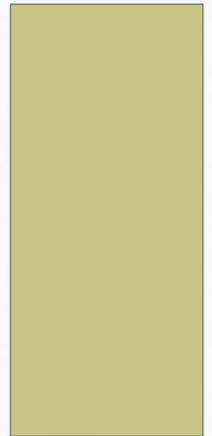


MOZAMBIQUE LABORATORY CAPACITY BUILDING

JULY 24-OCTOBER 21, 2015

LCDR JESSICA COLE

2016 CATEGORY DAY COA/COF SYMPOSIUM



PRESENTATION OUTLINE

- IETA program
- Mozambique Background
- HIV and PEPFAR in country
- Project and Outcomes
- Summary



IETA PROGRAM

- International Experience and Technical Assistance (IETA) program through CDC's Center for Global Health

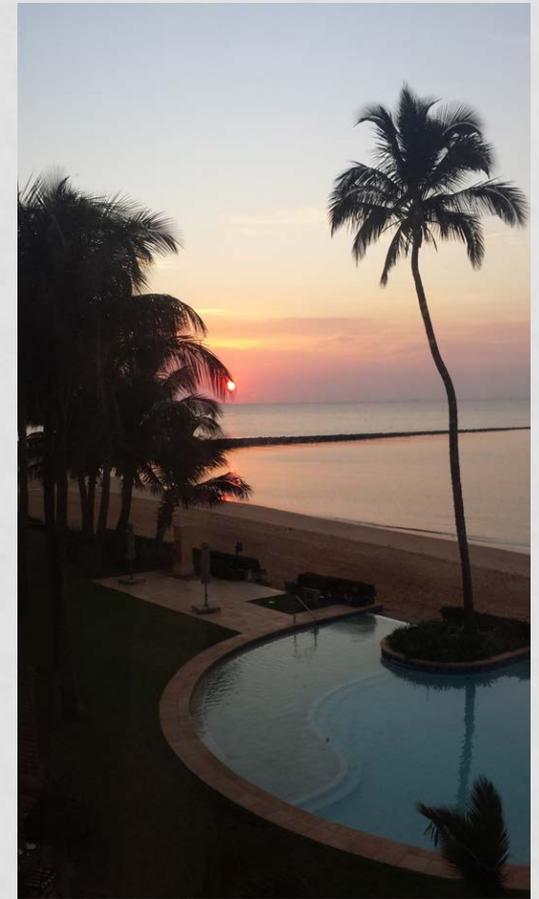


Cohort 17

- Open to all federal public health employees
- 12 month professional development and technical assistance program
 - 3 Atlanta based trainings
 - ≥ 12 weeks at one of 50 international locations
 - Interested programs conduct interviews after CV review

STATEMENT OF WORK

- Draft a road map for viral load (VL) implementation
- Support monitoring and evaluation program design for VL
- Develop operational research protocol on VL implementation
- Support blood safety protocol development



Sunrise over Maputo Bay

MOZAMBIQUE FACTS

- 25.3 million people
- 32.2% urbanization with 80% having no access to improved sanitation
- 13% electricity coverage with 5.5% internet access
- Life expectancy 53 years
- Portuguese speaking

CIA World Fact book November 2015



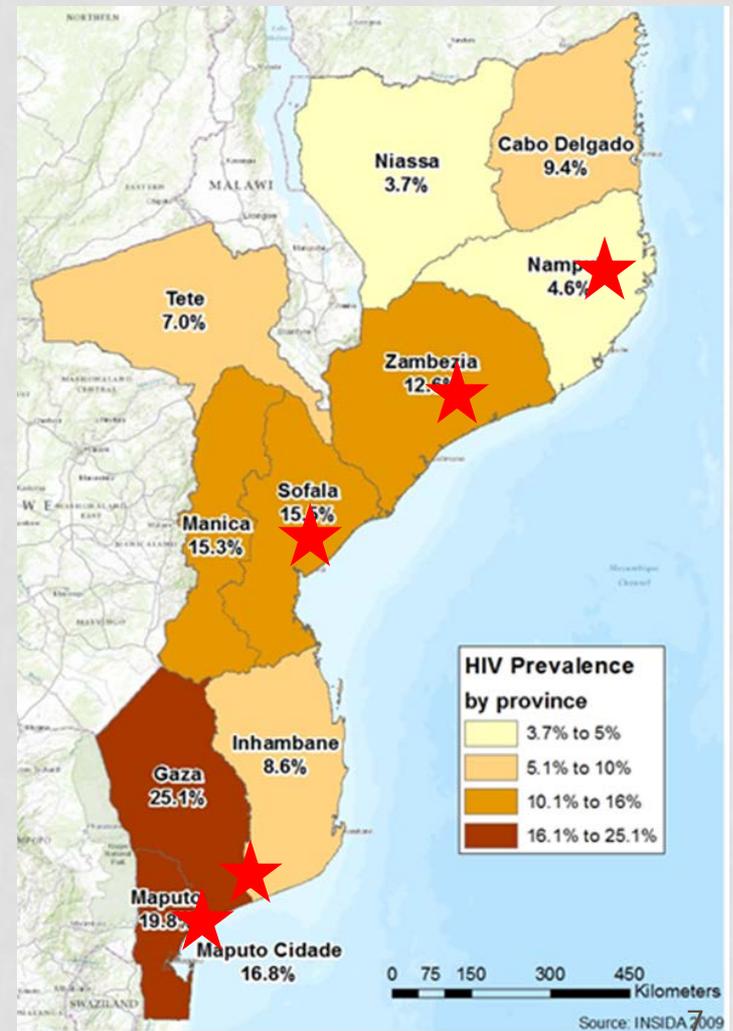
<http://autocww2.colorado.edu/~toldy3/E64ContentFiles/GeographyOfCountries/mozambique.htm>

HIV IN MOZAMBIQUE

- 1.6 million people living with HIV (2015)
 - Urban: rural prevalence 15.9%:9.2%
 - Female: male prevalence 13.1%/9.2%
 - 646,312 people on anti retroviral treatment (ART) (2014), 180,000 HIV+ children <15 yrs. (2015)
 - 41,400 children on ART (2014)
- HIV treatment available to children <5 years of age, TB+ patients, pregnant and lactating women, children with CD4 count <500 cells/mL, adults with CD4 counts <350 cells/mL and those who meet WHO stage 3/4 clinical criteria
- ~65% coverage of eligible, 31.7% of HIV+ people

HIV AND VIRAL LOAD (VL) TESTING

- Annual CD4 testing
- WHO recommended VL in June 2013
- Ministry of Health (MOH) developed a 3 year implementation plan in 2013
- 5 labs with Abbot RT-PCR
 - National capacity of ~150,000 VL tests annually



VL IMPLEMENTATION PLAN

- Interviewed MOH, INS, and supply chain partners to determine current needs
- OGAC scale-up funding announced
 - Undefined funding amount, funding period, 2 week turnaround
 - Extension requested and granted
- CDC and USAID clinical, laboratory and supply chain working group
 - Identified the biggest gaps and reasons for delayed implementation
 - Drafted proposed solutions and budgets required

LABORATORY PLANNING

- Brainstorming exercise to identify weaknesses
 - National level mentoring/management
 - Supply chain
 - Lab management
 - Sample processing
 - Paper records
 - Lack of utilization (two fold)
- Forecasting exercise with USAID supply chain management partner (SCMS)
 - Predicted need for 42 labs (21 with double shifts)



CDC laboratory Staff

NAMPULA SITE VISIT

- Molecular lab with electronic laboratory system
- High volume site
- Multiple problems with lab organization, supply chain, sample referral and sample processing
- Perception that the molecular staff are privileged



CONSENSUS BUILDING

- Multiple two day meetings with MOH, technical working group members, USAID, CDC
 - Small group break out sessions
 - Presentations and discussion with the full group
- Senior level meeting between MOH and CDC country director
- Final buy in and approval reached
- On-going activities were detailed in implementation plans



Ministry of Health

FINAL RECOMMENDATIONS

- Recruit national and provincial mentors

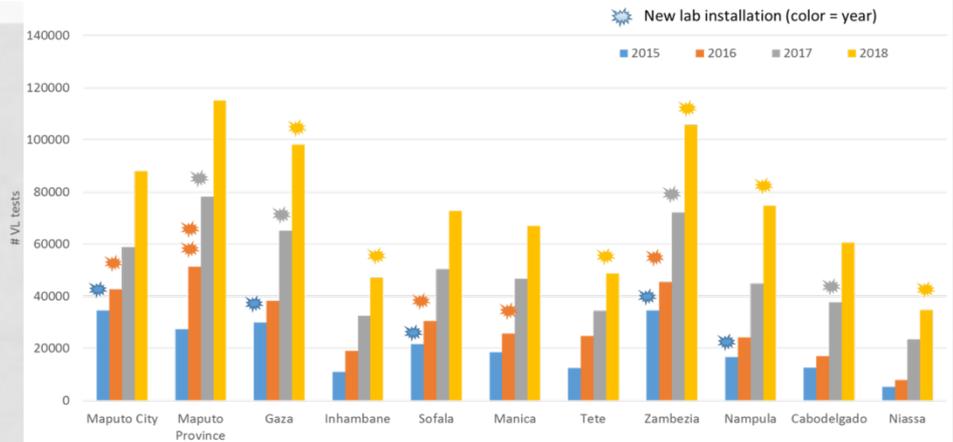
- M&E, quality systems, supervision/training, lab management, troubleshooting,

- Create testing SOPs and train new technicians
- Strengthen supply chain and infrastructure in each province

- Computers, printers, internet, power, cold chain, ordering

- Install electronic laboratory system

- \$50 million project with \$8 million scale up plan



Planned locations and years for new labs

LESSONS LEARNED

- Complex interactions between USG entities, local government, and implementing partners
 - Competing interests at times (grants, annual reports, etc.)
 - Important to have strong working relationships
- Many USG overseas staff are in non-technical positions with significant time spent on supervisory and administrative activities
- My training prepared me well for novel work outside of my expertise and I enjoyed the overseas experience
- Learn the language prior to arrival!

WEEKEND TRAVELS

- Kruger Park South Africa
- Swaziland Reed Dance
- Gorongosa National Park
- Catemebe Island
- Inhaca Island
- Cape Town South Africa
- Ilha de Mozambique



