

The hygiene factor in sustainable poultry production

In order to be able to optimize production results, poultry farms nowadays have to aim for a high health status. This can be done by using an efficient biosecurity program and by having a strict cleaning and disinfection protocol for the farm.

Hygiene is an important part of your biosecurity program on farm by protecting your farm against infections from outside and by stopping pathogens from spreading inside the farm.

Principal sources of infection are

- Direct contact with infected animals
- Indirect contact with excreta of infected animals
- Other types of animals: birds, rodents, insects...
- Feed, water, manure...

For the farm manager, therefore, making the right decisions for his or her farm is a very difficult task and one which involves taking into account all the aspects of modern poultry farming.

No disinfection before an effective cleaning

Cleaning and disinfecting go hand in hand and are imperative to maintain wellbeing and health of production animals, especially in intensive modern housing where high density and high productivity increases the infection pressure. Thorough cleaning and adapted disinfection allow to decrease the pathogens level and to prevent or to break the disease cycle.

The myth of the ideal disinfectant

The ideal disinfectant:

- Has a spectrum adapted to the target
 - Is fast-acting
 - Has a sufficient efficiency within the contact time
 - Remains active in presence of organic matter
 - Has a good material compatibility
 - Has no or low toxicity for users
 - Has an acceptable eco toxicity
 - And an easy protocol of application
- Stel samen met uw dierenarts een effectief vaccinatieprogramma op, aangepast aan uw bedrijf.

Iodine, chlorine, glutaraldehyde, phenolic or quaternary ammoniums compounds...None of these raw materials is responding to all these parameters. Thus, synergy is required: a mutually advantageous conjunction of distinct elements allow to be closer to the “myth of ideal disinfectant”.

Complex formulations with several active substances, containing also stabilizers, sequestering agents, buffering agents... offer the best solution.

In addition, together with the chemical properties of the disinfectant, the method of application is a key factor to obtain good results. To guarantee a good activity of the disinfectant, following directions of use is essential.

The reality of specific situations

On a poultry farm, sources of contamination are the environment, the material used at the farm, the farmer and the animals themselves. Several disinfectants are used on poultry farms at different frequencies and different applications.

Where to use a disinfectant on a poultry farm?

HOUSING HYGIENE

The aim of an efficient cleaning and disinfection protocol of a poultry house is to decrease the infection pressure in general. The reduction of bacteria in the immediate surroundings must reduce the opportunity for bacteria to gain access to the animals. Remove all organic matter and equipment before soaking and cleaning. A broad-spectrum disinfectant, such as Virocid® should be used afterwards.



Tools and equipment absolutely have to be the farm's own, in other words they may never be used on another poultry farm. If certain tools and equipment still have to be used on another poultry farm, they must be thoroughly cleaned and disinfected before coming back onto the uncontaminated part of the farm

PEOPLE HYGIENE

The hygiene lock should be constructed in such a way that the clean and contaminated sections are strictly separated from each other. Everyone entering the farm must pass the entry facility. This hygiene lock ensures a strict separation between the 'contaminated' outer zone and the 'clean' farm section. Clothing and footwear are to left in the areas provided in the contaminated zone. Showering thoroughly is sometimes also necessary. You need to pay attention to hand and boot hygiene.

The hygiene lock should be cleaned thoroughly every week. When doing so, the separation between the contaminated and the clean zones must be respected at all times. The entry facility should be disinfected regularly.

Hand hygiene

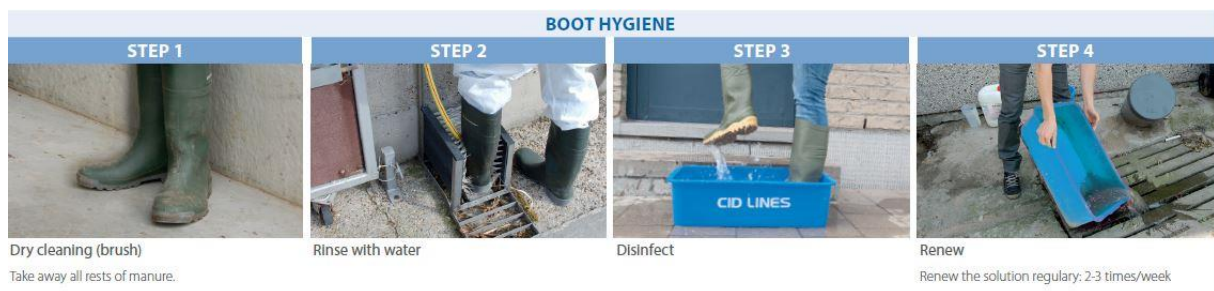
As farmers hands are directly in contact with the animal and the equipment, hand hygiene is directly involved in pathogen transmission. A standard recommendation is to wash your hands before entering the poultry house and when you leave the stables to avoid the circulation of germs. Use a cleaning and decontaminating soap, such as Keno™derm and disinfect afterwards with Keno™sept G, a disinfecting alcohol solution.

Boot hygiene

The critical characteristics required from a disinfectant used in a footbath/dip are speed of disinfection and broad spectrum. If disinfection baths are adequately used and located on strategic places, they are a good additional measure for the biosecurity on farm. Disinfectant based on hydrogen peroxide and per acetic acid as Kickstart are ideal for this purpose.

Disinfection dip:

- At the outer door to every unit which must be used on entering and leaving the stall
- Boots must always be cleaned before they are disinfected
- Refill 2-3 times/week



Drinking water hygiene

Water is one of the most important nutrients for a bird so a good water quality is essential to keep your animals healthy. A valuable disinfectant for animal drinking water lines should leave no residues, has to be stable until the end of the drinking water lines and should be safe for the animals. Start with a good cleaning and disinfection of the drinking water lines at sanitary stop by using a disinfectant such as Cid 2000 and afterwards disinfect your drinking water continuously while the animals are in house with for example hydrogen peroxide based product such as Cid Clean.

Transport hygiene

The poultry production is an industry on wheels and therefore it's of vital importance that all outgoing and incoming traffic (new animals, manure, feed, slaughterhouse, visitors...) are being disinfected without exception. A truck sprinkler installation is ideal but at farm level it's of course just as efficient to have someone disinfecting the truck manually with a Virocid® solution.

Conclusion

Cleaning and disinfection lies at the base of keeping out pathogens and is seen as one of the most important parameters for your farm management. To give new-born birds the best possible start and the best chances in their lives, they should be provided with a healthy environment and optimal biosecurity conditions on the farm.