

KID OR LAMB POSITIONS

Determining front or back legs – if the kid is being delivered right side up, the soles of the hoof point down on the front feet while the soles of the hoof point up on the hind legs. Regardless of whether the kid is right side up or upside down, the pasterns and fetlock joints on a kid's front legs always bend the same direction as the front knees while the pastern and fetlock joints on the hind legs bend the opposite direction of the kid's hocks.

Upside down kids – Do not pull a kid out upside down. Instead, flip the kid over while simultaneously pulling slowly on his legs to bring him out.

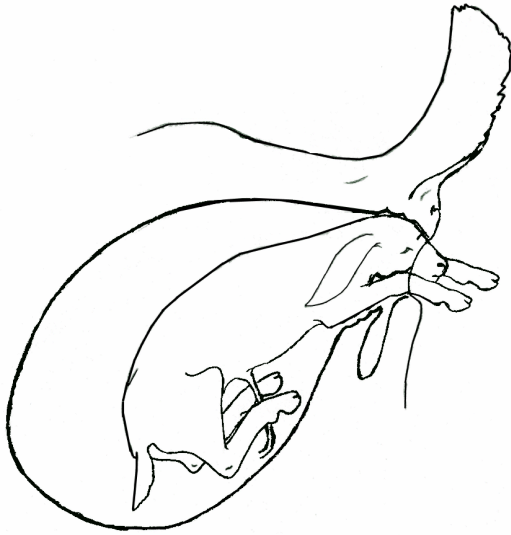


Figure 1. Normal Presentation



Figure 2. One Leg Back*

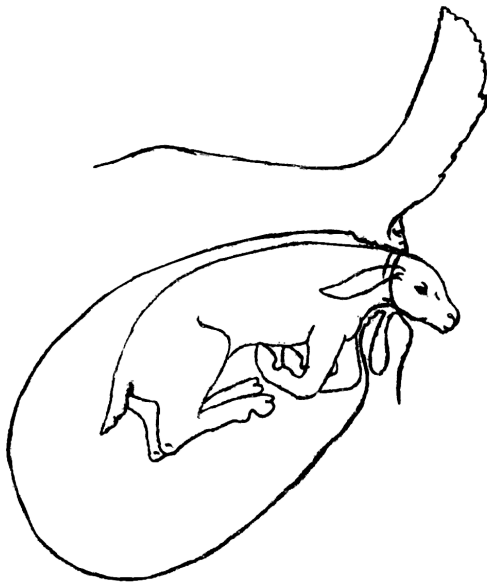


Figure 3. Both Forelegs Back- head will swell up and the kid die if a front leg is not retrieved quickly.*

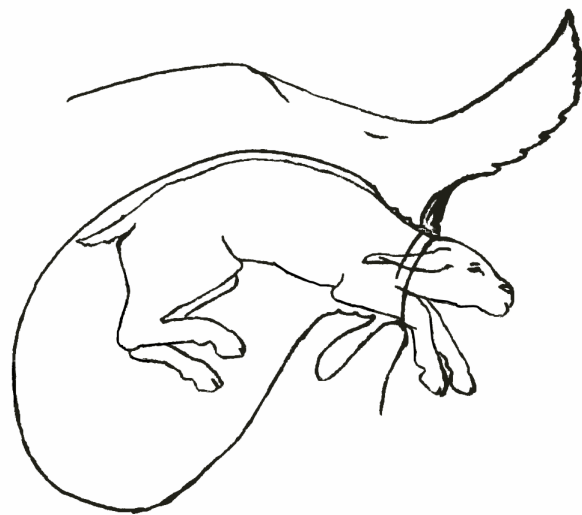


Figure 4. Elbow Lock – pull alternately on front legs to unlock.

* Follow the kid's head down to its chest and armpit to locate a front leg that you are sure belongs to that same kid. Reach under the kid's armpit and use your finger to hook the leg at elbow or knee and bring it forward into birth canal. Retrieve kid's second front leg if possible. Pull alternately on each front leg to bring out the kid. Keep in mind that you can often deliver a kid with one front leg back by pulling simultaneously on the front leg that is forward and on the dome of the kid's head. Pull out and down in an arc.

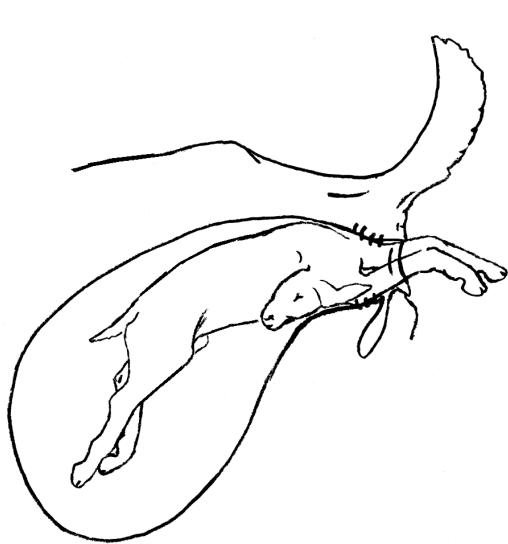


Figure 5. Head Back – a bad position. The doe may tear her uterus. Push the kid all the way back in until you have enough room to put your hand over the dome of his head and gently bring his head up.**

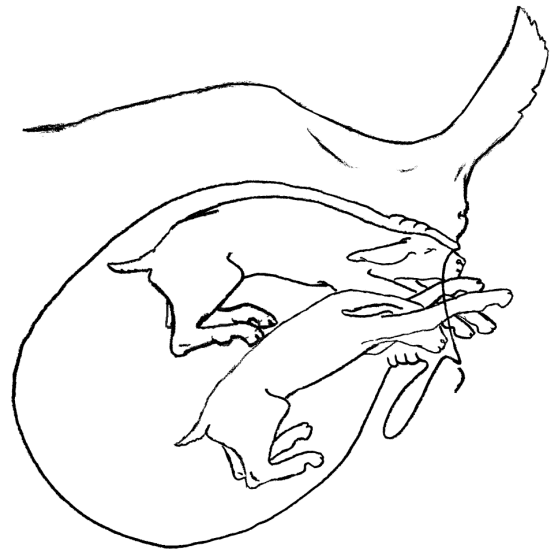


Figure 6. Four Legs & One Head – follow the head into the doe to confirm which legs belong to it. Push the other kid's legs and head way back in and pull the first kid out.

** You may need to put the doe on a downhill or have someone lift up her hind legs in order to push the kid back in far enough to retrieve the head. Sometimes the cervix may feel tight not because the doe is "too small" or has not dilated but because she is tense and fighting you. A veterinarian may give the doe an epidural (lidocaine - xylazine) to relax her muscles and make it easier to push the kid back in. You may need to use a lamb puller or twine noose to keep the kid's head from falling back again as you start bringing the kid out again. **Do not attempt to pull a kid out with his head back!**

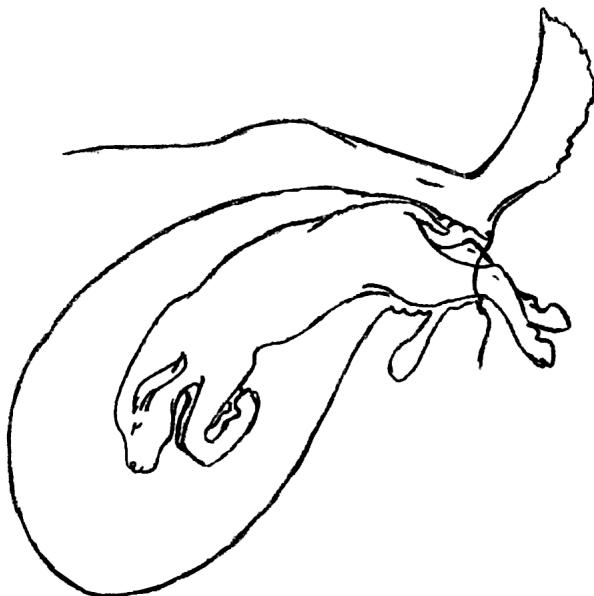


Figure 7. Hind legs first – kids are easy to deliver in this position but the umbilical cord may break as the kid's shoulders pass through cervix. Assist slow kids with a firm pull at this point, turning the kid's body sideways as it emerges so the cord does not break and to avoid hip lock in the pelvis.

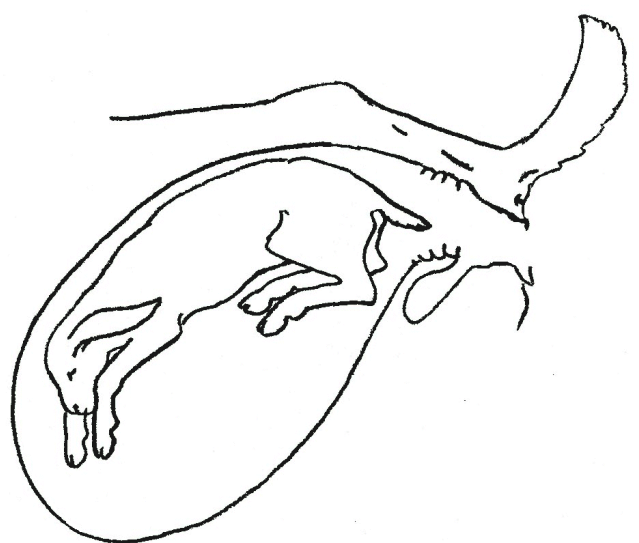


Figure 8. Breech Presentation – reach in and locate hocks under kid's tail. Push the kid towards the doe's front end until you can tuck your fingers under his hocks or back hooves, then straighten out the hind legs and deliver the kid.

KID AND LAMB POSITIONS CONTINUED

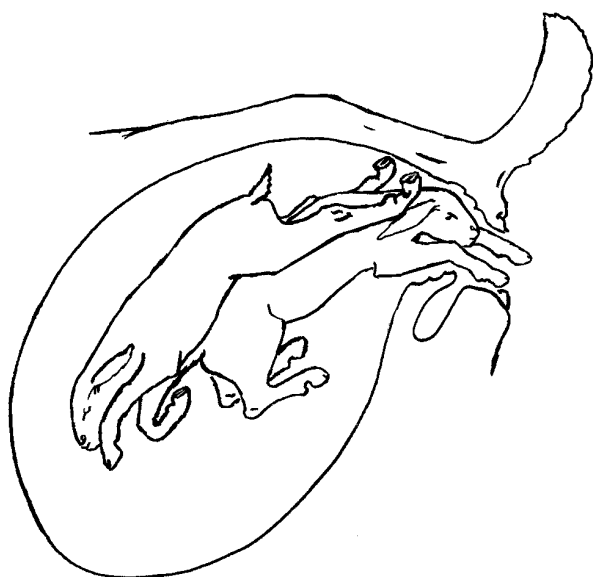


Figure 9. Twins - Front and Back- one of the normal ways twins are delivered.

USING A LAMB PULLER

A lamb puller is useful for delivering a kid or lamb whose head has slipped backwards. Push the kid or lamb all the way back into the dam so that you can straighten out his head. Put the noose of the lamb puller over your 3 middle fingers. Gently put your hand back into the dam and slide the noose over the dome of the offspring's head so that it rests behind his ears. See if you can get one or both front feet into the noose.



If you cannot get the feet into the noose, just put the noose over his ears and through his mouth or at least under his chin. Tighten the lamb puller (an assistant can do this most easily while you hold it in place). Use the lamb puller to hold the head steady while you pull the kid or lamb out by pulling down and out in an arc on his front legs. Disinfect your lamb puller between uses.

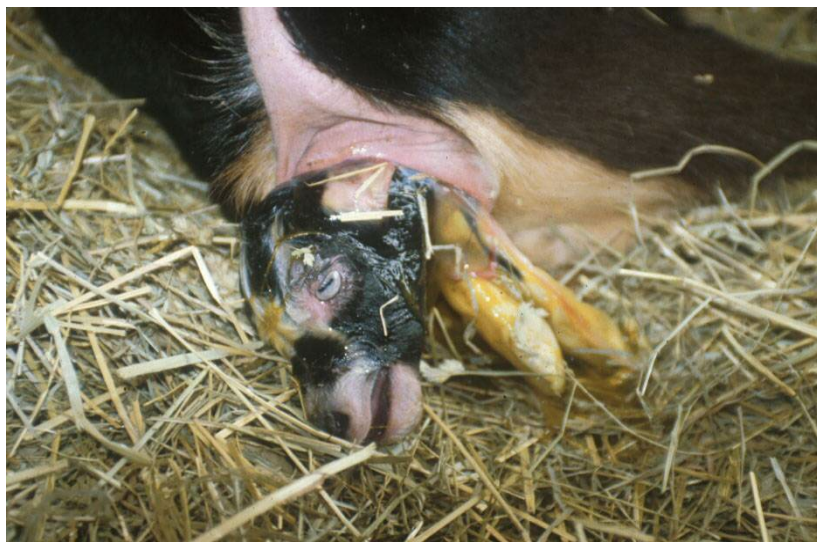
It is a good idea to fool around with your lamb puller earlier and learn how to tighten the noose automatically by pulling on the other end.

BASIC TIME TABLE FOR KIDDING

Water sac or fluids appear→30 minutes later →hard labor or examine→30minutes later →newborn #1 or examine→30minutes later →newborn # 2 or examine → 1hour later →placenta (considered retained after 8-12hours). **Dams birthing for the 1st time may progress through the first stages slower than this, but it is still a good idea to cleanly and carefully examine dam if progress becomes very slow or stops.**

GETTING READY TO ASSIST IF NEEDED

- 1) Clip your fingernails.
- 2) Wash hands and arms with recommended disinfectant.
- 3) Tie up dam if necessary and wash under tail with recommended disinfectant.
- 4) Put on latex or plastic gloves, especially women of child bearing age, and also to protect the dam from infection.
- 5) Lubricate your hand or glove and the inside of dam's vulva with a recommended lubricant or dish washing soap.
- 6) Brush tail aside with one hand, cup the fingers of your other hand, locate vulva, and gently enter at a slightly uphill tilt.
- 7) Be clean, gentle, and use lubricant or liquid soap.
- 8) Take the time to orientate yourself and figure out what parts of the kid you are feeling.
- 9) Reposition the kid or lamb if needed. Once offspring is in a proper position, carefully and firmly pull the kid down and out in an arc timing your pulls with contractions if possible.

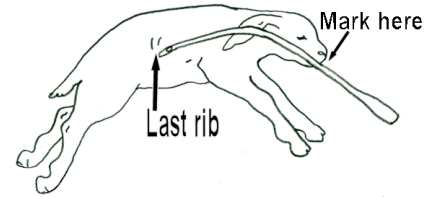


Meconium: If the kid or lamb is stressed during delivery, it will often excrete the meconium (tar-like first bowel movement) while being born. This will cause the birthing fluids to be stained dark yellow. This sign of stress signals that now is good time to assist the birth and help the kid or lamb out quickly.

FEEDING A KID OR LAMB BY STOMACH TUBE

Needed: an 18 French feeding tube, 60 cc (cc = ml) syringe, water, colostrum

1. Only if kid is able to swallow and has a body temperature of $>99^{\circ}\text{F}$. If kid is unable to swallow, administer an IP dextrose injection (see next page). If kid is cold, warm promptly (monitor temperature so kid does not get overheated) and then tube feed. Note - Giving 50% dextrose orally sometimes revives weak but conscious kids enough to start swallowing.
2. Measure the feeding tube from the tip of the kid's nose straight to the level of the last rib and mark. This length from nose to rib is the amount of tube you'll want to insert.
3. Sit with the kid on your lap facing away from you. Hold his head so his mouth is level with his eyes. Pass the tube straight down the mouth past the cheek teeth down the esophagus and into the stomach. Some resistance is normal. Stop at mark.
4. You want the colostrum to go to the stomach and not choke the kid by going to its lungs instead. If the tube is in the correct place - in the esophagus rather than accidentally in the trachea (windpipe) - you will be able to feel it by rubbing your fingers along the neck between the trachea and the neck bones.
5. Indications that it went down the wrong pipe (trachea) are: kid coughing or unable to bleat, inability to see and feel the tube, tube stopping far short of the mark, or hearing breathing when you listen in tube.
6. Remove the tube if you are in the trachea and go through steps #3 - #5 again.
7. When you know the tube is in the correct place (i.e. you can feel the tube), inject 5 cc (cc = ml) of warm water into tube.
8. If the water doesn't flow, try pulling the tube out slightly, as you may be against the stomach wall. Reposition the tube back to pre-measured mark. If still no flow, remove tube and measure again.
9. Once flow into the stomach is confirmed, fit a 60 cc dosing syringe on the stomach tube. Be sure that the colostrum is at about $102 - 104^{\circ}\text{F}$. Check with your wrist. Colostrum can be delivered by gravity, using the barrel of the syringe as a funnel, or can be injected slowly with the plunger of the syringe. *Be sure to warm up colostrum carefully using a hot water bath or double boiler set up rather than putting it directly on stove or in microwave because colostrum readily turns to cheese at high temperatures and antibodies will be destroyed.*
10. Rinse tube while tube is still in kid by injecting 5 cc of warm water into it.
11. Kink the tube by folding over the end and then pull it out of the kid while keeping the kid's head elevated.
12. Place the kid in an upright position. Prop kid up on its chest floor with a rolled up towel if necessary. (steps #11 and #12 are to avoid aspiration pneumonia).

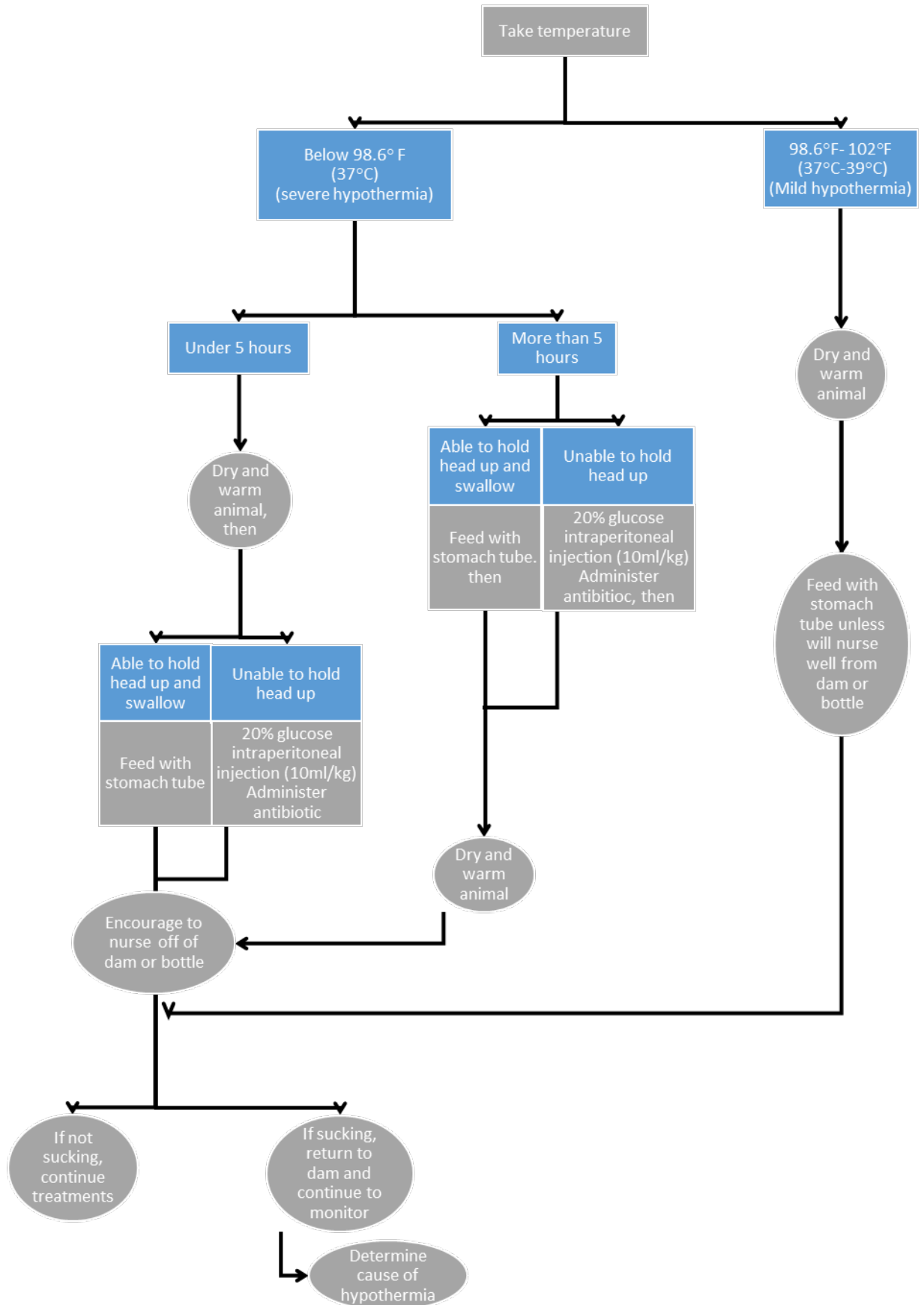


GIVING AN INTRAPERITONEAL (IP) DEXTROSE INJECTION TO A NEWBORN

1. This procedure is for very young kids that appear alive but comatose or far too weak to swallow. It is not indicated for older, severely weakened kids.
2. Prepare a 20% dextrose solution in a sterile 60cc syringe at a dose of 10 ml/kg body weight. (There are 2.2 lbs in a kg.) For example, an 11 lb kid (5kg) needs $5\text{kg} \times 10\text{ml/kg} = 50\text{ml}$ of 20% dextrose solution. However, generally you will have a 50% dextrose solution. Since $20/50=0.4$, you multiply $0.4 \times 50 \text{ml} = 20 \text{ml}$ of 50% dextrose. You will dilute the 20ml of 50% dextrose with 30ml of boiled water to get 50ml of 20% dextrose. An 8 lb kid needs about 35 – 38 ml of solution (14 ml of 50% dextrose to 21 cc of boiled water) in a sterile 35 cc syringe. A 5 lb kid needs about 25 ml of solution (10 ml 50% dextrose to 15 ml of boiled water).
3. Warm solution to $\sim 104^{\circ}\text{F}$.
4. Hold the kid up by its front feet and let kid hang from your arm or between your legs.
5. Locate your targeted injection site, 1 inch below and to the left of the umbilicus (where the umbilical cord enters belly) and clean if visibly dirty. You can use a marker to circle the site.
6. Using a sterile 19 or 20 gauge 1 inch needle (not on the syringe), enter the peritoneal cavity at a 45° angle aiming down towards the pelvis.
7. If blood, colostrum, or other fluids leak out of the needle hub, you have probably gone through an abdominal organ rather than into the intraperitoneal cavity. Pull out, get a new needle, and try again.
8. Please note, there is a risk for the kid of infection when you put the needle in alone because air can escape down into the body cavity. If you are sure the kid has not eaten, it is probably better to put the syringe directly on the needle. The disadvantage with this method is that if you pull back on the syringe and there is blood or colostrum in it, you will contaminate the dextrose solution and need to start over with a new batch and a new sterile syringe.
9. Once the needle is inserted without fluids being seen, attach the syringe to the needle and gently pull back to double check for blood, etc. Inject warm solution at roughly a 45° angle towards the rump (if a lump forms, the needle is only under the skin and needs to be deeper). Afterwards -warm kid up and give warm colostrum or milk, whichever is appropriate, when he/she revives.
10. To discourage possible infection from the IP dextrose injection, treat the kid with antibiotics SQ afterwards based on your veterinarian's recommendations.



Caring for Weak Kids and Lambs – hypothermia flow chart



For more information on how to give intraperitoneal injections and place stomach tubes see <http://www.ansci.cornell.edu/4H/goats/CaprineOuting2010/MorningHandsOnPracticals/TubingAndIPinjections.pdf>

Kidding/Lambing Kit Supplies:

The essentials:

Vet's phone number
Mild dish soap (internal exam, clean udder)
Sterile lubricant (internal exam)
Disposable gloves (internal exam, handling of newborns & placenta) Tri-Iodine 7 Tincture (navel dip)
Clean Towels/rags/newspaper (to dry kids or lambs if necessary)
Clean bucket – in case you have to do an internal exam on doe or ewe
Thermometer – to check body temperature of newborns and dam if needed
Extra “first milk” (frozen colostrum or store bought colostrum **replacer**)

Advanced:

Procaine Penicillin G or another antibiotic recommended by your veterinarian (for infections from dystocia, retained placenta)
Stomach tube and 60 cc dosing syringe (for tubing weak newborns that are able to swallow)
Dosing syringe 60 cc (for tubing weak kids or lambs that are able to swallow)
Vit E/ Selenium (Bo-Se) injections or Selenium Vit E oral paste (for newborn if Selenium or Vit E were insufficient in the dam's diet as can be common)
50% dextrose (weak kids or lambs - must dilute for IP injection)
23% Calcium Gluconate (for treating milk fever) Propylene Glycol (for treating ketosis)

Signs of kidding or lambing (sometimes!):

Ligaments around base of tail and vulva get soft, udder gets full and shiny Doe or ewe may separate herself from the herd, and paw the ground as if making a nest and nicker as if calling for her baby.

Kid or Lamb Care

1. Clean nose and mouth to make sure the newborn can breathe easily. Sometimes the water sack that surrounds the newborn in the uterus does not break before birth and the newborn's head is still partially covered in it. If so, wipe the head off quickly and tickle the newborn's nose with a piece of hay to make it sneeze.
2. Dip navel in Tri Iodine 7 tincture to prevent germs from the ground from going up the umbilical cord into the belly button and infecting the newborn.
3. Strip wax plugs out of the mom's (dam's) udder and check that both teats have milk, ensure easy nursing if leaving the kids with mom
4. If bottle feeding - 2 ½ to 3 ounces of colostrum per pound of body weight for the first day, broken into multiple small meals (i.e., 8 lb. kid should get around $3 \times 8 = 24$ oz in the first 24 hours, or 3 meals of 8 oz each depending on its appetite)
5. Use towels, coats, warming boxes if needed to keep newborn dry and warm
6. Check on newborn's activity level and stomach distention (sign of drinking)
7. Make sure dam has water, feed & a good appetite; watch for milk fever and ketosis