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Beef cattle health & Beef Quality Assurance

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Beef Cattle Herd Health & Production

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OVERVIEW

- Basic Health Concepts 
- Vaccines 
- Signs of disease 
- Beef Quality Assurance 

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BASIC HEALTH CONCEPTS

- Some principles to keep your cattle and yourself healthy:
 - Biosecurity
 - Quarantine new additions
 - Separate water and feed source – feed last!
 - No direct contact
 - How long?
 - 30 days
 - While in quarantine:
 - Good time to schedule a vet appointment
 - Test for BVD PI, BLV, Johnes?
 - Check for footrot
 - Booster vaccines
 - Pregnancy, breeding soundness
 - Deworm, check external parasites





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BASIC HEALTH CONCEPTS

- Some principles to keep your cattle and yourself healthy:
 - Biosecurity
 - Keep separate from other animals (including other cattle, deer, sheep, goats, cats & dogs)
 - Good hygiene (Cryptosporidium parvum, E. coli, Salmonella)
 - Prevention first
 - Better to prevent disease than to treat
 - Nutrition, vaccination, housing, avoid stress, biosecurity







www.cdcpet.com

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VACCINES - CONSIDERATIONS:




- No replacement for bad management
- Need time to work – vaccination before exposure 
- Store, handle and administer correctly
 - Temperature, amount, contamination, mixing
 - Read the label! 

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VACCINES - CONSIDERATIONS:

- No cookie cutter protocols
- What diseases do I want to protect from?
- What could my animals be exposed to?
 - Are they mixed with other animals?
 - Are they stressed?
 - Do they have my neighbors' facilities?






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VACCINES – MORE CONSIDERATIONS




- How good are the vaccines available?
 - No vaccine works 100%
 - Different claims provide clues:
 - Prevents infections
 - Prevents disease
 - Aids in disease prevention
 - Aids in disease control



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VACCINES – MORE CONSIDERATIONS

- What do they cost? 
- Are there any adverse effects? 
- How many animals do I need to vaccinate and what's the minimum number of doses available?
- What is the shelf life? 
- Vaccines have slaughter withdrawal periods!**


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VACCINES – CORE

- Respiratory / Repro
 - IBR
 - BVD type 1 and 2
 - BRSV
 - PI3

+/- others
 Lepto and Vibrio for breeding cattle
 Mannheimia and Pasteurella to control shipping fever



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RESPIRATORY VACCINES

Examples



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MODIFIED LIVE OR KILLED?

<p>Modified Live:</p> <ul style="list-style-type: none"> Pros: <ul style="list-style-type: none"> Longer immunity than killed Fewer hypersensitivity reactions Cons: <ul style="list-style-type: none"> Less forgiving if stored improperly Need to use up immediately Pregnant animals can abort <ul style="list-style-type: none"> If not already vaccinated with same vaccine pre-breeding Also not recommended for suckling calves on pregnant dams, if dam not vaccinated with same vaccine 	<p>Killed:</p>  <ul style="list-style-type: none"> Pros: <ul style="list-style-type: none"> Cannot cause disease Longer storage Cons: <ul style="list-style-type: none"> Often require boosters Often cause reactions Shorter immunity
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VACCINES – CORE

- Clostridia: 7-way or 8-way
- Blackleg
- Redwater
- Clostridium perfringens
- Tetanus

Castrations!


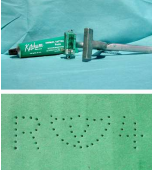



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VACCINES CORE FOR HEIFERS

- Brucellosis for heifers 4 – 12 months of age
- **Must be done by licensed accredited veterinarian**
- Mandatory for change of ownership







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SIGNS OF DISEASE

- Respiratory
- Reproductive
- Digestive
- Skin, eyes, feet








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RESPIRATORY DISEASE - DART


- Depression – sad looking, ears droopy, no interest
- Appetite – no interest in eating
- Respiration – breathing faster or with more effort than normal
- Temperature – high: 103 F or more

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REPRODUCTIVE

- **Not getting pregnant**
 - Infectious
 - Nutrition – body condition score
 - Trace mineral status
 - Breeding soundness
- **Aborting**
 - Infectious – many causes
 - Trauma
 - Drug induced
 - Toxins



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DIGESTIVE

- Bloat
 - Legumes, e.g. clover, fresh alfalfa
 - Too much concentrate
- Choke
 - Apple or other feedstuff obstructing ruminal gas
- Neonatal Diarrhea
 - Multiple causes
 - Watery feces
 - Need electrolytes
 - Can get depressed fast – if unable to stand call vet
- Coccidiosis
 - Intestinal parasites
 - In young 1 month – 1 year
 - Bloody diarrhea
 - Often from overcrowding, unsanitary conditions, stress

→ Rumen acidosis = grain overload



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SKIN, EYE, FEET

- Ringworm
- Warts
- Pinkeye
- Cancer eye
- Footrot
- Other causes of lameness

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SKIN, EYE, FEET


SKIN:

- Ringworm
 - Circular, slightly raised with hair loss
 - Fungus
 - Face, neck, eyes, most common in young
 - Transmitted from animal to animal
 - Rubbing on feeders, fences etc.
 - Treatment: Usually heals without treatment
 - Control: disinfect halters, feeders etc. with bleach




Ahmed Abdel-Rady & Sabar Khatib

**Zoonotic :
You or your kids can get it!!!**



www.123d.com



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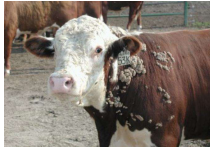
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SKIN, EYE, FEET


SKIN:

- Warts
 - Cauliflower, raised
 - Virus (multiple types)
 - Young most susceptible
 - Treatments: self-limiting, can squeeze warts with pliers for "self-vaccination"
 - Control: Disinfect tack, tagging pliers, tattooing instruments between uses
 - Prevention: good hygiene, vaccines available, but variable success




www.drovers.com

People don't get this!



www.stoofarmvet.com



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SKIN, EYE, FEET

Eyes:

- Pink eye
- Squinting, tears, white spot on eye, inflammation,
- Bacteria
- All are susceptible
- Flies, dust, plant awns, UV light
- Treatment: antibiotics, eye patch
- Prevention: fly control, insecticidal ear tags, vaccines (commercial, autogenous)



This hurts!!!

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SKIN, EYE, FEET

Eyes:

- Cancer eye
- Mass on eyelid or eyeball, will get progressively worse
- Cancer
- Older, Herefords, unpigmented eyelids
- Exposure to UV light
- Treatment: surgery and cull
- Prevention: do not breed



www.dpi.sen.gov.au

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SKIN, EYE, FEET

Feet:

- Footrot
- Lameness, pain, swelling, loss of appetite
- Bacteria
- All are affected
- Wet, humid conditions, stubble, rocks, feces urine
- Treatment: cleaning, antibiotics, anti-inflammatories, early treatment is key!!!
- Prevention: sanitation, prevent mechanical damage, mineral supplementation



www.drovers.com

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SKIN, EYE, FEET

Feet:

- Many other causes of lameness:
 - Sole abscess
 - Puncture wounds
 - Infected joints
 - Hoof injuries
 - Fractures, soft tissue injuries
 - Corkscrew claws

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SOME BQA PRINCIPLES

- Voluntary Program
- Certification – need to attend training and pass test

- Guidelines to avoid
 - Violative residues
 - Injection site damage
 - Foreign materials such as broken needles
- And ensure
 - Safe and wholesome product
 - Good food quality
 - Cattle health

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CARE AND HUSBANDRY

- Handle/transport all cattle in such a fashion to minimize stress, injury and bruising
- Regularly inspect facilities (fences, corrals, etc.) to help ensure proper care and ease of handling
- Keep feed and water handling equipment clean
- Provide appropriate nutritional and feedstuffs management
- Maintain an environment appropriate to the production setting
- Evaluate and enforce biosecurity

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TREATMENTS

- Maintain the following treatment records
 - Individual animal identification
 - Date treated
 - Product administered and manufacturer's lot/serial number
 - Dosage
 - Route and location of administration
 - Earliest date animal will have cleared the withdrawal period
 - Name of individual administering the treatment

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INJECTION SITES

- All injections should be given in front of the shoulder

<http://www.triplefarm.com>


UCR/UCD

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INJECTION SITE LESIONS



Huilan Ritchie

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INJECTION TECHNIQUE

- No more than 10 ml per site
- At least 4 inches apart
- Subcutaneous when possible – 1 inch or shorter needles
- Use 16 gauge to 20 gauge needles – depending on thickness of fluid
- For intra-muscular injections 16 – 18 gauge, 1 or 1.5 inch needles
- Change needle often – every time is best – or at least every 10 animals

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THANK YOU – QUESTIONS?

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