References

1. Weaver LAD, Ruegg PR: Investigation of dairy herd infertility, in *Proceedings of the Society of Theriogenologists*. Coeur D'Alene, ID, 1989, pp58-70. 2. Markusfeld ON: Herd Health Problems: The Epidemiological Approach. *Bovine Pract* 26:42-44, 1991. 3. Ruegg PL, Guterbock WM, Holmberg CA, *et al*. Microbiologic Investigation of an epizootic of mastitis caused by Serratia marcescens in a dairy herd. *J Am Vet Med Assoc*200:184-189, 1992. 4. Lessard P: The characterization of disease outbreaks. *Vet Clin North Am Food Anim Pract* 4:17-32, 1988. 5. Martin SW, Meek AH, Willeberg P: Veterinary Epidemiology, Principles and Methods. Ames, IA, Iowa State University Press, 1987. 6. Hueston WD. Evaluating Risk Factors in Disease Outbreak. *Vet Clin North Am Food Anim Pract* 4:79-97, 1988. 7. Swabe CW, Riemann HP, Franti CW. Epidemiology in Veterinary Practice. Philadelphia, Lea and Febiger, 1977. pp17.

Abstract

Evaluation of the effect of the fenbendazole sustained-release intraruminal device on the immunity of calves to lungworm

D.E. Jacobs, M.J. Hutchinson, E.M. Abbott
Veterinary Record (1996); 139, 60-63

Each of 10 set-stocked calves was given a fenbendazole sustained-release intraruminal bolus at turnout for the control of parasitic bronchitis while a group of 10 similar calves was left untreated. The respiratory rates of the control calves were not greatly increased during the grazing season, but persistent coughing was evident from early July when they all had patent lungworm infections. Only occasional coughing was reported from the bolus-treated calves except for a transient increase in its frequency in late September. In mid-August, one of the treated calves was passing lungworm larvae and when they were housed six of the 10 had patent infections. In August tracer calves picked up an average of 23.5 lungworms per day from the control paddock but only 2.1 from the paddock grazed by the treated calves. In September the corresponding figures were 7.6 and 19.2 lungworms per day, respectively, from the control and "treated" paddocks. After housing, the post mortem worm counts after an experimental challenge with *Dictyocaulus viviparus* larvae were reduced by 99.2 and 98.7 per cent ($P<0.0001$), respectively, for the control and bolus-treated calves in comparison with weight-matched parasite-naive calves. Thus, despite a relatively low level of challenge during the grazing season, the treated animals had developed a considerable degree of protective immunity.