



Masoyise

iTB

Let's beat TB and HIV

ANNUAL PROGRAMME REPORT **2017**

Association of Mineworkers and Construction Union • Department of Health • Department of Mineral Resources • International Labour Organisation • Mine Health and Safety Council • Minerals Council South Africa • National Health Laboratory Service • National Institute for Occupational Health • National Union of Mineworkers • Solidarity • South African Business Coalition on Health and AIDS • UASA The Union • The Joint United Nations Programme on HIV/AIDS • World Health Organisation

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1. BACKGROUND

Globally, South Africa is among 30 countries globally with high Tuberculosis (TB) and drug-resistant TB (DR-TB) burdens, who in turn together account for almost 80% of the global disease burden of TB.

The Masoyise iTB initiative was conceived as a major TB screening campaign for the South African mining industry. It was launched in late 2015 and its Steering Committee is chaired by Mr Andile Sangqu, the Vice President of the Minerals Council South Africa (formerly Chamber of Mines). The programme was intended to run over 3 years and formed part of a broader national campaign launched earlier in 2015 by then-Deputy President Cyril Ramaphosa.

Masoyise iTB (meaning “lets beat TB”) is a Minerals Council South Africa led multi-stakeholder initiative (for a full membership list, please see the end of this document). It aims to have a meaningful impact on South Africa’s TB challenge by reducing the current high incidence rate, while seeking to ultimately eliminate TB altogether. The focus of Masoyise iTB is to offer all employees in the mining sector HIV Counselling and Testing (HCT) and TB screening annually, over a three-year period from 2016 to 2018. Initiatives to achieve this goal include contact tracing, providing support to small mines, access to diagnostics, and increasing communication to mineworkers.

This second annual report of the Masoyise iTB programme reports on the key activities, achievements and challenges for the year 2017.

2. TARGETS AND OBJECTIVES

The project has adopted some good practices both from the mining industry and other sectors related to TB and HIV. The United Nations’ Sustainable Developmental Goals (SDGs) are one of the drivers of good progress in the industry, and Masoyise iTB has adopted Goal Three which focuses on good health and wellbeing. The goal’s targets include ending the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combatting hepatitis, water-borne diseases and other communicable diseases by 2030.

Masoyise iTB subscribes to the following international TB and HIV targets:

World Health Organisation’s (WHO) End TB Strategy - 2025	Joint United Nations Programme on HIV/AIDS’ (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 	90% of people living with HIV <ul style="list-style-type: none"> • know their HIV status • receive antiretroviral therapy <ul style="list-style-type: none"> • 90% of those receiving antiretroviral treatment have viral suppression

Miners, together with prisoners, sex workers, hospital visitors, health care workers and community health workers are classified as vulnerable groups.

At a national level, Masoyise iTB is informed by the Department of Health’s National Strategic Plan for HIV, STIs and TB which was implemented in 2017 and will conclude in 2022. The plan recognises the need to increase TB case detection to 90% as required and urgent.

The mining industry’s milestones (targets) for TB and HIV, set in 2014, as well as the Masoyise iTB targets set in 2015, are:

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 • Reduce TB incidence in the mining sector to at or below the South African rate by 2024 	<ul style="list-style-type: none"> • Counsel 100% of employees for HIV annually, using the cough questionnaire, to screen 100% of employees for TB annually

3. KEY ACTIVITIES AND ACHIEVEMENTS IN 2017

3.1 Monitoring performance against TB and HIV targets

The performance of TB programmes is measured against the targets set for Masoyise, the mining industry milestones for TB and HIV, the national TB control programme targets, and where possible against the 90:90:90 TB and HIV targets. Where appropriate, data from the Department of Mineral Resources (DMR), which represents the total industry, is included in the analysis. The total number of employees on these two databases is different as the DMR database represents the whole mining industry while the Minerals Council database is mainly - but not exclusively - open to MCSA members. Since June 2016, companies - including non-Minerals Council members - have been encouraged to report their TB statistics on the Council’s Electronic Reporting System. It is important to note that a statistician was appointed to analyse the data in 2016 and 2017 which means the data from these two years is comparable, while the data gathered in 2015 was from a manual reporting system and was not reviewed by a statistician.

The electronic system has been a major success with great uptake from companies. In 2017, 33 companies representing 431 622 employees submitted data (increasing from 30 companies with 380 548 employees in 2016 and 13 companies with 153 044 employees in 2015). The list of companies that submitted data can be found at the end of this document.

Brief results are presented below while a full report is available on request from the Minerals Council South Africa.

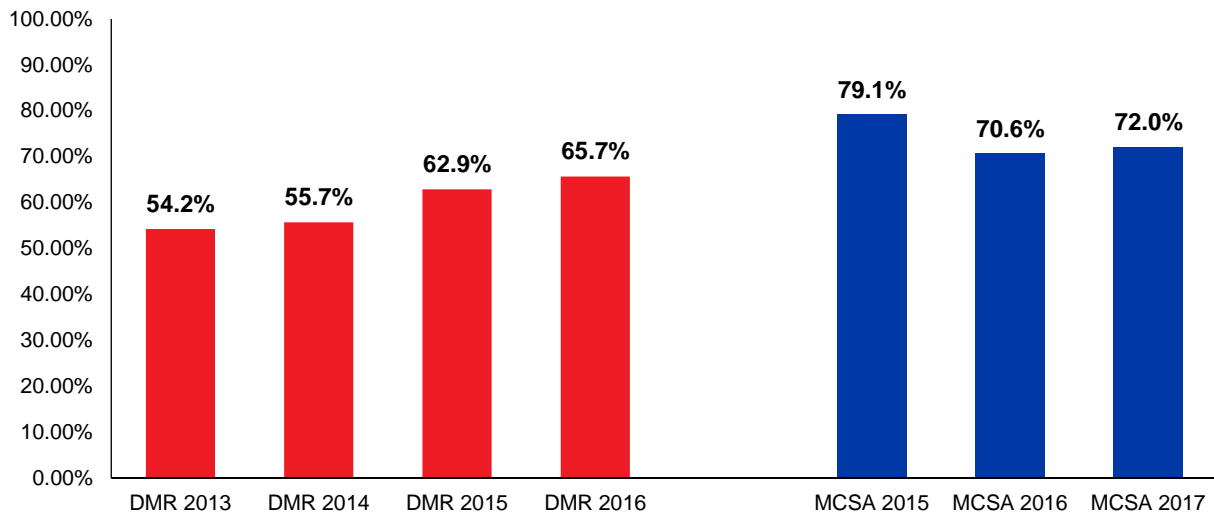
3.2 Summary of Achievements and Challenges experienced

Achievements	Challenges and mitigation
<ul style="list-style-type: none"> • Number of companies reporting on the system increases annually • Percentage of employees represented on the system increases annually • The definitions for indicators were enhanced • The MCSA electronic reporting system has been upgraded to include the revised version of the DMR 164 template • Support was provided to participating companies to mitigate challenges experienced • Companies implemented unique identifiers. • Unsigned MOU between MHSC and MCSA: This will allow access and verification of data from both MCSA and MHSC systems 	<ul style="list-style-type: none"> • The milestones (targets) on counselling for HIV and screening for TB are not being met • Consider a Central Data System under MHSC and strengthen support to improve efficiencies and subsequently data integrity. This will allow Masoyise access to all industry reports and enhance data analysis at that level

HIV counselling

Although there is a higher number of employees counselled for HIV, the percentage of employees counselled as reported on the Mineral Council's system only rose to 72.0% in 2017, from 70.6% in 2016 (see Figure 1). This, however, is still higher than the total industry percentage, as reflected in the DMR 2016 figure of 65.7%.

Figure 1: Percentage of Workers Counselled for HIV (%). Data as per DMR164 Reports 2013 – 2016



Even when the percentage of workers on antiretroviral treatment (ARTs) is added to those that have been counselled, the percentage counselled plus those on ARTs was 79.5% in 2016 and 79.3% in 2017, still not meeting the anticipated 100%.

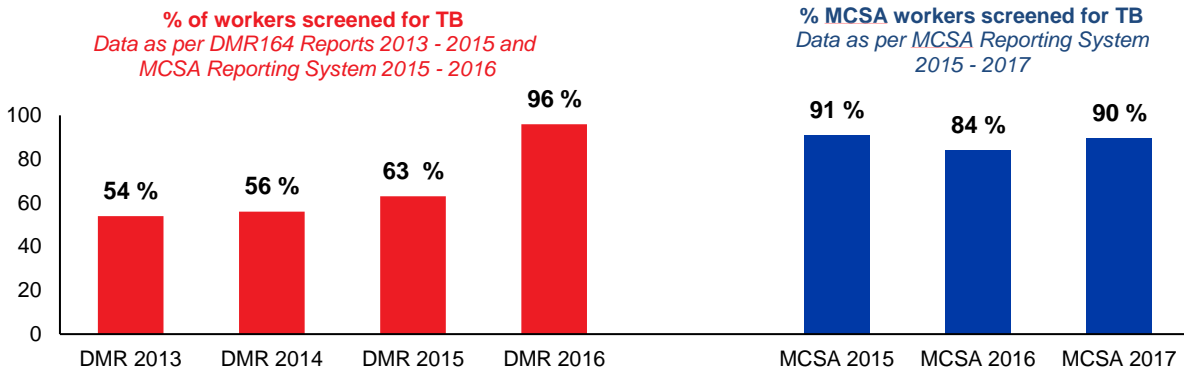
The industry did not meet its own and the Masoyise iTB targets of counselling 100% of employees annually.

There was great variation across commodities in the percentage of employees counselled for HIV, with platinum having the highest percentage of employees counselled at 99.0%, and coal having the lowest percentage at 54.9%.

Screening for TB

90% of employees were screened for TB in 2017, a 6% increase from the 84% recorded in 2016, see Figure 2 below.

Figure 2: Percentage of workers screened for TB in 2017



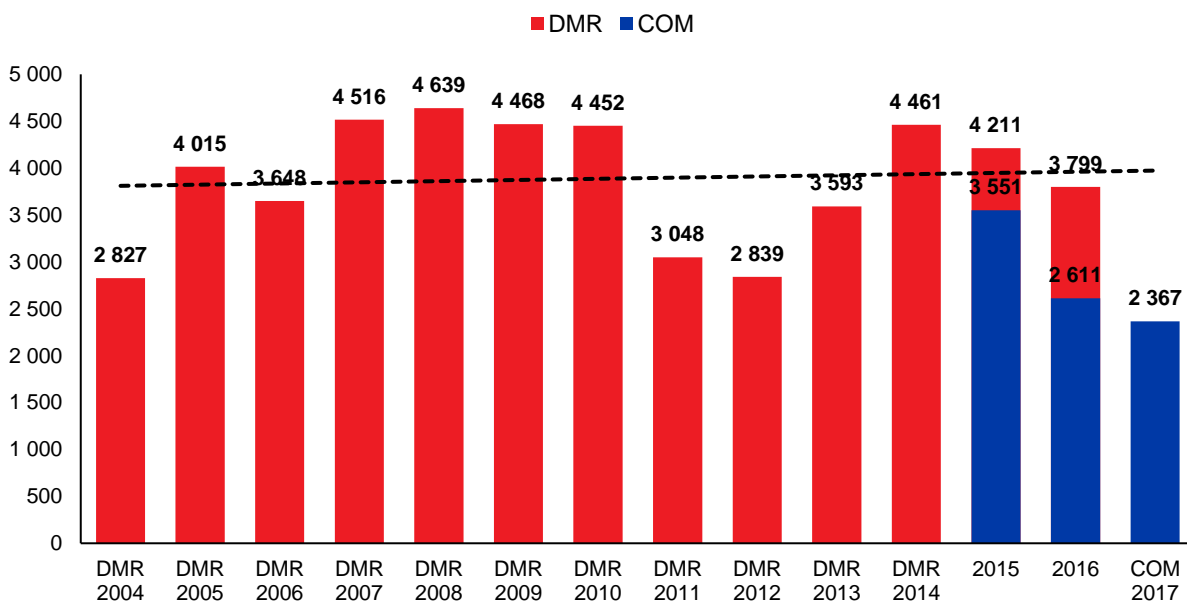
The Masoyise iTB target of screening 100% of employees for TB was not reached.

Although the screening of 90% of employees for TB is lower than the 100% target set by Masoyise, it meets the End TB Strategy target of tracing 90% of those infected by TB.

Figure 3 shows that the number of TB cases in the industry in 2017 was 2367, lower than the 2611 in 2016.

Figure 3: TB cases diagnosed in the industry, 2004-2017 (Minerals Council vs DMR)

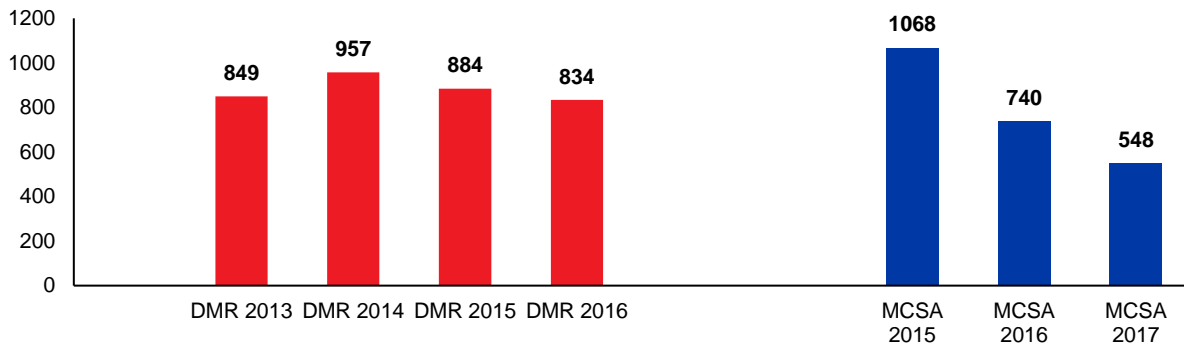
Data as per DMR 164 Reports 2004 - 2016 and MCSA (COM) Reporting System 2015 - 2017)



Expressed as a rate, the crude TB incidence for the mining industry in 2017 was 548/100 000, compared with 740/100 000 in 2016 (see Figure 4). Using the number of cases reported to the DMR in 2016, the TB incidence is 834/100 000. There is thus a decline in the TB incidence. The massive decline is however being investigated further.

Figure 4: Industry TB Incidence per 100 000 (DMR and MCSA)

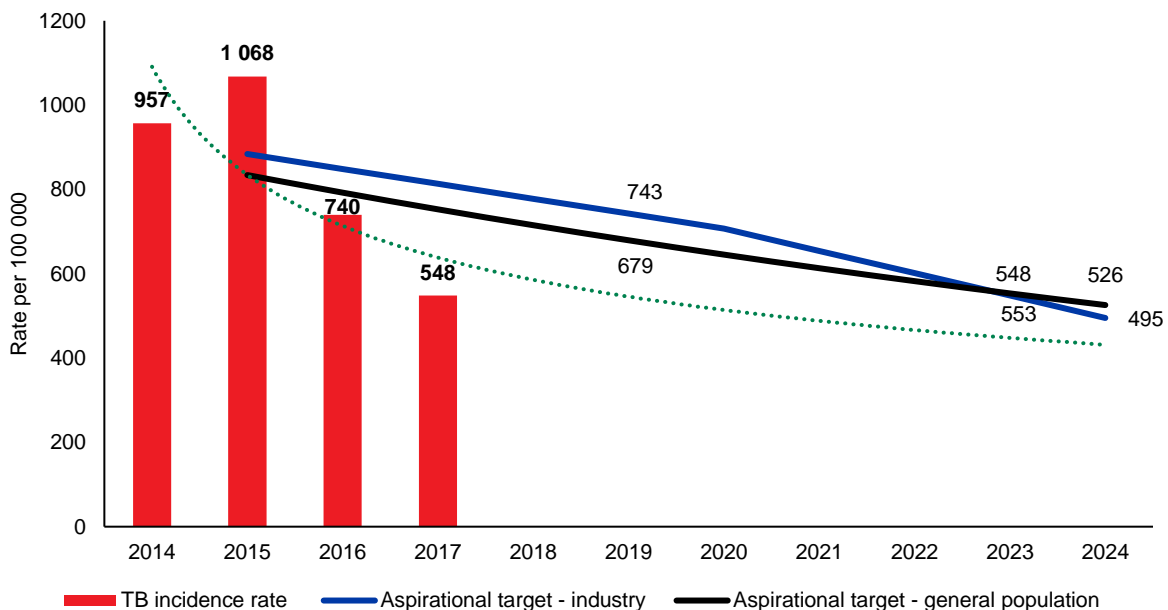
Data as per DMR reports 2013 -16



The mining industry has committed to reducing the TB incidence to or below the South African average. Aspirational curves were developed to monitor this commitment and as shown in Figure 5 below, the TB incidence for 2016 and 2017 falls within the expected range.

The TB incidence in 2016 and 2017 indicates that the industry is tracking below its aspirational targets and on track to meet its target of reducing TB to being at or below the South African national average by 2024.

Figure 5: Aspirational targets – industry vs general population



3.3 Challenges with monitoring performance against TB and HIV targets

A key challenge has been the plateauing of the percentage of employees counselled for HIV, as well as the industry not achieving both the Masoyise iTB and industry's TB and HIV targets.

Reasons for this include:

- More companies are utilising unique identifiers and thus double counting is getting less prevalent with time. This reflects as reduced numbers counselled or screened in later years
- Employees on ART or whose HIV status is known are not included in the counselling figures in most companies, and the percentage of employees on ART is significant
- Most companies do not offer health screening annually to office workers. Without a concerted programme addressing this population, companies will miss the target of screening or counselling 100% of employees

Another challenge in 2017 was that two large companies did not disaggregate data according to permanent employees and contractors. With the insufficient data, this meant that reporting on this could not be done.

The above challenges have been addressed through the Masoyise iTB Steering Committee and the Minerals Council Health Policy Committee. Recommendations on how these challenges can be mitigated are currently being tabled at the Minerals Council.

3.4 TB outcomes

As part of the Masoyise iTB programme, the National Institute for Occupation Health (NIOH) committed to track TB treatment outcomes in South African mines. This is done through extracting data from the TB Electronic Register in each provincial health department. This is a major achievement as the data is disaggregated for mine facilities. In 2017 the NIOH reported on TB treatment outcomes for 2015 from Gauteng. In 2017 the body managed to secure 2015 and 2016 data from Gauteng, Limpopo and the North West. The 2016 data is presented in Table 1 below.

Table 1: TB treatment outcomes in the health facilities in Gauteng, Limpopo and North West Provincial Departments of Health, 2016

Outcome	Global 21015 %	National Department of Health of South Africa 2017 %	Limpopo Mines 2016 N=301 %	Gauteng Mines N=662 %	North West Mines N=1299 %
Successfully treated	83	81	276 (91.7)	586 (88.5)	1 090 (83.9)
Cured	n/a	n/a	61 (20.3)	125 (18.8)	721 (55.5)
Treatment completed	n/a	n/a	215 (71.4)	461 (69.6)	369 (28.4)
Failed	n/a	n/a	5 (1.7)	4 (0.6)	1 (0.1)
Died	n/a	n/a	10 (3.3)	24 (3.6)	48 (3.7)
Lost to follow-up	n/a	n/a	3 (1.0)	8 (1.2)	2 (0.2)
Not evaluated	n/a	n/a	7 (2.3)	40 (6.0)	158 (12.2)

Compared to 2015, TB treatment success outcomes ranged from 52% to 88.7% within the 26 mining health services. This improved to a range of 83.9 – 91.7% in 2016. Mines in Limpopo province managed to reach the third 90% global target for successful TB treatment. Globally, first-line TB treatment success is at 83%.

3.5 Support to small mines

Led by the South African Business Coalition on Health and AIDS (SABCOHA), Masoyise iTB continued its support to small mines. A needs analysis was conducted in the Northern Cape, and roadshow meetings also took place in John Taolo, Kathu and Kimberley districts during 2017. Some of these were undertaken with the Mine Health and Safety Council (MHSC) and were of great value in providing information to small mines on mining industry initiatives and commitments on TB and HIV.

Through the TB in Mining (TIMS) programme, SABCOHA screened a total of 15 996 ex-miners, family and community members for TB in the John Taolo Gaetsewe district of the Northern Cape between January and August 2017.

In a partnership with the Aurum Institute, SABCOHA conducted comprehensive health screening for 5 120 ex-miners, family and community members in the Bojanala and Ngaka Modiri Molema districts in the North West.

3.6 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). Contact tracing is the process of ensuring that all people who have interacted closely with a person with TB - either at home or work - are traced and screened for TB.

The Contact Tracing Task Team was established to improve contact tracing on all index cases identified through Masoyise iTB. Following the successful piloting of contact tracing in 2016 in the West Rand district of Gauteng, the pilot moved to the Bojanala District of the North West in 2017.

Several task team meetings were held in Bojanala where reporting tools from the West Rand were adopted. The companies participating in the Bojanala contact tracing pilot were Bushveld Vametco; Glencore; Impala Platinum; Lonmin; Minopex; Royal Bafokeng Platinum and Sibanye-Stillwater. Not all companies had TB services and therefore not all were reporting on their contact tracing activities.

The report of the Contact Tracing task team is available from the Minerals Council South Africa. Selected contact tracing outcomes from both Bojanala and West Rand districts are presented in Table 2 below.

Table 2: Selected contact tracing outcomes

Indicator	Bojanala	West Rand	Total
Contacts traced (%)	93.9	99.5	97.9
Contacts screened (%)	90.1	97.9	95.8
Contacts lost to follow up (%)	9.3	2.9	4.6
Yield (% TB positive from those screened)	0.7	0.5	0.6
TB positive put on treatment (%)	100	100	100

The percentage of contacts traced was 97.9%, with the West Rand having a higher percentage of 99.5%, a small improvement from the 97% traced on the West Rand in 2016. The overall lost to follow up rate was 4.6%, although the rate in Bojanala was much higher, at 9.3%. The overall TB yield, which is the number of positive TB cases from all those screened, was 0.6% - with the West Rand at 0.5%, similar to the 0.58% recorded in the West Rand in 2016. All cases of TB identified were put on treatment.

In contact tracing, the industry meets the WHO End TB Strategy target of treating 90% of those identified with TB. Only Limpopo province reached the target of 90% successful TB treatment

Challenges encountered in 2017 included the difficulty of gaining momentum on reporting in Bojanala as the companies were not as experienced with TB control as operating in the West Rand. The relationship with the district health structures was also not as strong but improved over time. The Aurum office in Bojanala was not as efficient as in the West Rand and meetings had to be held to improve performance. Due to all these challenges, the pilot in Bojanala is continuing in 2018 and more training and support is required.

3.7 Rapid appraisal of follow-up of mineworkers that leave industry on TB treatment

The mining industry experienced significant retrenchments in 2016 and 2017, leading to the Masoyise iTB Steering Committee requesting that an assessment be conducted to establish what happened to those employees who left the industry whilst on TB treatment.

The Minerals Council commissioned a consultant who produced a report titled “Rapid Appraisal of follow-up of mineworkers that leave the Industry whilst on TB treatment” (the report is available on request). Eight employers (Anglo American Platinum, AngloGold Ashanti, Harmony, Impala, Lonmin, Sasol, Sibanye-Stillwater and South 32), the National Union of Mineworkers, one ex-mineworker’s association and TEBA were interviewed.

The study found that most of the companies interviewed used TEBA for the follow-up of mineworkers. TEBA linked the workers to local clinics and reported back to companies on the outcomes of treatment. Several recommendations were made to improve the follow-up of mineworkers and these were approved by the MCSA Health Policy Committee and Council.

The Masoyise iTB Steering Committee will continue to monitor implementation of recommendations on a quarterly basis in 2018.

3.8 Pledge to support health screening in the Eastern Cape

The Chairperson of the Masoyise iTB Steering Committee, Mr Andile Sangqu, participated in the national World AIDS Day celebration hosted by the then Deputy President of South Africa, Mr Cyril Ramaphosa, in Mthatha on 1 December 2017.

In recognition of the OR Tambo Centenary Celebrations, Mr Sangqu pledged R1,8 million for health screening and R500 000 for tracking and tracing ex-mineworkers with unclaimed pension benefits.

The funds will be spent in the OR Tambo district in the Eastern Cape. The MCSA partnered with EOH Health Solutions on the health screening and SABCOHA will conduct the screening during 2018.

3.9 Communication

2017 was a productive year for the Masoyise iTB project, with a communications initiative which focussed on educating member employees about TB and about their rights in the workplace.

On the theme of “Know your rights and responsibilities”, the communications initiative produced posters and leaflets for on-mine distribution and use by Health and HR teams. It also produced content to be used by members in HR and Health newsletters.

The material was put to exceptionally good use by Masoyise iTB members – six companies and one union have utilised the material in various ways – from 15 000 factsheets printed and distributed by Harmony, to NUM publishing the content in their national newsletter, and 5 000 leaflets printed and distributed by AngloGold Ashanti. There has also been valuable feedback from employees and health/HR staff on the ground as to how the campaign could be developed and refined further.

The team will build on these successes in 2018.

3.10 Challenges

Key challenges identified were mainly in the areas of data collection and contact tracing for TB. The industry has shown a lot of commitment to the screening of employees for TB and HIV. This has been done through investments in time and a range of activities. The statistics however do not show the expected outcomes. Instead of screening rates increasing as expected, there has been stagnation in the percentage of employees counselled for HIV and the industry has not reached its Masoyise target of screening 100% of employees for TB.

This requires further interrogation to find means of closing the gap.

The pilot project in Bojanala demonstrated that several companies still require training and support to ensure they conduct contact tracing in a proper manner and account for it according to WHO protocols.

4. CONCLUSION

2017 was the second year of the Masoyise iTB programme. A lot has been achieved and learnt in the process. Challenges were met and solutions devised to overcome them. Masoyise iTB has certainly been a great learning opportunity for the industry and for individual mining companies. We believe that 2018 will be a year of consolidation and even greater achievement.

Table 3: Companies that submitted 2017 Data

Companies	Employee count			
	Employees	Contractors	Ad-hoc contractors	Total
Sibanye Gold Limited	44 586	-	-	44 586
Impala Platinum	34 096	10 215	-	44 311
Anglo Platinum South Africa	24 220	12 368	-	36 588
Lonmin	24 795	7 743	-	32 538
Harmony Gold	26 848	4 473	-	31 321
AngloGold Ashanti	29 392	-	-	29 392
Anglo Coal South Africa	8 023	7 717	9 423	25 163
Sibanye Rustenburg Platinum	24 931	-	-	24 931
African Rainbow Minerals	11 585	6 887	1 387	19 859
Kumba Iron Ore	6 091	7 347	2 887	16 325
Glencore Coal South Africa	4 665	10 651	-	15 316
Sasol Mining (Pty)Ltd	7 917	5 781	-	13 698
South32 SA Coal Holdings (Pty) Ltd	6 394	7 026	-	13 420
Royal Bafokeng Platinum	4 153	7 392	-	11 545
Glencore Ferro Alloys South Africa	5 463	5 016	-	10 479
DRD Gold Limited	4 619	5 578	-	10 197
Petra Diamonds	4 538	4 449	1	8 988
Northam Platinum Limited	6 279	2 591	-	8 870
Gold Fields Limited	3 983	2 425	-	6 408
Exxaro	2 657	2 651	-	5 308
Richards Bay Minerals	1 960	2 799	-	4 759
De Beers Consolidated Mines (Pty) Ltd	1 851	2 858	-	4 709
ATLATSA Resources	2 176	1 433	-	3 609
Platinum Group Metals (Pty) Ltd	1 949	-	-	1 949
Universal Coal Pty Ltd	240	1 160	-	1 400
Wesizwe Platinum	1 289	-	-	1 289
Mbuyelo Coal	135	1 073	-	1 208

Companies	Employee count			
	Employees	Contractors	Ad-hoc contractors	Total
Kuyasa Mining (Pty) Ltd	427	532	-	959
Trans Hex Operations	404	345	-	749
Canyon Coal	89	459	-	548
Evraz Vametco	450	50	-	500
Shiva Coal	288	98	-	386
West Coast Resources	147	167	-	314
Total	296 640	134 982	13 698	431 622