Department of Primary Industries and Regional Development
GOVERNMENT OF WESTERN AUSTRALIA

Protect Grow Innovate

H5 avian influenza (H5 bird flu) in wildlife – frequently asked questions (FAQs)

Note: H5 avian influenza (H5 bird flu) has not been detected in Australia but is spreading quickly across the world.

What is avian influenza?

Avian influenza (AI) is an infectious viral disease caused by strains of influenza A virus. It mainly affects birds. Waterfowl such as ducks, swans and geese (Anseriformes) and gulls, terns and shorebirds (Charadiformes) are the natural reservoirs for avian influenza A viruses.

Avian influenza strains are classified as either low pathogenicity (LPAI) or high pathogenicity (HPAI), depending on how severely the strain affects poultry.

Avian influenza strains also have subtypes. The names of the subtypes reflect which surface glycoproteins (haemagglutinin [HA] and neuraminidase [NA]) are present (for example, H5N1).

HPAI strains cause severe outbreaks in poultry and H7 outbreaks have occurred in Australia. For details on the 2024 outbreaks in poultry, see Agriculture Victoria, NSW Department of Primary Industries and ACT Government webpages. In Australia, HPAI has never been detected in wild birds.

LPAI strains are common in wild birds in Australia, and affected birds are not usually sick.

When wild birds with LPAI have direct contact with poultry, their water, food, or environment, they can infect poultry with LPAI. While the poultry may show no disease or mild disease signs, this gives the LPAI strain the opportunity to mutate into an HPAI strain when the H5 or H7 subtypes are present.

The table below summarises the key differences between LPAI and HPAI.

LPAI	HPAI
H1–H16 subtypes	Only H5 or H7 subtypes
Common in wild birds (including in Australia)	Cause severe outbreaks in poultry
No disease or death in wild birds	Associated with disease and death in poultry and sometimes in wild birds Note: HPAI has never been detected in wild birds in Australia
Occasional mild disease in poultry	

Source: Table adapted from original graphic courtesy of Michelle Wille https://www.michellewille.com/

What strain of avian influenza is causing the global outbreak affecting wildlife, domestic birds and mammals?

Since 2020, a new strain of avian influenza called **HPAI H5N1 clade 2.3.4.4b** (known as H5 avian influenza or H5 bird flu) has been causing unprecedented outbreaks of disease in wild birds, wild mammals and some domesticated mammals across every continent except Australia.

In the rest of the world, the H5 avian influenza strain has:

- caused severe disease and high death rates in wild birds
- infected more than 500 bird species from more than 25 avian orders
- infected more than 60 species of mammals including seals, dairy cattle, cats, foxes, dogs, a pig
- infected some people who worked closely with infected animals or environments contaminated with bird droppings
- the ability to directly infect poultry with HPAI viruses and cause severe disease immediately (without needing to mutate).

To date, there have been no reported outbreaks of H5 avian influenza in wildlife or domesticated animals in Australia.

How could H5 avian influenza arrive in Australia?

With Australia now the only continent free of H5 avian influenza, the threat of the virus entering with migrating wild birds has increased.

Australia is closely monitoring avian influenza outbreaks overseas and carrying out wild bird surveillance to ensure we find H5 avian influenza early if it arrives. To date, no strains of HPAI virus have ever been detected in any wild birds in Australia.

For further information on wild bird surveillance see Wildlife Health Australia, Wild Bird Surveillance.

Does Australia have H5 avian influenza?

H5 avian influenza has not been detected in commercial poultry, backyard chickens or in wildlife in Australia.

There have been outbreaks of other HPAI strains in poultry and backyard chickens in Australia. These include:

- May 2024: HPAI H7N3 and HPAI H7N9 in Victoria
- June 2024: HPAI H7N8 New South Wales and the Australian Capital Territory.

These outbreaks were the result of Australian lineage LPAI strains ‘spilling over’ from wild birds into poultry farms, where the virus mutated to become HPAI. All previous outbreaks of HPAI in poultry in Australia have been linked to similar spillover events.
See Agriculture Victoria, NSW Department of Primary Industries and ACT Government webpages for the current avian influenza situation in these jurisdictions.

What are the signs of H5 avian influenza in wild birds and mammals?

The signs of avian influenza can vary between different species of birds. In wild birds signs can include:

- sudden death
- lack of coordination, tremors, swimming in circles
- twisted neck or other abnormal posture
- inability to stand or fly
- diarrhoea
- difficulty breathing, coughing or sneezing
- swelling around the head, neck or eyes
- cloudiness or change in colour of the eyes.

H5 avian influenza can also infect mammals. Infection is usually associated with the mammal eating an infected animal or having close contact with the contaminated environment the infected birds are associated with. Signs in mammals can include neurological (lack of coordination, circling) or respiratory signs (nasal or eye discharge, difficulty breathing) or sudden death.

It is important for people who regularly work with or have contact with wildlife to know the signs of avian influenza in wild birds and mammals and report them (see FAQ: What should I do if I see sick or wild birds).

What should I do if I see sick or dead wild birds?

Avoid – Sick and dead birds can carry diseases, including avian influenza, that can affect humans. It is recommended to avoid direct contact with birds that are sick or have died unexpectedly unless you use appropriate personal protective equipment (PPE) and the risk of leaving the birds/animals in place outweighs the risk of spreading infection by moving them.

See the Department of Health website for PPE recommendations.

Record – If you see sick or dead wild birds or wildlife, note the number of dead birds or animals, species, location, date and time.

Report – Reporting signs of avian influenza is important to enable early detection and to monitor the level and locations of H5 avian influenza if it arrives in Australia. Under the *Biosecurity and Agriculture Management Act 2007*, any strain of avian influenza is a reportable disease and anyone who suspects the disease is present must report it.

How to report signs of avian influenza in Western Australia	
What to report	**Who to call**

• More than 5 sick or dead wild birds
• Unusual disease signs or mass deaths in wildlife, including marine mammals
• More than 5 backyard poultry deaths
• Commercial poultry: signs consistent with avian influenza, particularly:
  ○ layers with respiratory or nervous signs, a drop in egg production, shell deformities or unexpected mortalities.
  ○ broilers with increased mortalities, unusual respiratory signs or nervous signs
	Emergency Animal Disease hotline:
	1800 675 888 (select WA option)

• Fewer than 5 sick or dead wild birds • Sick, orphaned or injured wildlife	**Wildcare Helpline:** 9474 9055

What is the risk of H5 avian influenza to humans from wild birds?

Avian influenza is considered a low risk to the public as it rarely affects humans unless there is direct and close contact with sick birds or other infected animals or contaminated environments. It is recommended to avoid direct contact with birds that are sick or have died unexpectedly unless you use appropriate personal protective equipment (PPE).

Anyone who has had contact with a wild bird or animal confirmed to have avian influenza should contact their local Public Health Unit for advice.

Contact details for public health units are available at:

https://www.health.wa.gov.au/articles/a_e/contact-details-for-public-health-units

What is appropriate personal protective equipment (PPE) for handling sick or dead wild birds?

Only people with appropriate training and PPE should handle sick or dead wild birds (and other wildlife). See the Department of Health website for PPE recommendations

Where there is a suspicion that wildlife are infected with avian influenza, people who are not up-to-date with human influenza vaccination or who are immunocompromised (e.g. pregnant or taking immunosuppressive medication) should avoid contact with these wildlife.

Can humans be vaccinated against avian influenza?

There is no vaccination currently available against avian influenza in people.

It is recommended that anyone working with wild birds or poultry has the seasonal influenza vaccine.

The human seasonal flu vaccination will not protect against avian influenza, but will minimise the risk of becoming infected with the human and avian influenza viruses at the same time, which could lead to the emergence of a new influenza strain.

For further information about seasonal flu vaccination for humans, visit:

- Australian immunisation handbook: recommendations for poultry industry workers
- National guidelines for avian influenza – protecting people who work with birds and wildlife

How does avian influenza spread between wildlife?

Low pathogenic avian influenza (LPAI) occurs in wild birds in Australia and causes only mild or no disease signs in wild birds. LPAI spreads among wild birds and to poultry by contact with infected birds, their saliva, nasal discharge and faeces (droppings), including contact with water, food, housing or equipment contaminated by the virus.

Wild birds infected with H5 avian influenza spread the virus in the same way as LPAI is spread – by contact with infected birds, their saliva, nasal discharge and faeces.

H5 avian influenza can also be spread by wildlife eating or having contact with an infected carcass.

People can also spread avian influenza to other animals if they move sick or dead birds or use equipment that is not cleaned effectively between handling birds.

How does avian influenza spread to poultry?

Avian influenza virus is shed in the saliva, nasal discharge and faeces of infected wild birds and can be spread to poultry by direct contact with infected wild birds or indirectly by water, feed, bedding, housing or equipment that has been contaminated by infected wild birds. This is called spillover of the virus.

Low pathogenic avian influenza (LPAI) (in particular H5 and H7) once introduced into a poultry farm may mutate into HPAI, leading to significant poultry deaths.

What can poultry and backyard chicken owners do to reduce the risk of an H5 avian influenza outbreak?

To prevent the spread of H5 avian influenza to poultry, all poultry and backyard chicken owners should prevent contact between wildlife and their poultry, their poultry's feed, water and housing environment. This means having secure enclosures that wildlife cannot access and ensuring feed and water cannot be contaminated by wild birds. As people, animal products and machinery can also spread avian influenza, poultry owners should develop a biosecurity plan to prevent this happening on their property.

See the DPIRD website for biosecurity practices to reduce the risk of avian influenza and further information on the Farm biosecurity website.

If a HPAI outbreak occurs, it is likely that DPIRD will issue housing orders for birds in affected areas. This will enable farmed or backyard birds including free range poultry to be kept in enclosures that prevent contact with wild birds during a specified period to reduce further spread of the outbreak.

How can veterinarians, wildlife managers and other animal carers reduce the risk of an H5 avian influenza outbreak?

As well as being aware of the signs of avian influenza and reporting any signs of the disease, anyone who may handle wild birds or wild mammals should take biosecurity measures to protect their health and prevent the potential spread of avian influenza.

Individual biosecurity measures should include:

- correct use and removal of personal protective equipment (PPE)
- correct disposal of PPE or appropriately cleaning and disinfecting PPE and equipment after handling each bird (where practical).

Further information can be found on the Wildlife Health Australia website at:

- National Wildlife Biosecurity Guidelines
- HPAI Risk Mitigation Toolbox for Wildlife Care Providers

Biosecurity plans should be in place for veterinary hospitals and wildlife facilities and should include:

- correct use and removal of personal protective equipment (PPE)
- protocols for handling, examining, treating and admitting potentially infected animals
- protocols for entering and exiting, as well as cleaning an isolation area
- protocols for the disposal of possibly infected animals

Further information can be found at:

- AVA Guidelines for Veterinary Personal Biosecurity & PPE
- HPAI Risk Mitigation Toolbox for Wildlife Care Providers

What is the role of a registered wildlife carer/rehabilitator during an H5 avian influenza outbreak?

As wildlife carers and rehabilitators may be the first to recognise the signs of an outbreak of H5 avian influenza in wildlife, they play important roles in detection and containment.

As a wildlife carer or rehabilitator, it is important to:

- Be aware of the signs of HPAI in wildlife.
- Use appropriate PPE when handling wildlife.
- Get vaccinated and encourage vaccination among staff with the yearly human influenza vaccine. This is important to minimise the risk of a person getting both the human seasonal influenza and avian influenza at the same time, which carries a risk of a new influenza strain emerging.
- Train staff on good biosecurity measures and how to implement them.
- Practice good biosecurity when responding to sick or injured wildlife
- Immediately report any suspected cases of HPAI to your private veterinarian, your local DPIRD veterinarian, or the Emergency Animal Disease Hotline 1800 675 888.
- Assist DPIRD and other government authorities by providing information or assistance as required.

Further information can be found on the Wildlife Health Australia website at:

- National Wildlife Biosecurity Guidelines
- HPAI Risk Mitigation Toolbox for Wildlife Care Providers

See also FAQ: How can veterinarians, wildlife managers and other animal carers reduce the risk of an H5 avian influenza outbreak?

Who will manage an H5 avian influenza outbreak in wildlife in Western Australia?

Under the *Emergency Management Act 2005*, the Department of Primary Industries and Regional Development (DPIRD) is the hazard management agency for animal disease emergencies in Western Australia.

However, prevention, preparedness, response and recovery activities for animal hazards are a whole of government responsibility. A working group with representation from the Department of Biodiversity, Conservation and Attractions, Department of Local Government Sport and Culture, Department of Water and Environmental Regulation and Department of Health has been set up to consider roles and responsibilities in preparing for and responding to H5 avian influenza in wildlife.

DPIRD is also working in collaboration with the Federal Department of Agriculture, Fisheries and Forestry as part of nationally coordinated efforts for preparedness and response to H5 avian influenza.

What will be the response if H5 avian influenza is detected in wild birds?

Limiting the movement or culling of wild birds would not be practical or appropriate in a H5 avian influenza outbreak.

The response will focus on strengthening biosecurity measures and enhancing disease surveillance.

Examples of strengthened biosecurity measures include access restrictions for important breeding colonies and nesting grounds of iconic species to minimise the risk of people contributing to the spread of avian influenza. Housing orders for captive birds and poultry (orders to keep birds inside away from wild birds) may also be issued to reduce the potential for further spread.

In cases where H5 avian influenza is detected in valuable or vulnerable species, risk assessment will guide the management strategies.

Can wild birds be vaccinated against H5 avian influenza?

Vaccines for avian influenza are not registered for general use in Australia.

A national approach to vaccination is being considered for captive wildlife in zoos and wildlife parks and on a risk-assessed, case-by-case basis in vulnerable wild bird populations. However, mass vaccination of wild birds would be unlikely. Effective vaccination requires two doses, which presents difficulties in wild birds, and the effectiveness of vaccines varies in different species and with different strains of virus. Ineffective vaccination may also contribute to the spread of the virus.

Can sick wild birds (and other wildlife) infected with H5 avian influenza be transported to receive supportive care?

Internationally, despite best efforts, there has been little success in treating infected birds. The risk of moving infected birds for treatment puts other birds and animals in the receiving facility at risk of being exposed to avian influenza, as well as presenting a risk to people.

It is recommended sick birds are not moved without first considering the risk to the wildlife facility or veterinary hospital that will be providing care, as well as the low likelihood the infected bird will recover.

During an H5 avian influenza outbreak, there will be further advice on the procedure to follow and approvals required before moving any sick or dead wild birds (and marine mammals).

Who is responsible for the disposal of dead wild birds during an outbreak?

During an outbreak, where dead wild birds do not pose a risk to human health, they may be left where they are to minimise the potential risk of spreading the disease further. The relevant landowners or government authority will manage safe disposal of dead birds on public land where they are considered to present a risk.

On private properties, subject to council local laws, owners will be able to dispose of dead birds by placing them in plastic bags in their red bin. Care should be taken to wear disposable gloves and to wash hands thoroughly after handling the dead bird.

What steps are being taken to protect rare and endangered wildlife from H5 avian influenza?

The National Avian Influenza Wild Bird (NAIWB) surveillance program continues to undertake targeted and passive surveillance to promote early detection of H5 avian influenza in wildlife across Australia. See Wildlife Health Australia, Wild Bird Surveillance.

Nationally, the Department of Environment is considering iconic, threatened and endangered species and where possible, putting contingency plans in place. While it is not possible to prevent wild birds moving, minimising stress on diseased colonies and reducing human-assisted spread will be important.

Can humans catch H5 avian influenza from food?

Food Standards Australia New Zealand (FSANZ) has advised the following:

- Avian influenza is not known to transmit to humans via food and it is safe to eat properly cooked chicken meat and eggs.
- Commercially pasteurised milk products are safe to consume.

Can cats and dogs be infected with H5 avian influenza?

Both cats and dogs can become infected with H5 avian influenza if they eat infected birds, mammals, raw pet food or unpasteurised milk from infected animals. Cats are particularly susceptible to H5 avian influenza and may become lethargic, reluctant to eat, and show neurological signs (seizures, lack of coordination, circling), respiratory signs (difficulty breathing, discharge from the eyes or nose), blindness and death.

During an H5 avian influenza outbreak, to protect your pets it is recommended to:

- Ensure cats do not have access to infected wild birds and other wildlife.
- Keep dogs on a lead when being walked to prevent access to infected dead birds or other wildlife, and do not exercise them in areas where waterbirds and wildlife are known to be present.
- Ensure dog and cat food and water bowls cannot be accessed by wild birds.
- Do not feed them raw chicken or other raw meats or unpasteurised milk.

If your dog or cat has had contact with wildlife and shows any signs of H5 avian influenza, contact your private veterinarian.

See also FAQ: What are the signs of avian influenza in wild birds and mammals?

These FAQs are current as of February 2025. Please check wa.gov.au for the most current information.