Heightened Risk of Avian Influenza in the Antarctic Treaty Area

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**Information Paper submitted by SCAR, IAATO & COMNAP**

Background

While there are no known cases of Highly Pathogenic Avian Influenza (HPAI) H5N1[[1]](#footnote-1) in the Antarctic Treaty Area, advice from avian influenza experts in 2022 suggested there was a heightened risk of the disease (commonly known as “bird flu”) arriving by way of migrating species during the 2022/2023 austral summer. The SCAR Antarctic Wildlife Health Working Group (AWHWG) raised concerns about the likely arrival and significant impact HPAI might have on wildlife in the Antarctic region.

AWHWG advises that the risk of HPAI arriving in the Antarctic Treaty Area remains high for the next two seasons, 2023/2024 and 2024/2025. We wish to bring this to the attention of the CEP. A Background Paper submitted by SCAR and IAATO has already brought the matter to the attention of CCAMLR (SCAR & IAATO, 2022).

Work is underway through SCAR, IAATO and COMNAP to continue developing practical advice to identify suspected cases and to eliminate risk associated with direct human contact.

Introduction

Since the beginning of 2022, the increasing intensity of HPAI (H5N1 strain) outbreaks has resulted in the deaths of hundreds of thousands of seabirds in the Northern Hemisphere, around the Atlantic and Pacific Oceans and southern Africa. Cases of HPAI have also been detected in wild birds and mammals (including penguins and sea lions) in South America in 2023.[[2]](#footnote-2) The AWHWG is concerned about the heightened risk and likely arrival of HPAI in the sub-Antarctic islands and in the Antarctic Treaty Area due to species migration. There is also a small risk of direct transfer of the virus from human movements. The arrival of the disease is likely to have a significant impact on wildlife in the Antarctic region and could result in mass mortality events.

No known cases have been detected in the Antarctic Treaty Area to date. However, birds that migrate from regions where cases have been detected to the sub-Antarctic and Antarctic continent may carry the disease to Antarctica. We therefore advise vigilance and suggest preparations for the likely arrival to the Antarctic Treaty Area of HPAI in 2023/24 and/or the 2024/2025 seasons.

Although the disease primarily affects poultry and wild birds, avian influenza can occasionally spread to mammals, including humans and pinnipeds. An increasing number of cases of HPAI have been reported in various mammals, both terrestrial and aquatic, causing morbidity and mortality, raising concerns about the threat it poses. While the risk is low to humans, there are reported instances of transfer to humans and other mammals resulting in loss of life.[[3]](#footnote-3)

2022/2023 Actions

Due to the heightened risk of HPAI being introduced to the Antarctic Treaty Area by migrating seabirds and mammals, the AWHWG developed “The Risk of Avian Influenza in the Southern Ocean: A Practical Guide” that provides background information and practical advice to identify suspected cases should they arise in the region, and also to reduce additional risk from direct transfer of the virus from human activity in the Antarctic region, for example through further enhancing biosecurity procedures. The draft document prepared by the AWHWG is available as a preprint from: <https://ecoevorxiv.org/repository/view/3686/>.

COMNAP shared guidance on the heightened risk of HPAI with their membership on 14 October 2022. A further reminder was issued to national Antarctic programs on 16 February 2023. Guidance remains available on the COMNAP website at <https://www.comnap.aq/environmental-protection> and is regularly updated, including through the COMNAP Environmental Protection Expert Group AGM session on 28 June 2023.

IAATO alerted its membership to the global HPAI situation on 11 August 2022, advising on biosecurity procedures that would be in place for the upcoming season in addition to IAATO’s standard decontamination procedures. These were incorporated into IAATO’s 2022-23 Biosecurity Instructions for the IAATO Field Operations Manual which are routinely reviewed and updated on an annual basis. Additionally, IAATO made guidance available on its website (<https://iaato.org/iaato-2022-23-biosecurity-protocols-regarding-avian-influenza/>) and used webinars and video to help communicate information about the risks of HPAI and IAATO’s biosecurity procedures to field staff and onwards to clients. Further updates were issued often throughout the season and following advice from the SCAR AWHWG.

Continuing Actions in Advance of the 2023/24 Antarctic Season

Since the large-scale spread of HPAI is primarily through the long-distance, latitudinal migration of birds, preventing the introduction of the disease to Antarctic species may not be possible. It is, however, possible to prepare for the likely arrival of HPAI in the Antarctic region and to reduce the additional risks through direct human activities. The SCAR AWHWG is tracking the progress of identified cases through the World Organisation for Animal Health (WOAH) as HPAI is a globally reportable disease (<https://www.woah.org/en/disease/avian-influenza>). A collaborative group is being formed by COMNAP, IAATO and SCAR (through AWHWG leadership) to focus on the issue for the upcoming season. This group has agreed to convene an expert workshop to work on a practical guidance that will be shared with the community before the start of the 2023/24 Antarctic season.

For the 2023/24 season, we have an opportunity to remain vigilant for any signs that the disease is present in sub-Antarctic and Antarctic species. Ensuring biosecurity guidelines and procedures are robustly implemented is also important to eliminate or mitigate the risk of spreading the disease within Antarctica by way of direct human activity.

COMNAP, IAATO and SCAR encourage wide participation of experts from the CEP to participate in the work described above. Further information will be distributed via the SCAR, COMNAP and IAATO community lists soon. An update on the status of HPAI and its potential impacts on Antarctic birds and mammals will be provided to CEP XVLI (2024).

References

SCAR and IAATO (2022) Heightened risk of avian influenza in the Southern Ocean. SC-CAMLR-41/BG/20.

SERNAPESCA <http://www.sernapesca.cl/noticias/sernapesca-entrega-reporte-de-animales-marinos-varados-muertos-por-situacion-de-influenza>

CNN <https://edition.cnn.com/2023/03/06/americas/bird-flu-sea-lion-deaths-peru-intl-latam/index.html#:~:text=At%20least%203%2C487%20sea%20lions,linked%20to%20the%20bird%20flu>

World Organisation for Animal Health - World Animal Health Information System (<https://wahis.woah.org/#/event-management>)

1. HPAI H5N1 clade 2.3.4.4b [↑](#footnote-ref-1)
2. 769 Humboldt, 17 Magellanic, and 1 king penguins & 1,960 sea lions reported in Chile (SERNAPESCA 12th April 2023); 3487 sea lions and 65,000 wild birds in Peru (CNN 7th March 2023; World Organisation for Animal Health WAHIS); cases in Argentina have predominantly been detected in poultry. See referenced websites for up-to-date figures. [↑](#footnote-ref-2)
3. <https://www.woah.org/en/statement-on-avian-influenza-and-mammals/> “Statement on Avian Influenza and Mammals”, posted 13 February 2023. [↑](#footnote-ref-3)