Graduation is a time of completion, of finishing, of an ending, however, it is also a time of celebration of achievement and a beginning for the new graduate."—Catherine Pulsifer



"To accomplish great things, we must not only act, but also dream, not only plan, but also believe." ~ Anatole France
"The roots of education are bitter, but the fruit is sweet." ~ Avistotle



Ethiopia Field Epidemiology Training Program Progress Report



Volume II September 2013 July 2013











Ethiopia Field Epidemiology Training Program Progress Report, July 2013

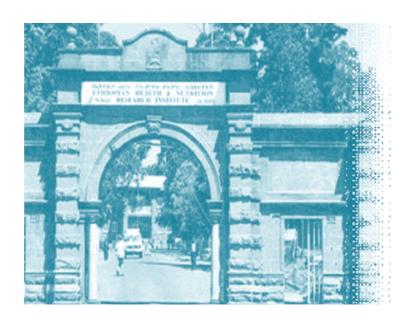
Author: Haftom Taame

Editors:

Dr. Daddi Jima

Dr. Lucy Boulanger

Haftom Taame



Contributors:

All 3rd cohort residents

Dr. Daddi Jima

Dr. Getahun Aynalem

Dr. Lucy Boulanger

Dr. Zegeye Hailemariam

Dr. Desalegn Dalecha

Mr. Alemayehu Bekele

Acknowledgement:

I would like to thank all the individuals who have been supportive in preparing this report.

Special thanks goes to the Ethiopia FETP and all the Resident Advisors and Coordinators striving to make the program realistic and useful for strengthening the public health system of the nation. Moreover I would like to acknowledge the institutions participating in the program implementation.

Acknowledgement:

I would like to thank all the individuals who have been supportive in preparing this report.

Special thanks goes to the Ethiopia FETP and all the Resident Advisors and Coordinators striving to make the program realistic and useful for strengthening the public health system of the nation. Moreover I would like to acknowledge the institutions participating in the program implementation.

Forward:

Each year the graduating residents of EFETP produce this progress report to highlight the achievements of the program during our training. As graduates we take on the responsibility of building the field epidemiology network in Ethiopia thru mentorship of the residents who follow in our footsteps, the ongoing dissemination of public health information and the promotion of the EFETP.

Table of contents

Message from the Country Director, EFETP	4
Message from the Dean, AAU School of Public Health	4
Message from the Executive Director, EPHA	5
Message from the Country Director, CDC Ethiopia	5
Introduction	6
Mission and goal of EFETP	6
Program objectives	7
The next five years	7
Major achievements	8
Outbreak investigation	9
Surveillance	-14
Training	16
National and international conferences	16
Residents in defense	19
Key messages from RAs and Coordinators	20
Third cohort graduates	23

Message from the Country Director, EFETP



Dr. Daddi Jima

FETP is a key strategy designed to fulfill the human resource needs of Public Health Emergency Management (PHEM) in Ethiopia. On behalf of Ethiopian Health and Nutrition Research Institute (EHNRI) and the Ethiopia Field Epidemiology Training Program (FETP), I would like to recognize the contributions of field epidemiology graduates towards fulfilling this need through investigating and responding to disease outbreaks, designing and evaluating surveillance systems, preparing and reporting evidence based information, and

above all playing a leadership role. I would extend my acknowledgment to the School of Public Health, Addis Ababa University, the Centers for Diseases Control and Prevention (CDC), the Ethiopian Public Health Association (EPHA) and other partners for their remarkable and sustainable contributions to the implementation of FETP in Ethiopia. This report shows the major activities and progress made by EFETP since its adoption in 2009. I would like to take this opportunity to congratulate cohort three residents who just finalized their course and who will be graduating shortly. I wish you success in your endeavor! You will often be on the front line during emergency situations to lead investigation teams, detect and manage outbreaks, analyze situations on the ground and make public health decisions. You will often on the front line during emergency situations to lead investigation team, detect and manage the outbreak, analyze situations on the ground and make public health decisions

Message from the Dean, AAU-School of Public Health



Dr. Wakgari Deressa

On behalf of Addis Ababa University School of Public Health, I am pleased to deliver key messages on the Ethiopia Field Epidemiology Training Program and congratulate EFETP 3rd cohort residents.

The EFETP is creating public health expertise and capacity that is already improving disease surveillance systems and health emergencies in Ethiopia. Graduates of the program now have immense roles as leaders in addressing public health emergencies in Ethiopia and they will be instrumental in establishing national and international field epidemiology networks. The School of Public Health will remain highly committed to the program and will continue to emphasize the practical "hands on" field work that makes this program both distinctive and effective.

Message from the Executive Director, Ethiopian Public Health Association



Mr. Hailegnaw Eshetu

Ethiopia is the second most populous country in Africa and faces many health problems. These health related problems are oftentimes life threatening and can often occur in the form of outbreaks. The Ethiopian Government has made tremendous efforts in addressing the health problems of the population by expanding health service delivery systems and creating innovative training. One of these programs is the Ethiopia Field Epidemiology Training Program that equips field epidemiologists a basic skill in public health emergency management and intervention.

I am honored and privileged to offer my gratitude and congratulations to all Field Epidemiology Training Program graduates and residents. I appreciate the immense contributions you have made and recognize your instructors and mentors who have been crucial in developing and implementing this training program.

Message from the Country Director, CDC-Ethiopia



Dr. Tom Kenyon

The Centers for Disease Control and Prevention (CDC) and the Federal Ministry of Health have identified capacity-building of public health systems as the cornerstone of their close partnership in Ethiopia.

Public health responses to HIV/AIDS, TB, malaria, chronic diseases and other major killers require precise and timely epidemiologic information to design effective programs. CDC has been able to support the training of field epidemiologists from all 11 regions and at the national level as well. CDC is grateful for the long history of collaboration and looks forward to doing its part to make even further progress with the EFETP in the future.

Introduction

The Ethiopia Field Epidemiology Training Program (EFETP) is a comprehensive two-year post-graduate training and service program tailored to address the public health needs and priorities of Ethiopia. It is designed to build sustainable public health expertise and capacity in Ethiopia with a deep commitment to public service. EFETP, aptly described as the "first program in applied epidemiology training," in Ethiopia, is an important learning institution that combines training from short modular classroom courses, designed to teach principles of epidemiology and public health, with a field residency program, "on-the-job" mentored training that consists of hands-on learning and service.

While grounded in mentorship, field supervision and classroom training, the program's residents work with disease surveillance systems to investigate disease outbreaks, develop effective prevention and control measures, and establish evidence based public health practice of priority diseases in Ethiopia.

The EFETP provides a Master of Public Health degree in Field Epidemiology after two years of supervised work in applied or field epidemiology.

Mission

The mission of EFETP is to train a cadre of skilled public health professionals who provide in-service assistance to advance and protect public health and contribute to evidence-based decision making.

Goal

The goal of EFETP is to strengthen the Ethiopian Public Health Emergency Management system by:

- Improving public health event detection and response;
- 2. Creating a robust disease surveillance system;
- 3. Building capacity in field epidemiology and public health laboratory systems;
- 4. Enhancing evidence-based decision making for public health practice; and
- 5. Reducing morbidity and mortality associated with priority diseases.

Program Objectives

Develop a cadre of health professionals with advanced skills in applied epidemiology and laboratory management;

Increase national and regional capacity to respond to public health emergencies;

Strengthen national surveillance systems;

Prepare field epidemiology residents to take part in the leadership of Public Health

Emergency Management units at national, regional, and sub-regional levels; Contribute to research activities;

Strengthen laboratory based surveillance investigations; Improve the network of public health practitioners in Ethiopia and East Africa; and Assure active use and dissemination of public health data.

The Next Five Years

The EFETP Five Year Strategic Plan developed in 2013 identified four goals to be implemented over the next several years based on challenges identified in the program. Goal #1 is to strengthen mentorship in field epidemiology. The EFETP is committed to establishing a system for high quality mentorship and field supervision using graduates and mentors from local universities. Goals #2 and 3 are to strengthen the FMOH ownership and the social marketing of the program. Goal #4 is to implement a pyramid model of field epidemiology training in Ethiopia, providing basic level training that is cascaded down to the woreda level throughout Ethiopia.

The EFETP continues to be committed to developing Ethiopia's greatest asset, its human resource, by training a cadre of skilled public health professionals who provide in-service assistance to advance and protect public health and contribute to evidence-based decision making.

Major Achievements

Since it was established in 2009, the EFETP has made significant achievements towards its goal and objectives:

To date 48 residents have graduated from the program while 46 continue to provide epidemiologic service to Ethiopia.

Eight graduates hold high level positions within three regional health bureaus, one city administration, the National PHEM Office and at AAU-SPH.

There are currently 32 residents in training. (16 each in cohorts 4 and 5).

Residents have investigated over 100 outbreaks, conducted over 150 surveillance activities and supervised numerous national surveys.

Specialty training in malaria and vaccine preventable diseases was implemented.

Residents have presented their scientific work regularly at regional workshops, the National PHEM Annual Review Meeting and at national and international scientific conferences.

Residents have trained over 2000 public health officers in 1-5 day trainings.

A Field Epidemiology Training Manual was produced for trainers and trainees with a plan to cascade basic level epidemiology training to the woreda level throughout Ethiopia.

A five-year strategic plan was developed and is being implemented.

The FETP residents have investigated over 100 disease outbreaks throughout Ethiopia



Meaza Tilaye-3rd cohort

Collecting data during a measles outbreak investigation Meta Robi Woreda, Wet Shewa Zone of Oromia Region in February 2013. Confirm the spelling of all residents' names.



Omod Omod-3rd cohort

Discussing with the Arbaminch hospital manager on the meningitis outbreak in Arbaminch in 2013



Omod Omod-3rd cohort

Selecting controls for the meningitis cases in Mhea Village, Sheybench District of Arbaminch Zone of SNNP Region in 2013.



Mekides(R) and Omod(L)-3rd cohort residents

Conducting measles case investigations at the community level in Gesha District, Keffa Zone of SNNP Region in 2012.



Addisu Werkineh(R1)-3rd cohort

Conducting malaria testing using Rapid Diagnostic Tests to verify a malaria outbreak in Mecha District in May2012.



Nega Asamenew(L2)-3rd cohort

Taking a blood sample for laboratory investigation during a rubella outbreak in Dibate Woreda, Metekel Zone of Benshagul Gumuz Region in January 2013.



Addisu Werkineh(R2)-3rd cohort

Conducting an entomological investigation of mosquito larvae in Mecha Woreda in May 2012.



Goitom(R1)-3rd cohort & Demis(R2)-2nd Cohort

Traveling to a village for a measles outbreak investigation in Tselemti District, North West Zone of Tigray Region in December 2011.



Dr. Million Wendabeku-1st cohort

Dr. Millyon(R) -1st cohort graduate and local Health officer(L) cohort

Coordinating the yellow fever vaccination South Ari District, South Omo Zone of SNNP Region in April 2013.

Spraying anti-aedes mosquito chemical in South Ari District, South Omo Zone of SNNP Region in April 2013.





Gole Ejeta(R2)-2nd cohort graduate conducting house to house active case search for guinea worm disease in Abobo Woreda, Agnuwa of Gambela Region in May2013.

Gole Ejeta (L)-2nd cohort graduate testing infective copopeds for guinea worm disease infection in Abobo Woreda, Agnuwa Zone of Gambela Region in May 2013.





Daba Mulata (R1)-3rd cohort resident collecting malaria data in Sekuru Woreda in July 2012.

Daba Mulata $-3^{\rm rd}$ cohort resident conducting flood impact assessment in Adama in July 2012.



Afework Tamiru (R2)conducting active case search during measles outbreak investigation.

Omod Omod (R1)-3rd cohort resident collecting data during the health emergency need assessment in November 2012.





Endeshaw Adane-3rd cohort conducting a measles outbreak investigation in Semen Bench Woreda, Bench Maje Zone of SNNP Region in March 2013.

Nigatu Tarekegn(4th cohort) conducting Malaria Outbreak investigation in Chanomile kebele, Arbaminch zuria woreda of Gomogofa zone– January 2013



Lema Bogale(3rd Cohort), conducting Measles outbreak in Mizanteferi zone of benchmaji zone-November 2012



Omod Omod(3rd Cohort), Supervising the humanitarian need assessment–December 2012

Surveillance Data Analysis and System Evaluations

Residents of the EFETP have conducted over 150 surveillance activities to establish data-derived information about the health burden of reportable diseases in Ethiopia.

Residents have contributed a lot for strengthening the surveillance system of Ethiopia by actively participating in surveillance activities while they were in their field bases.

In 2012/2013 residents of the third cohort and fourth cohort have done surveillance data evaluation on the following diseases and produced scientific papers which were accepted at national and international conferences. More over the outputs were given for decision makers possible intervention and program.

Among these outputs done by residents of cohort 3 and four, the following are some to mention.

Rabies—————Haftom Taame (3rd cohort) and Alefech Addisu(3rd Cohort)

Meningitis————Nega Asamene (3rd cohort) and Elsabet Megerssa(4th Cohort)

Measles————Meaza Tilaye (3rd Cohort and Henok Hifamo (3rd cohort), Alefech Addisu(3rd Cohort), Mekides Demisse(3rd Cohort), Daba Mulleta(3rd Cohort)

Malaria—————Gemechu Befa (3rd cohort) and Addisu Werkineh (3rd Cohort)

Goitom Mehari (3rd cohort), Ashenafi Argeta(3rd cohort)

Typhoid fever———Mastewal Werku(3rd Cohort)

Surveillance Data Analysis and System Evaluations

Residents of the EFETP conducted surveillance system evaluations on Malaria,

Measles, AFP/polio, Typhoid fever, Epidemic typhus and other notifiable diseases that helped to identify the gaps and strengthen the Ethiopian public health surveillance system and recommended possible solutions for improvement. These are some of the activities completed concerning the surveillance system in Ethiopia.

I

n addition to the data analysis and system evaluations residents have also conducted health profile description activities in many different parts of the country. Thus the health profile of some woredas and zones were described and recommendations were forwarded for the identified gaps to be improved and corrected.

More over products of the EFETP had participated in different national and regional surveys which were very important to improve the health service delivery programme of the country.

Residents of the programme have also produced many scientific research proposal based on national priority health issues that could be conducted in the future while fund is available.

Residents Conduct Trainings

Residents have given hundreds of trainings for public health professionals in different fields that improve knowledge and skills in managing public health issues.



Haftom Taame-3rd cohort resident giving the presentation "International Health Regulations (IHR2005)" at the PHEM Annual Review Meeting in Bahirdar in April 2013.



Gemechu Befa-3rd cohort resident giving a training on hygiene and cholera treatment center establishment for West Arsi, Bale, Guji and Borena PHEM officers.



Omod Omod-3rd cohort giving the presentation "Meningitis Outbreak Investigation Report in SNNP Region-Ethiopia" at the PHEM Annual Review Meeting in Bahirdar in April 2013.



Gemechu Befa(R1) and Omod Omod(R2) -3rd cohort residents discussing the EPI coverage survey training conducted in Churchill Hotel, Addis Ababa in May2012.

Residents Participate in Trainings and Workshops



3rd cohort residents participating in the 2nd PHEM Annual Review Meeting conducted in Bahirdar in April 2013.



 3^{rd} Cohort residents in class.



3rd cohort residents practicing GPS operation and reading during GIS training



3rd cohort residents' introduction to field base supervisors before deployment to field bases.

Residents in Defense

Residents have had their scientific findings accepted for presentation in six international conferences.





Ethiopian delegates participating in the 7th TEPHINET conference with TE-PHINET Director Dr. Dionisio Herrera. Residents and graduates of the Ethiopia FETP participating in the 7th TE-PHINET international conference in Jordan in November 2012.





Nega Asamene-3rd cohort resident participating in the American Society for Microbiologist's 113th annual conference in Denver Colorado, USA in May 2013.

Residents and graduates of Ethiopia FETP attending Dr. Million's poster presentation at the 13th World Health Congress in Addis Ababa-2012.

Residents in Defense



Haftom Taame-3rd cohort resident presenting his compiled body of work for Internal and External Examiners during his defense in June 2013.



Alefech Addisu in the middle with Dr. Dessalegn(L1), Dr. Getahun(L2), Dr. Rosen(L3), Dr. Daddi(R2) and Dr. Lucy (R1) after her defense in June 2013.



Haftom Taame(L2) with his Advisor Dr. Daddi (L1) External Examiner Dr. Tekeste (L3), Internal Examiner Dr. Ayele (R2) and Academic Coordinator Dr. Desalegn(R1)



Ethiopia FETP Coordinators and Field Supervisors sharing experience from Tailand FETP in September 2012.



Dr. Lucy Boulanger



Dr. Getahun Aynalem

As graduates of the FETP you join an elite group of people in the world. You are an amazing group of bright, engaged and caring scientists who have unique skills to prevent disease and suffering. Use these skills wisely and tirelessly. You are expected to save lives and now you know how. I've seen you all do it. If you hold this privilege in your heart and act on it, I am confident you will be blessed with a deep sense of purpose in your lives.

As you graduate from the EFETP, I bid you farewell with a deep sense of pride and affection. I would like to take the opportunity to offer a few reflections on what really matters in life. What really matters? The answers we give can change as we grow and our perception of life changes.

I guess as a Resident Advisor, one would expect that the importance of learning epidemiology, biostatistics, conducting good outbreak investigation, surveillance data analysis etc. would be the dominant theme of my comment, but in truth, the responsibility ahead of you, the various tragedies that some Ethiopians have undergone as result of preventable diseases in the last few years, have made me ever more aware that in the grand scheme of things these are not what really matter. Of course I would hope that you develop the skills and abilities of a very competent epidemiologist and we all together have so much to celebrate in your success. But it seems to me that it is really important that you remember the things that really make life worthwhile. Walking alongside someone so that your footprints are not the only ones left in the sand. Feeling triumphant when you have tried your best, knowing who you are, where you are from, and where you are going. No matter what mishaps you get into, as long as you remember that, then you'll be fine.

Message from the Program Coordinator



Dr. Zegeye Hailemariam



Dr. Adamu Adissie



Your graduation has brought great progress and achievement for the program (EFETP) as well as for your respective regional health bureaus. It is my pleasure to congratulate you, because you are successful graduates in Masters of Field Epidemiology and Public Health in the year 2013. Your capability and strength in shouldering public health emergency in your respective regions will enhance and promote the total health surveillance activities in the country, this is also the ultimate goal of EFETP.

As you know well there is immense progress in our health surveillance system in the country, this is because of you and your friends, who are working on this system and program.

Finally I would like to wish you best in your endeavors.

Your graduation has brought great progress and achievement for the program (EFETP) as well as for your respective regional health bureaus. It is my pleasure to congratulate you, because you are successful graduates in Masters of Field Epidemiology and Public Health in the year 2013. Your capability and strength in shouldering public health emergency in your respective regions will enhance and promote the total health surveillance activities in the country, this is also the ultimate goal of EFETP.

As you know well there is immense progress in our health surveillance system in the country, this is because of you and your friends, who are working on this system and program.

Finally I would like to wish you best in your endeavors.

Dr. Desalegn Dalecha



Mr. Alemayehu Bekele

The Field Epidemiology Training Program is a model adopted from the US Epidemic Intelligence Services (EIS) that emphasizes a learning by doing approach. Ethiopia, as a country facing diverse health problems, communicable, non-communicable diseases, maternal and child health problems, malnutrition and natural disasters launched this program in 2009. It is strongly believed that this particular training enables a country to produce knowledgeable and skilled public health professionals in intensifying the surveillance system and conducting effective outbreak investigation and response in rescuing lives.

In order to create a healthier Ethiopia, the role of field epidemiologists is immense.

This is particularly by strengthening the evidence based public health practices, improving the traditional surveillance system and establishing a stronger network among the graduates themselves. The network will help as a forum to exchange information and experiences in order to create a platform in public health practice.

At this juncture, I would like to appreciate the immense contribution of all my colleagues at the School of Public Health, CDC-Ethiopia, EHNRI, EPHA and at the field bases who make this program realistic.

Congratulations and I wish you all a productive future.



Addisu Werkineh



Afework Tamiru



Daba Mulleta



Alefech Addisu



Ashenafi Argata



Endeshaw Adane



Gemechu Befa



Haftom Taame



Lema Bogale



Goitom Mehari



Kasim Mahdi



Mastewal Werku



Meaza Tilaye



Nega Asamene



Mekdes Demssie



Omod Omod

Group Pictures





