



INFORMATION SHEET: FOCUS ON COMPLIANCE

Vehicle rollovers on WA mine sites between 2017 and 2022

Background

WorkSafe Mines Safety (Mines Safety) has noted an increase in incident notifications involving heavy mining equipment and other vehicles rolling over. These incidents can result in serious or potentially fatal injuries to workers.

Mines Safety intends to conduct a targeted awareness campaign that will focus on collisions, near misses and rollovers of mine vehicles.

Incident data from 1 January 2017 to 30 May 2022 identified four areas of causation factors: human and organisational factors; traffic management; maintenance of equipment; and vehicle centre of gravity.

The campaign will look at what controls PCBUs, including mine operators and contractors, have in place around these causation factors.

- The management of human and organisational factors:
 - fitness for work, including fatigue
 - training
 - procedures
 - operator competency.
- Traffic management:
 - road and intersection design factors such as gradients, road surface material, visibility, type and volume of traffic
 - common and specialised traffic signage, markings, delineators and barriers
 - site or company policies or protocols for functions such as speed limits, overtaking, road rules (e.g. give way), communication and parking
 - vehicle design, modification and maintenance strategies
 - schedules of inspections and auditing
 - when the plan is updated and by whom
 - management oversight and change management
 - reviews of critical controls.

- Equipment:
 - fit for purpose vehicles
 - maintenance schedules
 - warning / awareness systems
 - systems to prevent dumping without retracting tarps (e.g. side tippers).
- Centre of gravity.

Summary of hazard

Between 1 January 2017 and 30 May 2022 there have been 425 reported incidents involving vehicle rollovers, comprising:

- road trains (174)
- light vehicles (138)
- mobile equipment (including dozers, loaders and excavators) (113).

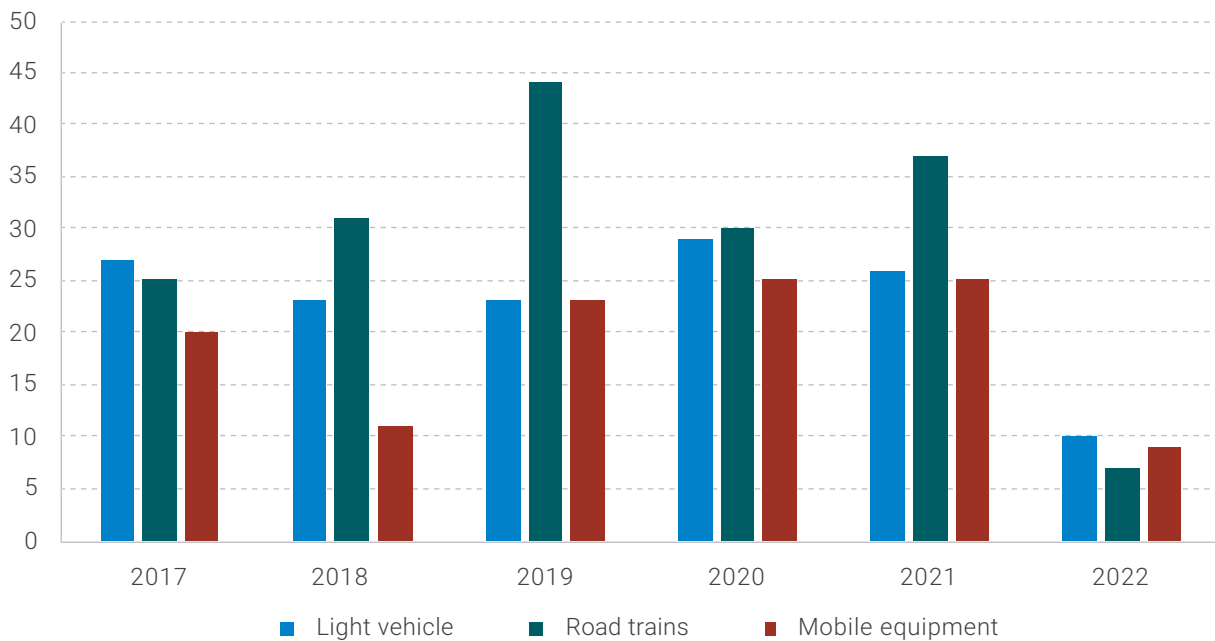


Figure 1 Number of vehicle rollovers by year and vehicle type

Note: Data for 2022 is to 30 May

Contributory factors

Analysis of the four causation factors identified the following contributory factors. While these may occur individually, some incidents may have multiple contributory factors.

- Human and organisational factors:
 - fatigue
 - inattention
 - training
 - travel management plans
 - not driving to conditions.
- Traffic management:
 - ground conditions
 - loss of control on bends
 - speed
 - contact with windrows.
- Maintenance of equipment:
 - mechanical faults
 - preventative maintenance.
- Vehicle centre of gravity:
 - improperly secured loads
 - incorrect loading of material
 - dumping across grade.

Reporting

Under the *Work Health and Safety Act 2020* and the *Work Health and Safety (Mines) Regulations 2022*, there is a duty to notify or report certain incidents to the regulator.

Notifiable incidents (ss. 35-37 WHS Act) include:

- the death or serious injury of a person.

Reportable incidents (r. 5 WHS Mines Regulations) include:

- damage to any plant that impedes its safe operation
- control is lost over a vehicle or other plant
- an incident that results in injury that requires medical treatment.

Further information

- [Guidance about traffic management](#)
- [Working with or near large mobile plant](#): pamphlet
- [Safety and Health Snapshot: Vehicle and mobile equipment rollovers](#)

Significant Incident Reports

- [SIR No. 230 Dump truck roll-over – fatal accident](#)
- [SIR No. 267 Haul truck operator loses control descending ramp on haul road – fatal accident](#)