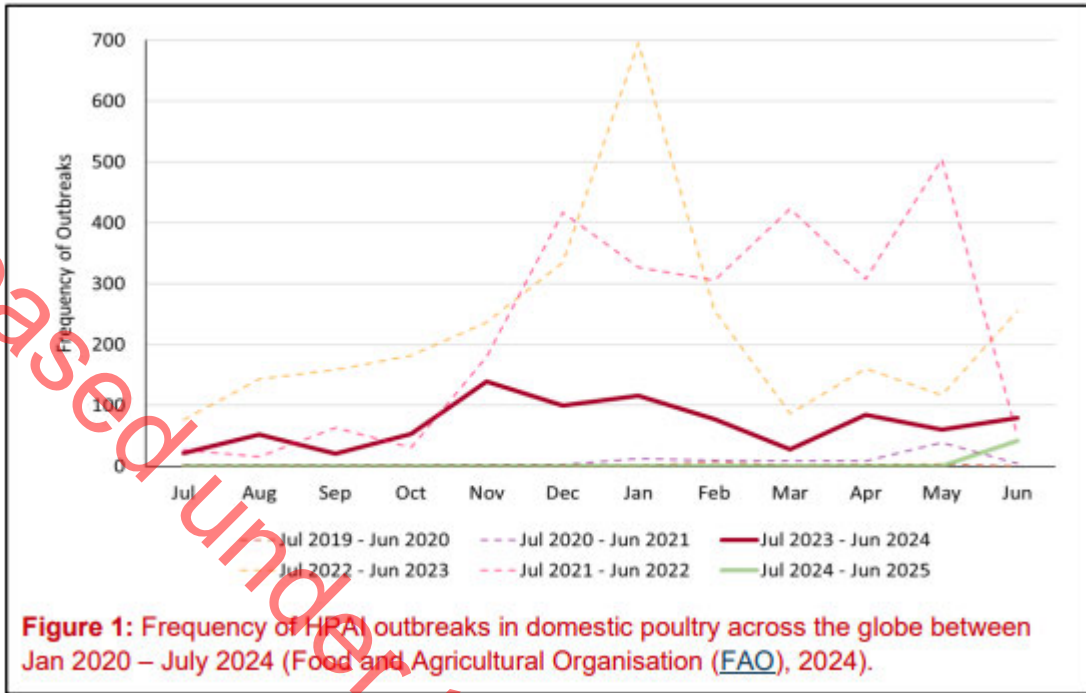




DOC HPAI Preparedness Situation Report #21

Incident Name HPAI Preparedness	Date 19th July 2024	As at (time) 1330
<p>Objective</p> <ul style="list-style-type: none"> ➤ Inform Tier II and III Managers of DOC's Highly Pathogenic Avian Influenza (HPAI) preparedness activities and provide coordination and support to Districts that will be impacted by HPAI. ➤ Please note that the SITREP, while in the monitoring phase, will now be released monthly to synchronise with the MPI intelligence update. Latest MPI Intelligence update 19 June 2024. <p>Situation – Context</p> <p>All new information or changes in assessments in the situation context is coloured in red.</p> <p>Geographic Spread of HPAI</p> <ul style="list-style-type: none"> ➤ <u>Aotearoa-New Zealand</u> <ul style="list-style-type: none"> ○ HPAI has not been detected on Mainland New Zealand or its surrounding territories. ○ New pathways for the potential introduction of HPAI are being assessed. ○ HPAI is unlikely to be introduced directly to New Zealand by infected seabirds (Albatrosses, shearwaters & Petrels) from the South Atlantic or the Antarctic Peninsula. This is due to the very large distances involved. ➤ <u>South Pacific.</u> There is no reporting to indicate HPAI is present in the South Pacific. It is possible HPAI will spread to islands in the South Pacific over the next 12 months. ➤ <u>Australia.</u> There is no reporting to indicate the H5N1 strain of highly pathogenic avian influenza (HPAI) is present in Australia or the South Pacific. <ul style="list-style-type: none"> ○ Australia's Department of Agriculture, Fisheries and Forestry considers the risk of HPAI arriving in Australia to be 'high', citing migratory shorebirds, shearwaters and nomadic waterfowl as species that could bring the virus to Australia. HPAI subtype H5N1 has never been detected in Australia. ○ H5N1 is likely to be detected in Australia before New Zealand, based on the higher number of wild birds flying to Australia than to New Zealand. Establishment of H5N1 among wild birds in Australia would increase the threat of onward spread to New Zealand. ➤ <u>Antarctica.</u> <ul style="list-style-type: none"> ○ Media reporting indicates an Australian-led expedition has found evidence of H5N1 spread in the Northern Weddell Sea area. The reports do not describe the species, numbers, locations, or dates of the discoveries. ○ The Council of Managers of National Antarctic Programs (CONMAP) reported that a Spanish team on an expedition along the South Shetland Islands tested seal carcass' on 7th March 2024. CONMAP has confirmed the presence of H5 Avian flu in these samples. ➤ <u>United States.</u> Spread of H5N1 among United States (US) dairy cows is continuing, with infection reported in 145 farms. <p>HPAI in Poultry</p> <ul style="list-style-type: none"> ➤ Overall global detections of HPAI in domestic poultry have been declining since 2022 and this trend is highly likely to continue (Figure 1). Continued detections of HPAI in northern 		

hemisphere poultry are likely but in reduced numbers through the northern summer. New detections of HPAI in southern hemisphere poultry are likely.

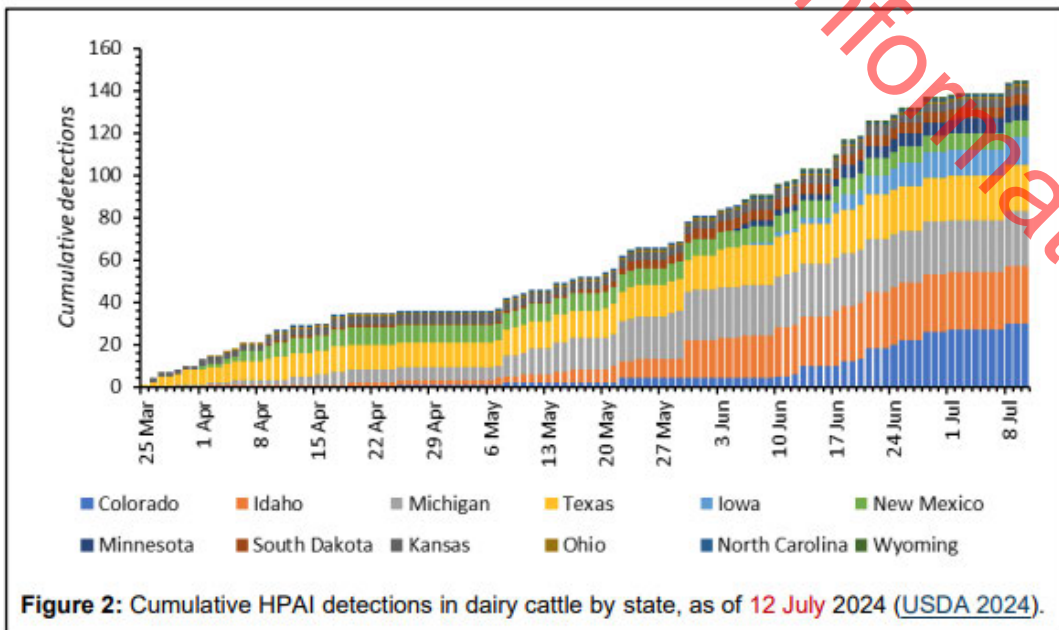


- The HPAI threat on regulated import pathways to New Zealand is unlikely to increase over the next two years, as New Zealand does not permit the import of uncooked poultry meat

HPAI in Mammals

Cattle

- H5N1 has been reported in dairy cows in the US. The first case was confirmed on 25 March, although undiagnosed cases are thought to have first arisen in January.
- It is likely detections of H5N1 in US dairy cows will continue over the next six months. US Department of Agriculture (USDA) data shows the detection rate has fluctuated over time (Figure 2).



- Other commentary suggests current US control measures are insufficient to eradicate the

outbreak, and detections will continue for the foreseeable future.

- It is likely the virus is being spread between cows via contaminated milk or milking equipment, although other infection routes have not been excluded.
- US officials state commercially available milk poses no risk to the public but warn against consumption of raw milk

Marine Mammals

- Mammal-to-mammal transmission of H5N1 has highly likely occurred among wild seals and sealions in South America [56, 57]. It is having significant conservation impacts on some species.
- It is possible that H5N1 infection among seals will show a seasonal pattern, if transmission peaks with increased social behaviour during the breeding season.
- There have been several mass mortality events among Caspian seals in the Caspian Sea in recent years.

Fur-farmed Mammals

- Mammal-to-mammal transmission has highly likely occurred on fur farms in Europe.
- A genomic and epidemiological study of last year's fur farm outbreak in Finland suggests multiple transmission events from wild birds to fur animals, together with some transmission between fur animals

Transmission Routes Among Mammals.

- Current evidence suggests H5N1 has not acquired the ability for efficient airborne transmission in mammals, which is considered necessary for it to cause a human pandemic. While multiple studies have found mutations in H5N1 suggesting some degree of adaptation to mammals, several such mutations likely need to coincide to substantially increase transmission.
- In several laboratory infection studies, H5N1 virus could be transmitted between ferrets via direct contact, but only less efficiently via airborne routes 10 (virus was isolated from US dairy cows, from the human case linked to cattle in Texas, from a mink farm outbreak in Spain, and from the human case in Chile. These studies were small-scale and are not definitive.
- **Transmission among cattle has only emerged in the one country, the US**, despite HPAI circulating globally in birds for some time. The reasons why this is the case are not clear, but both genomic and environmental factors could be considered. Research is beginning to tease these factors apart. **H5N1 in Humans**
- **There is currently no evidence of human-to-human transmission of H5N1.** The number of human cases reported to the World Health Organisation (WHO) is still well below those seen in previous outbreaks. Public health advisories are in place in many countries, including Australia.
- Two human cases of H5N1 have been reported in Cambodia. Both were children, aged three and five years old, and were cousins living in the same household. Both cases had exposure to dead poultry. 12 Testing of other exposed people is underway.
- H5N1 has been detected in four dairy workers in the US, one in Texas, two in Michigan and one in Colorado. The four cases are independent. Contact tracing has not identified additional cases, and there is no evidence of human-to-human transmission. US authorities continue to judge the H5N1 risk to the public is low, but the risk is higher for people with occupational or recreational exposure to infected animals, including cattle.

Global HPAI Management

Vaccination of People:

- Some countries have begun to consider H5N1 vaccination of people, including the US, EU, Canada and the United Kingdom (UK), with at-risk poultry and dairy workers, veterinarians, and lab technicians to be prioritised.
 - Media reporting from the US has cited researchers and epidemiologists calling for vaccination of high-risk individuals. High-risk individuals would include dairy/poultry farm workers, veterinarians, wildlife workers, and zookeepers.

- The EU's Health Emergency Preparedness and Response Authority (HERA) has secured supply of up to 665,000 doses of an H5 vaccine, with an option for a further 40 million doses over the duration of a four-year contract
- Japan has updated the H5N1 vaccine in its national stockpile.

Vaccination of Animals.

- Some countries are highly likely to adopt vaccination strategies to mitigate HPAI impacts on domestic and wild animals. The decision on how and when to use a vaccine will likely depend on evidence of increased transmission and disease severity, and vulnerability and accessibility of wild species.
 - Poultry vaccines are proving effective in ongoing field trials in the Netherlands. Some Dutch political parties are calling for mandatory vaccination of livestock against zoonotic diseases, including avian influenza.
 - In South Africa, industry calls to expedite vaccination of poultry are continuing.

Social Considerations

- It is possible tensions and distrust between agencies, industries and citizens will hamper HPAI management in the US. Media reports indicate limited uptake of personal protective equipment on dairy farms despite Centers for Disease Control and Prevention (CDC) recommendations, and reluctance from farms or farm workers to provide samples for testing.
 - In at least some cases, these factors are undermining epidemiological investigations of outbreaks, and public participation in control measures. Veterinarians are concerned their relationships with clients may be compromised by their role as intermediaries of authorities' regulations. A new Food and Drug Administration (FDA) rule requiring cattle to have electronic ear tags is facing some opposition.
 - Lost income and insecure immigration status are reasons why some farm workers are reluctant to come forward to be tested for HPAI.
- Within DOC. Rangers are seeking to have tasks allocated for work. IMT priority is to emphasise at this time that BAU work for Districts is the priority. Ongoing need to get Rangers to focus on work to be done and not work that might occur.
- Within DOC Major risk of Rangers seeking to do lots of responding and to be engaged in wildlife handling. IMT attempting to moderate expectations but needs ongoing constant attention.

Preparedness & Response Systems

- The Australian Federal Government has announced a \$7 million package to fund HPAI preparation. It includes allocations for wildlife surveillance, response capability for HPAI in commercial poultry, communication with stakeholders, and work to understand the link between low pathogenicity H7 strains in Australian wildlife and poultry outbreaks.
- US responses to the outbreak in dairy cattle include the following.
 - A **European Centre for Disease Prevention and Control (ECDC)** report proposes enhanced surveillance and testing measures to improve detection of sporadic human cases. There is likely some under-detection of human cases in many countries with outbreaks in animals.
 - **Taiwan's Centres for Disease Control** have added conjunctivitis to their case definitions for type A influenza. This is in response to the US cattle outbreak and associated human infections.
- Recent risk assessments addressing H5N1 include the following.
 - An FAO assessment of foodborne H5N1, concluding 'negligible' likelihood of acquiring H5N1 from contaminated food, 'especially when food safety practices like pasteurization and adequate cooking are applied'.
 - An ECDC assessment, concluding 'low' risk of infection for the general public, but 'low-to-moderate' risk for occupationally or otherwise exposed groups.
 - A Canadian assessment, concluding the risk to people in Canada remains 'low'.
 - A Taiwanese assessment, concluding that the overall risk to humans of the 2.3.4.4b clade of H5N1 is 'medium'.

- A Norwegian assessment of the outbreak in US dairy cows, concluding that the ability of the virus to infect and be transmitted by people has not significantly increased, and remains 'low'. The assessment notes that this likelihood could increase as the outbreak persists, or as prevalence among cattle becomes higher.

Critical Factors

Level	Critical Factor	Response
1	Confirmed case in Antarctic Peninsula	Monitor. IMT at watch status.
2	Detection in Ross Sea region/area (possible at any time, more likely after 1)	Monitor. IMT at watch status. Districts increase local monitoring.
3	Detection in Australia or wider Pacific (possible at any time)	Monitor. IMT at watch status. Districts at local monitoring. IMT prepare to stand up operational status. Regions rehearse response plans.
4	Detection in A-NZ subantarctic islands (possible at any time, more likely after 2 and 3)	IMT prepare to step up operational status. Regions continue monitoring and response plan rehearsal.
5	Detection on mainland A-NZ (possible at any time after arrival in Ross Sea and/or Australia)	IMT at operational status. All regions prepare to implement response plans if detection in region.

- The IMT is currently at Level 1.
- 9(2)(g)(i) [Redacted]
- Increased IMT resources have been allocated: Situation Unit (incl. data-entry) and Communications support.
- Placeholder names and roles during response IMT has been developed with Health and Safety. Names and roles are being reviewed and those identified will be engaged (if not already in place) over the next month.
- 9(2)(g)(i) [Redacted]

Actions Taken [Update on work completed compared to IAP (Incident Action Plan) Objectives]:

IMT (Incident Management Team) –The current IMT structure: [HPAI IMT](#).

- Identification of gaps and refining the IMT risk profile is ongoing.
- LNI and NSI do not have a District Plan Coordinator identified. Work is done on an alternative way of filling this role.

Planning & Intelligence

- Focus on finalising the standard content and advice in the HPAI District Response Plans. Final versions for of guidance for preparedness and response during outbreaks for high-risk sites and activities.

Operations – Planning

HPAI-District Response Plans (DRP)

Stages of completion as at **19 July 2024**

Inventory Not Completed	Draft DRP to do	DRP started	DRP drafted	DRP reviewed by DO	DRP Technical review	DRP signed off by Ops Mgr
		CNI - 1	NNI - 3	HWT -3		
LNI -1 Manawatu	LNI – 5*	HWT - 2		NNI-1		

	NSI - 4*	WSI-1	ENI - 1	AKLD - 1		
		SSI-1	NSI - 1			
	ESI - 4	ENI-3	SSI-1			
	SSI - 3		CNI-3			
	HWT - 1					
TOTAL	1	17	8	9	3	

NOTE: Te Urewera removed from list (discussed with H. Forbes 08/02/24).

*District Plan Coordinator allocated 19 July 2024

- Drop-in sessions were held with operations teams to explain the background of the preparations so far and the next steps the districts and regions need to undertake.
- A task assignment was sent to regional directors to prepare their district plans.
- We have requested that Health NZ review our response plans relating to staff working on remote and isolated locations. We are waiting for the response.
- We attended an MPI and Regional Council bio managers meeting. We discussed our approach to management of PCL&W that may be impacted by a HPAI incursion.
- We have received the Ministry of Health and WorkSafe NZ PPE guidance and will integrate this into current risk controls. We have the opportunity to review this. At present it does not include conservation related workers within scope so will be advising that this be included, and any relevant considerations or caveats be included.
- Establishment of TAG to facilitate technical advice required for IMT
- Request for summary maps with GIS initiated. Draft products starting to be reviewed by IMT.

Vaccination trial

- All birds involved in the trial to date are in good condition and no adverse reactions to vaccination have been observed, however one kākāriki received a fatal traumatic injury during capture, and one tūturuatu died of a fungal infection whilst in the trial.

Logistics

- Key issue for IMT: No Logistics manager in place.
- Concerns have been raised over the quantity of PPE held in the districts for a biohazard response. Need to continue to improve messaging to distinguish between PPE for current BAU during the preparedness phase of this work.
- IMT recording weekly hours in a [Timesheet Record](#). This SITREP reflects a more accurate picture of aggregate staff hours contributed.
- Weekly operating rhythm of Tuesday 8:30am / Thursday 1:00pm meetings continue.
- "[HPAI Logistics Tracking Spreadsheet](#)" to be utilized by Logistics team in Response (equipment, personnel, availability etc.)
- HPAI@doc.govt.nz mailbox working well as clearing house. An auto-response advises the email/inbox is monitored during standard DOC working hours, and what to do if a group of sick birds is found. **Increased capacity to maintain prompt replies has been assigned (Sonia Smart).**

Liaison with MPI, Internal and External comms

- **MPI:** G. Matthews MPI is current key contact/liasion between agencies. Grant attends the weekly IMT meetings – if possible.
- **Media:** We have received no media enquiries since the last report.
- We hosted two drop-in information sessions for all DOC staff. The recordings and presentation slides are available on the intranet page.
- We have drafted a template Stage 1 awareness email and issued a task assignment for districts to distribute this to their stakeholders as part of their district comms plan. We are working with the permissions team to issue similar comms to concessionaires and permit holders.
- We have requested to MoH that DOC staff that may be exposed to HPAI be a priority for any vaccine run out
- We continue to attend All of Government workshops that include MPI and MOH. These workshops focus on information sharing and preparedness.
- We continue to work with MPI and health on a high-level communications strategy.
- We are finalising the District Communications Templates, including systems for reporting engagement with iwi and other stakeholders.
- At an MPI led Strategic Insights Coordination Group meeting a discussion was held on how MOH will carry out any human vaccinations. They are reviewing the current policy which is 11 years old. We did voice our desire to be considered for the vaccination for our staff that would be directly involved with infected birds.

IMT Finance Summary.

- There is no resource held within TBU to fund ongoing work in vaccination trials other HPAI work.
- In late October 2023, \$50k was allocated by Hilary Aikman for the DOC HPAI preparedness work. A specific cost centre code was created and is noted in the HPAI IMT “Wiki” Manual.
- IMT Finance sits in Logistics and all expenses are approved/signed by the Incident Controller.
- The \$50K funds are to be used for two purposes only (see table) with the priority on vaccination trial costs. As of 17 April 2024, the financial situation is as shown:

Purpose	Description	Costs
Vaccination Trial costs	Travel, accommodation, food, supplies etc.	\$18,760.56
Contractor time	Vet personnel and IMT Support.	\$26,169.83
	Balance of CC:	\$44,930.39

IMT Finance Summary (cont.)

Cost-Impact of IMT work: table below shows amount of recorded time pulled into Response preparedness, and away from BAU.

April	May	June	July	Total
285	369	215	305	1174

Future work:

- Continue to develop District Response Plans and test with districts.
- District Inventory being incorporated into District Plans.
- An IMT procedures booklet is being developed to assist the IMT with their initial response to a possible incursion.
- Attend AOG workshops.
- Provision of first set of draft factsheets to MPI for review/alignment.
- Developing a stronger process for the reporting of iwi engagement.

Prepared by ST/CR/BM

Approved by Incident Controller, Paul Jansen

DOC-7492254

NB: HPAI@doc.govt.nz is the main channel for HPAI IMT emails. Use for general enquiries (inward & outward) and then cc'd for all team-wide communication.

IMT Role (timing if relevant)	Name	Phone number	Email (@doc.govt.nz)
Incident Controller	Paul Jansen (Scratch)	9(2)(a)	pjansen
Planning & Intell. Manager	Suliana Teasdale	9(2)(a)	steasdale
* Situation Lead	Chris Rothery	9(2)(a)	crothery
* Comms Lead	Alice Geary	9(2)(a)	ageary
* Comms (external)	Fiona Oliphant	9(2)(a)	foliphant
* Vaccination Trials Lead	Kate McInnes	9(2)(a)	kmcinnes
* District Plan (DRP) coordinator	Rolien Elliot	9(2)(a)	relliot
• NNI DRP compiler	Rolien Elliot		
• AUK DRP compiler	David Wilson		
• HWT DRP compiler	Antoinette Wilson		
• ENI	Tim Senington		
• CNI	Tim Senington		
• LNI	Vacant		
• NSI	Vacant		
• WSI	Cassie Mealey		
• ESI	Kiersten McKinley		
• SSI	Bronwyn Jeynes		
HPAI IMT Technical Advisor (Birds)	Bruce McKinlay	9(2)(a)	bmckinlay
HPAI IMT Advisor (Guidance)	Rachel Stanyer		rstanyer
Operations Lead	Rolien Elliot	9(2)(a)	relliot
Logistics Manager	vacant		
Governance			
Director Terrestrial Biodiversity	Hilary Aikman	9(2)(a)	haikman
DOC BHV – Biosecurity Manager	Clare Stringer	9(2)(a)	cstringer
External Agencies			
MPI Liaison – to DOC	Grant Matthews		Grant.Matthews@mpi.govt.nz
MPI Comms liaison	Nikki Douglas		Nikki.Douglas@mpi.govt.nz

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