

Practice | Five things to know about ...

Highly pathogenic avian influenza A (H5N1) virus

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1 Highly pathogenic avian influenza (HPAI) H5N1 virus is spread globally by wild birds

The circulating H5N1 clade (2.3.4.4b) has caused outbreaks on poultry farms and among backyard flocks, and die-offs among wild birds. Infections in mammals, including cattle and humans, triggered by viral spillover from birds highlights the potential for a pandemic, but the mechanisms of transmission are not fully known.^{1,2} Evidence exists of viral reassortment and mammalian adaptation,³ resulting in increased risk of transmission and disease among mammals.

2 As of June 12, 2024, no reported human cases of H5N1 have been acquired in Canada

Nearly 900 human cases of H5N1 have been reported globally since 2003, with a case fatality rate of 52%.⁴ The clinical presentation may vary from mild to severe influenza. Dairy workers in the United States who recently became infected presented with hemorrhagic conjunctivitis.²

3 Clinicians should ask about animal exposures in people presenting with influenza-like illness, conjunctivitis or, less commonly, meningoencephalitis

People with substantial exposure to livestock or wildlife may be at risk for infection. Currently, the risk to the general population is low, with no evidence of sustained person-to-person transmission.³

4 Conventional laboratory-based testing may identify H5N1 HPAI as influenza A virus

Confirmatory testing is conducted at a provincial or national reference laboratory for suspected infections, which underscores the need to identify patients with exposure histories as soon as possible.⁴ Nasopharyngeal and conjunctival swabs, if the patient has eye symptoms, should be collected, and public health should be informed of cases under investigation.

5 No vaccine currently exists for human use in Canada

Oseltamivir is the recommended antiviral for treatment and prophylaxis of HPAI infection. Oseltamivir should be administered as soon as possible to a person with a suspected infection, or after close contact with a confirmed case of HPAI.⁵

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