

The OIE standard on Avian Influenza

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Updating Chapter

- Update Chapter, taking the most recent scientific findings into consideration
- Establish notification criteria that encourage transparent reporting, including LPNAI
- Develop specific risk-based recommendations for most important commodities being traded



Recent events:

- Expert ad hoc group on pathogenesis and transmission (November 2004)
- Expert ad hoc group on epidemiology and surveillance (November 2004)
- Terrestrial Animal Health Standards Commission (January 2005)



Avian Influenza



- **Definition**
 - Poultry
 - HPNAI free
 - NAI free, free establishment
- **Surveillance (with and without vaccination)**
 - Clinical
 - Virological
 - Serological
- **Commodity trading recommendations**
- **Compartmentalization**



Poultry is defined as ‘all birds reared or kept in captivity for the production of meat or eggs for consumption, for the production of other commercial products, for restocking supplies of game, or for breeding these categories of birds’.



Notifiable avian influenza: (NAI) is defined as an **infection of poultry** caused by any influenza A virus of the H5 or H7 subtypes or by any AI virus with an intravenous pathogenicity index (IVPI) greater than 1.2 or ...

*The incubation period for NAI is taken to be **21** days*



NAI viruses can be divided into **highly pathogenic notifiable avian influenza (HPNAI)** and **low pathogenicity notifiable avian influenza (LPNAI)**



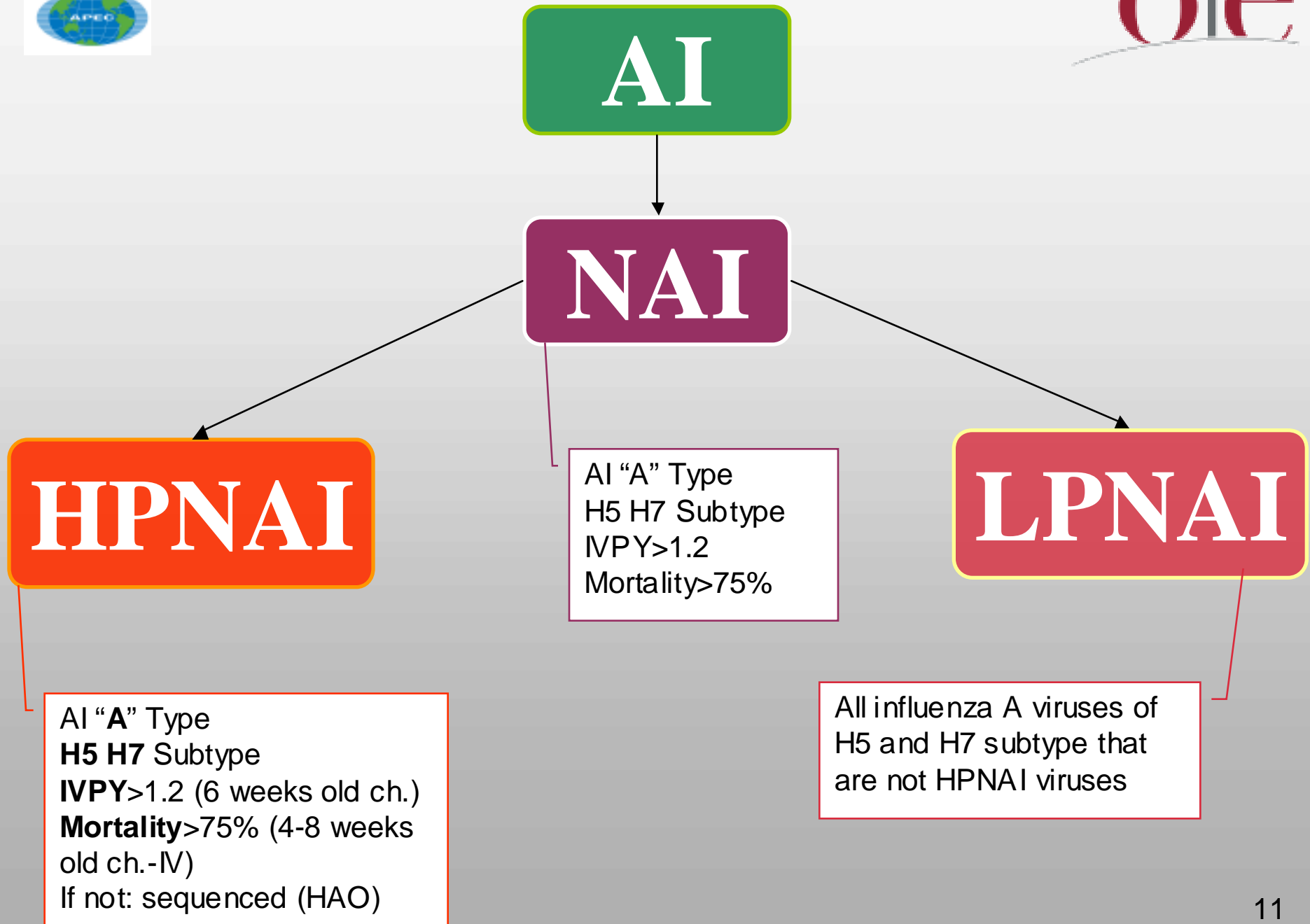
HPNAI viruses have an IVPI in 6-week-old chickens greater than 1.2 or, cause at least 75% mortality in 4-to 8-week-old chickens infected intravenously.



H5 and H7 viruses which do not have an IVPI of greater than 1.2 or cause less than 75% mortality in an intravenous lethality test should be sequenced to determine whether multiple basic amino acids are present at the cleavage site of the haemagglutinin molecule (HA0) for similarities to known HPNAI isolates.



LPNAI are all influenza A viruses of H5 and H7 subtype that are not HPNAI viruses.





Infection with NAI virus:

- HPNAI virus has been isolated and identified as such or viral RNA, specific for HPNAI has been detected in poultry or poultry products, or
- LPNAI virus has been isolated and identified as such or viral RNA specific for LPNAI has been detected in poultry or poultry products, or
- antibodies to H5 or H7 subtype of NAI virus that are not a consequence of vaccination, or could not be ruled out thorough epidemiological investigations.



Surveillance:

- Include early warning system throughout chain
- Implement regular, frequent clinical inspections
- Target population, all susceptible poultry species
- Frequency of active surveillance <6 months

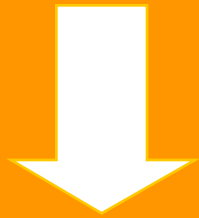


Animal Welfare concerns:

- Guidelines on killing for disease control
- Guidelines on slaughter, including religious sl.
- Guidelines on land transport
- Guidelines on housing (future)




Products		Free of HPNAI	Free of NAI	Regardless NAI status
ANIMALS	Live	Red	Green	Red
	Day Old	Green	Green	Red
EGGS	Hatching	Green	Green	Red
	For Human Consumption	Green	Green	Red
SEMEN	Semen	Green	Green	Red
MEAT	Fresh	Green	Green	Red
	Products	Green	Green	Yellow
EGGS	Products	Green	Green	Yellow
OTHERS	Feathers and down	Green	Green	Yellow
	For animal feeding, agricultural or industrial use	Green	Green	Yellow



Poultry



Commodities that can be traded:

<i>Birds other than poultry</i> 	Products		HPNAI	NAI	Regardless NAI Status
	ANIMALS	Live			
	SEMEN	Semen			
	MEAT or OTHERS	Meat or Others			



Change of OIE's paradigm

- Focus on country free of diseases when decisions-taken based on risk analysis.
- Recommendations by products, according to specific sanitary measures.
- Take major advantage of regionalisation and compartmentalisation concepts.



Decision-taken based in risk

- Recommendations according to products and specific risk by products
- Different recommendations according to zone and compartment risk.
- Products list without risk , regardless country status.



Taking advantage of zooning

- For certain diseases , the sanitary measures can be based according zones.
- For other type of diseases concept of compartment is recommended.
- However, has not to be forgotten that final goal is worldwide and territorial eradication of disease.

zoning/compartmentalisation



- zoning refers to the separation of animal sub-populations on the basis of geography
- compartmentalisation refers to the separation of animal sub-populations on the basis of biosecurity management practices

• Zone/Region

- a clearly defined part of a country established on the basis of natural, artificial or legal boundaries

• Compartment

- one or more establishments containing an animal sub-population with a distinct health status with respect to a specific disease or diseases for which required surveillance, control and biosecurity measures have been applied for the purpose of international trade

Application of the concepts



- there are Code recommendations for zones and compartments for diseases for which the concepts are appropriate
- the requirements are established by Veterinary Services and recommendations depend on
 - epidemiology of the disease
 - environmental factors
 - appropriate and applicable biosecurity measures
 - necessary surveillance



Necessary requirements for compartmentalisation



- I. Definition.
- II. Documents for critical issues.
- III. Public and Official Supervisors reports
- IV. Compartment disease status.
- V. Compartment vaccination status.



Necessary requirements for Oie compartmentalisation

- VI. Division of Zone and Compartment by Epidemiology.
- VII. Disease surveillance.
- VIII. Diagnostic capacity.
- IX. Response capacity. (emergency, control, notification).



The NAI status of a country, a zone or a compartment:

- the outcome of a risk assessment,
- NAI is notifiable in the whole country, awareness programme
- appropriate surveillance is in place to demonstrate the presence of infection in the absence of clinical signs in poultry, according to the Appendix.



NAI free country, zone or compartment

- When neither HPNAI nor LPNAI infections has been present in the last 12 months
- If infection has occurred:
 - In case of HPNAI, 3 months after stamping out and disinfection, followed by surveillance
 - In case of LPNAI, 3 months after slaughter or stamping out, in either case followed by disinfection and surveillance



HPNAI free country, zone or compartment

- When no HPNAI infection has been present in the last 12 months, although LPNAI may be unknown, but any NAI virus detected has not been identified as HPNAI virus.
- If infection has occurred, 3 months after stamping out and disinfection, followed by surveillance



Many Thanks