

# **THE MINING SECTOR, TUBERCULOSIS AND MIGRANT LABOUR IN SOUTHERN AFRICA**

*Policy and Programmatic Interventions for the Cross-Border Control of Tuberculosis between Lesotho and South Africa, Focusing on Miners, Ex-Miners and Their Families*

**AIDS and Rights Alliance for Southern Africa**

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For further information about the organization that sponsored this meeting, please see:

AIDS and Rights Alliance for Southern Africa: [www.arasa.info](http://www.arasa.info)

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### ***Policy and Programmatic Interventions for the Cross-Border Control of Tuberculosis between Lesotho and South Africa, Focusing on Miners, Ex-Miners and Their Families***

The mining community has long been associated with an exceptionally high prevalence of various lung diseases. TB rates, in particular, are very high partly as a result of the high prevalence of silicosis resulting from prolonged exposure to silica dust in mine shafts – especially on gold mines. High rates of HIV transmission and confined, humid, poorly ventilated working and living conditions further increase the risk of TB among mine workers. The South African government estimates that the TB incidence rates on gold mines are probably the highest in the world.<sup>1</sup>

The TB burden on South African mines has had a noticeable impact on neighbouring countries as a result of migrant labour. This is particularly problematic in Lesotho, which is entirely surrounded by South Africa (SA) and hence economically dependent, to a large extent, on the export of migrant labour to SA. Lesotho contributes more than 50,000 migrant workers to the South African mining industry. In fact, a recent study by Girdler-Brown et al<sup>2</sup> shows a heavy burden of silicosis, tuberculosis and chronic obstructive pulmonary disease in former Basotho gold miners.

Lesotho has the fourth highest TB incidence rate in the world, and tuberculosis is responsible for 15% of all deaths in the country. The relationship between the South African mining sector and the TB epidemic in Lesotho is unambiguous – a recent study showed that close to 40% of adult male TB patients in three of Maseru's main hospitals were working, or had formerly worked, on South African mines. Furthermore, at least 25% of the drug-resistant TB cases treated in Lesotho since August 2007 had a history of mines work or were referred directly from mines in SA. It is clear that the public health threat of TB in Lesotho cannot be adequately addressed without dealing with the issues around TB control in migrant Basotho miners and their families – on the mines in SA, across the border, and in their communities in Lesotho.

Cross-border management of TB involves special policy and programmatic considerations, which must be collaboratively determined and implemented by stakeholders in both countries. To date, there has been no coordinated action between Lesotho and South Africa on this issue. This has resulted in exacerbation of the TB crisis in Lesotho, lack of accountability of the South African mines in sharing the burden of this crisis, and serious weaknesses in the separate systems that seek to address TB in miners in both countries. Above all, it has contributed to the unnecessary loss of lives.

To discuss these issues and develop a plan for a comprehensive response to the problem, the AIDS and Rights Alliance for Southern Africa (ARASA) identified and brought together key stakeholders and experts in Johannesburg, South Africa, in May 2008.

Meeting participants included government officials from both countries; healthcare workers from Lesotho; members of the national union of mineworkers; representatives from non-governmental

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<sup>1</sup> Department of Health, Tuberculosis Strategic Plan for South Africa 2007 – 2011 (2007)

<sup>2</sup> Girdler-Brown BV et al, The Burden of Silicosis, Pulmonary Tuberculosis and COPD Among Former Basotho Goldminers, Am. J. Ind. Med. (19 June 2008)

organizations with expertise in migration, labour, public health, miners and human rights; HIV/AIDS and TB programme officials from the mining sector; activists; researchers; and representatives from international agencies and institutions working on TB/HIV.

The objective of the meeting was to develop specific programmatic and policy interventions to address cross-border issues in prevention, diagnosis and treatment of TB between Lesotho and South Africa, particularly focused on miners, ex-miners and their families.

After the first session during which overviews of the situation were presented, participants were broken up into four groups to develop prioritized work plans outlining their key recommendations for each of the identified thematic areas, which are listed on the next page. ARASA is committed to advocating for all of these recommendations, which are presented in the remainder of this report, and will continue to work with meeting participants and other government, civil society and mining sector institutions, both in Lesotho and South Africa, to ensure that the cross-border response to TB in migrant Basotho miners upholds their right to health, justice and quality of life. However, we believe the primary responsibility to miners, ex-miners and their families resides with the mining companies and the governments in both countries and any failure to protect and fulfil their rights should be laid at their feet alone.

**Key priority areas for improving the cross-border control of TB in migrant miners and their families:**

1. Establishing better systems for the prevention, diagnosis and treatment of TB, silicosis and HIV for miners, ex-miners and their families in Lesotho and South Africa;
2. Establishing linkages between TB and HIV programmes in and between Lesotho and South Africa, and in and between the public and private sectors; including enhanced information and administrative systems to support continuing improvements;
3. Building capacity among individuals and communities affected by the cross-border TB/HIV epidemic; and
4. Addressing the legal, human rights and socio-economic issues affecting TB/HIV control among miners, ex-miners and their families.

## **1. Systems for Better Prevention, Diagnosis and Treatment of TB and HIV**

The primary intervention needed to reduce the burden of TB among Basotho miners and their families is strengthening the programmes that are already in place for these purposes. These programmes exist in three main places – at the mines themselves, in the public healthcare system in South Africa, and in the public healthcare system in Lesotho. All of these need to be monitored and strengthened to ensure that, wherever they are, miners and their families have access to quality services for the prevention, diagnosis and treatment of TB.

### **Improving the government response in both countries**

More than 90% of reported cases of occupational lung disease in South Africa are attributed to the mining industry<sup>3</sup>. TB rates in the mines are up to 10 times the general population rate<sup>4</sup>, and TB control in the mining sector is therefore of tremendous significance to national TB control. It is essential that, within the context of broader National TB and HIV/AIDS programmes and policies both in South Africa and Lesotho, government systems give adequate attention and resources to the issue of TB/HIV in migrant miners and their families, and have provisions for them to access the services that they need – including the additional recommendations for which we will be advocating. The Tuberculosis Strategic Plan for South Africa 2007 to 2011 (TSP) outlines several recommendations and strategies specifically aimed at improving the management of TB in the mining sector – including the development of a comprehensive plan to address this problem – but most of these have not been implemented. We must demand immediate, coordinated action from our governments on TB in the mining sector.

### **Monitoring TB control activities in the mining sector**

The Department of Minerals and Energy (DME) has developed guidelines for the management of occupational tuberculosis on the mines. While formal Monitoring and Evaluation by medical inspectors in the different regions is supposed to be conducted regularly, to assess awareness and implementation of these guidelines, this is not always the case. Furthermore, some mining companies have their own internal policies and guidelines for dealing with TB and HIV, and it is important to make sure that these are in line with broader guidelines in both countries. We also need to advocate for more robust official guidelines for the mining sector, which are up to date with latest international standards and best practice and which give sufficient attention to all the critical areas of TB control, including a greater emphasis on community-wide Isoniazid Preventive Therapy and on increased collaboration between TB and HIV programmes.

Most important is how these guidelines are put into practice. Implementation of TB control activities on the mines poses serious concerns. Despite the apparent progress that has been made in the mining sector on the management of TB and HIV, the gold mining industry in SA has a rising incidence rate of TB that is up to ten times the national incidence rate<sup>5</sup>. Many of the miners or former miners enrolled in the Drug Resistant Tuberculosis (DR TB) treatment programme in

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<sup>3</sup> Department of Health, Tuberculosis Strategic Plan for South Africa 2007 – 2011 (2007)

<sup>4</sup> Department of Health, Tuberculosis Strategic Plan for South Africa 2007 – 2011 (2007)

<sup>5</sup> Department of Health, Tuberculosis Strategic Plan for South Africa 2007 – 2011 (2007)

Lesotho have a history of multiple previous episodes of TB treatment at the mines, even with mines that have well-established TB control policies and programmes. Furthermore, it is estimated that 79% of these miners are HIV positive and present with advanced TB and HIV disease, but very few of them will have started ART treatment on the mines. Clearly, there are serious gaps in the implementation of TB and HIV programmes on the mines. We need to identify what these are and to ensure that they are addressed as a matter of urgency.

### **Standardization of TB care and treatment for miners**

Lack of standardization in the care and treatment of TB in migrant miners is another serious concern. Some mines have healthcare facilities that provide on-site care and treatment, some refer patients to the public healthcare system in South Africa, and some miners will return to Lesotho to be treated there. While miners have the right to choose where they want to be treated, the existence of multiple points of care can result in an unpredictable variation in the treatments administered for TB. This variation has been a problem for healthcare workers further down the line, especially in the absence of referral systems that provide a detailed medical history for the patient.

Establishing strong referral systems is therefore key to solving this problem, but equally important is the establishment of a uniform standard of care and treatment for miners with TB – in the private sector, in the public sector, and on both sides of the border. This should be done in consultation with representatives from the mining sector and from national TB programmes in Lesotho and South Africa. It is not sufficient to rely solely on national guidelines for the cross-border treatment of TB in migrant miners – these differ between the two countries, and may also fail to take into consideration certain factors that are unique to the mining sector, such as silicosis. Where a uniform standard of care for miners differs from national guidelines – as is the case with the current DME guidelines for occupational TB on mines, which call for a higher level of investigation, treatment and monitoring – this should also be clearly communicated in the public healthcare sector on both sides of the border.

### **Understanding the problem: Situational analysis and operational research**

Although we are familiar with the issues related to the unacceptable situation in which miners, ex-miners and their families find themselves, the extent of the burden and the contributions of various factors are not fully known. While there has been involvement of the mining sector in research aimed at improving the management of TB in miners, this is generally limited to the bigger mining companies, although smaller mining companies are a major contributor to the problem since many do not have in-house TB or HIV programmes.

Furthermore, very little sector-wide research has been conducted, particularly on the issue of migrant labour and its implications for the health of miners. We need to advocate for a bigger investment from governments and mining companies in operational research across the sector, to improve the response to TB and HIV in migrant miners. This would include a thorough situational analysis of TB and HIV in the mining sector – as the South African government has committed to doing in its Tuberculosis Strategic Plan, and an analysis of the migration patterns of migrant miners so as to anticipate and plan for a better health response. The Lesotho national TB programme should also consider collecting detailed mining history on all TB cases, so as to evaluate the role that mining has on national TB control.

**RECOMMENDATIONS FOR IMPROVING SYSTEMS FOR THE PREVENTION, DIAGNOSIS AND TREATMENT OF TB AND HIV**

ACTIVITY	RESPONSIBILITY
Identify and establish a consortium of stakeholders to monitor, evaluate and improve implementation of interventions for strengthening bi-national management of TB in the mining sector	SA govt, Lesotho govt, Mines, civil society, representatives of miners
Immediate and regular application of assessment tool to evaluate the compliance of mining companies with DME guidelines	SA Govt, Mines
Periodic sector-wide review of TB policies, programmes and practice on mines	Mines, SA Govt, civil society, representatives of miners
Joint evaluation and harmonization of Lesotho-South Africa programmatic management of TB in miners	SA Govt, Les Govt, Mines, civil society, representatives of miners
Roll out community-wide IPT in mines, pending outcome of ongoing study to confirm benefit of this intervention	Mines, SA Govt
Situational Analysis of TB in Lesotho to identify contribution from SA Mining Sector	Les Govt, Mines, civil society, representatives of miners

## **2. Continuity and Linkages between Lesotho and South Africa**

An important aspect of cross-border management of TB is maintaining ongoing, accurate communication between miners, ex-miners, and service providers on both sides of the border. This is critical for ensuring continuity in care and treatment, as well as sustained access to certain services even after treatment has been completed. At the moment, although there are various systems capturing different kinds of information on Basotho miners in South Africa, there is an urgent need to establish a coherent, accessible bi-national system that standardizes and facilitates access to information on TB control in migrant Basotho miners and their families.

### **Referral systems for ongoing care and treatment**

We need to establish a standard, robust system of referral for miners and former miners with TB. Migrant miners can be highly mobile while undergoing care and treatment: some may start treatment on the mines or in the public sector in South Africa, return to Lesotho to receive care there, and then return to work on the mines as soon as they feel strong enough to do so. Former miners who have returned to Lesotho may also have a medical history from SA that will be relevant to their care and treatment for TB or HIV in the future.

Some mining companies with on-site treatment facilities provide patients with referral cards, but these are not standardized, often incompletely filled out and do not capture all the essential information needed for harmonization of care. There is also a lack of cross-border communication between health care providers in Lesotho and South Africa, as is needed to ensure continuity in the care and treatment provided for TB and HIV in migrant miners. The lack of continuity can result in sub-optimal care and treatment, for example the administration of anti-TB drugs that the patient has previously taken and failed to respond to. In addition to being a threat to the patient's health, this is also an unnecessary waste of time and resources.

A standardized system of referral is needed to ensure that adequate information on care and treatment provided to migrant miners for chronic medical conditions, including TB and HIV, is captured by and is available to healthcare providers in Lesotho and South Africa. This must be done without compromising the patient's right to confidentiality and right to control who has access to his/her information. The use of standardized, comprehensive patient-held records for miners should be explored so that investigation and treatment can continue when a miner crosses borders or changes mines. Bi-national communication also needs to be improved through the identification and mapping of key points of care, with contact details, in both countries.

### **Strengthening systems for medical follow-up of former miners**

Silicosis renders miners susceptible to tuberculosis long after the exposure to silica dust has stopped. For this reason, under South African law, former miners are supposed to receive two-yearly benefit medical examinations to identify any delayed development of an occupational lung disease for which they are entitled to compensation. This includes a chest x-ray and lung function tests. Any miner who has received treatment for occupational TB is also entitled to a medical examination 12 months after completion of treatment, to establish whether any permanent damage to the lungs has taken place – which would necessitate compensation. The Medical Bureau for Occupational Diseases (MBOD) is responsible for reimbursing medical practitioners who conduct

these examinations, but this is neither speedily nor consistently done. Dysfunctionalities in the MBOD need to be addressed as a matter of urgency.

When a former miner returns to Lesotho, however, it becomes nearly impossible to access the medical follow-up services, and potentially the compensation, that is his/her legal right. Lack of such follow-up also prevents a proper understanding of how occupational lung diseases affect former miners over time, and the contribution that this makes to the broader TB epidemic. We must advocate for the increased capacity of the health system in Lesotho to provide medical examinations for former miners, and for a system to expedite the processing of information from these examinations across the border. Responsibility for ensuring that this happens should not only be the burden of the Medical Bureau for Occupational Diseases, as is currently the case – mining companies should play a more active role in strengthening and financing medical follow-up of former miners across the border.

**RECOMMENDATIONS FOR IMPROVING CONTINUITY AND LINKAGES BETWEEN LESOTHO AND SOUTH AFRICA**

<b>ACTIVITY</b>	<b>RESPONSIBILITY</b>
Integrate, audit and strengthen sources of data on migrant miners, ex-miners and their dependants	Mines, SA Govt, Les Govt, TEBA
Establish standardized information and referral system and standard protocol for private/public/cross-border sharing of information, including hand-held medical records for miners	Mines, SA Govt, Les Govt
Establish points of service provision for medical follow-up examinations in Lesotho	Les Govt

### **3. Building Capacity among Individuals and Communities Affected by the Cross-Border TB Epidemic**

Interventions on TB and HIV in the mining sector should not be limited to governments and mining companies. There is an urgent need to build capacity in communities of miners, former miners and their families in South Africa and Lesotho, to empower them to become active partners in efforts to address this cross-border epidemic. This requires ongoing education activities in a variety of areas.

#### **Increasing awareness of TB among prospective, current and former miners**

Comprehensive, ongoing education on TB, HIV and silicosis, targeted at miners' communities, should be instituted immediately. This includes education on the TB and silicosis risks associated with mine work, prevention and treatment literacy for TB and HIV, and information on the cross-border policies and programmes to address TB and HIV in migrant miners. While this information is currently provided, to varying degrees, by some mining companies and some non-governmental organizations, there is no coordination and no harmonization of information between the different actors.

Recruitment agencies should be mandated to provide basic education on TB and silicosis risks for all prospective miners and to ensure that they understand these risks before entering into employment with the mines. More comprehensive education during and after employment should be provided, with coordination between mining companies, mining unions and other organizations that work at the community level. Already-existing structures in communities such as HIV/AIDS support groups would serve as good platforms for conducting such educational activities – particularly for the families of miners, who are also at risk, and for former miners in Lesotho.

#### **Empowering miners to advocate for their rights**

Education on TB and silicosis should include information on the rights and responsibilities of miners and former miners – including an explanation of the TB guidelines that mines and miners are compelled to abide by, compensation policies, and what to do if legal rights are not met. Mining unions should make empowerment and advocacy on the health rights of migrant miners an integral part of their work, and such work should be supported by government institutions, mining unions and non-governmental organizations working in this field. There is also an urgent need for an independent channel with legal authority through which miners can report and seek redress for violation of their rights.

#### **Addressing socio-economic issues**

Efforts to address TB and HIV in migrant miners must not overlook the socio-economic issues that contribute to the cross-border spread of these epidemics. These include, for example:

- **Gender dynamics:** Migrant male miners, who are usually breadwinners, are often reluctant to have their salaries made directly available to their partners and families in Lesotho. This necessitates frequent travel between Lesotho and South Africa so that they can relay the money in person, which contributes to the spread of tuberculosis across the border.
- **Living conditions on the mines and in Lesotho:** Living conditions on many of the mines are far from ideal for good infection control. Overcrowded and poorly ventilated housing

structures are hotbeds for the spread of TB. In Lesotho, similar living conditions often persist – the average household contact for miners is 7-8 people – placing miners’ families and communities at risk with every visit and with the return home.

Educational and other interventions should promote advocacy on these issues as part of a holistic approach to reducing the cross-border spread of TB.

**RECOMMENDATIONS FOR BUILDING CAPACITY AMONG INDIVIDUALS AND COMMUNITIES  
AFFECTED BY THE CROSS-BORDER TB EPIDEMIC**

ACTIVITY	<i>RESPONSIBILITY</i>
Generate and disseminate factsheet about Mining and Safety Act Essentials, and miners health rights and responsibilities	Civil society, representatives of miners
Ensure awareness of mining-associated health risks at time of recruitment	<i>TEBA, Mines</i> , civil society, representatives of miners
Develop TB treatment literacy materials for miners and their families	<i>Mines</i> , , civil society, representatives of miners

#### **4. Addressing the Legal and Human Rights Issues Affecting Miners and Their Families**

There is an urgent need for advocacy around the legal and human rights issues associated with the management of TB in the mining sector, especially where migrant labour is involved. Advocacy also needs to be directed at ensuring accountability of the institutions responsible for the protection and fulfilment of these rights, namely the mining sector and the government departments of Home Affairs, Labour and Health in South Africa and Lesotho.

##### **Clarity on the legal obligation of mines with respect to TB**

In its Tuberculosis Strategic Plan, the South African government has recognized the inconsistency in the management of TB in the mining sector, and set as a priority the establishment of a memorandum of agreement with the sector to clarify and standardize its role in responding to TB. However, such an agreement has not been established, and as a result there is a lack of clarity, consistency and ongoing regulation of the mining sector's response to TB in miners and former miners. The governments of South Africa and Lesotho need to establish a memorandum of understanding with the mining sector, outlining the basic obligations of each of these actors in responding to the cross-border TB epidemic linked to the mining sector. Mining companies should also articulate what they understand their role to be, and steps that they are willing to take above and beyond their basic legal obligations to assist in addressing the cross-border TB epidemic to which the sector is such a substantial contributor.

##### **Rectifying the inequities in access to services for contract employees**

Some miners are employed directly by the mines (full-time employees) while others are employed by an intermediary company that the mine contracts to provide labour for a fixed period of time (contract employees). Non-citizens are less likely to be employed as full-time employees than citizens, so the distinction between these two groups is of particular importance to migrant miners. Generally, contract employees are not entitled to the health benefits that may be provided for full-time employees. This compromises their access to health services and may also make them less likely to seek care and treatment for active TB, for fear of losing wages or losing their jobs. Thus, in addition to putting the personal health of contract employees at risk, this inequality also undermines efforts to decrease the spread of TB. It will not be possible to address the TB epidemic in mining communities if the health rights of full-time and contract employees are not equalized.

##### **South African Immigration Law**

Immigration law in South Africa does not allow for the employment of any non-citizen novice on South African mines. However, the demand for labour is such that non-citizen novices can still seek and find jobs on mines through contractors, without legal working status in South Africa. This has led to a growing pool of undocumented migrant miners from Lesotho who are susceptible to exploitation and who, due to their undocumented status, might struggle to access public healthcare services though they are eligible for such services under the provisions of the South African Constitution. The South African government needs to adapt immigration law to take into consideration the established demand for migrant labour on mines, especially migrant labour from Lesotho which is landlocked by SA, to ensure that laws do exacerbate vulnerability within this population.

## **Improving the Compensation Process**

Currently, certification of occupational tuberculosis can only be done by the Medical Bureau for Occupational Diseases, following a medical examination and in some cases the submission of certain medical samples. The process of getting such certification, which is a pre-requisite for compensation, can take years – especially if the miner has returned to Lesotho and is hence far away from the necessary medical services. In the study conducted among adult male TB patients who were current or former miners, 15% of the claims had taken more than one year to process, and some more than three years<sup>6</sup>. This is not acceptable. The losses incurred as a result of occupational disease are immediate and acute, and it is a violation of miners' rights to make them wait years or even months for compensation that is rightfully theirs.

There needs to be a mechanism to allow for certification of medical grounds for compensation in Lesotho, and urgent action must be taken by the mining sector, the MBOD and government departments in both countries to strengthen and expedite the process of compensation for migrant miners with occupational disease. The capacity of the MBOD also needs to be improved – if necessary, through the formation of functional partnerships with other health institutions – to ensure that it is capable of carrying out all necessary medical benefit examinations as it is required to do under the law.

The very definition of occupational TB also needs to be revised – currently, it only applies to the manifestation or complications associated with active TB of the cardio-respiratory organs in a person who has done at least 200 consecutive shifts of work in circumstances where injurious dust was present, and is no longer considered to be occupationally related one year after ceasing risk work, unless the person also has silicosis. This definition does not take into account the fact that the risk of TB remains elevated for years after people have ceased mining, even in the absence of radiological silicosis.<sup>7</sup> This degree of stringency further prohibits compensation for TB in miners and ex-miners.

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<sup>6</sup> Lugemba Budiaki (2005) Tuberculosis and Compensation: A Study of a Selection of Basotho Mineworkers from Maseru District

<sup>7</sup> Hnizdo, E. and J. Murray (1998). "Risk of pulmonary tuberculosis relative to silicosis and exposure to silica dust in South African gold miners." *Occup Environ Med* 55(7): 496-502.

**RECOMMENDATIONS FOR ADDRESSING THE LEGAL AND HUMAN RIGHTS ISSUES AFFECTING MINERS AND THEIR FAMILIES**

ACTIVITY	RESPONSIBILITY
Rectify inequities in treatment of full-time employees and contract employees with regards to care and treatment for HIV and TB	Mines, SA Govt, Les Govt
Establish Mining Ombudsman to receive complaints and to monitor and regulate practice in industry	SA Govt, Les Govt
Establish Memorandum Of Understanding between mining sector, Government of Lesotho and Government of South Africa	SA Govt, Les Govt, Mines
Conduct a study on compensation among miners and ex-miners	Mines, Les Govt, civil society, representatives of miners
Review and improve legislation and procedures, including MBOD capacity, pertaining to compensation of migrant miners and ex-miners	SA Govt, Les Govt, civil society, representatives of miners

## MEETING PARTICIPANTS

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