



## **Cleaning and disinfecting your chicken coop**

As the old saying goes *'cleanliness is next to godliness'*, and when it comes your chickens, coop hygiene is key. All animals and people can withstand being exposed to low levels of most bacteria and viruses but when exposed to high levels of a given disease our bodies are more likely to be overwhelmed and succumb to infection. The levels of challenge are particularly important when it comes to Marek's disease and Salmonella infection, as both require high levels of exposure to cause infection. We will never destroy all 'bugs' in our coops but we can certainly reduce them through regular thorough cleaning and disinfecting.

The frequency of cleaning your coop depends on:

- The numbers of hens present, more hens mean more mess!
- The age of your birds - young chicks and older birds are more vulnerable to disease.
- The disease history of the holding. If you've had an issue with respiratory disease, coccidiosis, Salmonella or Marek's disease then cleaning and disinfecting will need to be carried out more often.
- Weather conditions - wet weather the coop will become dirty quicker and therefore more frequent cleaning is needed with all the muddy feet entering it.

As a general rule, the droppings from under the perch should be removed weekly and the shed cleaned and disinfected every 1-3 months depending upon the above factors. If you have a red mite issue, then cleaning and treatment of the coop for red mites may be required as often as every two weeks!!

Irrespective of which disinfectant is used, the following steps should be carefully followed.

1. Remove all of the bedding and droppings from the shed.
2. Use a detergent to remove any dirt and grease from the shed, as most disinfectants will be inactivated by organic matter (aka droppings). Therefore any dirt, grease or dust left behind on surfaces can render disinfectants ineffective. This is why we wash our dishes

with washing up liquid rather than disinfectant. Bacteria are killed by the cleaning and drying process as well as by the disinfectant. **Poultry Shield** is a safe and effective cleaning agent and has the added benefit of destroying red mite.

3. Let the shed dry; putting disinfectant onto a damp surface dilutes it further, thus making it weaker than the recommended dose, losing power to kill the target bacteria and viruses.
4. Next, dilute your chosen disinfectant to the level recommended on the container. This is the level to which tests have been carried out to prove that the target bacteria will be successfully destroyed.
5. Apply the disinfectant in a hand sprayer or mixed in a bucket and applied with a brush. The spray needs to wet the surface and then be left to dry or leave on for the stated contact time. This is essential when using anti-coccidial disinfectants such as **Interkokask** or **Bi-OO-Cyst**, which must remain in contact with the surface for at least 4-hours.
6. Leave to dry before putting in fresh litter and returning the birds.

When choosing a disinfectant there are a number of considerations:

- What are the target diseases? Viruses e.g. Marek's disease; bacteria e.g. *Mycoplasma* or salmonella; or parasites such as coccidiosis or worms? Most disinfectants state on their labels which diseases they target and if they are DEFRA approved. This relates to the rigorous testing procedure the product has gone through before it can be used for specific use. DEFRA have a list of disinfectants on their website that are licensed to destroy Avian Influenza and Newcastle disease.  
[http://disinfectants.defra.gov.uk/Default.aspx?Module=ApprovalsList\\_SI](http://disinfectants.defra.gov.uk/Default.aspx?Module=ApprovalsList_SI)
- Does the disinfectant need to destroy worms or coccidiosis? These parasites are very difficult to destroy and are resistant to most disinfectants unless stated on the container or data sheet.
- How much do you need? Depending on the area needed to be disinfected; each disinfectant is used at a different rate or concentration depending on the disease issue to hand. For example, if the product states use at 1%, this means 1 part disinfectant to 100 parts of water. If you have 10 litres of water, 1% of this needs to be the disinfectant; so in this case 10ml is required. 10 litres is a handy size to work to as most large buckets are 10 litres in volume.
- The safety of the product. Ensure that gloves and overalls or old clothes are worn when using disinfectants. Wash any splashes from the skin. Always follow the manufacturer's guidelines. Dispose of empty containers responsibly.
- Cost – generally, the anti-coccidial disinfectants are more expensive.

When looking at the target diseases, it is important to remember that different disinfectants act in different ways and some are more suitable for bacteria, whilst others are more suitable to destroy viruses. Always check with your disinfectant supplier which disinfectant is the most appropriate for the diseases you are trying to destroy.

At Chicken Vet, for general disinfection against viruses and bacteria, we recommend using either **Bio VX** or **Poultry Shield**. Both of these products are very safe to use and will work for most of the pathogens your chickens come into contact with.

**Bio VX** is a peroxygen based disinfectant that is DEFRA approved against AI and Newcastle disease. It is effective against most viruses, bacteria and fungi. It is NOT effective against coccidiosis.

**Poultry Shield** is a general purpose disinfectant that is effective against bacteria, fungi and viruses. It is suitable for use on organic holdings. It is NOT effective against coccidiosis.

**Interkokask** and **Bi-OO-cyst** are recommended disinfectants against coccidiosis. Both products are DEFRA approved and are also effective against bacteria, viruses and fungi. As with **Bio VX**, **Bi-OO-Cyst/Interkokask** should be diluted in water and applied to the coop and left to dry.

**Interkokask** has the added benefit of destroying worm eggs, red mites and red mite eggs too – so is an all-round option for disinfection and lowering parasite levels too. It is available in a handy ready to use option which avoids measuring out the product as well as the concentrate version.

Consideration should also be given to where the target disease is likely to reside in your coop. Coccidiosis and Salmonella are most likely to be present on the floors and drinkers and feeders. Marek's disease is shed from the feather follicles and is more likely to be present throughout the coop. Infectious Bronchitis is shed through mucus and through droppings and as such could be anywhere in the coop.

When re-bedding the coop, adsorbent powders such as **Dri-bed** can be applied to areas which frequently become contaminated such as: around drinkers and feeders, around the pop hole and under the perch. **Dri-bed** contains Bio VX disinfectant to destroy bacteria and viruses as well as to absorb moisture and odours.

Having an understanding of disinfectants will help you implement good hygiene practices with your birds, therefore reducing the incidence and risk of disease affecting your birds.

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