Biosecurity for Aviary Birds
THE BIRD-KEEPERS’ GUIDE

Government of South Australia
Biosecurity SA

Keep this important information where it can be easily accessed
Acknowledgements


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To assist bird-keepers, avian organisations or avian related businesses to share information with others, this document is available for free download from The United Bird Societies of South Australia Inc. website:

www.unitedbirds.asn.au

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For the purpose of this Guide:

**Aviary birds** are “captive birds with the exception of pigeons (used for racing/showing), waterfowl, pheasants, partridges, quail or poultry used for the commercial production of meat or eggs”.

A “notifiable disease” is an animal disease of national and State concern, that has been listed in State legislation as requiring notification to State Animal Health authorities.

Within South Australia, the Livestock Act 1997 (section 27) requires that any person, including owners and veterinarians, who knows or has reason to suspect that livestock (including birds) or livestock products owned or under their control are affected with, or have died from a notifiable condition, must report their suspicions to PIRSA Animal Health by the quickest practical means.

Additionally, the owner/manager of the livestock (including birds) must also take all reasonable measures to control or eradicate the disease if it is a notifiable disease. With notifiable diseases, PIRSA will provide guidance and direction for the measures to be taken for control and eradication.
Biosecurity for Aviary Birds is an awareness level guide to disease prevention and preparing bird keepers and avian facilities for potential disease outbreak. This guide is subordinate to both the AUSVETPLAN and any State Government emergency response plan.

The keeping of aviary birds in Australia is a popular pastime. However aviary birds can be subject to a range of infectious diseases, some of which can be passed on to humans. These infectious diseases are not common and most aviary birds or aviary bird establishments may never be impacted by any such disease but the importance of being prepared cannot be underestimated.

Biosecurity is a set of preventive measures designed to break the cycle, and reduce the risk, of transmission of infectious diseases in aviary birds.

Infectious disease outbreaks can occur due to a variety of organisms, e.g. viruses, bacteria, protozoa. Given the right conditions, diseases may readily spread in avian species.

Infectious diseases are spread through animal to animal contact, droppings, respiratory secretions, contaminated food and water containers, equipment and on people’s clothing, footwear and potentially their hair and skin.

Bird-keepers should consider how day to day activities with birds can potentially spread disease between birds, properties and equipment and humans. Success in preventing and managing an avian disease outbreak will depend on fanciers/owners being aware of the potential threats and taking action to reduce exposure or risk.
Biosecurity for Aviary Birds

Biosecurity Awareness Levels

Level 1 Biosecurity - Daily Processes

The first Level of a Biosecurity regime revolves around the routine day to day processes you undertake in the management of your birds and their facilities. Bird-keepers should understand how these activities can potentially spread disease between humans, aviary birds, properties equipment and humans. The Self Risk Assessment (Appendix I) provides a tool for you to assess the risk of disease introduction into your aviaries.

General basic points to observe/enact include:

- Providing clean water at all times
- Providing clean fresh food at all times
- Not allowing food and water to become contaminated
- Keeping aviaries and equipment clean
- Providing adequate floor drainage
- Avoiding contact between aviary birds and wild birds
- Maintaining good hygiene practices e.g. hand washing
- Knowing the signs of disease
- Disinfecting - refer to Appendix II for general advice on disinfectants.
- Quarantining new, sale and show birds
- Vermin control – including insects

These basic procedures are contained in the publication “South Australian Code of Practice for the Husbandry of Captive Birds”¹ and bird-keepers are encouraged to obtain a copy.

Keeping a record: It is recommended to keep a diary of events in your aviary. This would provide you with useful operating and management advantages, and assist biosecurity in the event of a disease outbreak.

¹ The “South Australian Code of Practice for the Husbandry of Captive Birds” is published by Department of Environment, Water and Natural Resources (DEWNR) and can be obtained directly from the Department or from the website at www.environment.sa.gov.au
Biosecurity for Aviary Birds

Quarantine:
- Bird-keepers and breeders need to be particularly aware and pay heed to the quarantine aspects of the hobby. All birds brought on to a property, inclusive of birds that have been to sales or shows should be immediately isolated from resident birds for a suitable period - a period of 14 days is recommended where practicable.
- Birds may not show signs of illness during the early stages of an infectious disease, therefore it is best to keep new birds separate for a period of observation prior to introduction to existing stock.

The purpose of an appropriate quarantine regime is to:
- Protect resident birds from threats to their welfare.
- Observe quarantined birds to see if there are any health issues.
- Perform preventative treatments as required.
- Treat for lice and mites as required.

Birds held in quarantine should be the last birds visited in the daily feed/water process in order to minimise the risk of disease transfer to other birds.

Bird Shows, Bird Sales and Bird Dealer premises are potential sources for the spreading of disease. These activities may create an environment for the spread of disease but with responsible biosecurity procedures, the risk of disease spread should be minimised. Biosecurity awareness factors to be considered for Bird Sales/Bird Shows are included at Appendix III.

Level 2 Biosecurity - Know the Signs of Disease

The second Level of a Biosecurity regime is initiated when a number of sick birds are observed. An unusually high number of sick or dead birds is an indicator of a potential emergency disease and requires a high priority response.

All bird-keepers are encouraged to have a written procedure ready for implementation upon the suspicion of an outbreak of a notifiable disease on their property. This procedure should outline emergency procedures based on the risk assessment data for their particular establishment as ascertained by completing Appendix I.

Symptoms of ill health include but are not exclusive to:
- Sudden and unexpected deaths.
- Changes in appearance of droppings e.g. diarrhea.
- Changes in food or water consumption.
- Changes in attitude or behaviour e.g. respiratory distress (coughing, gagging, sneezing).
- Changes in appearance or posture e.g. swollen head, “fluffed up.”
- Unusual changes in body weight.
- Unexpected plumage change.
- Enlargements or swellings.
- Discharge from nostrils, eyes, beak or vent inclusive of blood.
- Vomiting.
- Displaying a loss of balance.
On discovery of sick birds

• Isolate immediately from healthy birds at the first signs of illness.
• Report immediately to your local veterinarian as quick action will minimise risk of spread.
• Place an “exclusion zone” around these birds and monitor at least twice a day.
• Droppings and other waste products which have been in contact with the sick bird(s) should be placed in sealed plastic bags – seek veterinary advice for the correct disposal.
• Separate this waste out from other waste on your premises and ensure that it is prevented from entering water courses and the drainage system.
• Prevent birds from leaving the premises.
• Prevent birds from entering the premises unless they can be immediately and completely isolated.
• Prevent people who enter and leave the premises from having contact with isolated birds.
• Notify your local club/society or other known clubs/societies – there might be health issues already present with other aviary birds within the local area and this information will assist veterinary officers or government officials with their approach to treatment or further actions.

Attending to sick birds

• Ideally, have people allocated to handle these birds who do not have to handle any other birds. If this is not possible, then attend to these birds last or at a separate time taking care to not cross-contaminate any other section of your premises.
• Be guided by veterinary officers or any other person/s so authorised to make decisions on tests and/or treatments.
• Medicate as required/determined by veterinary officers or authorised persons.
• Allocate separate equipment, including cleaning tools and food/water dishes, to the isolated birds.
• Regularly disinfect cages, utensils and floor area – refer to Appendix II for general advice on disinfectants.
• Wash hands and footwear after attending to isolated birds.
• After handling isolated birds, change and wash any contaminated clothing.
• If any other bird owner is asked to examine the sick birds, advise them to take biosecurity precautions (e.g. showering and changing clothes) before visiting their own birds.

If the owner cannot provide effective or adequate treatment (e.g. administering of treatments by needle) then seek the assistance of a veterinarian or veterinary nurse.
Level 3 Biosecurity - Notifiable Disease

All bird-keepers are encouraged to have a written procedure ready for implementation upon confirmation of an outbreak of a notifiable disease on their property.

Upon formal confirmation, by veterinary officers or government officials, of a notifiable disease outbreak in your aviary, a Level 3 Biosecurity situation exists. You should immediately implement your Notifiable Disease Outbreak Management Procedure. In addition, you will be required to rigidly follow any instructions initiated by Biosecurity SA (PIRSA) and/or any other relevant authority.

You should be prepared to provide important information to relevant authorities – including the points listed below. Your diary of aviary events (as recommended to be kept in Level 1) will be useful for this task.

• Name, address and contact details of the property where the bird(s) is kept.
• Name, address and phone number of your private or usual veterinarian.
• Clear directions to the property and any encumbrance to property access e.g. dogs, security.
• Total number of birds on the property with grouping by species and health status (sick and healthy).

The following are examples of questions you may be asked:

• Has there been any sickness on the property in the last 30 days?
• If yes – the number and species of birds, signs of disease, treatments used, numbers recovered or died, and if dead, how disposed of?
• What was the disease history prior to this?
• Has there been any sickness on adjoining properties? If yes, can you describe?
• What vermin are on the property?
• What wildlife or wild animals come on to or have access to the property?
• Do you have any other properties? If yes, please provide address and contact details.
• Have there been any persons, including from overseas or interstate, in contact with your avian stock, equipment, vehicles, feed or other livestock e.g. dogs? If yes, where and when?
• What is the travel history of the suspect bird(s) over the last 3 weeks e.g. have birds been to any shows or exhibitions?
• What new birds, treatments, feeds, feed sources, other products or equipment have been introduced to the property in the last 30 days?
• What Biosecurity or bird hygiene procedures have you currently implemented?
• Describe water supplies and drainage.
ALERT
Alert your family and your staff members as to the importance of close vigilance of the aviary birds. Every day routinely assess and compare current state of bird health and behaviour from what you know is normal. Implement training, reminder signs, include in meeting agendas and provide news updates.

CONTACT
Contact a veterinary officer or authorised person for advice.

DECIDE
Decide to get a veterinary diagnosis for a decision on how to proceed.

BE AWARE
Be Aware and Be Smart. Never assume that an exotic or reportable disease will not affect you. Get immediate advice. An ill or suspect bird must not leave your premises except for veterinary treatment.
If significant illness is seen in your birds:

Implement your Level 2 Biosecurity Procedures immediately.

For a list of
AVIAN VETERINARIANS refer to
THE UNITED BIRD SOCIETIES of SA Inc website

www.unitedbirds.asn.au

If you cannot contact your own veterinarian, call the Emergency Animal Disease Watch Hotline

Telephone: 1800 675 888
This table is provided as an aid in the identification of the risk factors likely to impact upon your aviaries from local environmental factors. By applying a rating scale of 1 to 5 (where 1 represents an assessed “low risk” and 5 represents an assessed “high risk”) to each of the items, you will clearly identify those important areas that your biosecurity management plan should be primarily directed towards.

Please contact UBSSA if you would like further information on completing this assessment.

### Appendix I - Self Risk Assessment

<table>
<thead>
<tr>
<th>PROXIMITY TO THE FOLLOWING:</th>
<th>RISK LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Known flight path of migratory birds</td>
<td></td>
</tr>
<tr>
<td>Known habitat area of wild birds: includes dams, rivers, wetlands, sea</td>
<td></td>
</tr>
<tr>
<td>Commercial poultry facilities</td>
<td></td>
</tr>
<tr>
<td>Free Range poultry establishments</td>
<td></td>
</tr>
<tr>
<td>Major arterial transport routes for commercial poultry</td>
<td></td>
</tr>
<tr>
<td>Other poultry on the property</td>
<td></td>
</tr>
<tr>
<td>Piggeries/livestock</td>
<td></td>
</tr>
<tr>
<td>Streams/water courses (from the above poultry and livestock)</td>
<td></td>
</tr>
<tr>
<td>Feed lots</td>
<td></td>
</tr>
</tbody>
</table>
### YOUR PROPERTY – FREQUENCY OF VISITS FROM:

<table>
<thead>
<tr>
<th>Species</th>
<th>RISK LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Doves/pigeons</td>
<td></td>
</tr>
<tr>
<td>Miners, mynas, sparrows, starlings or other free-flying birds</td>
<td></td>
</tr>
<tr>
<td>Mice, rats, undesirable insects</td>
<td></td>
</tr>
<tr>
<td>Waterfowl - domestic and wild</td>
<td></td>
</tr>
<tr>
<td>Hooved animals</td>
<td></td>
</tr>
<tr>
<td>Other pets</td>
<td></td>
</tr>
</tbody>
</table>

### YOUR AVIARIES WITH SUGGESTED RATINGS FOR EACH SITUATION:

<table>
<thead>
<tr>
<th>Situation</th>
<th>RISK LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fully roofed</td>
<td>1</td>
</tr>
<tr>
<td>Partially roofed (including shade cloth)</td>
<td>3</td>
</tr>
<tr>
<td>Wire roof only</td>
<td>5</td>
</tr>
<tr>
<td>Wire - sides and front</td>
<td>3</td>
</tr>
<tr>
<td>Dirt/sand/grit floor</td>
<td>5</td>
</tr>
<tr>
<td>Concrete floor</td>
<td>2</td>
</tr>
<tr>
<td>Suspended floor</td>
<td>1</td>
</tr>
<tr>
<td>Bird - keeper access from garden to aviary</td>
<td>4</td>
</tr>
<tr>
<td>Bird - keeper access from cage to cage</td>
<td>4</td>
</tr>
<tr>
<td>Enclosed aviary - within a building</td>
<td>1</td>
</tr>
<tr>
<td>Open aviary - open yards - no roof</td>
<td>5</td>
</tr>
<tr>
<td>Semi-open aviary - partial roof - fully wire enclosed</td>
<td>3</td>
</tr>
<tr>
<td>Enter aviary to feed</td>
<td>4</td>
</tr>
<tr>
<td>Mixed collection of birds - per aviary</td>
<td>4</td>
</tr>
<tr>
<td>One pair of birds per aviary</td>
<td>2</td>
</tr>
</tbody>
</table>

### VISITOR ACCESS WITH SUGGESTED RATINGS:

<table>
<thead>
<tr>
<th>Access</th>
<th>RISK LEVEL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent: including family members</td>
<td>4</td>
</tr>
<tr>
<td>Infrequent: including family members</td>
<td>2</td>
</tr>
<tr>
<td>Visitors enter aviaries</td>
<td>5</td>
</tr>
<tr>
<td>Visitors touch wire</td>
<td>4</td>
</tr>
<tr>
<td>No access - private facility</td>
<td>1</td>
</tr>
<tr>
<td>Walkway access only</td>
<td>1</td>
</tr>
<tr>
<td>Public access (Zoo, Fauna Park)</td>
<td>5</td>
</tr>
<tr>
<td>Overseas visitors</td>
<td>3</td>
</tr>
</tbody>
</table>
Biosecurity for Aviary Birds is not promoting any brand names but encourages all enthusiasts to search dedicated websites, or seek professional assistance, for more detailed information on Australian Pest and Veterinary Medicines Authority (APVMA) registered products inclusive of the benefits and risks on the use of these products. The following are very simplistic and minimum requirement suggestions.

**How to Disinfect Equipment and Surfaces** (e.g. food/water containers, carry boxes, perches, nesting boxes, benches, floors, walls, etc)

Three steps that must be taken in order for this process to be effective:

**Step 1 – Remove loose material**

Surfaces must first be cleaned in order for disinfectants to be effective. Ensure all litter and dirt is brushed off surfaces to be disinfected.

**Step 2 – Wash**

Wash the item with warm water and suitable detergent, then rinse thoroughly with clean water and dry.

**Step 3 – Disinfect**

Once item is clean and dry, disinfectant can be applied. Appropriate contact times (as per manufacturer’s label or instructions) are required for particular pathogens.

**Options for different surfaces:**

- Small items and footwear can be wiped with a disinfectant wipe or can be sprayed with disinfectant and wiped over with a clean dry cloth.
- Aviaries, including floors, can be sprayed with disinfectant made up in a spray bottle. For larger surfaces, a pump up garden sprayer/bottle (used only for this purpose) is ideal.

**Using Disinfectants**

- Always wear gloves and ideally, eye protection, when mixing detergents and disinfectants.
- Read labels to check ingredients.
- Read/follow manufacturers’ instructions and dose rates.
- Be careful with your clothes and equipment.
Disinfecting equipment

Although the following products are readily available in supermarkets it is best to look for reputable disinfectants that are APVMA registered.

Bleach (any bleaching agent containing hypochlorite). Mixing one part bleach to 10 parts water is a cost-effective way to disinfect feed and water receptacles, carry boxes, buckets, dustpans, etc., provided they have first been thoroughly cleaned.

Spray Disinfectants – (any quaternary ammonium compounds). Make sure you mix up as per instructions on label. These are good for disinfecting floors and walls. Some are suitable for footbaths.

Anti-bacterial/Alcohol Wipes – Make sure they kill both virus and bacteria. Wipes are quick and effective for wiping over clean surfaces and small items without the use of water.

Disinfecting a person

Liquid Hand Soap – liquid soap and water is sufficient for skin.

Waterless Antibacterial Hand Gels – These are available in gels or wipes at most supermarkets or pharmacies

Chlorhexidine – any hand wash that has a chlorhexidine compound used in most hospitals and veterinary surgeries.

Please note: In rare cases some people can be hypersensitive to Chlorhexidine so it is recommended that products containing Chlorhexidine are not used on the skin of allergy sufferers.

NOTE: A broad spectrum pathogen kill does not occur just by using antimicrobial gel on hands, or by stepping in a footbath, but is useful and does assist in reducing spread of some bacteria and viruses. Many disinfectants are inactivated by organic materials like manure and litter, so disinfectant solutions e.g. in footbaths, should be renewed regularly, or if they are visibly contaminated.
Appendix III - Bird Sales / Shows

Definitions

Bird Display
Is a collection of birds for the purpose of display.

Bird Show
Is a collection of birds for the purpose of judging and selecting the best bird(s).

Bird Sale, Auctions, Sales by Tender
Is a collection of birds for the purpose of selling the birds.

Tracing
Is the process of locating animals and people that may have been exposed to an infectious disease, with the purpose of advising the people of their exposure and determining if their animals have been infected.

As a minimum, aviary bird sales/auctions are to be conducted in accordance with The United Bird Societies of SA Inc. “Bird Sales – Code of Practice.”

In addition to the “Bird Sales – Code of Practice” consideration should be given to the following:

Bird Sales, Auctions, Sales by Tender – Sellers/Buyers
- All bird sale equipment and carrying containers should be cleaned and disinfected before and after a sale
- While at the sale, sellers should not handle birds other than their own, but if this is necessary, sellers should always thoroughly wash or disinfect their hands after each handling
- On returning home, unsold and/or purchased birds should always undergo a period of quarantine before introduction/re-introduction to the aviary
- Keep as a minimum a diary notation of all bird movements in or out of your aviary
- Do not take any birds to a sale if there are any signs of illness in your aviary

Bird Sales, Auctions, Sales by Tender - Organisers

• It is recommended that sale organisers keep adequate records of sellers at sales and club meetings. These records may be essential to assist in addressing a serious disease outbreak.

• Ensure adequate hand washing/disinfectant facilities are available in the selling area.

• Reserve a quarantine area for birds that are deemed as not being fit for sale.

• Use knowledgeable bird-keepers as the Sales Coordinator and the Biosecurity Steward to check birds for fitness on entry to, and for the duration of, the sale or auction.

• These people should then wash/disinfect their hands if handling birds or cages.

• Consider having an avian veterinarian on call and contactable by telephone on the day(s) of the sale.

• Consider providing biosecurity principles details for sales stewards and other assistants.

• Recommend to sellers that they record, as a minimum, name and post code of purchaser of bird(s) sold at the sale in case tracing of the bird(s) is required.

• All birds must be exhibited in show cages that are clean and well maintained.

• All show cages must have adequate clean seed and a standard show cage water drinker attached.

• Should an exhibitor have any doubt about the health of birds in their aviary they are expected to refrain from exhibiting and to have taken reasonable steps leading to diagnosis and treatment.

Bird Exhibitions - Organisers

• The organisation has the right to reject any exhibit from the designated show area showing signs of ill health, informing the exhibitor of the reason.

• The Show Manager (or a representative) is authorised and obliged to remove from the bench any birds showing signs of illness or injury.

• No birds, other than those accepted as show exhibits, or pre-approved sale or auction birds, will be allowed in the designated show area.

Organisers may also have their own standards and conditions for the conduct of these events.

Bird Exhibitions - Exhibitors

• Exhibitors are expected to have taken all practical steps to ensure the good health of their entries.
VETERINARIAN

MOBILE ........................................

ALL HOURS  ....................................

EMERGENCY ANIMAL DISEASE WATCH HOTLINE:
1800 675 888

CONTACT LIST - STATE GOVERNMENT PRIMARY INDUSTRIES

South Australia  (08) 8207 7900
New South Wales/ACT  (02) 6391 3100
Victoria  (03) 5332 5000
Western Australia  (08) 9368 3333
Northern Territory  (08) 8999 5511
Tasmania  1300 368 550
Queensland  (07) 3404 6999
This document was prepared as a partnership between:

**The United Bird Societies of South Australia Inc.**
- in consultation with:
  - Wildlife Exhibitors Association of South Australia
  - Pheasant and Waterfowl Sector
  - Bird-showing Clubs
  - The Avicultural Federation of Australia Inc.

and

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