


**DEPARTMENT of AGRICULTURE**  
 Provincial Government of the Western Cape

## H5N1 in birds

### The current global situation

Avian Influenza Seminar  
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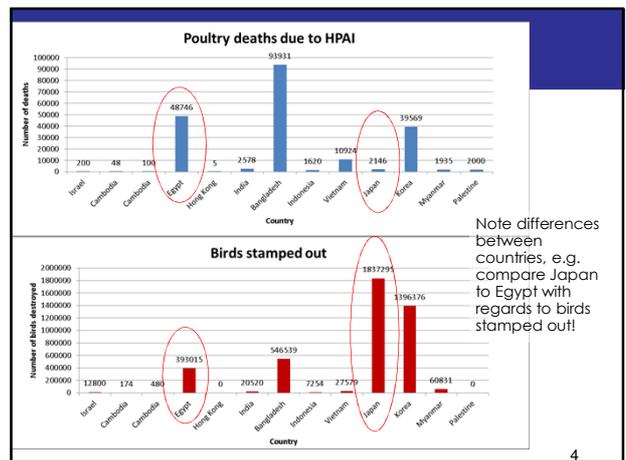
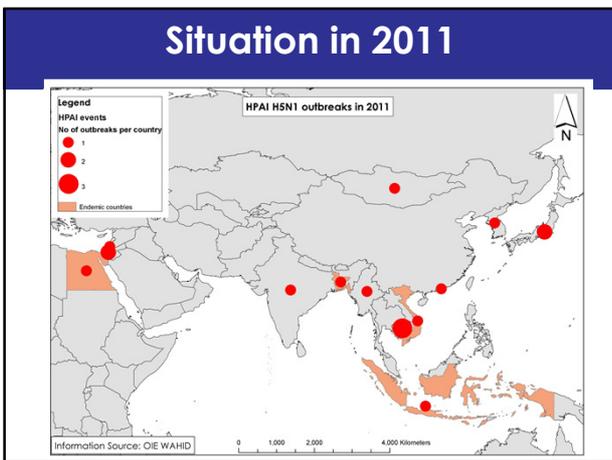
## Background

- HPAI rare: 21 outbreaks since 1959
- Asian H5N1 appeared in 1996
- 2003-2005 outbreak affecting 63 countries/territories
- \$10 billion loss to Asian poultry sector
- 20% workers lost jobs in badly affected areas of Indonesia
- Growth rate of Thai agriculture halved



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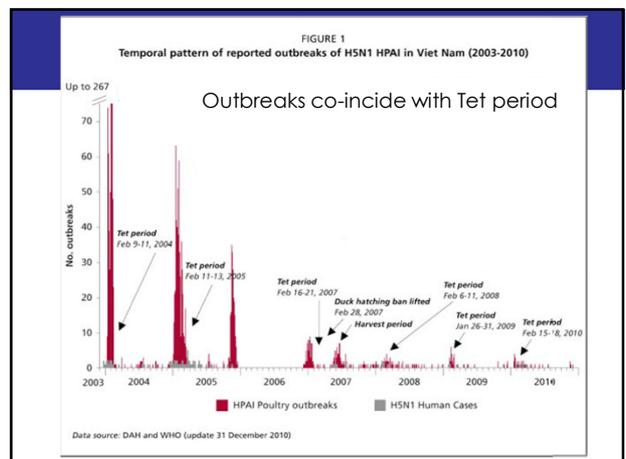


## Outbreak patterns

- Peak between Dec-March
- Cooler weather conditions
- Major festivals
- Migratory birds in winter residence



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## Methods of infection/spread

- Migratory wild birds
  - act as reservoir and initiate an outbreak through contact with resident birds or poultry
- Resident wild birds
- Subclinical infection
  - Ducks show fewer clinical signs than chickens, but can still shed the virus
- Trade in live poultry (Indonesia)
- Fomites
  - Contaminated objects and people play a role



## Current methods of control

- Stamping out
- Modified stamping out
- Biosecurity measures e.g. at markets
  - e.g. live poultry markets are emptied completely, cleaned and rested for 24 hours before trading is allowed to resume
- Awareness campaigns
- Vaccination
  - controversial, but most people agree it cannot be used alone
- Combination



## Difficulties in control

- Veterinary services
  - Lack of staff and funds e.g. some governments cannot afford vaccination
- Lack of public support
  - Some farmers not motivated to eradicate disease e.g. duck farmers as their ducks are asymptotically infected
- Lack of public understanding
  - Often low education and knowledge levels of farmers and the general public. For instance, in some parts of rural South East Asia people do not accept germ theory.
- Unregulated poultry industry
  - In most endemic countries poultry industry grew rapidly before AI outbreak, due to an increase in demand for poultry meat. The industry is therefore largely uncontrolled and unregulated

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## Useful sources

- World Organisation for Animal Health (OIE)  
[web.oie.int](http://web.oie.int)
- Food and Agricultural Organisation of the UN (FAO)  
[www.fao.org](http://www.fao.org)
- Network of expertise on animal influenzas (OFFLU)  
[www.offlu.net](http://www.offlu.net)

Thank you

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