AVIAN INFLUENZA

By your side, we care. Discover our solutions.



CID LINES

An Ecolab Company

WHERE HEALTH BEGINS



How do you cope with a highly contagious disease like Avian Influenza?

Avian influenza (AI) is a highly contagious and notifiable viral disease affecting several species of food producing birds (chickens, turkeys, quails, guinea fowl, etc.), as well as pet birds and wild birds. Occasionally mammals, including humans, may contract avian influenza.

There are many Al virus strains, which are usually classified into two categories, low pathogenic (LPAI) strains, which typically cause few or no clinical signs in poultry and highly pathogenic (HPAI) strains, which can cause severe clinical signs and potentially high mortality rates among poultry.

Wild birds are natural hosts and reservoirs for all types of avian influenza viruses, and play a major role in the evolution, maintenance, and spread of these viruses.

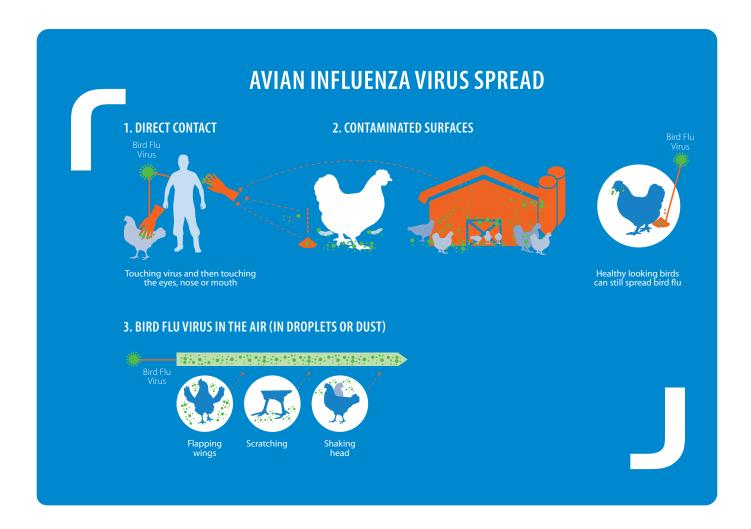
Avian influenza has captured the attention of the international community over the years, with outbreaks in poultry having serious consequences on both livelihoods and international trade in many countries.

BIOSECURITY IS KEY

Monitoring and controlling avian influenza at its poultry source are essential in susceptible avian species and environment.

Implementation of biosecurity measures, in line with OIE international standards, is key in securing the production sector and trade, to safeguarding food security and the livelihoods of farmers, and to limiting the risk of human infection with avian influenza strains that have zoonotic potential.

Source: World Organisation for Animal Health. Avian Influenza. https://www.oie.int



Routes of transmission

According to the Food and Agricultural Organsiation (FAO) 90% of the virus is spread by equipment, vehicles and people.

Poultry farming is a worldwide economic force: all the more reason for staying healthy and safe!

Of the 30 billion farm animals, 23 billion are chickens. Poultry is the fastest-growing meat protein source in the world. Low pathogenic AI can become highly pathogenic. Material contaminated with excretions (poultry feces) are the second most dangerous means of spread (after live birds).(1)

The virus can survive in manure for 30 to 35 days at 4°C (39°F). Al viruses in liquid manure have been known to remain viable for 105 days during winter.(2)

BIOSECURITY IS ALSO IN YOUR HANDS



8 tips to keep by your side and to start acting now

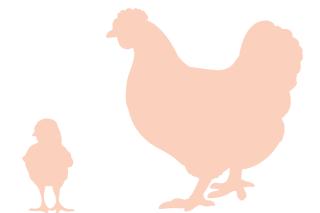
Having the right products and a biosecurity partner by your side to care for your farm and your flock is a big part of the solution. But there are a lot of - often tiny - steps that you can take yourself to stop the disease.

- 1. Make sure hand hygiene is properly done, wash and disinfect your hands before entering the barn.
- 2. Every person on your farm needs to follow the rules. Every visitor presents a risk of transmitting the disease.
- 3. Place boot baths outside the barn, at every entrance, make sure you manage them well to protect your farm from introduction of diseases via shoes or boots.
- **4.** Make sure the vehicles and crates coming to your farm are cleaned and disinfected properly.
- **7.** The virus can spread via feed and drinking water as well, make sure your feed storage silos and drinking water lines are cleaned and disinfected after every cycle.
- 8. Take samples of your drinking water source to be sure this is not contaminating your barn and animals.

BIOSECURITY IS KEY

- **5.** Place disinfecting wheel baths and spraying bows at the entrance of your farm to avoid introduction and transmission of the disease via trucks.
- **6.** Encourage and promote personal hygiene and biosecurity towards your truck drivers. If they don't follow procedures they represent a clear danger to your farm.

If you have any questions about these steps or about the right products that go with it, just ask your distributor or your CID LINES, An Ecolab Company representative.



The critical points of biosecurity

ENTRANCE HYGIENE

TRANSPORT HYGIENE

BARN HYGIENE



- Keno[™]derm, Kenosept L/G for hand hygiene
- Virocid® in a boot bath for boot hygiene



- Biosafe/Keno san for cleaning
- Virocid® for disinfection (Proven efficacy against AI virus)
 - Personal hygiene for truck drivers

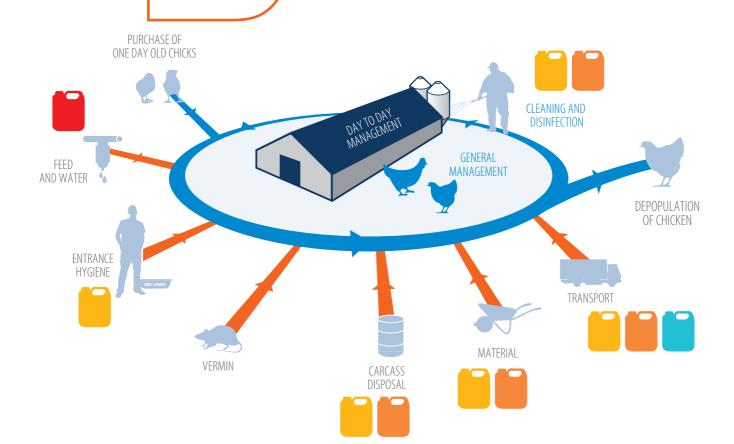


- Keno san for cleaning
- Virocid® for disinfection

BY YOUR SIDE IN THE PREVENTION **AGAINST AI**

Break through the route of transmission

You have the power to resist and prevent Avian Influenza. CID LINES, An Ecolab Company is by your side with products, solutions and best practices.



DRINKING WATER DISINFECTION



Cid 2000 during production for animal consumption (Proven on general virucidal activity).

DRINKING WATER SYSTEM



Cid 2000 at sanitary stop to clean and disinfect the whole system

Discover our products



Foaming alkaline degreaser with superior cleaning properties



Foaming alkaline cleaner, safe on the softest metals



Extremely concentrated broad-spectrum disinfectant*



Water line disinfectant*

Virocid®

Virocid® has been tested on the following the AI serotypes:

- H5N1 by the IZSVe, OIE & FAO Reference Centre for Avian Influenza and Newcastle disease, Italy
- H9N2 by Microbiotest Inc. Sterling VA, USA
- H5N8 by Wageningen University & Research, the **Netherlands**
- All three studies confirmed elimination of the virus at 0.25% (1:400 or 2.5ml/L or 1/3 oz/gal)
- Virocid® is listed by the Food and Agricultural Organisation of the United Nations and is approved by the by the US **Environment Protection Agency** (EPA) against Al virus.

VDA certified

For vehicle safety, we only use detergents and disinfectants that are certified by the German Association of the Automotive Industry (VDA) as 'non corrosive'. Virocid[®] is VDA approved at 1% as class A.

THE CRITICAL POINTS ON OUR FARM

WHAT EXPERTS SAY...

Feed

Birds should only be fed with products that are specifically intended for animals. Wild birds should have no access!

Feed bins

To prevent contamination of feed and loss of nutritional value, bins must be cleaned regularly, preferably with a product that prevents microbiological growth in feed bins. Empty the bins completely and clean and disinfect auger after every cycle.

Water

Your animals need water to keep them healthy and to keep their body functioning properly. Water transports various nutrients, is responsible for digestion and plays a key role in regulating an animal's temperature. Make sure the drinking water for your animals has an optimal microbiological quality. Prevent the growth of pathogens by using a water disinfectant during the production cycle. At a sanitary stop you need to clean and disinfect the whole drinking water system to remove biofilm and

to reduce the general infection pressure as much as possible before new animals come in. Wild birds should have no access!

Transport

Drivers must be sufficiently informed about the rules of the farm:

- The cab of the trucks must be kept always clean, and regularly disinfected. When accessing the farm, additional measures like hand hygiene and changing clothing or footwear must be taken
- The cargo section of trucks arriving to collect animals must be cleaned, disinfected and dry (with efficacious and non-corrosive chemicals)
- Drivers should not walk around the farm and definitely shouldn't enter the barns
- All equipment used by drivers for loading or unloading should be cleaned and disinfected after transport

Visitors

Make sure there is a registration of all the people entering the barn.

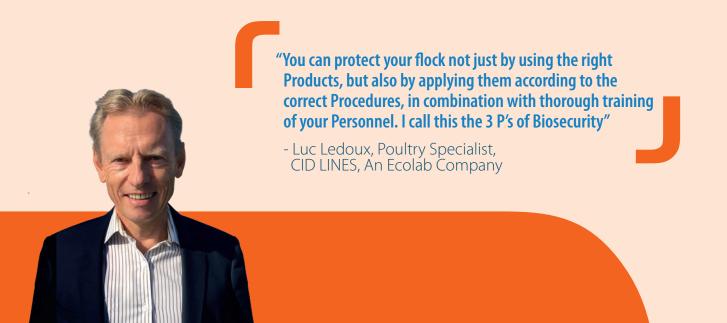
When entering the hygiene lock, they need to register, wash and disinfect their hands and take a shower. Then they go to the clean zone of the hygiene lock and wear farm-specific clothes and farm-specific boots.

Walk through a boot disinfection bath before entering the barn. Foot dips should be filled with a disinfectant with proven efficacy against the Al virus.

Barn

Make sure cleaning and disinfection are properly done after every production cycle to reduce the general infection pressure as much as possible before new animals come in.

Use the appropriate products to have a broad-spectrum working action and to be sure that you kill the AI virus. Ask for the product testing report on the AI virus!





CID LINES

An Ecolab Company

Fostering quality of life means caring for every stage of the cycle. Everywhere it matters, health means the world. And health, we believe, starts with hygiene. It's why at CID LINES, An Ecolab Company, we devote all our passion, experience, and expertise to safeguarding animal health and hygiene. Because no matter where you are in the food chain, health matters. And this is where health begins.

Discover our brand story



Interested in our solutions? Go to www.cidlines.com or ask your dealer for more information.