Further Evolution of the Ontario Animal Health Network
Summary v-1
March 2014

- Whereas a network of government, university and industry people working in animal health has evolved in Ontario over many years, this document summarizes contemporary plans for further evolution of that network.
- Examples of various activities of this network include collecting, monitoring, analyzing, exchanging and applying information concerning animal health. This has included information concerning: laboratory and clinical diagnoses, disease prevention, treatments, the management of animal health, production efficiency, product quality, safe sustainable trade, zoonoses and linkages to pubic health.
- Recently several studies have called for further improvements in animal health surveillance. In Ontario this includes enhancement of the Ontario Animal Health Surveillance Network (OAHSN) and its linkages with the Canadian Animal Health Surveillance Network (CAHSN). Significant funding has recently become available to make such improvements as part of Growing Forward 2 initiatives.
- For the purposes of this evolution, health surveillance is being defined as: The collection, monitoring, and analyses of data, sufficient to detect important changes in health, validate health and safety in context, and distribute information of value for use in timely health management decisions.
- Since the value of surveillance is only realized when the information is actually used, the process must integrate surveillance with extension/outreach and decision- making. This generates a true Animal Health Network involving bidirectional flow of information through appropriate nodes of people and organizations.
- This initiative refers to this provincial network as the Ontario Animal Health Network (OAHN), which along with similar networks in other jurisdictions, contributes to the Canadian Animal Health Network (CAHN) and international networks. It includes components of health surveillance, extension/outreach and information exchange, concerning: the identification of problems and benefits, needs, observations, problem-solving, and continuous improvement in the management of animal health and zoonoses.
- Efficient evolution of these systems requires application of the concept of maximizing marginal return on investment, by striving to achieve the "biggest bang" for the next dollar invested. This involves learning from previous successes (and failures), and applying that learning to areas of greatest need, balanced with the greatest probability of success, including quick wins.
- Several examples of historical evolution and improvements to animal health networks exist, such as the: Ontario Animal Health Surveillance Network (OAHSN), Canadian Animal Health Surveillance Network (CAHSN), Canadian Animal Health Laboratorians Network (CAHLN), Council of Chief Veterinary Officers (CCVO), Ontario Association of Swine Veterinarians (OA), Ontario Association of Poultry Practitioners (OAPP), Ontario Association of Bovine

Practitioners (OABP), Small Ruminant Veterinarians of Ontario (SRVO), and many others.

- Two particular examples that illustrate this flow of information include the animal health network in Quebec (RAIZO) and the Canadian Swine Health Intelligence Network (CSHIN) nationally. They facilitate multi-directional flow of both laboratory and clinical information, where clinical aspects include sharing of observations, prevention, clinical observation, treatment, response and actions, linked with laboratory information. This is achieved through a network of species-specific sub-networks, each working semi-independently, tailored to that species' needs, working synergistically, based on a template.

- Accordingly, plans for next improvements in animal health surveillance in Ontario (and contributing to improved national surveillance), as part of the GF2 surveillance initiative, include:

    1. The further evolution and refinement of existing animal health surveillance and extension/outreach networks, into a more visible network of species-specific sub-networks, similar to the Expert Committees in RAIZO and CSHIN (see below for more detail). This will include the filling of a full-time, permanent position known as the Animal Health Network Coordinator (AHNC), to coordinate these sub-networks.

    2. These provincial sub-networks will also link to existing and future applicable species-specific, and general, national networks (e.g. CSHIN, national species-specific producer and veterinary organizations).
    Note: It is recommended that some permanent national organization (e.g. CFIA), should provide coordination and secretariat leadership to national species-specific-animal-health-networks like CSHIN. Such coordination by CFIA would <u>not</u> obligate the CFIA to respond to findings beyond policies and programs of the day.

    3. Expanding the routine uploading of Ontario origin diagnostic laboratory data to the CAHSN data system, (based on the security of the Canadian Network for Public Health Intelligence (CNPHI)); to include data on all federally reportable and notifiable diseases, plus three production limiting diseases in each of swine, bovine and poultry.

    4. Increasing the quality, quantity, efficiency, effectiveness and representativeness of submissions and accompanying data to the Animal Health Laboratory (AHL). This will also be coordinated by the full-time AHNC, with support from others.

    5. Increased collation and analyses of surveillance data from other existing sources (e.g. abattoir, sales yard and dead stock data).

    6. Engage selected veterinary practices in a sub-network of sentinel veterinary practices including capture of farm-call-data in coordination with species-specific networks. This can include encouragement of high quality sample submissions, active sampling for sounder data and more sophisticated epidemiological data analyses. This component may be coordinated by an epidemiologist physically located at the AHL.

7. Evolution, expansion and replacement of technical capacity at AHL through development, validation and implementation of: new test panels for all species, a fish diseases diagnostic section, additional and replacement technical and professional staff.
8. Improve and lay groundwork for yet further improvement of the capture of unique premises ID codes for laboratory submissions, to distinguish between repeated submissions from one premises vs. multiple premises, and to facilitate high level spatial analyses (while protecting personal and specific business identification).

- The template for species-specific animal health network committees in Ontario (similar to RAIZO species Expert Committees and CAHSIN), is summarized in the table below. Some variation between committees is allowed where appropriate.
- Over a period of approximately one year, the Coordinator will oversee the establishment of such committees drawing from resources as indicated below, for swine, poultry and bovine. Learning from that experience, small ruminant, equine, fish and bee committees will be added the following year.

Species Specific Animal Health Network Committee Template		
Position	Tasks	Source
Chair*	Lead the committee Draft Alerts	OMAF species veterinarian
Coordinator/Secretary**	Coordination, logistics, minutes, alerts	Animal Health Network Coordinator (AHNC) veterinarian
Laboratory Professional	Pathologist or microbiologist	AHL professional specializing in species
Academic	Researcher and specialist perspective	OVC species specialist
Private Veterinarian 1*+	Practitioner perspective	Respective species veterinary association
Private Veterinarian 2+	Practitioner perspective	Respective species veterinary association

* The Chair and one private practitioner also serve on the respective national species specific animal health network committee where applicable (e.g. CSHIN).
** The Animal Health Network Coordinator (AHNC) serves on each and every species-specific sub-network committee to ensure coordination and synergy.
++ Private veterinarians are paid per hour for their time to participate in quarterly conference calls of the provincial committee (1 & 2), plus the national committee (1). Anticipated total time approximately 24 hours for Vet 1 and 12 hours for Vet 2 per year. With a maximum cap of 40 and 20 hours respectively. Others members provide service in-kind from their home positions. Committee structure may vary somewhat by species (e.g. bee and fish likely different).