Avian Influenza - Advisory for wildlife managers and bird banders

What is Avian Influenza?

Avian Influenza (also called bird flu) is a contagious viral disease that affects both domestic and wild birds and is caused by avian influenza (AI) viruses.

Most wild birds infected with the virus are asymptomatic. Strains of this virus are classed as either low pathogenic (causing no or minimal illness) or highly pathogenic (causing severe illness).

Currently the risk of the highly pathogenic avian influenza (HPAI) viruses reaching New Zealand is low. We are lucky to be isolated from other land masses and we have good border biosecurity.

Although AI viruses usually do not infect people, there have been some rare cases of human infection with these viruses.

How is it spread?

Avian influenza is mainly spread by direct contact between infected birds and healthy birds. It can also be transmitted when birds come in contact with equipment or materials (including water and feed) that have been contaminated with faeces or secretions from the nose or mouth of infected birds.

Wild waterfowl such as ducks, geese and swans are considered main reservoirs (natural hosts) for bird flu viruses. Birds such as gulls, terns, and shorebirds can also be reservoir species. HPAI strains are usually associated with outbreaks in poultry but can also affect wild birds.

What is happening now?

HPAI strains circulating in the northern hemisphere since December 2021 are associated with outbreaks of disease in domestic and wild birds across Europe, Asia, Africa, and North America.

New Zealand has never had a case of HPAI, but low-pathogenicity avian influenza viruses have been detected in wild mallard ducks in the past. Currently the risk of HPAI arriving is still considered low, however the situation is continually being monitored in consultation with national and international wildlife experts.



Is there a risk of migratory birds "importing" HPAI to New Zealand?

New Zealand is not on a migratory pathway of waterfowl and only occasional vagrants arrive from Australia, representing a very low risk pathway.

A variety of migratory shorebirds and seabirds do return to New Zealand. The most numerous shorebirds are the bar-tailed godwit, red knot, ruddy turnstone and Pacific golden plover. The bar-tailed godwit flies directly from Alaska to New Zealand without stopovers. Other species may visit estuaries along the Asian coastline, the Philippines and Australia on their annual migrations south from arctic Russia.

Additionally, seabirds such as Arctic and Pomarine skuas arrive every spring and summer from the Arctic region. Arctic tern, little terns and common terns are also regular annual visitors to NZ. Historically, HPAI viruses circulating in the northern hemisphere have been considered a low threat to New Zealand from migratory seabirds and shorebirds. This has been based on extensive surveillance, epidemiological and geographical factors.

Could HPAI enter any other way?

Another low-risk pathway for AI entering New Zealand is via inadvertent importation via legal trade movements or the illegal importation of risk items, for example, eggs, unprocessed poultry products, contaminated equipment, packaging, clothing and other commodities from infected areas. New Zealand has one of the strongest biosecurity systems in the world to limit this risk pathway, including highly effective pre-border, border and post-border processes.

Biosecurity New Zealand undertakes regular surveillance for AI virus to provide early detection, monitor endemic AI viruses, and to provide assurance of New Zealand's freedom from AI viruses.

Which New Zealand wildlife species are most vulnerable?

Based on the overseas evidence, large mortality events require extended close contact in a crowded situation. In New Zealand, colonially nesting birds are likely to be the most vulnerable.

What should you do?

- Maintain a heightened awareness of disease risk when working with wildlife.
- Always maintain good biosecurity and hygiene practices to prevent spread and protect yourself.
 - Scrub and disinfect all your equipment, boots & clothing between sites/species
 Including equipment used for capture, handling, marking, holding (e.g. transport boxes).
 - Use clean bird bags for each bird to avoid faecal contamination.
 - o Clean your hands and equipment between handling each bird e.g. alcohol wipe.
 - Employ good personal hygiene.
 - For captive birds, undertake the measures above and deter wild birds from access to aviary or food/water sources, and/or treat water sources.
- Report sick or dying birds to Biosecurity New Zealand's Exotic Pest and Disease hotline 0800 80 99 66.
 - o If a significant number of birds are observed in a group sick or dying, report it.
 - o Record a GPS reading or other precise location information.
 - o Take photographs and/or videos of sick and dead birds.
 - o Identify the species and estimate the numbers affected.
 - Note how many sick or freshly dead are present as well as total number present.
 - o Follow Biosecurity New Zealand instructions for handling of sick or dead birds.

What happens next?

The Department of Conservation and Biosecurity New Zealand are working together to continually monitor the situation here and overseas.

If HPAI is detected in New Zealand, Biosecurity New Zealand is the lead agency and will coordinate any Response.

The Department of Conservation is updating the HPAI Avian Influenza Management Action Plan to mitigate impacts on threatened species if HPAI is detected in New Zealand. This includes actions to enhance detection, reduce spread and protect threatened species.

Further resources

https://www.woah.org/en/disease/avian-influenza/ (link to website)

World Organisation for Animal Health Q&A Avian Influenza (link to pdf)

https://www.cdc.gov/flu/avianflu/wildbirds.htm (link to website)

ACAP Guideline for working with albatrosses and petrels (link to pdf)

MPI Avian influenza surveillance programme annual report (link to pdf)