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Tuberculosis kills more people than HIV/AIDS and malaria. In 2016, the disease claimed the lives of 1.7 million people worldwide, over 25% of these deaths occurred in Africa. So how can the burden of this disease be addressed in Africa? Dr Ibrahim Assane Mayaki, NEPAD Agency CEO has pointed out the urgent need to increase domestic resources to fund interventions to end TB on the continent. Dr Mayaki was speaking at the Africa side event on the margins of the first ever United Nations High Level Meeting on TB in New York, USA on 25th September 2018.

“The fight to end tuberculosis must be looked at in the broader context of inequality and our efforts must be repositioned in this perspective. Addressing the inequality gap will help to advance the fight to eliminate TB in Africa”, Dr Mayaki said.

The Africa side event under the theme "United to end tuberculosis in Africa: a continental response" was aimed at galvanizing commitment by leaders at the highest level of government, private sector and civil society on innovative regional collaboration towards ending the burden of TB. African Union Commissioner for Social Affairs, H.E. Amira El Fadil indicated that political will to end TB in Africa exists as evidenced by the decision by African Union (AU) Member States to adopt the Common Africa Position (CAP) on ending tuberculosis. She further echoed the words of Dr Mayaki on the need to increase domestic resources for sustainability purposes.

“We have to simultaneously address the challenges of TB by embracing both collective and individual..."
country efforts as both are critical in ending the disease”, the Commissioner said.

H.E. Amira El Fadil further reminded participants that despite positive progress, Africa still struggles with issues of affordability and accessibility of medicines, especially among vulnerable communities. She stated that the proposed establishment of the African Medicines Agency (AMA) will be very useful in promoting local production of medicines as well as address prevalence of Substandard and Falsified medical products on the continent. The Commissioner said that TB is related to poverty, hence we have to end poverty as this will add value to the fight against TB in Africa. The fight against tuberculosis will be won and how to win this fight is by addressing the disease from all possible vantage points.

She further brought attention to the existence of the Africa Centre for Disease Control (CDC) and that countries and development partners must make use of this strategic institution as it is operational and currently responding to various disease challenges on the continent. If we work collaboratively as a continent, we should be able to have an Africa free of TB.

Speaking during the event, Hon. Minister of Health of Zambia, Dr Chitalu Chilufya said that calls to end the burden of TB in Africa must be matched with appropriate investment in strengthening health systems. He further said that there are a lot of missing TB cases in most African countries that we don't even know about. Hence, we cannot under-estimate the urgency of escalating preventative measures, increasing awareness and sensitization campaigns in the most vulnerable hard to reach areas, as well as investment in the right infrastructure to increase coverage so that we can strengthen TB screening, diagnosis and successful treatment. It is time to go beyond rhetoric to invest in appropriate public health interventions that will bring us a lot of gains in the fight to eliminate the burden of TB in Africa.

“Health is an investment we need to make now to yield results later”, the Hon. Minister said.

During the event, testimonies regarding TB control in Africa were heard from two Multi Drug Resistant (MDR) TB survivors, Phumeza Tisile and Dalene von Delft. They spoke of their troubles having to deal with MDR TB and the treatment they underwent which led to hearing loss for Phumeza who now uses hearing aid. The two testimonies are a reflection on how inequality, and poverty are at the centre of the quality of TB treatment and care one is able to receive. The gaps in TB screening, diagnosis and treatment have
to be addressed so that patients receive the best care and access the most appropriate medication regardless of their social and economic status.

The Africa side event was moderated by global musical icon and NEPAD Agency Goodwill Ambassador for tuberculosis and nutrition, Yvonne Chaka Chaka. She stated that now is the time to walk the talk on the fight to end TB in Africa. She moderated two sessions and plenary discussions focussing on the importance of multi-country collaboration on the fight against TB in Africa and the value in establishing strategic partnerships, financing and accountability.

Yvonne Chaka Chaka closed the Africa side event in style with a beautiful rendition of her song whose words strike a nerve in every sphere of life and reflect on the values of Ubuntu.

“What have you done today to make you feel proud, it’s never too late to try...
What have you done today to make you feel proud...?”

The Africa side event was attended by over 200 high level participants from public to private sector and civil society organizations. The event was organized by NEPAD Agency, African Union Commission (AUC), World Bank (WB), Global Fund (GF), World Health Organization (WHO), Stop TB Partnership and the Minerals Council of South Africa.
GUIDELINES FOR MDR-TB SURVEILLANCE REVIEWED

Experts from laboratory systems strengthening, disease surveillance and outbreak response, health policy, and Africa Centre for Disease Control (CDC) gathered in Lusaka, Zambia for a three day meeting of the 2nd regional Community of Practice (CoP) on laboratory and surveillance. During the meeting, the experts reviewed the guidelines for Multi-Drug Resistant (MDR) TB surveillance. The guidelines will now be finalized in readiness for adoption by Member States.

The aim of the meeting was to review progress in implementation of laboratory and surveillance activities from the country work plans of 2018 and update these going forward in to 2019. The meeting took place from 19 – 21 September 2018 and was officially opened by Dr. Andrew Silumessi, Director of Public Health at the Ministry of Health (MoH) in Zambia. It was recommended that a Monitoring and Evaluation (M&E) Framework be developed and built in to the 2019 CoP work plan as this will help to track implementation progress during the course of the year. In addition, it was agreed that the countries should operationalization the National

The meeting also provided a platform to bring the various experts to strategize on how to achieve international ISO accreditation. It was recommended that accreditation road maps for target laboratories with clear timelines and milestones be developed and ensure that at least 1 laboratory enrolled in the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project gets accredited by 2020. In order to achieve this there will be need to seek high level commitment to support accreditation plans and also investment in human resource (quantity and quality) for target laboratories. It was observed that few laboratories have achieved international accreditation requirements of quality with less than 500 laboratories accredited in Africa and more than 80% of them in Southern Africa.

Furthermore, participants reviewed the draft ‘Framework for Cross-Border Integrated Disease Surveillance and Response for the SATBHSS project and recommended to include guidance at technical level on areas of coordination, synergies with existing cross-border initiatives and modes and content for communicating at the zonal level. It was recommended that there should be synergies on laboratory and surveillance between the national work plans and the SATBHSS project work plan, the activities should be aligned and there should be harmonization to maximize on the impact. The meeting was attended by experts from the four countries participating in the SATBHSS project, Lesotho, Malawi, Mozambique and Zambia. In addition, there were also experts from the Kingdom of eSwatini, Tanzania, Zimbabwe and development partners.
BUILDING A POOL OF EXPERTS IN OCCUPATIONAL HYGIENE

Prolonged exposure to dust, poor ventilation, and inadequate control of other related hazards pose a risk in work environments. In addressing this burden, the NEPAD Agency organized an intensive short course for occupational hygienists to build a pool of professionals that can anticipate, recognize, evaluate exposure, recommend appropriate measures and ensure adherence to international policies and standards. The short course took place in Kitwe, Zambia from 23 – 27 July 2018.

A total of 18 participants drawn from Lesotho, Malawi, Mozambique, and Zambia attended the course. The course outlined broad principles of occupational hygiene as the foundation module of the Occupational Hygiene Training Association (OHTA). After the short course, participants appreciated the value of occupational hygiene and their role as occupational hygienists in ensuring companies adhere to professional ethics.

Mr. Norman Khoza, Senior Programme Officer: Occupational Health and Safety Specialist at NEPAD Agency said the short course will result in participants acquiring an international qualification on basic principles of occupational hygiene after successfully passing the international exam.

“At the end of the training we would like to have a 100% pass rate, participants should be able to understand the basic principles of occupational hygiene, to start discussing establishing the national occupational hygiene association or chapters,” Mr Khoza said.

Furthermore, this initial group of participants is taken as a cohort until a point where they will be fully registered and internationally recognized as occupational hygienists. Project countries will then use them as trainers and mentors for the new aspiring occupational hygienists. The course was provided under the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project as a partnership between NEPAD Agency, Workplace Health Without Borders (WHWB), government of Zambia (Ministries of Health, Mining, and Labour), University of Witwatersrand School of Public Health, and the South African National Institute for Occupational Health (NIOH). The course facilitators represented different organizations in their own rights. The course director, Mr John Jacob is the president elect of IOHA, and Ms Claudina Nogueira is the vice-
president of ICOH while Mrs. Goitsemang Keretetse is a registered occupational hygienist with the Southern African Institute for Occupational Hygiene (SAIOH) and a Lecturer at the Wits School of Public Health.

During the course, participants shared information and experiences that will enable harmonization of approaches in the region. Occupational hygiene is a transboundary field that requires contributions from mining, labour, and health, as well as across countries. The course came in at the right time with emerging diseases and the introduction of technology in mining. Participants in the course enhanced their knowledge in professional ethics and the management of occupational hygiene programmes, as well as their understanding of the various range of hazards in the workplace (both physical and chemical).

Participants also benefited from knowledge on different methods of controlling exposure, hazard recognition techniques including sources and potential routes of exposure and exposure evaluation, assessment and measurement processes.

**LESOTHO-SOUTH AFRICA EXPAND CROSS-BORDER ZONES FOR DISEASE SURVEILLANCE**

Since 2017, the Kingdom of Lesotho and the Republic of South Africa have jointly established two cross border zones for disease surveillance in Thabo Mofutsanyane, Leribe and Butha Buthe and Thabo Mofutsanyane and Maseru respectively. In an effort to expand and strengthen disease surveillance, the two countries have established a 3rd cross border zone in Mafeteng, Mohale’s Hoek and Wepener and Zastron districts. This was achieved during a joint four (4) day meeting from 13 – 16 August 2018 that took place in Bloemfontein, South Africa.

The 3rd cross border zone will be useful in coordinating cross-border surveillance for diseases in the districts, as well as conditions and events of public health importance using the One Health Approach. The inaugural meeting of the 3rd cross border zone was attended by a total of 32 participants of varied disciplines from the two countries and these included personnel responsible for surveillance, animal health, immigration, customs, laboratory, clinicians, environmental health, Health Inspectors, port health, police and epidemiologists.
The cross border zones are being established with support from the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project. During the 3rd cross border zone meeting, it was observed that communication for outbreaks and other events of public health importance follows the official channel which in some cases delays response and actions at the local level. In addition, the participants noted the limited cross-border disease control and surveillance capacity at designated crossing points. Furthermore, it was observed that although emergency preparedness and response plans were in place, these were disease or condition specific and they have not been regularly tested.

In response to addressing some of these challenges, the participants discussed, developed and/or adopted the instruments and tools that will make the cross border zone operational and these include the Terms of Reference (TORs) and the joint 2018–2019 annual work plan. In addition, the participants also conducted a Table Top simulation exercise.

At the end of the meeting, participants agreed to implement four (4) recommendations. Firstly, to conduct regular quarterly cross-border meetings to address issues of common interest with particular emphasis on disease surveillance and outbreak management, based on the One Health model. It was proposed that the first meeting should take place in November 2018.

Secondly, to establish information sharing platforms that are in line with both countries’ data and information sharing policies and procedures. Thirdly, to adopt the TORs that shall govern the functionality of the cross border zone and fourthly to adopt the propose committee membership.

(i) Thabo Mofutsanyane, Leribe and Butha Buthe

(ii) Thabo Mofutsanyane and Maseru

(iii) Mafeteng, Mohale’s Hoek and Wepener and Zaztron

Lesotho and South Africa are committed to improving disease surveillance across their borders.
Malawi has adopted the One Health Approach to combating diseases. In efforts to further strengthen disease surveillance, the country has successfully completed the second multi-sectoral training in laboratory based disease surveillance involving Integrated Disease Surveillance and Response (IDSR), environmental and laboratory officers. The training took place in Salima district from 23 – 27 July 2018.

A total of 17 participants were trained with 4 of these being surveillance and environmental officers. The training strengthened in-country capacity for surveillance and improved laboratory capacity in handling disease outbreaks, as well as other health related emergency preparedness and response. Participants gained knowledge after the training and this was assessed through observations during practical sessions and an administered pre-test and post-test assessment. All participants showed a positive gain ranging from a percentage increase from as low as 10% to as high as 48% between pre-test and post-test, indicating an average increase in knowledge of 38%.

During the official opening, the National TB Reference Laboratory Manager, Mr. Mabvuto Chiwaula indicated that Malawi continues to strengthen surveillance as part of its preparedness by training more officers, following the success of the initial training that took place in January 2018. He was speaking on behalf of the NTP Manager, Dr James Mpunga.

“Disease surveillance and outbreak preparedness and response require a multi-sectorial approach as recommended by the One Health Approach. This approach provides a platform for establishing a working relationship between surveillance and laboratory staff which is key in surveillance and outbreak response,” Mr Chiwaula said.

Senior Laboratory Specialist from East Central and Southern Africa Health Community (ECSA-HC), Dr. Talkmore Maruta reaffirmed his organization’s commitment to continue supporting Malawi through technical assistance. He stated that one of the deliverables on the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project is to
strengthening diagnostic capacity and surveillance of diseases and other events of public health importance in project participating countries.

The capacity training was divided into two (2) modules focusing on specific technical areas. Module one focused on the role of the laboratory in surveillance and disease control from sample collection, transportation to processing, surveillance data management and communication.

The participants also conducted a scenario-based skills-drill that uses a progressive scenario together with a series of scripted injects to practice and demonstrate capacities and skills needed to early detect and effectively respond to a potential outbreak.

Module two focused on laboratory techniques with specific topics as well. This module also involved conducting a field visit where participants split into three groups to visit Salima Hospital water source (borehole) where they sampled water; Salima markets where they sampled food and the hospital kitchen and theatre respectively.

After the training, three recommendations were made as follows; (i) to conduct the training close to a facility that is able to offer a laboratory with adequate space, reagents and supplies (ii) to utilize the ongoing process of laboratory mapping to identify laboratories to be strengthened to provide microbiology services (culture and DST) as well as processing of environmental samples (iii) and to organize additional laboratory based training to build capacity of surveillance and laboratory staff.
ZAMBIA-DRC TO JOINTLY TACKLE CROSS BORDER DISEASE CHALLENGES

Zambia and the Democratic Republic of Congo (DRC) have come together to establish the first cross border disease surveillance committee under the Southern Africa Tuberculosis and Health Systems Support (SATBHSS) project. The main aim of this is to strengthen coordination of cross-border disease surveillance, conditions and events of public health importance, as well as joint response to disease outbreaks and emergency preparedness across borders using One Health Approach.

This first meeting of the committee took place from 09–12 July 2018 in Chililabombwe. During the meeting, Zambia and DRC identified three common cross-border challenges; uncontrolled and/or illegal crossing points (Bilanga), transhipping, and poor sanitation in the market places in and around the border areas. It was agreed that the two countries will develop a roadmap on how these challenges will be addressed. It was further agreed that the two countries will conduct regular (quarterly) cross-border meetings to address issues of common interest with particular emphasis on disease surveillance and outbreak management, based on the One Health Approach model. The first meeting is proposed for November 2018.

The cross-border disease surveillance committee was established between Chililabombwe district of Zambia and Sakania district of the DRC as Zone one and the inaugural meeting was officially opened by the District Commissioner of Chilibombwe, Mr. Paul Mulenga. Terms of Reference (TORs) for the committee were developed and adopted during the meeting and the 2018 annual work plan was developed with clear agreed activities for implementation. In addition to zone one, two other zones were identified during the meeting between the Zambia–DRC border for possible operationalization and these include; Mufulira (Zambia) – Sakania (DRC) and Ndola and Masaiti (Zambia) – Sakania (DRC).

The cross-border disease surveillance committee between Zambia and DRC is being established based on the recommendation that came out from the inaugural Community of Practice (CoP) on Laboratory and Surveillance regional meeting held in Maputo, Mozambique in 2017. The two countries made some recommendations during the meeting which include establishing information sharing platforms that are in line with both countries data and information sharing policies and conduct simulation exercises at least once every year to test the emergency preparedness plans.

A total of 35 participants drawn from Zambia and DRC attended this meeting from varied disciplines and functions of surveillance, animal health, environmental affairs, immigration, customs, authorities, laboratory, clinicians, District Medical Officers, security and communication.
A Joint External Evaluation (JEE) of public health systems in Lesotho shows a score of 1 out of a possible 5 on two components related to public health emergency preparedness and priority public health risk assessment. In an effort to address this and strengthen public health systems, the Ministry of Health of Lesotho in collaboration with East Central and Southern Africa Health Community (ECSA-HC) and Africa Centres for Disease Control and Prevention (Africa CDC) organized a capacity building workshop on Threats Hazards Identification and Risk Assessment (THIRA).

The capacity building workshop took place in Leribe, Lesotho from 02 – 05 July 2018 with the aim of training trainers on THIRA to build their capacity to conduct identification and mapping of threats, hazards and risks to enable the development of emergency preparedness plans in Lesotho. It was attended by 21 participants drawn from the One Health Approach and these included representatives from surveillance, laboratory, clinicians, environmental health, immigration, security, community leaders, metrology, veterinary, communication, planning, and fire department. The trained participants are expected to conduct step-down training in the country so that other key personnel can also benefit. This is expected to further strengthen public health systems in line with one of the main objectives of the Southern Africa Tuberculosis and Health Systems Strengthening (SATBHSS) project, which targets strengthening disease surveillance and diagnostics at country and regional level.

The THIRA curriculum was developed by the Global Emergency Management Capacity Development Branch, Centre of Disease Control and Prevention of United States of America and the areas covered by the training content includes 5 modules as follows; threats and hazards, risk assessment theory, THIRA process overview, THIRA process workshop and practice teaching. The interactive training in Lesotho included didactic power point presentations and classroom tasks. In addition, the participants used the training materials to teach back to other participants in groups. Each group received feedback from the class as well as from the facilitator.

After the training, three recommendations were suggested for possible implementation. Firstly, to convene all trained participants to conduct a Threats Hazard and Risk Mapping for Lesotho within the next 3 months and secondly, following identification of threats and hazards, input findings into the Emergency Preparedness Plan for Lesotho. Thirdly, to develop a step down training plan for national roll out of the THIRA curriculum in Lesotho.
The Centre of Excellence for Lesotho, “Community TB Care”

The CoE in Lesotho aims to improve case notification through community based approaches in TB management in the underserved and hard to reach areas.

Service package

Community TB Care will be implemented through a service package comprising of four (4) key components as follows:

**Component 1:**
Innovative active TB screening

- a) Door to door four symptom TB screening of CoE target group
- b) TB screening campaigns using digital X-Ray
- c) GeneXpert testing as diagnostic test for all presumptive TB cases
- d) HIV counselling and testing
- e) Screening for blood pressure and blood glucose.

**Component 2:**
Sputum referrals and linkage to care

- a) Sputum sample collection and transportation to the laboratory
- b) Delivery of results back to sites
- c) Basic sputum induction procedures for community level to ensure all presumptive TB cases will submit specimen.
- d) Cross-border referrals tracing and linkage to care

**Component 3:**
Patient treatment /follow-up/ support and contact tracing

- a) Initiation of TB treatment for all confirmed TB cases (facility based)
- b) HIV Testing Services for all TB patients and initiation of treatment (facility based)
- c) Screening for blood pressure and blood glucose
- d) DOTs for all identified and confirmed cases
- e) Tracing of Loss to follow ups
- f) Contact tracing and follow-up
- g) Under 5 Isoniazid preventive therapy (IPT) monitoring and support

**Component 4:**
TB awareness and infection control

- a) Education, information and communication to increase TB and infection control literacy
- b) Awareness on Occupational Health Diseases (OHD)
- c) Provision of masks for infection control

Implementation strategy – Community TB Care

Implementation will be comprised by two phases:

1. Pilot phase in two high burden districts (Thaba-Tseka and Leribe)
2. Scale-up phase – to a total of 4-5 districts based on pilot results