

## Section 8

### Response to avian influenza

#### 1 Careful and scientifically grounded decision and response

As for the response to the current novel influenza, during the initial period response was made in every sector based on “Action Plan for Measures against novel influenza” (see Section 8, 2 (2)) etc. which is intended for response to avian influenza (H5N1). Also, some pointed out that active response with temporary closing of classes etc. eventually helped suppress the epidemic. Moreover, active reports by various media broadened the citizens' understanding of the risk of novel influenza, spread the practice of hand washing, gargling and good manners to cough, and urged response with setting of disinfectant etc. at various facilities.

Also, for example, revision of vaccination round was decided only with the clinical test results turned in, and in confirmation of safety of imported vaccine, based on the information on cases of side reactions in Canada our staff was promptly dispatched there for direct information gathering, thus also for securement of efficacy and safety we have continued careful response.

In decision it is important to maintain careful response based on scientific ground. The change of surveillance method described in Section 3, 1(1) at the phase in summer from the system where all cases suspected of novel influenza shall be confirmed by PCR testing for report to a system for grasping mass outbreak situation with PCR testing being conducted only in some onset cases (excluding severe cases) lead to orderly and steady implementation of surveillance despite limited resources even in the full-scale epidemic nationwide since autumn. As grounds for this decision, scientific findings about properties of the current novel influenza virus and domestic as well as overseas epidemic situation may be cited.

Especially, such unprecedented and unknown situation as response to novel influenza may be accompanied by phases difficult for scientifically grounded decision or by situation different from what citizens require, however, even then we still have to manage the situation presenting to all

the citizens accurate information in active and plain manners thereby gaining their understanding.

## 2 Response to avian influenza (H5N1)

### (1) About avian influenza (H5N1)

Though case of avian influenza (H5N1) virus related infectious disease is not reported in Japan as yet, there are 490 reported confirmed cases in 15 countries of the world (Chart 1-8-1). The disease is transmitted from bird to human primarily through close contact with body fluids/feces from infected poultry etc. Thus far cases of such bird-to-human transmission account for almost all, however, rare cases have been reported in Vietnam, Thailand and Indonesia which were caused by close contact with the onset evidently suggesting human-to-human transmission.

Avian influenza (H5N1) virus related infectious disease in human at early stage mostly shows influenza-like symptoms comprising primarily sudden fever (mostly 38°C and over) and respiratory symptom such as cough. The fatality of avian influenza (H5N1) virus related infectious disease is about 60% considering the confirmed cases reported so far.

Though actual fatality might be lower considering the possibility of mild cases being overlooked, the frequency of asymptomatic or mild infections still remain unknown, therefore, further research is required\*1.

Although as stated above, avian influenza (H5N1) is at present mostly related to cases of bird-to-human transmission, it is feared that its hybridization with different influenza viruses may occur producing new type of influenza virus with high human-to-human infectiousness. The infectiousness and pathogenicity in human, and efficacy of anti-influenza virus drug etc. in such situation are actually still under research with no established findings.

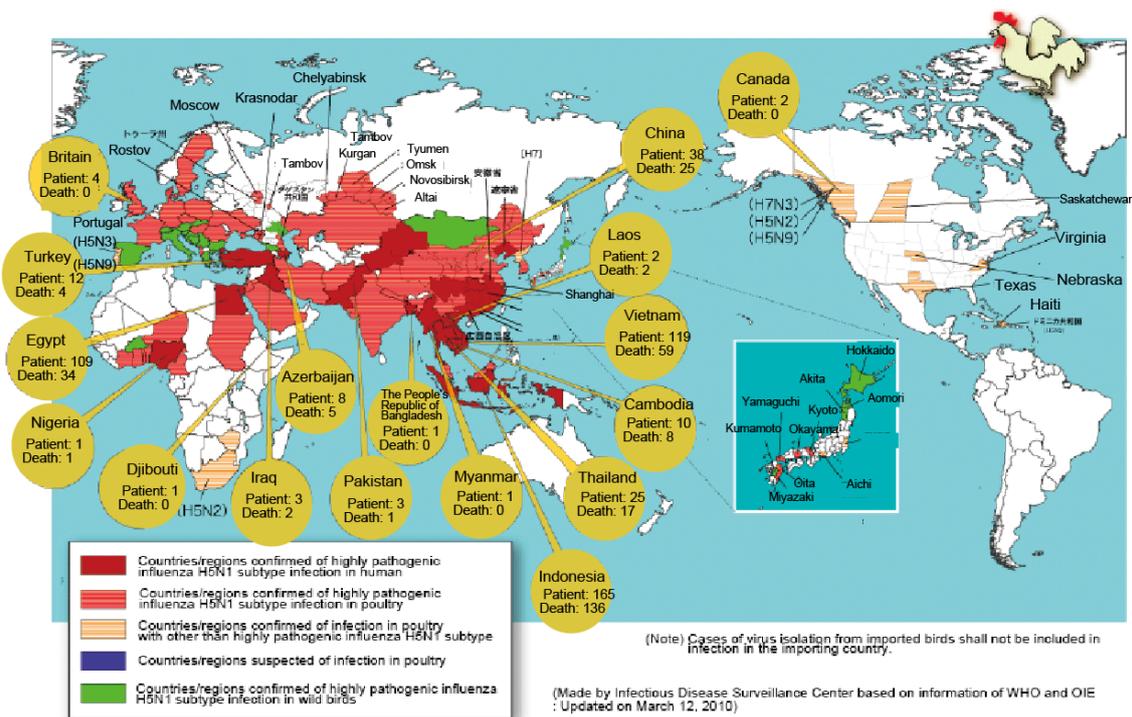
### (2) Response in the Ministry of Health, Labour and Welfare

With emphasis on the risk of outbreak of novel influenza when, due to mutation etc., H5N1 subtype avian influenza virus etc. gets transmitted from human to human, the Government formulated “Action Plan for Measures against novel influenza” in November 2005 which provide

Governmental response as a whole with successive revision as the occasion demands, and also in the early period of the epidemic of the current new type influenza, response was made on the basis of Action Plan (Last Revision: February 2009) .

The Ministry of Health, Labour and Welfare is also conducting response in line with Action Plan. As a concrete example, for 10 million people every year from 2006 to 2008, pre-pandemic vaccine against epidemic of H5N1 subtype avian influenza-derived novel influenza was manufactured and stored as undiluted solution with changed species of virus strain. Pre-pandemic vaccine means vaccine manufactured from virus which is isolated prior to outbreak of pandemic influenza from patients or birds with bird-human infectious disease, and is currently manufactured and stored using subtype A/H5N1 (considered to be highly likely to mutate into pandemic influenza).

Chart 1-8-1 Distribution of avian influenza infection based on official announcement (in and after October 2003)



\* 1 National Institute of Infectious Diseases; Epidemiology of human cases of infections with avian influenza (H5N1) confirmed by WHO  
[http://idsc.nih.go.jp/disease/avian\\_influenza/62who10.html](http://idsc.nih.go.jp/disease/avian_influenza/62who10.html)

Also, with arrangement of development and production systems for novel influenza vaccine deemed a pressing issue, in order to construct systems\*<sup>2</sup> capable of producing novel influenza vaccine for the whole nation approximately in half year, by supplementary budget 2009 (approximately 119 billion yen) we established “Temporary Special Provisions for Subsidy for Arrangement of development and production systems for novel influenza vaccine”, thereby creating a fund from the said subsidy.

As for anti-influenza virus drug, considering situation in foreign countries and the latest findings in “Action Plan for Measures against novel influenza”, we are promoting storage of the quantity corresponding to 45% of the nation as a goal. As of the end of June 2010, our total of all the prefectural storage put together is for approximately 56 million people.

Besides, early detection of occurrence of novel influenza in the world and accurate grasp of domestic epidemic situation are essential for response to epidemic of novel influenza. Therefore, we always participate in network of WHO, Major advanced countries, and Japan-China-Korea etc. for worldwide information gathering. Domestically we are conducting grasp of outbreaks by the tracking of epidemic outbreak behavior, and pathogen surveillance etc. for studying virus property.

Based on this experience, the Ministry of Health, Labour and Welfare will try to cooperate with related ministries, WHO, and related countries, hereafter also endeavor to arrange institutional framework, accumulate knowledge and promote scientific research without failure to guard against infectious diseases such as novel influenza etc. that threaten the safety of national life, and appropriately conduct information provision to the citizens to ensure their timely and accurate understanding and appropriate action.

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\*<sup>2</sup> To be specific, through development of a cell culture method, reduce the production period of vaccine for the whole nation, 1.5 - 2 years by the present culture method using hen’s eggs, to approximately half a year. The Ministry of Health, Labour and Welfare is in the first place managing to steadily implement the program supported by the Fund, and to complete a production system of novel influenza vaccine approximately in 5 years. Specifically, in July 2010 we adopted construction work plans of experimental production facilities by four corporations. Hereafter construction work plans etc. for actual production plants are to be separately collected.

## **~Column~**

### **To prevent the outbreak of influenza ~formulating an operation continuation plan~**

Although the novel influenza (A/H1N1) is settled for the time being, if highly pathogenic avian influenza spreads with human to human infection, it is assumed that 40% of workers must absent from their work because workers and their families are infected regardless of the fact that the peak of epidemic is different depending regions and type of businesses. In that case, intermission of non-essential and non-urgent business, lack of supplies and stagnation of physical distribution are predictable and there is possibility that economic activity will fall down widely.

While focusing on the security of human life primarily, in order to reduce as much damage to society/economic due to epidemic as possible at such epidemic stage, it must be essential for employers to establish a plan to keep their business working by considering new influenza like highly pathogenic avian influenza (A/H5N1) beforehand, to prepare for it carefully and to make an action calmly on the basis of those plan if epidemic occurs.

So what kind of measures for novel influenza should be taken in workplaces?

First, as for employers, while managing employees' health thoroughly, following ideas are examples to reduce infection opportunity

- Those who have fever must consider about measures such as taking leave, recuperating at home according to doctor's instruction.

Besides, for every employer, it is important to work on making hand-washing and Cough Etiquette known well and cleaning of office while paying attention at infection conditions.

Other than those efforts, followings are other examples.

- Educating/enlightening labour on infection precautions in work
- Confirming health status of absent labour and their family (checking if they have fever and possibility of contact to infected person) and grasping reasons of their absent, and instructing people to call if there is possibility that the said person and his/her family is infected.

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- If childcare facilities are temporary closed where children of employees go, it should be considered about arrangement of working hours etc. for them

Referring to the above, it is important to think of necessary preparation/measures for preventing flu during commuting in cooperation with labour and management.

Moreover, the central government is required to establish plans of business continuity plan in every government departments according to “Guidelines for operation continuation plan of the central government for Pandemic Influenza” since decision-making, securing people’s life at least minimum level, security, adjustment of economic activity, implementation/continuity of supports in addition to the measure mentioned above are required.

The basic concept of “Guidelines for operation continuation plan of the central government for Pandemic Influenza” says to narrow business down thoroughly and to assign resources to really necessary operation by scaling down/stopping nonessential and nonurgent business in order to keep required businesses working while protecting employees’ life and health. The Ministry of Health, Labour and Welfare has just established operation continuation plan according to the guidelines.

(Reference)

○Guidelines for novel Influenza at Workplaces

<http://www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou04/pdf/090217keikaku-08.pdf>

○Q&A of employers and workplaces on novel influenza

<http://www.mhlw.go.jp/bunya/kenkou/kekkaku-kansenshou04/21.html>

○Guidelines for operation continuation plan by the central government for pandemic influenza

<http://www.cas.go.jp/jp/seisaku/ful/dai23/dai23.html>

Roles required of the central government and budget screening

~ From overview of “Guidelines for operation continuation plan by the central government for Pandemic Influenza”

		Operation character	Examples
Continuous operation in case of novel influenza outbreak	Operation of novel influenza measures	Continuous operation in case of novel influenza outbreak Operation of novel influenza measures Operation which is required in “Action Plan to Handle Novel Influenza” and also which is predicted to be increased due to the outbreak	<ul style="list-style-type: none"> <li>●Frontline measures and development/supply of vaccine, etc. 【】</li> <li>● Support for municipalities to operate novel influenza measures and for those who are in charge of securing social functions</li> </ul>
	Ordinary continuing operation	Operations that are hard to be scaled down greatly since they are required to keep basic citizens' life and it may cause serious damage to the basic function to people' s life and economic activities by doing so and discontinuing those businesses temporally 【】	<ul style="list-style-type: none"> <li>●Diplomacy, defense and pension service 【】</li> <li>●Support for businesses of municipalities which are required to keep citizens' basic life 【】</li> <li>●Businesses that are to maintain environment to continue the operation such as purchase of commodities, contracts, security, hygiene, dinning and management of government offices</li> </ul>
	Scaled-down/ discontinued businesses	Businesses that are possible to be scaled down and discontinued temporally since those businesses are not needed for urgent actions like medium/long term business 【】※ Businesses effecting people' s life on some level due to latency of policy implementation, however, it must be required to scale down or discontinue those businesses from perspective of priority order of resource allocation	<ul style="list-style-type: none"> <li>●Planning new policy/system which require nonurgent 【】</li> <li>●Implementation of legal reform and subsidy which require nonurgent 【】</li> <li>●Permission (※) 【】</li> <li>●No urgent business like on-site inspection , statistics, surveillance study and produce of white paper</li> </ul>

※As for businesses that impose work upon citizens and employers, and that invest privilege in them, consider about flexible measures such as postponing deadline as long as possible and make office work simple.