

Avian influenza sample collection for wild birds

Equipment list

- **Recommended personal protective equipment (PPE):**
 - disposable gloves
 - P2/N95 face mask
 - eye protection
- **Sampling consumables:**
 - Floq swabs (two per individual bird sampled)
 - 2.5 mL vial viral transport media (VTM)
 - Scissors
 - Esky and disposable icebricks
 - Biohazard bags
 - Ziplock bags

Reporting

Ensure the event meets the reporting criteria and has been reported to the **Emergency Animal Disease hotline (1800 675 888)** and you have been instructed to collect and submit samples as a person who is able and with appropriate skills.

Note: not all reports of wildlife sickness and/or death will be investigated, but all reports do inform the Department of Primary Industries and Regional Development's (DPIRD's) understanding of disease in wildlife populations.

Samples can be collected from birds that are alive or **freshly dead** (that is, dead for less than 48 hours or even less in hot and dry environmental conditions).

From a biosecurity and human health perspective, when there is an index of suspicion for high pathogenicity avian influenza, vent and oral swabs must be submitted rather than entire birds.

Procedure for sampling

Only sample a maximum of 5 birds per disease/death event.

Vent swabs (cloacal swab)

1. Wear appropriate personal protective equipment (PPE) when handling birds and opening sample vials (see equipment list).
2. Unwrap a Floq swab from the stem-end of the packaging and be careful not to touch the swab tip.
3. Remove swab and insert the entire tip of the swab into the vent of the bird (Figure 1). Use gentle pressure and in a circular motion, swab the inside of the vent two to four times. The procedure is the same in a dead bird.
4. Shake off any large (>0.5 cm) pieces of faeces.

5. Open the VTM vial and place the swab tip in the transport media approximately $\frac{3}{4}$ of the way towards the bottom.
6. Cut or snap the stem of the swab so that the swab remains in the vial and the cap can be screwed on tightly. Please do not touch the part of the swab that enters the vial.
7. Wipe scissors with 70% alcohol if they were used to cut the swab stem.
8. Label the tube with appropriate information including a sample ID and type of sample (vent vs oral) (Figure 2). Please write on the body of the vial and not the lid. Store the VTM at 4°C before and after use.

Oral swabs

1. Wear appropriate PPE when handling birds and opening sample vials (see equipment list).
2. Unwrap a Floq swab from the stem-end of the packaging. Be careful not to touch the swab tip.
3. In a live bird, gently introduce the swab into the bird's mouth and gently rub the swab around entire oral cavity of the bird including the roof of the mouth (Figure 3). The procedure is the same in a dead bird.
4. Repeat steps 5-8 above.

Note: If oral sampling is likely to cause undue stress or trauma to the bird or if the handler does not feel comfortable with the technique, submission of only a vent swab is sufficient.

Sample submission

1. Place the vials in the biohazard bag.
2. Place the biohazard bag in another clear ziplock bag and seal.
3. Place all samples in an Esky with cool packs or ice bricks. Do not place samples directly onto ice bricks as this can damage the samples.
4. Seal the Esky with tape.
5. Place the laboratory submission form in an envelope or ziplock bag and tape to the side of the Esky.
6. Deliver the Esky to your regional DPIRD office. Request DPIRD staff send the Esky to:

DPIRD Diagnostics and Laboratory Services (DDLS)

DDLS Interim Lab, Building 102

3 Baron-Hay Court, South Perth WA 6151

Please refer to DPIRD document “**Veterinary sample packaging guide**” for a pictorial guide to sample packaging (see the ‘ruminant disease guide’ on dpird.wa.gov.au).

Email DDLS@dpird.wa.gov.au and advise you are submitting samples for avian influenza exclusion testing and that your local DPIRD office will be sending the samples by courier. Include the name of the DPIRD veterinarian who approved the sampling and submission.

A same-day courier is preferable, but overnight courier delivery is acceptable. Avoid shipping samples on Fridays as DDLS is closed over the weekend (unless otherwise advised by DPIRD).

If you are unable to deliver the samples to a DPIRD regional office during office hours, please store them in a refrigerator at 4 degrees Celsius. Samples can be stored in the fridge for up to 2 days prior to submission if absolutely required due to remote location.

If you are in the Perth metropolitan area and wish to submit samples in-person or via courier to DDLS, please email DDLS@dpird.wa.gov.au first with submission details. DDLS will review the submission and provide email instructions about how to proceed.

Alternatively, contact DPIRD Wildlife Health Australia Coordinator, Dr Nicole Brook on **0431 839 010**, or your **local DPIRD Field Veterinary Officer** (search 'field vet contacts' on dpird.wa.gov.au).

Storage of VTM

The VTM provided in the sampling kits can be stored for up to 12 months in the freezer. When the VTM is required for sampling, remove the VTM from the freezer and place in the fridge 24 hours prior to use.

Alternatively, remove the VTM from the freezer and gently roll between the palm of your hands to defrost to allow for immediate use.

Questions

Contact DPIRD Wildlife Health Australia Co-ordinator Dr Nicole Brook on **0431 839 010** or your local DPIRD Field Veterinary Officer if you have sampling procedure questions.



Figure 1: Vent swab

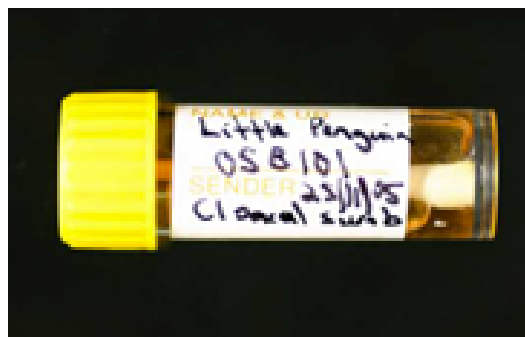


Figure 2: Appropriate labelling of VTM tube



Figure 3: Oral swab

Images source: Sick and dead wild bird health surveillance: Sample collection protocol. Australian Registry of Wildlife Health.

Important Disclaimer

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