Surveillance and coordination for the prevention and detection of Highly Pathogenic Avian Influenza in Antarctica

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**Working Paper submitted by the United States**

Summary

This paper provides information about the concern over the largest worldwide outbreak of Highly Pathogenic Avian Influenza (HPAI) which could potentially be introduced to Antarctica. The United States has developed and implemented procedures to detect and prevent the introduction or spread of HPAI between seabird and marine mammal colonies. The United States encourages Parties to develop and implement procedures for preventing the introduction or spread of HPAI by their National Antarctic Programs, to share information on HPAI detections in Antarctica, and requests that SCAR provide updates to the CEP on the potential impacts of HPAI to native birds and mammals in Antarctica.

***Introduction***

Avian influenza is a highly contagious viral disease which rapidly evolves. Highly Pathogenic Avian Influenza (HPAI) strains can cause high levels of mortality in both domestic poultry and wild birds. The current HPAI outbreak has led to record numbers of bird mortalities in both North America and Europe, with over 58 million cases in the United States and over 47 million cases in Europe, including mortalities of thousands of seabirds around the world. The World Organization for Animal Health (WOAH) has reported that the virus has shown an unusual persistence in wild birds for the first time and that the number of outbreaks is expected to increase in the coming months. As of January 2023, WOAH has reported that outbreaks of HPAI have been detected in Canada, Chile, Colombia, Ecuador, Honduras, Mexico, Panama, Peru, the United States of America, and Venezuela. In 2022, the SCAR Antarctic Wildlife Health Working Group (AWHWG) suggested that there was a high risk that HPAI could be introduced into Antarctica and recommended that National Antarctic Programs and tourism operators should monitor wildlife colonies for signs of HPAI, take precautions when working around wildlife, and maintain the highest biosecurity to prevent transmission.

Avian influenza can be spread through direct contact with respiratory secretions or feces from infected birds. Additionally, avian influenza viruses can survive for a long period at low temperatures, so could be introduced or spread to seabird colonies in Antarctica by contaminated clothing or equipment from visitors, or by scientists. According to WOAH, the severe mortality rates caused by HPAI in wild birds can lead to devastating impacts to ecosystem biodiversity.

***Response***

The United States developed and implemented guidance for enhanced detection and response of HPAI outbreaks in wildlife colonies (Attachment 1). The guidance also covered enhanced biosecurity steps to reduce the threat of anthropogenic introduction or spread of HPAI. This guidance applies to all participants in the U.S. Antarctic Program. Specifically, the guidance requires surveillance of a wildlife colony from at least 150m away before entry to detect any common behavioural signs of HPAI. If signs of HPAI are detected, personnel are not permitted to enter the wildlife colony. Researchers who work directly with birds require specific clearance from permitting officials, and should wear appropriate personal protective equipment during bird handling. The United States is further coordinating with U.S. authorized tour industry vessels and asking them to report any potential detections of HPAI. Additionally, all boots and equipment must be decontaminated before and after any wildlife colony visit. As of March 2023, no signs of HPAI have been detected in any locations where the U.S. Antarctic Program is operating.

While HPAI was not detected by the United States in Antarctica during the 2022-2023 season, the threat of introduction remains high. The ability to detect signs of HPAI outbreaks in Antarctica could be enhanced by further coordination amongst Parties which could allow communication of detections to all Parties, allowing National Antarctic Programs, and tour operators to avoid areas with outbreaks, and reducing the risk of spreading the outbreak to nearby colonies. Other National Antarctic Programs could also implement guidance on detection and response to HPAI outbreaks, which would reduce the level of risk of introducing or spreading HPAI infections in wildlife colonies in Antarctica.

***Recommendations***

The United States recommends that the CEP:

1. Encourages Parties to develop and implement procedures for preventing the introduction or spread of HPAI by their National Antarctic Programs;
2. Encourages Parties to share information on HPAI detections in Antarctica, including the location of the outbreak, the species, and approximate number of individuals affected, and the symptoms observed;
3. Request that the SCAR Antarctic Wildlife Health Working Group provide updates to the CEP on the potential impacts of HPAI to native birds and mammals in Antarctica.