

EMERGENCY PROCEDURES  
FIRST AID AND NURSING CARE FOR GOATS

Caprine Outing - October 12, 1996  
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1. Quick assessment tests on the sick or injured goat.
  - a. Stay calm - your goat will be more stressed if you panic.
  - b. Take a helper with you if possible.
  - c. Look at the goat and think, "What is different?"
    - i. If not sure, compare with other goats in the herd.
    - ii. Look, listen, touch, smell, use your intuition.
  - d. Can it breathe?
    - i. Clear the nose, straighten the neck.
    - ii. Cut the tether if the goat is hanging.
    - iii. Place the goat in sternal recumbency (sitting upright).
    - iv. Mouth-to-mouth resuscitation in kids is dangerous for you.
  - e. Severe bleeding or deep wound?
    - i. Pressure bandage (not tourniquet).
    - ii. Protective bandage.
  - f. Any obvious broken bones?
    - i. Simple splint to protect during transport.
    - ii. Splint often enough for young goats, distal fracture.
  - g. What is the goat's rectal temperature?
2. When you know you have a problem you can't handle, **call your veterinarian** to describe the situation. If you reach an answering service, have someone stay by the phone for a call-back if possible while you go back to the barn.
3. Specific situations
  - a. **Dystocia** (difficult birth)
    - i. Follow the 30-30-30-30 principle. Examine the doe if she makes no progress after 30 minutes of straining or 30 minutes after the water bag is visible. If all seems normal wait another 30 minutes before doing anything. Examine an unassisted doe if she hasn't delivered her second kid 30 minutes after the first.
    - ii. Not sure if in labor? Check for relaxation of ligaments around the tail, use AI speculum to examine the vagina without causing discomfort.
    - iii. Assist kidding if kids are obviously malpositioned (head only, muzzle on toes instead of on knees, only one leg, more than two legs, etc.). Remember that twins and triplets are the norm. Do not pull on two kids at once, do not pull on front legs if the head is missing. It is usually possible to deliver a kid with one front leg or one hind leg retained.
    - iv. Assist kidding if the kid is yellow (from meconium staining).

v. Apply Madel's rule for lambings: 1 L + 4 R's

Lubrication

Recognition

Repulsion.

Removal

Re-examination

Call for help if you can't deliver the kid in a few minutes.

vi. Rub kid briskly with towel or straw, clear its nose. If you choose to swing it, move away from the wall!

vii. Give antibiotics to the doe if manipulations were extensive.

b. **Tube feeding**

i. Do not hesitate to tube feed any kid that isn't sucking well, unless its body temperature is below 98.6 EF or it can't hold its head up.

ii. An 18 French feeding tube and a 60 ml syringe work well.

iii. Moisten and warm the tube and pass it straight into the kid's mouth. The end of the tube can be felt advancing down the neck, outside the trachea. Insert the tube to the level of the last rib and inject the colostrum slowly.

iv. The kid should receive one ounce per pound of safe colostrum three times in the first 24 hours.

v. Another rule of thumb is 150 ml for a small kid, 200 ml for a medium kid, 250 ml for a large kid at each of three feedings (250 ml is approximately 8 ounces or 1cup).

vi. Wash and sanitize the tube after use.

c. **Detection and treatment of hypothermia**

i. Intraperitoneal glucose injections are given to starved lambs, using a dosage of 10 ml/kg = 4.5 ml/pound of a 20% solution.

Using recommendations developed for lambs, the goat dose is

large (> 10#) kid (single) 50 ml

medium (6.5-10#) (twin) 35 ml

small (<6.5#) (triplet) 25 ml

ii. The glucose solution should be warmed (by holding the syringe under hot water) before administration.

iii. Hold the kid by its front legs. Apply a disinfectant to the injection site, 1/2 inch to the side and 1 inch behind the navel.

iv. Use a 19 or 20 gauge one inch needle fully and boldly inserted into the abdomen, aimed at an angle of 45 degrees to the skin, towards the kid's rump.

v. Also give the kid an injection of long-lasting antibiotic.

vi. Do not use this technique in kids with infectious enteritis, as peritonitis may result.

vii. Warm the kid in air, never hotter than 104 EF. Don't warm up cold kids with an infrared lamp, or hyperthermia may develop and quickly kill the kid. The lamp is OK to keep a kid warm.

d. **First aid for acidosis (fading kid or floppy kid syndrome)**

i. Kid shows depression, ataxia and weakness but no diarrhea or dehydration.

- ii. The syndrome is a metabolic acidosis of unknown cause.
  - iii. Affected kids are usually 3 to 10 days old.
  - iv. Veterinary treatment is intravenous sodium bicarbonate (125 to 200 ml of a 1.3% solution, given over 1 to 3 hours).
  - v. Producers report success treating early cases with oral peptobismol (1 ounce) or baking soda (1/2 teaspoon).
- e. **Frozen ears and feet**
- i. Use warm, not hot water to thaw the extremities.
  - ii. Pat dry but don't rub the damaged skin.
- f. **Prolapsed vagina**
- i. Wash off the prolapse (no harsh soaps) and push it back in, keeping your fingers together to avoid puncturing the wall of the vagina.
  - ii. Check to see if the cervix is open and kidding is in progress.
  - iii. Tie the goat in a depression in the corner of a pen so that when she lies down her rear end is always higher than her front end.
  - iv. Plastic retainers, external trusses, and sutures (preferably bootlaced) are all used if the prolapse recurs.
  - v. Plan to cull the doe from the breeding herd.
- g. **Prolapsed uterus**
- i. Confine the goat to a small, clean pen bedded with straw, not sawdust.
  - ii. Wrap the uterus in a clean cloth.
  - iii. If you have to replace the uterus yourself, keep your fingers together and work through a cloth if possible. Lift the uterus to the level of the vulva so you are pushing slightly downhill. If necessary, put the doe's rear end over a bale.
  - iv. Be sure the goat gets antibiotics and tetanus prophylaxis afterwards.
- h. **Mastitis**
- i. Hot packs or oxytocin (1/4 ml) to strip udder every 1-2 hours.
  - ii. Good idea to collect a milk sample in a sterile vial before treating. Store sample in fridge or freezer.
  - iii. Clean teat end with alcohol before collecting sample or infusing antibiotic.
  - iv. Use partial insertion of the mastitis tube.
  - v. Very sick goats will need fluid therapy and anti-inflammatory drugs; call your veterinarian.
- i. **Retained placenta**
- i. If the doe is still straining, check for another kid.
  - ii. If the placenta is still retained after 24 hours or the temperature is above about 103.5 EF, start antibiotics (penicillin).
  - iii. Remember that goats often eat the placenta - failure to find it when the goat seems otherwise normal is cause for close observation but not alarm.
  - iv. If you are sure there are no retained kids, stay out of the uterus from that point on and give systemic antibiotics.

- v. Remember that the red discharge (lochia) is normal if odorless and it lasts for up to three weeks after kidding.
  
- j. **Down goat - acute**
  - i. Calcium? - at kidding or during late pregnancy or lactation; skin cool, goat weak. Give 60 ml plain calcium borogluconate subcutaneously, divided into 4 sites, if can't get vet in time to give (slowly) intravenously.
  - ii. Mastitis or metritis?
  - iii. Grain overload? - sunken eyes, splashy rumen. Oral antibiotics (500 mg of tetracycline once) and baking soda (1 to 1.5 tablespoons) help but the goat may need intravenous fluids or even a rumenotomy (surgery to empty the rumen).
  - iv. Neurologic?
    - Blind or convulsions - think polioencephalomalacia. Place a towel under the head, give B vitamins (thiamine in particular) immediately, even if you aren't sure of the diagnosis.
    - Balance problems - think listeriosis or meningeal (deer) worm.
  
- k. **Down goat - chronic**
  - i. Provide physical therapy for legs at least twice a day.
  - ii. Roll from side to side frequently.
  - iii. Keep on dry absorbent bedding.
  - iv. Sling if possible.
  - v. You also have a life to live - euthanizing the goat that does not respond in 2 weeks is reasonable.
  
- l. **Urolithiasis**
  - i. A male goat that is off feed or straining is presumed to have urolithiasis until seen to urinate normally. A thorough examination often provokes urination after the unobstructed goat is released.
  - ii. Set the goat on its rump or place it on its back or side with the hind legs pulled up to the ears to examine the penis.
  - iii. Probably you can't extrude the penis if the goat was castrated very young, especially if it is obese.
  - iv. If a stone is found in the tip of the urethra cut it off, but usually you will need a veterinarian's assistance to prevent reobstruction.
  
- m. **Dog bites**
  - i. Shoot the dog.
  - ii. In New York, call the county assessor if one or more goats have been killed by the dog.
  - iii. Get the goats into a barn where they will feel more secure and you can examine them.
  - iv. Clip hair around wounds and wash with betadine or nolvasan shampoo.
  - v. Palpate carefully around joints and jugular veins for wounds. Your veterinarian can help you to decide which goats are unlikely to survive.
  - vi. Be prepared for weeks of daily flushing of abscesses.

- vii. Provide tetanus prophylaxis and antibiotics.
  
- n. **Freeze losses** after shearing.
  - i. Inclement weather during the first 4 to 6 weeks after shearing can kill up to 100% of exposed animals.
  - ii. Wind and rain can kill in August; it's not just a winter problem.
  - iii. Be sure shorn goats are back on full feed before cold wet weather hits.
  - iv. Shed the goats for 4 to 6 weeks if possible.
  - v. Don't turn the goats out late in the day if weather may change, and bring them in if they are hunched up and not eating.
  - vi. Leaving a cape of hair on the back at shearing provides some protection.
  - vii. Individual down animals may respond to intravenous glucose and fluids; call your veterinarian.