Mozambique Field Epidemiology and Laboratory Training Program (FELTP) -Strengthening disease detection through laboratory confirmation

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#### **Description of the Mozambican FELTP**

- Established in 2010, by the NIH (MoH), in partnership with Faculty of Medicine (UEM) and CDC support.
- Competency-based, postgraduate training and service program, with two tracks:
  - Epidemiology
  - Laboratory Management



### **Program Structure (Master)**

- Field work (75% of allocated time) focused on public health practice at national references laboratories public health services/services.
  - Outbreak investigations
  - Analysis of surveillance data
  - Evaluation of surveillance systems
  - Writing of abstracts, manuscripts
  - Oral or poster presentations at conferences

#### Classes (25% of allocated time)

- Public Health
- Epidemiology
- Research methods
- Public health laboratory systems
- Management and leadership





# FELPT is embedded into the Public Health System



## So far, <u>41.6%</u> of residents enrolled on the program were laboratories technicians



#### **Current profile of graduates**

					Actu	al Positic	n	
Cohort	Track	Enrolled	Finalized	MoH-HQ	Province	Univ.	Defense	ONG
Cohort 1 (2010-12)	Epi	5	4 (80.0%)	2	2	0	0	0
	Lab	6	6 (100.0%)	5	0	1	0	0
Cohort 2 (2012-14)	Epi	9	9 (100.0%)	7	2	0	0	0
	Lab	5	5 (100.0%)	2	2	1	1	0
Total		25	24	16	5	2	1	0
		(100.0%)	(96.0%)	(66.6%)	(20.8%)	(8.4%)	(4.2%)	(0.0%)



#### Laboratory related outputs

Output	Total	Торіс		
Outbreak Investigations with laboratory confirmation of an etiologic agent	21 (95,5%)	Measles, cholera, rabies, typhoid, polio, pesticide poisons, shigellosis, influenza, conjunctivitis, malaria, dengue		
Descriptive Analysis of Surveillance Data	12 (38,7%)	MDRTB, measies, Hiv, lymphatic filariasis, entomology		
Bulletins in MoH Epidemiology quarterly newsletter	5 (45.0%)	Outbreak investigations, descriptive analyses of surveillance data,		
Development of databases	8	Laboratory information systems		
Development of standard operating procedures (SOPs)	27	Laboratory procedures		
Laboratory Surveillance	11	AFP, measles, HIV, TB, malaria, rabies, water quality, food		
evaluations	(44.0%)	quality		
International training	2	Molecular Epidemiology of Emerging Infectious Diseases week-long course		
Master thesis residence	6	Antimicrobial resistance, analysis of drinking water quality data, HIV Surveillance and rabies		
Published Manuscript	1 (100.0%)	Mycobacterium tuberculosis resistance to antituberculosis drugs in Mozambique		



### **Field activities**



Measles investigation



Polio investigation



Cholera outbreak



Lymphatic filariasis activities



#### Challenges

- Long term sustainability of the program
- Weak regulatory framework for public health
- Weak laboratory capacity to support investigations.
- Insufficient number of senior supervisors for field investigations.
- Insufficient incorporation of the recommendation by the health system.



#### Conclusion

- The program contributed effectively to:
  - Strengthen the country capacity for outbreaks investigation
  - Improve of the country's health surveillance systems.
  - Integrate the training of field and laboratory epidemiologists
  - Bridge field epidemiology and laboratory investigation



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#### **Thank You**