



Wildlife

AVIAN INFLUENZA PREPAREDNESS TRAINING
2026
NSW



To report wildlife disease or a mass mortality event please ring the:

Emergency Animal Disease Hotline, 24 hours / 7-days

1-800-675-888

If you suspect that the event may be the result of a pollution, please also ring the:

Environment Line, 24 hours / 7-days

131 555

To enquire about wildlife sample collection and submission, please contact the:

Australian Registry of Wildlife Health

arwh@taronga.org.au

Thank you for participating in this wildlife avian influenza preparedness training workshop.

This workshop is co-delivered by the NSW Department of Primary Industries and Regional Development (DPIRD), NSW Health and the Australian Registry of Wildlife Health (Registry). DPIRD is dedicated to growing primary industries and supporting regional economic development to deliver long term benefits to regional NSW, and our state. The department also has a range of responsibilities to prepare, respond to and assist in recovery from animal and plant biosecurity emergencies, food safety events, natural disasters and other emergencies affecting the sector.

The Australian Registry of Wildlife Health is a conservation science program of Taronga Conservation Society Australia. We provide a diagnostic service for free-ranging wildlife throughout NSW in partnership with NSW Department of Climate Change, Energy, the Environment, and Water (DCCEEW), DPIRD and the NSW Environment Protection Authority (EPA).

The following information is designed to enhance your confidence and identify the resources that you will need to safely go into the field to collect high-quality information, images, and samples to contribute to a wildlife morbidity or mortality event investigation.

These procedures are subject to variation through consultation and as Australia's regulations or disease status change associated with adaptive situational management. Please stay up to date on current recommendations. These notes were last reviewed August 2026.

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Introduction

Since 2021 there have been expanding outbreaks of a high pathogenicity strain of avian influenza (HPAI, H5N1, H5 clade 2.3.4.4b) that is circulating in free-ranging wildlife. This virus is now prevalent across Asia, Europe, the Middle East, Africa, North and South America with recent detections on sub-Antarctic Islands, the Antarctic mainland and has more recently been detected on Australia's mainland.

Where the HPAI, H5 clade 2.3.4.4b occurs it has caused significant disease and death in poultry, wild birds, and marine mammals. Sporadic cases have also been reported in an expanding range of mammals, including rare, mostly mild illness in humans. This virus poses a threat to Australia's agricultural industry, economy, and biodiversity.

Early detection, diagnosis and response are critical to mitigating the impacts of H5 bird flu. NSW state agency field officers may be asked to assist by:

- 1) being familiar with clinical signs and symptoms,
- 2) knowing how to report their observations and findings to the Emergency Animal Disease Hotline and the NSW DPIRD.
- 3) knowing how to safely collect samples from wildlife and dispose of animal remains.

There are a range of diseases found in birds and other wildlife that can cause human illness. Ensure that you wear appropriate personal protective equipment (PPE) while handling sick or dead wildlife, and samples derived from them. This protective equipment will also protect you from toxins, if the animals have been poisoned.

Additional Resources

Additional information and resources regarding H5 bird flu are available from NSW DCCEEW, NSW DPIRD, Wildlife Health Australia, the World Organisation for Animal Health websites and Australian Centre for Disease Control websites:

<https://www.agriculture.gov.au/campaigns/birdflu> - resources and a national situation report

<https://www.dpi.nsw.gov.au/dpi/bfs/animal-biosecurity/avian-influenza> - NSW situation report, resources and details on how to report sick or dead wildlife

<https://www.dpi.nsw.gov.au/dpi/biosecurity/emergency-management/bioresponse-nsw> – up-to-date information on NSW emergency zone locations and restrictions

<https://www.dpi.nsw.gov.au/about-us/services/laboratory-services/veterinary/avian-influenza>

<https://wildlifehealthaustralia.com.au/Incidents/Incident-Information/incident-h5n1-high-pathogenicity-avian-influenza-h5-bird-flu-in-migratory-seabirds-australia-ongoing>

<https://www.woah.org/en/disease/avian-influenza/>

<https://www.cdc.gov.au/resources/publications/bird-flu-toolkit-people-who-work-birds>

<https://www.cdc.gov.au/resources/publications/cdna-national-guidelines-avian-influenza-workers>

What does H5 bird flu in wildlife look like?

Individual or clustered dead birds or mammals can indicate the presence of H5 bird flu.

Birds or mammals infected with H5 bird flu may have:

- Incoordination, head tremors, twisted necks, or neck and head held upside down
- tremors, inability to stand or fly
- unusual vocalisations
- diarrhoea or regurgitation
- rapid or laboured breathing, coughing or sneezing
- swelling of the head
- eye cloudiness or change in eye colour
- oral or nasal discharge.

Clinically normal birds may still carry influenza viruses.

How does H5 bird flu spread?

H5 bird flu viruses are shed in:

- faeces and
- respiratory secretions (e.g. nasal discharge or saliva).

The virus can be spread through:

- direct contact with infected animals or their faeces
- contaminated feed and water
- contaminated equipment and clothing
- air via aerosolised secretions, droppings or dust.
- The virus can travel short distances by air if there are large congregations of infected animals.

How will the NSW government respond to an outbreak of H5 bird flu?

As H5 bird flu can affect animals, people and the environment, a “One Health” approach is required to respond to it. A co-ordinated approach by different government agencies with responsibilities around human health, animal health and environmental health is being undertaken.

The response will aim to minimise the impacts of H5 bird flu on people, animals and the environment. Eradication of H5 bird flu in wildlife is not feasible and will not be attempted. No culling of wildlife for disease control will be undertaken.

What are the roles and responsibilities of different NSW government agencies in an outbreak of H5 bird flu in wildlife?

- The roles of different NSW government agencies in emergency responses are outlined in the NSW State Emergency Management Plan (EMPLAN). The combat agency for biosecurity responses such as H5 bird flu in animals is NSW DPIRD.
- The Environmental Services Functional Area (EnvSFA) provides support for native wildlife in emergencies.
- The Health Services Functional Area co-ordinates public health resources around human health risk.

- If the strain of H5 bird flu changes to become more capable of causing disease in people, and a human health emergency is declared, NSW Health will become a combat agency for human health.

What will staff members from EnvSFA agencies be required to do in an H5 bird flu outbreak?

- Surveillance of wildlife for signs of illness suggestive of H5 bird flu
- Reporting of sick or dead wildlife to the EAD Hotline
- Restricting access of people and domestic animals to areas where there are/have been suspected or confirmed cases of H5 bird flu
- Collecting samples from carcasses to test for H5 bird flu when requested by NSW DPIRD
- Disposing of carcasses when required.

Human Health Considerations When Handling Wild Birds

Wildlife can carry a range of diseases that can infect humans, and steps should always be taken to prevent infection whenever anyone is handling wildlife. Pregnant and immunocompromised personnel should discuss risks with their regular medical practitioner, or a medical practitioner recommended by their employer prior to undertaking work with wildlife.

Human infection with H5 bird flu 2.3.4.4b has occurred sporadically, often after close, prolonged or unprotected contact with infected animals or environments. Most human infections with this group of viruses have been mild. The human health risk posed by this virus is considered low, nonetheless there are some health risks, particularly in those who may be immunocompromised. In rare cases, human infection with H5 bird flu has resulted in severe disease and death.

Protect yourself and others through the regular use of PPE (gloves, P2 mask, eye protection, lab coat/ coveralls, boots) whenever and wherever you handle wildlife. Consider having kits containing PPE, sample collection materials, and remains disposal equipment (Appendix A) in vehicles and other areas where you may encounter wildlife. Apply and remove PPE in the sequential manner described in Appendix B.

Consult the NSW DPIRD or NSW Health websites to learn more about diseases that can be transmitted from wildlife to people and how to be careful around wildlife -

<https://www.dpi.nsw.gov.au/biosecurity/animal/humans>

<https://www.health.nsw.gov.au/Infectious/Pages/zoonoses.aspx>

[https://www.health.nsw.gov.au/Infectious/factsheets/Pages/be-careful-around-wildlife.aspx#:~:text=ensure%20you%20are%20safe%20\(away,between%20yourself%20and%20the%20animal](https://www.health.nsw.gov.au/Infectious/factsheets/Pages/be-careful-around-wildlife.aspx#:~:text=ensure%20you%20are%20safe%20(away,between%20yourself%20and%20the%20animal)

Consult SafeWork websites for guidelines on Workplace Health and Safety Obligations

<https://www.safeworkaustralia.gov.au/safety-topic/hazards/biological-hazards/avian-influenza-bird-flu>

<https://www.safework.nsw.gov.au/hazards-a-z/biological-hazards-and-diseases/avian-influenza>

National Guidance is also available through the Australian Centre for Disease Control

<https://www.cdc.gov.au/diseases/bird-flu-avian-influenza>

[Communicable Disease Network Australia – Protecting People Who Work with Birds and Wildlife](#)

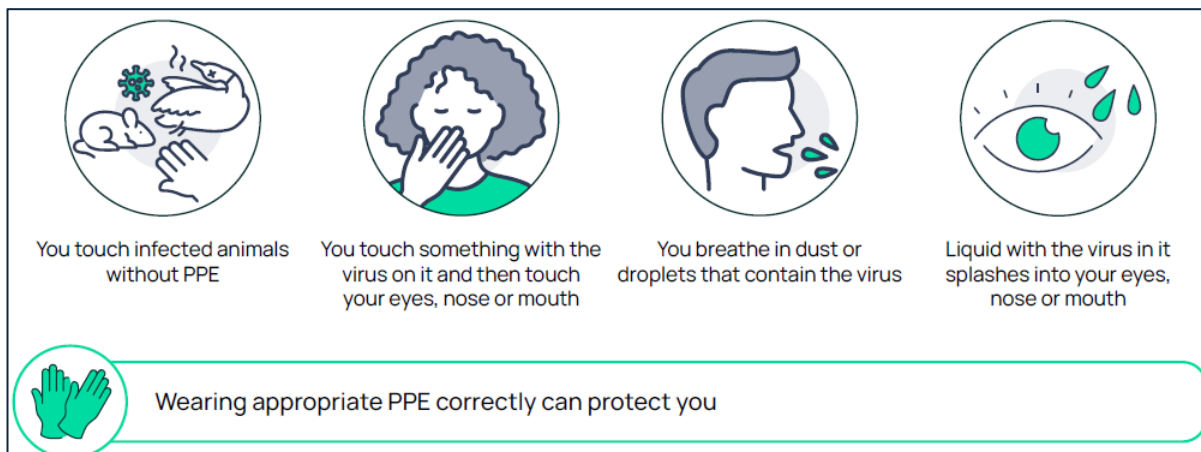
<https://www.cdc.gov.au/resources/publications/cdna-national-guidelines-avian-influenza-workers>

Avian Influenza

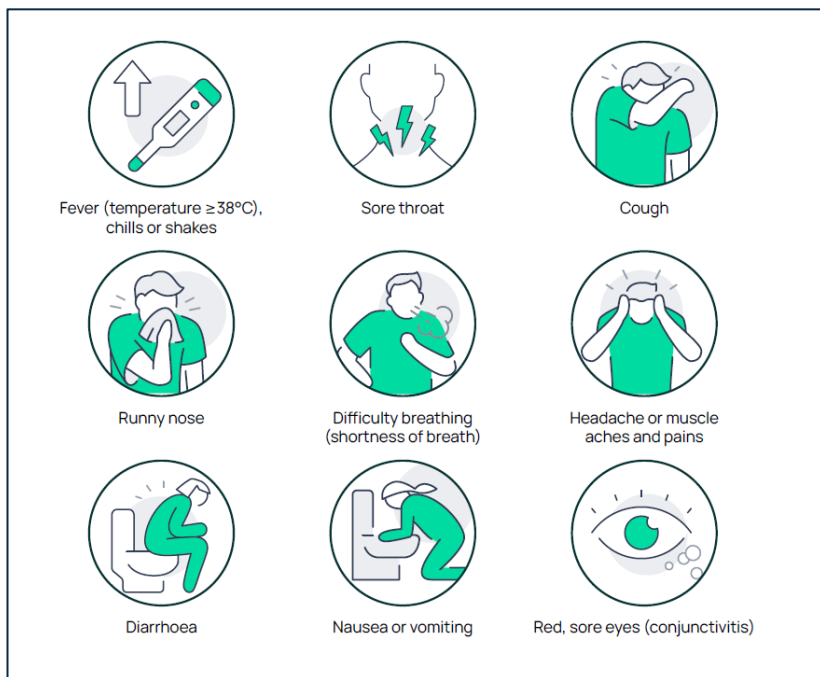
Who is at risk?



How do you catch avian influenza?



What are the symptoms of avian influenza in people?



How to prevent human infection with avian influenza?



IMAGES ABOVE ARE AVAILABLE WITHIN THE INTERIM AUSTRALIAN CENTRE FOR DISEASE CONTROL'S BIRD FLU TOOLKIT AVAILABLE VIA:
[HTTPS://WWW.CDC.GOV.AU/RESOURCES/PUBLICATIONS/BIRD-FLU-TOOLKIT-PEOPLE-WHO-WORK-BIRDS](https://www.cdc.gov.au/resources/publications/bird-flu-toolkit-people-who-work-birds)

NSW Health recommends getting the seasonal flu vaccine every year. It does not protect against avian influenza infection; however, it can help prevent changes to the virus that could occur if you got infected with avian influenza and seasonal influenza at the same time.

What to do if you have been in contact with avian influenza

If you have been in close contact with infected poultry, wild birds, livestock, wildlife, their secretions, their contaminated environments or contaminated materials, or people infected with avian influenza, you should carefully **monitor your health (including symptoms) for 10 days after contact**.

If you remain well, you will not be required to isolate. Your local public health unit may contact you to check how you are going.

What to do if you develop symptoms of avian influenza

If you develop symptoms:

- **Contact your doctor and mention possible bird flu exposure**
- **Isolate** yourself from others until seen by a doctor. Wear a mask if you cannot isolate from other people
- Tell your employer
- **Practice good hygiene.** Cover your mouth when coughing / sneezing, wash hands often and dispose of used tissues properly
- **Report your illness to your local Public Health Unit (1300 066 055)**

Other health considerations when in contact with sick and dead wildlife

Psittacosis

Wild birds may carry the bacterium that causes psittacosis in people. Human psittacosis may include symptoms such as fever, headache, chills, muscle pain, cough and breathing problems.

<https://www.health.nsw.gov.au/Infectious/factsheets/Pages/Psittacosis.aspx>

Mosquito-borne diseases

Mosquitoes can transmit serious diseases such as Ross River Virus, Barmah Forest virus, and Japanese Encephalitis virus, that are spread to humans. The best prevention for all mosquito-borne diseases is to avoid mosquito bites.

Spray up, Cover up, Clean up, Screen up!

<https://www.health.nsw.gov.au/Infectious/mosquito-borne/Pages/default.aspx>

Japanese Encephalitis Virus (JEV)

People working outdoors / in wild bird environments in NSW may be at risk of Japanese Encephalitis Virus (JEV) infection.

JEV is a rare but serious illness and is spread to humans by infected mosquitoes. A safe, effective and free vaccine is available for people who live or work in any of the 55 high-risk local government areas, or to people based on certain occupation risks. Once vaccinated, it takes 2-4 weeks to build immunity.

We strongly recommend if you live or work in the high-risk local government areas, that you / your networks speak to your GP, pharmacist, or Aboriginal Medical Service about getting vaccinated.

For further information, visit:

<https://www.health.nsw.gov.au/Infectious/jev/Pages/default.aspx>

Q fever

Q fever can cause prolonged illness in humans. Although Q fever is most often contracted from contact with livestock, wildlife can also be a source.

Q Fever vaccine is recommended for some people who work with animals. For more information, visit the NSW Health Q Fever vaccination webpage: <https://www.health.nsw.gov.au/Infectious/jev/Pages/vaccination.aspx>

How to protect yourself when handling sick and dead wildlife

Do not eat, drink, or smoke while working with sick or dead animals.

Wash your hands!

- Wash your hands with hot water and soap before putting on gloves and after removing them.
- Always wash your hands before and after eating, smoking, and using the toilet.
- Do not handle cigarettes, lighters, cell phones before thoroughly washing your hands.
- If clean running water is not available, use an alcohol-based hand rub and wash as described above.

When washing your hands, make sure the backs and palms of both hands are wet with warm water, apply soap, detergent or hospital grade antiseptics, lather and wash the backs, between the fingers and the palms of each hand. Rinse well and dry using a paper towel. Be careful when turning taps on and off if there is no automatic sensor or foot-operated system in place. Ensure tap handles are clean.

<https://www.healthdirect.gov.au/hand-washing>

Wear personal protective equipment

There are five key items of personal protective equipment (PPE) that will keep you safe:

- **Gloves** (need not be sterile), consider double gloving so that outer dirty gloves can be replaced without exposing skin. Wear nitrile gloves if animals may have been exposed to intoxicants.
- **Overalls or disposable coveralls** (consider an impermeable suit or apron if splashing is foreseen e. g. for wet water birds or marine mammals). Protective clothing should be disposable or easily cleaned after handling a sick or dead wild animal.
- **Disposable shoe covers** or dedicated washable boots (i.e. gumboots)
- **Respiratory protection** (N-95 or P2 respirator masks are recommended)
- **Eye protection** - glasses, goggles, or face shield.

Treat waste, used clothing and equipment with special care.

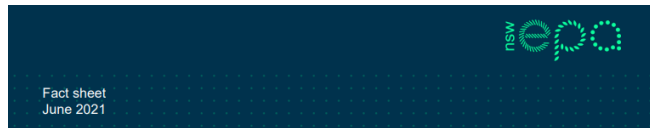
All waste must be treated as potentially contaminated. Disposable gloves, coveralls, shoe covers, masks and hair covers should be used once only. Disposal guidelines may change with the incursion of H5 bird flu, but current guidelines are outlined below.

It is important that disinfection procedures are followed at each field site so as not to relocate virus to other sites. In field situations, clothing, footwear, and other reusable equipment should be washed with detergent, hot soapy water, and treated with an appropriate disinfectant once it is clean. It is important to wash and rinse all materials thoroughly to remove organic material prior to disinfection. If possible, shower and change clothes before you contact live animals, food, colleagues, or family.

Wash hands with soap and hot water (preferable) or an alcohol-based hand sanitiser before and after handling carcasses.

Special Considerations: Rodent Plague Zones

Take care when collecting animals or carcasses in areas where there are active mouse plagues. Zinc phosphide rodenticides can accumulate in the crop of wild birds and may be a source of toxic phosphine gases. Consult the EPA “*guidance on handling native wildlife in areas where zinc phosphide has been deployed*” prior to collecting or transporting animals or animal remains.



<https://www.epa.nsw.gov.au/-/media/epa/corporate-site/resources/news/21p3074-handling-wildlife-where-zinc-phosphide-used.pdf>

Guidance on handling native wildlife in areas where zinc phosphide has been deployed

(part of the digestive system) may store enough undigested zinc phosphide to expose a person to risk during procedures such as dissection because they are likely to have undigested pellets in their crop. In addition, predatory and scavenging native wildlife may also be impacted directly by the poison.

Clinical signs in native wildlife

After ingestion of lethal doses of the rodenticide, death is sudden, resulting from heart failure, pulmonary oedema and kidney failure. Anorexia, debility and death in animals may occur from 15 minutes to hours after ingestion but may be delayed for up to 18 hours.

Mental Health

The NSW Government acknowledges that the response to an avian influenza outbreak can impact mental health.

For mental health support:

- Talk to your GP or other primary health care provider
- Mental Health Line: **1800 011 511**
- Visit: <https://www.health.nsw.gov.au/mentalhealth/Pages/mental-health-line.aspx>

Emotional Resilience

Seeing and handling dead wildlife can be confronting and can take a toll over time.

Critical incident stress is a normal reaction of the body to an abnormal event. Be self-aware and alert for the signs of critical incident stress in your colleagues.

Physical signs of incident stress can include fatigue, headaches, chills, unusual thirst, chest pain, dizziness, elevated heart rate, fainting, twitching, profuse sweating, and difficulty breathing.

Cognitive and psychological signs of incident stress can include confusion, fear, grief, panic, poor concentration, poor decision making, increased or decreased situational awareness, agitation, depression, feeling overwhelmed, loss of emotional control, rash, gastrointestinal upset, and sleep disturbance.

Being alert to these signs may help to enact early interventions to build resilience. Being resilient does not mean you become hardened or immune to the distress of sick or injured animals.

Resilience is having the ability to recover quicker from getting knocked down by stressful situations and be less likely to be knocked down by them in the first place.

The ABCs of resilience are:

- Awareness - of yourself, your strengths, your stress signals and how you cope under stress
- Balance - of your life, through home vs work, rest vs exercise, communication vs concentration, work vs entertainment, holidays away from caring, and remind yourself what an immense job you do that helps maintain our wildlife populations

- Connections – with friends, carers, family, organisations, mentors. Talk to them of your experiences and efforts to help, as well as the joys and sadness associated with your work.

Responding to a Suspected Case of H5 Bird Flu

How to Report Sick and Dead Wildlife

Any animal showing signs of disease consistent with H5 bird flu must be reported immediately to the Emergency Animal Disease Hotline on **1800 675 888** (24 hours a day, 7 days a week).



Alternatively, reports of sick or dead wild birds can be made online at the NSW DPIRD website <https://forms.bfs.dpi.nsw.gov.au/forms/23970>. Click on “How do I report sick or dead wild birds”.

When reporting, include the following information (if known):

- Location (GPS co-ordinates)
- Species affected, species present. Take photographs to assist with species identification.
- Number sick, dead, healthy
- Condition of the carcasses (how rotten)
- Clinical signs
- When did this start- sudden death or prolonged illness
- Any recent changes in environment e.g. weather, use of poisons (pesticides, sprays etc.), change in food or water supplies
- Proximity to other animals (e.g. livestock and pets) – are any sick?

H5 avian influenza viruses are listed as Prohibited Matter and everyone in NSW has a legal duty to notify any suspicion or a notifiable pest, disease or biosecurity event (Biosecurity Act 2015, Section 2, Sections 30 and 38, and Biosecurity Regulation 2019, clause 7). This notification is as simple as ringing the Emergency Animal Disease Hotline – 1800 675 888.

As soon as you ring the Hotline, you will be provided with guidance and clear instructions on next steps.

It is always better to ring the Hotline to make the report as soon possible, even when you aren't certain.

Preparing to Collect Samples to Test for H5 Bird Flu

DPIRD Animal Biosecurity may contact you regarding collecting samples for H5 bird flu. Only collect samples if directed to do so.

Being prepared to collect samples

Typical sample collection kits contain:

- PPE
- Swabs and transport medium
- Disinfection supplies

Please have these kits accessible in your field office and use them when appropriate. Ensure kits are restocked after use.

Samples will need to be kept cold prior to transport, so ensure that there is a suitable fridge and freezer where samples can be stored. An ice brick will be required for sampling and transport, so ensure that some are frozen.

Swabs and transport medium

The liquid transport medium should be **stored frozen** (in a standard freezer) prior to use. The medium can be re-frozen after sample collection if there is likely to be a delay while transport to the lab is organised. Ideally, the medium should be transported in a small esky with an ice brick until it can be frozen.

Sample collection swabs and transport medium (Phosphate Buffered Gelatine Saline - PBGS – viral transport medium) can be ordered from the NSW DPIRD website: <https://www.dpi.nsw.gov.au/about-us/services/laboratory-services/kits-and-media/order-media>. Please make sure to ask for swabs in addition to the medium in the comment box.

Before leaving to collect samples

Key areas to consider before responding to a suspect case:

Logistics & communication

- Ensure you are clear on what you have been asked to do
- Be authorised to enter the site
- Discuss the visit with the site owner/manager
- Have access to relevant procedures, risk assessments, and chemical safety data sheets needed

What to pack (See sampling equipment checklist in Appendix A)

- PPE kit
- Decontamination kit
- Sampling supplies
- Recording and packaging materials

Attending the site

Situational Awareness & Principles of Biosecurity

Movement of animals, plants, people, vehicles, and equipment can act as vectors for many endemic and exotic biosecurity threats.

Minimising these risks is a shared responsibility for all of us.

Clothing, boots, tyre treads and equipment can become contaminated with disease agents or weed seeds, while many insect pests are known to hitch rides in the undercarriages of vehicles or within containers. When people, vehicles and equipment move from property to property, those contaminants can be carried with them, making biosecurity an important barrier for preventing big problems from spreading.

Many of these risks can be handled by the simplest of biosecurity measures – the ‘come clean, go clean’ philosophy.

Setting up clean and dirty zones

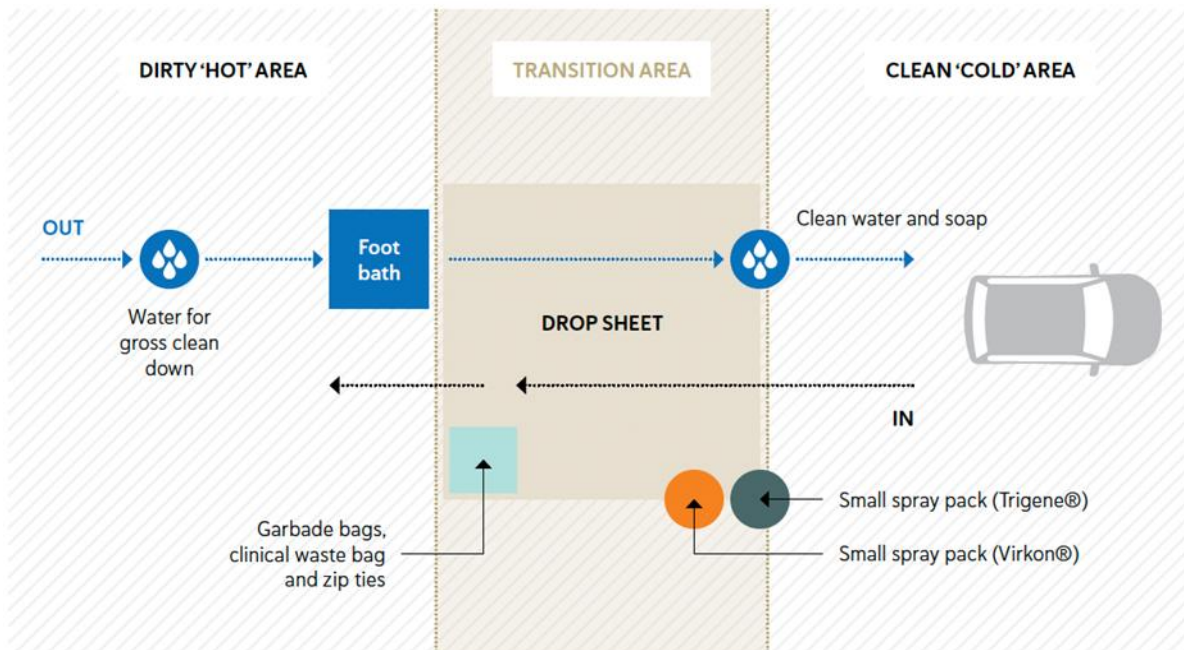


Figure 1 is reproduced with permission from Guidelines for veterinarians handling potential Hendra virus infection in horses Version 4 (2010) published by Biosecurity Queensland www.dpi.qld.gov.au/4790_2900.htm.

1. Identify the dirty area (where the suspected case is located) and the clean area outside this. Select an entry/exit point between the clean and dirty areas. Designate a small transition area at the entry/exit point where actions will be taken to move back and forth between the clean and dirty areas (Figure 1, above).
2. In the clean area lay out all PPE and equipment to be taken with you into the dirty zone. Ensure you have everything you need including overalls, boots, eye protection, mask or respirator, two pairs of gloves, sampling equipment, 2 plastic bags to put samples in, disinfectant wipe, bucket, soap or detergent and scrubbing brush for gross decontamination. If no water is available in the dirty area you will need to fill the bucket with water now.
3. Set up the transition zone ready for decontamination when you move from the dirty zone back into the clean zone:
 - a. Lay out a tarp as a ground sheet if you have one.
 - b. On the dirty side place a footbath full of disinfectant, a bucket with soap and water, disinfectant wipes or spray bottle, a scrubbing brush and 2 x large plastic bags with ties for waste.
 - c. On the clean side place a bucket with soap and water, disinfectant wipes or spray bottle and 2 x large plastic bags with ties for contaminated PPE.
4. Put on PPE as described below (and as outlined in Appendix B). Ensure to fit check your mask.
5. Pick up sampling equipment, bucket, soap or detergent and scrubbing brush, disinfectant wipes or spray or wipes and enter the dirty area.

6. Undertake sampling as per sample collection protocol below.
7. Decontaminate the primary sample containers by wiping or spraying with disinfectant after collection and place in a plastic bag and seal. Repeat this step so that the sample is double-bagged. This is important to protect the sample during decontamination into the clean area as disinfectants may leach into the sample and destroy it.
8. Remove any gross contamination from you and your equipment while in the dirty area using the brush, soap or detergent and water you have brought with you. Clean the treads on your boots.
9. Leave the bucket, soap or detergent and scrubbing brush in the dirty area if they will be needed again or otherwise take them with you and return to the dirty side of the transition area.
10. Place waste in a plastic bag and seal. Decontaminate the outside by dipping in, wiping or spraying with disinfectant. Place it in a second plastic bag, seal and decontaminate the outside. Place the double-bagged waste in the clean area.
11. Decontaminate you and your equipment:
 - a. Decontaminate boots by scrubbing in a footbath of disinfectant.
 - b. Wipe or spray disinfectant on outer gloves or dip into bucket of disinfectant.
 - c. Decontaminate samples and other equipment to the clean side by dipping them in or wiping or spraying with disinfectant.
12. Move to the clean side of the transition area and remove PPE as described below, leaving the inner pair of gloves on.
 - a. Put your removed PPE in a rubbish or contaminated waste bag.
 - b. Remove inner pair of gloves and put in contaminated waste bag. Tie off bag.
 - c. Disinfect bag by wiping, spraying or dipping in disinfectant then put in a second bag and repeat disinfection prior to disposal. Place in clean area for disposal.
 - d. Wash hands and dry.
 - e. Before leaving the property talk to the owner or manager on biosecurity procedures for use on the property. Ensure they know what PPE they will require for handling affected animals and where to get this PPE from.
 - f. Notify the relevant authorities and dispatch the samples.
 - g. If accidental exposure to blood or body fluid or sharps injury occurs, wash the affected area of skin thoroughly with soap and water and/or irrigate mucous membranes with water or saline. If the suspected disease is zoonotic, seek prompt medical advice.
 - h. See Appendix C for guidance on the cleaning and disinfection of vehicles, machinery and equipment.

Cleaning and Disinfection

Ensure that organic matter has been thoroughly cleaned from equipment prior to disinfection using a detergent, water and a scrubbing tool. Even when disinfectants contain a cleaning agent, the disinfectant will not penetrate organic matter to decontaminate the item.

A process of cleaning, rinsing, drying and inspection should precede disinfection.

Disinfection should be followed by inspection and drying.

Be aware of the potential toxicity of cleaning and disinfecting agents. Select a disinfectant that is safe for humans and the environment, effective, stable, and minimally corrosive. Dispose of disinfectants in an appropriate manner, consistent with your local council guidelines. Use household chemical cleanout programs offered by local councils or a commercial service to dispose of larger quantities or more hazardous disinfectants.

The H5 bird flu virus is quite susceptible to detergents, soaps and a range of disinfectants. If you are purchasing a disinfectant from a store, look at the label for evidence that the agent kills viruses, or for the term “Hospital Grade”.

Consider using surface wipes rather than spray bottles whenever possible to reduce exposure to aerosolised chemicals that may pose a health and safety risk. Biodegradable disinfecting wipes are commercially available.

Disinfectants active against avian influenza viruses include:

- 1% Virkon S™ (10-30 minutes)
- 70-90% ethanol (10 – 20 minutes contact time)
- 60-90% isopropyl alcohol
- 3% hydrogen peroxide (30 minute contact time)
- Sodium hypochlorite (domestic bleach) 40 ml/L to make a 0.5% solution, contact time 15-30 minutes
- Quaternary ammonium compounds such as F10 or Safe4™.
 - Some formulations of F10 contain a cleaning agent and others are purely a disinfectant to be used on previously clean items.
 - F10 disinfectant applied at 1:500 in water (2mL of concentrate per 1 litre of water) for a minimum of 10-30 minutes should be effective against influenza viruses
 - Safe4™ Disinfectant Cleaner – includes a detergent, surfactant and disinfectant when made up to manufacturer’s directions at a 1:50 dilution rate for 30 minute contact period.

The AUSVET PLAN Operation Manual on Decontamination provides additional details on appropriate cleaning and disinfection methods and products (table 6.1). https://animalhealthaustralia.com.au/wp-content/uploads/dlm_uploads/2026/06/AUSVETPLAN-Operational-Manual-Decontamination-v5.2.pdf

Sample collection protocol

Swabbing Technique

Testing of wildlife for avian influenza viruses should be conducted under the direction of a District Veterinarian, the Emergency Animal Disease Hotline or other NSW DPIRD personnel.

Please use swabs and PBGS transport medium provided by NSW DPIRD. If these are not available, paediatric or regular cotton tipped sterile swabs with a wood or plastic shaft can be used. If PBGS is not available, swabs can be placed into a vial with 2 mL of sterile saline.

Two swabs are required for H5 bird flu testing. Take the first swab by moving the swab along the roof of mouth and down the back of throat to collect a tracheal or oropharyngeal swab. Blowhole and/or tracheal swabs can be taken from cetaceans. Collect the second swab by inserting the swab into the cloaca (vent) or rectum. Place each swab in a separate, labelled, vial containing the orange (PBGS) transport medium.

If a veterinarian or person experienced with necropsies is present, a brain swab in transport medium is also recommended, especially in cetaceans and other mammals with neurological signs.

The vials with medium can be challenging to write on. It is easiest to label the vials while the medium is still frozen, as the labels get soft with condensation. Use pencil as many disinfectants contain solvents that will blur permanent ink.

1. **Wear appropriate PPE when handling birds and mammals and when opening sample vials.**
2. Unwrap a swab from the stem-end of the packaging and be careful not to touch the swab tip.
3. Gently collect an **oropharyngeal swab (Figure 1)** by extending the animal's head and neck, then rolling the swab around the roof of the mouth, the back of the throat, and the cartilaginous glottis at the base of the tongue.
4. Open the vial and place the swab tip in the transport media approximately $\frac{3}{4}$ of the way towards the bottom of the cryovial.
5. Cut or snap the stem of the swab so that the swab remains in the vial and the cap can be screwed on tightly (see Figure 3 below).
6. Label the tube with a pencil (alcohol in some disinfectants will remove ink). Include the sample ID and type of sample (cloacal vs oral), making sure that the ID on the tube can be cross referenced to the datasheet where additional information about the sample exists (see Figure 4 below).
7. Wipe scissors with 70% alcohol if they were used to cut the swab stem.
8. Record sample tube number on data sheet along with ID number, date, species, type of sample (cloacal vs oral), age, sex, location (GPS coordinates preferred), band number, comments, or other information (Figure 4).
9. Repeat steps 1, 2.
10. Collect a **cloacal or rectal swab** by inserting the entire tip of the swab into the cloaca (vent/rectum). Use gentle pressure and in a circular motion, swab the inside of the cloaca two to four times (see Figure 2 below). Repeat steps 4-8.
11. Wipe, dip or spray the collection containers with F10, or similar disinfectant effective against influenza, and allow it to air dry before placing it in two to three layers of zip-lock bag for transport. Place some absorbent material such as paper towel in the first zip-lock bag to absorb any liquid if the containers leak or break.

Oro-pharyngeal Swab



Tracheal Swab



Cloacal Swab



Cutting the Swab



SWAB COLLECTION FROM BIRDS

If directed to collect the carcass for further testing (e.g. testing for toxins), double bag the animal carcass, if small enough to do so, and retain frozen pending avian influenza exclusion test results.

Collecting Dead Animals for Post Mortem Examination

- Wear PPE.
- Invert the plastic bag around the animal remains and tie the bag closed.
- Bag and label each animal individually. Use masking tape to label each bag with the species (if known), date, location, and any animal identification (ear tag, microchip number), and whether the animal died or was euthanased.
- Double bag the group of remains.
- Collect the freshest remains possible.
- Collect as many fresh carcasses as possible. Aim for up to 10 small animals, or 5-10 medium to large animals. Prioritise fresh remains and a mixture of animals that have died and those that have been euthanased.

Record Keeping

To enable further investigation into potential wildlife diseases it is important to record details about the place, time, and location the animal was found. It is essential that this information is included in a Specimen Advice Form to accompany the samples to the laboratory. A sample Specimen Advice Form is included as Appendix D, along with a list of information that should be included in the Additional Information Section. A Morbidity and Mortality Log may be useful to track animals that are and are not sampled (Appendix E).

Sample transport and shipping

If transport to the laboratory will take place within 24-48 hours, store refrigerated and transport the samples on ice blocks. If samples cannot be shipped to an appropriate laboratory within 2 days of collection, they should be stored in a -20°C freezer, or colder if possible, prior to shipping on ice blocks. Always keep samples out of devices that chill human or animal foods. If need be, the samples can remain bagged, in an esky on ice, pending transport.

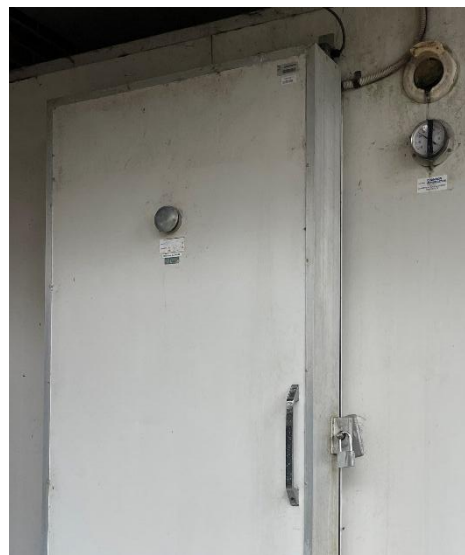
Sample Shipping

- The EAD Hotline Staff and the Registry can help you direct the samples to the appropriate laboratory. It is a dynamic situation, but typically, the swabs in PBGS media are directed to EMAI and carcasses may be directed to the Registry after receipt of negative results. Ideally, the samples should be sent to the lab as soon as possible, and ensure the receiving laboratory is aware that samples are on the way. In some cases, it may be better to freeze samples and carcasses over a weekend prior to shipment the following week.
- Place the labelled samples/remains that have been double wrapped in tightly sealed plastic bags in an esky containing ice packs. Frozen water in recycled plastic drink bottles with well-fitting lids, or gloves filled and knotted like a balloon, are excellent, cheap, makeshift icepacks for transport. Sample shipment in a hard-sided esky is preferred. Foam eskies should be shipped inside a cardboard box, when possible, to avoid crushing.
- Absorbent material (e.g. paper towel) should be in the bag with the samples.
- Keep the samples cool and out of the sun.
- Keep the Specimen Advice Form somewhere dry, on the outside of the esky in an envelope labelled “Attention Elizabeth McArthur Agricultural Institute (EMAI)” or “The Australian Registry of Wildlife Health” as appropriate.
- An exemplar of a completed EMAI Metrostate Courier Label and EMAI Address Label are attached as Appendix F
- If samples are directed to the Registry, a courier shipping label is attached as Appendix G
- A Suspect Avian Influenza warning should be placed inside the package and on the specimen advice form. This will ensure specific biosecurity precautions are undertaken at the laboratory.
- A Category B Shipping Label for Biological Substances must also be affixed to the outside of the package (Appendix H)
- Excellent resources on sample shipment are available on Department of Primary Industries website: <https://www.dpi.nsw.gov.au/about-us/services/laboratory-services/veterinary/veterinary-test-list/collecting-and-submitting-samples-for-veterinary-testing>

See Appendix I for an avian influenza sampling summary chart.



DOUBLE BAGGED SAMPLES WITH ABSORBENT MATERIAL PLACED IN THE INNER BAG (LEFT), AN ESKY CONTAINING AN ICE BRICK AND THE DOUBLE BAGGED SAMPLES IS PLACED INSIDE A CARDBOARD BOX (MIDDLE). LABELLING OF THE BOX FOR TRANSPORT. THE SPECIMEN ADVICE FORM IS PLACE IN AN ENVELOPE LABELLED "SUSPECT AVIAN INFLUENZA" POSITIONED BETWEEN THE ESKY AND THE CARDBOARD BOX, OR TAPED TO THE EXTERIOR OF THE OUTER PACKAGING (RIGHT).



LOCKED FREEZER (LEFT). SEALED ESKY WITH LABELS AND CHAIN OF CUSTODY FORM – READY FOR SHIPPING (RIGHT).

Carcass Disposal

Cultural Considerations

Management of infected carcasses to mitigate or eliminate human health risks and the spread of infection may need to be balanced with cultural considerations. Whenever possible, early relationship building with relevant Traditional Owners is recommended to protect culturally significant sites and species. Ongoing consultation can then include acknowledgements, access to land, and sensitive carcass management.

The disposal of bird carcasses should proceed in accordance with local council and EPA guidelines, and any NSW DPIPRD Control Orders that may require a permit for movement or disposal of animal carcasses. Refer to ongoing guidance from appropriate agencies as guidance is subject to change.

General Approach to Disposal

Where possible, leave carcasses to decompose naturally and prevent access by people, livestock or pets. Handling wildlife remains introduces the risk of viral spread and disturbance to other wildlife.

Signage is available from NSW DPIRD to notify the community of possible wildlife remains in the area.

https://www.dpiird.nsw.gov.au/data/assets/pdf_file/0010/1644229/Before-H5N1-is-confirmed-but-reports-of-sick-or-dead-wildlife.pdf

It is recommended to collect and dispose of carcasses where they are likely to be encountered by members of the public, such as areas used by children or pets, on a public right of way or an area frequented by the public, or in areas where wild birds regularly feed, breed or roost.

The collection and disposal of wild bird carcasses is the responsibility of each respective landholder and/or land manager. For example, when removal is necessary, the local council is responsible for carcass removal on council land, NPWS is responsible for carcass removal in National Parks. Members of the public are responsible for disposal of carcasses on their own properties if they want them removed.

Persons who may be collecting carcasses should understand the human health risks. While this virus rarely spreads to people, infection is possible following close contact with infected carcasses and the places they've contaminated.

Infected animals may become very sick and might appear dead. Such animals may pose a risk to personnel from bites or scratches as they react to approach or touch. Furthermore, it is important to ensure that animals are

dead before being disposed of for animal welfare reasons. Before approaching a carcass, look for signs of death, including absence of breathing, rigor mortis, dry eyes, and lack of response to stimulation - if you gently poke the animal, they should not react or show any signs of alertness. If in doubt, seek the assistance of a veterinarian.

Disposal Considerations and Steps:

- Undertake a risk assessment and refer to Standard Work Procedures/Job Safety Analyses
- Ensure that you are authorised to conduct the task and that your employer is aware
- Focus on safety and biosecurity. Conduct a risk assessment prior to undertaking carcass disposal.
- Contact the Emergency Animal Disease Hotline if you are not certain that an event involving more than 5 birds has been reported.
- Minimise the people involved
- Minimise disturbance of nearby wildlife
- Wear PPE (gloves, coveralls, gumboots, eye protection, P2 mask)
- Minimise disturbance of nearby wildlife
- Ensure that the animal is dead (not breathing). Ensure that you are authorised to conduct the task and that your employer is aware.
- Minimise disturbance of other animals nearby
- Do not touch the carcass with your bare hands
- Wear appropriate PPE
- Use tongs, shovels or other appropriate equipment to handle the carcass when possible
- Alternatively, lift the remains using an inverted bag. Once the carcass is grasped, the bag can be turned back on itself and tied off.
- The bag should then be placed in a second leak proof plastic bag, ensuring not to contaminate the outside of the outer bag
- Clean and disinfect any materials and equipment used
- Disinfect the outside of the outer bag
- Dispose of double-bagged remains in a “red topped” disposal bin.
- Alternatively bury a small number of carcasses (not bagged or wrapped in plastic) ensuring that the remains sit 60 cm deep, and that the burial site is not near waterways. The hole must be re-filled with soil and then covered in rocks or other materials that will deter predators.
- Double bagged remains can be taken to a local landfill that is licensed by EPA to manage animal waste.
- Bag and dispose of single use PPE in the same manner as the remains (do not bury).
- Wash and dry hands thoroughly with soap and water (preferable), or an alcohol based (>60% alcohol) sanitiser.
- Wash clothing, equipment and reusable PPE. Shower prior to contact with people, pets and other animals.
- If you feel unwell after handling sick or dead wildlife, contact your GP and let them know that you have been working with wildlife potentially infected with H5 bird flu. Notify your employer. Stay home. Consult the NSW Health website: <https://www.health.nsw.gov.au/Infectious/bird-flu/Pages/default.aspx>

Do:

- ✓ Keep yourself and those around you safe. Conduct a risk assessment or seek advice if uncertain.
- ✓ Limit access to the area where the carcasses are located, and keep domesticated animals, children and people away
- ✓ Wear personal protective equipment (PPE) – disposable waterproof gloves, disposable overalls or long-sleeved clothing, gumboots or other washable protective footwear, a face mask (must be P2/N95 grade) and eye protection.
- ✓ Wash or sanitise hands regularly, especially before and after wearing gloves. Wash clothing and clean and disinfect any footwear, reusable equipment or other items that may have been in contact with animal carcasses or contaminated environment.

Do Not:

- ✗ Touch without PPE any parts of dead wildlife or anything in contact with wildlife remains
- ✗ Transport wildlife or their remains in the passenger sections of vehicles, or take them into buildings
- ✗ Touch your face or put any item near your mouth until PPE is removed and hands have been thoroughly washed.
- ✗ Do not enter unsafe places, for example dark, rocky areas, beaches with rising tides. Do not lift heavy objects.
- ✗ Do not attempt to handle sick wildlife without experience and PPE.

Equipment Required to Bag Dead wildlife

Public land managers should consider having pre-packed kits containing PPE and equipment for collection and disposal that can be carried in vehicles or collected from work depots as required.

Useful resources that include biosecurity measures and donning and doffing PPE are available on the Registry Website (<https://arwh.org/resources/>) and an online training module is available on the NSW Emergency Management Capability Hub (<https://emtraining.nsw.gov.au/course/view/hpai-field-officer-training-76219>).

Items required for carcass disposal to gather before starting:

- Soap and water for hand washing (preferable) or appropriate alcohol-based hand sanitiser (80% ethanol or >60% isopropyl alcohol)
- Disposable, waterproof gloves (a plastic bag on each hand can be used as make-shift hand protection)
- Washable shoes (gumboots) and a pair of clean shoes
- Disposable overalls or long-sleeved clothing
- A disposable P2/N95 face mask
- Eye protection
- Thick leakproof plastic bags that are large enough to enclose the dead wildlife. A minimum of four bags: 2 for carcasses (unless burying), one for clothing and reusable PPE requiring further washing and disinfection, and one for single use PPE and other waste.
- A disposal tool such as dustpan, shovel or other garden tool to move the remains
- Strong tape, string, or something to seal the second bag shut
- Soap, water and a bucket to clean reusable PPE and tools
- Sray bottle with disinfectant such as bleach (5-10%) or a disinfectant that states that it kills viruses or “hospital-grade” on its label. See Appendix A.
- Large containers to place the bagged carcass for transport
- A long handled scrub brush and a tub to stand in to clean boots.
- A tarp to keep your equipment clean – preferably divided to a clean and dirty side.

Avoid driving vehicles onto contaminated sites (where the carcasses are lying). Where this is not possible, ensure that vehicles are decontaminated before leaving the site. Guidelines for the decontamination of vehicles can be found at <https://www.farmbiosecurity.com.au/essentialtoolkit/people-vehicles-equipment/>

If moving between sites, vehicles and equipment must be decontaminated on leaving one site and moving to the next site. PPE should be changed between sites.

If you did not use disposable overalls then, as soon as possible, wash the clothes that were worn during disposal (separately from any other clothing) in a washing machine, with laundry detergent, colour-safe bleach if possible, and on the hottest cycle appropriate for the material.

If shoes cannot be cleaned and disinfected or clothes washed immediately, seal them in a tied plastic bag until it can be done.

Disposal Options

There are several options for the disposal of the bagged carcasses and disposable PPE, and the choice of method is likely to be influenced by:

- the quantity of material
- access to council or private putrescible waste collection services ('red bin')
- availability of lidded skip bins, or other suitable containment vessels
- capacity to safely transport the material to an appropriate landfill facility

Unless specific alternate arrangements have been established by government authorities, small numbers of carcasses and any contaminated materials should be double-bagged (leakproof plastic bags), securely sealed and externally decontaminated with an appropriate disinfectant. Disposal of sealed bags should comply with clinical/hazardous waste protocols.

For large numbers of carcasses that cannot be practically managed through normal waste disposal options, seek advice from the NSW DPIRD.

- **Leave in situ** if they don't pose a risk to the public, or other animals. However, consideration should be given to the risk of further contamination or transmission from predators or scavengers.
- **Restrict public access** to facilitate collection. Contact DPIRD Animal Biosecurity. Use available signage templates https://www.dpiird.nsw.gov.au/_data/assets/pdf_file/0010/1644229/Before-H5N1-is-confirmed-but-reports-of-sick-or-dead-wildlife.pdf
- Double or triple bag small numbers of carcasses and place them in the **general waste bin ("red bin")** and disinfect the outside of the bag. Lids should be secured, inaccessible to children or scavenging animals. The bins should also be taken to a landfill that practices daily covering of waste.
- **Disposal direct to landfill** may be an option for larger volumes, but carcasses still need to be double bagged in leak-proof tub or sealed container, and should not be transported in the passenger section of the vehicle. The landfill site needs to cover the waste daily. It is strongly recommended to contact the facility prior to transporting carcasses to clarify procedures.

If you are using a commercial waste collection service, ensure that they are aware of the risks associated with the waste and confirm that the remains will be buried as soon as possible following disposal to the landfill site, but no later than at close of business of the same day.

- **On-site burial** could be suitable for small numbers of carcasses and only permitted with the permission of the landowner or manager. Do not bury the birds in plastic bags. Bury to a depth of 60 cm, handle the carcasses with gloves and include the gloves with the carcasses and then covered with the excavated soil. Place rocks or other materials over the filled-in hole to prevent animals from digging up the carcasses. Do not bury near any watercourses or in a place where it could contaminate local water supplies. Clean and disinfect any materials and equipment.

Undertake a site assessment for larger carcass numbers. In these instances, public land managers should seek the advice of the NSW EPA or Emergency Animal Disease hotline.

Records of burial locations and volume of carcasses buried should be kept.

Public land managers are advised to prepare in advance the resources necessary to complete each step of the burial process.

Composting of organic material occurs through heat and microbial activity. This method can be an effective form of decontaminating and managing animal carcasses. This process is complex and requires the construction of appropriate containment piles, protection from predators or vermin, and regular monitoring of temperature and conditions. This method should only be considered by landowners or managers who have skills and experience in composting animal remains and waste. Notify NSW DPIRD and the NSW EPA of your intention to use this process in a H5 bird flu response and obtain written approval.

Incineration of animal remains by a licensed commercial service provider can be an effective means of carcass disposal. Ensure that the service provider is aware of the materials being disposed of and the risks associated with transportation and possible handling of the remains.

Record Keeping

Records should be kept by the land manager of any carcass management activities conducted in an H5 bird flu response. Recorded details should include:

- Time, date and place
- Species types and numbers of each species
- Condition (state of preservation) of the remains – these details contribute to an understanding of timelines of viral spread, the likelihood of viral presence (reduced in older remains) and decision making regarding other potential mitigation actions.
- Other observations – such as the presence of any other sick wildlife nearby and their clinical signs, again to inform decision making on whether additional action is required.
- Disposal methods
- If removed, location of disposal (e.g. landfill) of the remains and disposable PPE.

Online Resources for Carcass Disposal

Full disposal guidelines are available on the NSW DPIRD website with a risk assessment tool. These guidelines are actively being updated:

Public Advice for carcass Disposal: https://www.dpiird.nsw.gov.au/_data/assets/pdf_file/0005/1588811/Disposal-of-bird-carcasses-from-public-and-private-land-Public-Version.pdf

Disposal Advice for Public Land Managers, including a risk assessment tool (Appendix 1): [Guidance-for-disposal-of-dead-wildlife-following-the-detection-of-high-pathogenicity-avian-influenza-H5N1-12-2025.pdf](https://www.dpiird.nsw.gov.au/_data/assets/pdf_file/0004/1588828/Disposal-of-bird-carcasses-from-public-and-private-land-Local-Government.pdf)

Public and Private Land Managers:

https://www.dpiird.nsw.gov.au/_data/assets/pdf_file/0004/1588828/Disposal-of-bird-carcasses-from-public-and-private-land-Local-Government.pdf

Disposal guidelines will be aligned with nationally developed guidelines.

H5 bird flu – public guidance for carcass disposal:

<https://www.agriculture.gov.au/sites/default/files/documents/public-guidance-disposal-dead-wildlife.pdf>

National principles for wildlife carcass management, with a management assessment framework (Appendix A)

<https://www.agriculture.gov.au/sites/default/files/documents/national-principles-wildlife-carcass-management.pdf>

Also refer to guidance from NSW Health: <https://www.health.nsw.gov.au/Infectious/factsheets/Pages/be-careful-around-wildlife.aspx>

APPENDIX A: Sample Collection Equipment List

PPE kit

Latex, vinyl or nitrile gloves (wear nitrile gloves if poisoning is suspected)

- ☐ N95 or P2 mask
- ☐ Protective eyewear
- ☐ Water impermeable coveralls
- ☐ Gumboots (preferred) or boot covers

Decontamination kit

- ☐ Tarp
- ☐ Buckets
- ☐ Scrubbing brushes
- ☐ Paper towel
- ☐ Footbath pan
- ☐ Hand soap
- ☐ Detergent
- ☐ Alcohol-based hand gel
- ☐ Rubbish bags
- ☐ Disinfectant in a spray bottle or disinfecting wipes

Sampling equipment

- ☐ 2 x 2.5 ml screw-top vials containing swab transport media (Phosphate Buffered Glucose Saline - PBGS)
- ☐ Sterile swabs
- ☐ 2 X zip-lock bags for the samples
- ☐ Esky and ice bricks
- ☐ Larger container to collect water, soil, poisoned bait (EPA officers only)

Recording and packaging materials

- ☐ Masking tape
- ☐ Scissors
- ☐ Permanent marker/pencil/sample labels
- ☐ Courier labels, Specimen Advice Form
- ☐ Camera/phone

Consider: hat, sunscreen, insect repellent, first aid kit, shade-tent, drinking water.

DO NOT use commercially prepared swabs with plastic sleeves that contain transport medium. In an emergency if PBGS is not available, swabs should be placed in 2 mL of sterile saline or stored dry in a sterile container (e.g. a cryovial, yellow-top vial or zip-lock bag).

Appendix B: PPE Donning and Doffing

The recommended PPE includes:

- disposable gloves
- overalls or disposable impermeable coveralls
- disposable shoes or shoe covers or washable boots (i.e. gumboots)
- respiratory protection (P2/N95 respirator mask) and
- eye protection (goggles or face shield).

Donning

Put on PPE in the following order (consider using a buddy system and/or a checklist):

1. Perform hand hygiene. Check for any cuts and apply waterproof dressings.
2. Put on coveralls.
3. Put on boots or shoe covers. Coveralls should be pulled down over boots leaving as little of the boot exposed as possible.
4. Put on apron (if used).
5. Put on respirator, which should be at minimum, an N95/P2 face mask. Do a fit check to ensure a proper seal has been established see Figure 1.
6. Put on eye protection (goggles/face shield).
7. Put on single-use disposable gloves.
8. Put on reusable, heavy-duty gloves.

Doffing

1. Clean and disinfect boots.
2. Remove outer gloves.
3. Decontaminate inner gloves (using disinfectant wipe or equivalent).[#]
4. Decontaminate and disinfect surfaces, samples, and equipment.
5. Seal the disinfected samples into a small plastic bag, spray or wipe disinfectant on the outside of that plastic bag.
6. Remove apron (if used).
7. Remove boots.^{**}
8. Remove coveralls.^{**}
9. Decontaminate inner gloves (using disinfectant wipe or equivalent).[#]
10. Remove eye protections (face shield, goggles).
11. Decontaminate inner gloves (using disinfectant wipe or equivalent).[#]
12. Remove respirator.
13. Remove inner gloves.
14. Perform hand hygiene.[^]
15. Shower, wash hair, and change into clean clothing when possible.

^{**}Sequence of removal may be dependent on the type of coverall and boots used. It may be necessary to step out of coveralls and boots in one motion within the same process.

[#] If inner gloves become visibly soiled, they should be cleaned with an approved disinfectant wipe. Additionally, perform hand hygiene by disinfecting the inner gloves with ABHR.

[^]If hands are visibly soiled, wash hands with soap and water. Where hands are not visibly soiled, an approved alcohol-based hand rub (ABHR) with 60-80% ethanol concentration may be used, although hand washing with soap is preferred.

In circumstances where all these PPE items are not available or appropriate, NSW Health advises that at a minimum:

- Disposable gloves or gloves that can be disinfected
- Respirator (P2/N95)
- Boots that can be cleaned
- No touch technique (e.g. use of equipment to pick up and dispose of carcasses)
- Proper cleaning and disinfection of equipment and materials

Perform hand hygiene, either with alcohol-based hand rub or by washing hands with soap and water if visibly soiled (soap preferred). This should be done regularly – but especially before and after contact with animals/ carcasses and their environments. Efforts should be made to avoid touching the nose, eyes or mouth with the hands during work/collecting and disposing of carcasses. Showering and changing into clean clothes after work, if feasible, is also recommended.

Principles of fit check for P2/N95 respirator



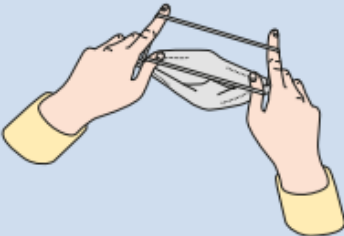
Step 1

Perform hand hygiene.



Step 2

Select the P2/N95 mask that fits you well. Only touch the outer edges. Separate the edges and straps.



Step 3

Put respirator on face as per manufacturer's instructions.



Step 4

Place top strap above ears at top of head. Place bottom strap below ears.



Step 5

Place fingertips of both hands at the top of the nosepiece. Conform the nosepiece, using the fingers of each hand, to the shape of your nose. Pinching the nosepiece using only one hand may result in less effective respirator performance.



Step 6

Once a good facial fit has been achieved, proceed to Steps 6a. and 6b.

Step 6a. Positive seal check

- Exhale sharply. The respirator should fill up with air. Check for air leakage around the edges.
- If leakage, adjust the position and/or tension straps.

Step 6b. Negative seal check

- Inhale deeply. The respirator should draw in and slightly collapse towards the face.
- Leakage will result in loss of negative pressure in the respirator due to air entering through gaps in the seal.
- If leakage, adjust the position and/or straps and repeat seal check.

Continue to fit PPE in the recommended order.



There is slight variation in fit check recommendations for different brands of respirator. Always check the manufacturer's instructions for use

Adapted from WHO Western Pacific Region, Sunshine Coast Hospital and Health Service and NSW Government Clinical Excellence Commission

Current as of June 2022



POSTER AVAILABLE FROM QUEENSLAND HEALTH VIA [HTTPS://WWW.HEALTH.QLD.GOV.AU/___DATA/ASSETS/PDF_FILE/0035/974294/P2-N95-FIT-CHECK.PDF](https://www.health.qld.gov.au/__DATA/ASSETS/PDF_FILE/0035/974294/P2-N95-FIT-CHECK.PDF)

Come Clean. Go Clean.

Dirty vehicles, machinery and equipment carry diseases, pests and weeds.



A GUIDE TO EFFECTIVE WASH DOWN OF VEHICLES AND MACHINERY

1

WASH DOWN

- Use compressed air or high pressure water to remove caked on debris and mud
- Get into crevices where mud or debris might be trapped
- Clean out the inside of the car, particularly foot pedals and mats regularly in contact with dirty footwear

WHERE

- ✓ On a clean wash down pad with a hard surface
- ✓ Located away from production areas
- ✓ Where wash off contaminants can be trapped



2

CLEAN

- Use a sponge or spray to cover all surfaces with an agricultural detergent
- Leave the detergent to work as per label instructions before rinsing, making sure to remove any remaining soil or plant material

REMEMBER

To wash all equipment, floor mats, tools and footwear kept in the vehicle as well



3

DISINFECT

- After removing physical dirt, consider using an agricultural disinfectant to kill any remaining pests or pathogens
- Refer to the APVMA for registered disinfectant and follow label instructions
- An additional rinse step may be necessary following disinfection

NOTE

Make sure vehicles and equipment are clean and free of mud and debris before applying a disinfectant



4

RINSE

- Rinse off vehicle, machine and/or other washed equipment
- Use high pressure water to remove mud and debris from the wash down area so it is clean for the next person

CHECK

Equipment that has not been cleaned on farm should be thoroughly cleaned and disinfected before being used elsewhere



Images courtesy of Sharna Holman, QD&F, unless otherwise stated

www.dpi.nsw.gov.au

POSTER AVAILABLE FROM NSW DPIRD VIA [HTTPS://WWW.DPI.NSW.GOV.AU/___DATA/ASSETS/PDF_FILE/0008/1454561/INT22-183269-BIOSECURITY-COME-CLEAN-GO-CLEAN-POSTER-A3-V2SCREEN.PDF](https://www.dpi.nsw.gov.au/__DATA/ASSETS/PDF_FILE/0008/1454561/INT22-183269-BIOSECURITY-COME-CLEAN-GO-CLEAN-POSTER-A3-V2SCREEN.PDF)

APPENDIX E: Morbidity and Mortality Log

Accession Number	Species	Location (suburb, property name, GPS locators)	Age	Sex	ID (Band/Tag #)	Clinical signs or postmortem findings	Live/Treated and Died/Found Dead / Euthanased	Date Death	Date Collected	Treatment Provided	Disposition (released, necropsy, frozen, etc)	Samples collected

APPENDIX F: EMAI Metrostate Label

The label on the left below is a sticker that is obtained from EMAI that charges the courier costs back to NSW DPIRD. This label is required to be affixed to the outside of the box prior to sending.

Ensure that the sender details are correct and that you have signed and dated the sticker.

The label on the right is an address label to tape to the outside of the box to ensure that the courier finds their way to EMAI.

METROSTATE SECURITY COURIER P./L.	
RECEIVER N.S.W. ONLY	E.M.A.I.
MENANGLE	
SENDER	Australian Registry of Wildlife Health
Taronga Zoo Bradleys Head Rd Mosman, NSW	
637733	
NO HAZARDOUS OR DANGEROUS GOODS TO BE SENT. NO INSURANCE ON GOODS SENT.	
We are not common carriers	
SIGNED	K. Roe
DATE	21/10/24

NSW EMAI ADDRESS LABEL:

TO: Regional Veterinary Laboratory

Elizabeth Macarthur Agricultural Institute

Woodbridge Road

Menangle NSW 2568

Telephone: 02-4640-6327

FROM:

APPENDIX G: Courier Shipping Label for the Australian Registry of Wildlife Health

Send carcasses for further testing here.

Australian Registry of Wildlife Health

Taronga Conservation Society Australia

End of Prince Albert Street

(opposite 9 Whiting Beach Road)

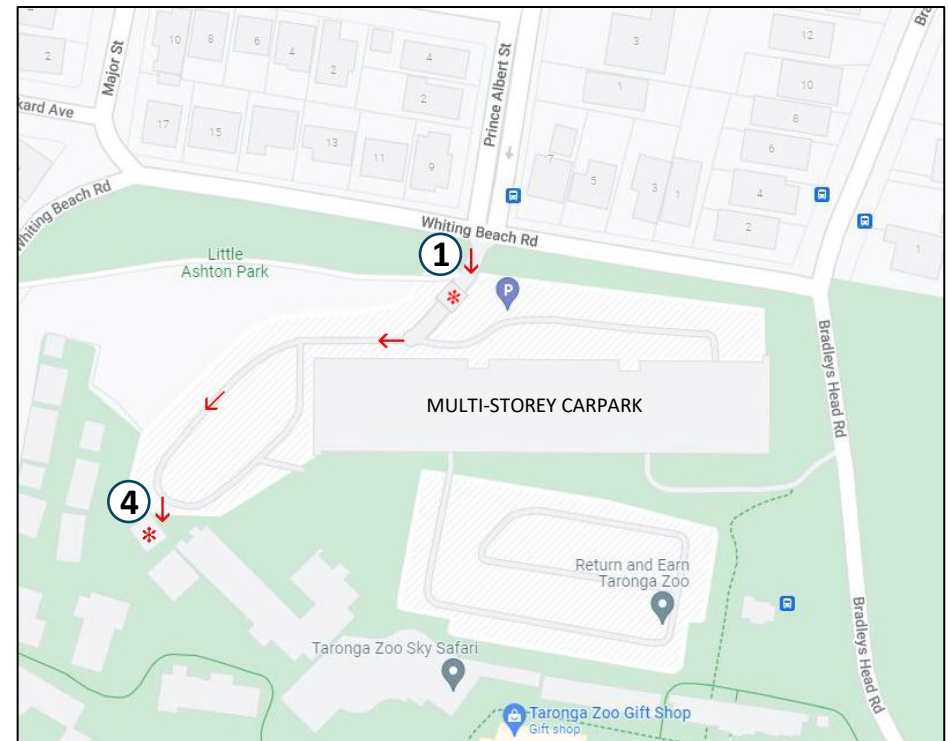
Mosman NSW 2088

Phone 0481 468 505

1. Approach Taronga Zoo security boom gate at the end of Prince Albert Street
2. Press button on yellow intercom (*)
3. Enter and proceed right along road and park vehicle near security portal
4. Deliver package to security portal
5. Taronga staff to call 0481 468 505 on arrival



Entrance at the end of Prince Albert Street

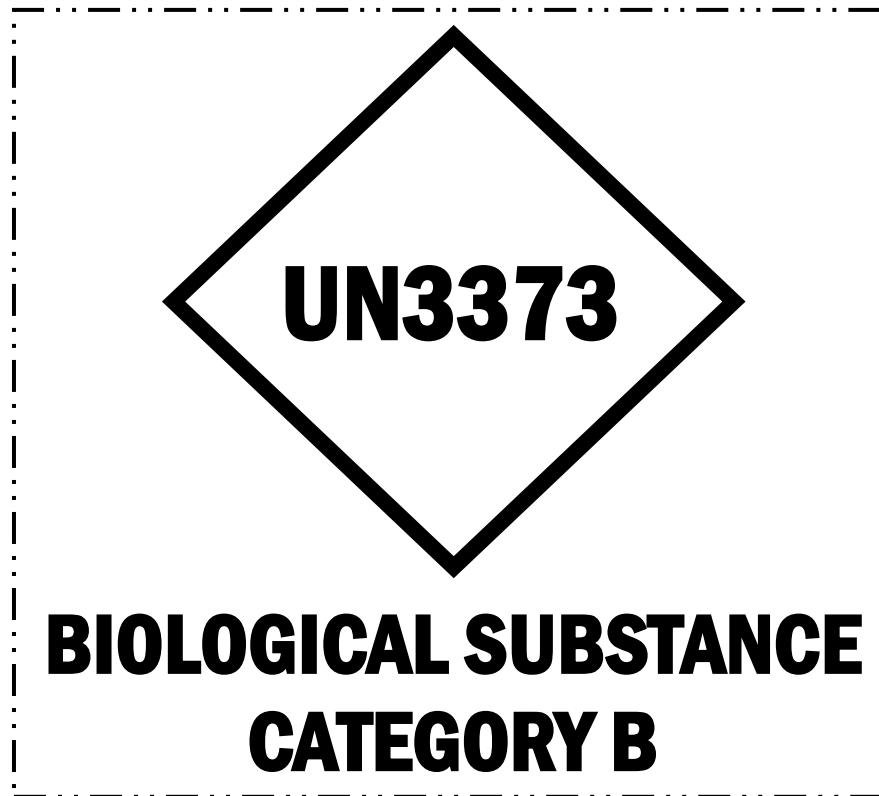


APPENDIX H: Category B: Shipping Label for Biological Substances

The label below should print with the proper dimension of an Infectious Substance label (minimum dimensions: 50 mm on a side, and the proper shipping name, “Biological Substance, Category B” must be in letters at least 6 mm high).

Affix the label to the package by covering with clear plastic tape, so that moisture will not cause printer ink to run.

Ensure all samples are double bagged and shipped in a hard-sided container (a hard esky or a foam esky inside a cardboard box).



APPENDIX I: Avian Influenza Sampling Summary Chart



Don PPE – wash hands, coveralls, gumboots, coveralls, P2 mask, eye protection, gloves.



Open sterile swab without cotton touching tip.



Collect oropharyngeal swab. Gently extend the animal's head and neck. Roll the swab around the roof of the mouth, the back of the throat, and the base of the tongue.



Place swab in vial and cut or snap the tip into the liquid. Close vial. Wipe scissors (if used) with 70% alcohol.



Label tube with the species, date, animal ID and type of swab (oropharyngeal vs cloacal).

Animal ID	Species	Date sample collected	Location	Clinical signs	Samples collected
Bird 1	Galah	01/01/24	Lat. Long.	Found dead	1 x oropharyngeal swab 1 x cloacal swab
Bird 2	Cockatoo	02/01/24	Lat. Long.	Uncoordinated, died within 1 day	1 x oropharyngeal swab 1 x cloacal swab Carcass stored for further testing.

Record sample tube number on specimen advice form or data sheet along with animal ID, species, date, type of sample (cloacal vs oral), location and any other information.



Collect cloacal swab. Use gentle pressure to insert the entire swab into the cloaca and rotate in a circular motion two to four times. Repeat steps 4-6, using separate vial.



Spray or wipe the collection containers with disinfectant and allow them to air dry.



Place vials in a bag with some dry paper towel. Spray or wipe the outside of bag with disinfectant. Place inside a second bag and spray or wipe the outside with disinfectant.