

Veterinary Science

Preparatory Training for the Veterinary Assistant

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FAZD CENTER

NATIONAL CENTER FOR FOREIGN ANIMAL
AND ZOONOTIC DISEASE DEFENSE

fazd.tamu.edu



Environmental Sanitation

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Objectives

- Discuss the importance of sanitation to the welfare and recovery of patients
- Discuss the legal sanitation requirements
- Describe sanitation techniques used in veterinary practice
- Discuss the role of sanitation in disease prevention

Introduction

- Development of disease requires:
 - Susceptible host – individual or population
 - Viable causative agent – primary cause
 - Favorable environment – affects agent and host
 - Temperature
 - Humidity
 - Sunlight
- Environmental conditions
 - Facilitate or retard growth of microorganisms
 - Sanitary practices – disinfection
 - Stalls, cages, equipment, utensils

General Principles

- Pre-cleaning inanimate objects
 - Organic matter (feces, urine, blood, hair)
 - Physical removal
 - Degrading and inactivating effects on disinfectants
- Disinfection
 - Destruction of pathogenic microorganisms
- Sterilization
 - Destruction of all living microorganisms
- Decontamination
 - Cleaning, disinfection, antisepsis, sterilization

Air-borne Transmission

- Mechanical force
 - Sweeping, dusting, washing
- Protective clothing and gear
 - Mechanical respirators
 - Face masks

Disinfection Methods

- Physical – sunlight, high temperature
 - Moist heat – $>60^{\circ}\text{C}$
 - Dry heat – $>100^{\circ}\text{C}$
- Chemical – solutions, gaseous
 - Anionic
 - Cationic
 - Amphoteric
- Biological – metabolites of microorganisms

Classes of Chemical Disinfectants

- Alkalies – carbonates, hydroxides
- Phenolics – coal tars
- Chlorhexidine – wide spectrum
- Aldehydes – formaldehyde
- Halogens – chlorine, iodine
- Alcohols

Personnel Training: Disinfectants

- Methods and application
- Safe application
 - Toxic effects
 - Hazardous to animals and humans
 - Emergency actions in event of accidents
- Read and follow labels