

# 野鳥高病原性家禽流行性感冒監測

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## 摘要

高病原性家禽流行性感冒除了對家禽產業的可造成嚴重損失之外，也可能對野生動物和公眾構成威脅。2.3.4.4 分支 H5 亞型高病原性家禽流行性感冒病毒為近年主要流行的病毒，持續在全球引起家禽及野生鳥類嚴重的疫情。野生候鳥是引入新興家禽流行性感冒病毒至國內的傳播途徑之一。臺灣 1998 年起開始針對秋冬季濕地之野生水鳥排遺進行家禽流行性感冒病毒監測，2019 年以前在排遺檢測到的病毒均為低病原性。我們在 2017 年後新增死亡野鳥的監測項目，後續檢測到 7 例新入侵的 H5 亞型高病原性禽流感病毒。然而到了 2020 年我們首次在野鳥排遺檢測到 1 株 H5N8 亞型病毒，到了 2021 年冬季則檢測到 12 株 H5N1 亞型病毒。今年秋冬則已累計有 3 批次的野鳥排遺檢出 H5N1 亞型病毒，並且分為 2 種基因型。在每年高病原性家禽流行性感冒病毒頻繁入侵的情況下，家禽產業的生安防護更顯得重要。另外 2.3.4.4b 分支病毒群在國外已有許多野生哺乳動物感染的案例，這也導致動物園及野生動物救傷保育單位生物安全控管上的難度增加，相關的流行病學調查與應變的經驗值得相關團體參考。

# **Surveillance of high pathogenicity avian influenza in wild birds**

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## **Abstract**

High pathogenicity avian influenza can cause severe damage to the poultry industry, as well as pose a threat to wildlife and the public. In recent years, 2.3.4.4 clade H5 subtype high pathogenicity avian influenza has been the dominant threat to poultry and wild bird all over the world. A major source introducing the emerging avian influenza viruses into Taiwan is through bird migration. Since 1998, we have conducted avian influenza virus surveillance on wild waterfowl of wetlands every autumn and winter. Before 2019, the viruses detected in wild bird feces were all of low pathogenicity. After 2017, we began to monitor dead birds and then successively detected seven strain emerging H5 subtype highly pathogenic avian influenza viruses from those targets. Moreover, in 2020, for the first time, we detected one H5N8 subtype virus in wild bird feces, and by the winter of 2021, twelve H5N1 subtype viruses were detected from feces. In the autumn and winter of this year, three H5N1 subtype viruses have been detected in wild bird feces, and the viruses belonged into two genotypes. In the case of frequent invasion of high pathogenicity avian influenza viruses every year, the biosecurity of the poultry industry is particularly important. In addition, there have been many cases of 2.3.4.4b infection in wild bird and mammals abroad and the disease increased the difficulty of biosafety control in zoos and wildlife rescue and conservation units. There is a need for relevant units to refer to the epidemiological investigations and response protocol of these cases.