### Epidemiology:

- Primarily transmitted to humans via direct contact with infected birds.
- Virus is shed in feces and respiratory secretions of infected birds.
- Identified in domestic and wild birds in Asian, African, and European countries; not found in the United States as of December 2007.
- Virus is poorly adapted for human-to-human transmission, but could have pandemic potential if genetic reassortment occurs.

### Clinical:

- Commonly presents with high fever (temperature greater than 38°C) and influenza-like symptoms.
- Rapidly developing lower respiratory symptoms common; almost all H5N1 patients develop pneumonia.
- Diarrhea, vomiting, abdominal pain, chest pain, and bleeding from the nose and gums reported in some patients.

### Laboratory Diagnosis:

- Oropharyngeal swab specimens and lower respiratory tract specimens preferred; nasal or nasopharyngeal swab specimens acceptable.
- Reverse-transcriptase polymerase chain reaction (RT-PCR) analysis should be handled in a biosafety level 2 laboratory.
- Commercial rapid influenza antigen tests for the evaluation of suspected influenza H5N1 cases should be interpreted with caution.

### Patient Isolation:

- Strict respiratory isolation with droplet precaution (gown, gloves, and eye protection).

### Treatment:

- Oseltamivir is the preferred treatment choice.
- Zanamivir is an alternative treatment choice.
- Amantadine and rimantadine are not recommended as treatment options.

### Prophylaxis:

- For high risk of exposure (e.g. household and close family contacts of a case), oseltamivir or zanamivir is recommended for 7-10 days after last known exposure.
- For moderate risk of exposure (e.g. healthcare personnel with H5N1 patient contact or individuals with direct contact with H5N1 infected animals), oseltamivir or zanamivir may be considered for 7-10 days after last known exposure.

Note: the epidemiology and clinical guidelines will change if the H5N1 virus mutates to become easily transmissible person-to-person.

March 2008