



**SCAN ME**  
To get this online



# The Handbook on Chicken Diseases



Implemented by  
**giz** Deutsche Gesellschaft  
für Internationale  
Zusammenarbeit (GIZ) GmbH

**AGRI-JOBS  
4 YOUTH!**





## Introduction

There are many causes of diseases in chicken. Some are caused by infections such as viral diseases, bacterial infections and parasites. Others are caused by poor feeding or bio-security that make the chicken weak and sick.

It is important to keep sick birds away from the rest of the healthy flock as diseases can spread quickly.



### *Important*

- If a chicken dies bury it in a plastic bag
- Never eat it
- Handle with care
- Do not touch it with bare hands
- Always use gloves

## Categories of Chicken Diseases

- Viral infection
- Bacterial infection
- Protozoan infection
- Parasitic infection
- Accidents

Let us now look at each disease category and dive in to the different diseases, their symptoms and how to control them.

### Viral Diseases

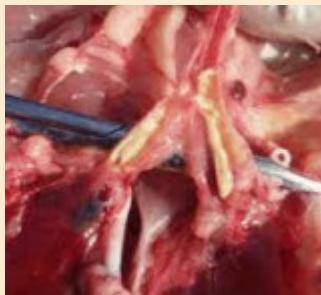
- Viral infections have no cure
- We only manage or treat symptoms

To prevent, vaccinate the birds and have strong biosecurity and biosafety measures.

## Common viral diseases are:

- Avian Influenza
- Infectious Bronchitis
- Gumboro Disease
- Fowl Pox
- Marek's Disease
- Newcastle's Disease
- Infectious Laryngotracheitis

## Avian Influenza



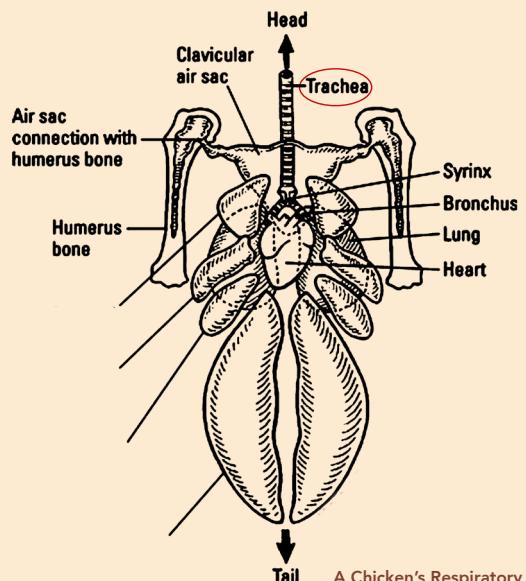
### Clinical signs

- Free egg yolk in the body (egg yolk breaks brown and mixes in the abdomen).
- Wounds/plaques in the trachea.

Also known as bird flu, this Infection is caused by Avian Influenza Type A virus.

### Symptoms

- Depression
- Loss of appetite
- Birds stop laying eggs
- Nervous signs
- Coughing
- Sneezing and diarrhoea
- Sudden death
- The combs and wattles swell, and turn blue due to poor blood circulation



A Chicken's Respiratory System



## Infectious Bronchitis (IB)

Infectious Bronchitis (IB) is a severe respiratory disease in chickens that is easily spread from one sick chicken to the rest.

### Symptoms

- Noise when breathing
- Coughing and sneezing

### Clinical signs

- Reproductive organs swell
- Spleen and liver are larger
- The kidney swells



## Newcastle Disease

Newcastle disease spreads easily in birds. It is caused by a virus.

### Symptoms

- Swelling around the eyes and in the neck
- Complete paralysis - birds are unable to move
- Sneezing
- Greenish, watery diarrhoea
- Runny nose
- Coughing
- Depression
- The chicken's muscles shake
- Drooping wings
- Sudden death
- Increased death in a flock

In Layers, there is a drop in egg production and the shells become thinner.

### Clinical signs



## Infectious Bursal Disease (Gumboro)

Infectious Bursal Disease (Gumboro) is a severe viral infection in chicks that spreads fast.

### Symptoms

- Diagnosis of Gumboro is not easy.
- Chicks less than 3 weeks of age will not show any sign.
- A high death rate will be seen for chicks between 3-6 weeks old.
- Areas near the joints are swollen.



### Prevention

Vaccinate the birds and have good biosecurity (foot bath, wash your hand before entering chicken housing, housing must have good ventilation).

## Fowl Pox

Fowl Pox is a viral infection of chickens, where we have wounds on the skin of the bird.

### Symptoms

- Drop in egg production
- Loss of appetite
- Weight loss
- Pimples or wounds on the skin (dry fowl pox) or inside the mouth and throat (wet fowl pox)



## Marek's Disease

Marek's Disease affects chickens and is caused by a herpes virus.



### Symptoms

- Paralysis in the legs, wings, and neck.
- The bird is unable to walk or stand.
- Tumours can grow on the birds.
- Irregular pupils, grey irises, or loss of vision/eyesight.

### Prevention

- Vaccinate chickens against the disease.
- Keep the chicken away from new birds for at least a week while the vaccine takes effect.



## Infectious Laryngotracheitis

- Infectious laryngotracheitis affects the respiratory parts of chicken and spreads very fast.
- Spreads by direct contact with infected birds or indirectly by people and contaminated materials.

### Symptoms

- Discharge from the eyes
- Nasal discharge
- Sneezing and coughing blood
- Decreased growth
- Decreased egg production

### Prevention

- Vaccinate the birds and have good biosecurity measures.
- Observe good hygiene: Clean and disinfect the house.



# Bacterial Infections

## These include:

- Fowl Cholera
- Infectious Coryza
- Fowl Typhoid



## Fowl Cholera

Fowl Cholera is a bacterium that is spread easily by sick to healthy birds.

### Symptoms

- High death rate
- Birds are unable to walk properly
- Before death, the bird may faint, become stiff, and breathe fast
- Swollen wattles

## Infectious Coryza

Infectious coryza is a serious respiratory disease of chicken caused by a bacterium.

### Symptoms

- Decreased activities
- Nasal discharge
- Sneezing
- Facial swelling



## Fowl Typhoid

Fowl Typhoid is caused by bacteria.

### Symptoms

- It's usually seen in older birds. The symptoms are:
- Depression
  - The feathers look rough
  - Lack of appetite
  - Thirst
  - Yellow diarrhoea
  - Birds are dull and don't move

# Protozoan Infections

There are many protozoan infections known in chicken but only a few survive under these conditions.



## Coccidiosis

### Symptoms

- Bloody diarrhoea
- The feathers look rough
- Anaemia
- Death of young chicks

### Prevention

- Regularly clean up the chicken house and disinfect it
- During outbreaks use a coccidiostat mixture in drinking water

# Parasitic Infections

These are either external parasites or internal parasites.

## Ectoparasites (External parasites)

### Lice

They are brought to the farm through infested equipment (e.g. crates). They are best controlled by spraying with the right insecticides.





## Ticks

There is no treatment for ticks.

### To get rid of them:

- Find out where the ticks are hiding.
- Use a high-pressure washer or stream cleaner to spray into the crack in which they're hiding and wash out as many ticks as you can.
- Apply a pesticide in their hiding spot, and apply again several times.

## Fleas

Fleas are common in backyard chicken or where birds spend a lot of time outdoors or when they come in contact with wild animals.

In chickens, they prefer to attach to the wattles or combs on the chicken's face.



## Endoparasites (Internal parasites)

There are two types of internal parasites that affect chicken

- Worms
- Protozoa

Low levels of attack do not cause a problem and can be left untreated.

### When your birds are badly affected you will see:

- Poor growth
- Poor feed conversion
- Decreased egg production
- Minerals and water
- Death

# Record Keeping

It's a good idea to keep health records and vaccination records for your chicken. This way you can look back and see what worked and what did not work when faced with a similar challenge.

## Vaccinations

Vaccination can prevent many chicken diseases. It is important to vaccinate your birds at the right time to keep diseases away. Here is a standard vaccination Schedules for chicken.

Age (Days/Weeks)	Vaccinate Against/ Activity	Administration
Day 1	Marek's Disease	Injection
Day 1	Newcastle	Eye/nasal drops
Day 8	Gumboro	In drinking water
Day 14	Newcastle	In drinking water eye/nasal drop
Day 15	Gumboro	In drinking water
Week 6 + every 3 months	Newcastle	In drinking water
Week 8	Fowl Typhoid	Injection
Week 8	Fowl pox	Wing stab
Week 9	Deworm	In drinking water
Week 12	Fowl Typhoid	Injection
Week 18	Newcastle 2 <sup>nd</sup> Dose	In drinking water
Week 30	Newcastle 3 <sup>rd</sup> Dose	In drinking water



Remember to vaccinate against Newcastle every 3 months

# Health Records

Here is a table to help you keep a record of the diseases that may attack your birds. We have filled in the first row as an example. Fill in the rest.

Disease Type	Date detected	Disease symptoms	Number of Chickens Affected	Number of Chickens Survived	Number of Chickens that died	Medicine Administered (if any)
EXAMPLE: Coccidiosis	15th Jan 2024	Bloody diarrhoea	10	9	1	Amprocox & Amilyte

## Recording your Chicken's Vaccinations

Fill in the table below with the type of vaccine given, date, how it was given and include all the management practices like deworming, debeaking among others.

Chicken Batch no. \_\_\_\_\_ / Date received \_\_\_\_\_

Age (Days/weeks)	Vaccine/Activity	Date	Administration	Remarks
	Marek's Disease			
	Newcastle Disease			
	Gumboro			
	Newcastle Disease			
	Gumboro			
	Newcastle Disease			
	Fowl Typhoid			
	Fowl Pox			
	Deworm			
	Fowl Typhoid			
	Newcastle Disease 2 <sup>nd</sup> Dose			

Watch



Saturdays 1:30 pm (English)

Sundays 1:30 pm (Kiswahili)



Produced by



For more information  
Subscribe to iShamba  
Send the word "JOIN" to 21606

Content approved by

