

# Singapore's COVID-19 Experience

## Good Practice and Training Challenges

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Global Health Security Agenda  
E-meeting hosted by Thailand, 3 Nov 2020

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National Centre for  
Infectious Diseases



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MINISTRY OF HEALTH  
SINGAPORE

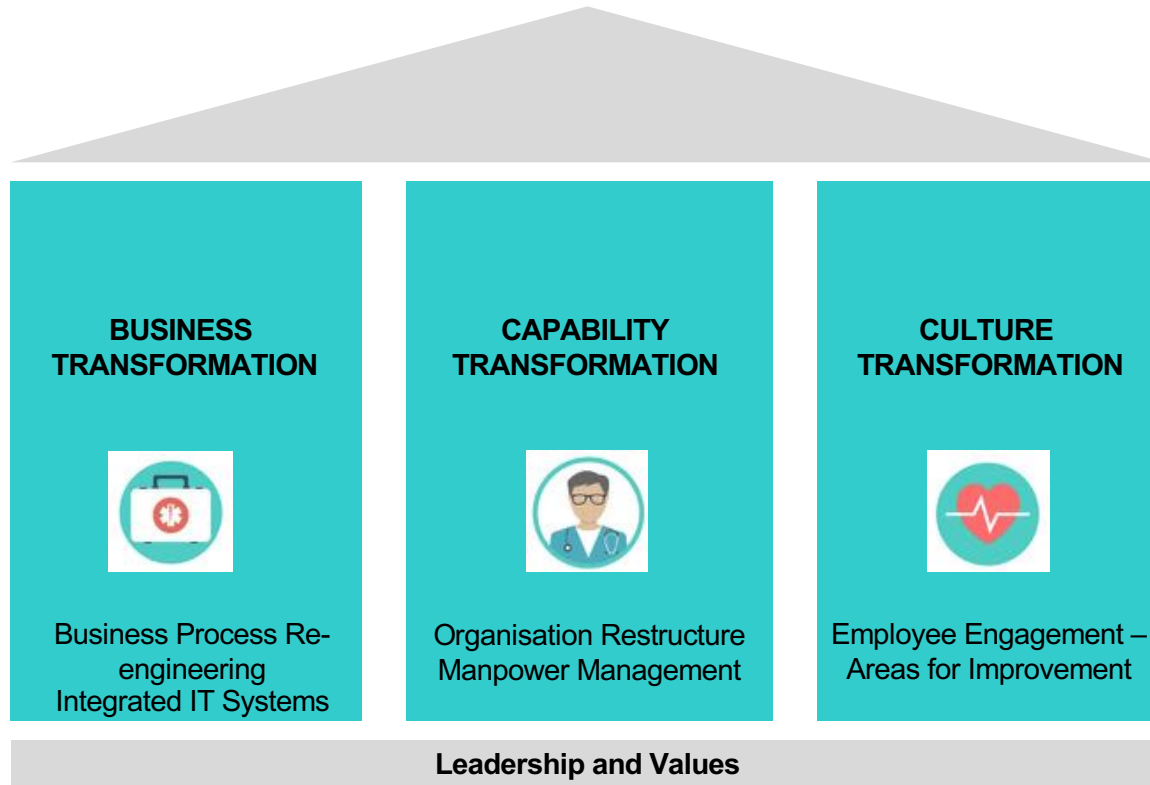
# 1st Workshop for WHO Western Pacific Region Epidemiology Fellowship Programme

15 to 16 November 2018 | Tokyo, Japan



Workforce Development a Priority...

# Public Health Service Transformation





Footloose!

Basic competencies

## **Applied epidemiology and rapid response**

How to undertake rapid response on the ground for surveillance, investigation and control

## **Fundamentals of public health practice**

How to apply evidence-based scientific approach when conducting outbreak field investigations

## **Elementary methods in field epidemiology**

How to explain transmission dynamics in the emergence of unusual public health events and epidemics

Foundational level

Additional competencies

## **Epidemic intelligence primer**

How to perform multi-disciplinary investigation into epidemics and environmental threats

## **Epidemiologic risk assessment**

How to apply the principles and practice of risk assessment and management for all hazards

## **Outbreak epidemiology and global health**

How to control outbreaks with implications for global health security and health regulations

## **Communicable diseases control**

How to undertake surveillance, epidemiology and response to disease clusters and outbreaks

Intermediate level

Additional competencies

## **Health emergencies and preparedness**

How to conduct whole-of-government approach in pandemic management, prevention and control

## **Community health protection**

How to advocate a whole-of-society approach in addressing public health emergencies

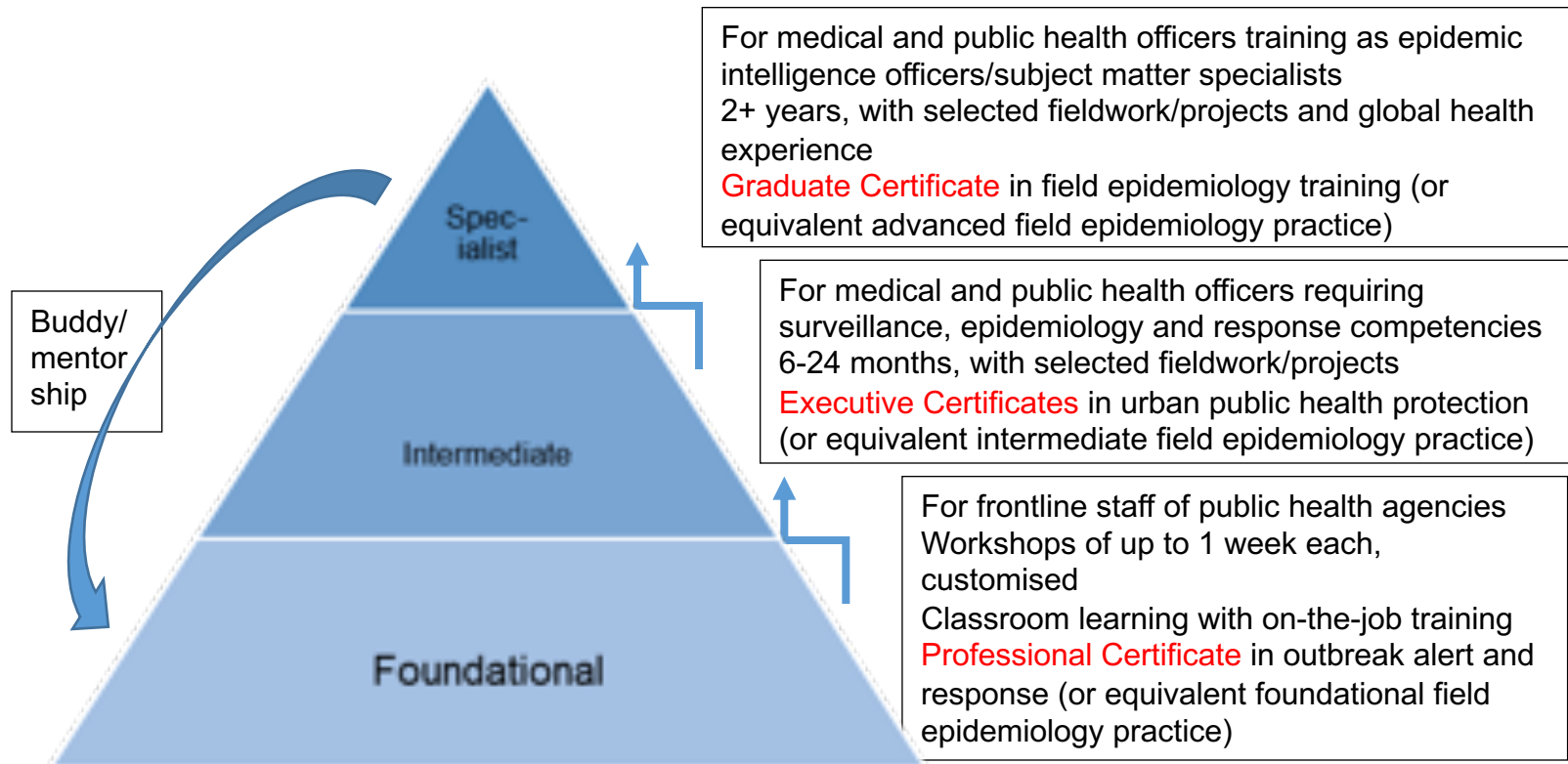
Specialist competencies

1. Leadership in the community
2. Epidemic intelligence services
3. Global health security
4. Outbreak alert and response

Intermediate-to-advanced level



## Three Tiers for Field Epidemiology Workforce Development







What Do Trainees Wish?

## WHAT MILLENNIALS WANT

- Want to know why they need to know
- Practical insights with immediate relevance to work
- Experiential learning by doing, error, and experience
- Problem-solving skills, not content-centred learning
- Internal motivation and own pace for learning journey

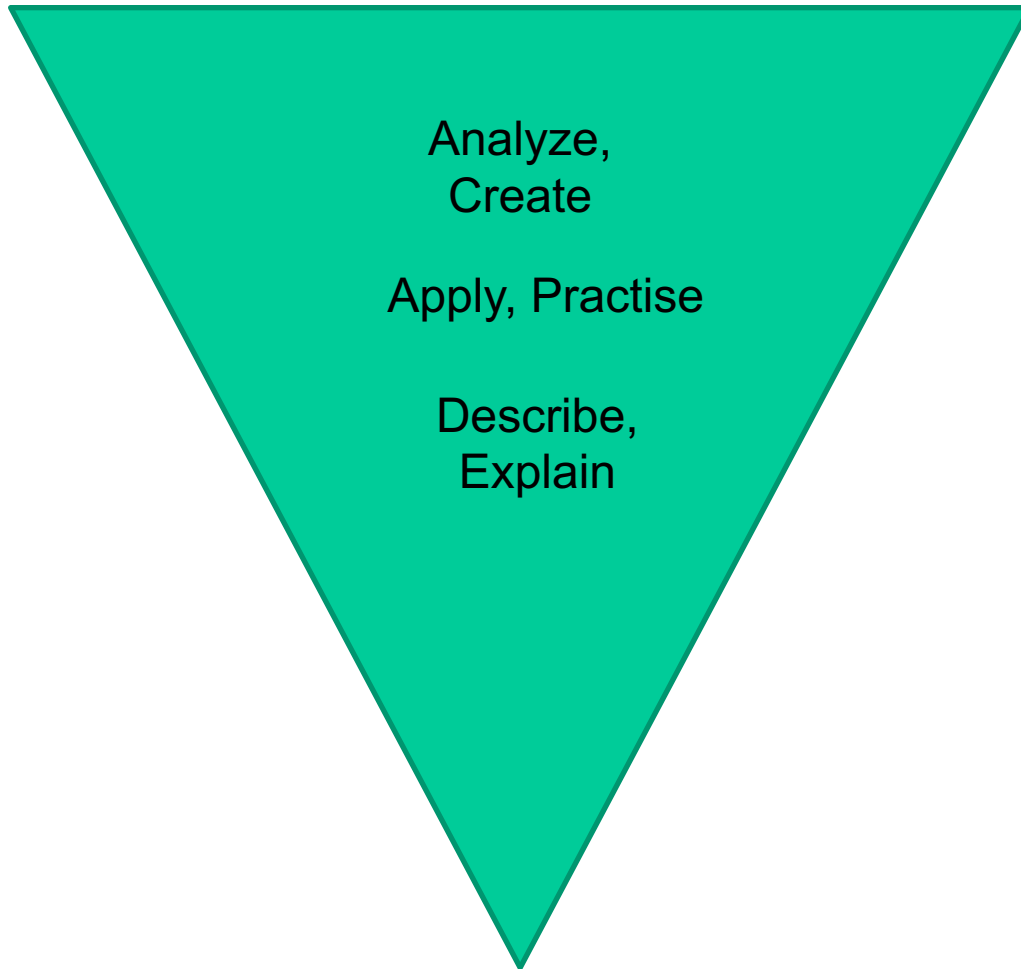
*Edutainment!*





Finding More Clues...

# Our Learning Journey



**90%** *Roleplay Experiences*

**70%** *Interactive Visits*

**50%** *Multi Media*

**30%** *Audiovisuals*

**10%** *Listening, Reading*

Somewhere on this planet...

# Survivors Morphing Heroes



Playing Our Part...



**COMMUNICABLE DISEASES DIVISION**

**CD**  
COMICS  
#1 Apr 11

The Adventures Of  
**EPiMAN**

*SalmoNellil*

*Lady Influenzal*

*Darth Vector!*

*TB Zombiel!*

UNLEASHING THE POWER OF PUBLIC HEALTH AGAINST  
**INFECTIOUS DISEASE AGENTS!!!**

# THE CREDIBLE HULK

YOU WON'T LIKE ME WHEN I'M ANGRY...

BECAUSE I ALWAYS SUPPORT MY  
ARGUMENT WITH PROPERLY  
DOCUMENTED SCHOLARLY SOURCES.







Heroes in the making  
Work in Progress!





The Art of Public Health...



The Art of Public Health...



The Art of Public Health...

# **Painful lessons, not taught!**

1. Communities exist with different reality and expectations
2. Epidemiologists should not infer beyond what evidence supports
3. Systems are not built to care; it's people who do
4. Communicating with stakeholders requires credibility, mutual respect and patience
5. Engagement with policymakers more art than science



Are You Game?

# Our vision for tomorrow...

A cadre of highly competent physician and non-physician professionals who, *having cross-trained in FETP across hospitals and agencies*, can provide domain expertise in public health with skills and knowledge for outbreak management and pandemic response!

