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ONE HEALTH. ONE SYSTEM

A UNIFIED FARM SAFETY GUIDE

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Contents

For too long, we've treated agricultural risk in silos.

People safety here, animal health and biosecurity there, the environment somewhere else.

But fragmentation breeds vulnerability - and in agri, the costs are real.

Lives lost, outbreaks spread, audits failed, opportunities missed.

A shift is underway. Forward-thinking agribusinesses are embracing a more connected way of managing risk - rooted in the World Health Organisation's *One Health* model.

It's not just an academic idea. It's a practical framework that brings safety, biosecurity, and environmental care together. Because the health of people, animals, and the land are deeply interconnected.

Unified safety is just good risk management. It breaks down internal walls, encourages collaboration, and makes operations more resilient - whether you're facing a serious injury, or a disease incursion.

To truly protect our people, livestock, ecologies, and food supply - we must change how we think and act. The cost of inaction is already written in injury and fatality statistics, as well as outbreak reports.

And truthfully... the benefit of action is a lot harder to quantify.

It's the crisis that never occurs, the profit that isn't lost, and the life that isn't harmed.

Those are the dividends. Often invisible, but worth every effort.

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

1 UNIFIED FARM SAFETY
& THE 'ONE HEALTH' MODEL

What is *One Health*?

One Health starts from a simple yet profound truth:

The wellbeing of people, animals, plants, and the planet are inseparable.

WHO calls it “an integrated, unifying approach to balance and optimise the health of people, animals and ecosystems,” a reminder that people, teams, businesses and even sectors must collaborate, not operate in silos.

In agriculture, this principle is tangible. At its most basic:

- the safety of workers
- the vitality of herds and crops
- the resilience of soil and water

… these all exist in one continuous loop.

A shock in any part ripples through the rest.

Take zoonotic diseases; illnesses that jump between species. Lax stock-health practices or just sheer bad luck can spark an outbreak that slaughters livestock, hospitalises employees, breaks supply chains, threatens regional infrastructure and even global food supplies.

That’s bigger than biosecurity.

Environmental hazards follow the same pattern: contaminated run-off, drought, or extreme heat can sicken cattle, erode yields, and endanger entire communities who draw from the same resources.

The *One Health* model supplies the map to see these connections early, guiding agriculture to integrate biosecurity, worker protection, and environmental stewardship so that each measure strengthens the next.

What is *unified farm safety*?

Agriculture is one of the most hazardous sectors in Australia and NZ, responsible for a disproportionate share of workplace injuries and deaths.

Duties are often splintered.

- One team does worker safety
- Another does animal health or biosecurity
- Another chases environmental compliance

Yet the well-being of people, animals, and the land is indivisible.

And when protections sit in silos, blindspots appear.

- A disease can leap from livestock to employees or wildlife
- A chemical spray can injure both ecosystems and human health

Financial shocks follows: product bans, recall costs, lost export markets.

This guide champions unified safety through *One Health,* a framework by the WHO to harmonise human, animal, and environmental health.

Unified farm safety aligns worker safety, animal health and biosecurity protocols, and environmental management in a single, self-reinforcing system. The pay-off is a safer, more efficient, and more resilient operation.

Modern tools and data visibility power this union.

Technology now makes it possible to track people, livestock, and assets in real time, giving decision-makers a bird's-eye view of risk. Digital visitor logs and geofencing can monitor visitors, ensuring biosecurity rules are followed and concurrently keep people out of danger. Centralised data allows for trend-spotting, and early warning. Technology, through the *One Health* lens, can transform compliance from a reactive necessity into a strategic advantage for agriculture.

Cornerstones of unified safety

A unified farm safety plan serves as an overarching blueprint that links what are typically separate documents:

- the health and safety plan,
- the biosecurity plan,
- the environmental management or sustainability plan.

The plan aims to close any gaps where one domain affects another.

Key components include:

Integrated risk assessments

Jointly identify and assess hazards across human safety, biosecurity, and environmental impacts - highlighting interconnected risks. Industry biosecurity and safety guidelines are integrated into a single, holistic assessment, where each risk is viewed through many lenses at once.

Cross-functionality

Clear roles and communication are essential. Safety managers, vets, and environmental officers collaborate closely. Breaking down communication silos ensures critical info - like a vet detecting early signs of avian influenza - is swiftly shared, prompting a response for PPE and hygiene.

Consolidated protocols

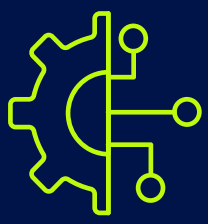
Tackle multiple risks simultaneously. A single protocol for farm visitors can combine digital check-in, safety inductions, and biosecurity assessments at entry, efficiently capturing emergency contact data and disease-risk info. Consolidating these tasks saves time while enhancing overall safety.

Cornerstones of unified safety

Data centralisation and visibility

Risk management platforms consolidate diverse data onto one dashboard, bridging safety and biosecurity.

- Recording a visitor's arrival simultaneously tracks their movements across the property, aiding rapid traceability during biosecurity incidents.
- Sensors capturing water quality, chemical use, and animal treatments provide visibility. Correlating higher injury rates and illness in one facility may trigger investigations into environmental factors like ventilation.



Alignment with regulatory frameworks

An effective unified safety plan clearly aligns with regulatory responsibilities, integrating all obligations into a cohesive strategy. Rather than separate checklists, unified training addresses multiple standards simultaneously, like handling animals safely for both protection and welfare compliance.

Preventative and continuous focus:

Prioritise proactive risk reduction consistent with the *One Health* emphasis on prevention. Initiatives might include:

- Livestock vaccination (protecting animals and humans)
- Installing machinery guards and fencing dams (preventing injuries and safeguarding water quality)
- Planting shelterbelts that control erosion, provide animal shade, and protect farm workers from heat.

Recognising that most operations evolve continuously, the plan should be dynamic - regularly reviewed, updated, and refined based on emerging threats or operational changes.

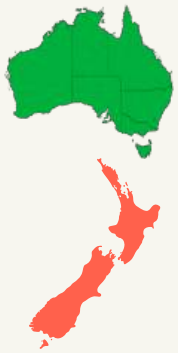
Impact examples

CHALLENGE	HUMAN IMPACT	ANIMAL IMPACT	PLANT IMPACT	ENVIRON. IMPACT
Zoonotic disease outbreaks	Respiratory/flu-like illness, hospitalisation, lost labour	Morbidity, culling, trade bans	N/A	Carcass disposal, pathogen spread to wildlife
Invasive pests & plant pathogens	Pesticide-exposure risks during eradication drives	N/A	Reduced yield, vine death, export shutdowns	Increased chemical use; biodiversity loss
Antimicrobial resistance	Hard-to-treat infections in rural communities	Drug-resistant mastitis, enteric disease	N/A	Resistant bacteria in soil & waterways
Chemical & pesticide exposure	Acute poisoning, chronic neuro & cancer risk	Secondary toxicosis	Phytotoxic damage to neighbouring crops	Water & soil contamination; pollinator decline
Fertiliser & nutrient runoff	Nitrate in drinking water → blue-baby & cancer risk	Algal toxins in troughs; botulism	Excessive vegetative growth, disease	Eutrophication, fish kills, algal blooms
Machinery & vehicle accidents	Fractures, roll-over fatalities	N/A	N/A	Hydro-oil spills, soil compaction
Heat stress & extreme weather	Heatstroke, UV skin cancer, mental stress	Reduced fertility, mortality	Sunburn, fruit cracking, mildew after storms	Soil erosion, flash-flood sediment loads
Water scarcity & drought	Stress, hygiene shortages, contaminated water	Dehydration, feed deficits	Reduced fruit size, quality loss	River-ecosystem collapse, salinity rise
Poor waste & manure management	Pathogen aerosols, hydrogen-sulphide asphyxiation	Hoof infections, flystrike	N/A	Nitrous-oxide & methane, leaching nutrients
Air-quality hazards	Occupational lung disease, asthma	Respiratory distress	N/A	Regional particulate pollution
Animal-welfare breaches	Reputational damage; worker moral	Immuno-suppression, lameness, mortalities	N/A	Public backlash drives regulatory change
Wildlife conflict / feral species	Bite injuries, leptospirosis	Predation, disease transfer	Fruit damage, contamination	Landscape imbalance, native-species decline
Soil degradation & erosion	Dust inhalation; reduced rural incomes → stress	Poor pasture → nutrition deficits	Stunted growth, nutrient lock-up	Loss of topsoil, sedimentation of waterways
Greenhouse-gas & climate risk	Regulatory costs to consumers; bushfire smoke	Heat-stress knock-ons as climate warms	Altered pest ranges, phenology shift	Warming, extreme-weather amplification

Human health and safety

Protecting the people who work or visit our operation is paramount. Yet agriculture still tops the danger charts.

Check out the data here: Australia | New Zealand



- Every year Australian agriculture loses around 50–60 people, with thousands more sustaining injuries.
- New Zealand faces similar issues. 14 farm-worker deaths recently made up 40 percent of all workplace fatalities.

The culprits are familiar:

- Multi-tonne machines
- Quad bikes and other vehicles
- Unpredictable animals
- Chemicals and dust
- Searing heat and sudden storms

These risks are often faced alone, kilometres from help.

Add a “she’ll-be-right” culture that buries injuries and mental-health, and the risks multiply. But the data makes it pretty clear, the tolerance for “acceptable risk” in agri has been shattered by evidence and human cost.

And it’s beginning to show.

Recent landmark convictions in Australia and New Zealand are redefining accountability - setting a new safety precedent that every agricultural business must now meet.

The new safety precedent

In 2024 the New Zealand District Court convicted former Ports of Auckland CEO, Tony Gibson, for failing his PCBU duty after a 2020 crush fatality.

In February 2025 Judge Bonnar KC imposed a NZ $130 000 fine + $60 000 in costs, stressing that Gibson's failure to verify "work-as-done" exclusion-zone controls materially increased the risk of death.

Legal commentators **described the ruling** as the first of its kind against an officer of a large, complex enterprise and **a call-to-arms** that senior executives must probe beyond dashboards and assess safety at the ground level.

Across the Tasman, Victoria recorded its first industrial-manslaughter conviction in 2024. A stonemasonry company was **fined AU $1.3 million** and its sole director, Laith Hanna, received a two-year community-corrections order after a forklift he was driving fatally crushed a contractor.

Why these cases matter now:

- **Personal accountability has teeth:** New Zealand has set a precedent that officers of large organisations cannot hide behind organisational layers; Victoria has shown it will criminalise negligent leadership.

- **Regulators are synchronising:** Both NZ and Australian WHS agencies all referenced the Gibson decision when **briefing their enforcement priorities**, signalling that proactive compliance is the new baseline.

- **Boardrooms need insight:** Both judges pointed to the gap between policy and reality, underscoring that safety governance now demands real-time verification and insight - not retrospective paperwork.

Modern safety leadership

Agriculture already tops the risk ladder for human safety.
But for many agribusinesses, human safety is only the beginning.

Many agribusinesses have to bear the weight of double, even triple, the regulatory demands of other industries. Worker safety, biosecurity, and environmental stewardship each demand their own audit trails.

What modern safety leadership does:

- **It unifies the risk picture:** A pesticide spraying run is simultaneously a chemical-safety, environmental-impact and biosecurity event. Modern officers map these intersections and insist on controls that satisfy all three regimes.

- **It demands ground-truth data:** Visitor check-ins, inductions, biosecurity screenings, chemical applications, and livestock movement should flow into a single dashboard that directors review weekly, asking: “Where are today’s critical gaps, and who owns the fix?”

- **It proves the loop closes:** Regulators now expect evidence that insights trigger action, action is verified, and lessons are shared across properties. If you can’t display that loop on demand, the Gibson and Hanna cases prove the courts will assume it doesn’t exist.

Leadership *must* set the tone that nothing is more important than everybody coming home safe.

Genuine commitment starts with simple practices like pre-start safety meetings, “no solo work” rules for high-risk tasks, and empowering *any* worker to speak up or stop work otherwise.

Every person on-site has a role in safety, including visitors and contractors.

Safety non-negotiables

Cultivate the culture: Australia and New Zealand are reshaping farm safety through initiatives like WorkSafe NZ's *Farm Without Harm*. Safety should be core to everyday farm life, driven by visible leadership setting examples - and regular discussion covering human, animal, and environmental risks.

Integrate training: Comprehensive training should merge multiple safety aspects, such as machinery operation, chemical handling, biosecurity, and first aid. Following guidelines from Safe Work Australia and WorkSafe NZ ensures compliance and practical preparedness.

Safe work design: Unified safety starts with well-maintained equipment and infrastructure. Using protective machinery features, clearly fencing hazardous areas, and having dedicated visitor entry points enhances safety for people, animals, and the environment alike.

Mental health matters! Mental wellness is crucial to safety, especially with the stress and isolation of agricultural communities. Open conversation, realisitic workloads, and supportive mental programs are key to preventing accidents.

Prepare. Prepare. Prepare! First aid training, firefighting readiness, and effective communication are all essential. Leveraging technology like GPS tracking and geofencing improves rapid response, supported by regular drills covering diverse situations.

DID YOU KNOW

On Australian livestock farms, vaccinating at-risk workers against Q fever is recommended, as this illness has hospitalised many farmers and abattoir workers.

Animal and plant health

Healthy animals and plants are the lifeblood of agribusinesses.

Whether it's cattle, poultry, sheep, or crops - biosecurity and animal health management are about keeping diseases, pests, and parasites out of your operation and quickly controlling them if they do enter.

Australia and New Zealand have strong biosecurity controls at their borders, yet internal biosecurity is just as critical. The introduction of a disease or a pest can be catastrophic to livelihoods and threaten entire economies and food supply.

The risk isn't theoretical:

- In 2017, the discovery of Mycoplasma bovis in New Zealand highlighted how one biosecurity lapse can have nationwide ramifications.
- In 2010, the Psa-V outbreak devastated New Zealand's kiwifruit industry, costing growers over NZ $1 billion.
- Australia's poultry flock size has **decreased by around 10 per cent** due to avian influenza-enforced depopulation.

A unified safety plan doesn't look at animal health in isolation.

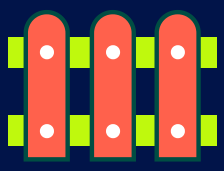
- Animal disease affects humans through zoonoses or foodborne illness.
- Animal health affects environmental health. Poorly managed carcass disposal can lead to environmental pollution. Disinfectant can affect run-off.

Conversely, the environment can make animals more prone to illness. A contaminated water source or climate extremes can influence issues like antimicrobial resistance (which also impacts human medicine).

Biosecurity non-negotiables

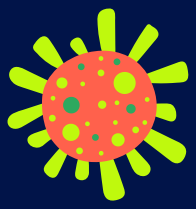
Unified safety puts biosecurity at the centre, not the sidelines.

Here are 5 considerations when thinking about your unified safety plan.

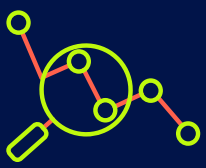


- **Biosecurity starts at the gate:** Clear signage, check-ins, and cleaning requirements will help protect the farm. Staff, visitors and contractors should log their visit, confirming they haven't come from risky areas and they have clean equipment and/or footwear.

- **Prevention is cheaper than culling:** Routine checks, vaccinations, and quick isolation of sick animals are essential. If a cow shows lesions or fever, staff must know how to isolate it fast and call a vet - whether it's FMD or something lesser, early action matters. Everyone should know the signs.



- **Mud. Muck. Microbes:** Small habits make a difference. Footbaths, wheel washes, and clean animal housing reduce spread. On cropping farms, cleaning machinery between blocks and limiting foot traffic stops fungus and pests from jumping properties.



- **What you can track, you can contain:** Knowing exactly who's visited your farm, and where they've come from allows rapid response if something goes wrong. Digital check-ins and movement records mean you can quickly trace contacts, and limit disease spread. Clear visibility stops outbreaks early.

- **No buy-in, no biosecurity:** From vets to delivery drivers, all need to understand the risks and protocols. Regular training and SOP updates, as well as mock drills - like simulating the spread of avian influenza - keep awareness high, and contain many great learnings for the real thing.

Environmental health

An agribusiness' environmental health; its soil, water, air and biodiversity is fundamental to productivity, safety, and sustainability. Poor environmental practices can lead to immediate dangers like chemical poisonings or contamination, whereas sound management protects people, animals, and production long-term.

In a unified framework, environmental stewardship directly supports healthier animals, safer workplaces, and higher quality products.

And, in many ways, helps build your 'social license' to operate.

Today's consumers and regulators expect agribusinesses to do more than produce; they expect them to protect.

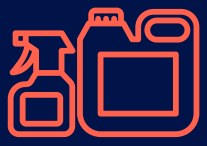
By integrating environment into your unified safety plan, you can:

- **Strengthen trust:** Show regulators, partners and customers that you operate responsibly and transparently. A commitment to environmental care signals long-term thinking and credibility.

- **Improve market access:** Many markets now demand proof of sustainable practices. Meeting (or exceeding) environmental standards can open doors to premium buyers, certifications, and supply chain partnerships.

- **Build goodwill:** Communities are more likely to support businesses that care for shared natural resources like water, air, and biodiversity. When people see that you're protecting the land, not just profiting from it, they become advocates.

Environmental non-negotiables



Chemicals: Proper chemical handling prevents direct injuries and environmental damage. Implement a comprehensive chemical plan:

- Store chemicals securely in locked, ventilated sheds with spill containment.
- Maintain Material Safety Data Sheets (MSDS) and ensure workers are trained in handling and first aid.
- Ensure only trained staff handle chemical mixing and applications, using regularly calibrated equipment.
- Dispose of containers and unused products safely through approved recycling programs.

Waste and pollution: Waste like manure, effluent, used oils, animal carcasses, and plastics require careful consideration around human and animal health:

- Implement manure and effluent management systems, preventing contamination and gas buildup.
- Recycle hazardous materials like used oil, batteries, and plastics through designated collection services.
- Avoid practices like burning or burying waste, which creates toxic residues and physical hazards.

Soil health: Soil erosion and degradation pose immediate safety hazards and threaten productivity. In New Zealand, 90% of Fonterra farmers **follow Farm Environment Plans**.

- Adopt soil conservation measures (cover crops, terracing, contour plowing, riparian buffers).
- Maintain ground cover and sustainable stocking rates to prevent erosion and dust hazards. Healthy soils better absorb water, reducing flooding risks and infrastructure damage.

Environmental non-negotiables

Water quality and access: Clean water is non-negotiable for animals, workers, and the landscape. New rules in New Zealand will mandate **Freshwater Farm Plans to safeguard streams and rivers.**

- Fence off waterways, test bores, and install troughs to avoid fouling and drownings.
- Nutrient management and vegetation buffers prevent runoff; rainwater capture and treated reuse closes the loop.
- Drought and flood planning - elevating fuel stores, mapping evacuation routes, storing feed - protect farms from crisis.

Biodiversity and ecosystems: Biodiversity isn't a luxury, it's a natural insurance policy.

- Shelterbelts buffer wind and heat, wetlands filter water, and predators manage pests. Managed wisely, these zones coexist with production, improving safety, biosecurity, and ecological health.
- Programs like Criffel Station in NZ show how integrating native ecosystems and regenerative practices builds long-term resilience.

Climate Preparedness

Climate change is no longer a future threat - it's a current disruptor. More heat, longer droughts, fiercer storms. Safety plans now must include fire breaks, heat-aware work schedules, resilient crops, and mental health support. Mitigation also matters: methane reduction, carbon farming, and better feed conversion not only cut emissions but boost farm efficiency. In this way, climate action is both protection and progression.






2 CREATING YOUR PLAN


Your unified farm safety plan

By extending your current safety framework to embrace biosecurity and environmental stewardship, and anchoring it all in *One Health* principles, you create a living blueprint that protects people, plants, animals, and the land alike. Use the roadmap below to build, or elevate, your own plan.

1. Establish leadership

First, designate who will lead the development of the plan

Ideally a small team representing different areas. It could be:

- the operations manager
- a safety lead or officer
- a veterinarian or biosecurity manager
- an environmental or agronomy advisor (if available)

ROLE	KEY RESPONSIBILITY (ONE HEALTH FOCUS)
SAFETY MANAGER	Ensure PPE, hygiene protocols, and staff education around animal-borne risks
VETERINARIAN / BIOSEC. MANAGER	Monitor livestock health, advise on zoonotic risks, oversee vaccination programs
OPS. MANAGER	Manage waste systems, advise on chemical use and ecosystem protection
FRONTLINE WORKER	Follow safe practices, report symptoms in self or animals, maintain hygiene
C-SUITE / OWNER	Oversee integrated safety and biosecurity strategy, ensure collaboration across roles

2. Integrate your risk

With your staff and leadership, create a checklist and walk through your entire operation and identify the hazards and risks of each category.

The checklist should cover:

- farm infrastructure (buildings, yards, fences)
- machinery
- vehicles
- animal handling areas
- chemical storage and use
- natural features (water bodies, steep terrain)
- routine tasks (feeding, mustering, spraying, etc.)

For each hazard and risk, ask:

What are the risks to human safety?

- *e.g. Could someone get injured, fall sick?*

What are the risks to animal health or biosecurity?

- e.g. *Could this introduce or spread disease?*

What are the risks to the environment?

- e.g. *Could this cause pollution or degradation?*

Review farm records, past injuries or near-misses, vet reports, lab test results, or audits. A data-driven approach can further help you spot emerging risks, or identify existing trends. If you have digital records from an app like Onside, analyse them for patterns.

Engage workers! The people doing the jobs ***will*** point out the issues management overlook. Respecting the reality of how work is actually performed (appropriately called 'work-as-done') is an often missed opportunity to make tangible changes that are widely adopted.

3. Prioritise with a risk matrix

Not all risks are created equal.

A risk matrix can help turn uncertainty into clarity. It helps you weigh up the hazards on your farm - not by gut feel, but by logic.

- How likely is it to happen?
- And if it does, how bad could it be?

The grid on the next page brings structure to chaos. It helps you sort the urgent from the manageable, the high-impact from the low. It sharpens your focus and ensures your time and resources go where they should.

Why it matters in a unified safety plan?

Unified farm safety is about seeing the whole system as one connected web. Risks don't sit in silos: what harms the land may harm the stock, and what harms the stock can harm you.

Here are a few examples:

Rollover on steep terrain = **high likelihood** + **high severity**
→ *Needs immediate prevention: ROPS, helmets, training.*

FMD outbreak = **Low likelihood** + **catastrophic severity**
→ *Demands strict biosecurity controls and rapid response plans.*

Unauthorised access = Moderate likelihood + high severity
→ *Risk to safety and biosecurity; need sign-in systems, physical signage, and visitor protocols.*

Fertiliser runoff = Moderate likelihood + high severity
→ *Risk to environment, stock, and market access; requires proactive nutrient and effluent management.*

PRINT ME!

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Your agri-risk matrix

Create a custom risk matrix by copying **this spreadsheet.**

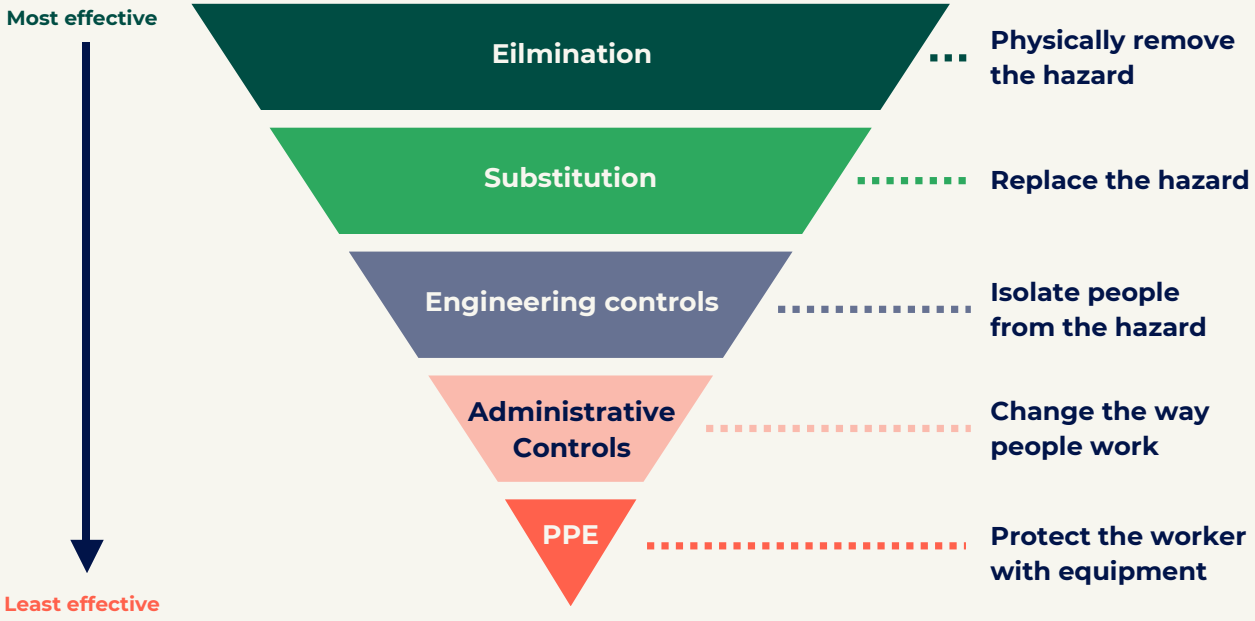
- High likelihood + high severity = **Act immediately**
- Low likelihood + high severity = **Have a plan in place**
- High likelihood + low severity = **Reduce and monitor**
- Low likelihood + low severity = **Review occasionally**

LIKELIHOOD	INSIGNIFICANT	MINOR	MODERATE	MAJOR	CATASTROPHIC
RARE	LOW	LOW	LOW	LOW	LOW
UNLIKELY	LOW	MEDIUM	MEDIUM	MEDIUM	MEDIUM
POSSIBLE	LOW	MEDIUM	MEDIUM	HIGH	HIGH
LIKELY	LOW	MEDIUM	HIGH	HIGH	EXTREME
ALMOST CERTAIN	MEDIUM	MEDIUM	HIGH	EXTREME	EXTREME

CONSEQUENCE

4. Control measures

For each identified risk, decide on control measures following the hierarchy of control. A detailed explanation of which you can find **here.**



Ensure controls address all relevant aspects.

To control risk of disease from visitors, measures might include:

- Put up biosecurity signage (administrative/environmental control),
- Provide a wash station (engineering control),
- Require check-in and disclosure of recent farm visits (administrative),
- PPE like disposable boots for high-risk visitors (PPE).

Document protocols for clarity. This will form the bulk of your plan

Avoid duplication! If one procedure covers multiple risks, write it once. You might have a "Visitor Protocol" that covers safety briefings, biosecurity steps, and escorting visitors, rather than three procedures.

5. Tools and equipment

Having identified your key risks and control strategies, the next step is to ask: *What tools or infrastructure do we need to make this real?* Managing risk isn't just about signs and briefings - it's about investment in equipment that reduces exposure and automates compliance.

Infrastructure: In many cases, physical infrastructure is the frontline of defence. The following examples may seem incredibly basic, but proper physical controls can reduce most risks.

- **Gates** create biosecurity zones and restrict movement.
- **Signage** at entrances, silos, or spray zones guide behaviour.
- **Safety guards and interlocks** prevent entanglement and crush injuries.
- **Secondary containment** for fuel and chemicals reduce pollution risk.
- **Livestock handling equipment** allows safer animal interactions.

Technology: The rise of agritech has brought powerful, practical solutions for operations of all sizes.

- **Onside** automates all check-ins and check-outs - including for contractors. It also verifies biosecurity compliance, and offers real-time traceability of movements.
- **CCTV / trail cams** monitor areas for intrusion and incursion.
- **Water quality sensors** detect contamination before it's a problem.
- **Personal gas monitors** for workers entering silos or confined spaces.
- **Weather sensors** and **fire alerts** inform daily operations.
- **Drones** for checking fence lines, water troughs, or crop conditions.

The beauty of these tools is their multi-functionality. **A drone** might save a half-day's labour checking water-troughs while also detecting hazards and other risks.

A digitised visitor check-in system might reduce biosecurity risk, streamline contractor inductions, and provide head-count visibility all in one move.

6. Write *everything* down

Once you've identified your risks, chosen your controls, and gathered your tools, it's time to make your thinking visible.

- **Intro / policy statement:** A short summary of your commitment to safety, biosecurity, and environmental stewardship. This sets the tone.
- **Human health and safety:** Your approach to worker training, PPE, lone workers, contractor management, machinery/vehicle protocols, incident/hazard reporting, and roles.
- **Animal health & biosecurity:** Biosecurity controls, livestock monitoring, cleaning schedules, isolation procedures, and movement traceability.
- **Environmental management**: Waste disposal, chemical use, erosion control, conservation and climate resilience.
- **Equipment/tech:** Document what you're using to support the plan.
- **Emergency response:** SOPs for fire, flood, injury, or disease outbreak.

Define Roles and Responsibilities

Assign roles that fit your team and your scale. For example:

- **Biosecurity Manager / Veterinarian:** Oversee visitor biosecurity controls, hygiene stations, livestock movement logs and traceability.
- **H&S Manager:** Monitor visitor/contractor safety briefings and inductions, oversee training, and hazard/incident/near-miss reporting.
- **C-Suite / Owner:** PCBU; ultimately accountable, signs off on updates, ensures all roles are supported to fulfil their obligations.

These are just examples. One person may wear many hats - but writing this down makes expectations explicit and empowers others to step in.

Include checklists and SOPs

Keep the main plan high-level and easy to digest, but attach detailed procedures for safety checks, visitor induction and training, chemical mixing protocols, and emergency contact sheets. This keeps the core document clean, while ensuring important actions aren't lost in the weeds.

7. Train and simulate

Conduct training sessions to roll out the new plan: Start with an all-hands meeting explaining the One Health approach - why the business is emphasising this unified safety plan and what benefits it brings, then do specific training on new procedures or refreshed best practices.

Incorporate biosecurity into safety drills: For example, in a fire drill, include a step to secure any quarantine pens or ensure records of livestock movements are grabbed (if deemed safe to do so).

Extend this training to contractors and seasonal workers.

CASE STUDY

DARWALLA GROUP
QLD, AUSTRALIA

INDUSTRY
POULTRY

CHALLENGE
AVIAN INFLUENZA

An initial mock H5N1 simulation exposed gaps in Darwalla's traceability and rapid response time, raising concerns from Biosecurity Queensland. In response, they partnered with Onside to enable real-time traceability across 44 properties, as well as digitising their visitor, contractor and safety protocols, unifying Darwalla's operations.

In a second H5N1 simulation, Darwalla showed significant improvement, earning praise for its enhanced traceability and response time. Onside not only strengthened Darwalla's biosecurity and safety but also built trust with Biosecurity Queensland... ***Read more***

Watch how they did it!

8. Showcase the standards

Position purposeful signage at decision points. Examples include:

- The shed door reminds, “PPE required beyond this point,” simultaneously flagging chemical safety and biosecurity clothing
- Gates into sensitive habitats carry green environmental notices; quarantine zones are an unmistakable red.

Pair signage with tactile cues: colour-coded tags on equipment, floor stencils, or painted posts so even a quick glance conveys risk level and the required behaviour.

Some visitor management apps offer QR code signage. A quick scan checks visitors in, ensuring they answer/acknowledge specific safety and biosecurity questions, while logging a time-stamped record.

Bake the standards into regular tasks. For example, a manager’s morning circuit could now run on two intertwined tracks:

- Safety sweep: machine guards secure, slip hazards cleared, etc.
- Biosecurity sweep: feed spills contained, pest traps intact, etc.

Dual scans normalise a unified safety approach without adding extra jobs.

Make reporting frictionless: Arm staff and contractors with a safety and biosecurity app that logs hazards as simply as sending a text. Two taps, and the hazard alert lands in the manager’s dashboard. Notifications nudge overdue actions, and a weekly digest highlights recurring issues.

Recognise and incentivise: Shout-outs in the toolbox talk, a leaderboard for hazard/incident reporting (with prizes) and a public dashboard visually highlighting any improvements. Recognition reinforces and encourages.

9. Digitise and consolidate

Paper logbooks, spreadsheets and half-patched “office” software leaves blind spots. When safety records live in one folder, training logs in another, REI chemical SOPs in a third, and people/vehicle movement logs in a fourth, it is virtually impossible to act fast when something goes wrong.

One fix is to digitise and consolidate every risk stream - safety, biosecurity, visitor and contractor management - into a single system.

Below are just a few examples of how beneficial this can be.

WITHOUT DIGITISATION	WITH A UNIFIED DIGITAL RISK SYSTEM
Duplicate data entry, and missing forms	One system logging hazards, incidents visitors, contractor inductions, people movement and biosecurity questions, all updated in real-time.
Slow, manual audits	Instantly generate PDF/CSV reports and evidence for WorkSafe, EPA, Freshcare, NLIS or MPI/DPI audits
Unclear headcount in an emergency	Live view of who’s on-site, inc. contractors and visitors via automated digital check-ins
Remote, lone workers unseen until shift-end.	Automated check-ins/geofence alerts show headcount + trigger welfare checks after missed departure time
Patchwork software with low adoption	Rural-ready UX: Purpose-built for agri. Works offline, map-based and mobile.
Paper logs stall traceability during biosecurity event	One dashboard instantly exports every person and vehicle movement in seconds, ready for regulators
Contractors arrive unaware of stand-down periods	Geofenced check-ins block entry until rules are met; instant alerts flag any breach.

10. Monitor. Record. Audit.

A plan that isn't measured soon drifts into wishful thinking, so weave monitoring, record-keeping, and auditing into your operation's natural cadence:

Monitor: Most tasks are a data-collection moment.

- A stockperson logs vaccination dates while tagging calves
- The irrigator notes water-quality readings during pressure checks
- The gate sensor timestamps each visitor's arrival
- IoT sensors and app prompts run quietly in the background

Feeding a single dashboard, this data turns routine into living metrics.

Record as you go, not after the fact: Attendance at toolbox talks, pesticide-handling refreshers, or biosecurity drills is captured with a tap of a phone; machinery maintenance signs off right beside the grease gun; incident photos auto-attach GPS and time. These breadcrumbs become your evidence bank - far richer than dusty ring-binders ever were.

Audit for insight, not blame: Once a quarter, team-leads walk the property with the digital checklist - scoring against safety, biosecurity, and environmental benchmarks in one sweep. Each year, invite an outside expert for a fresh-eyes review. Outside perspective almost always reveals the blind spots.

Turn numbers into narrative:

- "99 % of visitors completed the biosecurity control questions on entry",
- "All seasonal staff finished induction three days early",
- "Water-nitrate levels fell 8 % this quarter".

Share these wins at the morning muster or in a simple heat-map report. Trends guide investment; outliers flag where coaching or fixes are due.

11. Regularly review and update

Agricultural risk never stays still. New machinery adds unfamiliar pinch-points, new pests cross borders, and yesterday's "best practice" can become tomorrow's gap.

To keep your plan fit-for-purpose, treat it as a living document.

1 - Lock in an annual "One Health audit"

- **Who:** Cross-functional team (ops, safety, vet/biosecurity, environment).
- **What:** Walk the whole property, pull incident and movement data from your digital platform, compare against last year's goals, and rewrite any SOPs that no longer match reality.
- **Why:** SafeWork NSW's rolling incident bulletins show how quickly risk profiles shift - tractor rollovers spiked again in 2024 - so recalibration is non-negotiable.

2 - Update the plan immediately when you:

- **Add a new business function or major asset** (e.g., installing a high-capacity grain dryer, or adding a piggery near cattle yards).
- **Change inputs or suppliers** (new feed sources, or contract crews).
- **Experience - or hear of - a sector incident** (an avian-influenza detection close by; a quad-bike fatality in similar terrain). Record lessons learned and bake them into protocols.
- **Notice control drift:** For example, if data shows PPE compliance below 85%, or spill-kit checks missed twice - it's time to tighten training.

3 - Stay wired to external signals

- **Google alerts:** Create alerts for keywords like "H5N1 Victoria" or "quad-bike safety recall" and be notified of any crucial developments.
- **Regulator bulletins:** Subscribe to SafeWork/WorkSafe newsletters for real-time safety advisories.
- **Sector initiatives and drills:** Whenever possible, join mock-response exercises to pressure-test your own plan against emerging threats.

12. Champion a unified culture

As ever, change begins at the top. When owners, executives, and senior managers publicly frame human safety, animal health, and environmental care as one, priorities snap into alignment across the organisation.

Consider establishing a One Health committee made up of:

- a C-Suite executive or other high-ranking PCBU
- frontline staff
- an operations or farm manager
- a safety officer
- a veterinarian or biosecurity officer
- an agronomist or environmental officer

The committee could look at last month's incidents through a shared lens. Asking not only what, but why and how... OK, a hand injury occurred, but did stock handling, feed hygiene, or runoff management play a part?

Decisions are weighed by triple impact, and fixes are embedded.

"We safeguard people, herds, and land as a single system"

Reward cross-functional thinking and behaviour:

Celebrate the worker who redesigns a chemical-mixing bay to cut both injury risk and biosecurity exposure.

Break down silos:

By bringing diverse voices into the same conversation, you turn isolated fixes into system-wide improvements and give every team member licence to flag risks wherever they spot them.

The result is a culture that sees the whole farm, speaks a common language of prevention, and acts before hazards cascade.

Why choose Onside for your agribusiness?

EFFORTLESS COMPLIANCE

Digital record-keeping for safety, biosecurity and contractors ensures you stay compliant with regulations, making it easy to produce accurate records and meet audit requirements.

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 protocols.

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.

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?

Talk to sales