Obuasi, Ghana

Regional health

1. Key issues at a glance

Planning for and managing the social and economic impact on the company and the communities in which we operate. Key areas that we have identified are:

- HIV/AIDS, particularly in Southern Africa
- Malaria, particularly in West Africa
- Cholera, which is endemic in Guinea
- The global threat of avian flu

Contents

2. Living our values

AngloGold Ashanti's regional health management practices and policies are guided by the group's business principle, 'AngloGold Ashanti as an employer – labour practices', the last point of which is relevant to regional health threats:

We are committed to prompt and supportive action in response to any major health threats in the regions in which we operate.

3. Our scorecard

Objectives for 2007	Performance in 2007	Achieved or not achieved	The next steps
HIV/AIDS			
VCT uptake of 60% at all business units in South Africa.	VCT uptake of 102% amongst the South African workforce (assuming single testing).	Achieved	As VCT needs to be undertaken on a regular basis, we will continue with our efforts to promote VCT.
Rate of 1 peer educator to 50 employees at all business units in South Africa.	Rate of 1 peer educator per 52 employees for the SA region as a whole	Partially achieved	Adequate number of peer educators have been procured; now the challenge is to use them more efficiently.
25% increase in Wellness Clinic patients.	Net total of 4,610 patients enrolled in Wellness Programme, an increase of 29%.	Achieved	Increasing access to and use of Wellness Programme remains a priority.
25% increase in patients on ART.	Cumulative total of 2,061 patients on ART, an increase of 40%.	Achieved	Provision of ART to, and retention on ART of, infected employees will remain an important area of work.
Malaria			
Implement integrated malaria control programme at Geita.	Progress has been made as plans for the programme have been put in place, including liaison with local government officials, training of spray operators and a first round of spraying (mine village and infrastructure) has been completed.	Partially achieved	Programme to be fully implemented in 2008.
Obtain approval for funding of control programmes at Siguiri and Iduapriem.	Funds for 2008 programme have been allocated. Initial work started at Iduapriem and Siguiri with studies of the regional vectors completed.	Achieved	Further implementation of the programme is planned for 2008.
Achieve a further reduction in malaria incidence of 25% at Obuasi and achieve community parasite prevalence of less than 50% in all samples.	A further 62% reduction in the malaria incidence rate at Obuasi was achieved, indicating a 74% reduction in malaria incidence rate since the implementation of the programme in 2006. The 2007 Obuasi study showed a community parasite prevalence of 18% to19% in all samples, a reduction in malaria parasitemia of 57% compared with that of 2006.	Achieved	Continued implementation of the programme is planned in 2008.

4. Review of the year

Introduction

Inherent in our core values and business principles is a commitment, on the part of AngloGold Ashanti as an employer, to ease the burden for employees in the face of debilitating regional health threats and to ensure that the resulting impact on the company is addressed.

During the year under review four regional health threats have been identified, unchanged from 2007. They are:

- the management of HIV/AIDS, which is primarily an issue in southern Africa;
- the management of malaria, which is primarily an issue in West Africa;
- assistance with the prevention of cholera, which is endemic in Guinea; and
- the potential threat of avian flu at any operations.

Management of regional health threats

The management of HIV/AIDS and malaria is undertaken directly at an operational level between mine management and the occupational health and healthcare service professionals contracted to perform these tasks. The exact nature of the services provided differs from site to site, depending on specific circumstances and requirements. Further details are provided below and in the operation- and country-specific reports available at *www.aga-reports.com*.

Experts within the company, such as James Steele who heads the HIV/AIDS programme in South Africa, and Steve Knowles, who manages the malaria programme at Obuasi, provide guidance to other operations as this is required.

Iduapriem, Ghana

Regional health continued

Home-based care, West Wits, South Africa

The company's response to HIV/AIDS in South Africa, where the disease is of pandemic proportions, is underpinned by the company's Board-approved HIV/AIDS policy, and supported by an HIV/AIDS agreement between the company and various unions. Arrangements at an operational level provide for joint management/union HIV/AIDS committees that oversee the mine-based programmes.

In South Africa, oversight and implementation of the HIV/AIDS programmes is undertaken by AngloGold Ashanti Health, a wholly-owned subsidiary of AngloGold Ashanti, in association with the business units and their HIV/AIDS committees.

HIV/AIDS and malaria programme performance and statistics are reported to the regional management of AngloGold Ashanti on a monthly basis and to the Safety, Health and Sustainable Development Committee of the Board every quarter. The issues are also considered during the company's risk management process.

During the year, the company's group internal audit, in conjunction with an external consultant, developed plans and a toolkit to manage and ensure the continuity of business operations in the event of a catastrophe with a long-term outlook such as an influenza pandemic. In 2006, the potential for avian flu was considered by a group task force in the light of the World Health Organization's positioning of such an outbreak as a serious global health threat.

A formal plan or code of practice is being developed for each site and a number of simulation exercises have been undertaken. The exercise has proved to be very useful: AngloGold Ashanti's operations have a track record in managing immediate crises, but have had less experience in managing those of a longer-term nature. (*See the case study in the Report to Society 2006 AngloGold Ashanti establishes avian flu task force at www.aga-reports.com/06/avian-flu.htm and Business continuity management – an update at www.aga-reports/06/BCM.htm*).

AngloGold Ashanti recognised for its contribution in the fields of malaria, HIV/AIDS and TB control

In 2007 AngloGold Ashanti was recognised by a number of independent entities, NGOs and conferences for its work in delivering sustainable healthcare solutions in the communities in which it operates.

- In June 2007, the Global Business Coalition on HIV/AIDS, Tuberculosis and Malaria (GBC) identified the AngloGold Ashanti Obuasi Malaria Control Programme as a global example of excellence in the private sector's response to these three pandemics. Founded in 2001, the GBC is the private sector arm of the Global Fund and has spent the past six years developing a rapidly expanding alliance of over 200 international companies dedicated to combating these epidemics through the business sector's unique skills and expertise. Headquartered in New York, GBC maintains regional offices in Beijing, Geneva, Johannesburg, Nairobi, and Paris; it harnesses the individual and collective power of the world's top corporations to fight AIDS, TB and malaria at the local, national, and international levels.
- AngloGold Ashanti also won three awards in the second annual ABSA Healthcare Initiative Awards held in August 2007, a part of the Pan African Health Congress, for its integrated HIV/AIDS and Tuberculosis Control Programmes in South Africa, and for its Malaria Control Programmes in its operations in East and West Africa winning in the category of Listed Company/Multinational Organisation/Hospital Group, as well as the Most Sustainable Project award and the award for Project with the Biggest Impact.

Performance for the year

HIV/AIDS

Prevalence estimates

HIV/AIDS remains an issue of concern in the African countries in which we operate, with the most significant affected areas in Sub-Saharan Africa. Generally, the estimated prevalence levels at our operations are in line with similar demographically segmented portions (that is, predominantly males of working age) in the general population.

It is estimated that the HIV/AIDS prevalence levels amongst employees at the South African operations in 2007 remained stable, at around 30% of the workforce.

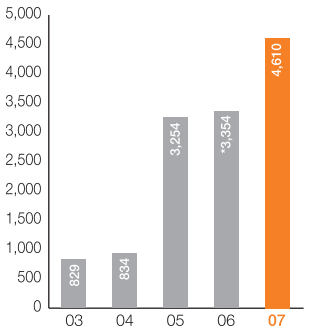
Prevalence levels are estimated at around 8% at Navachab in Namibia, at between 15% and 20% at Geita in Tanzania, at between 3% and 4% at Sadiola/Yatela and Morila in Mali, at 3% in Ghana, and at 4.5% at Siguiri in Guinea. While the prevalence level at Geita is far higher than the estimated Tanzanian national average of around 9%, the prevalence rate at the mine is consistent with the level in Mwanza Province in which the mine is located. The same applies to Siguiri mine in Guinea, where the prevalence level in the province and at the mine is higher than the national prevalence level of 1.5%.

AngloGold Ashanti programme

The group's HIV/AIDS programme in South Africa is the most comprehensive as this is where the disease has had its greatest impact and, additionally, where the company has the greatest number of employees. For this reason, the performance that is covered below relates primarily to the South African operations.

Regional health continued

Wellness clinic participation (cumulative) (South Africa)



**Restated due to a transition from an external database to an internal database.*

The key objectives of the group programme are: minimising the risk of HIV/AIDS to the company and its employees by reducing and ultimately eliminating new infections; efficiently managing those infected; and supporting those with advanced AIDS.

AngloGold Ashanti's HIV/AIDS programme is grouped into three areas:

- prevention of HIV, through various workplace initiatives, including Voluntary Counselling and Testing (VCT);
- treatment programmes, which comprise the clinical care of those infected by the virus, including the use of anti-retroviral therapy (ART); and
- support for the AIDS-ill requiring separation from the company and palliative care, including support for various community initiatives.

Prevention	Treatment	Support
■ AIDS co-ordinators ■ AIDS committees ■ Induction training ■ Peer education ■ Awareness campaigns ■ Information sessions ■ Condom distribution ■ Treatment of STIs ■ Commercial sex worker treatment ■ VCT	■ Integrated healthcare provision – primary, secondary and tertiary ■ Primary health care clinics ■ Wellness clinics ■ Treatment of opportunistic infections ■ ART	■ Engagement with NGOs and community ■ Home-based care ■ Projects supported through corporate social investment initiatives

Prevention:

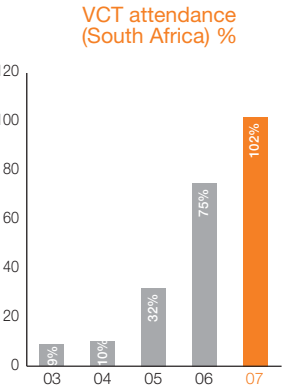
Extensive education and awareness programmes are in place at various operations in an effort to halt the spread of the disease and to reduce and eliminate the stigma associated with it. (*See case study on the success in recruiting peer educators at Great Noligwa mine in South Africa at www.aga-reports.com/07/Great-Noligwa-peer.htm and the launch of the HIV/AIDS programme at Iduapriem at www-aga-reports.com/07/Iduapriem-HIV.htm*).

Voluntary Counselling and Testing (VCT) forms a cornerstone of every HIV/AIDS programme and is available, directly or through nearby facilities, at every operation. All our African operations encourage VCT in a strictly controlled anonymous environment that provides not only for further options in terms of treatment but guarantees confidentiality and support by the company.

A great deal of emphasis is placed on VCT at the South African operations, with VCT targets being an important part of performance management at senior levels. In 2007, 33,435 VCT encounters were recorded and, assuming single testing, this represents around 102% of the South African workforce (2006: 75%). Of those tested, 65% have had a single test during the year, while 35% had two or more tests. Of those tested during the year, 20% were HIV-positive and 80% HIV-negative.

At a number of the African operations outside of South Africa VCT is undertaken by third parties (such as state hospitals or jointly-funded centres). Not all the statistics are available to the company and hence cannot be meaningfully reported. At some operations, where VCT is offered to dependents and community members, statistics are captured for all VCT encounters and not for employees alone.

Two significant achievements during the year were the successes achieved in promoting VCT: at Siguiri mine in Guinea more than 1,000 community members participated in VCT during the year; similarly, at Iduapriem in Ghana, a new state/mine partnership saw the rapid growth in VCT in the second half of the year, with 41% of employees participating in a programme that was also extended to dependents and contractors.



Wellness programme

In line with the significant increase in VCT in South Africa, so there has been a similar rise in the participation in the wellness programme – as those who have tested positive are persuaded to understand and manage their health.

At the end of December 2007, there were a cumulative 4,610 participants in the wellness programme, with 1,182 people joining the programme for the first time. The comparative figures for the end of 2006 were a cumulative total of 3,554 patients, with 1,252 new enrolments during the year.

Anti-retroviral therapy

Anti-retroviral therapy (ART) is available to all employees at the African operations either directly from company facilities (South African operations, Navachab in Namibia, Obuasi in Ghana, Siguiri in Guinea), through company sponsored or funded facilities (such as Iduapriem in Ghana, Geita in Tanzania, and Morila in Mali) or through state facilities (Sadiola/Yatela in Mali).

In South Africa, a cumulative net total of 2,061 employees are being provided with ART, through AngloGold Ashanti Health in West Wits and Vaal River. A total of 189 patients previously receiving ART withdrew from the programme for a variety of reasons, including poor adherence, retirement, resignation and death. In 70% of these cases ART was no longer considered to be medically indicated for a variety of reasons. It should be noted that in South Africa ART is provided by the state and efforts are made to support the transition by referring employees on ART to state-run facilities. In 2006, the corresponding statistics were 1,467 patients on ART, with 617 new patients during the year.

Home-based care, West Wits, South Africa

Economic benefits of ART

In 2002, AngloGold Ashanti took a decision to provide ART to employees where this was medically indicated, in advance of the state-provided ART programme that followed in 2004. At that time the company was faced with either introducing what was deemed to be a high-cost intervention (in the form of ART) or face the reality of rising death rates (peaking at 14 people per 1,000 employees in 2004) and consequent impact on the company, employees and their communities. The loss of a breadwinner in the South African context could have an impact on more than 10 people, very often in rural and poverty-stricken areas of Southern Africa.

Over the past five years, however, drug access and affordability have improved and the cost implications have not been as significant as had originally been envisaged. Interventions with ART have increased both the physical and economic lifespan of those affected, and limited the social consequences associated with the loss of a breadwinner. In addition, outcomes to date indicate improved levels of absenteeism of affected individuals, lower costs of medical care and lower than expected recruitment costs.

Medical separation

In total, 763 employees in South Africa left the employment of the company as a result of ill-health in 2007. Although not all of these separations were as a result of AIDS it is likely that this was the reason behind some of the ill-health formal medical separations. In 2006, this figure was 993.

Deaths

Approximately 285 people died because of illness while in the service of the company in South Africa in 2007 (2006: 305 people). It is estimated that AIDS was one of the main courses of these deaths. This figure has declined, largely as a result of the provision of ART. Statistics for operations outside of South Africa are not disclosed for reasons of confidentiality as the numbers are so low.

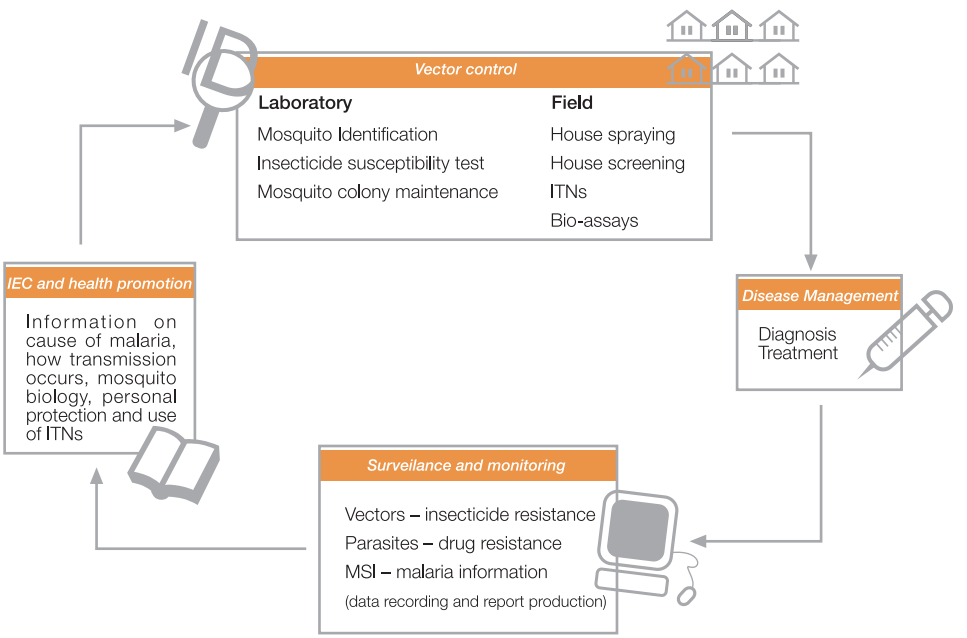
Costs

Total expenditure on the company's HIV/AIDS programme in South Africa amounted to approximately R25.15 million in 2007 ($3.6 million) (2006: R21.5 million). This excludes medical care (for example admissions for opportunistic infections) and other costs associated with ill-health retirement, recruitment, training and productivity losses.

Malaria

Malaria remains an area of concern for AngloGold Ashanti's operations in Ghana, Guinea, Mali and Tanzania. Not only does the disease result in death, illness and absenteeism amongst employees, but the disease is a major cause of death in young children and pregnant women, with an obvious impact on employees' families and communities.

Key elements of the malaria control programme are depicted in the diagram below:



An extensive malaria programme is in place at Obuasi and the lessons learnt here are being applied elsewhere (*See case study Lessons learnt at Obuasi to lead other programmes at www.aga-reports.com/07/malaria-Obuasi.htm)*. Malaria rates have declined consistently over the past three years – from 25% in the first quarter of 2005, to 15% in the first quarter of 2006 and then again to 7% in the first quarter of 2007. Because of seasonal changes in malaria incidence, it is appropriate to compare quarterly rates.

In 2007 the programme was audited by The National Institute of Communicable Diseases (South Africa) and the Noguchi Institute of Ghana, with an overall score of 95%.

A revised integrated malaria control programme was launched at Geita in Tanzania in September 2007, with indoor residual spraying of the Mchaura staff village and all mine vehicles. Spraying is being extended to Geita Town (a population of around 140,000 people) in 2008.

Work began during the year on the development of an integrated campaign at Siguiri in Guinea, modelled on the programme at Obuasi. A Professor Richard Hunt of the University of the Witwatersrand's Department of Entomology, undertook a survey at the mine to identify the malaria vector (carrier) mosquito in the region, and possible insecticide resistance by these vectors. This has provided valuable insight into the malaria programme planned for 2008. (*See case study on Study on Siguiri mosquitoes to inform malaria programme at www.aga-reports.com/07/Siguiri-malaria.htm*).

In addition to monitoring the incidence of malaria (that is known and diagnosed), the company has developed a malaria lost-time injury frequency rate (MLTIFR). This is expressed as the number of cases (incidents) due to malaria for every million man-hours worked, and allows the rate to be compared with the conventional LTIFR.

Malaria programme, Obuasi, Ghana

Incidence

The incidence of malaria has continued to decline at Obuasi in Ghana following the third year of the integrated malaria control campaign, from 164 per 1,000 employees in 2006 to 61 in 2007.

At Iduapriem, the incidence of malaria decreased from 8.6% to 7.8% during the year. At Morila mine in Mali, the malaria incidence remained unchanged at around 2%.

4. Case studies

In this report

The following case study is presented in this report.

- **TB control at AngloGold Ashanti Health** – applying best practice – page 126.

On our website:

The following case studies are presented on our website at *www.aga-reports.com/07/case-studies.htm* or at the urls listed under each heading.

Ghana

- **Obuasi malaria control programme: a model for Africa** – The most significant public health threat to AngloGold Ashanti's operations in West Africa, malaria, resulted in the development of the integrated malaria control programme at Obuasi Mine in Ghana in 2006. In September 2007, the success of the programme saw a 74% decline in reported malaria cases since January 2005. The incorporation of various elements in the programme has ensured an integrated approach and the reception of international recognition. *See case study at www.aga-reports.com/07/malaria-Obuasi.htm*

Malaria programme, Obuasi, Ghana

- **Iduapriem launches VCT programme** – August 2007 saw the successful launch of a voluntary counselling and testing (VCT) programme at Iduapriem mine in Ghana. The VCT programme has improved knowledge of, as well as the attitude towards, HIV and AIDS, with 461 employees, contractors, and community members being tested in the first month alone. Treatment of HIV and AIDS has also been greatly assisted by the programme. *See case study at www.aga-reports.com/07/Iduapriem-HIV.htm*

Guinea

- **Study of Siguiri mosquitoes to inform malaria programme** – A survey to identify the malaria carrier mosquito in the region of AngloGold Ashanti's Siguiri mine in Guinea was undertaken during the course of 2007. Professor Richard Hunt of the University of the Witwatersrand's Department of Entomology explored the reasons for the prevalence of malaria in the area, and suggested valuable solutions to combat this fatal disease. A malaria control plan will be established that will positively impact both the mine and the surrounding community. *See case study at www.aga-reports.com/07/Siguiri-malaria.htm*

South Africa

- **Success in recruiting peer educators at Great Noligwa mine** – AngloGold Ashanti has recognised the invaluable contribution of peer education in generating awareness, providing a forum for the discussion of key issues, and imparting information on the prevention and treatment of HIV and AIDS. A peer education programme has been established at Great Noligwa mine, South Africa, with excellent results. Careful management and innovative drives are sure to guarantee the project's continued success in 2008. *See case study at www.aga-reports.com/07/Great-Noligwa-peer.htm*

5. Objectives

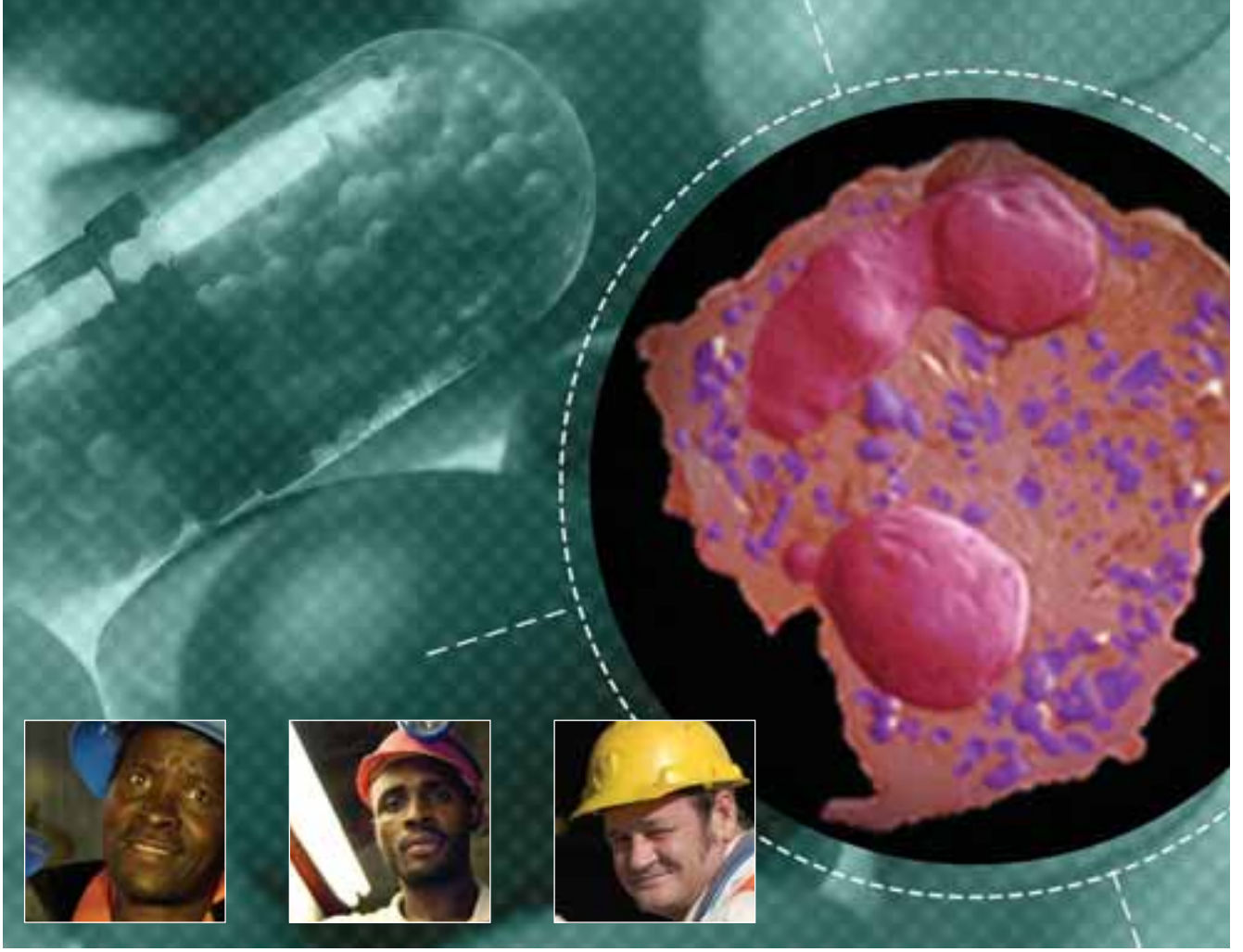
The following objectives have been set for 2008

HIV/AIDS

- To increase VCT uptake at all African operations and to achieve an 80% uptake at all business units in South Africa.
- To recruit and train additional peer educators and to achieve a rate of one peer educator per 50 employees in South Africa.
- To increase the ratio of employees registered at the Wellness Clinics to at least 60% of those estimated to be infected with HIV.
- To increase the ratio of employees on ART to at least 90% of those in whom it is clinically indicated.

Malaria

- To implement integrated malaria control programmes at Geita, Siguiri and Iduapriem.
- To achieve further reduction in malaria incidence at Obuasi and Sadiola/Yatela.



Case study: TB control at AngloGold Ashanti Health – applying best practice

Taking into account that South Africa has one of the highest prevalence rates of HIV infection in the world, and is positioned seventh of the countries with the highest burden of tuberculosis (TB), it is not surprising that the South African gold mining industry, with risk factors of high HIV prevalence of about 30%, and the additive effect of occupational exposure to silica dust, has probably the highest known incidence of TB in the world. A well-managed and effective TB control programme is essential in such a setting and AngloGold Ashanti Health (AGA Health) has in place such a programme, which is nationally and internationally recognised for its effectiveness and sustainability.

The underpinning principles of the TB programme involve the incorporation of recommendations from the World Health Organisation (WHO), the South African National TB Control Programme guidelines, and the Guidelines for TB Control Programmes in the Mining Industry issued by the South African Department of Mineral and Energy Affairs. Compliance with the Occupational Diseases in Mines and Works Act, the Compensation for Occupational Injuries and Disease Act, the Mine Health and Safety Act, and the National Health Act of South Africa are built into the programme.

TB control programmes in high incidence settings should include proactively finding, rapidly identifying and diagnosing infectious cases, access to rapid bacteriological methods for culture, identification and drug sensitivity testing for TB bacteria, and provision for the rapid institution of appropriate therapy with quality drugs. In addition, the isolation of infectious cases, the administration of treatment via directly observed

supervision, and the confirmation of a bacteriological cure at the end of treatment are essential components. No programme can claim success without an adequate quality assurance and audit trail of how the programme functions. Lastly in the setting of high-HIV prevalence, no TB programme will be successful without an equally effective HIV programme administering active anti-retroviral therapy (ART) to those patients in need.

Each element above is in place in the AGA Health TB programme. Active case finding is supported by the twice-yearly occupational health chest x-ray screening of all employees working underground and in other 'dusty risk work' positions. The installation of digital x-ray technology at the Occupational Health Centre and the commissioning of two mobile digital x-ray units have improved the early detection of pulmonary disease. Symptom screening of patients at every health care contact, that is, asking direct questions about the presence of coughing for more than two weeks, night sweats and weight loss, facilitates the earlier identification of possible TB suspects, and their diagnosis and treatment.

A modern TB laboratory situated at the Vaal River operation's West Vaal Hospital processes the sputum microscopy and culture essential for the bacteriological confirmation of diagnosis and, on completion of the treatment, confirmation of the cure for Pulmonary TB (PTB) cases.

Quality combination drug therapy is started as soon as the diagnosis for PTB or other forms of TB is confirmed. Patients are educated about their condition and on the need to take their treatment properly for the entire duration of the treatment programme – six months for new cases and eight months for re-treatment cases. Directly Observed Therapy (DOT) is the strategy applied to the administration of TB treatment and involves the daily supervised administration of therapy either at one of the health care facilities or by a treatment supervisor. The underlying principle is that every daily dose of medication is seen to be swallowed. Using combination-drug therapy ensures that the patient receives all four drugs required for optimal therapy, combined in one tablet formulation.

Regular quality assurance, quarterly data analysis, and annual audits of the standard operating procedures applicable to all aspects of the TB programme ensure that the success or failure of the programme can be evaluated to optimise effectiveness. Benchmarking standards for TB control programmes are identified by both the WHO and the South African National TB Control Programme and have been met or bettered by the AGA Health TB control programme since 2001 on a quarter-by-quarter basis for both case-finding and successful outcomes.

Patients who have TB need to know their HIV status as each condition has an aggravating effect on the other. For TB patients who are co-infected with HIV, there is a need for proper assessment and the timely introduction of Highly Active ART. Improved outcomes, reduced mortality, more rapid return to health and earlier return to work are achieved by treating both conditions effectively. Yet despite these facts, there is still reluctance on the part of some TB patients to be tested for HIV, and they miss out on the synergistic benefits of treatment for both conditions.

For patients who have completed their TB therapy for occupationally related TB, a compensation medical examination is performed approximately six months after the completion date. Those patients considered to be suffering from disability as a result of TB infection are referred to the Medical Bureau for Occupational Diseases (MBOD) for assessment of compensation.

Case study: TB control at AngloGold Ashanti Health – applying best practice continued

Despite an effective TB programme, wherever TB exists and is treated there is always a risk of patients developing multi-drug resistant TB (MDR-TB). Approximately 4% of the total AGA Health TB cohort develops MDR-TB which on review is fairly evenly split between new TB cases and re-treatment cases. With the possibility of MDR-TB being spread from one patient to another, especially in the setting of high HIV prevalence, a MDR-TB unit was established at the West Vaal Hospital in late 2003 where patients are housed in an airborne infection isolation unit that can take up to 25 patients at a time. As MDR-TB carries a higher mortality and is more difficult and costly to treat, these patients spend prolonged periods of time in hospital, with the average stay being more than six months.

Unfortunately the clinical condition of some patients does not improve despite the use of MDR-TB treatment, as the TB bacteria develop progressive resistance to the MDR-TB drugs. This results in the development of extremely drug resistant TB (XDR-TB) a condition for which there are very few drugs currently available for treatment. XDR-TB carries a very high mortality and has been recognised within the AGA Health MDR-TB cohort of the AGA Health TB programme. Research into the genetic mechanisms of TB resistance is currently underway with the Division of Molecular Biology and Human Genetics at the University of Stellenbosch.

Both the AGA Health TB and HIV wellness programmes in South Africa, and the malaria programme for West and East Africa, were recognised in September 2007 at the ABSA Health Care Initiative Awards, which formed part of the Pan African Health Care Congress. Both programmes were winners in the category 'Listed Company/Multinational Organisation/Hospital Group', with AngloGold Ashanti also receiving the 'Most Sustainable Project and the Project with the Biggest Impact'.

MDR-TB and XDR-TB

Multi-Drug Resistant TB (MDR-TB) and Extensively (or Extremely) Drug Resistant TB (XDR-TB) are not new diseases. MDR-TB occurs when the TB organism demonstrates resistance to at least Isoniazid and Rifampicin, two of the most effective first line anti-TB drugs available, while XDR-TB is diagnosed when the TB organism demonstrates resistance to one of the second line injectable drugs (Kanamycin, Amikacin, or Capreomycin) and to the Fluoroquinolones.

MDR-TB occurs in 102 of the 109 countries that report TB statistics to the WHO. The WHO estimates that 424,203 MDR-TB cases were detected in 2004, representing 4.3% of all new and previously treated TB cases. More than half of these were in China and India, while the highest estimated prevalence was in countries of the former Soviet Union and certain provinces of China. This represents a 55% increase over the estimates for 2000.

Resistance to the two first line drugs has been around ever since these medicines were first used as treatment for TB and reflects the ability of the organism to develop resistance to antibiotics. Cases of chronic non-responsive tuberculosis were identified in the 1980s and MDR-TB had been classified by 1988. Similarly, cases of XDR-TB have also been identified in the past 20 years as resistance developed to the second line drugs. AGA Health diagnosed its first case of XDR-TB in 1988 and labelled it chronic non-responsive tuberculosis but it has only been classified in the past four years or so and was only described in terms of the current definition by the WHO in October 2006. The recent rise to prominence of MDR-TB and XDR-TB is a result of the significant increases in such cases, largely as a result firstly of drug-sensitivity testing which has allowed the medical fraternity to identify them, and also as a consequence of the HIV epidemic which promotes the rapid spread of TB.