

APEC SYMPOSIUM ON RESPONSE TO OUTBREAKS OF AVIAN INFLUENZA AND
PREPAREDNESS FOR A HUMAN HEALTH EMERGENCY

SAN FRANCISCO, CALIFORNIA
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PROPOSED REPORT AND RECOMMENDATIONS

The APEC Health Task Force convened a symposium on the impact and threat of Highly Pathogenic Avian Influenza (HPAI). Participants from 16 APEC economies, as well as Cambodia and Lao PDR, representing sectors ranging from agriculture and health to trade and foreign affairs, gathered with representatives from the World Health Organization (WHO), World Organization for Animal Health (OIE), the Food and Agriculture Organization (FAO), and the private sector to discuss 1) the impacts of avian influenza and human health concerns on relevant sectors, 2) response and preparedness, and 3) recommendations to the APEC Health Task Force on meeting the challenges.

Impacts of Avian Influenza and Human Health Concerns on Relevant Sectors

Presenters at the symposium informed its participants that Highly Pathogenic Avian Influenza, specifically H5 N1, is endemic in certain economies in the APEC region, and stated

1. With regard to animal health, HPAI has been reported in eight APEC economies and two other Asian countries 2003 through 2005.
 - a) In these reported disease outbreaks more than 100 million birds either died or were culled as part of containment measures.
 - b) Additional animal species affected included tiger and pig.
2. With regard to human health,
 - a) Increasing contact between humans and their sources of food have resulted in an increase in zoonotic transmission of disease (50% or more of current emerging diseases are zoonotic).
 - b) The transmission of this HPAI strain from birds to human has been demonstrated (108 cases with 54 deaths). Sustained human-to-human transmission has not been demonstrated.
 - c) Avian influenza viruses may play a role in the evolution of new human strains by contributing viral genes to human strains via genetic reassortment. With the increasing contact between humans and animals, we face a greater likelihood of transmission of zoonotic diseases like influenza.
 - d) One conservative estimate is that today the world would face up to 233 million outpatient visits, 5.2 million hospital admissions and 7.4 million deaths during an 'average' pandemic.

- e) If such an influenza pandemic were to occur we would be left with viruses that continue to circulate around the world and cause disease and deaths even in hosts that may have seen the viruses before.
3. With regard to the direct impact of HPAI on agricultural production and trade and the potential effects of a pandemic on tourism, trade, and the broader economy,
- a) A high percentage of the labor force in affected APEC economies is engaged in agriculture;
 - b) The mix of poultry production sectors is not homogeneous, with backyard production accounting for 70% in one economy and only 10% in another. Biosecurity is lowest among backyard farmers who often rely on poultry for their livelihood.¹
 - c) Where outbreaks have been reported there have been steep drops in poultry production, consumption and export;
 - d) Importing countries have adopted varying trade restrictions. These restrictions are often inconsistent with the recommendations of international standard-setting bodies, such as the OIE.
 - e) The OIE Chapter on Avian Influenza was updated to include specific risk-based recommendations for the most important commodities being traded. These recommendations take advantage of the concepts of zoning and compartmentalization, based on the biosecurity measures implemented.
 - f) Export poultry products have moved from production of fresh to production of cooked products. Avian Influenza outbreaks have increased prices of other foods in the market. Demand reduction, coupled with overstocking, has depressed market prices for poultry with resulting unemployment in the Breeder Farm, Feed Mill, Farm, Slaughter, and Export sectors (In Vietnam, animal feedstuff production decreased 25 - 30%);
 - g) A public health emergency from pandemic influenza could surpass the impact of SARS and would have broad economic, social, and security consequences including negative consequences for mass transportation, retail stores, restaurants, hotels and the travel and recreation sectors. A single major public health incident can have a major impact on the local economy.

Response and Preparedness: The Challenge Ahead

Presenters at the symposium informed its participants of the capacity and resource implications of internationally recommended responses to avian influenza and preparedness for a human health emergency and stated with regard to:

1. Research . . .

¹ "Biosecurity" is defined here as risk assessment measures and agricultural best practices taken to prevent the incursion of exotic agricultural pest.

To support research on active viruses (especially in regard to vaccine development), WHO and OIE recommend that economies share virus isolates in a timely manner with their laboratory networks.

2. Animal health surveillance and monitoring, including laboratory capacities . . .

Government bears the costs of monitoring, enforcement and coordination costs;

Where there are existing programs of animal health surveillance and monitoring, the new costs are associated with additional infrastructure, equipment and recurrent expenses;

Laboratories operate under considerable constraints of insufficient funding and training. For veterinary services and public health at different levels, governments lack trained and experienced staff, especially at the grassroots level.

Introduction of vaccination of poultry as a control strategy would require development of enhanced monitoring and surveillance programs to detect changes in the virus.

3. Animal disease control and eradication, including culling and biosafety, vaccination of poultry, indemnification, and cultural factors . . .

The goal is to eliminate infection from the environment. Control programs must be based on the local situation with respect to the production and marketing system, veterinary capacity and the extent of infection and disease.

International recommendations call for a reform of those commercial poultry production systems with low to minimal biosecurity, most often characterized by the birds entering live bird markets, and of village and backyard systems with minimal biosecurity, which are characterized by home or local consumption. These reforms would address improvement of hygiene, introduction of market rest days for cleaning and disinfection, segregation of different species of animals, practices of storing and stacking animal cages, training and education of producers and market workers, and the use of personal protective equipment. These reforms would reduce the incidence of infection.

During periods of active infection, where there is low or minimal biosecurity, veterinary authorities should consider vaccination strategies.

Farmers/Producers and Industry bear the compliance costs for reforms, including vaccination, control and eradication efforts. The price of poultry determines whether farmers/producers can carry these costs.

One economy's control measures benefit outside economies' avoidance of HPAI.

In some cases, where producers cannot afford to cull their flocks, governments have intervened. A large part of the government spending was used to compensate farmers whose poultry died or was culled during the epidemics.

Inconsistent and low rate of compensation has been proven to affect the timely reporting and rapid destruction of infected poultry.

In certain cases, local banks should consider easing the burden on small poultry farmers who suffer economic loss from HPAI by postponing debts, decreasing profits and lending money with low profits;

The specific effectiveness and outcomes of interventions will depend on local circumstances and, in particular, the ability of authorities to develop, implement and manage a comprehensive implementation plan with all essential elements instead of selective application of those which are deemed to be affordable.

3. Trade restrictions . . .

Economies need to participate in the work of trade related standard-setting bodies to assure that the work of those bodies is responsive to their needs.

4. Human health surveillance and monitoring, including laboratory capacities . . .

An outbreak of HPAI in birds has been demonstrated to create an increased demand for health care services among workers involved in culling and poultry vaccination operations.

Monitoring and surveillance capacities should meet the pandemic preparedness recommendations of the WHO.

5. Human health disease quarantine and epidemic mitigation, including cultural factors . . .

WHO emphasizes developing domestic preparedness plans requiring multisectoral approaches and coordination with many levels of the governments including the animal and human health, communications, disaster management and legislative agencies. The essential elements of the pandemic preparedness checklist include preparing for an emergency, disease and virus surveillance, case investigations and treatment, prevention of spread in the community, stockpiling PPEs and antivirals, maintaining essential services, research and evaluation and implementation, testing and revision of the plan.

6. Risk communication . . .

Campaigns need to be launched with the aim of raising public awareness on HPAI prevention and control. For example, in Vietnam, 500,000 leaflets and 70,000 booklets on HPAI disease prevention and control were printed and distributed to provinces and cities. National and local television stations broadcasted several programs on the HPAI situation and provided guidelines for disease control and prevention. Newspapers were provided with daily progress on the epidemic.

Meeting the Challenge

Recognizing the need for strong political commitment and leadership to achieve prevention, preparedness and response to avian influenza and pandemic influenza, the Symposium asks that APEC consider:

1. Encouraging the affected and at-risk APEC Economies and other affected countries in the region to:
 - a. Increase and sustain coordination, cooperation and collaboration between APEC member economies' and other non-APEC countries' domestic veterinary and human health systems and other relevant sectors, and between regional and local levels;

- b. Emphasize public awareness, outreach and education to at risk populations, with coordinated messages from veterinary, human health and producer sectors;
 - c. Ensure adequate compensation to assure timely and complete reporting of disease and implementation of appropriate disease control measures is established;
 - d. Strengthen domestic veterinary service and public health capacities and ensure that it is sustainable at all levels;
 - e. Respond to the Global Strategy for the Progressive Control of HPAI and for those economies in which farms with little or no biosecurity [footnote re: "biosecurity"] are a dominant feature, pay priority attention to the risk-reduction measures identified in the FAO/OIE/WHO Consultation on Avian Influenza and Human Health;
 - f. Participate, as appropriate, in the standard-setting activities of the relevant international bodies to assure that their activities related to transboundary animal diseases (TAD) are responsive to their needs;
 - g. Base decisions on trade restrictions in cases of reported TAD on the recommendations of the relevant international standard-setting bodies, with specific consideration of zoning and compartmentalization;
 - h. Commit to timely and complete reporting of outbreaks of notifiable avian influenza (NAI) and or of related human disease to relevant international organizations;
 - i. Commit to timely sharing of virus isolates with international reference laboratories of relevant international organizations;
 - j. Develop pandemic preparedness plans for human health emergencies consistent with WHO recommendations;
 - k. Where WHO members lack complete preparedness plans for human health emergencies and there is a lack of available resources, cooperate in the implementation of regional plans in coordination with WHO regional offices;
 - l. Support research in the areas:
 - i. Epidemiology
 - ii. Vaccine and anti-viral drug development and delivery systems
 - iii. Risk management strategies
 - iv. Diagnostic tests
 - v. Socio-economic impacts of poultry systems restructuring options
 - vi. Basic research
 - vii. Evaluation of interventions to control avian influenza
 - viii. Role of wildlife and pigs in the spread of HPAI
 - m. Encourage domestic laboratories to join multinational and international lab networks to share AI virus isolates, data and expertise.
2. Encouraging the donor APEC Economies to:
- a. Increase and sustain coordination, cooperation and collaboration among their animal and human health communities, as well as their foreign affairs, trade and foreign aid sectors;
 - b. Increase and sustain coordination, cooperation and collaboration with relevant international and regional organizations, especially with regard to coordination of bilateral donor assistance in relation to human and animal health. In relation to

animal health, particular attention should be given to the Global Strategy for the Progressive Control of HPAI, prepared by FAO/OIE in collaboration with WHO;

- c. Encourage business/private sector, academia, and non-governmental organization involvement in prevention and response;
3. Congratulating FAO, WHO and OIE on the high level of cooperation, coordination and collaboration demonstrated in their response to this emergency, and encourage continued and expanded work in this area, particularly at the relevant economy level.