Ministry of Health, Labour and Welfare, by sharing information with other government bodies, has now produced 'Pandemic Influenza Preparedness Action Plan'

**Background**

In the past, influenza pandemic recurred at 10-40 year intervals.

Highly pathogenic avian influenza virus epidemics, some associated with fatal human cases, have recently occurred in South-Eastern Asia, and very recently in Europe. The epidemic is expanding, and there is increasing risk of emergence of a new pathogenic avian influenza virus that has acquired, through mutation, capacity of human-to-human spread.

The 'Pandemic Influenza Preparedness Action Plan of the Japanese Government' has been drafted in compliance with WHO Global Influenza Preparedness Plan (May 2005) to facilitate quick and trustworthy countermeasures.

**Overview**

1. **Estimation of pandemic scale**

Estimation model of US Centers for Disease Control (FluAid 2.0) was used for the assessment of new influenza epidemics/pandemics. It was estimated that, if 25% of the Japanese population are infected by the virus, 13 to 25 million (median approx. 17 million) will visit medical facilities.

2. **Scheme to promote measures against new influenza**

Japanese government established 'Inter-ministerial Avian Influenza Committee' to facilitate inter-ministerial cooperation. Ministry of Health, Labour and Welfare established Headquarter for Pandemic Influenza Counter-measures, chaired by Minister of Health, Labour and Welfare. With these provisions, the action plan will be carried out in cooperation with local governments, other relevant organizations (e.g. medical institutions) and citizens.

3. **Action plan**
According to WHO Global Influenza Preparedness Plan (May 2005), there are six possible phases of events. We divided each phase further into two categories, 'no outbreak in Japan' and 'outbreak in Japan'. The five action areas to be considered for each event/category are (1) planning and coordination; (2) surveillance; (3) prevention and containment; (4) medical response; and (5) risk communication.

* Phase 1 and Phase 2 (avian to avian)
  No human case of new influenza virus subtypes.

* Phase 3 (avian to human)
  Human infection(s) with a new subtype, but no human-to-human spread, or if present, only rarely among closest contacts.

* Phase 4 and Phase 5 (human to human)
  Human-to-human transmission cases, which are, however, clustered and limited.

* Phase 6 (pandemic)
  Increasing human cases and sustained transmission in general population.

4. **Outline of the action plan**

Phase 3A (No outbreak in Japan)

- Develop the government's Action Plan.
- Alert to the overseas travelers.
- Ensure preventive measures against the outbreak of highly pathogenic avian influenza in poultry flocks in Japan, particularly, by guidance and support of farmers in the implementation of prevention measures.
- Manufacture and stock the prototype vaccine source for possible need of vaccination, and plan measures to secure eggs for production of vaccines in case of pandemic, Phase 4.
- Determine the amount of oseltamivir phosphate (product name: Tamiflu) to be secured, and start stock.
- Strengthen the capacity of designated medical facilities that are responsible for care and treatment of new influenza patients, and request them to secure necessary medical materials.
- Provide information on highly pathogenic avian influenza to Japanese citizens as well as Japanese residing in countries where the outbreak is observed.

Phase 4A (No outbreak in Japan)

- Upon diagnosis, designate the new influenza as "government-decreed infection" according to the Law concerning the Prevention of Infectious
Diseases and Medical Care for Patients of Infections (hereinafter referred to as the 'Infectious Disease Law').

- Initiate cluster surveillance at schools or working places to detect clusters of the virus infection.
- Strengthen quarantine measures, such as detainment of suspected infection cases returning from outbreak regions, according to the Quarantine Law.
- Once new influenza virus type is identified, start manufacturing pandemic vaccine immediately when eggs and other necessary materials are secured. In case of regular influenza vaccine manufacturing season, take appropriate responses such as shift of manufacturing line to the new influenza vaccine.
- Instruct medical institutions, as a general rule, to refrain from using anti-influenza virus agent to non-new influenza patients.
- Communicate, where appropriate, with media on outbreaks and responses abroad through a government spokesperson.

Phase 4B (Outbreak in Japan)

- Headquarter for Pandemic Influenza Counter-measures, chaired by Minister of Health, Labour and Welfare declares the outbreak of human-to-human infection in Japan, and announce the government's determination to strengthen countermeasures.
- Guide suspected patients to be hospitalized for establishing definite diagnosis according to the Infectious Disease Law.
- Guide those who have had contact with suspected patients, such as patients' families, to be monitored for designated evaluation period for sign/symptom of infection; request them to refrain from going out and to be alert to the influenza symptoms; and instruct them how to respond when symptoms appear.
- Recommend to avoid conducting non-urgent large scale meetings or gatherings of general public in a region where infection is observed.
- Order preventive administration of anti-influenza virus agent to health care workers who have treated the influenza patients and to workers in public service who had close contact with patients.
- Instruct medical institutions not to use anti-influenza virus agent to patients other than those infected or suspected to be infected with the new influenza virus.
- Distribute, as an urgency measure, proto-type vaccines to vaccination centers, and, if necessary, vaccinate health care workers or workers in public services and conduct vaccination.
- Commence vaccination of the pandemic vaccine to those who wish as soon as pandemic vaccine is manufactured.

Phase 6B (Outbreak in Japan)
- Minister of Health, Labour and Welfare declares a state of emergency (Declaration of strengthening of domestic countermeasures).
- Provide care for new influenza patients in all medical institutions by easing hospitalization requirements, and limit hospital treatment to serious cases.
- Administer anti-influenza virus agent to suspected new influenza patients within 48 hours of onset of symptoms.
- The priority of treatment with anti-influenza virus agent is as follows:
  
  1. Hospitalized new influenza patients
  2. Health care workers or workers in public services
  3. Patients who are of medical high risks (such as patients with cardiac disorders)
  4. Children and the elderly
  5. General outpatients