



Highly Pathogenic Avian Influenza in Japan (2004)

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Guideline for the control of HPAI

**Domestic Animal Infectious Diseases
Control Law (Article 3.2.)**

Guidelines on the preventive measures of
specific domestic animal diseases (e.g. HPAI, FMD)

Notification and Confirmation of HPAI

Livestock Hygiene Service Centre
(Prefectural Veterinary Inspector)

Livestock Industry Division
of prefecture government

Prefectural government

↓ ↑
Central government

Animal Health Division of MAFF

↓ ↑
Independent Agency

The National Institute of Animal Health (NIAH)

When farmers find poultries with
some HPAI like clinical signs...

Farm level

farmers, veterinarian

Samples

Control measures on HPAI in Japan

高病原性鳥インフルエンザに関する
特定家畜伝染病防疫指針



平成16年11月18日
農林水産大臣公表

“Guidelines on control measures on HPAI” as the contingency plan announced by Minister of MAFF

- Notification
- Diagnosis
- Stamping out
- Movement control
- Eradication program
- Vaccine
- Surveillance

Diagnosis of HPAI



National Institute of Animal Health, Japan

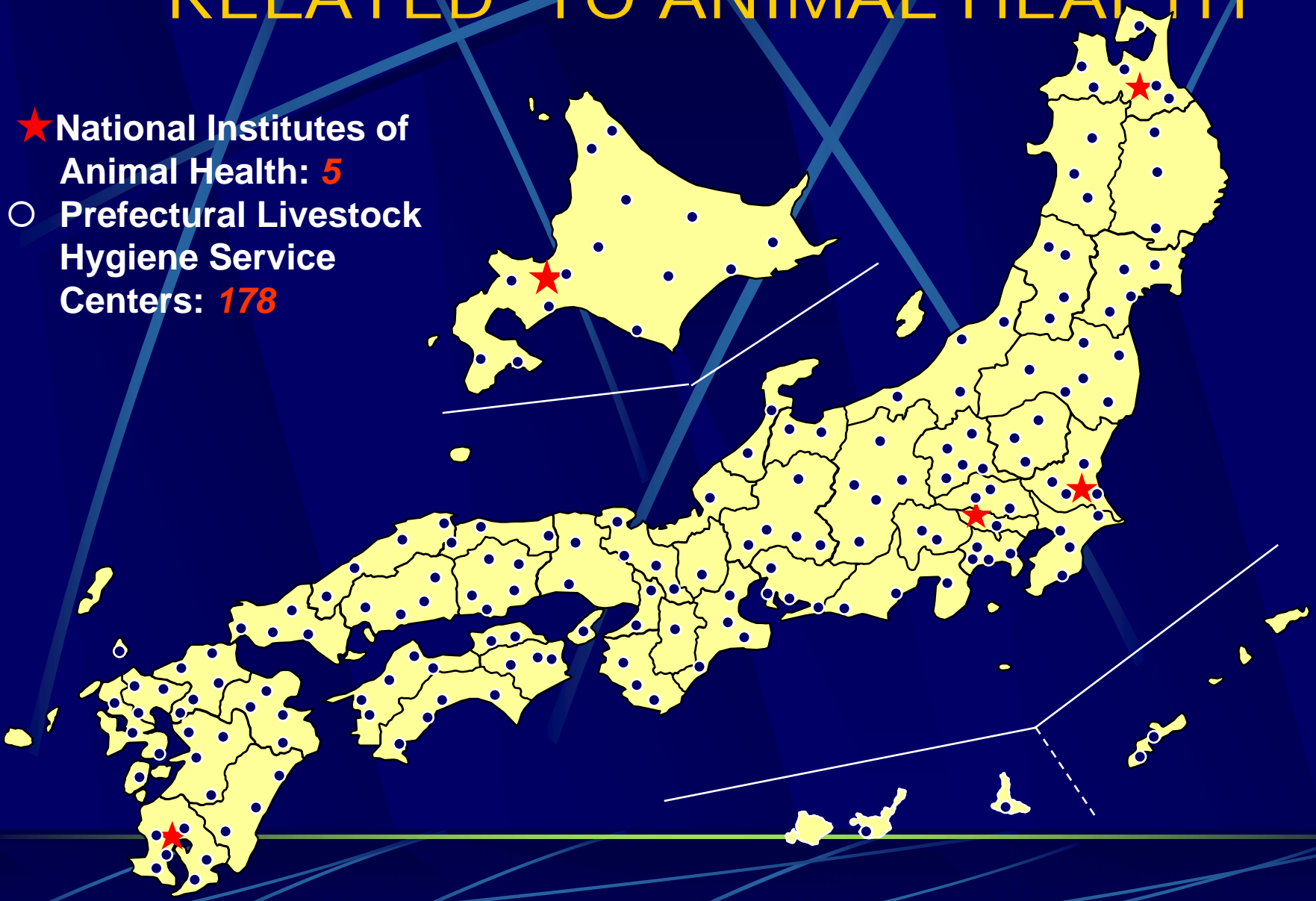


Animal Hygiene Center, prefecture

- Identification of AIV
- Sub typing (HA, NA)
- Pathogenicity test
- Genome analysis
- Reagents supply

LOCATION OF THE FACILITIES RELATED TO ANIMAL HEALTH

- ★ National Institutes of Animal Health: **5**
- Prefectural Livestock Hygiene Service Centers: **178**



Control Measures implemented at the affected premises

Basic control measures

- Control of spreading
- Protection of on site workers

Emergency control measures

- Isolation of infected and suspected poultries
- Disinfection



Humane killing

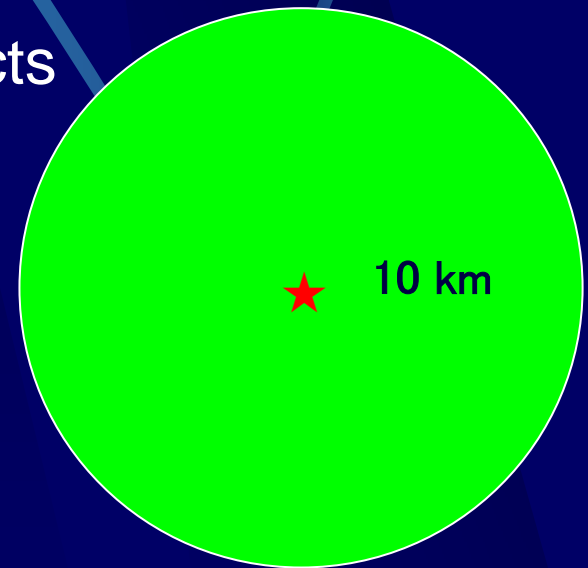
Destruction (Bury) of carcass, excretory substance, contaminated feedstuff etc

Disinfection of contaminated premises etc.

Movement Control

Movement control zone: 10 km (5-30 km) radius

- >21 days
- poultry equipment
- poultry, carcass, poultry products
- feces
- feedstuff
- disinfect tracks
- close GP center



Monitoring for free status

- virus isolation /antibody test for every farm (twice)
- Lifting the control

Outbreaks of H5N1-HPAI in Japan (2004)

Case 3&4

Case 1

Case 2

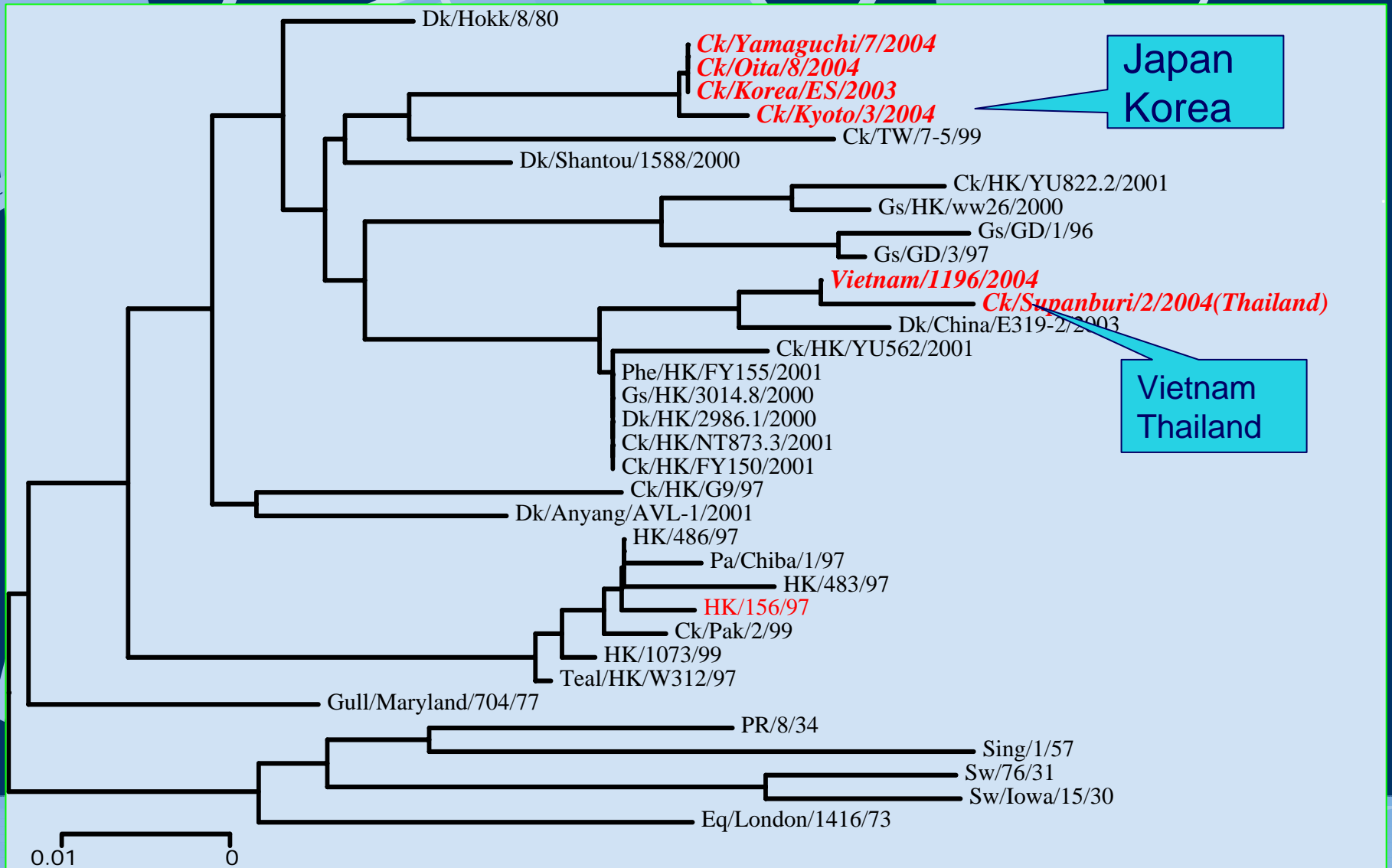


Case No.	Location	Date of Confirmed	Disposal No.	Virus	Pathogenicity
1	Yamaguchi Pref.	12 Jan,2004	34,000(layers)	H5N1	HPAI
2	Oita Pref.	17 Feb,2004	14 (pet chickens)	H5N1	HPAI
3	Kyoto Pref.	28 Feb,2004	265,000(layers)	H5N1	HPAI
4	Kyoto Pref.	5 March,2004	15,000 (broilers)	H5N1	HPAI

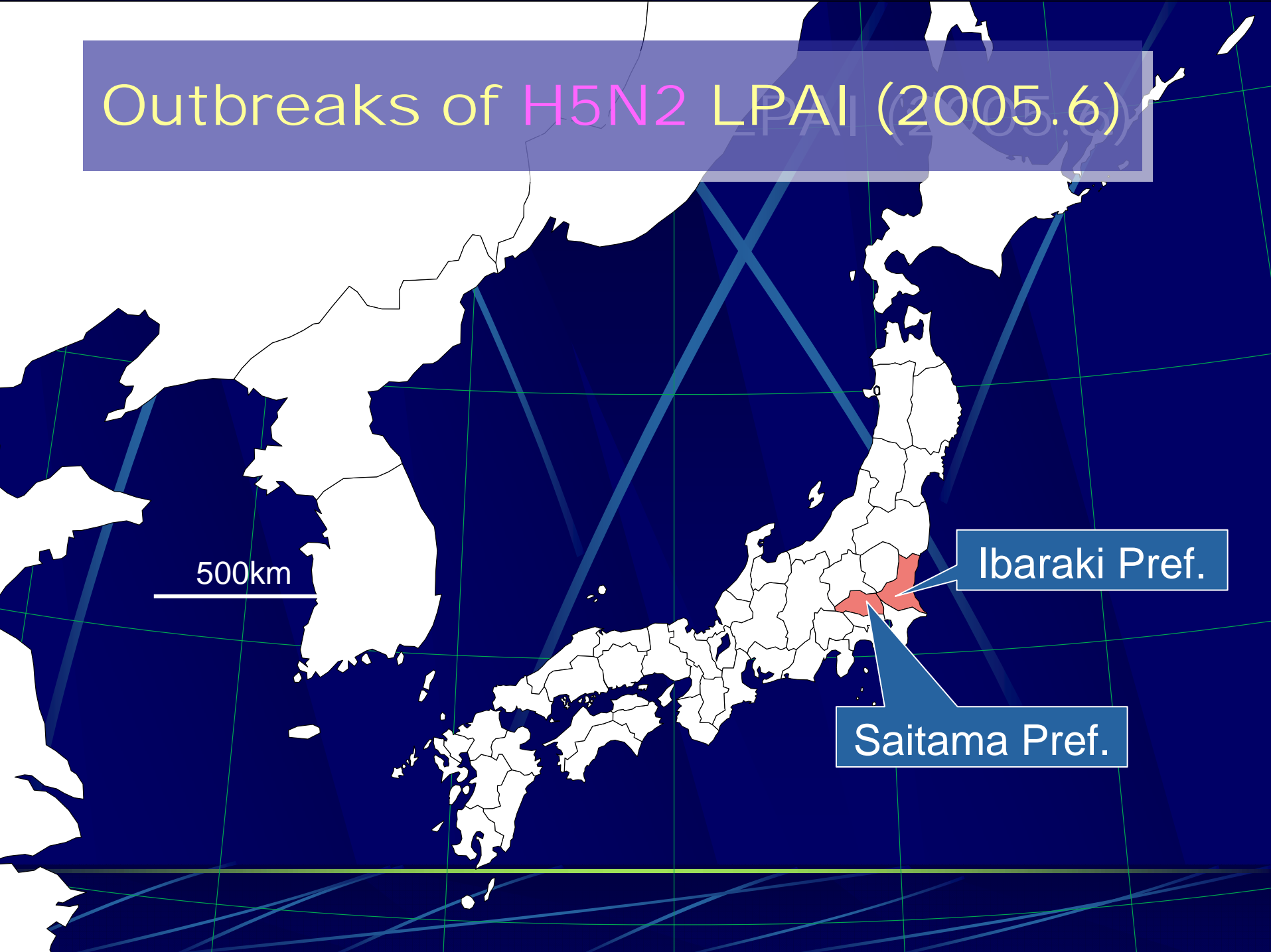
Experimental inoculation to chickens

- intra-venous ino. :100% mortality (within 1 day)
- intra-nasal ino. :100% mortality (within 3 days)
- $1\text{CLD}_{50} = 100\text{EID}_{50}$
- No recovered chicken

Phylogenetic analysis of PA gene



Outbreaks of H5N2 LPAI (2005.6)



500km

Ibaraki Pref.

Saitama Pref.


Symptoms observed H5N2 infected flocks in Ibaraki prefecture

- No mortality
- No/slight egg drop



Laboratory test is necessary for detection of infected flocks

Core Principles

- 1 HPAI should be basically eradicated by means of prompt notification and movement control, and stamping-out policy, taking into account international rules 
- 2 When it become difficult to control by the stamping out policy because of frequent outbreaks of HPAI within the control area, MAFF would examine the vaccination
- 3 Once vaccination was appropriately applied, monitoring should strictly be conducted until all administered poultries are disposal or delivered



Thank you very much!