18. The usability of the food chain information for visual meat inspection of pigs
Felin, E.*, Jukola, E.*, Raulo, S., Fredriksson-Ahomaa, M.

Introduction

For efficient meat inspection, it is important beforehand to identify those batches presenting a high potential risk for meat condemnation. The food chain information (FCI) provided by the pig producer, covers important information on the health status of the animals to be slaughtered, and therefore is essential for risk-based meat inspection.

Materials and Methods

Eighty-five slaughter batches including 8954 fattening pigs were randomly selected at a slaughterhouse receiving animals from across Finland. For each slaughter batch, the mortality rate, the FCI and the meat inspection results were obtained. Linear regression was used in order to reveal predictive factors that may indicate high condemnation rates in forthcoming slaughter batches.

Results

For a selected batch, the partial condemnation rate for all the pigs sent for slaughter from the same holding the previous year revealed as the best predictor for the partial condemnation rate at meat inspection of the batch (regression coefficient 0.9). The same analogy was found for the organ condemnation rate, for abscesses, bitten tails, pleuritis, liver condemnations and findings related to Mycobacterium avium–complex.

According to the producers’ declarations by the FCI forms, the batches were divided into two groups: batches with nothing to declare on (n=22) and batches with something to declare on (n=63). Unlike expected, there were no clear differences between these two groups, and for example: the group of batches with "nothing to declare" did not have significantly less condemnations at meat inspection.

Conclusions

Analyzing only the FCI regarding the slaughter batches intended to visual meat inspection is not sufficient to predict whether the batch will present a high condemnation risk or not. Instead, the most important predicting factor for high condemnation risk could be derived from the historical information on meat inspection of the pigs sent for slaughter from the same holding the previous year.

* P.O. Box 66, 00014 University of Helsinki, Finland

* Corresponding author: elina.felin@helsinki.fi; fax: +358 13 2674474