Agent-Specific Information Sheet

**Agent Name: Highly Pathogenic Avian Influenza (HPAI)**

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Date: 9/20/2010 (Revised 8/13/2013; 12/01/2014; 12/2015; 09/2016; 4/2017; 8/2019; 12/2020; 06/2021)

1. What is the natural mode of transmission?
   *Contact with infected poultry, contact with surfaces contaminated with excretions/secretions from infected birds, transmission from one ill person to another has been very rarely reported.*

2. What is the potential route of exposure in the lab?
   *Inhalation of infectious aerosols, contact with surfaces contaminated with infectious material, contact with animals infected with HPAI, or self-inoculation.*

3. What is the infectious dose?
   *Human infectious dose is not well-characterized. It should be noted that aerosols generated in the lab may be infectious at a lower dose than naturally occurring aerosols due to purity and concentration.*

4. Can this infection be transmitted directly from person-to-person?
   *Rarely is person-to-person transmission reported and transmission beyond individuals infected by the initial ill person has not been observed, this data indicates the community risk for humans is low*

5. How long after exposure until the onset of symptoms?
   *Median incubation of 4-6 days, though most become ill within 2-10 days.*

6. What are the symptoms of infection?
   *Typical flu-like symptoms (fever, cough, sore throat, muscle aches), eye infections, pneumonia, severe respiratory disease, symptoms may lead to severe and life-threatening complications.*

7. How stable is this organism in the environment?
   *Surface stability varies on temperature, humidity and organic material.*

8. What are some effective inactivation methods for this agent?
   *Thermal: autoclaving, 121$^{o}$C*
   *Chemical: 2% Micro-Chem Plus® disinfectant, 4% paraformaldehyde, or 70% ethanol*

9. Is a vaccine available for this agent?
   *No.*

10. Which antibiotics/antivirals are effective treatments for infection with this agent?

*Many HPAI strains are resistant to amantadine and rimantadine. Oseltamavir and zanamavir (preferred) may prove to be effective treatments but little data is available at this time.*

## Medical Response Protocols

### Known Exposure Event

(High or low risk of exposure is documented in an incident report, see below)

1. Request assistance from (a) others present in lab and/or (b) call via yellow call box in BSL3/ABSL3 or phone CPM Security 502-852-1181 7AM-11PM, M-F. Between 11PM-7AM, M-F, and weekends 852-1181 transfers to ULPD-Comm, 502-852-6111. For emergency call 911.
   a. Location in the facility (Room #).
   b. Nature of injury and/or exposure (e.g. needlestick, left thumb, agent name OR sprained ankle, no agent).
   c. Status: Acute, Severe, Minor/ambulatory, non-ambulatory.
   d. Request call tree notification for a potential release/exposure:
      i. Supervisor, Severson (205-266-4556).
      ii. RO, T. Hopp (281-782-4373) or ARO, C. Cowan (502-457-8649), C. Hildreth (502-417-8406).
2. Wash the affected area with soap and water for 15 minutes if a puncture injury.
3. Follow normal decontamination and exit procedures for BSL3/ABSL3 and await further instruction in the anteroom:
   a. Doff potentially contaminated scrubs and undergarments (collect for autoclaving).
   b. Don new scrubs.
4. Seek medical evaluation, RO and Supervisor call for medical consult:
   a. High risk of exposure (E.g., Needle stick with agent or release of agent from primary containment with PPE failure)
      - UofL Hospital Emergency Department: 502-562-3015 (24/7 Availability, main ER area).
        530 S Jackson St Louisville, KY 40202
        24/7 UofL Infectious Disease Consult: 1-800-717-6963.
      - Event based serology with follow-up as directed by the attending physician.
      - Alert to local and state public health authorities as required.
   d. Low risk of exposure (E.g., release of agent from primary containment with functional PPE)
      - UofL Campus Health Services: 502-852-6446 (answering service after business hours)
        401 East Chestnut Street, Suite 110
        Louisville, KY 40202
        i. Serology and/or prophylactic treatment may be directed by the attending physician.
5. Report the injury/exposure:
   a. Supervisor Severson completes First Report of Injury, IA-1 Form, https://louisville.edu/riskmanagement/workerscomp.
   b. Notify CDC: RO, T. Hopp (281-782-4373) or ARO, C. Cowan (502-457-8649), C. Hildreth (502-417-8406).
      i. RO initiates an internal and external incident report (e.g. CDC DSAT Form 3).
         - An initial report (phone/email) must be made in 1 day and a formal written report in 7 days.

### Laboratory Worker Exhibiting Symptoms Without Known Exposure Event

(E.g., Fever greater than 100.4$^0$F and entry into a A/BSL3 with **HPAI** within the last 10 days)

Consider the following:

1. Record body temperature for monitoring of fever in addition to other symptoms.
2. Alert supervisor, Severson (205-266-4556).
3. Alert RO, T. Hopp (281-782-4373) or ARO, C. Cowan (502-457-8649), C. Hildreth (502-417-8406).
4. In-home self-quarantine may be directed on a voluntary basis.
   a. Consider if any household contacts are immunocompromised and respond accordingly.
5. The symptomatic individual shall document the following occupational activities.
   a. Identity of infectious organism manipulated for the previous 14 days.
   b. Entries into BSL3 or ABSL3 laboratories for the previous 14 days.
   c. Experimental procedures conducted and equipment used.
   d. Work performed by others in a shared laboratory.
   e. Any possible event that may have resulted in exposure to viable infectious materials (e.g. breach in PPE)
   f. Recent changes in health status (e.g., recently use of an immune suppressing medication)
6. The symptomatic individual shall document the following social history activities.
   a. Personal contacts for the previous 14 days.
   b. Public locations visited or use of public transportation in the previous 14 days.
   c. History of recent travel.
7. Precautions to be followed by the symptomatic individual.
   a. Limit skin-to-skin contact with others.
   b. Wash hands frequently.
8. The RO and Supervisor may consult Campus Health Services: 502-852-6446 or UofL Infectious Disease ID) 1-800-717-6963 or ID Physician Forest Arnold (502-649-7274)
   a. Serology and/or prophylactic treatment may be directed by the attending physician.
   b. Diagnostic tests to confirm the causative agent of illness may be directed.

If it is probable or confirmed that the illness is due this agent, notifications will be made to the CDC, state health department, and local health department.