

Publications: Nigel French

Peer reviewed journals and book chapters

Infectious disease epidemiology, zoonoses, molecular epidemiology.

1. Clough, H.E., Clancy, D., **French, N.P.** Quantifying exposure to VTEC O157 in milk sold as pasteurized: the role of mathematical modelling in Microbial Risk Assessment. *Journal of Food Protection*. Under review.
2. Fenton, S.E., Clough, H.E., Diggle, P.J., Evans, S.J., Davidson, H.C., Vink, W.D., **French, NP**, (2008), Spatial and spatio-temporal analysis of *Salmonella* infection in dairy herds in England and Wales. *Epidemiology and Infection*, in press.
3. Robinson, S.E., Brown, P.E., Wright, E.J., Hart, C.A., **French, NP**, (2008), Quantifying within- and between-animal variation and uncertainty associated with counts of *Escherichia coli* O157 occurring in naturally infected cattle faeces. *Journal of the Royal Society Interface*, in press
4. Benschop, J., Hazelton, M.L., Stevenson, M.A., Dahl, J., Morris, R.S., **French, NP**, (2008a), Descriptive spatial epidemiology of subclinical *Salmonella* infection in finisher pig herds: application of a novel method of spatially adaptive smoothing. *Veterinary Research* 39: 2-12.
5. Benschop, J., Stevenson, M.A., Dahl, J., **French, NP**, (2008b), Towards incorporating spatial risk analysis for *Salmonella* sero-positivity into the Danish swine surveillance programme. *Preventive Veterinary Medicine* 83: 347-359.
6. Benschop, J., Stevenson, M.A., Dahl, J., Morris, R.S., **French, NP**, (2008c), Temporal and longitudinal analysis of Danish Swine Salmonellosis Control Programme data: implications for surveillance. *Epidemiology and Infection*, 136: 1511-1520.
7. Brook, E., Hart, C.A., **French, N.**, Christley, R., (2008), Prevalence and risk factors for *Cryptosporidium* spp. infection in young calves. *Veterinary Parasitology* 152: 46-52.
8. Kwan, P.S., Barrigas, M., Bolton, F.J., **French, NP**, Gowland, P., Kemp, R., Leatherbarrow, H., Upton, M., Fox, A.J., (2008a), The molecular epidemiology of *Campylobacter jejuni* populations in dairy cattle, wildlife and the environment in a farmland area. *Applied and Environmental Microbiology* 74: 5130-5138.
9. Kwan, P.S., Birtles, A., Bolton, F.J., **French, NP**, Robinson, S.E., Newbold, L.S., Upton, M., Fox, A.J., (2008b), Longitudinal study of the molecular epidemiology of *Campylobacter jejuni* in cattle on dairy farms. *Applied and Environmental Microbiology* 74: 3626-3633.
10. McTavish, S.M., Pope, C.E., Nicol, C., Sexton, K., **French, N.**, Carter, P.E., (2008), Wide geographical distribution of internationally rare *Campylobacter* clones within New Zealand. *Epidemiology and Infection* 136: 1244-1252.
11. Brook EJ, Christley RM, **French, NP**, Hart CA. (2008). Detection of *Cryptosporidium* oocysts in fresh and frozen cattle faeces: comparison of three methods. *Letters in Applied Microbiology*, 46:26-31,

12. Brook EJ, Hart C, **French,N**, Christley R. (2008) Molecular epidemiology of *Cryptosporidium* subtypes in cattle in England. *The Veterinary Journal* in press.
13. Karimuribo, E.D., Fitzpatrick, J.L., Swai, E.S., Bell, C., Bryant, M.J., Ogden, N.H., Kambarage, D.M., **French, NP**, (2008), Prevalence of subclinical mastitis and associated risk factors in smallholder dairy cows in Tanzania. *Veterinary Record* 163: 16-21.
14. **French, NP**, Gemmell, N.J., Buddle, B.M., (2007), Advances in biosecurity to 2010 and beyond: towards integrated detection, analysis and response to exotic pest invasions. *New Zealand Veterinary Journal* 55: 255-263.
15. Kunda, J., Fitzpatrick, J., Kazwala, R., **French, NP**, Shirima, G., Macmillan, A., Kambarage, D., Bronsvort, M., Cleaveland, S., (2007), Health-seeking behaviour of human brucellosis cases in rural Tanzania. *BMC Public Health* 7: 315-.
16. Heuer C, **French,N**, Jackson R, Mackereth G. (2007) Application of modelling to determine the absence of disease in the face of a suspected/threatened incursion. *New Zealand Veterinary Journal* 55:289-96.
17. Lake R, van der Logt P, McBride G, **French,N**, Mullner P. (2007) Campylobacteriosis in New Zealand: modelling as a way forward. *New Zealand Science Review* 64: 37-41.
18. Leatherbarrow AJ, Griffiths R, Hart CA, Kemp R, Williams NJ, Diggle PJ, Wright EJ, Sutherst J, Houghton P, **French,NP**. (2007) *Campylobacter lari*: genotype and antibiotic resistance of isolates from cattle, wildlife and water in an area of mixed dairy farmland in the United Kingdom. *Environmental Microbiology* 9: 1772-9.
19. Pleydell EJ, Brown PE, Woodward MJ, Davies RH, **French,NP**. (2007). Sources of variation in the ampicillin-resistant *Escherichia coli* concentration in the feces of organic broiler chickens. *Applied and Environmental Microbiology* 73: 203-10,.
20. Swai ES, **French,NP**, Karimuribo ED, Fitzpatrick JL, Bryant MJ, Kambarage DM, Ogden NH. (2007). Prevalence and determinants of *Cryptosporidium* spp. infection in smallholder dairy cattle in Iringa and Tanga Regions of Tanzania. *Onderstepoort Journal of Veterinary Research* 74: 23-9.
21. Xiao Y, Bowers RG, Clancy D, **French,NP**. (2007a). Dynamics of infection with multiple transmission mechanisms in unmanaged/managed animal populations. *Theoretical Population Biology* 71: 408-23.
22. Xiao Y, **French,NP**, Bowers RG, Clancy D. (2007b) Pair approximations and the inclusion of indirect transmission: theory and application to between farm transmission of *Salmonella*. *Journal of Theoretical Biology* 244: 532-40.
23. Clough HE, Clancy D, **French,NP**. (2006) Vero-cytotoxigenic *Escherichia coli* O157 in pasteurized milk containers at the point of retail: a qualitative approach to exposure assessment. *Risk Analysis* 26: 1291-309.
24. Stuen S, Casey AN, Woldehiwet Z, **French,NP**, Ogden NH. (2006). Detection by the polymerase chain reaction of *Anaplasma phagocytophilum* in tissues of persistently infected sheep. *Journal of Comparative Pathology* 134: 101-4.

25. Karimuribo, E. D., J. L. Fitzpatrick, C. E. Bell, E. S. Swai, D. M. Kambarage, N. H. Ogden, M. J. Bryant, and **French, NP**. (2006). Clinical and subclinical mastitis in smallholder dairy farms in Tanzania: risk, intervention and knowledge transfer. *Preventive Veterinary Medicine* 74:84-98
26. Turner J, Bowers RG, Begon M, Robinson SE, **French,NP**. (2006). A semi-stochastic model of the transmission of *Escherichia coli* O157 in a typical UK dairy herd: dynamics, sensitivity analysis and intervention/prevention strategies. *Journal of Theoretical Biology* 241: 806-22.
27. Xiao Y, Clancy D, **French,NP**, Bowers RG. (2006). A semi-stochastic model for *Salmonella* infection in a multi-group herd. *Mathematical Biosciences* 200: 214-33.
28. Christley R., Pinchbeck G, Bowers R, Clancy D, **French, N.**, Bennett R., and Turner J. (2005), Infection in social networks: Using network analysis to identify high-risk individuals. *American Journal of Epidemiology*, 162: 1024-1031.
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30. Fearnhead P, Smith N, Barrigas M., Fox A., and **French,N**. (2005), Analysis of recombination in *Campylobacter jejuni* from MLST population data. *Journal of Molecular Evolution*, 61: 333-340.
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35. Xiao, Y., Bowers, R., Clancy, D., and **French, N.**, (2005), Understanding the dynamics of *Salmonella* infections in dairy herds: a modelling approach. *Journal of Theoretical Biology*, 233: 159-175.
36. Ogden, N.H., Swai, E., Beauchamp, G., Karimuribo, E., Fitzpatrick, J.L., Bryant, M, Kambarage, D and **French, NP** (2005) Risk factors for tick attachment to smallholder dairy cattle in Tanzania. *Preventive Veterinary Medicine*, 67, 157-70

37. **French, N.P.**, H.E. McCarthy, P.J. Diggle, and C.J. Proudman. (2005) Clustering of equine grass sickness cases in the UK: a study considering the effect of position-dependent reporting on the space-time K-function. *Epidemiology and Infection*, 133: 343-348
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42. S.E. Robinson , P.E. Brown, E. J. Wright, C.A.Hart, M. Bennett, N. P. French (2004) Intermittent and persistent shedding of *Escherichia.coli* O157 in cohorts of naturally infected calves. *Journal of Applied Microbiology*, 97, 1045-1053.
43. Robinson, SE, Wright, EJ, Williams, NJ, Hart CA and **French, NP** (2004) Development and application of a method for the enumeration of *Escherichia coli* O157 in bovine faeces. *Journal of Applied Microbiology* 97, 581-589
44. Casey, ANJ, Birtles, RJ, Radford, AD, Bown, K, **French, NP**, Woldehiwet Z and Ogden, NH. (2004). Groupings of highly similar major surface protein (p44)-encoding paralogues: a potential index of genetic diversity amongst isolates of *Anaplasma phagocytophilum*. *Microbiology* ; 150: 727-734
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51. Turner, J, Bowers, RG, Begon M and **French, NP**. (2003) A model appropriate to the transmission of a human food-borne pathogen in a multigroup managed herd. *Preventive Veterinary Medicine* 57, 175-198
52. Ogden, N.H., Casey, A.N.J., Woldehiwet, Z. and **French, NP** (2003) Transmission of *Anaplasma phagocytophilum* to *Ixodes ricinus* ticks from sheep in the acute and post-acute phase of infection. *Infection and Immunity* 71, 2071-2078
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55. Ogden, N.H., Gwakisa, P., Swai, E., **French, NP**, Fitzpatrick, J., Kambarage, D. and Bryant, M. (2003) Evaluation of PCR to detect *Theileria parva* in field-collected tick and bovine samples in Tanzania. *Veterinary Parasitology* 112, 177-183
56. Christley, RM and **French, NP** (2003) Small-world topology of UK racing: the potential for rapid spread of infectious agents. *Equine Veterinary Journal*, 35 585-588
57. Swai E S, Karimuribo E, **French, NP**, Ogden N H, Fitzpatrick J, Kambarage D, Bryant M. Occurrence and spatial distribution of clinical mastitis in smallholder dairy farms in Tanga, Tanzania. *Bulletin of Animal Health and Production in Africa* 2003;50:205-212.
58. Swai E S, Karimuribo E, **French, NP**, Ogden N H, Kambarage D, Fitzpatrick J, Bryant M. The prevalence of udder and teat lesions in dairy cattle in Tanga, Tanzania. *Bulletin of Animal Health and Production in Africa* 2003;51:5-9.
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67. Mathews, JB, Davidson, AJ, Freeman, K.L. **French, NP**. (2001) Immunisation against *Dictycaulus viviparus* using recombinant acetylcholinesterase and adult worm excretory / secretory products. *International Journal for Parasitology* 31 307-317
68. McCarthy, HE. Proudman, CJ. and **French, NP**. Epidemiological Investigations of Equine Grass Sickness - a Literature Review. *Veterinary Record* 149, 293-300
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Animal welfare publications - selected papers from 70+ peer-reviewed publications (see <http://epicentre.massey.ac.nz/> for details)

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