# Bas Engel et al. 2005

Bas Engel et al. 2005
When can a veterinarian be expected to detect classical swine fever virus among breeding sows in a herd during an outbreak?

**Abstract -**
 The herd sensitivity (HSe) and herd specificity (Hsp) of clinical diagnosis of an infection with classical swine fever (CSF) virus during veterinary inspection of breeding sows in a herd was evaluated. Data gathered from visits to herds during the CSF outbreak in 1997?1998 in The Netherlands were used for the analysis. Herds were visited one or more times by the same or by different veterinarians. On the basis of the veterinarians? reports, each visit was coded as 0 (negative clinical diagnosis) or 1 (positive clinical diagnosis). The HSe for clinical diagnosis of CSF was modelled as a function of days elapsed since introduction of the virus. The moment of introduction of the CSF virus in the CSF-positive herds was unknown, so for each herd, a probability distribution for the unknown number of days since introduction was derived from serum samples collected at depopulation. The information from the reports of the veterinarians and from the test results of the serum samples at depopulation was combined in a Bayesian analysis. Data from CSF-negative herds were analysed to estimate HSp of clinical diagnosis of CSF. The HSe of clinical diagnosis was 0.5 at 37 days after virus introduction (95% CI: 31, 45) and reached 0.9 at 47 days after virus introduction (95% CI: 41, 54). The estimated herd specificity was 0.72 (95% CI: 0.64, 0.79). Dependence of HSe and HSp on characteristics of the veterinarians and the herds also was studied. Specialisation of the veterinarian significantly, although not markedly, affected the HSe.

Yes