

# Lamb Losses from Birth to 6 Months

A paper given at the Ruakura Farmers' Conference Week by  
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THE period in a lamb's life from birth to 6 months is obviously a very important one from both economic and health considerations. It has been estimated in a survey conducted by the New Zealand Meat and Wool Boards' Economic Service that every year about 4,000,000 lambs fail to reach weaning or sale age. The potential loss is therefore about £10,000,000 to £12,000,000. The figure of 4,000,000 covers all losses, but I intend to deal only with losses that occur in lambs that are born alive and normal and absolutely free from any infectious disease. A separate figure for losses in this group is not available.

THE causes of lamb losses vary greatly. Some are accidental, some are preventable, some are curable, and some are incurable. The ones which we can prevent or cure are the ones which we are going to talk about.

Before getting on to specific diseases let us consider firstly why, if a lamb is born perfectly healthy, so many become infected with disease producing organisms, and how these organisms get into the body. The most important diseases occur as the result of either wound infection or of infectious bacteria being taken in through the mouth. The first wound which all lambs must sustain is the rupture of the navel cord, so that within minutes of being born the cord becomes contaminated with bacteria and there is danger of infection with a disease producing variety. This brings us, then, to the first group of diseases, known as navel infection.

When the navel cord is still moist and contains the freshly clotted blood it provides an ideal place for bacteria to grow. In order to minimise this danger the cord normally dries very quickly and ceases within a day or two except under wet conditions to become a means of entry for bacteria. Broadly, two different types of infection occur: the first causes rapid death from blood poisoning within the first few days and the other a slower death in one or two weeks (but sometimes longer) by forming abscesses at the navel and in various organs, especially the liver and lungs.

Most lambs with the blood poisoning type are found dead and can quite easily be picked by their appearance; they putrefy and blow up rapidly, the belly is swollen, and the skin of the belly and inside the thighs has a bluish appearance. When you open them, you find under the skin around the navel a layer of dark reddish bloodstained gelatinous material; inside the abdomen all the organs have a similar dark red appearance and there is usually much dark blood-

stained fluid in the abdomen and in the sac around the heart.

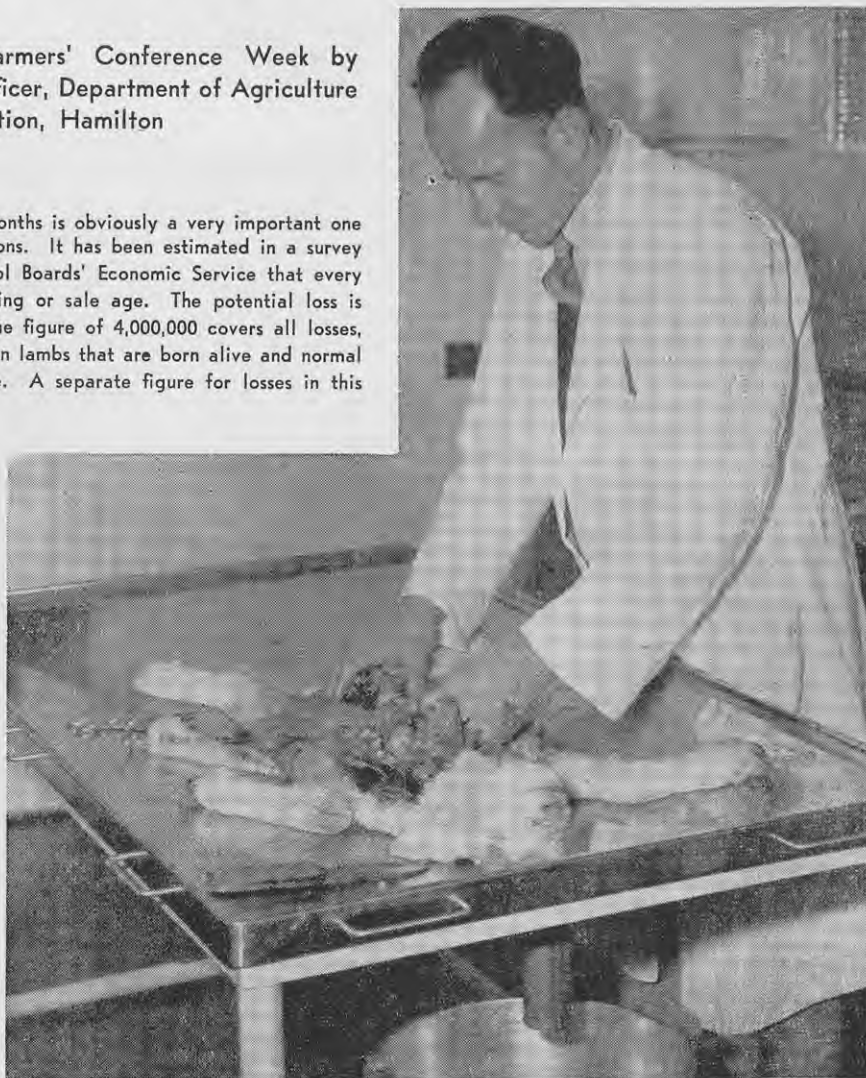
The organisms which cause this type of infection belong to the clostridial group; they are always present in the soil and commonly infect wounds, causing blood poisoning or, more specifically, blackleg, malignant oedema, and tetanus.

Owing to the rapidity of death in these cases of navel infection treatment is usually too late, but I believe that it is always worth trying an injection of penicillin. Even if you were to save only one in ten, you would more than recover the cost of the penicillin.

As treatment is unlikely to be successful, it is fortunate that we can

prevent this disease by vaccination of the ewes 3 weeks before lambing. There is no need for me to go into the details of this. The problem can be discussed with your veterinary surgeon or Livestock Instructor. As these blood poisoning organisms are always present in the soil, it is important that you lamb your ewes on well grassed paddocks away from the sheep yards and places where sheep tend to camp; such places are always a greater source of infection than "clean" paddocks.

The things to remember about this type of navel infection are (1) that it is the most common, (2) that it affects lambs less than a week old, and (3)



Mr Dodd conducting a post-mortem examination at the Ruakura Diagnostic Centre, which was established in 1955. The aim is efficient and fast handling of specimens and reporting of results to veterinary surgeons who submitted the specimens.