



Public Health  
Agency of Canada

Agence de la santé  
publique du Canada

## **Final Audit Report**

# **Follow-up Audit of Laboratory Management**

**March 2013**

**Canada** 

## Table of Contents

<b>Executive summary</b> .....	<b>i</b>
<b>A - Introduction</b> .....	<b>1</b>
1. Background.....	1
2. Audit objective.....	1
3. Audit scope.....	2
4. Audit approach.....	2
5. Statement of assurance.....	2
<b>B - Findings, recommendations and management responses</b> .....	<b>3</b>
1. Follow-up on the 2010 audit recommendations.....	3
1.1. <i>Progress made on 2010 recommendations</i> .....	3
<b>Scorecard</b> .....	<b>4</b>
<b>Appendix A – Lines of enquiry and audit criteria</b> .....	<b>6</b>
<b>Appendix B – Assessment of recommendation implementation</b> .....	<b>7</b>

## Executive summary

The follow-up audit of recommendations from the 2010 *Audit of Laboratory Management* was carried out as part of the Public Health Agency of Canada's (the Agency's) 2012-13 Risk-Based Audit Plan. The objective of the follow-up audit was to determine whether the implementation of the management action plan has been effective in addressing the recommendations made in the *Audit of Laboratory Management* tabled in June 2010. An assessment of actions taken by management was performed to address the recommendations. The follow-up audit was conducted from October 2012 to January 2013.

The key objectives of the 2010 *Audit of Laboratory Management* were to assess the Agency's governance and accountability framework, systems and practices for managing its laboratories. Further, the audit assessed the extent to which the Agency's laboratory activities support its program needs and those of its internal and external clients and identified relevant opportunities and best practices for improvement.

In response to the federal Budget 2012, the Agency has reiterated that science and research remain a key priority. Through the implementation of its new *Framework for Science and Research Excellence*, the Agency will further focus on its federal role in public health science and research, clarify its leadership responsibilities and continue to put evidence and science information at the centre of its policies and programs.

The follow-up audit concludes that the implementation of the management action plan has been effective in addressing some of the recommendations made in the *Audit of Laboratory Management*. Of the seven recommendations, five (72%) have been fully implemented. The remaining two recommendations (28%) have achieved the preparation for implementation stage.

A major improvement has been the development and approval of the Infectious Disease Prevention and Control Branch's (IDPC) *2011-16 Strategic Plan*. This is significant not only because it addresses one recommendation directly, but also because it details the mandate for the Infectious Disease Prevention and Control Branch, the centres and laboratories. The Strategic Plan commits to developing a human resources action plan. Once developed, this should address the recommendation related to human resources planning for the laboratories. Lastly, the Agency is in the process of developing an Office of the Chief Science Officer (OCSO) and has a draft job description for the Chief Science Officer. Once both are completed, these actions will address the recommendation related to roles and responsibilities of the Chief Science Officer.

## A - Introduction

### 1. Background

As part of the Public Health Agency of Canada's (the Agency's) Risk-Based Audit Plan for 2012-13, the Portfolio Audit and Accountability Bureau undertook the follow-up audit of the management action plan commitments as outlined in the 2010 *Audit of Laboratory Management*.

The 2010 *Audit of Laboratory Management* concluded that program objectives and priorities exist for the laboratory activities, and the level of excellence of the science and research continues to meet the International Organization for Standardization (ISO) accreditation requirements and the needs of the clients and stakeholders. However, it was noted that the Agency would benefit from senior corporate management oversight of the science and research activities of the laboratories, and would benefit from strategic direction setting at the Branch level to guide and set priorities for the laboratories and the centres. Attention in the area of oversight and strategic direction setting would assist the Agency in better documenting the alignment of laboratory work with the strategic priorities of the Agency. Lastly, clearly defined authorities, accountabilities and roles and responsibilities for the laboratories and the centres would better demonstrate the best use of Agency resources. The audit had seven recommendations related to:

- the structure of the Agency's program delivery;
- governance and strategic directions;
- the role and responsibilities of the Chief Science Advisor/Officer; and
- the adequacy of resources.

In response to the federal Budget 2012, the Agency has reiterated that science and research remain a key priority. Through the implementation of its new *Framework for Science and Research Excellence*, the Agency will further focus on its federal role in public health science and research, clarify its leadership responsibilities and continue to put evidence and science information at the centre of its policies and programs. As recently as April 2012, the acting Deputy Head noted in an Agency communiqué that the Chief Science Officer will take on a more robust role that includes: leading the establishment and monitoring of the Agency's science priorities; supporting excellence and innovation in science; promoting science and science partnerships; and overseeing the Agency's science support infrastructure.

### 2. Audit objective

The objective of the follow-up audit was to determine whether the implementation of the management action plan has been effective in addressing the recommendations made in the *Audit of Laboratory Management* tabled in June 2010.

### **3. Audit scope**

The follow-up audit focused on management action plan commitments contained in the 2010 *Audit of Laboratory Management*. The follow-up audit was conducted from October 2012 to January 2013.

### **4. Audit approach**

For each recommendation, the progress achieved against action plan commitments was assessed. The follow-up methodology included interviews and the analysis of supporting documentation.

### **5. Statement of assurance**

In the professional judgment of the Chief Audit Executive, sufficient and appropriate procedures were performed and evidence gathered to support the accuracy of the follow-up audit conclusion. The follow-up audit findings and conclusion are based on a comparison of the conditions that existed as of the date of the audit, against established criteria that were agreed upon with management. Further, the evidence was gathered in accordance with the *Internal Auditing Standards for the Government of Canada* and the *International Standards for the Professional Practice of Internal Auditing*.

## B - Findings, recommendations and management responses

### 1. Follow-up on the 2010 audit recommendations

#### 1.1. Progress made on 2010 recommendations

**Audit criterion:** *Management's actions have been effective in addressing the recommendations identified in the audit tabled in June 2010.*

The follow-up audit concludes that the implementation of the management action plan has been effective in addressing some of the recommendations made in the *2010 Audit of Laboratory Management*. Of the seven recommendations, five (72%) have been fully implemented. The remaining two recommendations (28%) are in the preparation for implementation stage.

A major improvement has been the development and approval of the Infectious Disease Prevention Centre Branch's *2011-16 Strategic Plan*. This is significant not only because it addresses one recommendation directly, but also because the document contains mandates for the Centre for Immunization and Respiratory Infectious Disease, the Centre for Communicable Diseases and Infection Control and the Centre for Foodborne Environmental and Zoonotic Infectious Diseases and the two laboratories which addresses another important recommendation. The Agency's *2013-18 Strategic Horizons* notes that laboratory operations will focus on core, high priority laboratory activities, while preserving the capacity to respond to new and emerging health issues and to supplement Canadian laboratory capacity when needed. This will mean, among other things, exploring more integrated management of Agency laboratories.

The acting Deputy Head stated in April 2012 that the Chief Science Officer will take on a more robust role that includes: leading the establishment and monitoring of the Agency's science priorities; supporting excellence and innovation in science; promoting science and science partnerships; and overseeing the Agency's science support infrastructure. Currently on the Science, Policy and Management Committee's forward agenda is the "way forward" for the Office of the Chief Science Officer and the next steps on the implementation of Science Research Framework as well as the suite of science priorities for the new Office.

#### Recommendation implementation progress

<u>Implementation rating level</u>	<u>Number of recommendations</u>	<u>Percentage</u>
No progress or insignificant progress	0	0%
Planning stage	0	0%
Preparation for implementation	2	28%
Substantial implementation	0	0%
Full implementation	<u>5</u>	72%
Total	<u>7</u>	

See **Appendix A** for the assessment rating guide and **Appendix B** for the detailed assessments.

## Scorecard

The table below summarizes the status of each audit recommendation.

Recommendations	Rating	Conclusion	Current Target Date
1. Should develop clearly defined mandate statements, including authorities, accountabilities, roles and responsibilities, for the Centres and the laboratories, and communicate.	FI	The approved Infectious Disease Prevention and Control Branch's <i>2011-16 Strategic Plan</i> details the mandate for Infectious Disease Prevention and Control (IDPC), the Centres and the laboratories. This has been communicated. Work is to begin on defining logic models linking the three program Centres with the two laboratories.	
2. Should put in place mechanisms to improve the level of communications and interactions among the program Centres and the laboratories.	FI	The IDPC Branch single window approach to planning and reporting links the work of the Centres and labs for improved integration. As well, the IDPC Branch's <i>2011-16 Strategic Plan</i> calls for integration of surveillance systems and policy-science and research program planning.	
3. Should develop and communicate a strategic directions document, establishing a clear set of priorities for the laboratories and program Centres.	FI	The IDCP Branch developed and had approved a 5-year strategic plan which articulates: mandates; direction; and priorities aligned with the Public health Agency of Canada's (the Agency's) strategic objectives.	
4. Should draft, obtain approval for, and communicate widely throughout the Agency a clearly defined set of roles and responsibilities for the position of Chief Science Officer.	PI	A draft job description for the Chief Science Officer was developed. A communiqué from the Deputy Head (April 4, 2012) details the expectations for the role and responsibilities of the Chief Science Officer. The Office of the Chief Science Officer "way forward" to be discussed at the Science, Policy and Management Committee.  Office of the Chief Science Officer "way forward" to be completed.	April 2013
5. Should coordinate, approve and communicate widely an updated job description, reporting relationships and accountabilities document for the position of Scientific Director General of the National Microbiology Laboratory.	FI	The Agency relies on a job description established by Health Canada. The Agency's organization chart of 2012 indicates the reporting relationship of the Director General, National Microbiology Lab and the Director General, Laboratory for Foodborne Zoonoses as reporting the Assistant Deputy Minister-IDPC and the Chief Science Officer as reporting directly to the Chief Public Health Officer and Associate Deputy Minister.	

Recommendations	Rating	Conclusion	Current Target Date
6. Ensure that the Agency's human resource planning for the laboratories is fully integrated with its strategic and operational planning, with particular attention to the staffing and succession planning requirements of the laboratories.	<b>PI</b>	<p>The Agency operational planning process integrates human resources planning. The <i>2011-16 Strategic Plan</i> includes a commitment for IDPC to implement a human resources action plan that provides for attracting, developing and retaining a dedicated, knowledgeable, professional and sustainable workforce. The laboratories have been actively working on a vacancy management strategy.</p> <p>IDPC to implement its human resources action plan.</p>	December 2013
7. Review the annual funding allocations to address the recurring annual funding shortfall of the NML.	<b>FI</b>	The NML budget was rationalized and stabilized during the 2011-12 budget allocation.	

<b>FI</b>	<b>SI</b>	<b>PI</b>	<b>PS</b>	<b>NP</b>	<b>O</b>
Full implementation	Substantial implementation	Preparation for implementation	Planning stage	No progress	Obsolete

## Appendix A – Lines of enquiry and audit criteria

<b>Follow-up of the Audit of Laboratory Management</b>	
<b>Criteria Title</b>	<b>Audit Criteria</b>
<b>Line of Enquiry 1: <i>Follow-up on the 2010 Audit Recommendations</i></b>	
1.1 Progress made on 2010 recommendations	Management's actions have been effective in addressing the recommendations identified in the audit tabled in 2010.

### **1. No progress or insignificant progress**

No action taken by management or insignificant progress. Actions such as striking a new committee, having meetings, and generating informal plans are insignificant progress.

### **2. Planning stage**

Formal plans for organizational changes have been created and approved by the appropriate level of management (at a sufficiently senior level, usually Executive Committee level or equivalent) with appropriate resources and a reasonable timetable.

### **3. Preparation for implementation**

The entity has begun necessary preparation for implementation, such as hiring or training staff, or developing or acquiring the necessary resources to implement the recommendation.

### **4. Substantial implementation**

Structures and processes are in place and integrated in some parts of the organization, and some achieved results have been identified. The entity has a short-term plan and timetable for full implementation.

### **5. Full implementation**

Structures and processes are operating as intended and are implemented fully in all intended areas of the organization.

### **6. Obsolete**

Audit recommendations that are deemed to be obsolete or have been superseded by another recommendation.

## Appendix B – Assessment of recommendation implementation

Recommendation 1 (52)			
<i>The Assistant Deputy Minister Infectious, Infectious Disease Prevention and Control Branch, in collaboration with the Directors General of the National Microbiology Laboratory, the Laboratory for Foodborne Zoonoses, and the Centres of the Infectious Disease Prevention and Control Branch, should develop clearly defined mandate statements, including authorities, accountabilities, roles and responsibilities for the Centres and the laboratories, and communicate these widely across the Agency.</i>			
Overall Assessment	Full Implementation		
Planned Actions	Target Date	Progress to date	Status of action item
<p>The Assistant Deputy Minister, Infectious Disease Prevention and Control Branch (ADM IDPC) will work collaboratively through the following mechanisms to determine the most effective means in articulating the Branch's authorities, accountabilities and roles and responsibilities by creating an ad hoc working group that reports to IDPC-Branch Executive Committee (BEC):</p> <p><b>A1.</b> This working group will review key documents such as the Public Health Agency of Canada's (the Agency's) Strategic Plan, Report on Plans and Priorities (RPP) and Departmental Performance Report (DPR) and ensure that roles and responsibilities align with the current integrated operational planning exercise and outcomes.</p>	Sept 2010	<p>The IDPC 2011-16 Strategic Plan details the mandate for the Branch, each of the Centres and the laboratories. The Agency created a revised Program Alignment Architecture and Performance Management Framework for 2013-14, which provides further clarity on roles, accountabilities and authorities for the program Centres and laboratories. The Agency is also preparing 4 high-level logic models that would build the rationale for the IDPC programs and review 3 existing logic models for consistency.</p> <p>The IDPC Branch Planning Working Group meets with the Planning Leads Committee (single window) monthly and works collaboratively on the RPP and DPR planning highlights and associated expected results to ensure that roles and responsibilities align with the Agency's Operational Plan and strategic horizons.</p>	Full Implementation
<p><b>A2.</b> The topic will be discussed at an IDPC Branch management retreat, which has been scheduled in July 2010.</p>	Sept 2010	<p>Branch management strategic meetings (such as Town Halls) were held to develop the Strategic Plan. A subsequent IDPC Branch Executive Committee management retreat is being planned for a full day in Spring 2013 to review and validate the IDPC Strategic Plan in order to monitor the goals and objectives of the Plan, including strengthening the National Public Health System.</p>	Full implementation

A3. Finalize recommendations for ADM and for presentation to various governance bodies, including PHAC-Executive Committee.	Sept 2010	IDPC Strategic Plan presented and approved at PHAC-EC.	Full Implementation
<b>Recommendation 2 (53)</b>			
<i>In addressing the first recommendation, the Assistant Deputy Minister, Infectious Disease Prevention and Control Branch should put in place mechanisms to improve the level of communications and interactions among the program Centres and the laboratories to ensure the efficient, effective and economical use of Agency resources.</i>			
<b>Overall Assessment</b>		<b>Full Implementation</b>	
<b>Planned Actions</b>	<b>Target Date</b>	<b>Progress to date</b>	<b>Status of action item</b>
<p>The ADM, IDPC will:</p> <p><b>A1.</b> Build on existing models for collaboration and communication among Centres and laboratories, such as is in place for Human Papillomavirus and Human Immunodeficiency Virus working groups.</p>	Sept 2010	Centres and labs have improved communication and knowledge transfer and exchange in support of common initiatives. This includes, but is not limited to, subject-specific horizontal committees and working groups. Centres and labs interact in identifying and characterizing public health events that may require a disease outbreak or emergency response. Surveillance systems run by the Centres are integrated with research and analysis of biological samples when an event issue is identified and reporting on this has been made more formal through Daily Intelligence Reporting, linked to risk assessments based on integrated information exchange between labs and Centres.	Full Implementation
A2. Apply and integrate the models to relevant Branch activities.	Sept 2010	Management has undertaken several initiatives to improve the level of communications and interactions among the Centres and labs demonstrating application and integration. For example, its single window approach to planning and reporting links the work of the Centres and labs for improved integration. As well, the IDPC Strategic Plan calls for integration of surveillance systems and integration of policy-science and research program planning.	Full Implementation

<p><b>A3.</b> Formalize processes of the existing models of communication and interactions among program Centres and the Laboratories.</p>	<p>March 2011</p>	<p>IDPC's <i>2011-16 Strategic Plan</i> devotes a section of the to "Knowledge Translation and Communication" and states that it will to work with the Communications Directorate and strategic partners to implement a comprehensive communications strategy and action plan which includes the use of new social media tools.</p>	<p>Full Implementation</p>
<p><b>Recommendation 3 (72)</b></p>			
<p><i>The Assistant Deputy Minister, Infectious Disease Prevention and Control Branch should develop and communicate a strategic directions document for the Branch, establishing a clear set of priorities for the laboratories and program Centres, and aligned with the strategic directions and priorities of the Agency, and which would become guidance for the Agency's Science and Research Strategic Plan soon to be under development.</i></p>			
<p><b>Overall Assessment</b></p>		<p><b>Full Implementation</b></p>	
<p><b>Planned Actions</b></p>	<p><b>Target Date</b></p>	<p><b>Progress to date</b></p>	<p><b>Status of action item</b></p>
<p>The ADM IDPC will:  <b>A1.</b> Develop a five-year Branch strategic plan, ensuring to align its priorities to the Agency's strategic directions and priorities as evidenced in the annual RPP and to the Science and Research Plan being developed.</p>	<p>Dec 2010</p>	<p>IDPC Branch has developed the 5-year Branch Strategic Plan. A Town Hall meeting with the ADM and National Microbiology Laboratory (NML) staff on the Strategic Plan was held May 25, 2011. A Town Hall meeting was held with Laboratory for Foodborne Zoonoses (LFZ) staff on the Strategic Plan on May 22, 2012.</p>	<p>Full Implementation</p>
<p><b>A2.</b> Present its Strategic Plan to PHAC Executive Committee (EC).</p>	<p>March 2011</p>	<p>The Strategic Plan was approved by EC in April 2011.</p>	<p>Full Implementation</p>

<b>Recommendation 4 (78)</b>			
<i>In order to address the perception of a potential lack of objectivity noted above, the Director General, Human Resources, in consultation with the Chief Science Officer, should draft, obtain approval for and communicate widely throughout the Agency a clearly defined set of roles and responsibilities for the position of Chief Science Officer.</i>			
Overall Assessment	Preparation for implementation		
Planned Actions	Target Date	Progress to date	Status of action item
<p><b>A1.</b> The Director General, Human Resources will work collaboratively with the Chief Public Health Officer to develop a description of roles and responsibilities for the position of Chief Science Officer.</p>	<p>Sept 2010</p> <p>Review Mar 2011</p>	<p>A work description for the position of Chief Science Officer has been drafted and discussed at EC. Moreover, the acting Deputy Head stated in an April 2012 Agency communiqué that the Chief Science Officer will take on a more robust role that includes: leading the establishment and monitoring of the Agency’s science priorities; supporting excellence and innovation in science; promoting science and science partnerships; and overseeing the Agency’s science support infrastructure.</p> <p>Currently on the forward agenda of the Science, Policy and Management Committee is the “way forward” for the Office of the Chief Science Officer and the next steps on the implementation of the Science Research Framework and the suite of science priorities for the new Office. These next steps are to be discussed at an April 2013 meeting.</p> <p>Office of the Chief Science Officer “way forward” to be completed.</p> <p><b>Revised date : April 2013</b></p>	<p>Preparation for Implementation</p>

<b>Recommendation 5 (79)</b>			
<i>The Assistant Deputy Minister, Infectious Disease Prevention and Control Branch should coordinate, approve and communicate widely throughout the Agency an updated job description, reporting relationships and accountabilities document for the position of Scientific Director General of the National Microbiology Laboratory.</i>			
<b>Overall Assessment</b>		<b>Full Implementation</b>	
<b>Planned Actions</b>	<b>Target Date</b>	<b>Progress to date</b>	<b>Status of action item</b>
<b>A1.</b> The ADM IDPC will work collaboratively with the Agency's Human Resources Directorate to develop and approve a work description and subsequent accountabilities for the position of Scientific Director General (DG) of the National Microbiology Laboratory and will present it to PHAC EC.	Sept 2010	The Agency relies on a job description established by Health Canada for this position. The ADM-IDPC noted that the job description remains relevant. The Agency's organization chart of 2012 indicates the reporting relationship of the DG National Microbiology Lab and DG Laboratory for Foodborne Zoonoses as reporting the ADM-IDPC. The Chief Science Officer as reporting directly to the Chief Public Health Officer and Associate Deputy Minister.	Full Implementation
<b>Recommendation 6 (86)</b>			
<i>The Assistant Deputy Minister, Infectious Disease Prevention and Control Branch should ensure that the Agency's human resources planning for the laboratories is fully integrated with its strategic and operational business planning, with particular attention to the staffing and succession planning requirements of the laboratories.</i>			
<b>Overall Assessment</b>		<b>Preparation for implementation</b>	
<b>Planned Actions</b>	<b>Target Date</b>	<b>Progress to date</b>	<b>Status of action item</b>
<b>A1.</b> The ADM, IDPC will ensure that the Agency's human resources planning for the laboratories is fully integrated with its strategic and operational business planning, as is evidenced in the 2010-11 Integrated Operational Planning (IOP) exercise, expanding it into its Five-Year Branch Strategic Plan. Development of the Plan will include consultations with the Agency's Human Resources Directorate.	Dec 2010	The 2011-12 Agency Operational Plan integrates human resources planning with the IDPC strategic goals. This was expanded to the 2011-16 Strategic Plan, which has a commitment for IDPC to implement a human resources action plan that provides for attracting, developing and retaining a dedicated, knowledgeable, professional and sustainable workforce.	Preparation for implementation

<b>Recommendation 7 (87)</b>			
<i>The Senior Assistant Deputy Minister, Programs, Assistant Deputy Minister, Infectious Disease Prevention and Control Branch and the Scientific Director General, National Microbiology Laboratory, in collaboration with the Chief Financial Officer, should review the annual funding allocations to address the recurring annual funding shortfall of the National Microbiology Laboratory.</i>			
<b>Overall Assessment</b>		<b>Full Implementation</b>	
<b>Planned Actions</b>	<b>Target Date</b>	<b>Progress to date</b>	<b>Status of action item</b>
<b>A1.</b> As part of the 2010-11 Integrated Operational Planning process, the ADM, IDPC will emphasize accurate forecasting, commitment management and timely declarations of variances.	Oct 2010	Management notes that responsibilities for forecasting and preparing management variance reports (MVRs) are communicated through call letters issued by the Office of the Chief Financial Officer. The MVR process is a review of the financial position of all business units. Managers review and analyze actual expenditures and commitments, estimate anticipated expenditures for the remainder of the year and identify corresponding deficits or surpluses by fund.	Full Implementation
<b>A2.</b> As part of Agency's 2010-11 integrated operational planning budget base will be rationalized and stabilized.	Oct 2010	Early in 2011-12, the Agency launched an operations review process to assess the relative priorities of activities across the Agency. This process informed the development of the Budget 2012 savings measures and the 2011-12 IDPC budget allocations. The NML budget was rationalized and stabilized, resulting in a permanent reallocation of \$2.9M in salary and \$1.0M in operations and maintenance to the NML. The MVRs of 2011-12 and 2012-13 show that the NML now operates within its approved budget allocation.	Full Implementation
<b>A3.</b> Subsequently, on a quarterly basis, and at mid-year review of IDPC Branch budgets, the ADM, IDPC, in consultation with the DG, NML will review NML's performance as consistent with budgets.	Quarterly from Oct 2010	Management notes that the OCFO meets with the ADM, IDPC to review the results of the DG-approved MVRs and to obtain ADM approval of the Branch MVR. The results of the mid-year reviews for 2011-12 and 2012-13 demonstrate that the NML is operating within budget.	Full Implementation