involving line-of-fire scenarios had a corresponding injury

**87%** of the notifiable incidents involved a serious or apparently serious injury

**13%** of notifiable incidents were potentially serious occurrences

### Line-of-fire fatalities

(five-year period from 1 October 2012 to 30 September 2017)



MS SIR: Mines Safety Significant Incident Reports

## Some recent incidents



### Foot injury 16/10/17

Three personnel were tasked with replacing the left-hand drive sprocket on an excavator. In order to carry out the work, the travel motor guard on the left-hand side needed to be removed. The maintenance crew had planned to use a lifting jib on a forklift to support the weight of the guard and then lower it to the ground. The guard weighed 500 – 600 kg and eight bolts secured the guard to the track frame.

A fitter was removing the bolts that secure the guard when the guard swung down, trapping the individual's foot. The fitter received a partial amputation of the big toe on the left foot.



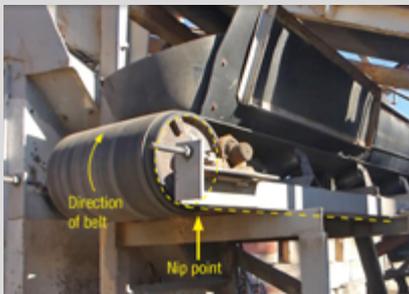
### Hand injury 04/10/17

A driller's offsider received a crush injury while breaking down a reverse circulation (RC) drill hammer assembly. The offsider's hand was caught between the RC hammer sleeve and the bottom clamp of the breakout tool assembly, while removing the sleeve from the breakout tool. The offsider sustained a crush injury to three fingers on the right hand.

## Spotlight on Mines Safety Significant Incident Report No. 248

### Worker seriously injured when caught in moving conveyor

12 September 2016



#### Key message:

Develop suitable controls to prevent workers being caught, trapped and crushed.

## Spotlight on Mines Safety Significant Incident Report No. 251

### Worker seriously injured while operating a block-making machine

24 February 2017



#### Key message:

Confirm the correct isolation procedure has been applied before work commences.

## Spotlight on Mines Safety Significant Incident Report No. 252

### Fitter struck in chest by packing plate released under pressure

12 May 2017

#### Key message:

Identify all hazards before starting a job, including those with the potential for releasing stored energy and workers being in the line-of-fire. Consider risks posed by design and conditions of plant and work systems.

## Avoid being caught in the line-of-fire

### Adopt the "known hazard and known precaution" approach

Many line-of-fire incidents are repeat situations where there are well-known precautions or controls that could prevent injuries.



Never stand under anything that can fall on you



Never place any part of your body where it can be crushed or hit



Never start work if there is a risk of unstable objects that could swing and hit you

### More information

*Analysis of serious injury data in the Western Australian mining industry July-December 2013*

*Fatal accidents in the Western Australian mining industry 2000-2012*

## KNOW YOUR HAZARDS

### Are you aware of your workplace hazards?

*Know Your Hazards* is a video series produced by the Department for the resources industry. The series targets common workplace hazards that have injured or killed. Let's work together to reduce the risk of these accidents happening.



View or download our hazard awareness videos at [www.dmp.wa.gov.au/HazardVideos](http://www.dmp.wa.gov.au/HazardVideos)