

# Monthly Safety and Health Snapshot

for the Western Australian minerals sector

# Natural hazards

Issued November 2017

Exposure to natural hazards has the potential to cause serious harm. Western Australia is subject to severe weather events such as tropical cyclones, extreme temperatures and severe thunderstorms. In remote areas, bushfires started by lightning can burn for weeks or months, particularly during periods of drought, and may affect mining operations. Serious and fatal injuries can result from inadequate identification, planning and preparation for these hazards.

This snapshot covers natural hazard incidents for the period from 1 August 2016 to 31 July 2017.

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



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Department of Mines, Industry Regulation and Safety

#### Injuries by employment type





# Notifiable incidents by top three contributory factors



**61%** rain



**14%** lightning and thunderstorms



**11%** wind

The remaining 14% consists of wildlife, fire and ice formation.

### Injuries by severity



identified as natural hazard injuries were **classified as serious** 



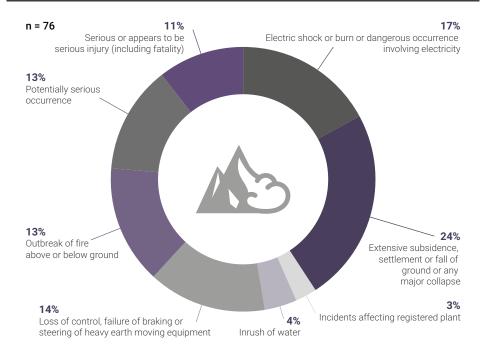
**6 of the 14** injuries were caused by **strong winds** 

#### Injuries by nature



**4 of the musculoskeletal** injuries were classified as **strains** 

## Notifiable incidents by reporting category



#### Notifiable incidents by area

**88%** of the 76 notifiable incidents occurred during **surface operations** 



**12%** of the 76 notifiable incidents occurred during **underground operations** 



Spotlight on 2016 Yarloop fire

## the impact on mine sites



#### Road closure

- Transportation of product interrupted
- Workers unable to access sites



#### **Evacuation**

- Sites evacuated for days
- Workers unable to attend shift as homes evacuated



#### Fire

- Buildings burnt down and equipment destroyed
- Water, power and sewerage shut down or damaged
- Air quality affected



#### Clean up

 Time and personnel allocated to clean up of site and ensuring safety



# Stay alert

Stay up to date with the latest emergency warnings at www.emergency.wa.gov.au

Are you travelling during bushfire season? Prepare using the DFES *Travelling During a Bushfire* fact sheet. Go to www.dfes.wa.gov.au

# Yarloop lessons learned



## **Preparation**

- Emergency response plans and procedures need to be up to date, readily available and easily accessible in an emergency (e.g. electronic linking of documents could improve availability and response time)
- Emergency response plans should include a specific and detailed bushfire checklist
- Clear and concise criteria for defining a 'crisis' are needed
- Muster points must be appropriately located, clearly communicated and accessible to all personnel
- Previous scenario training and exercises can be beneficial for preparation



## Response

- Dead spots in phone and radio communication should be identified and covered by an alternate method of communication
- Have a system in place to account for all people entering or leaving site (e.g. after evacuation, seek registered mine manager approval before entering site)
- Make sure road and site closures are in place and communicated to all stakeholders, including external suppliers (e.g. during the Yarloop fires, a truck carrying explosives tried to make a delivery through the fire exclusion zone)



## Recovery

Confirm the site and surrounding areas are safe for re-entry (e.g. restrict access
to structurally damaged infrastructure; check that smoke levels will not affect
workers)



