

# 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](http://www.who.int/csr/disease/avian_influenza/guidelines/infectioncontrol1/en/index.html)



World Health Organization

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## 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