A guide to tech driven biosecurity

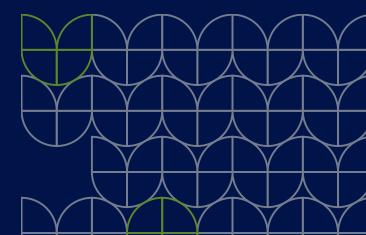
For avian influenza & the poultry sector





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There's a saying;

"Life is 10% what happens to you and 90% how you react to it".

It's a nice thought, but it doesn't exactly cover being prepared and staying ahead of the game.

The recent HPAI H7 outbreaks across Australia have put biosecurity front and centre. With ecologists warning the circular spring migration of birds could bring **HPAI H5N1** to the sub-Antarctic islands, and ultimately Oceania, we need to be prepared.

It's hard work building a thriving poultry operation. You've got a handle on what you can control— but as anyone in the agri-community would agree with, there's just a ton of stuff that's out of our control.

That's why, in the event of an animal biosecurity emergency, knowing who has been on your poultry farm, and when, is crucial.

As a trusted tech partner for poultry farms across Australia and New Zealand, Onside gets what you're going through. We've got the tools and support you need to handle your farm's biosecurity with confidence and resilience.

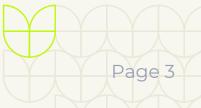
Onside gives you real-time traceability; keeping a digital and detailed record of everyone who's been on your farm and what's been going on. You'll be able to spot potential risks fast, and take action to keep your operation safe.

It isn't just about ticking boxes—it's about peace of mind.

We're here to support you and tackle this challenge head-on. Together, we can protect our farms, flocks, and industry. Let's move forward confidently, with the right tools and determination.



Ryan Higgs, Ph.D Co-founder & CEO Onside



Leading poultry operations across Australia and NZ trust **Onside** with their biosecurity























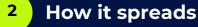




Understanding avian influenza (AI)

Knowledge is always the first line of defence.









1. What is avian influenza?

Avian influenza (AI), also known as Bird flu, is a highly contagious virus that affects birds. Severe cases can cause serious symptoms and sudden death in domestic poultry. Milder forms might not show symptoms but can still cause some deaths, making it hard to detect in some birds.

Bird flu virus strains are classified as 'low' or 'high' pathogenicity based on the mortality in chicken populations.

- Low pathogenicity avian influenza (LPAI)
- High pathogenicity avian influenza (HPAI)

Influenza viruses (including those that infect humans) are also classified by the two groups of proteins that make up the virus; the **H** (hemagglutinin) and the **N** (neuraminidase) proteins. There are 16 H subtypes **(H1 to H16)** and 9 N subtypes **(N1 – N9)**.

Some mild bird flu viruses, like LPAI H5 and LPAI H7, can become severe (HPAI) when they spread from wild birds to poultry. **HPAI H5N1** is a severe strain that can infect humans and domestic animals. H5N1 can result in human mortality.

2. How it spreads

Wild birds are the natural hosts for the virus. Infected birds spread the virus through saliva, nasal secretions, and faeces. In Australia, some wild birds carry LPAI but usually don't show signs.

The virus spreads from wild to domestic birds, when they interact or contaminate their food or water.

With the spread of HPAI H5N1 globally, many animals have been infected after close contact with infected birds or contaminated environments.

3. The situation

In May-June 2024, there were outbreaks of three different dangerous **HPAI H7** variants identified across Australia.

At the time of publication, **HPAI H5N1** has <u>not</u> been found in birds in Australia or New Zealand, making Oceania the only continent free of the disease.

The H5N1 strain, specifically **clade 2.3.4.4b**, has raised significant concerns because of its detection in other species and vast global spread (including Antarctica). This puts southern Australia and New Zealand - typically shielded by geography - on the frontline of potential incursions.

The circular Spring migration of birds could bring the virus to the sub-Antarctic islands, such as Macquarie Island. In turn, this would make regions like Tasmania and Campbell Island particularly vulnerable.

Additionally, incursions from northern neighbouring countries remain a threat, given the widespread nature of H5N1 globally.

This scenario underscores a heightened biosecurity threat, which is now considered a greater risk than Foot and Mouth Disease and Lumpy Skin Disease.

The virus's ability to survive across a broad temperature range, on nonporous surfaces for up to 48 hours, and on clothing for 12 hours, further emphasises the need for stringent biosecurity measures.

An important note on food contamination and security:

• With proper preparation, food safety is **<u>not</u>** compromised.



4. Signs of disease

Signs usually appear in several or all birds in a flock, including:

- sudden death
- lethargy or reluctance to walk, eat or drink
- droopy appearance or ruffled feathers
- head or limb swelling
- bruising of the wattle, comb, feet or skin
- respiratory signs such as panting, nasal discharge or sneezing
- diarrhoea
- unusual head or neck posture, incoordination, inability to walk or stand
- unusual reduction in egg production
- mass mortality in flocks, particularly in confined spaces
- decreased feed or water consumption
- darkening or purpling of comb, wattle or legs (not just bruising)
- watering eyes and sinusitis
- soft-shelled or misshapen eggs

Suspected disease must be immediately reported to a **veterinarian**, and:

Australia:

24/7 Emergency Animal Disease Hotline 1800 675 888.

New Zealand:

Biosecurity NZ's Exotic Pest and Disease Hotline 0800 80 99 66



Why poultry needs a biosecurity solution

Managing an Al outbreak takes a lot of resources, putting emotional, psychological, financial and logistical strain on farms. Adding to the operational headache, poultry farms <u>must</u> be capable of providing an accurate record of historical movements - as soon as a governing body requests them. This makes a digital biosecurity solution critical for poultry farms.

We want to help.

We're Onside. We created a compliance and biosecurity app entirely for the agriculture community. That's what sets us apart. We're ag-only. We help protect people working at over 16,000 properties, every day.

We want to share with you how Onside's robust check-in system can greatly improve internal tracing, making it possible to instantly generate movement records using a digital history. We'll also look at Onside's other biosecurity features that will help tackle these risks, keeping your operations healthy and productive.



Onside digitises poultry biosecurity

Proactively manage your on-farm biosecurity.

With Onside, you can:



Proactively screen for biosecurity risks

2 Share vital biosecurity information



Instantly identify risks and respond



Tracability, reporting and digital history



Proactively screen for biosecurity risks

Onside can help you manage the risk of diseases being brought onto your poultry farms. One of the most effective ways to protect your poultry against avian influenza is by screening people who come on to your farm for common transmission vectors.

Onside makes this process straightforward and practical.

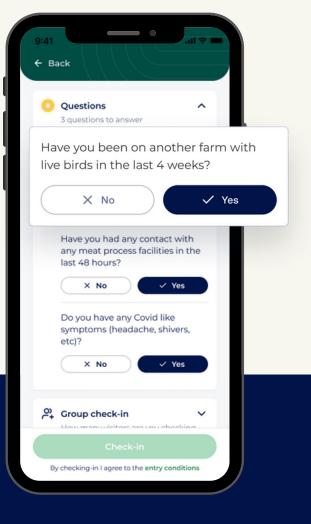
When someone checks in using the Onside mobile app, they'll be prompted to answer a set of yes/no questions that you've customised for your poultry farm. This helps you gather crucial information about potential risks before they even set foot on your property.

For example, you can ask:

- Have you been on another poultry farm in the last 48 hours?
- Have you been in contact with live birds this week?
- Do you have live birds at your home?

This helps catch risks early, making it less likely for visitors to bring in diseases. It's an easy but powerful way to keep your farm safe and maintain biosecurity standards. Additionally, with everything digitised in the app, staying compliant is simplified and without paperwork.

If some of your visitors/contractors don't have the Onside app, you can set up QR codes or a check-in kiosk so that <u>everyone</u> arriving provides the same check-in information.

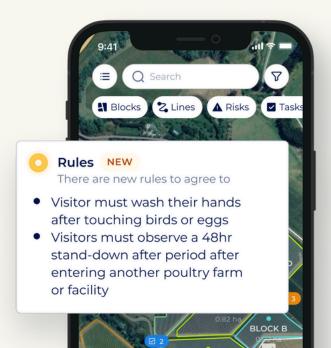


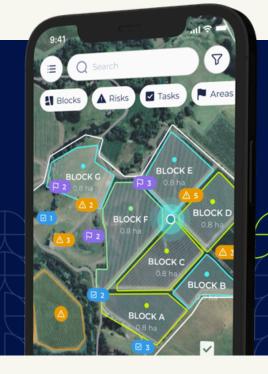
Share vital biosecurity information instantly

Using the custom rules in the Onside app, visitors, contractors and staff must read and agree to the rules of your farm when they check-in. If rules are updated, then they will have to agree to the new information when they next check-in.

The check-in rules are a practical way to ensure that everyone who arrives on your farm sees your biosecurity information and instructions, and provides a digital record that they have acknowledged these.

In your property rules, you can link to other documents if you have more information to share with people who enter your property.





Digital mapping and geofencing

With Onside's **digital farm mapping and geofence feature**, you can map off-limits areas to protect biosecurity.

BLOCK A

Instantly update and share risks with contractors, visitors, and staff, ensuring they've acknowledged biosecurity info.

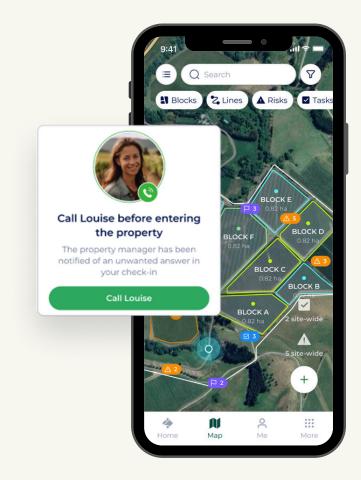


Instantly identify risks and respond accordingly

When someone arrives at your properties and checks in with the Onside app, QR code, or kiosk, you (or nominated people in your teams) will get mobile notifications to inform you when they have arrived, or checked in, and then again when they check out and leave.

If an answer to your check-in questions highlights a potential biosecurity risk:

- the person who arrived will get an Onside message that asks them not to enter the property until they have contacted the key property contact person.
- the property admin(s) will be notified instantly about the person's answer and will be prompted to contact them to discuss whether they should proceed to enter the property or not.



"We chose Onside because we needed a biosecurity partner and solution that's robust but easy-to-use to ensure engagement. As a business that feeds Queensland and beyond, we have to be confident that we're handling the threat of Avian Influenza in the right way, and that we're all making an effort."

Jonathan Millard CEO, Darwalla



Tracing, reporting and keeping a digital history

Onside's instant reports and internal traceability can transform and strengthen your biosecurity operations, offering significant advantages over paper-based systems.



Instant reports

Instantly generate accurate records of movements and meet the requirements from regulators. Unlike paper records, Onside's digital data is always available and up-to-date as people enter and navigate around your properties.

Internal tracing

Get clear visibility into the internal movements of staff, visitors and contractors - crucial for your own business operations and internal tracing, so you can stay on top of any situation that arises.

Ditch the paper

A digital system makes tracking and managing biosecurity easy with real-time updates, automated records, and instant data access, unlike slow and error-prone paperbased systems.



A single source of truth

Biosecurity is one part of a larger system.

Using Onside, you will also streamline:



Health and safety



Compliance and auditing



Contractor management

Health and safety

Onside gives your contractors, visitors, and staff mobile access to safety information to manage risks and incidents on the property.

Using Onside, you'll easily ensure you are compliant. Here's why:

- Easily share site safety info Create a digital risk map that everyone can access, ensuring they acknowledge risks at check-in. Pinpoint exact risk spots, update safety changes, and keep everyone informed.
- Get a clear view of all risks See unmitigated risks, use quick-response templates, publish to your map, show risk management proof, and handle risks end-to-end.

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- Simplify incident reporting Log incidents in real-time with photos and locations, create detailed reports, and assign corrective actions to prevent future issues.
- Stay prepared for emergencies Visitors, contractors and staff can access the emergency plan, see your location, contact key responders, and quickly find everything you need.



Contractor management

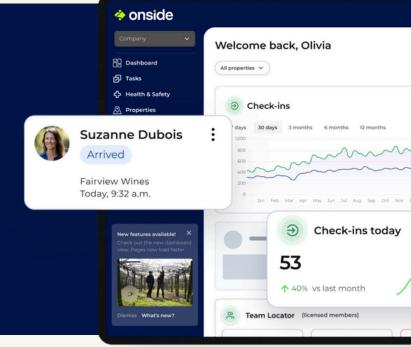
Get your contractors set up and easily gather and share all the necessary info ahead of time. Keep track of where they are and what they are doing.



- **Pre-qualify contractors** Streamline contractor onboarding by collecting and managing documents in advance, ensuring contractors are ready on arrival.
- Simplify your inductions Use digital check-ins to induct contractors on arrival. Share risks and rules, and have them acknowledge hazards and answer questions, creating a digital record.

Real-time awareness

Onside's check-in app lets you know who's on your property and what they are doing. Get alerts when contractors arrive, notify everyone about high-risk jobs, and get reminders if contractors don't check out, ensuring their safety.





Compliance and auditing

Using Onside as a daily operational tool means that when it's time to be audited, the data you need is ready to report in one click.

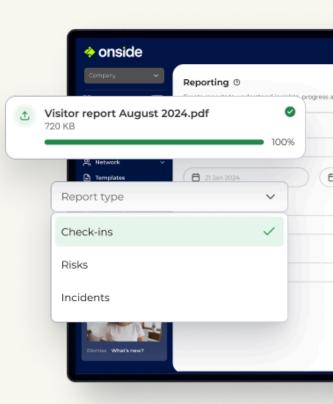
Collect accurate data

Auto-capture info on visitors, incidents, risks, tasks, and biosecurity for audits, industry needs, and reports. Onside does the heavy lifting, keeping you ready.

Create a digital paper trail

Track data sources and follow reliable processes, see follow-up actions, store essential documents, and time-stamp info. Easily provide evidence during audits.

• Records at your fingertips Find everything in one place for audits, skip the filing cabinets, set report parameters, and easily pull up relevant info. Report accurately, pass audits, and stay compliant.





"Onside has proven to be an easy to use, practical tool, for keeping track of people visiting your property. It allows critical information to be always available – like Manager's numbers and risks hazard activities happening that day."

Michael Nichols,

Owner & Farm Manager, Redbank Farming

Why choose Onside for your poultry operation?



REAL-TIME TRACEABILITY

Onside provides a digital and detailed record of everyone who's been on your farm and their activities, helping you quickly spot potential risks and take action to keep your operation safe.



ENHANCED BIOSECURITY

With custom check-in questions and real-time updates, Onside helps you proactively manage biosecurity risks, ensuring all visitors and contractors adhere to your farm's safety protocols.



EFFORTLESS COMPLIANCE

Automated reminders and digital record-keeping ensure you stay compliant with regulations, making it easy to produce accurate movement records and meet audit requirements without the hassle of paperwork.

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STREAMLINE OPERATIONS

Onside simplifies the management of contractors, visitors, and staff with features like digital check-ins, instant notifications, and centralised document storage, making your farm's operations more efficient and effective.

Ready to get started?

Book a demo

