Veterinary Science
Preparatory Training for the Veterinary Assistant
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Objectives

- Describe types of chemical disinfectants
- Discuss proper handling of chemical disinfectants
- Discuss proper disinfection procedures
Definitions

- **Disinfectants**
  - Chemical compounds applied to inanimate surfaces to reduce or eliminate pathogenic microorganisms

- **Disinfection**
  - Act or process of destroying pathogenic organisms
    - Bacteria
    - Viruses
    - Fungi
- Inanimate surfaces
  - Tables
  - Feeding and watering equipment
  - Cages
  - Stalls
Handling Techniques

- Wear rubber gloves
  - Irritants
- Follow directions
  - Not too strong
- Store properly
  - Room temperature
  - Dark
  - Nontransparent containers
- Dispose of properly
Procedures

- Clean surfaces
  - Blood
  - Manure
  - Soil
  - Pus
  - Cracks in surface
- No admittance
  - Animals
Classes

- Alkalies
- Chlorine
- Formaldehyde
- Quaternary ammonium
- Phenol
Alkalies

- Examples
  - Lye
  - Lime
  - Soda
  - Potash

- High pH

- Problems
  - Skin irritation
    - Remove animals

- Uses
  - 2% solution lye – soil and rubber boots
Chlorine

- Bleaching agent
- High concentration of chloride ion

Problems
- Degrades on exposure to light
- Offensive odor

Uses
- .05% to .2% solution – hard surfaces
Formaldehyde

Gas-like chlorine

Solution called formalin

Problems

Offensive odor

Uses

5% formalin solution – rubber boots, feed and watering utensils
Quaternary Ammonium

- Chlorhexidine
- Benefits
  - Acceptable odor
  - Non-irritating
- Commonly used by veterinarians
- Uses
  - 1:1000 to 1:5000 solution – hard surfaces
Phenol

- Called cresol as disinfectant
- Problems
  - Offensive odor
  - Irritant
  - Corrosive
- Uses
  - 2% solution – soil and hard surfaces