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Mine Health and Safety Council

OVERVIEW OF THE MHSC AND UPDATE ON THE BARRING PROJECT

30TH OF MARCH 2017

Rustenburg RFT Meeting

Fleckson
Safety Research Coordinator

Presentation Outline

- 1. MHSC mandate**
- 2. Adoption of LP / BP and Research outcomes**
- 3. Opportunities to improve the safety of barring practices**
- 4. Conclusion**



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MHSC mandate

MHSC is a national public entity established in terms of the MHSA, No 29 of 1996.

- **Advise the Minister** on all occupational health and safety issues in the mining industry relating to legislation, research and promotion
- **Review and develop legislation (regulations)** for recommendation to the Minister
- **Promote health and safety culture** in the mining industry
- **Oversee research** in relation to health and safety in the mining industry



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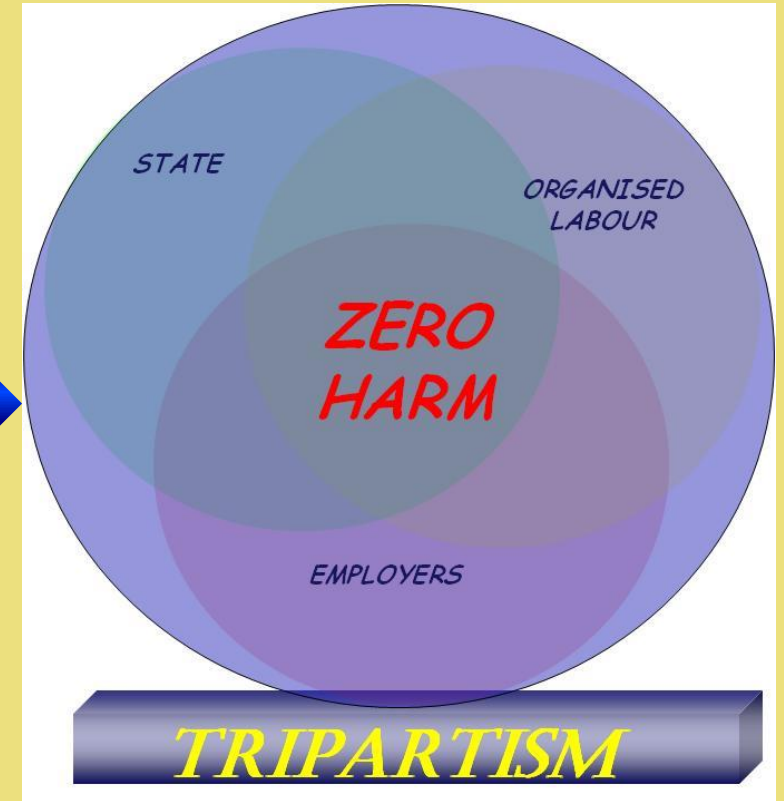
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MHSC Role in the SAMI

- Promoting a culture of OHS.
- Fostering an effective tripartite partnership.

To promote the culture of OHS in the mining industry by striving towards zero harm on all health and safety issues and legislation

Driven by



MHSC Overview

Mine Health and Safety Council

} State Labour Employers

Audit and Risk Committee (ARC)

Human Resources & Remuneration
Advisory Committee (HRRAC)

Mining Regulations
Advisory Committee
(MRAC)

Legislation
Regulations
Guidelines
Standards

Mining
Occupational
Health Advisory
Committee
(MOHAC)

Health Policy
Health
information
Health
Regulations /
Research input

Culture
Transformation
Advisory
Committee(CTAC)

Oversight role
on the overall
Implementation
of culture
transformation

Safety in Mines Research
Advisory Committee
(SiMRAC)

Research needs
Research
programmes

Mining Industry
HIV/AIDS and TB
Advisory Committee
(MiTHAC)

HIV/AIDS
and TB
Programmes

MHSC Office: Operations, Execution and Implementation



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MHSC Research Thrust Areas

Safety

Rock falls

Rock burst

Explosions and Fires

Machinery and
Transport

Occ Health

Airborne pollutants

Physical hazards

Occupational diseases

Special projects

*Human factors /
behavioral safety*



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Adoption of LP / BP and Research outcomes

Mining Charter, culture transformation framework (CTF) and 2014 OHS summit milestones encourages the following in the SAMI in an attempt to accelerate the attainment of Zero Harm:

- Sharing of knowledge and experiences**
- Adoption of leading practices (LP) [MOSH] / best practices (BP)**
- The use of research outcomes to inform OHS decision making**



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2014 OHS Summit milestones

Elimination of fatalities and injuries

- Zero fatalities by Dec 2020
- 20% reduction in serious injuries per year by Dec 2016
- 20% reduction in lost time injuries per year from Jan 2017

Rehabilitation of mine workers injured in the line of duty

Elimination of occupational diseases- By December 2024 95% of all exposure measurement results must be below the following limits for the respective respirable dust:

- 0.05 mg/m³ for silica dust
- 1.5 mg/m³ for platinum dust
- 1.5 mg/m³ for coal dust
- No new cases should occur amongst previously unexposed individuals

Elimination NIHL

- By December 2024, noise emitted by equipment should not exceed 107 dB(A).
- By December 2016, no employee standard threshold limit will exceed 25 dB from the baseline .

Integrate and simplify compensation systems

Reduction and prevention of TB, HIV & AIDS

- By December 2024, the TB incidence rate should be at or below the National TB incident rate.
- 100% of employees offered HIV Counseling and Testing (HCT) annually & all eligible employees linked to an Anti Retroviral Treatment (ART) programme.

Culture Transformation Framework

- 100% implementation of the Leadership, Risk Management, Data Management, Diversity Management, **Leading Practice** and Bonus and Performance Incentive pillars by December 2020.
- Implementation of the Integrated Mining Activity, Technology, Inspectorate, Tripartism, Regulatory Framework pillars after December 2020.

ESTABLISH CENTRE OF EXCELLENCE FOR RESEARCH, RESEARCH IMPLEMENTATION AND CAPACITY-BUILDING



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Opportunities to improve the safety of barring practices

FOG are among the major causes of fatalities and injuries in the SAMI - A significant proportion of the FOG accidents are as a result to non-compliance to barring standards:

- Not barring at all.**
- Insufficient barring.**
- Incorrect barring.**

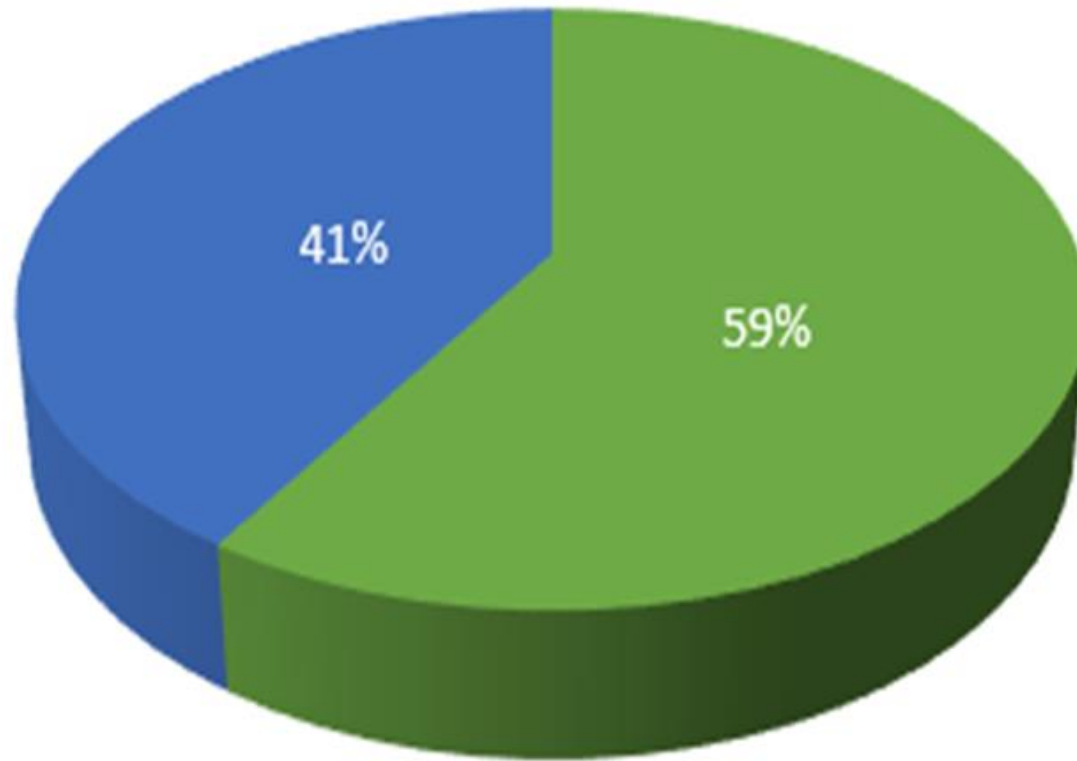


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RE Findings

Barring to standard

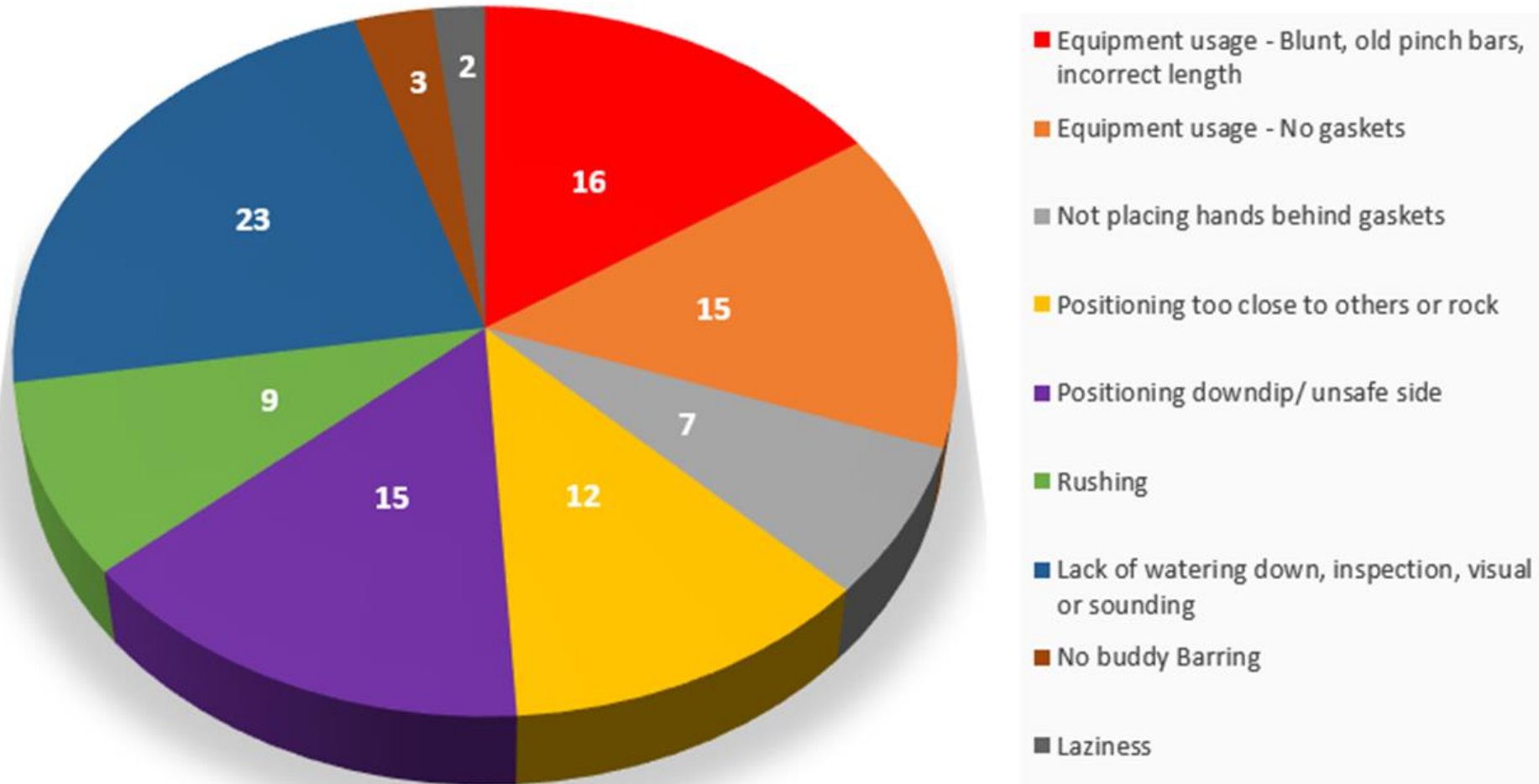


■ Non-compliance ■ Compliance



RE Findings

Reasons for non-compliance



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Opportunities to improve the safety of barring practices

The Four Main Objectives of the study:

- **Root Cause Analysis**
- **Identification of leading practices**
- **Assessment of barring training**
- **The development of innovative barring training material**



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Research outcomes

- **Innovative barring training videos were developed for underground coal, gold and platinum mines (English, Zulu, Tswana and Xhosa)**
- **Recommended some opportunities for improving the safety of barring**



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Feasible Implementation Solutions

- **Adoption of MOSH Entry Examination initiative;**
- **Adoption of MOSH Trigger Action Response Plan (TARP) initiative;**
- **Improved Illumination such as use of EE Light;**
- **Buddy Barring;**
- **Behaviour-based Safety training;**
- **Leadership training;**
- **Increased Visible Felt Leadership;**



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Dissemination

- A barring workshop was held on the 23rd of March 2017 at Glenburn Lodge.
- Barring workshop / day of can be arranged in the region upon request.
- Research report, training videos and presentations will be uploaded on MHSC website.
- Kindly request for research material from: entlakane@mhsc.org.za / fmagweregwe@mhsc.org.za
- Mines are encouraged to assess if the research outcomes can be used to enhance EE and barring practices.



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The road to Zero Harm

- **Attaining ZERO HARM is a journey which is long, windy and bumpy**
- **Over the last years, through tripartism, working together, huge progress has been made in reducing the frequency of mining fatalities in the SAMI, which is the result of legislative, research, adoption of LP and technological interventions.**
- **About 482 in 1994 vs 73 fatalities in 2016**



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EVERY MINE WORKER RETURNING FROM WORK UNHARMED EVERYDAY



**20 Years of Positive Contribution to Zero Harm for mine workers.
Pursuing Research Excellence**

