

PUBLIC HEALTH LABORATORY
Public Health, Wellness
and
Children and Youth Services Branch
Department of Health and Community Services

ANNUAL PERFORMANCE REPORT
2008-2009



MESSAGE FROM THE DIRECTOR

On behalf of the Public Health Laboratory (PHL), Public Health, Wellness and Children and Youth Services Branch, I am pleased to submit the 2008-2009 Annual Report to the Minister of the Department of Health and Community Services (DHCS). In keeping with the *Transparency and Accountability Act*, the PHL has been assigned a Category 2 status and is expected to develop business plans and reports. This report focuses on the progress made on the key issues identified in the 2008-2011 Performance-based Business Plan as part of our commitment, to ensure best practices and the highest level of integrity of our services. The strategic directions of the Department have been considered in the development of this report.

As Director, I acknowledge that on behalf of the PHL and the Department, I am accountable for the preparation of this report and the actual results or any variances reported in this document.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sam Ratnam', with a stylized flourish at the end.

Sam Ratnam, Ph. D., MPH, FCCM
Director

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1.0 INTRODUCTION

This document has been prepared under government's accountability measures as defined in *The Transparency and Accountability Act* (the *Act*) and is based on the 2008-2011 Business Plan. The 2008-2009 Annual Report demonstrates the commitment of the Public Health Laboratory (PHL) to ensure the effective management of its mandate and that all associated efforts reflect the values and principles of this legislation while also pursuing standards of excellence for all of its operations. This report is also focused on ensuring that the PHL's allocation of resources is consistent with government's broader mandate for the efficient use of public resources.

2.0 THE PUBLIC HEALTH LABORATORY OVERVIEW

2.1: *Core Services*

The PHL operates under the authority of the Department of Health and Community Services (DHCS) with the Director of the PHL reporting to the Chief Medical Officer of the DHCS. Thus, PHL is not a legislated entity. The PHL existed under the DHCS historically.

The core services for the PHL are focused on the screening, detection, prevention, protection, surveillance and assessment of infectious diseases throughout Newfoundland and Labrador. Thus, the PHL is an essential and integral part of the provincial public health system infrastructure and our services are a vital component in safeguarding provincial public health. There are no facilities in the province that duplicate the roles and responsibilities of the PHL and therein no redundancy in PHL operations.

Annual Statistics: 2005-06 to 2008-09

Section	Tests Performed			
	2005-06	2006-07	2007-08	2008-09
SEROLOGY	79,666	81,671	90,041	101,898
VIROLOGY	8,257	12,969	13,504	8,915
BACTERIOLOGY MYCOLOGY PARASITOLOGY	23,879	18,711	19,796	24,498
MYCOBACTERIOLOGY	2,073	2,140	1,921	1,925
SANITARY	16,094	15,217	14,141	15,430
TOTAL	129,969	130,708	139,403	152,666

The above stats show a clear trend of steadily increasing demand for the services provided by the PHL over the years. This may be attributable to a number of factors including introduction of new services and increasing range of existing services to adequately meet our provincial demand.

The main laboratory is located on 100 Forest Road in St. John's with external water testing service sites in all health regions of the province. These sites operate under the direction of the PHL. .

Contact Information: Newfoundland Public Health Laboratory
 Dr. Leonard A. Miller Centre, Suite 1
 100 Forest Road, St. John's, NL A1A 3Z9
 Telephone # 709-777-6583, Fax # 709-777-6362

2.2 *Staff and Budget*

The PHL has a staff complement of 24 employees, 16 females and 8 males.

5 Management (DHCS)

5 Hospital Support (NAPE HS)

14 Laboratory and X-Ray (NAPE LX)

The 2008-09 budget allocation from the Government of Newfoundland and Labrador was approximately \$3.9 million. A copy of the **2008-2009** audited financial statement can be found in Appendix C. The PHL does not charge for any of its services and therein generates no revenues from its clients.

3.0 MANDATE

The PHL operates under the authority of the Department of Health and Community Services (DHCS) with the Director of the PHL reporting to the Chief Medical Officer of the DHCS. The mandate is as follows:

- Act as the provincial laboratory center for infectious disease detection, surveillance, prevention, control and epidemiology.
- Provide a comprehensive range of specialized and reference laboratory services in clinical and public health microbiology and infectious disease epidemiology to the all provincial health authorities and related stakeholder groups.
- Pursue research and development activities in support of its others responsibilities for securing optimum public health.

4.0 LINES OF BUSINESS

Public Health Laboratory is not a legislated entity. It operates under the Department of Health and Community Services (DHCS) with the Director reporting to the Chief Medical Officer of the DHCS. PHL supports the Department's mandate to strengthen the public health capacity and has several lines of business including:

- Laboratory, consultative, educational and training services in the detection, prevention, surveillance and control of infectious diseases;
- Provision of routine and specialized laboratory diagnostic and screening services in public and clinical health microbiology to all hospitals, clinics and other health related agencies across the province;
- Laboratory and consultative services in outbreak investigation and control;
- Laboratory based surveillance of communicable disease incidence and prevalence;
- Research and development activities in the areas of infectious disease epidemiology, immunization, community health, clinical and public health microbiology;
- Municipal Water Supply Safety;
- Pandemic influenza, Bioterrorism and emergency response preparedness;
- Lab supply center ; and
- Guidance in the development of related policy.

These lines of business are entirely consistent with the PHL's mandate and sufficiently comprehensive. One of the focus areas in the DHCS's strategic directions is the "Surveillance of Communicable Disease" which provides the primary strategic direction for PHL's lines of business. The core function of the PHL is to safeguard public health throughout the province through the surveillance, detection, prevention and control of infectious diseases. In this capacity, PHL works closely with hospitals, medical clinics, health care agencies and health care professionals throughout the province, as well as public officials within DHCS, the provincial health regions and other public health authorities to provide routine and specialized diagnostic and screening services in clinical and public health microbiology.

The PHL test services cover the following seven clinical and public health service areas:

- Serology
- Virology
- Bacteriology
- Parasitology
- Mycology
- Mycobacteriology
- Sanitary/Environmental Microbiology

The PHL also provides bacteriological water quality testing service for protection of public health to government departments, private individuals, communities, municipalities, private and other public agencies etc, throughout the province. Partners in external water testing services include 6 hospital laboratories across the province. A full listing of all patient and public health-related diagnostic and screening services provided by the PHL is provided in Appendix A.

5.0 VISION

The 2008-2011 vision of PHL builds on the vision of the DHCS that “individuals, families and communities will have achieved optimal health and well being”. The vision of the PHL is:

Newfoundland and Labrador will have state-of-the-art technology in laboratory services that reflect best practice in clinical and public health microbiology, public health safety and protection and contribute to optimal health and well being.

This vision reflects the core mandate of the PHL as well as desired outcomes. It also provides the basis for the organization’s core identity, roles and responsibilities. As the science respecting infectious diseases advances, so too should the capabilities and quality of services provided by the PHL. This vision is fundamental to the well-being and health of the provincial population

Note: To access a complete version of the PHL 2008-2011 Strategic Plan or the DHCS 2008-2011 Strategic Plan , please contact the Department of Health and Community Services Tel: 709-729-4984 or email: healthinfo@gov.nl.ca or visit <http://www.health.gov.nl.ca/health/>.

6.0 VALUES

The PHL has adopted its own set of core values to guide its work of the PHL and the manner in which it pursues its mandate. PHL has also adopted and modified the broader values established by the DHCS. Both sets of values are provided below:

Department of Health and Community Services Values:

PHL has adopted and modified the broader values established by the DHCS. The PHL has also adopted its own set of core values to guide its work and the manner in which the mandate is pursued. Both sets of values are provided below:

Department of Health and Community Services Values:

Collaboration Ensure that the PHL works with other stakeholders in fulfilling its overall mandate for the protection of public health.

Fairness Ensure that each person uses a balance of evidence for equity in decision making.

Privacy Ensure confidentiality and protection of information related to any persons, families, organizations, communities.

Respect Enable each person the opportunity to express their opinions in an open and safe environment

Transparency Ensure all persons are forthcoming with information related to decision making except where prohibited by legislation.

Public Health Laboratory Values: The following reflects the core values that guide the work of the PHL and the manner in which the mandate is pursued:

Integrity Ensure that the PHL is consistent in securing the absolute accuracy and reliability of its services, procedures, test results and policy advice.

Timeliness Ensure all clients have access to information and test results on a consistent basis and with the fastest turn-around time possible.

Reliability Ensure all its clients can count on the PHL for addressing their laboratory and information requirements so as to enable them to fulfill their mandates with accuracy and confidence.

Excellence Ensure state-of-the-art technology and expertise in the delivery of all of its services consistent with best practices and standards established in the industry.

7.0 PRIMARY CLIENTS

As the mandated provincial laboratory responsible for providing all routine and specialized reference diagnostic and specialized services in clinical and public health microbiology in the province, the PHL has many clients. These include:

- All provincial hospitals
- Health officials of DHCS
- All community health clinics
- All medical clinics/offices
- Doctors and their patients
- Nursing homes and stations
- Public Health Inspectors
- Department of Municipal Affairs
- Municipalities
- Department of Environment and Conservation
- Department of Government Services
- National and international networks, expert working groups, advisory committees etc involved with clinical and public health microbiology and epidemiology.

Many of these clients are entirely dependent on the services provided by the PHL and, without these services, would be severely compromised in fulfilling their mandates for preserving public health and addressing the health related needs of their clients. Based on current quality and communication protocols, PHL is successfully addressing client needs.

8.0 SHARED COMMITMENTS / PARTNERSHIPS

As part of its mandate the PHL functions closely and in partnership with all microbiology laboratories in the province as well as many health related agencies provincially and nationally. The following items illustrate the shared commitments of the PHL in dealing with various areas identified in its goals, role and functions and the contributions of each towards identified strategic directions.

- **Provincial Electronic Data Transfer Initiative:** Over the past several years, PHL has been working in close collaboration with the Information Technology Department of Eastern Health towards establishing complete electronic data transfer of laboratory information to microbiology laboratories of major hospitals in the province. This was initially implemented in 2003 with hospitals in Eastern Health Region and subsequently expanded to Central and Western Health Regions in partnership with concerned microbiology laboratories. Labrador-Grenfell Health Region remains to be linked pending integration of existing electronic databases in 3 sites within the region. This project has greatly improved the timely transfer of, and access to health data across the province. This system is designed to enhance the ability of the provincial infectious disease surveillance system to monitor overall public health in a timely manner and to respond quickly to critical and urgent health issues.
- **National Partnerships:** The PHL participates in several national and international networks, expert working groups and advisory committees that are involved with clinical and public health microbiology, and prevention, control and surveillance of infectious diseases. In this capacity, the PHL is a partner in public health at the national level and represents the province in facilitating the two-way transfer of information vital to monitoring and securing the public health of the country. The following highlights PHL's existing partnerships at the national level:
 - **Canadian Public Health Laboratory Network (CPHLN)**, whose main focus is providing a forum for exchange of information and identification and establishment of common goals and priorities at inter-provincial and national levels. CPHLN is one of 6 Expert Groups of the recently established Pan Canadian Public Health Network, with a major role respecting national public health. Membership includes all PHL Directors across the country.

There are also several committees and working groups under the CPHLN umbrella and the PHL is an active member of the following groups.

- *Canadian Tuberculosis Laboratories Technical Network (CTLTN)* whose mission is to promote excellence, standardization and quality assurance in mycobacteriology services.
 - *National Enteric Surveillance Program*, a federal-provincial network of laboratories that tracks the prevalence and incidence of microorganisms causing enteric illnesses.
 - *National Water and Food Safety Subcommittee* whose prime objective is to ensure best practices in microbiology testing of drinking water for public health purposes.
 - *Bio-terrorism Subcommittee*, whose main objective is preparedness and technical expertise and training for potential events of terrorism involving microorganisms,
 - *Laboratory Standardization Subcommittee*, whose main objective is to review, update and standardize laboratory testing parameters for nationally notifiable diseases and address related quality control and quality assurance issues?
 - *Pandemic Influenza Laboratory Preparedness Network*, whose main objective is development of national laboratory guidelines, technical expertise, coordination, and response plan for an effective and timely response to pandemic influenza,
- ***Canada Health Info way*** - Pan-Canadian Lab Standards Group - This national group was formed to contribute to, review and validate laboratory information standards to support the interoperable pan-Canadian electronic health record (EHR) as defined by Infoway and as part of the Laboratory Program.
- ***Canadian Association of HIV Clinical Laboratory Specialists*** - This national network is dedicated to the advancement of excellence in HIV laboratory practices and services.

In addition to laboratory testing, the PHL is active in research and special projects in microbiology and infectious disease epidemiology as part of its broader mandate to protect public health. These projects are undertaken through close partnership with many hospitals and agencies both within the province and nationally involving numerous health care professionals. The following outlines recent and significant projects:

➤ ***HPV Triage in Cervical Cancer Screening***

The PHL now plays an important role in the provincial cervical cancer screening program by providing HPV triage service. As part of this program, PHL has been working with the Eastern Health Regional Cytology Laboratory to introduce HPV genotyping on a trial basis starting in the fall of 2009. There is considerable savings in health care costs with this approach which also ensures better patient care and management as well as resource utilization, and elimination of unnecessary anxiety and follow up visits for the majority of women who are not at risk.

➤ ***Research on HPV and Cervical Cancer***

Following the completion of a major randomized clinical trial on the application of HPV DNA testing in primary cervical screening for detection of cervical disease, involving over 10,000 women in St. John's and McGill University, a new multicentre Canadian study has been recently started. This involves participation of major health care institutions in 6 provinces. This study will further assess the relative merits of testing for certain molecular markers for more accurate and specific identification of the small fraction of women truly at risk for cervical cancer among those having abnormal Pap test.

This multi centre HPV molecular marker study is the only study of its kind in the country, which will contribute to cervical cancer screening strategy.

This study enrolled about 3000 women in 6 sites across the country, and the 1st phase of the study is scheduled to be completed by the summer of 2009. The longitudinal component of the study will commence thereafter and expected to continue through all of 2010. This study will determine the relative predictive value of the new tests for underlying risk of cervical pre-cancer and cancer.

9.0 HIGHLIGHTS AND ACCOMPLISHMENTS

Emergency Response: The PHL has an important role to ensure the province can respond effectively to potential bioterrorism threats. The laboratory's level III facility and technical expertise are integral parts of our rapid response system to bioterrorism threats. PHL employees, as well as Environmental Health Officers across the province, have been trained to handle suspicious packages and deal with biohazard events. The PHL also ensures that it maintains adequate and satisfactory response capacity to biohazard/ bioterrorist threat through annual re-certification of the response team members.

The PHL has taken the initiative to train microbiology laboratory technologists in the province in the handling of clinical specimens and agents associated with bioterrorism.

Accreditation: The PHL has always been vigilant in following recommended laboratory procedures and practices. It has traditionally ensured strict quality control protocols and practices and routinely participated in various proficiency testing programs to monitor performance level, accuracy and competency. It has also made every effort to provide a safe working environment for its employees. In 2008-2009, PHL has initiated efforts and made considerable progress towards obtaining International Standard Accreditation with ISO 15189, a newly developed accreditation standard.

➤ **Electronic Data Transfer/Networking**

In November 2007, a privacy breach occurred at PHL involving the accidental internet disclosure of patient information by a Consultant working for the PHL. As a result, improvement opportunities were identified. Additional security measures were implemented. Follow up action included future consultant contracts that contain specific clauses on privacy, a governance and policy and practice review with Eastern Health, DHCS and PHL, and completion of a Privacy Impact Assessment and ATIPP training.

10.0 MISSION *

The 2008-2011 Business Plan identified the following mission for the Public Health Laboratory:

In pursuit of this mission the PHL will focus on securing and improving the PHL laboratory testing capacity to respond to any and all infectious diseases threats to the provincial public health and respecting the delivery of its laboratory services. This mission supports the Department's strategic direction of strengthening public health capacity by contributing to surveillance for communicable disease, health emergency planning, and environmental health policy. The PHL mission for the 2008-2011 planning period is:

By 2011 the PHL will have secured technical, professional and human resource capabilities for the timely detection, surveillance, prevention and control of and protection from infectious diseases in the province.

Measure: Secured technical, professional and human resources capabilities

Indicators:

- Continued advancement of existing resources
- Improved capacity in identified areas, i.e., technical, professional and human resources
- Focused response to any and all threats relating to infectious diseases
- Increased security in the delivery of laboratory services

The 2010-2011 Report will provide progress on achieving the mission.

* To access a complete version of the PHL 2008-2011 Strategic Plan or the DHCS 2008-2011 Strategic Plan , please contact the Department of Health and Community Services Tel: 709-729-4984 or email: healthinfo@gov.nl.ca or visit <http://www.health.gov.nl.ca/health/>

11. REPORT ON PERFORMANCE 2008-2009

As the 2008-2009 year, represents year one in a three year planning cycle (2008-2011), the remainder of this reports documents progress towards the goal and annual objective in 2008-2009 and develops the indicators for 2009-2010 based on the progress in 2008-2009.

PHL is an important and integral part of the provincial and national public health system infrastructure, and must maintain adequate range of testing services and have response capacity and expertise to respond to public health emergencies. In keeping with Government's objective to protect the health of people in the province, measures were taken to enhance the province's ability to respond to public health emergencies involving infectious agents, especially pandemic influenza.

Strategic Issues

The Department of Health and Community Services has set four strategic directions for the period of 2008-2011. The PHL's Business Plan focuses on the strategic direction of strengthening public health capacity. The core functions of the public health system include population health assessment, health surveillance, prevention, health promotion and health protection.

The ability of the providers to fulfill public health functions is dependent on the strength and capacity of the supporting infrastructure. This requires sufficient, competent and appropriately distributed workforce, adequate resources, organizational capacity, and an ability to manage information upon which decision making is dependant. Health and community system responsiveness to public health issues and broad planning for disaster and emergencies need to be strengthened. This requires a strategic focus to collectively address:

- Organization of the provincial public health structure;
- Fiscal and human resources for public health;
- Surveillance for communicable disease control;
- All hazards emergency preparedness in the health and community services system;
- Immunization management including vaccine inventory control and immunization.

The strategic issues in the 2008-2011 Strategic Plan are:

Issue 1: Pandemic Flu Response Capacity

The threats of a public health emergency triggered by events like a flu pandemic, food or water borne outbreaks, emergence of exotic diseases or terrorist attack are within the realm of possibility in North America. With Newfoundland's proximity in travel routes and as a point of entry from European countries, the threat of an exotic disease or a virulent pathogen being imported into the province is real. Such an event will have a significant impact on national and interprovincial public health security. As part of its continued improvement initiative, the PHL maintained efforts to review and update all its services and capabilities with focus on improved access to testing and turnaround time. Work continued in assessing the province's capabilities to respond to emergencies, in particular to the impending pandemic flu and outbreak management. Progress in this strategic issue will increase provincial laboratory surveillance capacity and preparedness to deal with issues in a more co-ordinated and informed manner across regions.

GOAL: By March 31, 2011, PHL will have enhanced provincial laboratory response capacity to provide the required laboratory testing services for pandemic flu or other severe infectious disease risks to public health.

Measure #1: Enhanced provincial laboratory response capacity

Indicators:

- Increased throughput and improved turnaround time for identification of pathogens;
- Improved access to required pandemic flu laboratory reagents and supplies;
- Integrated databases with health regions;
- Signed contract with appropriate suppliers of test kits and reagents;
- Established realistic reporting times on key tests.

Objective: By March 31, 2009, PHL will have improved efficiency in testing for influenza and established molecular testing capability for pandemic flu.

Measure: Improved efficiency

INDICATORS	
Introduced improved test procedures	Molecular-based tests were introduced with automation to improve the overall sensitivity of testing algorithm with a rapid point-of-care test. The latter was introduced in 3 external sites covering Western and Northern Health regions which did not have the capacity for flu diagnosis.
Shortened turnaround time for results	The introduction of the above new technologies has reduced the test turnaround time significantly from the time specimens are received at the PHL to the time results are reported, from a several days to within 24-48 hours.
Increased throughput to deal with higher testing demands	The introduction of molecular-based tests and the use of automated system increased throughput significantly. Throughput refers to the ability to test a number of specimens in a given time. For example, using the above technology, testing can be completed on 100 specimens in a single day, which otherwise took a few to several days in the past.
Identified suppliers that need contracts developed	Suppliers, who needed contracts developed, were identified and contracts signed with appropriate vendors to ensure supplies with a standing order, and a stockpile of essential supplies was established. Adequate supplies to ensure a minimum stockpile of supplies on hand were also provided to all major hospital microbiology labs in the province.
Ensure logistic and supply needs in emergency situations	Funding was provided and the inventory of reagents and supplies was increased to provide for emergency situations.
Identified information system integration improvements with Regional Health Authorities	Information system improvements were identified. The PHL electronic data transfer system has been fully functional. However, integration with Labrador-Grenfell Health region is pending.

Discussion of Results

Molecular-based diagnostic tests with automation largely replaced traditional culture method which typically took a longer turnaround time stretching over a few to several days. The use of molecular test allowed for identification of specific strains of influenza which is important in a pandemic. This approach also ensured rapid turnaround time with a significant increase in throughput

Indicators for Annual Objectives:

Based on progress in 2008-2009, the indicators for the 2009-2010 annual objective follows:

Objective: By March 31, 2010, PHL will have developed information systems and a communication plan for its clients to be deployed in public health emergencies associated with the pandemic flu and other infectious disease outbreaks.

Measure: Developed information systems and a communication plan

Indicators:

- Developed information systems
- Electronic data transfer will be fully implemented throughout the province
- Reduced duplication with Eastern Health Laboratory Information System
- Greater integration of laboratory data management
- Communication plan developed

The indicators for the 2010-2011 Annual Objective will be developed based on progress in 2009-2010 and documented in the Annual Report for 2009-2010.

Objective: By March 31, 2011, PHL will have pilot tested and evaluated laboratory response protocols in dealing with pandemic flu and other emergency situations dealing with infectious disease outbreaks.

Issue 2: Accreditation

Accreditation of laboratories across Canada is a requisite that ensures all the laboratory services meet the highest standards, quality and reliability. A relatively new International Standard (ISO 15189) has been developed specially to address requirements for accreditation of medical laboratories. It takes into account special constraints imposed by the medical environment and the essential contribution of the medical laboratory service to patient care. Accreditation of PHL laboratory services was considered a priority to ensure and meet the highest standards, quality and reliability. This is consistent with Government's goal to protect the health of people in the province.

GOAL: By March 31, 2011 PHL will have achieved the status of ISO 15189 accreditation in selected areas of its laboratory services.

Measure: ISO accreditation status achieved

Indicators:

- Confirmation of accreditation award received
- Accreditation certificate publicly displayed
- Accreditation status acknowledged by Department
- Accreditation symbol included on promotional material

Annual Objective: By March 31, 2009 PHL will have taken the initial steps to achieve accreditation by 2011.

Measure: Initial accreditation steps taken

INDICATORS	PROGRESS IN 2008-09
Staff informed on accreditation requirements	All completed documentation was posted online for ready access and familiarity of lab personnel with accreditation requirements. PHL staff now has easy access to these documents and routinely use them.
Started development of required documentation	Documentation of procedures and policies were completed in the form of Quality Manual
Supporting agencies informed of IT website requirements	Necessary IT support was obtained to post all completed documents online. Supporting agencies were informed of website requirements. Information was conveyed through discussions before implementation,

	which was supported with memos and other written documentation; communication is ongoing.
Monitoring program developed, inclusive of manual and computer based reports and reporting processes.	Based on the review of laboratory policies and procedures, necessary documentation and Laboratory Quality Manual have been developed. Further review and additional documentation are underway with external expert consultation Programs were put in place to routinely monitor manual and electronic reports and reporting processes to ensure quality assurance

Discussion of Results

The PHL has initiated efforts towards accreditation, which represent a significant undertaking. Additional rigor in documenting established procedures and processes is still required before proceeding further. Future steps include site inspection and preliminary document review. This initiative will lead to ISO certification and ensure that formal, national recognition exists for the quality management and services offered by the PHL.

Based on progress in 2008-2009, the indicators for the 2009-2010 annual objective follows:

Annual Objective: By March 31, 2010 PHL will have completed initial site inspection requirements.

Measure: Completed initial site inspection requirements

Indicators for 2009-2010:

- Selected areas identified
- Finalization of all required documents
- Site preparation completed
- Staff education completed on accreditation
- External consultant's approval to proceed in place

Objective: By March 31, 2011 PHL will have completed the necessary steps to achieve ISO accreditation.

12. OPPORTUNITIES AND CHALLENGES

➤ **Electronic Data Transfer/Networking**

The long term goal of electronically linking the PHL database with databases of microbiology laboratories of major hospital in the province has to a great extent been realized. Electronic data transfer/networking allows for controlled access and direct exchange of data from one laboratory information system to another and has eliminated duplication and considerable paper work with a real-time exchange of laboratory data with high efficiency. There are further opportunities to maximize this system by bringing on board the Labrador-Grenfell Health. This however requires integration of the existing databases in three sites within the region and necessary logistical support and resources at the concerned sites.

➤ **Emergency Response/Bioterrorism**

The PHL is constantly vigilant in its efforts to respond to potential bioterrorism threats to the public. The laboratory's Level III facility and technical expertise are integral parts of the PHL's rapid response system. In 2008-09, refresher training was offered to the select group of Environmental Health Officers across the province who were previously trained in handling suspicious packages and dealing with biohazard/bioterrorism threats. The PHL also provided training to laboratory technologists across the province in the handling of clinical specimens associated with such threats. However, it is important to periodically review the level of competency and offer refresher courses. This is an ongoing initiative that requires co-ordination, continued trainee commitment and interest, and funding.

➤ **Retention and Recruitment**

Several senior laboratory and management employees of the PHL with over 35 years of service will be retiring within the next few years and replacing them pose a major challenge. Pending retirement of personnel at senior management level is of considerable concern. The PHL has developed a succession management plan. Advance planning and competitive compensation will be required to implement the plan to ensure stability and continuity of high quality services and expertise.

➤ **Accreditation**

In addition to daily work, accreditation is a major undertaking, a slow and highly demanding task. This requires dedicated personnel and considerable knowledge and tenacity to meet or exceed the requirements of ISO 15189. While the goal is to obtain accreditation by 2011, considerable work needs to be done in the interim. When accreditation is achieved, the PHL will have a formal certification ensuring further quality management and services of the PHL at the national level.

Appendix A: Listing of All Patient and Public Health-Related Diagnostic and Screening Services Currently Provided By NL Public Health Laboratory

- Adenovirus -antigen detection Anthrax –microscopy, culture, PCR
- Arbovirus –referred
- Astrovirus – EIA
- Botulism –referred
- Brucella –culture, serology
- Bartonella –referred
- Chl. Psittaci –referred
- Chl. Trachomatis –PCR, culture
- C.difficile – EIA
- CMV –PCR, culture
- Coxiella –referred
- CJK –referred
- C.diphtheria –culture, serology (referred out)
- E.coli 0157- culture, toxin
- EBV – serology, PCR
- Enterovirus –culture
- Farmer’s lung –referred
- Food borne bacterial disease –culture various agents
- Francisella –culture
- Gonorrhoea –PCR, culture confirmation
- Hantavirus- referred
- H.pylori –serology
- Hepatitis A-serology
- Hepatitis B-serology
- Hepatitis C –serology, PCR
- Hepatitis D-referred
- Hepatitis E-referred
- Herpes simplex virus – microscopy, culture, serology, PCR
- HIV –serology, PCR
- HTLV I/II – serology
- HHV-6, HHV-7, HHV-8, -referred
- HPV – hybrid capture
- Influenza – DFA, culture, PCR
- Legionella –antigen detection
- Lyme Disease –referred
- Measles –serology

Continued Listing of All Patient and Public Health-Related Diagnostic and Screening Services Currently Provided By NL Public Health Laboratory

- Meningococcus – typing, susceptibility
- MRSA –ID, susceptibility
- Mumps – serology, culture, PCR(referred)
- Mycobacteria –microscopy, culture, susceptibility, PCR
- Mycology(Fungus) – microscopy, culture
- Mycoplasma –serology, culture
- Norovirus – EIA
- Parainfluenza – DFA, culture
- Parasitology –microscopy, EIA, serology
- Parvovirus – serology
- Pertussis –culture
- Poliomyelitis- referred
- Rabies –referred
- Rickettsia – referred
- Rotavirus – antigen detection
- RSV – DFA, culture
- Rubella –serology
- Salmonella –typing
- Shigella –typing
- Syphilis – serology
- Tetanus- referred
- Toxoplasma –serology, PCR(referred)
- VZV – serology, culture
- West Nile V – serology, PCR(referred)
- Reference service for culture identification-various bacteria and fungi
- Water testing service for municipal, provincial and private agencies/individuals
- Dairy products- bacterial quality testing
- Bacterial culture media preparation for several laboratories.

Appendix B: Audited Financial Statement for the Fiscal year April 1, 2008 to
March 31, 2009



Financial Statements of

PUBLIC HEALTH LABORATORY

March 31, 2009

PUBLIC HEALTH LABORATORY
March 31, 2009

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Auditors' Report

To the Management Committee of
Public Health Laboratory

We have audited the statement of financial position of the Public Health Laboratory as at March 31, 2009 and the statements of operations and deficit and cash flows for the year then ended. These financial statements are the responsibility of management. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with Canadian generally accepted auditing standards. Those standards require that we plan and perform an audit to obtain reasonable assurance whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation.

In our opinion, these financial statements present fairly, in all material respects, the financial position of the Public Health Laboratory as at March 31, 2009 and the results of its operations and its cash flows for year then ended in accordance with Canadian generally accepted accounting principles.

The comparative figures for the year ended March 31, 2008 were audited by another firm of chartered accountants who issued their report without reservation dated May 23, 2008.

Deloitte & Touche LLP

Chartered Accountants
July 7, 2009

PUBLIC HEALTH LABORATORY
Statement of Operations and Deficit
Year Ended March 31, 2009

	2009	2008
	\$	\$
Revenue		
Government of Newfoundland and Labrador	3,998,276	3,740,027
Expenditures		
Wages and benefits	1,742,049	1,564,167
Laboratory supplies	1,694,306	1,464,384
Operating supplies	210,926	193,384
Professional fees	199,650	199,586
Minor equipment	49,500	40,853
Repairs and maintenance	42,815	31,713
Travel	34,252	19,155
Printing, stationery and office	33,483	52,460
Telephone	11,252	13,630
	4,018,233	3,579,332
Excess of (expenditures over revenue) revenue over expenditures before undernoted items	(19,957)	160,695
Amortization of capital assets	(82,728)	(41,390)
Amortization of deferred capital contributions	71,586	28,525
(Increase) decrease in severance pay accrual	(51,646)	2,786
Excess of (expenditures over revenue) revenue over expenditures	(82,745)	150,616
Deficit, beginning of year	(873,823)	(1,024,439)
Deficit, end of year	(956,568)	(873,823)

PUBLIC HEALTH LABORATORY
Statement of Financial Position
Year Ended March 31, 2009

	2009	2008
	\$	\$
Assets		
Current assets		
Cash	500	500
Accounts receivable	145,424	38,278
Due from Eastern Regional Health Authority	-	108,199
Prepaid expenses	65,310	-
	<u>211,234</u>	<u>146,977</u>
Capital assets (Note 4)	324,898	99,736
	<u>536,132</u>	<u>246,713</u>
Liabilities		
Current liabilities		
Accounts payable and accrued liabilities	83,640	86,562
Due to Eastern Regional Health Authority	204,683	-
Deferred revenue	75,000	242,770
Current portion of accrued severance pay	33,814	65,520
Accrued vacation pay	291,837	241,614
	<u>688,974</u>	<u>636,466</u>
Accrued severance pay	459,671	376,319
Deferred capital contributions	344,055	107,751
	<u>1,492,700</u>	<u>1,120,536</u>
Deficit		
Deficit	(956,568)	(873,823)
	<u>536,132</u>	<u>246,713</u>

Approved by the Board

Shahan Trustee Paul Snatton Trustee

PUBLIC HEALTH LABORATORY
Statement of Cash Flows
Year Ended March 31, 2009

	2009	2008
	\$	\$
Operating activities		
Excess of (expenditures over revenue) revenue over expenditures	(82,745)	150,616
Adjustments for:		
Amortization of capital assets	82,728	41,390
Amortization of deferred capital contributions	(71,586)	(28,525)
Increase (decrease) in severance pay accrual	51,646	(2,786)
Change in non-cash operating working capital (Note 5)	19,957	(160,695)
	-	-
Financing activity		
Capital asset contributions	307,890	51,748
Investing activity		
Purchase of capital assets	(307,890)	(51,748)
Net increase in cash	-	-
Cash, beginning of year	500	500
Cash, end of year	500	500

PUBLIC HEALTH LABORATORY

Notes to Financial Statements

March 31, 2009

1. NATURE OF OPERATIONS

The Public Health Laboratory (the "Laboratory") is a not-for-profit organization.

The purpose of the Public Health Laboratory is to act as the provincial reference laboratory centre for clinical and public health microbiology and infectious disease surveillance and control. The Laboratory offers specialized and reference laboratory services to all physicians, hospitals, clinics and health related agencies in the Province.

As a not-for-profit organization, the Laboratory is exempt from income taxes.

2. CHANGE IN ACCOUNTING POLICIES

Effective April 1, 2008 the Laboratory adopted the Canadian Institute of Chartered Accountants' ("CICA") new accounting standards related to "Capital Disclosures" (Section 1535) and "General Standards of Financial Statement Presentation" (Section 1400).

Capital Disclosures

CICA Section 1535 "Capital Disclosures" establishes standards for disclosure of information about the Laboratory's capital and capital management, including the Laboratory's objectives and processes of managing capital, quantitative data about what the Laboratory regards as capital, whether the Laboratory has complied with any externally imposed capital requirements, and if it has not complied, the consequences of such non-compliance. The adoption of this standard had no effect on the Laboratory's financial position, operations or cash flows and these disclosures have been included in Note 7.

General Standards of Financial Statement Presentation

CICA Section 1400 "General Standards of Financial Statement Presentation" provides additional guidance related to management's assessment of the Laboratory's ability to continue as a going concern. The Laboratory's current disclosures meet the reporting requirements of this section.

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Basis of accounting

The financial statements include only the assets, liabilities, revenue and expenditures relating to the operations carried on under the name of the Public Health Laboratory.

Cash

Cash includes cash on hand and balances with banks.

PUBLIC HEALTH LABORATORY

Notes to Financial Statements

March 31, 2009

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Capital assets

Capital assets are recorded at cost. Rates and bases of amortization applied to write off the cost of capital assets over their estimated lives are as follows:

Equipment	15%, straight line
Computer equipment	20%, straight line

Impairment of assets

Long-lived assets are tested for recoverability whenever events or changes in circumstances indicate that their carrying amount may not be recoverable. The amount of the impairment loss is determined as the excess of the carrying value of the asset over its fair value.

Capital contributions

Capital contributions are recorded as deferred capital contributions and amortized to income on the same basis as the related capital assets are amortized. Capital contributions on non-depreciable capital assets are recorded as direct decreases in deficit.

Accrued severance pay

Severance pay is accounted for on an accrual basis and is calculated based upon years of service and current salary levels. Severance pay is only recorded in the accounts for employees who have a vested right to receive such a payment. No provision for severance pay is recorded in the accounts for any employee who has less than nine years of service. Severance is payable when the employee ceases employment with the Laboratory.

Revenue recognition

Revenue is recognized as earned and when collection is reasonably assured. Revenue received for a future period is deferred until that future period and reflected as deferred revenue.

The Laboratory is dependent on funding from the Department of Health and Community Services.

Pension costs

Employees of the Laboratory are covered by the Public Service Pension Plan and the Government Money Purchase Plan administered by the Government of Newfoundland and Labrador (the "Government"). Contributions to the plans are required from both the employees and the Laboratory. The annual contributions for pensions are recognized in the accounts on a current basis.

PUBLIC HEALTH LABORATORY

Notes to Financial Statements

March 31, 2009

3. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Continued)

Financial instruments

The Laboratory's financial assets and liabilities are generally classified and measured as follows:

<u>Asset/Liability</u>	<u>Classification</u>	<u>Measurement</u>
Cash	Held for trading	Fair value
Accounts receivable	Loans and receivables	Amortized cost
Due from Eastern Regional Health Authority	Loans and receivables	Amortized cost
Accounts payable and accrued liabilities	Other liabilities	Amortized cost
Due to Eastern Regional Health Authority	Other liabilities	Amortized cost

Other balance sheet accounts do not meet the criteria to be considered financial instruments.

The Laboratory has determined that it does not have derivatives or embedded derivatives.

Use of estimates

In preparing the Laboratory's financial statements in conformity with Canadian generally accepted accounting principles management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements, and reported amounts of revenue and expenditures during the year. Actual results could differ from these estimates.

Future accounting standards

In December 2006, CICA issued new Section 3862, "Financial Instruments – Disclosures" and Section 3863, "Financial Instruments – Presentation", which established standards for the presentation and disclosure of financial instruments and non-financial derivatives.

Following a decision by CICA that permits the application of Section 3861, "Financial Instruments – Disclosure and Presentation", in place of Section 3862 and 3863, the Laboratory has decided to continue to apply Section 3861.

In September 2008, the CICA amended the introduction to accounting standards that apply only to not-for-profit organizations as outlined in the Section 4400 series of CICA Handbook (the "Handbook") as well as consequently changes to other sections of the Handbook.

These new standards are effective for the Laboratory on April 1, 2009. The Laboratory's management does not expect the application of these standards will have a material impact on its financial statements.

PUBLIC HEALTH LABORATORY
Notes to Financial Statements
March 31, 2009

4. CAPITAL ASSETS

	Cost	Accumulated Amortization	Net Book Value	Cost	Net Book Value
	\$	\$	\$	\$	\$
Equipment	1,898,506	1,573,608	324,898	1,590,617	99,736
Computer equipment	602,290	602,290	-	602,290	-
	2,500,796	2,175,898	324,898	2,192,907	99,736

5. SUPPLEMENTAL CASH FLOW INFORMATION

	2009	2008
	\$	\$
Change in non-cash operating working capital		
Accounts receivable	(107,146)	5,411
Prepaid expenses	(65,310)	-
Due to Eastern Regional Health Authority	312,882	(319,455)
Accounts payable and accrued liabilities	(2,922)	38,925
Accrued vacation pay	50,223	(9,673)
Deferred revenue	(167,770)	124,097
	19,957	(160,695)

6. RELATED PARTY TRANSACTIONS

The Laboratory coordinates with the Eastern Regional Health Authority to provide a reference laboratory centre. Transactions between these related parties are measured at their exchange value.

7. CAPITAL MANAGEMENT

The capital structure of the Laboratory consists of deficit. The Laboratory's objective when managing capital is to ensure it maintains adequate capital to support its continued operations.

The Laboratory is not subject to externally imposed capital requirements.

PUBLIC HEALTH LABORATORY

Notes to Financial Statements

March 31, 2009

8. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT

Financial risk factors

The Laboratory has exposure to credit risk and liquidity risk. The Laboratory's Management Committee has overall responsibility for the oversight of these risks and reviews the Laboratory's policies on an ongoing basis to ensure that these risks are appropriately managed. The source of risk exposure and how each is managed is outlined below.

Credit risk

Credit risk is the risk of loss associated with a counterparty's inability to fulfil its payment obligation. The Laboratory's credit risk is primarily attributable to accounts receivable. Management believes that the credit risk with respect to accounts receivable is not significant.

Liquidity risk

Liquidity risk is the risk that the Laboratory will not be able to meet its financial obligations as they become due. As at March 31, 2009 the Laboratory had cash of \$500.

Fair value

The fair value of the Laboratory's short-term financial instruments approximate the carrying value due to the short-term maturity and normal credit terms of those instruments.