October 2017 | Issue 16

ASLM
AFRICAN SOCIETY FOR LABORATORY MEDICINE

LAB CULTURE

ADVANCING THE LABORATORY PROFESSION AND NETWORKS IN AFRICA

Diagnostics Updates:

HIV, tropical viruses, tuberculosis, malaria, hepatitis C virus

In this issue:

Laboratory personal protective equipment:
Developing a culture of safety

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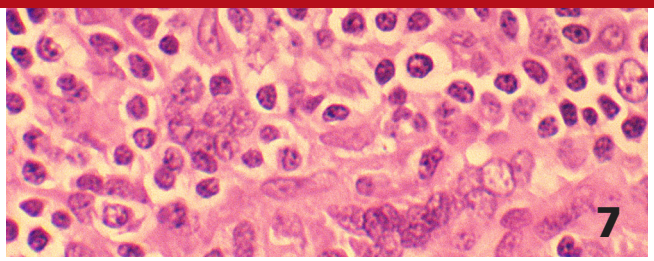

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DIAGNOSTICS

DEPARTMENTS

SPECIAL REPORT

INDUSTRY WATCH

EDUCATION & TRAINING

Contribute to *Lab Culture*

ASLM is currently accepting article and photo submissions for upcoming issues of ***Lab Culture***. We publish timely, informative, inspirational articles relevant to the unique challenges faced by laboratories in resource-limited settings. We are interested in articles on the critical aspects of laboratory medicine, best practices, success stories, leaders in the field, industry news, etc.

To submit articles, proposals, photos, etc., please contact the Editor at newsletter@aslm.org.

Lab Culture. Established along with ASLM in 2011 as a member newsletter, ***Lab Culture*** relaunched in 2017 as ASLM's magazine for laboratory medicine in Africa. Dedicated to bringing timely, informative articles relevant to the unique challenges faced by African laboratories, ***Lab Culture*** seeks to be Africa's premiere resource for laboratory professionals and other stakeholders working on with the continent. Published six times a year as a digital edition, ***Lab Culture*** includes features on critical aspects of laboratory medicine and best practices in resource-limited settings, success stories from the continent, industry news, and more.

Letter from the CEO

Welcome back, ASLM members, to *Lab Culture!*

Dr Ali Elbireer

As we take a new direction with *Lab Culture*, so too does ASLM. During the past 6 years, since your ASLM started, the world of diagnostics in Africa has evolved. To meet the new challenges, ASLM has grown along the way, elevating laboratory medicine priorities from the benches into the boardrooms. Meanwhile, a major shift in diagnostics technology has taken place away from traditional diagnostics towards molecular technologies that require different approaches.

In light of achievements made towards ASLM's original 2020 Strategic Vision and Goals, evolution in the state of laboratories in Africa, and changes in health priorities and the political, funding, and technical landscape, ASLM acknowledged the need to revisit and reenergise its founding goals. In June 2017, ASLM held a strategic planning meeting attended by 32 members of the staff and other stakeholders. During the meeting, ASLM's vision, mission, values, and guiding principles were reviewed, the four original Strategic Goals were expanded to five, and a revised Strategic Plan for 2017-2020 – and a plan for its implementation – were drawn up. The 2017-2020 Strategic Plan is currently in the final stages of approval. We hope to share it with the various laboratory communities of Africa in early 2018.

The new strategic plan enumerates ASLM's accomplishments since its founding and lays out a detailed plan for how best to build upon them. It also takes an honest look at ASLM's setbacks and challenges and presents a plan to overcome them. A key part of that plan is a purposive focus on various laboratory professional cadres and laboratory leadership as a critical building block in achieving quality laboratory medicine for all Africans. The strength of Africa's laboratory workforce and its leadership are the foundation of that vision.

Furthermore, laboratory professionals must have a seat at the table with leaders in all healthcare forums. To that end, ASLM will be working to synergise its activities to advance the role of laboratories across the healthcare continuum. ASLM has many strengths it can utilise to achieve this. Its international reputation, existing partnerships, collective expertise, and convening power all speak to ASLM's ability to bring diverse political, economic, and healthcare stakeholders together with laboratory leaders and ensure that our voices are heard.

As the largest pan-African organisation addressing laboratory strengthening, ASLM is in a unique position to attract sustainable support. Diversification and stabilisation of that support go hand in hand to ensure the sustainability that is essential for ASLM's future. This will be challenging in an increasingly competitive funding environment. However, the goals set for 2017-2020 are worthwhile and ASLM is ready and well-positioned to achieve them.

Finally, ASLM will continue to strive toward its vision of promoting laboratory professionals and its sustainability goals in the year ahead. As we do, you have our commitment that we will be working on strengthening the laboratory professionals' role in improving quality of healthcare in Africa and global healthcare security.

Sincerely,

Dr. Ali Elbireer, CEO

LAB CULTURE
ADVANCING THE LABORATORY PROFESSION AND NETWORKS IN AFRICA

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Welcome back to *Lab Culture*!

By Bethanie Rammer, Editor

Last June, ASLM staff, Board members, and other stakeholders met in Addis Ababa to assess the organisation's progress since its founding in 2011 and revise its strategic goals and plans. As part of this process, we reimagined *Lab Culture* as a 'member magazine', although it's not just for members – it's available to anyone with an internet connection all over the world!

Our aim going forward is to make *Lab Culture* the premiere resource for laboratorians in Africa, especially for those in resource-limited settings. Thus, we are dedicated to bringing practical, thought-provoking information and inspiration to laboratory professionals across the continent. To that end, we've partnered with well-established publisher, NP Communications, LLC. NP Communications has been successfully publishing the monthly *Medical Lab Observer* (better known as '*MLO*') since 1969. We are delighted to have them on board to share their expertise in delivering quality content!

In this issue, we aimed a spotlight on current diagnostic needs in Africa beyond HIV, as countries begin closing in on the first UNAIDS 90-90-90 goal of 90% of all people living with HIV knowing their status. Experts in a number of fields have provided updates on what's needed in Africa for diagnosis of other conditions, including hepatitis C, emerging infectious diseases, and fever. In addition, we've covered the growing importance of connected diagnostics not only for quality patient care but also for surveillance, and point-of-care assays for HIV viral load, important for the achievement of the second two '90-90-90 goals'.

We also have a special report on personal protective equipment (PPE). Proper use of PPE is critical for the safety of laboratory and healthcare workers dealing not just with the headline-makers like the Ebola virus, but with many other infectious organisms from Marburg virus to *Yersinia pestis*, the causative agent of plague. In our report, you'll find a review of guidelines, as well as advice for implementing an effective PPE program and building a culture of safety in your laboratory.

In future issues, we'll be exploring how Africa will meet the growing global threat of antimicrobial resistance and how to bring quality management systems to the next level with SLIPTA and SLMTA. In the meantime, we hope you enjoy the new *Lab Culture*! Drop us a line at newsletter@aslm.org to let us know what you think!

Bethanie Rammer

The state of diagnostic needs in Africa in relation to diagnosis of HCV

It is estimated that in 2015, 257 million people were living with chronic hepatitis B virus (HBV) infection and 71 million with chronic viraemic hepatitis C virus (HCV) infection. In the African region, 6.1% (60 million) and 1% (11 million) of the population is infected with HBV and with HCV, respectively.[1] People living with HIV are at higher risk of getting infected with viral hepatitis, which is a growing cause of mortality among people living with HIV. If not properly treated, both HBV and HCV infection can lead to severe complications such as cirrhosis and hepatocellular carcinoma and then death. As of today the majority of these infections still remain undiagnosed globally. In 2016 the World Health Organization set ambitious targets to eliminate viral hepatitis as a public health threat by 2030 (defined as a 65% reduction in mortality and a 90% reduction in incidence compared with the 2015 baseline).[2]

Screening of HCV can be performed with single rapid diagnostic test or laboratory-based immunoassay; however, these assays are very often limited to blood banks and not offered routinely to high-risk groups. The nucleic acid tests, which are used to guide whom to treat, to monitor treatment response and as test of cure, are rarely available, especially in the public sector. The systems and processes built over the past decades in sub-Saharan Africa in areas such as HIV and tuberculosis offer the unique opportunity for integrating viral hepatitis testing into existing infrastructures. The integration of different assays on polyvalent platforms has many benefits as it brings efficiency gains across programs. The technical update issued by the World Health Organization provides strategic and operational considerations for diagnostic integration.[3] In particular, it highlights the key role played by country-led and country-coordinated collaborative processes to achieve integration. This approach should be a priority for those countries willing to strengthen their viral hepatitis testing capacity that already have operational multidisease testing devices, both at central and decentralized facilities, as well as those considering their introduction.

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Francesco Marinucci, PhD, Head of HCV & HIV, FIND, Geneva, Switzerland

In Cameroon, the Foundation for Innovative New Diagnostics (FIND) has signed a memorandum of understanding with the Ministry of Health to support the health sector by strengthening the decentralized management of viral hepatitis in public, private and faith-based health facilities to reduce the incidence and mortality related to HCV. In partnership with the Centre Pasteur du Cameroon, FIND is strengthening efforts to focus on integration of the HCV assay into laboratory-based molecular equipment by promoting good laboratory practices in the collection and transport of samples, and on decentralization of HCV testing by introducing point-of-care diagnostics both for screening and confirmatory tests at lower-level health facilities. The overall goal of this collaboration is to generate evidence that will be translated into national policies for HCV management.

This project is made possible thanks to Unitaid's support.

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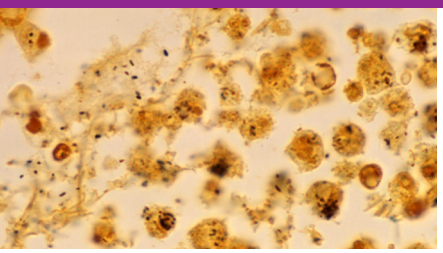

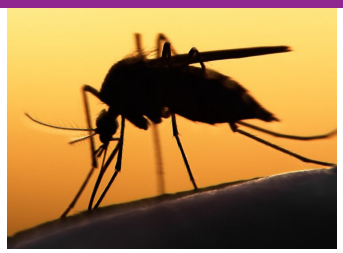

Photo: CDC/ Dr. William Cherry

Beyond HIV, tuberculosis and malaria

Making sure that all fevers can be diagnosed in a clinical setting

Over the last two decades, laboratory diagnostics have greatly enhanced the detection, management and containment of HIV, tuberculosis and malaria in African countries. In contrast, very little progress has been made in the diagnosis of non-malarial fevers. This diagnostic gap has important ramifications for patient care, antimicrobial resistance and patient confidence in health systems. For example, point-of-care malaria diagnostics were recently blamed for increasing irrational antibiotic use. The simple explanation for the finding that prompted that discourse is the near absence of effective diagnostics for other causes of fever. Malaria-negative febrile patients too often receive an antibiotic even though their fevers could have viral, fungal or parasitic etiologies. And when an antibiotic is needed, there is little evidence available to ensure that the most cost-effective option will be selected.

In low-resource settings, the majority of fevers are initially managed at home, with herbal or over-the-counter remedies and bed rest. Only when symptoms continue to worsen is medical attention sought. Therefore febrile patients often present at health centers with prolonged or life-threatening disease that must be addressed promptly and effectively. Special challenges for fever diagnosis in tropical settings arise from the broad range of endemic pathogens that produce similar syndromes. Even when malaria has been ruled out, the clinical diagnosis of fever is imprecise due to numerous patient, healthcare access, environmental and occupational variables. The climate, season and geography of the location and outbreaks may also influence disease patterns. In general, without laboratory diagnostics, it will be difficult or impossible to pinpoint the etiology of most fevers in sub-Saharan Africa.

Robust and reliable diagnostics for non-malarial fevers include bacteriological culture, molecular tests, immunological techniques and, in a few fevers, direct microscopy. Many African settings, particularly rural ones, do not have the laboratory infrastructure, supply chains, constant electricity and water supply needed for such tests. These underserved areas also do not have good road networks to connect them to regional reference laboratories, nor do their populaces have the resources to pay for expensive tests. For some febrile diseases—typhoid fever being a case in point—there are no optimal diagnostics in clinical use.

All of these issues could be addressed by focusing present-day technologies on diagnostic development for the most common causes of fever and, as has been done admirably for HIV and tuberculosis, by improving access to existing tests in the interim. The ideal fever diagnostic would be useable at a remote point of care and provide information on multiple fever etiologies. We know that such a diagnostic dream is possible, because it has already been realized for malaria, and to some extent, tuberculosis and HIV.

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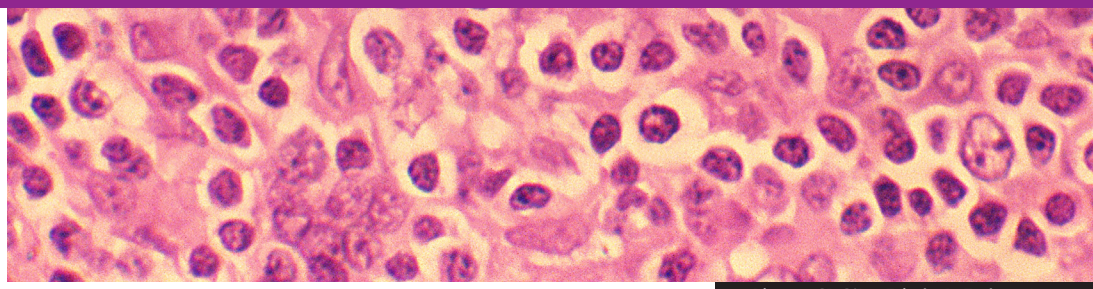

Photo: CDC/Dr. Edwin P. Ewing, Jr.

HIV viral load monitoring – third UNAIDS 90% target

The UNAIDS 90-90-90 goals represent an ambitious strategy to end the AIDS epidemic by 2020.[1] It differs from previous targets in its (usually) three-pronged approach that embodies the complete cycle from an individual's knowledge of his or her HIV status to access to antiretroviral therapy and, importantly, treatment outcomes, as measured by viral suppression. The third UNAIDS target envisions 90% of all people receiving antiretroviral therapy to be virally suppressed. This is perhaps the most challenging target goal, since its quantification requires a sophisticated laboratory assay. While viral load testing is the gold standard of HIV treatment monitoring, current commercial viral load assays require highly trained laboratory staff and significant infrastructure. As a result, the availability of viral load testing, even with decentralized networked systems and the use of dried blood spots, is still quite limited in most low- and middle-income countries.

The use of an affordable, reliable, point-of-care viral load assay has been considered a 'game-changer', where increased access, minimal laboratory worker training and same-day results could be addressed in a single solution. To date, point-of-care viral load assays have been evaluated by their manufacturers with reference panels of samples with some in-country laboratory evaluations. While these are appropriate and critical first steps, it is also important to evaluate the impact of this new technology against the standard-of-care method of point-of-care viral load monitoring in an actual low- and middle-income country antiretroviral therapy setting.

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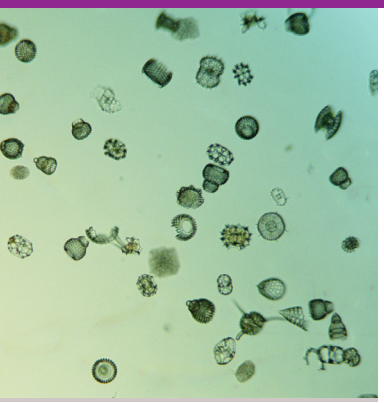
At the Jos University Teaching Hospital, Plateau State, Nigeria, the Centers for Disease Control and Prevention is funding a randomized control trial of point-of-care viral load monitoring versus standard-of-care viral load monitoring in patients newly initiating antiretroviral therapy in collaboration with Harvard T. H. Chan School of Public Health scientists. As the first 12 months of ART are critical to sustained viral load suppression, we will evaluate the efficacy, feasibility and acceptability of point-of-care viral load monitoring and compare HIV outcomes, patient retention and adherence in comparison to standard-of-care viral load monitoring in the first 12 months of antiretroviral therapy.



Diagnostics for tropical viruses

The 2013-2016 outbreak of Ebola virus disease (EVD) in West Africa was the largest outbreak of a filovirus so far recorded in medical history, with 28 616 cases and at least 11 310 deaths (World Health Organization). Importantly, recent reports[1,2] evidenced an overall high mortality in patients without EVD admitted to Ebola treatment units (ETUs) in Sierra Leone and in Guinea. Patients typically present with a range of non-specific signs and symptoms such as fever, headache, malaise, myalgia, conjunctivitis, a range of gastrointestinal disturbances and occasionally bleeding. In the early phases of disease and in the absence of a recognized outbreak, filovirus disease is often impossible to differentiate based on clinical signs only from more common pathogens causing hemorrhagic fever such as Lassa fever, yellow fever, or a severe dengue fever, or pathogens causing severe febrile illness like Chikungunya fever, malaria, typhoid fever or bacterial gastroenteritis.

Rapid and safe laboratory diagnosis of patients with suspected filovirus infection is imperative to control an outbreak. However, as many non-EVD cases succumb to other infectious diseases, diagnosing these pathogens is equally important but often underappreciated during a filovirus disease outbreak. The development of field-deployable laboratories and molecular technologies, especially RT-PCR, has proven to be an invaluable tool for case identification and management of EVD[3] but several bottlenecks exist. First, the long turnaround time for Ebola testing by conventional RT-PCR prolongs the time that a non-EVD patient remains in an ETU. Second, these field laboratories often do not have the capacity nor the time in the midst of an outbreak to perform differential diagnostic testing (perhaps with the exception of malaria rapid diagnostic tests) in the case of a non-EVD patient.

During the 2013-2016 EVD outbreak, several Ebola tests have been developed on (semi-)automated molecular diagnostic platforms[4,5,6] as well as immunoassays.[7] While immunoassays are obviously faster than nucleic acid-based tests, there is still debate about the sensitivity and biosafety concerns associated with the use of these tests for filovirus detection, especially in a resource-limited setting. According to the World Health Organization interim guidance on the use of rapid Ebola antigen detection tests[8] a confirmatory PCR will still need to be obtained to exclude false-negative immunoassay results. The molecular diagnostic platforms have a number of advantages to shorten the time to result: they require only limited hands-on time, can be used near-patient and require minimal training so that non-laboratory specialist staff can run these assays. Furthermore, these assays are safe, sensitive, precise, highly quality controlled and incorporate assay and sample controls.

Although many of these molecular platform technologies have the capacity for multiplexing, none of the tests that received Food and Drug Administration Emergency Use Authorization and/or World Health Organization Emergency Use Assessment and Listing prequalification during the 2013-2016 EVD outbreak was designed to diagnose multiple pathogens simultaneously. Future efforts should focus on developing multiplex tests that not only cover a comprehensive panel of pathogens causing febrile illness, but at the same time are optimally suited for use in resource-limited settings and under outbreak conditions. At the same time

and as a complement to nucleic acid-based tests, sensitive and specific immunoassays are needed that can be used safely as the front-line test. In addition to performance and usability in developing countries and under outbreak situations, the price of a test needs to be considered. Last, logistical and infrastructural challenges, such as lack of refrigeration and electricity, must be overcome to enable widespread deployment of all forms of diagnostic capacity.

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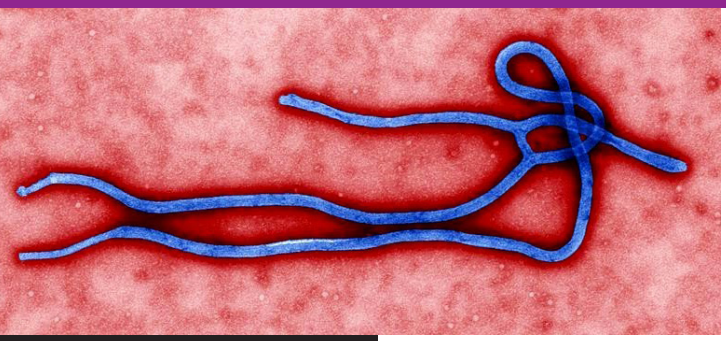
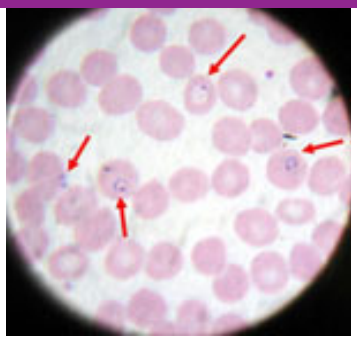




Diagnostics – connecting forward

SystemOne is a software company located in Springfield, Massachusetts, United States, that is dedicated to 'connecting diagnostics and providing data-driven platform solutions for the developing world.' It provides a software platform used by laboratories in 32 countries to connect and share data on diagnosis of diseases ranging from malaria to Ebola.

The majority of routine diagnostic testing is conducted in a centralised laboratory setting, such as a reference laboratory, with adequate infrastructure, trained staff and a controlled environment. Recent technological advances are increasing coverage and access to diagnostic testing to reach peri-urban, rural and other hard-to-reach areas. Apart from expanding the catchment area for testing, this is also expanding the laboratory network and laboratory systems. The shift from a centralized to a more decentralized testing network will require stronger as well as more innovative systems to support the expanded network and ensure that each patient receives the same quality testing and data is appropriately collected.

Currently, laboratory data are not being fully utilized to measure quality, report on surveillance, elimination and eradication programs and support the global health security agenda. Various connectivity initiatives are promising to allow for the expansion of quality diagnostic testing, while continuing an uninterrupted laboratory network. This connected network could closely monitor the quality of testing and testing services and support absolute data collection.

However, connectivity solutions cannot be used to their full potential without the proper support systems needed to establish a sustainable program. Countries will need trained human resources specific for information technology. In many countries, this may mean the establishment of a new cadre supporting healthcare professions. Similarly, as diagnostic testing expands beyond the laboratory, so too will the supporting systems and healthcare professions need to expand beyond the laboratory. Information technology, quality data and clear terminology as to what 'connectivity' is will be central.

Debi Boeras and Ben Cheng, The Global Health Impact Group, Atlanta, Georgia, United States

Photo: CDC/Patrick Adams RTI International

Infectious disease outbreaks underscore the importance of PPE for laboratorians

By MLO staff

In October 2017, Uganda confirmed one death from the highly infectious Marburg virus. The victim was a 50-year-old woman who presented with symptoms of the hemorrhagic fever, confirmed by laboratory tests. She had cared for her 42-year-old brother, who had died a month earlier after showing similar symptoms, and she had helped to prepare his body for burial. According to Ugandan Health Minister Jane Ruth Aceng, the brother was 'a hunter who carried out his activities where there are caves with a heavy presence of bats'. By 19 October 2017, the death count had reached 74.

In the meantime, an outbreak of plague in Madagascar continues. Between 1 August and 15 October, 2017, 849 cases (suspected, probable and confirmed) had been reported, affecting 37 of the nation's 114 districts. The district of Antananarivo Renivohitra was the most affected, with 57% of the reported cases. Plague is endemic on the Plateaux of Madagascar, including Ankazobe District.

Of the 849 cases, 568 were clinically classified as pneumonic plague, 155 were bubonic plague, one was septicaemic plague and 125 were unspecified. Thirty-nine healthcare workers had contracted the disease by mid-October. They and others were being treated with antibiotics, as healthcare workers, with help from the World Health Organization (WHO) and other nations, worked diligently to defeat the outbreak. The WHO has sent $1.5 million to the island nation, along with expert medical personnel.

As part of the national and international effort on behalf of Madagascar, healthcare workers in plague treatment centres were oriented on the correct use of personal protective equipment (PPE), pending formal training. The WHO has supplied more than 150 000 sets of PPE to Madagascar. The United Nations Children's Fund (UNICEF) is sending 100 000 masks, and France is organizing the supply of 300 000 examination gloves.

WHO guidelines on PPE

For clinical laboratory professionals, the appropriate use of PPE is part of their everyday work experience; they don't need to be reminded to use PPE by infectious disease outbreaks. It is certainly true, however, that such outbreaks bring attention to the importance of PPE. If there was any silver lining to the dark cloud of the 2013-2016 Ebola epidemic, it is that the tragedy caused national and international organisations to formalize guidelines on the use of PPE, including procedures for donning and doffing.

For example, in its document 'Personal protective equipment in the context of filovirus disease outbreak response', the WHO asserted that PPE must be correctly selected and used in a safe manner;

Figure 1.

this is especially important when putting on and removing PPE, and decontaminating PPE components.

The WHO made a series of specific recommendations that are directed to healthcare workers generally, with regard to clinical contact with patients, but they are easily applicable to laboratorians and sample processing. Among them:

- All health workers should have the mucous membranes of their eyes, mouth and nose completely covered by PPE while providing clinical care for patients with filovirus disease in order to prevent virus exposure.
- All health workers should use either a face shield or goggles while providing clinical care for patients with filovirus disease.
- Health workers should wear a fluid-resistant medical/surgical mask with a structured design that does not collapse against the mouth (e.g., duckbill, cup shape) while caring for patients with filovirus disease.
- All health workers should wear double gloves while providing clinical care for patients with filovirus disease. Nitrile gloves are preferred over latex gloves.
- Health workers should wear protective body wear in addition to regular on-duty clothing.
- The choice of PPE for covering clothing should be either a disposable gown and apron, or a disposable coverall and apron; the gown and the coverall should be made of fabric that is tested for resistance to penetration by blood or body fluids or to bloodborne pathogens.
- If disposable aprons are not available, heavy-duty, reusable waterproof aprons can be used as long as appropriate cleaning and disinfection is performed.
- All health workers should wear waterproof boots (e.g., rubber/gum boots).
- All health workers should wear a head cover that covers the head and neck.
- The head cover should be separate from the gown or coverall, so that these may be removed separately.

The WHO also provided technical specifications for each piece of equipment. Further, the agency created posters, 'Steps to put on personal protective equipment (PPE) including gown' (**Figure 1**) and 'Steps to put on personal protective equipment (PPE) including coverall' **(Figure 2**).

U.S. CDC recommendations

At about the same time, the U.S. Centers for Disease Control and Prevention (CDC) issued new guidelines designed to protect

healthcare workers from exposure to the virus that causes Ebola virus disease. The recommendations are equally valid for other dangerous infectious agents. The CDC offered 'detailed guidance on the types of personal protective equipment (PPE) to be used and on the processes for donning and doffing (i.e., putting on and removing) PPE for all healthcare workers entering the room of a patient hospitalized with Ebola virus disease.' The CDC directive included these points:

- Prior to working with Ebola patients, all healthcare workers involved in the care of Ebola patients must have received repeated training and have demonstrated competency in performing all Ebola-related infection control practices and procedures, and specifically in donning/doffing proper PPE.
- While working in PPE, healthcare workers caring for Ebola patients should have no skin exposed.
- The overall safe care of Ebola patients in a facility must be overseen by an onsite manager at all times, and each step of every PPE donning/doffing procedure must be supervised by a trained observer to ensure proper completion of established PPE protocols.

The CDC provided 'recommendations for laboratory testing by staff': Any person testing specimens from a patient with a suspected case of Ebola virus disease should wear gloves, water-resistant gowns, full face shield or goggles, and masks to cover all of the nose and mouth, and as an added precaution use a certified class II Biosafety cabinet or Plexiglass splash guard with PPE to protect skin and mucous membranes. All manufacturer-installed safety features for laboratory instruments should be used.

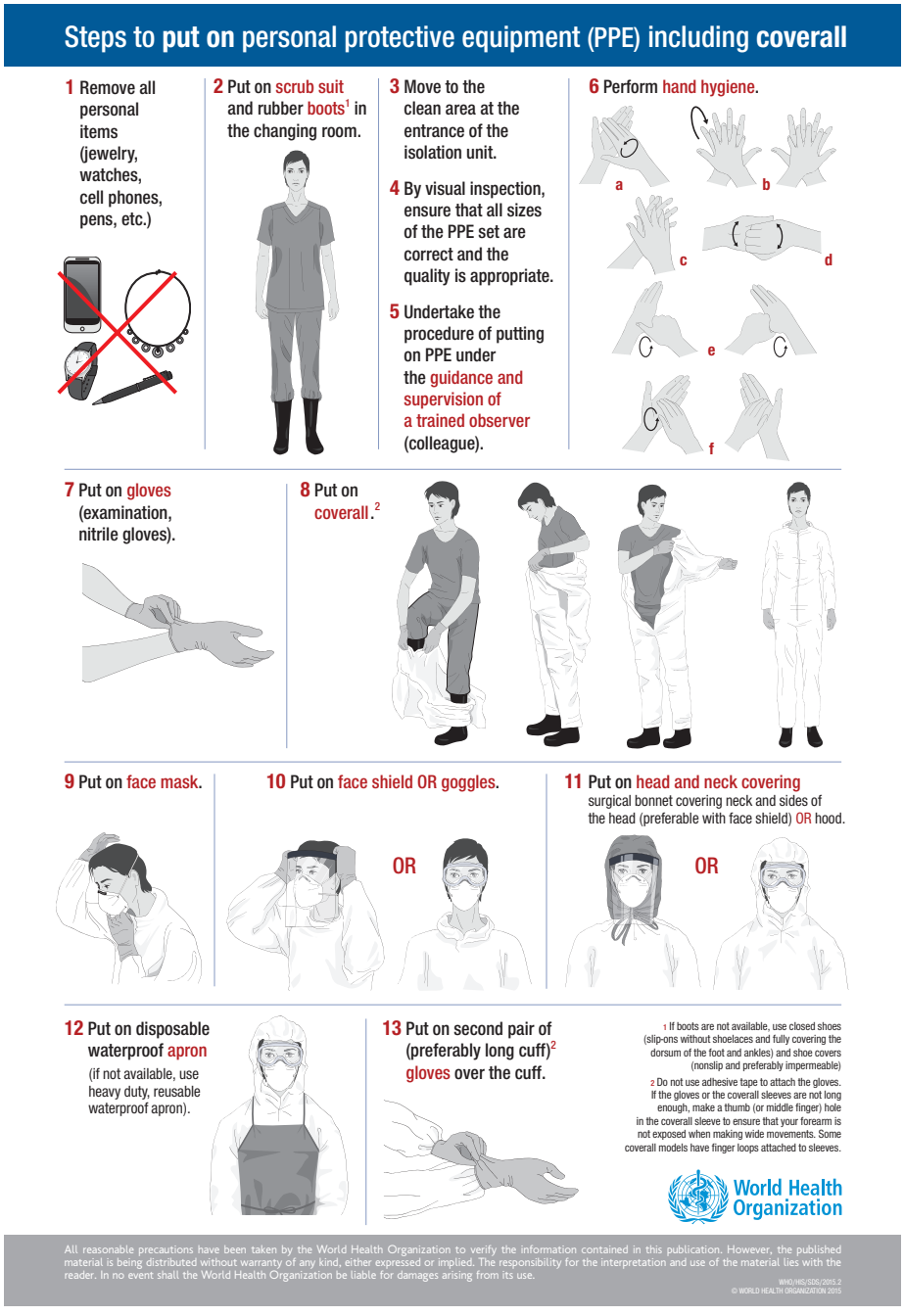


Figure 2.

The CDC indicated that routine laboratory testing, including traditional chemistry, hematology, and other laboratory testing, can be used to support and treat patients, and that the precautions as described offer appropriate protection for healthcare personnel performing laboratory testing on specimens from patients with suspected infection with Ebola virus.

The CDC also provided a detailed graphic that demonstrates the proper procedures for donning and doffing. (**Figures 3a, 3b and 3c**).

The American Society for Microbiology (ASM) Committee on Laboratory Practices also released guidance. The ASM indicated that it agreed with the CDC recommendations that specimens

Figure 3a.

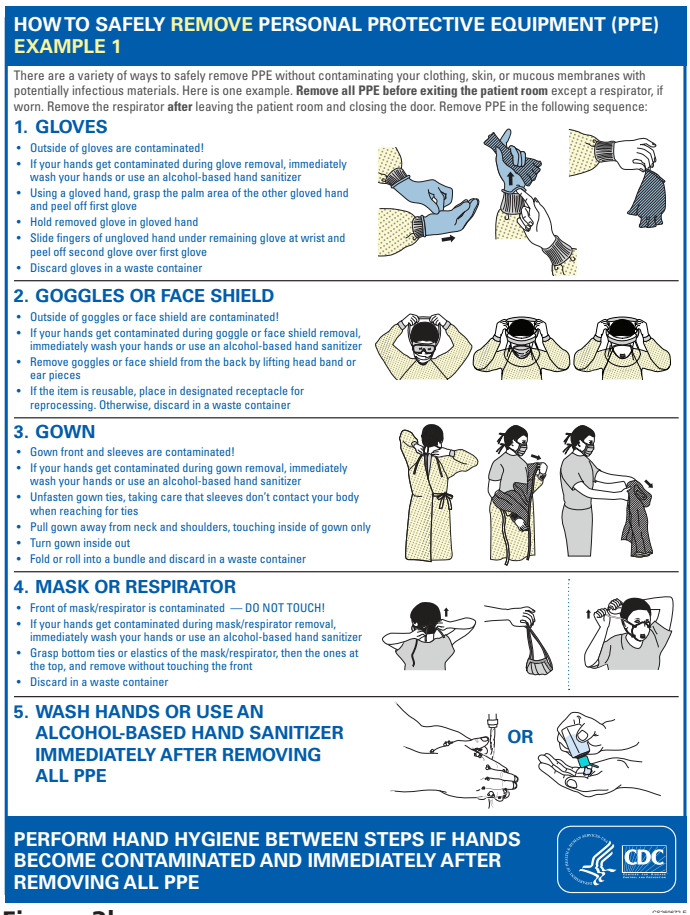


Figure 3b.

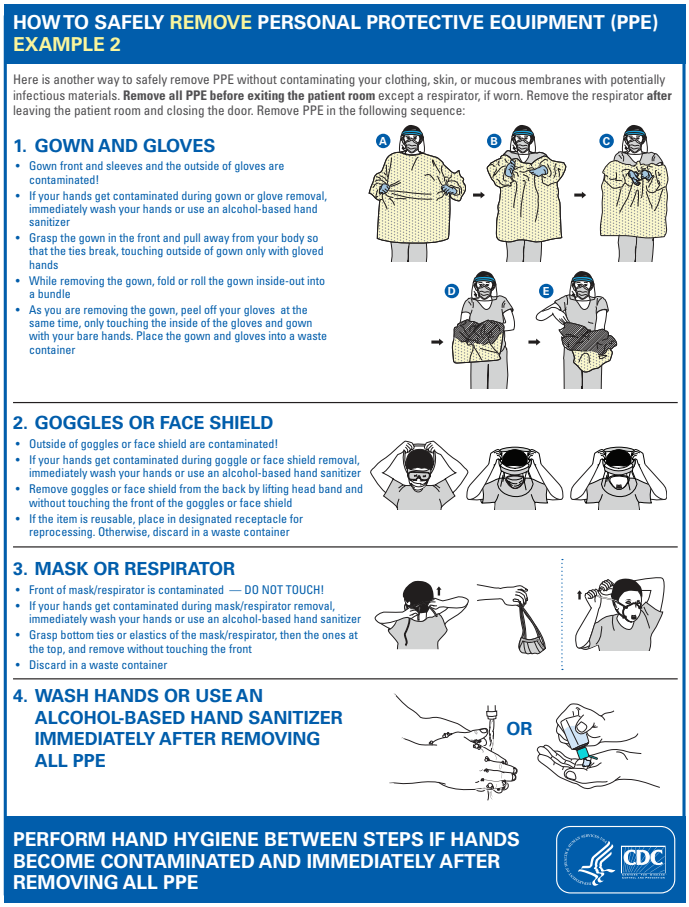


Figure 3c.

from suspect haemorrhagic fever virus (HFV) patients may arrive at the routine testing laboratory without the knowledge of the laboratory, and that all laboratory testing must follow standard precautions. In addition, the ASM drafted a document outlining 'enhanced precautions' which some institutions may choose to adopt in order to assure the safety of their testing personnel. These precautions are spelled out in **Table 1**. (on pg 15)

The use of PPE should be a routine precaution—not a reaction to a specific threat. It may be ramped us to include enhanced precautions in times of particular exposure. However, laboratories are intrinsically dangerous places where bloodborne and airborne pathogens are omnipresent, and actions must be taken routinely to protect staff members. In order to prevent laboratory-acquired infections, PPE should always be employed. It should be part of a culture of safety in every clinical laboratory.

RESOURCES

WHO International. http://apps.who.int/iris/bitstream/10665/251426/1/ 9789241549721 -eng.pdf?ua=1.

CDC. https://www.cdc.gov/vhf/ebola/healthcare-us/ppe/guidance.html; https:// www.cdc.gov/hai/prevent/ppe.html.

ASM. https://www.asm.org/images/PSAB/ASM-VHF-5-2016.pdf.

Enhanced Precautions

Comparison of the Centers for Disease Control and Prevention and the American Society for Microbiology procedures to assure testing personnel safety.

Area	Centers for Disease Control and Prevention	American Society for Microbiology
Sample collection	Gloves, water-resistant gowns, full face shield or goggles, and masks to cover all of nose and mouth.	Same as CDC, and suggest to label all specimens'suspected hemorrhagic fever virus.
Sample transport	Place in durable, leak-proof secondary container. Do not use any pneumatic tube system for transporting suspected Ebola virus disease specimens.	Wipe-down specimen container, double bag with absorbent pads soaked with bleach, then place into a rigid container for transport. Wipe-down transport container prior to leaving patient room. Do not use any pneumatic tube system for transporting suspected hemorrhagic fever virus specimens.
Sample processing	Use a biosafety cabinet or plastic splash guard with PPE to protect skin and mucous membranes. All manufacturer-installed safety features for laboratory instruments should be used.	Perform in patient's room, nearby in contained area, in biosafety cabinet located in a negative pressure room, or inside biosafety cabinet in an isolated area of the laboratory.
Laboratory PPE	Gloves, water-resistant gowns, full face shield or goggles, and masks to cover all of nose and mouth.	Impermeable gown, double gloves, eye protection, N-95 mask, shoe covers. PPE should not be re-used or leave the testing area. Double-bag with absorbent pads soaked with bleach, then place in a rigid plastic, impervious container for disposal.
Malaria diagnosis	Standard precautions	Rapid malaria detection in patient room and detailed enhanced precautions provided for testing in the laboratory.
Blood cultures	Standard precautions	Detailed enhanced precautions provided for testing in the laboratory.
Other specimens for bacterial culture	Standard precautions	Unless critically needed, do not perform. Detailed enhanced precautions provided for testing in the laboratory.
Urinalysis	Standard precautions	Urinalysis available as a urine dipstick may be performed in the patient's room.
Routine chemistries/ hematology	Routine laboratory testing includes traditional chemistry, hematology, and other laboratory testing used to support and treat patients. Precautions as described above offer appropriate protection for healthcare personnel performing laboratory testing on specimens from patients with suspected infection with Ebola virus. Precautions include both manufacturer-installed safety features (not specifically defined) for instruments and the laboratory environment as well as PPE specified above.	May be limited to point-of-care testing in patient room, especially for high-risk/proven patients
Specimen storage	Not specified	All specimen containers should be wiped with bleach, double bag with absorbent pads soaked with bleach, then placed in a rigid plastic, impervious container and isolated until they can be disposed of in an appropriate manner (see specimen/waste disposal section below). Long-term storage of specimens is not permitted for any known or suspected hemorrhagic fever virus patient.
Specimen/waste disposal	Waste generated during laboratory testing should be placed in leak-proof containment and discarded as regulated medical waste. To minimize contamination of the exterior of the waste bag, place this bag in a rigid waste container designed for this use. If available, autoclave or incineration as a waste treatment process can inactivate the virus and reduces waste volume.	Containers wiped with bleach, double bagged with absorbent pads soaked with bleach, then placed in a rigid plastic, impervious container and isolated until they can be disposed of in an appropriate manner. All specimens should be autoclaved prior to disposal.

Table 1.

Building an effective PPE program

By John Ross

In the public mind, fed perhaps by disaster movies and paperback techno-thrillers, the idea of dangerous 'lab accidents' is probably still most associated with research laboratories—and indeed, the possibility of contamination by infectious agents involved in research is a continuous concern for leaders of such laboratories. But clinical laboratory directors have always known that the issue is highly relevant to their operations as well. It has ever been thus, even before Ebola and Zika, even before HIV. Laboratorians have always needed to take precautions against being exposed to dangerous organisms via the serum samples they collect and analyse.

Despite all of those efforts, each year hundreds of accidents occur in laboratories across the world. It would be wrong to say that all incidents can be prevented if proper precautions are taken. However, implementing appropriate safety measures and adhering to a well-structured personal protective equipment (PPE) program can reduce exposures to infectious material and improve overall safety conditions in clinical laboratories.

No laboratory is immune to the risk of an accident occurring. In clinical laboratories, laboratory-acquired infections (LAIs) are a particularly significant concern. LAIs can happen as a result of inhalation or ingestion, percutaneous inoculation, and direct contact with samples or with contaminated surfaces—all of which can be minimized through the use of proper PPE.

Components of an effective program

An effective PPE program takes into account the following considerations: compliance with standards, appropriate types of protection to address potential hazards, the comfort and fit of each (wearable) item, quality of products, convenience and ease of ordering the necessary equipment, proper training procedures for wearers, and long-term effectiveness of the program.

In order to best assess the types of protection a PPE program should provide, a thorough analysis of the potential hazards should be performed. Additionally, it is important to review and adhere to the safety requirements provided by regulatory agencies and documentation. The insight and conclusions drawn from this research will contribute to determining the specific items appropriate for inclusion in the program, such as laboratory coats, masks, gloves, and safety goggles.

An essential component of PPE that should not be overlooked is the fit and feel of each product. This is especially important because PPE that fits poorly can contribute to additional safety hazards. Uncomfortable or ill-fitting protective clothing can become neglected, unused protection that wearers opt to alter or forgo. Even rolling up the sleeves of a lab coat or temporarily removing a mask can have significant safety consequences, so it is essential for PPE to be comfortable enough that it is worn properly. Additionally, PPE that doesn't fit well can contribute additional safety hazards to the lab environment. For instance, a laboratory coat that is too large can easily get caught on or dragged through something, increasing the likelihood of spills, trips, and falls. To ensure the proper fit, PPE that is available in multiple sizes or styles should be assigned and fitted on an individual basis.

Implementation and training

It is also necessary for PPE programs to be built with implementation and long-term effectiveness in mind. Programs must be developed to facilitate consistency and longevity, while providing staff—both new employees and veterans—the opportunity to be properly and efficiently trained. Training procedures should be established to properly implement the program and ensure that each individual understands the importance of PPE, as well as how to use it correctly. A variety of training resources can be made available. Examples include video tutorials, pamphlets and brochures, and hands-on practice with various protective products. Ongoing, regularly scheduled meetings and training sessions can also be very beneficial in reinforcing the importance and proper use of PPE. Inspections should be conducted regularly to assess the condition of PPE.

One game-changing factor in the landscape of PPE programs is the ever-evolving technology that many laboratories are starting to utilize for implementation. For example, the option to work with PPE suppliers to develop customized online stores has streamlined and simplified the ordering process, creating a convenience not associated with PPE program implementation in the past. The stores can be populated with preselected products that meet each organization's specific preferences and safety requirements. This technology also allows flexibility and fast turnaround in response to ongoing needs and changes, allowing laboratory leaders to update equipment as needed.

A culture of safety

A laboratory accident can happen in an instant, but the effects may last forever. PPE programs are an important component in laboratory safety that—when properly developed and implemented—help prevent unnecessary tragedies. The effectiveness of a PPE program can be optimised through a thorough hazard assessment, compliance with all applicable regulations, prioritization of comfort and fit, and consideration of long-term sustainability. With a responsible PPE program in place, laboratory administrators are helping to create an environment that fosters efficiency as well as optimal patient care.

John Ross is president and CEO of Mission Linen Supply, based in the U.S., a provider of rental and direct-sale uniforms, linens, and other essentials for laboratories.

Photo: CDC/Jessie Blount

Photo: CDC

An HIV vaccine is essential for ending the HIV/AIDS pandemic

Today, highly effective modalities of HIV treatment and prevention are available, and these essential tools, if properly implemented, could end the current HIV/AIDS pandemic. Yet, the pandemic continues.[1]

Most of the major infectious diseases affecting humans, such as smallpox, polio, and yellow fever, have required effective vaccines for their control and in some cases elimination, and so the question arises whether the HIV/AIDS pandemic can be effectively addressed without an HIV vaccine.

The answer to that question is not straightforward, but needs to be addressed from both a theoretical and a practical standpoint. Theoretically, the HIV pandemic can be ended without an HIV vaccine. More than 30 highly effective anti-HIV drugs are currently available. When given in combinations of three or more, these medications can durably suppress the virus such that patients who are treated soon after infection and continue therapy throughout their lifetime can expect to have an almost-normal life expectancy.

Importantly, effective treatment can reduce the level of virus in a person with HIV to such a degree that it is extremely unlikely that this person will transmit the virus to his or her uninfected sexual partner. This concept is referred to as 'treatment as prevention.'

Therefore, theoretically, if most or all of the people living with HIV in the world could be identified, accessed, and treated, it would be possible to stop all infections and end the epidemic. People who are uninfected, but whose behavior or life situation puts them at high risk of HIV infection, can take a single pill containing two anti-HIV drugs and decrease the likelihood of acquiring HIV infection.

This approach—'pre-exposure prophylaxis' or PrEP—can lower the risk of acquiring HIV through sexual activity by more than 90%, or from injection drug use by more than 70% if the medications are taken consistently.[2] Accordingly, if both of these treatment and prevention modalities were effectively implemented throughout the world, the HIV/AIDS pandemic would end.

However, from a practical standpoint, ending the HIV/AIDS pandemic without a vaccine, though possible, is unlikely. Although an estimated 19.5 million of the estimated 36.7 million HIV-positive people globally are receiving anti-HIV therapy (an extraordinary accomplishment), more than 17 million people are not receiving therapy.[1] This leaves a substantial treatment gap.

These 17 million people can continue to infect others, allowing the pandemic to be sustained. In addition, although PrEP is highly effective in preventing acquisition of HIV among people at high risk of infection, only a very small percentage of these individuals are actually taking these medications. In the United States, it is estimated that only approximately 10% of people who could benefit from PrEP are actually receiving it,[3] and this proportion is much smaller elsewhere in the world.[1]

The Joint United Nations Program on HIV/AIDS (UNAIDS) has set an ambitious target to help end the HIV pandemic. Called '90-90-90', the goal for 2020 is to have 90% of HIV-positive people throughout the world know their HIV status, 90% of people diagnosed with HIV receiving anti-HIV treatment, and 90% of people who receive treatment having their virus suppressed to undetectable levels. If successful, the result would be that an estimated 73% of all

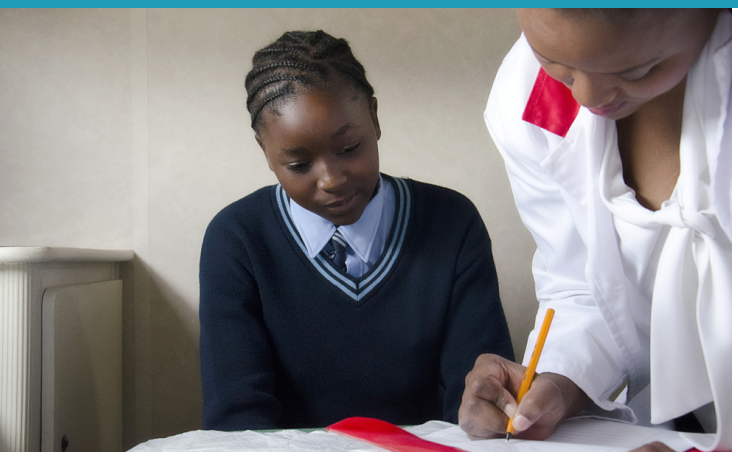


Photo: CDC/Jessie Blount

Photo: CDC/Jessie Blount

people in the world with HIV would have undetectable viral levels.

Since suppressed viral levels result in a marked reduction in the risk of HIV transmission to other individuals, mathematical models suggest that achieving the 90-90-90 goal would reverse the kinetics and trajectory of global HIV disease such that it would no longer be of pandemic proportions.

A recent study in rural Kenya and Uganda demonstrated that implementation of community-based testing and treatment resulted in increased HIV diagnosis, initiation of antiretroviral therapy and viral suppression, and the study communities reached the UNAIDS target within two years. In addition, some entire countries have been successful in reaching the goal of 73%, largely through the efforts of the President's Emergency Plan for AIDS Relief and the Global Fund to Fight AIDS, Tuberculosis, and Malaria. However, the global figure for achieving this goal in all countries is just 44%.[1] Also, modeling studies have suggested that in certain high-prevalence regions of the world, the geographic dispersion of the infected population would make it extremely difficult to reach them effectively with HIV treatment.[5]

The question also arises whether it is economically feasible to end the HIV pandemic in the absence of a vaccine. In this regard, the resource requirements to achieve such a goal are continually increasing. The 19.5 million people currently receiving anti-HIV drugs must be maintained on these medications for the rest of their lives; at the same time, anti-HIV drugs need to be provided to the 17.2 million HIV-positive but untreated people.

Furthermore, the estimated 1.8 million people who are newly infected with HIV each year[1] also need to be treated. In addition, the cost of providing PrEP and other prevention services to the millions of people who are at risk for HIV infection is substantial. In 2016, UNAIDS estimated that the total investments needed for an adequate treatment and prevention response for HIV in low- and middle-income countries between 2016 and 2030 would amount to approximately $350 billion.[6] Against this backdrop, a recent Kaiser Family Foundation and UNAIDS study found that donor-government funding for HIV decreased by 7% in 2016, which represents the lowest funding level since 2010.[7]

Despite the remarkable gains in the treatment and prevention of HIV infection, development of an effective HIV vaccine will likely be necessary to achieve a durable end to the HIV pandemic. An important question is how effective that vaccine must be. One vaccine tested in a large vaccine trial[8] in Thailand reduced the risk of infection by 31%, a figure inadequate to justify licensure of the vaccine. In contrast, other vaccines used in controlling or ending global outbreaks have been much more effective. For example, the measles, polio, and yellow fever vaccines are nearly 100% effective. Given the difficulty for the human immune system to mount a protective response against HIV, it is extremely unlikely that an HIV vaccine will be as effective as those other proven vaccines.

In fact, modeling studies have suggested that if current treatment and prevention efforts are continued and an HIV vaccine that is about 50% effective is developed and deployed, millions of additional new HIV infections could be averted, and the pandemic could slow substantially.[9]

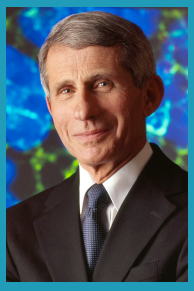
Despite extraordinary advances in the treatment and prevention of HIV infection, and while it is theoretically possible to end the HIV epidemic by aggressively and effectively implementing these interventions, from a practical standpoint this goal would be difficult to achieve. Therefore, development of a moderately effective vaccine together with optimal implementation

of existing treatment and prevention modalities could end the current HIV pandemic.

Recent advances in HIV vaccine research provide hope that at least a moderately effective vaccine can be developed. It is critical to continue to accelerate a robust research effort in that direction while aggressively scaling-up the implementation of current treatment and prevention tools. To do anything less would lead to failure, which for HIV is not an option.

https://jamanetwork.com/journals/jama/fullarticle/2656461?

Anthony S. Fauci, MD, Laboratory of Immunoregulation, National Institute of Allergy and Infectious Diseases, United States



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ASLM Laboratory Community of Practice (LabCoP)
Share your expertise and successes with others – Participate in LabCoP

At the recent HIV Viral Load Regional Workshop held in Addis Ababa 23-25 October 2017, ASLM with support from the Bill and Melinda Gates Foundation, launched the Laboratory Systems Strengthening Community of Practice (LabCoP). ASLM's LabCoP is a learning network of practicing country teams working together to share information, experiences, and best practices amongst themselves through structured and interactive discussion moderated by subject matter experts. The implementation of LabCoP is supported by ICAP at Columbia University and the Extension for Community Health Outcomes (ECHO) project at the University of New Mexico. LabCoP membership is open to any country able to form a multidisciplinary team and provide a letter of interest from its Ministry of Health. LabCoP products will be hosted on an ECHO Knowledge Base platform that will be available online to LabCoP members.

Four main activities are planned for LabCoP:

1) Identification of best practices, innovations, and implementation solutions;

2) Dissemination of best practices through hubs and spokes;

3) Implementation of a monitoring and evaluation framework to measure adoption of best practices and impact of their implementation; and

4) Development of country investment cases and advising on specific interventions.

LabCoP's initial project is focused on scale-up of HIV viral load testing for better patient management. A focused group discussion was held with country representatives and a survey was conducted among all meeting participants to inform priority areas of the viral load cascade. Other planned topics include early infant diagnosis testing, turn-around time reduction, utilisation of test results, and demand creation.

How to Join: Countries that can form multidisciplinary teams involving, at a minimum, representatives from laboratories, clinical teams and civil society are invited to join LabCoP.

Whom to Contact: Countries should submit an official Letter of Interest from their Ministry of Health to Dr Legese Mekuria (LMekuria@aslm.org) or Dr Charles Kiyaga (Ckiyaga@aslm.org) at ASLM.

Photo: CDC

Adesina calls for immediate action over deepening crisis of global malnutrition

The President's charge aligns with the African Development Bank Group's High 5 development priorities, in particular with the fifth goal: to improve the quality of life for the people of Africa

African Development Bank[1] President Akinwumi Adesina has called for urgent action from stakeholders over the deepening crisis of global malnutrition.

Adesina made the call as he joined key nutrition actors, private-sector representatives, policy-makers, and thought leaders at the 2017 World Food Prize-Borlaug Dialogue Symposium[2] in Des Moines, Iowa, on Wednesday, 18 October, to push for mutual accountability on leadership, governance, and investments for nutrition.

The 2017 World Food Prize Laureate made the remarks during a high-level meeting on nutrition hosted by the African Development Bank and the Global Panel on Agriculture and Food Systems for Nutrition.

The President's charge aligns with the AfDB's High 5 development priorities,[3] in particular with the fifth goal: to improve the quality of life for the people of Africa.[4] The quest for high-quality, healthy diets also supports the achievement of Goal 2 of the UN Sustainable Development Goals, to 'End hunger, achieve food security and improved nutrition, and promote sustainable agriculture'.

Earlier, Adesina attended a plenary session to launch the Global Panel on Food Systems and Nutrition policy brief, 'Urban diets and nutrition: Trends, challenges, and opportunities for policy action',[5] where he highlighted the major problem associated with poor diets.

'Poor nutrition has become the number one killer in the world. It's therefore high time to address this seriously and decisively,' he said.

He explained how many low- and middle-income countries now experience a 'triple burden' of malnutrition, where under-nutrition and

African Development Bank President Akinwumi Adesina

Photos: CDC

micronutrient deficiencies co-exist with obesity and other diseases related to diets.

'We must face the reality that unhealthy foods now pose the greatest danger to the health of urban dwellers,' he stressed. 'In short: Urban foods are energy rich, but nutrient poor. The changing face of urban areas aggravates malnutrition. We must address the problems of rapidly expanding slums, globally and, especially, in Africa.'

The Global Panel report highlights critical areas that deserve attention in dealing with the link between urbanization and malnutrition.

'First, we need to have stricter food market regulations in urban areas, especially for informal food markets,' Adesina said. 'Second, to reduce pressure on urban food systems, policies should be used to promote more sustainable peri-urban agriculture, especially for vegetables, legumes and other nutrient-rich crops. Third, better policies are needed to link rural and urban food systems, with greater investments in infrastructure, transport logistics, storage, and markets, to assure steady supply of foods to cities and secondary towns.'

To cut back on rising obesity, urban areas need to invest in better education on health and nutrition, support physical activities, and tax sugar drinks, he added.

The policy brief describes the challenge of providing healthy diets in urban environments, with eight evidence-based recommendations.

'The urban food crisis has become a threat we can no longer ignore,' said Agnes Kalibata, President of the Alliance for a Green Revolution in Africa (AGRA).

Former Director General, Institute of International and European Affairs (IIEA), Tom Arnold; Senior Adviser to the Center for Strategic and International Studies Global Food Security Project, Emmy Simmons; and Director of the Food and Agriculture Organization (FAO)'s Liaison Office for North America, Vimlendra Sharan, stressed how decisive action is required to reduce urban malnutrition crisis.

Policy-makers at the local level need to take a leading role in championing better diets and nutrition, and this requires them to be both mandated and empowered to act, the Global Panel members emphasized.

The Global Panel is an independent group of influential experts and leaders who hold or have held high office and who show strong personal commitment to improving nutrition. Formally established in August 2013 at the Nutrition for Growth Summit in London, it is jointly funded by the Bill and Melinda Gates Foundation and the UK Department for International Development.

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RESOURCES

1. www.AfDB.org
2. http://APO.af/EXgmf3
3. http://APO.af/6D641c
4. http://APO.af/smUo9g
5. http://APO.af/x2Ce7e

For more on the World Food Prize/Borlaug Dialogue events, please visit: http://www.AfDB.org/2017wfp and www.WorldFoodPrize.org.

Photo: WHO/A. Zouiten

Photo: WHO/A. Clements-Hunt

Nigeria needs N712 billion annually to bridge healthcare gaps

Nigeria needs about N712 billion annually to bridge healthcare financing in the country, according to BudgIT, a civic technology organisation.

BudgIT said this at the presentation of a report on health financing analysis in countries affected by Ebola.

The report was presented in Abuja earlier in October.

Oluseun Onigbinde, lead partner of the organisation, said Nigeria would achieve tangible investments if it increases its budget for the health sector.

'The budgetary allocation to health should be increased to cater to the needs of Nigerians as the health per capita is relatively low when compared to other African countries,' he said. 'If Equatorial Guinea could do $663 per citizen, then Nigeria can improve from $118 to at least $300.'

Onigbinde continued, 'If the health budget is made to attain at least to 15 percent of the national budget, as declared by the African Union, an additional sum of N712 billion (USD 1.9 billion) will be needed to give the goal sum of N1.09 trillion (USD 3.03 billion), and Nigeria can achieve more tangible investments in the sector.'

He also urged the federal government to spend more money on capital expenditure.

Onigbinde urged state governments to equip primary healthcare centres to cater for the needs of citizens in rural areas.

'The federal government should spend more on capital expenditure, as the difference between recurrent and capital is wide. If Nigeria seeks to fund the health sector through borrowing, then transparency and accountability should be adopted,' he said.

'Primary Health Centres should be adequately equipped, as these centres are often visited by citizens in rural communities. This will also help to reduce congestion in the tertiary health institutions.'

RESOURCES

This article reprinted courtesy of The Cable: https://www.thecable.ng/nigeria-needs-n712bn-annually-bridge-healthcare-gaps

The full BudgIT report is at http://yourbudgit.com/wp-content/uploads/2017/10/State-of-states-2017-report.pdf

Photo: WHO/A. Clements-Hunt

ASLM partners with AFRAC to support ISO accreditation of African medical laboratories

Participants of the ASLM and AFRAC side meeting (front row, left to right): Mr Moez Boughalmi (External Relations, TUNAC and MRA Chair, AFRAC), Dr Ali Elbireer (CEO, ASLM), Mr Araya Fesseha (Chair, AFRAC and Director General, ENAO), Mr Celestine Okanya (CEO, NINAS); (back row, left to right): Mr Ron Josias (Executive Director, SANAS), Mrs Noura Haddaoui (Head, Medical & Testing Laboratory Accreditation Department, TUNAC), Mrs Maureen Mutasa (CEO, SADCAS), Mr Teferi Mekonen (Program Manager & SLIPTA Coordinator, ASLM), Mrs Susan M-Ochieng-Ag (CEO, KENAS), Dr Ahmed Mohamed Fouli (Head, Medical Laboratory Accreditation Department, EGAC), Dr Tamar Mohamed Abdel Aziz (Staff, Medical Laboratory Accreditation Department, EGAC). Photo: Mr Teferi Mekonen, ASLM

In late September 2017, the African Society for Laboratory Medicine (ASLM) and the accrediting body members of the **African Accreditation Cooperation** (AFRAC) agreed to sign memorandums of understanding (MOUs) to establish formal collaborations in support of enabling more African laboratories to achieve accreditation to International Standards Organization (ISO) standards. The agreement was reached during a side meeting at AFRAC's 8th General Assembly and Meetings, held in Cairo, Egypt, 23-29 September 2017, where ASLM representatives Dr Ali Elbireer, CEO, and Mr Teferi Mekonen, Program Manager & SLIPTA Coordinator, met with with the Chair of AFRAC and Executive Directors of its member accrediting bodies, including the **Egypt Accreditation Council** (EGAG), **Ethiopian National Accreditation Office** (ENAO), **South African National Accreditation System** (SANAS), **Southern African Development Community Accreditation Service** (SADCAS), **Kenya Accreditation Service** (KENAS), **Nigeria National Accreditation Service** (NiNAS), and **Tunisian Accreditation Council** (TUNAC).

AFRAC, a regional cooperative body established in 2010 to bring together African accreditation bodies and other stakeholders, facilitates use of accreditation to support development, improve competitiveness, and protect public health and safety. ASLM was admitted to AFRAC in 2014 as a Stakeholder Member and has participated since then in a number of general assembly and other AFRAC-organized meetings. At the 8th General Assembly meeting, Dr Elbireer and Mr Mekonen shared ASLM's strategic vision, mission, and goals and reported on SLIPTA-related progress towards international accreditation for African medical laboratories.

Dr Ali Elbireer speaking at the 8th AFRAC General Assembly and Meetings.

'The SLIPTA certification process offers a great opportunity for laboratories in Africa to offer the best service to patients by providing reliable test results,' said Professor Alash'le Abimiku, Chair of the ASLM Board of Directors. 'We are excited about the prospects of ASLM collaboration with AFRAC to further assist African laboratories in attaining international standards, such as the ISO accreditation, which will result in better quality healthcare in Africa.'

During the side meeting held on 26 September 2017, ASLM expressed the organization's appreciation for the role played by the accrediting bodies in the progress achieved to date. More than 20 of the 300

laboratories enrolled in SLIPTA have achieved ISO accreditation. One aim of the planned MOUs is to increase that number very rapidly by building the capacity of ASLM-certified SLIPTA auditors through further training on auditing and ISO requirements.

'Laboratories all across Africa will benefit from the collaboration and the strengthening of the partnership between ASLM, AFRAC, and its member accrediting bodies,' said Dr Elbireer. 'The more transparent communications and information sharing that will result from these partnerships will eliminate communication gaps and past misunderstandings about the implementation of SLIPTA, which will result in more comprehensive support for laboratories moving towards accreditation.'

A number of specific action items were agreed upon at the side meeting. These included the need to jointly address new areas, such as blood transfusion and other medical facilities that will need to move towards accreditation in the near future and issues of traceability, calibration, proficiency testing, and supplies. Additionally, meeting attendees agreed on the importance of creating awareness that countries should have national standards, which most African countries lack, with minimum requirements that must be complied with in order for laboratories to legally practice. In order to achieve these and other aims, the signing of MOUs with various accrediting body members of AFRAC is expected to be completed within the next few months.

RESOURCE

Distribution of SLIPTA-Audited Laboratories in Africa ASLM SLIPTA webpage

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