Basic Livestock Health Plan

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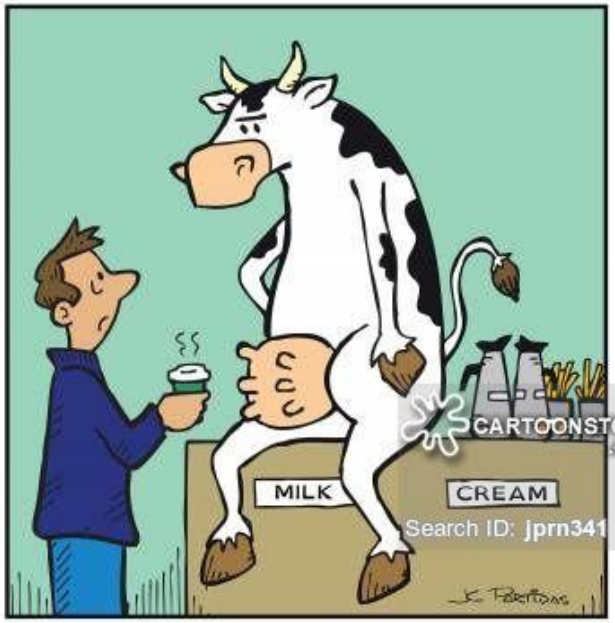
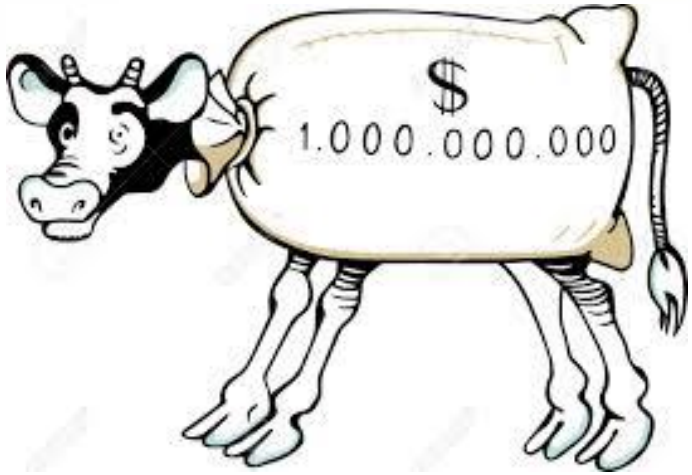
What do we expect from livestock?





What do livestock expect from us?

- Proper husbandry practices
  - Health
    - Disease control
    - Environmental hygiene
  - Nutrition
    - Feeds and feeding
  - Handling
    - Animal welfare

Livestock health planning

- Set Objectives
  - Adhere to veterinary regulations
    - Maintain high standard animal health, and farm hygiene
    - Follow animal movement protocols

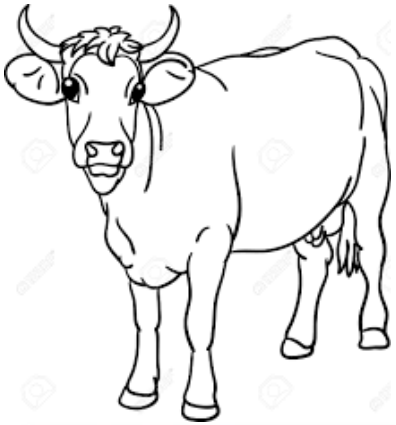
- Activity plan
  - Develop animal health calendar
    - Regular vaccinations
    - Regular parasite control
    - Farm hygiene practices
    - Keep health records

Considerations

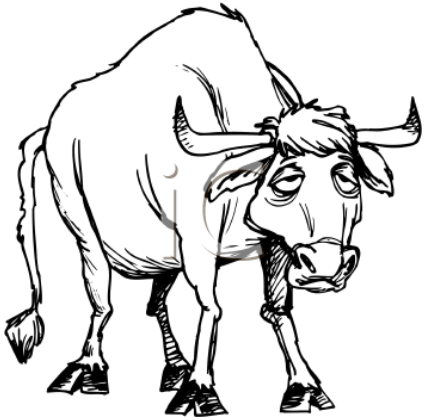
- Disease prevalence
  - Compulsory vaccinations (e.g. Anthrax, brucellosis, FMD)
  - Recommended vaccinations (e.g. Lumpy Skin Disease, Pulpy Kidney, Pasteurellosis)
- Parasite prevalence
  - Common parasites
- Medicines
  - Source and costs
  - Storage and use
- Breeding program
  - Timing
    - Season
    - Age
    - Production status
      - Gestation, lactation

A healthy and a sick animal

Active, alert, attentive, shiny smooth coat, social, wagging tail, eating, strong

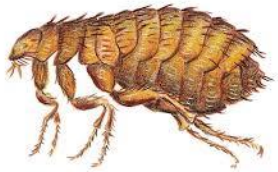


inactive, dull eyes, rough coat, poor appetite, isolated, weak



Organisms causing diseases

- **Living organisms** (parasites, bacteria, virus, protozoa)
  - Bacteria
  - Virus
  - Protozoa



Common sources of diseases/infections

- **Poisoning (Plants & chemicals)**
  - E.g. lead, nitrate
  - Poison leaf

- **Nutrition**
  - Quantity and quality
  - Deficiencies (minerals & vitamins)
    - Joint problems, botulism, eye infection, abortion

- **Injuries**
  - Fractures, bruises/wounds

- **Management**
  - Poor hygiene

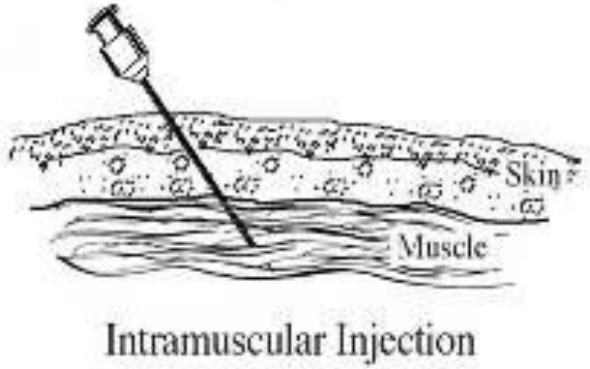
Remedies

- **Vaccines**
  - Healthy animals
  - Subcutaneous injection
- **Antibiotics**
  - Sick animals
  - Intramuscular (IM) injection (some SC or IV e.g. Disulfox)
- **Anti-parasitic**
  - Parasite control
    - Internal
    - External
- **Supplements/deficiency**
  - Minerals
  - Vitamins

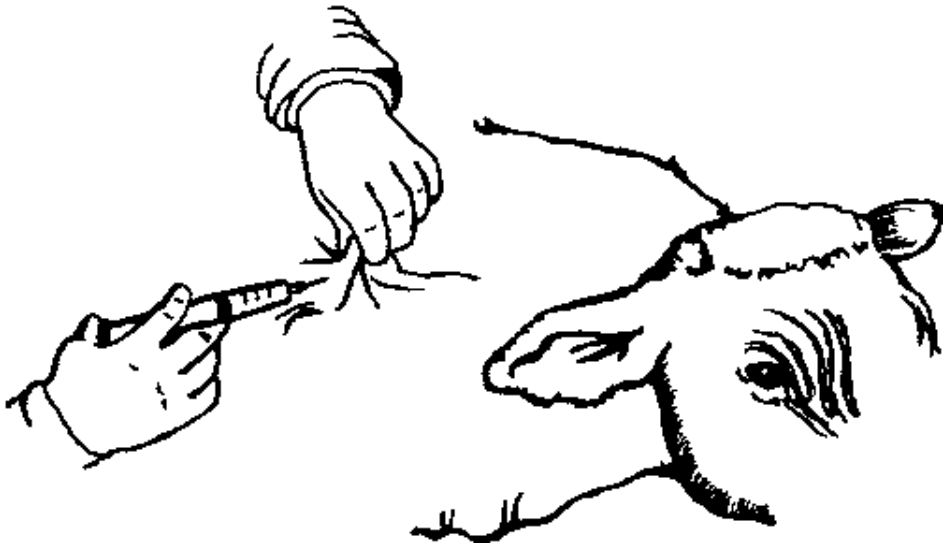
Failure of medicines

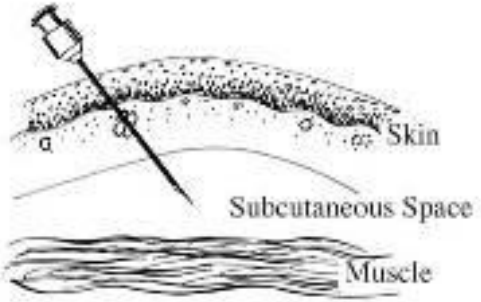
- Medicine factor
  - Expired
  - Damaged (temperature)
  - Poor mixing
  - Incorrect diagnosis
- Animal factor
  - Poor nutritional status and body condition
  - Stressed
  - Overpowered by disease
  - Parasite infestation (int & ext)
- Human factor
  - Incorrect dosage
  - Live vaccine vs. antibiotic
  - No boosting
  - Vaccinating during outbreaks

Injection sites



Intramuscular Injection



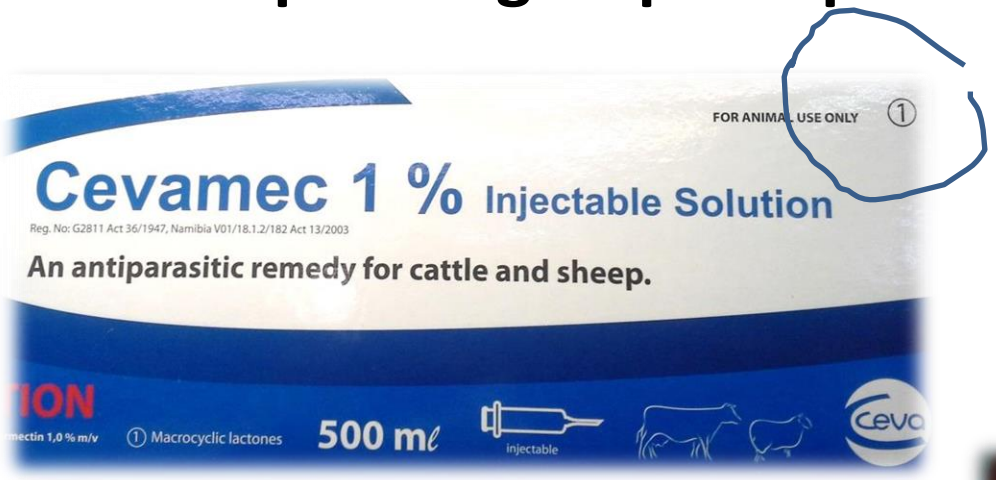


Subcutaneous Injection

Anti-parasitic remedies groups

Group No.	Chemical Group	Active Ingredient	Effective against
1	Macrocyclic Lactone	Ivermectin, Abamectin, Doramectin,Cydectin	Round worms & Certain external paracites
2	Benzimidazoles	Albendazole, Fenbendazole, Mebendazole, Triclabendazole	Round worms & eggs, tape & Flukes
3	Imidiothiazole	Levamisole	Round worms
4	Salicylinides	Rafoxinide, Closantel, Resorantel, Oxyclosanite	Flukes,tape,round &nasal worm
5	Phenols	Nitroxynil, Disophenol	Round & liver fluke
6	Sulphonamides	Clorsulon	Flukes
7	Organophoshates	Haloxon, Trichlorfon,Napthalophos	Round worms
8	Isoquinalones	Praziquantel	Tape worms
9	Tetrahydorpyrimidine	Morantel, Pyrantel	Round worms

Examples of groups on products



Basic Cattle health plan

	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Vaccines	***Supavax** Anthrax, Botulism Blackquarter *Adults & 6 months olds		***Duovax-**Booster Blackquarter, Botulism (4 wks. after Supavax-for first timers) ***Brucella** (4-8 month old heifers)	***Vitamin A**			***Lumpyvax** (adults & calves 3-6 month old) *2nd **Vitamin A**		
Parasites	*Control parasites at least twice a year. *Control internal parasites before and after the rainfall season (May & Sept) *Give attention to external parasites during the rainy season (Dec-Apr) *Do not use same anti-parasitic remedy all the time to avoid parasite resistance								

Basic sheep and goat health plan

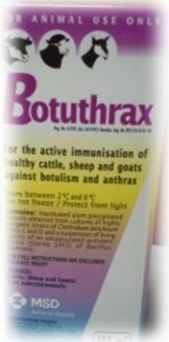
	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov
Vaccines	***Pasteurella** (2 weeks olds & adults) ***Pulpyvax** (3 months olds & adults) <u>Option 2-</u> ***MultivaxP**, ***One Shot Ultra**		***Boost** – Pasteurella & Pulpyvax *Boost	***Vit A**	***Pasteurella** (when necessary)		***Pulpyvax** ***Vit A**		
NOTE!	*Vaccinate against enzootic abortion 4-6 weeks before mating activities (e.g. Chlamysure vaccine)								

Parasite control in smallstock

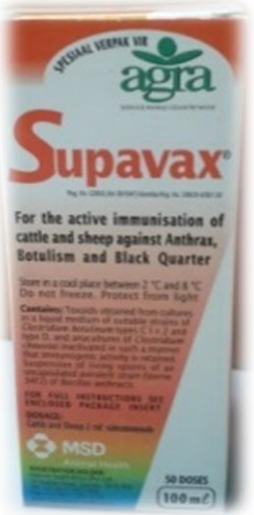
Parasite	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Parasites	*Roundworm and flukes occur, *Ticks					*Roundworm and tapeworm, *Lice and mites				*Roundworm *ticks		
	Nasal Bot(occurs throughout the year)											
Remedy group	Group 1,2,4 *e.g. Closamectin*					Group 2, 3, 4 *e.g. Prodose orange & Agra Dip Cyp*				Group 1,3,4 *e.g. Dectomax*		
NOTE!!	*Vaccinate animals against pulpy kidney 3 weeks before controlling internal parasites *Parasites should be controlled a minimum of 2 times in a year											

Common diseases and vaccines

- **Botulism**
  - *C. botulinum (leave in bones/carcases)*
  - Paralysis



March – April



- **Blackqurter**
  - *C. chauvei (soil borne)*
  - Dark spongy muscles

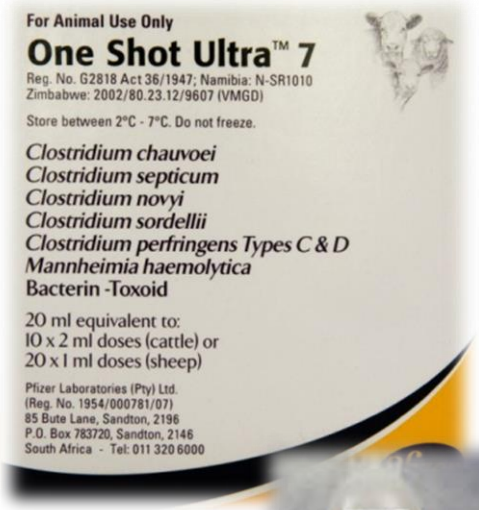
Boost at 4-6 weeks

- **Anthrax**
  - *B. anthracis (in carcasses)*
  - Bloody dischargers

Common diseases and vaccines

- **Pulpy kidney**
  - *C. perfringens D (leave in intestines)*
  - Sudden death
  - Depressed, nervous
- **Pasteurellosis**
  - *P. haemolytica/multocida (leave in respiratory tract)*
  - Fever, coughing, poor appetite
- **Tetanus**
  - *C. tetani*
  - Spasm, stiffness, lock jaw
- **Malignant oedema**
  - *C. septicum*
  - Fever & hot wounds, lameness
  - Similar to black quarter
- **Black quarter**
  - See previous slide

All ages
Boost at 4-6



Diseases affecting reproduction : abortion, still birth, retained placenta

- **Brucellosis**
  - *B. abortus*
  - *Heifers (4-8 months of age)*
  - *S19 & RB51*

- **Vibriosis**
  - *C. fetus*
  - *Heifers & bulls 6 weeks before breeding*

- **Chlamydiosis**
  - *Chlamydophila psittaci*
  - *Disinfect premises*
  - *Vaccinate 4-6 weeks before mating*

Common tick-borne diseases

- **Anaplasmosis (gallsickness)**
  - *Anaplasma marginale* (from ticks)
  - Anaemia, fever, constipation, dark urine
  - Antibiotics, iron, vitamin B12,
  - Sugar, vinegar & yeast (stimulate digestion)

- **Sweating sickness**
  - *Hyalomma truncatum (tick sp)*
  - Eczema, sweating, hypethermia
  - Antibiotics, anti-inflamatory
  - Tick control

Common skin infections

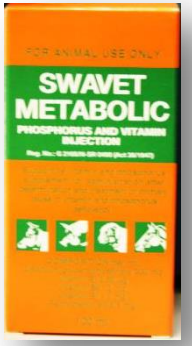
- **Warts**
  - Viral infection
  - Pinch & twist
  - Plug off for vaccine

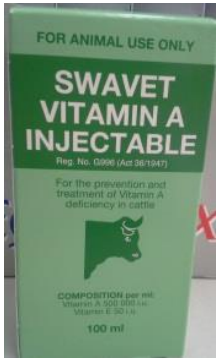
- **Orf**
  - Viral infection (poxvirus)
  - Zoonotic
  - Vaccination, separation, antibiotics

- **Lumpy Skin Disease**
  - Viral infection (poxvirus)
  - Round nodules
  - Vaccine (Oct-Nov)

Common deficiencies

- Mineral deficiencies
  - Phosphorus
    - Deviated appetite
  - Zinc
    - Wool plugging in sheep
- Vitamins
  - (A, C, E & B complex)
    - Eyes, reproduction, respiratory





Parasites

- **Internal**
  - Oral doses

- **External parasites**
  - Pour-on, spray, grease, dip

- **Internal & external**
  - Injectable solutions

Parasite infestation

- Rough hair coat
- Poor body condition
- Scratching
- Nasal discharges
- Faecal infestation
- Anaemia
- Diarrhoea

Use of antibiotics: long/short acting

- Footrot
- Navel-ill
- Joint-ill
- Pneumonia
- Coccidiosis (bloody diarrhoea)
- Scours (white diarrhoea)
- Strangles (horses)
- Pink eye
- Heartwater

Wound and abscess

- **Wounds**
  - Clean and disinfect
- **Abscess**
  - Drain, clean, disinfect

Infection from unhygienic environment

- **Footrot**
  - *Bacteroides nodosus*
  - Dump/wet places
  - Painful hoof, lameness
  - Antibiotics

- **Mastitis**
  - Caused by range of pathogens
  - Use antibiotics (mammary infusion drug)- pen strep

The End

- Observe your livestock condition and behaviour every day
- Prevention is better than cure
- Consult a local Veterinarian