



ISU Veterinary Diagnostic Laboratory Protects Global Food Supply *Safe Food Starts Here.*

Like bacon and eggs? Iowa State University's (ISU) Veterinary Diagnostic Laboratory (VDL) plays a behind-the-scenes role in your daily life.

"We help ensure the safety and security of our food supply while protecting animal and human health," said Rodger Main, DVM, PhD, VDL Director of Operations at ISU's College of Veterinary Medicine in Ames. "The lab plays a critical role in sustaining Iowa's local, national and global food economy."

It's no accident that Iowa's food supply is unmatched for availability, quality, reliability and safety. The full-service, fully-accredited VDL has trained the next generation of veterinarians and scientists since the 1940s.

The VDL has expanded multiple times since its groundbreaking in 1976. The workforce has similarly expanded, from 15 employees in 1976 to 125 employees and 25 faculty members today. The facilities have adapted to meet soaring veterinary demand, and today the VDL features state-of-the-art technologies.

The VDL receives approximately 85,000 cases each year, which result in more than 1.25 million diagnostic tests. "We handle the largest number of food-animal diagnostic cases in the nation," said Main, who noted that nearly 75 percent of the cases involve swine.

How it works

The process starts when a local veterinarian submits a case to the VDL. Mornings are fast paced, as hundreds of blood and tissue samples arrive via delivery services. On average, the Iowa Select Farms health services team submits 70 cases per week.

Based on case history and relevant data, a VDL diagnostician selected tests for each sample. "Tests can range from bacteriology to virology to toxicity," said Katie Woodward, DVM, who handles client outreach and education at the VDL.

The goal? Rapidly diagnose animal disease to help veterinarians treat livestock, poultry and pets – a task that is not only important to the health and well-being of the animals, but also to the U.S. and global food supply.

"IOWA SELECT FARMS HAS MADE SIGNIFICANT INVESTMENTS IN BIOSECURITY TO PROTECT SWINE HEALTH, PLUS IT BOOSTS THE ECONOMIC HEALTH OF RURAL COMMUNITIES."

"We're proud to help advance Iowa's \$32.5 billion animal agriculture industry and support its competitiveness in the global marketplace," Main said.

- Rodger Main, DVM, PhD, VDL Director of Operations at ISU College of Veterinary Medicine

Adding value to agriculture and Iowa's economy

The internationally-recognized VDL addresses ongoing swine health challenges like the Porcine Reproductive and Respiratory Syndrome (PRRS) virus, as well as emerging diseases like Seneca Valley Virus. While neither virus impacts human health, they can create significant setbacks to Iowa farmers in terms of lost productivity and the overall challenge of caring for sick animals.

"We're an extension of a farm's veterinarian," said Main, who appreciates working with clients like Iowa Select Farms. "VDL results are key in helping us make timely treatment decisions that align with our commitment to judicious antibiotic usage," said Shamus Brown, DVM and director of multiplication for Iowa Select Farms. "Fast and accurate diagnostics help us provide the best possible care for our animals."

"Iowa Select Farms is a good partner and plays a significant role in animal agriculture," Main added. "They have made significant investments in biosecurity to protect swine health and boost the economic health of rural communities. Iowa Select Farms is a great example of value-added ag in Iowa, which is in a good place to grow its ability to produce high-quality pork."



PROFILE

Iowa State University Veterinary Diagnostic Laboratory

AMES, IOWA

Employees:

125 staff + 25 faculty members

Iowa Select Farms has approximately **70 case-based interactions** with the ISU VDL every week. In the past year, we have worked on **3,500 individual cases together.**

