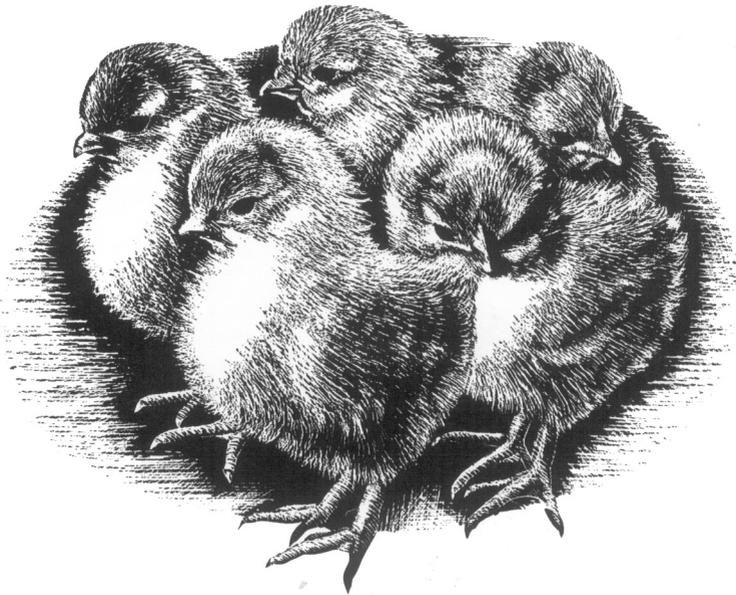


Disease prevention in chickens



M.S.K. Mashishi

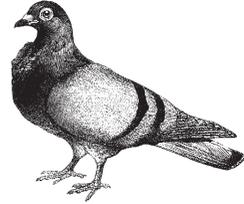


agriculture

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REPUBLIC OF SOUTH AFRICA

Diseases may enter the chicken flock *via* many sources:

- people
- other birds
- rodents
- insects
- feed and equipment.



These diseases will result in sick chickens that are less productive or that could die.

For disease prevention all the measures should be applied together. For example, chicken health will not improve if vaccination is done but the housing management and hygiene are poor.

The following measures are important for disease prevention in chickens.

House management

- The **design** of the house is very important. It should be easy to clean and disinfect. Cracks should be filled so that germs and parasites cannot survive there. The house should also be bird and rodent proof. Rodents (rats and mice) contaminate the feed with their faeces and therefore make it difficult to control salmonellosis in chicken houses.
- There should be **good ventilation** to prevent build-up of ammonia. Excessive dust and draughts can cause respiratory problems in chickens.
- Where possible an **all-in all-out system**, where chickens of the same age are kept in one house, should be used. Between batches the house should be thoroughly cleaned and disinfected and left to dry out completely. This system is effective in controlling diseases that do not survive long outside the host (chicken).
- Strict measures should be taken to control movement of people and chickens between different houses. People entering the chicken house should have their boots disinfected in a footbath placed at the entrance.

Hygiene

- Litter should be removed and dumped in a suitable area away from the chicken houses. Houses should be cleaned, using high-pressure waterjets and soap. After rinsing the soap, a disinfectant should be applied.
- All equipment used should also be cleaned and disinfected before a new flock enters the house.



- Good drainage should be a priority because standing waterpools can increase the risk of diseases and insect problems such as mosquitoes that can spread a viral infection called pox.

Vaccination

Vaccination can be used to prevent many diseases. There are different ways of vaccinating chickens; spray, drinking water, injection and the eye-drop method.

Some vaccines must be given using a specific route, for example, pox vaccination is only given *via* a wing-web-stab method, not in drinking water or in the eye.

- Only healthy chickens should be vaccinated.
- The vaccine should be used as soon as possible after mixing.
- The vaccine should not be exposed to sunlight but should be kept cool.
- It is important to note these points because vaccination failures may result if these aspects are neglected.



Spray vaccination

With this method the vaccine is mixed with clean, cool water that has no soap or disinfectant residue. Add 2 to 4 g of skimmed milk powder to 1 ℓ of drinking water. The mixture is left to stand for 30 minutes before the vaccine is added.

The chickens should be sprayed in the early morning before it is too hot.

Curtains should be raised to prevent wind from scattering the vaccine droplets. Special sprayers are also used.

Eye-drop vaccination

This method is regarded as the best for obtaining good protection but is more labour intensive because all the chickens must be caught.

The vaccine is dissolved in water before being given. One drop is given in one eye only.

Vaccination via drinking water

With this method the vaccine is mixed with water and then poured in the drinking equipment used.

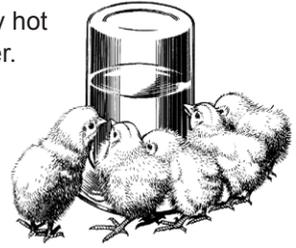
To ensure the uptake of vaccine water by the chicken, water should be removed for about 2 hours before vaccinating so that chickens are



thirsty enough when the vaccine water is given. In very hot weather it may not be necessary to hold back the water.

Make sure that there are enough places for drinking.

You may have to put in more drinkers for vaccination. Ordinary water should be given after the vaccine water is finished.



Sources of chickens

If you buy day-old chicks from the supplier, make sure that they are vaccinated against Newcastle disease and infectious bronchitis.

Chickens bought at auctions or other farms may be a source of infection when introduced to a new flock of chickens.

Other

If any mineral or vitamin deficiency is suspected supplements should be provided.

Free-ranging chickens should be dewormed regularly because they can pick up worms when searching for food.

For further information contact your animal health technician, state or private veterinarian

or

Animal Health for Developing Farmers
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