

IMPROVE LIFE.

Ontario Agri-Food Innovation Alliance Impact Case Study



Animal Health Laboratory



Animal Health Laboratory

A laboratory leader: Keeping Ontario's animals safe

Through the Ontario Agri-Food Innovation Alliance, the Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) invests in laboratory testing and emergency planning to make Ontario's food system one of the safest in the world. U of G's Laboratory Services Division, comprised of the Animal Health Laboratory (AHL) and Agriculture and Food Laboratory (AFL), provides comprehensive, reliable, accredited testing services to help build transparency and public confidence in the agri-food sector.

The Animal Health Laboratory works with partners to determine the health of livestock, poultry, horses and pets through a wide array of tests, and in turn provides disease surveillance data for the province of Ontario.

With new lab tests continually developed and validated, AHL stands on guard, ready to respond to emergencies and keep Ontario open for business.

AHL at a glance

- National leader in animal health testing, providing world-class laboratory services
- Works with veterinarians, government and university partners across Canada
- Accredited by international standards
- Fully computerized veterinary diagnostic lab employs analysts with post-graduate training and specialty board certification
- Monitors trends in existing diseases and sends realtime alerts to OMAFRA to ensure rapid and efficient response to health threats in the livestock and poultry industries
- Enables policy makers to have information readily available to assess risks, evaluate control strategies, identify research needs, and facilitate planning



Unique position in Canada

Uniquely positioned as a laboratory leader, AHL greatly benefits the agri-food and rural sector in Ontario. With funding from OMAFRA, through the Ontario Agri-Food Innovation Alliance, AHL uses new, cuttingedge technologies to continuously improve the services they offer. Proceeds from feefor-service revenue is reinvested into the lab's various sections, providing innovative testing services to clients from multiple sectors.

Inputs

\$5.7M from OMAFRA **\$8.6M**

from testing services

Virology Lab Roche Flow— 1 of only 5 instruments in Canada—enables AHL's capacity for high-volume export and surge testing in the event of a foreign animal disease outbreak.

laboratory sections

- Bacteriology
- Client Services
 (Specimen Reception)
- Clinical Pathology
- Histotechnology
- Guelph Anatomic
 Pathology
- Kemptville Anatomic Pathology
- Molecular Biology
- Parasitology
- Surveillance
- Toxicology
- Virology





- American Association of Veterinary Laboratory Diagnosticians (AAVLD) - full accreditation, all species
- Standards Council of Canada (SCC) to ISO/IEC 17025:2017 standard for accredited techniques
- Orthopedic Foundation for Animals Inc. (OFA)—fT42s, TgAA, cTSH

Advanceo

SterilGARD® III

By the numbers (2020/21)



AHL performed **770,377** procedures to complete **77,584** submitted cases

10[%]+ in revenue over 2019/20 to \$8.6 million

98.5[%] compliance with published turnaround times

24 new tests developed or improved by AHL scientists

94.8[%] client satisfaction with AHL services





AHL sample flow chart



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Making an impact

The following two examples showcase how the Animal Health Laboratory is making an impact in Ontario's agri-food sector and rural communities.

- Partner of choice for
 Ontario's livestock trades
- 2 Emergency preparedness for African swine fever



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Supporting the export industry Partner of choice for Ontario's livestock trades



AHL is integral to Ontario's multi-million dollar livestock export industry—as well as Canada's poultry exports—by providing rapid and reliable confirmatory tests required by import countries. To ensure the livestock industry meets the rigorous requirements of import countries, AHL remains at the forefront of refining tests for more rapid service to the sectors while maintaining the integrity and reliability of the results.

AHL's reinvestment approach ensures the purchase of up-to-date lab instruments and equipment, enabling multiple tests to be performed at once. With the ability to test a wide variety of non-human animals—including falcons exported to Saudi Arabia—AHL provides the comprehensive, quality testing program required for successful export industries.

"There are a lot of labs out there, but you need a certain level of confidence in the lab, which is what we have with AHL."

-Dr. Kevin Vilaca, veterinarian, Southwest Vets Services

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Metrics and impact



2020 ONTARIO ANIMAL EXPORTS¹







¹<u>OMAFRA International Trade Statistics</u> 2020





Verifies negative status for disease in flocks and herds eligible for the export market



Cutting-edge technology

Utilizes up-to-date technology that optimizes efficiency and surge capacity

Unique in Ontario

Only Ontario lab with capacity for export testing

Innovative

Develops new tests related to export requirements

"Due to their accreditation status, we utilize AHL in order to satisfy the requirements of domestic and international testing programs."

-Christa Arsenault, DVM, Canadian Swine Health Intelligence Network (CSHIN) manager

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Disease monitoring and surveillance

Emergency preparedness for African swine fever

AHL plays a leadership role in disease monitoring and surveillance to support Ontario livestock producers and consumers.

For example, African swine fever (ASF) is a highly transmissible viral disease that affects hogs and poses a major threat to the commercial pork industry. AHL provides a local option for testing in Ontario and has the ability to detect that potential first positive case quickly and increase testing capacity rapidly to help monitor the spread of the disease. If ASF were detected in Ontario, it would have devastating economic implications for the pork industry, such as border closures and major animal health and welfare implications, including morbidity and mortality.



AHL supports the current provincial and national ASF disease-free status with quick, confirmatory testing of samples from animals that may present with symptoms similar to those of ASF. It is critical for Ontario and Canada to maintain this disease-free status to ensure a safe, healthy and profitable commercial pork industry.

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Metrics and impact





1,142 producers







Ontario leader

Only Ontario lab providing testing for African swine fever

Collaborative

Establishes and maintains collaborative relationships with veterinarians and the Canadian Swine Health Intelligence Network

High capacity

High-volume test capacity for urgent situations

"The data and information that AHL provides into this network [Canadian Swine Health Intelligence Network] is extremely valuable to monitor endemic swine disease as well as to monitor for new and emerging swine pathogens."

-Christa Arsenault, DVM, Canadian Swine Health Intelligence Network (CSHIN) Manager

Comprehensive monitoring and surveillance

Monitors the industry through screening and diagnostic tests to ensure a disease-free sector



"A quick turnaround time for test results we can be confident in is critical to disease monitoring and surveillance and AHL provides that assurance and are ready to go beyond regular work hours to address our urgent needs, which is critical to the success of the industry."

-Dr. Kevin Vilaca, veterinarian, Southwest Vets Services

AHL

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