Cattle Product Safety Use Guide

By Dee Griffin, University of Nebraska, GPVEC; March 2004

Vaccines

- **Modified Live Virus (MLV)**
  - Minimal Risk
    - Most if not all fit in this category.
  - Dangerous
    - None recognized.
  - **Safety Action If Exposed:**
    - Wash exposed / injected area and treat with a topical antibacterial ointment
    - See a doctor if swelling or pain develops.

- **Modified Live Bacterial (MLB)**
  - Minimal Risk:
    - None.
  - Dangerous:
    - All have the potential to cause disease in humans.
  - **Safety Action If Exposed:**
    - See a doctor immediately and take the label / bottle of vaccine with you.
    - The doctor will likely begin treatment with an appropriate antibiotic.

- **Killed (virus/bacteria)**
  - Minimal Risk:
    - Most if not all fit in this category.
  - Dangerous:
    - None recognized.
  - **Safety Action If Exposed:**
    - Wash exposed / injected area and treat with a topical antibacterial ointment
    - See a doctor if swelling or pain develops.

Medications

- **Injectable and Oral:**
  - Minimal Risk:
    - Most fit in this category.
    - A potential allergic response in some individuals.
    - People with known allergies to one or more antibiotics should not work in areas in which animals are being treated … OR remove the class of antibiotics for which they are allergic from the treatment protocol and thoroughly clean the treatment area to remove remaining traces of the offending antibiotic before the person works in the area.
  - Dangerous:
    - **Micotil**, IF INJECTED WILL LIKELY CAUSE DEATH IN HUMAN.
      - Do not load syringe until the animal is properly and adequately restrained.
      - Use the "one-hand" SQ tented technique for giving injections.
      - As per all injections … Micotil should be given ahead of the shoulder.
      - As per all SQ injections … there is no BQA limit to the amount of Micotil that can be given in one site.
  - If Micotil is accidentally injected, Apply ice to injection site. Take label to ER/attending physician for information.
**Micotil Continued:** In addition to calling 911 they should themselves or instruct/demand the physician call 1-800-722-0987 or 1-317-276-2000 those are the numbers for Rocky Mountain Poison control and the Lilly emergency hotline. They often have more accurate and up to date information for tilmicosin than local or regional poison control centers.

- **Lutalyse (and other prostaglandins)**, PREGNANT WOMEN CAN/WILL ABORT OR GO INTO LABOR IF EXPOSED TO THIS MEDICATION … this product can be absorbed through the skin … therefore pregnant women should not handle a prostaglandin bottle, work in an area or touch equipment that may be contaminated with a prostaglandin.
- **Dexamethasone** PREGNANT WOMEN CAN POTENTIALLY ABORT OR GO INTO LABOR IF EXPOSED TO THIS MEDICATION.

  - **Safety Action If Exposed:**
    - For products other than MICOTIL … wash exposed / injected area and treat with a topical antibacterial ointment and see a doctor if swelling or pain develops
    - An accidental injection with MICOTIL should be treated as an extreme emergency … CALL 911 and rush person to the emergency room … however there is no known antidote.
    - For pregnant women LUTALYSE (and other prostaglandins), and for pregnant women Dexamethasone … wash exposed / injected area AND see a doctor ASAP
    - A person exposed to antibiotic or other medication for which they are allergic should see a doctor ASAP … if the allergy is severe will need to call 911.

### Antiparasitics

- **Injectable:**
  - **Minimal Risk:**
    - Most fit in this category.
    - No known allergies.
    - Should a person develop an allergic like response they should see or be taken to a doctor ASAP … if the response is severe call 911.
  - **Dangerous:**
    - None.
  - **Safety Action If Exposed:**
    - Wash exposed area and contaminated clothing.
    - Should a person develop an allergic like response they should see or be taken to a doctor ASAP … if the response is severe call 911.

- **Pour-On/Topical/Oral:**
  - **Minimal Risk:**
    - Most fit in this category.
    - Organophosphates potentially can be a serious hazard if handled improperly.
    - No known allergies.
    - Should a person develop an allergic like response they should see or be taken to a doctor ASAP … if the response is severe call 911.
  - **Dangerous:**
    - Only organophosphates are considered dangerous unless an allergic like response should develop.
  - **Safety Action If Exposed:**
    - Newer generation synthetic pyrethroids can cause a severe paraesthesia in some people depending on location of exposure.
    - Wash exposed area and contaminated clothing.
    - Should a person develop weakness, tremors or an allergic like response they should see or be taken to a doctor ASAP … if the response is severe call 911.
10 tips for better vaccination

Vaccinations are an important key to proper animal health and herd health management. And, to ensure that vaccination is as effective as possible, proper vaccine handling and administration is very important. The following tips from Dr. Dale Grotelueschen, a veterinarian with Pfizer Animal Health, will help get you on the right path to better herd health management:

1) Consult your veterinarian to develop a protocol that fits the health goals of your operation.

2) Select a quality product. Consult your veterinarian to ensure you are selecting the right products for your use. It is important to purchase only federally licensed vaccines from a reliable source.

3) Carefully read the label to maximize the value and effectiveness of the vaccine. It is important to understand precautions so vaccines are given at the right stage of the animals’ lives, to animals of the right age, in the proper dosage and at the appropriate intervals if more than one dose is needed.

4) Store the vaccines according to label directions, paying particular attention to ensure correct temperature and light conditions.

5) When transporting vaccines to chuteside, store them in a cooler with an ice pack. Keep the cooler and products in the shade.

6) Always use a sterile transfer needle or disposable syringe when rehydrating products.

7) Mix only one vaccine bottle at a time prior to administration. A good rule of thumb is not to mix more vaccines than will be used in an hour.

8) Subcutaneous injections are the preferred route whenever label instructions allow. All injections should be given in the neck.

9) Make sure to use new, sharp needles and the correct gauge size for the vaccine being used and the size of the animal. Change needles every 10 to 15 animals, and never re-enter a vaccine bottle with a used needle.

10) Always properly clean equipment and syringes after vaccinating. Grotelueschen suggests using the following steps to ensure your equipment is sterilized:

   - Reusable syringes should be washed in hot, distilled water. First wash the outside and then take the syringe apart to wash it thoroughly.

   - Fill the syringe with water and cover with damp paper towels.

   - The wrapped syringe should be placed in an open resealable plastic bag and placed in the microwave on high for five minutes. The damp paper towels prevent the metal parts from sparking.

   - Transfer needles also should be sterilized in the microwave. Wrap in damp paper towels, place in an open, resealable plastic bag and microwave on high power for 30 seconds.