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Mine Health and Safety Council

INDUSTRY DAY OF LEARNING • BRIDGING THE GAP

Analysis of Recent Fall of Ground Incidents

Z. Nkosi

Research Delivery Specialist, Mine Health and Safety Council

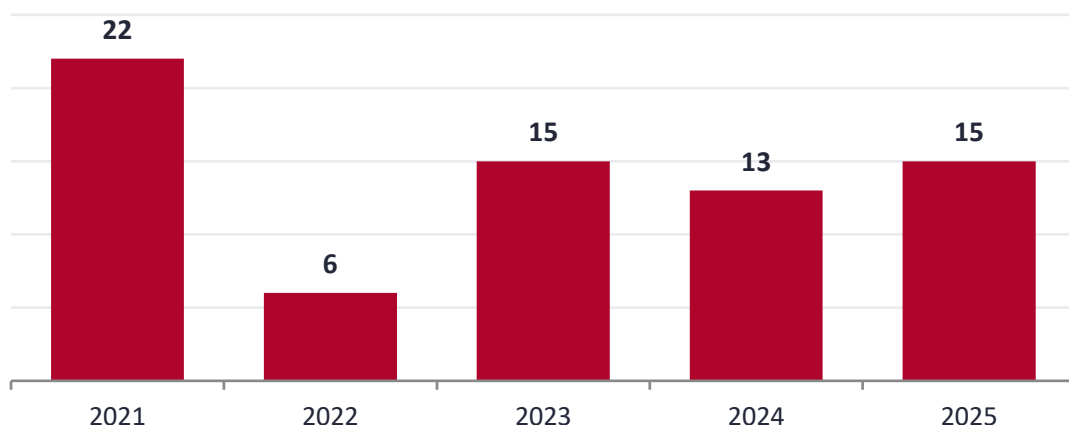
Silverstar Casino, Muldersdrift | 24 July 2026

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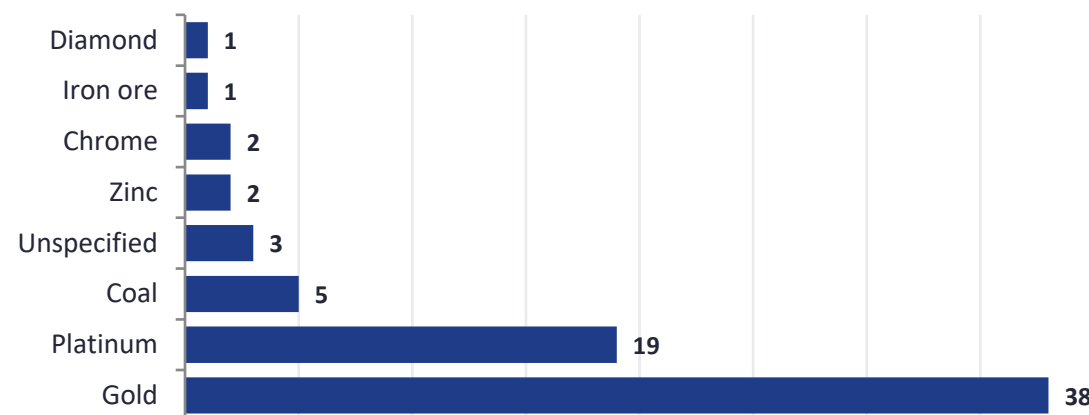
2021 – 2025 • Fall of ground safety data

71 fall of ground fatalities in five years

Fatalities per calendar year



Fatalities by commodity



71

Total FoG fatalities

Across 2021 to 2025

54%

Are in gold

38 of 71 — high stress, manual support and barring,
high face exposure

Plateau

Since 2022

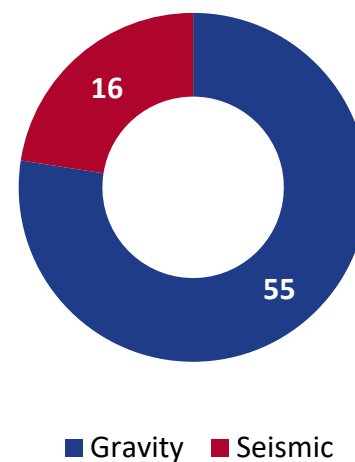
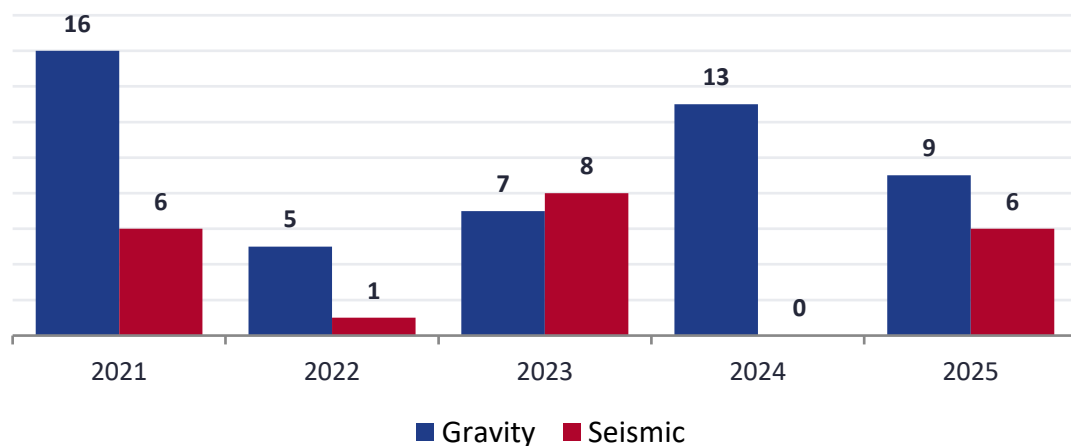
Never returns to the 2021 peak, but improvement
has stalled at 13–15 a year

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2021 – 2025 • GROUND CONDITION

Most fatalities are gravity-driven — not unpredictable seismicity

Gravity vs seismic, by year



77% gravity

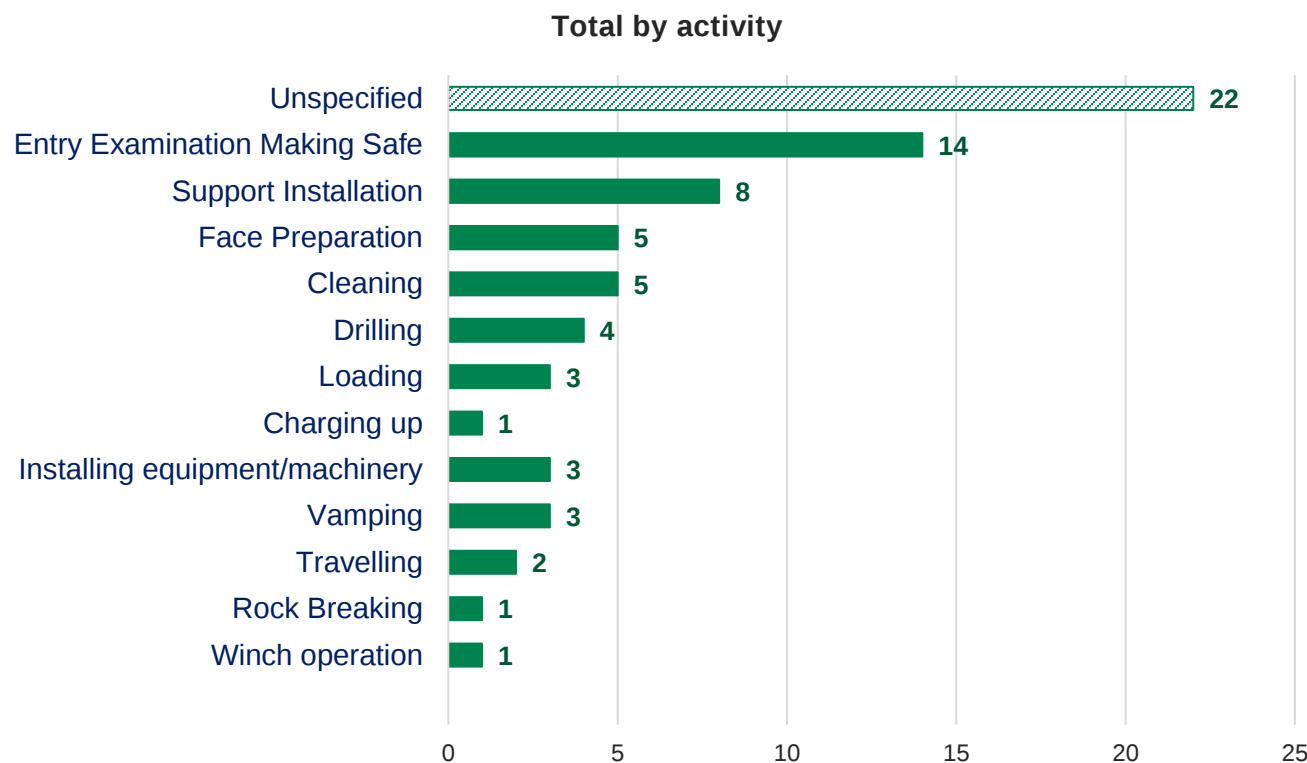
Why are predictable risks still causing harm? Are our controls:

- Not designed well?
- Not implemented consistently?
- Not verified effectively?

Gravity-related falls dominate. These are failures in routine ground control — conditions we should be able to predict, control and prevent — not random events.

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The highest count is entry examination and making safe



14

fatalities during entry examination and making safe

The largest identified activity — 29% of the 49 fatalities where activity was recorded.

22 more are unspecified — the true entry-examination figure is likely higher, not lower.

How do we verify that 'making safe' is truly effective?

If this were a historical problem, 2026 would look different.

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SETTING THE SCENE

Two numbers moving in opposite directions

4

Fall of ground fatalities

2026 to date, down from 12 in the same period of 2025

-67%

Reduction in FoG deaths

The steepest fall of any accident classification

+23%

Total mining fatalities

37 lives lost this year against 30 by this date in 2025

What this means for us

- Fall of ground is no longer the leading killer in South African mining. That is a genuine achievement, built on years of FOGAP, leading practices, legislation, support standards and rock engineering disciplines.
- But the industry is losing more people overall than last year, and the fatalities have simply moved to other classifications — general accidents, mudrushes, transportation.
- The four FoG deaths we did have are concentrated at the point of face exposure. Progress has not removed the risk; it has narrowed where it bites.

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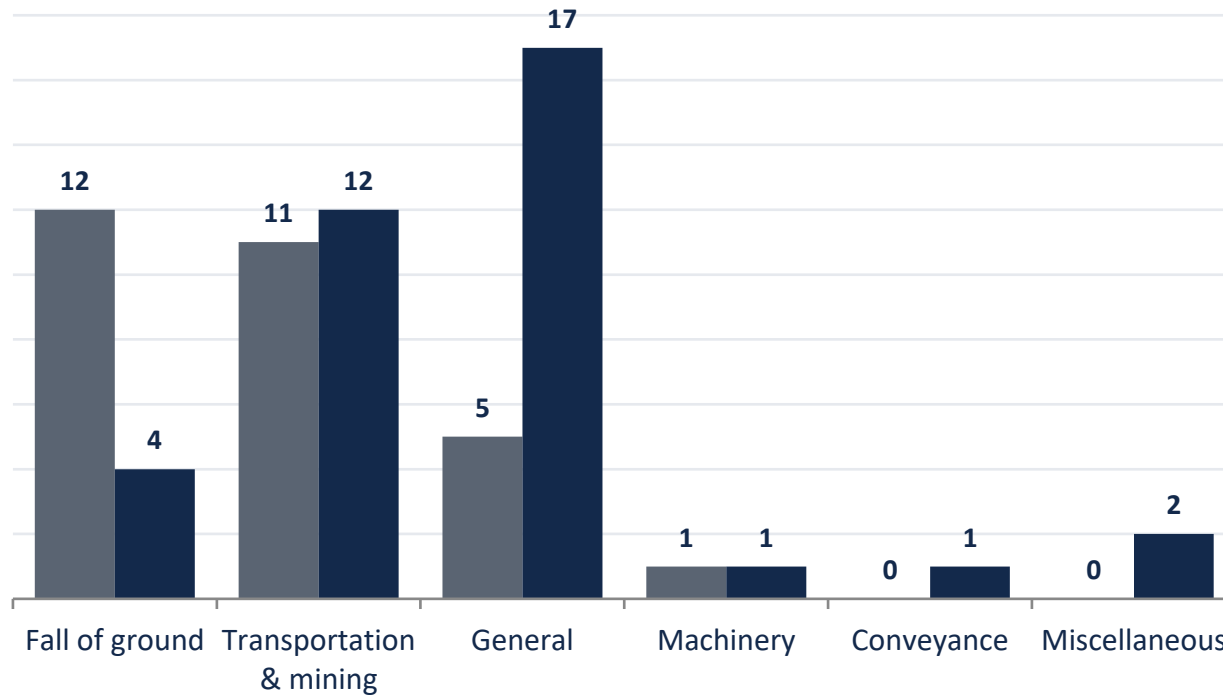


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WHERE THE FATALITIES ARE

Fall of ground has fallen — general accidents have surged

■ 2025 (to 20 Jul) ■ 2026 (to 20 Jul)



-67%

Fall of ground

12 → 4 fatalities

+240%

General accidents

5 → 17 fatalities

+9%

Transportation & mining

11 → 12 fatalities

Eight (8) fewer FoG fatalities, but twelve more general-accident fatalities, 1 more transportation & mining fatality, 1 more conveyance fatality and 2 more unclassified fatalities. The industry has not become safer overall.

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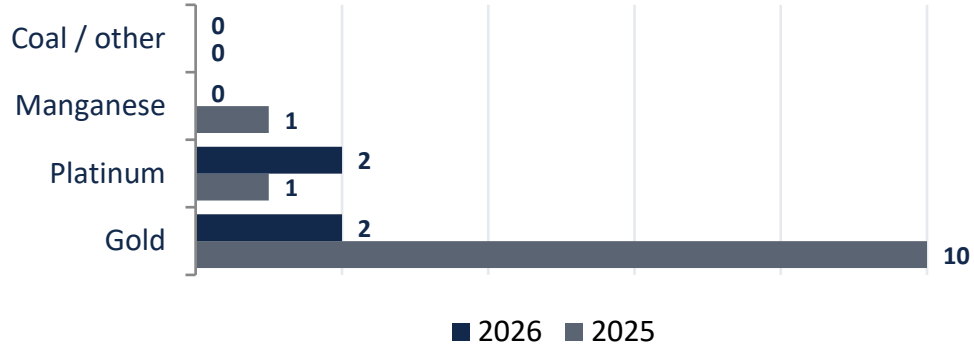


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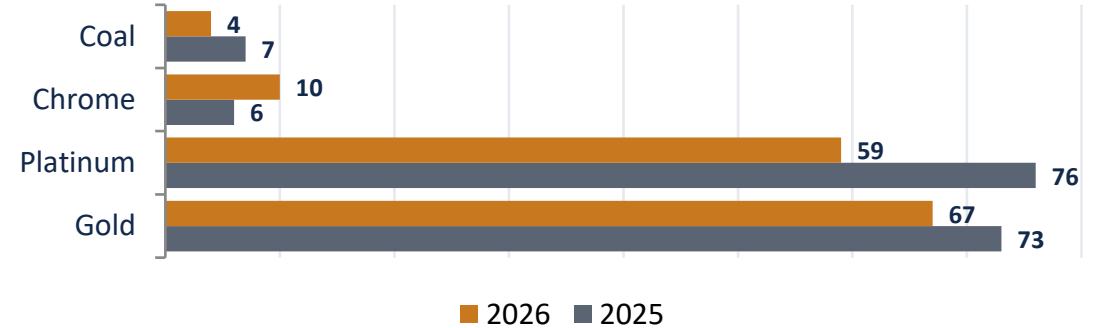
WHO IS AFFECTED

Gold and platinum carry the fall of ground burden

Fatalities



Serious injuries



141

FoG serious injuries in 2026

Down 13% from 163 — but still the second-largest injury category after general accidents

89%

Of FoG injuries are gold & platinum

126 of 141 injuries, in the deep-level and narrow-reef operations

+67%

FoG injuries in chrome

The only commodity where fall of ground injuries increased this year

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THE FOUR INCIDENTS

What actually happened, in the crews' own circumstances

02 APR

Mining Team Member

Klerksdorp · Gold

Struck by a rock while barring down. Injured on 31 March, died in hospital on 2 April.

Making safe

07 APR

Panel Operator

Rustenburg · Platinum

A rock dislodged from the stope face and struck his hard hat — during entry examination.

Entry examination

13 JUN

Rock Drill Operator

Rustenburg · Platinum

A strainburst occurred from the development face while the crew was busy with early entry examination.

Entry examination

19 JUN

Underground employee

Klerksdorp · Gold

A 1.2 magnitude seismic event. Two employees trapped; one rescued and hospitalised.

Seismicity

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THE FINDING THAT MATTERS TODAY

Three of the four fall of ground fatalities occurred during the EEMS process itself

2

During entry examination

A rock dislodged from the face; a strainburst from the development face

1

During making safe

Struck by the very rock he was barring down

1

Seismically driven

A 1.2M event — beyond what visual examination can detect

These are not failures of awareness. They are failures at the moment of highest exposure — when a person is closest to unsupported ground, deciding whether it is safe.

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READING THE PATTERN

Four incidents, four questions for the room

1 Timing of exposure

Two deaths during entry examination and one during barring mean the person was in the danger zone by design, not by error.

Does our entry examination procedure minimise the time and body position of exposure — or just record that it happened?

2 Detectability

A strainburst and a 1.2M seismic event cannot be seen or sounded by a person at the face.

Where visual and sounding examination cannot detect the hazard, what does our TARP trigger on instead?

3 Making safe as a hazard

The Klerksdorp employee was killed by the rock he was in the act of making safe.

Are our barring positions, tools and stand-off distances designed for the rock actually failing?

4 Migration of risk

FoG deaths fell 67% while general accidents rose 240% — including three mudrushes.

Is our ground-related risk genuinely reducing, or is it being reclassified into other categories?

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IN SUMMARY

Bridging the gap

- Fall of ground fatalities are down 67% — from 12 to 4. The controls the industry has invested in are working.
- But total fatalities are up 23%, and 141 people were still seriously injured by falling ground this year.
- Three of the four FoG deaths happened inside the entry examination and making safe process — the exact controls under discussion today.
- Two involved seismic or strainburst events that no visual examination could have detected, putting the weight on TARP triggers rather than observation.
- The gap is not between policy and knowledge. It is between the procedure as written and the moment a person stands in front of unsupported ground.

Four men went to work and did not come home. Every improvement we identify today is measured against that.

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