

Masoyise

iTB

Let's beat TB and HIV

MASOYISE iTB ANNUAL REPORT 2018

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GLOSSARY/ACRONYMS

DMR	Department of Mineral Resources
DoH	Department of Health
HCT	HIV Counselling and Testing
HIMS	Health Information Management System
Minerals Council	Minerals Council South Africa
MHSC	Mine Health and Safety Council
NCDs	Non-communicable Diseases
OLDs	Occupational Lung Diseases
PCB	UNAIDS Program Committee Board
SABCOHA	South African Business Coalition on Health and Aids
WHO	World Health Organization

1. INTRODUCTION

Masoyise iTB turned three (3) years old in 2018 and was one of the flagship initiatives of the Minerals Council South Africa (Minerals Council) in achieving Zero Harm. Over its lifetime, much was achieved while challenges were met and mitigated. From 2019, Masoyise iTB will continue as Masoyise Health Programme with a wider mandate beyond TB and HIV.

This is a report on the activities, achievements and challenges for Masoyise iTB for the year 2018 and serves to close out its period as a project.

2. BACKGROUND

Masoyise iTB “Lets Beat TB” was approved by the Minerals Council’s Board in September 2015, as a project that would run for three years, 2016 to 2018. This was in response to the high rates of TB and HIV in the mining industry and as part of South Africa’s campaign, launched in March 2015 to screen all South Africans for TB and HIV.

Miners are described as a key population in the South African National Strategic Plan for HIV, TB and STIs 2017-2022. At a mining industry level, through the Mine Health and Safety Council (MHSC), the industry has already committed itself to meeting two milestones on TB and HIV by 2024. The response of the Minerals Council was thus to establish Masoyise iTB, as a multi-stakeholder initiative with the key aim of having a meaningful impact South Africa’s TB and HIV challenges in the country by reducing the current high incidence rates, while seeking to ultimately eliminate TB and HIV. Masoyise iTB bolstered the Mineral Council’s efforts in reaching the MHSC TB and HIV milestones.

The focus of Masoyise iTB was to offer all employees in the mining sector HIV Counselling and Testing (HCT) and TB screening annually, over these 3-year period. The project was overseen by a Steering Committee, chaired by Mr. Andile Sangqu, Vice President of the Minerals Council, and a Project Committee. Masoyise iTB embarked on several activities that contributed to reducing TB in the industry, including monitoring of performance on screening for TB and HIV and TB outcomes, TB contact tracing, support to small mines and improving communication with mineworkers.

The stakeholders in Masoyise iTB are representatives of Minerals Council member companies, along with representatives of trade unions (National Union of Mineworkers, Solidarity, Association of Mineworkers and Construction Union, United Association of South Africa), government (Department of Health (DoH) and Department of Mineral Resources(DMR), the Mine Health and Safety Council, National Health Laboratory Service and National Institute of Occupational Health) and other organisations including International Labour Organization, Joint United Nations Programme on

HIV/AIDS, South African Business Coalition on Health and Aids (SABCOHA), and the World Health Organization (WHO).

3. TARGETS AND OBJECTIVES

Masoyise iTB subscribed to international and national targets on TB and HIV as set out below.

WHO End TB Strategy - 2025	UNAIDS Fast Track Strategy on HIV -2030
<ul style="list-style-type: none"> Find at least 90% of people with TB, including key and vulnerable populations, place 90% on appropriate treatment, at least 90% successful completion 	<ul style="list-style-type: none"> 90% of people living with HIV know their HIV status, 90% of all people living with HIV receive antiretroviral therapy and 90% of those receiving antiretroviral treatment have viral suppression.
Mining industry milestones	Masoyise targets
<ul style="list-style-type: none"> 100% of employees should be offered HIV counselling and testing annually and be linked to an antiretroviral therapy programme. To reduce TB incidence in the mining sector to at or below the South African rate by 2024. 	<ul style="list-style-type: none"> To counsel 100% of employees for HIV annually. To screen 100% of employees for TB annually using the cough questionnaire.

4. KEY ACTIVITIES AND ACHIEVEMENTS IN 2018

Masoyise iTB’s core activities in 2018 included: monitoring programme performance against TB and HIV targets, monitoring TB outcomes, support to small mines, TB contact tracing and communication. Other activities included execution of the pledge made to the Eastern Cape government for health screening and tracing of ex-mineworkers for compensation purposes and monitoring the recommendations of the 2017 study on follow-up of mineworkers that leave the industry while on TB treatment.

The project achieved international recognition as it was showcased in events around the UN High Level Meeting on TB in September and was visited by the UNAIDS PCB Board.

4.1 Monitoring performance against TB and HIV targets

Companies continued to submit reports on TB and HIV on the Minerals Council’s Health Information Management System (HIMS) that is hosted by Healthsource. The system is available to all companies, including those that are not members of the Minerals Council. An epidemiologist reviewed the data to produce the comprehensive Data Report (the full Masoyise Data Report for 2018 can be found in Annexure A).

The analysis presented in this report captures the situation as at 30 April 2019 - it excludes 62 companies registered on the Minerals Council’s HIMS that did not report any data in 2018. In 2018, a total of 32 companies, representing 370,223 employees, submitted year-end data. The total number of employees covered by the 32 companies represents about 81% of the estimated 455,226 employees in the mining industry (see Table 1: Minerals Council member companies as a proportion of Industry.) The methodology applied in the analysis of data for this report is outlined in the detailed annexed Data Report.

Compliance with reporting requirements improved from 87% of expected reports finalised in 2017, to 99.3% finalised in 2018.

Table 1: Minerals Council member companies as a proportion of Industry

2018	Companies	Employees
Industry	-	455,226 (est)
Respondents		
Minerals Council Respondents	32	370,223
as % of Industry	-	81,3%

The summary of performance against targets is in Table 2 below.

Table 2: Summary of performance against Masoyise Targets

	Activity	Milestone	Mining industry performance 2018
Masoyise iTB	HIV Counselling and Testing	100% of employees should be offered HCT annually with all eligible employees linked to an ART programme as per the South African National Strategic Plan for HIV, TB and STIs 2017 - 2022.	Target of 100% employees counselled for HIV/AIDS not met
	TB Screening	Masoyise iTB milestone: To screen, annually, 100% of employees for TB.	The target of 100% employees screened for TB not met
	TB Incidence	MHSC Milestone: By December 2024, the Mining industry TB incidence rate should be at or below the National TB incidence rate.	The industry is on track to meet the target of reducing TB incidence rate to below that of the general population by December 2024.

 Not meeting target

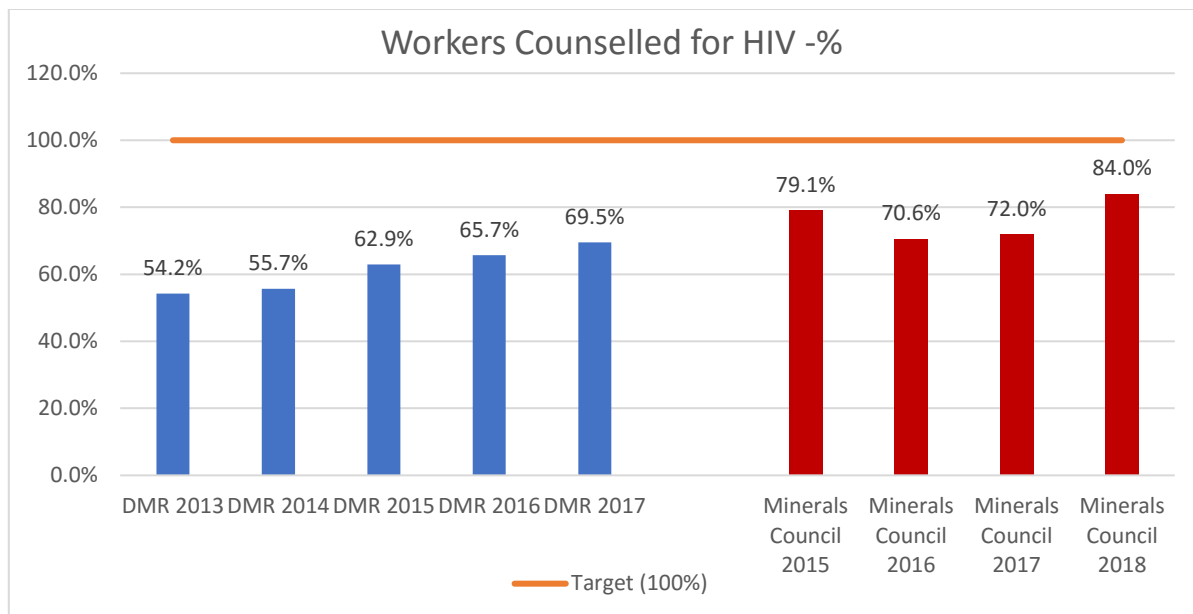
 On track/Met target

4.1.1 HIV counselling

The target for HIV counselling is that 100% of all employees should be counselled annually and eligible employees be linked to an ART programme.

Figure 1 shows how the percentage of employees counselled for HIV improved by 8% to 84% in 2018.

Figure 1: Trend in Percentage of workers counselled for HIV



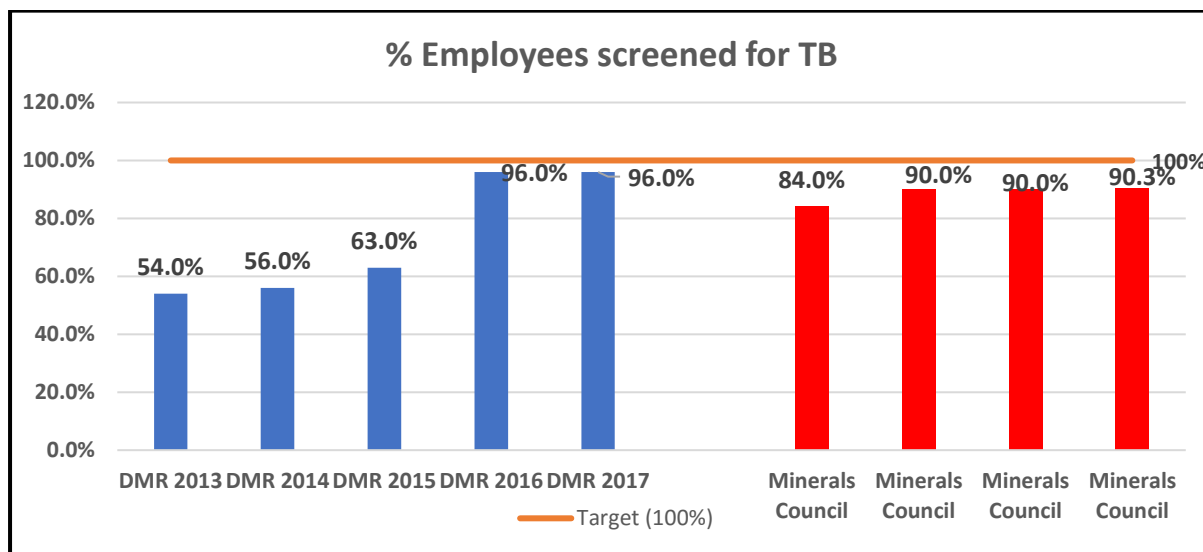
Platinum had the highest percentage of employees counselled at 95%, however, this was a slight decline for platinum from 99% in 2017 where it was at 99%. Although coal had the lowest percentage at 67%, a significant increase compared to the 54.9% it reported in 2017.

4.1.2 Screening for TB

There was no significant change in the percentage of employees that were screened for TB in 2018 (90.3%), compared to the two previous years (90%) see

Figure 2 below, which shows trends for reports submitted to both the Minerals Council and the DMR. TB screening was highest in the platinum sector at 97%, which was a slight improvement from the 94% reported in 2017. Gold was 96%, an improvement from 2017's 91%. Coal reported 74% screening for TB which is a regression from 77% achieved in 2017.

Figure 2: Trend in percentage of Workers Screened for TB



Although the screening of 90% of employees is lower than the 100% target set by Masoyise, this target seeks to assist the mining industry in meeting the WHO’s End TB Strategy Target of finding 90% of those living with TB disease.

4.1.3. TB incidence

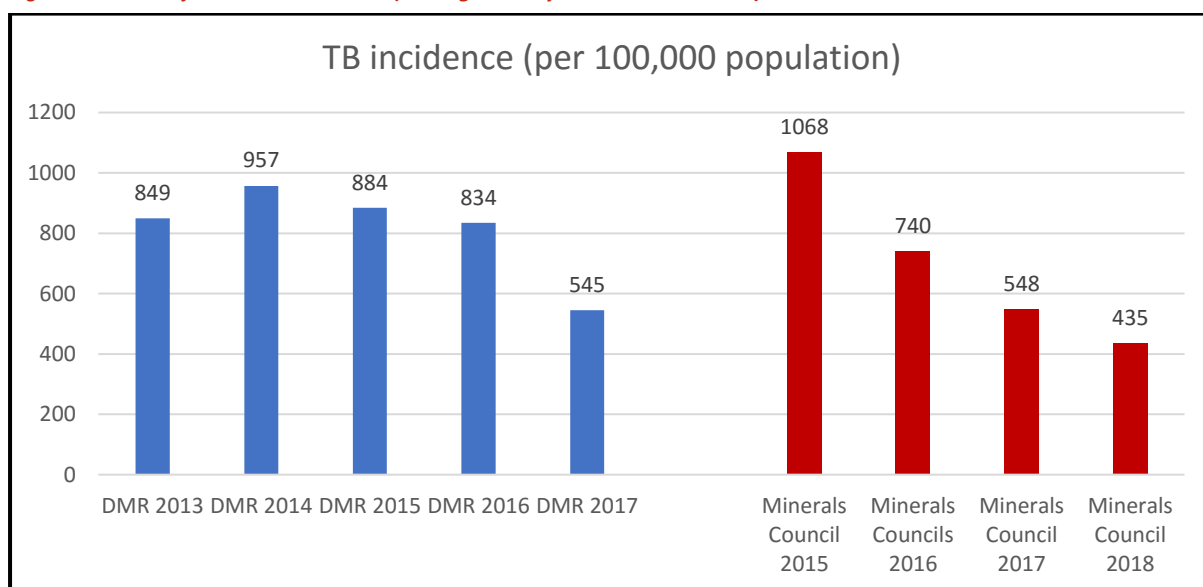
The TB incidence target for the mining industry is to be at or below the South African national TB incidence rate.

Error! Reference source not found. shows the trends in TB Incidence, from both the DMR and Minerals Council datasets.

There is clear evidence of TB Incidence decline from the 2015 reporting period, this is reflected on both DMR and Minerals Council data. The following should be taken note of in the interpretation of the 2015 incidence rate:

1. Data gathered in 2015 was through a paper-based system which limited the scope to review and adjust for coverage and non-response errors, double counting and alignment with industry data. The new electronic reporting system was implemented in 2016 to address these issues and has to a certain extent.
2. The TB Incidence rate for 2015 was calculated predominantly from data supplied by larger Gold and Platinum mines, who have always reported higher TB incidence rates, hence the bias towards the upside. A more representative rate, i.e. if all mines reported, would probably lie within the range of **702 -1068 cases/100 000** population.

Figure 3: Trends of TB Incidence rates (Mining industry vs Minerals Council)



The TB Incidence for South African General Population in 2017 was **567 cases/100 000** population and higher compared to TB incidence for the Mining Industry of **545 cases/100 000** population in the same year. This was still higher than that of the Minerals Council companies at **548 cases/100 000** population in 2017. The Minerals Council data demonstrates a further improvement TB incidence in

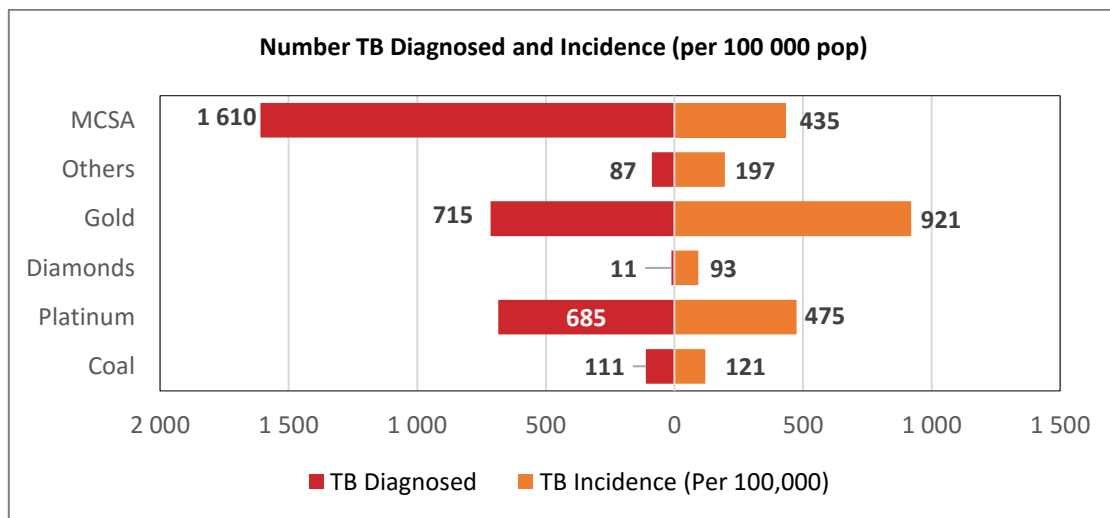
2018 at 435 cases/ 100 000 population. This seems to indicate that the industry is on track to meet the target of reducing TB incidence to below the SA TB incidence.

The risks for TB differ across commodities, with gold having the highest risk due to the presence of silica dust.

4.1.4. TB Incidence across commodities

Figure 4 shows the TB cases and TB incidence across the commodities.

Figure 4: Number of TB cases and TB incidence according to commodities in 2018



Gold mines reported the highest number of cases and incidence while diamond mines reported the lowest cases and incidence. When compared to the South African national incidence all commodities, except gold, are below the SA rate.

4.1.5. Challenges with monitoring performance against TB and HIV targets

The plateauing of the percentage of employees screened for TB and the fact that 100% of employees were not reached for counselling remains a challenge. It is still the opinion of service providers that the missing employees are office staff and the solution would be more innovative screening methods for these employees.

4.2 TB outcomes

The National Institute for Occupation Health is part of Masoyise iTB and was tasked with monitoring TB outcomes as defined by the WHO. The aim of this work was to provide the results of TB programmes in selected Minerals Council members, covering the years 2015 – 2017. The objectives were to estimate the TB burden and to evaluate the performance of the TB programmes.

This work is conducted as a retrospective review of TB control programmes. 26 mines were invited to participate and 11 accepted the invitation, three gold and eight platinum. A summary of results thus far is in Table 3: TB Treatment outcomes by year.

Table 3: TB Treatment outcomes by year

Outcome	Global%	2015 (n=1054)	n%	2016 (n=829)	n%	2017 (n=691)	n%
Treatment success	82	805	76.4	641	77.3	554	80.2
Cured		401	38.0	337	40.6	267	38.6
Treatment completed		404	38.3	304	36.6	287	41.5
Treatment failed		7	0.6	4	0.5	2	0.2
Died		76	7.2	49	5.9	41	5.9
Lost to follow-up		8	0.7	4	0.5	5	0.7
Not evaluated		158	14.9	131	15.8	89	12.8
Total		1 054	100	829	100	691	100

The significant finding was that the TB treatment success rate has been going up slowly, from 76.4% in 2015 to 80.2% in 2017. This is however still lower than the global treatment success of 82% and the WHO target of 85%.

A continuing concern was the percentage of employees that were not evaluated, ranging from 15,8% to 12.8%, as well as the high death rate ranging from 5.9% to 7.2%. The international milestone for death rate is below 5%. A new target for zero deaths in 2-3 years' time should be explored. The results thus far indicate that more work needs to be done to strengthen TB programmes. The data reflected on the outcomes report was received from the following companies that participated in the study: Elandsrand Harmony Mine, Harmony Doornkop Sir Albert Mine, Anglo American Amandebult Mine, African Rainbow Minerals Modikwa Mine, Anglo Platinum Mogalakwena Mine, Northam Platinum Setaria Mine, Union Mine Swartklip Mine, NW Andrew Safety Mine Hospital and NW Bafokeng Rasemone Platinum Mine Clinic.

4.3 Support to small mines

Masoyise iTB endeavored to support small mines through collaboration with SABCOHA. In 2018, reaching small mines was virtually impossible due to a lack of funding. SABCOHA submitted various funding applications for services to small mines as the key focus area but none of these materialized.

It was however determined after meeting small mines in Kimberley and the DMR in Pretoria, that small mines do report HIV and TB data to DMR.

It is only in 2019 that SABCOHA will be able to continue with support to small mines as it has secured funding as a sub-recipient of the Global Fund Against TB, HIV and Malaria.

4.4 Contact tracing

Intensified TB case-finding, which includes contact tracing, is recognised as a key strategy in reaching the “first 90” (finding 90% of people with TB).

A Contact Tracing Task Team was established in 2016 to improve contact tracing on all TB index cases identified through Masoyise iTB. The pilot was run in West Rand gold mines in 2016, followed by two years of support to the platinum mines in Bojanala, North West Province in 2017 and 2018. (Full contact tracing report can be found **in Annexure B**)

Companies that were involved in the Bojanala contact tracing initiative were Bafokeng Rasimone Platinum Mine (BRPM), Bushveld Vametco, Glencore, Impala, Lonmin, Minopex and Sibanye Stillwater. Quarterly meetings were held to monitor progress.

In the West Rand, Goldfields, Harmony Gold and Sibanye Stillwater continued to report on their TB contact tracing.

Selected contact tracing outcomes from both Bojanala and West Rand districts are presented in Table 4.

Table 4: Selected contact tracing outcomes

Indicator	Bojanala	West Rand	Total
Number of index cases identified	488	153	641
Number of contacts identified	2356	719	3075
Number of contacts successfully traced	2256	694	2950
Percentage contacts traced	95.7%	96.5%	95.9%
Percentage of contacts screened	88.7%	100%	91.4%
Number of TB cases detected	18	28	46
Yield (% TB positive from those screened)	0.9%	4.0%	1.7%
Percentage of TB positive put on treatment	100%	100%	100%

The overall tracing rate was high at around 95.9% but slightly lower than in 2017 (97.9%). The TB yield, which is the number of positive TB cases from all those screened, was 4.0% in the West Rand and 0.7% in Bojanala. The yield in the West Rand was significantly different to previous years, which were around 0.5%, suggesting that the method or recording of data might be different in 2018. It was heartening to see that all cases of TB identified were put on treatment.

The contact tracing exercise in Bojanala was of great value for the companies involved as they learnt a lot about TB programmes in general and TB contact tracing in particular. The WHO provided support and advice on how to set up successful contact tracing services. All companies are showing improvements in conducting contact tracing. The relationship with the relevant districts was strengthened.

A key challenge into the future will be the withdrawal of Aurum Institute support in the provision of contact tracing services in the community. From 2019, companies will need to find sustainable methods of continuing with contact tracing in communities, supported by the Department of Health.

4.5 Pledge to support health screening in the Eastern Cape

During the celebration of World AIDS Day in December 2017 in Mthatha, Eastern Cape the Chairperson of the Masoyise iTB Steering Committee, Mr. Andile Sangqu pledged R1,8 million for health screening and R500 000 for tracking and tracing ex-mineworkers with unclaimed pension benefits. The pledge was made in partnership with EOH Holding Ltd on the health screening and SABCOHA was to conduct the screening in 2018.

The campaign was a success with a total of 7,500 people in deep rural areas screened. A 7.9% HIV positivity rate was found; while 3,150 people needed further screening for TB, with 1,009 of these having partners in the mines. SABCOHA concluded that the screening exercise should be repeated as it was of great value to the community.

In conjunction with the Medical Bureau for Occupational Diseases and Compensation Commissioner for Occupational Diseases, the R500 000 tracking and tracing funds were utilised in outreach activities for ex-mineworkers in the Eastern Cape.

4.6 Communication

Education of employees continued to be a priority and a pocket-sized leaflet was produced to assist peer educators and health advisors at the mines and mine clinics on educating both employees and community members about their rights. (A full communications report can be found in **Annexure C**)

A comprehensive set of SMSs was produced and shared with mining companies. These SMSs aimed to educate employees about TB, specifically how to prevent and manage the diseases. An extensive social media campaign, translated into five African languages, was conducted on the Minerals Council's Facebook page for World AIDS Day. The campaign was supplemented by posters which were produced and distributed to various mining companies to ensure that employees without social media exposure also received the messaging.

The communications team also assisted with the planning of parallel session under the theme “*MINING INDUSTRY – Reinforcing the Multisectoral Response to TB and HIV*”, which was hosted on the side-lines of the SA TB conference held in June 2018 in Durban.

The re-branding of Masoyise iTB to the Masoyise Health Programme was another activity that was undertaken by the communications team.

4.7 International recognition

2018 was a notable year for validation of the project, with much international activity and recognition.

Members of the Masoyise iTB team attended the preparatory meeting as well as the UN High-Level meeting on TB that were held in June and September respectively. At the recommendation of the Masoyise Steering Committee, the Minerals Council supported language proposed by the International Congress on Occupational Health to promote action by Heads of State to control silica dust in the workplace. The experiences of the South African mining industry and Masoyise iTB and its success in reducing TB and HIV were showcased at the meeting.

In December 2018, Masoyise iTB also hosted a delegation from the UNAIDS Programme Committee Board (PCB), with representatives from across the world. The objective of the meeting was to understand the national AIDS response in South Africa, with particular reference to the mining sector, the role of communities and sustainability.

Mr. Andile Sangqu (Masoyise chairperson) and Dr. Catherine Sozi (UNAIDS Regional Director, Eastern and Southern Africa) chaired the meeting, with the opening formalities by Ms Shi Ying (Deputy Director Bureau of Diseases Control and Prevention National Health Commission, China & PCB Deputy Chair). The meeting was attended by representatives of the Masoyise working group which includes the mining industry, organised labour and government. The session was a successful exchange of views on the control of HIV in the industry and once again, case studies from companies were presented and generated much interest from the PCB Board members.

4.8 Transition to Masoyise Health Programme

A major development for Masoyise iTB was a review of the project and a decision to transition from the name “Masoyise iTB Project” to “Masoyise Health Programme”. The Steering Committee had proposed the review of the project and in August a workshop was held to review the work done in the past three years and the relevance of the project going forward.

The general consensus was that the project was of great value in focusing attention on TB and HIV in the mining industry. In line with national and industry trends, a decision was made to extend the scope of the project to include non-communicable diseases (NCDs) and occupational lung diseases (OLDs)

and to convert it into a programme. The Masoyise Health Programme Strategy was approved by the Steering Committee and funding was allocated by the Minerals Council for a period of three years from 2019 to 2021.

It is envisaged that the new strategy will give fresh impetus to the control of TB, HIV, NCDs and OLDs in the mining industry.

5. CHALLENGES

The project has performed well over the past three years. Some of the challenges that can be highlighted are the following:

- The mining industry not meeting its own milestones and targets on HIV counselling and TB screening.
- Not meeting the global TB treatment success rate of 85%.
- The termination of funding for Aurum Institute support which provided TB contact tracing in communities. This leaves a gap to be filled by an overstretched public health system or by companies engaging NGOs.
- Low levels of participation by some key stakeholders such as the NDoH

6. CONCLUSION

Masoyise iTB was a project premised on meeting set targets through industry milestones. It succeeded in reducing the burden of TB and HIV in the sector and made major contributions in improving TB programmes generally. The project managed to leverage support from stakeholders and other resources and strengthened partnerships. The activities undertaken in the past three years will serve as a solid foundation for the new Masoyise Health Programme.