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Researchers are working with veterinary clinics to develop a way to monitor the emergence of diseases in the province's swine population

by MARY BAXTER

Testing the feasibility of a surveillance system for disease control

Over the past few years, Ontario hog producers have seen the arrival of some major diseases, such as porcine circovirus associated disease (PCVAD), new strains of swine influenza and more virulent forms of Porcine Reproductive and Respiratory Syndrome (PRRS).

These diseases have created devastation, panic and confusion about treatments and there has been little coordination of efforts to control outbreaks or to stop the diseases' spread.

Researchers with the Ontario Veterinary College's department of population medicine, at the request of the Ontario Ministry of Agriculture, Food and Rural Affairs, are now working with veterinarians to test the feasibility of a surveillance system which relies on veterinary practitioner activity to monitor the emergence of a new diseases or changes in the expression of existing diseases in the province's swine population. The hope is that this might enable a quick response, minimize economic loss and reduce any food safety risk if new syndromes emerge.

In the past, there were several regional diagnostic labs and subsidy programs that encouraged producers to submit pigs for post-mortem examinations. With diagnostic services now centralized in Guelph, "we're more relying on veterinary clinics to submit samples and to recognize a problem," says Prof. Bob Friendship, who is involved in the project. But while one clinic

might see something happening, its staff may not realize another clinic is seeing the exact same thing in other herds.

Hence "our project is to test the feasibility of a surveillance system and test the feasibility of using veterinarian clinics in this sort of system," says Friendship.

Nine of about 16 swine veterinary clinics in Ontario are involved. The college's research team hopes to correlate the vets' data with other sources of information, including animal health lab records, drug sales and condemnations at slaughter.

So far, they have found the clinics are very busy and "aren't really keen on developing more paperwork," says Friendship. To this end, effort is being made to work with the clinics to determine what way of filing data works best for them and how it might be worked into their regular routine without adding too many additional steps.

Since researchers only began collecting data last summer, it will take a while to develop benchmarks for normal fluctuations in the province's herd health, says Friendship.

He notes that the merit of the study only becomes obvious if a new disease is occurring. But in that instance, its presence could literally be lifesaving: "If we have an early warning, maybe we can do a better job and set up better diagnosis and approach to control the disease than we have in the past."

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