

Meeting 16: Economics

Reading

- Dijkhuizen AA and Morris RS (1997) Animal Health Economics: Principles and Applications. PGFVS, University of Sydney, Chapters 1-4.
- Pfeiffer, DU (1997) Decision making and risk analysis. In R.Ruppanner (ed.) Risk Analysis and Animal Health - A Course Manual. International Training Course, Dübendorf, Switzerland, July 13-18, 1997, 861-877. Available: http://www.vetschools.co.uk/EpiVetNet/risk_analysis.htm
- Thrusfield 2nd Edn or 3rd Edn, Chapter 20 (economics of disease).

Presentations

1. Partial farm budgeting
2. Gross margins analysis
3. Decision trees and pay-off tables
4. Cost benefit analysis and cost effectiveness analysis
5. Sensitivity analysis

Exercises

1. Choose a management situation on a farm and as a group work out a partial farm budget for a particular change.
2. Choose an animal disease and as a group work through a pay-off table or decision tree for different treatment options.
3. An exercise in Decision Analysis: When is Coronary Angiography required in aortic valve replacement. Available: http://www.med.uiuc.edu/m2/epidemiology/dec_anal_2000/dec_anal_prob.htm

Example examination questions

1. Using examples write brief notes on the situations in which you would use partial farm budgeting and pay-off tables, the information you would need for each and the way you would interpret the results (2003 written).
2. Using examples write brief notes on the characteristics, application and limitations of cost-benefit analysis (2005 written).

Additional reading/resources

- Norton S, Groenendaal H and Heuer C (2005) Simulating control strategies for Johne's Disease on NZ dairy farms: effects on the prevalence and economic impact of disease. Proceedings of the Food Safety and Biosecurity and Epidemiology Branches of the NZVA, p.193-204.

- Swinkels JM, Zadoks RN and Hogeveen H (2005) Use of partial budgeting to determine the economic benefits of antibiotic treatment during lactation of chronic subclinical mastitis caused by *Staphylococcus aureus*. In: Mastitis in dairy production – current knowledge and future solutions, p. 217-223.
- Otte MJ and Chilonda P. Animal Health Economics: an Introduction. Available: <http://www.fao.org/ag/aginfo/resources/en/publications/agapubs/pproc01.pdf>
- Martin, Meek and Willeberg Chapter 9 (animal health economics)
- Stevenson MA, Frey B and Morris RS (1996) Decision Making in Veterinary Practice: Economics made easy. AAPV- NZPVS 2nd Pan Pacific Program; pp 57-64.