MINISTRY FOR PRIMARY INDUSTRIES

OFFICIAL INFORMATION ACT REQUEST:

ENDANGERED SPECIES VACCINATION IN RESPONSE TO HPAI H5N1

J R BRUNING. AUGUST 20, 2026. REQUEST NO: OIA26-0675

BACKGROUND AND REASON FOR THE REQUEST

This request concerns an active vaccination programme involving critically endangered native species. As further booster doses may occur while this request is being considered, please provide information already held by the Ministry of Primary Industries (MPI) without awaiting further vaccination, monitoring or programme outcomes. This is particularly important for information supporting decisions that precede further intervention.

In July 2026, DOC announced that approximately 300 core breeding birds from five threatened native species would be vaccinated against avian influenza, following its 2024–2025 vaccine trial. In announcing the programme, DOC stated:

> *"Last year DOC completed a world-first research trial on five native bird species that showed vaccination is safe and effective in these birds and will help protect them from bird flu."*

However, the 2024-2025 trial used a completely different product than will be used in 2026.

The MPI *One Health approach for HPAI H5N1 (August 2025)* expressly states that vaccination of threatened native birds may be undertaken "based on the vaccination trial conducted during 2024". The trial therefore directly informs the subsequent vaccination programme, making it important to establish precisely what the trial demonstrated concerning safety, immune response and expected protection against H5N1.

Neither the One Health document nor a related Cabinet paper *One Health Response Approach to Highly Pathogenic Avian Influenza (2024-10-17),* identifies the criteria or threshold for moving into a vaccination programme. A specific decision pathway could not be identified. DOC subsequently described the detection of H5N1 in migratory seabirds in Australia as a 'trigger to start vaccinating some of our most critically endangered birds as a safeguard' (July 2, 2026).

The detection of H5N1 in migratory seabirds in Australia may reasonably have heightened concern, but on its own it does not provide a rigorous basis for deciding to vaccinate threatened native birds. Such a decision requires consideration of the species-specific likelihood and consequences of infection, including expected morbidity and mortality, population-level risk, and the known and uncertain risks of vaccination, capture, handling and repeated boosting. Without those considerations, the trigger does not amount to a transparent risk-benefit assessment.

Pathogenicity describes the *capacity* of the virus to cause disease, while the severity and mortality produced by infection can differ substantially between species.

Therefore, even if H5N1 reaches New Zealand, its classification as highly pathogenic does not mean that it will necessarily cause high death rates in these threatened species. The HPAI classification does not predict how severely every species will be affected. Different bird species can respond very differently to the same virus. The relevant question is therefore how great the risk of serious disease and death actually is for each of the threatened species proposed for vaccination.

The risk problem therefore does not only concern the risk of death from avian influenza, including the extent to which assumptions about mortality rely upon a classification principally derived from pathogenicity in domestic chickens. There is also significant uncertainty about the risks of the vaccination programme itself.

The public has yet to see the actual numbers from the 2024–2025 trial showing that, more than a year later, the fate and outcome of all birds are accounted for, allowing the longer-term safety of the intervention to be assessed.

Vaccination involves capture, handling and injection, potentially followed by repeated boosters, while free-living birds may be difficult to recapture and monitor over time. These risks and uncertainties must be weighed against the species-specific risk posed by the virus. To vaccinate threatened populations simply because a virus is classified as 'highly pathogenic', without first establishing the likely risk of serious disease, mortality or population decline in those particular species, would leave one side of that risk assessment largely unquantified.

DOC subsequently publicly stated that the trial showed vaccination was "safe and effective" and, in August 2025, stated:

> *'We now know for at least five of our most critically endangered bird species the vaccine will work to protect them from the highly contagious H5N1 virus.'*

In July 2026, DOC Senior Science Advisor Kate McInnes was also reported as stating:

> *"We know for these species that we get at least six months of good antibody protection, which is really reassuring."*

These statements appear to go beyond the findings directly demonstrated by the trial.

- The trial demonstrated an antibody response following vaccination and measured the persistence of that response.
- It did not expose the vaccinated birds to H5N1 to establish whether vaccination prevented infection, morbidity or mortality.
- The trial report itself states that "overall efficacy will not be known until natural challenge occurs following the arrival of the virus in Aotearoa New Zealand" and that duration of antibodies is only an approximate measure of duration of protection.
- The 2024-2025 trial was for a different vaccine (A009733) than the 2026 300-bird injection programme (A012218).

Accordingly, the inference from an antibody response to protection against H5N1 requires a clearly identified scientific basis.

The presence or persistence of antibodies does not, by itself, establish the degree to which vaccination will prevent infection, disease, viral shedding or mortality following exposure to H5N1 clade 2.3.4.4b.

This distinction is particularly important because DOC has now progressed from a small experimental trial to vaccination of approximately 300 core breeding birds from threatened species.

The data from the trial was published in the report: Avian Influenza vaccine safety and efficacy trial in threatened species (22 July 2025). The purpose of that trial: *To assess the safety and efficacy of an inactivated avian influenza vaccine in five nationally critically endangered species for use in the protection against extinction from highly pathogenic avian influenza (HPAI).* The report expressly noted the current strain of H5N1 clade 2.3.4.4b Highly Pathogenic Avian Influenza (HPAI). Elevated antibody responses 'determined the effectiveness of the dosage and the duration of expected protection (using antibody titre as a proxy for protection). The study authors recommended that '*the vaccine be used to protect endangered species by vaccinating captive breeding birds, and a cohort of free-living birds to represent a small insurance population against the risk of extinction from HPAI.*'

https://www.doc.govt.nz/globalassets/documents/our-work/wildlife-health/h5-avian-influenza-vaccine-trial-report.pdf

The vaccine was Poulvac Flufend i AI H5N3 RG (ACVM A009733).

The basis of the vaccination programme is that threatened native species would be protected from a HPAI disease threat identified by DOC and MPI as H5N1 clade 2.3.4.4b. More recent communications have referred more broadly to 'H5 bird flu'.

It is important that the public and officials do not conflate H5 bird flu generally with the specific H5N1 clade 2.3.4.4b threat, or conflate evidence of an antibody response to an H5 vaccine with demonstrated protection against that specific virus. Vaccines developed using one H5 virus may provide protection against another, but this depends on how closely the viruses match in the parts recognised by the immune system. Some H5 viruses are closely related while others are sufficiently different that protection may be reduced. Protection against one H5 virus therefore cannot simply be assumed to demonstrate protection against another.

In addition, the haemagglutination inhibition (HI) test on the largest bird, takahē appears to provide an important part of the experimental bridge used to infer that the H5N3 vaccine-induced response might protect against H5N1, acting as a form of cross-reactivity evidence. DoC's report says that, based on the H5N1 HI results: "most could be expected to have protection up to six months".

But the report only establishes that bridge experimentally in takahē and it applies chicken-derived benchmarks to takahē. That may be a reasonable working hypothesis, but the report doesn't demonstrate that 1:16 has the same biological meaning in a takahē as it does in a chicken.

If the programme is intended to protect against H5N1, the H5N1-specific HI testing undertaken only in the takahē cohort becomes central to the inference of efficacy across all five species, yet the report does not disclose how many takahē were tested at each time point.

However, the purpose of the study was ultimately to inform protection of threatened species from population decline or extinction due to highly pathogenic avian influenza.

DOC has stated that vaccination will begin with kākāpō, takahē, tchūriwat'/tūturuatu/shore plover, kakī/black stilt and kākāriki karaka/orange-fronted parakeet. Approximately 300 core breeding birds from these species will be vaccinated. These birds are held in captivity or, in the case of kākāpō and takahē, on offshore islands.

https://www.doc.govt.nz/news/media-releases/2026-media-releases/doc-to-vaccinate-at-risk-birds-against-bird-flu

Lack of Clarity on Animal Numbers and Long Term Health

Although the Animal Ethics Committee applications identify proposed numbers of animals for the respective trials, these do not establish the actual number of birds enrolled, vaccinated, surviving, recaptured and tested at each subsequent time point.

https://www.doc.govt.nz/globalassets/documents/about-doc/oia/2025/january/oiad-4751-attachment-1.pdf

The report does not declare how many birds of each species were injected and subsequently tested, nor does it establish that the threshold used to define 'elevated antibodies' was a threshold demonstrated to confer protection against HPAI H5N1 clade 2.3.4.4b.

HPAI H5N1 clade 2.3.4.4b.

This OIA request therefore seeks clarity on the evidence for protection against H5N1 clade 2.3.4.4b. This distinction is particularly relevant because the 2024–2025 trial vaccine was H5N3, while the vaccine selected for the 2026 programme is H5N2.

However, the report does not disclose how many takahē were tested at each time point. The scientific question is therefore whether the evidence demonstrates that these vaccines will protect these species against the specific H5N1 clade 2.3.4.4b virus the programme is intended to address.

However, the 2024–2025 trial was undertaken using Poulvac Flufend i AI H5N3 RG (ACVM A009733), whereas the approximately 300 core breeding birds in the 2026 programme are to receive a different product: Avian Influenza Vaccine H5N2 Subtype Killed Virus (ACVM A012218). The publicly available Delegate Decision for A012218 identifies MPI as the applicant/registrant, while MPI is also the regulatory authority responsible for assessing and approving the product. The approved label states that "Full efficacy and potency data is pending" and that duration of immunity has not been established.

In particular, the threatened-species trial cannot itself establish the safety, immunogenicity or efficacy of A012218 in these species because A012218 was not the product tested in that trial.

The scientific and regulatory basis for bridging between the two different vaccine products, and for concluding that A012218 will protect these threatened species against H5N1 clade 2.3.4.4b, therefore requires clarification.

The initial small experimental trial was undertaken using a completely different product from the proposed 2026 injection programme.

It is therefore important that the underlying evidence supporting DOC's conclusions concerning safety and efficacy can be independently understood and evaluated.

> In both cases, MPI was the registrant while also being the regulatory authority responsible for assessing the product.

- DOC experimental trial: A009733, Poulvac Flufend i AI H5N3 RG.
- 2026 vaccination programme: A012218, Avian Influenza Vaccine H5N2 Subtype Killed Virus
- In both cases the Adjuvant was comprised of: White Oil; Arlacel-83, Tween-80
- In both cases: ADVERSE EFFECTS Vaccinate only healthy chickens (A012218: and ducks) and avoid stressing the birds at the time of vaccination.

ELEVATED ANTIBODY RESPONSES AS PROXIES FOR EFFICACY

DoC identified H5N1 clade 2.3.4.4b as the contemporary threat (page 3/8), but then used the older H5N3/clade-1 Poulvac vaccine.

The trial report did not demonstrate protective efficacy against H5N1 through viral challenge.

> *It is not appropriate to undertake virus challenge trials with these threatened species, so overall efficacy will not be known until natural challenge occurs following the arrival of the virus in Aotearoa New Zealand. Population monitoring after arrival of HPAI will further inform the level of protection provided by vaccination. (page 2/8)*

https://www.doc.govt.nz/globalassets/documents/our-work/wildlife-health/h5-avian-influenza-vaccine-trial-report.pdf

DOC's 2024–2025 trial used Poulvac Flufend i AI H5N3 RG (A009733) in five threatened native bird species, while the contemporary disease threat identified by DOC and MPI was H5N1 clade 2.3.4.4b.

The trial did not expose vaccinated birds to H5N1 to establish whether vaccination prevented infection, disease, viral shedding or mortality. DOC itself acknowledged that “overall efficacy will not be known until natural challenge occurs following the arrival of the virus in Aotearoa New Zealand.” Instead, antibody responses and their persistence were used as proxies for expected protection.

This is key because an antibody response and demonstrated protective efficacy are not the same finding. Sequence similarity, antigenic similarity, antibody cross-reactivity and immunogenicity may provide evidence from which protection can be predicted, but the strength of that prediction depends upon the evidence connecting these different measures.

The Animal Ethics Committee documentation records advice from Zoetis that Poulvac Flufend should provide protection against the circulating HPAI strain based on 91% amino-acid homology, while also recording that a newer vaccine based on the circulating strain was then in development.

https://www.doc.govt.nz/globalassets/documents/about-doc/oia/2025/january/oiad-4751-attachment-1.pdf

The strongest H5N1-specific evidence reported in the trial appears to be haemagglutination inhibition (HI) testing undertaken only in takahē. Serum was tested against both the H5N3 vaccine type and an H5N1 "panzootic type", providing evidence that antibodies induced by the H5N3 vaccine could cross-react with the H5N1 antigen used in the test.

However, protection was inferred using HI thresholds derived from chickens, H5N1-specific HI testing was not undertaken in the other four threatened species, and the report does not identify how many takahē were tested at each time point.

https://www.doc.govt.nz/globalassets/documents/our-work/wildlife-health/h5-avian-influenza-vaccine-trial-report.pdf

These issues become particularly important because the 2026 programme is not using the vaccine tested in that threatened-species trial.

Approximately 300 core breeding birds are instead to receive Avian Influenza Vaccine H5N2 Subtype Killed Virus (A012218). The earlier H5N3 trial therefore cannot itself establish the safety, immunogenicity or efficacy of A012218 in these five species.

The relevant question for MPI is consequently the scientific and regulatory evidence supporting the successive inferences from antibody response to expected H5N1 protection, from takahē to the other four species, and from the H5N3 product actually tested to the different H5N2 product now being used.

OFFICIAL INFORMATION ACT REQUEST QUESTIONS:

Such scientific and technical information, including the relevant considerations identified in this OIA request, would reasonably be expected to exist as part of the public record, given the significant public interest in the protection of endangered native species and the national importance of decisions that materially alter the manner in which their protection is undertaken.

1. **2024-2025 VACCINATION PROGRAMME**

The Ministry for Primary Industries Biosecurity New Zealand was the applicant for this product. The Gazette Notice of Application stated:

- To stimulate active immunity in chickens, turkeys and ducks against avian influenza virus, H5 subtype.
- To induce serological response against N3 neuraminidase, which can act as a marker to differentiate infected from vaccinated animals (DIVA strategy).
  https://gazette.govt.nz/notice/id/2006-go4263

Its vaccine strain is a reverse-genetics H5N3 virus whose H5 derives from A/chicken/Vietnam/C58/04, which is clade 1, not clade 2.3.4.4b. The original NZ registration notice likewise identifies the active ingredient as recombinant H5N3 strain rg A/ck/VN/C58/04.

For the period *1 January 2024 to 18 August 2026,* please provide the principal existing scientific assessments, advice or other records relied upon by MPI in determining that vaccination of these five threatened species was expected to provide a net protective benefit against H5N1 clade 2.3.4.4b.

In particular:

1.1. Please provide the species-specific evidence relied upon by MPI to estimate the risk of serious disease, mortality, population decline or extinction from H5N1 clade 2.3.4.4b in kākāpō, takahē, kakī/black stilt, tūturuatu/shore plover and kākāriki karaka/orange-fronted parakeet.

1.2. Please provide the principal records showing how the known or estimated risk from H5N1 was weighed against the known and uncertain risks associated with vaccination and the necessary capture, handling, restraint, blood sampling and repeated boosting of these threatened birds.

1.3. Please provide the principal scientific evidence relied upon by MPI concerning the relevance of the H5N1 HI results obtained in takahē to expected protection against H5N1, including evidence relied upon to extrapolate those findings to the four species in which H5N1-specific HI testing was not undertaken.

Given the conservation significance of intervention in core breeding populations of threatened species, information documenting the scientific basis for these decisions would reasonably be expected to exist for the scientific and public record.

2. REGISTRATION AND EVIDENTIAL BASIS FOR A012218

The vaccine now proposed for use in threatened native birds appears to be Avian Influenza Vaccine H5N2 Subtype Killed Virus, ACVM registration A012218. This is a different vaccine from Poulvac Flufend i AI H5N3 RG (A009733), which was used in DOC's 2024–2025 threatened-species trial (Report dated July 22, 2025).

The Public Record of Delegate Decision for A012218 states that efficacy and safety trials and data conformed to MPI requirements and were "sufficient to assess". However, the approved product label states that "Full efficacy and potency data is pending", that "Duration of immunity is not established", and that efficacy may vary according to antigenic homology between the vaccine strain and circulating field strains.

The approved label is for use in chickens. The publicly available registration documents do not identify the manufacturer, while MPI is identified as both applicant and registrant.

Please provide:

2.1. The identity of the manufacturer and supplier of A012218, including the country and manufacturing facility from which the vaccine supplied to New Zealand originates.

2.2. The identity and provenance of the H5N2 vaccine strain, including its complete strain designation, year and geographical origin, H5 clade, and genetic relationship to contemporary H5N1 clade 2.3.4.4b viruses.

2.3. The principal efficacy, safety, potency and stability studies or assessments relied upon by MPI in approving A012218, including identification of the species in which the relevant studies were undertaken. Where these studies are already identified in an existing regulatory assessment or bibliography, provision of that record and the studies held by MPI which materially informed the approval would satisfy this part of the request.

2.4. Please provide the principal existing record or records explaining why the Delegate Decision states that efficacy trials and data were sufficient to assess while the approved label states that 'Full efficacy and potency data is pending'. Please identify the efficacy and potency information that remained outstanding at registration, whether it has subsequently been supplied, and any assessment of that information held by MPI.

2.5. Please provide the evidence relied upon to support the label claim that A012218 may 'aid in reducing mortality', including whether this was demonstrated through viral challenge and, if so, the identity and clade of the challenge virus.

2.6. Please provide the principal scientific evidence relied upon by MPI to conclude that A012218 is expected to provide protection against H5N1 clade 2.3.4.4b, including any antigenic matching, cross-reactivity, neutralisation or challenge evidence held by MPI.

2.7. Given that A012218 is registered and labelled for use in chickens, please provide the regulatory authorisation and principal scientific assessment relied upon for its use in kākāpō, takahē, kakī/black stilt, tūturuatu/shore plover and kākāriki karaka/orange-fronted parakeet, including any assessment of species-specific safety, dose, immunogenicity or expected efficacy.

2.8. Please provide the anticipated dose and booster regime for each threatened species and the principal evidence relied upon to support those doses and intervals, particularly given that the approved A012218 label states that duration of immunity is not established.

These questions seek the regulatory evidence already held by MPI concerning a product for which MPI is the registrant and regulatory authority. They do not ask MPI to undertake a new scientific assessment of A012218.

3. Cost, funding and decision to proceed

For the period 1 January 2025 to 18 August 2026, please provide the principal existing records documenting MPI's role in the decision to commence and subsequently extend the threatened-species vaccination programme.

The search may be confined to the MPI staff directly responsible for the HPAI response and threatened-species vaccination programme, relevant veterinary/scientific advisers involved in the decision, the responsible senior manager or managers, and the Office of the Chief Veterinary Officer where it was substantively involved.

Please provide:

3.1. The principal record or records identifying the criteria, thresholds or risk-benefit considerations used to determine when the H5N1 threat was sufficient to justify commencement of threatened-species vaccination.

3.2. The principal record or records concerning the significance attributed to H5N1 detections in migratory seabirds in Australia and the basis upon which these detections contributed to the decision to commence vaccination in New Zealand.

3.3. The principal records identifying the criteria used to determine which species and populations should be prioritised, where vaccination would "provide the greatest protection", and when the programme should be extended through subsequent tranches.

3.4. The principal records documenting MPI's role, including that of the Chief Veterinary Officer where applicable, in approving, recommending or advising upon commencement or extension of the programme.

I am not requesting MPI to reconstruct a new chronology of the programme. Existing decision papers, briefings, meeting records or substantive emails which document these matters are sufficient.

Bird flu work steps up – second case confirmed, 17 July 2026

4. COST AND FUNDING

For the period *1 January 2025 to 18 August 2026*, please provide:

4.1. The appropriation and programme from which MPI's involvement in the 2026 vaccination of approximately 300 core breeding birds is funded, including expenditure associated with the purchase, importation, registration, storage and supply of vaccine, and whether this expenditure is being met from MPI's existing baseline or additional H5/H5N1 preparedness or response funding.

4.2. The principal record approving or authorising MPI expenditure on the programme or MPI's contribution to it, identifying the amount approved, the source of funding, who authorised the expenditure, and any material conditions attached to that funding.

4.3. Where held, the principal proposal, briefing or recommendation supporting that expenditure which records the scientific, biosecurity or conservation justification for it.

I do not require routine financial administration, invoices, procurement correspondence, duplicates, or internal correspondence that does not materially address the authorisation, amount, source or justification for the expenditure.

Where the information requested in Parts 1–4 is contained within a small number of existing regulatory assessments, scientific reviews, decision papers, briefings, meeting records, datasets or substantive emails, provision of those existing records is sufficient.

MPI is not being asked to undertake new scientific research, prepare a new risk assessment or create a new analysis in order to answer this request.