

Mapping PRRS in Ontario

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Introduction

Swine producers and veterinarians have been successful in eliminating clinical PRRS problems from herds. However, the herd often becomes re-infected with the virus. The overall purpose of this project is to understand the spread of the PRRS virus in the Ontario Swine Industry.

Methods

Producers who have positive PRRS results from samples submitted to the Animal Health Laboratory are invited to participate in the study. We are including herds with samples submitted after August 2004. Producers with PRRS negative herds are also participating in the study as control herds. If a producer has a new break and is willing to participate in the study, the \$200 cost of the gene sequencing of the virus will be paid for by the project.

Results

The swine producers and veterinarians in Ontario have been wonderfully cooperative with this project. To date we have 297 herds in the study with completed survey data, 51 of these herds are control herds. There are also 30 herds enrolled in the study pending completed survey data.

PRRS viruses are considered the “same” when 98% of the gene pattern from one virus is the same as the gene pattern from another virus. Five percent of the viruses from one farm were the same as a virus from at least one other farm. We know that viruses change over time as they replicate or multiply inside the pig’s cells. Therefore, over time, a virus from one source might look almost the same as another virus. Eight percent of viruses in our study were had another virus that was 96% the same at itself.

We asked producers to describe the clinical problems they experienced in their herds during the clinical PRRS outbreak. Approximately half of the herds had problems with sows off feed, weak-born pigs, pre-weaning mortality and finisher barn mortality and respiratory problems. Close to 40% of herds had problems with abortion and increased numbers of stillborn pigs. Seventy percent of farms with nursery pigs had high mortality and respiratory problems in this age of pigs.

More than half of the herds (58%) in the study use PRRS vaccine in the breeding herd. Forty-four percent of herds use the vaccine in sows and forty percent use the vaccine in gilts. Only 3% of producers vaccinate their nursery pigs. Serum inoculation was used in only 6% of farms (to either gilts or sows or both). Feedback given to gilts was used in 22% of farms, whereas feedback was given to sows on only 15% of farms.

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