



July 2021

NEWSLETTER

Impala Platinum – Rustenburg

MESSAGE FROM **THEMBA MKHWANAZI**



Themba Mkhwanazi, CEO Kumba Iron Ore and Chair of the CEO Zero Harm Forum

We remain unwaveringly committed to zero harm. Our absolute and foremost priority as an industry is, and must be, the health and safety of our employees.

On 8 July 2021, the Minerals Council will host the annual National Day of Health & Safety in Mining 2021, centred on a theme of Renewed Focus for Our New Normal. And, in the weeks and days leading up to this event we have engaged with our social partners – specifically with the Chief Inspector of Mines, and organised labour – on how we can collectively turn our immediate and focussed attention to the regression in safety performance that we saw in 2020, and in 2021 to date. The theme for this year's event recognises the integration of health, safety and

well-being; acknowledges the impacts of COVID-19 on the regression in fatalities in 2020; as well as our intention to focus on step-change actions. This annual commemoration is important as it is a heart-felt reminder of why we need to do better, and publicly demonstrates the industry's recommitment to the health and safety milestones and the shared imperative of zero harm.

The industry's misstep in safety performance over the past year has been the subject of much consideration and introspection by the CEO Zero Harm Forum, and within the Minerals Council. In 2020, the number of fatalities reported in the industry rose to 60 (from 51 in 2019), despite shut-down periods and reduced operations during the early stages of lockdown. The 2021 year-to-date performance has indicated the upward trend in fatalities continues. This is not a regression that we can – or will – accept. We must revive our focus on health and safety at our mines, starting with

intensive introspection and investigation into the root causes of these events.

We cannot ignore the impact that COVID-19 has had on health and safety performance, especially at frontline supervision and mining team levels. We need to have the right measures in place to support health and safety at all times; we need to drive the right behaviour and culture changes; and we need to provide the means and support to employees during this time. The start of workplace vaccination programmes by mining companies is very welcome, and we look forward to seeing much more progress in the weeks and months ahead.

Working with our tripartite stakeholders in government and organised labour, and through engagements with CEOs and member companies, let's commit to renewing our focus on health and safety in 2021, and intensifying our programmes to achieve zero harm.



National Day of Health & Safety in Mining 2021

RENEWED FOCUS
for our New Normal

SAFETY AND HEALTH PERFORMANCE UPDATE



SAFETY REGRESSION RECORDED IN 2020

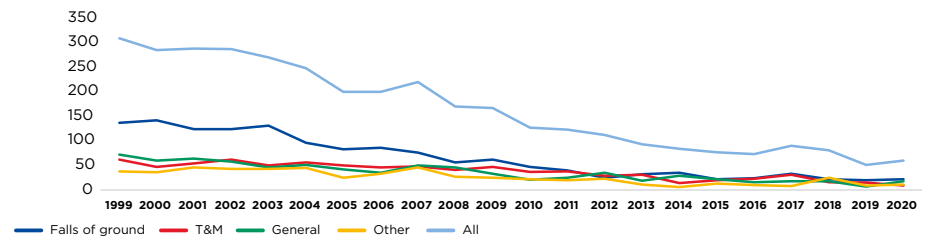
Following a gratifying improvement in 2019's safety performance, where the lowest ever number of fatalities in mining was recorded, the industry observed a disappointing regression in 2020 with 60 fatalities, compared to 51 in 2019. This shows a year-on-year increase in fatalities of 18%. In 2021, the trend continues with 32 fatalities reported as at 28 June, compared to 24 in the same period last year.

An analysis of the fatality trends indicates that fall of ground (FoG) is a key area of concern, particularly in the platinum and gold sectors, with 22 fatalities (37%) reported in 2020 caused by FoG. Transport-related accidents accounted for nine fatalities (15%) in 2020, affecting mostly the coal and platinum sectors.

A spike in miscellaneous-related fatalities was also evident, and a cause for concern. Through discussions with members, it is clear that COVID-19 has impacted occupational safety in mining operations, especially with respect to supervision, safety coaching, crew allocation, absenteeism, and high potential incidents, amongst other areas. Minerals Council Head: Safety and Sustainable Development, Dr Sizwe Phakathi, said: "As we continue to grapple with the effects of the COVID-19 pandemic, we call for extra vigilance on employee wellness and health which undeniably impact one's ability to work safely every day".

While FoG accidents remain a significant contributor to fatalities, the industry has somewhat managed to reduce rock-burst related fatalities, supported by initiatives focusing on in-stope preconditioning to help prevent and manage rock-bursts.

Number of fatalities by cause (1999 - 2020)



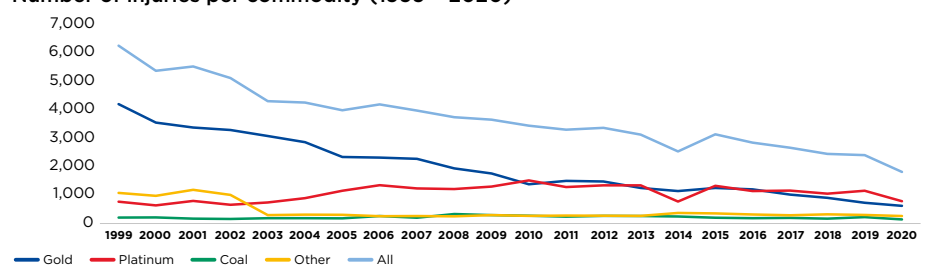
Source: Department of Mineral Resources and Energy

Additionally, the Council for Geoscience's instruction for reporting seismicity has increased focus on its monitoring. It is apparent, however, that further improvements are needed to effectively manage FoG accidents, given the increase in rock-fall (gravity-induced FoG) related fatalities seen in the past three years.

To this end, a targeted approach to address major causes of fatalities across commodities is underway. This includes a series of workshops held by the Minerals Council's Rock Engineering and Technical Committee (RETC) and South African National Institute of Rock Engineering (SANIRE) Task Team to identify tangible actions. The Minerals Council Board and the CEO Zero Harm Forum have also approved a special project on Trackless Mobile Machinery (TMM)/Collision Avoidance Systems (CAS) to improve transport safety. A series of engagements with various stakeholders on a holistic risk-phased approach to the implementation of CAS technologies is also in progress.

IMPROVEMENT IN INJURIES

Number of injuries per commodity (1999 - 2020)



Source: Department of Mineral Resources and Energy

The industry recorded a 26% improvement in overall injuries, from 2,452 in 2019 to 1,814 in 2020. This reduction is the highest improvement recorded in the last five years, above the annual milestone reduction target of 20%.

The number of injuries in the coal sector decreased the most, followed by platinum, gold and then 'other' commodities. Injuries classified under 'general' were the largest contributor, followed by transport and FoG. Dr Phakathi said: "More work is needed to reduce general injuries to ensure continued improvement above the annual milestone reduction target of 20%".

HEALTH PERFORMANCE IMPROVEMENT

In the last decade, health-related statistics have improved significantly as the industry has undertaken efforts to reduce occupational health risks. The total occupational diseases reported in 2019* showed a reduction of 9.5% when compared to the previous year; silicosis cases reduced by 19.6%, pulmonary TB cases by 10.1%, and cases of other occupational diseases by 24.7%.

Coal workers' pneumoconiosis (CWP) cases, however, increased by 70.4%, as did noise induced hearing loss (NIHL) cases by 1.9%. The asbestosis cases remained unchanged from 2018 to 2019.

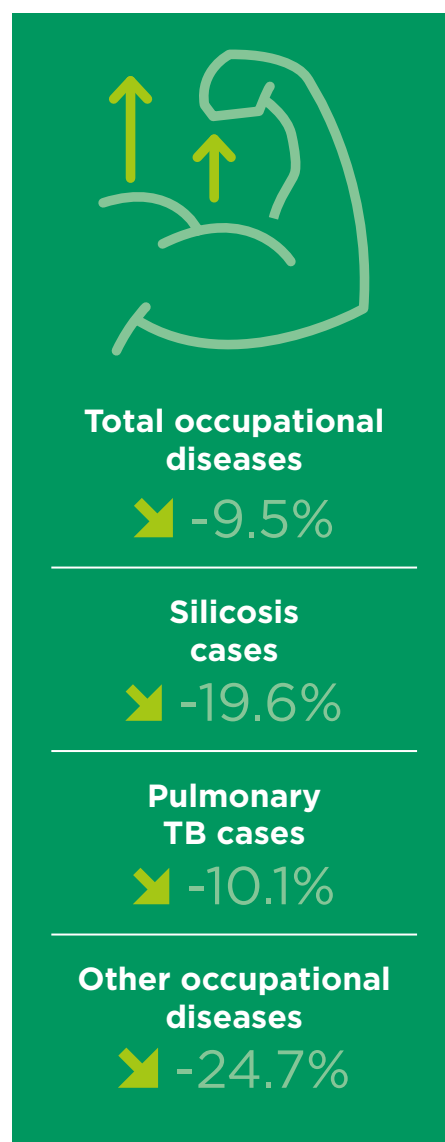
Although the industry is doing well in reducing a number of occupational disease, CWP is still a concern and little progress is being made on NIHL.

Indicator overview of 2018 versus 2019 performance

Activity	Milestone	Industry performance 2018	Industry performance 2019
Compliance to milestones reporting	100% reports should be finalised.	92.0%	80.6%
HIV counselling and testing	100% of employees should undergo HIV counselling and testing annually with all eligible employees linked to an antiretroviral treatment programme as per the South African National Strategic Plan for HIV, TB and STIs 2017-2022.	73.2%	70.2%
TB screening	100% of employees should be screened for TB annually.	96.2%	97.3%
TB incidence	MHSC Milestone: By December 2024, the mining industry TB incidence rate should be at or below the national TB incidence rate.	0.4%	0.3%
The general population aspirational target of TB incidence reduction	5% year-on-year reduction for the TB Incidence rate	The industry is on track to meeting the target	The industry is on track to meeting the target
Non-communicable diseases (NCDs)	Screen all employees for hypertension	N/A	63.2%
	Screen all employees for diabetes	N/A	57.6%

Target not met Target met/on track

A major concern in 2019 regarding the monitoring of occupational health milestones was the decrease in reporting by companies onto the Minerals Council health reporting system, which declined further in 2020 as a result of the COVID-19 pandemic. To improve on occupational health exposures, the Minerals Council's members have committed to adopting continuous real time monitoring systems.



*Due to a lag in the reporting of health-related performance, the statistics represented are for 2019

WOMEN IN MINING

safety and health focus

The Minerals Council's Women in Mining (WiM) Leadership Forum aims to streamline the industry's strategies to advance women in the industry, with a focus on improving the representation of women in the sector and encouraging leaders to make decisions that are in the best interest of women.

In 2020, WiM identified six priority initiatives to drive action and set seven foundational measures (FMs) for companies to deliver on, including the objective to build an inclusive physical environment (FM 6) and to ensure that Personal Protective Equipment (PPE) for women is widely available across the industry (FM 7). These measures are crucial to ensuring safe working environments for women that will contribute to the retention of women in mining.

To read more about the WiM strategy, please visit:

www.mineralscouncil.org.za/special-features/1139-national-day-of-women-in-mining-2020



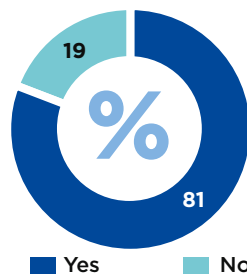
Tumi Nkomo,
WiM Coordinator

Recently, a survey was conducted on physical conditions and PPE for women in mining. Said WiM Coordinator, Tumi Nkomo: "The survey was conducted

as a diagnostic exercise to evaluate companies' compliance with infrastructure requirements, and to gain insights into the gaps that may exist. The survey provided the Minerals Council with baseline information to help inform guidance needed by members to ensure women in mining are universally provided with the correct gender-centric PPE and that they have access to the appropriate physical environment in the workplace".

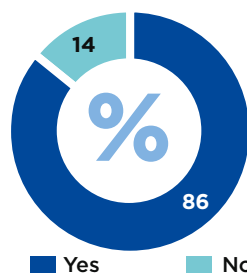
A total of 145 participants in 23 companies responded to the survey, which consisted of 26 questions across 15 categories. Some of the key findings are summarised below:

Does your company have a PPE procurement committee that ensures procurement of gender-specific PPE?



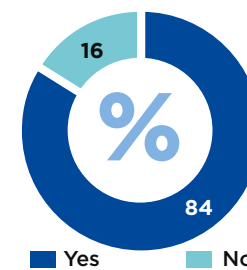
Most responses confirmed the existence of the procurement committee that ensures procurement of gender-specific PPE, however, numerous comments raised concerns about the design and comfort of the current PPE.

Has your company developed and implemented a Code of Practice (COP) on PPE selection and provision for WiM?



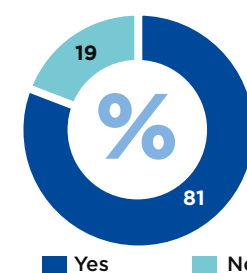
Most responses were affirmative, but comments suggested that the company code of practice for selection of PPE for women in mining was outdated and needed reviewing.

Is your company COP based on the outcomes of the research project SIM 100904 on Personal Protective Equipment for Women in the South African Mining Industry as mandated by the Guideline?



Although responses were affirmative, additional feedback suggested that companies were not familiar with the Mine Health and Safety Council (MHSC) study on PPE for women in mining.

Is your company equipped with female toilets in all working areas including underground?

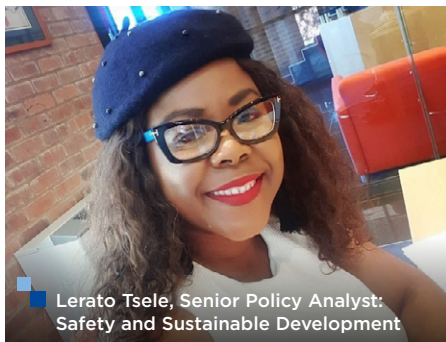


Concerns were raised that underground toilets were still unisex, and there were many concerns related to the privacy and safety of using the toilets.

WOMEN IN MINING

safety and health focus

(continued)



Lerato Tsele, Senior Policy Analyst:
Safety and Sustainable Development

Minerals Council Senior Policy Analyst: Safety and Sustainable Development, Ms Lerato Tsele, said: “While the survey produced a high degree of positive feedback, the additional comments from participants contradicted many of the affirmative responses. The findings tell us that more work still needs to be done for the mining industry to satisfy the objectives of the foundational measures, particularly regarding the physical working environment and provision of PPE for women in mining”.

Recommendations from the study include that companies should review the outcomes of the MHSC study on PPE for women in mining and conduct gap analyses of what they are currently implementing on PPE and physical working environment against the MHSC study recommendations. Further, companies are encouraged to develop an action plan on interventions to address the identified gaps.



Anglo American Platinum - Mogalakwena

RESULTS OF SEROPREVALENCE STUDIES



In April 2020, the CEO Zero Harm Forum supported the re-purposing of existing funds from the Khumbul’ekhaya safety and health strategy, to support the industry’s response to the COVID-19 pandemic. A number of projects were undertaken, including a COVID-19 seroprevalence survey.

The seroprevalence survey is being conducted in three phases, carried out at two mines – a gold mine in Gauteng and an iron ore mine in the Northern Cape. The first two phases of the survey are complete.

Objectives of this study are to assess the prevalence of infection among key groups, measured by serology; document the range of clinical presentation (symptoms, duration, requirement for hospitalisations); identify risk factors for COVID-19 infection and evaluate the effectiveness of infection prevention and control measures.

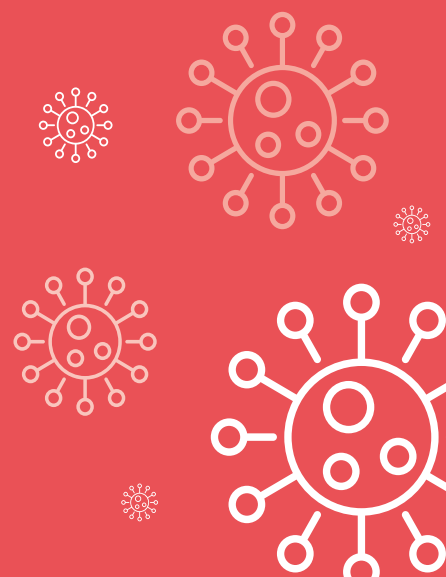
The results for the first cycle of tests showed that the first wave of COVID-19 infected approximately 20.8% of the workforce at the studied mines, and that the second wave infected 24.1%. No statistical difference in seroprevalence, however, was evident between the two waves.

In both phases of the survey, seropositivity was significantly associated with ethnicity, previous positive PCR testing and past COVID-19 symptoms. However, only Phase 1 found contact with an infected person and obesity to be significantly associated with seropositivity and only Phase 2 found working underground and age to be significantly associated

with seropositivity. Further, Phase 2 results showed no evident differences by gender, type of work, transport to work, shaft, mining site, reported contact with an infected person, comorbidities, BMI, knowledge of PPE use and behavioural motivation to prevent COVID-19 and travel within South Africa.

While it is unclear why such significant differences were observed in the two phases and more research is required to determine the relationship between waves of infection and seroprevalence, the differences may be attributable to a combination of factors which include the timing of data collection, and possibly the underground work at the gold mine.

Minerals Council Head of Health, Dr Thuthula Balfour, commented: “The results of the study are of value in tracking the evolution of COVID-19 in the mining industry and in South Africa, and are shared with the Ministerial Advisory Committee as they shape scenarios for South Africa’s third wave.”





NOISE INITIATIVE AND LEADING PRACTICE

NIHL is one of the most prevalent occupational injuries in the South African mining industry. In 2014, the MHSC agreed that by December 2024, the total operation or process noise emitted by any equipment must not exceed a milestone sound pressure level of 107dB(A).

INDUSTRY-WIDE BUY AND MAINTAIN QUIET INITIATIVE

Driven by the shared vision of zero harm, mining companies collaborated on an industry-wide initiative to eliminate noise hazards associated with mining. The Industry-wide Buy and Maintain Quiet Initiative (IBMQI) is a standing decision from mining companies to manage and procure new, as well as maintain existing, equipment and machinery in such a way to ensure compliance with the relevant noise emission requirements.

The initiative focuses on noise source measurement and noise risk management processes as the primary controls towards managing noise hazards at the equipment or machine design phase; engagement with manufacturers and suppliers to place

significant focus on noise reduction as part of their product development; and industry best practice on the procurement of equipment.

The IBMQI was developed in three phases.

- The development of the IBMQI framework and key principles, which have been widely communicated to industry stakeholders to ensure a common understanding of the framework and processes
- Equipment noise measurement best practices and noise management awareness, supported by the development of [industry guidelines](#) and two information booklets and
- Equipment noise risk management best practices and the development

of the [Critical Noise Equipment Screening Tool](#), a user-friendly, online tool to assist with identifying critical machinery or equipment for noise management purposes

The IBMQI framework and resources are available on the [Noise page](#) of the Mining Industry Occupational Safety and Health (MOSH) website.

Links

<https://mosh.co.za/tools/noise/screening/>

<https://www.mosh.co.za/noise/summary>

<https://www.mosh.co.za/noise/documents>

TYRE DEFLATION NOISE REDUCTION SIMPLE LEADING PRACTICE

The Tyre Deflation Noise Reduction Simple Leading Practice primarily focuses on the mitigation of noise exposure risk to employees performing tyre maintenance work on or around mobile equipment, by isolating noise source position and remotely releasing it further away from the potential exposure zone.

Integrating this leading practice into the routine tyre maintenance programme can have vast noise exposure reduction benefits. In fact, the noise emitted from deflating mobile equipment tyres could be reduced from approximately 114.0dB(A) to approximately 68.0dB(A). Following the adoption of the Remote Tyre Deflation

Simple Leading Practice at Khwezela Colliery, the mine realised several benefits relating to health and safety, production as well as cost savings.

Benefits of the leading practice include:

- Reduction in mobile plant downtime due to faster deflation duration
- Reductions in the occupational health exposures (noise and airborne pollutants)
- Reduction in eye injuries due to trajected particles, as well as a reduction in hand and associated injuries from the unexpected release of stored energy

Resources related to this leading practice have been developed for the South African

Mining industry, and are available on the [Noise page](#) of the MOSH website.

[Click here](#) to watch the leading practice adoption case study video.

Links

www.mosh.co.za/noise/initiatives/industry-wide-buy-and-maintain-quiet-initiative-ibmqi

www.youtube.com/watch?v=A4s_GU_Kz2M



www.safetyandhealthinmining.co.za

Follow, comment and share using
#rememberhome
[@KhumbulekhayaSafetyAndHealth](https://www.facebook.com/KhumbulekhayaSafetyAndHealth)