

## **PREVALENCE OF ANTIBODIES TO *ACTINOBACILLUS PLEUROPNEUMONIAE* IN MULTIPLYING HERDS IN SWEDEN**

P. Wallgren 1, B. Molander 2, M. Persson 1, M. Sjolund 1, K. Karlsson 3.

*1 National Veterinary Institute, SVA, 751 89 Uppsala, Sweden; 2 Farm & Animal Health, Staffanstorps, Sweden; 3 Farm & Animal Health, Falkenberg, Sweden.*

### **Introduction**

*Actinobacillus pleuropneumoniae* (APP) is a common respiratory pathogen, but the incidence is generally unknown. This study aimed to screen the presence of APP in Swedish multiplying herds.

### **Material & Methods**

All 30 multiplying herds in Sweden were screened with indirect ELISA-systems for serum antibodies to APP serotypes 1-12, where serotype 5 included 5a, 5b and 5s (an atypical variant detected in Sweden in 1999 and 2007). Eight blood samples per age category were collected from pigs aged 10, 20 and 30 weeks (n=29). One herd sold gilts below 20 weeks of age.

### **Results**

All herds were seronegative to serotypes 1, 5a, 5b, 9,10, 11 and 12, and to serotype 5s.

Pigs aged 10 weeks were seronegative to all serotypes.

Pigs aged 20 weeks were seronegative to all serotypes in 22 of 29 herds. Antibodies to serotypes 3-6-8 were demonstrated in three herds, and to serotypes 4-7 in four other herds.

Pigs aged 30 weeks were seronegative to all serotypes in 23 of 29 herds. Antibodies to serotype 2 were demonstrated in two herds, to serotypes 3-6-8 in another herd, and to serotypes 4-7 in four other herds.

In four of the herds with seropositive pigs aged 20 weeks, pigs aged 30 weeks were seronegative.

### **Discussion & Conclusion**

The multiplying herds were concluded free from serotypes previously never demonstrated in Sweden (1, 5a, 5b, 9,10, 11 and 12), and to 5s.

Prevalences and levels of antibodies to endemic serotypes (2, 3-6-8 and 4-7) were substantially

lower than at the previous screening made in 2005. Terminating introduction of live animals, age segregated rearing and improved biosecurity probably contributed to this result, and may also explain why herds with seropositive pigs aged 20 weeks in another batch could have seronegative pigs aged 30 weeks.