

Codes of practice for noise exposure and air pollutants are in place, which ensure monitoring of personal exposure limits. Where the occupational exposure limits are found to be excessive, measures are put in place to reduce these exposure limits.

### Highlights

#### Group

- ➔ Reduction of TB cases
- ➔ Increased voluntary counselling and testing of HIV/Aids
- ➔ Increased awareness of health-related lifestyle diseases

#### Barberton Mines

- ➔ Positive response to health and wellness programmes
- ➔ Fewer new HIV-positive cases
- ➔ Zero sporotrichosis cases

#### Evander Mines

- ➔ Reduction of hypertension and diabetes cases
- ➔ Improved training of occupational health staff members has led to improved identification, diagnosis and submission of noise-induced hearing loss cases

#### Phoenix Platinum

- ➔ No reports of occupational diseases from annual medical fitness tests

#### Uitkomst Colliery

- ➔ Integration of hygiene monitoring results with individual exposure and risk assessments

### Challenges

#### Group

- ➔ Managing TB and HIV/Aids across operations
- ➔ Managing lifestyle diseases despite awareness improvements
- ➔ Reducing noise-induced hearing loss cases

#### Barberton Mines

- ➔ Increasing cases of hypertension and diabetes
- ➔ Increasing cases of pulmonary TB
- ➔ Preventing any further noise-induced hearing loss cases and claims
- ➔ Achieving 100% voluntary counselling and testing for HIV/Aids

#### Evander Mines

- ➔ Increase in noise-induced hearing loss cases due to an improved diagnosis system in 2015
- ➔ Continuing to assess and reduce dust levels to prevent new silicosis cases
- ➔ Achieving 100% voluntary counselling and testing (VCT) for HIV/Aids

#### Phoenix Platinum

- ➔ Availability of drinking water within the area

#### Uitkomst Colliery

- ➔ Integration of the contractors' medical surveillance programmes with those of Uitkomst Colliery

### Looking ahead

#### Group

- ➔ Establishing a group health strategy within the next two years
- ➔ Reducing noise-induced hearing loss claims and cases

#### Barberton Mines

- ➔ Conducting 100% HIV testing each year
- ➔ Reducing pulmonary TB cases
- ➔ Preventing and controlling chronic diseases such as hypertension and diabetes
- ➔ Reducing noise-induced hearing loss claims and cases by addressing the basic causes

#### Evander Mines

- ➔ Reducing noise-induced hearing loss cases and dust exposure by addressing the causes
- ➔ Continuing health and wellness education and awareness initiatives

#### Phoenix Platinum

- ➔ Continuing health and wellness campaigns
- ➔ Improving drinking water supply and purification

#### Uitkomst Colliery

- ➔ Integrating contractors into the Uitkomst Colliery occupation health system



## Overview of progress

Our focus for 2016	What we achieved	Self-assessment
Continuing education and awareness initiatives	Ongoing at all operations	
Targeting a 10% increase in the uptake of voluntary counselling and testing	The group achieved a 4.9% increase in the uptake of voluntary counselling and testing	

We recognise that mining carries inherent health risks. Effectively managing associated conditions and diseases is a direct investment by the group in our people, and managing their health is in the interests of our long-term sustainability.

We assume full responsibility for providing a work environment that minimises risks by:

- Promoting work practices that are conducive to the long-term wellbeing of our employees
- Ensuring adequate surveillance of workplaces and employees
- Providing appropriate and adequate healthcare facilities and resources.

At all of our operations, occupational health and employee wellness includes the

management of the Big 6 diseases: HIV/Aids, TB, diabetes, hypertension, silicosis and noise-induced hearing loss (NIHL). Barberton Mines also focuses on a seventh disease – sporotrichosis<sup>1</sup>. The prevalence of these illnesses is monitored at operational level and reported to the board SHEQC sub-committee quarterly.

<sup>1</sup> Sporotrichosis is an infection caused by a fungus called *Sporothrix schenckii*

## Key performance indicators

Description	Barberton Mines		Evander Mines		Uitkomst Colliery		Group	
	2016	2015	2016	2015	2016	2015	2016	2015
<b>HIV/Aids</b>								
Total number of tests	654	484	1,672	1,744	190	171	2,516	2,399
Total positive	32	65	57	75	2	8	91	127
Total on treatment	5	20	45	32	20	18	70	70
<b>Tuberculosis (TB)</b>								
Total cases	50	43	57	95	2	1	109	139
<b>Diabetes</b>								
Total cases	17	13	7	12	2	2	26	27
<b>Hypertension</b>								
Total cases	264	146	32	42	16	17	312	205
<b>Silicosis</b>								
Suspected cases	0	0	9	23	0	0	9	23
Certified cases	0	0	22	19	0	0	22	19
<b>Noise-induced hearing loss</b>								
Submitted (>10% shifts)	8	5	15	6	1	0	24	11
Reportable (5% to 10% shifts)	12	10	44	16	0	0	56	26
<b>Sporotrichosis</b>								
Total cases	0	5	0	0	0	0	0	5

## Occupational hygiene monitoring

The nature of mining lends itself to various occupational hygiene hazards such as dust inhalation, excessive noise levels and thermal stress (heat). These occupational hygiene stressors are monitored by a qualified occupational hygienist and quarterly reports are submitted to the DMR. Each employee has an individual health risk profile. All operations' crystalline silica occupational exposure limits were below the legislative requirement of 0.05mg/m<sup>3</sup> for the year under review.

Noise, dust and thermal stress are closely monitored to provide a safe and healthy working environment for employees. If the working environment is deemed to be unsafe, work is halted immediately in terms of section 23 of the Mine Health and Safety Act 29 of 1996 as amended.

All employees are trained in the correct use of personal protective equipment (PPE). In areas where occupational exposure limits are above the required limits additional PPE is issued to ameliorate the exposure.

- **HIV/Aids:** We can beat HIV/Aids in our lifetime
- **Tuberculosis:** Is curable, no one deserves to die from it
- **Diabetes:** Lifestyle is a personal thing. Be responsible for your own health
- **Hypertension:** Can be a silent killer. Monitor your blood pressure
- **Silicosis:** It has no cure. Protect yourself from dust inhalation
- **Noise-induced hearing loss:** Protect your hearing

# Barberton Mines

## Overview of progress



Our focus for 2016	What we achieved	Self-assessment
Continuing health and wellness education and awareness initiatives	Two campaigns were held during the year in collaboration with the Department of Health that covered HIV/Aids and related diseases. Achieved the highest HIV testing rate to date (more than 700 employees) through the HIV/Aids campaign	

The operation has primary healthcare clinics at each mine, with the main occupational health facility located at Fairview Mine for the benefit of all employees. These facilities are staffed by 11 full-time employees and make use of an external medical practitioner and occupational health care specialist. Permanent category 4 – 8 employees at Barberton Mines are eligible for medical aid benefits. The mine contributes 60% of the respective membership contributions to this insurance. This enables employees and their families to also utilise local hospitals, which service the communities in which they live.

In addition to primary healthcare services, these clinics also provide HIV counselling and testing. To date, approximately 83% of the workforce has been counselled and tested and the retesting programme is well supported. HIV/Aids roadshows are conducted regularly and Barberton Mines collaborates with the local hospital and the regional government health department on HIV/Aids and TB initiatives.

Barberton Mines continued with an Influenza Day campaign during the year under review and flu vaccinations were offered to all employees free of charge. The occupational health facility at Fairview Mine conducts medical surveillance to assess fitness for work when employees return from leave.

A hearing conservation programme is in place and employees who are exposed to noise levels above 85db are issued with personalised noise clippers. All employees are trained in the use of hearing protection to reduce exposure levels. Employees undergo a heat tolerance test to acclimatise with hot conditions underground. Employees are provided with energy supplements on a daily basis.

### The Big 7 health-related risks

The occupational health services focus on the Big 7 health and wellness statistics, which are tabled on page 2. These statistics are reported to management on a monthly basis and also discussed during the board SHEQC sub-committee meeting on a quarterly basis, to measure performance and identify areas that require action. During the year under review there were no new cases of sporotrichosis that were reported. There was a reduction in the group TB cases. A significant increase has been noticed in the participation of HIV/Aids counselling and testing programmes, due to regular campaigns being conducted. Lifestyle disease (diabetes and hypertension) remains a challenge and educational programmes have been implemented to address the shortcomings.

Barberton Mines provides support to local clinics, the local HIV/Aids Council and local community health and wellness initiatives with funding.

During the year, Barberton Mines was subjected to two DMR health audits. No material concerns were raised by the DMR in any of these audits.

### Occupational hygiene

Occupational hygiene monitoring programmes are ongoing at each operation, to further identify health-related risks to which employees are exposed. Occupational hygiene reports are submitted to the DMR on a quarterly basis. All employees are trained on health-related risk and preventative measures to prevent over-exposure levels.



# Evander Mines

## Overview of progress



Our focus for 2016	What we achieved	Self-assessment
Continuing education and awareness initiatives	Through our health educator, we are providing monthly health education. This includes the Cancer Month in October and the World AIDS Day in December	

The Evander Health Hub (the Hub) is situated at 8 Shaft and operates on a 24/7 basis to provide medical treatment to our employees. A major benefit for employees and management relating to the on-site Hub is that the issuing of chronic medicine is controlled and that the Hub also monitors the compliance to consumption thereof.

The Hub is managed by a full-time medical doctor with a wellness team of 25 staff.

As part of social responsibility, the wellness team provides services to informal settlements surrounding the mine by providing health education and distributing condoms on a monthly basis.

Evander Mines' HIV/Aids and TB policy is aligned with the group's SHEQC policy. A quarterly voluntary counselling and testing (VCT) programme forms part of the mines' medical surveillance programme. All employees who volunteer to be tested are counselled.

The focus to encourage employees who have not been tested previously to join the programme is ongoing. An anti-retroviral therapy (ART) programme is in place and available for all HIV-positive employees.

### The Big 6 health-related risks

A risk-based medical surveillance programme for both work and health-related risks is in place for all employees. The Big 6 health-related risks are tabled on page 2 and are reported to management on a monthly and quarterly basis, to measure performance and identify areas that require action. All employees are screened for TB. Those who are considered at high risk, such as those who are HIV positive, are treated with preventative isoniazid prophylaxis. Employees diagnosed with TB receive intensive treatment. Although there was a decrease in the incidence of TB infection, TB/HIV co-infection still remains a challenge, as most employees who have TB have HIV/Aids. There has been a marked reduction in TB-related deaths in that there were only three in 2016 as compared to seven in 2015.

Employees are also screened for silicosis, diabetes and hypertension as part of the medical surveillance programme. All suspected silicosis cases are reported to the Medical Bureau for Occupational Diseases (the Bureau). There was a marked improvement in pay-outs due, as the Bureau's administrative backlog continues to be rectified. Evander Mines has implemented a watering down campaign to reduce dust levels. An improvement in dust levels has been noted during the year under review.

Lifestyle disease (diabetes and hypertension) forms part of the annual medical examination, in order to diagnose such diseases and address them at an early stage. All employees are encouraged to use their chronic medication.

Noise-induced hearing loss cases with shifts greater than 10% are submitted to Rand Mutual Assurance for processing, evaluation and consideration for compensation.

# Phoenix Platinum

## Overview of progress

Our focus for 2016	What we achieved	Self-assessment
Continuing health and wellness education and awareness initiatives	A health and wellness session was held	

All employees have access to medical and healthcare services. This includes pre- and post-employment screening of noise-induced hearing loss and silicosis.

The quality of drinking water is regularly monitored through the water purification system.

An annual wellness campaign promoting health awareness was held for all employees. This includes voluntary testing for HIV/Aids, hypertension, cholesterol and Body Mass Index (BMI). The results of the past two years are tabled below.

Health screening	2016	2015
Campaign participants including contractors	73	75
HIV prevalence (% of participants)	6.85	8.0
Hypertension and cholesterol prevalence (% of participants)	4.11	2.67
High BMI (% of participants)	10.96	10.81

The HIV prevalence participation rate of 6.85% is below the national average of 15.9%. The hypertension and cholesterol prevalence increased but we continued with education and treatment. The BMI remained relatively static, which demonstrates that employees are more aware of eating healthier due to these health awareness campaigns.

# Uitkomst Colliery

## Overview of performance

Uitkomst Colliery provides medical surveillance and primary healthcare services. The health hub is managed by a registered nurse and a doctor visits the clinic on an ad hoc basis. The health report is submitted to the DMR on an annual basis.

