EXERCISE
PanStop 2008

a rapid containment exercise on pandemic influenza of the World Health Organization, in coordination with the Department of Health

Manila, Philippines
5-6 March 2008
EXERCISE PANSTOP II
EXERCISE EVALUATION REPORT

A rapid containment exercise on pandemic influenza.
Department of Health, Philippines
in collaboration with
World Health Organization, Western Pacific Region

Manila, Philippines
5 to 6 March 2008

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NOTE

The views expressed in this report are those of participants in the Exercise PanStop and do not necessarily reflect the policies of the World Health Organization.

This report has been printed by the WHO Regional Office for the Western Pacific for the participants in the Exercise PanStop, held in Manila, Philippines, from 5 to 6 March 2008.
SUMMARY

On 5 and 6 March 2008, the Department of Health Philippines (DOH), in conjunction with the World Health Organization (WHO) Country Office in the Philippines and WHO Western Pacific Regional Office (WPRO), conducted a national exercise on the rapid containment (RC) of a strain of potential pandemic influenza. This exercise was named PANSTOP II 2008.

The purpose of the exercise was to assess the preparedness of the country to conduct an RC operation with the intent of stopping or slowing the spread of an emerging potential pandemic influenza. The scope of the exercise was implementing RC, including decision-making, coordination, and communication; risk assessment for RC; mobilization of ASEAN stockpiles; RC operation activities (pharmaceutical and non-pharmaceutical interventions); and risk communication.

This was a two-day exercise. On 5 March 2008, a modified functional exercise was conducted involving exclusively DoH and WHO, focusing on risk assessment and decision-making processes prior to launching an RC operation.

On 6 March 2008, a tabletop exercise was conducted that focused on operationalizing the RC activities and mobilizing other Philippine Government agencies based on their perceived roles and functions.

The scenario was developed through the teamwork of Communicable Disease Surveillance and Response (CSR), WPRO. It depicted an outbreak of H5N1 influenza virus in the hypothetical municipality “Potsnap” in the Philippines with consequent opportunities to contain the outbreak by response to required progressive requests for, and release of, information from relevant stakeholders.

During the exercises, the following important issues were noted:

- Risk assessment for RC was initiated smoothly. There was, however, some confusion partially due to lack of communication between central and local levels. During the exercise, it was not clearly assessed whether or not RC was a viable option.
- Procedures for the deployment of field teams are well documented and understood by the NEC. However, there was little discussion of infection control, non-pharmaceutical interventions, and logistical feasibility during the routine response and risk assessment.
- DoH CP noted that it is necessary to strengthen the national surveillance system before and during the risk assessment. Exit screening in the airport should also be addressed once risk assessment is initiated.
To make RC operational, it is essential to define the referral system with respect to infection control. In addition, establishing a communication network among the referral hospitals is essential.

The exercise highlighted potential problems in defining boundaries of a containment zone and index zone. The area with index cases (index zone) was easily identified and it was agreed to enforce strict movement control and infection control in the area. The boundary of the index zone could be natural borders. Logistic and administrative implication (i.e. - across the administrative boundaries) should be considered for the containment zone. WHO guidelines on RC should include references to determining boundaries.

It is important in the early stage to calculate the necessary amount of antivirals separately for treatment and prophylaxis. At the same time, the logistic plan for antiviral transportation and distribution should be addressed.

DoH CP decided to notify other Government agencies (in particular DILG) and the National Disaster Coordination Council of developments in order that concurrent planning could take place in early stage. This highlighted the need for early engagement of the NDCC.

DoH should review the communications requirements of regional units and provide sufficient resources to enable an effective incident management (command) system to be set up in the region of an outbreak, as the local level should be included in decision-making processes.

Overall, players in the DoH Command post had a good understanding of the mobilization procedures for the ASEAN stockpile, but local levels were not involved. As soon as the risk assessment was initiated, an e-mail was sent to ASEAN alerting of the developing situation and requesting they go on 'stand-by'.

There was some confusion in the DoH CP regarding the calculation of the antivirals needed during RC for a population of 100,000. There was no clear understanding of the different PPE to be requested in specific locations and under particular circumstances within the containment zone. It would have been beneficial to have an information board, which could provide a clear picture on the availability of and local and national needs for items.

There appeared to be a common understanding that supplies need to be handled in a staged manner, namely:

- Ensuring appropriate amounts of antivirals and PPE are present in the RHUs, health centres, and hospitals when the first news of the outbreak comes in.
- Deploying the national stockpile in advance of the regional (ASEAN) stockpile
• Deployment of ASEAN stockpile.
• If necessary, requesting access to the global stockpile through WHO.

It was generally accepted that outbreak communications should be more focused on educating the population on the containment strategy and maintaining law and order. Within the containment zone, a communications cell should be formed with representatives from key government and welfare agencies (e.g. Red Cross) as well as local media outlets.

Evaluation from most DoH players from day one indicated that they derived significant benefit from the exercise and believed it was an important means of improving preparedness for RC. Likewise, the table-top exercise on day two represented the first opportunity for government and non-government agencies to consider the implications and importance of an RC operation from a national perspective. This collaboration of DOH, NDCC, and WHO in pursuit of developing country capacity to respond to a pandemic situation was given priority by both the health and non-health sector partners.

Overall, PanStop II 2008 was well-designed and conducted and, with some exceptions, achieved the objectives set. It was a unique exercise in that it was conducted in the absence of a national RC plan.

This initiative should now be followed up by DoH, NDCC, and WHO working in concert to develop and evaluate through further exercises a national RC plan for the Philippines.
1. INTRODUCTION

Exercise PanStop II was held in Manila on 5 and 6 March 2008. The exercise was conducted by the Philippine Department of Health (DoH) in collaboration with the World Health Organization, Western Pacific Region (WHO WPRO) and the WHO Representative in-country (WR).

Day One (5 March 2008) was a modified functional exercise involving the Department of Health, the WHO WPRO, and the WHO Representative Office in the Philippines. The scenario depicted an outbreak of a potential pandemic strain of the type A influenza virus in the Philippines with consequent opportunities to contain the outbreak by utilizing stockpiles of antiviral medication and non-pharmaceutical interventions. Focus was on the DoH and WHO decision-making processes prior to launching an RC operation.

Day Two (6 March 2008) was a tabletop exercise involving other Philippine Government agencies, as well as the Department of Health and WHO. The scenario addressed the situation after a decision to launch RC had been made. It focused on the implementation of RC, coordination among government agencies to implement pharmaceutical and non-pharmaceutical interventions, and risk communications.

The exercise was conducted without a specific national plan against which performance could be measured. The primary references were the Philippines DoH AHI Pandemic Preparedness Plan and the draft WHO RC protocol.

Its aim was to assess the preparedness of the Republic of the Philippines to conduct an RC operation with the intent of stopping or slowing the spread of an emerging potential pandemic influenza.

The exercise was designed to identify strengths and opportunities for improvement in planning activities for pandemic influenza and to gain a better understanding of operational capacity for the conduct of RC in the Philippines. The scope of the exercise was limited to a hypothetical outbreak occurring in the simulated municipality of 'Potsnap', Pampanga Province. The response required progressive requests for, and release of, information from participating agencies.
1.1 Objectives

Day One

1. Assess capacity to conduct a timely risk assessment.
2. Validate established decision-making processes.
3. Verify established coordination and communication arrangements with all levels of the DoH, and with WHO.
4. Ensure understanding of procedures for mobilizing ASEAN stockpiles.
5. Practice development and use of risk communications.

Day Two

1. Validate existing arrangements for requesting, releasing, and managing antiviral medication distribution and administration for treatment and prophylaxis.
2. Assess national capacity to implement non-pharmaceutical interventions.
3. Evaluate risk communications.

2. PROCEEDINGS

2.1 Exercise development

As the Philippines had not had a prior opportunity to evaluate its pandemic preparedness, or to be involved in a functional exercise of this nature, it was decided that the exercise should be conducted over two days. The first day was to be focused on the internal capabilities of DoH to conduct risk assessment and decision-making processes to launch or not to launch RC operations, while the second day was to introduce other national government agencies and non-governmental organizations (NGOs) to their potential roles during an RC operation.

Under the overall direction of Dr. Takeshi Kasai, the Regional Adviser CSR WPRO, staffs of CSR and WHO Country Office and the DOH were widely consulted throughout the planning and conduct of the exercise and made a significant contribution to a successful outcome.
Day One (5 March 2008)

Exercise Design Team

The Exercise Design Team for Day One included:

- Dr Satoko Otsu  Exercise Director, WPRO
- Mr Peter Vanquaille  WPRO
- Dr Nerissa Dominguez  WHO Country Office
- Dr Lyndon Lee Suy  Programme Manager of Emerging Infections Diseases, DoH
- Mr Aldrin Reyes  Infectious Disease Office, DoH

DoH Command Post (Day One)

Epidemiology

The epidemiological background, and the epidemiological tree of the cases upon which the scenario was based, were carefully designed and developed by staff of the CSR.

2.2 Type of Exercise

The Day One exercise was designed as a modified functional exercise focusing on staffs of the DoH and WHO exclusively. The DoH players responded in their designated roles to a fully-simulated series of events.
Three sites were activated:

- DoH Command Post (DoH CP) – established in the Malaria Network Room
- National Epidemiological Centre (NEC)
- Centre for Health Development, Region 3 (CHD 3)

**Scenario**

The Day One exercise scenario and narrative is attached as Appendix 1.

**The Master Sequence of Events List (MSEL)**

The MSEL includes a description of all (scheduled) simulated events to be injected into exercise play and the expected actions resulting from them. The MSEL was compiled to simulate an outbreak as realistically as possible. Event Injects were focused on evaluating each of the exercise objectives. A copy of the MSEL is attached as Appendix 2.

**Exercise Management Team**

The organization of the exercise Management Team on Day One is shown below:
The team members and their deployment during the exercise were as follows:

<table>
<thead>
<tr>
<th>Role</th>
<th>Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exercise Director</td>
<td>Dr Satoko Otsu</td>
<td>Exercise Control Room</td>
</tr>
<tr>
<td>Lead Controller</td>
<td>Ms Tamara Curtin</td>
<td>Exercise Control Room</td>
</tr>
<tr>
<td>Lead Moderator CHD 3</td>
<td>Dr Ailan Li</td>
<td>CHD 3 Control Room</td>
</tr>
<tr>
<td>Moderator CHD 3</td>
<td>Dr Ma. Nerissa Dominguez</td>
<td>CHD 3 Control Room</td>
</tr>
<tr>
<td>Lead Moderator NEC</td>
<td>Dr Weigong Zhou</td>
<td>NEC Situation Room</td>
</tr>
<tr>
<td>Moderator NEC</td>
<td>Ms. Amy Cawthorne</td>
<td>NEC Situation Room</td>
</tr>
<tr>
<td></td>
<td>Ms. Paola Montes</td>
<td>NEC Situation Room</td>
</tr>
<tr>
<td>Lead Moderator DoH CP</td>
<td>Mr Peter Vanquaille</td>
<td>DoH Command Post</td>
</tr>
<tr>
<td>Moderator DoH CP</td>
<td>D Naomi Seki</td>
<td>DoH Command Post</td>
</tr>
<tr>
<td>Lead Evaluator</td>
<td>Mr David Knaggs</td>
<td>DoH Command Post</td>
</tr>
<tr>
<td>Evaluator CHD 3</td>
<td>Dr Koji Nabae</td>
<td>CHD 3 Control Room</td>
</tr>
<tr>
<td>Evaluator NEC</td>
<td>Dr Bounpheng Philavong</td>
<td>NEC Situation Room</td>
</tr>
<tr>
<td>Lead Simulator (DoH CP)</td>
<td>Mr Wayne Antkowiak</td>
<td>Exercise Control Room</td>
</tr>
<tr>
<td>Simulator (CHD 3)</td>
<td>Dr Chris Oxenford</td>
<td>Exercise Control Room</td>
</tr>
<tr>
<td>Simulator (NEC)</td>
<td>Mr Thomas Bernard</td>
<td>Exercise Control Room</td>
</tr>
</tbody>
</table>

Exercise Control Room was established in the WPRO situation room.

**Preliminary Activity**

A briefing for the exercise Management Team was conducted at 10:00 a.m. on Tuesday, 4 April 2008, followed by a short rehearsal at 3:00 p.m. the same day. Exercise players, except for the CHD 3 team, were not fully briefed until the morning of the exercise. This is insufficient preparation for a functional exercise. Although the briefing included an overview of RC and roles and responsibilities of both the players and the Management Team, it took a while for many players to fully comprehend their roles or what was expected of them during the exercise.

**Exercise Play**

Exercise play commenced at 8:30 a.m. and was terminated at 4:30 p.m.

Day One exercise lasted seven hours and simulated activities over eight days. The scenario depicted an outbreak of a potential pandemic strain of the type A influenza virus in a hypothetical municipality “Potsnap”. The scenario allowed for the opportunity to contain the outbreak by utilizing stockpiles of antiviral medication and non-pharmaceutical interventions. The exercise focused on the Department of Health and WHO decision-making processes prior to the launching of an RC operation.
Approximately 50 players took part. The following units of DoH and agencies participated in the exercise:

- Office of the Secretary
- Health Emergency Management staff
- National Centre for Disease Prevention & Control
- National Epidemiology Centre
- National Centre for Health Promotion
- National Centre for Health Facility Division
- Bureau of Quarantine & International Health
- Procurement and Logistics Service
- Media relation Unit
- Centre for Health Development III (CHD 3)
- San Lazaro Hospital

The Secretary of Health visited the CHD 3 to inspect their activities during the exercise.

The players were assigned to three venues, Command Post, NEC, and CHD 3, as shown below. E-mail, telephone, and fax, were used to communicate among the venues.

During the exercise, a total of nineteen Injects was presented to the players. Each Inject was presented to the relevant venue and additional ‘ad-hoc’ messages (approximately 10) were used to stimulate exercise play when necessary. All Injects were discussed and responded to accordingly by the players in each venue, which led to hundreds of e-mails and fax communications among the venues.
Day Two (6 March 2008)

Type of Exercise

The Day Two exercise was conducted as a “Table-Top” exercise in which key government agencies and NGO partner members of the National Disaster Coordinating Council participated while the remaining attendees primarily observed but were encouraged to participate as necessary. The group was headed by a representative of the Secretary of National Defense and the Under Secretary of Health. Through a facilitator, their task was to consider and discuss simulated emergency situations and attempt to identify problems requiring resolution.

Exercise Management

The exercise Management Team included:

- Exercise Director: Dr Satoko Otsu  WPRO
- Facilitators:  Mr David Knaggs  WHO Short Term Consultant
               Dr Tamara Curtin  WHO Geneva
- Evaluation:  Dr Koji Nabae  United Nations System Influenza
               Coordination (UNSIC)
               Dr Bounpheng Philavong  ASEAN Secretariat

Scenario

The scenario for Day Two was a continuation from Day One. To focus discussion on roles and responsibilities during a containment operation, the scenario included the assumption that the decision to undertake RC had already been made by the national government.
Preliminary activity

Prior to the exercise, the DoH briefed attendees on the nature of H5N1 influenza outbreaks, while WHO Philippines provided briefings about RC operations and conduct of the table-top exercise.

Exercise Play

The facilitators presented a series of problem statements based on a situation from the narrative. Representatives from government agencies were invited to comment on their roles and responsibilities in each situation and to consider how they would work in concert with the other agencies involved. A copy of the problem statements is attached as Appendix 3.

The exercise was chaired by Chief of Operations, Office of Civil Defense, Department of National Defense and Under Secretary, and DoH. The Secretary, Department of National Defense joined the afternoon session.

Sixty-seven players and observers from the following agencies attended the exercise:

- Department of National Defense
- Department of Interior & Local Government (DILG)
- Philippine National Police (PNP)
- Department of Social Welfare & Development (DSWD)
- Armed Forces of the Philippines (AFP)
- Philippine Information Agency (PIA)
- Department of Agriculture (DoA)
- Department of Education (DoE)
- Department of Trade & Industry (DTI)
- Department of Budget & Management (DBM)
- Philippine Ports Authority (Airport & Seaports)
- Philippine National Red Cross (PNRC)
- Department of Transportation & Communication (DOTC)

Exercise Debriefing

An after-action debriefing was conducted at each site on Days 1 and 2 so as to have fresh responses. An overall debriefing for both days of the exercise was conducted in the CSR Situation Room at 3.30 p.m. on 6 March 2008. The debriefing was attended by all available CSR staffs including support staffs, as well as the WHO Representative (WR) of the Philippines and country CSR staff. No representative from DoH was in attendance. All participants, including exercise Management Team members from each location, were invited to comment on performance and outcomes.
Administrative and logistics support

The staff of DoH, WHO Country Office, and WPRO provided administrative support. Instruction for logistics preparation in each venue was provided by the WPRO, and arrangements were completed by the staff of DoH and WHO Country Office. Logistic support capabilities were not evaluated in this exercise.

Media Relations

A media event was planned in advance with DoH and WHO. A Press Release from DoH was distributed 3 days before the exercise, and a media briefing was conducted during the morning on Day One to provide an opportunity for media questions and a photo-shoot of the DoH Command Post activity. The Secretary of Health, WR Philippines, and the Regional Advisor of CSR WPRO participated in the media briefing.

Media capabilities were not exercised. All media involvement in exercise play was simulated.

EXERCISE EVALUATION

Evaluation and Reporting Principles

The aim of the evaluation was to improve the planning, management, and operation of pandemic response arrangements, specifically RC, within the Philippines Department of Health.

Evaluation Methodology

Evaluation framework

The evaluation framework is comprised of:

- Exercise objectives
- Performance indicators
- Event Injects and expected actions

Performance indicators against each of the objectives for Day One are in Appendix 4. Evaluators were asked to relate all activities and issues raised during the exercise to the evaluation framework. Each evaluator was provided with a copy of the exercise objectives, the performance indicators, and the MSEL.
Information capture

The following means were used to capture the information required to properly evaluate the outcome of the exercise:

**Evaluator Response Form:** This form was used by evaluators to identify specific issues and recommend actions to improve performance in the future. It was the primary means of reporting and evaluating situations arising during the exercise. A copy is in Appendix 5.

**Action Log Sheets:** Player action logs were used by players to record actions taken, significant activities and telephone conversations that occurred during the exercise. The information captured will require detailed analysis by DoH to ensure that responses to events during the exercise were as expected. The format for the Player Action Log is provided in Appendix 6.

**Problem Logs:** Problem logs were made available for use by all participants (including evaluators and moderators) to record significant problems encountered during the conduct of the exercise. The problem log allowed documenting any observed action that created a problem. Problems encountered should be reviewed after the exercise to determine their source(s) (plan, preparedness, training, or simulation) and what corrective action is required. A copy is in Appendix 7.

**Participants' Evaluation Forms:** Evaluation forms were provided to all participants for completion at the conclusion of the exercise. A copy of the form is in Appendix 8.

**Exercise Observations – Day One**

**General**

The task of evaluating the outcomes of the exercise was made difficult by the absence of a Philippines national RC plan. This evaluation report should provide some useful guidance for the creation of a national plan.

**Recommendation 1:**

*Philippines DoH, in consultation with WHO and NDCC, should prepare a draft plan for RC, to be completed prior to the next exercise.*


The evaluations and related recommendations below refer to specific objectives.

**Objective 1: Assess capacity to conduct a timely risk assessment.**

Routine response was initiated in a timely way. DoH responded to reports from the field teams promptly and effectively, although early reports from the field were slow to reach DoH CP.

Risk assessment for RC was initiated smoothly. However, initially there was little communication between central and local levels. It was not clear who had been designated to conduct the risk assessment and what issues should be addressed. Consequently, there was confusion in the CHD 3 about what information should be gathered for risk assessment. The epidemiological evidence of sustained human-to-human infection of influenza virus and the operational feasibility of RC are the key factors in risk assessment in order to make a decision about launching RC. During the exercise, it was not clearly addressed whether or not RC was a viable option.

The importance of continuing routine rapid response activities in parallel with a risk assessment of RC operations was not adequately addressed in the exercise.

The NEC team communicated well among themselves, quickly analyzing e-mails and information received from other players before taking appropriate action. However, the surge capacity of the NEC could not be evaluated.

Procedures for the deployment of field teams are well documented and understood by the NEC. However, not all procedures were followed, as there was little opportunity for discussion among field team members in preparation for the exercise. For example, there was little discussion of infection control, non-pharmaceutical interventions, and logistical feasibility during the routine response and risk assessment.

The make-up of field teams was well-prepared and described by NEC. The team members seemed to be assembled, briefed, and deployed promptly. However, the team composed for risk assessment was not instructed to go to CHD 3, which caused confusion at the local level.

DoH CP noted it is necessary to strengthen the national surveillance system before and during the risk assessment. Exit screening in the airport should also be addressed once risk assessment is initiated.

There was little discussion on the transportation of initial influenza cases from the village to the referral hospital. In the exercise, some patients were sent directly to RITM without notice instead of to the provincial influenza referral hospital. The degree of infection control during patient transport was not clear. To make RC operational, it is essential to define the referral system with consideration to infection control. In addition, establishing a communication network among the referral hospitals is essential.
Recommendation 2:

Roles and responsibilities of risk assessment teams for RC and standard rapid response teams should be clearly articulated and included in the national RC plan.

Objective 2: Validate established decision-making processes

Initially, DoH CP players tended to respond to Injests as individuals representing their sub-agencies. As the exercise progressed, more teamwork was evident. Later, one channel of communication with the outside world was established.

DoH staff clearly felt the conflicting pressures of making a timely decision to launch RC and waiting until there was clear epidemiological evidence. Action should have been taken earlier than it was to consider all the factors in selecting a containment zone. DoH would benefit from a better-developed and integrated incident management system, understood and practised by all.

Recommendation 3:

Team leaders should be trained in the establishment and operation of incident management systems.

The exercise highlighted potential problems in defining boundaries of a containment zone, particularly where these were to be based on existing boundaries (e.g. municipalities and regions). The area with index cases (index zone) was easily identified and it was agreed to enforce strict movement control and infection control in the area. The boundary of the index zone could be natural borders. However, the extent of the containment zone took time to define. Ideally, the containment zone should include all area of contacts. However, logistic and administrative implications (i.e. across the administrative boundaries) should be considered. WHO guidelines on RC should include references to determining boundaries.

There was little communication between CHD 3 and DoH CP to define the containment zone. Some confusion resulted from the action taken by CHD 3 to impose quarantine on a significant part of the population (a 6-10 km radius from the index cases). The decision was taken without proper consultation with the central level and could have compromised an RC operation. A joint telephone conference to define the containment zone would have promoted a coordinated decision-making process between central and local levels.
There was no discussion on calculating necessary antivirals for the containment zone. Since early dispatch of antivirals is essential in an RC operation, it is important in the early stage to calculate the necessary amount of antivirals separately for treatment and prophylaxis. At the same time, the logistic plan for antiviral transportation and distribution should be addressed.

The NEC team was expected to investigate the initial outbreak and to generate accurate, reliable, and timely information for decision-making by the DoH CP. However, due to the time-compression of the exercise and the presence of the NEC director in the DoH CP (which should occur in a real situation), the role of NEC in the exercise could not be properly conducted. Therefore, it took a while to make a decision, which also resulted in unnecessary duplication of effort.

**Objective 3: Verify established coordination and communication arrangements with all levels of health and with WHO.**

Initially there was some confusion among DoH CP, NEC, and persons at CHD 3. However, as time passed, the communication and coordination among stakeholders improved. WHO was fully engaged by DoH CP and the roles and responsibilities of the WR were well understood.

DoH CP decided on Exercise Day Two, when the result of initial case specimens confirmed positive for H5N1 influenza by PCR, to notify other Government agencies (in particular DILG) and the National Disaster Coordination Council of developments in order that concurrent planning could take place. This highlighted the need for early engagement of the NDCC.

Coordination between CHD and LGU was not very effective. Little information sharing from central to local levels was observed through the exercise. DoH should review the communications requirements of regional units and provide sufficient resources to enable an effective incident management (command) system to be set up in the region of an outbreak, as the local level should be included in decision-making processes.

Liaison and coordination between DoH CP and CHD 3 would have been greatly improved if a representative of DoH supported CHD 3 operations. It is not clear whether CHD 3 should have activated the Regional Emergency Incident Command System. Team leaders should be better trained in incident management.

**Recommendation 4:**

*DoH should improve coordination arrangements between DoH CP, CHDs and LGUs.*
Objective 4: Ensure understanding of procedures for mobilizing ASEAN stockpiles.

In this exercise, players only discussed ASEAN stockpiles.

The current guideline “Stockpiling Tamiflu and Personal Protective Equipment (PPE) provided under the JAIF for the Containment of Pandemic Influenza in ASEAN”, the process for mobilizing the stockpile is as follows: Once an outbreak of a possible pandemic influenza is detected in the ASEAN region, the WHO is mandated to provide necessary guidance to the affected member country, the ASEAN Secretariat, and the government of Japan for release and delivery of the stockpiled antiviral courses and PPE. Immediately after receiving the guidance, the ASEAN Secretariat, in consultation with the WHO, will work on delivery management of the antiviral stockpile. A shipping agent appointed by the JICS will begin shipping the antiviral stockpile to the designated point in the affected country within 24 hours of receiving instructions from the ASEAN Secretariat.

As soon as the risk assessment initiated in exercise Day three, an e-mail was sent to ASEAN alerting of the developing situation and requesting go on 'stand-by’. It was well understood that the request for mobilizing the ASEAN stockpile needs to be done based on the findings of the risk assessment team and in collaboration with WHO. Overall, players in the DoH Command post had a good understanding of the mobilization procedures for the ASEAN stockpile, but local levels were not involved. Real communication with ASEAN Secretariat and JICS would have enhanced the value of this aspect of the exercise.

There was some confusion in the DoH CP regarding the calculation of the antivirals needed during RC for a population of 100,000. There was no clear understanding of the different PPE to be requested in specific locations and under particular circumstances within the containment zone. It would have been beneficial to have an information board, which could provide a clear picture on the availability of and local and national needs for items.

There appeared to be a common understanding that supplies need to be handled in a staged manner, namely:

- Ensuring appropriate amounts of antivirals and PPE are present in the RHUs, health centres, and hospitals when the first news of the outbreak comes in.
- Deploying the national stockpile in advance of the regional (ASEAN) stockpile
- Deployment of ASEAN stockpile.
- If necessary, requesting access to the global stockpile through WHO.
Material Management Division (MMD) in the DoH command post sent a prompt reply to JICS confirming logistic preparation for receipt after JICS informed them about the stockpile being prepared in Singapore for transportation. However, it was not clear that MMD has a “fast track” procedure in place to release, store, reconstitute if necessary, transport, and distribute stockpiles to the RC area. MMD did not coordinate with the DoH CP to request NDCC for specific help, although they confirmed later (on Exercise Day Two). This should be done in future exercises and emergencies.

The limited time available during the exercise led to no attempt being made to gain an understanding of the size and logistic implications of the stockpile that was being dispatched. No request was made for assistance from other government agencies (e.g. - DOTC, PNP) for safe and secure stockpile transportation.

No communication was sent to CHD 3 to notify them of the size of the stockpile to expect. Neither was there any communication about an expected date of arrival in the region. It is important to communicate and discuss the necessary amount of PPE in the field or a description of the PPE (e.g. - medical mask/face shield or N-95 mask) in order to assist properly the operational needs.

**Recommendation 5:**

*Clear guidelines and Standard Operating Procedures (SOPs) should be developed by DoH for requesting, deploying, distributing, and securing stockpiles, including:*

- *Calculation of supply requirements*
- *Formal request mechanisms.*

*These should be included in the national RC plan.*

**Objective 5: Practice development and use of risk communications.**

The importance of risk communications and a consistent, coordinated message seemed to be well understood. DoH CP proposed that questions from the media be referred to a daily press conference to be conducted by the Secretary of Health or his designated officer. It was also suggested that the secretary should appear on national TV as soon as possible.

It was also recognized that a senior official should be designated as a spokesperson at regional and local levels.
Exercise Design and Conduct

- Although a lot of work had been done prior to the exercise, a lot more preparation was required for this exercise than was undertaken. To compound matters, the Players' Handbook was not distributed until just prior to the briefing on the day of the exercise. Although the exercise was well conducted and teamwork was evident, it was apparent that not all players were fully aware of their roles and responsibilities during exercise play.

- Generally, RC activities were not well understood by players. This is not surprising given that a Philippines country plan for RC does not yet exist. Although an overview was provided during the exercise briefing at DoH CP, additional training would have been beneficial.

- The compression of eight (notional) days into one day's exercise play meant that some sites were occasionally overwhelmed with information. One reason was that players were slow to realize the purpose of the Action Log, and that a detailed message in response to Injects was not necessarily called for. Overall, Injects were very realistic and came at a pace that was manageable by the players.

- Due to limited time, time management and awareness was critical for the whole process of the exercise. However, jumps in 'exercise time' caused confusion among players at first. By the end of the exercise, this had been rectified and play proceeded more smoothly.

- Some of the communication among the exercise players was in Tagalog. Even with a translator present, not all information was communicated to moderators.
All sites lacked adequate communications and office systems. In the case of CHD 3, only one Internet access point was available initially, which was insufficient for an exercise of this nature. Later, two more units were made available. It is imperative that adequate facilities and equipment are installed and properly tested prior to the exercise. This would be a serious problem in the event of a true emergency.

Moderators were important in keeping the flow of incoming messages and replies to maintain attention and motivate participants to reply by e-mail.

Mobile phones were an alternative means of communication to e-mail. Unless such conversations were recorded in the Action Logs, it was difficult to track responses.

The rehearsal conducted on 4 March proved to be very useful in identifying gaps in procedural awareness and logistic preparation. For instance, it was found that a dedicated support person was essential for photocopying and disseminating incoming messages amongst participants.

Operators of PCs where incoming messages were received were not all trained for the task; this should have occurred during the dry run on the previous day.

DoH CP implemented a very effective means to manage Injects. Each Inject was read aloud by the moderator and projected onto the screen, with additional copies distributed to the players. The same was done in CHD 3, except without the screen projection.

**Recommendation 6:**

*DoH should establish a cyclical programme of exercises to review, evaluate, and update pandemic preparedness planning.*

**Recommendation 7:**

*When planning for future exercises, DoH should appoint a senior-level sponsor and steering group to ensure ‘buy-in’ and adequate preparation and organizational commitment to the exercise.*

**Recommendation 8:**

*A pool of expertise should be established within DoH to assist in the design, development, conduct, and evaluation of future exercises.*

**Recommendation 9:**

*Future exercises should be preceded by thorough briefings and rehearsals for both the Management Team and players to ensure that roles and responsibilities are well understood.*
**Recommendation 10:**

DoH should provide sufficient communications and office equipment to allow the DoH command post, NEC, and regional Centers for Health Development to mount an effective RC operation.

**Recommendation 11:**

Observers from other ASEAN member states should be invited to future exercises in order to exchange information and improve preparedness throughout the region.

**Exercise Observations – Day Two**

**General**

The National Disaster Coordinating Council (NDCC) was organized to deal with national disasters of all sorts and is the national multi-agency body through which RC would be coordinated. What appears to be lacking is a legal and ethical framework to guide a response and the SOP specific to an RC operation.

**Objective 1: Validate existing arrangements for requesting, releasing, and managing the distribution and administration of antiviral medication for treatment and prophylaxis.**

While there is a fair understanding within DoH about procedures for requesting and releasing stockpiles, other government agencies, many of which would play important roles, don’t share that understanding. It is important that a future national plan for RC includes the roles and responsibilities of all agencies involved and that SOPs are developed.

Attention must be given to the release of supplies arriving at airports and seaports in the Philippines, as it is likely that most delays will occur between arrival of regional/international stockpiles and final release out of customs. Agencies and departments likely to be involved include: DoH, forwarding agent, Philippines Ports and Customs Authorities, NDCC, DOTC, AFP and PNP.

The absence of a representative from the DOTC limited a more useful discussion under this objective.

The coordinating role of NDCC in an RC was apparent and was well understood by those agencies represented. It was not made clear how the “cluster” model” (as explained by the NDCC representative) would be applied. There was little time to discuss the possible responsibilities of each agency.

There must be a common understanding of who will receive the stockpile, who will clear customs, transport, and store the stockpile. This must include the means for transportation, who will take care of
loading/unloading, and who will provide security during any stockpile movement. Information must also be included on warehouses, temperature control, management, and monitoring of stockpiles.

Calculation of weight and volume is crucial to plan for the right transport means, storage, distribution, and human resources for dealing with this.

There was no discussion on distributing antivirals to RC field workers.

**Recommendation 12:**

*NDCC, in consultation with DoH and WHO, should establish Working Groups to develop SOPs for RC operations. Consideration should be given to:*

- Agencies which would be involved and the level of coordination between them
- Lines of authority, particularly with respect to the role of LGUs
- Facilitating the release and distribution of antivirals and other urgently needed supplies.

**Objective 2: Assess national capacity to implement non-pharmaceutical interventions.**

The absence of representatives from DSWD, DOTC and DOE limited useful discussion under this objective.

Several government agencies felt they had a clear role in implementing non-pharmaceutical interventions. What was not clear was how this would be coordinated (e.g. - through a forward operations centre established in or near the RC zone). It was also unclear how quickly these arrangements could be put in place once an RC was launched.

**Recommendation 13:**

*NDCC should plan for a suitably manned and equipped forward coordination Centre capable of rapid deployment in the event of RC.*

Understandably, there was some confusion surrounding the terms “index zone” and “containment zone” and how each would be treated. A consistent model needs to be developed and promulgated as soon as possible.

There was little time to discuss the necessary issues with respect to maintaining a containment zone.

The military and the police seemed to have a mutual understanding about the different roles they would play (police would assure security inside the RC zone while the military would focus on security outside the zone). The military’s role would be limited without a state of disaster being declared.
Recommendation 14:

NDCC, in consultation with DoH and WHO, should establish a legal and ethical framework to guide the development of an RC plan.

Objective 3: Evaluate the potential effectiveness of a risk communications strategy.

The Philippine Information Office (PIA), which might have made a valuable contribution during this discussion, unfortunately was not represented in the exercise.

There appeared to be common understanding among the players that effective risk communications and social mobilization strategies are keys to a successful RC operation.

It was generally accepted that outbreak communications should be more focused on educating the population on the containment strategy and maintaining law and order. Within the containment zone, a communications cell should be formed with representatives from key government and welfare agencies (e.g. - Red Cross) as well as local media outlets.

Recommendation 15:

DoH, in consultation with NDCC and WHO, should develop an outbreak communications strategy for inclusion in the national RC plan.

Exercise Design and Conduct

There was some confusion at the beginning of the exercise, as several agencies were not represented. The activity was chaired by Chief of Operations, OCD, which created some initial conflict with the role of the facilitators. Once this was sorted out, the exercise progressed well.

As on Day One, insufficient time was allowed for preparation of the players. Agency representatives were not identified early enough to ensure a thorough briefing and establish a common level of understanding. Some participants had difficulty with the nature of pandemic influenza in general and RC in particular. A glossary of terms would have been useful.

Most players commented favourably on the design and conduct of the exercise, and the fact that they had the opportunity to exchange information with other government and non-government agencies.

Recommendation 16:

NDCC should be included in exercise design and Management Teams for future exercises.
**Recommendation 17:**

*DoH, in consultation with WHO and NDCC, should develop a glossary of terms for inclusion with the RC plan.*

**Future activities**

Although it was the first time DoH had conducted a functional exercise, the concept (of a modified functional exercise followed by a multi-sectoral table-top exercise) over two consecutive days worked quite well. Exercise play was slow to get underway as systems were being developed and implemented. It will always be difficult to find sufficient time for the exercise to ensure decision-making and response capabilities can be properly evaluated. In future exercises, more time must be made available in the lead-up for the preparation of participants in their allocated roles and responsibilities.

Future exercises should be based on a national RC plan.

**Recommendation 18:**

*DoH should task a group to analyze Player Action Logs from this exercise to verify that actions identified by players were consistent with existing procedures and expected actions.*

**Recommendation 19:**

*DoH should task a group to review the Problem Logs in more detail, in order to identify potential areas of weakness.*

**Recommendation 20:**

*DoH, in consultation with WHO and NDCC, should conduct a modified functional exercise in 2009, following the drafting of a national RC plan. The exercise should be designed to evaluate the plan, with emphasis on multi-sectoral cooperation at the international, national, and local government levels.*

**Recommendation 21:**

*As an interim activity, a workshop should be held by DoH, in consultation with WHO and NDCC, to resolve potential problem areas identified in this exercise.*
3. CONCLUSIONS

Exercise PanStop II 2008 was well-designed and conducted and, with some exceptions, achieved the objectives set. It was a difficult exercise to evaluate, given the absence of a national plan for RC. Nevertheless, existing processes were evaluated and there were several valuable outcomes, which should assist in the development of the plan and the conduct of future exercises.

Philippines DoH had no prior experience of conducting functional exercises on pandemic preparedness. A review of the participant evaluation forms from Day One suggests that most players derived significant benefit from the exercise and believed it was an important means of improving preparedness for RC. Likewise, the table-top exercise on Day Two represented the first opportunity for government and non-government agencies to consider the implications of an RC operation from a national perspective. Clearly, the DoH and NDCC will have significant roles.

It is important that this initiative be followed up by DoH, NDCC, and WHO working in concert to develop and evaluate, through further exercises, a national RC plan for the Philippines.

Summary of Recommendations

Recommendation 1:

Philippines DoH, in consultation with WHO and NDCC, should prepare a draft plan for RC, to be completed prior to the next exercise.

Recommendation 2:

Roles and responsibilities of risk assessment teams for RC and standard rapid response teams should be clearly articulated and included in the national RC plan.

Recommendation 3:

Team leaders should be trained in the establishment and operation of incident management systems.

Recommendation 4:

DoH should improve coordination arrangements between DoH CP, CHDs and LGUs
**Recommendation 5:**

Clear guidelines and Standard Operating Procedures (SOPs) should be developed by DoH for requesting, deploying, distributing, and securing stockpiles, including:

- Calculation of supply requirements
- Formal request mechanisms.

These should be included in the national RC plan.

**Recommendation 6:**

DoH should establish a cyclical programme of exercises to review, evaluate, and update pandemic preparedness planning.

**Recommendation 7:**

When planning for future exercises, DoH should appoint a senior-level sponsor and steering group to ensure ‘buy-in’ and adequate preparation and organizational commitment to the exercise.

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A pool of expertise should be established within DoH to assist in the design, development, conduct, and evaluation of future exercises.

**Recommendation 9:**

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SUMMARY

1. INTRODUCTION

2. PROCEEDINGS
   2.1 Exercise development
   2.2 Type of exercise

3. CONCLUSIONS
   3.1 Summary of Recommendations

ANNEXES

ANNEX 1 - BACKGROUND TO SCENARIO
ANNEX 2 - MASTER SCENARIO OF EVENTS LIST
ANNEX 3 - MAP OF PAMPANGA
ANNEX 4 - EXERCISE SCHEDULE
ANNEX 5 - EVALUATOR RESPONSE FORM
ANNEX 6 - ACTION LOG SHEET
ANNEX 7 - PROBLEM LOG SHEET
ANNEX 8 - PARTICIPANTS' EVALUATION FORM

Keywords:
Disease outbreaks / Influenza, human / Pandemics / Risk Management – standards / Health personnel - education