

LESSON FOR WEEK EIGHT (8) ENDING 31ST OCT, 2025.

SUBJECT: AGRICULTURAL SCIENCE.
TOPIC: PRINCIPLES OF ANIMAL HEALTH MANAGEMENT
CLASS SS3
DATE: 28TH OCT, 2025

Definition of disease, susceptibility, resistance and management.

Disease is defined as any condition in which there is a deviation from a normal state of health or normal functioning of any or all the tissues and organs of the animal body. Health is a state of alertness, freedom from ill-health, accompanied by unhindered growth and productivity of animals.

Susceptibility is a condition in the animal by which it is easily attacked or infected by disease.

Resistance to disease is the ability of the animal to stop or reduce invasion by disease – causing organisms or agents. Animal health management consist of all the activities involved in control all the occurrences and build – up of pathogens in livestock.

FACTORS THAT COULD PREDISPOSE ANIMALS TO DISEASES.

1. Health states of the animals.
2. Nutrition
3. Sanitation
4. Breeds of animals
5. Poor housing
6. Management
7. Unfavourable climatic conditions.

Causative organisms of animal diseases.

Disease of farm animals are caused mainly by micro-organisms called pathogens. These pathogens are;

1. Viruses.
2. Bacteria
3. Fungi
4. Protozoa
5. Malnutrition or metabolic disorder.

VIRAL DISEASES.

Name of disease	Animals affected	symptoms	Mode of transmission	Control
Foot and mouth	Cattle, sheep, goat, pig.	Formation of blisters on the mucous membrane of the mouth, skin, between the hoof. (ii) inflammation of teat and udder. (iii) loss of weight, etc.	Through infected materials like urine, faeces, milk. (ii) by farmers.	Isolation of infected animals. (ii) burning or burying of contaminated materials. (iii) regular vaccination.
Rinderpest or cattle plague	Ruminants	High fever, weakness, difficult breathing, blood stained diarrhoea, high mortality, loss of	Body contact. (ii) contaminated faeces and urine	Regular vaccination. (ii) isolation of infected animals. (iii) restriction of movement within the farm.

		appetite and weight		
Newcastle	Poultry e.g. fowl.	Sneezing, coughing, nasal discharge, difficulty in breathing, paralysis, somersaulting and cycling movement, etc	Through contaminated feed, water, breeds and liter.	Vaccination. (ii) proper sanitation. (iii) disinfection of poultry pen. Iv) burning and burying infected birds.

BACTERIAL DISEASES.

Name of diseases.	Animals affected.	Symptoms	Mode of transmission	Control
Anthrax.	Ruminants and pig	High fever. Depression. Blood oozing from nose, mouth, anus of arecas. Loss of weight.	Through contaminated feed, water, equipment. (ii) infected animals, soil, inhalation of spore from contaminated soil.	Regular vaccination. (ii). Proper sanitation.
Brucellosis or contagious abortion.	Pigs and ruminants	High fever. Thritis in cow and pig. Diarrhoea and dysentery. mastitis and lameness in goat. Pre-mature abortion. Still birth. infertility	Through contaminated materials and infected animals.	Isolation of infected animals. (ii) proper sanitation.(iii) regular vaccination.
Tuberculosis	Ruminants, pigs, poultry birds	Difficult breathing, constant coughing. Weakness. Loss of appetite. Emaciation. High mortality.	Through inspiration of germs. Contaminated water, feed, litter and dropping	Regular vaccination. Proper sanitation. Isolation of infected animals.

FUNGAL DISEASES.

Name of organisms	Animals affected	Symptoms	Mode of transmission	Control
Aspergilosis.	Poultry, pig and cattle	Difficult breathing. Loss of appetite. Skin irritation. High body	Through contaminated feed, litter and contaminated incubator.	Regular disinfection of pen and equipment. Practice good sanitation and

		temperature. Loss of weight.		hygiene. Spray with fungicides.
Ring worm.	Ruminants, rabbits	Lesion on the skin. Skin irritation. Loss of appetite and weight.	Through infected animals. Contact with infected brushes, feeders and drinkers	Disinfection of all pen and equipment. Infected parts of animals should be treated six days with mixture of Sulphur and Vaseline.

PROTOZOA DISEASES.

Name of diseases.	Animals affected.	Symptoms.	Mode of transmission	Control
Trypanosomiasis.	Cattle e.g. white Fulani, red Bororo, Kuri chade, Sokoto Gudali.	Rise in the body temperature. Dullness in appearance. Anemia. Sleepiness and weakness.	Through blood sucking tse tse fly (Glossina spp)	Clearing of bushes around farm in order to remove fly's habitat. Spray with insecticides, etc
Coccidiosis	Poultry birds, rabbits, pig, ruminants.	Dropping wings. Loss of appetite. Blood stained diarrhoea. High mortality. Loss of hair or alopecia in rabbit	Consumption of water. Wet feed. Peking feces. Contaminated pasture, feed and water. Wet feed. Pecking of contaminated litter materials.	Proper sanitation. Avoid wet litters and feeds. Disinfection of the pen house
Red water fever (Diroplamosis) or babesiosis	Ruminants, pigs, rabbits.	Moderately high temperature. Fever. Intermittent fever. Shortage of blood. Severe anemia. Loss of appetite	Through the vector called blue tick. Bite of infected animals.	Spray with insecticides to kill the vector of diseases (blue tick). Inject animals with drugs like trypan blue, babesan or acaprin.

Evaluation.

1. Define disease.
2. List the types of viral, bacteria, fungal, and protozoa disease.
3. What is resistance, susceptibility
4. State the factors that predispose of animal diseases.

Assignment.

Discuss Ebola disease under the following heading: animals affected, symptoms, mode of transmission and control.