

# Notice to Clinicians

**Nunavik Department of Public Health** 

# Update 2023: Avian Influenza

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# <u>Update</u>

The present communication is meant as a reminder and an update to the publication of the spring 2022 on the evolution of avian influenza.

# <u>Avian Influenza</u>

Avian influenza is caused by a virus carried by and spread among birds. A highly pathogenic strain of avian influenza (H5N1) has been circulating in Canada since December 2021. Although the present epidemic primarily affects domestic fowl, migratory waterfowl (geese, Canada geese and ducks) are often natural carriers of avian influenza and are at risk of developing H5N1. Even though no birds have tested positive in Nunavik to date, we must assume that the virus is present on the territory, as it has previously been detected in neighbouring regions (Labrador, Nunavut) that share the same migration corridor.

Although the virus mostly circulates among birds, it can also spread from a bird to another animal sharing the same habitat. For example, some cases of avian influenza have been identified among harbour seals in Québec.

#### Transmission to Humans

Internationally, since 2022, 13 human cases of A(H5N1)/(H5) have been reported: United Kingdom (3), Spain (2), United States (1), Vietnam (1), China (2), Ecuador (1), Cambodia (2) and Chile (1). The majority of cases (10/11) had a history of exposure to domestic fowl and 1 may have been exposed to a contaminated environment.

In North America, the only case of transmission to a human was reported in the United States and involved a worker assigned to the slaughter of contaminated domestic fowl. That patient came down only with fatigue for a few days, with no other symptoms.

The risk of transmission is therefore likely very low and primarily exists for individuals working with domestic fowl. The risk for hunters and others who handle fowl (for food or down, for example), however, should not be neglected.

The mode of transmission is poorly understood. The virus is excreted in secretions, saliva and stool and is present in the blood of fowl. The infection could therefore spread through inhalation of droplets or through contact with the eyes, nose or mouth.

There have been no cases of sustained transmission between humans in the past.



# **Clinical Aspects**

With the available data, the signs and symptoms of human infection with H5N1 are not precise and resemble those of flu-like illnesses.

The vague symptoms, combined with a very low incidence, pose a diagnostic challenge. Factors to consider include exposure, severity of the illness and absence of an alternate diagnosis.

A provincial aid (technical sheet) is in production to guide health workers.

There are criteria for severe acute respiratory infections (SARI) to identify emerging respiratory viruses. The case is a reportable disease (*MADO*) when the criteria are met (Severe Acute Respiratory Infection (SARI) Case Definition - Canada.ca).

Even though a patient does not meet all the criteria for an SARI, if he or she has severe respiratory symptoms, significant exposure and no alternate diagnosis, he or she should receive particular attention.

# <u>Public Health</u>

The Nunavik Department of Public Health (DPH) seeks to minimize the impact on the eating habits and traditional practices in its recommendations for the public.

A Web page containing, among other things, information on the protective measures recommended for hunters and others who handle fowl was designed and is available on the regional board's site (Avian Influenza | Nunavik Regional Board of Health and Social Services (nrbhss.ca)).

A public notice as well as Facebook posts were once again issued in early May.

The DPH is also working jointly with the Nunavik Research Centre (Makivik).

#### Role of Clinicians at the Present Stage

In the presence of a suspected case, discuss clinical care (diagnosis, clinical management, prophylaxis) with the MUHC's tropical-diseases team (Dr. Yansouni, Dr. Libman) or the infectious-diseases specialist on duty at 514-934-8075.

In the presence of a suspected case, report to the DPH (physician on duty: 1-855-964-2244 or 1-819-299-2990) even if the criteria for an SARI are not fully met.