OIA24-0905

20 February 2025

Stephan Hokke
fyi-request-29443-f784aafb@requests.fyi.org.nz

Dear Stephan Hokke

Thank you for your email of 5 December 2024 requesting information relating to the detection of H7N6 Avian Influenza in Otago. Your request has been considered under the Official Information Act 1982 (OIA).

You requested the following:

> *1) What report sparked the sending of your team to the chicken farm (copy please)*
> *2) Were the people who took the sample trained in the procedure of getting a sample? Give their name as an identifier such as MPI sampler #001, their qualifications, the chain of custody of the sample from the chicken farm to the testing equipment.*
> *3) How many samples?*
> *4) What method was used to detect the flu? List the machines used, operater's names as an identifier such as MPI tester #001 and their qualifications and experience.*
> *5) How many cycles were used on the sample?*
> *6) How did you match the result to the standard? Please supply the report that the tester provided to you.*
> *7) How can you prove that that standard causes that flu?*
> *8) Please supply all email threads (with names "search and replaced" by an identifier such as emailer#001 etc)*

On 23 January 2025 the Ministry for Primary Industries (MPI) extended the time limit to respond to your request to 24 February 2025.

Avian influenza is a viral disease of birds found globally. Virus strains are described as low pathogenicity (LPAI) or high pathogenicity (HPAI).

The H7N6 strain is closely related to LPAI strains present in wild birds in New Zealand.

When a low pathogenicity strain of avian influenza is introduced to chickens, it can mutate into a high pathogenicity strain. We have strong evidence that this is the cause of the case in Otago and may have happened after free-range laying hens foraging outside were exposed to the low pathogenicity virus from wild birds, which then mutated in the hens to become HPAI. This is the first time such an event in New Zealand has been documented, indicating that it is a very rare event for New Zealand.

There is no evidence that this strain of high pathogenicity H7N6 can spread from chickens back into wild birds.

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While this is a high pathogenic strain, it is not the HPAI H5N1 strain that has caused deaths in poultry, wild birds, and mammals overseas. New Zealand remains free of HPAI H5N1.

Testing also shows that the strain is unrelated to the H7 strain of avian influenza identified in Australia earlier this year.

Further information is available on our website at https://www.mpi.govt.nz/biosecurity/exotic-pests-and-diseases-in-new-zealand/active-biosecurity-responses-to-pests-and-diseases/a-strain-of-bird-flu-h7n6-in-otago/.

Please find below a response to each part of your request:

1) What report sparked the sending of your team to the chicken farm (copy please)

MPI received a notification, via phone, on the afternoon of 29 November 2024, from a technical specialist for the affected farm, indicating that increased poultry deaths had been noted over the past few days. The notification was passed to the incursion investigation team and was investigated as per standard process.

2) Were the people who took the sample trained in the procedure of getting a sample? Give their name as an identifier such as MPI sampler #001, their qualifications, the chain of custody of the sample from the chicken farm to the testing equipment.

The MPI personnel performing sampling were all registered veterinarians with a BVSc or DVM (equivalent degrees). They used standard sampling techniques and approved practices as per the MPI standard operating procedures.

Handling and transport of samples followed standard biosecurity processes, with collected samples packaged securely in line with International Air Transportation Association (IATA) regulations and sent via urgent courier or in the possession of Response personnel to the MPI Animal Health Laboratory (AHL). Samples contained accompanying paperwork allowing tracing to the farm and shed of origin. Samples were received by AHL staff and were accessioned into Laboratory Information Management Software (LIMS), and samples were processed accordingly.

3) How many samples?

There were 35 samples initially tested for the presence of HPAI. In total, MPI's Animal Health Laboratory has tested 1,721 samples for the presence of HPAI by polymerase chain reaction (PCR) since the start of the response.

4) What method was used to detect the flu? List the machines used, operater's names as an identifier such as MPI tester #001 and their qualifications and experience.

Samples were tested using a generic Influenza A PCR and H5 and H7 subtype-specific PCRs. Machines used were BioRad CFX96 Real-Time PCR Detection System and CFX Opus 96 Real-Time PCR System.

Whole genome sequencing was performed on representative samples that tested positive by PCR. The machine used was Oxford Nanopore Technologies PromethION 2 Solo device.

Laboratory technicians who perform testing meet the minimum requirement of a BSc degree or equivalent in a relevant scientific discipline. Scientists supervising testing and authorising

results hold a minimum of a PhD in the relevant field, with extensive experience in diagnostic testing and quality assurance.

> *5) How many cycles were used on the sample?*

The PCRs were run for 45 cycles.

> *6) How did you match the result to the standard? Please supply the report that the tester provided to you.*
> *7) How can you prove that that standard causes that flu?*

As an accredited laboratory, we matched the results to the standard by adhering to the NZS ISO/IEC 17025:2018 General requirements for the competence of testing and calibration laboratories. This can be purchased from Standards New Zealand at https://www.standards.govt.nz/shop/NZS-ISOIEC-170252018.

> *8) Please supply all email threads (with names "search and replaced" by an identifier such as emailer#001 etc)*

MPI has interpreted your request for emails relating to the initial notification and testing of H7N6. Providing the emails would require MPI to consult and review a significant amount of correspondence between a number of people. This part of your request is therefore declined pursuant to section 18(f) of the OIA – *that the information requested cannot be made available without substantial collation or research*.

Should you have any concerns with this response, I would encourage you to raise these with the Ministry for Primary Industries at Official.InformationAct@mpi.govt.nz. Alternatively, you are advised of your right to also raise any concerns with the Office of the Ombudsman. Contact details are: Office of the Ombudsman, PO Box 10152, Wellington 6143 or at info@ombudsman.parliament.nz.

Yours sincerely

Fleur Francois
Director, Diagnostics, Readiness and Surveillance