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Collection of Domestic Measures to Prevent, Control and Respond to Avian Influenza among APEC Member Economies

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Collection of Domestic Measures to Prevent, Control and Respond to Avian Influenza among APEC Member Economies

The highly pathogenic avian influenza virus type A/H5N1, has been spreading among bird populations across the globe since late 2003, with causing limited but continuing infection to humans. The potential emergence of a pandemic influenza virus grows as opportunities increase for changes in the avian virus, such as widespread contact between humans and diseased birds, that allow it to be easily transmitted from human to human. In order to prevent the emergence of a pandemic influenza virus and to mitigate the damage to the poultry industry and the livelihood of small farmers, it is crucial to take effective action to prevent and control avian influenza at its source.

In November 2005, Leaders of Asia Pacific Economic Cooperation (APEC) agreed on the "**APEC Initiative on Preparing for and Mitigating an Influenza Pandemic**." In this Initiative, APEC economies agreed to work collectively to "enhance capacity building in preventing and controlling a pandemic of avian origin at its source." Furthermore, in the APEC Action Plan agreed at the APEC Ministerial Meeting on Avian Influenza Pandemics in May 2006, Ministers agreed to "Promote adequate systems in each economy to encourage timely and complete reporting of disease and implementation of appropriate disease control measures," and to "Share reports on domestic measures to mitigate the negative effects of avian influenza."

For putting the Action Plan into practice, Japan and the US, co-sponsored by Canada, Indonesia and Viet Nam, jointly organised the 'APEC Capacity Building Seminar on Avian Influenza: Preventing AI at its Source and a Dialogue on Indemnity' in September 2006 in Hoi An, Viet Nam, which attracted more than 100 participants. The Seminar aimed to assist in building capacity to take effective domestic measures to prevent and control avian influenza, and contributed to helping APEC economies share useful information and best practices to do so.

In response to a call from Japan, as a follow-up action to the Seminar, 17 APEC member economies shared brief response of their domestic measures which is herewith compiled as “Collection of Domestic Measures to Prevent, Control and Respond Avian Influenza among APEC Member Economies”

We hope that this collection will contribute to supporting various activities to combat avian influenza within and outside of APEC region as a good reference.

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Domestic Measures Reports

Domestic Measures to Prevent Avian Influenza

Economy Australia

Measures	Avian influenza
Prevention against viruses' entrance into each economy	• Australia conducts import risk assessments on all products and materials potentially carrying any strains of Avian Influenza viruses that have potential to cause and mutate into Highly Pathogenic Avian Influenza (HPAI). • The *Quarantine Act 190*8 and its subordinate legislation, provide the legal basis for controlling the importation of animals and other goods with respect to preventing the entry, establishment and spread of pests and diseases. Quarantine officers at airports, seaports and international mail facilities are on high alert for all prohibited poultry products, focusing on passengers and products arriving from targeted high risk AI countries. • Australia has stringent quarantine measures in place to prevent the introduction of HPAI virus with animal and animal product imports. Currently no live birds or hatching eggs are permitted from countries with HPAI. Import conditions are currently in place for cooked chicken meat from Denmark, USA and Thailand, the product must be cooked according to strict time and core temperature requirements ranging from 74ºC for 165 minutes, up to 80ºC for 125 minutes. This will inactivate pathogens of concern including HPAI. All other avian derived imported products are treated to ensure inactivation of pathogens of concern including HPAI. In the event of human-to-human transmission, border measures would be put in place including positive pratique, thermal scanners, Health Declaration Cards (HDC), quarantine of people with influenza-like-illness and their contacts and temporary suspension of travel from some countries. • Australian Quarantine Inspection Service (AQIS) officers at airports and international mail centres have been on high alert for bird and poultry products since the first, isolated cases of avian influenza were reported in Asia in late 2003. Poultry meat and products are not allowed into Australia and are seized and destroyed by AQIS. All incoming international mail is

	also subject to quarantine intervention. Incoming international passengers baggage may be x-rayed, inspected or checked by detector dogs for quarantine risk items. • An early warning system for the surveillance of wildlife using the Australian Wildlife Health Network database is articulated in the National Animal Health Information Strategy and National Animal Health Laboratory Strategy, which identify issues on a range of zoonoses, including HPAI, and means of addressing the issues. • Australia's aid program together with direct links at agency level is helping build the capacity of developing countries in the Asia-Pacific region to detect and control AI, prevent transmission to humans, identify human cases of infection and facilitate rapid response to prevent potential adaptation and spread between humans. These measures support domestic efforts to prevent or delay virus entry into Australia.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)	• Australia uses the following guidelines to formulate the advice on import permit applications: o Physical containment and management practices as specified by the Australian/New Zealand Standards; o World Health Organization Biosafety Guidelines for Handling Avian Influenza A Viral Specimens; o WHO Biosafety Risk Assessment and Guidelines for the Production and Quality Control of Human Influenza Pandemic Vaccines; o WHO Laboratory Biosafety Manual and US Centers for Disease Control-Biosafety in Microbiological and Biomedical Laboratories. • Australia uses a partnership approach between the federal, state and territory governments and industry to develop national standards for the prevention of infection. The need for risk reduction measures at national, regional and individual farm level is recognized by the government and industry signatories to the Emergency Animal Disease Response Agreement (EADRA). • AQIS identifies the pests and diseases relevant to an import proposal, assesses the risks posed, and if those risks are unacceptable, specifies what measures should be taken to reduce those risks to an acceptable level. • Current government post-border activities include surveillance for AI,

				monitoring the health of wild birds, and improving biosecurity awareness at farm level and in groups such as hunters, small poultry holders and bird fanciers. • The chicken meat and egg industry in Australia have well developed biosecurity systems in place, which have been strengthened in recent years.
Measures in case infected poultry is found	Regulations	Case identification		• Diagnostic criteria are set out in the Australian Veterinary Emergency Plan (AUSVETPLAN). The criteria include clinical signs, pathological findings and laboratory testing. The Australian Animal Health laboratory (AAHL) is the national reference laboratory for AI. • Development of occupational health and safety (OH&S) guidelines for poultry and other bird workers involved in dealing with outbreak of HPAI. These guidelines provide comprehensive advice for these workers, including on hygiene, personal protective equipment and personal health monitoring to minimise human infection and assist containment of the disease in birds. • Australia contributes to case identification by providing an emergency rapid diagnostic service using state of the art laboratory diagnostic tests maintained under an ISO/IEC 17025 quality assurance system. • In the event of an ongoing disease situation Australia engages surge capacity diagnostic testing in support of response to spreading disease and surveillance in non-affected areas
		Reporting system	Summary	• Legislation mandates that suspected incidents must be reported by animal owners and managers, veterinarians and diagnostic laboratories to government authorities as soon as possible. The Consultative Committee on Emergency Animal Diseases (CCEAD) and the National Emergency Animal Disease Management Group (NMG) are the peak national agricultural bodies for reporting and decision making on significant incidents. • Electronic interconnectivity for direct communication with jurisdictions is under development.
			Measures in case not reported	• Persons who do not comply with reporting provisions under state and territory legislation are guilty of an offence. Penalties apply.
		Containment Measures	Summary	The agreed strategy, detailed in AUSVETPLAN, is to eradicate HPAI in the shortest possible period while limiting economic effects. A combination of

				strategies would be used including: • *stamping out* by destruction of all birds on infected premises (IPs) where there is clinical disease or evidence of active infection with HPAI virus, and the sanitary disposal of destroyed poultry and contaminated poultry products to remove the source of infection • *pre-emptive slaughter* of birds on other premises, depending on information derived from tracing, surveillance and study of the behaviour of the disease • *quarantine and movement controls* on poultry, poultry products and associated items in declared areas to prevent spread of infection • *decontamination* of facilities, products and associated items to eliminate the virus on IPs and to prevent spread in declared areas • *tracing and surveillance* to determine the source and extent of infection and to establish proof of freedom from the disease • *vaccination* may be considered as a tool to assist in eradication if stamping out is unlikely to be rapidly successful • *increased biosecurity* at poultry establishments • *a public awareness campaign* to promote cooperation from industry and the community, and • *protection of public health,* by requiring that personnel engaged in eradication activities be vaccinated, treated with antivirals (if appropriate) and wear protective clothing. • Australia's laboratory testing capability and surge capacity supports containment by providing the means to undertake surveillance and rapid exclusion diagnosis.
			Measures to ensure containing system	• The response to an outbreak of HPAI would be conducted under AUSVETPLAN and the EADRA. The EADRA describes the government-industry arrangements for emergency animal disease preparedness and response, including cost-sharing of eradication responses and the categorisation of diseases in terms of the proportion of costs to be borne by government and industry respectively when a disease outbreak occurs • The powers of Ministers and government officials to implement response measures are contained in Australian Government and state and territory government legislation.

<table>
<tr><td></td><td></td><td></td><td></td><td colspan="3">• An extensive R & D program ensures new laboratory technologies are incorporated into testing capability as they become available and are validated as fit for the purpose of testing.
• The Australian Animal Health Laboratory (AAHL) is recognized as a World Animal Health Organisation (OIE) Reference Laboratory for AI, and collaborates with regional countries affected by AI to use techniques of molecular epidemiology to monitor for changes in the strains of virus. This knowledge underpins continued reassessment of diagnostic tests for appropriate specificity and sensitivity.</td></tr>
<tr><td rowspan="3"></td><td colspan="3" rowspan="2">Compensation
(National contingency plan)</td><td>Case</td><td>Rate</td><td>Funded by</td></tr>
<tr><td>Stamping out (culling) of birds on IPs and high risk premises</td><td>Prevailing market rate at the time the bird was destroyed or died of the disease</td><td>Under EADRA, HPAI viruses with potential human health implications are in Category 2, meaning that governments would pay 80% of eradication costs (including compensation) and the poultry industry would pay the remaining 20%. HPAI viruses that are not of human health concern and LPAI viruses (H5 and H7 subtypes only) are in Category 3, meaning compensation will be shared 50 per cent by governments and 50 per cent by industry.</td></tr>
<tr><td colspan="3">Mutual Fund</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Risk communication, including public awareness programs / Measures to communicate between central government and local government</td><td colspan="3">• The Australian Government together with state and territory governments and industry have targeted communications efforts at identified groups such as the commercial poultry industry, owners of backyard poultry flocks, bird fanciers and small producers. Australia has commenced an AI awareness campaign to promote good biosecurity practices.
• A Primary Industries National Communications Network (PINCN) has been</td></tr>
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	established that comprises a whole of government input, complemented by the inclusion of relevant agricultural industries to enable robust and consistent national communications in the event of an animal disease emergency. • Coordination between governments on animal health matters is achieved through the Primary Industries Ministerial Council (PIMC) framework and through the EADRA. • Coordination of national and sub-national human health measures occurs via the Australian Health Protection Committee (AHPC) and the Communicable Disease Network of Australia (CDNA) • **A Bird Flu Brochure** has been developed to provide information on the human health risks of avian influenza and is available at http://www.health.gov.au/internet/wcms/Publishing.nsf/Content/ohp-birdflu-broch.htm • The National Action Plan for Human Influenza Pandemic outlines how Commonwealth, state, territory and local governments will work together to protect Australia against the threat of an influenza pandemic and support the Australian community should one occur. The plan outlines governance structures between the levels of government and a communications framework in the event of an influenza pandemic. The plan is publicly available at www.dpmc.gov.au/publications/pandemic/index.htm • AAHL maintains a website for dissemination of information on AI. Staff regularly provide information to government agencies and to the press.
Training veterinary worker	• A National Emergency Disease Training Program provides on-going, proactive education and training to veterinarians, producers and other stakeholders in the Australian livestock industries. • OH&S guidelines for poultry and other bird workers involved in dealing with outbreak of HPAI are being developed. These guidelines provide comprehensive advice for these workers, including information on hygiene, personal protective equipment and personal health monitoring to minimize human infection and assist containment of the disease in birds. • Training material and courses have been developed to improve the quality of the veterinary services for rapid disease recognition.

Information sharing among countries/regions in avian influenza outbreak	• The Australian Government, through AusAID, contributes to capacity building in the Asia-Pacific region through programs to strengthen animal and public health sectors and emergency planning and response capability in both affected and unaffected countries. Part of Australia's funding commitment is specifically for APEC-related activities, including the 2006 simulation exercise that tested communication protocols amongst APEC economies. Australian funding through the APEC Support Fund provides opportunities for economies to share their experiences in managing avian influenza and similar threats.
Vaccination policy	• Vaccination may be considered as part of the emergency response if disease spread is unable to be rapidly controlled by stamping-out and other measures. Vaccine use will be limited to tightly controlled circumstances and restrictions will be placed on vaccinated birds.

Domestic Measures to Prevent Avian Influenza

Economy Brunei

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• Import of poultry and its products are temporarily suspended from countries affected by avian influenza. • Accreditation of foreign farms applying for export of poultry and poultry products to Brunei Darussalam • Quarantine measures and strict border inspections
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Any poultry farms are requested to comply with Farm Hygiene Guidelines and Good Animal Husbandry Practices. • Simulation of stamping-out procedures for HPAI preparedness have been conducted by Department of Agriculture, Ministry of Industry and Primary Resources in collaboration with Ministry of Health and other government agencies. • Stockpile of personnel protective equipment (protective clothing, masks, goggles, groves) by Department of Agriculture. • Closure of live poultry markets in the country to prevent mixing of bird species and exposure of humans to live poultry. • Public awareness campaign in an effort to disseminate relevant information to poultry farmers, processors, backyard farm owners and public
Measures in case infected poultry is found	Regulations	Case identification		Monitoring of AI has been implemented at poultry and backyard farms registered to the Department of Agriculture. In case that AI is suspected by information such as clinical signs, or by the monitoring, the Department of Agriculture shall conduct diagnostic tests. Consequently, when influenza virus is isolated, the Department will send samples of the case to the referral laboratory (Australia) for reconfirmation.
		Reporting system	Summary	As stipulated in the Infectious Disease Order and HPAI Manual of Department of Agriculture.
			Measures in case not	As stipulated in the Infectious Disease Order and HPAI Manual of Department of Agriculture.

			reported			
		Containment Measures	Summary	As stipulated in the Infectious Disease Order and HPAI Manual of Department of Agriculture.		
			Measures to ensure containing system	As stipulated in the Infectious Disease Order and HPAI Manual of Department of Agriculture.		
	Compensation (National contingency plan)			Case	Rate	Funded by
				Affected poultry killed in accordance with the order by the Minister of Primary Industry and Resources.	50% of market price	National Government
				Suspected poultry culled in accordance with procedures of HPAI manual		
	Mutual Fund				50% of market price value will be compensated by the government. The same rate for all species of poultry.	
Risk communication, including public awareness programs/Measures to communicate between central government and local government				National Committee for Pandemic Influenza and National Task Force For Zoonotic Diseases including avian influenza was established in 2004. All government ministries and departments are members of both committees as means of information dissemination and transparency. Public awareness campaign to all poultry farmers, poultry backyard owners and the general public.		

Training veterinary worker	Training of veterinary personnel by attending workshops, seminars and on-the-job training on surveillance, containment measures, stamping-out and diagnostic techniques organized by regional and international organizations.
Information sharing among countries/regions in avian influenza outbreak	Any outbreak of avian influenza will be reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza according to the OIE Terrestrial Code. Brunei Darusslam is obliged to report to the ASEAN Regional for Animal Health Information System (ARAHIS) on disease status and production information.
Vaccination policy	No vaccination policy.

Domestic Measures to Prevent Avian Influenza

Economy Canada

http://www.inspection.gc.ca/english/anima/heasan/disemala/avflu/avflue.shtml

Measures			Avian influenza
Prevention against viruses' entrance into each economy			• No imports without a permit issued by the Canadian Food Inspection Agency which specifies requirements for inspection, testing and isolation of all imported birds. • Imports of birds and bird products from countries / regions with HPAI prohibited. • Wild bird surveillance program for early warning
Prevention against infection (Biosecurity standards of husbandry practices, and so on)			• On Farm Food Safety programs for poultry set standards for Biosecurity. • Currently, developing national Biosecurity standards for the commercial poultry industry. • Desk-top and hands-on exercises for NAI preparedness have been conducted by the federal government, provincial governments and commercial poultry industry groups. • A stockpile of personnel protective equipment (protective clothing, masks, goggles, gloves) and disinfectant available locally for 3 day period and centrally for a 1000 responders for a 6 week period. • A stockpile of antivirals for emergency responders.
Measures in case infected poultry is found	Regulations	Case identification	**Health of Animals Act** **Notification by owner, etc.** • 5. (1) A person who owns or has the possession, care or control of an animal shall notify the nearest veterinary inspector of the presence of a reportable disease or toxic substance, or any fact indicating its presence, in or around the animal, immediately after the person becomes aware of the presence or fact. **Notification by veterinarian, etc.** • (2) Immediately after a person who is a veterinarian or who analyses animal

				specimens suspects that an animal is affected or contaminated by a reportable disease or toxic substance, the person shall so notify a veterinary inspector.. • A network of provincial and university labs has been formed to allow rapid diagnosis. • Confirmation of virus at the Canadian OIE Reference laboratory in Winnipeg, Manitoba.
		Reporting system	Summary	• All suspected cases of AI are required by regulation to be reported to federal authorities.
			Measures in case not reported	• General offence 65. (1) Every person who contravenes any provision of this Act, other than section 15, or the regulations or who refuses or neglects to perform any duty imposed by or under the Act or the regulations is guilty of (a) an offence punishable on summary conviction and liable to a fine not exceeding fifty thousand dollars or to imprisonment for a term not exceeding six months, or to both; or (b) an indictable offence and liable to a fine not exceeding two hundred and fifty thousand dollars or to imprisonment for a term not exceeding two years, or to both.
		Containment Measures	Summary	• Stamping out and disease containment according to CFIA's Animal Health Functional Plan and Notifiable Avian Influenza Hazard Specific (NAIHS) Plan
			Measures to ensure containing system	• Ministerial Declaration of a Control Area – Section 27 Health of Animals Act. **Control Areas** **27.** (1) Where the Minister believes that a disease or toxic substance exists in an area, the Minister may declare the area to be a control area, describe the area and identify the disease or toxic substance that is believed to exist there. Measures (2) The Minister may take all reasonable measures consistent with public safety to

				remedy any dangerous condition or mitigate any danger to life, health, property or the environment that results, or may reasonably be expected to result, from the existence of a disease or toxic substance in a control area. <u>Regulations</u> (3) The Minister may make regulations for the purposes of controlling or eliminating diseases or toxic substances in a control area and of preventing their spread, including regulations (*a*) prohibiting or regulating the movement of persons, animals or things, including conveyances, within, into or out of a control area; (*b*) providing for the establishment of zones within a control area and varying measures of control for each zone; and (*c*) authorizing the disposal or treatment of animals or other things that are or have been in a control area. • Establish 3 and 10 km zones. • Movement restrictions for birds, bird products and by-products according to NAIHS Plan. • Pre-emptive cull of commercial poultry premises within 1 km of infected premises. • Surveillance for 21 days in 10 km zones following last infected premises.		
	Compensation (National contingency plan)			Case	Rate	Funded by
				Federal order to destroy animals and / or things	<u>Compensation to owners of animals</u> **<u>51.</u>** (1) The Minister may order compensation to be paid from the Consolidated Revenue Fund to the owner of an	Federal Government

			animal that is (*a*) destroyed under this Act or is required by an inspector or officer to be destroyed under this Act and dies after the requirement is imposed but before being destroyed; (*b*) injured in the course of being tested, treated or identified under this Act by an inspector or officer and dies, or is required to be destroyed, as a result of the injury; or (*c*) reserved for experimentation under paragraph 13(2)(*a*). <u>Amount of compensation</u> (2) Subject to subsections (3) and (4), the amount of compensation shall be (*a*) the market value, as determined by the Minister, that the animal would have had at the time of its	

			evaluation by the Minister if it had not been required to be destroyed minus (*b*) the value of its carcass, as determined by the Minister. <u>Maximum value</u> (3) The value mentioned in paragraph (2)(*a*) shall not exceed any maximum amount established with respect to the animal by or under the regulations. <u>Additional compensation</u> (4) In addition to the amount calculated under subsection (2), compensation may include such costs related to the disposal of the animal as are permitted by the regulations. The Minister of Agriculture and Agri-Food, pursuant to paragraphs 55(*b*)[a] and (*c*)	

			of the *Health of Animals Act*[b], hereby makes the annexed *Compensation for Destroyed Animals Regulations*.[a] S.C. 1997, c. 6, s. 71 [b] S.C. 1990, c. 21 Ottawa, June 8, 2000 Lyle Vanclief Minister of Agriculture and Agri-food COMPENSATION FOR DESTROYED ANIMALS REGULATIONS INTERPRETATION **1.** In these Regulations, "Act" means the *Health of Animals Act*. MAXIMUM AMOUNTS **2.** For the purpose of subsection 51(3) of the Act, the amount that is established as the maximum amount with respect to an animal that is destroyed or required to be	

			destroyed under subsection 48(1) of the Act is (*a*) if the animal is set out or included in column 1 of an item of the schedule, the amount set out in column 3 of that item; and (*b*) in any other case, $30.	
	Mutual Fund		N/A	
Risk communication, including public awareness programs / Measures to communicate between central government and local government		• Prepared communication messages for the public related to events prior to and during a NAI event. • Formal communication plan between federal government agencies (Canadian Food Inspection Agency, Public Safety Canada and Public Health Agency of Canada), provincial/territorial governments and industry.		
Training veterinary worker		• Foreign Animal Disease recognition courses at the National Centre for Animal Diseases (NC FAD), Winnipeg • Incident Command training • Training in various aspects of emergency animal disease response such as information management, biocontainment, sample submission, destruction, disposal and cleaning and decontamination procedures. • Exercises and workshops. • Experience from domestic outbreak and international assistance when requested. • Creation of a National Veterinary Reserve of privately employed veterinarians		
Information sharing among countries/regions in avian influenza outbreak		• Avian influenza case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza		

	according to the OIE Terrestrial Animal Health Code.
Vaccination policy	• Canada has stockpiled 10 million doses of H5 and H7 avian vaccine as a contingency. • A decision to deploy the vaccine will be made after examination of the information associated with a disease outbreak. • The primary disease control measures will be traditional stamping out.

Domestic Measures to Prevent Avian Influenza

Economy Chile

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• Domestic Animal Infectious Disease Control Law stipulates that no person shall import any causative agent of highly pathogenic avian influenza (AI). • Poultry and its products are suspended to import from countries which occur an H5 or H7 strain type avian influenza case among poultry. • Prohibition of importing birds other than poultry.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Any poultry farms are requested to comply with "Biosecurity standards of husbandry practices" according to Domestic Animal Infectious Disease Control Law. • "Biosecurity standards of husbandry practices" includes: ➢ Aspects about localization, buildings and entry control procedures. ➢ It should be ensured that poultry in farms be separated from wild birds/animals by covering gateways/windows of the farms with net or other equipments. ➢ Water for poultry in farms should be sterilized or with disinfectant. ➢ Disinfection practices should be thoroughly implemented. (cf. washing area with disinfectant should be prepared at gateways of poultry farms/houses.). ➢ Management of litters, dead birds, food, eggs, feces. Stockpile of personnel protective equipment (protective clothing, masks, goggles, groves) by Central, regional and Local Level.
Measures in case infected poultry is found	Regulations	Case identification		Monitoring of AI has been implemented at grandparents stocks, poultry breeders, broilers, turkeys, layer farms, ostriches, pet stores and backyard poultry by regionals and/or locals units by Agricultural and Livestock Service (SAG). In case that AI case is suspected by information such as clinical signs, or by the monitoring, SAG regional and/or local unit shall conduct diagnostic tests. The samples will are send to national veterinary Lab. The analysis included all test mentioned by OIE.
		Reporting system	Summary	Domestic Animal Infectious Disease Control Law stipulates the following; (1) In case where a domestic poultry is found to have become an affected poultry (domestic poultry that has affected by AI) or a suspected poultry (domestic poultry

				which is suspected to be an affected poultry), the veterinarian who has diagnosed the said domestic poultry or has conducted post-mortem inspection on the carcass thereof (as for domestic poultry or its carcass that has not been diagnosed or received post-mortem inspection by veterinarian, the owner) shall submit a report thereon to the Regional and/or Local Unit of the province without delay. In 24 hours an Official Veterinarian will go to the farm, will take samples and will applied a prediagnosis quarantine.
			Measures in case not reported	Domestic Animal Infectious Disease Control Law stipulates that any veterinarian and owner who fails to submit the said report will can to be subjected to legal action.
		Containment Measures	Summary	Domestic Animal Infectious Disease Control Law regulates the following; • The owner of affected poultry or suspected poultry shall isolate the poultry concerned immediately. • The Head of SAG Regional Unit may order owner of affected or suspected poultry to kill the said domestic poultry by setting time limit, if it is necessary to do so for preventing the spread of AI. • Owner of carcass of affected or suspected poultry shall incinerate or bury the carcass concerned immediately pursuant to the animal health inspector in accordance with the specific standards. Carcass of affected or suspected poultry shall not be incinerated or buried until the said direction. Carcass of affected or suspected poultry that shall be incinerated or buried in accordance with the first sentence of this paragraph shall not be moved to other place, damaged nor dissected. • Owner of articles contaminated or likely to have been contaminated with a causative agent of AI (in case the articles concerned are in the course of transportation by a forwarding agent by means of railway, tramway, automobile, ship or aircraft, the owner or the forwarding agent thereof) shall incinerate, bury or disinfect the articles concerned immediately under the direction as given by animal health inspector in accordance with the specific standards. • In accordance with direction based on the stipulated standard, owner shall disinfect poultry infected with AI and premise, ship, vehicles and facilities etc. found dead body. • Head of SAG Regional Unit may, by enacting by-laws, prohibit or restrict the movement of certain species of domestic animals, its carcasses or articles which

				is liable to disseminate the causative agent of AI within the region, their entry into the region or transit beyond the region boundaries, if it is necessary to do so for preventing the spread of AI.		
			Measures to ensure containing system	Domestic Animal Infectious Disease Control Law stipulates that any veterinarian and owner who fails to ensure containing system will can to be subjected to legal action.		
	Compensation (National contingency plan)			Case	Rate	Funded by
				In Chile don´t exist a compensation program for to kill poultry by avian influenza.		
	Mutual Fund			In Chile don´t exist a compensation program for to kill poultry by avian influenza.		
Risk communication, including public awareness programs / Measures to communicate between central government and local government				In response to AI outbreaks including in foreign countries/zones, Central Government issues Notice for AI preparedness to SAG Regional and Local Units. SAG Central Unit shall convey the Notice to any related persons/agencies such as farmers, agricultural agencies, related industries.		
Training veterinary worker				In order to fulfill actions for prevention and control of infectious animal diseases including avian influenza pursuant to Domestic Animal Infectious Disease Control Law, animal health inspectors are assigned from veterinarians etc who are SAG officials in all over Chile.		
Information sharing among countries/regions in avian influenza outbreak				Avian influenza case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza according to the OIE Terrestrial Code.		
Vaccination policy				Vaccination prohibited in Chile. Chile does not have a Vaccine stock for any avian influenza virus.		

Domestic Measures to Prevent Avian Influenza

Economy China

Measures			Avian Influenza
Prevention against viruses' entrance into each economy			According to the relevant regulations of "Law on Inspection of Exit and Entry of Animal and Plant in PRC" 1. Prohibit importing birds and their products from AI infected countries; 2. Prohibit carrying birds and their products from AI infected countries; 3. Destroy all birds and their products caught from smuggling birds and their products from AI infected countries; 4. Seal up all birds and products from AI infected countries on the board of international ships, planes and trains via China or stop in China, and dispose all wastes, sewage in a bio-safety way under the inspection of relevant authorities. Domestic Frontier Quarantine Law stipulates that no person shall import any causative agent of highly pathogenic avian influenza (HPAI). Poultry and its products are suspended to import from countries which occur an H5 or H7 strain type avian influenza case among poultry. Disinfection is performed for persons/vehicles from AI occurrence countries at air/seaports.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)			1. According to the regulation of "Management Methods of Animal Epidemic Prevention Condition Auditing": 1) Animal premises should meet animal epidemic prevention conditions stipulated in the Law, and the "Certification of Animal Epidemic Prevention " should be issued after the auditing and approving; 2) The choice of sites, overall arrangement, design, building, facilities and appliances for the animal premises should be met the animal epidemic prevention requirements; 3) Having specific persons and proper systems for animal epidemic prevention; 4) Staffs for animal feeding, epidemic prevention and disease diagnose have no zoonosis. 2. all poultry should be vaccinated by permissive vaccines.
Measures in case infected poultry is found	Regulations		According to the regulations of "Technological Standards of HPAI": 1. Veterinarians should be dispatched to diagnose on-spot after reception of suspect cases reported by animal epidemic prevention inspection institutes, and can apply for diagnosis

		Case identification	assistance from provincial relevant institutes if necessary and should provide primary diagnosis; 2. Samples should be collected for detection by provincial animal epidemic prevention inspection institutes if any HPAI cases are suspected. For unvaccinated poultry, serological test is undertaken by applying AGID and HI (AGID is not suitable for water fowl.); and for the vaccinated poultry, etiological test should be undertaken by applying RT-PCR. If the results of the tests are positive then the cases are conformed as HPAI; 3. For the cases suspected HPAI can't be confirmed in the provincial animal epidemic prevention inspection institutes, stringent isolation and blockage measures should be taken and specimens should be sent to National AI Reference Laboratory or laboratories approved by State Department veterinary administrative departments for etiological tests and then confirmed.	
		Reporting system	summary	According to the regulations of "Technological Standards of HPA I": 1. Any sections or persons should report to local animal epidemic prevention inspection institutes if infected poultry or suspect HPAI poultry are found; 2. Local animal epidemic prevention inspection institutes should handle the cases after receiving the report according to "Law on Animal Epidemic Prevention in PRC "and "National Contingency Plan for HPAI".
			Measures in case not reported	"Law on Animal Epidemic Prevention in PRC" and "Major Animal Disease Emergency Regulation" stipulated: animal epidemic prevention institutes should give warning and amercement of 2,000 to 5,000 yuan RMB to any sections or persons for concealing, reporting, giving false reporting or hindering other peoples reporting; and give administrative punishments to persons directly in charge of the disease reporting; if one act constitutes a crime, he shall be investigated for criminal responsibility according to law;
		Containment Measures	summary	"Major Animal Disease Emergency Regulation " and "National Contingency Plan for HPAI" stipulated: 1. Veterinary authorities above county levels should identify infected points, infected areas and threatened areas and investigate original disease sources; 2. Infected points are infected premises or infected nature villages with backyard poultry; infected areas are areas within 3km radium around infected points and threatened areas are areas with 5 km radium around infected areas;

				3. Blockage should be conducted in the infected areas, poultry in infected points and infected areas should be culled and destroyed in a bio-safety way, poultry should be vaccinated emergently in threatened areas and surveillance should be conducted fro susceptible animals, close all poultry and their products trade markets within 10km around infected areas and threatened areas, disinfection should be conducted in infected points, infected areas and threatened areas; 4. Blockade should be released after 21 days surveillance with result of no new cases emerging after handling of all poultry and their products in infected areas according to the regulations.
			Measures to ensure containing system	"The Regulation on Emergent Response to Major Animal Diseases" specifies that 1. The people's government at this level or the related authorities of the people's government at the upper level shall give order to immediately rectify, issue notice to criticize, or give warning to the competent veterinary departments and their subordinating animal epidemic prevention supervision institutions, who do not implement the Regulation; The main responsibilities, the persons in charge or other responsibilities shall be given administrative penalty from a big demerit, record degradation, suspension to discharging from post; Those who make crimes shall be investigated for their criminal responsibility according to the law; 2. The individuals who do not implement the regulation shall be give a warning, by the animal epidemic prevention supervision institutions, and be fined for up to 5000 yuan RMB; Those who make crimes shall be investigated for their criminal responsibility according to the law.
	Compensation (National contingency plan)		Items	Funded by
			1. 10 yuan is compensated for every chicken, duck or goose in average, the find is born both by central and local financial departments. The central finance shall bear 20% in the east parts(of china). 50% in the central parts and 80% in the west parts of the required fund. (In the most poverty counties, the ration will be increased by 10%.) 2. For affected company, the income tax is exempted from,	Central government finance Local government finance

		the value-added tax is returned while taken, the export tax return is fulfilled. And the local taxes are partially reduced and exempted from accordingly. 3. The poultry breeding and processing enterprises and farmers are exempted partially from the governmental fund, and partially from the administrative fund collection. The exit and entry inspection and quarantine fee is free for the exporting poultry and its product. 4. The financial organs will give necessary floating fund support. 5. The farmers are organized to develop production for self-help. The essential living is guaranteed for the related premises, persons and the peasant, workers in difficultly are given relieve.	
	Mutual fund	1. Construction of Infrastructure for Animal Epidemic Prevention Strengthened. In order to improve the infrastructure for animal epidemic prevention and to raise animal disease prevention and control capacity, the State invested 1.1926 billion yuan RMB in 2004, 796.87 million yuan RMB in 2005. 2. In 2005, the Central Finance Department and the local finance departments earmarked RMB 1593.55 million yuan and 1055.13 million yuan RMB from the local finance departments. On Nov. 2, 2005, the Chinese State Council decided that the Central Finance Department earmarked 2 billion yuan RMB of total budget for prevention and control of AI funds. Meanwhile, some provinces and cities augmented the investment and established the funds earmarked for prevention and control of AI. 3. Investment for Scientific Research and Disease Surveillance. In the year 2004and 2005, the Chinese Government allocated more than 200 million yuan RMB for the research on efficacious vaccines, diagnostic reagents and the virus mutation rules regarding AI, foot and mouth disease and other major animal diseases. Recombinant inactivated vaccine against AI and recombinant chicken pox vector live vaccine have been developed. These provide timely and effective technical support for the prevention and control of AI and other major animal diseases. 99 and 101 million yuan RMB was invested in 2004 and 2005 respectively for animal disease pathogenic surveillance, epidemiological survey and summarized analysis of epidemic data, and tracing, epidemiological survey and prevention for exotic and newly-emerged animal diseases, providing scientific evidence	

		for early detection, prompt diagnosis, bio-safety disposal and effective control of animal diseases.
Risk communication, including public awareness programs /Measures to communication between central government and local government		1. Release termly the information of animal disease, animal disease surveillance results and related documents on <Official Veterinary Bulletin>. Release emergent animal disease news through mass media and internet if there outbreak animal disease. 2. MOA edited and free distributed books and leaflets, such as < Animal Health in China>(2004-2005), <Poultry Avian Influenza in China> and < Current Situation of Prevention and Control of Highly Pathogenic Avian Influenza (HPAI) in P.R.China > in Chinese and English, to related organizations and representatives to publicize the situation, progressive and experience of prevention and control of HPAI. 3. China have handed out 7 million leaflets, 600,000 posters and 200,000 pamphlets of HPAI control knowledge, which have been distributed to village households free of charge. Besides these, we publicized the control and prevention policy and measures through mass media and internet to improve public awareness and insist on participatory approach. 4. MOH has established a multi-sector cooperation system with MOA and other ministries. All the ministries work together closely under the leadership of the National Commander Center for AI containment, which organization will do risk communication according to related laws. 5. MOH has set up PHE response decision-making system covering central and provincial health authorities.
Training veterinary work		1. National AI Reference Laboratory is responsible for technological guides and training for provincial veterinary laboratories; the latter are responsible for technological guides and training for civic and county laboratories. 2. Funds from FAO and World Bank were used for systematic training for grass-root veterinarians and farmers in surveillance technology and bio-safety.
Information sharing among countries/regions in avian influenza outbreak		1. Release epidemic information, including animal disease and surveillance results, timely to the public, and report to relevant international organizations 2. Joint four-party of MOA and MOH of PRC, FAO and WHO meeting system was established; 3. AI outbreaks are notified to FAO and OIE in the formulation of OIE; 4. Timely communication and technological exchange with FAO and WHO representatives in China in AI situation and control measures; 5. FAO and WHO specialists to investigate in infected areas were received and arranged.

	6. Avian influenza human case is reported to the World Health Organization immediately after it is determined of confirmed or suspected case.
Vaccination policy	AI vaccination policy is implemented in China compulsory. All poultry in the country should be vaccinated compulsory. With approval of the provincial veterinary authorities, vaccination can be exempted when the exporting enterprises perform effective prevention and control measures and have to meet the relevant requirement of the importing country or the poultry for research and vaccine production. Central finance affords the compulsory vaccination.

Domestic Measures to Prevent Avian Influenza

Economy Hong Kong Special Administration Region (HKSAR)

Measures	Avian influenza
Prevention against viruses' entrance into each economy	• The Public Health (Animals and Birds) Regulations (Cap. 139A) has provisions to prevent the introduction of infectious animal and bird disease to HKSAR. • Poultry imported to HKSAR must be accompanied by a valid health certificate issued by a competent veterinary authority in that place certifying that the birds have no clinical signs of disease, have not been kept in premises where there is serological or virological evidence of H5 avian influenza (AI) infection having occurred within the 180 days immediately preceding the day on which the health certificate was issued, and have been segregated from other birds and tested negative for H5 avian influenza within the 5 days before the health certificate being issued. • Random sample testing for H5 virus are conducted at border and airport for imported birds and test results on these samples have to be confirmed negative before birds could be released.
Prevention against infection (Bio-security standards of husbandry practices, and so on)	• All poultry farms must be licensed according to Hong Kong law. The license is subject to terms and conditions relating to the keeping of poultry and public health or environmental protection. • License conditions include no direct sale to market, no waterfowl and other animal on farm, no birds which have been in a wholesale or retail market are allowed to enter the licensed premises, no movement of chickens, eggs, or feed between farms is allowed without prior written permission, chicken must be tested for H5 antibody and other appropriate tests within 5 days prior to sale, only disinfected cages under the control of government could be used to transport chicken for sale. • Bio-security measures have been imposed as part of the conditions and they include the demarcation of production area and non production area, human movement control, vehicle movement control, control of movement of materials, installation of bird-proof facilities, application of the batch in batch out system, report of unusual mortality, protection of water tanks, wells and

				containers of poultry drinking water, proper disposal of carcass etc. • Universal vaccination against H5 infection has been imposed since June 2003. All flocks must be sampled and confirmed to have the required H5 antibody level before they could be released to market. • Legislation has been in place to ban household keeping of poultry since 13 Feb 2006. • Round–the-clock dead and sick bird collection service has been offered to public and birds so collected will be tested for H5 infection as part of our wild bird AI surveillance program. • The administration has arranged annual training for staff to conduct poultry culling operation and interdepartmental drill on handling an avian influenza outbreak situation. • The Agriculture, Fisheries and Conservation Department (AFCD) has stockpile of personnel protective equipment and culling materials for universal culling operation if any outbreak occurred. • The Department of Health has stockpile of prophylactic medicine for any avian influenza outbreak occurred in human.
Measures in case infected poultry is found	Regulations Cap139 Public Health (Animals and Birds) Regulations	Case identification		Swabs samples will be collected from suspected sick and dead birds. The samples will be tested by RT-PCR for H5 genome first and confirmed by virus isolation through egg inoculation.
		Reporting system	Summary	• All poultry farms are visited at least once every 5-7 days and samples are taken from sick and dead birds for H5 RT-PCR tests conducted by the Tai Lung Veterinary Laboratory if found. • Farmers are also required to report unusual mortality and submit carcass for disease investigation. • If any sample tested positive for H5 in RT-PCR test, the farm concerned will be put under quarantine and the flock will be culled. The sample will be subject to virus isolation procedure at the Tai Lung Veterinary Laboratory. • The AFCD will report the suspect H5 infection case to the Health, Welfare and Food Bureau on the day of RT-PCR test conducted.

			Measures in case not reported	• The Public Health (Animals and Birds) Regulations stipulates that any person who keeps any animals or birds affected with, or suspected of being affected with, disease shall with all practicable speed notify the fact about the animal or bird being so affected or suspected to the police officer, or the police area where such animal or bird is in, or to a health inspector.		
		Contain-ment Measures	Summary	• In case a H5 infection case was suspected, the farm concerned will be put under quarantine and all birds on farm will be culled. • When there is confirmation of HPAI outbreaks in the environment of or among poultry population in retail markets, wholesale markets or farms in Hong Kong due to a strain with known human health impact, under the current contingency plan for avian influenza outbreak, the Director of Agriculture, Fisheries and Conservation Department (AFCD) will declare Hong Kong an infected place and order the culling of live poultry in Hong Kong.		
			Measures to ensure containing system	Any person who acts in contravention of the Public Health (Animals and Birds) Regulations shall be liable on summary conviction to a fine and to suffer any forfeiture of the poultry.		
	Compensation (National contingency plan)			Case	Rate	Funded by
				Affected or suspected poultry culled by order of the Director of AFCD	Appraised value of the poultry before they became affected	Government of HKSAR
	Mutual Fund			N/A	N/A	N/A
Risk communication, including public awareness programs / Measures to communicate between central government and local government				A disease notification system has been in place as communication channel between the Mainland and HKSAR for any disease outbreak in the Mainland or HKSAR.		
Training veterinary worker				The administration has arranged annual training for staff to conduct poultry culling operation and interdepartmental drill on handling avian influenza outbreak.		

Information sharing among countries/regions in avian influenza outbreak	Avian influenza case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza according to the OIE Terrestrial Code.
Vaccination policy	All chicken farmers must vaccinate their birds against H5 infection. Only birds confirmed to have the required level of H5 antibody would be released to the market.

Domestic Measures to Prevent Avian Influenza

Economy Japan

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• Domestic Animal Infectious Disease Control Law stipulates that no person shall import any causative agent of highly pathogenic avian influenza (AI). • Poultry and its products are suspended to import from countries which occur an H5 or H7 strain type avian influenza case among poultry. • Disinfection is performed for persons/vehicles from AI occurrence countries at air/seaports.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Any poultry farms are requested to comply with "Biosecurity standards of husbandry practices on highly pathogenic avian influenza" according to Domestic Animal Infectious Disease Control Law. • "Biosecurity standards of husbandry practices on highly avian influenza" includes: ➢ It should be ensured that poultry in farms be separated from wild birds/animals by covering gateways/windows of the farms with net or other equipments. ➢ Water for poultry in farms should be sterilized or with disinfectant. ➢ Disinfection practices should be thoroughly implemented. (cf. washing area with disinfectant should be prepared at gateways of poultry farms/houses.) • Desk-top exercises etc. for HPAI preparedness have been conducted by Central Government and Prefectural Governments. • Stockpile of personnel protective equipment (protective clothing, masks, goggles, groves) by Central and Prefectural Government
Measures in case infected poultry is found	Regulations	Case identification		Monitoring of AI has been implemented at layer farms holding more than 1,000 layers by prefectural and/or city government. In case that AI case is suspected by information such as clinical signs, or by the monitoring, prefectural and/or city government shall conduct diagnostic tests. Consequently, when influenza virus is isolated, the National Institute of Animal Health shall test/analyze the samples to determine diagnosis of the case.
		Reporting system	Summary	Domestic Animal Infectious Disease Control Law stipulates the following; (1) In case where a domestic poultry is found to have become an affected poultry (domestic poultry that has affected by AI) or a suspected poultry (domestic poultry which

				is suspected to be an affected poultry), the veterinarian who has diagnosed the said domestic poultry or has conducted post-mortem inspection on the carcass thereof (as for domestic poultry or its carcass that has not been diagnosed or received post-mortem inspection by veterinarian, the owner) shall submit a report thereon to the governor of the prefecture without delay. (2) As for a domestic poultry in the course of transportation by a forwarding agent by means of railway, tramway, automobile, ship or aircraft, the forwarding agent shall submit the report that must be done primarily by owner of domestic poultry concerned, except for in cases where the owner is able to submit the report without delay.
			Measures in case not reported	Domestic Animal Infectious Disease Control Law stipulates that any veterinarian and owner who fails to submit the said report shall be imprisoned not more than 3 years or fined not exceeding one million yen.
		Containment Measures	Summary	Domestic Animal Infectious Disease Control Law regulates the following; • The owner of affected poultry or suspected poultry shall isolate the poultry concerned immediately. • The governor of prefecture may order owner of affected or suspected poultry to kill the said domestic poultry by setting time limit, if it is necessary to do so for preventing the spread of AI. • Owner of carcass of affected or suspected poultry shall incinerate or bury the carcass concerned immediately pursuant to the direction of prefectural animal health inspector in accordance with the specific standards. Carcass of affected or suspected poultry shall not be incinerated or buried until the said direction. Carcass of affected or suspected poultry that shall be incinerated or buried in accordance with the first sentence of this paragraph shall not be moved to other place, damaged nor dissected. • Owner of articles contaminated or likely to have been contaminated with a causative agent of AI (in case the articles concerned are in the course of transportation by a forwarding agent by means of railway, tramway, automobile, ship or aircraft, the owner or the forwarding agent thereof) shall incinerate, bury or disinfect the articles concerned immediately under the direction as given by prefectural animal health inspector in accordance with the specific standards. • In accordance with direction based on the stipulated standard, owner shall disinfect poultry infected with AI and premise, ship, vehicles and facilities etc. found dead body. • No person shall dig up the land within 3 years in which carcass or article contaminated or likely to be contaminated with a causative agent of AI was buried, in accordance

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<tr><td></td><td></td><td></td><td></td><td colspan="3">with the preceding two paragraphs.
• Governor of prefecture may, by enacting by-laws, prohibit or restrict the movement of certain species of domestic animals, its carcasses or articles which is liable to disseminate the causative agent of AI within the prefecture, their entry into the prefecture or transit beyond the prefectural boundaries, if it is necessary to do so for preventing the spread of AI.
• The Minister of Agriculture, Forestry and Fisheries may, by limiting an area, prohibit or restrict the transportation of certain species of domestic animals, its carcasses or articles which is likely to disseminate causative agent of AI from the area concerned, if it is necessary to do so for prevent the spread of AI.</td></tr>
<tr><td></td><td></td><td></td><td>Measures to ensure containing system</td><td colspan="3">Domestic Animal Infectious Disease Control Law imposes the following punishment in case of the violation of the law;
(1) Violation of the order by governor of prefecture to kill the affected or suspected poultry; imprisonment not more than 3 years or fine not exceeding one million yen.
(2) Violation of the obligation to isolate affected or suspected poultry or to incinerate or bury carcass of affected or suspected poultry, or violation of the order by governor of prefecture or Minister of Agriculture, Forestry and Fisheries to prohibit or restrict movement; imprisonment not more than 1 year or fine not exceeding five hundred thousand yen.
Violation of the obligation to submit report when slaughtering affected or suspected poultry, or to incinerate, bury or disinfect the articles contaminated or likely to have been contaminated with a causative agent of AI; fine not exceeding three hundred thousand yen.</td></tr>
<tr><td></td><td colspan="3" rowspan="4">Compensation
(National contingency plan)</td><td>Case</td><td>Rate</td><td>Funded by</td></tr>
<tr><td>Affected poultry killed in accordance with the order by the governor of prefecture</td><td>1/3 of the appraised value of the domestic poultry before becoming affected poultry</td><td rowspan="3">National Government</td></tr>
<tr><td>Suspected poultry slaughtered in accordance with the order by the governor of prefecture</td><td>4/5 of the appraised value of the domestic poultry before becoming a suspected poultry</td></tr>
<tr><td>An article incinerated or</td><td>4/5 of the appraised value</td></tr>
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		buried under the direction as given by prefectural animal health inspector in accordance with specific standards	of the article concerned before its incineration or burying	
	Mutual Fund		630 yen for each matured female domestic poultry; 210 yen for each maturing female domestic poultry; 20 yen for each domestic poultry for meat; 1,020 yen for each matured domestic poultry for breeding; and 340 yen for each maturing domestic poultry for breeding	Poultry breeders supported by the National Government and independent administrative agency
Risk communication, including public awareness programs/Measures to communicate between central government and local government		In response to AI outbreaks including in foreign countries/zones, Central Government issues Notice for AI preparedness to Prefectural Governments. Prefectural Governments shall convey the Notice to any related persons/agencies such as farmers, agricultural agencies, related industries.		
Training veterinary worker		In order to fulfill domestic quarantine for prevention and control of infectious animal diseases including avian influenza pursuant to Domestic Animal Infectious Disease Control Law, animal quarantine inspectors are assigned from veterinarians etc who are prefectural officials in all over Japan. Desk-top exercises etc. for HPAI preparedness have been conducted by Central Government and Prefectural Governments.		
Information sharing among countries/regions in avian influenza outbreak		Avian influenza case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza according to the OIE Terrestrial Code.		
Vaccination policy		With regard to animal health, stamping-out is the priority measure. Emergency vaccination may be considered just in case where outbreaks continue and stamping-out in short period is not feasible. For a precaution measure, Japan has stockpile of emergency vaccination for domestic poultry (H5N2 subtype: 8.2 million doses).		

Domestic Measures to Prevent Avian Influenza

Economy Republic of Korea

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• No imports without import risk assessment by Ministry for Food, Agriculture, Forestry and Fisheries(MIFAFF) • Import of birds and bird products from countries with HPAI prohibited • Wild bird surveillance program for early warning
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Public education of avian influenza biosecurity SOP • Obedience of obligations of biosecurity measures such as installation of disinfection equipment and implementation of periodic disinfection of farm • Completed the stockpiles as follows - Antivirals (1.24 million, planning to increase it every year) - Personal Protective Equipment (0.19 million person use) - Conducted seasonal influenza vaccination to AI first response workers.
Measures in case infected poultry is found	Regulations	Case identification		• Mandatory notification of diseased animals by the person who owns or has control of animals, veterinarian who diagnosed those animals, and the person who supplied veterinary medicines or feed to the farm.
		Reporting system	Summary	• All suspected case of AI are required by regulation to be reported to veterinary authorities
			Measures in case not reported	• Veterinarian : imprisonment for less than 3 years or fined less than 15 mil. won • Owner : imprisonment for less than 1 year or fined less than 5 mil. won • Veterinary medicine or feed supplier : monetary penalty of less than 5 mil. won
		Containment Measures	Summary	• Stamping out and disease containment according to MIFAFF's HPAI contingency plan
			Measures to ensure containing system	• Depopulation of all infected and suspect flocks within a 500m radius • Movement restrictions applied to two designated zones - Protection zone : an area within a 3km radius of the index farm - Surveillance zone : an area between 3 and 10km radius of the index farm

	Compensation (National contingency plan)			Case	Rate	Funded by
				An administrative order to destroy animals and contaminated materials	100% of market value (Compensation rate can be 80%, 60% or down to 40% proportionate to owner's compliance to biosecurity regulations such as disinfection and reporting obligations)	Central government
	Mutual Fund			Living expenses can be subsidized if budget is available	Average farmer's living expenses for up to 6 months	50% from Central government and 50% from Provincial government
Risk communication, including public awareness programs / Measures to communicate between central government and local government				• Press release or press conference for the public related to events prior to and during HPAI event • Distributed 『Prevention of AI Human Infection manual』 to 16 provinces and related agencies. • Planning to develop manuals for Risk Communication • Established KCDC Crisis Command and Control Office -Enables video conference with 16 provinces and 13 quarantine stations.		
Training veterinary worker				• Training in various aspect of emergency animal disease response such as laboratory diagnosis, information management, stamping out and disinfection procedures, movement restrictions		
Information sharing among countries/regions in avian influenza outbreak				• HPAI case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as avian influenza according to the OIE Terrestrial Animal Health Code		
Vaccination policy				• No vaccination permitted against HPAI • H9N2 subtype LPAI vaccine permitted since 2007 • Stockpiling pre-pandemic vaccine - Planning to buy 40 thousand in 2008. • Build capacity for vaccine production - Planning to build facilities to produce mock-up vaccine by 2010.		

Domestic Measures to prevent Avian Influenza

Economy Mexico

Measures	Avian Influenza
Prevention against viruses entrance into each economy	It is prohibited the importation of animals, animal goods, wastes, offal and other goods when originated or come from areas, regions or countries that are not recognized by SAGARPA as free of exotic pests or diseases or are under enzootic scheme official campaign on our national territory; except those goods that SAGARPA determines that do not involve animal health risk. According to the above, it is not allowed the importation of birds and their products from affected countries in Asia, Africa and Europe. The inspection is carried out in the Offices of Agricultural Health Inspection dependent of SAGARPA located at seaports, airports and borders. The countries that exported goods to Mexico, must endorse with the formats and official seals of international veterinary certificates; the security measures to guarantee the authenticity and traceability of goods.
Prevention against infection (Biosafety standards of husbandry practices, and so on)	In December 1994 it was detected an outbreak of highly pathogenic avian influenza (HPAI) in Mexico; disease that was eradicated in June 1995 through the operation of the National Emergency Animal Health Devise (DINESA). Since then Mexico continues with a "National Campaign Against Avian Influenza" to prevent HPAI and eradicate the low pathogenic avian influenza (LPAI) virus, which is still in some areas of the country; regulated by the Mexican Official Standard NOM-044—ZOO-1995, which is mandatory in the country and aims to standardize procedures, activities, criteria, strategies and operational techniques for the prevention, control and eradication of AI in domestic birds, commercial and backyard as well as wild into captivity. In addition, standardize activities of epidemiological surveillance, diagnosis, Biosafety, free farms, immunization, quarantine measures, mobilization and control of imports of poultry products and by-products, as well as the location of poultry farms, incubators, slaughterhouses, packing and food

			factories. In the event of a health risk, SAGARPA may request additional requirements for Biosafety, to strengthen efforts in prevention, control or eradication, as the case may be.	
Measures in case infected poultry is found	Regulations	Case Identifications	SAGARPA got the DINESA, which is the instrument for response to confront any possible contingency of Highly Pathogenic Avian Influenza (HPAI) and other exotic or emerging pests and animal diseases as well as an Emergency Plan in the event of an outbreak of HPAI. NOM-044-ZOO-1995 "National Campaign Against Avian Influenza" says the sanitary measures to be applied in the case of suspicion and/or occurrence of an outbreak or a positive result in a official serological test for viral isolation or any subtype of AI in the country, and the diagnosis should be carried out in laboratories authorized by SAGARPA or in the official ones. Official Laboratory tests for the diagnosis of AI are: hemagglutination inhibition (HI), agar gel immunodiffusion, immunosorbent assay (ELISA), viral isolation (VI), characterization and testing of pathogenicity, gene sequencing and those determined by SAGARPA, after and authorization. In vaccinated flocks, the official tests are the VI and serology through HI or by ELISA in sentinel birds and/or those determined by SAGARPA and that allow differentiate vaccinated birds from infected ones.	
		Reporting System	Summary	Based on the “Agreement by which, are listed pests and diseases of animals, exotic and endemic for mandatory notification"; every people associated with poultry, must notify the disease or suspected to SAGARPA immediately. Epidemiological surveillance of any subtype of AI is active and passive. Annually establishing a statistically representative sample permanent and continuous in the commercial and backyard poultry. As support for the activities of epidemiological surveillance, reconnaissance free zones, analyses and epidemiological research, risk analysis and other related activities, there are state traceability systems of birds, products and by-products, and satellite geo-referenced farms.

			Measures in case not reported	The owner, the legal representative, the veterinarian responsible for the poultry farm, the firm, or diagnostic laboratory or personnel involved; may be punished with imprisonment of three to ten years and two hundred to a thousand days of fine, before concealment or lack of notification of outbreaks of AI.
		Containment Measures	Summary	When detecting or taking evidence for the presence or imminent entry of exotic pests and diseases, notifiable, eradicated, unknown or non-existent in the country, events that put an animal health emergency in one or more species or populations of animals in all or in part of the national territory, or where an endemic disease exceed the number of cases expected; SAGARPA activates, integrates and operates DINESA through the immediate publication of an Agreement in the Official Gazette, and issues the sanitary provisions for prevention, control and eradication to be applied to the particular case.
			Measures to ensure containing system	The Emergency Plan in the event of an outbreak of HPAI considers the contra epizootic measures to be carried out in the emerging form to control and eradicate the disease, based on the quarantine of the affected properties; controlling mobilizations of birds, products and byproducts, risk material and possibly contaminated people, epidemiological surveillance and diagnostic status; culling of flocks affected and their contacts; cleaning and disinfecting facilities and equipment; vaccination of flocks in areas at risk; use of sentinels and restocking. It also includes the organizational chart of DINESA and the operating procedures before a case of HPAI comprising the taking and sending of samples; delimitation of the affected area; identification of focal, perifocal and buffer quarantine lines; Biosafety in production units; humanitarian sacrifice; cleaning and disinfection; general aspects of communication; appraisal procedures; monitoring epizootic in wildlife and bird surveillance program after the outbreak has been controlled.

	Compensation (National contingency plan)	SAGARPA can agree with the Federal Entities, the Federal District and the municipalities, as well as the interveners and interested individuals, the creation of a contingency fund to deal with animal health emergencies. The general rules under which implements and integrates the DINESA; determine their timing, space, equipment and personnel, integration and management of contingency funds, as well as the implementation and evaluation of the contra epizootic measures or contamination risk reduction.
	Mutual Fund	SAGARPA coordinates with state and municipal governments, producers and other persons associated with poultry production; the mechanisms for compensation in money or in kind, for the elimination of birds in an outbreak of AI in free or eradication zones.
Risk communication including public awareness programs / Measures to communicate between central government and local government		Given the events of avian influenza in the world, SAGARPA responded to the challenges of communication that emerged at the time. In October 2005 prepared and launched an information campaign on AI, and will continue to operate a communication strategy for health risks. It gave interviews on radio, television and print media at national and regional levels; it was launched the creation of a chamber of specific information about the situation; were criteria and guidelines were unified between different areas of SENASICA; trained spokespersons, monitored health news media on AI, internal meetings were held with health authorities, the media were summoned to visit poultry farms and TIF plants in the country to observe the processes of quality and safety, and press conferences were conducted with local, national and international Media. In addition, a study was conducted about the impact resulted in the consumption of chicken as a result of the information provided on the AI. There is structural and operational coordination between the Federal Government and the Federal Entities, actively participating in an organized manner Associations of Veterinary Medical Specialists, Universities, Research Institutes and the National Technical Consultative Council for Animal Health, which is the advisory body of SAGARPA in animal health matters.
Training Veterinary worker		By declaring DINESA instituted in 1988, it was established a continuous training program aimed at official and private personnel for integration into State Groups on Emergency Animal Health

	(GEESA's), whose specialized training is based on teaching regular courses and simulation on exotic diseases. Since 1996 simulation exercises are held on Emergency Plans for Highly Pathogenic Avian Influenza, which consist of a cabinet exercises for five days, aimed at veterinary officers and individuals specialized in poultry production. In addition, four days courses called "Recognition of Major Exotic Diseases of Animals", which targets students in the last semester of the Veterinary Medicine Course; conferences where they are taught about the different exotic diseases, including Highly Pathogenic avian influenza.
Information sharing among countries / regions in avian influenza outbreak	Mexico is part of the Security and Prosperity Partnership of North America (SPP), which has developed a regional coordinated plan for response to this threat and we are involved in the technical and scientific groups of the OIE and FAO in developing programs against avian influenza, allocated through SAGARPA, additional resources for surveillance and prevention. It also works on the Trinational Net of North America Laboratories in conjunction with Canada and the United States, in order to harmonize the diagnostic techniques of avian influenza. Mexico complies with the international recommendations for prevention, preparedness and response, with official veterinary services at a level of action that commensurate with the guidelines of the OIE, as well as having enabled a multi sector plan against influenza in humans and animals as well as an early warning and immediate response system, which includes a program of communication at sector and international levels.
Vaccination policy	To prevent, control and eradicate Low Pathogenic Avian Influenza virus in areas where it is still endemic, mandatory vaccination is established. SAGARPA authorizes the application of inactivated emulsified vaccine and recombinant smallpox-avian influenza vaccine, both within the H5 subtype. For purposes of epidemiological surveillance in vaccinated flocks and farms, they are properly maintained, identified or caged, sentinel birds inside each booth, and the farmer is obliged to allow serological and virological sampling that SAGARPA requires.

	For control purposes, it is maintained a record of producers and users of the vaccine, as well as flocks and farms identified as free of the disease. The implementation of vaccination without permission involves the establishment of quarantine, regardless of animal health measures and administrative and criminal penalties.

Domestic Measures to Prevent Avian Influenza

Economy New Zealand

Measures			Avian influenza
Prevention against viruses' entrance into each economy			• New Zealand's geographical isolation and import health standards mean that the risk of avian influenza being introduced into NZ is low • Under the Biosecurity Act 1993, Avian Influenza is a notifiable unwanted organism within NZ and may not be imported. Any suspect cases must be notified to government agencies (Ministry of Agriculture and Forestry and Ministry of Health) • There are tight import controls on the importation of poultry and unprocessed poultry products into NZ. Border surveillance procedures are in place for imported product, with people and products entering from known areas of AI infection having increased surveillance and monitoring
Prevention against infection (Biosecurity standards of husbandry practices, and so on)			• The poultry industry in NZ maintains high levels of compliance with good Biosecurity standards to maintain New Zealand's recognized disease free status. This is well supported by the Poultry Industry Association of New Zealand (PIANZ). These included separation from wild birds and animals, high hygiene standards and regular disinfection. They are also familiar with the requirement for early notification of MAF if there are signs of diseases seen. • Response standards have been developed and simulations and training programs are in place to maintain familiarization and competency with requirements should disease be suspected. PPE is available to government and service providers should there be suspected cases on AI identified
Measures in case infected poultry is found	Regulations	Case identification:	• Defined within the "Technical Response Policies for Avian Influenza Viruses of Regulatory Concern" : http://www.biosecurity.govt.nz/files/pests-diseases/animals/avian-influenza/response-policies.pdf • Surveillance programmes of domestic poultry are in place and regularly reviewed. There is s surveillance programme that targets wild migratory birds including those known to migrate from the Northern Hemisphere • Passive reporting and testing of birds is completed where deaths or disease are

				reported to MAF through the Pest and Exotic Disease hot line. • Response policies and Procedures have been developed for Avian Influenza viruses of Regulatory concern to align with requirements under the Biosecurity Act for the elimination and control of unwanted organisms. These include movement control requirements, culling and disposal as well as vaccination policies and compartmentalization and zoning options • A vaccine bank has been established and vaccine is registered – this includes options for vaccination of native endangered species.
		Reporting system	Summary	• All influenza virus type A (exotic avian strains), as well as H5 and H7 strains are classed as unwanted organisms and are notifiable under the Biosecurity Act (Part 4, section 45). This places a requirement on every person to report (Part 4, section 46) without unreasonable delay the presence or possible presence of H5/H7 subtypes or exotic strains of Influenza virus type A to the Chief Technical Officer (CTO).
			Measures in case not reported	• Under the Biosecurity Act it is an offence not to report the suspected presence of a notifiable organism. Penalties (Part 8, section 157) on conviction or indictment for failure to comply with section 46 are: a. In the case of an individual person, to imprisonment for a term not exceeding 5 years, a fine not exceeding $100,000, or both: b. In the case of a corporation, to a fine not exceeding $200,000.
		Containment Measures	Summary	• For LPNAI: o MAF will undertake interim containment measures on places where LPNAI is detected, pending a review of the response options by the Technical Advisory Group (TAG). Interim containment measures could include movement controls, depopulation, and cleaning and disinfection. Sanitary measures will be guided by TAG and may not be enforced through the MAF-led response plan, but rather overseen by industry. o Surveillance is undertaken and Organism Management is carried out. o Movement control measures to contain virus may take the form of quarantine and sanitary procedures enforced using Restricted Place notices issued on Infected and At-risk places if decided. Area controls will not generally be placed – this decision will also be subject to TAG review of delimiting surveillance and other analyses. • For HPNAI:

				o Declaration of a Controlled Area notice (Biosecurity Act: Part 6, section 131) enforcing an initial standstill of the movements of poultry, caged zoo and pet birds, and other high risk conveyances. Movement control permitting, dependent on place status and zoning requirements, will be implemented as soon as is technically feasible, o Co-ordination of relevant stakeholders and affected industries to ensure biosecurity measures are in place for susceptible species at all levels (farm, conveyance, and processing), o Infected place management including decontaminating or destroying ('stamping out') all potentially infected conveyances, places, product or other risk goods, o Epidemiological investigations to accurately identify at-risk flocks by back and forward tracing, o Surveillance carried out on at-risk places identified through tracing, places in the protection and surveillance zone, and public reports
			Measures to ensure containing system	• Under the Biosecurity Act it is an offense not to comply with controlled area notice movement and other specified control measures. Penalties (Part 8, section 157) on conviction or indictment for failure to comply with Enforcement of area controls (Part 6, section 134) are: a. In the case of an individual person, to imprisonment for a term not exceeding 5 years, a fine not exceeding $100,000, or both: b. In the case of a corporation, to a fine not exceeding $200,000.
	Compensation (National contingency plan)			• Compensation is payable for verifiable loss where these losses are the result of actions that have been taken under the Biosecurity Act (Part 9, section 162A) o The compensation payable under this section must be of such and amount that the person to whom it is paid will be no better or worse position than any person whose property or goods are not directly affected by the exercise of the powers.
	Mutual Fund			
Risk communication, including public awareness programs / Measures to communicate between central government and local government				• The Technical Response Plans includes a Communication Plan that outlines strategic and tactical plan for external communications / public relations and media including lists of spokespersons; stakeholders and key messages

	• MAF Communications Team provide emergency communication of disease status and response action
Training veterinary worker	• Training exercises including government service veterinarians and contracted service providers are regularly conducted as part of exotic disease preparedness and response on a regular basis.
Information sharing among countries/regions in avian influenza outbreak	• Obligations to OIE and WHO are to be met also work in closely with FAO and trading partners all of whom would be notified in the case of an AI outbreak.
Vaccination policy	• MAF will **not** adopt a general vaccination policy but may introduce emergency and preventive vaccination in certain species or compartments as a short term measure as recommended by the Technical Advisory Group/Stakeholder Advisory Group when a risk assessment indicates there is a significant and immediate threat of HPNAI spreading within New Zealand. Vaccination may be used to: o Induce immunity and reduce virus shedding in an outbreak with high disease incidence in poultry overwhelming the ability to stamp out by depopulation and decontamination within a reasonable time frame with concurrent increasing spread particularly to wild bird populations; or o Protect elite flocks or socially/culturally valuable poultry or private/zoological collections in the face of an uncontained outbreak; or o Protect threatened indigenous birds when HPNAI is confirmed in populations of species that regularly migrate to New Zealand or infection in New Zealand endangers them. • MAF will only permit vaccines meeting the requirements of Agricultural Compounds and Veterinary Medicines which are applied in accordance with FAO/OIE guidelines using techniques such as sentinel birds, Differentiating Infected from Vaccinated Animal (DIVA61) strategy and that are registered in New Zealand by MAF. • MAF will require a vaccination plan to be approved by the Chief Technical Officer • MAF will require an active surveillance programme to OIE guidelines with both clinical and laboratory tests carried out in and adjacent to designated vaccination areas prior to and following vaccination to monitor the epidemiological situation, the effectiveness of vaccination and the control of movements of vaccinated poultry and/or other birds.

Domestic Measures to Prevent Avian Influenza

Economy Peru

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• Domestic Animal Infectious Disease Control Law stipulates that no person shall import any causative agent of highly pathogenic avian influenza (HPAI). • Poultry and its products are interrupted to import from countries which occur an avian influenza case among poultry according to OIE.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Any poultry farms are requested to comply with "Biosecurity standards of husbandry practices on highly pathogenic avian influenza" according to Avian Sanitary System Rules. • Desk-top exercises for HPAI preparedness have been conducted by Central Level and regional level of the Official Veterinary Services – SENASA, with Central Government and local Governments, national university, NGOs, etc. • Stockpile of personnel protective equipment (protective clothing, masks, goggles, groves) by Central and regional level of the SENASA.
Measures in case infected poultry is found	Regulations	Case identification		Monitoring of AI has been implemented at all poultry farms holding more than 500 birds by regional level of SENASA. In case that an AI case is suspected by information such as clinical signs, or by the monitoring, SENASA central laboratory shall conduct diagnostic tests. Consequently, when influenza virus is isolated, the central laboratory must send the strain to an OIE reference laboratory to determine the type of the AI strain.
		Reporting system	Summary	Domestic Animal Infectious Disease Control Law stipulates the following; (1) In case where a domestic poultry is found to have become an affected poultry (domestic poultry that has affected by HPAI) or a suspected poultry (domestic poultry which is suspected to be an affected poultry), the veterinarian who has diagnosed the domestic poultry or has conducted post-mortem inspection on the carcass thereof (as for domestic poultry or its carcass that has not been diagnosed or received post-mortem inspection by veterinarian, the owner) shall submit a report thereon to SENASA without delay. (2) Everyone who suspect of AI case shall report to SENASA within 24 hours from noticed the case.

			Measures in case not reported	Domestic Animal Infectious Disease Control Law stipulates that any veterinarian and owner who fails to submit the said report shall be punished.
		Containment Measures	Summary	Domestic Animal Infectious Disease Control Law regulates the following; • The veterinarian responsible of affected poultry or suspected poultry shall isolate the poultry concerned immediately. • The regional SENASA apply quarantine to affected or suspected poultry and kill the said domestic poultry if confirm the AI case for preventing the spread of AI. • The carcasses of affected or suspected poultry are incinerated by SENASA in accordance with the specific standards. • All measures of cleaning and disinfection are applied in the affected poultry farm facilities and vehicles and a rest period until assure the absence of the AI virus by sentinels. • SENASA, prohibit or restrict the movement of certain species of domestic animals, its carcasses or articles which is liable to disseminate the causative agent of AI within the special zones, their entry into the zones or transit beyond them for preventing the spread of AI.
			Measures to ensure containing system	Domestic Animal Infectious Disease Control Law imposes the following punishment in case of the violation of the law. (3) Violation of the obligation to report of affected or suspected poultry AI case, fine not exceeding three thousands four hundreds fifty soles. (4) Violation of the obligation of apply treatment to inactivate the AI virus in poultry farm residues, fine not exceeding two thousands five hundreds eighteen. (5) Anyone who drops residues of affected AI poultry farm, fine not exceeding one thousand three hundred forty seven dollars.

Compensation (National contingency plan)	Case	Rate	Funded by
	-	-	Not considered
	-	-	
	-	-	

	Mutual Fund			
Risk communication, including public awareness programs/Measures to communicate between central government and local government		In response to AI outbreaks including in foreign countries/zones, Central level issues Notice for AI preparedness to regional levels. Regional levels shall convey the Notice to any related persons/agencies such as farmers, agricultural agencies, and related industries.		
Training veterinary worker		In order to fulfill domestic quarantine for prevention and control of infectious animal diseases including avian influenza pursuant to Domestic Animal Infectious Disease Control Law, animal quarantine inspectors are assigned from veterinarians etc who are under responsibility of SENASA in all over provinces and districts of Peru. Desk-top exercises etc. for HPAI preparedness have been conducted by Central level and local level of SENASA with participation of many government and private entities.		
Information sharing among countries/regions in avian influenza outbreak		Avian influenza case is reported to the World Organization for Animal Health (OIE) immediately after it is determined as notifiable avian influenza according to the OIE Terrestrial Code.		
Vaccination policy		With regard to animal health, stamping-out is the priority measure. Emergency vaccination may be considered.		

Domestic Measures to Prevent Avian Influenza

Economy Papua New Guinea

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• HPAI is a notifiable disease in PNG under the Animal Disease and Control Act and importation of poultry and poultry products from economies endemic for HPAI is totally prohibited. • All importation of live poultry and poultry product are subject to 100% quarantine inspection at port of entry in PNG. • Regular active surveillance system at the Indonesia/PNG border areas.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Major commercial poultry farms have biosecurity control management systems and response plans in place. • All semi and commercial poultry must be confined in sheds including feed and feeding equipments which must not be in any risk of contact with wild birds. • Limited stockpile of PPEs.
Measures in case infected poultry is found	Regulations	Case identification		Sentinel flock of poultry/ducks are sampled on a 3-monthly basis and vet investigation of dead birds is routine surveillance activity throughout the country. All suspected AI cases is subjected to rapid test and sera (blood) and cloaca and tracheal swabs are collected for PCR and Virus isolation which are sent to Australian Animal Health Laboratory (AAL) for confirmation. If confirmed, the AI response plan is activated for containment followed by eradication or control depending on the disease situation.
		Reporting system	Summary	HPAI is a notifiable disease under the PNG Animal Disease and Control Legislation and as such, it is mandatory for all gazetted stock inspectors empowered under this legislation to report to Chief Veterinary Officer of PNG (position held under NAQIA) any suspected cases of HPAI even without confirmation. The Chief Veterinary Officer, upon receipt of the report will instruct the nearest veterinary officer or experienced stock inspector to further investigate the case.
			Measures in case	Under the above law, Stock Inspectors that fail to report within a reasonable time

			not reported	will be prosecuted and may be imprisoned for 6 months or fined K200		
		Containment Measures	Summary	Animal Disease and Control Act regulates the following: • setting up checkpoints to ensure diseased or contact animals under quarantine are not moved out of the declared infected area. • Owners of animals or carcasses suspected of being diseased must surrender these animals for disposal by a stock inspector. • Animals in a area that is under quarantine movement restriction must not be moved without the permission of the Chief Stock Inspector (Chief Stock Inspector is ex-officio Chief Veterinary Officer • Within a declared Disease Area, stock inspectors are empowered to enter diseased premises and to remove and disposed of any animal suspected of being diseased and also to put in place a containment measures. • Movement of animals from a declared Disease Area to other parts of PNG is totally prohibited without the permission of the CVO. • Movement of live animals between provinces within PNG is restricted and is subjected to a movement permit system – poultry, pet birds and other birds from the border areas require AI and Newcastle disease free test before they are issued a permit to allowed movement.		
			Measures to ensure containing system	Under the animal disease and control law, person breaching or interfering with the containment/eradication measures or conditions imposed by the CVO are liable for prosecution and may be imprisoned or fined.		
	Compensation (National contingency plan)			Compensation is a sensitive issue in PNG and has not been resolved or specified in the National AI contingency plan, although, under the animal disease control law, Minister of Agriculture is given the discretion to	The rate of compensation is not specified if compensation is approved by the Minister of Agriculture.	National Government funds any compensation payments.

		approve compensation if he wants.		
	Mutual Fund	NONE		
Risk communication, including public awareness programs / Measures to communicate between central government and local government		In the event of an suspected AI outbreak, CVO will inform the National AI Technical Taskforce. National AI Taskforce will inform the National AI Coordinating Body (Central Government at the NEC level). Agriculture and Poultry industry is represented at the Taskforce and Coordinating level and will be alerted accordingly.		
Training veterinary worker		PNG veterinary officers, laboratory workers and selected stock inspectors have undergone training under regional training programmes conducted by OIE, FAO and SPC and bilateral programmes such as with Australia.		
Information sharing among countries/regions in avian influenza outbreak		PNG is included in the SE Asia subregional AI surveillance and lab diagnostic networking under a FAO TCP. This project allows for sharing of surveillance results between the project economies in the region. Although, PNG is not a OIE member, it reports to OIE on quarterly basis of its disease status. PNG is in the process of gaining membership to OIE. PNG also reports to SPC of any new disease cases including AI		
Vaccination policy		In accordance with the PNG AI response plan in animals, vaccination is not a priority unless absolutely necessary – only for rare breeders or species. The priority is to immediately eradicate AI upon detection.		

Domestic Measures to Prevent Avian Influenza

Economy Singapore

Measures	Avian influenza
Prevention against viruses' entrance into each economy	a) The Animals and Birds Act stipulates that no person can import or transship any animal or bird without a licence from the Agri-Food and Veterinary Authority (AVA). b) Import of birds, poultry and avian products is banned from any country that has reported an outbreak of highly pathogenic avian influenza (HPAI). c) AVA and Customs officers inspect all consignments of birds at border entry points for any signs of disease including HPAI. d) For ornamental birds, the birds must be quarantined and must test negative for HPAI before they can be exported to Singapore. e) Only farms and processing plants approved by AVA can export poultry or poultry products to Singapore.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)	a) All local poultry farms and poultry slaughterhouses (PSH) must implement strict bio-security measures to keep out HPAI. b) Bio-security measures include: restriction of entry to farm/PSH to workers only, no causal visitors; complete perimeter fencing around the farm or PSH; all poultry houses must be completely bird proofed; all farms and PSH must have disinfection facilities for personnel and vehicles. c) AVA officers regularly audit farms and PSH for implementation of bio-security measures. Fines are issued to farms or PSH that fail to comply. d) AVA carries out surveillance for HPAI in local poultry farms, ornamental bird shops, imported poultry, migratory and resident birds, zoo and bird park. e) AVA has drawn up contingency plans to prepare for any outbreak of HPAI. f) AVA has signed contracts with local agencies to provide manpower for culling of poultry (in event of an outbreak). AVA has also drawn up contracts with supporting agencies to provide disposal services and logistic support. g) Field and desktop exercises are carried out annually to test and improve the

				contingency plans and to improve inter-agency coordination. h) AVA has stockpiled personnel protective equipment (PPE), tamiflu tablets and other supplies and equipment for culling operations. i) High risk bird species in the zoo, bird park and botanic gardens are vaccinated against HPAI.
Measures in case infected poultry is found	Regulations	Case identification		a) AVA regularly carries out surveillance for HPAI. Farms and PSH are directed to inform AVA if high mortality is seem in poultry or birds. b) Samples are sent to AVA's Animal and Plant Laboratory (APHL) for diagnostic tests for HPAI. c) Case identification is based on clinical signs of HPAI and confirmation of H5 or H7 subtype by lab diagnostic tests.
		Reporting system	Summary	HPAI is a notifiable disease under the Animals and Birds (Disease) Notification.
			Measures in case not reported	For failure to report a notifiable disease, a person is liable (upon conviction) to a fine not exceeding $5,000 or to imprisonment to a term not exceeding 6 months or to both.
		Containment Measures	Summary	In an outbreak, AVA will immediately quarantine the suspected premises. No movement of poultry or poultry products in or out of the premises is allowed. AVA will then send in an investigation team to take samples to confirm the outbreak. If confirmed, poultry in the infected premises will be culled. Culled poultry will be incinerated. Other poultry farms maybe culled depending on AVA's investigation.

<table>
<tr><td></td><td></td><td></td><td>Measures to ensure containing system</td><td colspan="3">Under the Animals and Birds Act, the Director General of AVA has the power to order the isolation or destruction of any animal or bird that either has been certified to be infected with disease or there is reasonable cause to believe is infected with disease. This includes any animal or bird that may have been in contact with the infected animal or bird, may have been exposed to disease or may perpetuate the disease.</td></tr>
<tr><td></td><td colspan="3" rowspan="4">Compensation
(National contingency plan)</td><td>Case</td><td>Rate</td><td>Funded By</td></tr>
<tr><td>Affected & suspected poultry to be culled in accordance with an order from the Director General of AVA.</td><td>To be decided by AVA.</td><td rowspan="3">National Government</td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td></td></tr>
<tr><td></td><td colspan="3">Mutual Fund</td><td></td><td></td><td></td></tr>
<tr><td colspan="4">Risk communication, including public awareness programs / Measures to communicate between central government and local government</td><td colspan="3">AVA regularly issues press notices and articles on HPAI. AVA also informs traders and importers about outbreaks in other countries and suspensions of import of poultry and avian products.</td></tr>
<tr><td colspan="4">Training veterinary worker</td><td colspan="3">AVA conducts regular training for its officers on measures to take in any suspected HPAI outbreak. Training includes proper wearing of PPE, handling of potentially infected materials and precautionary measures. Specialist and veterinary officers are trained on outbreak investigation, surveillance, sample collection and HPAI</td></tr>
</table>

	diagnostic techniques. AVA also carries out regular exercises to test its standard operating procedures and improve inter-agency coordination.
Information sharing among countries/regions in avian influenza outbreak	AVA will report any outbreak of HPAI to the World Organization for Animal Health (OIE) as soon as it is confirmed to be notifiable avian influenza as defined according to the OIE Terrestrial Code.
Vaccination policy	During an outbreak, stamping out of infected and in-contact poultry is the preferred policy. Emergency vaccination maybe considered under conditions where the threat of a HPAI incursion is imminent. As a precaution AVA has stockpiled a quantity of HPAI vaccines for emergency use in domestic poultry (H5N2 subtype by Intervet).

Domestic Measures to Prevent Avian Influenza

Economy Chinese Taipei

Measures	Avian influenza
Prevention against viruses' entrance into each economy	1. Implement the border quarantine strategies (e.g. fever monitoring, disinfect blanket, symptom declaration, etc.) 2. Implement the Self-health-management to the passengers from infectious areas/economies. 3. Strengthen the detection of smuggling animal. 4. According to the "Statute for Prevention and Control of Infectious Animal Disease", highly pathogenic avian influenza is one of the notifiable animal diseases in Chinese Taipei. 5. Collection of global disease information and ban of the importation of birds and their products from the avian influenza virus infected areas have been implemented. 6. Strict quarantine procedures at the international airports and harbours have been conducted. 7. Since 1998, the HPAI surveillance program has been conducted to monitor the virus. The monitoring spots are established at places such as swamps or debouchments of rivers or streams where migratory birds rest frequently and domestic farms.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)	1. Continue conducting exercises for influenza pandemic response, and supervising the essential exercises or drills. 2. Completed the stockpiles as follows, (1) Antiviral agents for 2,280,000-person use. (Up to cover 10% of the population.) (2) Human-A/H5N1 vaccine for 190,000 doses. (3) Adequate and appropriate stockpile of personal protective equipment. (4) Influenza lab-test materials for 10,000-person use. 3. Provide the Antiviral agents to the person who meets the criteria for therapy and prophylaxis. 4. Organizing research expert teams for providing disease prevention and control

				techniques and information. 5. Holding expert meetings to develop the new measures and to examine the current preventive measures at irregular interval. 6. Continuing to monitor if avian influenza virus exists in poultry and pig populations. 7. Visiting and helping poultry producers to strengthen the bio-security measures by field official veterinarians. 8. Subsiding setup of bird-proof net system of poultry and pig producers' houses. 9. Having conduct the simulations and eradication exercises in January 2004, October 2004, October 2005 and April 2006, respectively. 10. Conducting of education programs for poultry producers on how to prevent the introduction of the virus.
Measures in case infected poultry is found	Regulations	Case identification		1. In case of outbreaks of HPAI, an emergency control center starts to function immediately and emergency control teams will operate at the infected areas. 2. Measures are undertaken immediately based on the "Emergency Manual for Avian Influenza" and the Statute for Prevention and Control of Infectious Animal Disease. ➢ The poultry on the premises will be stamped out and the surrounding premises in a radius of 1-km will undergo pre-emptive culling depending on the results of epidemiological surveys. Premises in a radius of 3-km from the infected site will be quarantined for at least 21 days. ➢ The relevant authorities will establish evaluation committees to decide on the compensation to the farmers. ➢ For control of pandemic outbreaks, ring vaccination will be considered.
		Reporting system	Summary	1. According to the "Statute for Prevention and Control of Infectious Animal Disease", if animals display clinical signs compatible with notifiable diseases, farmers or veterinarians shall report to the Live Stock Disease Control Center (LDCC) of the prefecture. Then the LDCC shall notify the Bureau of Animal and Plant Health Inspection and Quarantine (BAPHIQ) through a computerized disease reporting system, fax, or telephone. The premise will be quarantined temporarily and suspected samples will be sent to the Animal Health Research Institute (AHRI) for final diagnosis. 2. Epidemiological investigation will be conducted to identify the source of infection and possible extent of the spread to show the disease status. The BAPHIQ will then compile the reports and send monthly report to the OIE.

			Measures in case not reported	1. According to the "Statute for Prevention and Control of Infectious Animal Disease", the owners and keepers of animals should report to the animal disease control authorities when their animals are suffering or suspected of suffering from infectious animal diseases or when their animals die of unknown causes. Animal owners, keepers, or persons in the transportation business who violate the above article shall be fined between NT$10,000 and NT$50,000. 2. During the course of work, if veterinarians or their assistants discover that animals are suffering, suspected of suffering or suspected of being contaminated with Type A infectious animal disease, a report should be made to the local animal disease control authorities. Upon receipt of the report, animal disease control authorities should deal with the matter immediately and report to the relevant authorities concerned. Veterinarians and their assistants who violate the above article shall be fined between NT$30,000 and NT$150,000.
		Containment Measures	Summary	1. According to the "Statute for Prevention and Control of Infectious Animal Disease", if animals display clinical signs compatible with notifiable diseases, the premise will be quarantined temporarily and suspected samples will be sent to the Animal Health Research Institute (AHRI) for final diagnosis. Epidemiological investigation will be conducted to identify the source of infection and possible extent of the spread to show the disease status. 2. Measures are undertaken immediately based on the"Emergency Manual for Avian Influenza"and the Statute for Prevention and Control of Infectious Animal Disease. The poultry on the premises will be stamped out and the surrounding premises in a radius of 1-km will undergo pre-emptive culling depending on the results of epidemiological surveys. Premises in a radius of 3-km from the infected site will be quarantined for at least 21 days.
			Measures to ensure containing system	For animals suffering or suspected of suffering from infectious animal diseases, the animal owners or keepers should quickly quarantine animals and implement other necessary measures according to the instruction of animal disease control officials. While observing the spread of infectious animal diseases, animal disease control official should be on alert to stop animals within the same rearing area from being moved out and stop animals from being moved in. Animal owners or keepers who violate above article and have not quickly quarantined animals or taken other necessary measures according to the instructions of animal disease control and control authorities, shall be fined between NT$30,000 and NT$150,00.

	Compensation (Economy's contingency plan)	1. According to the Statute for Prevention and Control of Infectious Animal Disease, for death or abortion which occur during physical examination, immunizations, vaccinations, medicinal bath, or medical treatment of animals or for sacrificed animals and destroyed items, the relevant authorities of counties (cities) should set up evaluation committee to decide on the values of animals and items, and makes compensation according to the following standards (Compensation will not apply to owners or keepers who violate the Statute or other pertinent laws): (1) For bodies of healthy animals died of physical examinations, immunizations, vaccinations, medicinal bath, or medical treatment, compensation will be made within the evaluated price. (2) For animals sacrificed because of suspected infection or possible contamination of infectious animal diseases, compensation will be made within the evaluated price. (3) For animals sacrificed for etiology identification, compensation will be made within the evaluated price. (4) For animals which are sacrificed because they are suffering from the infectious animal diseases, compensation will be made within third- fifth of the valuated price. (5) For items destroyed, compensation will be made within half of the price determined. (6) For animals sent to the abattoirs for slaughtering in order to control infectious animal disease, with the consent of the relevant authorities compensation will be provided to made up the difference between the evaluated price and the market price. 2. The Chinese Taipei will select evaluation committee members to decide on the standard of evaluated price. 3. No compensations will be made for animals or items according to Paragraph 1, Part I – V of the aforementioned Statute, during import/export quarantine; or animals which die during quarantine. 4. Compensations mentioned in Paragraph 1 of various Parts of the Statute will be borne by the relevant authorities of counties (cities). However, the Chinese Taipei should provide financial assistance.
Risk communication, including public awareness programs		1. In view of the current epidemiological information on avian influenza, HPAI outbreaks in the world and the threat of avian influenza virus spread by migratory birds, the Chinese Taipei task force was established in 2004 to coordinate the

	responsibilities and activities of related authorities. 2. Gathering of global disease information and restriction on the importation of birds and their products from the avian influenza virus infected areas have been carried out, strict quarantine procedures at international airports and harbors have been implemented, and prevention smuggling of birds and related products have also been conducted. 3. Field official veterinarians visit poultry farms at irregular intervals and help poultry producers to strengthen their biosecurity measures
Training veterinary worker	The simulations of HPAI eradication exercise have been held in 2004, 2005 and 2006. The aims of these exercises are to test the contingency plan for the control of HPAI and to strengthen of the communication and cooperation between public health and animal health authorities.
Information sharing among economies in avian influenza outbreak	1. Establishment the Chinese Taipei Influenza Center. 2. Participate in major international conferences. 3. To respond to WHO, Chinese Taipei proceed to the regional cooperation actively, including donate stockpiles, exchange information. 4. As a member of the World Organization for Animal Health (OIE), Chinese Taipei has been working cooperatively with the organization and the members, especially those in the Asia region in the control of avian influenza.
Vaccination policy	1. Continue to carry out the seasonal influenza vaccine program that held every year. 2. Stockpile 190,000 doses of human-A/H5N1 influenza vaccine 3. To set about the production and stockpile of H5N1 influenza vaccine. 4. The Council of Agriculture has prepared 40 million doses of H5 subtype AI vaccines and 30 million doses of H7 subtype AI vaccines for poultry to be used for ring vaccination in a buffer zone

Domestic Measures to Prevent Avian Influenza

Economy Thailand

Measures			Avian Influenza
Prevention against viruses 'entrance into each economy			**The Department of Livestock Development conducted the following measures** 1. Impose restriction on importation of poultry and poultry products from avian influenza infected countries. 2. Strictly control animal movement specially poultry and poultry diseases along international borders
Prevention against infection (Biosecurity standards of husbandry practices, and so on)			**Implementation under the frame-work of National Strategic Plan for Avian Influenza Control and Influenza Preparedness in Thailand** (Phase 1 (2005-2007), Phase 2 (2008-2010) 1. For special risk groups, namely backyard poultry, free-grazing duck and fighting cock, improve and develop raising system for disease control purpose based on biosecurity principles 2. For industrial poultry production, 'Compartmentalization' has been promoted
Measures in case infected poultry is found	Regulations	Case identification	1. Empowered by Animal Epidemic Act B.E. 2499 (1956) and its amendment in B.E. 2542 (1999) 2. AI case definition 2.1 '**AI confirmed case**' means 1) Disease caused by Influenza virus type A, subtype H5 or H7 which is confirmed by OIE standard methods. Avian influenza viruses are classified into 2 categories: 1.1) Highly Pathogenic Notifiable Avian Influenza (HPNAI) means: - Disease caused by avian influenza virus which kills at least 75% of 4-8 week-old chickens within 10 days after intravenous injection or IVPI greater than 1.2 - Disease caused by avian influenza virus subtype H5 or H7 which contains amino acid sequence at the hemagglutinin cleavage

				site similar to highly pathogenic avian influenza 1.2) Low Pathogenic Notifiable Avian Influenza (LPNAI) means - Avian disease caused by H5 or H7 which does not cause severe disease in chicken and amino acid sequence at the hemagglutinin cleavage site does not similar to that of HPNAI virus 2) Low pathogenic avian influenza(LPAI) means avian disease caused by หมายถึง Influenzavirus type A other than subtypes H5 and H7 2.2 **'Suspected avian influenza case'** means 1) For poultry in a farm setting, mortality rate at least 1% in 2 days or daily feed and/or water consumption rate reduces by 20% in one day; or 2) For backyard poultry, mortality rate at least 5% in 2 days 3) Poultry in points 1) and 2) with other symptom such as sudden death, respiratory distress, swollen head, lacrimation, convulsion, twisted neck, diarrhea, ruffled feather, depress, anorexia, egg drop, egg deformity, purple comb/wattle, petrichial hemorrhage at the shank
		Reporting System	Summary	Daily report and daily AI situation from proximal units are sent to the head quarter using Internet GIS
			Measure in case not reported	Implementation of the Ministerial Regulations of Ministry of Agriculture and Co-operatives to emphasize and monitor the reporting of mortality and morbidity of poultry. One that omits the report shall be punished by law (2 months imprison or 4,000-baht fine or both)
		Containment measure	Summary	Operational goal is "Early Detection and Rapid Control"
			Measure to ensure containing system	AI outbreak response 1. Stamping out on-site within 12 hours 2. Compensation 75% of market price 3. Cleaning and disinfecting with effective disinfectant 4. Restriction of animal movement of the area within 10 kilometer radius around the outbreak spot 5. Active laboratory surveillance by collecting samples from premises within the 5 kilometer-zone around the index farm; active clinical surveillance for premises in the 10 kilometer zone

				around the index farm.
	Compensation (national contingency plan)			1. Compensation can be paid faster by utilizing the “Disaster Budget”. This mechanism is allowed by the Ministerial Ordinance regarding the reserved budget for emergency alleviate the disaster victims B.E. 2546 (2003) and its amendment B.E. 2549 (2006) 2. Compensation rate is 75% of market price of animal in that locality prior to the outbreak
	Mutual fund			Assistance from international organizations such as FAO and OIE
Risk communication, including public awareness programs / Measures to communicate between central government and local government				Public education, information , communication through mass media and local media, production of various media to communicate with different target groups.
Training veterinary worker				Continuous training programs for different levels of staffs each year in order to update the know-how, for example epidemiology training course for veterinary officers
Information sharing among countries/ regions in avian influenza outbreak				Report to the OIE according to the Animal Health Code
Vaccination policy				Currently, AI vaccination in poultry is not allowed in Thailand; however, research for vaccine development is being supported

Domestic Measures to Prevent Avian Influenza

Economy United States of America

Measures	Avian Influenza
Prevention against viruses' entrance into each economy	o The Federal government, primarily the U.S. Department of Agriculture (USDA), maintains restrictions and prohibitions on the importation of live poultry, commercial birds, pet birds, hatching eggs, and unprocessed products that could introduce avian influenza (AI) virus into the United States. Legally imported live poultry and pet birds are quarantined and tested for the AI virus. o The U.S. government inspects travelers, cargo, and vehicles at U.S. ports of entry, detects and traces smuggled birds or bird products at retail markets, specialty shops, restaurants, and other venues within the United States, and regulates and monitors wildlife shipments at U.S. ports of entry. o The USG conducts surveillance of wild migratory birds to ensure early detection of highly pathogenic avian influenza (HPAI) virus and if HPAI virus is present, to help prevent or minimize its introduction into domestic poultry. Over 250,000 samples have been collected from wild birds in the United States since April 2006; however, no HPAI viruses have been detected.
Prevention against infection (Biosecurity standards of husbandry practices, and so on)	o Multiple entities, including the poultry industry, universities, state governments, and the Federal government, produce and distribute biosecurity guidelines and standards. The use of biosecurity measures (specific sanitary conditions and practices) is required for all flocks participating in the National Poultry Improvement Plan (NPIP) under Title 9 of the Code of Federal Regulations (9 CFR), Parts 145-147. Poultry owners affected by AI will be eligible for indemnity for 100 percent of eligible costs, if the state has a biosecurity plan followed by all poultry producers participating in the H5/H7 Low Pathogenic Avian Influenza (LPAI) program (9 CFR Part 56). o A USDA outreach, education, and awareness program called "Biosecurity for the Birds" has as one of its primary objectives the enhancement of the biosecurity of non-commercial poultry owners. Through this program, bird owners are educated on appropriate biosecurity practices and how to report signs of illness that could be caused by AI or other avian diseases of concern.

				o The Federal government, specifically USDA, also operates the National Veterinary Stockpile (NVS) that maintains personal protective equipment which can be rapidly distributed to the site of an AI outbreak.
Measures in case infected poultry is found	Regulations	Case identification		o The H5/H7 LPAI prevention and control program provides on-going active and passive surveillance in commercial poultry, live bird market systems, and other non-commercial poultry sectors. Notifiable Avian Influenza (NAI), defined by the World Organization for Animal Health (OIE) as H5/H7 LPAI or any HPAI, is a reportable disease in the United States, and if it is identified in domestic poultry, additional active or enhanced surveillance activities will be put in place to detect subsequent cases of infection. These activities will be implemented in accordance with the National HPAI Response Plan and the initial state response and containment plans as required in the H5/H7 LPAI regulation (9 CFR Part 146). o Investigation and testing of suspect illnesses in any domestic birds will continue to be performed by Federal and state authorities. Under 9 CFR Part 146, diagnostic surveillance of all domestic poultry is required of laboratories in all states participating in the H5/H7 LPAI program. o Wild bird surveillance targeted at detecting HPAI H5N1 virus is ongoing in all 50 states. In the event that an AI virus such as HPAI H5N1, which can be spread by wild birds or other animals, is introduced into domestic poultry, additional active and passive wildlife surveillance will be implemented in accordance with the National HPAI Response Plan. o As part of the National Animal Health Laboratory Network (NAHLN), state or university laboratories often perform the initial diagnostic testing on suspected cases of AI. However, all presumptive positive results from a NAHLN laboratory on an OIE-notifiable AI infection (HPAI or H5/H7 LPAI) in domestic poultry or HPAI in wild birds, are confirmed at the USDA's National Veterinary Services Laboratories, which is an OIE reference laboratory for AI.
		Reporting system	Summary	o Over 40,000 licensed veterinarians in the United States are accredited by the Federal government (USDA) to carry out certain Federal duties under 9 CFR Part 161. As such, federally accredited veterinarians are required to report all suspected cases of communicable animal disease not known to exist in the United States or for which there is a USDA control or eradication program. This means that any OIE-notifiable AI must be reported by these accredited veterinary practitioners. o Under 9 CFR Part 146, H5 and H7 LPAI in all domestic poultry is a disease reportable to the State Veterinarian. Further, all laboratories that perform diagnostic

				procedures on poultry in those states must examine for AI, by both serological and antigen detection tests, all submitted cases of unexplained respiratory disease, egg production drops, and mortality.
			Measures in case not reported	o Federally accredited veterinarians that do not comply with disease reporting requirements may have their Federal accreditation suspended or revoked, and may be subject to civil or criminal penalties. o Under 9 CFR Part 146, in states participating in the NPIP for commercial poultry, under which both reporting of suspected cases of NAI and diagnostic testing for NAI are required, licensed veterinarians would potentially be subject to penalties for failure to report a finding of an H5 or H7 infection or to perform appropriate diagnostic testing.
		Containment Measures	Summary	o The National HPAI Response Plan, developed under the authority of the Animal Health Protection Act (AHPA), 7 U.S.C. 8301et seq., specifies containment measures to be taken in the event of an HPAI outbreak, in accordance with the stamping-out policy of the OIE. The primary measures are as follow: • Rapid diagnosis and reporting of cases • Swift imposition of effective quarantine of affected premises and areas • Prevention of movement of known or potentially contaminated products, other materials, or certain species of domestic animals to prevent the spread of AI • Stamping-out of infected and exposed birds, including timely disposal of carcasses and any potentially contaminated products or other materials, followed by cleaning and disinfection of affected premises • Increased surveillance in both the disease control area and the area believed to be free of disease • Use of strategic vaccination, if warranted (see “Vaccination Policy”) o Similar measures apply to the detection of H5/H7 LPAI infection, although alternatives to stamping-out, such as controlled marketing, may be appropriate in some cases.
			Measures to ensure containing system	The Federal government works directly with states to oversee the containment of cases of OIE-notifiable AI, which includes measures to prevent the spread of AI, such as the purchase, destruction, and disposal of affected or exposed poultry; quarantine of affected premises or areas; and restriction of movement of poultry products, other potentially contaminated materials, or certain species of domestic animals. Should the owner of animals or products/materials fail to comply with these containment measures, criminal or civil penalties, or both, may be applicable. Criminal penalties under the AHPA (7

			U.S.C. 8301 et seq.) can include fines and imprisonment of up to 5 years for an initial violation. Civil penalties under the AHPA can include fines from $1,000 to $500,000 depending on the circumstances involved.		
	Compensation (National contingency plan)		Case	Rate	Funded By
			Expenses of purchase, destruction, and disposition of animals and contaminated materials required to be destroyed, and cleaning and disinfection of premises due to infection or exposure to HPAI	Up to 100% of the appraised fair market value of the animals and materials	Federal government
			Expenses of purchase, destruction, and disposition of animals and contaminated materials required to be destroyed, and cleaning and disinfection of premises due to infection or exposure to H5/H7 LPAI virus	Up to 100% of the appraised fair market value of the animals and materials for NPIP participants and 25% for non-participants.	
	Mutual Fund		Expenses for purchase, destruction, and disposition of birds or materials due to the finding of NAI virus	Variable	State or regional poultry industry associations
Risk communication, including public awareness programs / Measures to communicate between central government and local government			o When another country reports an outbreak of NAI to the OIE and to the Chief Veterinary Officer of the United States, the USDA issues a notification of the event and details of Federal government-imposed import restrictions or prohibitions to a variety of government stakeholders. o USDA maintains an internet web page that lists countries affected by HPAI, along with a website that presents a variety of specific information on AI (www.usda.gov/birdflu). o Delivering factual, timely information on AI is a priority for USDA. For instance, in the event that a USDA screening test indicates the possible presence of an H5N1 virus in a bird, the public will be notified. Confirmatory testing would then be conducted by USDA, with results expected within 5-10 days, and those results would also be shared with the public in a timely fashion. Depending on the circumstances of an NAI outbreak, USDA would either promptly hold a press conference or technical briefing, or issue a statement/press release on the outbreak and release related risk communication information, or both.		
Training veterinary worker			o Licensed veterinarians receive education on the recognition and reporting of diseases like HPAI through their veterinary education and the Federal accreditation process		

	(per 9 CFR Part 161). o Over 400 state and Federal veterinarians involved in the diagnosis and control of diseases like HPAI have received specific training on “foreign” animal diseases and are certified as “Foreign Animal Disease Diagnosticians.” o Multiple HPAI response exercises have been conducted by Federal and state animal health authorities to train veterinarians and other responders in various aspects of an HPAI outbreak response. o A three-day “Poultry FAD Training Course for Industry Veterinarians” promotes improved coordination of surveillance, diagnosis and response efforts. o An annual three-day Live Bird Market System (LBMS) training course is part of our initiative to combat LPAI. The course informs and familiarizes trainees with various aspects of the LBMS including, but not limited to, respiratory diseases that affect poultry, biosecurity, GIS, state and Federal regulations, and cultural sensitivity in the LBMS setting. The intended audience is Federal and state-employed Veterinary Medical Officers (VMOs) and Animal Health Technicians working in the LBMS throughout the United States o A three-day “Wildlife FAD and Emerging Disease” workshop is conducted for state and Federal field VMOs and wildlife biologists.
Information sharing among countries/regions in avian influenza outbreak	Any occurrence of NAI infection (HPAI or H5/H7 LPAI) in poultry is reported to the OIE per definitions and protocols of the OIE Terrestrial Animal Health Code.
Vaccination policy	In the event of an HPAI or H5/H7 LPAI outbreak, our primary response will be the implementation of sanitary measures and a stamping-out policy. However, under certain conditions, a vaccination approach may be considered as an adjunct or complementary strategy to control disease spread. USDA has stockpiled 140 million doses of killed AI vaccine to implement such an approach, 75 million doses of which are for H5 AI virus. Further, USDA has a contract for delivery of up to 500 million doses of live fowlpox recombinant H5 AI vaccine.

Domestic Measures to Prevent Avian Influenza

Economy Vietnam

Measures				Avian influenza
Prevention against viruses' entrance into each economy				• Ban on import of live birds and poultry products which are not processed properly from AI infected countries • Health checking for people from AI occurrence countries at air/ sea port
Prevention against infection (Biosecurity standards of husbandry practices, and so on)				• Biosecurity standards for different farm sectors were developed and piloted in some provinces, to be expanded, subject of an evaluation • Pandemic preparedness plan reviewed by an external expert (FAO). • Stockpile of PPE and disinfectants, as well as other equipment • Assign two institutions having Laboratory equivalent with BSL3 testing all AI specimens in human • Disinfection practices in hospital and in environment having infected persons • Desk-top exercises for HPAI preparedness have been conducted by Central Government and local governments
Measures in case infected poultry is found	Regulations	Case identification		The trigger point of unusual mortality of 5% within 2 continuous days in a flock shall be subject of an official follow-up investigation. Samples shall be collected and case be confirmed if laboratory reveals positive result against H5 influenza virus by Real-time RT-PCR test.
		Reporting system	Summary	Avian Influenza is a notifiable disease in Vietnam, therefore, by law (Veterinary Ordinance 2004) is subject to immediate report, following by daily reports until the end of the outbreak.. Daily updates on disease situation and vaccination progress are published on DAH's website. Thanks to the kind assistance of various donors, FAO has been able to assist Vietnam in improving its reporting system by deploying the FAO's TADinfo, an online reporting system. The gradually increased number of provinces using the system to report animal disease outbreaks of selected disease proved the usefulness of the system.
			Measures in case not reported	For farmers, no compensation will be given for the flocks being culled if not tried to cover the information.

<table>
<tr><td rowspan="6"></td><td rowspan="2"></td><td rowspan="2">Containment Measures</td><td>Summary</td><td colspan="3">• Once an outbreak is confirmed, modified stamping-out policy shall be implemented with compensation (only birds within the infected farm).
• Ad-hoc control points shall be established to control poultry movement
• Closesure of all live bird markets in the infected areas until the ban on movement is shifted.
• Disinfection of infected premises be carried out everyday for a week after the incidence.</td></tr>
<tr><td>Measures to ensure containing system</td><td colspan="3">• Establishment of local Taskforces and Rapid Response Teams and trained these teams on outbreak containment;
• Public awareness campaigns targeting farmers, traders and consumers were launched to secure their willingness and commitment.</td></tr>
<tr><td colspan="3" rowspan="4">Compensation
(National contingency plan)</td><td>Case</td><td>Rate</td><td>Funded by</td></tr>
<tr><td>Affected poultry culled in accordance with the order by the provincial Chairperson</td><td>The amount of 15,000 VND (0.94 USD) shall be paid to each bird being culled, of which farmers shall receive12,000 VND, the rest is for costs of culling, e.g. fuel, labor, etc.</td><td rowspan="3">National Government</td></tr>
<tr><td>Voluntary culling of birds that cannot be sold due to the impact of the ban on movement</td><td>The amount of 10,000 VND (0.63 USD) shall be paid to each bird being culled, of which farmers shall receive 7,000 VND, the rest is for culling cost, e.g. fuel, labor cost, etc.</td></tr>
<tr><td></td><td></td></tr>
<tr><td colspan="3">Mutual Fund</td><td>n/a</td><td></td><td></td></tr>
<tr><td colspan="4">Risk communication, including public awareness programs / Measures to communicate between central government and local government</td><td colspan="3">• PAHI (Partnership for Avian & Human Influenza) Secretariat is developing the National Communications Strategy for HPAI which is expected to provide a coordinated framework for communications of both human and</td></tr>
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	animal health sectors. • Central government issues directives about AI containments, calling whole political system involving with AI containment. • National Steering committee conduct regular meeting to exchange information and give directions for continuing AI control and prevention. • Daily, weekly of monthly report AI situation in the local areas to Ministry of Health. • Several public awareness campaigns have been conducted with UNICEF taking the lead. Mass media such as national and local television and radio stations were utilized as the main channels. • Leaflets, posters, booklets and other materials were produced and distributed nationwide.
Training veterinary worker	• A 2-week training workshop on Veterinary Epidemiology for epidemiological officers from central and regional offices of the Department of Animal Health was conducted with sponsorship of the USDA and Colorado University, USA. • Outbreak investigation trainings were carried out in collaboration with the FAO/ADB project in partnership with the OIE for over 600 district veterinary staffs. This training module would be expanded for more district staff. • Animal Health Workers who work at the field were trained on vaccination skills, as well as early detection and response; training on usage of PPE was also given.
Information sharing among countries/regions in avian influenza outbreak	▪ Since the start of the first outbreak, Vietnam has committed on information transparency with immediate report to the World Organization for Animal Health (OIE) and, consequently follow-up reports. ▪ Reported to WHO after determining infected cases. Cooperated with WHO to conduct investigation and in deep researching on variant of the virus. ▪ Daily updates on avian influenza situation published on DAH's website, available both in local and English language. ▪ Information on status of the disease in Viet Nam is often updated to international community through various conferences and workshops.
Vaccination policy	▪ Mass vaccination policy has been deployed since August 2005 ▪ The National Vaccination Strategy for HPAI was critically reviewed with

	the aim to modify it to ensure its sustainability as well as to determine an exist plan. ▪ Post-vaccination surveillance program to back up the vaccination program has been intensively implemented to monitor the efficacy of the program. ▪ Now in process to develop AI vaccine for human with support from WHO and ourselves.