



Experience of Regional/Countries' Pandemic Simulation Exercises

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Recent Simulation Exercises in A/P region



Country

- Australia
- Cambodia
- Japan
- Laos
- Malaysia
- Myanmar
- Singapore
- South Korea
- Thailand
- Yunnan-China
- Vietnam

Regional

- APEC
- MBDS

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Regional

- **APEC**
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Disclaimer

Most of my slides are borrowed from various sources.



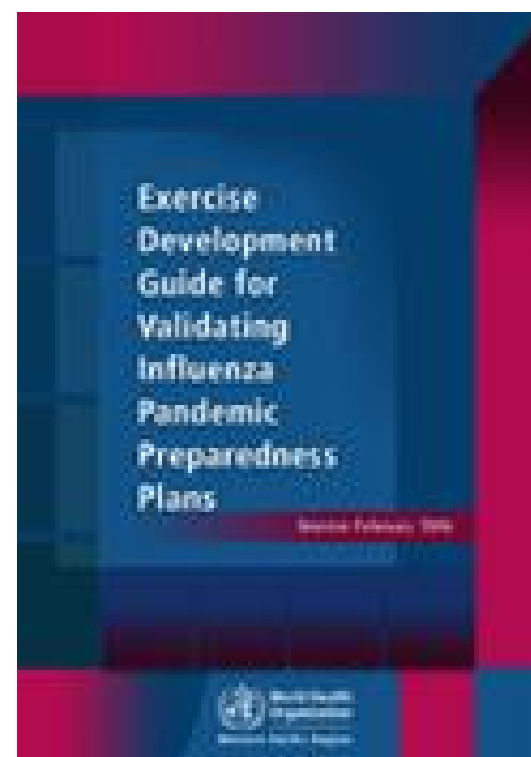
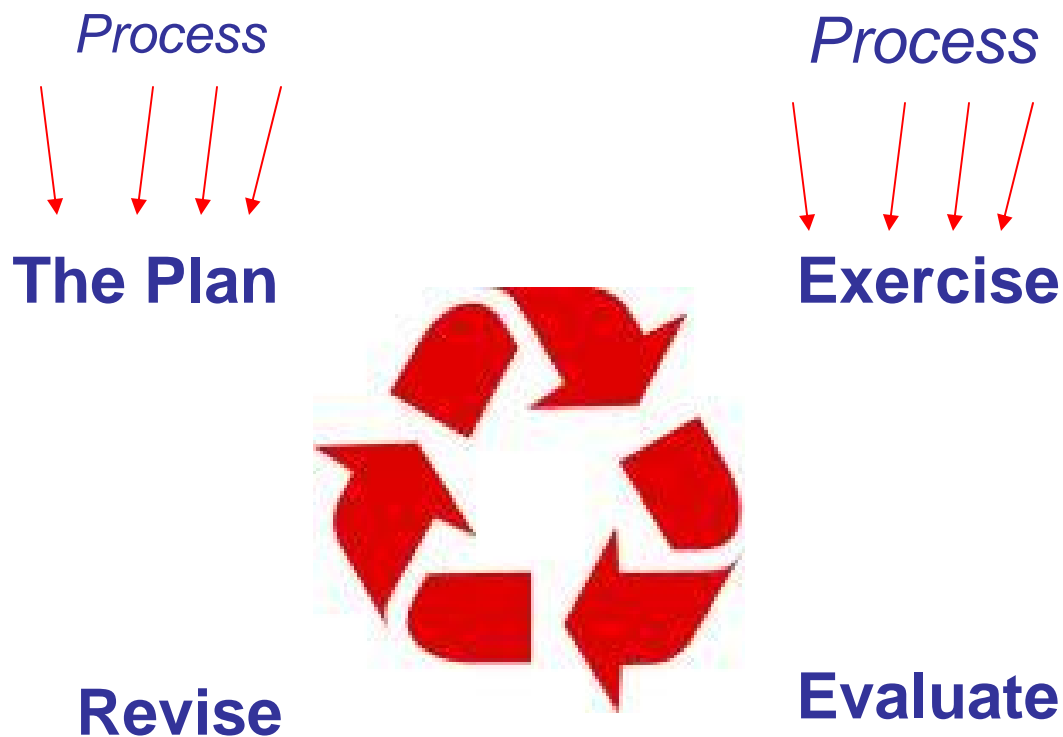


Why Exercise?





The Planning Process





Why and for What

- A plan that has not been tested is only a theory.
- People react in the way they have been trained to react.
- Exercises are conducted to **evaluate an organization's capability (NOT individual capability!)** to execute one or more portions of its response plan or contingency plan.
- The goal of exercises is to **uncover gaps in policies and procedures** that ultimately result in a person on the ground being able to perform better.

Source: Ms T Curtin HQ/WHO and US DHHS



Why and for What - continue

- To familiarize participants with plans
- To know colleagues who may work together in the future
- To sensitize people as an entry for plan development

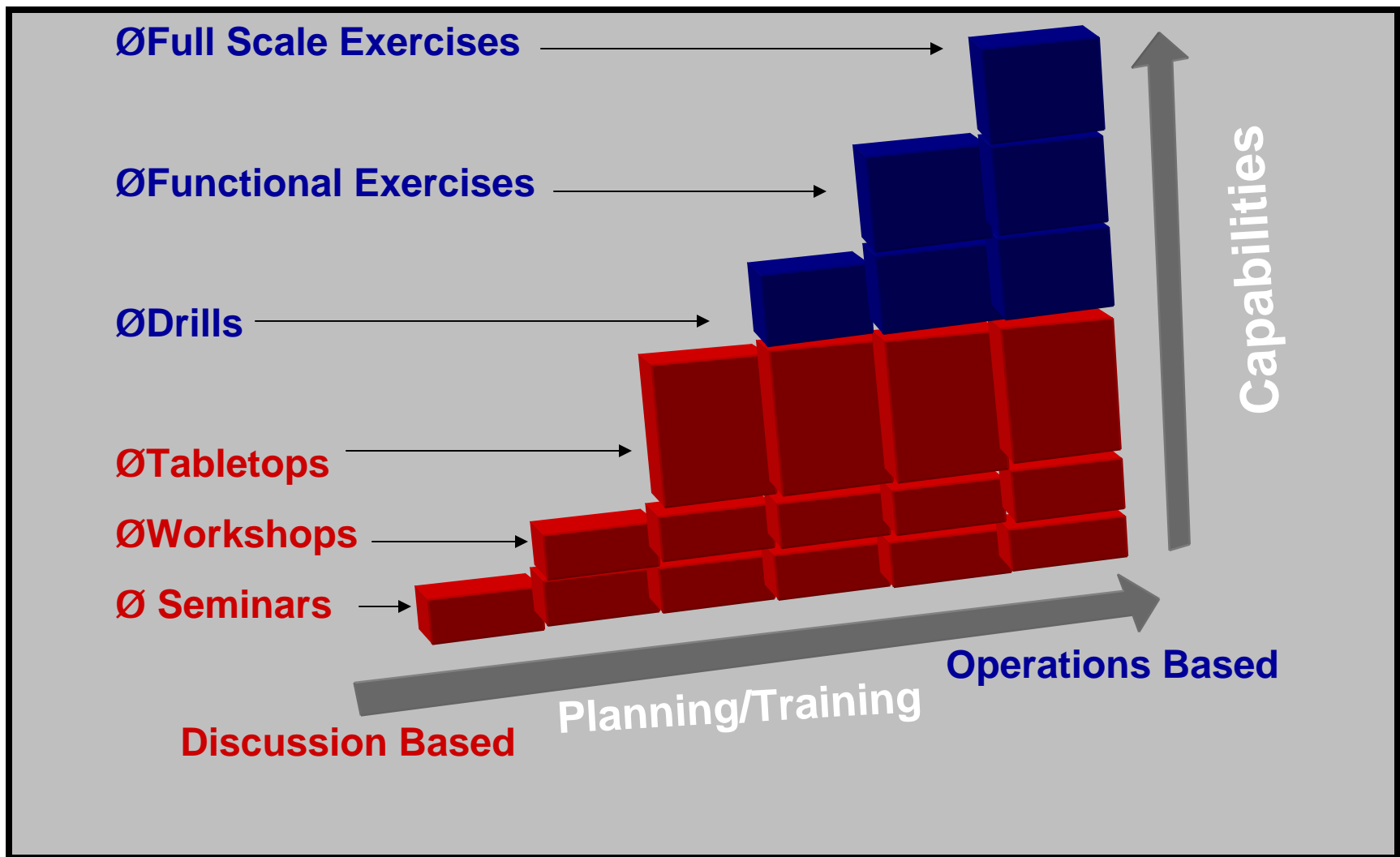
Different Types of Exercises



- Orientations
- Drills
- Table Top Exercises
- Functional Exercises
- Full Scale Exercises

Source: WPRO/WHO and US DHHS

Characteristics of different exercises



Source: Adapted from HSEEP, U.S. Dept of Homeland Security

Exercise Type Utility Evaluation Guide



Activity , Cost & planning time	Policy	Plan	Procedure	Tactic	Skill
Orientation \$ 2 wks to 2 months	Low	Low	Low	Low	Low
Drill \$\$ 1 to 3 months	N/A	Low	Medium	High	High
Table Top Exercise \$ 2 to 6 months	High	High	Medium	N/A	N/A
Functional Ex. \$\$\$ to \$\$\$\$ 2 to 12 months	Medium	Medium	Medium	High	High
Full Scale Exercise \$\$\$\$\$+ 3 to 12 months	High	High	High	High	High

Source: US DHHS

Exercise in South Korea



- 11-12 October 2006 (first one in March 2005)
- Functional exercise
- Multi-sectoral and multi-tier; involving 12 ministries, and 16 provincial governments
- Scenario starting from imported cases to a pandemic
- used mathematical modeling which could bring about 1,040 different outcomes on the number of affected and dead
- developed a special web-site
- [developed news-style video-clips](#)
- Budget of US\$400,000 excluding staff cost.

Exercise in South Korea



Tested the following eight policy issues;

- i. When and how to use reserved antiviral drugs
- ii. When and how to secure hospital beds, doctors & drugs for emergency
- iii. When and how to change isolation policy; institute-home
- iv. When and how to distribute reserved resources (personal protective equipments)
- v. When and how to limit gatherings and moving.
- vi. How to communicate effectively between central and local respondents
- vii. How to conduct risk communication with mass media and general population
- viii. How to apply and evaluate the current manuals

Central Control Crisis Committee



Response Team



Response to media



Source: Ms T Curtin HQ/WHO

South Korea

A Designed Symbol for Pandemic Influenza Preparedness

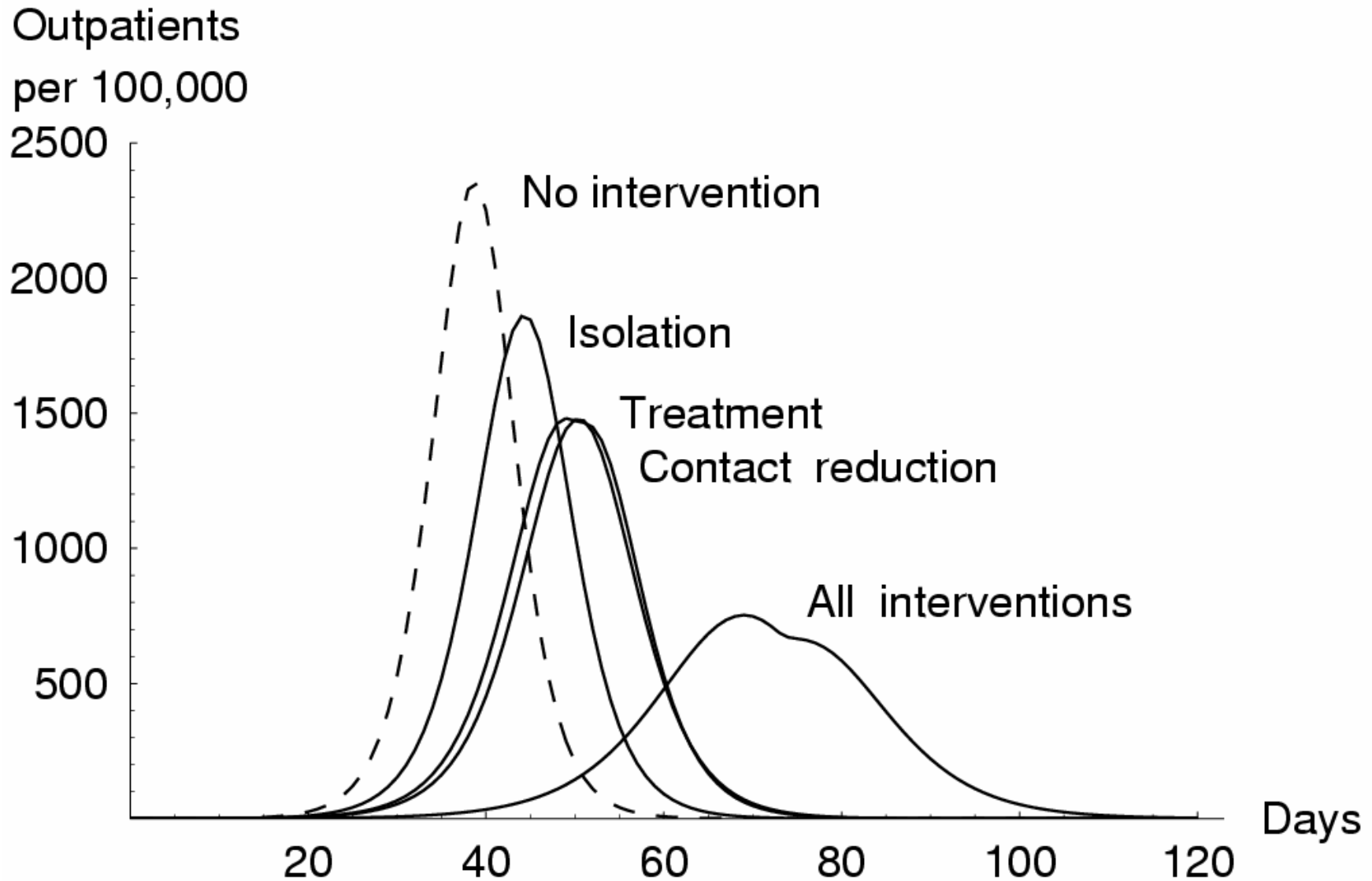


Flu fighter

- **Background Red- bean : meaning to beat off evils**
- **Images : a legendary person who defeated evil of disease at ancient Shilla Dynasty (7th Century)**
- **Shield Shape : frame to protect disease**



Intervention scenarios



Source: Dr M Eichner, University of Tübingen, Germany

Australia

EXERCISE CUMPSTON 06



- 16-19 October 2006
- Full Scale Exercise
 - For field part, Brisbane International Airport tested their capacity for properly handling suspected incoming passengers, and local community tested the arrangement and procedure of a fever clinic
- Multi-sectoral and multi-tier
- Event Master Sheet and detailed evaluation
- More than 2000 people participated and budget of A\$4M

Australia; Responders



- Australian Government
 - Air Services Australia
 - Australian Customs Service
 - Australian Federal Police
 - Australian Quarantine and Inspection Service
 - Department of Prime Minister and Cabinet
 - Department of Foreign Affairs and Trade
 - Attorney-General's Department
 - Department of Immigration and Multicultural Affairs
 - Department of Industry, Tourism and Resources
 - Department of Defence
 - Department of Families, Community Services and Indigenous Affairs
 - Department of Health and Ageing
 - Department of Immigration and Multicultural Affairs
 - Department of Transport and Regional Services
 - Department of Agriculture, Fisheries and Forestry
- State and Territory Governments
 - First ministers' departments
 - Health departments
 - Emergency management departments or organizations
 - Other departments at the discretion of the state/territory governments
- Non-government Organizations
 - Australian Divisions of General Practice
 - Australian Medical Association
 - Australian Red Cross
 - Salvation Army
- Industry
 - Brisbane Airport Corporation
 - QANTAS



The objectives of exercise

to test and validate;

- Health planning and coordination arrangements within and between all jurisdictions
- Pandemic influenza surveillance arrangements
- Public health measures
- Health care and emergency response arrangements
- Public communications strategies
- Cross-portfolio and cross-jurisdictional decision making and coordination.



Scenario and Sequence of Events

Pre-September

Sporadic human cases

Sept. – Oct. – AI outbreaks in Aldebaran.

Oct 6 - Outbreak in village of Indicium (family cluster), 1 hour from AldebaranWHO contacted and investigates (Oct 12)...

Oct 14 – 2nd cluster identified by WHO

Oct 15 – Australia put on high alert...more cases...



Performance Indicators

- Example objective #3 “Public Health Measures”

“effective public health management measures at the airport”

Examples of evidence –

1. Are procedures in place to manage incoming passengers?
2. Are personnel aware of procedures?
3. Available PPE and Anti-virals?
4.

Source; Mr P Cox, WPRO/WHO

Airport Screening



Source; Mr P Cox, WPRO/WHO

ATTENTION

DO NOT PASS THIS BARRIER

**THIS IS A RESTRICTED
QUARANTINE AREA**

THANK YOU FOR YOUR PATIENCE AND
UNDERSTANDING



Queensland Government
Queensland Health

Source; Mr P Cox, WPRO/WHO

Fever Clinic

Entertainment
Centre

 ASSESSMENT CENTRE

Fever Clinic



Source; Mr P Cox, WPRO/WHO

Fever Clinic



APEC Exercise



- APEC: Asia-Pacific Economic Cooperation
- **21 Member Economies** (Australia, Brunei Darussalam, Canada, Chile, People's Republic of China, Hong Kong China, Indonesia, Japan, Republic of Korea, Malaysia, Mexico, New Zealand, Papua New Guinea, Peru, Philippines, Russia, Singapore, Chinese Taipei, Thailand, United States, Viet Nam)
- Vietnam was a host in 2006
- Australia will host in 2007



Leaders Meeting 18-19 November 2006 in Hanoi

APEC Exercise



- Conducted on 7-8 June 2006 (Follow-up Workshop in Singapore on 14-15 August)
- the purpose and scope of the exercise was to test **regional communication** for
 - **networks** for sharing information and providing regional assistance
 - **provision of advice** to bordering economies and regional partners
- The exercise was **not** intended to involve **domestic decision-making processes** on issues such as vaccine distribution, deployment of experts and repatriation of citizens from overseas



APEC exercise: Arrangement

- Member economies participated from their own offices during their normal working hour.
- Inputs were provided by Exercise Coordination Centre in Australia to member economies, and member economies had to reply to Exercise Coordination Center (no bilateral dialogue)
- The Exercise lasted 26 hours across eight time zones and involved some 500 messages passing between over 100 officials



APEC exercise: Overview

- Scenario: a hypothetical outbreak of a new strain of influenza - 'Straits Flu' - which was suspected in some fishermen, who were picked up by a passing cruise ship after capsizing their boat.
- Examples of inputs;
 - Possible assistance to other economies; PPE, Antivirals...etc
 - Participation to a soccer game in Vietnam
 - Enquiry on whereabouts of backpackers who traveled the region

Malaysia



Chile



APEC exercise: Conclusion



- It provided an opportunity to look at **communication capacity** both domestically and between economies and a chance to **self-audit domestic arrangements** and **preparedness plans**.
=> identified and improved shortfalls in telecommunications technology and capacity.
- The Exercise reaffirmed the need for APEC to continue to work in partnership with a range of other response and international and regional efforts.

Source: APEC Pandemic Exercise Outcome Report

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Conclusion



- There are many different types of simulation exercises.
- Choose the one that best fits your objectives and resource availability.
- The key is to have a clear objective! (eg. what to test)



Thank you for your attention