

Regional implementation of occupational health and safety information system (OHASIS)

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Background

Countries in the southern Africa region have initiated efforts to strengthen availability and utilisation of occupational health and safety data to inform policy and practice. These efforts are part of implementing the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project, which supports the rolling out of a standardised package of occupational health services and mining safety standards to respond to tuberculosis and occupational lung diseases. In undertaking these tasks, the countries are strengthening the capacity of public sector agencies responsible for mine safety inspection; expanding periodic screening and referral for occupational lung diseases and other diseases, in line with regional standards and international best practice; and developing/strengthening care programmes for occupational lung diseases. These efforts are being implemented with cognisance that the different countries have varying degrees of mining experience to offer occupational health and safety services. Zambia, the project's regional centre of excellence (CoE) on occupational health and safety (OHS), has a relatively large OHS capacity and mining sector, while Lesotho, Malawi and Mozambique have growing mining sectors.



Front (L-R): Mr Muyunda Sundano (Ministry of Mines and Mineral Development, Zambia), Mr Absalom Ndlovu (OHSI, Zambia), Dr Samuel Olalekan (NIOH, SA), Mr Norman Khoza (AUDA-NEPAD), Mr Monty Rambau (NIOH, SA), Mr Sam Phiri (Ministry of Health, Zambia); back (L-R): Mr Darlington Maamba (MSD, Zambia), Mr Yoram Chulu (MSD, Zambia), Mr David Jones (NIOH, SA)

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One of the countries' challenges is weak OHS data management systems to support the evolution of OHS paradigms. The lack of data presents a challenge in understanding the extent of OHS incidents and accidents in the region. Therefore, the SATBHSS project made provision to support the development and roll-out of occupational health services databases and electronic record systems in the region. The aim is to assist countries to link medical surveillance with occupational hygiene and inspection data for integrated management of occupational lung diseases, and to strengthen overall referral for compensation. The electronic record systems and databases will support countries to move from the current paper-based systems for inspection, and medical surveillance, reporting, storage and sharing of information. The implementation of these OHS information systems will facilitate efficient and effective data capturing and storage, enable countries to monitor progress of OHS, and allow data-sharing among different sectors at national and regional levels.

Occupational health and safety information systems

In a bid to implement a robust and sustainable occupational health and safety information system, the countries undertook a scoping analysis of available cost-effective options in the region. The Occupational Health and Safety Information System (OHASIS) was subsequently chosen. The system was developed by researchers from the University of British Columbia, Canada, and South Africa. It captures and manages OHS information, which is key for surveillance programmes in a healthy workplace, and allows patterns and trends to be identified and early interventions to be instituted. The web-based system plays a role in collating and storing information on reported incidents and accidents, hazard assessments, and other services, such as hazardous waste management. Implementation of OHASIS, coupled with enhanced capacity of safety, health and environment systems, will result in better management of OHS in the region. The system will contribute to training and increased awareness on OHS issues in the workplaces, along with an increased reporting of accidents and incidents. It will also be useful in the daily management of occupational health surveillance, and the identification of common root causes of disease, allowing for interventions to be targeted. The information generated through OHASIS is valuable for strengthening research to generate evidence in support of policies and interventions.

The African Union Development Agency (AUDA-NEPAD) is collaborating with the National Institute for Occupational Health (NIOH) to provide technical support to countries in rolling out the information system. While implementing the project at national

level, an additional functionality will be included to allow for sharing of aggregated data on agreed indicators at the regional level.

The following OHASIS modules are available and can easily be adapted by countries, thereby reducing the time required to develop new modules:

1. Incident reporting
2. Incident investigation
3. Employee health
4. Vaccination
5. Respirator fit testing
6. Workplace assessment
7. Hazardous waste
8. Audit
9. Equipment maintenance tracking
10. Self-reporting

The following modules are currently under development, and will be rolled out in the various countries when finalised:

1. Health and safety committee
2. Occupational hygiene
3. Workplace health risk assessment

The AUDA-NEPAD and NIOH technical teams have been working with the Government of Zambia to detail their functional and non-functional requirements, and information technology (IT) governance. The team has concluded workshops with the Ministry of Labour and Social Security (MLSS), Ministry of Health (MoH), Workers' Compensation Fund Control Board (WCFCB), Occupational Health and Safety Institute (OHSI), and Mine Safety Department (MSD).

OBJECTIVES

1. To support project countries to implement an integrated cost-effective and country-owned occupational health and safety (OHS) information system for compliance monitoring, mine health surveillance, and referral for compensation
2. To promote harmonisation of data-generating and reporting systems that link worker exposure and outcomes, in the countries
3. To develop a regional dashboard for information-sharing between project countries based on agreed regional OHS indicators

SCOPE OF THE INITIAL IMPLEMENTATION

The project will initially be implemented in the four countries, i.e. Lesotho, Malawi, Mozambique, and Zambia. The focus will be to ensure that the current fragmented OHS data are converted into an integrated and organised system across ministries, sectors, and industries. At national level, the initial roll-out will be at strategic areas as a starting point for a nationwide roll-out of the system.



Back (L-R): Mr Sam Phiri (MoH, Zambia), Mr Chibesa Ndawa (OHSI, Zambia), Dr Fwasa Singogo (MoH, Zambia), Mr Kingsley Kangwa Mukwikile (WCFCB Acting Commissioner/CEO, Zambia), Dr Samuel Olalekan (NIOH, SA), Mr Monty Rambau (NIOH, SA), Mr. Mario Mutale (WCFCB, Zambia); front (L-R): Mr Chansa Kapema (WCFCB, Zambia), Mr Norman Khoza (AUDA-NEPAD), Mr David Jones (NIOH, SA), Mr Gilbert Mukumbi (WCFCB, Zambia)

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Further to the adaptation of the available modules, countries will be supported with the development and installation of additional required modules, as per the countries' requests. The initial roll-out of the system has started in Zambia at the CoE on OHS. Lessons learnt in Zambia will be utilised to roll out the system in the rest of the region.

EXPECTED OUTCOMES

1. Integrated occupational health and safety (OHS) information systems will be rolled out in Lesotho, Malawi, Mozambique, and Zambia.
2. Databases will be linked, at the national level, for data sharing between the implementing ministries, institutes and regional organisations.
3. In-country co-developers, system administrators and users will be trained in the four countries.
4. Regional modules to facilitate sharing of aggregated data between countries will be developed and rolled out.
5. Aggregated data will be shared at the regional level as per agreed OHS indicators.

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