

Current Topic: Psittacosis

Psittacosis is a zoonotic disease caused by *Chlamydophila psittaci* (formerly known as *Chlamydia psittaci*). It is transmitted to humans by inhaling the agent from dried droppings and secretions of infected birds. Although all birds can transmit the disease to humans, psittacine birds, e.g., parrots, cockatiels, parakeets, macaws and occasionally even turkeys and ducks are the usual culprits, and they can appear either sick or apparently healthy. Rarely, person-to-person transmission may occur during acute illness with paroxysmal coughing.

In human infection, common symptoms include fever, headache, rash, muscle pain, chills and dry cough. Pneumonia may sometimes occur. Encephalitis, myocarditis and thrombophlebitis are occasional complications. The incubation period is usually 5 to 19 days.


Diagnosis of psittacosis is usually by a combination of serology screening and subsequent molecular confirmation. A four-fold increase in *Chlamydia* antibodies between acute and convalescent serum in a patient with compatible symptoms and history of bird exposure should prompt further testing of the patient's respiratory specimen by PCR specific for psittacosis. In cases with high initial suspicion of psittacosis, prior liaison with hospital microbiologists should be made for special arrangement of psittacosis PCR testing directly on respiratory specimens.

Psittacosis is a statutory notifiable disease in Hong Kong. A sporadic case of psittacosis has been reported recently [see [CD Watch Volume 11 Issue 6](#)]. Furthermore, a study reported that Psittacosis may have been transmitted from person to person in a hospital setting (Infect Control Hosp Epidemiol 1997;18:165-16). The clustering of pneumonia involved seven individuals (one roommate and six health-care workers) who were exposed to an infected pet shop worker admitted to the hospital subsequently confirmed with psittacosis. In order to mitigate the risk of transmission, **standard precautions, hand hygiene, respiratory hygiene or cough etiquette** should be observed.




Watch out for Measles !


Be on alert to pre-vaccination age (<1 year-old)




A recent increase of measles cases is observed both in Hong Kong and neighbouring areas



Clinical Presentation



Infection Control Measures



Journal Highlight: MRSA colonization in neonates carries a higher risk for subsequent infection

Methicillin-resistant *Staphylococcus aureus* (MRSA) is known to cause significant morbidity and mortality in paediatric and neonatal ICUs. In a recent meta-analysis published in Pediatrics 2014;133:e1015–e1023, Fainareti N. Zervou et al., studied the significance of MRSA colonization in these group of patients. They identified 18 suitable articles and found an overall prevalence of MRSA colonization of 1.9% on admission to the NICU or PICU. The acquisition rate of MRSA colonization was 6.1% for the NICU patients. There was a relative risk of 24.2 (95% CI 8.9–66.0) for colonized patients to develop a MRSA infection during hospitalization.

Latest Epidemiology: Point-Prevalence Survey of Health Care-Associated Infections in USA

Concerning the reporting of device-associated infections, selected surgical-site infections (SSI), and infections due to *Clostridium difficile* and methicillin-resistant *Staphylococcus aureus* (MRSA) are limited. The Centers for Disease Control and Prevention (CDC) conducted a prevalence survey in 10 geographically diverse states to determine the prevalence of health care-associated infections in acute care hospitals and generate updated estimates of the national burden of these infections.

Surveys were conducted in 183 hospitals. Of 11,282 patients, 452 had 1 or more health care-associated infections (4.0%; 95% confidence interval, 3.7 to 4.4). Of 504 such infections, the most common types were pneumonia (21.8%), SSI (21.8%), and gastrointestinal infections (17.1%). *C. difficile* was the most commonly reported pathogen (causing 12.1% of health care-associated infections). Results of this multistate prevalence survey also drive the recent focus of the CDC on surveillance and prevention of *C. difficile* infections.

Reference:

Shelley, S.M. et al. Multistate Point Prevalence Survey of Health Care – Associated Infections. N Engl J Med 2014; 370:1198-208.

HOSPITAL INFECTION UPDATE

Respiratory viruses infection

Data source: Five HA laboratories (PMH, PWH, QEH, QMH, TMH)

Time frame covered (dd/mm/yyyy):

Week 12 (16/03/2014-22/03/2014), Week 13 (up to 27/03/2014)

- Positive rate of influenza B has stayed around 4-6% for 6 weeks. The positive rate in week 13 is 6.0% (figure 1);
- Positive rate of RSV has been increasing from 0.7% in week 7 to 5.8% in week 13 (figure 2);
- Positive rate of parainfluenza has stayed around 3-5% for 4 weeks;
- Positive rate of influenza A has decreased to 2.6% in week 13 (figure 1);
- Positive rate of adenovirus was at low level.

Circulating influenza A strain

Data source: Influenza virus subtyping (by cell culture), PHLC

Time frame covered (dd/mm/yyyy):

Week 10 (02/03/2014-08/03/2014), Week 11 (09/03/2014-15/03/2014)

- In week 10 and 11, 59.3% of the typed isolates (296/499) were subtype H1, 40.5% (202/499) were subtype H3 and 0.2% (1/499) was subtype H7.

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Figure 1: Influenza A and B – number of tests done and positive rate

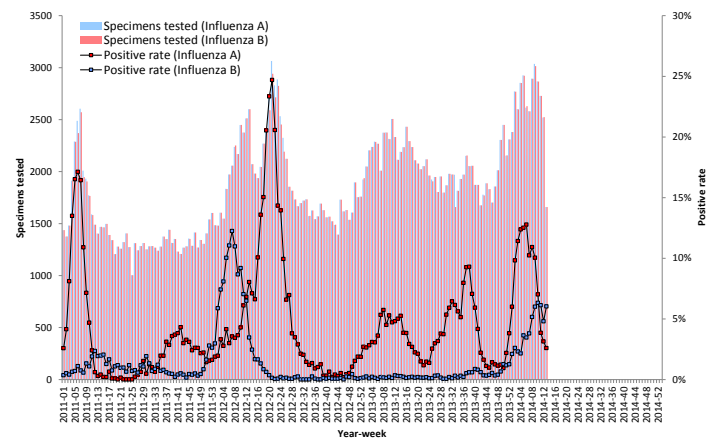
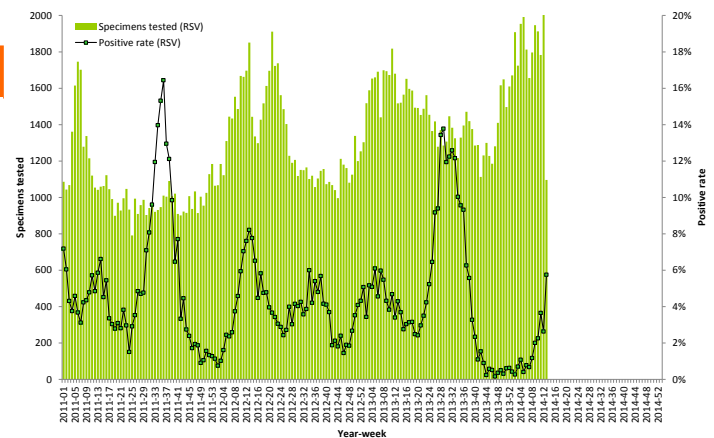


Figure 2: RSV – number of tests done and positive rate



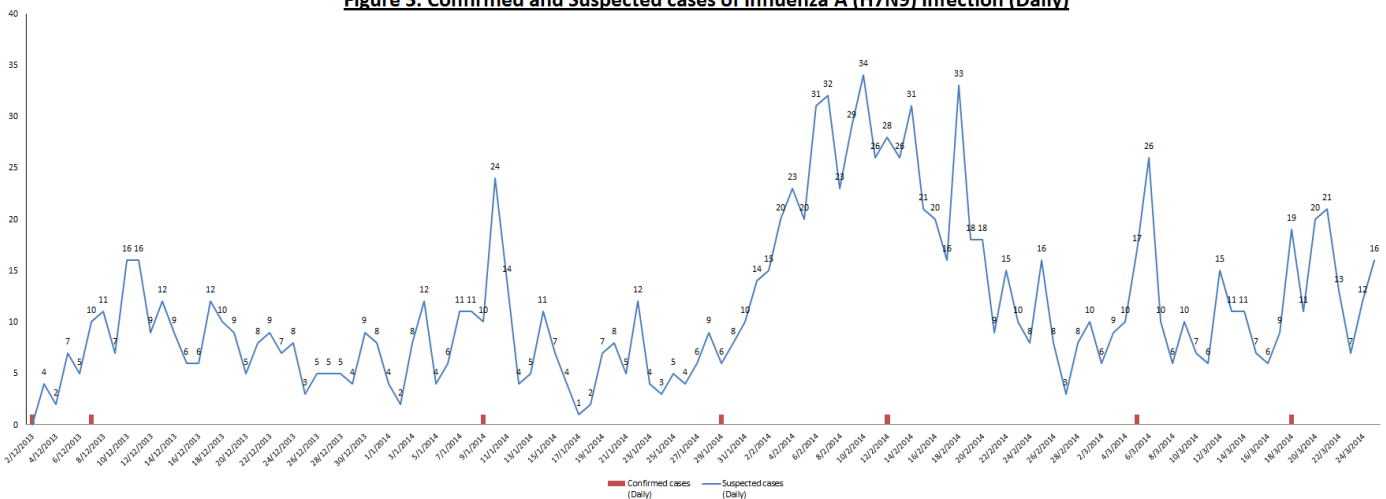
ICT TO NOTE

Influenza A (H7N9) Infection Situation Update

On 17 March 2014, Hong Kong reported the 7th imported human infection of avian influenza A (H7N9) affecting a 5-month-old girl. The patient stayed in Shenzhen with her parents and grandparents. She was brought to Hong Kong for medical consultation. Investigation revealed that she had no direct contact with poultry during her recent visit to a wet market in Shenzhen.

As of 25 March 2014, a total of 1303 suspected cases and 7 imported confirmed cases have been notified in Hong Kong since 2 Dec 2013. Peak was 34 cases per day and daily average is now 12 cases (figure 3).

Figure 3. Confirmed and Suspected cases of Influenza A (H7N9) Infection (Daily)



On 15 March 2014, the Centre for Health Protection (CHP) has informed that in Macao, avian influenza A (H7) has been detected in environmental samples from two markets, so **Macao SAR is subsumed as one of the H7N9 affected areas**. Please refer to the following link: www.chp.gov.hk/files/pdf/global_statistics_avian_influenza_e.pdf

As of 27 March 2014, a total of 391 human cases of avian influenza A(H7N9) have been confirmed in the Mainland, including Zhejiang (138 cases), Guangdong (95 cases), Jiangsu (44 cases), Shanghai (41 cases), Fujian (21 cases), Hunan (19 cases), Anhui (10 cases), Jiangxi (six cases), Beijing (four cases), Henan (four cases), Guangxi (three cases), Shandong (three cases), Guizhou (one case, imported from Zhejiang), Hebei (one case) and Jilin (one case).

UPCOMING EVENTS:

Paediatric Infection Disease & Immunology Course 2014

Date: 19 – 20 June 2014

Venue: Lecture Theatre, 7/F, Block H, Princess Margaret Hospital, Hong Kong

For details, please visit <http://haicd.ha.org.hk/>

HKICNA – 6th International Infection Control Conference

Date: 1 – 3 August 2014

Venue: Hong Kong Convention & Exhibition Centre

For details, please visit <http://www.mvdm.com/hkicna/>