



## HEALTH AND SAFETY FOCUS

### APPROACH

Sibanye strives to prevent all accidents, and to have a healthy and productive workforce through continuous improvements in safety by focusing on compliance and the systematic reduction of employees' exposure to risk in the work environment by:

- identifying and ranking risks
- identifying technical and procedural engineering solutions in terms of a risk mitigation hierarchy to eliminate the risk completely
- controlling the risk at source
- minimising the risk
- monitoring risk exposure
- providing personal protective equipment (PPE).

As required by the Mine Health and Safety Act, 1996 (Act No 29 of 1996) (MHSA), all employees are represented in formal joint management-worker health and safety committees through their representatives to assist in monitoring and advising occupational health and safety programmes.

### SAFETY PERFORMANCE

It is with deep regret that we report the death of seven employees during the year under review although this is a significant improvement on the 12 fatalities reported in 2014. Our Board and management extend their deepest sympathies to the families, friends and colleagues of the deceased.

The more than 40% decline in fatalities is pleasing and reflects the lowest number on record for our mines. However, it is of concern that, in general, other safety trends have deteriorated. Management acknowledges that the deterioration in other safety trends is cause for concern but action plans have been put in place to address these issues.

All accidents are investigated and the main causes have been found to be incorrect identification of risks, not timeously and effectively correcting identified risks and not complying with mine standards. Greater attention is being paid to the impact supervisors have on the work environment.

#### KEY INDICATORS: SAFETY (PER MILLION HOURS WORKED)

	2015	2014		% change and status
Fatalities	7	12	▼	(42%)
FIFR	0.06	0.12	▼	(46%)
LTIFR	6.74	5.87	▲	15%
SIFR*	4.68	3.88	▲	21%
MTIFR**	3.60	3.37	▲	12%
Section 54 work stoppages	109	77	▲	42%
Production shifts lost as a result of Section 54 stoppages	70	99	▼	(29%)
Internal stoppages***	18,642	23,257	▼	(20%)

\*Serious injury frequency rate

\*\*Referred to as treat-and-return injury frequency rate (TRIFR)

\*\*\*Internal stoppages are an integral part of Sibanye's risk management strategy (any person can stop a task or workplace until arrangements have been made to reduce high risk).



### FATALITY-FREE MILESTONES: 2015

1 million fatality-free shifts achieved:

- Sibanye (four times)
- Driefontein
- Beatrix (twice)
- Cooke

2 million fatality free shifts achieved:

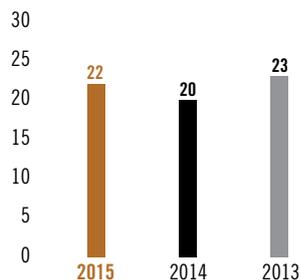
- Sibanye (twice)
- Driefontein
- Kloof

### MINESAFE AWARDS 2015

- Kloof: No 2 metallurgical plant
- Driefontein: Mining Unit 1



**HIV prevalence\* among employees (%)**



\*Cohort from voluntary testing and counselling (VCT) including employees and contractors

**The new Sibanye healthcare model focuses primarily on disease prevention, early detection thereof and management. Since the disposal of our healthcare assets in 2014, we have focused on efficiencies and embedding the new healthcare model.**

**HEALTHCARE AND OCCUPATIONAL HEALTH PERFORMANCE**

Sibanye's new operational model for health is aimed at prevention, early detection and management of disease, and prevention of disability, through the provision of accessible healthcare. Early identification of health risks with early intervention and stringent application of the mandatory code of practice on minimum standards of fitness to perform work at a mine are critical.

Our health model is in its second year of a planned three-year roll out that has seen focus on optimisation, efficiencies and excellence.

As with safety risks, we reduce occupational health risks by proactively managing health risk factors. The most significant occupational diseases encountered at our operations are NIHL, chronic obstructive airways disease (COAD), cardiorespiratory TB and silicosis. The most challenging public health concerns are HIV/Aids, TB, hypertension and diabetes mellitus.

**VOLUNTARY COUNSELLING AND TESTING AND TB SCREENING**

In line with the Department of Health's strategic initiative to screen 90% of the population for TB and HIV, we have increased access to screening by introducing annual testing for all employees following certificate-of-fitness examinations. In all, 23,538 employees were offered VCT, of whom 8,505 were tested for HIV, while 47,465 employees and contractors were screened for TB. Employees diagnosed with communicable and non-communicable diseases are appropriately referred for further management in the Sibanye network.

**SHAFT CLINICS**

Recognising the shift in employees' residential preferences and the reduction in formalised hostel residents, we have improved access to quality healthcare by building five clinics close to the shafts. These clinics manage trauma, acute ailments and chronic diseases for all employees, and provide entry into the Sibanye Health network. Mining accidents are immediately assessed and referred to an appropriate facility of definitive care, which includes referral to Level 1 trauma units in the greater Johannesburg area and Bloemfontein.

**DISEASE AND CASE MANAGEMENT**

All employees suffering chronic diseases are registered and managed in terms of formalised disease-management programmes. In 2015, a total of 14,871 medical conditions were formally registered and managed in these programmes (including medical schemes), which ensure that employees are monitored objectively for adherence and compliance with evidence-based treatment protocols. A team of highly proficient case managers ensure that employees are referred and managed by the network specialists and provider hospitals.

**TB CARE**

The number of new TB cases declined in 2015 despite intensified case finding and the use of DNA molecular assay studies for diagnosis. Of significance is the reduction in multidrug-resistant TB (MDR-TB) strains from 34 cases in 2014 to 14 cases in 2015. This can be attributed, in part, to stricter controls in the TB programme. Primary MDR-TB, which accounts for around 50% of MDR cases, refers to infection of an individual with the resistant strain of TB, which can be contracted on mine and within communities. This provides a measure of the degree of transmission of the MDR-TB strain. Secondary MDR is resistant TB, which develops in patients previously treated for TB.

**TRAUMA CARE MANAGEMENT**

All employees are insured for work-related injuries and disease in terms of COIDA by Rand Mutual Assurance from the first day of the injury. We ensure that employees are appropriately triaged on scene and referred to a facility for definitive care. In this context, the majority of employees are referred to Level 1 or Level 2 trauma units.

**HIV CARE**

Early detection and management of employees affected with HIV and the suppression of viral replication remain the clinical end points of disease control. The new integrated health model allows patients to be assisted at numerous service points and, with almost 80% of employees managed on once-daily therapy, progress is being made in achieving the targets.

**OCCUPATIONAL HEALTH**

All employees undergo stringent medical testing annually as part of the medical-surveillance programme monitoring the health effects of hazards in the workplace.



## HEALTH AND SAFETY FOCUS CONTINUED

### KEY INDICATORS: HEALTH

	2015	2014	change	
Medical surveillance and certificate-of-fitness examinations:				
– Total	<b>84,022</b>	72,132	▲	16%
– Employees	<b>69,284</b>	63,338	▲	9%
– Contractors	<b>14,738</b>	8,744	▲	69%
VCT for HIV – employees and contractors	<b>8,505</b>	5,590	▲	52%
Percentage of employees and contractors who have undergone VCT	<b>18%</b>	13%	▲	38%
Number of cases of NIHL reported <sup>1</sup>	<b>105</b>	138	▼	(24%)
Number of cases of COAD reported <sup>2</sup>	<b>57</b>	45	▲	27%
Number of cases of silicosis reported <sup>3</sup>	<b>186</b>	264	▼	(30%)
Number of new and retreatment cases of cardiorespiratory TB	<b>679</b>	715	▼	(5%)
Number of new and retreatment cases of TB treated	<b>744</b>	832	▼	(11%)
Number of new cases of MDR-TB treated	<b>14</b>	34	▼	(59%)
Total number of new recipients of HAART <sup>4</sup> (Category 3-8) <sup>5</sup>	<b>875</b>	548	▲	60%
Total number of Category 3-8 employees on HAART	<b>5,023</b>	4,604	▲	9%
HAART patients alive and on treatment <sup>4</sup> (in active Sibanye employment)	<b>5,750</b>	5,283	▲	9%
Total number of employees leaving HAART programme <sup>6</sup>	<b>127</b>	57	▲	123%
Lost days due to health-related absenteeism <sup>7</sup>	<b>478,568</b>	414,424	▲	15%

<sup>1</sup> Diagnosis of NIHL is made on assessment of the percentage hearing loss from baseline audiograms, where NIHL is defined as a loss of hearing in excess of 10%, which manifests over a prolonged period after repeated exposure to noise levels in excess of 85dBA.

<sup>2</sup> COAD is characterised by chronically poor airflow, resulting in shortness of breath, coughing and sputum production. Long-term exposure to smoking, and particulates associated with air pollution and genetic predisposition cause an inflammatory response in the lungs, resulting in a narrowing of the small airways and breakdown of lung tissue known as emphysema or chronic bronchitis.

<sup>3</sup> Exposure to free silica (SiO<sub>2</sub>), also known as crystalline quartz, found across a broad range of industries, including mining, cement manufacturing and quarrying, reaches the small airways of the lungs and forms tiny nodules (pulmonary fibroses), resulting in the development of silicosis.

<sup>4</sup> Highly active antiretroviral treatment (HAART) refers to the combination of drugs used to suppress HIV (includes all employees).

<sup>5</sup> Entry level mining employees

<sup>6</sup> Number of employees leaving HAART within 12 months of ART initiation

<sup>7</sup> 2015 data includes Cooke Operations

### FUTURE FOCUS

There has been renewed emphasis on supervisor safety-awareness training to positively influence employees' behaviour so as to timeously and correctly identify and deal with risks as well as to ensure compliance with mine-safety standards. We need to ensure that our focus on preventing falls of ground, in particular, remains top of mind during all planning and auditing interventions, and during the daily execution of mining activities.

Our health strategy has been designed to achieve excellence, which is accessible, equitable and quality healthcare for all employees by 2017.

We will focus on improving efficiencies in our healthcare value chain in 2016 with the delivery of improved clinical outcomes and healthy, productive employees.

## PROGRESS HAS BEEN MADE IN REDUCING EXPOSURE TO SILICA DUST AND NOISE

- silicosis submissions declined to 4.91 per 1,000 (186 cases) versus 7.26 per 1,000 (264 cases) in 2014

- NIHL submissions declined to 2.82 per 1,000 (105 cases) versus 3.74 per 1,000 (138 cases) in 2014

