

## READING CHEMICAL LABELS

**Objective:** Decrease the likelihood of negative effect from chemical exposure.

**Concept:** Chemical labels contain useful information, which influence human safety.

**Targeted Age:** Early Adolescence

**Materials:**

Chemical Label, copied for each participant (one is provided on the next page)

Distribute a copy of the following chemical label to the participants. It is a product used to kill parasites on cattle. Using the label, ask participants to answer the question after each of the following situations.

**Background Scenario:**

John, age 17, and Mary, age 12, are brother and sister who live on a ranch in Montana. Both are in 4-H and are preparing their breeding heifers for the county fair. They also have a younger brother, Ted, age 4. Dad usually treats their cattle with Ivermectin for parasites every six months. He was gone to Helena for a big cattle sale and will be gone for the next week. John and Mary realize it is time to treat the cattle. They don't think they should wait until their dad gets home because the fair is on Saturday.

**Situation A:**

John and Mary proceed to measure the solution according to the directions. Ted is watching carefully. Suddenly a bee flies through the barn and Ted is scared. He bats at the bee with the stick he is holding and runs for the door. In the process, the stick hits the bottle John is holding. It is knocked out of his hand and spills on John's leg. The bee escaped, but John's leg is soaked with the chemical.

- ▶ What information on the label is useful?  
*Warning section*
- ▶ What should John do about his leg?  
*Remove jeans and wash area immediately with soap and water*

**Situation B:**

John and Mary apply the chemical to the cattle without problems. When finished, their mom calls for them to come in the house for supper. They leave the empty chemical container on the counter and rush to the house.

- ▶ How should they have disposed of the container?  
*Dispose in an approved landfill or burn*
- ▶ What should be done before eating supper?  
*Wash hands with soap and water*

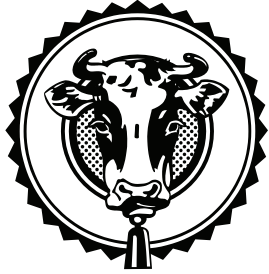
Participants can have fun with this activity by acting out the different situations. Encourage different people to take on various roles. The rest of the group can answer the questions.

**Further Discussion Questions:**

- ▶ What does the phrase "internal and external parasite control" mean?
- ▶ What is stated on the label to indicate that this product has been tested for safety?
- ▶ Can you safely use this product on animals other than cattle? What is on the label to indicate this?
- ▶ Why should this product not be used on market animal prior to a fair and/or sale?



# Sample chemical label

<p><b>ACME IVERMECTIN</b> Pour-on for Cattle</p>	
<p>Consult your veterinarian for assistance in the diagnosis, treatment, and control of parasitism. This product delivers internal and external parasite control in one convenient application. This product, when applied correctly, is effective for control of these parasites:</p> <ul style="list-style-type: none"> <li>▶ Gastrointestinal Roundworms</li> <li>▶ Lungworms</li> <li>▶ Cattle Grubs</li> </ul>	
<p><b>Dosage:</b> The dose rate is 1 ml for each 22 lb of body weight.</p>	<p><b>Administration:</b> Use either a squeeze-measure-pour system or collapsible pack and applicator gun to apply the solution. Follow the directions on the applicator. The formulation should be applied along the topline of a narrow strip extending from the withers to the tail.</p>
<p><b>Safety:</b> Based on plasma levels, the topically applied formulation is expected to be at least as well tolerated by breeding animals and has no effect on breeding performance.</p>	<p><b>WARNING:</b> Cattle must not be treated within 48 days of slaughter for human consumption. Because a withdrawal time in milk has not been established, do not use on female dairy cattle of breeding age.</p>
<p><b>WARNING! NOT FOR USE IN HUMANS!</b> This product should not be applied to humans because it may be irritating to the skin and eyes and absorbed through the skin. To minimize accidental skin contact, the user should wear a long-sleeved shirt and rubber gloves. If accidental skin contact occurs, wash immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with water and seek medical attention. In case of accidental ingestion, contact the local poison control center. Keep this and all drugs out of the reach of children.</p>	<p><b>Environmental Safety:</b> When this product comes into contact with the soil, it readily and tightly binds to the soil and becomes inactive over time. It may adversely affect fish or certain waterborne organisms on which they feed. Do not contaminate water by direct application or by the improper disposal of drug containers. Dispose of containers in an approved landfill or by incineration.</p>
<p><b>WARNING! FLAMMABLE!</b> Keep away from heat, sparks, open flame, and other sources of ignition.</p>	
<p><b>Precautions:</b></p> <ul style="list-style-type: none"> <li>▶ Store away from excessive heat and protect from light</li> <li>▶ Use only in well-ventilated areas of outdoors</li> <li>▶ Close container tightly when not in use</li> <li>▶ Do not use when rain is expected within six hours of treatment</li> <li>▶ Apply to skin surfaces only</li> <li>▶ Do not give orally</li> <li>▶ Antiparasitic activity will be impaired if the formulation is applied to areas of the skin with mange scabs, lesions, caked mud, or manure</li> </ul>	

**THIS IS NOT AN ACTUAL CHEMICAL LABEL.  
THE INFORMATION SHOULD NOT BE USED FOR APPLICATION.**

