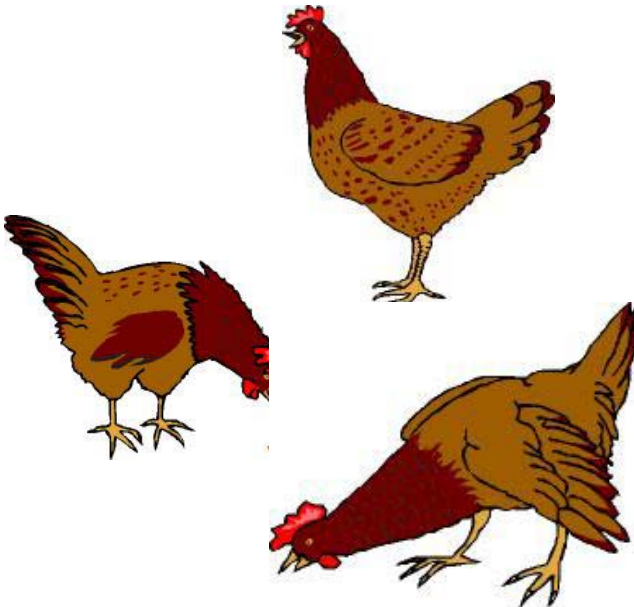




DEPARTMENT: AGRICULTURE  
REPUBLIC OF SOUTH AFRICA

# Newcastle disease

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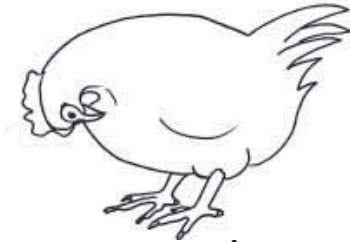
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***N****ewcastle disease is a very serious disease. Prevent it by vaccinating your chickens (poultry) and using good management practices.*

*If you suspect the disease in your poultry, notify your animal health technician or state veterinarian so that they can help you to control it.*

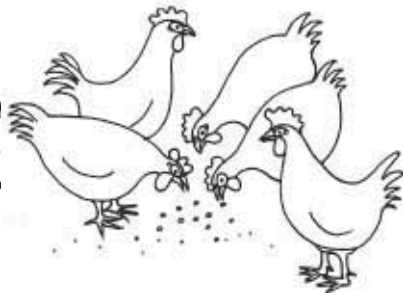


## What is Newcastle disease (NCD)?

- It is the most important poultry disease in South Africa and probably the world
- Newcastle disease is caused by a virus and is highly contagious, which means that it spreads rapidly among chickens
- It has a high death rate
- It can affect any kind of poultry farm, from backyard to large commercial poultry farms
- Intensive management of poultry where large numbers of chickens are housed together as well as the transportation of chickens over long distances promote the spread of the disease

## How are chickens infected?

- The virus is present in the **droppings** of sick as well as healthy chickens that carry the virus. Healthy chickens are infected when they eat food or drink water contaminated by these droppings
- Chickens are also infected by breathing in small **airborne droplets** that originate from sick chickens and from healthy chickens that carry the virus



- The virus can live for some time outside chickens, and the disease can be spread by the movement of poultry, people, equipment and poultry products (the virus may be present on the clothing of people, equipment, at markets, etc)

## Signs of NCD in live chickens

The signs of the disease depend on the part of the body that is affected. The airways, gut and nervous system tend to be infected

### *General signs*

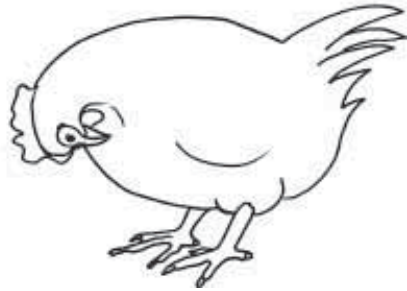
- Chickens rapidly become weak and often die without showing any signs
- Depression
- Sitting with ruffled feathers
- If laying hens are affected, egg production drops suddenly. The eggs are of poor quality, have soft shells and may also be deformed. Egg whites may be watery



### *Nervous signs*

- Walking in circles
- Turned head
- Head may be held between the legs

- Difficulty in walking
- Muscle twitching (shaking)
- Paralysis



### *Gut signs*

- Green diarrhoea

### *Airway signs*

- Laboured and rapid breathing
- Coughing
- Swollen sinuses may be visible



## Signs of NCD in dead chickens

- The carcasses are usually in good condition
- There may be bleeding in the stomach and gut
- There may be small red spots on fat around the heart or intestines
- Watery contents in the nose and sinuses
- The windpipe may be red or show small red spots on the inside
- Sometimes there are no signs or lesions at all!

## Diagnosis

- There are no signs or lesions specific for NCD!
- If your chickens are dying, you should contact your nearest animal health technician or state veterinarian. Samples will be taken from the dead chickens, and maybe they will kill some sick chickens to take samples. The samples will be sent to the laboratory to determine the cause of death

## What other diseases could be confused with NCD?

- Other flu-like diseases
- Diseases that cause sudden death or green diarrhoea
- Various kinds of poisoning
- Egg abnormalities can be caused by other viruses or feed-related problems



## Treatment

- There is **no treatment** for NCD and it is best to destroy the sick chickens
- This is a controlled disease. You should therefore contact your animal health technician or state veterinarian if you suspect the presence of the disease. They will then help to control it and prevent it from spreading. Control measures will include quarantine, emergency vaccination, disinfection and burning of chicken litter and dead chickens
- The best way to prevent the disease is by good management and vaccination

## Prevention

### *Vaccination*

- Vaccines are available to protect chickens against Newcastle disease
- Only healthy chickens should be vaccinated
- There are different vaccines available. Ask your animal health technician or state veterinarian to advise you about the best ones for your chickens





## Security



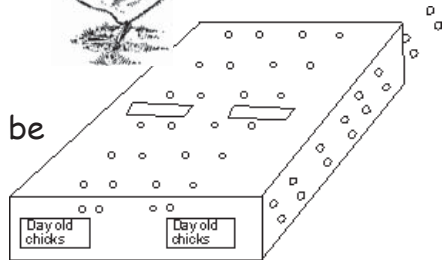
- Prevent people from other chicken farms from coming into contact with your chickens, because people could carry the virus on their clothes and shoes
- Control rats and birds near the cages, as they could also spread the disease

- Buy healthy chickens only



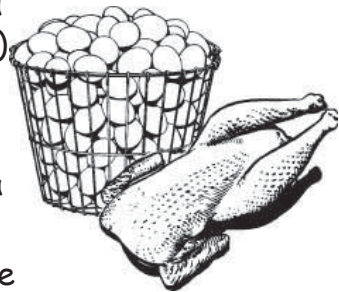
## Resistant poultry

- Indigenous poultry may be more resistant to NCD if in good condition



## Why is NCD important?

- The high death rate leads to a loss of production (eggs, meat)
- Cost of control (buying and administration of vaccines)
- Loss of trade possibilities as a result of quarantine measures
- Cost of eradicating the disease



*If you suspect Newcastle disease in your poultry,  
notify your animal health technician or state  
veterinarian so that they can help you to control  
the disease*



For further information contact your state  
veterinarian  
or animal health technician

or

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