



Safety and Health Snapshot

 for the Western Australian minerals sector

Outbreak of fire

Issued February 2022

Outbreak of fire is the highest reported category for notifiable incidents on mine sites. Reoccurring incidents within the data include vehicle mechanical fires, electrical fires and fires caused by fluid ignition. In case of fire, do not panic, carry out correct emergency procedures, consider the situation, and move carefully to the safest area away from the fire.

This snapshot covers the period from 1 July 2020 to 30 June 2021 (unless otherwise stated). During this period there were a total of 3 injuries and 745 incidents identified as fire caused by mining operations.

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

-  WorkSafeWA
-  WorkSafe WA
-  WorkSafeWA

Notifiable incidents by area

673 of the 745 notifiable incidents occurred during **surface operations**



72 of the 745 notifiable incidents occurred during **underground operations**



Injuries by employment type



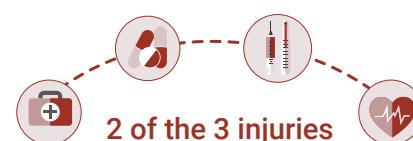
Injuries by occupation



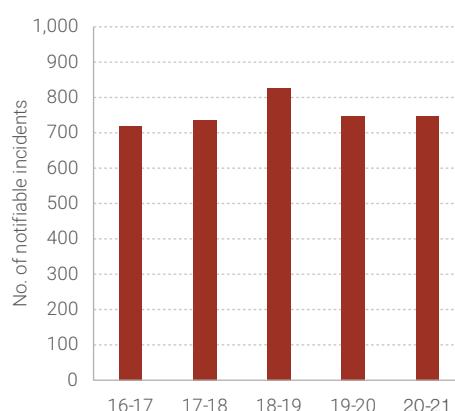
Notifiable incidents by primary commodity



Injuries by severity



Notifiable incidents in the last 5 financial years



Outbreak of fire incidents frequency rate in the last 5 financial years



Some recent incidents



Machine fire 22/04/21

A loader at a processing plant returned to work after a 500-hour service when the operator noticed a diesel leak and shut the machine down before they heard a bang and saw flames coming from the engine bay. The operator activated the aqueous film forming foam (AFFF) fire suppression system, which put out the fire. A non-original equipment manufacturer O-ring on the diesel fuel filter had failed.



Electrical fire 13/01/21

An operator conducted a pre-start inspection of mobile plant. When they went up the access ladder, they smelt something electrical burning. The operator put their bag in the cab and came out to investigate. They saw flames coming from beneath the walkway. The operator called an emergency and shut the machine down. When they tried to exit, they were unable to drop the emergency ladder. As the flames were starting to die down, the operator used a dry chemical powder (DCP) extinguisher to put the fire out. An investigation was conducted.



Vehicle fire 04/10/20

A truck driver was taking a load up the decline at an underground mine when they smelt smoke and saw flames around the engine bay of the vehicle. The operator activated the aqueous film forming foam (AFFF) fire suppression system and called an emergency. The operator used a dry chemical powder (DCP) extinguisher put out the fire. Refuge chambers were used when the emergency was called. A failed O-ring on the rear fuel rail connection block allowed fuel to spray onto the hot engine. All other trucks were inspected. An investigation was conducted.



Cutting sparks 20/04/21

A boilermaker at an open pit was oxy cutting a nut off the inside of an apron feeder when sparks from the cutting set the shin area of his trousers on fire. A spotter saw the incident and used a water hose to put out the fire. The boilermaker was taken to the site medical facility and was treated for burns to the leg.



Vehicle fire 14/01/21

An empty haul truck was travelling along a haul road toward an underground mine, when the operator noticed a vibration coming from underneath the cab. As they pulled over to the side of the road, another operator notified the first operator that they could see flames coming from the engine compartment of the truck. The operator manually activated the aqueous film forming foam (AFFF) fire suppression system, and the two operators attempted to put out the fire with four dry chemical powder (DCP) fire extinguishers. The two operators retreated and called an emergency. Underground operations were suspended and workers evacuated. The emergency response team (ERT) attended, observed that the fire had engulfed the tyre and the engine bay and barricaded the scene to allow the fire to burn out. About three hours later, it was noted that the fire had died down and the front tyres had burnt out and ruptured. Wind conditions were favourable so the ERT extinguished the remains of the fire and used water to cool the machine.



Equipment fire 13/01/21

A worker at a construction project kitchen switched on an electric tilt skillet to cook dinner and added cooking oil to clean the tray. Soon after, the oil caught fire. A dry chemical powder (DCP) extinguisher and fire blanket were used to put out the fire. Two workers were assessed for exposure to dry chemical after extinguishing the fire. No one was injured. An inspection found the thermostat was faulty and failed to control the temperature.

Safe work practices

Examples include:



Only refuel at designated surface or underground refuelling locations that have appropriate fire suppression systems



Remove excess grease and oil from engines



Carry out daily inspections of critical components such as hydraulic lines, heat shields and other protection equipment



Inspect the site thoroughly before and after hot work is done



Ensure escape routes are free of any obstruction



Develop bushfire protection measures

More information

- [Guidance about fire hazards](#)