

Summary for The Budgerigar Council of Victoria: Import risk review for psittacine birds from all countries

Compiled by

Dr Hamish Baron BVSc (Hons), FANZCVS (Avian Medicine and Surgery) Registered Avian Specialist Veterinarian

The draft review proposes that the importation of aviary psittacine birds to Australia be permitted, subject to a range of biosecurity risk management measures.

This draft risk review identifies hazards (disease agents) that require risk management measures to reduce biosecurity risk to a very low level in order to achieve Australia's appropriate level of protection.

The hazards requiring risk management measures are:

- Avian orthoavulavirus 1
- Internal and external parasites (excluding protozoa)
- Parrot bornavirus
- Psittacine herpesvirus 1
- Psittacine pox virus.

The draft risk review proposes a combination of risk management measures that will reduce the biosecurity risk associated with the importation of live aviary psittacine birds into Australia to achieve Australia's allowable level of protection. Proposed measures include:

- Sourcing from approved countries
- Pre-export and post-entry quarantine
- Veterinary inspection
- Testing for diseases of biosecurity concern

Summary of the Importation of Psittacine Birds for public comment

The following disease agents were excluded from risk management (no action is required by importers)

- avian paraavulavirus 3
- avian metaavulavirus 5
- psittacid herpesvirus 2
- *Salmonella* spp
- reovirus

Risk management was identified and required for the following agents in order to achieve appropriate levels of control prior to importation:

- avian influenza viruses (OIE Code recommendations will be required)
- avian orthoavulavirus 1
- internal and external parasites (other than protozoa)
- parrot bornavirus
- psittacid alphaherpesvirus 1
- psittacine pox virus
- West Nile Virus (OIE Code recommendations will be required)

Summary of the requirements for allowing importation of psittacines:

Summary of conditions for the importation of psittacine birds into Australia

	Aviary psittacine birds
Species	Must be on the Live Import List
Ownership	Nil
Country of export	Birds must be exported from countries approved to export aviary birds to Australia (including a residency period in that country).
Quantity	No quantity restriction
Identification	Microchip or permanent leg band
Pre-export quarantine facility approval process	Approved by the competent veterinary authority of the exporting country (following a country's approval as an aviary bird approved country by the department). Thereafter, for each consignment: Approved by an Official Veterinarian of the exporting country
Pre-export quarantine duration	35 days
Pre-export inspection and testing	Avian influenza virus; avian orthoavulavirus 1; internal and external parasites; parrot bornavirus; psittacid alphaherpesvirus 1; psittacine pox virus; West Nile virus (see below for specific details of testing requirements)
Transport to Australia	Must meet transportation requirements

Aviary psittacine birds	
Post-entry quarantine length	15 days minimum (will depend on turnaround time for laboratory samples)
Post-entry quarantine facility	BC3 live bird room
Post-entry inspection and testing	Avian orthoavulavirus 1; internal and external parasites; parrot bornavirus; psittacid alphaherpesvirus 1; psittacine pox virus (see below for specific details of testing requirements)

Quantity restrictions for psittacine birds

Aviary: No quantity limit (up to 500 budgerigars may be imported at any time)

- Birds will be required to enter a BC3 live bird room at the government quarantine facility in Mickleham, Victoria.
- This room can accommodate approximately 500 small psittacine birds (e.g. budgerigars)
- Joint consignments managed via a single agent will be permitted.
- The department will deal exclusively with the agent (not individual syndicate members)
- The entire consignment will be managed as a single epidemiological unit. This means that the health status of any single bird in the consignment may affect the outcome for the entire consignment. I.e. If one bird is found to be carrying one of the restricted diseases, the entire consignment will be treated as “infected” and will likely be destroyed.

Country of origin requirements for psittacine birds

Aviary: Must reside in an approved country (a list of approved countries is available) and can only be exported to Australia if they complete pre-export quarantine at premises that have been approved as suitable for these purposes.

If you want to import budgerigars from a non-approved country, they can only be exported to Australia after:

- 1) being legally imported into an approved country
- 2) completing that approved country’s import requirements and being free from quarantine restriction,
- 3) completing all relevant Australian pre-export quarantine requirements in the approved country.

Pre-export and post-entry quarantine requirements

Pre-export and post-entry quarantine periods are required in order to help manage the risk associated with psittacine bird importation.

A pre-export quarantine period of **35 days** for aviary birds is required on the basis that this is the minimum period of time that will allow the appropriate testing and reports to be carried out prior to departure.

A minimum post-entry quarantine period of **15 days** in a Biosecurity Containment Level 3 live bird room in Mickleham, Victoria, is required aviary birds to facilitate sufficient clinical observation, disease testing and/or treatment.

Diagnostic testing

Diagnostic testing during pre-export and/or post-entry quarantine is also required.

The export process requires various tasks to be performed by an *Official Veterinarian* of the country of export. This veterinarian must be approved by the government in the country the birds are being exported from.

Requirements for birds to meet the pre-export conditions

- 1) Birds must be individually identified with an implanted ISO-compatible microchip or a permanent leg band containing unique identification details.
- 2) All pre-export testing must be conducted in a laboratory recognised by the competent veterinary authority of the country of export for the purpose of testing for export.
- 3) Any treatments or medications, other than those specified in the disease-specific requirements, that birds receive during pre-export quarantine must be listed on the veterinary health certificate (active ingredient(s), dose, route of administration).
- 4) The birds must not receive any antimicrobial or antiviral medication during pre-export quarantine.

Pre-export disease-specific requirements

Note: All laboratory results must be provided to the department prior to export.

Note: Oral and cloacal swabs are collected using a sterile cotton-tip applicator that is rubbed on the inside of the oral cavity and oesophagus, before being inserted into the cloacal (vent) and the swab coated in faecal material.

Avian influenza virus

- The bird has not been vaccinated for avian influenza in the past.
- Agent Identification: Within 14 days prior to export to Australia, oral and cloacal swabs are to be collected from each bird.
- Virus isolation or PCR is to be performed for avian influenza virus with a negative result.

Avian orthoavulavirus 1

- Agent Identification: At least 28 days after the commencement of pre-export quarantine, oral and cloacal swabs are to be collected from each bird. Virus isolation or PCR is to be performed to confirm freedom from avian orthoavulavirus 1.

Internal and external parasites (other than protozoa)

- Treatment for internal parasites: Within 14 days prior to export to Australia, each bird was treated with a registered broad spectrum antiparasitic agent effective against nematodes, mites, ticks, fleas and cestodes

Parrot bornavirus

- Agent identification: Within 35 days prior to export to Australia, cloacal swabs are to be collected from each bird and tested for freedom from parrot bornavirus by PCR with negative results.

Psittacid alphaherpesvirus 1

- Agent identification: Within 35 days prior to export to Australia, combined oral mucosal and cloacal swabs are to be collected from each bird and tested for freedom from psittacid alphaherpesvirus 1 using PCR with negative results.

Psittacine pox virus

- The bird has been held in pre-export quarantine for at least 35 days immediately before export and has been isolated from other birds not of equivalent health status.
- Declaration: A declaration by the OV performing the examination of the bird(s) at the commencement of pre-export quarantine and within 3 days of export that either:
 - no lesions suggestive of avian pox were found, or
 - lesions suggestive of avian pox in psittacine birds were present but after due investigation (including testing of the lesion(s)), were shown not to be caused by psittacine pox virus. Evidence of this investigation (including a description of lesion location(s) and test results) must be attached to the certificate.

West Nile virus

- The bird has not been vaccinated for West Nile virus in the past.
- Agent Identification: Within 27 days prior to export to Australia, serum was drawn from a statistically valid sample of birds and subjected, with negative results, to an IgM capture ELISA or plaque reduction neutralisation (PRN) test.

On arrival in Australia

- 1) The first point of entry into Australian territory must be Melbourne International Airport.
- 2) The bird(s) will be transported directly from the first point of entry to the department's quarantine facility in Mickleham, Victoria, by the most direct route.
- 3) At least one week prior to arrival, the owner (or agent) must provide the department's quarantine facility with a suitably sized cage(s) with perches of appropriate size, all feed and a feeding plan, and any items for environmental enrichment.

Aviary psittacine birds: post-entry conditions

Birds must enter a Biosecurity Containment Level 3 (BC3) live bird room at the department's quarantine facility in Mickleham, Victoria, for a minimum period of **15 days AND until satisfactory laboratory results are received** for all pathogens of concern.

Post-entry disease-specific requirements

Avian orthoavulavirus 1

Agent Identification: Between 4 and 7 days after the commencement of the post-entry quarantine period, oral and cloacal swabs will be collected from each bird and tested for freedom from avian orthoavulavirus 1 by PCR. Results must be negative.

Internal and external parasites (other than protozoa)

If there is evidence of internal or external parasites on arrival or during post-entry quarantine, the department will require that the bird(s) be treated with a registered broad spectrum anthelmintic(s) and/or parasiticide(s).

Parrot bornavirus

Agent identification: Between 4 and 7 days after the commencement of the post-entry quarantine period, cloacal swabs will be collected from each imported bird and tested for parrot bornavirus by PCR. Results must be negative.

Psittacid alphaherpesvirus 1

Agent identification: Between 4 and 7 days after the commencement of the post-entry quarantine period, cloacal swabs will be collected from each imported bird and tested for psittacid alphaherpesvirus 1 by PCR. Results must be negative.

Psittacine pox virus

Examination: On arrival at the quarantine facility, each imported bird will be examined for lesions suggestive of avian pox and lesions must not be present.

Additional conditions

Detection of a disease in post-entry quarantine

- Birds will be monitored during post-entry quarantine for clinical signs of disease and tested and/or treated for disease agents of biosecurity concern.
- Any abnormalities in any bird will be subject to a full veterinary investigation.
- If any investigation or specified test indicates the presence of a pathogen of biosecurity concern in the quarantined bird(s), the bird(s) shall remain in isolation.
- At the discretion of the department and in consultation with the laboratory carrying out the investigations or tests, further investigations and additional testing may be carried out to clarify the situation.
- If a diagnosis cannot be established on the basis of clinical examination and testing, in consultation with the owner, the bird may be held in isolation for further testing or euthanised and submitted for laboratory examination with specific investigations for pathogens of biosecurity concern.
- If the department has biosecurity concerns about any bird in quarantine, this can have implications for the management of other birds in the same consignment. Actions could include (but are not limited to) extending the quarantine period, testing or treating other

birds in the consignment, or in extreme cases, exporting or destroying other birds in the consignment.

Death in post-entry quarantine

- A departmental Veterinary Officer shall require all birds that die during post-entry quarantine before routine testing is complete, to be tested for freedom from the pathogens of biosecurity concern at the owner's expense.
- At the discretion of the department, an entire consignment of imported birds may be destroyed and disposed of as biosecurity waste.

Release

- Each bird will be examined within 24 hours prior to release to ensure it is healthy. It will only be released subject to satisfactory results of the program of testing and treatment required by the department.

Veterinary Comment on the diseases identified by the report:

Avian influenza viruses

Has the risk matrix been applied correctly? Yes

Has the virus been reported in budgerigars? Yes, have been linked to spread of H7N9 in south-east China

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes

Are there areas of concern that should be highlighted with the report into avian influenza viruses? No

Avian orthoavulavirus 1

Has the risk matrix been applied correctly? Yes

Has the virus been reported in budgerigars? Yes

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes

Are there areas of concern that should be highlighted with the report into orthoavulavirus viruses? No

Internal and external parasites (other than protozoa)

Has the risk matrix been applied correctly? Yes

Have internal and external parasites been reported in budgerigars? Yes

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes, this is exceptionally easy to treat and makes sense for any budgerigar fancier to receive birds free of parasites.

Are there areas of concern that should be highlighted with the report into internal and external parasites? No

Parrot bornavirus

Has the risk matrix been applied correctly? Yes

Has bornavirus been reported in budgerigars? Yes

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes, this is a devastating disease and it is currently not present in Australia.

Are there areas of concern that should be highlighted with the report into internal and external parasites? Yes, there is currently very little capacity for bornavirus testing in Australia. This will need to be addressed in order to achieve appropriate importation requirements. I also have significant concerns surrounding the intermittent shedding and false negative results obtained with bornavirus testing. Current recommendations for sampling include the collection of fresh faecal samples over the course of 3-5 days. The report requires only one cloacal swab be tested by PCR and I worry that you will miss some positive birds and potentially import this disease into budgerigar collections.

Psittacid alphaherpesvirus 1

Has the risk matrix been applied correctly? Yes

Has the virus been reported in budgerigars? Yes

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes, this is a hugely devastating disease overseas and causes mass mortality in collections, resulting in massive economic losses. It is essential that we do not import this virus with the birds.

Are there areas of concern that should be highlighted with the report into orthoavulavirus viruses? As with bornavirus I have concerns about the availability of accurate and timely testing for imports. Especially if we are hoping for a 15 day turnaround time for a large number of samples (up to 500), there is currently no laboratory in Australia that will be able to upscale their production of this test to be able to achieve the diagnostic results in a timely manner. Sydney university is the only laboratory I know that can run this test and I have concerns regarding the feasibility of testing such large scale samples in such a short period of time. This will result in longer quarantine times and significantly higher fees for importers.

Psittacine pox virus

Has the risk matrix been applied correctly? Yes

Has psittacine poxvirus been reported in budgerigars? Yes

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes

Are there areas of concern that should be highlighted with the report into internal and external parasites? No, it is easy and cheap for a veterinarian to confirm the budgerigars are negative for poxvirus. Some species of avian poxvirus already exist in Australia, but psittacine poxvirus is not known to be present – canary breeders will know the troubles associated with poxvirus and it is advised that screening and prevention of importation is very sensible.

West Nile Virus

Has the risk matrix been applied correctly? Yes

Has West Nile Virus been reported in budgerigars? Yes, experimentally only

Is requirement for quarantine and testing budgerigars necessary in my professional opinion?
Yes

Are there areas of concern that should be highlighted with the report into West Nile Virus? Yes, in experimentally infected budgerigars some of the birds did not develop viral antibodies and therefore the testing suggested by the department may not identify infected birds. I feel that personally it is extremely unlikely that budgerigars will be infected with this virus unless imported from an area experiencing an outbreak. The test is not available in Australia commercially, but we are not required to sample birds post-import, only prior to their departure from the country of origin.

Veterinary Comment on areas of concern that should be highlighted

- Quarantine period of a minimum of 46 days to allow for disease detection, appropriate testing and sample submission and results. Suspect based on the current resources available that even in the best case scenario, this will be an unrealistic timeframe for disease screening tests to be carried out and results to be made available given Australia's current PCR capacity and the lack of diagnostic testing facilities offering the tests that have been requested.
- There is no discussion in the document regarding who will be responsible for collecting the samples from imported birds to be submitted for testing. Assuming this is going to be the veterinarian at the Mickleham facility, but know nothing about their abilities handling and collecting samples safely from a large number of high-value budgerigars. The veterinarian in Melbourne would be responsible for health checking, examination for avian poxvirus and collection of oral and cloacal swabs. Oral and cloacal swabs are first collected from the oral cavity and mouth of the budgerigars, then the same swab is used to swab the cloaca / vent to collect a sample that is coated in saliva and then faeces. These swabs can be collected safely by a competent operator and undue stress or risks are not routinely encountered, but include perforation of the cloacal wall, damage to the oral cavity or crop associated with overzealous sample collection.
- In budgerigars, the necessity for serum samples to be collected prior to export for West Nile Virus testing poses significant risks in venepuncture if an inexperienced veterinarian carries this out. Serum samples are collected via a blood test, normally blood is collected from the jugular vein in conscious birds. In the hands of an experienced avian veterinarian, this procedure is relatively safe but there are still significant welfare considerations when considering the collection of blood from budgerigars. Risks associated with haemorrhage, haematoma formation (massive bruising) and stressors associated with restraint are all real and tangible considerations. It is essential that these samples are collected by competent and confident avian clinicians to prevent undue stress and stock losses.
- Diseases such as *macrorhabdus ornithogaster* have been excluded from the list of diseases that should be screened for. But we know that the prevalence of *macrorhabdus ornithogaster* is high in budgerigars throughout the world. Importation and the stress associated with this may precipitate a large disease outbreak and losses during shipment or quarantine. I would suggest that the pre-import birds are also screened for *macrorhabdus ornithogaster* to prevent fanciers from importing sick or diseased birds that are unlikely to survive the journey.
- Whilst unavoidable, the costs associated with the disease screening of these birds prior to export and following import is going to be significant with the PCR testing that is currently required. There may be a way that the syndicates can work alongside a laboratory to develop a "quarantine screening package" similar to the one currently offered by the University of Sydney, only more specific and tailored for the needs of the fancier to help to bring costs down.
- The duration of quarantine and the requirement for the administration of routine anti-parasitic treatment as well as repeat sampling of both blood and oral / cloacal swabs is a

real and tangible stress for a small bird such as a budgerigar. Fanciers should expect that these birds will leave the quarantine facilities and require some time to recover after an extended journey and period in a small cage. It is to be expected that there will be stock losses, and some loss of fitness during this quarantine period. The birds will not be exposed to unnecessary antibiotic or antifungal treatments whilst in quarantine.

- I feel as though the report put together by the government is lenient in many of the applications of the risk profile matrix and is certainly skewed in favour of importation of birds and as such, there are no areas where I feel the matrix has been applied too harshly or without valid and real concerns to the health and welfare of the current avian population in Australia. I would not suggest any arguments associated with the current diseases that have been placed on the risk mitigation list and am surprised a number of others have not been included – I expect that after this public review, there will be more robust discussion surrounding some of these diseases and perhaps the second review will include more screening tests.

For further questions or clarification, please contact Dr Hamish Baron BVSc (Hons) FANZCVS (Avian Medicine and Surgery) Registered Avian Specialist Veterinarian

(Hamish@unusualpetvets.com.au)

