

BIOGRAPHY

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Title and name

Dr. Aline A. de Koeijer

Nationality

Netherlands.

Panel

Animal Health and Welfare (AHAW)

Education

Master Biology, 1993, Leiden University; PhD Applied Mathematics, 2003, Utrecht University

Scientific and risk assessment experience

My main expertise lies in mathematical modelling of dynamic biological systems, with specific interest for the behaviour of infectious agents in host populations always looking for the simplest methods. These modelling methods I have applied to questions regarding analysis of transmission, control measures, preventive measures, eradication strategies, surveillance issues and risk assessment questions. Although my work mostly covers exotic infections, endemic diseases are also covered.

Main scientific publications

Publications cover mathematical modelling, veterinary epidemiology of infectious diseases and risk assessment of live stock infections

A.A. de Koeijer, G-J. Boender, H.A. Nodelijk, C. Staubach, E. Meroc, A.R.W. Elbers. (2011)
Quantitative analysis of transmission parameters for bluetongue virus serotype 8 in Western Europe in 2006. Veterinary Research; March 2011, 42:53. doi:10.1186/1297-9716-42-53

Ducrot C, Sala C, Ru G, de Koeijer A, Sheridan H, Saegerman C, Selhorst T, Arnold M, Polak MP, Calavas D: Modelling BSE trend over time in Europe, a risk assessment perspective. Eur J Epidemiol; 2010 Jun;25(6):411-9

A.A. de Koeijer, O.Diekmann, M.C.M. deJong. Calculating the time to extinction of a reactivating virus, in particular Bovine Herpes Virus. Mathematical Biosciences 212(2): 111-131 (2008).

P.L. Eblé, A.A. de Koeijer, M.C.M. de Jong, B. Engel, A. Dekker. A meta-analysis quantifying transmission parameters of FMDV strain O Taiwan among non-vaccinated and vaccinated pigs. Preventive Veterinary Medicine 83: 98-106 (2008).

H.R. Høgåsen and A.A. de Koeijer. Quantitative risk assessment for Bovine Spongiform Encephalopathy in low or zero prevalence countries: the example of Norway. *Risk Analysis* 27 (5): 1105–1117 (2008)

A.A. de Koeijer. Analysing BSE transmission to quantify regional risk. *Risk Analysis* 27 (5): 1095-1103 (2008)

Aline de Koeijer en Armin Elbers. Modelling of vector-borne diseases and transmission of bluetongue virus in Northwest Europe. In: *Emerging pests and vector-borne diseases in Europe*. Eds. Bart Knols and Willem Takken. Wageningen University Press, Wageningen (2007)

A.A. de Koeijer, B.E.C. Schreuder, J.A.P. Heesterbeek, R.C. Oberthur, J Wilesmith, M.C.M. de Jong. Quantifying BSE control by calculating the basic reproduction ratio for the infection among cattle. *Journal of Mathematical Biology* 48:1-22 (2004).

A. Bouma, A. R. W. Elbers, A. Dekker, A. de Koeijer, C. Bartels, P. Vellema, P. van der Wal, E. M. A. van Rooij, F. H. Pluimers and M. C. M. de The foot and mouth disease epidemic in The Netherlands in 2001. (2003) *Preventive Veterinary Medicine* 57(3): 155-166

Aline de Koeijer, Bram Schreuder, Annemarie Bouma. (2002) Factors that influence the age distribution of BSE cases: potentials for age targetting in surveillance. *Livestock Production Science* 76 : 223-233.