

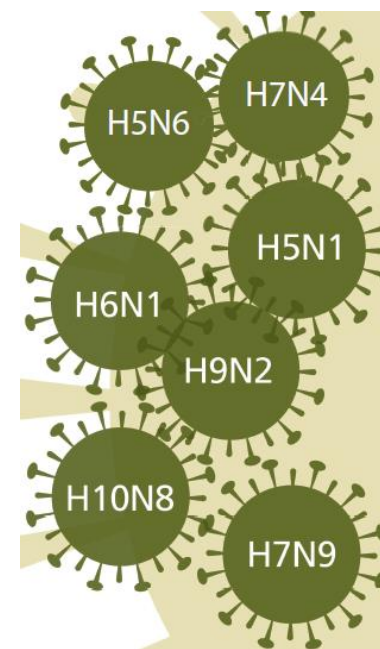
Prevention of Avian Influenza

April 2020

- Avian influenza
- Clinical features
- Mode of transmission
- High risk groups
- Management
- Prevention
- Travel advice

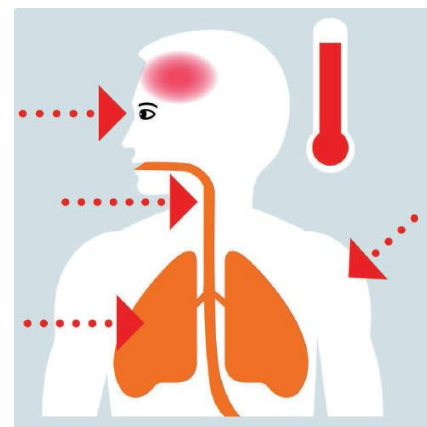
Avian influenza

- It is caused by those influenza viruses that mainly affect birds and poultry, such as chickens or ducks, e.g. H5N1, H5N6, H6N1, H7N4, H7N9, H9N2 and H10N8
- Since they do not commonly infect humans, there is little or no immune protection against them in the human population



Clinical features

- Eye infection (conjunctivitis)
- Gastrointestinal symptoms (e.g. nausea, vomiting and diarrhoea)
- Flu-like symptoms (e.g. fever, cough, sore throat, muscle aches)
- Severe respiratory illness (e.g. chest infection)
- The more virulent forms [e.g. avian influenza A (**H5N1, H5N6, H7N9 or H10N8**) **viruses**] can result in respiratory failure, multi-organ failure and even death



Mode of transmission

- Mainly through contact with infected birds and poultry (live or dead) or their droppings, or contact with contaminated environments (such as wet markets and live poultry markets)
- Human-to-human transmission is inefficient



High risk groups

- People in close contact with live poultry
- Elderly
- Children
- People with chronic illness

Management

- Adequate rest and drink plenty of fluids
- Supportive treatment to relieve symptoms
- Some antiviral drugs (e.g. Tamiflu)
 - Must be prescribed by registered doctors
- Aspirin **should not** be taken by children



Prevention

- Handling poultry
- Personal hygiene
- Environmental hygiene
- Vaccination
- Antiviral drugs

預防禽流感 Prevention of Avian Influenza

避免接觸 Avoid contact
禽鳥或其糞便 with poultry and birds,
or their droppings

避免到訪 Avoid visiting
家禽市場及農場 poultry markets and farms
when travelling

徹底煮熟 Poultry and egg products
家禽和蛋類食物 **must be cooked
thoroughly**

雙手清潔 保持 Keep
hands clean

盡快求診 Wear a surgical mask,
戴上外科口罩, **seek medical
advice promptly**
並告知醫生外遊紀錄 and inform doctor of travel
details if feeling unwell

HP 衛生防護中心
www.chp.gov.hk
fb.com/CentreforHealthProtection
2833 0111
衛生署
Department of Health

Handling poultry

- When buying live chickens, **do not** touch them and their droppings
- **Do not** blow at their bottoms
- Wash eggs with **detergent** if soiled with faecal matter and cook and consume them immediately
- People handling chilled poultry or poultry carcasses are reminded to observe **strict personal and hand hygiene**. They should never touch the mouth, nose or eyes when handling any poultry, poultry products or eggs. Afterwards, they must wash hands thoroughly with liquid soap and water



Handling poultry

- Eggs should be **cooked thoroughly** until the white and yolk become firm
- **Do not** eat raw eggs or dip cooked food into any sauce containing raw eggs
- Poultry should be **cooked thoroughly**



Personal hygiene

- **Perform hand hygiene frequently.** Wash hands with liquid soap and water, and rub for at least 20 seconds. Then rinse with water and dry with either a clean cotton towel or a paper towel, especially:
 - Before and after touching the mouth, nose or eyes
 - Before eating
 - After using the toilet
 - After touching public installations such as handrails or door knobs
 - When hands are contaminated by respiratory secretion after coughing or sneezing



Personal hygiene

- If **hand washing facilities are not available**, or when **hands are not visibly soiled**, hand hygiene with 70 to 80% alcohol-based handrub is an effective alternative

Personal hygiene

- **Cover your mouth and nose** with tissue paper when coughing or sneezing. Do not spit or litter. Use tissue paper to hold your spit. Dispose of soiled tissues into a lidded rubbish bin, and then wash hands thoroughly
- When having respiratory symptoms, wear a surgical mask, **refrain from work or attending class at school**, avoid going to crowded places and seek medical advice promptly
- **Build up good body immunity** by having a balanced diet, regular exercise and adequate rest, do not smoke and avoid alcohol consumption

咳嗽 要講禮 Maintain Cough Manners



Environmental hygiene



- Regularly clean and disinfect frequently touched surfaces such as furniture, toys and commonly shared items with 1:99 diluted household bleach (mixing 1 part of 5.25% bleach with 99 parts of water), leave for 15 – 30 minutes, and then rinse with water and keep dry. For metallic surface, disinfect with 70% alcohol
- Use absorbent disposable towels to wipe away obvious contaminants such as respiratory secretions, and then disinfect the surface and neighbouring areas with 1:49 diluted household bleach (mixing 1 part of 5.25% bleach with 49 parts of water), leave for 15 – 30 minutes and then rinse with water and keep dry. For metallic surface, disinfect with 70% alcohol

Environmental hygiene



- Maintain good indoor ventilation. Avoid going to crowded or poorly ventilated public places. High-risk individuals may consider putting on surgical masks while in such places
- Maintain drainage pipes properly and regularly (about once a week) pour about half a litre of water into each drain outlet (U-traps). The water seal will prevent foul odour, insects and dirt (including microorganisms) in the soil pipe from entering the premises via drain outlets
- Arrange immediate inspection and repair by qualified technician if there is defect in the trap or foul odour coming out from drain outlets

Vaccination

- At present, only vaccine against H5N1 is available on the market and is only recommended for use by specific laboratory workers at higher risk of exposure to avian influenza A (H5N1) virus. There is **no vaccine to prevent other avian influenza in humans**
- **Seasonal influenza vaccine cannot prevent avian influenza**, however it can help reduce the chance of complications and hospitalisation from seasonal influenza as well as reduce the risk of co-infection with human and avian influenza A viruses

Antiviral drugs

- Whether a doctor prescribes antiviral drugs (e.g. Tamiflu) to a patient will depend on the circumstances and health needs of the patient. Indiscriminate use of antiviral drugs may give rise to drug resistance
- People who have had contact with infected birds may be given antiviral drugs preventatively. While antiviral drugs are most often used to treat influenza, they also can be used to prevent infection in someone who has been exposed to influenza viruses
- Prophylaxis should be prescribed by registered doctors. Self-medication is **not** encouraged because of the potential side effects and possibility of emergence of antiviral resistance



Advice to travellers

- When travelling to affected areas:
 - **Avoid touching** birds, poultry or their droppings;
 - **Avoid visiting wet markets, live poultry markets or farms;** and
 - Eggs and poultry can be eaten only if **thoroughly cooked**



Advice to travellers

- Travellers if feeling unwell when outside Hong Kong, especially if having a fever or cough, should wear a **surgical mask** and inform the hotel staff or tour leader and **seek medical advice at once**
- Travellers returning from affected areas with avian influenza outbreaks should **consult doctors promptly** if they have flu-like symptoms, and inform the doctors of the **travel history** and wear a surgical mask to help prevent spread of the disease

For more information about Avian Influenza

- Please visit the Centre for Health Protection website
<https://www.chp.gov.hk/en/features/24244.html>

Thank you