

Veterinary data shown to help avoid under-reporting of disease

A three-year study to determine if data provided by vets offers any additional disease insights, compared to more passive laboratory surveillance, suggests that the answer is yes

BY
MIKE MULHERN

After a three-year University of Guelph study comparing the effectiveness of veterinary disease surveillance and laboratory surveillance, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) has taken over collection and monitoring of swine veterinary disease surveillance data. The ministry also works with large animal vet clinics to collect data on cattle, horses, sheep and goats.

Bob Friendship, a professor in the department of population medicine at the University of Guelph, says the study concluded that veterinary oversight can work, but the downside is finding a way to get reports in a timely way.

"We suggested that it would help if vets were reimbursed for the time and effort of sending in information," Friendship says, "but so far no funds have been available to support this."

He adds: "In an ideal world, you'd use all the information you could get — the information the meat inspectors accumulate every day and the information from the animal health lab (at the University of Guelph) and information from veterinarians. We'd like that all to be co-ordinated on a daily or weekly basis." That, he says, isn't happening yet, but "we are working on it."

The study, paid for by OMAFRA, was conducted because there has been evidence over the last decade that widespread problems in swine health can be under-reported.

"We have seen over the last decade some very serious diseases, some brand new and other more severe forms of old diseases — something like porcine circovirus that came in and spread rapidly and I think it had become pretty widespread before there was general alarm."

Friendship says that most of the swine work in

Ontario is handled through 15 veterinary clinics, all members of the Ontario Association of Swine Veterinarians, making it possible to get maximum coverage using just a few people.

Seven practitioners from five clinics, distributed in

The submission rate by veterinarians was higher than the submission rate from the laboratory. However, the veterinary data and the diagnostic laboratory submissions captured similar trends of disease problems.



different areas of Ontario, agreed to record and transmit information to the project on a weekly basis. The objective was to determine if active veterinary-based surveillance data provide any additional insights into disease patterns when compared to passive surveillance data obtained from the regional laboratory at the University of Guelph.

In general, the submission rate by veterinarians was higher than the submission rate from the laboratory. However, the veterinary data and the diagnostic laboratory submissions captured similar trends of disease problems. The veterinary data also captured trends of other potential endemic problems that were not reflected in the laboratory-based data.

In addition, the veterinary data captured trends of other potential endemic problems that were not reflected in the laboratory data, possibly because vets get information from clients more routinely and the scope is not restricted to itemized information submitted to a lab.

Friendship says that new technology will lead to better reporting from all sources, adding that the important factor will be co-ordination.

"When you get new diseases coming in," he says, "it sometimes takes a year or two before you have a specific diagnosis. If it's something new, we don't know what to look for, but it is awfully important that it be picked up. The best way to do that is to know there is suddenly an increase in respiratory disease or diarrhea, or something along that line." The vets are in a good position to make that determination and sound the alarm.

Dr. David Pearl, an assistant professor in population medicine, and Dr. Rocio Amezcua, a post-doctoral fellow, were collaborators on the research. The project was also supported by Dr. Bruce McNab at OMAFRA. ■



PHOTO BY MARTIN SCHWALBE