

FOR INFORMATION

NAHIP Advisory Committee Teleconference Meeting 2023

Agenda Item 1.1

Last updated: **23 August 2023**

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WHA REPORT – SURVEILLANCE ACTIVITIES 2022-23**RECOMMENDATION**

1. That the NAHIP Advisory Committee NOTE:
 - a. **The update on surveillance activities provided by WHA**

BACKGROUND

2. WHA administers Australia's general wildlife health surveillance system, through which wildlife health information is collected into a national database, the electronic Wildlife Health Information System (eWHIS). Information includes reports by our network of State/Territory WHA Coordinators, veterinarians at zoo-based wildlife hospitals, sentinel wildlife clinics and universities, as well as researchers, other wildlife health professionals and WHA members. A summary of wildlife disease and mortality events, reported through the system to eWHIS, is published through the NAHIP in each issue of Animal Health Surveillance Quarterly (AHSQ). WHA provides information to help fulfil Australia's reporting requirements to the World Organisation for Animal Health (WOAH). This paper briefly summarises some of the key programs and projects supported by WHA that are of relevance to the NAHIP Advisory Committee.

DISCUSSION**3. Wildlife Health in 2022-2023**

A total of 901 wildlife events were submitted to the national eWHIS database between July 2022 and June 2023 (Figure 1), with a wide variety of species reported (Table 1). Significant wildlife disease events in 2022-23 included: the first detection of pigeon paramyxovirus in free-ranging pigeons in SA and detections in a new area in Western Australia (reported in [AHSQ 27\(3\)](#)) and seasonal recurrence of 'flying-fox paralysis syndrome' in southern Qld.

Figure 1: Wildlife disease events in eWHIS from July 1986 – 2023 by financial year (Inset: monthly events). Total number of events in eWHIS to 30 June 2023 = 15,213

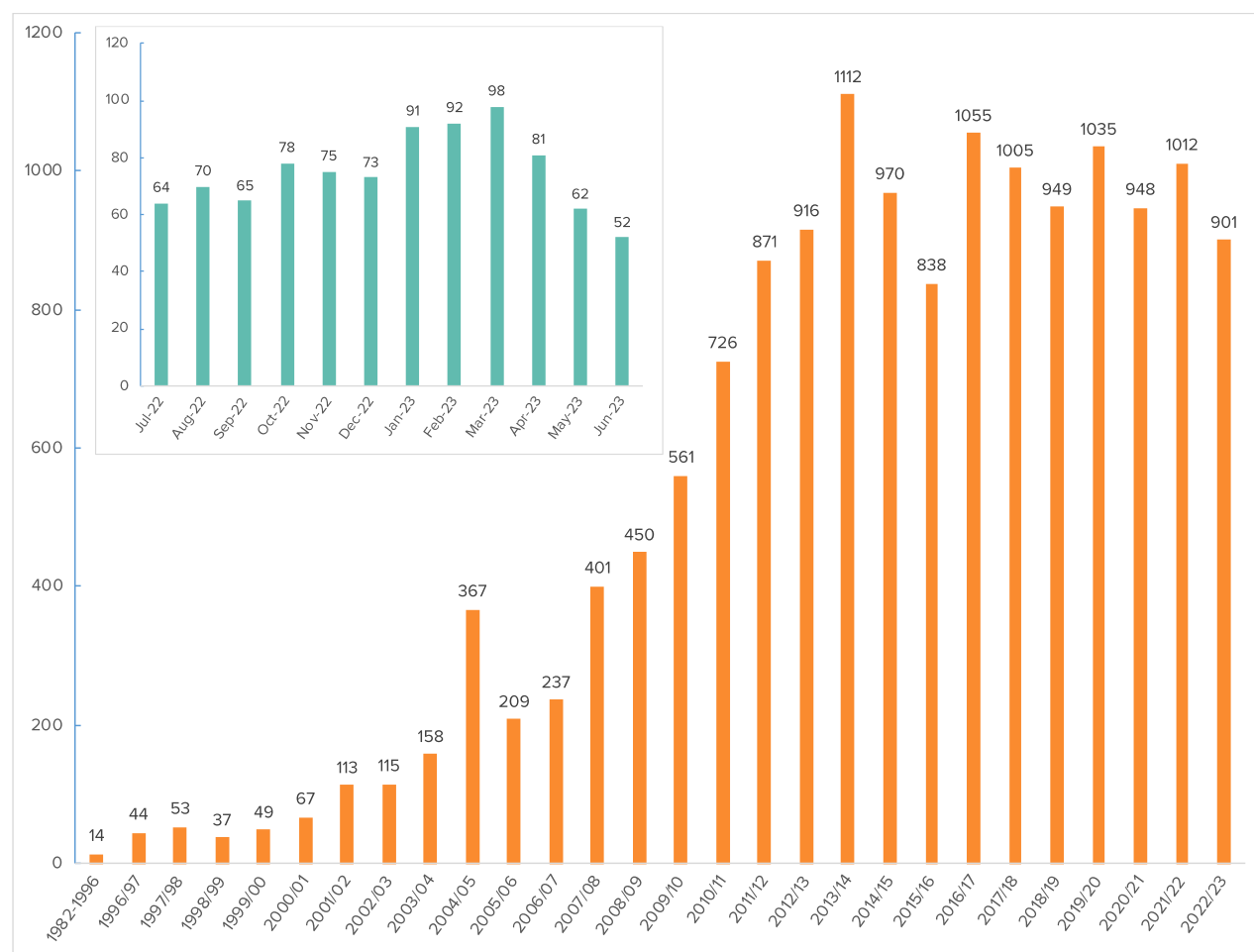


Table 1: Species involved in wildlife disease events^a reported into eWHIS, July 2022-June 2023

Animal Group	Number of eWHIS events
Bats ^b	335
Birds	268
Marsupials	138
Feral mammals	67
Reptiles	41
Marine Mammals	20
Amphibians	19
Monotremes	10
Exotic mammals (captive)	9
Fish	3

- a. Disease investigations may involve a single animal or multiple animals e.g. mass mortality events.
b. The majority of bat disease investigations are single bats submitted for Australian bat lyssavirus testing.

4. Programs and Projects

a. General Surveillance Program

The aims of the program are to:

- Maintain and develop a national general wildlife health surveillance system that can be used to protect Australia's trade, human health and biodiversity.
- Improve collaboration, coordination and communication between the Australian government, states, territories, and others on issues relating to diseases with wildlife as part of their ecology.

Deliverables include:

- Monthly entry of significant wildlife cases into eWHIS based on priorities identified for wildlife disease reporting.
- Regular reports for AHSQ, WOA, Animal Health in Australia (AHiA) and others as requested.
- Ad hoc reports, analysis and foresighting as requested by stakeholders.

The program is primarily funded through a cost-shared agreement with the Australian Government Department of Agriculture, Fisheries and Forestry (DAFF) and all Australian state and territory governments, and receives significant in-kind contributions from our surveillance partners. WHA also receives funding through the NAHIP.

b. National Avian Influenza Wild Bird (NAIWB) Surveillance Program

In 2022-23 WHA continued to assist the National Avian Influenza Wild Bird (NAIWB) Steering Group to coordinate the NAIWB surveillance program. WHA is responsible for collation and reporting of surveillance data for avian influenza in wild birds in Australia. National funding is provided by DAFF and is matched by in-kind contributions from many collaborators including Commonwealth and State/Territory government agencies, NAQS, non-government organisations, industry, and universities.

Since July 2005, over 130,000 wild birds have been tested for avian influenza viruses (AIVs), with a sub-set also tested for avian orthoavulavirus 1 (AOAV-1; also known as Newcastle disease virus or avian paramyxovirus 1). Between July 2022 and June 2023 pathogen-specific, risk-based surveillance was conducted by sampling apparently healthy, live (predominantly waterfowl species) and hunter-shot wild birds at sites in NSW, NT, Qld, SA, Tas, Vic and WA. In total, over 4,000 faecal environmental swabs and/or cloacal swabs collected from waterbirds were tested for AIVs, with a subset also tested for AOAV-1. No highly pathogenic AIVs or strains of AOAV-1 have been identified. However, targeted surveillance activities continued to find evidence of low pathogenicity avian influenza (LPAI) viruses, including LPAI H1, H2, H3, H4, H5, H6, H7, H8, H9, H10 and H11. The National Avian Influenza Wild Bird Surveillance Newsletter, '[Wild Bird News](#)', makes the results of this program available to the general public.

Given the increased activity of HPAI and multiple intercontinental movements of the virus in the last two years, projects are underway to evaluate the HPAI risk to Australia, re-evaluate natural incursion pathways, assess performance of the wild bird surveillance program, and capacity to respond rapidly should an incursion occur. Information on the global HPAI situation, and resources and advice documents, are available from the [WHA website](#).

c. Wild bird mortality and morbidity events

Between July 2022 and June 2023, 268 wild bird mortality/morbidity event investigations were reported to WHA. AIV was excluded by PCR in 142 events. AOAV-1 was excluded by PCR specific for Newcastle disease virus and/or pigeon paramyxovirus type 1 in 127 events. Specific disease exclusion testing was not warranted in the remaining events based on clinical signs, history, prevailing environmental conditions, or other diagnoses. The primary diagnoses for wild bird events included: aspergillosis, avian pox, *Chlamydia psittaci* infection, coccidiosis, parasitism, pesticide toxicity, pigeon paramyxovirus, psittacine and non-psittacine beak and feather disease, and non-pestis yersiniosis. Low pathogenicity avian influenza viruses

were detected by PCR in a small number of birds (mostly Anseriformes), but were considered incidental findings with no associated disease. Most of those events are likely due to botulism.

d. WHA Environment Representatives

In order to further promote collaborative links in the investigation and management of wildlife health, representatives from each jurisdiction's environment agency are included as part of Australia's general wildlife disease surveillance system. Each WHA Environment Representative works closely with their respective WHA Coordinator and ensures a second point of contact in the jurisdiction.

e. Sentinel Surveillance Programs

WHA coordinates a Sentinel Surveillance Program, which includes 10 major zoos, 10 sentinel clinics and 7 universities. The zoo based program is a collaborative project between WHA and the Zoo and Aquarium Association. Sentinel clinics include those with a high or dedicated wildlife caseload, or which expand the geographic or taxonomic range of the national surveillance system. The clinics participating in this surveillance program see over 65,000 free-ranging wildlife cases every year, which represents a significant surveillance effort. Over 4,700 wildlife disease records have been entered into eWHIS by these clinics and organisations since 2010.

f. WHA Bat Health Focus Group

The Bat Health Focus Group, supported by WHA, uses a collaborative One Health approach to consider bat health issues in relation to the broader context of biosecurity, public health, domestic animal health and environmental impacts in Australia. Members come from a wide range of government and non-government organisations. Working with the Bat Health Focus Group, WHA maintains a national dataset of ABLV bat testing, with data contributed into eWHIS by the participants of the surveillance programs described above. Summary reports of ABLV testing of bats are provided in WHA's reports in AHSQ and published in '[ABLV Bat Stats](#)' every six months.

FINANCIAL ACTIVITIES

N/A

FEEDBACK

5. No suggested changes to the program. Continued inclusion of a wildlife health article and key wildlife health feature articles in AHSQ and AHIA acknowledges the importance of wildlife in the Australian national animal health surveillance system. These outputs assist in raising awareness of wildlife health issues and disease investigations nationally.