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

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Total poultry population

- Commercial poultry production = 800,000,000 bird
- Backyard poultry production = 250,000,000 bird
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.
Epidemic curve (passive and active surveillance) 2008

AI situation in farms (sectors 2&3) and backyard (sector 4): 2006 to 2008.
Species affected by HPAI in Egypt from 2006 to 2008

- Chicken: 73%
- Mixed: 5%
- Duck: 3%
- Turkey: 0.8%
- Geese: 0.5%
- Wild bird: 19%
- Quail: 0.2%
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).
     (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.
Thank You