

Highly Pathogenic Avian Influenza – Factsheet

Highly pathogenic avian influenza (HPAI), or bird flu, is a highly contagious virus that can infect all species of bird (wild and domestic) and caused significant mortality in species of seals and sealions.

Background

The H5N1 strain of Highly Pathogenic Avian Influenza (HPAI) has spread globally to all areas since December 2021 except Aotearoa, Australia, the Pacific Islands.

New Zealand has never had a case of HPAI and the likelihood of it arriving on pathways that Border Services manage is low. HPAI is currently spreading internationally in wild birds, which is the most plausible path by which it would reach New Zealand. As information emerges about the distribution of the disease in Antarctica, there will be a better understanding about the likelihood of HPAI reaching New Zealand through wild bird movements.

Once in New Zealand, it could spread by direct contact between infected and healthy birds, or through contaminated equipment and materials, including water and feed.

We are actively monitoring disease spread, particularly towards the Ross Sea region in Antarctica and globally. We're talking regularly with colleagues around the world so we can learn as much as we can about how the disease is behaving as it spreads, and what other countries are doing to manage the disease.

International experience has shown that a One Health approach to the current strain of HPAI is essential. If HPAI is detected in New Zealand or its territories, Biosecurity New Zealand will be the lead agency and will coordinate any response in partnership with the Department of Conservation (DOC) and the Ministry of Health.



Various native sea birds congregating at sea (DOC).

Species at risk

We don't know exactly what impact HPAI would have on native species; based on overseas evidence, it's more likely to affect colony nesting birds, seals and predator/scavenger species. Species, such as red and black-billed gulls, gannets, terns, seals and other seabirds are likely to be impacted due to the close contact transmission of the virus through secretions and faeces, as well as predator/scavenger species such as raptors.

Transmission to mammals

Any animal that consumes or interacts with an infected bird/ mammal or the carcass of one, is at risk of catching HPAI. Various mammal species have contracted HPAI in this way with varying susceptibility and mortality rates.

Mammalian infections significant to Aotearoa are mortalities in species of: sealions, seals, canines, felines, and mustelids.



Alan Tennyson among white-napped petrels, Macauley Island, Nov 1988 (DOC).

What to look out for?

While there are many other possible causes of illness and death in wild birds, be aware of HPAI so you can minimise risks to yourselves and other animals if you encounter sick or dead birds.

The most obvious sign of HPAI is sudden death in several animals. Other signs can include weakness, tremors, paralysis, difficulty breathing, lack of co-ordination, blindness, trembling and diarrhoea.

If you see three or more sick/dead wild birds or marine mammals in a group, report it immediately to Biosecurity New Zealand's Exotic Pest and Disease Hotline on 0800 80 99 66. Provide as much detail to Biosecurity New Zealand as you can, including:

- a GPS reading or other precise location information
- photographs and/or videos of sick and dead birds
- species identity and estimate of numbers affected
- note how many are sick or freshly dead, and the total number present.

Biosecurity New Zealand will take details and an incursion investigator will be in contact with you. Follow any instructions from Biosecurity New Zealand for handling of sick or dead birds.

The World Health Organisation states HPAI has a 50% mortality rate in humans, though cases are very rare. Do not handle sick or dead birds if you suspect HPAI.

Management Options

Once HPAI is spreading in wildlife populations in New Zealand it will be here forever with periods when outbreaks are high.

Effective management targets population support through the species recovery programmes; focussing on increasing baseline health and increasing population resilience.

DOC is developing response plans for all Districts, identifying high risk sites and activities.

During periods of active outbreaks, areas of Public Conservation Land and Waters may have restricted access or be closed. This is to reduce stress on wildlife and prevent humans (and their pets) from catching the disease or disturbing birds, spreading the disease to more locations. These decisions will be made based on a variety of factors including the nature and site of the outbreak, species infected, and time of year.

International experience has shown the collection of bird carcasses does not reduce the impacts of an outbreak and in some instances, due to disturbance of sick and/or recovering birds, makes the outbreak worse. In some scenarios it may be necessary to collect and dispose of carcasses to mitigate a worse risk to human health or a species of concern. Carcasses will be collected and disposed of under strict biosecurity protocols.

For a few species, using vaccination might be an effective tool during outbreaks to protect a core breeding population to prevent species extinction.

In early 2024, DOC began a trial to assess the safety and efficacy of the vaccine in the five species:

- Kakī (Black stilt)
- Takahē
- Kākāpō
- Tūturuatu (Shore plover)
- Red-crowned kākāriki (as a surrogate species for kākāriki karaka/orange-fronted kākāriki)

It is not possible or impactful to vaccinate all endangered birds, due to the efficacy of the vaccine and the feasibility of catching wild birds. We will focus on those species reliant on captivity where the full two doses of vaccine can be given and reassess as we learn more about susceptibility of native species.

More Information

DOC website: www.doc.govt.nz/our-work/wildlife-health/avian-influenza/

MPI website: www.mpi.govt.nz/HPAI