

Avian Influenza

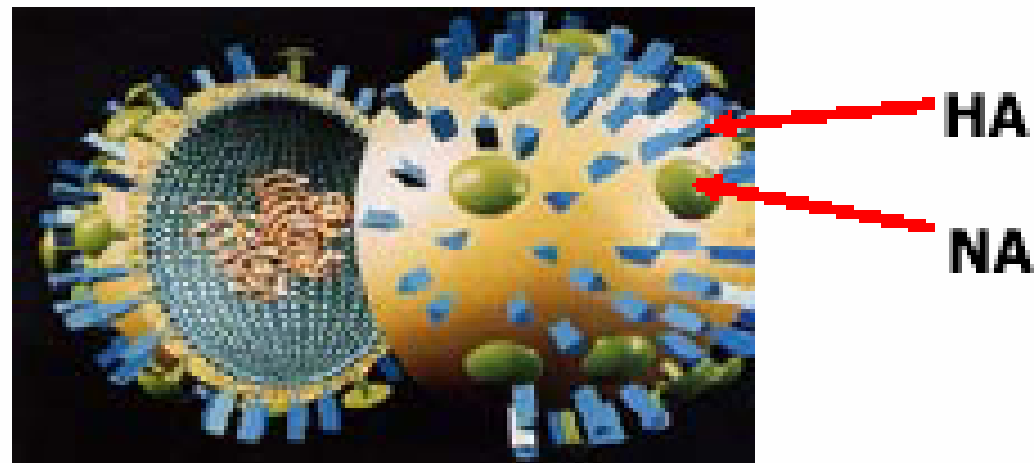
Why all the ruffled feathers?

Avian Influenza

- “Bird flu”
- Viral respiratory infection spread among birds
- Influenza A virus
- Many subtypes but H5N1 is current concern (NOTE: H5N1 avian virus does NOT exist in US at the present time—another concern)

Influenza A Viruses

- Subtyped based on surface glycoproteins:
 - 16 hemagglutinins (HA) and
 - 9 neuraminidases (NA)
- Current human subtypes:
 - H1N1, H3N2, H1N2



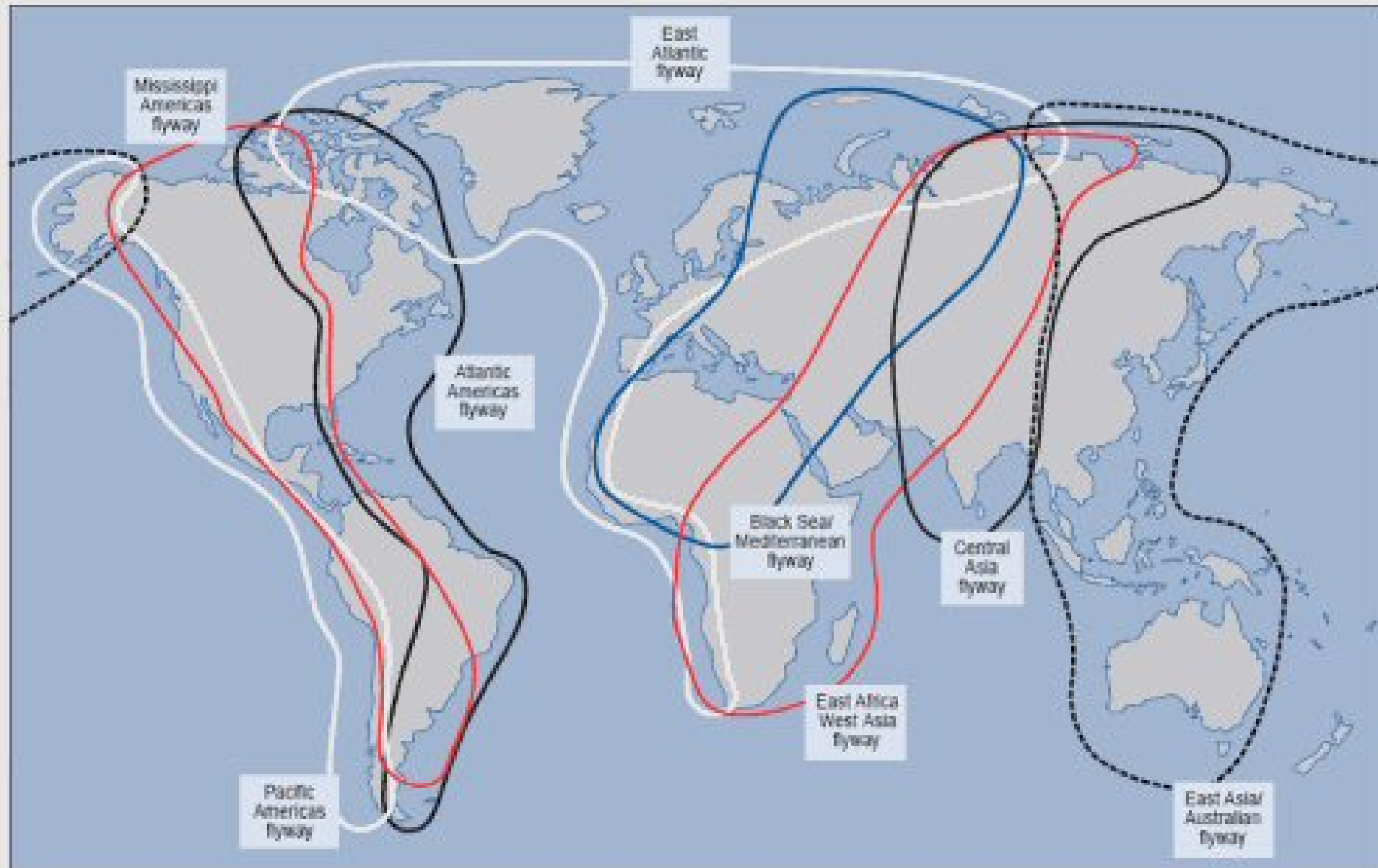
From University of Albany handout

Avian Influenza

- Wild birds worldwide carry the viruses
- Highly transmissible among birds
- Domesticated birds can become sick & die
- Usually not transmitted to humans but can occur, usually during large bird flu outbreak
 - 1997 first human cases—Hong Kong 18 cases/6 deaths
 - 2003 was next time human cases seen 3/3

Avian Influenza Concerns

- Person to person extremely rare and has only been documented to one level
- Mutation possibility
- Lack of immunity
- Transmissible before symptoms appear
- Ease of human transportation
- US entry into poultry via fly way zones



Avian Influenza Planning-Global

- Surveillance in poultry
 - Encouraging enclosure of poultry
 - Containment of disease in positive poultry
- Isolation/treatment of positive cases
- High index of suspicion in countries known to have H5N1
- Rapid response & supplies are vital
 - Containment
 - Treatment with antivirals—Roche donation of 3 million doses

Avian Influenza Planning-National

- Observation of global situation
- Stockpile of antivirals
- Investigative vaccine
- Pillars of National Strategy
 - Preparedness & Communication
 - Surveillance & Detection
 - Response & Containment
- \$100 million to states for planning over next few years

Avian Influenza—State/Local

- Ban poultry from endemic countries
- Surveillance in poultry
 - Routine testing of farms, markets, fairs
- \$4.6 Million for planning
- Work with all agencies, including Quarantine
- Use portions of Strategic National Stockpile plan

References

- <http://www.cdc.gov/flu/avian/index.htm>
- http://www.who.int/csr/disease/avian_influenza/en/
- http://www.ualbanycphp.org/SiteCoordinators/09_08_05/Media/Handouts.pdf
- <http://www.ualbanycphp.org/GRS/eventpast.cfm?ID=37>
- <http://www.whitehouse.gov/homeland/pandemic-influenza.html>