AIDE-MEMOIRE

Infection control recommendations for avian influenza in health-care facilities

Health-care facility infection control recommendations for avian influenza (AI)

The current avian influenza A/H5N1 epidemic in birds began in south-east Asia in 2003 and has since spread to other parts of the world. Human cases have been reported in several countries since December 2003 and health-care facilities in several countries now face the challenge of providing care for patients infected with avian influenza (AI). It is critical that health-care workers use appropriate infection control precautions when providing care for these patients to minimize the possibility of transmission of infection to themselves, other health-care workers, patients, and visitors.

As of the date of this document, no efficient human-to-human transmission of AI A/H5N1 is known to have occurred, and there is no evidence to suggest airborne transmission of AI A/H5N1 to humans. However, enhanced infection control precautions for patients with suspected or confirmed AI infection appear to be warranted because of the uncertainty about the modes of human-to-human AI transmission, the high lethality of human AI A/H5N1 infection to date, and the possibility that the virus could mutate or reassort at any time into a strain capable of efficient human-to-human transmission.

Important advice

- Use standard and droplet precautions when providing care for patients with acute, febrile, respiratory illness, regardless of whether AI infection is suspected. Facial protection and hand hygiene are the most critical elements of these precautions and should be prioritized.
- Full barrier precautions (standard, contact, and airborne precautions, plus eye protection) should be used, when possible, when working in direct contact with suspected or confirmed AI-infected patients.
- Because the use of airborne precautions may not be feasible in all health-care facilities, minimal requirements when providing care for AI-infected patients should include standard, contact, and droplet precautions, plus eye protection. Elements of airborne precautions should be prioritized and pursued when resources permit.

✔ Personal protective equipment (PPE) and hand hygiene checklist

- Before entering the AI patient room or area, put on PPE including:
  - Clean, non-sterile long-sleeved gowns.
  - If cloth gowns are used, a plastic apron should also be used if splashing of blood, body fluids, excretions, or secretions is anticipated.
  - Clean, nonsterile, ambidextrous gloves, which cover the cuffs of the gown.
  - Face shield, visor, or goggles.
  - A particulate respirator that is at least as protective as a US NIOSH-certified N95, EU FFP2, or equivalent respirator. If particulate respirators are not available, use surgical or procedure masks.
- Put on PPE carefully before patient contact to avoid the need for adjustments and to reduce the risk of self-contamination/inoculation.
- Remove PPE carefully to avoid self-contamination/inoculation.
- Perform hand hygiene before and after any patient contact and after contact with contaminated items, whether or not gloves are worn.
  - Perform hand hygiene before putting on PPE, immediately after glove removal, and after taking off all PPE items.
  - Hand hygiene includes either hand washing with soap and water, followed by drying with a clean towel or, preferably, the use of an alcohol-based hand rub.
  - Wash hands with soap and water when they are visibly soiled.

For more details, see **Avian Influenza, including Influenza A (H5N1), in Humans: WHO Interim Infection Control Guideline for Health-care Facilities** available at http://www.who.int/csr/disease/avian_influenza/guidelines/infectioncontrol1/en/index.html

World Health Organization

EPIDEMIC AND PANDEMIC ALERT AND RESPONSE

Health-care facility infection control recommendations for avian influenza (AI)

KEY ELEMENTS AT A GLANCE

1. **Basic infection control recommendations for all health-care facilities**
   Standard and droplet precautions when caring for patients with acute, febrile, respiratory illness

2. **Respiratory hygiene/cough etiquette**
   Individuals with respiratory symptoms should cover cough with mask or tissue and perform hand hygiene

3. **Early recognition and reporting of AI cases**
   Consider AI in patients with acute, febrile, respiratory illness who have been in an AI-affected region within the 2 weeks prior to symptom onset and who have had exposure to birds or to a human AI case in the region

4. **Isolation precautions for suspected and confirmed AI cases**
   Place patient in negative pressure room (if available). Full barrier precautions (standard, contact, and airborne) for all persons entering the isolation room

5. **Additional measures to reduce nosocomial AI transmission**
   Limit numbers of health-care workers/family members/visitors exposed to AI patient

6. **Specimen collection/transport/handling within health-care facilities**
   Use full barrier precautions for specimen collection. Use standard precautions for specimen transport to the laboratory. Health-care facility laboratories should follow best biosafety practices

7. **Family member/visitor recommendations**
   Family members/visitors should be limited to those essential for patient support and should use full barrier precautions

8. **Patient transport within health-care facilities**
   AI patient should wear surgical mask. Health-care workers doing transport should wear gowns and gloves

9. **Pre-hospital care**
   Full barrier precautions for all involved with suspected AI patients

10. **Waste disposal**
    Treat waste possibly contaminated with AI virus as clinical waste

11. **Dishes/eating utensils**
    Use standard precautions

12. **Linen and laundry**
    Use standard precautions; avoid shaking linen/laundry

13. **Environmental cleaning and disinfection**
    AI virus can survive in the environment for variable periods of time (hours to days), and is inactivated by standard hospital disinfectants. Clean and disinfect AI patient room at least once a day; frequently touched surfaces should be cleaned more often

14. **Patient care equipment**
    Dedicate to AI patient. If not possible, clean and disinfect before reuse

15. **Duration of AI infection control precautions**
    Adults >12 years: 7 days after resolution of fever
    Children <12 years: 21 days after symptom onset

16. **Patient discharge**
    If AI patient is still infectious (i.e. discharged within the period of AI infection control precautions: see box above), instruct family members on appropriate infection control precautions in the home

17. **Occupational health recommendations**
    Monitor health of health-care workers exposed to AI patients. Antiviral prophylaxis should follow local policy. Use of seasonal influenza vaccine should be promoted

18. **Health-care facility administrative controls**
    Health-care worker AI education, training, and risk communication. Adequate staffing and PPE

19. **Prioritization of PPE when supplies are limited**
    Facial protection (eyes, nose, and mouth) and hand hygiene are priorities

20. **Health-care facility engineering controls**
    If single rooms for AI patients are not possible, cohort patients in isolation wards keeping at least 1 m between beds. Negative pressure rooms for AI patients, if available