# Global Health Security and International Health Regulations (2005)

Dr Nyan Win Myint
Deputy Director (Epidemiology/IHR)
Department of Public Health

## Security?



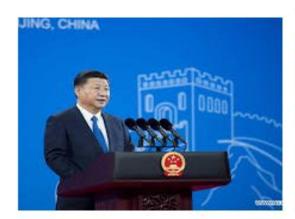
**Security** is the degree of resistance to, or protection from, harm. It applies to any vulnerable or valuable asset, such as a person, dwelling, community, item, nation, or organization.

### **Global Security?**





















### U.S.-Myanmar Relations

Fact Sheet, Office of the Spokesperson, Washington, DC September 14, 2016



### Top US general warns of 'tough' North Korean ground war



CNN

By Barbara Starr, CNN Pentagon Correspondent

9 hrs ago









M EMAIL

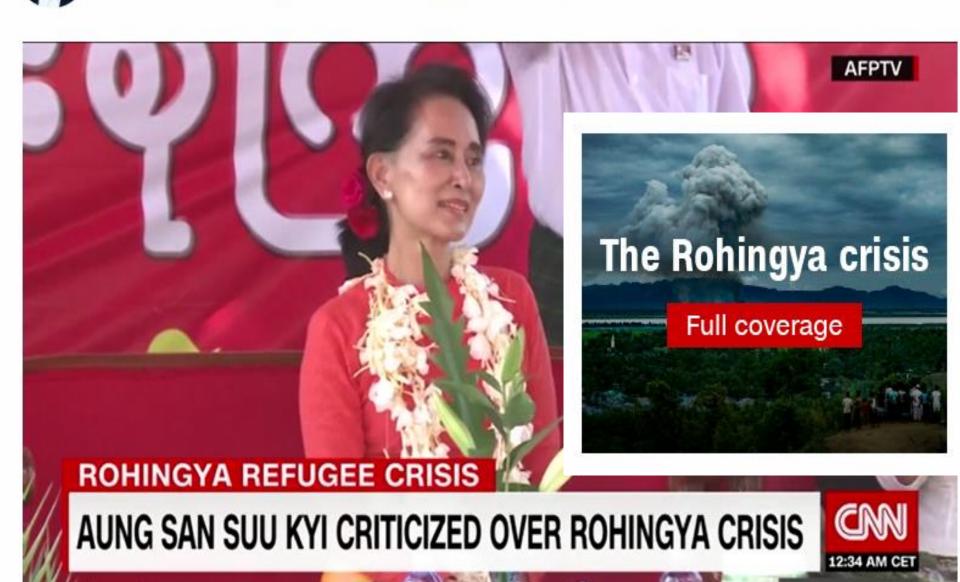


© Alex Wong/Getty Images



Regions » Has the Rohingya crisis 'changed' Myanmar's Aung San Suu Kyi?

① Updated 0656 GMT (1456 HKT) January 26, 2018



### **Global Health Security Agenda**

- The United States and Myanmar are committed to advancing global health security.
- In 2017, Myanmar will complete and publish a Joint External Evaluation (JEE) of national capacity to prevent, detect, and respond to infectious disease threats.
- The United States completed and published a JEE in 2016.
- President Obama hopes that together we can make significant progress on the goals of the Global Health Security Agenda (GHSA) this year as partners in building capacity against the threat of infectious diseases.

### Global Health Security Agenda

Prevent avoidable catastrophes



**Detect threats early** 



Respond rapidly and effectively



### **Action Packages to Achieve Targets**







National Laboratory Systems



**Emergency Operations** Centers



Zoonotic Diseases



Surveillance





Linking Public Health with Law Enforcement and Multisectoral Rapid Response



Biosafety/Biosecurity

**Immunization** 



Reporting



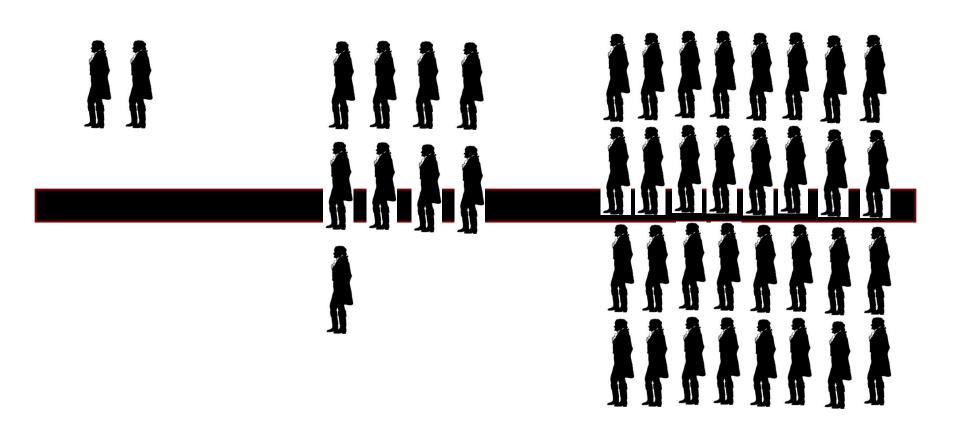
Workforce Development



Medical Countermeasures and Personnel Deployment

### Global Population and Effect of Epidemic and Pandemic





Black Death

34 million dead (Europe) 8.5%

Spanish Flu

50-100 million dead,

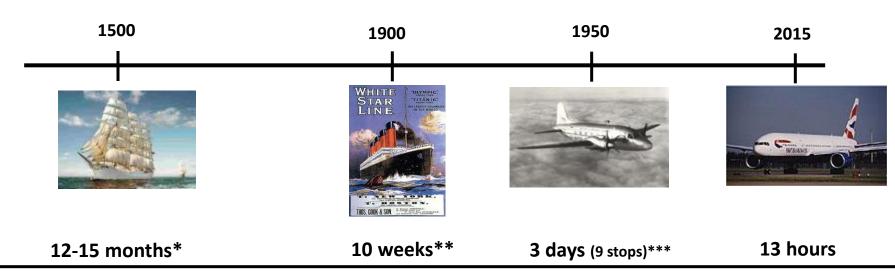
+ 5% (Global) **The Next Pandemic** 

???? million dead,

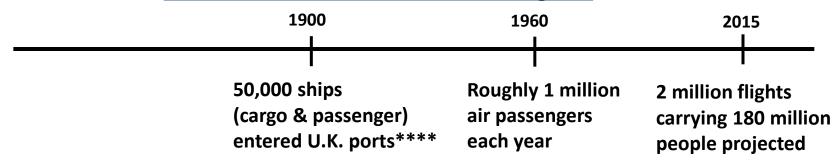
5%????

## And the interconnectivity of our species has increased dramatically in both speed and scale

#### <u>Travel Time: London – Hong Kong</u>



#### **Human Traffic to/from the United Kingdom**



<sup>\*</sup> Based on the voyage of Vasco de Gama around the Cape of Good Hope.

<sup>\*\*</sup> Voyage of the White Star liner Oceania through the Suez Canal

<sup>\*\*\*</sup>Route of a typical flight was London, Frankfurt, Rome, Damascus, Basra, Karachi, Delhi, Calcutta, Rangoon, Bangkok, and Hong Kong.

<sup>\*\*\*\*</sup> Starkey, David, et al. Shipping Movements in the ports of the United Kingdon, 1871-1913 (University of Exeter Press, 1999)

## (18<sup>th</sup> Century) Quarantine Measures

International Sanitary Convention (1951)

Quarantine Measures

Communicable Diseases

plague, yellow fever, and cholera

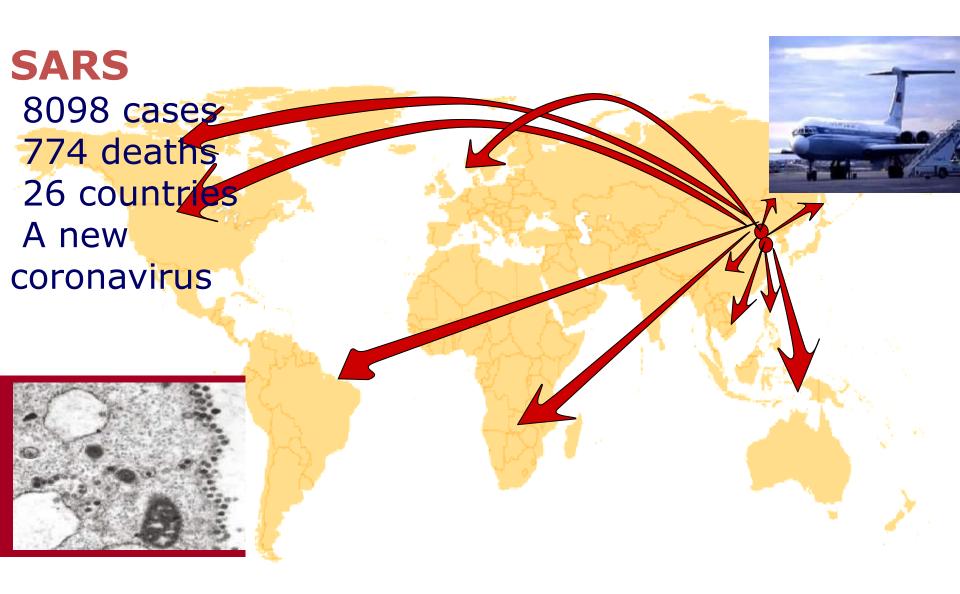
International Health Regulation (1969)

Quarantine Measures

Communicable Diseases

plague, yellow fever, and cholera

### First pandemic of this century : SARS



# A reminder to us: "Vulnerability is universal"

 Public health security depends on the capacity of each country to act effectively and contribute to the security of all countries

International Health Regulation (1969) is revised

Not diseases specific

Events Based



"All for one, one for all!"

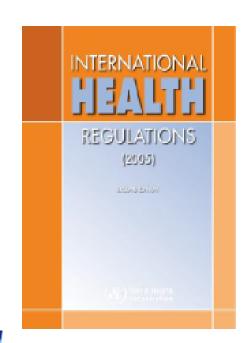
The Three Musketeers Alexander Dumas, 1844 In May 2005, The 58th World Health Assembly adopted the revised International Health Regulations, "IHR"

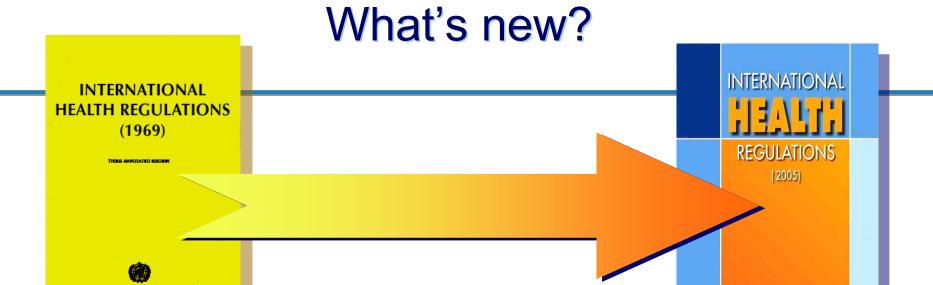
To prevent, protect against, control and provide a public health response to the international spread of disease in ways that are commensurate with and restricted to public health risks, and which avoid unnecessary interference with international traffic and trade.



# **About IHR (2005)**

- A global legal framework for global public health security – "legally binding"
- A shared risk management approach, calling for
  - Strong national systems (IHR core capacities)
  - Strong regional and international alert and response systems
- Entered into force since June 2007





- From three diseases to all public health risks
- From preset measures to tailored response
- From control of borders to also include containment at source



### What does IHR implementation mean...?

Two very important aspects...

- An immediate and ongoing requirement for countries to report some types of event and for WHO to provide assistance
- 2. A requirement, *linked to a timeframe* for countries to establish capacities to detect and respond to public health events (initially, by June 2012)

### What needs to be reported to WHO?

- Any potential 'Public Heath Event of International Concern' (PHEIC)
- To help any decision, some criteria have been established
  - 1. Is the public health impact of the event serious?
  - 2. Is the event unusual or unexpected?
  - 3. Is there a significant risk of international spread?
  - 4. Is there a significant risk of international travel or trade restrictions?
- A decision on whether to report an event will normally be made at national level (by the national IHR focal point)

### PHEIC

• Public health emergency of international concern is defined "an extraordinary public health event which is determined to constitute a public health risk to other countries through the international spread of disease; and to potentially require a coordinated international response".

(IHR, 2005)

# IHR Emergency Committee Ebola



Dr. Steffen, Switzerland



Dr. Cetron, Quarantine US CDC

August 8, 2014

- No general ban on international travel or trade
- •Exit screening for travellers from affected countries: no travel for Ebola patients, their contacts or suspected cases

### **Decision instrument (Annex 2) of IHR (2005)** for Assessment and Notification

4 diseases that shall be notified polio (wild-type polio virus), smallpox, human influenza new

subtype, SARS. Disease that shall always lead to utilization of the algorithm: cholera, pneumonic plague, yellow fever, VHF (Ebola, Lassa, Marburg), WNF, others...

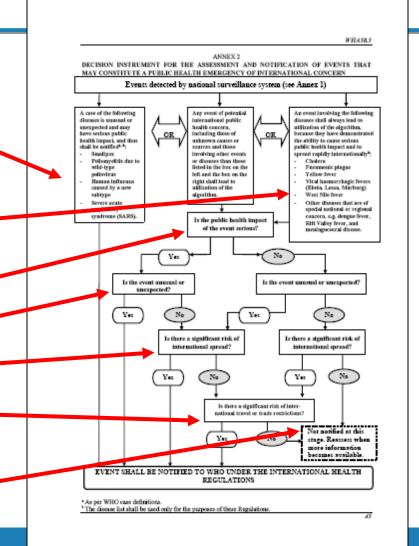
Q1: public health impact serious?

Q2: unusual or unexpected?

Q3: risk of international spread?

Q4: risk of travel/trade restriction?

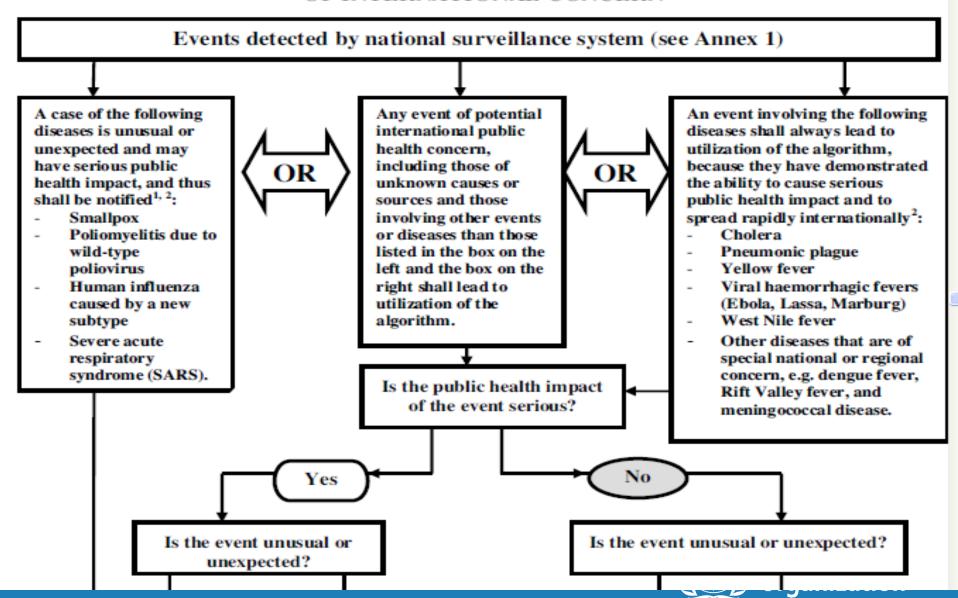
**Insufficient information: reassess** 

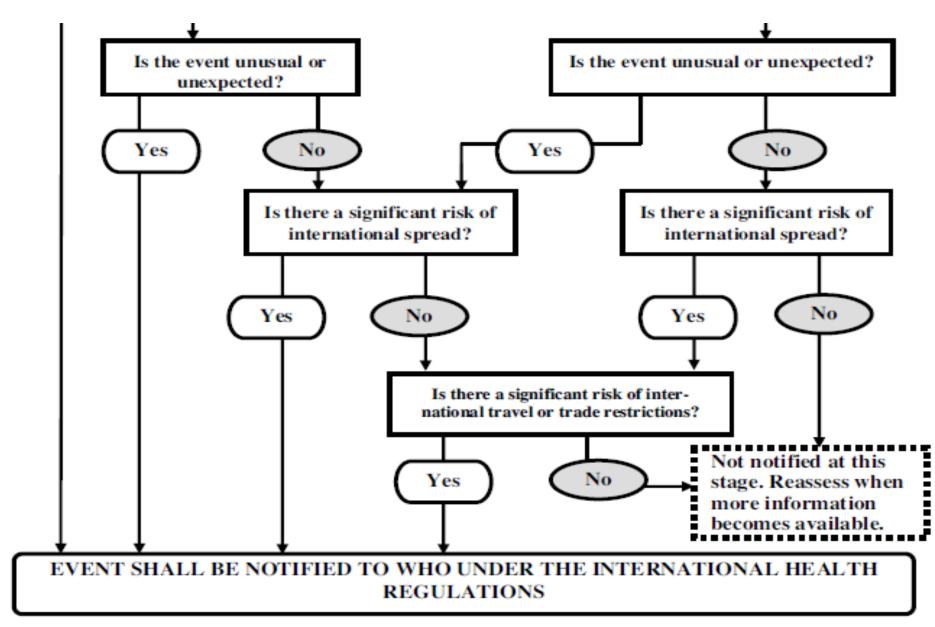




#### ANNEX 2

#### DECISION INSTRUMENT FOR THE ASSESSMENT AND NOTIFICATION OF EVENTS THAT MAY CONSTITUTE A PUBLIC HEALTH EMERGENCY OF INTERNATIONAL CONCERN





### **IHR Core Capacities**

- Eight "core capacities"
  - National legislation, policy and financing.
  - Coordination and National Focal Point (NFP)
     Communications.
  - Surveillance.
  - Response.
  - Preparedness.
  - Risk communication.
  - Human resources.
  - Laboratory.
- Points of Entry
- Capacities for IHR-relevant hazards (infectious diseases, zoonoses, food safety, chemical, radio-nuclear).

## Article 6 (Surveillance)

 Each State Party shall notify WHO, by the most efficient means of communication available, by way of the National IHR Focal Point, and within 24 hours of assessment of public health information, of all events which may constitute a public health emergency of international concern within its territory in accordance with the decision instrument, as well as any health measure implemented in response to those events.

### Articles 14

- WHO shall cooperate and coordinate its activities, as appropriate, with other competent intergovernmental organizations or international bodies in the implementation of these Regulations, including through the conclusion of agreements and other similar arrangements.
- In cases in which notification or verification of, or response to, an event is primarily within the competence of other intergovernmental organizations or international bodies, WHO shall coordinate its activities with such organizations or bodies in order to ensure the application of adequate measures for the protection of public health.

## **Cross Country Notification**

- Local health authorities of Sagaing State verified the news of detection of EVD suspected cases at Jawaharlal Nehru Institute of Medical Sciences (JNIMS) Hospital in Imphal, India
- The case had history of travelling to Myanmar
- MoH, India verified that the case was not even consistent with the case definition of PUI nor suspected cases of EVD and also tested negative for EVD.



By Our Staff Reporter

Japanese tourist has been confined in the isolation ward of JNIMS after she showed symptoms of high fever on the uspicion that she might be Ebola infected.

been, in the meantime, putting in place all possible preventive measures to thwart off Ebola in the border State.

The Japanese came to Myanmar through Moreh. She sudfrom denly showed symptoms of high fever at Classic Hotel yesterday subsequent upon which health workers took her to the JNIMS isolation ward,



Health workers attending a patient

been identified as Kawkubo (27). She arrived here on

Even as blood sample of the Japanese tourist has been collected, no courier service

necessary test, today being Sunday, conveyed the offi-

The tourist's blood sample tested at Raj Medicity for woman this morning showed

condition is being monitored at the isolation ward. Due inthe top ranking officials of the relevant State and Central

nptoms of Ebola are rhinidrooling and high fever The disease can be communicated even through shaking

In order to prevent transmission or outbreak of the screening check gates have already been opened at Mao, Moreh, Jiribam and Tulihal Airport. Moreover, necessary kits have also been procured One individual from Iram

Siphai who returned from Congo recently after a UN Peacekeeping Mission is be-



### IHR notification through WHO on H1N1 pdm 09

WHO - notified by MoHS on 27 July 2017 (13 cases of Influenza A(H1N1)pdm09)



Increased acute respiratory infections since early July 2017, which is consistent with Myanmar's expected influenza season.

### PoEs Obligations (Article 19)

- Each State Party shall, in addition to the other obligations provided for under these Regulations:
- (a) ensure that the capacities set forth in Annex 1 for designated points of entry are developed within the timeframe provided
- (b) identify the competent authorities at each designated point of entry in its territory; and
- (c) furnish to WHO, as far as practicable, when requested in response to a specific potential public health risk, relevant data concerning sources of infection or contamination, including vectors and reservoirs, at its points of entry, which could result in international disease spread.

### Article 22 (Responsibility)

- (a) for monitoring baggage, cargo, containers, conveyances, goods, postal parcels and human remains departing and arriving from affected areas, so that they are maintained in such a condition that they are free of sources of infection or contamination, including vectors and reservoirs;
- (b) ensure, as far as practicable, that facilities used by travellers at points of entry are maintained in a sanitary condition and are kept free of sources of infection or contamination, including vectors and reservoirs;
- (c) be responsible for the supervision of any deratting, disinfection, disinsection or decontamination of baggage, cargo, containers, conveyances, goods, postal parcels and human remains or sanitary measures for persons, as appropriate under these Regulations;

### Article 22 (Responsibility)

- (d) advise conveyance operators, as far in advance as possible, of their intent to apply control measures to a conveyance, and shall provide, where available, written information concerning the methods to be employed;
- (e) be responsible for the supervision of the removal and safe disposal of any contaminated water or food, human or animal dejecta, wastewater and any other contaminated matter from a conveyance;
- (f) take all practicable measures consistent with these Regulations to monitor and control the discharge by ships of sewage, refuse, ballast water and other potentially disease-causing matter which might contaminate the waters of a port, river, canal, strait, lake or other international waterway;

### Articles 22 (Responsibility)

- (g) be responsible for supervision of service providers for services concerning travellers, baggage, cargo, containers, conveyances, goods, postal parcels and human remains at points of entry, including the conduct of inspections and medical examinations as necessary;
- (h) have effective contingency arrangements to deal with an unexpected public health event; and
- (i) communicate with the National IHR Focal Point on the relevant public health measures taken pursuant to these Regulations.

### **Articles 23**

- health measure under these Regulations shall be carried out on travellers without their prior express informed consent or that of their parents or guardians
- Any medical examination, medical procedure, vaccination or other prophylaxis which involves a risk of disease transmission shall only be performed on, or administered to, a traveller in accordance with established national or international safety guidelines and standards so as to minimize such a risk.

# IHR - Public health security in travel and transport

- At all times
  - Access to medical service
  - Transport of ill travellers
  - Inspection of conveyances (e.g. Ship Sanitation Control Certificate)
  - Control of vectors / reservoirs
- For responding to events
  - Emergency contingency plan
  - Arrangement for isolation (human, animal)
  - Space for interview / quarantine
  - Apply specific control measures





### Articles 27 Affected conveyances

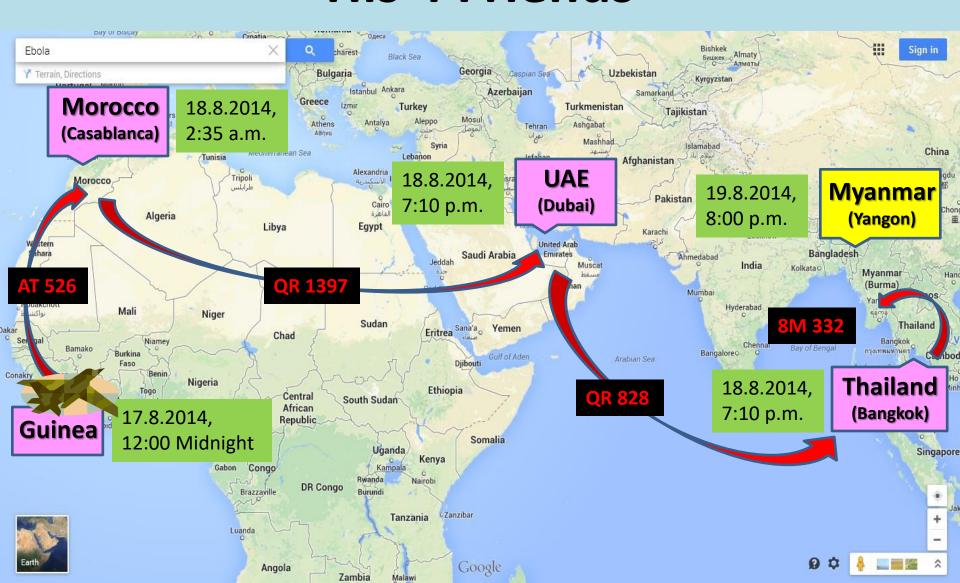
If clinical signs or symptoms and information based on fact or evidence of a public health risk, including sources of infection and contamination, are found on board a conveyance, the competent authority shall consider the conveyance as affected and may:

- (a) disinfect, decontaminate, disinsect or derat the conveyance, as appropriate, or cause these measures to be carried out under its supervision; and
- (b) decide in each case the technique employed to secure an adequate level of control of the public health risk as provided in these Regulations. Where there are methods or materials advised by WHO for these procedures, these should be employed, unless the competent authority determines that other methods are as safe and reliable.
- The competent authority may implement additional health measures, including isolation of the conveyances, as necessary, to prevent the spread of disease. Such additional measures should be reported to the National IHR Focal Point.

## Articles 32 (Treatment of Passengers)

- In implementing health measures under these Regulations, States Parties shall treat travellers with respect for their dignity, human rights and fundamental freedoms and minimize any discomfort or distress associated with such measures, including by:
- (a) treating all travellers with courtesy and respect;
- (b) taking into consideration the gender, sociocultural, ethnic or religious concerns of travellers; and
- (c) providing or arranging for adequate food and water, appropriate accommodation and clothing, protection for baggage and other possessions, appropriate medical treatment, means of necessary communication if possible in a language that they can understand and other appropriate assistance for travellers who are quarantined, isolated or subject to medical examinations or other procedures for public health purposes.

# Travelling History of Suspected Case & His 4 Friends





Activities of Seaport for incoming vessels

Any incoming vessels from other country to Yangon port

,. they have to fly Yellow flag ( or ) Q flag .

It is mean – We are healthy, we request to get

Pratique

### **Annex 5 Vector Control**

- Every conveyance leaving a point of entry situated in an area where vector control is recommended should be disinsected and kept free of vectors. When there are methods and materials advised by the Organization for these procedures, these should be employed.
- States Parties shall establish programmes to control vectors that may transport an infectious agent that constitutes a public health risk to a minimum distance of 400 metres from those areas of point of entry facilities that are used for operations involving travellers, conveyances, containers, cargo and postal parcels, with extension of the minimum distance if vectors with a greater range are present.

### **Annex 5 Vector Control**

- A State Party should not prohibit the landing of an aircraft or berthing of a ship in its territory if the control measures provided for in paragraph 3 of this Annex or otherwise recommended by the Organization are applied. However, aircraft or ships coming from an affected area may be required to land at airports or divert to another port specified by the State Party for that purpose.
- A State Party may apply vector control measures to a conveyance arriving from an area affected by a vector-borne disease if the vectors for the foregoing disease are present in its territory.

#### MODEL INTERNATIONAL CERTIFICATE OF VACCINATION OR PROPHYLAXIS

This is to certify	that [nai	me]	, date of birth	, sex	,
nationality		, national ider	ntification document,	if applicable	
whose signature	follows				
has on the date i	ndicated	been vaccinated or rec	eived prophylaxis ag	ainst:	
(name of disease	or cond	ition)			
in accordance with the International Health Regulations.					
Vaccine or prophylaxis	Date	Signature and professional status of supervising clinician	Manufacturer and batch No. of vaccine or prophylaxis	Certificate valid from	Official stamp of administering centre
	Date	professional status of	batch No. of vaccine or	valid from	
prophylaxis	Date	professional status of	batch No. of vaccine or	valid from	

This certificate is valid only if the vaccine or prophylaxis used has been approved by the World Health Organization.

This certificate must be signed in the hand of the clinician, who shall be a medical practitioner or other authorized health worker, supervising the administration of the vaccine or prophylaxis. The certificate must also bear the official stamp of the administering centre; however, this shall not be an accepted substitute for the signature.

Any amendment of this certificate, or erasure, or failure to complete any part of it, may render it invalid.

The validity of this certificate shall extend until the date indicated for the particular vaccination or prophylaxis. The certificate shall be fully completed in English or in French. The certificate may also be completed in another language on the same document, in addition to either English or French.

### WHO Yellow Fever Vaccination

- **Vaccination** recommendations for travellers (WHO)
  - Protection of travellers
- **Vaccination** certificate requirements by **States** 
  - Preventing importation of YF

#### INTERNATIONAL CERTIFICATE\* OF VACCINATION International Certificate of **OR PROPHYLAXIS** Vaccination or Prophylaxis This is to certify that [name] ..... International Health Regulations (2005) date of birth .....sex nationality ..... national identification document, if applicable ...... Certificat international de vaccination ou de prophylaxie whose signature follows ..... has on the date indicated been vaccinated or received prophylaxis Règlement sanitaire international (2005) against: (name of disease or condition) in accordance with the International Health Regulations. Vaccine or prophylaxis Date Date Vaccin ou agent prophylactique Issued to / Délivré à Passport number or travel document number 3. Numéro du passeport ou du document de voyage \* Requirements for validity of certificate on page 2.

Signature and professional status of supervising

clinician

Signature et titre du

clinicien responsable

### 建立口岸突发公共卫生事件应急保障机制

Build up safeguard mechanism

各类防护服 Protective













消毒处理车 Disinfection vehicles

登机查验设备 Check-out facilities before boarding

# 北京口岸甲型H1N1流感防控

H1N1 Prevention and Control of Beijing Ports



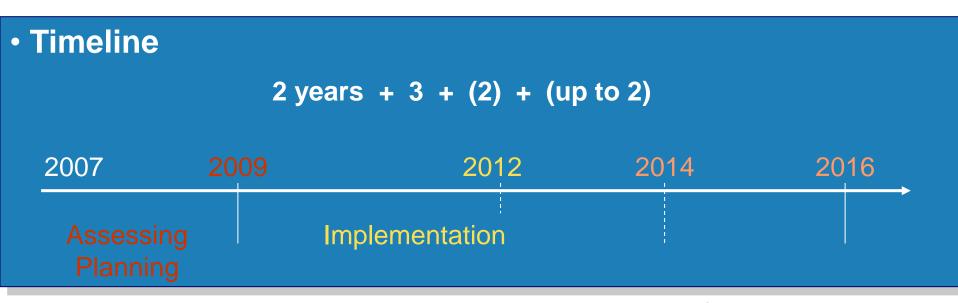


# 国际旅行医学

# International travel medicine



# STRENGTHEN NATIONAL CAPACITY FOR PUBLIC HEALTH RESPONSE



extensions

"As soon as possible but no later than five years from entry into force ..." (Articles 5, 13)



International Health Regulations (2005)International Health Regulations (2005) IHR CORE CAPACITY MONITORING FRAMEWORK: QUESTIONNAIRE FOR MONITORING PROGRESS IN THE Assessment tool for core capacity requirements at designated airports, IMPLEMENTATION OF IHR CORE ports and ground crossings CAPACITIES IN STATES PARTIES October 2009 2014 Questionnaire Global Capacities Alert and Response International Health Regulations

Coordination

### **Events Tested on IHR**

#### Deliberate use of biological agents to harm humans

Anthrax

#### **Emergence of new pathogens : a pathogen a year & protracted events**

- SARS, MERS CoV
- Influenza: H5N1 Flu, Influenza pandemic, H7N9
- Ebola
- Cholera

#### **Unresponsiveness to antibiotics**

- MDR-TB
- AMR

#### Food borne major outbreaks

Melamine contaminated milk and E.coli contaminated food

#### **Nuclear accident**

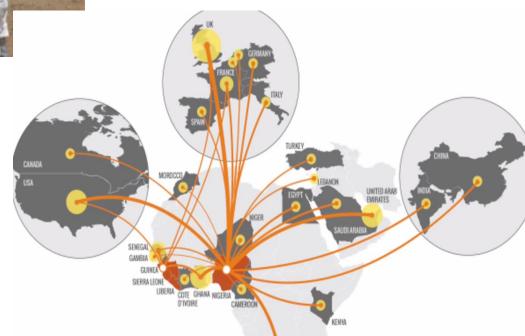
Fukushima

#### Ebola Virus Disease in West Africa



 Ebola in 2014 caused 11291 deaths among 28135 cases

 Review on Ebola response indicated that the world is not well prepared to prevent and mitigate major public health events



## Combined approach with 4 Components



- Transparency
- Mutual accountability
- Trust building
- Appreciation of public health benefits
- Dialogue
- Sustainability





# Purpose of Joint External Evaluation

- To measure country specific status and progress in achieving the targets of IHR 2005
- Baseline measurement of the country's capacity and capabilities.
- Subsequent evaluations are necessary to identify progress made and ensure any improvements in capacity are sustained.
- a number of important features, including: voluntary country participation; a multisectoral approach by both the external teams and the host countries; transparency and openness of data and information sharing; and the public release of reports.
- Refers to the joint process during an external evaluation (envisioned to take place approximately every five years) where a team of national experts first prepares a self-assessment supplied to the external team prior to the on-site visit, and

### **Tools of Joint External Evaluation**

- The external team uses the same tool for their independent evaluation, working together with the national team in interactive sessions.
- The external evaluation allows countries to identify the most urgent needs within their health security system, to prioritize opportunities for enhanced preparedness, response and action, and to engage with current and prospective donors and partners to target resources effectively.
- Every indicator in the evaluation tool has attributes that reflect various levels of capacity with scores of 1-5 (1 indicates that implementation has not occurred; 5 indicates that implementation has occurred, is tested/ reviewed/exercised and that the country has a high level of capability for the indicator).
- Countries will be asked to provide documentation for some if these items in addition to the responses.

### **Colour Scoring System of JEE**

**1. No Capacity :** Attributes of a capacity are not in place Colour Code:

#### Red

**2. Limited Capacity:** Attributes of a capacity are in development stage (some are achieved and some are undergoing; however, the implementation has started). Colour Code:

#### Yellow

**3. Developed Capacity:** Attributes of a capacity are in place; however, there is the issue of sustainability and measured by lack of inclusion in the operational plan in National Health Sector Planning (NHSP) and/or secure funding. Colour Code:

#### Yellow

**4. Demonstrated Capacity:** Attributes are in place, sustainable for a few more years and can be measured by the inclusion of attributes or IHR (2005) core capacities in the national health sector plan. Colour Code:

#### Green

**5. Sustainable Capacity**: Attributes are functional, sustainable and the country is supporting other countries in its implementation. This is the highest level of the achievement of implementation of IHR (2005) core capacities. Colour Code:

#### Green

- Without achievement of all attributes at prior capacity levels, a country cannot progress to the adjacent levels (for instance, in order to reach demonstrated capacity, one has to meet all the attributes of developing and demonstrated capacity).
- 2. All responses should be supported by documentable evidence.

# 19 Technical Areas of JEE

#### Prevent

- 1. National legislation, policy and financing.
- 2. IHR Coordination and National Focal Point (NFP) Communications.
- 3. AMR
- 4. Zoonotic Diseases
- 5. Food Safety
- 6. Biosafety and Biosecurity
- 7. Immunization

#### 1. Detect

- 8. NHL
- 9. Real Time Surveillance
- 10. Reporting
- 11. Workforce Development

### 19 Technical Areas of JEE-continued

#### Respond

- 12. Preparedness
- 13. Emergency Response Operations
- 14. Linking Public Health and Security Authorities
- 15. Medical Countermeasures and Personnel Deployment
- 16. Risk Communication
- Other IHR-related hazards and Points of Entry (PoE)
  - 17. Points of Entry (PoE)
  - 18. Chemical Events
  - 19. Radiation Emergencies

### Joint External Evaluation Process

- Joint External Evaluation Process
- Stakeholders Meeting for JEE (6-2-2017)
- Training on Internal Assessment Teams (21-2-2017) to (22-2-2017)
- Internal Assessment Teams Visit (15-3-2017) to (22-3-201&)
  - Internal Assessment Teams Debriefing (6-4-2017)
  - Report to WHO (10-4-2017)
  - External Team Visit (3-5-2017) to (9-5-2017)
  - 5 years Strategic Plan for JEE (September 2017)

# Stakeholders Meeting on JEE (7<sup>th</sup> February)



### **Teams for Internal Review Process**

- Team A National Legislation, Policy and Financing; IHR
   Coordination and National Focal Point Communication
- Team B National Health laboratory; Antimicrobial Resistance;
   Biosafety and Biosecurity
- Team C Real Time Surveillance; Reporting; PoE; Immunization
- Team D Workforce Development; Risk Communication
- Team E Food Safety; Zoonoses
- Team F Preparedness; Emergency Response Operations, Linking Public Health and Security Authority; Medical Counter Measures and Personal Deployment
- Team G Chemical Events; Radiation Emergency

# **External Assessment Team Visit (3-9 May)**



### Joint external evaluation of International Health Regulations in Myanmar

Mission report May 2017

### National legislation, policy and financing

Indicators	Score
p.1.1 Legislation, laws, regulations, administrative requirements, policies, or other government instruments in place are sufficient for implementation of IHR (2005)	2
P.1.2 The State can demonstrate that it has adjusted and aligned its domestic legislation, policies, and administrative arrangements to enable compliance with IHR (2005)	2

- Reviewing and revising existing laws to strengthen IHR core capacities and the expanded functions
- Develop cross-boarder MOUs with neighbouring countries on public health emergencies
- Review the existing ASEAN framework and health clusters to include the aspect of public health emergencies
- Regular assessment identifying adjustment needs for relevant legislation, regulations or administrative requirements every 5 years
- Follow up the finalization of draft laws in the parliament
- Advocacy to stakeholders and Raising awareness campaign about laws to the public

### IHR coordination, communication and advocacy

P.2.1 A functional mechanism is established for the coordination and integration of relevant sectors in the implementation of IHR

- Establishing cross government steering committee to oversee global health security activities through an all hazards approach
- Developing multi-sectoral, multidisciplinary coordination and communication mechanisms and joint action plan
- SOPs development for coordination between IHR Focal point and other relevent sectors

### **Antimicrobial resistance**

P.3.1 Antimicrobial resistance detection	
P.3.2 Surveillance of infections caused by antimicrobial-resistant pathogens	3
P.3.3 Health care-associated infection (HCAI) prevention and control programmes	1
P.3.4 Antimicrobial stewardship activities	1

- Launch and disseminate the National action plan for detection and reporting of priority AMR pathogen
- Sustain the quality and services of laboratories that are able to detect and report priority AMR pathogen aligned with the GLASS
- Establish an evidence-based public communications program targeting audiences in policy making, human and animal health practice, the general public and professional on prudent use of antimicrobials
- Sustain the surveillance capacity of existing 25 (human) and 3 (animal) laboratory

### **Antimicrobial resistance (Cont:)**

- Sustain the quality assessment scheme of N EQAS
- Develop surveillance system for usage of antimicrobial in human and animal sectors
- Disseminate the National action plan that includes Hospital infection prevention and control program
- Implement according to the Hospital infection prevention and control program in NAP
- Achieve a national steering committee for AMR and technical working groups to coordinate and implement each objectives

### **Zoonotic diseases**

P.4.1 Surveillance systems in place for priority zoonotic diseases/pathogens	
P.4.2 Veterinary or animal health workforce	3
P.4.3 Mechanisms for responding to infectious and potential zoonotic diseases are established and functional	2

- One health planning, Finalizing and implementation
- Prioritizing zoonotic disease surveillance program and quarantine systems
- SOP and guidelines
- Development of system of Linkage between public health and animal health laboratories
- Development of sample sharing mechanisms to reference lab
- Development of sharing of surveillance reports

### **Zoonotic diseases (Cont:)**

- laboratory upgrading
- Joint training including FETP, CHAW
- Animal census Data updating
- formal coordination and information sharing mechanism between LBVD and DoPH
- TTX and simulation exercises
- strengthen reporting systems between LBVD and DoPH (inter departmental), Private veterinarian, Farmers

# **Food safety**

P.5.1 Mechanisms for <u>multisectoral</u> collaboration are established to ensure rapid response to food safety emergencies and outbreaks of foodborne diseases

- Guidelines for the national food safety emergency and outbreak of food borne diseases
- Capacity building of health staff
- Establish the effective communication platform
- multi-sectoral collaboration in risk profiling of food safety problems to implement food safety control management system

# **Biosafety and biosecurity**

P.6.1 Whole-of-government biosafety and biosecurity system is in place for human, animal and agriculture facilities	2
P.6.2 Biosafety and biosecurity training and practices	1

- Develop comprehensive national biosafety and biosecurity legislation
- Strengthen infrastructure of biosafety and biosecurity facilities in States/Regional laboratories
- Implement training program on Biosafety and Biosecurity

### **Immunization**

P.7.1 Vaccine coverage (measles) as part of national programme	3
P.7.2 National vaccine access and delivery	4

- Capacity building
- Improving Service delivery
- Program management
- Improving Health information system
- Demand generation
- Expanding vaccine storage capacity
- Maintenance of cold chain equipment's
- Scaling up of supply chain infrastructure
- Improving supply chain Management system

# National laboratory system

D.1.1 Laboratory testing for detection of priority diseases	
D.1.2 Specimen referral and transport system	3
D.1.3 Effective modern point-of-care and laboratory-based diagnostics	2
D.1.4 Laboratory quality system	3

- Formation of NLCC (National laboratory coordination committee) according to Myanmar National Policy on Health Laboratories
- Stakeholder meeting to finalize the National Strategic Plan for Health Laboratories
- Review and revise of existing diagnostic guidelines for priority diseases.
- Strengthening of EQAS for medical laboratories od all levels
- Capacity building of laboratory staffs for diagnosis of emerging and reemerging diseases.
- Regular supply and maintenance of laboratory equipment and reagents.

#### Real-time surveillance

D.2.1 Indicator- and event-based surveillance systems					
D.2.2 Interoperable, interconnected, electronic real-time reporting system					
D.2.3 Integration and analysis of surveillance data					
D.2.4 Syndromic surveillance systems	3				

- Development of database and data sharing mechanism SOPs among MOHS, MOALI and other
- improve data management capacity by training of staff, soft ware development
- Revise and update communicable diseases and zoonoses guidelines and training to SCDU teams, clinicians and BHS
- Carry out surveillance activities under one health strategic plan
- Cross border information sharing mechanism
- approval of CD laws dissemination to stakeholders and public

#### Reporting

D.3.1 System for efficient reporting to FAO, OIE and WHO					
D.3.2 Reporting network and protocols in country	2				

- Develop protocols and SOPs for regular PHIC reporting mechanism between animal and human sectors
- Simulation exercises to test the protocols and SOPs
- Establish single information platform among MOHS, MOALI, WHO, OIE
- Development of training material on IHR and Health security
- Training on reporting, risk assessment, IHR responsibilities in (animal and human health sectors) in Central and S/R

#### Workforce development

D.4.1 Human resources available to implement IHR core capacity requirements					
D.4.2 FETP <sup>1</sup> or other applied epidemiology training programme in place					
D.4.3 Workforce strategy	3				

- HR planning to increase health personnel stock level to enable implementing IHR Core functions
- Train more epidemiologists, biostatisticians, ICU staff and social scientists abroad or set up in-country training for those specialties which facilitate further strengthening of IHR core capacities
- Finalize and approve the draft curriculum for national and international FETP short course, basic course (3-month) and intermediate course (9-month)
- Mentorship program for FETP
- Develop public health workforce strategy in line with HRH Strategic Plan (2018-2021) (Public Health workforce Planning, Quality, Governance, Financing)

#### **Preparedness**

R.1.1 National multi-hazard public health emergency preparedness and response plan is developed and implemented	1
R.1.2 Priority public health risks and resources are mapped and utilized	1

- National Multi-hazard Health emergency, Preparedness and Response plan development (In Process)
- Advocacy on National Multi-hazard Health emergency, Preparedness and Response plan
- Exercise on National Multi-hazard Health emergency, Preparedness and Response plan
- Review and Revise the National Multi-hazard Health emergency, Preparedness and Response plan
- Conduct Public Health Risk and Health Resource Mapping
- Capacity building to increase build in capacity on Public Health Risk and Health Resource Mapping

#### **Emergency response operations**

R.2.1 Capacity to activate emergency operations			
R.2.2 EOC operating procedures and plans	1		
R.2.3 Emergency operations programme	2		
R.2.4 Case management procedures implemented for IHR relevant hazards.	2		

- Strengthening the capacity to operate PHEOC
- Upgrading the facility of PHEOC
- PHEOC Plan and SOPs development
- Exercise for strengthening of PHEOC functions
- To update or develop guidelines / SOPs for priority diseases and health emergencies
- Review and revise the developed documents

## Linking public health and security authorities

R.3.1 Public health and security authorities (e.g. law enforcement, border control, customs) are linked during a suspect or confirmed biological event

- Development of MOU or other agreement or definite plan between public health and security organizations for better co-ordination and response to biological events
- To conduct public health emergency response or exercise including all public health security agencies to test the efficiency of the agreement/MOU
- Development of SOPS for better co-ordination and response to biological events
- Co-ordinating meetings between civil and military organizations for information sharing and co-ordinated response for public emergency

# Medical countermeasures and personnel deployment

R.4.1 System in place for sending and receiving medical countermeasures during a public health emergency	
R.4.2 System in place for sending and receiving health personnel during a public health emergency	2

- Develop national SOPs for receiving/sending mechanism of medical countermeasures
- Medical Depots construction for receiving/sending and storing
- Develop national SOPs for receiving/ sending of mechanism of health personnel

#### **Risk communication**

1
3
3
2
2

- Develop an all-hazard national risk communication plan
- Suitable funding to implement national risk communications plan and functions
- Communication line developed for risk communication mechanism in case of events
- Conduct ongoing assessment of the effectiveness of public information messaging including formalizing system for feedback and adjusting messaging as appropriate
- advocacy training at all S&R for risk communication

#### **Points of entry**

PoE.1 Routine capacities established at points of entry					
PoE.2 Effective public health response at points of entry	2				

- Review and revise current PoEs Plan and SOP in multi-sectoral aspects to create linkage to the National Public Health Emergency Plan
- Strengthen existing organizational set up and procurements for Quarantine service (Both human and animal sectors)especially in Ground Crossings
- Strengthen capacity building processes especially for quarantine services in all designated PoEs(Eg: emergency medical services and Infection control)
- Advocacy and awareness raising with other IHR implement partners from other Ministries to improve measures for vector control, safe environment and food safety
- Strengthen coordination mechanism for Public Health Emergency response with neighboring countries especially at cross border PoE
- Develop evaluation tools to conduct formal evaluation and to publish the effectiveness in responding to PH events annually

#### **Chemical events**

CE.1 Mechanisms established and functioning for detecting and responding to chemical events or emergencies	1
CE.2 Enabling environment in place for management of chemical events	1

- Develop SOPs for chemical event detection and assessment (Develop guidelines or manuals on the surveillance and assessment of chemical events, intoxication and poisoning)
- Develop an integrated national chemical surveillance system, which incorporates lab analysis and centralized reporting of chemical events to the national PHEOC
- Develop SOPs for chemical event response operation
- Finalize and approve the national CBRN contingency plan
- Making national and plans or legislation for chemical event surveillance alert and response

#### Radiation emergencies

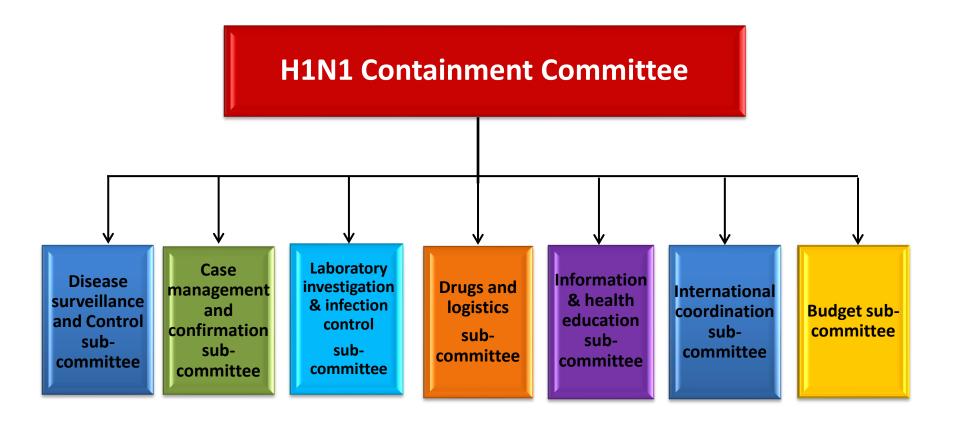
RE.1 Mechanisms established and functioning for detecting and responding to radiological and nuclear emergencies	1
RE.2 Enabling environment in place for management of radiation emergencies	1

- development of National Radiological/ Nuclear Emergency Response
   Plan for detection, assessment and response to radiation emergencies
- To develop SOPs for the management of radiation emergencies (including risk assessment, reporting, event confirmation and notification and investigation)
- develop National Authority for Radiological/ Nuclear Emergency Response (DAE, MOHS, MOD, Custom dept, MLFRD, Red cross association, NGOs)
- Designate IHR National Focal point for the Emergency Response Team
- Routine Surveillance/ Monitoring Activities (now Implementation)
- To establish the Radiation monitoring Laboratory for surveillance and risk assessment
- Establishment of Biodosimetry service

### **Costing Tool for five years plan**

			Consultant	SOP	supervisors or Activity	Meetings	s	Substract 2 days per diem	Quantity per Year for Costing		To
Technical Area	Objective	Key Activity	Detailed act	tivity	Description	of Cost	Unit Cost	Calculation breakdown	201 2018 201 202 202	2017	2018
1. National Legislation, F	Policy and Financing								,	10,613	149,885
2. IHR Coordination Corr	mmunication and Advocacy										76,142
3. Anti-Microbial Resista	ance								,	183,326	350,533
4. Zoonotic Disease											106,858
5. Food Safety										10,530	47,619
6. Biosafety and Biosec	urity									60,427	180,545
7. Immunization										363,888	419,138
8. National Laboratory S	<u> </u>									199,436	64,276
9. Real Time Surveillance	e									333,649	836,810
10. Reporting										1,571,448	1,618,272
11. Workforce Developme	ent									4,360,000	4,907,330
12. Preparedness										141,807	575,488
13. Emergency Respons	-									-	78,829
_	th and Security Authorities									-	238,135
	asures and Personnel Deploy	yment								-	5,662,756
16. Risk Communication										-	728,415
17. Points of Entry (PoE)										39,445	2,874,782
18. Chemical Events	18. Chemical Events								5,250		
19. Radiation Emergenci	ies									-	
	( )										

## Establishment of H1N1 Containment Committee



5/9/2018



Media, public communication and press release by MoHS led by Union Minister of Health and Sports

5/9/2018

#### Media Interview for Public Awareness



Dr. Than Tun Aung said the health ministry is working its hardest to prevent the virus from growing into a public health emergency.

"Whether the disease will become worrying depends on the people. If the people follow our instructions, it will have the least impact.

The Irrawaddy, 27 July 2017

5/9/2018 87

#### **Media Interviews for Public Awareness**



Interview with WHO Represe... ကမ္ဘာ့ကျန်းမာရေးအဖွဲ့၊ မြန်မာနိုင်ငံဆိုင်ရာ ဌာနေကိုယ်စားလှယ် Dr. Stephan P... 2.7k views



Advocacy Meeting and Healt... ရာသီတုပ်ကွေးဖြစ်ပွားမှုအခြေအနေနှင့် ပူးပေါင်းဆောင်ရွက်မည့်လုပ်ငန်းများအား... 396 views 1:29



Seasonal Influenza A(H1N1)... ရာသီတုပ်ကွေးရောဂါ အကြောင်းသိတော င်းစရာ - ၂... 6.1k views 36:16



Currently Circulated Influenz...

မြန်မာနိုင်ငံ၌ လက်ရှိ ဖြစ်ပွားနေသည့် ရာသီတုပ်ကွေးရောဂါ H1N1 ၏ မျိုးရိုးဗီ... 8 4k views 4:11



Media, public communication and press release by MoHS led by Union Minister of Health and Sports



### Thank You