



# “Bird Flu” Preparedness

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# Overview

- ◆ Avian Influenza in Birds
- ◆ Asian Strain H5N1 in Humans
- ◆ Factors Contributing to Spread
- ◆ Situation in Georgia

# Bird Flu Transmission



Low Pathogenic Avian  
Influenza Strains

Low Path



Low Path



# Bird Flu Transmission

Low Path



High Path



# H5N1 “Bird Flu”



Highly Pathogenic  
H5N1 Bird Flu



H5N1

H5N1

# H5N1 “Bird Flu” Questions



H5N1



Migratory Birds



H5N1



Europe & Africa



# H5N1 “Bird Flu”



Human H5N1  
Infection: 256 sick,  
151 dead



# Factors Associated with Human Disease

- ◆ Home preparation of sick poultry
- ◆ Defeathering
- ◆ Contact with soil contaminated with feces of infected birds
- ◆ Cohabitation with sick birds
- ◆ Potentially water contamination
- ◆ Close contact with very ill family member





# Factors NOT Associated with Human Disease

- ◆ Eating prepared poultry
- ◆ Depopulating poultry
- ◆ Unprotected health care workers (a couple of exceptions)
- ◆ Poultry farming



FAO Photo

# H5N1 “Bird Flu” Pandemic Risk

H5N1



Human Influenza



H5N1



# Factors Contributing to Spread

- ◆ Animal Movement
- ◆ Persistence
  - 56°C for 3 hours
  - 60°C for 30 min
  - Water for 4-30 days
  - Manure for 105 days
- ◆ HPAI infectivity
  - 1 gm manure can infect 1 million birds







# Factors Contributing to Spread



“Mechanical transmission by anything that can walk, crawl, or fly from farm to farm can *and will* occur. Rodents, insects (including flies) and wild birds (like sparrows) can act as vectors for AIV by carrying the virus on their bodies from place to place.”

# Risk to Georgia



- ◆ Largest poultry industry in US
- ◆ “Old world” Asian migratory birds do not interact with “new world” birds

# Risk to Georgia



◆ Migratory birds?

◆ Importation

- Exotic birds
- Illegal smuggling
- Human travel





# Georgia Preparedness

## ◆ GA Department of Agriculture

- Active and passive surveillance in commercial industry
- Surveillance at other poultry venues

## ◆ USDA Wildlife Services

- Wild bird surveillance

## ◆ USDA APHIS

- Closed to imports from affected countries
- All imported birds tested



# Georgia Preparedness

## ◆ Training and Exercises in Georgia

### – Tabletop

- Local:State response tested
- State:Federal response tested

### – Field

- Depopulation and disposal of commercial flocks
- Vector control

Questions?