



Good Production Practices: Reading and Understanding a Medication Label

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Purpose: To teach youth how to read a medication label so they are better able to understand how to store and administer medications to different livestock species.*

Materials Needed

- One copy of the worksheet for each youth or small group of youth.
- One copy of the Micotil label per 1-2 youth.

Steps

1. Have youth complete the activity worksheet individually or in small groups using the Micotil label provided.

Remembering What Is Important

Labels on medications are crucial for making sure that medications are properly stored to guarantee maximum effectiveness and for ensuring that they are given in the proper locations and amounts in order to effectively help the animal. In addition, labels help to ensure that medications are not given to a species they are not approved for.

Go through some of the questions with the youth, asking thought-provoking follow-up questions to help them understand why following label instructions is so important. Questions might include the following:

- What might happen if you give your animal too much medication? Not enough?
- What could happen if the medication is stored at a temperature that is too high?
- What could occur if the withdrawal time listed on the label is not followed?
- What might happen if you administer the medication to a species it is not approved for?
- What could happen if you administer the medication in a location not listed on the label?

**This activity has been developed to supplement the information that can be found in the National Pork Board Good Production Practice No. 6: Properly store, label, and account for all drugs and medicated feeds.*

Reading and Understanding a Medication Label

Using the medication label and insert below, answer the following questions.

1. What is the name of this medication? _____
2. What is the slaughter withdrawal time on this medication? _____
3. What animals can this medication be used on? _____
4. What occurs if this medication is given to swine? _____
5. What is the recommended dosage for a 500-pound steer? _____
6. How should this medication be stored? _____
7. How should this medication be given? _____
8. Can an automatically powered syringe be used to administer this medication? _____

Dosage Calculation

Using the medication label and insert below, determine the dose that should be given to a 150-pound ewe.

Medication Label

Micotil® (tilmicosin injection) Dose and Administration Information



Indications: Micotil® is indicated for the treatment of bovine respiratory disease (BRD) associated with *Mannheimia haemolytica*, *Pasteurella multocida* and *Histophilus somni* and for the control of respiratory disease in cattle at high risk of developing BRD associated with *Mannheimia haemolytica*.

Dosage and administration: Inject subcutaneously only. In cattle, administer a single subcutaneous dose of 10 to 20 mg/kg of body weight (1 to 2 mL/30 kg or 1.5 to 3 mL per 100 lbs). Do not inject more than 10 mL per injection site.

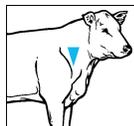
Residue warning: Micotil has a withdrawal time of 42 days, regardless of dose.

Proper Micotil handling procedures

- Storage of Micotil in a secure location to prevent the risk of misuse is recommended
- Recommended storage includes a lockable cabinet or container or a secure storage room, depending on the amount of product in inventory
- Keep full or empty Micotil bottles, used syringes and needles out of the reach of children and the general public
- Read, understand and follow all label use directions
- For subcutaneous use, do not use in automatically powered syringes
- Use a 1/2" to 5/8" 18- to 16-gauge needle
- Keep a protective cover on needles until ready to use
- Never carry loaded syringes in pocket or clothing

Proper Micotil administration procedures

- Properly restrain animal prior to administering Micotil
- With a single hand on the syringe, insert the needle subcutaneously, at a top-down angle, while avoiding penetration of underlying muscle
- Administer a single subcutaneous dose of 1.5 mL to 3 mL of Micotil per 100 lbs of body weight
- Ensure proper disposal of needles, syringes and used bottles
- If syringe is broken or damaged in any way, discontinue use immediately
- Exercise caution and care when removing needle from syringe
- Access to Micotil should be limited to personnel trained in safe handling and use procedures



Micotil dosage chart

Animal weight (lbs)	Micotil dosage		
	1.5 mL/100 lb body weight	2.25 mL/100 lb body weight	3 mL/100 lb body weight
200	3.00	4.50	6.00
300	4.50	6.75	9.00
400	6.00	9.00	12.00
500	7.50	11.25	15.00
600	9.00	13.50	18.00
700	10.50	15.75	21.00
800	12.00	18.00	24.00
900	13.50	20.25	27.00
1,000	15.00	22.50	30.00

What to do in case of self-injection

Seek immediate medical attention and:



REACH for and apply ice pack



REFERENCE product label "Note To The Physician" and/or product insert and provide to emergency medical personnel



REMEMBER to contact Rocky Mountain Poison and Drug Center (RMPDC) at 1-800-722-0987 or Eli Lilly and Co. at 1-800-422-4441 (select product support)

Important Safety Information

- See label on back for complete use information, including boxed human warnings and non-target species safety information.
- Micotil is to be used by, or on the order of, a licensed veterinarian. For cattle or sheep, inject subcutaneously. Intravenous use in cattle or sheep will be fatal. Do not use in female dairy cattle 20 months of age or older. Use in lactating dairy cattle or sheep may cause milk residues.
- The following adverse reactions have been reported: in cattle: injection site swelling and inflammation, lameness, collapse, anaphylaxis/anaphylactoid reactions; decreased food and water consumption, and death; in sheep: dyspnea and death.
- Always use proper drug handling procedures to avoid accidental self-injection. Do not use in automatically powered syringes.
- Consult your veterinarian on the safe handling and use of all injectable products prior to administration.
- Micotil has a pre-slaughter withdrawal time of 42 days.

8. No
7. Subcutaneously
6. Below 86 degrees Fahrenheit; avoid direct sunlight
5. 7.5-15 mL
4. Injection of this antibiotic in swine has shown to be fatal
3. Cattle and sheep; not for use in lactating dairy cattle 20 months of age or older; not for use in lactating ewes producing milk for human consumption
2. 42 days until slaughter
1. Micotil 300 Injection or Micotil
- Answer Key to Questions**