

CDC's Global Health Agenda

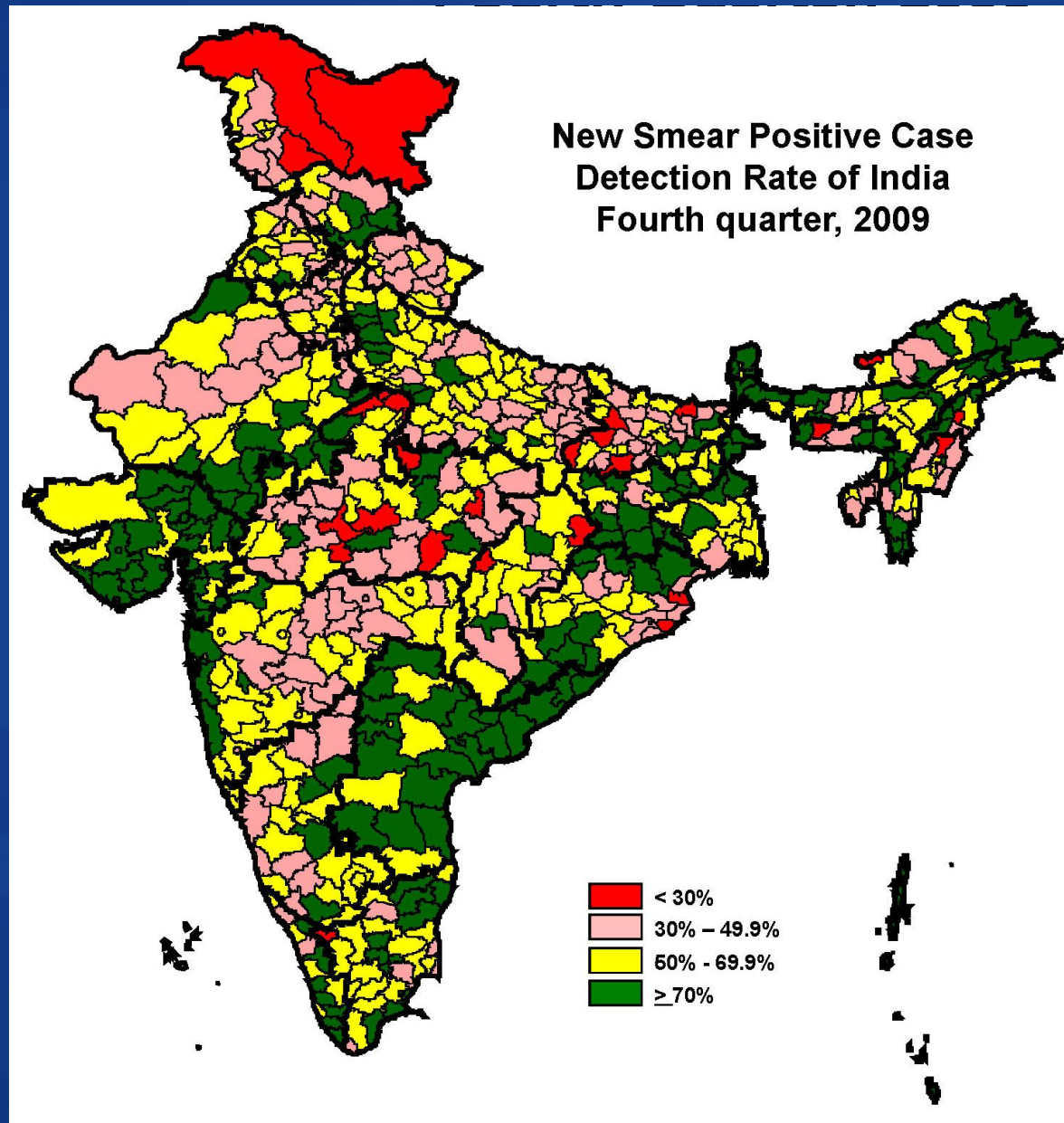
Partnering for Rapid Progress in Global Public Health

Center for Strategic and International Studies

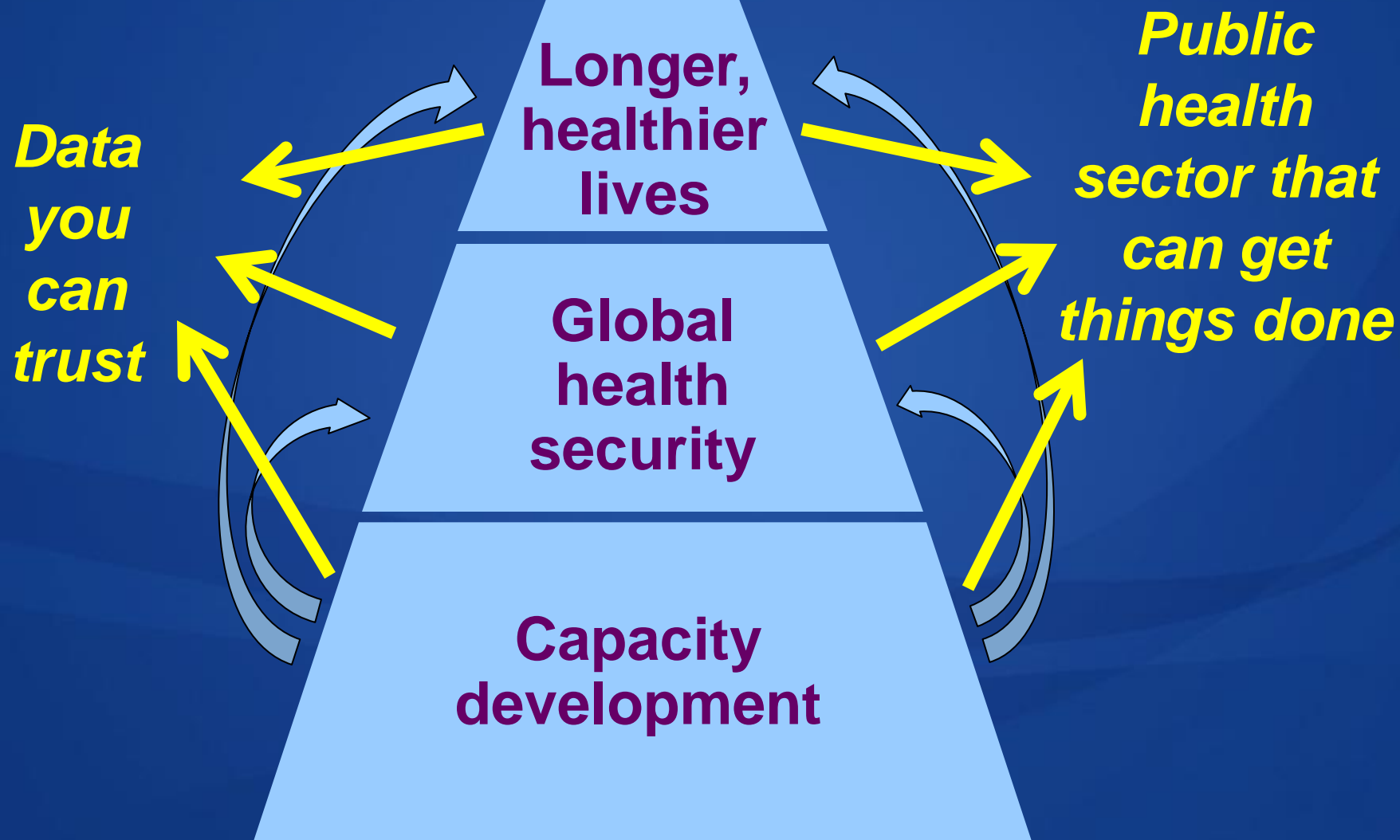
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11 million treated, 2 million lives saved



CDC Center for Global Health



Longer, healthier lives



Longer, healthier lives

- Disease-specific programs
 - HIV, TB control, malaria prevention and control
 - Immunization
 - NTDs and more
- Prevention chronic conditions and injuries
- Accurate data and knowledge generation for effective global public health action



HIV

- Support for prevention of mother-to-child HIV transmission during ~16 million pregnancies
- >300,000 babies born without HIV due to PEPFAR-supported programs
- Anti-retroviral treatment for >2.4 million men, women, and children – half the ~4 million on treatment globally
- Support to ministries of health in 35 countries
 - Planning, resource mobilization, training, supervision, establish information systems

**Drastic declines in death rates in
dozens of countries**



Tuberculosis

- 36 million tuberculosis patients cured between 1995 and 2008
- Estimated >5 million tuberculosis deaths prevented in same time period
- In recent years, estimated >700,000 deaths prevented each year
- Need to strengthen basic DOTS implementation, expand evidence-base



Malaria

- Goal: reduce malaria morbidity and mortality by half in high-burden countries
- Develop and deploy new and improved tools to control malaria
- Document effectiveness of rapid diagnostic tests for treatment and surveillance
- Support Ministries of Health



Neglected tropical diseases

- Goal: eliminate Lymphatic Filariasis globally and onchocerciasis in the Americas
- Monitor and evaluate drug therapies and delivery strategies
- Technical assistance monitoring and evaluating programs and tools
- Staff support to WHO to develop monitoring and evaluation guidelines for integrated programs
- Help develop operational research agenda to support President's Initiative on Neglected Tropical Diseases



Non-communicable diseases and injuries

- Twice as many deaths from non-communicable diseases and injuries in some developing countries as from communicable diseases
 - Nearly as many NCD deaths as communicable even in sub-Saharan Africa
- Many nations lack basic capacity to detect or respond to chronic diseases and hazards
- Link data to public health action and policy change
- Help build national public health capacity
- Address tobacco use, poor nutrition, traffic injuries





Global health security

Global health security

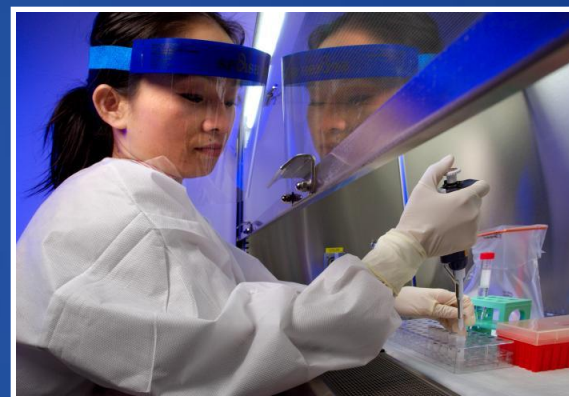
- Weak surveillance in any country is risk to all
 - Requires coordinated systems to detect and respond to infectious diseases
 - Quicker identification of H1N1 in Mexico could have enabled much earlier availability of H1N1 vaccine
- Strengthening Ministries of Health
 - Public health emergency response
 - Surveillance and strategic information systems



International Health Regulations

- Empower international community to prevent and respond to outbreaks or hazards that could cross borders to threaten lives and economic stability
- Effective June 2007, regulations require countries to report certain outbreaks and events to WHO
- 194 ratifying countries also must strengthen surveillance and response capacity





Capacity development



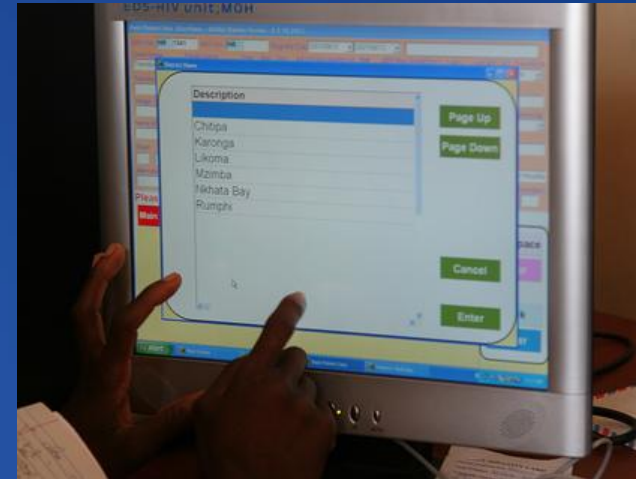
Public health capacity development

- Address infectious and emerging threats as well as non-communicable diseases and injuries
- Increase trained epidemiologists to 1 per 200,000
 - Develop tracks in noncommunicable, maternal/child health, zoonotic, etc., in Field Epidemiology and Laboratory Training Programs
 - Tiered models of epidemiologic training
- Strengthen Ministries of Health
 - Surveillance of disease outbreaks/occurrence
 - Technical expertise on immunization and other areas
 - Research (including operational research)



Surveillance systems as an optimal tool for monitoring and evaluation

- Surveillance systems
 - Sustainable – often existing but underused and poor quality
 - Investment – build national systems
 - Improve treatment and program management (e.g., TB, HIV, malaria)
- Surveys
 - Although less likely to build national capacity or contribute to program management, can be essential for planning and evaluation



REVISED NATIONAL TUBERCULOSIS CONTROL PROGRAMME
Tuberculosis Register

Quarter: 3 rd Year: 1998

TB No.	Date of registration	Name (in full)	Sex M / F	Age	Complete address	Name of Treatment Centre	Date of starting treatment	Regimen/Category	Disease class (Pulm./extra-pulm.)	New case (N)	Relapse (R)	Transfer in (T)	Transfer out (D)	Other (O)
1	8/8	Parvathi Singh (F)	F	16	1884, Adli Parvathi Wall, Chandel Chowk	PBI 257	7/8	CAT I	P	N				
2	17/8	Lakshmi Kumar (F)	F	48	229, Bandhi Pham Kaya Nagar	PBI 101	16/8	CAT I	P	N				
3	17/8	Lakshmi Patti Rao (F)	M	50	An above	PBI 101	16/8	CAT II	P	N				
4	17/8	Kalpana Nath (F)	M	35	225, Bandhi Pham Kaya Nagar	PBI 101	16/8	CAT I	P	N				
5	18/8	Khanbhai Singh (M)	M	18	124, 42 Colony, Rajiv Forum	PBI 257	4/8	CAT III	SP	N				
6	18/8	Shila Kam (F)	M	32	1704, Balli Wali Wall Near Mandir	PBI 257	10/8	CAT I	P	N				
7	20/8	Lalita Parand Parwar (F)	M	32	217, Balli Akara Near Kiveli	PBI 257	17/8	CAT II	P	N				
8	20/8	Kiran Kumar (M)	M	37	15, Gulmehar Park	PBI 257	23/8	CAT III	P	N				
9	30/8	Srinivasa Rao (M)	M	38	WP 2431, Balli Parham Wall, Lion Village	PBI 257	23/8	CAT III	P	N				
10	30/8	Nanda Kumar (M)	M	24	54, Khan Market	PBI 257	12/8	CAT I	P	N				

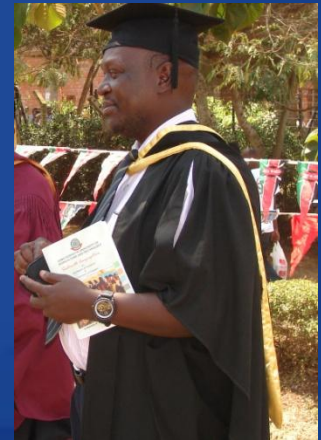
1267

New case	Relapse	Transfer in	Transfer out	Other
2	2	1	0	5

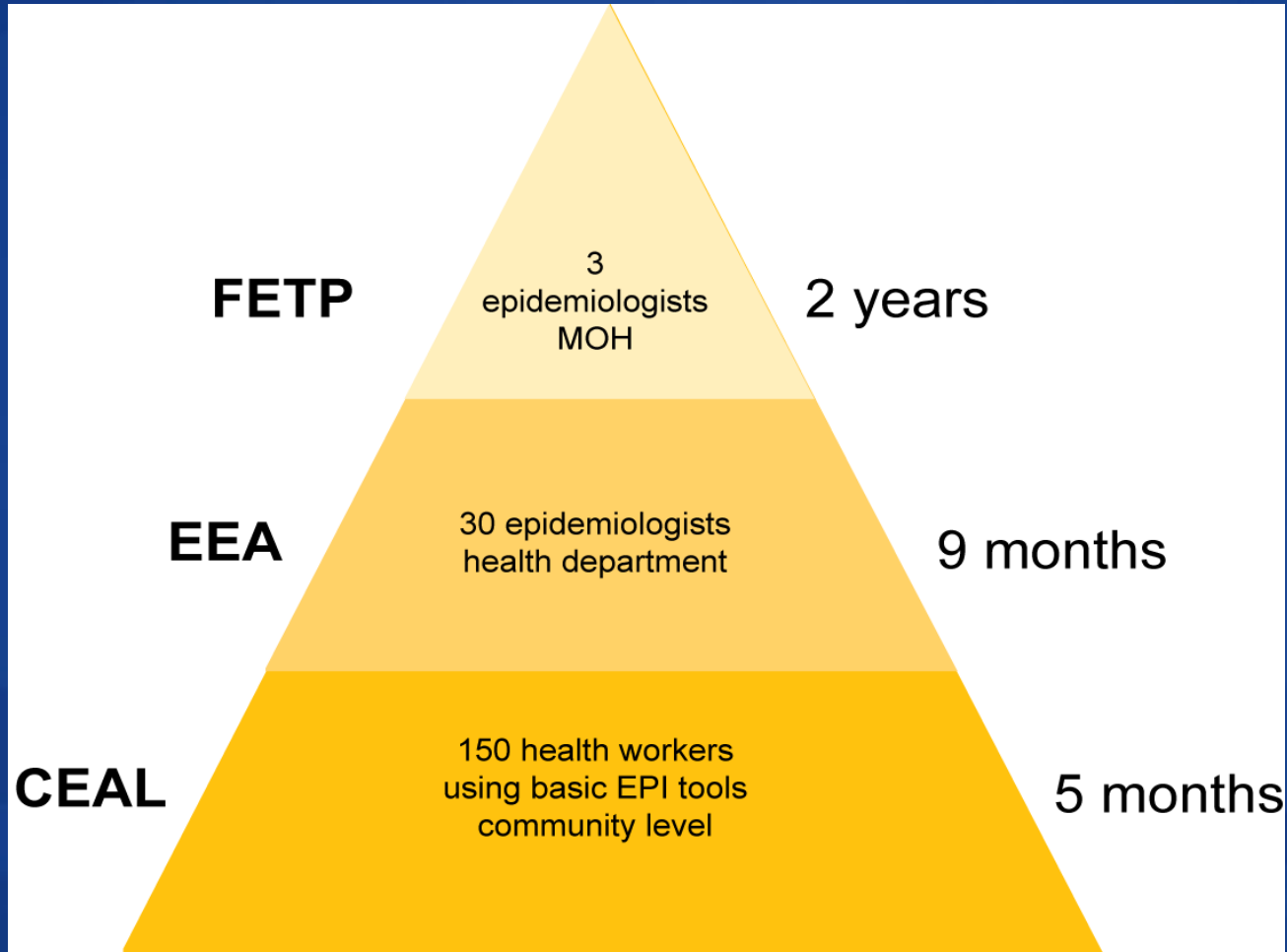


Field Epidemiology Training Program

- Since 1980, 31 FETPs have trained more than 1,200 epidemiologists
 - More than 80% stay in their countries after graduating
 - In 2008, 276 active trainees conducted more than 300 outbreak investigations
- Effective, low-cost, practical epidemiology training – but only small proportion of numbers needed and scope

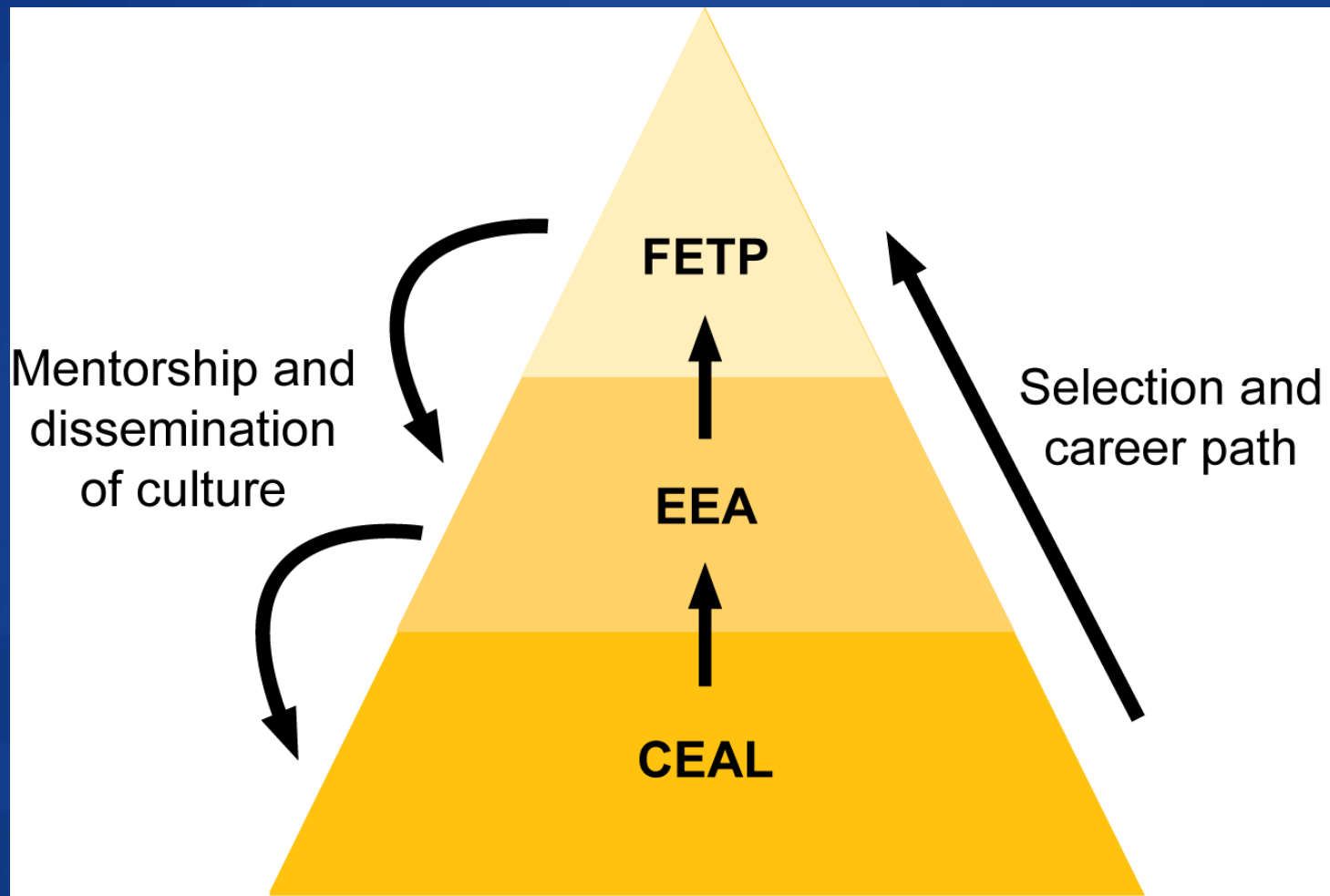


Pyramidal model of epidemiology training



FETP: Field Epidemiology Training Program
EEA: Especialización en Epidemiología Aplicada
CEAL: Capacitación en Epidemiología de Nivel Local

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Future of FETP

- Better
 - Quality control
 - Specialized tracks: HIV, malaria, immunization, TB, NTDs, injury, non-communicable disease, etc.
 - Strengthen host institution
- Bigger
 - Reach larger proportion of need at national and sub-national levels
 - Multiple levels of epidemiology practitioners
- Broader
 - Non-communicable diseases, health care system monitoring, economic analysis, etc.



Strengthen global lab capacity

- One of the most concrete, useful aspects of strengthening health systems
- Strengthen at national, referral, and clinical levels
 - Promote training that addresses sustainable, accredited laboratories
 - Coordinate epidemiology and laboratory development
 - Focus on achievable goals; maximize existing tools



In-country technical support

- Support Ministries of Health
- Links to CDC's strong disease and public health staff in US
 - Thousands of leading disease control experts
 - 40 WHO Collaborating Centers at CDC
- Partner with WHO, UNICEF and others to provide on-the-ground technical support in immunization, influenza, HIV/AIDS, malaria, and many other areas
- Close coordination with USAID



Better data = effective public health action in Nigeria

- 2006 – H5N1 arrives in Nigeria but not detected until 2007 due to lack of in-country surveillance capacity
- CDC partners with WHO and Nigerian Ministry of Health to develop surveillance system within existing health care system
- Field Epidemiology Training Program established in Nigeria in 2008



Haiti – healthier, longer lives

- Malaria, NTD elimination framework
 - Surveillance and entomologic capacity, lab strengthening
- New and underutilized vaccines
- HIV – PEPFAR
 - Antiretroviral treatment, care, and support
 - Prevent maternal-to-child transmission
- Strengthen National TB Control Program
 - Restore interrupted anti-TB treatment
 - Case finding with community educators
 - Improve laboratory capacity



Haiti – health security

- Surveillance
 - For preventable illness in camps and nationally
- Disseminate pre-decisional briefs for responding to acute outbreaks
- Support PAHO health and Water, Sanitation, and Hygiene clusters and UNICEF nutrition work
 - Develop water quality monitoring and testing program within Haiti water and sanitation department



Haiti – capacity development

- Epidemiologic and laboratory training
 - Adapt pyramidal model and curriculum
 - Begin short-term trainings
 - Establish Field Epidemiologic and Laboratory Training Program
- Strengthen laboratory capacity
 - Tiered system based on functioning national public health Laboratory
 - New national blood center



Global Health Initiative targets

- HIV: Prevent 12 million new infections, treat >4 million
- Reduce under-five mortality 35% to save ~3 million lives
- Reduce maternal mortality 30%
- TB: Reduce 50% to save ~1.3 million lives
- Malaria: Reduce burden 50%
- NTDs: Reduce 7 neglected tropical diseases 50%
- Prevent 54 million unintended pregnancies
- Reduce child undernutrition by 30%



Current CDC international activities and support



Thank you

