

 DEPARTMENT of
AGRICULTURE
Provincial Government of the Western Cape

H5N1 in birds

The current global situation

Avian Influenza Seminar
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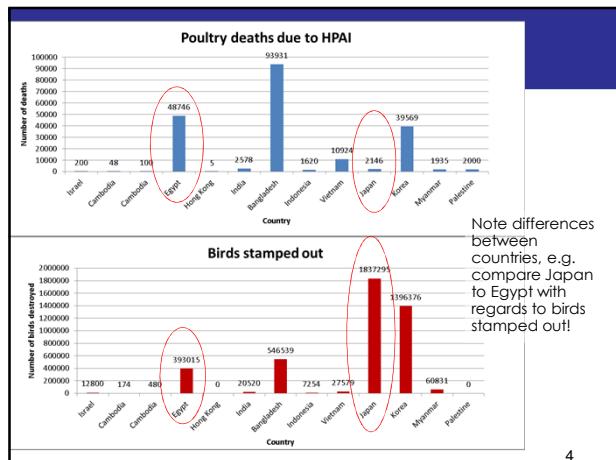
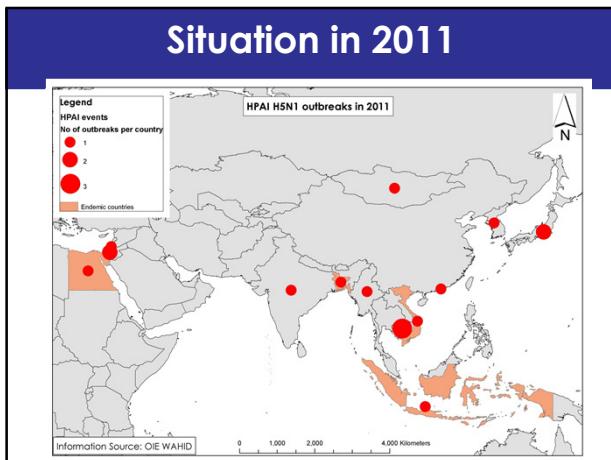
Background

- 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

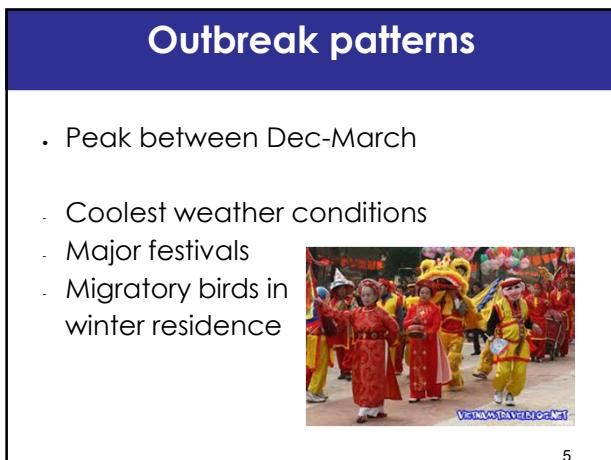


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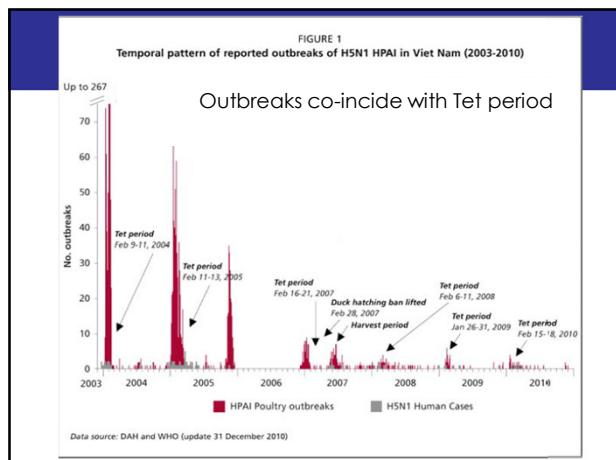
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Methods of infection/spread

- 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



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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



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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
- Food and Agricultural Organisation of the UN (FAO)
www.fao.org
- Network of expertise on animal influenzas (OFFLU)
www.offlu.net

Thank you

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