

禽流感

病原體

流感病毒有不同類型。除了在人類之間流傳而引致季節性流感的流感病毒之外，亦有很多其他甲型流感病毒見於禽鳥和其他動物物種。這些病毒有別於人類季節性流感病毒，並不會輕易傳染人類。然而，其中某些動物病毒可能偶爾會感染人類，這類病毒稱為新型流感病毒，禽流感便是一個例子。

禽流感是由主要影響鳥類和家禽（如雞或鴨）的流感病毒引致。近年亦出現人類感染甲型禽流感（H5N1、H5N6、H6N1、H7N4、H7N9、H9N2 和 H10N8 等）病毒的個案。

由於人類感染禽流感病毒的情況並不常見，因此人體對該病毒的免疫力極低，甚至沒有免疫力。不過，一旦禽流感病毒因為有了適應能力，或從人類病毒中獲取某些基因，以致能輕易地在人與人之間傳播，便會出現流感大流行。

病徵

人類感染禽流感的病徵包括眼部感染（結膜炎）、流感樣病徵（例如發燒、咳嗽、喉嚨痛、肌肉痛）或嚴重的呼吸道感染（例如肺炎）。感染較嚴重的類型〔如甲型禽流感（H5N1、H5N6、H7N9 或 H10N8）病毒〕可引致呼吸衰竭、多種器官衰竭，甚至死亡。

傳播途徑

人類主要透過接觸染病的禽鳥（活鳥或死鳥）或其糞便，或接觸受污染的環境（例如濕貨街市和活家禽市場）而感染禽流感病毒。禽流感病毒在人類之間的傳播能力十分低。不時有一些國家報告禽鳥爆發禽流感疫情，並偶爾出現人類感染個案。

潛伏期

約 7 – 10 天，視乎甲型禽流感的個別亞型。

高危人士

與活家禽有近距離接觸的人士較易感染禽流感。長者、兒童及長期病患者一旦受感染，亦較容易出現併發症，如支氣管炎、肺炎等。

治理方法

患者應有充足休息，多飲水。支援性治療可紓緩病徵。若出現流感樣病徵，尤其是屬抵抗力較弱人士或病情轉趨嚴重時，例如出現持續高燒或呼吸急促等症狀，應盡快求診。由甲型禽流感（包括 H5N1、H5N6、H7N9 和 H10N8 病毒）引起的病情比一般流感嚴重，大部分患者須留院醫治。抗病毒藥物對病情可能有效。兒童忌服含有阿士匹靈成分的藥物，以免引致雷爾氏綜合症。

預防方法

染病的禽鳥（活鳥或死鳥）或其糞便可能帶有病毒，因此，市民應避免接觸家禽、雀鳥、動物或其糞便，並留意以下重點以預防感染禽流感：

處理家禽

購買活雞時，切勿觸摸活雞和雞糞，切勿吹其尾部。洗淨沾有糞便的蛋，用洗滌劑輔助清洗，並立刻烹煮和進食。若需處理冰鮮家禽或家禽屍體，必須時刻保持個人及手部衛生。處理家禽、禽類製品或蛋時切勿觸摸口、鼻或眼睛，其後亦必須用梘液和清水徹底洗手。

要徹底煮熟蛋類，直至蛋黃及蛋白都凝固才可進食，也不要將食物蘸著加有生蛋混和的醬料一同進食。應徹底煮熟家禽。如家禽在烹煮後仍有粉紅色肉汁流出，或骨髓仍呈鮮紅色，應重新烹煮至完全熟透。

個人衛生

保持雙手清潔，經常用梘液和清水洗手，尤其在觸摸口、鼻、眼睛前、處理食物及進食前、如廁後、觸摸過公共物件，例如電梯扶手、升降機按鈕或門柄後，或當手被呼吸道分泌物污染時，如咳嗽或打噴嚏後。

咳嗽或打噴嚏時，用紙巾遮掩口鼻，把用過的紙巾棄置到有蓋垃圾箱，然後徹底清潔雙手。

倘若有發燒或呼吸道感染病徵、要前往醫療機構、要照顧有發燒或呼吸道感染患者的人士，均應戴上外科口罩。

如出現流感樣病徵，應留在家中休息，避免前往擠逼或空氣不流通的場所。

保持均衡飲食、恆常運動、充足休息、不要吸煙和避免飲酒，以建立良好身體抵抗力。

環境衛生

保持室內空氣流通。

每星期最少徹底清潔家居一次，例如可使用 1 比 99 稀釋家用漂白水（以 10 毫升次氯酸鈉的濃度為 5.25% 漂白水混和於 990 毫升清水內）來清潔家居非金屬表面。金屬物件表面則使用 70% 酒精徹底消毒。

應預防屋外隔氣彎管乾涸及定期消毒排水口（約每星期一次）。

如隔氣彎管有損毀，或排水口發出臭氣，應立即維修。應聘請合資格技工檢查及維修。

疫苗接種

現時只有供人類使用的 H5N1 疫苗，但只建議有高風險接觸甲型 (H5N1) 禽流感病毒的實驗室特定人員接種。現時並沒有預防人類感染其他禽流感的疫苗。

季節性流感疫苗不能預防禽流感，但仍有助減低因感染季節性流感而引致併發症及住院的可能性。基於流感疫苗是安全和有效的，而健康人士亦有可能發生嚴重流感感染，因此除個別有已知禁忌症人士外，所有年滿 6 個月或以上人士都適宜接種季節性流感疫苗作個人保護。

此外，疫苗可預防疾病科學委員會建議一些群組優先接種季節性流感疫苗。建議是根據多項科學因素，包括本地的疾病負擔和國際經驗而制定。

抗病毒藥物

醫生會視乎病人的情況及健康需要，向病人處方抗病毒的藥物（例如特敏福），過程中須考慮有否任何不適合使用抗病毒藥物的情況，並權衡服用後的好處與可能出現的副作用。胡亂使用抗病毒的藥物，可能會導致病毒出現抗藥性。

預防流感藥物，應由註冊醫生處方。其藥力只在服用期間有效；一旦停止服用，預防功效也會消失。因此，市民不應自行服藥，以免出現副作用或令病毒出現抗藥性。

旅遊建議

前往受影響地區旅遊時應避免接觸禽鳥或其糞便，和到濕貨街市、活家禽市場或農場。

身處外地時，如身體不適，特別是有發燒或咳嗽，應戴上外科口罩，立即通知酒店職員或旅遊領隊，並盡快求診。

旅客從受禽流感影響地區回港後，若出現流感樣病徵，應立即求診，告訴醫生最近曾到訪的地方；並佩戴外科口罩，以防傳染他人。

Avian Influenza

Causative agents

There are various types of influenza viruses. Apart from those which can circulate among humans and cause seasonal influenza, many other influenza A viruses are found in birds and other animal species. These viruses are distinct from human seasonal influenza viruses and are not easily transmitted to humans. However, some of these animal viruses may occasionally infect humans. These are known as novel influenza viruses and avian influenza viruses are one example.

Avian influenza is caused by those influenza viruses that mainly affect birds and poultry, such as chickens or ducks. Human cases infected with avian influenza A (e.g. H5N1, H5N6, H6N1, H7N4, H7N9, H9N2 and H10N8) viruses have been identified in recent years.

Since they do not commonly infect humans, there is little or no immune protection against them in the human population. However, if an avian influenza virus acquired the capacity to spread easily from person to person, either through adaptation or acquisition of certain genes from human viruses, an influenza pandemic can occur.

Clinical features

Clinical presentation of avian influenza in humans includes eye infection (conjunctivitis), flu-like symptoms (e.g. fever, cough, sore throat, muscle aches) or severe respiratory illness (e.g. chest infection). Infection of 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

People mainly become infected with avian influenza virus 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. Outbreaks of avian influenza in poultry have been reported in some countries from time to time, and some cases of human infection have occasionally been reported.

Incubation period

Around 7 - 10 days depending on the specific subtypes of avian influenza A viruses.

High risk groups

People in close contact with live poultry are more susceptible to contracting avian influenza. The elderly, children and people with chronic illness have a higher risk of developing complications such as bronchitis and chest infection.

Management

Patients should get adequate rest and drink plenty of fluids. Supportive treatment can relieve symptoms. People with flu-like symptoms should seek medical advice, especially those with weakened body resistance, or if their condition deteriorates (e.g. developing persistent high fever or shortness of breath). Avian influenza A (including H5N1, H5N6, H7N9 and H10N8 viruses) are generally more severe than common flu, and most patients require hospital care. Some anti-viral drugs may be effective in treating the condition. Aspirin should not be taken by children to avoid the risk of inducing Reye's Syndrome.

Prevention

Infected birds and poultry (live or dead) or their droppings may carry avian influenza virus. Therefore, members of the public should avoid touching poultry, birds, animals or their droppings, and pay attention to the following issues to prevent avian influenza:

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.

Eggs should be cooked well 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. If there is pinkish juice running from the cooked poultry or the middle part of its bone is still red in colour, the poultry should be cooked again until fully done.

Personal hygiene

Keep hands clean, wash hands frequently with liquid soap and water, especially before touching the mouth, nose, or eyes, before handling food or eating, and after going to toilet, touching public installations or equipment such as escalator handrails, elevator control panels or door knobs, or when hands are dirtied by respiratory secretion after coughing or sneezing.

Cover mouth and nose with tissue paper when coughing or sneezing. Dispose of the soiled tissues properly into a lidded rubbish bin, and then wash hands thoroughly.

Wear a surgical mask if developing fever or respiratory symptoms, going to a hospital or clinic, or if caring for a patient with fever or respiratory symptoms.

If flu-like symptoms develop, stay at home and avoid going to crowded or poorly ventilated places.

Build up good body immunity by having a balanced diet, regular exercise and adequate rest, do not smoke and avoid alcohol consumption.

Environmental hygiene

Maintain good indoor ventilation.

Home should be cleaned thoroughly such as using 1 in 99 diluted household bleach (mixing 10 ml of bleach containing 5.25% sodium hypochlorite with 990 ml of water), at least once per week.

For metallic surfaces, 70% alcohol should be used.

U-trap should be prevented from drying up and drain outlets should be disinfected regularly about once a week.

Repair immediately if there is defect in the U-trap or foul odour coming out from drain outlets.

Qualified technicians can be hired for inspection and repair.

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. Given influenza vaccines are safe and effective and that serious influenza infection can occur even in healthy individuals, seasonal influenza vaccination is suitable for personal protection against clinical influenza for all persons aged 6 months or above except those with known contraindications.

Moreover, the Scientific Committee on Vaccine Preventable Diseases recommends a number of [priority groups](#) for seasonal influenza vaccination. These groups have been determined based on a range of scientific considerations taking into account local disease burden and international experience.

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, taking into consideration the presence of any contraindication and balancing the benefits of taking the antiviral drugs against the possible adverse side effects. Indiscriminate use of antiviral drugs may give rise to drug resistance.

Prophylaxis should be prescribed by registered doctors. Its effectiveness lasts as long as the drugs are being taken and ceases once the drugs are stopped. Self-medication is not encouraged because of the potential side effects and possibility of emergence of antiviral resistance.

Travel advice

Avoid touching birds, poultry or their droppings and visiting wet markets, live poultry markets or farms when travelling to affected areas.

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 doctor of the travel history and wear a surgical mask to help prevent spread of the disease.