



OPHA RESOLUTION: Strengthening Public Health Laboratories

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OPHA RESOLUTION: Strengthening Public Health Laboratories

On December 15, 2008, the new Ontario Agency for Health Protection and Promotion¹ (OAHP) accepted the transfer of one of the largest public laboratory systems in North America, consisting of a central lab in Toronto and eleven regional labs, from the Ontario Ministry of Health and Long Term Care (MOHLTC.)

WHEREAS in the last several years, there has been a significant decrease in laboratory services provided by the Ontario Ministry of Health's Public Health Laboratories (PHL) which provide laboratory services to the 36 Ontario Public Health Units,¹ and

WHEREAS, public health professionals in Ontario recognize that a reliable public health laboratory system is necessary to support the Ontario Public Standard in order to protect public health and

WHEREAS epidemiological evidence clearly indicates that high quality laboratory testing is necessary to confirm and investigate infectious and communicable disease outbreaks, and

WHEREAS the number of communicable disease outbreaks and food product recalls have increased and resulted in increasing public health concerns related to the capacity and timeliness of response of relying on one central lab.

BE IT RESOLVED THAT OPHA advocate the following to the MOHLTC, and the Ontario Agency for Health Protection and Promotion² (OAHP):

- provide full public consultations regarding the renewal and modernization of services provided by the PHL.
- consult with Ontario Health Units on any new or proposed restructuring of laboratory services available for health unit use.
- ensure full funding for health units to fill any existing testing gaps resulting when tests and services are removed, and
- through the Public Health Laboratories provide to the Health Units, and specifically to public health staff, up-to-date environmental standards and guidelines

THAT the Environmental Health Working Group forward this resolution to the Public Health Protection and Prevention Branch of MOHLTC, the Minister of Health and Long-Term Care and the Ontario Agency for Health Protection and Promotion for follow up and action. Copies will also be sent to the Canadian Food Inspection Agency, the Public Health Agency of Canada, the Association of Supervisors of Public Health Inspectors of Ontario, the Association of Local Public Health Agencies, the Canadian Institute of Public Health Inspectors, the National Collaborating Centre for Environmental Health, the Environmental Health Foundation of Canada and the Canadian Public Health Association - Environmental Health Division.

Background

Health units rely on the Public Health Laboratories (PHL) to provide high quality laboratory testing and analysis to support investigations and confirmations of suspected reportable infectious and communicable diseases (e.g. SARS, WNV, H1N1, and Legionnaires). In addition, health units rely on the PHL to provide the laboratory identification of environmental health hazards, such as bacteria in drinking water supplies (i.e. bacteria testing of drinking water for public premises and the public's access to testing their drinking water) and infectious agents.

At least thirty different tests and services previously available to health units are no longer available. Examples of public health laboratory analyses that are no longer available to health units but are still required include:

- drinking water chemistry testing for chemicals in private drinking water supplies (i.e. nitrates, fluoride and sodium etc),
- blue green algae and toxin identification in cooperation with the Ontario Ministry of the Environment,
- mould spore testing,
- rapid laboratory testing for Legionella results psittacosis testing of high risk bird flocks for fecal Chlamydia testing,³
- tick speciation and bacterial testing if tick is found on an animal,
- unopened food products testing for food safety investigations,
- food testing for botulism (*Clostridium botulinum*)⁴, capability to test raw uncooked foods (meats) during investigations and outbreaks,
- *E. coli* O157:H7 serotyping in a timely manner, and
- vomitus sample testing to facilitate viral (i.e. Noro-virus) outbreak investigations.

The following services would improve the capacity of public health units to provide exemplary services:

- the availability of some laboratory supplies such as sound leak proof sampling kits, environmental swabs (including for *Legionella* identification), whirl pack bags, and food sampling containers, at no cost to health units.
- review of existing health based PHL standard for recreational beach water testing (100 *E. coli* per 100ml),
- provision of current field testing kits for identification of parasites, such as *Cryptosporidium* in both drinking and recreational water (spas, splash pads waterborne outbreaks),
- environmental test kits for swabbing utensils in food premises,
- revised food sanitation standards for food bacteriology testing,
- completion of the revision to the Health Inspectors' guide to Principles and Practices of Environmental Bacteriology, 1997 Mike Brodsky⁵ (Environmental Standards Resource Guide) currently under review,
- the capability to have DNA testing and molecular typing for rapid phage identification to assist in outbreaks and food born illness investigations,

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- ensuring capability for rapid response with laboratory results, including specimen serotyping, for communicable disease investigations such as salmonella, wherever possible,⁹
- standards for other new emerging pathogens and DNA typing capability,
- established protocols to facilitate access to other government labs with the capacity for specific testing that may be required by health units i.e. Ministry of the Environment labs and federal Health Canada labs,
- full after hours PHL services for emergencies and outbreaks, recalls and bioterrorism events,
- best practices standards to interpret lab results and support public health risk assessments,
- laboratory support for the investigation of chemical contamination of foods,
- ability to provide laboratory support in the identification of filth and extraneous matter in food products (rodent hairs, feces etc.),
- public access to free testing of private drinking water for bacteria,
- provision to health units of an adenosine triphosphate ATP analyzer to provide immediate assessment of the effectiveness of cleaning and sanitizing of food contact surfaces and equipment,
- Lyme disease testing and diagnostic assistance (once available) for health units⁶ and
- expansion of reverse transcription polymerase chain reaction (RT-PCR) testing to other environmental applications (recreational water).⁷

The MOHLTC's Ontario Public Health Standards (OPHS) require Boards of Health to ensure that all programs (i.e. food safety, safe water, communicable diseases, etc.) meet MOHLTC regulations/guidelines/protocols as applicable. The PHL system is a critical component for effective program delivery. Standards, guidelines and/or protocols should be developed to assist local health units. Expectation of compliance with the new standards is challenging and possibly unrealistic when some of the major supports for laboratory testing and services have been reduced dramatically or removed completely. The MOHLTC must take steps to re-establish these services or to provide the funding required to secure these services from other sources.

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