

[192] AVIAN INFLUENZA VIRUS SURVEILLANCE IN WILD BIRDS IN BRAZIL

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The spread of avian influenza virus (AIV) through wild aquatic birds has recently drawn much attention, particularly in face of highly pathogenic avian influenza viruses. From October 2008 to November 2010, 1.146 wild birds were sampled in Brazil. Oral and cloacal swabs were collected from each bird, and placed in cryotubes containing transport media. *Real time* RT-PCR revealed 4 positive samples for influenzavirus in one species, the Ruddy Turnstone *Arenaria interpres* (Charadriiformes), caught in Amazon region. Previous studies involving multiple shorebird species had also found *A. interpres* to present the highest AIV prevalence among shorebirds. The reasons for this are yet unknown; experimental infections would be needed to determine whether there are unique physiologic characteristics that explain the increased prevalence observed on these species in the field. Avian influenzavirus have been detected in migratory birds, especially in shorebirds, at numerous localities in North America. These birds arrive in Brazil through two flyways, Central and Pacific, and islands in the Brazilian Amazon forest are areas with large migratory confluence, a condition that might facilitate virus transmission. Our results thus emphasize that the surveillance and early detection of influenzavirus in Brazil is critical to assure the rapid implementation of control and prevention measures, focused on both public health and conservation of these birds and their environments.

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