

TMM INCIDENT ANALYSIS PERTAINING TO BRAKE FAILURES

VIRTUAL DAY OF LEARNING WEBINAR ON BRAKE TESTING FOR TMMs 25 MARCH 2021



Outline of the presentation

- Key consideration
- Brake Failure incidents
- Accident classification as per SAMRASS
- Cause of Accident
- Equipment Type
- Conclusion

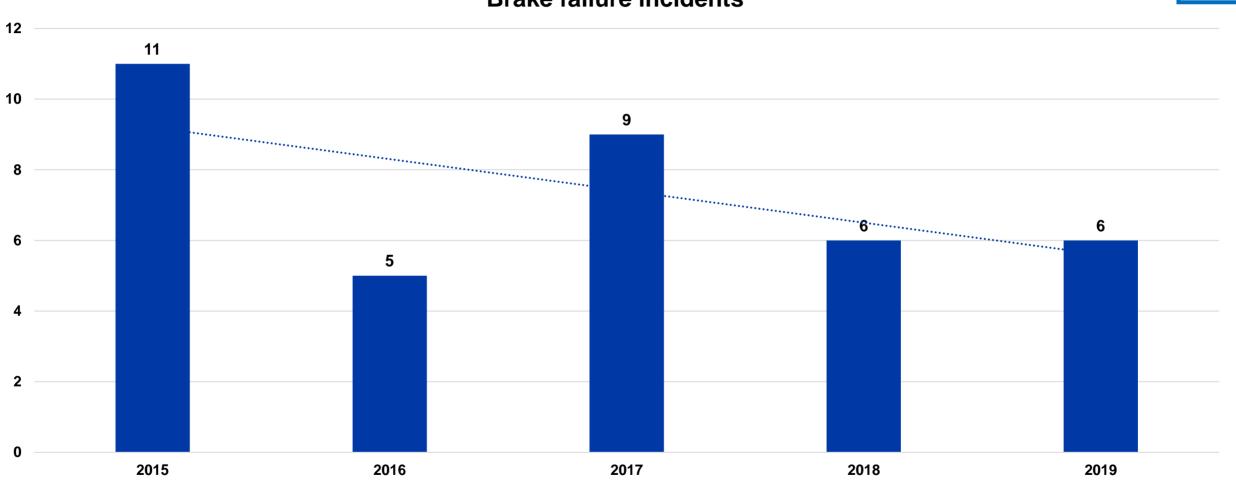


Key consideration

- DMRE SAMRASS data was used from 2015 to 2019
- Some of the accident descriptions were not captured clearly
- Incidents related to driver behaviour were excluded from the analysis
- Only incidents directly mentioning brakes were considered
- Common naming conventions were used to label equipment
- Incidents were not separated between underground and surface



Brake Failure Incidents



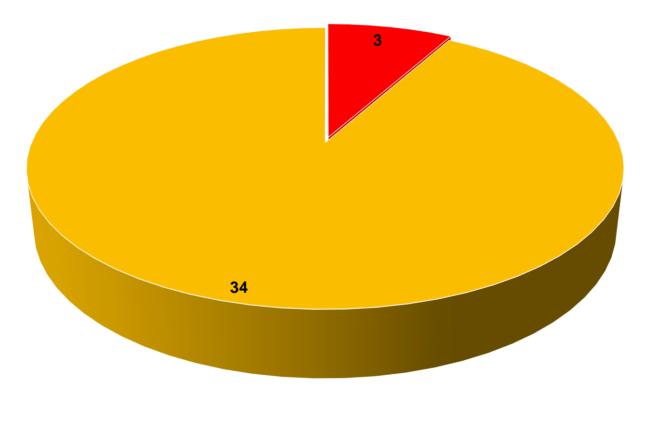
Brake failure incidents



37

Brake Failure Incidents

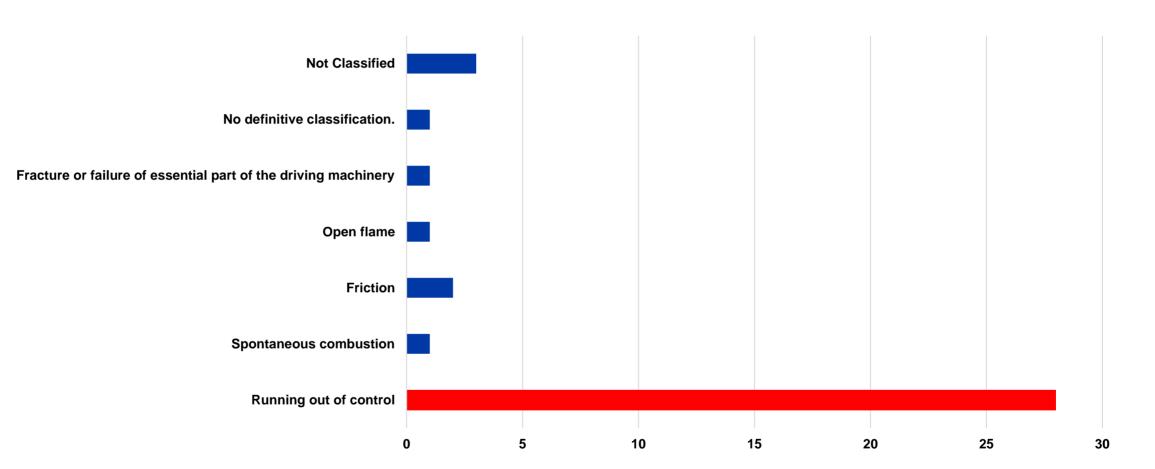
Total Brake Failure Incidents



Injuries I Dangerous Occ N



Accident classification as per SAMRASS



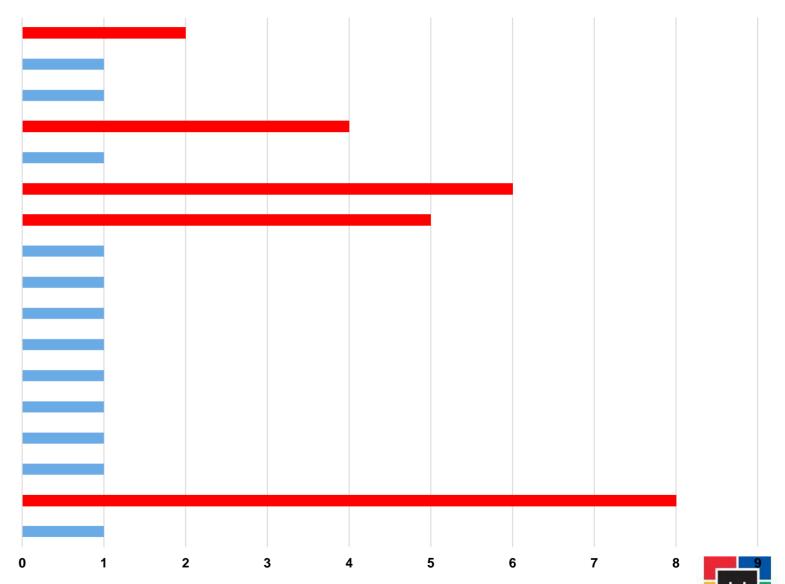
Classification Code



Cause of Accident

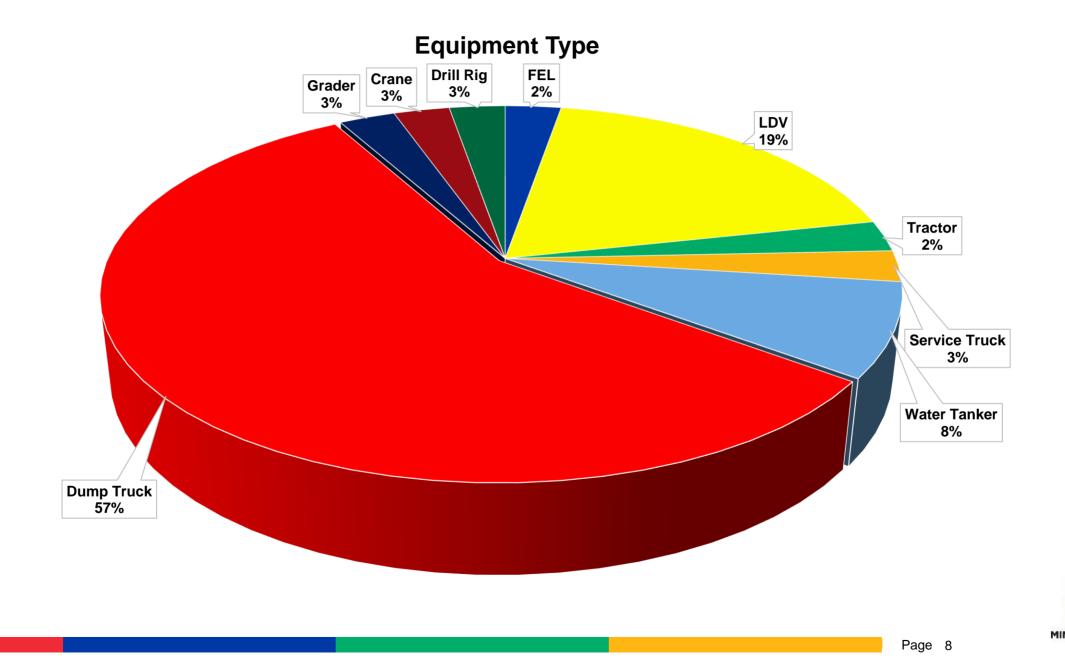
Cause of Accident

Wrong/sub-standard equipment Workplace not modified to accommodate personal shortcomings Shortcomings in risk control system Poor judgement Poor co-ordination Parts Other (specify) No/inadequate training on task that lead to incident No/inadequate task analysis and procedures system No or inadequate system to prevent use of unsafe equipment Man-job specifications not available to medical officer Lack of knowledge regarding safety aspects of job Incorrect adjustment Inadequate policy/guideline/procedure Inadequate control over maintenance Frequency of maintenance Equipment defects not reported





Equipment Type



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Conclusion

- Brake failure incidents remain a significant concern
- Adequate capturing and reporting of Incidents on SAMRASS Forms
- LDVs and Dump Trucks are the equipment highest prone to brake failure
- Maintenance issues are the highest cause of brake failure
- A number of incidents occur either on decline or main haul road
- Some of the incidents resulted in runaways that damaged infrastructure and other mobile machinery





Thank You

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