
4 Health Promotion and Protection: Communicable Disease Prevention and Control

Summary

Our audit at the Department of Health Promotion and Protection (HPP) uncovered significant deficiencies. Management of HPP indicated many of these concerns were identified in the *Renewal of Public Health in Nova Scotia*. We evaluated the governance and leadership structure within HPP; adequacy of information systems related to vaccines and immunizations; adequacy of performance information; and compliance with policies and procedures as well as timeliness of information during the recent mumps outbreak.

We found that neither the mandate of Health Promotion and Protection, nor the structure of public health in Nova Scotia is clearly defined in legislation or regulations. Legislation should be updated to ensure an adequate leadership and accountability structure in Nova Scotia's public health system.

We found overall planning inadequate. The Department does not have a strategic plan. Although the Department has outbreak plans in place, many significant areas are not addressed and had to be dealt with during the recent mumps outbreak. Additionally, the provincial mumps outbreak team had not considered recommendations from previous outbreaks.

HPP's information systems are inadequate. Key systems such as an immunization registry do not exist or are paper-based. Information which is recorded is often incomplete. HPP does not provide adequate guidance to the districts regarding information to include in immunization records.

HPP has an adequate system to track vaccine distribution but protocols for vaccine storage and handling are inadequate. HPP does not monitor to ensure vaccines are maintained at an appropriate temperature during transport. Appropriate vaccine protocols in line with the Public Health Agency of Canada's national guidelines should be established to ensure consistency across the province.

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Background

HEALTH PROMOTION AND PROTECTION: COMMUNICABLE DISEASE PREVENTION AND CONTROL

- 4.1 The Department of Health Promotion and Protection (HPP) is responsible for oversight of the public health system in Nova Scotia. Front-line public health staff are located in District Health Authorities across the province. There are also public health inspectors working in the Departments of Environment and Labour, and Agriculture. Together, the Department and front-line staff are responsible for various areas of public health, including communicable disease prevention and control.
- 4.2 In 2007-08, the Department of Health Promotion and Protection's budget was \$49.7 million (2006-07 – \$36.3 million), with \$24.4 million allocated to public health (2006-07 – \$23.1 million). Of the public health portion, \$863,000 (2006-07 – \$307,000) was allocated to communicable disease prevention and control and \$6.9 million (2006-07 – \$3.7 million) for vaccine purchases. Additional public health funding is provided to District Health Authorities (DHAs) through the Department of Health.
- 4.3 In January 2006 government accepted the *Renewal of Public Health in Nova Scotia* – an external review of the public health system commissioned by the Department of Health and then Office of Health Promotion. The report contained 21 recommendations to improve public health in the province, including the formation of one central department responsible for public health in Nova Scotia. In February 2006, government created the Department of Health Promotion and Protection.
- 4.4 HPP brought together many existing groups under one department including addictions, physical activity, sport and recreation, and public health. Communicable disease prevention and control is one of many responsibility centres within public health.
- 4.5 Management indicated they are working on a 10-year plan to implement the remaining 20 recommendations in the *Renewal of Public Health in Nova Scotia*. Although we reviewed this report during our audit, we did not audit HPP's progress towards implementing recommendations.

Audit Objectives and Scope

- 4.6 In fall 2007, we completed a performance audit of communicable disease

prevention and control within the Department of Health Promotion and Protection. The audit was conducted in accordance with Section 8 of the Auditor General Act and auditing standards established by the Canadian Institute of Chartered Accountants.

4.7 The objectives of our audit were to assess:

- whether the governance and leadership structure within Health Promotion and Protection is appropriate to fulfill its mandate;
- the adequacy of information systems used to record and track immunizations administered in Nova Scotia;
- whether outbreak management policies and procedures were complied with during recent mumps outbreaks;
- whether information was communicated on a timely basis during recent mumps outbreaks;
- the adequacy of Health Promotion and Protection's system to monitor and control the distribution, storage and usage of vaccines; and
- the adequacy of performance information prepared and reported on communicable diseases by Health Promotion and Protection.

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4.8 Audit criteria were obtained from recognized sources, such as the Public Health Agency of Canada and the CCAF-FCVI Inc. Additional criteria were prepared by this Office. Criteria were accepted as appropriate by management of the Department prior to our audit.

4.9 Our audit approach included review of documents and interviews with key management and staff within the Department of Health Promotion and Protection. We also met with senior management members in regional public health offices and Vice-Presidents from three District Health Authorities.

4.10 The scope of our audit focused on communicable disease prevention and control, although many of our findings and recommendations relate to the public health system and the Department of Health Promotion and Protection on a broader level.

Significant Audit Observations

Governance and Leadership

4.11 *Conclusions and summary of observations* – We assessed whether the governance and leadership structure within Health Promotion and

Protection is appropriate to fulfill its mandate. We concluded that neither the mandate of Health Promotion and Protection, nor the structure of public health in Nova Scotia is clearly defined in legislation or regulations. The role of Health Promotion and Protection in public health is not clearly defined. Additionally, HPP does not have a strategic plan.

- 4.12 Legislation should be updated to clearly identify Health Promotion and Protection's mandate and ensure an adequate leadership and accountability structure in Nova Scotia's public health system. Without an adequate accountability structure, HPP cannot require its partners in the health system to follow its direction for public health. Although management indicated that all parties currently work together, there is no guarantee this will continue. The lack of a strategic plan to clearly establish goals and objectives could lead to unclear or conflicting priorities. There is a risk that staff could unknowingly focus their efforts in lower priority areas.
- 4.13 *Legislative authority* – The Department of Health Promotion and Protection's legislative authority is provided under the Health Protection Act and related regulations. The Act was proclaimed in 2005, prior to the creation of HPP. Order-in-Council 2006-116 updated references from the Department and Minister of Health to Health Promotion and Protection.
- 4.14 The Health Protection Act does not identify the mandate or program responsibilities of the Department of Health Promotion and Protection. HPP management informed us it is currently developing its mission, vision and goals through consultation with stakeholders within the Department and throughout public health; however this process will not legislatively define the mandate of Health Promotion and Protection.
- 4.15 Updated legislation that clearly defines HPP's role in the public health system and clarifies its organizational structure is required. Management at Health Promotion and Protection indicated they intend to update legislation in 2011 as part of the 10-year plan to renew the public health system. Operating without an adequate legislative framework poses a number of risks. HPP may not be able to fulfill its role leading public health in Nova Scotia. Although HPP may develop initiatives to improve communicable disease prevention and control or other public health initiatives, the department has no means of enforcing these requirements. HPP may not be able to compel others in Nova Scotia's health system to assist the Department in carrying out their work.

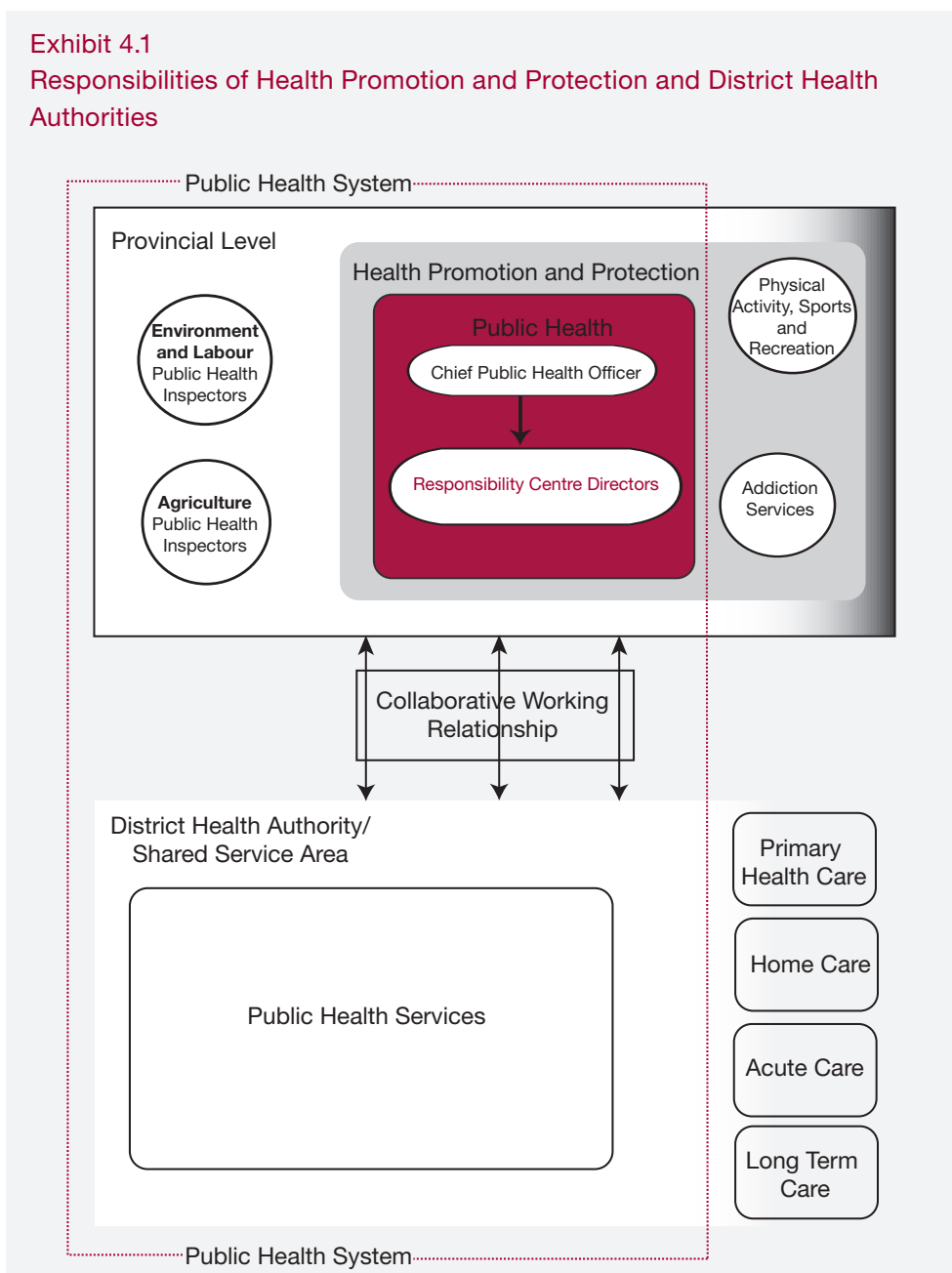
Recommendation 4.1

The Department of Health Promotion and Protection should draft new legislation to clearly identify the mandate, authorities and accountabilities for the public health system.

4.16 *Organizational structure* – The public health system in Nova Scotia is comprised of the Department of Health Promotion and Protection, led by the Chief Public Health Officer working at the provincial level, and the District Health Authorities working at the local level. The nine DHAs across the province have been grouped into four shared service areas (SSA) in an attempt to create sufficiently large population bases to support public health activities. Each SSA has a Director of Public Health reporting to the Vice-Presidents of the DHAs in that Shared Service Area. Public health staff, supervisors and program managers are accountable to the Directors of each SSA.

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Exhibit 4.1
Responsibilities of Health Promotion and Protection and District Health Authorities





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- 4.17 DHA public health staff are not directly accountable to the Department of Health Promotion and Protection as they are not employees of HPP. DHA program managers work collaboratively with Health Promotion and Protection Directors but there are no direct reporting relationships from the districts to Health Promotion and Protection.
- 4.18 Through discussions during our audit, district staff identified the need for an updated accountability structure to formalize the relationship between the districts and Health Promotion and Protection. The current structure lacks clear lines of accountability, although the DHAs and HPP appear to work collaboratively to ensure the Nova Scotia public health system continues to function. However, without a formal accountability structure, HPP cannot require the DHAs to follow the Department's vision for public health. This lack of accountability structure could jeopardize the department's ability to implement changes in Nova Scotia's public health system. Valuable resources could be wasted trying to get all parties to agree on a common approach.
- 4.19 The Chief Public Health Officer agreed that a new accountability structure is necessary. He also identified a need to clarify the public health structure in Nova Scotia and noted that although front-line staff would be aware of their individual roles and responsibilities, they may not know how they fit in the overall public health system.

Recommendation 4.2

The Department of Health Promotion and Protection should identify and define the accountability relationships necessary to deliver public health in Nova Scotia. These relationships should be formalized, including direct reporting from the District Health Authorities to the Department of Health Promotion and Protection.

- 4.20 *Lack of strategic plan* – HPP does not have a strategic plan. Although the previous Office of Health Promotion had a strategic plan, the Department of Health Promotion and Protection is responsible for a wider variety of areas. A strategic plan is necessary to establish priorities, set the direction of the Department and clearly define HPP's goals and objectives. The lack of a plan could lead to unclear or conflicting priorities. There is a risk that provincial resources could be expended on low priority projects while significant initiatives lack adequate funding. Without a strategic plan for guidance, staff may not be aware of high-level Departmental priorities and could focus their efforts in the wrong areas, wasting valuable human and financial resources.

Recommendation 4.3

The Department of Health Promotion and Protection should develop a strategic plan, including key targets and goals for the Department.

- 4.21 *Human resources* – We reviewed the organization chart for HPP and noted several key positions were vacant at the time of our audit; including Deputy Chief Medical Officer of Health and three Medical Officers of Health. Vacancies in higher-level positions often mean remaining senior staff must fill several roles. Significant gaps at senior levels could compromise the ability of HPP to lead public health in Nova Scotia. Failure to fill these positions will have a significant impact on day-to-day oversight of the public health system. There is a risk that certain aspects of public health will not be monitored regularly as they would with a full-time staff person.

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Recommendation 4.4

The Department of Health Promotion and Protection should prepare a plan to address vacancies.

Immunization Registry

- 4.22 *Conclusions and summary of observations* – We assessed the adequacy of information systems used to record and track immunizations administered in Nova Scotia. We concluded the systems are inadequate and information is incomplete. We noted Health Promotion and Protection does not provide guidance to districts regarding what information to include in immunization records. District staff informed us they have difficulty obtaining complete immunization records from physicians, who provide most childhood vaccines. In the event of an outbreak or compromised vaccine, it may not be possible to identify individuals who have not been immunized or those who received compromised vaccines.
- 4.23 *Immunization registry* – The province's immunization registry is paper-based. Immunization information is entered manually by district employees. The resulting system is ineffective. Paper records are time-consuming to prepare, require significant amounts of space for storage and are not easily searched when required. The *2006 Canadian Immunization Guide* issued by the Public Health Agency of Canada states that all provinces and territories should have an electronic immunization registry. There is evidence the province considered developing an electronic registry as far back as 1999.
- 4.24 Nova Scotia's current immunization registry makes accessing records difficult and poses a significant risk that public health has incomplete immunization histories for Nova Scotians. Department management indicated they did not attempt to retrieve immunization records during the 2007 mumps outbreak due to lack of time and resources. Instead, HPP



relied on individuals' recollections of their previous vaccinations. There is a risk people will not accurately recall their immunization history and this could lead to incorrect decisions regarding who should receive booster shots. Although an individual may be able to obtain their vaccination history from their physician, this adds an extra step to the process and could slow HPP's ability to respond to an outbreak.

- 4.25 *Lack of guidance to districts* – Health Promotion and Protection has provided limited guidance to district public health offices to ensure consistent immunization records are maintained. The *Nova Scotia Immunization Manual* requires public health nurses submit immunization information, including vaccine and lot number, recipient, immunization provider and position. For vaccines administered by physicians, HPP requests completion of a form with similar information; however the Department has no authority to require physicians to comply.
- 4.26 HPP management informed us physicians administer 80% of vaccines in Nova Scotia. Although we did not audit the accuracy of this statistic; complete and accurate information from physicians is key to the province's immunization registry. District management informed us they have varying levels of success collecting immunization information from physicians.
- 4.27 The Province of Nova Scotia, through a federal initiative called Panorama, plans to have an electronic immunization registry once it is developed and integrated into the current nation-wide electronic health record project. Health Promotion and Protection has estimated this registry will be functional by 2009. HPP management informed us data will be entered on a go-forward basis only, meaning no existing records will be recorded in the new system. Additionally, there are no immediate plans to have physicians enter information directly into this system. Given the Department's comments that the majority of vaccines are administered by physicians; there is a risk that complete information will not be available to enter in the new electronic registry. In addition to making records easier to access and search with an electronic system, HPP needs to ensure completeness of information recorded. National guidelines from the Public Health Agency of Canada require provinces have the ability to determine who requires vaccinations. This is only possible with complete records.

Recommendation 4.5

The Department of Health Promotion and Protection should implement an electronic immunization registry for Nova Scotia.

Recommendation 4.6

The Department of Health Promotion and Protection should develop a solution to ensure all immunization information is reported to public health on a timely basis.

4.28 *Record retention policy* – Health Promotion and Protection’s retention policy for immunization records requires maintaining records until an individual is 25, at which time the records can be destroyed. District Health Authority staff informed us they have records dating back more than 25 years, although the paper-based system in Nova Scotia makes retrieval difficult. If the retention policy were followed, the province may no longer have relevant information in the event of an outbreak or indication a batch of vaccines were ineffective. Nova Scotians may not have the information they need to make decisions regarding whether they should be vaccinated during an outbreak. As Nova Scotia moves toward implementing an electronic registry the retention policy should be updated to ensure records are maintained for an adequate time period.

Recommendation 4.7

The Department of Health Promotion and Protection should develop and implement a consistent, province-wide immunization record retention policy.

Outbreak Management – Mumps

4.29 *Conclusions and summary of observations* – Our objectives were to assess whether outbreak management guidelines were complied with and information was communicated on a timely basis during the 2007 mumps outbreak. We concluded the Department of Health Promotion and Protection’s response to the outbreak was in compliance with its outbreak management guidelines, although we found the guidelines insufficient. As a result, the response was less than timely as the outbreak team was addressing areas which should have been covered in the outbreak plan.

4.30 *Outbreak management planning* – The *Nova Scotia Communicable Disease Control Manual* provides guidelines for outbreak management, or the outbreak plan. The initial outbreak response takes place within the district health authority where the outbreak occurs. When the district is no longer able to handle the outbreak at a local level, a provincial outbreak is declared. The Department does not have formal written criteria for when to declare a provincial outbreak. We did not assess the response of the district health authorities; rather, we assessed the Department of Health Promotion and Protection’s response to the provincial outbreak.

4.31 A mumps outbreak was declared on March 7, 2007 by Capital Health. The outbreak spread to two additional district health authorities and was managed jointly until it further spread to three additional districts, at which time a provincial outbreak was declared on April 10. During the time the districts were managing the outbreak, the Department of Health Promotion and Protection was in regular communication with the districts, providing advice and guidance on day-to-day issues.

4.32 Two weeks after the provincial outbreak was declared, a skills analysis was conducted to determine if the provincial outbreak team included the necessary expertise. Job descriptions and the *Nova Scotia Communicable Disease Control Manual* identify which positions to consider including on the outbreak team. The necessary skill sets should have already been determined as part of outbreak planning. This would have avoided the need for further analysis which diverted staff attention from dealing with the outbreak.

4.33 We noted additional deficiencies with the plan for managing an outbreak as follows.

- There was no plan in place to address immunizing health care workers. The team discussed this possibility after 120 confirmed cases, but immunization was not approved until 203 confirmed cases; 58 days after the local outbreak was declared. During any significant public health event, such as an outbreak, availability of adequate numbers of health care workers is essential. Failure to consider whether workers should be immunized could result in fewer staff available to respond to an outbreak.
- No formal plan existed to address storage of additional vaccines required to deal with the outbreak. This poses a risk that the province will not have adequate numbers of vaccines available to meet demand and ensure timely response to vaccination requests.
- No plan existed for implementing a 1-800 number to provide information to the public. Capital Health had an existing 1-800 number in place for communicable diseases. HPP discussed a province-wide number 17 days into the provincial outbreak, established the number 36 days into the outbreak and released it to the general public 69 days into the outbreak; at which time there were 383 confirmed cases of mumps in the Province.

Information regarding the number of mumps cases was provided by HPP management. We did not audit the accuracy of this statistic.

Recommendation 4.8

The Department of Health Promotion and Protection should update its outbreak planning to provide an adequate framework to respond to outbreaks.

4.34 As of January 18, 2008, HPP statistics indicate there were 777 mumps cases in Nova Scotia. At the time this report was written, the outbreak was ongoing. Two previous mumps outbreaks in the province in 2005 had a total of 32 confirmed cases.

4.35 *Outbreak evaluation and reporting* – The *Nova Scotia Communicable Disease Control Manual* outbreak management guidelines require an evaluation of the response to all declared outbreaks. Although there were two mumps outbreaks in Capital Health in 2005, a report evaluating the response was not prepared for one outbreak. An overall clinical report was prepared, however this did not address the District’s response to the outbreaks. Although these outbreaks were limited to one DHA we believe HPP has a role to ensure all required reports are prepared and reviewed to improve outbreak response across the province. Failure to review response to outbreaks means the province will not know what worked well versus what did not, and can result in the same problems in future outbreaks.

Recommendation 4.9

The Department of Health Promotion and Protection should take a leadership role to ensure all required reports are prepared following outbreaks.

4.36 Outbreak management guidelines also require consideration of recommendations stemming from outbreak evaluation reports when responding to future outbreaks. The provincial mumps outbreak team did not have a copy of the 2005 outbreak report and had not considered any of its recommendations. Capital Health’s Medical Officer of Health informed us CDHA considered the recommendations from the 2005 report in their response to the 2007 outbreak; however we did not verify whether recommendations were addressed.

Recommendation 4.10

The Department of Health Promotion and Protection should review recommendations from all outbreak reports and update related outbreak management policies as necessary.

4.37 There were no minutes for the first provincial mumps team meeting and minutes were discontinued as of the August 17, 2007 meeting. Department management indicated these minutes were the only formal record of what it was doing to manage the outbreak. Accordingly we were unable to assess what actions had been taken in recent months to deal with the outbreak. Without adequate records, the Department will not be able to accurately assess its outbreak response. There is a risk that any problems in addressing the current outbreak will be repeated.

Recommendation 4.11

The Department of Health Promotion and Protection should ensure adequate information is maintained to allow the Department to formally evaluate its response to an outbreak.



Vaccine Storage and Distribution

- 4.38 *Conclusions and summary of observations* – Our objective was to assess the adequacy of Health Promotion and Protection’s system to monitor and control the distribution, storage and usage of vaccines. We concluded HPP has an adequate system to track vaccine distribution but protocols for vaccine storage and handling are inadequate. HPP does not monitor to ensure vaccines are maintained at an appropriate temperature during transport. This poses a risk vaccines could be compromised due to improper storage and handling and could result in Nova Scotians receiving vaccines which provide little or no immunity. Additionally, HPP does not have a system to monitor and control vaccine storage or usage in physician offices.
- 4.39 *Immunization protocols* – In 2000 the Department of Health released the *Nova Scotia Immunization Manual* to provide guidance and standards for individuals administering vaccines. Although the manual stated “*it is paramount to keep this manual up-to-date and relevant on an ongoing basis*”, there have been no formal revisions since it was released. We compared the manual to the *2006 Canadian Immunization Guide* published by the Public Health Agency of Canada and noted that 9 of the 26 national guidelines were not adequately addressed in the provincial manual. HPP’s Director of Communicable Disease Prevention and Control informed us the Department no longer distributes the manual to districts as it is outdated.

Recommendation 4.12

The Department of Health Promotion and Protection should prepare appropriate vaccine protocols that are consistent with national guidelines established by the Public Health Agency of Canada.

- 4.40 Based on the lack of a current provincial immunization manual, as well as interviews with Health Promotion and Protection staff and the Directors of Public Health in the districts, we concluded the Department does not provide sufficient information or guidance to districts regarding vaccine storage, handling and distribution. In the absence of adequate direction, some districts have created their own manuals and procedures. Due to the lack of standard vaccine handling, storage and distribution procedures throughout the province, the Department is unable to ensure vaccines are handled in a consistent and appropriate manner. There is a risk that failure to properly control vaccines could lead to vaccines losing their effectiveness. This could result in individuals having reduced or no immunity to an illness they assume they have been properly vaccinated against.
- 4.41 Health Promotion and Protection provides additional information regarding vaccine storage and administration to the districts on an ad hoc basis. Management indicated they developed a one page information sheet regarding vaccine storage in 2006. An updated vaccination schedule was

released in 2007. HPP does not track the distribution of this information or maintain a comprehensive central listing for future reference. As a result, the Department is unable to determine whether all necessary information was provided to DHAs or whether DHAs are following the guidelines.

Recommendation 4.13

The Department of Health Promotion and Protection should develop standard requirements for storage, handling and distribution of vaccines. These requirements should be communicated to district health authorities and physician offices.

- 4.42 *Vaccine distribution* – Health Promotion and Protection is responsible for distributing all publicly-funded vaccines to public health district offices. The districts are responsible for distributing vaccines to physicians as well as public health nurses administering vaccines for the school-based vaccination program.
- 4.43 We interviewed the departmental staff member responsible for packing and distributing vaccines to the districts. Most vaccines must be stored between 2°C and 8°C and management informed us manufacturers use temperature monitors during transport. Additionally, HPP has a training manual that states vaccines are to be shipped with a temperature monitor. HPP does not use temperature monitors during vaccine transport and are not in compliance with their own policy. To determine if a vaccine has been compromised, we were informed staff relies on the look and feel of the vaccine, ice packs and coolers. Although we are not aware of any instances where vaccines were compromised due to a lack of temperature monitoring, the Department's practices increase the risk that vaccines may be compromised during transport. This could result in ineffective vaccines which do not provide adequate immunity.
- 4.44 We did note that one of the 2005 mumps outbreak reports listed ineffective vaccines as a possible cause. However the report's authors were not able to conclusively determine the cause of the outbreak.

Recommendation 4.14

The Department of Health Promotion and Protection should use temperature-monitoring devices when shipping vaccines requiring refrigeration.

- 4.45 Health Promotion and Protection does not audit or monitor vaccine storage, distribution or usage by physicians and public health nurses. Monitoring would allow the Department to ensure guidelines are followed and provide assurance that vaccines' effectiveness is maintained.

Recommendation 4.15

The Department of Health Promotion and Protection should monitor vaccine distribution, storage and usage processes throughout the public health system.

- 4.46 *Other observations* – Health Promotion and Protection has not established formal processes to be followed in the event of a vaccine shortage. Management informed us HPP would arrange a transfer if one district was experiencing a vaccine shortage while another district had excess inventory. In the event of an outbreak, the province will have to allocate vaccines should a shortage arise. The lack of a formal process to allocate and distribute vaccines could jeopardize HPP’s ability to respond quickly.

Recommendation 4.16

The Department of Health Promotion and Protection should formalize the process to allocate vaccines in a shortage or crisis situation.

Performance Information

- 4.47 *Conclusions and summary of observations* – We assessed the adequacy of communicable disease performance information prepared and reported by the Department of Health Promotion and Protection. We concluded the Department does not prepare or report any performance information relating to communicable diseases. The only information reported on communicable diseases comes from the surveillance system, which monitors and reports occurrences of notifiable diseases as required by provincial regulations. Failure to establish targets and monitor achievement of those targets limits the Department’s ability to assess whether its programs are effective.
- 4.48 *Performance information and reporting* – Performance measurement involves measuring and monitoring against established targets and indicators to assess progress made in achieving predetermined goals and objectives. The Department does not have adequate systems and processes in place to report accurate and complete data necessary to prepare and report performance information. Assessing performance is critical to allow the Department to evaluate the effectiveness of its programs. For example, HPP does not have established targets for immunization rates in all sectors of the population. In addition, the department does not have accurate immunization statistics in all areas. The lack of targets and adequate statistics prevents HPP from assessing whether its immunization programs are working as intended.
- 4.49 Department staff identified the need for more real-time surveillance data as well as a vaccine registry. Through the surveillance system, HPP monitors, investigates, and reports on occurrences of communicable diseases.

However, goals and targets are not set for areas such as immunization rates or incidents of communicable diseases. Although surveillance figures provide a good starting point for certain performance information, such as determining the effectiveness of immunization programs; additional information such as immunization rates, is required for actual performance reporting. We were informed the Department is working in conjunction with other provinces and a private sector partner to design and implement a new computerized public health system. The new system will be capable of providing data that can be used to report performance information on communicable diseases and will include components such as the electronic immunization registry discussed earlier in this Report.

- 4.50 We reviewed a number of job descriptions and noted that roles and responsibilities for preparing and reporting performance information are not addressed.

Recommendation 4.17

The Department of Health Promotion and Protection should clearly define, assign, and communicate roles and responsibilities for performance information and reporting.

Recommendation 4.18

The Department of Health Promotion and Protection should develop and report performance measures and targets for key aspects of its operations.

Legislative Requirements

- 4.51 Under the Health Protection Act, the Department of Health Promotion and Protection is required to provide an annual report to the House of Assembly outlining the Department's progress with respect to the surveillance of, and response to, health hazards, notifiable diseases or conditions, and communicable diseases. The Department has not tabled such a report in the House of Assembly since its inception.

Recommendation 4.19

The Department of Health Promotion and Protection should provide an annual report to the House of Assembly in accordance with Health Protection Act requirements.

Response: Department of Health Promotion and Protection

The Department of Health Promotion and Protection appreciates the Auditor General's thorough review of the public health system's communicable disease prevention and control functions. The department is in overall agreement with the recommendations as they are consistent with the external review of the public health system. The review resulted in the report *The Renewal of Public Health in Nova Scotia: Building a Public Health System to Meet the Needs of Nova Scotians* (aka: Public Health Review) released in 2006 and accepted by government. The full report can be found at <http://www.gov.ns.ca/hpp/publichealth>

Public health is described as the art and science of promoting health, preventing disease, prolonging life and improving the quality of life through the organized efforts of society. The five functions of public health are: health promotion, health protection which includes emergency preparedness, disease and injury prevention, health surveillance and population health assessment.

It is important to note that unlike most other provinces and territories, in Nova Scotia the public health mandate is spread across three government departments – the Department of Health Promotion and Protection and the public health inspection functions at the Department of Agriculture and the Department of Environment and Labour. The delivery of public health is shared between these three government departments and local public health services at the district health authority level.

Governance and Leadership

The audit identifies the need to develop a strategic plan. This was also identified in the Public Health Review Action #1 for System Renewal. The Department of Health Promotion and Protection is in the midst of a strategic planning process as is the public health system as a whole.

The audit identifies the requirement for legislation, accountability relationships with District Health Authorities and an accountability framework. The department is in agreement. Initiatives are already underway as part of the department's response to the Public Health Review which addresses these recommendations in Actions #5, #12 and #14 for System Renewal.

Based on advice from the expert review panel consisting of senior public health leaders from three provinces and territories, it was recommended that comprehensive legislation be developed in the latter years of implementation to ensure the standards, accountability requirements were incorporated into the legislated mandate. Currently, the Health Protection Act provides the legislative mandate and authority for the Chief Medical Officer of Health to protect the public's health against communicable diseases and environmental health hazards.

The development of standards and an accountability framework will start in the coming fiscal year but it is understood this is an iterative process and will take a significant amount of time, consultation and building of a systems approach.

The department agrees with the importance of an accountability relationship with the District Health Authorities, however, does not agree with the recommendation that public health services should report directly to the department. It is critical to have public health integrated with the remainder of the health care system at the local level which is the current configuration under Act 34, the District Health Authorities Act.

The audit identifies the need to develop a plan to address vacancies in key positions within the public health system. Compensation and job classification levels are significant barriers to recruiting for positions such as medical officers of health and epidemiologists that are both specialized skill sets and in short supply nationally. The department is working with the Public Service Commission to address these issues as quickly as possible. The Public Health Review also identifies the need for a competent and sufficient workforce. Initiatives are already underway in response to Action #7 for System Renewal which identifies the need for a workforce development strategy. The department has hired a project executive to lead this initiative. In fact, Nova Scotia has demonstrated leadership in this area as we are the first province to dedicate resources for public health human resource planning to address recruitment, development and retention strategies.

Immunization Registry/Vaccine Storage

The department is in agreement with these recommendations. Initiatives are already underway as part of the department's response to the Public Health Review which addresses these recommendations in Action #10 for System Renewal.

The Department has full confidence in the vaccine storage and distribution system currently in place in Nova Scotia. The public's safety is not compromised with the current system. At the same time, we appreciate and agree with the recommendations related to vaccine storage and distribution. We acknowledge there is always room for improvement and believe the recommendations from this audit will enhance an already safe and effective system. The department has already started to plan for improvements as part of its response to the 2006 Public Health Review.

Currently, a major initiative is underway with Canada Health Infoway in implementing PANORAMA. Panorama is an integrated public health electronic information system which includes applications for immunization registry, communicable disease surveillance and communicable disease case management and outbreak management.

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Nova Scotia is adopting the Panorama application province wide. The planning phase was completed in March 2007. The department is now preparing for implementation to begin in fiscal 08-09. It is anticipated this phase will take approximately two to three years to complete. It is also anticipated, given the current national project time lines, that front line public health staff in Nova Scotia will be using the Panorama application by late 2008 or early 2009.

Outbreak Management – Mumps

The Department of Health Promotion and Protection is in agreement with the recommendations related to outbreak management recognizing that each outbreak is unique dependent on the specific disease and population affected. Initiatives are already underway in response to the Public Health Review which addresses these recommendations in Action #15 for System Renewal. Ensuring frameworks, manuals, protocols, policies, guidelines and post outbreak analysis/evaluations are fundamental to a comprehensive approach to outbreak management. Having the infrastructure, ie, human resources and information systems as previously identified, will contribute to well managed and comprehensive responses to threats to the public's health.

Performance Information

The Department agrees with the importance of performance measures and targets. This will be included in the development of standards, an accountability framework and a strategic plan.

Legislative Requirements

The Department acknowledges its legislative requirement to table an annual report on notifiable diseases however, the shortage of epidemiologists and Medical Officers of Health has significantly altered our ability to table the report on a timely basis.

The Department of Health Promotion and Protection welcomes the audit recommendations as they are consistent with the renewal efforts underway.