

Summary of animal health  
information relevant to human  
exposure to HPAI H5N1 in

## Egypt

**Prof. Dr. Mona M. Aly**

Director of  
Animal Health Research Institute  
(AHRI-NLQP)  
Dokki, Giza., Egypt

### Total poultry population

- Commercial poultry production =  
**800,000,000 bird**
- Backyard poultry production =  
**250,000,000 bird**

## Situation of HPAI H5N1 in Egypt

The disease was reported on 17th February 2006. Outbreaks were in 3 of the 27 Governorates which were:

Cairo : 4 cases .

Giza : 2 cases.

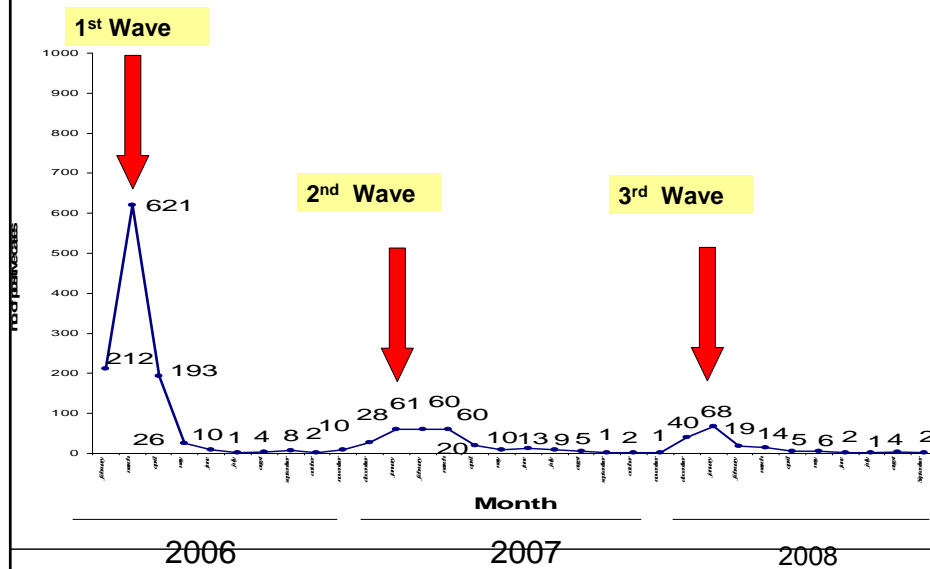
Menia : 1 case.

The H5N1 virus (Calde 2.2) has spread to 16 Governorates within one month; infecting both commercial farms and backyard flocks.

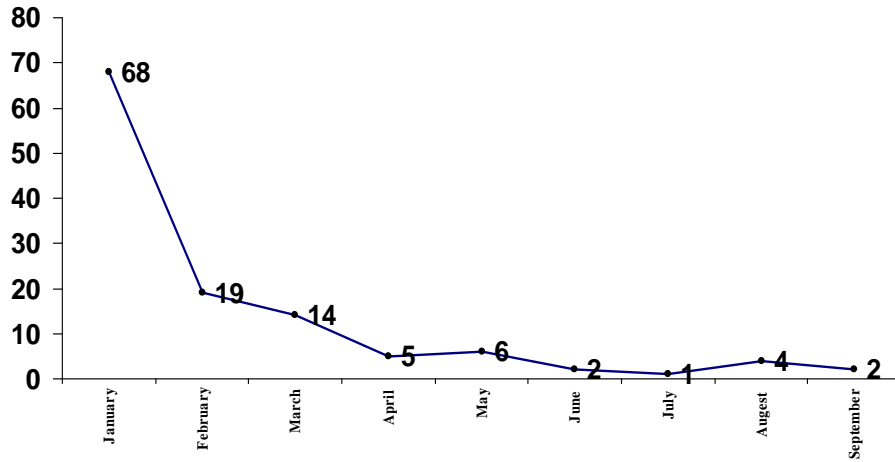
Backyard & LBM

### Epidemic curve (passive and active surveillance)

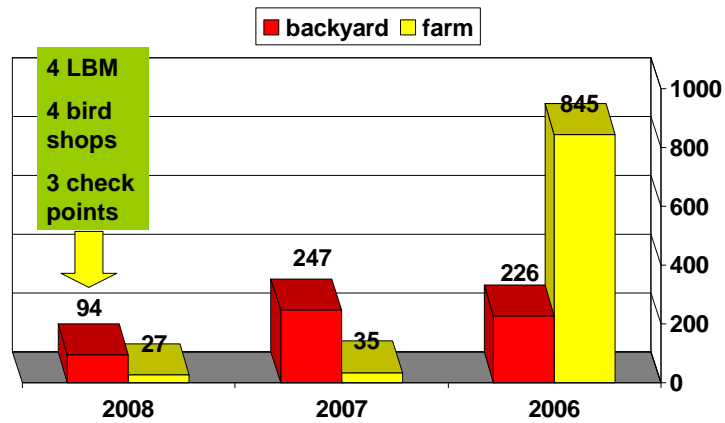
Feb. 2006 till September 2008

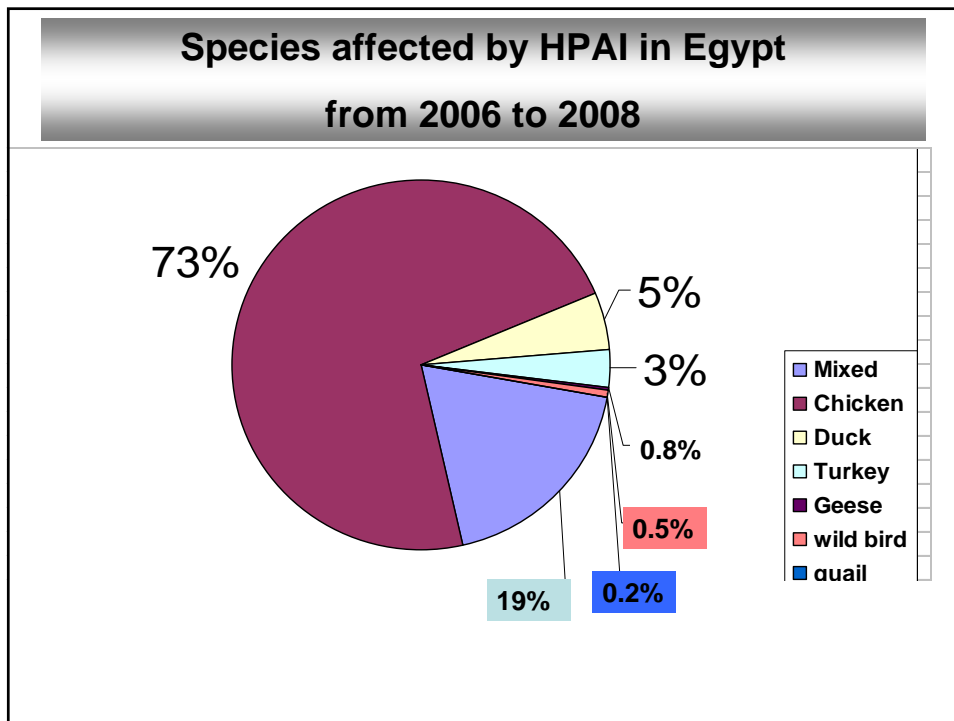
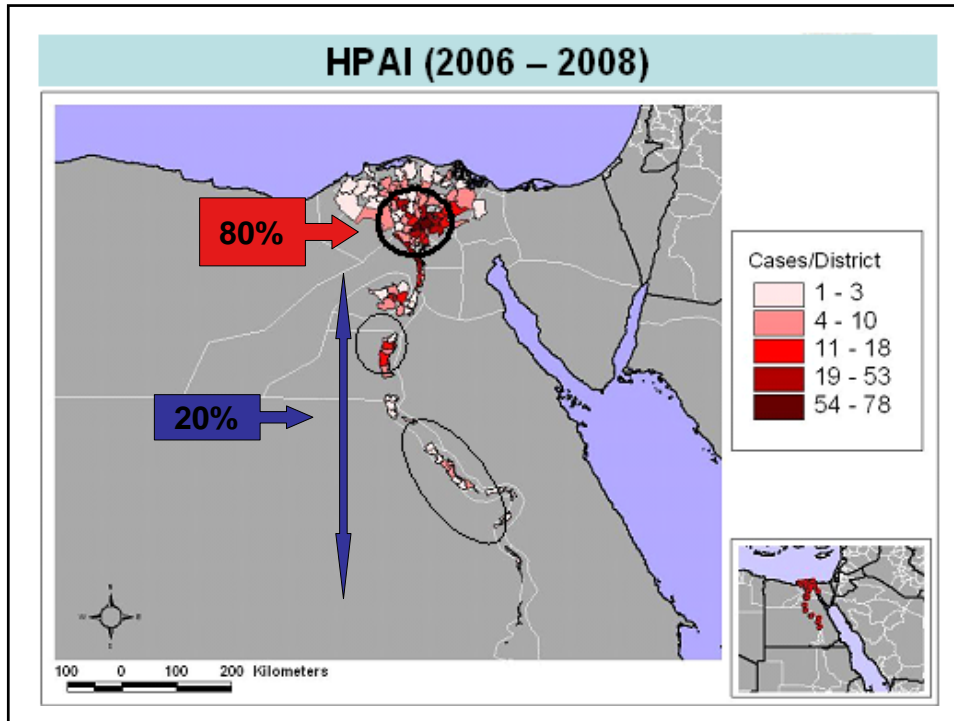


### Epidemic curve (passive and active surveillance) 2008



### AI situation in farms (sectors 2&3) and backyard (sector 4): 2006 to 2008 .





## **Outbreak reporting and possible constrains**

**The reporting level is poor due to:**

- **Lack of compensation funds.**
- **Weak regulatory support.**
- **Insufficient infrastructure of vet. services.**

## **H5N1 control measures in poultry**

**➤ Current control measures:**

- **Stamping out.**
- **Mass vaccination.**
- **Public awareness**
- **Surveillance (active, targeted and passive).**
- **Restructure of poultry production.**
- **Upgrade GOVS and NLQP.**
- **Enforce the regulation.**

## Vaccination program

- The vaccination was permitted in march 2006.
- The vaccination policy started as:
  - 1. Targeted vaccination:**  
(Started in March 2006, by vaccination zoo birds, grand parents and layer breeders).
  - 2. Ring vaccination.**  
(Started in April 2006).
  - 3. Mass vaccination.**  
(Started from the end of May 2006 till now).
- Backyard vaccination is done free of charge using reassorted H5N1.
- Commercial sector vaccinated with variety of H5N1 and H5N2 vaccines.

## Weaknesses in the vaccination program

- Low vaccination coverage.
- Insufficient manpower.
- Inadequate post vaccination monitoring.
- Use of different sources of vaccines

## Risk factors associated with AI in Egypt

- Migratory birds flyways (35 wet lands).
- No geographical borders between the Egyptian governorates that affect movement control.
- Unorganized & poor biosecurity measures in sector 3.
- Extensive backyard & rooftops production.
- Uncontrolled Live bird Markets & poultry shops.
- Low vaccination coverage.
- Capacity of slaughter houses cover about 50% of daily production.



## **Risk factors associated with AI in backyard sector.**

- Slaughtering diseased birds.
- Improper carcass and litter disposal.
- Rearing of mixed species.
- Poor rearing hygienic condition
- Contact with wild birds and other animals.
- Uncontrolled bird movement.





## **AH/PH collaborations**

### **What has worked well?**

- Political commitment.
- Cooperation between AH&PH.
- Raising public and professional awareness.
- Upgrading the national lab capacity (NLQP).
- Implementation of compartment program in sector 1 and 2.
- International cooperation with reference laboratories and international organization FAO,OIE,WHO& USAID.

### **What needs strengthening and improvement?**

- Compensation fund.
- Strengthen public awareness and biosecurity practices in sector 3 and 4.
- Strengthen the movement control and quarantine measures.
- Sustainable vaccination, surveillance and reporting.

