



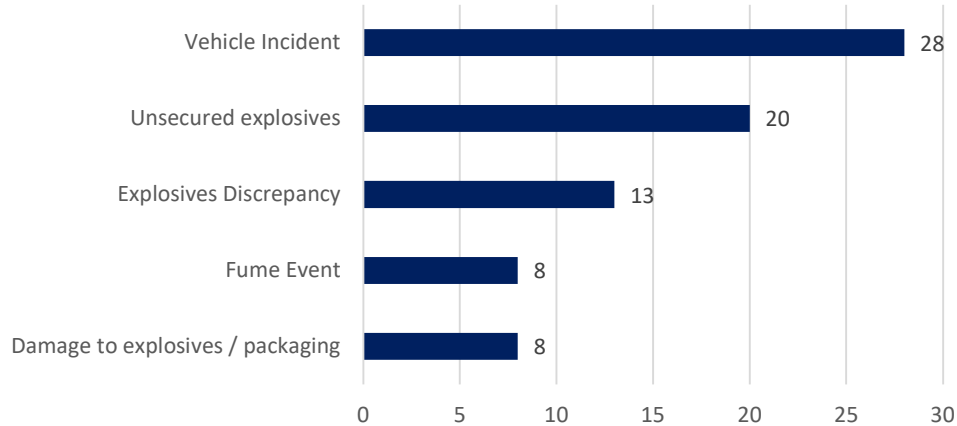
Explosives incidents – March 2021

This document presents statistics for all explosives safety and security incidents reported during March 2021. It also includes the top 5 incidents for the current and previous financial years, plus a cumulative summary of all safety and security incidents for the last 12 months. The number of injuries and fatalities occurring in the community and industry are presented for the month of March 2021, as well as the cumulative total for the financial year 2020-21.

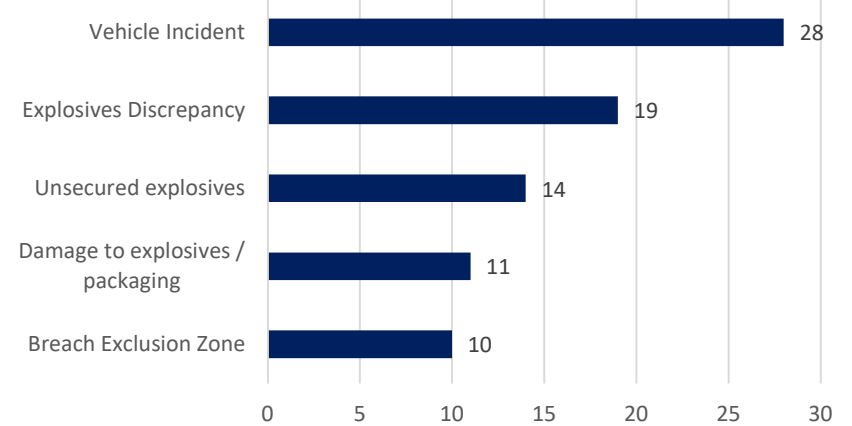
	March 2021	Financial year to date (2020-21)
Community	0 fatality 0 injury	0 fatality 0 injury
Industry	0 fatality 1 injuries	0 fatality 2 injuries



Top 5 Most Common Incidents Excluding Misfires Jul 2020 - Mar 2021

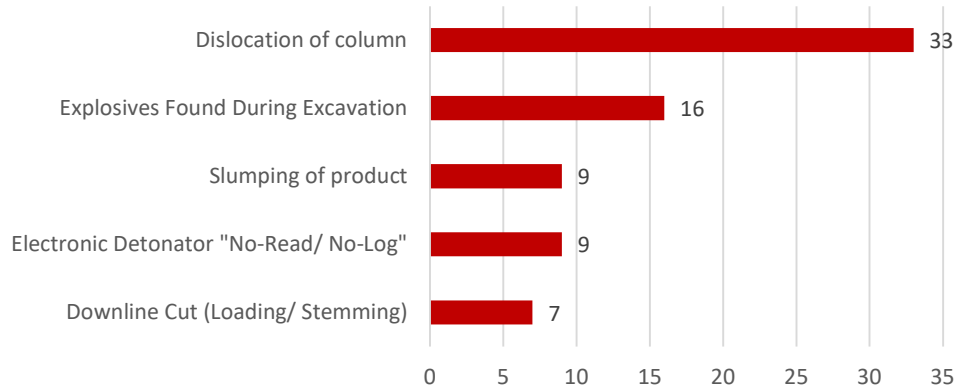


Top 5 Most Common Incidents Excluding Misfires Jul 2019 - Jun 2020



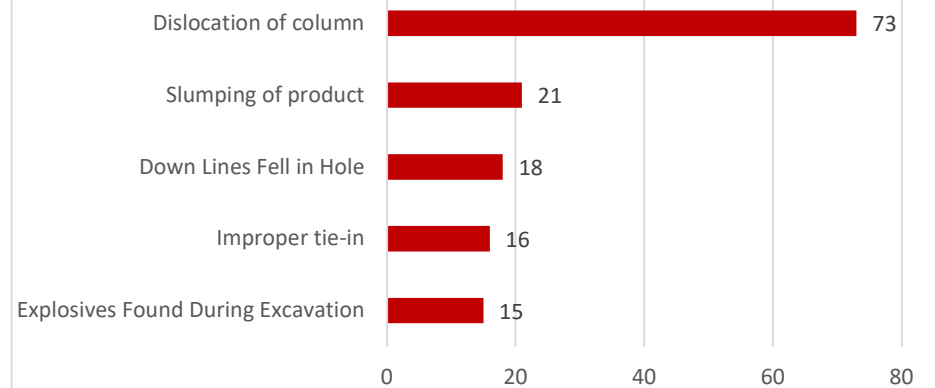
Top 5 Most Common Reasons for Misfires Jul 2020 - Mar 2021

Note - Unidentified and Other have been removed (49)

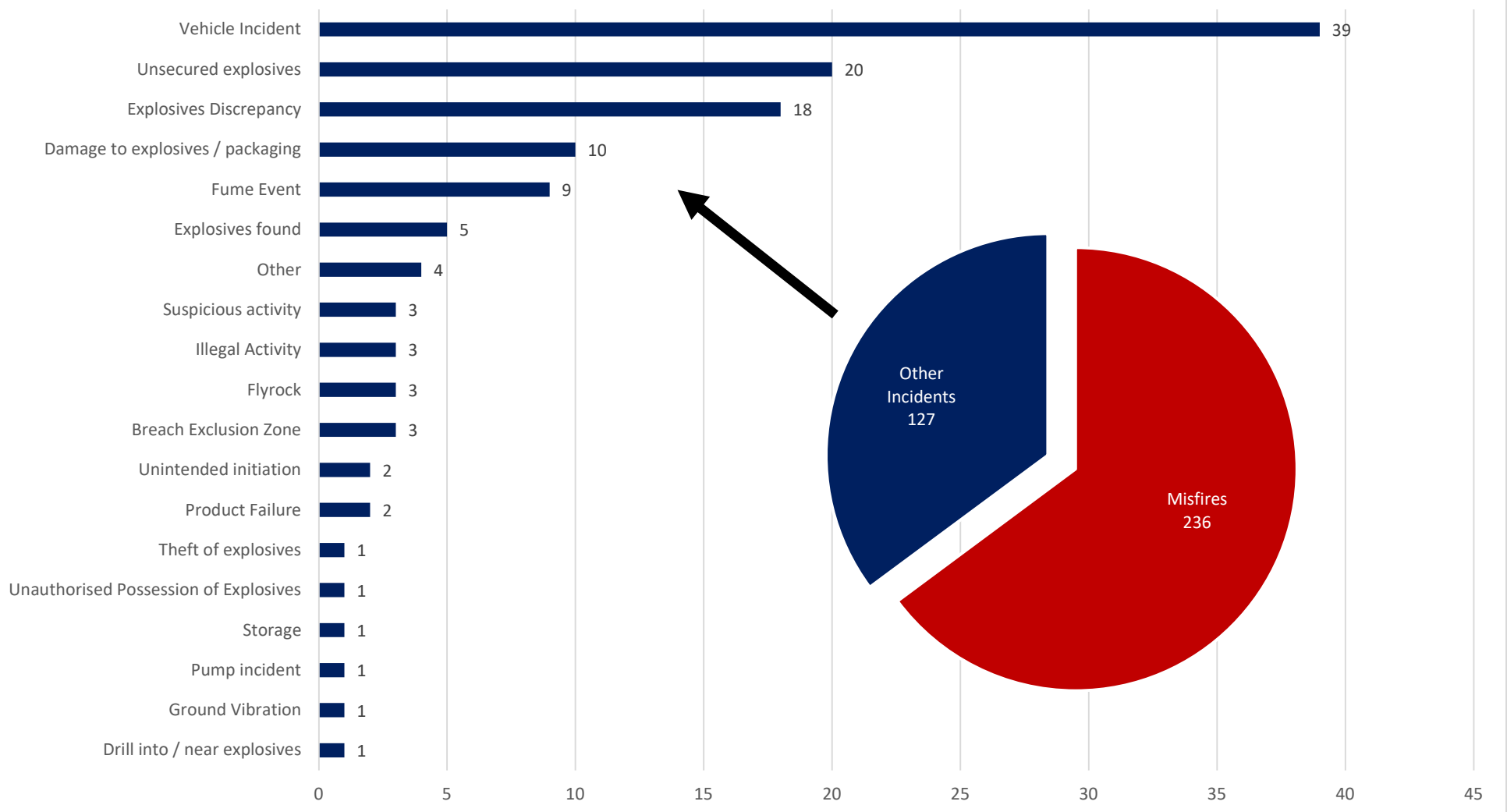


Top 5 Most Common Reasons for Misfires Jul 2019 - Jun 2020

Note Unidentified and Other have been removed (72)



Past Year Incidents April 2020 - March 2021



Breakdown of incidents for March 2021

Security

Problem	Action	Explosives Inspectorate Actions / Outcomes
Unsecured Explosives (3 incidents)		
Magazine keys missing. Locked in magazine keeper's personal locker. Key safe showed 'green', meaning all keys in safe. Keys retrieved from locker when found missing from safe. Overall, explosives access remained restricted but stocktake completed to show no missing explosives.	Refresher training of staff conducted. Key safe to be checked by supplier.	No adverse outcomes.
One of the charge crew misplaced a set of keys to the explosive box for one of the underground bomb utes when they fell out of his pocket. After looking for the keys in the mud / water on the ground he was unable to find them.	The incident was reported to the supervisor and the spare set of keys were obtained to use the explosive boxes. New locks and keys have been ordered and as a precaution the bomb ute will not be left unattended if it contains any explosives until the locks are replaced.	No adverse outcomes.
During delivery of ANE, truck was forced to evacuate area due to severe warning TARP. Upon leaving the compound, the gates were closed but not locked. Area was evacuated due to TARP and exclusion zone around the storage facility.	Nil provided	No adverse outcomes.
Explosives Discrepancy (3 incidents)		
UN1942 ordered. Transport documentation was correct, however, bags of UN2067 were shipped instead	Nil provided	Awaiting discrepancy report from supplier. No adverse outcomes.
Railway track signal lost during track work in built-up area	Nil provided	No adverse outcomes.
Detonator store holding in excess of licence limits	Excess stock to be disposed of within a day. Additional storage facility to be licenced and commissioned	No adverse outcomes.

Safety

Problem	Action	Explosives Inspectorate Actions / Outcomes
Misfires – aboveground (11 incidents)		
Connector Failure 2		
Last echelon of shot has failed to fire	1. Document to be developed and implemented that records who checks the rows. 2. Supervisor to coordinate the development of a schedule for one PTO per round for every SFIC. 3. Performance discussion with SFIC	No adverse outcomes.
Shotfirer failed to connect the initiation line to the explosives in the hole	Nil provided	No adverse outcomes
Dislocation of Column 1		
Dislocation of column believed to be cause.	Area demarcated for misfire treatment as more expected to be found. Site investigating	No adverse outcomes.

Electronic Detonator "No-Read/ No-Log" 1		
Nil electronic report provided.	Nil provided	No adverse outcomes.
Explosives Found During Excavation 2		
Approximately 50kg of HANFO found at toe of hole	Nil provided	No adverse outcomes.
Approximately 60kg of HANFO found in dig face	Nil provided	No adverse outcomes.
Lead Line Cut 1		
Top Primer in hole was cut due to dislodged rock during loading, bottom primer located in explosive column	Hole reprimed with another top primer. Cut downline and booster expected to be consumed in blast	No adverse outcomes.
Other 2		
Whilst firing a floor disruption shot, the control row on the western side shut down.	After completing a JSA with the OCE, the shot was re-fired with no further incident	No adverse outcomes.
Whilst the dragline was conducting normal operations the operator of the dragline identified ammonium nitrate on the dig. Believed to be caused by hole dislocation	Dragline operators stopped work, area was demarcated. Shotfirer conducted an inspection of the area. The shotfirer and excavator operator conducted JSA to complete works to further expose what product was identified. Approximately 10kg of ammonium nitrate was found. Explosives cleared and area designated 'dig with caution'	No adverse outcomes.
Slumping of Product 2		
Slumped face holes. Able to recover priming explosives form one but not other	Holes reprimed and successfully fired	
Both leads in hole snapped due to a hole liner pulling leads and snapping.	Stemming removed and hole collar reprimed. Blast fired with potential misfire.	
Misfires – underground (4 incidents)		
Unknown/unidentified 2		
3kg ANFO found after firing	Product washed out. No detonator found. Probable cause incorrect charging.	No adverse outcomes.
Remnant of Powergel found	Misfired product has been recovered and destroyed as per Site procedures. Cause is suspected to be hole overloading.	No adverse outcomes.
Dislocation of Column 1		
Recovered explosives from a misfire used to re-fire the toe	Nil provided	Site informed of ill-advised use of explosives, according to AS 2187.2
Other 1		
Locked cabinet on explosives utility vehicle contained a box of Orica Pentex G Boosters as well as several Orica icon detonators. Explosives ute parked in designated parking area adjacent the Redpath Site offices and workshop	All explosives and detonators have been returned to the magazine and accounted for. Authority holder undertaking ICAM investigation.	No adverse outcomes.

Damage to explosives / packaging (2 incidents)		
Noticed damage to packaging on box of boosters on arrival at store	Nil provided	No adverse outcomes.
Empty ammonium nitrate UN1942 bags involved in a fire at a recycling plant. Firecom reports 4000 - 5000 empty bags were at the site. Bags had not been turned inside out and potentially contained residual product.	Queensland Fire and Emergency Service responded to incident. QFES were fighting fire and noticed the AN bags and pulled out. Fire was effectively extinguished by that stage. The QFES Scientific Officer was on the scene.	Inspectors of Explosives notified and maintained contact with Fire Com and established comms with QFES incident commander at the accident scene. Inspector was informed that the fire was out and that they were at the Recovery stage.
Drill into / near explosives (1 Incident)		
Misfired product was intercepted during the re-drilling of a blasted area, due to hard dig. Drill offset was 1.2 metres from original drill design. Appears column dislocation has caused part of the column to shift. This has led to the re-drill intercepting an unknown misfire	Site undertaking investigation	Advised that re-drill spacings should be increased to maximum to allow for ground movement
Flyrock (1 Incident)		
Screening plant and lighting plant left inside exclusion zone, 70m from blast face. Both struck by debris.	Nil information provided	No adverse outcomes
Fume Event (1 incident)		
Multiple staff reported smelling an odour following a blast	Staff sought medical evaluation after smelling odour	No adverse outcomes
Other (1 incident)		
Locked cabinet on explosives utility vehicle contained a box of Pentex G Boosters as well as several icon detonators. Explosives ute parked in designated parking area adjacent the Redpath Site offices and workshop	All explosives and detonators have been returned to the magazine and accounted for. Authority holder undertaking ICAM investigation	No adverse outcomes
Storage (1 incident)		
760 Detonators over licence limit during receipt of order due to wet weather	Production schedule indicated detonator quantity will be back under licence capacity within a week - depending on weather conditions	No adverse outcomes
Vehicle Incident (4 incidents)		
Explosives utility vehicle hit by Charmec basket. No injury or affect on explosives	Nil provided	Requested additional information
Rear wheel fell off light vehicle travelling down decline while transporting explosives. No injuries or effect on explosives	Nil provided	No adverse outcomes
Shotfirer's utility vehicle contacted bollard whilst reversing, had an explosive load. Minor vehicle damage	Nil provided	No adverse outcomes
An AB triple (3 trailer) combination loaded with ammonium nitrate emulsion has left the road to avoid an oncoming vehicle. Rear trailer has disconnected. Tanker has nose dived into the earth which seems to have caused the centre tanker discharge T piece to become damaged causing a small leak of ANE.	QPS attended. Vehicle isolated. Company cleaned up spill. Driver has sustained a head knock and has been taken away to hospital	Driver injured.