TEPHINET requests updates from its member programs for inclusion in each issue of TEPHINews, our quarterly newsletter. If your program would like to submit an update for a future issue, please contact trezvani@tephinet.org.

This update has been compiled using text provided by the contributing field epidemiology training programs. Editing has been restricted to formatting and minimal corrections where necessary. The information in each program’s section is the responsibility of the program.
FETP Updates

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AUSTRALIA FIELD EPIDEMIOLOGY TRAINING PROGRAM (MAE)

Australian FETP welcomes new agreement to train ASEAN health fellows

The National Centre for Epidemiology and Population Health (NCEPH) at The Australian National University (ANU) has been running Australia’s FETP, the Masters of Applied Epidemiology (MAE) Program, since commencement in 1991, building a network of health experts who can be deployed quickly to respond and manage health problems following major disasters.

MAE graduates have worked on the front-line responses to outbreaks of Ebola in West Africa, cyclones in the South Pacific and in 2018 to the diphtheria outbreak in Bangladesh.

NCEPH welcomes a new agreement with the Australian Government to help train a new generation of health security experts across Southeast Asia.

The agreement, announced following the ASEAN-Australia Special Summit in Sydney, will see the ANU National Centre for Epidemiology and Population Health (NCEPH) run the new ASEAN-Australia Health Security Fellowship Program, in partnership with the Australian Government's Indo-Pacific Centre for Health Security.

Professor Ross Andrews from NCEPH said the new agreement would see the MAE Program train nurses, doctors, health officials and lab workers in how to deal with major health crises and disasters, such as a disease outbreak or the response to a major cyclone.

“The ASEAN-Australia Fellowship is a fantastic initiative that will allow us to support training in neighbouring countries and build stronger people to people linkages in the region,” Professor Andrews said.

“The new fellowship will also help with cross-border collaboration and ensure we are best prepared to respond quickly to the health threats of the future.”

Under the fellowships, nine health officials from ASEAN countries will undertake the two-year postgraduate Master of Philosophy in Applied Epidemiology program at NCEPH, while based in their own country. In addition, eight Australian candidates will undertake field placements for one year each in ASEAN countries.

The Fellowship Program is part of Australia’s leadership in health security through the Indo-Pacific Health Security Initiative, and falls under the Joint Statement of the ASEAN-Australia Special Summit (The Sydney Declaration). The Initiative will contribute to the avoidance and containment of health threats that have the potential to cause severe health and economic disruptions to the region.

BRAZIL FIELD EPIDEMIOLOGY TRAINING PROGRAM (EpiSUS)

EpiSUS Fundamental

Implemented in March 2017, in partnership with TEPHINET, EpiSUS-Fundamental trained 249 professionals from 73 municipalities and 7 capitals. From June/2018 on, EpiSUS-Fundamental continues with 100% national financial sources.
From April to June 2018, EpiSUS-Fundamental principal activities were:

1. May 10 to 11th: Workshop 3 of Cohort #11 (Minas Gerais State)
2. May 16 to 18th: 10th TEPHINET Regional Scientific Conference of the Americas. EpiSUS-Fundamental submitted 54 abstracts, of which 20 (37.0%) were approved and 10 (six orals and four posters) were presented. One of the orals presentation were awarded and its title was: “Vigilância Entomológica: eixo estratégico sinalizador para identificação de áreas de risco e casos humanos de arboviroses, Foz do Iguaçu/Paraná, Brasil, 2017”.
3. May 26 to 27th: Workshop 3 of Cohort #12 (Amazonas State, frontier region, including professionals from Peru and Colombia)
4. June 4th: A new phase of the EpiSUS-Fundamental began, 2018, which aims to train 800 people until May 2019 in the 27 Brazilian states in partnership with the syphilis program. From June 4 to 8th, the workshop 1 began for four cohorts: Brasília/Distrito Federal, Porto Velho/Rondônia, Boa Vista/Roraima and Salvador/Bahia.
5. June 14 to 15th: A national meeting was held in Brasilia to evaluate the strategy, which was attended by Dr. Augusto Lopez - a medical epidemiologist at the Centers for Disease Control and Prevention (CDC) in the United States and professionals from 22 of the 27 Brazilian States and the Federal District from Brazil. In this event, the strategies of diffusion of the EpiSUS Fundamental for all the states of the country were discussed, as well as the implementation of the Intermediate Program (this one in an internal meeting with Dr. Lopez).
6. June 18 to 22nd: workshop 1 began for three new cohorts: Brasília/DF, Belém/PA and Vitória/ES.

EpiSUS Advanced

From April to June 2018, EpiSUS participated in seven fieldwork projects:

1. Roraima State: measles outbreak - the state received support for case investigation and deployment of a situation room. Circulation of the measles D8 genotype, circulating in Venezuela and recently introduced in the country was identified.
2. Amazonas State: measles outbreak - the field team has investigated the cases and identified the transmission chains in order to direct the actions of blocking and intensification vaccination. The circulating virus is D8 genotype, the same identified in Venezuela and among immigrants in Roraima.
3. Rio Grande do Sul State: toxoplasmosis outbreak - a retrospective study was carried out to identify the source of infection, with 86 cases and 146 controls being investigated.
4. Minas Gerais State: environmental disaster - a survey is being conducted in Barra Longa Municipality, which was affected by the rupture of the ore dam in 2015, with the objective to estimate the main health complaints and the prevalence of heavy metal poisoning.
5. Amazonas State: mass gathering event (Parintins Festival) - for the opportune identification of clusters and to respond to public health emergencies, the monitoring of medical attendance related to the event will be carried out by the method of data collection at real time using mobile devices (Epi InfoTM 7).

6. Distrito Federal: rare diseases - a descriptive study is being conducted to characterize people served by a specialized service in rare diseases to know the profile of this population and promote public health policies.

7. Brazil: teratogenicity of anti-retrovirals used by pregnant women with HIV - research has begun on the suspicion of neural tube defects in newborns due to the use of dolutegravir during pregnancy, as reported by the World Health Organization.

During this period, the 10th TEPHINET Regional Scientific Conference of the Americas was also realized in Colombia. EpiSUS submitted 77 abstracts for the event - 23 of the advanced and 54 of the frontline; of which 34 (44.2%) were approved - 14 (60.9%) of the advanced and 20 (37.0%) of the frontline. Twenty-two papers were presented (64.7%) - 12 participants could not afford to participate in the event; being 12 oral and 10 electronic posters. Of the abstracts presented, three were awarded - two of the advanced (oral and poster) and one of the fundamental (oral). In the International Night, the delegation of Brazilians presented one of their main traditions - the "Festa Junina", a group festival to celebrate a marriage! At the end of the event, TEPHINET announced that Brazil will host the next regional conference in 2020, commemorating the 20 years of EpiSUS.

CAMEROON FIELD EPIDEMIOLOGY TRAINING PROGRAM

CAFETP: Advanced training

In April 2018, two residents from the advanced FETP program were selected for a poster presentation at the International Night during the EIS conference in Atlanta (Poster 1: Neisseria meningitidis isolated during an outbreak in a prison: investigation and response in Cameroon, 2017. Author: Djikeussi K. Tatiana; Poster 2:
Smoking prevalence, awareness and tobacco cessation training among healthcare professional, Cameroon; Author: Amabo Chi Franck). A CAFETP delegation, including the 2 Resident Advisors, MoH CAFTEP technical consultant and a senior MoH Staff visited the EIS conference in Atlanta from April 16th to 19th.

The 16 residents of cohort 4 defended their dissertation at the University of Buea from April 26th-27th 2018 for the master degree in field epidemiology. Various subjects included rabies, vaccine preventable diseases, non-communicable diseases, maternal health and infectious diseases.

The cohort 6 residents have been involved in 4 outbreak investigations in Cameroon and one in Central African Republic (CAR) from April to May: maternal and perinatal death, measles outbreak, acute diarrhea among children less than 5 years, a human case of Monkey Pox and a meningitis outbreak.

In Cameroon, residents were also involved in the activation of the Emergency Operating Center for human cases of Monkey Pox in North-West region and the participation in response preparedness activities against an Ebola outbreak.

In Chad and CAR residents participated in the validation workshop of malaria vector resistance management plan for insecticides and in the elaboration of the contingency plan for the threat of Ebola virus disease.

On May 8th 2018 in Buea, CAFETP organized the annual steering committee meeting of the CAFETP which provides oversight to the program. It was presided by the Secretary General of Ministry of Health and involved representatives from the Ministry of Higher Education and the University. During this meeting, CAFETP presented performed activities during last year in both advanced and basic training and presented his
sustainability plan for the program, which was really appreciated by both representatives of MoH and The Vice Chancellor of the University. According to the Secretary General of Ministry of Health: “A lot has been done since the last meeting of the committee. We can see that between May 2017 and April 2018 apart from theoretical training residents participated at many scientific conferences which attests of the quality of the training which is provided.”

**CAFETP: Frontline FETP program**

A total of 395 MoH staff (and staff from MINEPIA, MINJUSTICE and MINDEF) from regional and district levels have been already trained during the 3-months CAFETP basic training and 44 staff from Littoral and South region are still in training.

**COLOMBIA FIELD EPIDEMIOLOGY TRAINING PROGRAM**

The Field Epidemiology Training Program (FETP) in Colombia of the National Institute of Health (INS), affiliated with the Network of Training Programs in Epidemiology and Public Health Interventions (TEPHINET), accomplished a number of goals this past quarter. For instance, this program:

- Co-hosted the 10th TEPHINET Regional Scientific Conference of the Americas in Cartagena, Colombia
- Inducted the 2018 cohort of the advanced level of the FETP
- Completed Frontline training in Norte de Santander, Chocó and Ejercito Nacional de Colombia
- Applied for TEPHINET Accreditation
- Participated in the response and investigation and control of outbreak and emergency situations in public health in Colombia: measles, acute respiratory infection, infections associated with health care, among others.
- Developed a curriculum proposal for each level of the Field Epidemiology Training Program

**GHANA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM**

**FETP-Frontline workshops**

**Volta and Upper West Regions**

The workshop one for the eleventh (Cohort XI) and twelfth cohorts (Cohort XII) for the FETP-Frontline were held from May 21-25, 2018 and June 4 – 8, 2018 at the Freedom Hotel, Ho in the Volta Region and Sem-B Hotel, Wa in the Upper West Region respectively. Thirty trainees made of 13 Disease Control Officers, 2 Health Information Officers, 3 Public Health Nurses, 3 Laboratory Scientists, 1 Environmental Health Officer, 6 Veterinary Technical Officers and 2 Regulatory Officers from the Food and Drugs Authority participated in the training in the Volta Region whereas 29 trainees made of 7 Disease Control Officers, 5 Health Information Officers, 4 Public Health Nurses, 5 Laboratory Scientists, 5 Veterinary Technical Officers, and 2 Regulatory Officers from the Food and Drugs Authority participated in the Upper West Region.
Western Region

The workshops two and three for the tenth cohort of frontline trainees (Cohort X) in the Western Region was held from April 9 – 13, 2018 and May 15-16, 2018 respectively at the Grand Favor Hotel, Takoradi in the Western Region. Twenty-Nine trainees comprised of Disease Control Officers, Health Information Officers, Public Health Nurses, Public Health Officers, Laboratory Scientists, Veterinary Technical Officers, Nutrition Officers and officials from the Food and Drugs Authority participated in the workshop two.

Workshop three, which was the dissemination and graduation ceremony was held on May 15-16, 2018 at the Grand Favor Hotel, Takoradi in the Western Region. Twenty-eight trainees out of 30 trainees graduated and were awarded certificates of completion. All trainees made oral presentations of their field assignments for assessment and discussion. The presentations were based on the fieldwork two outputs produced: Expanded Surveillance Summary Report, Case Investigation, Outbreak Investigation and Problem Analysis.

The dissemination and graduation ceremony was attended by Ms. Beatrice Mochia – Chief Nursing Officer, Ghana Health Service, Western Region who represented the Regional Director of Health Services, Dr. Kofi Asemayi-Mensah – Deputy Director, Public Health, Western Region, Mr. Seth Williams from the Food and Drugs Authority, Dr. Simon Gbene – Regional Head, Veterinary Services Department, Western Region, Dr. Samuel Sackey – Field Coordinator, GFELTP and Dr. Ernest Kenu – Director, GFELTP.

The workshop was also attended by Mr. Francis Bbosa Xavier – Director, Human Resource, AFENET, Ms. Mariah Namuwanga – Administrator, AFENET, Mrs. Romary Abbo – Accountant, AFENET, Dr. Donne Kofi Ameme, Resident Advisor – GFELTP, Mr. Joseph Asamoah Frimpong – Technical Advisor, CDC Ghana, mentors and GFELTP Support staff.

Upper East Region

FETP-Frontline workshops two and three were held on March 26-30, 2018 and May 2-3, 2018 at the Extee Crystal and Premier Lodge Hotels respectively in Bolgatanga, Upper East Region. Twenty-Nine trainees comprising Disease Control Officers, Health Information Officers, Public Health Nurses, Public Health Officers, Laboratory Scientists, Veterinary Technical Officers, Nutrition Officers and Regulatory Officers from the Food and Drugs Authority were trained in workshop two.

Conferences

Epidemic Intelligence Service (EIS) Conference - Hilton Atlanta, April 16 – 20, 2018

The abstracts of Mr. Samuel Dapaa and Dr. Anna Jammeh, both Cohort IX alumni of the GFELTP were accepted for poster presentations at the 67th Annual Epidemic Intelligence Service (EIS) Conference and FETP International Night 2018 in Hilton Atlanta, Georgia, USA from April 16 – 20, 2018. Presentations on the topics “Probable pertussis outbreak among unvaccinated population in three hard-to reach satellite Communities - Pru District, Brong Ahafo Region, Ghana-2017” and “Risk factors associated with cervical
**FETP Updates**

*dysplasia among women living with HIV: Experience from a low resource setting, Gambia-2017*” were made by Mr. Joseph Effah Acheampong and Dr. Christabel Ayepah respectively on behalf of the two alumni.

**7th Multilateral Initiative on Malaria Conference - Dakar, April 15-20, 2018**

The abstracts for Mr. Enoch Opoku-Antoh and Mr. Samuel Dapaa, both Cohort IX alumni were accepted for poster and oral presentations at the 7th Multilateral Initiative on Malaria Conference held in Dakar, Senegal from April 15-20, 2018. Mr. Opoku-Antoh made a poster presentation on the topic “Severe Malaria Case Management in Selected Health Facilities in the Tamale Metropolis, Ghana – 2017” whereas Mr. Dapaa made an oral presentation titled “Uptake of Intermittent Preventive Treatment for Malaria and Birth Outcomes in Selected Health Facilities in the Brong Ahafo Region – Ghana, July 2017” at the conference. Presentations of field work one assignments were made by trainees at the workshop two. Trainees were also taken through lessons on outbreak investigation, linking laboratory to outbreaks, problem analysis, scientific communication and making PowerPoint presentations.

Workshop three, which was the dissemination and graduation ceremony for FETP-Frontline trainees (Cohort IX) was held on May 2-3, 2018 at the Premier Lodge Hotel, Bolgatanga in the Upper East Region.

Twenty-Nine out of 30 trainees graduated and were awarded certificates of completion. All trainees made oral presentations of their field assignments for assessment and discussion.

**Suspected Foodborne Outbreak, Grace Citadel Church, Konkonuru - Akuapim South District, Eastern Region, May 2018**

A suspected food borne outbreak among members of the Grace Citadel Church in Akuapim - South District, Eastern Region was reported on May 13, 2018 after a mother’s day celebration. Between the hours of 4:30 p.m. and 10:00 p.m. on May 13, 2018, a total of 38 people who attended the event reported to the hospital with several episodes of diarrhea and vomiting. Residents and alumni of the Ghana FELTP in the region supported the district with the investigation on May 14, 2018 to determine the magnitude, source and causative agent of the outbreak as well as to implement preventive and control measures based on findings.

A total of 51 cases were recorded with an attack rate of 25% (51/200) with no deaths. Of these, 53% (27/51) were males. Participants at the event were served with cake and soft drinks (either Coke or Fanta). Median age of case patients was 12 [1 - 70 years]. Thirty (59%) out of the 51 case patients were children less than 18 years of which 14 were children under 5 years.
**KENYA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM**

**Child Health and Mortality Prevention (CHAMPS) Project Training – May 21, 2018 to June 26, 2018**

The Kenya field epidemiology and laboratory training program partnered with the KEMRI/CDC in Kenya to conduct training to healthcare workers involved in the Child Health and Mortality Prevention (CHAMPS) project. The training is dubbed CHAMPS Data to Action Training. The training goal is to build capacity of Kisumu and Siaya Counties to use CHAMPS data for Public Health Action and the objectives of the training is to improve skills of county staff to formulate strategic questions that can be answered with their data, be able to analyze data, and use findings to guide policies and programs to reduce under-five child mortality in the two Counties. A total of 22 participants were recruited for training. The first course was conducted in May 21st to 25th 2018 followed by a second course conducted on June 11th to 15th 2018. The next course is scheduled for June 25th to 26th 2018.

**KFELTP Scientific Writing Workshop – April 3-7, 2018**

The KFELTP conducted a scientific training workshop for residents in cohort 12 and 13 who had participated in various outbreaks and were at various stages of developing manuscripts based on the investigations in readiness for publication in peer reviewed journals. A total of 12 residents were recruited for the training with a total of 14 manuscripts. The workshop focus was to ensure that all participants have a draft manuscript that can be shared out with co-authors for further review before submission to a journal.

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<th>No</th>
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<td>Grace Kariuki</td>
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<td>Grace Kariuki</td>
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<td>Ngina Kisangau</td>
<td>Review of national chola data 2014-2017 using DSRU Data set</td>
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<td>Martin Mwangi</td>
<td>Cholera case control in Tana River</td>
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<td>Valerian Mwenda</td>
<td>Weston Outbreak/Cese control in informal settlements in Nairobi</td>
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<td>Philip Ngere</td>
<td>Outbreak of Cholera in a training institution in Nairobi</td>
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<td>Joash Ogutu</td>
<td>Cholera outbreak following a Wedding reception</td>
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<td>Anthi Mutembei</td>
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<td>Beatrice Kingori</td>
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**Outbreak investigations**

**A. Polio virus detection in environmental sample Eastleigh**

The Kenya Ministry of Health (MoH) was notified by the Kenya Medical Research Institute (KEMRI) laboratory on April 6, 2018 of Polio Virus 2 (PV2) isolation from an environmental sample collected on March 21, 2018 from East Leigh site, Kamukunji Sub County in Nairobi County. The KFELTP residents with the support from the Core Group polio project, WHO, Horn of Africa Coordination office, and UNICEF conducted a rapid polio routine immunization coverage survey in Kamukunji Sub County of Nairobi County to determine the population immunity status from April 12, 2018. The survey collected data from 516 children from 76 villages from which 88.2% had received OPV at birth which gradually decreased to 75.4% for the 14 weeks OPV dose. The investigation recommended strengthening of polio immunization advocacy, communication and social mobilization targeting social and cultural beliefs; enhance immunization activities while addressing...
availability, access, and service provision and strengthen water, hygiene and sanitation services to reduce transmission.

B. Cholera outbreak in Busia County

The MoH Emergency Operations Centre (EOC) was notified on 7th December, 2017 of a suspected cholera outbreak in Busia County. There were 143 total cases, 2 confirmed, 141 probable cases and a Case fatality rate of 6 (4.2%). Due to this high CFR of 4.2% was considered high (>1%), KFELTP residents conducted an investigation using matched case control study from April 30th to May 9th 2018 to identify risk factors associated with the cholera outbreak. The investigation identified that using unprotected shallow well as a source of drinking water; drinking water direct from the river; drinking untreated water; using dirty personal latrines and drinking untreated water seven days before the outbreak were the independent factors associated with the outbreak. The investigation recommended that the County department should map out all drinking water points/sources and intensify water treatment at the source and the point of consumption.

C. Mysterious disease among high school girls

News reports from a leading daily newspaper on 12th May 2018 indicated that 60 students in a girl school in Murang’a County had been sent home after contracting an unidentified infection that caused their limbs, and in rare cases their mouths to swell. There were no reports of any other symptoms such as diarrheal illness, respiratory condition, sore throat, fever or rash among the affected students at the time. KFELTP residents’ supported an investigation to identify etiology of the outbreak in order to stop further transmission. A total of 217 students were interviewed of which 42 (19%) showed symptoms of the disease. All cases experienced limb swelling, arthralgia and myalgia. A total of 18 blood samples taken from the cases and tested for Chikungunya, dengue and Zika viruses were all negative and 9 stool samples taken for testing for entero-bacteria also turned negative. The investigation is still ongoing.

Risk Management Training for KFELTP faculty members by AFENET

The Kenya FELTP faculty was taken through a risk management awareness and assessment training at the end of the training, the team came up with objectives, risks and risk source for both technical and program support operations. The program will identify a risk management champion, develop a table of risks, continuously update it and use mitigation measures to either avert, reduce/minimize risks.

Other activities

The KFELTP is finalizing on the K-FELTP Tracking and Monitoring System (KTAMS) which is an electronic system meant to track residents’ enrolment, competencies and deliverables. The first phase of the system has been developed and is ready for deployment. System administrators and end users have also been trained. The training happened between June 18th and 22nd 2018.

KFELTP in collaboration with the Neonatal Child and Adolescent Health Unit continued to support counties to establish birth defects surveillance systems to monitor trends of common defects. Training of 52 health care workers from Naivasha county referral hospital was conducted on March 26th to 29th 2018, bring the total number of trained healthcare workers to 272. Birth defects surveillance is now established in four sites, namely Pumwani Maternity Hospital, Nyamira County Referral Hospital, Kilifi County Referral Hospital and Naivasha County Referral Hospital.
PHILIPPINES FIELD EPIDEMIOLOGY TRAINING PROGRAM

The Philippine Field Epidemiology Training Program (FETP) of the Department of Health continuously trains health professionals to become competent field epidemiologists who rapidly and effectively respond to health threats across the country.

For the past 30 years, the FETP continues to strengthen the epidemiological services of the Department of Health in the following areas: (a) investigation of disease outbreaks; (b) reporting and analysis of disease surveillance data; (c) development of methodologies for disease prevention and control; and (d) utilization of epidemiological data for planning, managing, and evaluating health services.

On April 10-13, 2018, a workshop on Western Pacific Surveillance and Response (WPSAR) Journal manuscript writing was facilitated by Ms. Dorothy Southern from United States Centers for Disease Control and Prevention and Control (CDC). It was participated by FETP fellows, graduates, and training staff. This continued collaboration of Philippine FETP and WPSAR strengthened the capacity of FETP fellows and training staff in writing manuscripts for peer-reviewed scientific journals.

Philippine FETP had conducted two evaluations for this quarter. The evaluation of FETP Batch 27 for Graduation was held last April 23, 2018 and the First Year Evaluation of FETP Batch 28 was held last May 8, 2018. These evaluations were attended by selected FETP Board members.

On May 16, 2018, four FETP Batch 29 fellows started their didactics at the Epidemiology Bureau, Department of

The Epidemiology Bureau staff welcomes four FETP Batch 29 fellows
Health. The aim is to capacitate the trainees on epidemiological principles, procedures, and its application in preparation for field work.

SOUTH AFRICA FIELD EPIDEMIOLOGY TRAINING PROGRAM

In April, Dr Lazarus Kuonza and Hetani Mdose facilitated in the Disease Surveillance module at the Witwatersrand (WITS) University. Later that month, two of the SAFETP staff (Dr Carl Reddy, Dr Lazarus Kuonza) and two of the second year residents (Mpho Sikhosana and Itumeleng Moema) attended the EIS international night conference in Atlanta (USA). The residents presented the following oral posters:

- “Atypical presentation of Herpes Simplex Virus type 1 in paediatric burns patients in a large tertiary hospital - Gauteng, South Africa, July 2017” presented by Dr Mpho Sikhosana
- “Outbreak of culture-confirmed Candida auris bloodstream infection in the neonatal unit of a public-sector hospital, South Africa, July through September 2017” by Ms. Itumeleng Moema—she won the best poster presentation award!

In May, Dr Carl Reddy and Dr Lazarus Kuonza travelled to Malawi for the field site orientation visit for a first year resident, Daniel Mapemba, and to meet with other stakeholders. Second year resident Poncho Bapela participated in the foodborne outbreak investigation at a Johannesburg correctional services facility. Eight of the SAFETP residents received their MPH degrees at the University of Pretoria Autumn graduation ceremony. All seven from the 2016 cohort graduated including one resident from the 2013 cohort. The Advanced Epidemiology II module took place at the National Institute for Communicable Diseases from the 7th to the 11th for the first year UP residents. The Outbreak Investigation and Control module took place from the 14th to the 18th and was attended by the first year residents registered at UP and 6 other students from the university. Second year resident Natasha Abraham travelled to Helen Joseph Hospital on the 31st for a foodborne illness outbreak investigation at a Johannesburg hospital accompanied.

In June, SAFETP facilitated the Frontline course for 25 TB Managers and Coordinators for the Province of Gauteng. Dorothy Southern facilitated the Field Epidemiology Core Learning Activities workshop for the five University of Pretoria first year residents. Dr Carl Reddy participated in a Task Force for Global Health meeting at the Rockefeller Foundation Bellagio Center.
in Bellagio, Italy to chart a more coordinated, effective and sustainable path forward in our collective efforts to develop global field epidemiology capacity. Dr Lazarus Kuonza and Hetani Mdose travelled to Lesotho for a quarterly site visit for second year SAFETP resident, Dr Tsepang Lekhela, and to meet with other stakeholders. Dr Stefano Tempia facilitated the Advanced Biostatistics in Field Epidemiology module attended by the five University of Pretoria first year residents.

SOUTH CAUCASUS FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM

On June 15th in Tbilisi, Georgia, Acting Deputy of US Embassy Jeffrey Renaud and Azerbaijan, Armenia, Ukraine and Georgia Government representatives congratulated Cohort 8 of South Caucasus Field Epidemiology and Laboratory Training Program (SC FELTP) epidemiologists and laboratory specialists with successfully completion of 2-year Program.

SC FELTP is a partnership with the US Department of Disease Control and Health and Ministries of Agriculture, Health and State Veterinary Services in Georgia, Armenia and Azerbaijan. On June 15th five specialists from Azerbaijan, four Armenians, three Ukrainians and seven from Georgia participated in graduation ceremony.

TANZANIA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM

Tanzania Field Epidemiology and Laboratory Training Program (FELTP is anchored within the Ministry of Health, Community Development, Gender, Elderly and Children under the epidemiology unit in the department of disease prevention and control. The program was designed in recognition of the need to strengthen the epidemiologic and laboratory management capacity to meet the challenges of the emerging infectious diseases and other public health problems. During the month of April to June 2018, several activities were done including outbreak investigation, surveillance evaluation and course work were conducted by the program. Below is the summary of the activities.

Resident training, activities, and didactics

International Health Regulation training

Seventeen cohort 10 residents attended a one-week International Health Regulation training. The training was held on May 28th, 2018 to June 1st, 2018 at the FELTP lecture room and was facilitated by FELTP staffs and Muhimbili University faculty members. Several topics including, Overview of IHR, IHR application in national context, introduction to IDSR and Animal Disease Surveillance, Overview of the IHR core capacities, Introduction to PVS tool and core
competencies, the roles and responsibilities of stakeholders in IHR implementation and One Health in Tanzanian context were covered.

Manuscript writing workshop
The workshop was held at the FELTP lectures room from 9th -13th April 2018. A total of 14 residents participated in the workshop. The purpose of the workshop was to equip residents with writing skills to enable them convert their work into publishable materials. A total of 14 draft manuscripts were prepared.

Outbreak investigation
Outbreak of Suspected food poisoning in Kigoma Region, Tanzania
On 9th April 2018, Ministry of Health Community Development Gender Elderly and Children received a report from Kigoma RMOs Office of an outbreak of food poisoning of unknown cause in Kigoma District which is suspected to be Cyanide toxic outbreak. On 12 -16 April 2018 FELTP cohort 10 residents joined a team from Tanzania Food and Drug Authority and a regional health management team (RHMT) to investigate suspected cases of food poisoning to confirm the existence of cyanide poisoning outbreak; to find risk factors associated with the disease; and to institute control measures. A total of 11 cases (1 death \(\text{CFR} 9\%\)) were line listed. All the cases and death were from the same family in Zashe village Kagunga ward, Kigoma region. The index case who was 11 years who presented to the health facility with sudden onset of vomiting and jaundice after eating Ugali made of Cassava flour on 12th March 2018. All the cases were seen at the Maweni Regional Referral Hospital. Blood samples were taken to rule out viral and parasitic infection. Samples were referred to National laboratory and government chemist for toxicological analysis.

Outbreak of Dengue cases in Dar es Salaam, Tanzania
On 18th May 2018, the Ministry of Health Community Development Gender Elderly and Children received a report of an increase in the number dengue cases in one of the private health facility in Dar es Salaam. TFELTP residents were sent for investigation to verify the existence of dengue cases in Dar Es Salaam; to describe the epidemiological patterns of disease among febrile patients; identify the risk factor, and to identify institutional challenges in detecting. As of 25th May 2018, a total of 226 suspected dengue cases had been line listed. These cases come from different districts including Kinondoni, Ilala, Temeke and Ubungo Districts. Cases were presenting with fever, joint pain and headache.

Cholera Outbreak in Songwe Region, Tanzania
Since August 2015, Tanzania has reported over 26,000 cases of cholera with all the 26 regions of the country reporting at least a case. As of 4th May 2018, Songwe region had reported approximately 50 suspected cholera cases with 2 deaths giving a CFR of 4%. TFELTP residents
investigated an outbreak of cholera in Songwe region. The objectives of the investigation were to determine the magnitude of the outbreak; to assess the risk factors for cholera outbreak; to identify gaps and challenges that hinder prevention and control of cholera; to assess the testing procedures for confirmation and reporting in the Lab line list and to provide recommendations for the prevention and control of cholera outbreak.

**Suspected food poisoning Outbreak in Kilindi District, Tanga region, Tanzania**

On 6th June, 2018 the Ministry received a report of unknown disease from Tanga Regional Health Management Team (RHMT) on presence of seven patients presenting with nausea/vomiting, general body malaise followed by generalized body swelling more marked on lower limbs and face, yellow skin and eye coloration. TFETP residents were deployed to investigate the suspected food poisoning outbreak. A total of 15 people were affected (8 died). The disease was associated with consumption of contaminated food. The families that were affected had reported to have eaten the food (mostly ugali) which was prepared using the contaminated flour. Blood and crop samples were sent to lab for confirmation.

**Surveillance activities**

Three cohort nine resident and six alumni took lead in the evaluation of the first 6 years of the Pink Ribbon Red Ribbon-funded Tanzania Cervical Cancer Control Program. The program came in as a skilled and independent organization with no conflicts of interest. This evaluation’s actionable recommendations will be used to plan the second five years of the Control Program. Focus was on the secondary prevention activities in many clinical sites around Tanzania and involved at least 16 two-day assessments at clinical sites including direct observation and assessment of quality of clinical services such as Visual Inspection of Cervical Whitening and Cryotherapy/Loop Excision of pre-cancers.

**UNITED KINGDOM FIELD EPIDEMIOLOGY TRAINING PROGRAM**

The UK FETP welcomes our newest team member, Sarika Desai, who joins us as part-time as Scientific Coordinator.

Our fellows are fully integrated into the UK Public Health Rapid Support Team (UKPHRST), and three fellows have been recently been deployed with the UKPHRST to support outbreak response and capacity building activities. Beth Smout, a first-year fellow deployed to Abuja to support the Nigerian CDC in responding to the largest Lassa fever outbreak on record. Beth’s role was to provide epidemiological assistance to the surveillance pillar.

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David Roberts and Ashley Sharpe deployed to Sierra Leone to deliver a Master’s Thesis Review Workshop for MPH students at the College of Medical & Allied Health Sciences, Freetown. Here they developed and led lectures and practical sessions on developing a research question, protocol and scientific writing, and facilitated a workshop on thesis review.

Our fellows also give support to Public Health England’s global public health IHR programme, helping to increase countries’ capacity to meet their IHR requirements. Kazim Beebeejaun will deploy this month to Abuja to evaluate Nigeria’s Event-Based surveillance system.

Finally, the UK FETP Director was honoured to attend the Taskforce for Global Health meeting, held at the Rockefeller Foundation Bellagio Center, to begin developing the Field Epidemiology Roadmap for the future.

YEMEN FIELD EPIDEMIOLOGY TRAINING PROGRAM

The Fourth Y-FETP Cohort Accomplishes their First Assignment: Short Rotation at 33 Health Ministry Programs

During these rotations, the residents gained the experience of working through the health system through knowing about the different programs’ activities and functions. They also become more knowledgeable how they could support these programs during their long placement and in the future. At the end of this assignment, the Y-FETP organized one-day concluding meeting that was headed by the Deputy Minister for Health Services and Care and Director of Disease Control and Surveillance to thanks the programs for their support to residents and discuss how this assignment could be improved in the future. Certificates of appreciation were distributed to the best five programs that hosted the residents more efficiently as well as to the mentors and directors who helped to introduce the residents to the programs and supported them during their short rotation.
FETP Updates

Y-FETP Organizes the Second Quarter Mentorship Workshop

The residents will start their second assignment during the next quarter where they will be placed at the key central programs to support them and to successfully complete their first deliverables i.e. the surveillance system data analysis. Therefore, a one-day mentorship workshop was organized for the programs’ directors and mentors to gain their support for the residents during the second assignment and ensure their active participation in developing the residents’ skills and transferring knowledge. During the workshop, the purpose and structure of the surveillance analysis report, the common errors that could be found in the report, and how to use the checklist to evaluate the report were discussed. The role of the mentor to ensure successful completion of this deliverable was elaborated.

Y-FETP Conducts Six Dissemination Workshops to Share the Findings from the Third Cohort Planned Studies

As part of the commitment of Y-FETP towards strengthening health system through evidence based data, the program conducted six dissemination workshops to share findings from the planned studies conducted by the Third Y-FETP Cohort. The workshops were attended by the relevant stakeholders from inside and outside the MoPHP as well as the key decision makers. After presenting the background, objectives, methodology and findings of the planned studies, the participants identified the gaps and challenges that were highlighted by these studies and discussed the recommendations and how could be implemented. They also exchanged experiences and ideas regarding the priority areas for future research that the Y-FETP residents and graduates could conduct in the future to highlight the health system challenges and help better understanding of the health problems in Yemen.

Y-FETP Third Cohort Graduates Submit Nine Surveillance System Analyses’ and Evaluations’ Manuscripts

With robust technical support from EMPHNET, the Y-FETP successfully submitted for publication nine surveillance systems analyses’ and evaluations’ manuscripts which will help to increase the visibility of the work of the Y-FETPs. This is part of a wider regional initiative that was supported by EMPHNET and launched through organizing the Scientific Manuscript Writing Workshop at EMPHNET Headquarter on March 2018 and was attended by 21 participants from Jordan, Iraq, Morocco, Tunisia and Egypt and Yemen. EMPHNET has also facilitated the discussion with the “INQUIRY: Journal of Health Care Organization Provision and Financing” that reach an agreement to publish these manuscripts as a supplement on the “Applied Epidemiology in the Eastern Mediterranean Region”.

Residents during an outbreak investigation.
Y-FETP was Nominated in the Integrated Training Outbreak Guidelines Scientific Committee

Wars and the chaos associated with, often provide the optimal conditions for the emergence and re-emergence of communicable diseases. With suspected cholera cases reaching more than a million, Yemen is also facing other deadly outbreaks including diphtheria, measles, influenza etc. A ministerial decree was issued to establish a Scientific Committee -with participation of the Y-FETP Technical Advisor- to develop an Integrated Outbreak Training Guidelines. After approving, such integrated training package will be used for training health workers on case definition, diagnosis, case management protocols and infection prevention and control for the common outbreaks.

Y-FETP Participates in in Investigating Six Cholera and Measles Outbreaks and Helps Rapid Containment

While in the field, residents and graduates took the primary actions that helped rapid outbreak containment. The teams met with relevant local stakeholders where the preliminary findings were shared and short and long term recommendations to control such outbreaks and prevent its further spread were presented. Furthermore, the teams presented the findings to the relevant MoPHP officials and their colleagues during the Y-FETP biweekly resident’s meeting. Outbreak reports in English and Arabic were developed and shared with the governorate and central levels that can be viewed on the Y-FETP website.

ZAMBIA FIELD EPIDEMIOLOGY TRAINING PROGRAM

During the period April—June 2018, the Zambia Field Epidemiology Training Programme (ZFETP), which operates under the National Public Health Institute (ZNPHI), worked with Ministry of Health in various activities. One of the key activities performed was the involvement of the residents in the control of the cholera outbreak which was ongoing during this period. In addition, the residents were part of an operations section of a cholera incident management system that was used to manage the outbreak. Residents also participated in water quality monitoring; conducted a case control study for cholera risk factors; and conducted a case control study for cholera deaths. All the residents participated in writing an article, on the cholera outbreak in Lusaka, that was published in the morbidity and mortality weekly report (MMWR) May 18 2018 (https://www.cdc.gov/mmwr/volumes/67/wr/mm6719a5.htm). Apart from the cholera outbreak, one of the current advanced FETP residents, led an investigation of an outbreak of malaria in Western province of Zambia during May—June 2018.

Graduates of the first advanced cohort have continued to be involved as disease detectives at national and continental levels; three of advanced FETP graduates were among disease detectives sworn in during the launch of the AFENET corps of disease detectives in early May 2018.
Current Advanced Field Epidemiology Residents (cohort two) have continued with their field placements in various sites including HIV, Tuberculosis, Malaria, and Cancer at national level and in clusters of the ZNPHI. During field placements residents have continued to contribute and respond to public health concerns and emergencies including HIV case-based surveillance, data analysis and data quality audits. The field placements have enabled all the residents to acquire and enhance skills in applied epidemiology owing to the presence of mentors and various experts in public health. The resident advisor, programme director, administrator, and a CDC public health specialist continue to offer support to the residents in meeting their deliverables. The current Zambia FETP and are expected to graduate in September, 2018.

The Zambia National Public Health Institute through its Emergency Preparedness and Response cluster will be setting up an Emergency Operations Centre (EOC). The major role of EOC is coordinate information and resources to support incident management activities in monitoring key indicators for disease surveillance and epidemic preparedness. Three of FETP trainees were actively involved in the formulation of Public Health Operation and Emergency Centre (PHEOC) implementation plan for Zambia. This exercise was held in first week of May 2018 in Livingstone, Southern province – Zambia. The participants included various experts drawn from ZNPHI, Ministry of Health, Disaster Management and Mitigation Unit and partner organizations such UNICEF, WHO, Africa CDC.

Further, during the period under review, WHO conducted a Vulnerability and Risk Assessment Mapping (VRAM) in Zambia which aimed at capturing multiple aspects of socio-ecological vulnerability. The VRAM indices are easily communicable and offer valuable guidance to policymakers and investors, providing insights as to where more targeted research or policy interventions can address current challenges and reduce future risks. Three residents from advanced cohort two of FETP trainees were involved in the organization and facilitation of the workshop together with a WHO team. This exercise was held in Ndola, Copperbelt province – Zambia, from 21st – 25th May 2018.

Graduation: Frontline Plus (Level 1 FETP)
During May 14 through 17 2018, the third and final workshop for 16 cohort 3 Frontline Plus residents was held in Lusaka, Zambia at the University Teaching Hospital Pediatric Centre of Excellence. Frontline plus is a modified intermediate FETP training which last six months. Each resident presented a fishbone analysis of problems of not analyzing surveillance data at their district health office, hospital or clinic. As a way of identifying and prioritizing root causes to solve problems in a surveillance system, the residents categorized possible interventions into those that were partly or fully under their control; and the resulting impact (high or low) if the causes to the problems were to be mitigated. Well targeted policies and recommendations were then formulated to increase surveillance data analysis in their area of operation.