

Scientific Interpretive Summary (SIS)

Project title: **Evaluation of on-farm risk factors for *Campylobacter***

The Science Group of NZFSA commissioned ESR to investigate on-farm factors in New Zealand that potentially affect the infection of broilers with *Campylobacter*. The resulting report contained an international literature review as well as an overview of broiler farming in New Zealand. This report together with expert opinion was used to develop a survey instrument that was completed by experienced poultry veterinarians during visits to 60 out of the approximately 160 broiler farms in New Zealand. The survey visits were conducted prior to the release of the Poultry Industry Biosecurity Manual (August 2007).

The results of the survey are described in a second report and document that in general, generic biosecurity practices are well in place. Recommendations that might improve biosecurity for *Campylobacter* were made as follows:

- More rigorous monitoring of chlorination of drinking water
- More frequent or rigorous cleaning of drinker lines
- More stringent exclusion of pets from shed surroundings
- Universal provision of hand washing and hand hygiene facilities for staff and visitors
- Repairs or replacement of shed and annex structural features to improve cleanability
- Upgrading or replacement of end pads and universal cleaning and sanitising between flocks
- More universal availability of facilities for vehicle decontamination
- Provision of dedicated clothing for each shed, in addition to the dedicated boots already available.

It should be noted that the farm survey was completed during a single visit and could not evaluate whether the ongoing use by farmers or visitors of available facilities was effective.

Irrespective of the results reported above, effective biosecurity for *Campylobacter* is likely to require that all pathways of entry of *Campylobacter* into the sheds are subject to strict controls at all times. Because of the speed with which *Campylobacter* spreads within a shed, one biosecurity lapse may be sufficient to infect an entire flock. (This is a different situation to that for *Salmonella*, where control measures applied at the farm level can markedly reduce *Salmonella* contamination of slaughter broilers).

It is clear that proposals to change biosecurity measures at the farm level in an attempt to reduce *Campylobacter* contamination of product must be carefully evaluated as to their likely impact and practicality under New Zealand conditions.