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TECHNICAL BULLETIN No.9
IS MY SHEEP OR GOAT SICK?



ESGPIP

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FOREWORD

This Technical Bulletin titled “*is my sheep or goat sick?* ” is produced by the Ethiopia Sheep and Goat Productivity Improvement Program (ESGPIP). The ESGPIP is a USAID funded Project with the objective of improving the productivity of Ethiopia’s sheep and goats.

The Technical Bulletin is intended to serve as an extension aid for Kebele Development Agents (KDA’s) to foster improvement of the health of sheep and goats in ESGPIP target weredas and beyond. It is believed that the information contained in this technical Bulletin will be transferred to Sheep and goat producers and help them to up keep the health of their flocks. It will also be useful for other users engaged in the production of other types of ruminants.

At this juncture, I would like to thank all those involved in the preparation and review of this technical Bulletin.

Desta Hamito (Prof.)
Chief of Party
ESGPIP

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IS MY SHEEP OR GOAT SICK?

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1. Introduction

Sheep and goats will become ill from time to time no matter how well one takes care of them. This may be for a variety of reasons ranging from infectious or noninfectious disease to improper nutrition or management. It is very important to recognize animals that are not feeling well before a disease becomes severe or the condition spreads to other animals.

The producer has the responsibility of detecting animals that are sick or undergoing other stress. Certain signs and actions that animals exhibit can alert owners or attendants that animals need attention. These animals should then be examined more closely. If a producer is unable to assist the animal or fears a disease is infecting the herd, an animal health technician should be notified.

2. Signs to look for

The best way to detect illness in your sheep or goats is to know how they look, act, eat and play when healthy. This means that you should spend some time each day observing your animals and learning their normal behavior and attitude. Get to know their normal eating and drinking patterns, how they walk and act, the consistency of their feces, and the normal appearance of their hair, skin and body. Use body condition scoring (see Technical Bulletin #8) to know if your animals are in good flesh or if they are too thin or fat. Once you know your animals' normal appearance, it is easier to know when they are acting strangely.

Observe animals early in the morning before they go out to graze and again in the evening. As you observe your animals, look for some major signs that an animal is acting differently; then, more closely examine those animals. Animals exhibiting the following signs may need closer examination.

- Standing alone
- Poor appetite
- Abnormal walking or other muscular movement
- Hunched back
- Diarrhea
- Abnormal respiration (best checked in the morning before grazing in the heat of the day)
- Grinding teeth

Animals suspected of not feeling well should then be more closely observed, first unrestrained and then restrained.

2.1. Unrestrained animals

- **Body condition:** do animals look fat and sleek or thin and rough?
- **Hair coat:** is it rough or smooth? Are there indications of external parasites?
- **Movement and gait:** does the animal favor one leg? Is the animal moving more slowly than normal?
- **Lameness:** is the animal using all 4 legs?
- **Swelling:** are there obvious swellings on the body, legs, neck or jaw? Do the hooves appear swollen?
- **Bloat:** does the left side look distended or swollen? Does the animal kick at its belly?
- **Respiration:** is it faster than normal? Does the animal breathe with difficulty?
- **Cough:** Is the animal coughing? Does the cough appear to be dry or wet?
- **Discharge:** nasal, eye, vaginal – what is its color and consistency? Is it bloody?
- **Feces:** are they pelleted or loose? Do they appear off-color?
- **Urination:** is the animal urinating normally? Does the urine look cloudy or bloody? Is the amount of urine normal?
- **Eyesight:** can the animal see normally? Do eyes appear red and runny? Are they white or cloudy?

2.2. Restrained animals

After observing a potentially sick animal unrestrained, it should be caught and more closely examined. Some of the following recommended observations can be done by the producer; others may need to be done by an animal technician.

2.2.1. Head:

- Do the eyes blink when a hand is moved slowly towards them? Is there any discharge from the eyes?
- Is the nose moist and cool? Is there a discharge coming from the nose? What type of discharge – runny, thick, clear, cloudy or colored?
- Are there sores on the nose?
- Are there ulcers around the lips, gums, tongue, etc.? Is there normal salivation?
- Does the breath smell bad?
- Check the mucous membranes of the eyes and mouth.
 - Roll down the lower eyelid – is it pale white or pinkish red?
 - Look at the gums – are they pale or reddish in color?
- Are there swellings on the jaw or neck?



Figure 1. Checking the mucous membrane of the eye.
Photo adapted from Meat Goat Production Handbook with permission, Langston University.



Figure 2. Swelling on the jaw indicating a caseous lymphadenitis abscess.



Figure 3. "Bottle jaw" swelling indicating internal parasite infestation.

Photos used with permission, Langston University.

2.2.2. *Body*

- Is the animal breathing normally – between 12 and 15 times per minute?
- Is breathing difficult?
- Is the animal coughing or sneezing?
- Are there any places where the wool or hair is missing?
- Are there any sores or blisters on the skin? Wet, sore patches of skin may allow disease agents to enter causing infection.
- Are there any swellings under the skin? These may be *lymph nodes or abscesses*.
- Is the coat normal and healthy?

2.2.3. *Legs and feet*

- Is the animal lame? Examine the foot and legs for ulcers, wounds, swelling or pain.
- Are one or more legs involved?
- Are the hooves unnaturally hot, have an odor or are painful to the touch?
- Is there swelling or infection between the hooves?
- Do the hooves need trimming?

2.2.4. Udder

- Is the udder swollen or warmer than usual?
- Does the animal refuse the udder being touched or is it painful to the touch?
- Are there injuries on the teats, udder?
- Is the milk normal in color, quantity, and consistency?

2.2.5. Genitals

- Is there any vaginal/vulva discharge?
- Are there any ulcers/scabs around the vulva?
- Is there any injury or swelling on the scrotum?
- Is the sheath swollen or injured?
- Any discharge from the penis?

2.2.6. Feces and urine

- Does the animal pass urine and feces normally?
- Does the animal look distressed when it passes feces and urine?
- Are feces watery and pass more frequently than normal?
- Is there blood or mucous in the feces?
- Is the color of urine normal?

2.2.7. Body temperature

- Take the temperature of the animal with a thermometer.
- Holding the thermometer firmly, shake it to move the line of mercury near the thermometer's bulb.
- Smear a little Vaseline on the bulb end.
- Have someone hold the animal or tie it up. Lift the animal's tail and gently insert the thermometer about 5 cm into the rectum.
- After 2 minutes, remove the thermometer, wipe it clean and read the temperature. The normal temperature of sheep and goats is between 38.5° and 40°C.
- Finally, shake the thermometer again, wash in cold water and dry before storing it.

2.2.8. Pulse or heart rate

- The pulse or heart rate should be measured on a rested animal.
- Place your fingertips between the animal's ribs behind the elbow to feel the heartbeat.
- Pulse can be detected on the inside of the rear leg roughly 1/3 of the way down or on the artery located below and slightly inside of the jaw two-thirds to the rear of the muzzle.
- A normal range for adult animals is 70 to 90 beats per minute with kids and lambs faster.



Figure 4. Measuring heart rate (left) and pulse (right).
Photos used with permission, Langston University.

2.2.9. Respiration

- Watch the rib cage and count how many times the animal breathes per minute. A normal range is from 12 to 20.

2.2.10. Rumen movement

- If the rumen is not moving normally, that animal will become sick.
- Place your fist in the hollow on the left side of the animal behind the rib cage to feel the rumen move.
- A healthy goat or sheep should have 1 to 2 rumen movements per minute.



Figure 5. Checking rumen movement.
Photo used with permission, Langston University.

3. What to do if an animal is sick?

If your examination of the animal makes you think it is ill, identify the animal in some way and isolate it from the rest of the herd. Inform an animal health officer of the results of your examination. Make sure that items you use in taking care of that animal, such as feed and water buckets, are not used by other animals. Make sure the sick animal does not have contact with the rest of your flock. When feeding or caring for your livestock, always feed and care for the sick animal last and wash your shoes and hands afterwards. If the animal aborts or has any discharge, bury or burn it and don't let any other animal touch or lick it. By following these recommendations you will not take any disease from the sick animal to your healthy ones and help prevent disease spread.

If the illness is beyond the capacity of the producer to handle, it will have to be reported to health professionals and/or veterinary officials for appropriate action. It is the duty of Kebele development agents to report disease incidences that are beyond the management capabilities of producers in their mandate area. Disease reporting is important because it guides action, especially regarding epidemic diseases, and is useful in planning disease control strategies, e.g., resource allocation, disease priority, etc.. The development agent should follow a reporting format with the following content:

- Name of person reporting;
- Reporting date;
- Address of outbreak;
- Affected animal species;
- Numbers of animals affected;
- Number of dead animals;
- Start date of outbreak;
- History; and
- Major clinical signs seen.

4. Summary

Knowing how your animals appear and act when healthy will assist you in determining when they are sick. Observe your animals daily. Take a closer look at animals acting abnormally. Check them using the procedure outlined in this technical bulletin and note any problems. Tell these to the animal health officer. Make sure the sheep or goat is identified in some way. If you think a goat or sheep is sick, isolate it from its herd mates. This can help stop the spread of disease. Always feed and care for your sheep and goats to keep them healthy and less likely to contract disease. Contact your animal health officer to get all required vaccinations. Report disease incidences that are beyond the management ability of producers to government animal health officials. This will assist in disease control strategies.