

## 1. Background

In January 2006, the Government of Malaysia developed and launched a *National Influenza Pandemic Preparedness Plan* (NIPPP)<sup>14</sup> and related strategies, in which the Ministry of Health is designated as the lead agency of the response to pandemic outbreaks, with coordination by the Disease Control Division. However, in the event that a pandemic occurs requiring multiple agency activities, the National Security Council (NSC), headed by the Deputy Prime Minister, will assume leadership of the response.

The Ministry of Health will continue to play the role of lead agency in pandemic control under the NSC and will coordinate the overall public health and medical emergency response across federal departments and agencies at all levels.

As one of the strategies to enhance pandemic preparedness, the Ministry of Health has held a series of pandemic influenza simulation exercises at various levels, named *ExPanFlu 1* and *ExPanFlu 2*. These were part a series of exercises designed to evaluate Malaysia's preparedness plans for a pandemic influenza outbreak. This series of exercises included:

- health response TTX – 23 March 2006
- Ministry of Health intra-agency TTX – 24 March 2006
- interagency TTX – 4 April 2006
- Asia-Pacific Economic Cooperation (APEC) pandemic response exercise – 7 June 2006
- medical response drill (*ExPanFlu 1*) – 1–2 August 2006
- public health response drill (*ExPanFlu 2*) – 14 September 2006

This section will elaborate on *ExPanFlu 1* and *ExPanFlu 2*.

## 2. Objectives

The aim of *ExPanFlu* was to test and consolidate the NIPPP at various levels among key government agencies and health-care institutions. It was also intended to assess surveillance and response policies and systems, decision-making structures, coordination mechanisms and the relationship between the Ministry of Health at various levels and other relevant agencies.

<sup>14</sup> *National Influenza Pandemic Preparedness Plan (NIPPP)*, Ministry of Health Malaysia, January 2006 ([www.dph.gov.my/survelans/NIPPP/](http://www.dph.gov.my/survelans/NIPPP/), accessed 8 July 2008).

The overall objectives were to assess the level of preparedness, test the feedback mechanism and improve the systems for dealing with an influenza pandemic. The specific goals were to evaluate the implementation of the *Pandemic Influenza Plan of Action* in health-care facilities and at Kuala Lumpur International Airport (KLIA), to review interagency coordination and networking, and to assess the capacity of operational activities in managing an emergency situation.

Areas of pandemic response targeted include:

- surveillance;
- infection control mechanism;
- movement of cases;
- contact tracing;
- proper usage of PPE;
- medical response;
- border control;
- effective communication and coordination within the Ministry of Health and with other agencies.

## 3. Participating agencies and organizations

**Table 9**  
Participating agencies and organizations

ExPanFlu 1
Ministry of Health headquarters
State Health Departments
District Health Offices
Hospitals and health clinics
ExPanFlu 2
Ministry of Health
Malaysia Airport Berhad
Department of Civil Aviation (DCA)
Malaysia Airlines System (MAS)
Department of Immigration and Customs
Kuala Lumpur International Airport (KLIA) health office
Royal Malaysian Police
National Security Council
Department of Civil Defence

## 4. Type of exercise

Drill.

## 5. Preparation for the exercise

The exercise management team comprised 40 people from the Ministry of Health, as well as other representatives involved in the exercise. The preparation started in June 2006 and regular meetings were conducted by the Pandemic Influenza Exercise Committee and subcommittees.

As the preparation progressed several documents were developed, including a concept paper, checklists, scenarios, alert letters, a management flowchart and a programme book. Documentation and scripts for participants were also developed for each of the scenarios.

To create awareness among the public, the media were invited to participate in the exercise and to provide coverage of the events. Press conferences were held during both exercises.

The State Health Departments were also urged to volunteer to host the drill, ensuring their commitment to the exercises. The State of Perak and KLIA were chosen because they already had pandemic response plans to be tested. Prior to the exercise those plans were reviewed and endorsed by the Ministry of Health.



*Briefing on exercise to all guests and participants.*

## 6. Conduct of the exercise

*ExPanFlu 1* lasted for two days and *ExPanFlu 2* lasted for four hours. During the conduct of the exercise, the simulation exercise team assumed the following roles:

- exercise control team: communicated with facilitators and evaluators, monitored progress, determined when corrective action was required and provided the materials to enable facilitators to set the proceedings back on track;
- exercise facilitators: provided briefings and debriefings for exercise participants, provided exercise inputs, monitored progress of the exercise, ensured actions expected from exercise inputs were com-

pleted, liaised with the exercise control team and solved problems arising during the exercise;

- exercise evaluator team: observed exercise participants, noted actions taken against expected actions, assessed the performance of systems and personnel, and prepared a report on exercise conduct in their respective locations;
- exercise writing team: developed operational scenarios and scripts;
- secretariat: organized logistics (including communication and audiovisual equipment), prepared observers and provided participants.

Both exercises adopted a number of protocols to ensure smooth conduct of the exercise:

- Participants were briefed before the exercise.
- Security codes were used during the exercise to control the progress of the exercise, and to halt or end the exercise if necessary.
- The exercise management team ensured communication lines were working.
- The exercise management team ensured participants (actors) played their roles as required by the scenario, as well as their functional role in real life.
- Evaluators were stationed at strategic points and were able to move around.

The press was invited to observe the exercise and after the event the Director of the Disease Control Division held a press conference.

The scenario was developed by the exercise writing team and was approved by the Exercise Planning and Implementation Committee headed by the Director of the Disease Control Division.

The scenario developed as the exercise progressed and included:

- lead-in events before the introduction of pandemic influenza in Malaysia – a simulated pandemic situation in neighbouring countries;
- introduction of pandemic influenza into Malaysia;
- implementation of border management strategies;
- initial pandemic influenza spread within Malaysia;
- alert notification to the State Health Department (WHO Pandemic Alert Phase 4).

## 7. Evaluation

During the *ExPanFlu* exercises the evaluators were given access to key areas in order to assess performance. They worked off checklists developed beforehand and created an after-action report, which was circulated to all relevant parties. An exercise debriefing was conducted involving all participants and exercise controllers. It provided



*Thermal scanner screening of arriving passengers.*

feedback on all aspects of the exercise related to issues that had been previously identified. Around 10 exercise evaluators were deployed in each of the exercises.

### 8. Lessons learnt

A number of lessons were identified in conducting the exercises:

- The exercises allowed clarification of certain policies and different interpretations of procedures.

- The exercises have apparently revealed that it is not sustainable to maintain a high level of readiness amongst the entire personnel of relevant agencies. Instead, having a response team and standard operating procedures will enable an organization to elicit the high-level rapid response needed if an outbreak occurs.
- The early engagement of participating agencies generated a greater level of commitment to the exercise.
- It is important to educate organizations beyond the government about preparedness, especially those from the business and industry sectors. Involving these organizations in the exercises is beneficial because it generates a more realistic and holistic response to a pandemic and builds learning.

Finally, the exercise identified a number of areas for improvement, predominantly around the clarity of the guidelines for response to a pandemic. After conducting the exercises it has been necessary to review processes and resource allocations, and update the plans and manuals accordingly.