

STANDARD OPERATING PROCEDURE

Cornell Sheep Flock

PNEUMONIA

Pneumonia can be demonstrated by cranioventral bronchopneumonia in lambs dying on the farm and residual lung lesions in lambs at slaughter. When cultured, these pneumonia lesions routinely yield *Mannheimia (Pasteurella) haemolytica*. Mycoplasmas may also be involved in the enzootic pneumonia on the farm. The effect of the pneumonia on growth rate of lambs surviving to market is unknown.

Peracute pneumonia

Wherever lambs are raised and pneumonia is a problem, it is common for lambs in good body condition to be found dead of pneumonia with no previous clinical signs of disease. These lambs will be necropsied to verify cause of death. The bodies will be kept refrigerated until transported to the necropsy room at the veterinary college for examination by Dr. Mary Smith or other designated veterinarian.

Acute pneumonia

Lambs with clinical signs of pneumonia have a labored breathing pattern, different from normal shallow panting. They are lethargic or weak and may show extreme or repetitive coughing. These animals will be treated with oxytetracycline (Biomycin 200 or equivalent) at 5 cc per 100 pounds subcutaneously and the treatment will be recorded on the health record sheets and subsequently entered into the Cewe data base. This treatment will be repeated at 48 hours. If the lamb is not normal at 96 hours after first treatment, a 3rd injection of LA200 will be given, a veterinary evaluation will be requested, or the lamb will be euthanized. A meat withdrawal of 30 days from last oxytetracycline injection will be followed.

At the manager's discretion, lambs may be treated instead with a single injection of tulathromycin (Draxxin) SC at 0.5 ml/50 pounds. A meat withdrawal of 30 days from last injection will be followed. Alternatively, and by permanent employees only because of human health risks, lambs will be treated with tilmicosin (Micotil) at 0.1 ml/ per 7 pounds, measured with a tuberculin syringe and given subcutaneously only. The tilmicosin will be repeated in 3 days if the lamb has not recovered. A meat withdrawal of 28 days from last injection will be followed.

If slaughter in less than 30 days is a possibility, the lamb will be treated with ceftiofur (Naxcel, obtained from the T&R Beef or Dairy facility) at 2 cc per 100 pounds IM in the neck once a day for at least 3 and up to 5 days. This treatment results in no required meat withdrawal before slaughter. Once reconstituted, the Naxcel must be kept refrigerated, for up to 7 days. Unused product may be frozen for up to 8 weeks.

Chronic pneumonia

If a weaned lamb has already been treated for pneumonia with oxytetracycline 3 times at 48 hour intervals or with tilmicosin or tulathromycin twice at a 72 hr interval or with ceftiofur for 5 days and is still not normal, it will be deemed to have chronic pneumonia and will be moved to an elevated pen, well separated from healthy lambs. A lamb that previously appeared to respond to treatment for pneumonia but has relapsed twice will also be designated a chronic case and moved to the elevated pen. Here it will be treated with either Draxxin twice at 3 day intervals or Naxcel daily for an additional 5 days. If there is no improvement with this treatment the lamb will be euthanized (if treated with tulathromycin) or slaughtered as soon as possible (if treated with ceftiofur and at a marketable slaughter weight).