



Sampling birds for Avian Influenza investigations

AHL LabFact- October 2024

Use the information in this LabFact to ensure the integrity of the samples being sent to the laboratory for Avian Influenza (AI) testing.

In the case of bird mortalities, please contact a Veterinary Officer from Animal Biosecurity and Welfare, Biosecurity Tasmania, prior to sampling birds.

For after-hours assistance, please contact the Emergency Animal Disease Hotline on

1800 675 888.

Background

PCR testing at the Animal Health Laboratory (AHL) can detect the presence of Avian Influenza (AI) type A and specifically identify H5 and H7 strains. The Australian Centre for Disease Preparedness (ACDP) conducts further testing of positives including sequencing, pathogenicity testing and isolation to characterise the virus as low or high pathogenicity.

Purpose

To provide veterinary practitioners with advice on AI sampling.

Materials Required

- Sterile flocked swabs (cotton swabs can be used if no flocked swabs available)
- Virus Transport Medium (Phosphate Buffered Gelatine Saline (PBGS) or other)
- Ice bricks and esky
- Plastic Ziplock bags
- Absorbent material
- A fully completed Laboratory submission form

Virus Transport Media

The AHL can provide Viral Transport Media - Phosphate Buffered Gelatine Saline (PBGS) or another AI medium.

Transport Media will be sent chilled and can be kept at 4-8°C for up to 1 month. Store unused Transport Medium at -20°C longer term (until expiry) and defrost for use at room temperature or in the fridge. On defrost, PBGS should be clear and orange in colour (not dark pink or bright yellow).

To request media, email animaldisease.enquiries@nre.tas.gov.au.

On receipt, store at -20°C until expiry, defrost at room temperature or in the fridge.

Sampling birds for Avian Influenza investigations

Alternatives

If no in-date Transport Medium is available:

Use expired Transport Medium, this does not affect PCR capability as long as it's kept chilled after sampling. It may, however, affect the ability to isolate (grow), and type the virus at the Australian Centre of Disease Preparedness (ACDP).

If no Transport Medium is available:

Use PBS or isotonic saline in a sterile tube, this will be appropriate for PCR but **not virus isolation**.

Do not use Amies Gel Bacterial Transport Swabs – this **may inhibit PCR**.

For testing in isolated areas please contact the Animal Health Laboratory on 03 67772111 for further advice.

Selecting Animals for Testing

AI infection in birds is notifiable in Tasmania, so you must contact a Veterinary Officer from Animal Biosecurity and Welfare to discuss if you are considering testing for this disease. The Veterinary Officer will advise on which samples to collect for laboratory submission.

Animal Biosecurity and Welfare Branch

Phone: (03) 6165 3263

Email: animaldisease.enquiries@nre.tas.gov.au

Sampling Procedure

AI is a potential zoonosis therefore appropriate personal protective equipment (PPE) must be worn before sampling.

Euthanise the bird where appropriate. Live birds can also be successfully swabbed.

Either:

- Double bag the bird (leak-proof bags) and keep chilled until transfer to the laboratory within 24h.

or

- Swab the trachea and cloaca of each bird and put both swabs in one tube of media. Use a separate tube for each bird. Once swabs are added to the tube, keep chilled and submit to AHL, ideally within 24h. If pooling samples, contact the laboratory for advice.

Note: If whole birds, or large numbers of swabs are being submitted, notify the laboratory in advance on (03) 6777 2111.

Transporting Samples

Bagged samples should be packed into the esky, with ice-bricks and absorbent material, and taped closed. Transfer to the AHL should occur within 24h of collection.

Complete the laboratory advice note. Copies of submission forms are available from www.nre.tas.gov.au/ahlabsforms.

Seal all documentation including the advice note in a ziplock bag and attach to the **outside** of the esky.

If you have any questions, please contact the laboratory on (03) 6777 2111 and ask for the duty pathologist.

Submitting Samples

Submit samples to:

Animal Health Laboratory

NRE Tas

165 Westbury Road

Prospect TAS 7250

Phone: 03 6777 2111

Email: specimenreception@nre.tas.gov.au

