

African Union COVID-19 / Occupational Safety and Health **GUIDELINES SERIES**

Mining Industries

Volume 2



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Foreword



The COVID-19 pandemic is significantly impacting economies, social cohesion and health systems of African Countries. The effects of the pandemic, if not efficiently and effectively addressed, will have an adverse impact on the realisation of continental goals set in the African Union (AU) Agenda 2063, the Sustainable Development Goals and other developmental goals and targets at the continental, regional and national level.

In February 2020, the AU Member States adopted a strategy that aims to prevent severe illness and death from COVID-19 infection and to minimize social disruption and economic consequences of COVID-19 outbreak. The AU has so far established a Coronavirus fund with commitments to-date totalling USD20 million. At the national level, most African countries have implemented lockdowns, testing (of suspected cases) and contact tracing.

On the 4th of April 2020, the African Union Development Agency (AUDA-NEPAD) published a White Paper on AUDA-NEPAD Response to COVID-19 and other epidemics. The Paper features five key priorities with an aim of strengthening: health systems; food systems; skills development and employment; education; and national planning and data systems.

As part of AUDA-NEPAD's White Paper, particular focus has been placed on occupational safety and health (OSH) for both frontline health care workers and the working population at large. It is evident that the impact of COVID-19 on the working population is significant, especially the working population that have high exposure risks due to the nature of their work. This cohort includes healthcare workers, laboratory workers, border management teams, those in the food supply, logistics and public transportation industry, death-care workers, and waste management workers, amongst others. Similarly, the pandemic has posed significant risks to other workers, inter alia, increased absenteeism; loss of wages and jobs; loss of man-hours and productivity; increase in medical costs in the face of limited medical insurance cover and social protection; changes in the way of doing business; and interruption of supply chains.

There is, therefore, need for a coordinated response by the AU Member States to minimise the impact of COVID-19 on the working population. Such efforts will, amongst others, promote the efficient and effective deployment of expert support thereby making available technical support and evidence-based guidance and advice on occupational safety and health needs within the realm of AU's COVID-19 response Plan.

It is with the foregoing that AUDA-NEPAD in collaboration with the African Union Commission, the International Labour organisation and other partners have developed the COVID-19/OSH Guidelines for Specific Workplaces. The guidelines covering thematic areas such as Occupational Safety, Health and Wellness of Health Workers and Clinical Occupation Health, serve as key technical reference instruments for all stakeholders, including national and sub-national governments, regional bodies, civil society, academia and development partners, to work in a coordinated and coherent manner in addressing occupational safety and health at workplaces in the face of the Covid-19 pandemic.

It is our sincere hope that the values and imperatives that are framed in the guidelines will inspire all of us to promote occupational safety and health at workplaces as part of the concerted efforts to fight against the effects of the global pandemic and advance the Continent's development agenda encapsulated in Agenda 2063.

Dr Ibrahim A Mayaki
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Definition Of Terms

Competent person: A person with suitable training and sufficient knowledge, experience and skill for the performance of the specific work to be conducted.

Exposure: The subjection of a person to an airborne pollutant in the course of employment through any route of entry (e.g. inhalation, ingestion, skin contact or absorption).

Health Worker: People primarily engaged to enhance health by providing preventative, curative, promotional or rehabilitative health care services.

Quarantine: A state, period, or place of isolation in which people or animals that have arrived from elsewhere or been exposed to the infectious or contagious disease are placed..

Self-Isolation: Staying indoors and completely avoiding contact with other people.

Acronyms

ACDC	Africa Centre for Diseases Control
AU	African Union
AUC	African Union Commission
AUDA-NEPAD	African Union Development Agency-New Partnership for Africa's Development
COVID-19	Corona Virus Disease 2019
EAP	Employee assistance programme
HCW	Health Care Worker
OSHMS	Occupational Safety and Health Management System
PPE	Personal Protective Equipment
PUI	Person under investigation
RTW	Return to Work
RPDs	Respiratory Protective Devices
WHO	World Health Organization

1. Background

Mining activities are an important economic contributor in the SADC region, but mining activities are historically associated with a high burden of occupational lung diseases (OLD). This is due to working conditions in mining such as prolonged exposure to respirable dust, poor ventilation, and inadequate control of hazards. The situation is exacerbated by poor health-seeking behaviour, poor living conditions, and poor safety culture and inadequate occupational health and safety policies, laws and regulations; and inadequate human resources capacity. Mining is a labour-intensive operation, experts who come or constantly visit different regions of the world, miners work in confined spaces and the presence of artisanal small-scale mines with zero access to OSH. This place mine workers of contracting COVID-19 and spread it should mine do not take precautionary measures to prevent the spread.

Most of the COVID-19 responses are biased towards public health response, little has been done to assist workplaces in terms of occupational safety and health (OSH) in mines. The African Union and African Union Development Agency (AUDA-NEPAD) developed the guidelines to assist mine operations in member states. The guidelines should be implemented within the national occupational safety and health management systems (OSHMS) of the country and organizational armpits, in partnership with local relevant authorities such as the ministry of health. The African Union (AU) guidelines should be read together with other applicable guidelines including the Africa Joint Continental Strategy on COVID-19 outbreak, AU COVID-19 at Workplace Guidance in Africa, AU COVID-19 at Workplace Joint Communiqué. The guidelines aim to assist employers to protect the safety and health of workers and prevent the spread of the COVID-19 virus by:

- ensuring that every worker has adequate and accurate information on COVID-19
- implementing measures to prevent the spread of COVID-19
- providing guidance on handling of suspected or confirmed COVID-19 cases at the workplace
- ensuring safe business continuity throughout the pandemic

2. Application

This Guideline applies to all mines or part/s thereof, mine workers, irrespective of employment category, and contract workers that might be exposed to COVID-19 in the performance of their duties. The guidelines provide best practices for the prevention and management of the spread of COVID-19 amongst mine employees and contractors returning

to work and as well as visitors. The aim is to ensure good health and safety of employees on return to work (RTW) and beyond. The guidelines should be implemented in conjunction with the local mining regulatory framework and international treaties and statutes.

3. Purpose

The purpose (objective) of this Guideline is to promote the integrations of COVID-19 prevention and management into the broader OSH management systems of the respective responsible organisation, assist relevant organisations and authorities to establish and maintain a COVID-19 prevention and management programme at mines, which if properly implemented and complied with, would protect the health of the mine employees, to assist organisations with no OSHMS such as artisanal small-scale mines to establish theirs systematically.

4. Roles and Responsibilities

Employer

- Conduct a COVID-19 Risk Assessment and/or review the current existing risk assessment to include COVID-19 as new hazard
- Develop COVID-19 policy and procedures for the mine
 - » Policy-A summarizing document describing the principles of action adopted
 - » Procedures – a written document setting out steps describing who, what, where, when and why to establishing compliance and accountability.
- Communicate the developed COVID-19 policies, procedures and risk assessment in the workplace
- Submit all developed COVID-19 policies, procedures, implementation plans/management plans, risk assessment, etc to the relevant ministries as per the national OSH regulations.
- Provide appropriate controls including the supply of relevant and effective personal protective equipment and instructions on how to properly use and maintain them written in a language commonly understood by employees
- Report any suspected and confirmed cases of COVID-19 to the relevant authorities such as ministries of mines and health or any other as required by the local legal framework.
- Refer any complicated case of COVID-19 to relevant district or national health establishment as per the local health protocol.
- Provide temporary and permanent isolation and quarantine facilities for the mine

- Provide COVID-19 education and awareness to all workforce on the signs and symptoms, sources of exposures, available control measures and what to do if an employee suspects any case of COVID-19
- Implement a system for continued surveillance of COVID-19 in the workplace as guided by local authorities
- Ensure that visitors and contractors comply with safety and health measures when on-site or workplace.
- Ensure that contractors and visitors are subjected to the same screening and testing procedure
- Contractors should submit their safety files with an emergency, first aider, safety and any other relevant representatives required by the national local laws and international best practice

Employees

- Report to the employer any suspected signs and symptoms of COVID-19, such as cough or fever including any close contacts to a COVID-19 suspected case.
- Familiarize themselves with and follow the instructions given by the employer on the management of COVID-19 in the workplace
- Right to refuse to work in workplaces with confirmed cases of COVID-19, as guided by the local OSH laws anchored by ILO convention 155, article 13.

Relevant Safety and Health Authorities

- Provide a clear communication channel of reporting and communication with employers and employees with regards to matters related to COVID-19
- Advise, inspect and enforce relevant government directives



5. Procedures for mitigation of COVID-19

The section will cover the following minimum thematic areas: risk assessment, risk assessment review, return to work procedures, prevention and management programme, monitoring and social security or compensations.

Workplace Risk Assessment

The employer is required to conduct a risk-based assessment covering all work activities as per the local regulatory framework and international OSH best practices at mines and the risk assessment should identify:

- Significant sources of COVID-19 to which employees may be exposed to.

- Health effects associated with exposure to COVID-19.
- Nature of the key workplace operations and activities that pose the greatest potential for exposure to and spread of COVID-19.
- Occupations and number of employees who are likely to be exposed to and spread the COVID-19.
- Identifying the risk of exposure for vulnerable employees (occupational diseases, communicable and non-communicable diseases).
- Determining if workers could be exposed to activities or materials where the virus may be encountered.

- Control measures in place, i.e. engineering, administration, personal protective equipment etc.
 - De-densification of employees on transport modes and other spaces.
 - Frequency of any ongoing monitoring to assess the effectiveness of the controls.
 - Identify any existing human resources policies that need to be revised to accommodate current national, regional and international disaster management, lockdown, prevention and control strategies
 - WHO classifies the risk of COVID-19 infection into 4 risk groups, (refer to Table 1):
 - Draft and communicate a clear supply chain standard operating procedure to suppliers: this will include a procedure for receiving of packages and parcels, clear mitigation measures should be provided such as a separate room with hygiene and sanitization of parcels and goods before they can be sent inside the main work area.
- An employer must cause the risk assessment to be conducted by competent persons based on all available information as far as is reasonably practicable, including:
- classification of SARS-CoV-2 virus into the relevant risk group, according to its level of risk of infection;
 - recommendations from Organisations such as the World Health Organization (WHO) or a competent person regarding the control measures necessary to protect the safety and health of employees against SARS-CoV-2 virus as a result of their work; and
 - knowledge of diseases from which employees might be suffering and which may be aggravated by conditions at the workplace.
- For the risk assessment matrix template, please refer to annex 1

Table 1: COVID-19 Risk Classification

i. Very high exposure risk	High potential for exposure to known or suspected sources of COVID-19 during specific medical, post-mortem, or laboratory procedures. The very high-risk exposure activities include performing aerosol-generating procedures for example intubation, cough induction procedures, bronchoscopies, or invasive specimen collection) on known or suspected COVID-19 patients
i. High exposure risk	<i>High exposure risk</i> jobs are those with high potential for exposure to known or suspected sources of COVID-19. In the case of the mining industry, medical surveillance procedures such as spirometry and breathalysers fall into this category.
ii. Medium exposure risk	Medium exposure risk jobs include those that require frequent and/ or close contact with i.e., within 2 meters of people who may be infected with COVID-19, but it is unknown. In areas without ongoing community transmission, workers in this risk group may have frequent contact with travellers who may return from international locations with widespread COVID-19 transmission. In areas where there <i>is</i> ongoing community transmission, workers in this category may have contact with the general public for an example in schools and high-population-density work environments
i. Low exposure risk	Low exposure risk jobs are those that do not require contact with people known to be or suspected of being infected with COVID -19 nor frequent contact (within 2 metres) with the general public. These workers have minimum contact with the general public and co-workers

Source: <https://www.osha.gov/Publications/OSHA3993.pdf>

Workplace Risk Assessment Review

The principle is always to review the current risk assessment for those mines that currently have a risk assessment in place, if not then baseline risk assessment is warranted. The principles of risk assessment within the OHSM dictates that risk assessment should be reviewed whenever circumstances arise or change at the mine that could have an impact on the original assessments, the international best practice suggests the following circumstances:

- When a new risk has been introduced or suspected to be introduced (in this case COVID-19 pandemic);
- When outcomes of medical surveillance programmes indicate the need for it;
- When new or revised legislation is introduced (in this case the activation of Disaster Management Laws);
- When new mining methods are introduced;
- When a new control has been introduced or the results of the occupational hygiene survey show a high exposure (case of COVID19);
- When process changes are introduced (e.g. in process plants);
- When new types of machinery are introduced; and
- When the current risk assessment has expired.

Return to Work Procedures

- Employers should as far as is reasonably practicable conduct a Return-To-Work (RTW) online survey of all employees whilst they are still at home 2 days before the date of return to work
- The online survey should be structured in a way that will identify high-risk employees before they come to work
- At a minimum, the RTW survey questionnaire should collect information on the following:
 - » Any symptoms that the employee may have experienced that are related to COVID-19, such as fever, cough, sore throat, redness of eyes or shortness of breath
 - » If they were in contact with anyone who recently travelled from a high-risk area
 - » If they cared for any COVID-19 positive case
 - » If they visited any hospital caring for COVID-19 patients
 - » If their spouse or person they are leaving with works in hospital likely to come into contact with COVID-19 patients
 - » If they are aware that as per the government regulations is a criminal offence to knowingly spread, infect or allow the diseases to spread

The employer should ensure that before allowing any forms of mining activities to commence after a prolonged stoppage; safe precautionary return to work procedure should be developed (See Annexe 1)

- Any return to work procedure should be aligned with the Instruction that was issued by the ministries of mines
- The return to work should put measures in place to address the cleaning and disinfection of the following but not limited to: -
 - » Transport for workers i.e. buses, taxis.
 - » Any transport entering the mine
 - » Change Houses/lock rooms
 - » Lamp rooms
 - » Waiting areas underground and open cast areas should the mine be far from its offices
 - » Offices especially in open-plan spaces
 - » Medical stations
 - » Examination and consulting rooms
 - » Kitchens

General Areas of Concern and Infection Control of COVID-19

- Leaving accommodations in and around mining areas: generally, mineworkers stay in in-house accommodation (hostels) or surrounding communities with poor hygienic conditions and poor health-seeking behaviours. Mines should recognise and put measures in place to mitigate cross-infection from mines to communities and/or vice versa.
- Transportation of miners from the place of residence to the mines and in and around the mines. Mines should carefully develop a transportation plan to mitigate COVID-19 transmission through measures such as the social distancing, disinfection, PPE, use of gloves, personal hygiene, reporting of any contact with close contact, reporting of symptoms, etc
- Security biometrics and turnstile gates should be avoided by all means, if not avoidable due to the nature of the mining activities, appropriate technology should be implemented to avoid contact or provide well satisfactory cleaning and disinfection.
- The use of breathalysers to test any alcohol abuse or use in order to safeguard the safety and health of miners should be discontinued or done in a manner that will prevent COVID-19 spread. Employers should apply their discretion whether to use a single-use breathalyser (preferable due to low risk) or multiple-use which is a medium approach that needs precautionary and additional measures to prevent COVID-19 spread. This might need regular disinfection and sanitisation (See Box 1).
- The employer should take precautionary measures to minimise COVID-19 infection linked to medical surveillance equipment and facilities. These include the use of waiting areas, seating arrangements, use of spirometry, audio booths and earpieces, X-ray, scales, eye testing, thermometers and any other temperature measuring tools, etc. therefore, periodic medical assessment should be conducted where it is mandatory or necessary.
- Occupational hygiene programmes and sampling: the recommendations to prevent the spread of COVID 19 is social distancing, which is keeping at least a distance of 2 meters. Therefore, it is recommended that static samples be preferred as compared to personal sampling or sampling be avoided at this time if unavoidable then sampling equipment should be properly disinfectant, hand gloves and at least FFP2 masks should be used when in close proximity of the person being sampled.
- Personal Protective Equipment (PPE). The selection and use of respiratory protective equipment (RPD) and other PPE should be informed by risk assessment. These should include instruction on how to correctly don and doff them.
- Other general awareness and preventive measures should be taken to prevent the spread of the disease

Box 1: Management of COVID-19 spread and contamination through the use of a breathalyser:

- It is recommended that the spirometry procedure is performed outdoors. If performed indoors, there should be adequate ventilation and the room should be provided with natural or artificial UV light to reduce the amount of viable organism in the air.
- The breathalyser must be held with an extended arm away from the operator. The person must blow into the point, directed past the operator in case the operator should hold the device.
- It is recommended that the operators should wear masks, gloves and goggles. This is provided that they are fully trained and competent in the use of the provided PPE in infection control setting.
- The operator will require training on how to put on and take off the masks (PPE) without contaminating their faces and autoinoculation of the mucus membranes
- If possible, the people being tested can hold the breathalyser themselves, which will be preferable with continuous sanitisation of the handle where they held the devices
- The mouth of the person being tested must be at a distance of 50mm from the blowing point
- Workers must be instructed and monitored that they never place their lips on the point of a blow. If it happens then proper hygiene sanitisation should be done
- The person must be instructed to blow steadily towards the blow point as per the manufacturer's instructions.
- The area, seating or standing arrangements must comply to the minimum social distancing and other related legislations
- The chairs, tables, door handles, and other contactable areas should be disinfected regularly

Social security and compensation

Countries such as South Africa and Zimbabwe have already included COVID-19 as a compensable disease. Health care workers (HCW) are classified as high-risk groups, and this includes also the rest of the workforce if they come into contact with HCW during the provision of mandatory medical surveillance. Member states and organisation should consider including COVID-19 disease as an occupational disease.

Steps to be taken should any employee present with signs and symptoms of COVID-19

Should any worker fall ill with symptoms consistent to COVID-19 or have a temperature of more than 38 degrees Celsius or have any reason to suspect that they have come into contact with COVID-19, they must be isolated immediately. Employers must endeavour to provide the employee with necessary support such as isolation, quarantine facilities and treatment specifications and medicine with full instructions and information on what an employee can and cannot do.

The following should be done for such workers:

- They should self-isolate for 14 days from the last time they had contact with the confirmed case. They will be actively followed up by the local

Response Team who will advise on the steps to be taken.

- If they develop new symptoms, or their existing symptoms worsen within the 14-day observation period, they should be re-tested.
- If they are unwell at any time within their 14-day observation period and they test positive for COVID-19 they will become a confirmed case and will be treated for the infection.
- In the absence of any testing capacity, persons with symptoms consistent with COVID-19 shall be treated as a positive case until confirmed by a laboratory test.
- This information will be communicated to employees and local response team

Steps to be taken in a workplace with a COVID-19 confirmed case (s)

The best possible way of managing COVID-19 is to prevent it when this has failed the process becomes even more expensive. Where a COVID-19 confirmed case is encountered at the workplace

- Activate the relevant procedure developed following the risk assessment on the management of COVID-19 case at the workplace. These procedures include

- Informing the relevant authority at the workplace
- Closing the mine operations, the entire operation or section where the employee has been active should be closed and proper disinfection is done to the satisfaction of the chief inspector or inspector general or any overseeing authority.
- Develop and submit a management plan to the relevant authority. Wait for approval if the management plan is adequate or needs to be improved. Once approved follow the management plan until return to work. The management plan will include procedures to close the operations, isolate every worker, test every worker, quarantine those found to be positive, review the risk assessment and deep clean and disinfect the working area.

Other issues to be considered

Please refer to the clinical management guidelines for any COVID-19 clinical related issues, general risk assessment guidelines for in-depth risk assessment, etc.

6. Key relevant documents

- [African Union. 2020. Africa Joint Continental Strategy for COVID-19 Outbreak](#)
- [African Union. 2020. AU COVID-19 at Workplace Guidance in Africa.](#)
- [ECOWAS Communique No 02 of 6 April 2020 on the Fight Against the Coronavirus Disease](#)
- [African Union Mining Vision \(2009\)](#)
- [SADC Protocol on Mining \(1997\)](#)
- Safety and Health in Mines Convention, 1995 (No. 176)
- Occupational Safety and Health Convention, 1981 (No. 155),
- Occupational Health Services Convention, 1985 (No. 161),
- ILO Code of Practice on Occupational Safety and Health in Coal Mines (2009)
- ILO Code of Practice on Occupational Safety and Health in Open Cast Mines (1991)
- National Mining and Health OSH policies, laws, regulations and guidelines

7. Further reading material

- Department of Mineral Resources and Energy. 2020. Guiding principles on the prevention and management of COVID-19 in South African Mining Industries (SAMI). RSA
- Minerals Council of South Africa. 2020. Standard Operating Procedure (SOP) for addressing cases of COVID-19.
- Department of Health of South Africa. 2020. Specialised health risk assessment for workplaces (by employers and self-employed persons). Published 1 May 2020
- National Social Security Authority. 2020. Guidelines for the protection of workers in the workplaces from COVID-19. Zimbabwe.



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