## What is Avian Influenza?

- A viral infection, meaning it is sickness caused by a virus.
- The virus is highly contagious among birds.
- The virus has been around globally a long time, since at least the early 1960s.
- Found in domestic poultry (such as chickens) and in many different types of wild birds.
- The virus has evolved over time. There are a range of types of avian influenza, some are low pathogenic (causing no disease in wild birds: all HA subtypes) and some are high pathogenic (associated with disease and death in poultry and wild birds: only the H5 and H7 subtypes). The virus can infect some mammals.
- Many Antarctic bird species are hosts for the low pathogenic type of virus and it does not cause concern.
- The type we are concerned about in regards to Antarctic species is Highly Pathogenic Avian Influenza of the Clade 2.3.4.4b. Commonly referred to as HPAI H5N1.
- To date, HPAI H5N1 has spread globally very rapidly but has not been found in the Antarctic Treaty Area. There is now a heightened risk that it will arrive there through natural migration of wild bird species this austral summer season 2023/24. The Antarctic bird groups considered most vulnerable are the gulls and skuas. Fur seals are considered the most vulnerable Antarctic mammal species.

## **HPAI H5N1**

- "HP" or "Highly Pathogenic" means it makes infected birds [and some infected mammals] sick and causes mass mortality events where many infected animals die.
- An infected bird usually displays visible signs of the infection, such as nervousness, tremors, lack of coordination, lack of
  movement or odd movements, coughing/gasping for air, and swelling or redness around the eyes, neck and head.
  Although, some infected birds may not show any of these symptoms.
- Multiple dead animals in one area may be an indication that the virus is present.

## What is the risk to humans?

- Recently, there have been increasing reports of outbreaks among mammals, with sporadic detection in humans reported but remaining very rare. To date, human-to-human transfer has never been detected.
- Infections in humans can cause severe disease with a high mortality rate.
- The human cases thus far are mostly linked to close contact with infected birds, or from their carcasses, body fluids or feces, and from virus contaminated environments<sup>1</sup>.

## What can we do?

- We <u>cannot</u> prevent the natural migration of wildlife to/from Antarctica.
- National Antarctic programs can take extra precautions to prepare for when the virus arrives.
- Programs working with their contractors can strengthen your program's biosecurity protocols to avoid inadvertently
  introducing the virus into sub-Antarctic areas and the Antarctic Treaty Area from our home countries and our deployment
  gateways.
- We can review our procedures for Antarctic activities, especially any activities that are near wildlife.
- We can remain vigilant and monitor Antarctic wildlife for signs of infection.
- So, if while in the Antarctic or sub-Antarctic you:
  - Encounter birds acting strangely, **do not** approach or interact with the birds.
  - o Discover dead birds or mass mortality events, **do not** investigate, touch or dispose of the dead bird carcasses.
  - Encounter dead mammals such as seals, **do not** investigate, touch or dispose of the dead animal carcasses.

Do take photos or videos to record what you saw to support further investigations.

**Do** take note of the location(s). **Do** report to your Manager.

- Mangers should report (through their chain of command) any suspected [or confirmed cases] of HPAI in Antarctic wildlife. Avian flu is a globally reportable disease, so there will be national protocols for reporting any confirmed avian flu cases in Antarctica.
- Follow national protocols, implement your human safety protocols and share information through COMNAP if and when the virus is confirmed in the Antarctic Treaty Area.
- National Antarctic programs should have a communications plan prepared in advance.

Follow the **latest global information** at: <u>https://www.woah.org/en/disease/avian-influenza/</u>. Follow the **latest COMNAP guidance** at: <u>https://www.comnap.aq/heightened-risk-of-hpai-in-antarctica</u>. Follow the **latest information from the SCAR Antarctic Wildlife Health Working Group** at: <u>https://www.scar.org/</u>.



<sup>&</sup>lt;sup>1</sup> World Health Organization (WHO), <u>https://www.who.int/news/item/12-07-2023-ongoing-avian-influenza-outbreaks-in-animals-pose-risk-to-humans</u>, downloaded 21 August 2023.