## **RES-OP-01**

TITLE

THE SUCCESSFUL ERADICATION OF MYCOPLASMA HYOPNEUMONIAE FROM NORWEGIAN PIG HERDS – 10 YEARS LATER

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## CONTENT

Background and objectives

Mycoplasma hyopneumoniae (Mhyo) is the causative agent of enzootic pneumonia which causes considerable economical losses, in addition to adversely affecting animal health and welfare. M. hyopneumoniae was previously common in the Norwegian pig population. In 1994, The board of The Norwegian Pig Health Service decided on conducting a national eradication program for Mhyo.

The present study describes the implementation of the national eradication program, the subsequent surveillance and provides documentation on the current freedom of Mhyo in the Norwegian pig population.

## Materials and methods

The eradication program aimed for population wide freedom from Mhyo, based on serological surveillance. A partial depopulation program was initiated in all Mhyo positive farrow-to-feed and farrow-to-finish herds. Total depopulation was performed in all positive finishing farms. All units were cleaned and disinfected, and restocked with pigs from herds documented free from Mhyo.

Results

From 1994 to 2009, a total of 138 635 pigs in 3215 herds were serologically tested for the presence of antibodies against Mhyo. Of these, 5538 (4%) individual samples and 398 (12.4%) of the herds were defined as positive.

Fifteen years later, in 2009, the Norwegian pig population was declared free from Mhyo, and has been since then.

From 2009 through 2017, a total of 35 202 individual blood samples have been analyzed for the presence of antibodies against Mhyo; all tested negative.

## Discussion and Conclusion

Eradication of Mhyo infections has resulted in significant savings for pig farmers, and improved health and welfare of the Norwegian pig population. The success of the strategy is based on numerous factors, such as negligible import of live pigs, a well-structured commercial pig population, relatively small herds, low herd density in most of the population, and finally, the loyalty and significant effort of farmers, slaughterhouse employees and veterinarians.