

JOB ROLE – ANIMAL HEALTH WORKER

Sector – Agriculture

(Qualification Pack Code: AGR/Q4804)

Class IX



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UNIT 3: Veterinary First Aid

Session 1: Preventive First Aid Measures for Infectious Diseases

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Session Objectives

The student will be able to :

- Explain different routes of disease transmission in animals.
- Prevent and control various infectious diseases in farm animals.
- Perform the cleaning and washing of muzzle, mouth, hooves, feet etc. with prepared aseptic solution.

Introduction

1. Providing immediate treatment of injuries or sudden illness or life-threatening emergencies.
2. Save life of the animal and reduce pain and suffering.
3. Timely first aid prevents injuries or illness from deteriorating and promotes recovery of animal.
4. First aid is provided in requiring fast action by owner or animal health workers.

Preventive First Aid Measures for Infectious Diseases

Certain viruses, bacteria, parasites and fungi are responsible for causing infectious diseases.

Infectious diseases are transmitted from one animal to another animal or from animal to human beings by direct or indirect contact.

Different Routes of Disease Transmission

Diseases can be transmitted through different routes. These are mentioned below.

1. Aerosols
2. Direct contact
3. Oral route
4. Fomites
5. Through vectors

1. Aerosols:

The coughing and sneezing of an infected animal usually coming out in the form of spray can spread an infectious disease. Disease causing agents contained in the aerosol droplets are passed from infected animal to the susceptible healthy animals and healthy humans.

2. Direct Contact:

The disease gets transmitted when a susceptible animal comes in direct physical contact with the infected animal or its environment. The infection causing organisms enter through open wounds, mucous membranes or through skin.



3. Oral Route:

Feed and water offered to animals can be contaminated with infectious agents passed through saliva, nasal discharges, urine and faeces of infected animals. Consumption of contaminated feed or water transmits the disease to susceptible animals.



4. Fomites:

Some infectious agents can live for a short time on inanimate objects like farm equipment, feed and water troughs, fencing, etc. When the susceptible animal comes in contact with these contaminated inanimate objects, the infectious agents are transmitted to them. It is a type of indirect route of disease transmission.

5. Through vectors:

A vector acquires an infectious agent from a diseased animal and transmits it to another susceptible animal either while biting or sucking the blood of a healthy animal. Fleas, ticks and mosquitoes are common vectors of diseases in farm animals.

Practices for Prevention of Disease Transmission

Isolation of sick animals

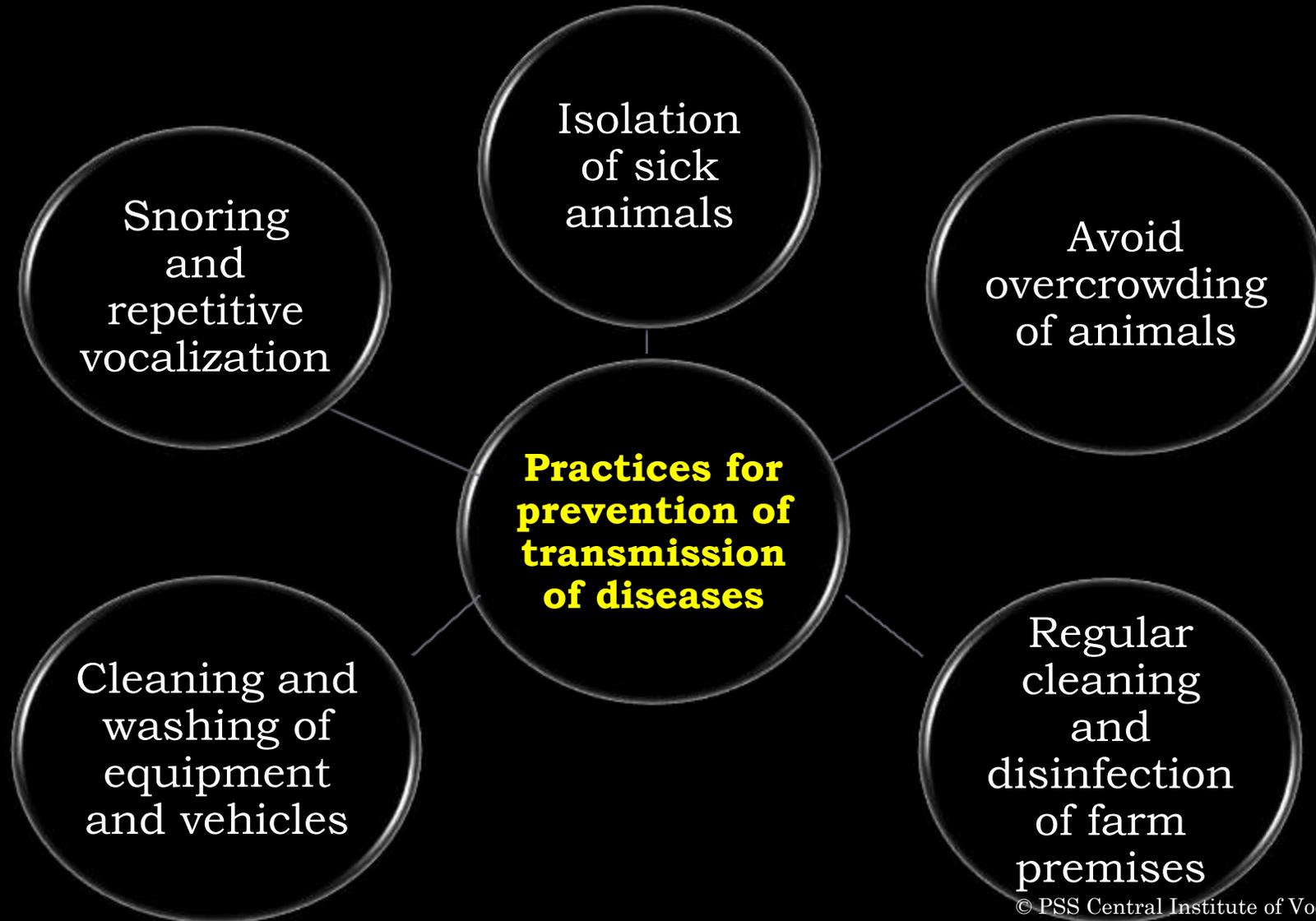
Avoid overcrowding of animals

Regular cleaning and disinfection of farm premises

Cleaning and washing of equipment and vehicles used in transporting animals

Restricted entry in isolated sheds

Practices for Prevention of Disease Transmission



Controlling Infectious Diseases

1. Maintaining hygiene and properly cleaning the animal's body parts like muzzle, mouth, hooves, feet, etc., with antiseptic solutions.
2. Cleaning and washing of body parts with antiseptic solution in animals.

Controlling Infectious Diseases (contd...)

1. Antiseptics:

Antiseptics slow down or stop the growth of micro-organisms on body surface of the animals and prevent infections.

Antiseptics

1. Reduces micro-organisms.
2. Disinfect skin or mucous membranes
3. Reduce chances of infection.

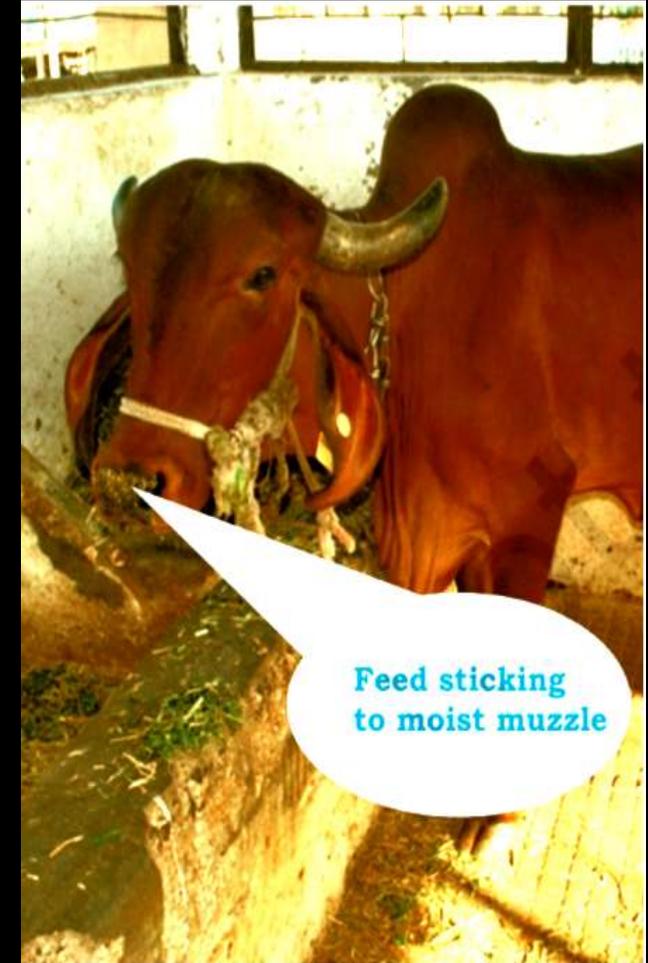
Potassium permanganate (0.01%) solution is used for external use on the skin. The solution is prepared just before using it.



Controlling Infectious Diseases (contd...)

2. Cleaning and Washing of Muzzle:

1. Muzzle of an animal is the protruding part of its head which includes nostrils, mouth and jaws.
2. The muzzle and nostrils of healthy animals are moist-cool and free from any discharges.
3. Dry muzzle and continuous watery or thick discharge from nostril is a sign of disease in the animal.
4. Such animals can contaminate the feed and water through their nasal discharges.



Controlling Infectious Diseases (contd...)

3. Footbath:

1. Footbaths are constructed in the livestock farm for effective disinfection of the hooves of the animals along with disinfection of persons entering into the farm.

2. A footbath is a specially designed area about 9–15 feet long, 3 feet wide and 6 inches deep filled with a disinfectant solution (5% solution of copper sulphate)

3. Generally, located at a place where animals can pass through it several times in a day for is infection of their hooves.



Suggested Items for a Livestock First Aid Kit

1. Scissors
2. Flashlight
3. Halter and rope
4. Needle nosed pliers
5. Wire cutters
6. Disposable gloves
7. 4×4 gauze sponges
8. Skin cleanser
9. Several small bottles of sterile saline
10. Anti-bloat medicine
11. Trocar and cannula
12. Rolls of medical tape
13. Fly repellent
14. Several large syringes (35–60 cc)
15. Cotton
16. Antibiotic eye ointment
17. Thermometer
18. Water soluble ointment

Summary

- In this session you have learnt about the routes of disease transmission, control of various infectious diseases and cleaning and washing of muzzle, mouth, hooves, feet etc. of farm animals.

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