

Quarterly Bulletin

Kenya Chapter

ICT Innovations: Are we doing enough?



The East Africa Public Health Lab Network Newsletter

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Editor's Note

At the end of the first year of implementation, the EAPHLN Project seeks to take an audit of the progress made up to this point. Much has been achieved - and there is still much to achieve - with the primary focus being on the five satellite laboratories.

The third publication has put together what has been done this year on the project towards the achievement of the principal components. The show stopper for the next year will be the construction of the five satellite labs, a real indication that the mini-centers of excellence are about to be put in place. And on this note I would like to echo the Project Manager's words that the journey of transforming laboratory services in East Africa has indeed begun! This bulletin will be one of the avenues of public awareness and hopefully help in drumming up of partnerships and active participation by all stakeholders. The five satellite laboratories will definitely generate interesting stories and innovations which will resonate from later issues of this publication. To all our readers I wish you a merry Christmas and an eventful 2012.

E. Tuitoek

Under Recognized Cadres of Human Resources for Health (HRH) in Africa

By Dr. Chris Masila [... et al]

Of all the regions of the World, Africa is lagging considerably behind when it comes to the availability of health personnel. Africa's health human resource problems take various forms, including overall scarcity, inequitable distribution and poor performance. Governments across Africa with support from development partners are stepping up efforts to strengthen the health workforce, building on the growing evidence base that shows an important link between the number of health workers and both service delivery and health outcomes. To date, focus has been on doctors and nurses, leaving out a large number of other cadres critical to the delivery

of health services. These are the "under-recognized" cadres in the health sector that include: health systems managers, health information specialists, social welfare workers, community health workers, pharmacists, supply chain management professionals, and laboratory personnel. All the above cadres, by virtue of their work, are important for the effective delivery of health services and an integral--but neglected-- part of the health system.

Laboratory personnel are one of the key under-recognized cadres. Shortages of qualified laboratory technicians, inadequate

training opportunities, and a skewed distribution are common problems hindering the efficient delivery of lab services across sub-Saharan Africa. There is an urgent need for recognition of the vital role of laboratory personnel, as human resources are the backbone of quality diagnostics.

The EAPHLN project is now doing a lot in order to have the laboratory personnel be recognized in the health system this includes capacity building, empowerment at lower levels and advocacy of importance of laboratories and the laboratory personnel terminology being properly defined.

In this issue

Quarterly message
Page 2

1st Year Wrap
Page 3

ICT Innovations: Are
we doing enough?
Page 4

Focus on Satellites
Page 7

Power of Advocacy
Page 8

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Transforming Laboratory Services in East Africa - The journey has begun

Each year, countless numbers of children and adults across East Africa present to hospitals and clinics with fevers caused by deadly diseases which range from malaria to pneumonia, tuberculosis to meningitis. Yet, it is incredibly difficult for doctors and other health workers to identify the disease causing the fever without the right tools and equipment.

I've seen this problem since my early days as a medical student and intern. Because of limited diagnostic capacities in our health facilities, we had to rely on our best guess to determine what was causing the fever. Two decades later, laboratories remain the weakest link in the provision of quality health care.

It is for this reason, that 2011 should be remembered as the year when East Africa took a bold step to lay the path of truly transforming its laboratory services.

As we come to the end of 2011, it is indeed gratifying to

Dr. Willis Akhwale, MBS



note that substantial progress is being made towards achieving our goals. Countries have started acquiring the much needed critical diagnostic equipment, we have finalized a common research proposal, we have agreed on the way forward with regards to ICT innovations and laboratory accreditation and finally empowering the satellite districts with seed funding. Trainings and other forms of capacity building are in full gear and plans to conduct cross border surveillance are being finalized while constructions and renovations of the reference and satellite laboratories are about to commence. I wish all staff working on this project in all the five (5) countries a most memorable end year and a much energized and focused 2012. I believe that during 2012 the project will provide useful lessons with regards to regional collaboration and partnerships.

FROM THE TEAM LEADER, WORLD BANK

As the year is coming to an end it is time to reflect on our achievements. I think the Kenya team has much to be proud of. The project continues to benefit from strong leadership and effective management which are reflected in strong results on the ground. This past year the Bank team had the pleasure to visit the Kitale and Malindi District Hospitals and to see firsthand the innovations being undertaken, and the commitment and dynamism of the laboratory and district teams. Our colleagues at KEMRI have provided regional leadership in developing a strong operational research agenda. Experts from the disease surveillance team responded expeditiously to the disease outbreaks in Northern Kenya. The Kenya team has made solid progress in advancing the accreditation agenda,

Miriam Schneidman Team Lead, WB



expanding training opportunities, and initiating the upgrading the equipping of laboratories. Kenya has also done an exceptional job in documenting and disseminating information through these well crafted newsletters. I would like to thank everyone engaged in this project, and to pay a special tribute to Dr. Chris Masila who has displayed drive and determination to making this project a success. Together, let's make 2012 another successful year!

FROM THE PROJECT CO-ORDINATOR

On behalf of the EAPHLN Project Coordination Team, this laboratory initiative has managed to implement several activities successfully in country and at regional level including having hired key laboratory staff i.e. Degree laboratory technologists and laboratory scientists who are now becoming key in rolling the new diagnostic technologies. The year has

ended on a pretty good note with the commencement of designing of the six laboratories which is actually the main component of this project and by early 2013 the laboratories should be fully in place. We are excited that the Burundi team are now on board on this regional initiative which is actually encouraging the spirit of togetherness and solidarity within the East African Community. This World Bank Regional Project being managed for the last one year at the Department level of the Ministry is a classic

working example that country and regional partnerships can actually work within bureaucratic Government Systems. As we move to 2012, more challenges are presenting themselves but from the words of wisdom from the late IT legend "Steve Jobs" (former Apple CEO) that a combination of great passion, great talented team and constant hard work should be the key in moving any initiative. I would like to wish my team and regional partners a Happy Xmas period and another innovative year!!

Dr. Chris Masila.



Up Coming Events:

- The 4th AFENET Scientific Conference in Dar es Salaam, Tanzania from 11-16 December 2011. Theme: "Field Epidemiology and Laboratory Training Programs as a platform for Public Health systems strengthening".
- National stakeholders planning meeting in February 2012 - to plan for the next FY's Work plan.
- Regional Integrated Disease Surveillance and Response training to be held in January 2011.
- Support Supervision and Monitoring and Evaluation visit to the five district laboratory sites (Wajir, Kitale, Busia, Malindi and Machakos) in February 2012
- East African Laboratory Stakeholders partnerships forum - March 2012.
- Construction of laboratories to commence in May 2012

Appointment

Mr. Solomon Gikundi Medical Virologist (Lab Scientist)

Mr. Gikundi holds a Masters of Science degree in Molecular Medicine from Jomo Kenyatta University of Agriculture and Technology and a Bachelor of Science degree in Medical Laboratory Sciences (Hons). He has over nine years working experience in the area of medical laboratory service, six and half of which were in the area of medical virology. His most recent employment was with the KEMRI-CDC program where he has served as the Laboratory Manager and scientist for about seven years. He will be charged with building capacity for virology testing at the National Public Health Laboratory; contribute to disease surveillance and emergency preparedness through laboratory based surveillance. He will also be supporting satellite laboratories towards accreditation within accepted international standards among other duties.



1st Year Wrap

Christabel Misiko, Operations Officer

The World Bank funded East African Public Health Laboratory Networking Project (EAPHLNP) with support from East, Central and Southern Africa Health Community (ECSA-HC), East African Community partner states identified the need for a collective regional approach targeting strengthening country and regional laboratory health systems with a USD 63.66 million support with Kenya being allocated USD 23.5 million (Ksh 2.1 Billion) over a period of five years. The implementation of the project has been taking place for the last nine months and a lot of goals have been achieved during this period. In the first financial year, the PCU recruited an ICT and Operations officer for the project as well as a laboratory scientist. In the second financial year, the project recruited a virologist and thirty laboratory technologists, ten of whom are degree holders. Achievements The project has had two implementation support missions which aimed at taking stock of the project progress by reviewing the status of the activities that are funded in the work plan as well as to discuss challenges and way forward.

The project held a two day National Stakeholder's meeting in July 2011. This meeting brought together the entire



The World Bank and regional teams visits the Kitale Satellite Lab, during one of the support missions

project stakeholder's from the districts, the programs and the PCU to discuss milestones, challenges and way forward for the project.

The baseline assessments for laboratory accreditation were completed in the last FY in the five satellite labs using the WHO/SLMTA checklist and empowering these facilities to plan, program and execute their own laboratory improvement plans. The project developed surveillance Monitoring and Evaluation tools that are used to track performance. They have been circulated to the districts and the programs and consist of the weekly reporting tool, laboratory monthly tool,

the quarterly reporting tools and the annual reporting tools.

Monitoring & evaluation supervision was conducted in September 2011 at the satellite districts to take stock of the progress and challenges faced by the districts. The report with the findings and recommendations has been circulated to the districts.

There has been a lot of progress in the project ICT component. Email accounts, training and asset manager are up and running. In addition, the ICT needs assessment for the project has been completed.

The project is procuring lab reagents and equipments for the five satellite districts and the NPHLS. So far, the NPHLS has already received the bio safety equipment which has been placed in the microbiology laboratory. The civil works procurement of a consultant is done. The consultant is responsible for the design and construction phase of the civil works.

The challenges of the project include procurement procedures being lengthy and therefore delaying activities. The civil works procurement of a consultant and the procurement of the vehicles having taken longer than planned.

Way forward As we approach the end of the 2nd quarter of the 2nd Financial Year of the project, we hope to have more involvement from local partners such as WHO, CDC, AMREF, etc in the project forums. We also need to finalize the procurement of the Genexpert and the vehicles because they are vital for the progress of the project.



Hussein Farah tests out one of the microscopes during a routine support supervision



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ICT Innovations: Are we doing enough?

By Edward Tuitoek

Quality health management requires timely and accurate data, and paper-based reporting does not fill this role adequately. The introduction of rapid diagnostic tests and the availability of wireless communications present an opportunity to open direct data transmission and feedback between peripheral health workers and central managers. Mobile based reporting systems have the potential to improve timeliness in reporting of specific, time-sensitive metrics at modest cost, while by-passing current bottlenecks in the flow of data.

In this newsletter we sample some of the innovations that have so far been made by the

member countries within the Lab Network in this front.

Kenya

E-IDSR is a web based system that is used for disease surveillance and response in Kenya. The methods of data input are both client web based and mobile web based. The client web version is currently being used at the national level with the aim of rolling out to the district level at the beginning of 2012. This version is fully functional while the mobile web version is still undergoing testing for optimization as well as for consistency checks. There are plans to further this development into mobile based applications that rely on basic phones for data collec-

tion and dissemination.

Uganda

The e-health and m-health efforts between the MOH (Malaria Control Programme, Aids Control Program, TB program etc) and the partners like WHO, UNICEF, Rapidsms in Uganda have collaborated in the creation of various SMS-based systems for two-way exchanges. In fact there have been a lot of pilot programs on this by several entities.

A typical example is Rapid sms that has been piloted for TB. Focus area is for tracking Sputum samples sent from health facilities around the country. The same system is used to relay results of the sent sample back to the referring facility. Additionally it is for tracking slides collected for External Quality Control(EQA) from health facilities around the country.

The System was designed with the help of FIND (Foundation for Innovative New Diagnostics). It is also being used by Malaria Program.

Tanzania

A mobile health initiative in which health facilities are required to report occurrence of epidemics promptly and notifiable diseases

weekly and monthly. This is an IVR(Integrated Voice Response) system in which health workers call in and are prompted for values by a central server. The reports are then analyzed for consumption. These benefits have since been accrued;

- Timeliness and data submission rates increased from 40% to 84% during the one year pilot.

- Data reported on the distribution of maternal deaths resulted in the allocation of ambulances to health centres instead of the district hospital, with cross cutting benefits to patients.

- The data obtained has resulted in doctors better informed about the community they serve, with the reports showing the Diseases trends and outbreak notifications

Rwanda

The roll out of Electronic Integrated Disease Surveillance and Response (e-IDSR) is on track, all five hospitals have gone for training with health centres in their catchment area. The disease surveillance reporting has started using Interactive Voice Response (IVR) on their mobiles and internet where the infrastructure allows.

TRAINING AND CAPACITY BUILDING

The EAPHLN project aims to train and build various capacities for staff for the sake of deepening their understanding, knowledge and skills of communicable diseases that will benefit the project as well as increase adoption of new laboratory technologies and methods.

The project sponsored the training of 300 officers during the last financial year. Both national and regional training programs were offered for the national and district level staff. This financial year, the project has sponsored a number of trainings. Three senior lab technologists attended a laboratory management training and leadership course that was held in Tanzania. The course has improved their knowledge and skills in management issues. The trained officers will be utilized to train other officers on the same. The project recently funded a two day training and orientation of the Genexpert equipment in France for two laboratory technologists. The trained officers have gained first-

hand knowledge on the Genexpert equipment and can now be utilized to train other officers once the equipment is procured. The procurement procedures' training was held in Arusha. Three procurement officers participated in this tailor made training through ESAMI. The training aimed at improving the procurement skills of the staff. Similarly, two accountants were previously trained in financial management procedures in Pretoria South Africa and Swaziland.

Two District Medical Laboratory Technologists and one lab scientist attended a regional laboratory assessment training that

Dr. Shikanga contributes to the M&E training at Sio Port

was sponsored by African Society for Laboratory Medicine (ASLM) in Dar es Salaam. The aim of the training was to give insight into how assessments are carried out and to practically demonstrate how assessment techniques can be used to maximize accreditation benefits.

The project sponsored officers to attend scientific conferences. Officers were sponsored to attend the international lung health conference in France and ECSA-HC Health minister's conference. Similarly, the project sponsored another officer to attend a lab management seminar in Windhoek, Namibia.

At the national level, the project plans to sponsor a total of six officers on the monitoring and evaluation course which is a powerful accountability mechanism that helps the officers involved in the project to assess if progress is being achieved in line with expectations.

Operations Research Quiz



This ambulance was spotted in a hospital somewhere in the region. The hospital is one of the 26 EAPHLN satellite facility.

1. How many letters does the word inscribed on the ambulance have?
2. Guess the meaning of the above word which is the motto of Operations Research.
3. Name the hospital facility where this ambulance is stationed.
4. Can you list the colors sprayed on the body of the ambulance?

Answers
 1. 19 words
 2. Ready-to-intervene
 3. Kibingo Hospital in the Republic of Rwanda
 4. 5 colors which roughly can be equated to OR characteristics which results to improved program implementation (e.g. effectiveness, efficiency, quality, access, scale-up, sustainability)

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Inverness medical

Large Exposure to a Rabid Zebra among Tourists and Staff at a Safari Lodge in Kenya, 2011

Rabies is an acute viral infection that affects the central nervous system and is nearly always fatal, killing approximately 50,000 people a year. On August 2011, a zebra kept at an upscale safari lodge in Kenya from 18 countries. We conducted an investigation to determine levels of exposure among local staff, and other animals, and to describe animal bites surveillance and preparedness in this region.

Methods: We conducted unstructured interviews among management staff of the implicated lodge on circumstances surrounding the zebra's illness and death and carried a site inspection. We also reviewed animal bite case report forms from the outpatient department at the district hospital. Level of preparedness and response of the district to rabies was also assessed using the WHO Expert Consultation on Rabies (2004: Geneva, Switzerland) on rabies prevention and control checklist.

Results: The zebra was reported bitten by a stray dog near its nose on the July 31, 2011, noted ill on August 23, and died three days later. There were 22 employees working at the lodge during that time. Six (27%) had elevated exposure risk requiring post exposure prophylaxis (PEP) and a dose of immune globulin, and 16 (73%) had low exposure risk requiring PEP. From January 2010 to September 2011, 118 cases of animal bites were reported; 67 (57%) occurred among males and 65(57%) in children <15 years old. Sixty-one (52%) were inflicted on the lower extremity. All cases of head, face and neck bites were recorded in children <15 years old. Most bites, 116 (98%) were caused by dogs, of which 96 (81%) were domestic dogs. However Sixteen (14%) received a full course of PEP. In terms of district preparedness, communications regarding confirmed rabies in wildlife animal was limited, and surveillance reporting was linked to PEP provision.

Conclusion: This outbreak highlights the importance of a **ONE HEALTH APPROACH** with strong communication lines between animal and human sectors. Dog bite cases are common in this district particularly among young children, and animal bite surveillance and community education should be improved in an effort to improve rabies prevention and control.

*M. Obonyo and S. Kadivane
 The authors are current FELTP trainees.*

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1. A doctor is always a doctor even with epidemiology: Dr. O. Shikanga examines a child waiting to be seen at Busia Hosp casualty during the support supervision 2. Dr. Sam Mahugu, the Head of International Health Relations, making opening remarks during the ECSA Health Community Ministers Conference, Mombasa 3. The AMREF Central Routine Laboratory 4. Malindi DMOH team, showing the financial management team the Lab construction site. 5. The organizing committee for the Kenya National Scientific Lung Health Conference held at KICC, Nairobi.

A real-time PCR instrument is a machine that amplifies and detects DNA. It combines the functions of a thermal cycler and a fluorimeter, enabling the process of real-time PCR.



KITALE

By Daniel Wekesa, Lab incharge

The facility serves as a referral centre for the neighboring counties e.g. West Pokot, Elgeiyo Marakwet, Lodwar, Bungoma and parts of the Republic of Uganda. The hospital handles high volume of workload. Besides routine hospital services, it also offers specialized health services to its customers. The idea of installing the Electronic Medical Records Application for the hospital was put forward in the HMT meeting chaired by the Medical Superintendent. The hospital chose FIF (Facility Improvement Fund) to fund the project, which was to be done in phases. The priority sites in the first phase of implementation were the OPD clinics, registration desks, laboratory, MCH and pharmacy which started working in Jan 11 2010. Achievements on the patient journey All the OPD clinics, laboratory, registration

desk, maternity wing are fully utilizing the application Turnaround time (TAT) has been substantially reduced. When patients come for their first visit or revisit, they are registered at the registration desk and given a registration number. They are then sent to the clinicians for diagnosis. The clinician then sends them to the laboratory for appropriate investigations(s). They first pass through the paying point to validate the authorize the test. At the laboratory reception, the patient submits the registration number, which is keyed in to enable the laboratory personnel to access the requested tests and collect appropriate samples for analysis. After analysis, the results are keyed into the computer system. These results can be viewed by the clinician, who then prescribes appropriate medication. The next point is the paying point to make payments for the medication and any other services prescribed by the clinician. All these have reduced paper work since

patients need only their registration numbers so that their information can be accessed at every point. Sample management and work flow has improved, data is easily accessible on demand and printing of reports is now automated and standardized. Laboratory manager and quality manager can now monitor and supervise laboratory work process with ease. FIF collections have improved since all the tests are captured in the system.

Future of LIS in Laboratory Management Based on the experience gained so far with the Electronic Medical Records, LIS is the way to go. Our workload is ever increasing and there is need to fully adopt the system to streamline workflow to meet the demand. Most of our machines are semi automated, and require to be interfaced with electronic information to read the test result in real time, reduce TAT and transcriptions errors to enhance accuracy and timeliness.

WAJIR POLIO CAMPAIGN

By Dr Francis Njoroge, DMOH

The Polio SNIDS Round 1 Campaign in Wajir East District was carried out from 12th to 16th November 2011. The planning process involved a series of meeting starting with the District Health Stakeholders Meeting under the leadership of the District Medical Officer on 27th October 2011 aimed at sensitizing all the stakeholders on the upcoming exercise. On 1st November, DHMT hosted all Religious and Local Leaders to try and win their trust and convince the locals to take up the vaccine. This was followed by a courtesy call to the D.C's office on 7th November 2011.

remains infected, children in all countries are at risk of contracting polio. Pre-campaign planning This exercise was carried out by the DHMT On 4th November 2011. During the micro-planning, the team came up with a tentative program on how to roll out the campaign. Logistics and cold chain Polio vaccines were collected from the provincial KEPI stores before the campaign, each division's main health facility was visited to assess inventory cold chain materials. Some fridges and freezers that were not functioning properly were checked. Supervision, Monitoring and Evaluation Support Supervision was done throughout the week with DHMT members dividing into two groups. The National Coordinator gave backups during the supervision. Some of the roles of the supervision teams included; To ensure that the polio campaign was ongoing Rescued the stranded teams if any Check on the both finger and house marking Redistribution of vaccines To ensure proper documentation During the supervision, the teams could give backup by ferrying the vaccinators to

areas which were inaccessible and assist in vaccination. Review meetings were held every evening to review the day's progress and plan for the following day activities on how to address the emerging issues.

- Challenges**
- Inadequate vaccine carriers
 - Rainfall erased the chalk markings
 - Poor network coverage hence delayed communication between the supervisors and the vaccinators
 - Refusal by parents to have their children fingers marked
 - Impassable roads due to heavy rains
 - No budget for vehicle maintenance
 - Fear for some partners to provide vehicles to cover border divisions due to insecurity
- Recommendations**
- Provide enough vaccine carriers especially during the polio SNIDS round two
 - Health educate the care takers on door to door strategy
 - Clear all the myths and misconception surrounding finger marking
 - Avoid conducting the campaigns during rain seasons.
 - Allocate some budget for vehicle maintenance
 - Allocate funds to enable the district to hire security officers

Introduction Poliomyelitis (Polio) is a highly infectious viral disease, which mainly affects young children. The virus is transmitted through contaminated food and water, and multiplies in the intestine, from where it can invade the nervous system. There is no cure for polio, it can only be protected. Unvaccinated young children are at highest risk of polio and its complications, including permanent disability. As long as a single child

MALIDI

By Dr. Joan Karanja, Benson Kitole, Erasto Mwanganyi, Abdulkadir Zubeir

Malindi is privileged to be one of five districts in Kenya rolling out the World Bank funded East Africa Public Health Laboratory Networking Project. Since the start of the project in the last financial year, the district has benefited in the following areas;

confirm infections.

- Consistently taking health services to vulnerable populations in hard to reach area is appreciated by the community.

- Sharing data on diseases and events of public health importance with neighboring districts improves disease surveillance and response and defaulter tracing especially for TB. This means can an outbreak can be captured very early and its impact will be reduced.

- Involving the community in health services guarantees acceptability of the services.

- When stakeholders are involved in planning there is ownership of the project and better chances of implementation

Challenges

- Resources are not adequate to cater for all services. It is paramount that local stakeholders are also involved to support the mission of the project
- Lack of reagents at the laboratory to

- Not all health workers are aware about the project and how it will improve the quality of services.

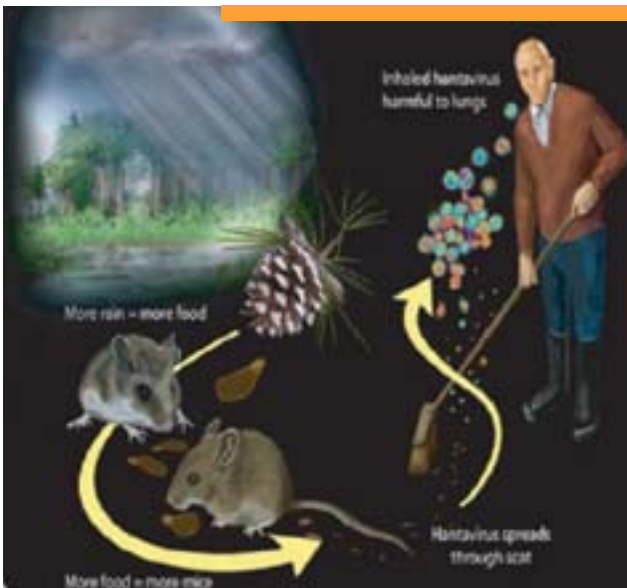
- Specimen collection and shipment procedures are a challenge to most health workers.

- A strong network for referrals and laboratory services support within and without the district is urgently required to ensure a continuum of quality health services. Way Forward

- Scale up support supervisory activities, cross district meetings, capacity building in relevant areas, outreach clinics to vulnerable populations, meetings for project and data review and EQA.

- Strengthen integrated disease surveillance and response at level one
- Strengthen capacity of health workers in sample collection and shipment.

CHALLENGES TO EMERGING AND REEMERGING DISEASES



Source: Dr. T.V. Rao MD Emerging infections

By Joshua Rotich, Medical Microbiologist EAPHLN

for the outbreak. We have confirmed samples positive for Whooping cough from the camps. Meaning this is a real and imminent danger of emergence of new diseases that will surely cross the border. Dwindling medical services and torrential rainfall in Somalia have seen the reemergence of previously controlled infections and many in internally displaced camps are vulnerable to contagious diseases like measles which must be at outbreak levels. One of the projects satellites sites Wajir district hospital will play a crucial role in the detection and control of diseases in this theater. WHO warned in 2007 that infectious diseases are

emerging at a rate that had never been seen. Emerging diseases are those that have newly appeared in a population or have existed but are rapidly increasing in incidence or geographic range. Since the 1970s, more than 40 new infectious diseases have been discovered, including SARS, Ebola, AIDS, Avian flu, and Swine flu. People travel more frequently greater distances than in the past, the potential for emerging infectious diseases to spread rapidly and cause global epidemics is a major concern. Some emerging infectious diseases are caused not by new pathogens, but by the re-emergence of microbes that had been successfully controlled. The mosquito-borne dengue virus was shown in 1903 to be the causative agent of dengue fever, a disease accompanied by fever, rash, and arthralgia. Fifty years later, a new disease caused by the virus, dengue hemorrhagic fever,

was identified in Southeast Asia. The outbreak reported in September by the Ministry of Public Health and Sanitation and the World Health Organization (WHO) of dengue fever, a re-emerging disease, in Mandera near the Somalia and Ethiopia borders, affected more than 1,000 people, with four unconfirmed deaths. Public health microbiology labs have a critical link in the prompt identification and reporting of these emerging diseases. Fortunately these newer uncommon isolates are rarely resistant to antibiotics and treatment should be based on antibiotic tests. We establish surveillance for unusual diseases & drug resistance by ensuring high throughputs labs has capacity to investigate new agents. Team work with clinicians on responsible use of antimicrobial will be critical.

When the United Nations reported on 15 Nov 2011 that Cholera had broken out in Dadaab (the world's largest refugee camp), home to nearly 500,000 Somali refugees, I became

worried. Worried not so much because insecurity complicates effort; not because Kenyan troops are at risk of infections but because the emerging *Vibrio cholera* 0139 strain may be responsible

AMREF'S LABORATORY TRAINING PROGRAMME

By Dr. Jane Carter

The African Medical and Research Foundation (AMREF) was founded in 1957 with a vision of lasting health change in Africa. AMREF's goal is to offer solutions to health care development through helping to establish strong, sustainable, community-based health care systems. The organisation has grown to comprise a full range of medical and health-related services with clear strategies for strengthening key building blocks of health systems.

The Clinical and Diagnostics Programme comprises the Laboratory and Medical Services (Outreach) Programmes, working to increase access by disadvantaged communities to quality medical, surgical and diagnostic services. The

Laboratory Programme was established in 1985 to assist the Ministries of Health in East Africa to develop effective and sustainable laboratory services. All projects are conducted in close collaboration with the Ministries of Health. Current projects include coordination of a Regional External Quality Assessment Scheme (REQAS), Community Based Disease Surveillance addressing IDSR priority diseases, and the Improving Malaria Diagnostics (IMaD) project in 10 African countries. The Laboratory Programme staff also contribute to various components of the East Africa Public Health Laboratory Networking (EAPHLN) Project, including disease surveillance and training.

The AMREF Laboratory Programme has a Central Laboratory at the AMREF Kenya Country Office, Nairobi, and laboratories at the AMREF offices in Dar es Salaam and Kampala. All laboratories are equipped for diagnostic testing and training. The AMREF Laboratory Programme trains laboratory technicians, laboratory managers and clinicians in diagnostic laboratory testing and its utilisation. AMREF has published several manuals on diagnostic practices, addressing both laboratory and clinical practices. The AMREF Laboratory Programme has established a number of training courses that target different cadres of laboratory personnel: Refresher Course in Essential Laboratory Services: an annual twelve week training course to strengthen laboratory diagnostic services through practical refresher training in essential laboratory

procedures and basic management. The course targets medical laboratory technicians working in remote and under-served areas. Since the course started in 1989, 195 participants from 10 African countries have been trained. The course details are accessed through the following links: <http://www.amref.org/silo/files/amref-refresher-course-in-essential-lab-services-info-sheet.pdf> and <http://www.amref.org/silo/files/amref-refresher-course-in-essential-lab-services-application-form.pdf>

Medical Laboratory Practices and Management (MLP&M) Course: an annual 22 week course to

improve health through competency-based training of medical laboratory supervisors and managers. The course is administered in three phases: Phase One and Phase Three are conducted at the participants' work stations; and Phase Two is residential training at the AMREF Central Laboratory. Since the course started in 2008, 52 participants from 11 African countries have been trained. Course details are accessed through: <http://www.amref.org/silo/files/amref-medical-lab-practices-and-management-course-info-sheet.pdf> and <http://www.amref.org/silo/files/amref-medical-lab-practices-and-management-course-application-form.pdf>



The East, Central and Southern African Health Community (ECSA-HC) is a regional inter-governmental health organization that fosters and promotes regional cooperation in health among member states. Member states of the ECSA Health

Community include Kenya, Lesotho, Malawi, Mauritius, Seychelles, Swaziland, United Republic of Tanzania, Uganda, Zambia and Zimbabwe.

Since the project is of a regional nature, ECSA-HC is coordinating

reviews and technical discussions as well as providing platforms for knowledge sharing.

The East Africa Community (EAC) is also part of the project with a strategic focus in improving

surveillance programs within the East African Community which is closely linked to the proposed project. ECSA and EAC are strategic partners in this regional laboratory initiative playing a critical role in utilizing a regional approach in combating cross border activities.

