

# Topic: Farm Animal Diseases (I)

## Diseases

Diseases can be defined as the absence of normal health due to infection, nutritional deficiency and imbalance, hereditary and functional disorders as well as injuries. Diseases can also be described as any disturbance in the normal life or body function of an organism which may affect a particular organ or the whole body and sometimes leads to reduced growth, production or premature death.

**Infectious Diseases** – these are diseases which can affect an animal without the animal coming in contact with the infected animal. Transmission of this type of disease is through air, water, dust. Examples are fowl cholera, anthrax, tuberculosis.

**Contagious Diseases** – A disease is said to be contagious if the mode of transmission is by a healthy animal coming in physical contact with an infected animal with the diseases being transferred. Examples of such diseases are Foot and Mouth Disease, Newcastle disease

## Types of Diseases

1. **Per acute disease** – one that lasts only for a short time with no noticeable symptoms
2. **Acute disease** – This shows noticeable symptoms and manifests maximum causality
3. **Sub – acute disease** – This lasts more than acute with one or more symptoms of the disease
4. **Chronic disease** – This is the type that keeps on longer causing loss of growth and production but no resulting death of the animal

## Causes of Disease

- Virus
- Bacteria
- Fungi

- Protozoa
- Malnutrition or metabolic disorder

## **Fungal Diseases**

### **1. Ringworm** – animals affected are poultry birds, pigs

Causal Organism – fungus

#### **Symptoms**

- Lesions on the skin
- Skin irritation
- Loss of appetite and weight

Method of Transmission

Through infected animals, contact with infected brushes, feeders and drinkers.

Control

- Disinfection of all pens and equipment
- Infected parts of animals should be treated every two to six days with mixture of Sulphur and Vaseline
- Old scabby area can be scrapped off and iodine solution applied.

### **2. Aspergilosis**

Animals affected – cattle, poultry birds, pigs and sheep

Caused by *Aspergillus fumigatus*

#### **Symptoms**

- Loss of weight
- High body temperature
- Loss of appetite
- Difficulty in Breathing
- Skin irritation
- Respiratory disorder

Method of Transmission

Via contaminated (mouldy) feed, mouldy litter and contaminated incubator

Control –

- Regular disinfection of pens and equipment
- Avoid mouldy feed

- Good sanitation
- Spry with fungicides

## **Protozoa Diseases**

### **1. Trypanosomiasis**

Animals affected – Resistant breeds of cattle are N'Dama, Muturu and Keteku while susceptible breeds are White Fulani, Red Bororo, Kuri Chad, Sokoto Gudali and Boran.

Causal Organism

It is caused by a protozoan called *Trypanosoma spp.*

#### **Symptoms are**

- Rise in body temperature
- dullness in appearance
- anaemia
- sleepiness
- weakness
- dry coat
- nervous disorder
- loss of appetite and weight

#### **Method of Transmission**

Spread by blood sucking tsetse fly.

Control

- Clearing of bush around farm to remove the fly's habitat
- Biological control of insect vectors
- Treatment of infected animals with drugs such as antimosan, trypanosomide
- Eradication of wild species or animal carriers in and around pasture

### **2. Coccidiosis** – animals affected are poultry birds, domestic fowl, turkey, goose, rabbit

Causal Organism – protozoa

#### **Symptoms**

- Loss of appetite
- Drooping wings
- High Mortality

- Emaciation
- Huddling
- Dullness
- Loss of hair
- Blood stained diarrhea
- Rough Feathers

### **Control**

- Changing of Litter
- Drugs such as amprolium, nitrofurazone should be administered
- Avoid wet litters and feed
- Proper sanitation

### **3. Red water fever**

Animals affected – sheep, goat, cattle, pig.

Caused by babesia spp

#### **Symptoms**

- Emaciation and death
- Loss of weight and appetite
- Diarrhea
- Increase in body temperature

#### **Mode of Transmission**

Through bite of infected animal by vector called blue tick

#### **Control**

- Spray with insecticides to kill disease vector
- Inject animals with drugs like babesan, trypan blue and acaprin

### **Viral Diseases**

#### **1. Foot and Mouth Disease**

Animals affected are – cattle, sheep and goat

Causal Organism – Virus

#### **Symptoms**

- Formation of blisters on the mucous membrane of the mouth and skin, hoofs
- Salivation

- Loss of weight
  - Lameness
  - Inflammation of teats and udder
- Method of Transmission – Via infected materials like urine, faeces and milk.  
Mechanical means by farmers
- Control  
Isolation of infected animals. Burning and burying of contaminated materials. Regular vaccination.

## 2. **Newcastle Disease**

Animals Affected – Fowl, turkey. Ducks, goose and guinea fowl

Causal Organism – Virus

### **Symptoms**

- Respiratory symptoms include sneezing, coughing nasal discharge
- Nervous symptoms include paralysis, muscle tremor, somersaulting and cycling movements
- Digestive symptoms include lack of appetite and diarrhea

## 3. **Rinder Pest Disease or Cattle Plague**

Animals affected are cattle, sheep and goat

Causal Organism – virus

### **Symptoms**

- high fever
- weakness and fatigue
- high mortality
- loss of appetite and weight
- blood stained diarrhea

## **Bacterial Diseases**

### 1. **Anthrax** – affects cattle, sheep, goat and pigs.

Causal organism – *Bacillus anthracis*

### **Symptoms**

- high fever
- Depression
- Blood oozes from nose, mouth and anus

- Loss of weight
- Lack of appetite
- Staggering and sudden death

Method of transmission – via contaminated feed, water, equipment and infected animals

### **Control**

- Regular Vaccination
- Proper Sanitation
- Isolation of infected Animals

## 2. **Tuberculosis** – animals affected are cattle, poultry birds, pigs and sheep

Causal Organism – *Mycobacterium tuberculosis*

Symptoms

- difficult breathing
- loss of weight and appetite
- soft and moist cough
- milk reduction
- high mortality
- constant coughing
- emaciation

### **Method of Transmission**

Via inspiration of germs, contaminated water, feed, litters and droppings

### **Control**

- regular sanitation
- slaughter infected animals
- proper sanitation

## 3. **Brucellosis or Contagious Abortion**

Animals affected are – Pigs, sheep, cattle and goat

**Symptoms**

- High fever
- Diarrhea
- Dysentery
- Inflammation of the uterus, scrotum
- Infertility in male animals

- Reduction in milk production
- Still birth and premature abortions
- Posterior paralysis

Method of Transmission – Through contaminated feed and water

**Control**

- Proper sanitation
- Regular Vaccination
- Isolation of infected animals

Treatment – No effective treatment