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@tphinet.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.
CONTENTS

BRAZIL FIELD EPIDEMIOLOGY TRAINING PROGRAM – FRONTLINE (EPISUS FUNDAMENTAL)...........3
BRAZIL FIELD EPIDEMIOLOGY TRAINING PROGRAM (EPISUS).................................................................4
COLOMBIA FIELD EPIDEMIOLOGY TRAINING PROGRAM........................................................................7
EGYPT FIELD EPIDEMIOLOGY TRAINING PROGRAM..............................................................................8
GHANA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM.............................................16
GUINEA-BISSAU FIELD EPIDEMIOLOGY TRAINING PROGRAM – FRONTLINE..............................18
INDONESIA FIELD EPIDEMIOLOGY TRAINING PROGRAM........................................................................21
KENYA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM...........................................22
MALAYSIA EPIDEMIC INTELLIGENCE PROGRAM......................................................................................24
PAKISTAN FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM......................................26
PAPUA NEW GUINEA FIELD EPIDEMIOLOGY TRAINING PROGRAM...................................................28
PHILIPPINES FIELD EPIDEMIOLOGY TRAINING PROGRAM.................................................................30
SOUTH AFRICA FIELD EPIDEMIOLOGY TRAINING PROGRAM...............................................................33
TANZANIA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM...................................40
YEMEN FIELD EPIDEMIOLOGY TRAINING PROGRAM............................................................................42
ZAMBIA FIELD EPIDEMIOLOGY TRAINING PROGRAM............................................................................44
ZIMBABWE FIELD EPIDEMIOLOGY TRAINING PROGRAM......................................................................46
BRAZIL FIELD EPIDEMIOLOGY TRAINING PROGRAM – FRONTLINE (EPISUS FUNDAMENTAL)

On June 4, the Brazilian FETP Frontline initiated a new phase supported totally by national funds after the conclusion of the pilot program in partnership with TEPHINET and CDC.

The training is being offered to all 26 states and the Federal District in addition to two classes for professionals from the Ministry of Health and partner institutions.

All of the methodology and materials developed and recommended by TEPHINET and CDC are being used, with only the case study being changed to address syphilis instead of Zika and arboviruses.

There are 32 cohorts scheduled from June 2018 to April 2019. In the period from July to September, eight classes were started and another seven were completed, which had started in June. Until September, we have 124 graduates, with a completion percentage of 78%. Another 228 professionals are currently in training.

Cohorts carried out or in progress include professionals from all five regions of the country (South, Southeast, Midwest, Northeast and North), 11 states and the Federal District and 106 municipalities.

To date, 20 percent of the professionals included in the training work in surveillance or health care related to Sexually Transmitted Infections. Besides that, in the cohorts that have already been concluded, 32 percent, regardless of their area of action, developed and presented syphilis-related work in the Workshop 3.

Figure 1. Closing ceremony of the second cohort of EpiSUS-Fundamental held in the Ministry of Health, Brazil, September, 2018. Source: Communication Center of the Secretariat of Health Surveillance/Ministry of Health of Brazil
Currently, there is a cohort in progress with 13 professionals in training; a new class of 12 trainees scheduled to begin in November 2018 is being selected.

1. From July to September 2018, EpiSUS supported the investigation of seven events of importance for public health in five Brazilian states:

- Minas Gerais State: In November 2015 there was the biggest world disaster involving mining tailings dam, devastating the environment and several cities; one of them was Barra Longa, whose population remained exposed to the products of the dam (mud and dust) in their daily lives. A second population survey was conducted (the first was conducted by EpiSUS in July 2016) with the aim
of characterizing the health of the population and estimating the prevalence of heavy metal poisoning two years after the disaster.

- **Ceará State**: An outbreak of post streptococcal glomerulonephritis occurred, and an investigation was carried out to characterize patients and analyze factors associated with illness; where a case-control study was carried out.

- **Espírito Santo State**: After the notification of epizootics in equidae with a positive result for West Nile fever, an investigation was carried out to search for infection in human cases.

- **Federal District**: EpiSUS support was requested for characterization and survival analysis of patients diagnosed with rare diseases of genetic origin; considering the implementation of two regional public reference services.

- **Amazonas State**: Since February 2018, the state of Amazonas has experienced an outbreak of measles, whose serotype identified also circulates in Venezuela. EpiSUS has supported the investigation and closure of cases, analysis of serious cases and associated factors (cohort study) and situation room, performing analyzes that support decision making.

![Figure 2: Investigation of cases of hospitalized measles, Amazonas, Brazil, 2018. Source: Josivania Arrais de Figueiredo, Brazilian FETP—Advanced (EpiSUS).](image)

2. During this period, EpiSUS also participated in six events, including modules of the Program and scientific forums, three of which were international:

- **Module of advanced statistical analysis - Brasília, Brazil**: with a time load of 44 hours, it was approached subjects such as linear regression, logistic regression among others.

- **Module of economic evaluation in public health - Brasília, Brazil**: with a workload of 36 hours, the main methods of economic evaluation, in partnership with the University of Brasilia (UNB).
- XVIII International Course on Molecular Epidemiology in Emerging Infectious and Parasitic Diseases (EPIMOL) - Bahia, Brazil: the application of molecular biology in outbreak investigations was addressed with a 48 hour workload.

- Hispana Salud Pública Conference (CHISPA 2018) - Dorado, Puerto Rico: a professional in training presented the results of the investigation of an outbreak of acute diarrheal disease during a sports mass event; winning work at TEPHINET's 10th Regional Conference of the Americas.

- International Conference on Emerging Infectious Diseases (ICEID 2018) - Georgia, USA: Two trainees and an EpiSUS supervisor presented three papers, the products of nosocomial influenza outbreak investigation and mass event monitoring, which identified and investigated an outbreak of acute diarrheal disease.

- 54th Congress of the Brazilian Society of Tropical Medicine (MEDTROP 2018) - Pernambuco, Brazil: four papers were presented, investigations of outbreaks of acute Chagas disease by oral transmission, histoplasmosis, human rabies, and aggression by hematophagous bats.

Figure 3: Participation in the International Conference on Emerging Infectious Diseases, Georgia, United States, 2018. Source: Ana Júlia Silva e Alves, Indianara Maria Grando and Priscila Leal e Leite, Brazilian FETP—Advanced (EpiSUS).
The Field Epidemiology Training Program (FETP) Colombia, of the National Institute of Health, continues to work on training the public health surveillance workforce. In the period of July to September 2018, it has carried out the following activities:

Cohort XXIII (2018-2010) of the advanced level of the Colombian FETP began during the first week of June. The trainees have developed modules corresponding to the following topics: Methodology for unusual behavior analysis, risk communication, One Health, scientific writing, and outbreak attention, among others.

In July 2018, 18 Secretariat of Health personnel were certified as field epidemiologists at the basic (Frontline) level; on the 31st of the same month, they celebrated the advanced level graduation, where they certified new field epidemiologists from the Colombian FETP.

The first week of August had the second workshop for Frontline epidemiologists, with personnel from the Air Force Public Health Service and National Navy of Bogota. This training was developed at the Colombian Air Force Headquarters.

During the week of September 10-14, two reviewers from Spain and the United Kingdom made an audit visit of the Colombian advanced level FETP within the framework of TEPHINET’s third cycle of FETP accreditation.
The curricular design of the program is being adjusted, adapting it to academic credits methodology and maintaining the Public Health Surveillance competencies proposed by TEPHINET. This majorly contributes to the quality increase and visibility of the Colombian FETP.

During the week of September 24-28, the seventh Frontline Field Epidemiology Workshop of the year was held at the National Institute of Health. The Colombian FETP continues consolidating a competent field epidemiology workforce that responds to the challenge of creating, reinforcing and maintaining basic public health capacities needed for surveillance and response tasks in accordance with the requirements of the International Health Regulations and in order to promote capacities for its development in the territory.

The program staff are preparing for the XXVI International Course on Field Epidemiology with emphasis on outbreak attention and public health surveillance systems evaluation which will take place from November 6-15 with participation of national and international guests; experts on outbreak attention and public health emergencies.

EGYPT FIELD EPIDEMIOLOGY TRAINING PROGRAM

For the advanced level: We are working with FETP cohort #19 (21 residents who are in their second year of training), and FETP cohort #20 (22 residents who are in their first year of training).

For the basic level: Cohort #2 of Public Health Empowerment Program-Basic Field Epidemiology (PHEP-BFE) graduated on 5 July. We are now preparing for the recruitment of a new cohort.

As for FETP cohort #19:

Module 8: Scientific Writing
This course was held in Cairo during the period 31 July-2 August 2018. The aim of the scientific writing course is to enhance the capability of residents to write good scientific manuscripts of their study projects. The course emphasizes quality of writing to improve the opportunities for publishing. The major topics covered in this course include: searching the scientific literature, research misconduct, writing concept paper, proposals, and manuscript, research ethics, reference citations preparing scientific presentations, data presentation using visual aids.
As for FETP cohort #20:

**Module 4: Outbreak Investigation**

A five-day training course was held in Cairo during the period 21st of 15-19 July 2018 in which 20 residents of cohort #20 were attending. During this training course, residents presented their field projects including surveillance evaluation reports and surveillance analysis reports with a successful open discussion with cohort mentors.

The aim of this course is to provide residents with the skills to early detect, investigate and respond to outbreaks. The major topics addressed in this workshop are outbreak investigation and response, the
role of laboratory, vector control department and environmental health departments in outbreak investigation, and risk communication. At the end of this workshop, residents were asked to conduct the second field work (Outbreak investigation) and submit their reports. Residents returned to their jobs and will complete report on an outbreak investigation.

As for cohort #2 of PHEP-BFE:

Workshop 3: Basics of Leadership and management

A three-day training workshop was held in Cairo during the period of 3-5 July 2018 in which residents of cohort #2 presented their second fieldwork projects with successful open discussion with their mentors.
The aim of this workshop is to introduce the residents to the concepts of leadership and management. Participants recognized the basic skills of a leader and how to improve leadership skills, communication skills and other soft skills.

Graduation of the 2nd Cohort of PHEP-BFE

After successful completion of four months in-service training in applied epidemiology, forty-nine sanitarians graduated from the program on July 5, 2018. The head of surveillance and epidemiology department at the MoHP Dr. Hanaa Abu El Sood, GHD/EMPHNET consultant Dr. Samir Refay, member of the Centers for Disease Control and Prevention Dr. Mark Wooster, and alongside representatives of the MoHP health departments attended the ceremony. During the ceremony, remarks were given to the graduates to recognize their valuable contribution in detection of and response to public health threats.

The event ended with appreciation and special thanks to cohort mentors for providing the support and the guidance for the residents.
Common field activities:

- Our FETP residents and graduates as well as PHEP-BFE graduates participated in routine assessment visits of governorates capacities for surveillance, outbreak investigations, and rapid response.

- One of our FETP residents (cohort #20) participated in Egypt national STEPwise Survey for Non-communicable diseases risk factors.
• Our residents and graduates participated in the Egyptian Hajj medical mission to serve the Egyptian Pilgrims during the Hajj season 2018. They participated in gastroenteritis outbreak investigation and other field activities.

• FETP residents and graduates participated in annual Haji survey for estimating Influenza prevalence and detecting Corona infections among Egyptian pilgrims at Cairo and Borj Al Arab international airports.

• Our residents and graduates are selected as members in rapid response teams (RRT) at directorate and district levels and they attended RRT training which is supported by GHD/EMPHNET.
• Our residents and graduates participated as trainers in training workshops conducted for surveillance officers at directorate and district levels to improve epidemiological capacities at all levels.

• Four of our residents participated in preparation of president's initiative for hepatitis C and non-communicable disease screening survey that will be conducted on October 1, 2018.

• Our residents participated in community awareness raising about different communicable diseases at different governorates.
• Our residents and graduates participated in assessment of Polio vaccination campaign coverage in Cairo governorate.

• Our veterinarian residents and graduates participated in different national and international field investigations of zoonotic diseases.
Our residents and graduates participated in preparation for the Joint External Evaluation (JEE) that will be conducted in Egypt from the period of 30 September – 4 October, 2018.

Participation in Conferences:

- As for the seventh AFENET scientific conference that will be held from 11-16 November 2018 in Maputo, Mozambique, two abstracts were accepted.

- Two abstracts were accepted as poster presentations at IMED 2018 that will be held in Vienna, Austria during the period from 9-12 November 2018.

Upcoming events

- Graduation of cohort #19
- Study designs and developing research question module
- Recruitment of new cohort of PHEP-BFE
- Encourage publication of FETP study projects

Follow the program’s Facebook page Egypt FETP

GHANA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM

2018/19 Admissions

Twenty-three residents have been admitted into the M.Phil in Applied Epidemiology and Disease Control Programme for the 2018/19 academic year. Residents are from The Gambia, Sierra Leone, Guinea Bissau, Liberia and Ghana.

KOICA Global Fellowship Program
Dr. Basil Benduri Kaburi, an alumnus and a faculty of the GFELTP participated in the KOICA Global Fellowship Program on “Infectious Disease Field Management Training Program” in Korea from August 8-September 4, 2018.

Workshops

African Field Epidemiology Training Network (AFENET) Grant Writing Workshop

Mr. Christopher Tamal, a Cohort X resident of the GFELTP participated in a Grant Writing Workshop organized by the African Field Epidemiology Training Network (AFENET) from September 10 – 13, 2018 at the Transcorp Hilton Hotel, Abuja, Nigeria. The workshop was also attended by trainees from Kenya, Nigeria, Niger, Uganda, Senegal, Namibia, South Africa and Zambia.

AFENET Scientific Writing Workshop

Two residents and a faculty of the GFELTP participated in the AFENET Scientific Writing Workshop in Kampala, Uganda from July 23-27, 2018. The purpose of the workshop was to build capacity of FETP residents and alumni to complete at least one scientific paper for publication in the maiden edition of AFENET’s journal: Journal of Interventional Epidemiology and Public Health (JIEPH). Participants were taken through topics such as; strategies for a good ‘results’ section, strategies for a good ‘introduction’ section, presentation on Zotero and strategies for a good ‘discussion’ section

Upper West Region

The workshops one and two for the twelfth cohort of frontline trainees (Cohort XII) took place from June 4-8, 2018 at the Sem B Hotel and July 9-13, 2018 at the Nuoyong Hotel respectively in the Upper West Region. Cohort XII trainees comprised of 29 trainees made of seven Disease Control Officers, five Health Information Officers, four Public Health nurses, five Laboratory Scientists, five Veterinary Technical Officers, and two officials from the FDA.

The dissemination and graduation ceremony was held on August 23-24, 2018 at the Nuoyong Hotel, Wa in the Upper West Region. All 29 trainees completed the requirements and were awarded certificates of completion.

Meetings

Steering Committee Meeting

The GFELTP had a Steering Committee meeting on September 3, 2018 at the University of Ghana School of Public Health. The meeting was organized to discuss critical issues concerning the programme such as the sustainability of Advanced FELTP and Intermediate FETP in Ghana and the placement of graduates of the programme.

Meeting with the AFENET Board

The Board members of the African Field Epidemiology Network (AFENET) held a board meeting in Accra – Ghana from August 20-24, 2018 at the Holiday-Inn Hotel, Accra - Ghana. The Board on August 20, 2018 paid a visit to the GFELTP at the School of Public Health, University of Ghana to interact with the faculty of the programme. The Board members also met with the current residents (Cohort XII) of the
GFELTP to encourage them on the importance of the programme and its benefits to their respective countries and the world at large.

The Board also paid a courtesy call to the Director General, Ghana Health Service and the Director, Public Health – GHS on August 23, 2018.

**Outbreak investigations**

**Suspected Foodborne Disease Outbreak in the Ketu-North District, Volta Region, 2018**

Three alumni and two residents of the GFELTP and 7 FETP-Frontline graduates assisted the Ketu North Municipal Health Directorate to investigate a Foodborne outbreak in Tadzewu in the Volta Region from August 28-31, 2018.

Of the 8 case-patients that reported to the hospital, 6 (75%) were females. The median age was 12.5 years (IQR: 9.5-44 yrs) with case fatality rate of 75%. All, 8 (100%) case-patients presented with vomiting with one person having traces of blood in the vomitus. Five of the eight case-patients (62.5%) were from one household and 3 (37.5%) from a second household, all located in one community.

**Outbreak Investigation of Avian Influenza, Kpone Katamanso District, Greater Accra Region**

Five residents of the GFELTP from Cohorts X and XI assisted the Kpone Katamanso Municipal Health Directorate to investigate an Avian Influenza outbreak in the Kpone Katamanso District of the Greater Accra Region. The investigation took place from July 9-13, 2018. A total of 132 birds died in Sylcat farms between June 15 and 20, 2018.

**Conferences**

**1st Annual Emmet A. Dennis National Scientific Conference, Monrovia – Liberia**

The GFELTP participated in the 1st Annual Emmet A. Dennis National Scientific Conference held at the Millennium Hotel, Monrovia in Liberia from August 27-29, 2018. The conference was co-organized by the National Public Health Institute of Liberia, the Liberia FETP and the University of Liberia.

**GUINEA-BISSAU FIELD EPIDEMIOLOGY TRAINING PROGRAM – FRONTLINE**

The FETP Guinea-Bissau Frontline team is composed of an epidemiologist (resident advisor) and technical mentor and an administrative assistant.

**Activities and Achievements**

**Training**

Since the beginning of the Guinea- Bissau FETP, thirteen classes have been trained with a cumulative total of 188 professionals graduated in field epidemiology. From July to September two regional groups were held, an average of 15 students per class.
Students
Students selected to attend FETP work in various sectors of the country such as; Regions, Sanitary Areas of Health. Thirty-one students, 12 men and 19 women, were admitted during the study period.

Fieldwork
Field studies and studies were carried out on several topics such as Arbovirosis, Microcephaly, HIV/AIDS, HBV-HIV Co-infection, HIV-TB Co-infection, Female genital mutilation, and maternal mortality among others.

Outbreak investigation
All outbreaks detected and reported to INASA since the beginning of the program have been investigated with the support of FETP students. Outbreaks of Measles, Dysentery. The investigations carried out included laboratory confirmation of five cases of Chikungunya in the Gabu Region. IgG antibodies to Dengue, Chikungunya, and Zika have also been identified in febrile patients at various locations in the Oio Region. An important highlight was the investigation of cases of diarrhea in children under five years old in the pediatric services of the National Hospital of reference where cases of rotavirus were identified.

Closing ceremonies
During the closing of the classes the students present the results of the work developed during the three months of the course and discuss how to implement the recommendations. For this session it is necessary to emphasize the presence of the ambassador of the United States in addition to other guests.

Science Presentations
The work done by FETP students is being presented at National and International Scientific Conferences. Highlight for the following presentations that will be presented next November:
FETP Updates

- Home birth: Oral Presentation at the AFENET Scientific Conference in Mozambique
- First laboratory identification of Leishmaniasis in the country: Oral presentation in poster format at the AFENET Scientific Conference in Mozambique
- Diarrheal diseases: Oral Presentation at the AFENET Scientific Conference in Mozambique
- Multidrug-resistant tuberculosis: Oral Presentation at the AFENET Scientific Conference in Mozambique

Other achievements

- Professional dispatch to attend Advanced FETP in Ghana in September 2018.
- Also this month it is expected to send two more professionals to the FETP advanced in Brazil.

Progress of the Program

Progresso do Programa FETP Linha de Frente GB, Março de 2016 – Setembro de 2018

188 Graduates

Turma 13
15 estudantes
Região de Cacheu

• Janeiro
  • Curso STEP
  • Novembro
  • Avaliação FETP

• Março
  • Lançamento do FETP
  • 3 Cursos
    • 39 graduados

• 2 Cursos regionais
• 2 Cursos Nacionais
• 62 graduados

• 6 Cursos regionais
• 72 graduados

Fonte: Base de dados dos graduados FETP, 2016/2018
Main challenges

- The main challenge of the FETP in Guinea-Bissau is to ensure the sustainability of the program, involving and holding national professionals responsible for the activities.
- The limitations in the national capacity to respond to outbreaks and to carry out laboratory investigations have prevented the advancement of some studies.
- The FETP and other partners such as the CDC have supported the National Laboratory in investigations and in the identification of etiological agents circulating in the country.

Reporter: Geraldo Aníbal Chambe – Resident Consultant hired by AFENET

INDONESIA FIELD EPIDEMIOLOGY TRAINING PROGRAM

Lombok Island Earthquake – On the 29th of July 2018, Lombok Island struck by 6.3 magnitude earthquake that caused 560 causalities and more than 390,000 people displaced.

FETP Indonesia deployed FETP students to assist the local health office to conduct rapid assessment, implement disease surveillance system, outbreak investigation and response. The FETP students roles are pivotal in analyze the surveillance data, detect and respond to outbreaks in the area. Local Health Authorities acknowledged the support of the FETP that has made epidemiological data available for immediate intervention. Varicella, malaria, and foodborne disease outbreaks were identified and responded immediately.

Measles and Rubella Immunization Campaign – Government of Indonesia implements Measles and Rubella Campaign phase II (MRC) in all island outside of Java Island in August-September 2018. The
activities will be continued with strengthening VPD Surveillance and Routine Immunization from October-December 2018.

Ten FETP graduates were deployed to very high risk area in Aceh (four persons) and North Sumatera (six persons). The graduates provides technical assistance to the District Health Offices and Health Centers to strengthen their micro-plan, support the implementation and monitoring and evaluation of MRC. The graduates will work with the DHO to review the VPD surveillance and routine immunization, identify the problem and its solutions to strengthen the VPD surveillance and routine immunization.

**FETP Frontline** – FETP Secretariat, in collaboration with South Sulawesi Center for Health Training and South Sulawesi PHO conducted the first batch of FETP frontline training for Rapid Response Team from six priority districts in South Sulawesi. This first batch of training was supported by the SAFETYNET. The training adapted frontline training model and curriculum developed by US CDC.

**FETP Intermediate** – The Surveillance Sub-directorate has agreed to implement FETP Intermediate Training for District Health Officers and selected East Java Province to field test the FETP Intermediate. Discussion on Curriculum and module development, and implementation plan took place in East Java province on the first week of September 2018. The discussion was attended by the representatives from Subdirectorate Surveillance, East Java PHO and Center for Human Development and Training. Draft curriculum was developed for further discussion. It is expected that the first batch FETP Intermediate Training will be implemented in Q1-2018.

**KENYA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM**

**Recruitment of Cohort 15 in the Advanced Level Kenya Field Epidemiology Training**

KFELTP has recruited Cohort 15 residents for the Advanced level Kenya Field Epidemiology Training. The advertisement was placed on the Daily Nation newspaper on 24th July 2018 and receipt of applications closed on 14th August 2018. A total of 149 applications were received. The shortlisting was done on 23rd August 2018 and a total 60 applicants were shortlisted on 23rd August 2018. The shortlisted applicants were interviewed on 15th September 2018. The twenty (20) successful applicants are expected to start training in October 2018.

**Recruitment of cohort 3 Masters in Public Health Management and Application**

The IMPACT programme has recruited cohort (3) residents for the MSc. In Public Health Systems Management and Application. The advertisement was placed on the Daily Nation Newspaper on 24th July 2018 and applications were received up to 13th August 2018. 90 applications were received and shortlisted. 30 applicants were invited for interview. The interviews for the shortlisted applicants were held on 18th September 2018 and (8) successful applicants are expected to commence their studies in October 2018.

**Intermediate Course 2 training**

The FELTP intermediate class (4) training was held from 30th July to 3rd August 2018 at the white Rhino hotel in Nyeri. Twenty nine (29) trainees took the course. They were graduates of the Basic
epidemiology course. The aim of the training was to improve surveillance, detection and reporting of priority diseases, unusual health events, and community health conditions in Kenya via improving practices among all levels of the Ministry of Health’s public health workforce. Field supervision for the intermediate class was carried out from 9th September to 19th September 2018 at Mandera, Wajir and Turkana field sites. Dr. Zeinab Gura, Dr. Elvis Oyugi, Dr. Jane Githuku, Dr. Kigen Hadson and Dr. Mark Obonyo were involved in the field supervision.

Advanced Field Epidemiology Cohort XIV and Cohort XIII

From 28th August to 30th 2018, Kenya FELTP Cohort XIV residents of the Advanced Level Epidemiology class sat for their end of semester exam which marked the completion of semester 2. They will now start the IREC process for clearance of their protocol based studies. The twenty (20) residents are expected to begin data collection upon IREC Clearance. Cohort XIII was involved in the scientific writing workshop at 67 Airport hotel in Nairobi from 13th August 2018 to 24th August 2018. From the workshop, all of the nineteen (19) residents in cohort XIII were able to develop manuscripts which will be submitted to various journals for publication.

Nigeria FELTP pays a courtesy call to the Kenya FELTP

The Nigeria FELTP office paid a two day courtesy call to the Nairobi FELTP office on 27th and 28th August 2018. The team was led by the Director, Nigeria FELTP Dr. Godfrey Ntadom and the Resident Advisor Dr. Muhammad Shakir. They were warmly received by Dr. Zeinab Gura, the Director Kenya FELTP. The team held meetings and discussions for two days at the Kenya FELTP office. Key among the discussions between the two teams was the TEPHINET accreditation process. The teams also shared their unique experiences in the FELTP program. TEPHINET provides an opportunity for field epidemiology training programs (FETPs) to align with common standards that support quality training and increased recognition of their value in supporting country public health priorities.

Dissemination workshop

The FELTP Dissemination workshop was held on 25th September 2018 at the Silver Springs hotel in Nairobi. The workshop began by registration of participants at 8.00 am. The Director KFELTP then gave a warm welcome to the workshop participants and noted that the aim of the workshop was to provide a platform for dissemination of findings for capacity building in epidemiology and public health in Kenya. She then invited the director CDC Kenya, Dr. Kevin De Cock to make his remarks. Dr. De Cock congratulated the KFELTP program for doing an excellent job in advancing requisite skills to the residents and noted that the training was translating into action. He congratulated the leadership of KFELTP for the continued effort in hosting the annual dissemination workshop and said that the organizers should consider scaling up the workshop to an annual conference. The official opening of the conference was done by Dr. Waqo Ejersa, the Head of Malaria Program, on behalf of Dr. Peter Cherutich, the Head of the Department of Preventive and Promotive Health. In his speech, he congratulated the residents whose (27) abstracts will be presented in the AFENET conference in Mozambique in November 2018. He also noted that the findings presented provided good feedback that was given to the relevant people at the MoH. He also thanked CDC for their dedicated service that they have offered to the K FELTP office over the last thirteen years. Other speakers in the workshop were Dr. Justin Williams and Dr. Seymour Williams. There were 40 abstracts presented in the dissemination workshop.
FETP Updates

Strengthening VPD /Polio Surveillance and Routine Immunization in Garissa, Wajir, Mandera and Lamu counties of Kenya

FELTP program received funding from CDC to support Acute Flaccid Paralysis (AFP) surveillance in five counties majorly to support the routine surveillance for AFP with a view to have a more Enhanced AFP surveillance in the five counties in Kenya, which are; Mandera, Garissa, Wajir, Tana River and Lamu. The enhanced AFP surveillance aims to strengthen polio surveillance and by extension VPD Surveillance and routine immunization in the five counties. Five FELTP graduates and some residents were selected alongside DSRU officers from the national level to support the project. During the month of July and August, the county and sub county disease surveillance officers visited 116 health facilities in the five counties and were involved in sensitization of health care workers on detection of AFP cases and geocoding the cases on ODK. They also recruited community informants and trained them on detection of AFP cases. Five (5) cases of suspected AFP cases were reported and the stool specimens collected and shipped to the Kenya Medical Research Institute for further screening.

MALAYSIA EPIDEMIC INTELLIGENCE PROGRAM

From July to September 2018, EIP Malaysia main activities were:

1. July 2

EIP Malaysia conducted a viva session for the purpose of evaluating the 8th cohort. The session was attended by selected EIP members as internal examiners with the presence of invited external examiners.

2. July 2 to 13

A graduate of EIP Malaysia attended a 2 month course known as the 11TH BATCH OF IFETP TRAINING OF TRAINER conducted at Nonthabury, Thailand. Meanwhile, another graduate attended the 2 weeks didactic class associated with the course. The course was organized by Department of Disease Control, Ministry of Public Health through IFETP-Thailand with scholarship provided by USAID & FAO through GHSA Workforce Development.

This program was designed to train FETP graduates to be a professional trainer. The concept of the training was “learning-by-doing” which covered the enhancement of 6 competencies of a field epidemiology trainer i.e., (1) mentoring & coaching, (2) field epidemiology supervision, (3) Scientific writing, (4) training program management, (5) field management and (6) curriculum development.
3. July 22 to September 15

Another EIP Malaysia graduate attended a Field Epidemiology Training Program attachment at the WHO Health Emergency Information and Risk Assessment (HIM) of the Western Pacific Regional Office (WPRO) in Manila. This was a great opportunity to, (1) learn and experience on risk assessment of potential public health threats and (2) develop networking and good fellowship with the other fellows and WHO consultants.
5. July 25-27

An Outbreak Class was conducted for 9th Cohort trainees at the Ministry of Health Malaysia in Putrajaya. The trainees were given input on Outbreak Management and Report Writing. They were also given the opportunities to listen to the experience of trainers as well as other trainees in handling outbreaks.

PAKISTAN FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM

NSTOP-FELTP Officers participated in the Annual Review Meeting

An annual review meeting was held at National Institute of Health (NIH), Islamabad from September 10-14, 2018. A total of 65 NSTOP-FELTP officers (Districts, Division and Provincial leads) attended the meeting. Executive Director NIH, Resident Advisor FELTP Pakistan, Coordinator National EOC Islamabad, Team Leads of PEI partner organizations; WHO, UNICEF, Technical Focal Person BMGF, Dr. Chris NSTOP Focal point CDC, and TEPHINET Team specially participated in the opening session. NSTOP-FELTP officers presented key performance Indicators of 53 NSTOP Districts, four Divisional Task Forces and four provincial EOCs. External reviewers from CDC, WHO, UNICEF & BMJF and Provincial Leads of partner organizations were, also invited to review and evaluate NSTOP performance.
FELTP Pakistan fellows are investigating world’s first major outbreak of extensive drug resistant (XDR) Typhoid Fever

Fellows of Pakistan FELTP are investigating an outbreak of XDR Typhoid in districts of Hyderabad and Karachi, Province Sindh. From November 2016 till April 29th 2018 total 930 confirmed Ceftriaxone resistant Typhoid cases were recorded from different district in Sindh province. Out of these 734 (79%) cases were from Hyderabad District. Provincial Disease Surveillance and Outbreak Response Unit (DSRU) in Sindh remained on the forefront of this investigation and steer-headed the setting up of a surveillance system for drug resistant Typhoid at provincial level. Since January 2018, 4264 cases of Typhoid have been reported from Karachi; out of which 2325 are of extensive drug resistant type.

Chickenpox Outbreak in district Sibi, Pakistan September, 2018

Provincial Disease Surveillance & Response Unit (PDSRU) Balochistan received information from District Health Officer Sibi on 9th September 2018 about 6 suspected chickenpox cases. These cases were reported from a single village.

Director General Health Services assigned a frontline alumnus to visit the affected area, confirm the outbreak and investigate the situation. The team left for field on same day. A total of 14 cases were identified. The District Health Authorities formed a rapid response team and the Basic Health Unit remained open 24 hours during the outbreak.

Pre-deployment Training of new NSTOP officers

Five new NSTOP officers attended a 6 days training before deployment in the high risk districts. The training was held at FELTP Office in National Institute of Health, Islamabad from September 13 to 18,
2018. The CDC focal person for NSTOP along with NSTOP and FELTP federal team facilitated the training. This will be followed by 5-day field training and then these officers will join the team for polio eradication.

**NSTOP-FELTP Officers assessed 7800 children during polio vaccination campaigns**

During July and August 2018, NSTOP-FELTP Officers assessed 7800 children during polio vaccination campaigns. They identified 800 previously unvaccinated kids, who were then vaccinated against polio.

**PAPUA NEW GUINEA FIELD EPIDEMIOLOGY TRAINING PROGRAM**

Fellows past and present of the Field Epidemiology Training Program in Papua New Guinea (FETPNG) have been kept busy over the past few months, with numerous opportunities to apply their skills.

The outbreak of circulating vaccine-derived poliovirus type 1 (cVDPV1) led to several FETPNG fellows and graduates being deployed into provinces to assist in the response. Their work focused on data management and surveillance support, contact tracing and coordinating the supplementary immunisation activities. Manager of Public Health at PNG’s National Department of Health, Berry Ropa, noted that FETPNG was great example of capacity building a pool of people who can readily be deployed in times of disease outbreak and disaster.
Members of the FETPNG faculty administering a polio vaccine in response to the recent outbreak.

More tangible results of the FETPNG project include six abstracts accepted for presentation at the 9th Southeast Asia & Western Pacific Bi-regional TEPHINET Conference. All six will be delivered by oral presentation at the conference in November, with the topics covered including:

1. Identifying and addressing barriers to immunisation for young children in Gazelle District, East New Britain Province, Papua New Guinea, 2017. *By Elsie Stanley.*
4. Factors associated with loss to follow-up amongst children (<15 years) treated for tuberculosis in Kimbe Provincial Hospital, Papua New Guinea, from January to December 2015. *By Bethseba Peni.*

Also in November will be the last workshop of the final cohort of the current FETPNG project. Fellows will deliver presentations of their operational research at the week-long workshop, culminating with a graduation ceremony for the last two cohorts on Friday November 30. This celebration will double as the project launch of an advance FETP project, with the first cohort of ADEPPt (Accelerating the Development of Evidence-based Policy & Practice in PNG) scheduled to begin in March, 2019.
The ADEPPt project logic, with the first research development workshop of the first cohort scheduled to be held in March.

ADEPPt will include more advanced field epidemiology content, with operational research still emphasized in order to develop tangible recommendations for policies and programs. After developing operational research questions, fellows will apply their project, feeding results back to the cohort and synthesising these into policy briefs. A participatory workshop was held in August to identify priority themes of focus for the two cohorts. The four identified were vaccine preventable diseases and immunisation, maternal and reproductive health, communicable diseases and health systems strengthening. These will be further refined during ADEPPt workshops in December, giving fellows clear parameters through which to target their interventions.

PHILIPPINES FIELD EPIDEMIOLOGY TRAINING PROGRAM

The Philippine Field Epidemiology Training Program (FETP) of the Department of Health is a special two-year post-graduate program at the Department of Health designed to develop epidemiological expertise among health professionals. The program provides highly trained epidemiologists to meet the country's disease prevention and control needs. To date, the program had produced 113 graduates wherein a large percentage of them stay in the public health sector and many achieve leadership positions within the health system.
1. From July 17-21, 2018, updating of FETP Manual of Procedures and Development of Participant’s Workbook was conducted in Baguio City, Philippines. It was attended by selected FETP Graduates to update the policies and guidelines of the program and identify learning outcomes, topics, and methodologies for the FETP fellows’ workbook to be used for didactics.

2. To date, FETP Batch 29 fellows had conducted 12 epidemiologic investigations (10 outbreaks and 2 special studies) for this quarter. These include investigations on Aedes-borne infections, Cholera, Hepatitis A, and foodborne illness epidemic.

3. From August 27-30, 2018, a Scientific Writing Workshop was conducted in Rizal, Philippines by the Field Management Program Course (FMPC) of the Epidemiology Bureau for its selected graduates. A total of 8 applied management projects were drafted. FETP Philippines provided the training course and FETP alumni Mr. John Bobbie Roca and Ms. Paola Katrina Ching and current FETP Fellow Ms. Denisse Lou Manalili acted as facilitators.
4. Dr. Vikki Carr de los Reyes, FETP Philippines Training Officer, is currently on her Hubert H. Humphrey Fellowship at Emory Rollins School of Public Health, Atlanta, Georgia, USA. She was delighted to meet Dr. Dionisio Herrera and other TEPHINET staff during ICEID in August. Recent highlight of her stay in Atlanta included cherished hanging out with Dr. Mark White, CDC Resident Advisor to FETP Philippines (1987-1993), and learning from his experiences in public health and lessons in American history.
SOUTH AFRICA FIELD EPIDEMIOLOGY TRAINING PROGRAM

July

02-06: SAFETP team gave lectures in the Applied Research Methods and Protocol Writing module for first year students (including SAFETP Cohort 2018 residents) at the University of the Witwatersrand (WITS) School of Public Health.

13: SAFETP team evaluated protocol presentations of MSc students (including SAFETP Cohort 2018 residents) at the University of the Witwatersrand (WITS) School of Public Health.

16-18: The TEPHINET Program Directors meeting was co-hosted by the SAFETP. The meeting took place at the National Institute of Communicable Diseases (NICD) PRF Auditorium. There were around 60 participants from FETPs, regional networks, partners and collaborators.

19: Program director Dr Carl Reddy attended the TEPHINET Advisory Board meeting at the Hilton Hotel in Sandton.

20: Dr Carl Reddy attended the AFENET finance and audit sub-committee meeting at the Hilton Hotel in Sandton.

23-27: Khuliso Ravhuhali (SAFETP Field Epidemiologist) travelled to Uganda (Kampala) to attend the Scientific Writing workshop organized by AFENET in preparation for the Journal of Interventional Epidemiology and Public Health in Africa (JIEPH) official launch.

23-27: Dr Carl Reddy travelled to Amman, Jordan to attend a Public Health Emergency Management Center (PHEMC) Coordination meeting hosted by the Eastern Mediterranean Public Health Network (EMPHNET). He represented the TEPHINET director and Advisory Board in his capacity as Chairman of the TEPHINET Advisory Board.

27: Three first year residents Fatuwani Gavhi, Mashudu Teresa and Mojalefa Makae travelled to Enhlanzeni district in Mpumalanga for a diarrheal disease outbreak investigation accompanied the NICD Outbreak Response Unit (ORU) team. See photos below.

August

13-17: Dorothy Southern and SAFETP staff facilitated a dedicated structured scientific writing workshop to maximize concentration and reduce distractions so residents can complete their requirements for the University of Pretoria Master of Public Health (MPH) degree. See photos below.

20: Scientific Seminar attended by SAFETP 1st and 2nd year residents and staff.

20-23: Drs Arvelo Wences and Georges Schmid from the US CDC conducted a review of the SAFETP as part of the accreditation process.

21-22: Dorothy Southern and SAFETP staff facilitated a Supervisors Training Workshop for seven (7) new supervisors.
22: Dr Reddy attended the Labour Forum Meeting between NICD management and the trade union, NEHAWU.

September

03-07: SAFETP team facilitated a frontline course in Lesotho, a neighbouring country within the Southern Africa Development Community (SADC) region as a capacity building request from the country for Ministry of Health officials. There were 12 participants who completed week one (1). See photos below.

10-12: SAFETP team members attended the PHASA conference in Parys, Free State Province, South Africa. Two abstracts were accepted for Oral presentations: Mpho Sikhosana (Cohort 2017 resident) “Epidemiology of laboratory-confirmed mumps infections in South Africa: 2012-2017” & Poncho Bapela (Cohort 2017 resident) “Investigation of Clusters of Malaria Cases in Gauteng Province – South Africa, September – October 2017”.

10-13: First year resident Teresa Mashau travelled to Nigeria (Abuja) to attend the AFENET Grant Writing workshop sponsored by AFENET.

17-21: SAFETP team conducted the second and final week of the Frontline course for the Gauteng Province MoH officials (18 participants) at the NICD where participants presented their field projects. See photos below.

20: Drs Reddy, Doyle and Kuonza had a teleconference with Dr Augusto Lopez in CDC Atlanta to discuss rolling out the Frontline Course.

28: Dr Reddy met with Jackie Kleynhans and Vusi Ntlebi from the SAFETP Alumni Association to discuss further engagement between the SAFETP and the Alumni Association.

From left to right: Fhatuwani Gavhi, Tekwane south clinic home-based caregiver and two cases. Entokozweni village, Mpumalanga Province, South Africa, 3 August 2018
Fhetuwani Gavhi. Daantjie Village, Mpumalanga Province, South Africa, 3 August 2018. The resident was inspecting the open drainage system during the case interview.

From left to right, front row: Mashudu Teresa Mashau; middle row: Gal Faller, Genevie Ntshoe, Fhetuwani Gavhi; back row: Mojalefa Makae, Nomathamsanga Ndlovu, Andronica Moipone Rakgantso. The investigation team had attended a stakeholders meeting. Enhlazeni District, Department of Health, Mpumalanga Province, South Africa. 3 August 2018
Left to right: Hetani Mdose, Tracy Arendse (Cohort 2017 resident) and Joy Ebonwu

From left to right: Poncho Bapela and Prof. Robert Summers (Cohort 2017 resident)
From left to right: Emelda Ramutshila and Dr. Sibongile Walaza (Cohort 2017 resident)

Prof Olga Perovic and Itumeleng Moema (Cohort 2017 resident)
From left to right: Dr. Elvira Singh and Natasha Abraham (Cohort 2017 resident)

From left to right: Khuliso Ravhuhali and Tsepang Lekhela (Cohort 2017 resident)
SAFETP Team and Lesotho Frontline participants

SAFETP Team and the Gauteng Province Frontline participants
TANZANIA FIELD EPIDEMIOLOGY AND LABORATORY TRAINING PROGRAM

Introduction
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 July to September 2018, several activities were done including outbreak investigation, dissertation proposal presentation, dissertation defences, and TEPHINET accreditation site visit were conducted by the program. Below is the summary of the activities.

Residents Major field attachment, activities and Didactics
Dissertation defence for cohort IX: Fourteen cohort 10 residents defended for their dissertations on 28th and 29th August 2018. All the residents defended successfully and got only minor corrections.

Outbreak investigation
Rapid response of cholera outbreak in Ngorongoro, Arusha, from August-September 2018: Arusha Region first reported cholera cases from Longido District on 18 April 2018 and up to 13 August 2018, 1157 cases including 21 deaths (CFR 1.8%) had been reported from rural communities in Longido, Ngorongoro and Monduli Districts. However, the outbreaks were controlled in Longido and Monduli Districts. During the Cholera National Task Force (NTF) meeting which was held on 20 July 2018, it was agreed that a Rapid Response Team (RRT) from the national level should be deployed to Arusha for support in cholera control. A team composed of three staff from the ministry of health in the areas of WaSH, Risk communication and Surveillance was formed. The team was joined by four epidemiologist residents from TFELTP and one anthropologist from WHO to support the response in Arusha starting from 25 July to 5 August 2018. The team highlighted the following gaps:

1. Lack of coordination meeting at the region and district level
2. Under reporting of cases, delayed reporting and failure to update of cholera line list
3. Lack of community involvement and mobilization
4. Lack of clean and safe water in the community

The team worked with the Regional team to support for containment and control of cholera outbreak in the region by:

1. Conducting a high-level involvement forum for government officials in the region to support cholera interventions for multi sectoral approach
2. Creating awareness of the community through community acceptable approaches which involve religious and clan leaders
3. Contact tracing and active case search for early case management, household decontamination and health promotion
4. Capacity building for staff in the CTC for line listing of cholera cases, analyzing and reporting
5. Map, collect and test water samples from all water sources in the affected communities
6. Identify and treat the source or closed it from being accessed by the public
7. Discuss with the PHC on alternative sources of water while the contaminated source is closed
8. Deploy IEC materials to raise community awareness especially those affected
9. Characterize the active outbreak in the affected districts by time place and person
Outbreak of Cholera in Rukwa, Tanzania: Three cohort X Boniface Jacob, Catherine Gitige and Mercy Anga under the leadership of Dr Ahmed Abade investigated an outbreak of cholera in Sumbawanga District, Rukwa region of Tanzania. Since August 2015, Tanzania has experienced several waves of cholera outbreak with over 35,000 cases and approximately 525 death being reported from all the 26 regions of the country. Ministry of Health Community Development Gender Elderly and Children received a report of an increase in the number of cholera suspects in Sumbawanga municipality. Ministry requested FELTP to investigate the outbreak and support Rukwa RHMT, Sumbawanga CHMT in responding to the outbreak. The objective of the investigation was

- To determine the magnitude of the suspected outbreak through record review and active case search
- To identify the possible source of transmission
- To set appropriate preventive and control measures against the suspected outbreak

During the investigation a total of 1130 cases and 21 deaths had been line listed giving a cases fatality rate of 1.85%. Since the outbreak began a total of 14 wards had been affected with a ward called Kaoze/Kapenta being the most affected. Sixty percent of the samples that were taken since the outbreak began revealed *V. cholerae* O serotype Ogawa. Several surveillance gaps including Poor data quality, data inconsistency, missing variable, data entry error and inadequate line list entry form in some facility were noted. The investigating team worked closely with Rukwa RHMT and CHMT to institute control measures.

Surveillance activities- Cohort 10 residents continue to support six chikungunya sentinel sites that were development in response to chikungunya outbreak in Dar es Salaam. The sentinel sites are all in Dar es Salaam region. Given the outbreak in Kenya, the Ministry of Health, Community Development, Gender Elderly and Children in Tanzania requested FELTP program to set up surveillance in hot spot region including Dar es Salaam. So far several cases of Dengue have been identified through this sentinel surveillance. The residents presented the surveillance report to the national task force.

Site visits for TEPHINET accreditation- On 10th to 14th September 2018, our program has a site visit from the TEPHINET reviewers where our program was evaluated against the minimum criteria used to evaluate the accreditation application. The main objectives of a site visit are to:

i. Validate the information provided by the Program in the FETP Accreditation Application.
ii. Review additional information substantiating the Program’s full compliance with all accreditation indicators and standards.

iii. Provide evidence-based accreditation recommendations for review by the Global Accrediting Body.

**YEMEN FIELD EPIDEMIOLOGY TRAINING PROGRAM**

1. The Fourth Y-FETP Cohort Accomplishes their First Deliverable Disease Surveillance Report: The Y-FETP Fourth Cohort residents practiced during this quarter skill learned by carrying out surveillance systems data analyses for key Ministry of Public Health and Population (MoPHP) Surveillance programs, e.g., Diphtheria, Diarrheal Disease, Meningitis, Rabies, and Tuberculosis. These analyses pinpointed the strengths and weakness of the surveillance systems and recommended how to improve. Since the selected surveillance systems analyzed were priority for the MoPHP and the health institutions for whom the residents work and developed under their direct supervision, there are strong expectations for the MoPHP and health institutions to take seriously the recommendations based on the results of these analyses.

2. Y-FETP Organizes the Third Quarter Mentorship Workshop: The objective is to gain the programs support for the Fourth Cohort residents during their Second deliverable: Surveillance Systems Evaluation. During the workshop, the goal and methodology of the Surveillance Systems Evaluations were discussed. The common errors that could be found in such report and how to use the checklist to evaluate the report and ensure its quality were also explained. The workshop held on 31 September with participation of 20 program director and mentors.

3. Y-FETP Organizes Training Workshop on the International Health Regulations (IHR): This workshop aimed to strengthen the technical capacities of the Y-FETP residents and graduates as well as the key MoPHP professionals engaged in the IHR implementation who can be used as resources for future dissemination and implementation. The workshop held during 22-26 September with participation of 20 residents, key MoPHP staff from central and governorates level and facilitated by National IHR Team.

4. Y-FETP Helps to Facilitate the ToTs Integrated Training Workshop for the Five Common Diseases’ Outbreaks: Ongoing war in Yemen and its inevitable consequences provided the optimal conditions outbreaks e.g. cholera, diphtheria. A Scientific Committee to develop the Integrated Outbreak Training Package has been established with participation from the Y-FETP
Technical Advisor (TA). The Y-FETP director and TA help to facilitate the first Integrated Outbreak training that was held in Sana’a from Sept 1 – 6. The workshop aimed to train a ToTs on the current epidemiological situation as well as the case definition, diagnosis, case management protocols and infection prevention and control for common outbreaks of the five diseases: Diphtheria, Cholera, Measles/ Rubella and Influenza.

5. **Y-FETP Participated in the 2018 TEPHINET Program Directors Meeting, Johannesburg, South Africa:** As a member of programs that rely heavily on exchange and learning from the experiences of other programs, the Y-FETP Director Assistant Dr. Mohamed Alemad participated in the 2018 TEPHINET Program Directors’ Meeting which was held from July 16–19, in Johannesburg, South Africa. The meeting provided an excellent opportunity for Y-FETP to exchange experience with different programs and to discuss future collaboration with different networks and partners e.g. TEPHINET, AFNET, EMPHINET and Task Force for Global Health.

6. **Y-FETP Director Assistant Conducts Exchange Visit to the Sudan FETP:** For exchange experiences and get benefit from each other, the Y-FETP Director Assistant Dr. Mohamed Alemad conducted an exchange visit to the Sudan Field Epidemiology Training Program (S-FETP) in his way to the 2018 TEPHINET Program Directors Meeting. During the visit Dr. Alemad met with the S-FETP staff and discus possible future collaboration. He also provided a short training on Epi Info program for the S-FETP residents. The visit was very fruitful for both programs and it was agreed to continue dialogue and exchange experiences in the future.

7. **Y-FETP Participates in the National Immunization Technical Advisory Group (NITAG):** The NITAG is a multidisciplinary group of national experts responsible for providing independent evidence-informed advice to the Minister of Public Health on policy issues related to immunization and vaccines. Being NITAG member, the Y-FETP TA participated in July NITAG meeting that discussed the basis and strategies for shift from the use of single-antigen TT to combinations containing diphtheria toxoid i.e., DT or Td vaccines. The meeting concluded with advising the MoPHP to adopt the
WHO's Strategic Advisory Group of Experts on immunization’ recommendation to switch from TT to Td vaccine and stressed the importance of developing a policy for poster immunization in Yemen.

8. **Y-FETP Participates in Investigating Six Cholera, Measles, and Leishmania Outbreaks and Helps Rapid Containment:** While in the field, the Y-FETP residents and graduates helped rapid outbreak containment and met with local stakeholders to share short and long term recommendations to control such outbreaks and prevent its further spread. 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 and posted on the Y-FETP website.

**ZAMBIA FIELD EPIDEMIOLOGY TRAINING PROGRAM**

To date, Zambia Field Epidemiology Training Programme (ZFETP), which started in 2014, has trained two frontline cohorts (n= 29) and two advanced cohorts (n=14). The ZFETP operates under the Zambia National Public Health Institute (ZNPHI) which is a technical wing of the Ministry of Health responsible for health security in the Country. Training of Field Epidemiologists is one of the key capacity building programmes in workforce development of disease detectives for the country; the disease detectives increase the country’s ability to quickly detect, respond to, and control events of public health concern. For success of the programme, current partners that play a key role include U.S CDC, University of Zambia, Ministry of Health, and World Health Organization.

During the 2018 programme directors meeting in South-Africa, Zambia was awarded a certificate of membership to TEPHINET (Figure 1 and 2).

September 2018 was the last month for field placements for the second cohort of advanced. Therefore the ZFETP organised site visits to evaluate the field placement sites, residents and supervisors as a way of getting valued feedback necessary to improve and inform future site placements. Preliminary review of the evaluation indicate the need to spend more time during orientation of supervisors; need for more time for mentorship; and need for regular feedback during field placements (Figure 3 and 4).
During July through September 2018, advanced FETP residents continued with their attachments to national-level public health programme areas namely: HIV, Tuberculosis, Malaria, Immunization, Cancer and other Non-Communicable Diseases, Disease Surveillance, Epidemic Preparedness & Response, Laboratory Systems, and Health Information Systems.

The ZFETP program has continued to participate in AFENET programmes; two residents from the Zambia FETP were among trainees for a manuscript writing course held in Uganda in July 2018; one resident was selected for a grant writing workshop held in Nigeria in September 2018.

During July through August 2018, residents participated in the Vulnerability and Risks Assessments and Mapping (VRAM), and Threats and Hazards Identification and Risk Assessments (THIRA) for Zambia. The VRAM and THIRA process was later followed by detailed descriptive analysis of collected data; the residents participated in the analysis. This is later expected to inform the all hazard epidemic preparedness and response plans. Furthermore, residents have also facilitated in the trainings for Integrated Disease Surveillance and Response (IDSR). FETP residents continue to be among frontline health workers investigating outbreaks including an investigation of a measles outbreak during July through September; an advanced FETP and a graduate jointly investigated an outbreak of measles in one district of Zambia.

Figure 3 and 4: Field placement evaluations

Figure 5 and 6: FETP residents training rapid response teams in EVD preparedness— August-September 2018
ZIMBABWE FIELD EPIDEMIOLOGY TRAINING PROGRAM

On the 5th September 2018, 25 patients were admitted at Beatrice Infectious Hospital in Harare presenting with diarrhoea and vomiting. The laboratory confirmed Vibro Chorea Ogawa from the patients. As at 25 September 2018, a cumulative, 6741 cases were reported of which 6436 were suspected, 98 confirmed and 49 deaths. Two residents (ZIMFETP) were tasked to investigate the outbreak however, on 12 September 2018, his Excellency the President of Zimbabwe E.D Munangagwa declared the cholera outbreak as a state of disaster, in line with Civil Protection Act. In response to the cholera outbreak, the ZIMFETP with support from AFENET recalled all residents from their attachment sites across the country to assist in the control and prevention of cholera in Harare, which was the epicentre of the outbreak. A planning and deployment meeting with MoH officials, ZimFETP staff, residents and key stakeholders was held to discuss areas of collaboration.

The Ministry was working under five thematic areas, which included coordination and logistics, case management, Water Sanitation and Hygiene (WASH), health promotion and social mobilization and surveillance. After noting the gaps, the residents were put into four of the groups working under the supervision of the thematic leads. The ZIMFETP has been instrumental in contact tracing, surveillance, case management and health promotion (figures 1 and 2). The role of research can never be under estimated as such besides the work allocated to them by the thematic leads, the residents are also conducting research in the each of the thematic areas to identify gaps and make recommendations to assist the different ministries involved. Preliminary findings of these researches were shared on the 27th of September at the ZIMFETP monthly dissemination seminar held at the ministry headquarters.

Figure 1: ZIMFETP residents and two of their supervisors (Dr Gerald Shambira and Miss Tsitsi Juru)
Scientific Writing Workshop Uganda

The African Field Epidemiology Training Network (AFENET), through the program of scientific writing, sent out a call to member countries to send at least two residents/alumni to participate in a 5-day (23-27 July 2018) writing workshop in Kampala, Uganda. The workshop was organized to aid the preparation of manuscripts for the inaugural publication of AFENET’s Scientific Journal, the Journal of Interventional Epidemiology and Public Health in Africa (JIEPH), which will be launched at the 7th AFENET Scientific Conference in November 2018 in Maputo, Mozambique.

Two ZimFETP Alumni attended the workshop (Mrs Zvanaka Sithole-Muguza and Dr Stanley Tapesana). Dr Tapesana worked on a paper titled, “Comorbidities determining ART failure: A case control study of HIV clients seeking care at Kadoma, 2017.” Whilst Mrs Zvanaka Sithole-Muguza worked on a paper titled, “Effectiveness of quality improvement on occurrence needle stick injuries in Harare City: A Quasi Experimental study, 2017.” These papers are still undergoing internal review with the publication team. In attendance also was Miss Juru the scientific writer from ZIMFETP who was invited to co-facilitate the writing workshop.

Zimbabwe Annual Medical Research Day (AMRD) abstracts Accepted

The program submitted six abstracts for consideration for the AMRD conference to be held in Harare 20 October 2018. Amongst the submitted abstracts, three were accepted for oral presentations (Table 1). The program has consistently submitted abstracts to this auspicious yearly event and is privileged to have its abstracts accepted.
**ZIMFETP Monthly Seminars**

Every last Friday of every month, the program religiously holds a dissemination seminar at the ministry of health headquarters. The seminar provides an opportunity for residents to share their research findings to the ministry and the civil society. This provides a platform for recommendations to be taken up at the highest level and effected in the area of study. The program held the July (6 presentations), August (6 presentations) and September (9 presentations) monthly seminars. Table 1 shows the presentations on the 27th of September 2018 at the Zimbabwe Ministry of Health headquarters. This seminar was special because preliminary findings of the on-going cholera outbreak investigations were shared according to the four thematic groups. In attendance where key stakeholders from MOH, WHO, the city health officials and University.

**Table 2. Titles of presentations, September ZIMFETP MPH monthly dissemination seminar, 2018**

<table>
<thead>
<tr>
<th>Presenter name</th>
<th>Title of presentation</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Dr Reginald Mhene</td>
<td>Factors associated with SAnaemia among Pregnant women in Kwekwe District</td>
<td>Results</td>
</tr>
<tr>
<td>2. Group Case management</td>
<td>Cholera case- management in Harare City, 2018: Are we doing the right things right?</td>
<td>Cholera Preliminary Results</td>
</tr>
<tr>
<td>3. Group Surveillance</td>
<td>Evaluation of the water surveillance system in Harare city, A response to the cholera outbreak</td>
<td>Cholera Preliminary results</td>
</tr>
<tr>
<td>4. Group WASH</td>
<td>An assessment of the availability of water and hygiene practices in Harare city in response to the cholera outbreak</td>
<td>Cholera Preliminary Results</td>
</tr>
<tr>
<td>5. Group Coordination</td>
<td>Evaluation of the coordination meetings in cholera response, in Harare city</td>
<td>Cholera Preliminary results</td>
</tr>
<tr>
<td>6. Mr Simbarashe Chiwanda</td>
<td>Determinants of ART uptake and TB Treatment outcomes in HIV/TB Co-infected Clients in Seke District, Zimbabwe 2018</td>
<td>Results</td>
</tr>
<tr>
<td>7. Dr Morgen Muzondo</td>
<td>Determinants of contracting Malaria Among Estate workers on Deltaprim, Colin Sanders, Zimbabwe, 2018</td>
<td>Results</td>
</tr>
<tr>
<td>8. Miss Tungamirayi Magwati</td>
<td>Factors associated with repeat STIs among sexually active Men in Makoni district, Manicaland, Zimbabwe</td>
<td>Results</td>
</tr>
<tr>
<td>9. Dr Reginald Mhene</td>
<td>Analysis of Trends in Early infant diagnosis of HIV in Midlands province 2012-2016: a secondary data analysis</td>
<td>Results</td>
</tr>
</tbody>
</table>