



Health Santé
Canada Canada

COMMUNICABLE DISEASE CONTROL CLUSTER EVALUATION

Final Report

Approved by

Executive Committee

Finance, Evaluation and Accountability (EC-FEA)

November 23, 2010

Canada 

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- **Management Action Plan for Communicable Disease Control — Cluster Evaluation**
- **Communicable Disease Control — Cluster Evaluation — Final Report**

Communicable Disease Control – Cluster Evaluation Management Action Plan

Recommendations	Actions	Responsible Manager	Planned Implementation Date
<p>1. Place a high priority on moving towards a more strategic and coordinated approach in the design and implementation of cluster activities. To take fuller advantage of the potential benefits of the cluster approach, FNIHB should develop a strategic plan which clearly defines the national vision for the Cluster, the structure of the programming, the strategic priorities going forward, the inter-relationship between the three programs and associated activities, and the relationship with other resources.</p>	<ul style="list-style-type: none"> • To take fuller advantage of the potential benefits of the Cluster approach, CDCD will develop a coordination plan which clearly defines the national goals for the Cluster, the structure of the programming, the main priorities going forward, the inter-relationship between the three programs and associated activities, and the relationship with other resources and organizations. The plan will also note that the newer funding models were initiated starting in 2008-2009. • CDCD is taking part in a Branch wide ‘renewal of authorities’ process that is: updating the Cluster logic models and related performance measurement strategy; reviewing the Community Based Reporting Template (CBRT). This will address the inter-relationship between the three programs and associated activities, and the relationship with other resources. 	<p>Director, Communicable Disease Control Division (CDCD), Primary Health Care and Public Health Directorate (PHCPHD), First Nations and Inuit Branch (FNIHB), Health Canada (HC)</p>	March 2011
		<p>Director, CDCD, PHCPHD, FNIHB, HC</p>	December 2010
<p>2. Work with Provincial Governments, the Public Health Agency of Canada (PHAC), and regional and community staff to strengthen the surveillance system. To improve surveillance, Health Canada needs to work with the provincial governments and PHAC to improve information sharing agreements, processes and protocols. FNIHB also needs to provide on-going training to support implementation of surveillance systems and the Performance Measurement Strategy. Options should be considered to tie funding more directly to the success in meeting reporting requirements and expected outcomes.</p>	<ul style="list-style-type: none"> • CDCD programs are already participating in the panorama deployment piloted in two regions (BC and Quebec). • CDCD takes part in the Branch “renewal of authority” process including the update of the Performance measurement Strategy. Once approved, training will be provided on new reporting requirements. • CDCD, in conjunction with HIARD and interdepartmental advice (e.g. PHAC), will initiate a pilot project for one of the Cluster areas to focus on surveillance data gaps in regional areas and develop means to rectify the data gaps. 	<p>Director, CDCD, PHCPHD, FNIHB, HC</p>	Ongoing
		<p>Director, CDCD, PHCPHD, and Director, Business Planning and Management Directorate (BPMD), FNIHB.</p>	March 2011
		<p>Director, CDCD, PHCPHD, and Director BPMD, FNIHB, HC</p>	April 2012

Recommendations	Actions	Responsible Manager	Planned Implementation Date
<p>3. Facilitate greater sharing of information, resources, research and best practices within and across the programs, regions and communities. A Cluster-wide strategy should be developed to build on existing efforts through strategies such as conducting best practice and promising practices reviews; developing a Cluster website through which information, resources, research and best practices can be shared; and featuring best practices and promising practices at training sessions and conferences.</p>	<ul style="list-style-type: none"> In collaboration with other partners (Regions, Programs and Communities), CDCD will expand existing information sharing collaboration and conduct a literature review that examines how other jurisdictions share information, resources and research. Based on the literature review, CDCD will, in collaboration with other partners, develop communication tools (e.g. newsletter or web site, social networking, etc.) to use in order to share information, resources, research and best practices collected at training sessions, workshops and conferences. 	<p>Director, CDCD, PHCPHD, and Director, BPMD, FNIHB, HC</p> <p>Director, CDCD, PHCPHD, and Director, BPMD, FNIHB, HC</p>	<p>September 2011</p> <p>March 2012</p>
<p>4. Develop and support implementation of a formal training strategy for the Cluster. A formal training strategy will assist in the defining objectives and priorities, identifying opportunities developing and sharing common training tools and resources, supporting the development of multiple delivery options (e.g., national and regional sessions, local training sessions, mentoring, job shadowing, online workshops, video conferences, teleconferences, publications, updates, and webinars), and better enable the Cluster to take advantage of other existing training and educational resources.</p>	<ul style="list-style-type: none"> CDCD will develop a business plan for centralized training for the national and regional level which will build on the existing initiatives that are underway. 	<p>Director, CDC, PHCPHD, FNIHB and Regional Directors, FNIH, Regional and Program Branch (RAPB), HC</p>	<p>March 2012</p>
<p>5. Work with others within Health Canada to develop and then implement strategies to reduce the level and impact of staff turnover at the national, regional and community levels.</p>	<ul style="list-style-type: none"> CDCD to conduct an analysis of the “exit survey” to examine and analyse current trends in morale and staffing and then use the findings to develop solutions to reduce negative turnover rates. CDCD will consult with other partners in Health Canada, including the Human Resources (HR) group, to develop HR approaches and strategies to reduce the level and impact of staff turnover for national and regional levels. 	<p>Director CDC, PHCPHD, FNIHB and Regional Directors, FNIH, RAPB, HC</p> <p>Director CDC, PHCPHD, FNIHB and Regional Directors, FNIH, RAPB, HC</p>	<p>June 2011</p> <p>January 2012</p>

Recommendations	Actions	Responsible Manager	Planned Implementation Date
<p>6. Place a high priority on increasing community ownership of Cluster activities. Strong community leadership and ownership increases the profile of the programs and issues, lends greater credibility and importance to the messages, helps to increase participation in the programs, and facilitates promotion and delivery of program activities including the awareness and education programs.</p>	<ul style="list-style-type: none"> • FNIHB has already implemented a community health planning process for recipients. This asset mapping process is designed to help recipients in collecting and recording the information for use in community health planning and community development as well as assessing their programming needs and capacity to deliver and determine how to address gaps. Overall the process assesses the community's readiness to proceed with comprehensive health planning. • CDCD will develop a business plan for centralized training for the national and regional level which will build on the existing initiatives that are underway and focus on program specific awareness and capacity (linked to Recommendation # 4). • CDCD will implement awareness and education activities to build capacity to manage CDC services and programs in communities. 	<p>Director CDC, PHCPHD, and Director BPMD, FNIHB, HC</p> <p>Director CDC,PHCPHD, FNIHB, HC</p> <p>Director CDC,PHCPHD, FNIHB, HC</p>	<p>On going</p> <p>March 2011</p> <p>December 2011</p>



Health Canada
Santé Canada

COMMUNICABLE DISEASE CONTROL

Cluster Evaluation

Final Report

May 2010

Canada 

Based on primary research by:

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ACRONYM

AFN	Assembly of First Nations
AIAI	Association of Iroquois and Allied Indians
BBP	Blood Borne Pathogens
BC	British Columbia
BCG	Bacille Calmette Guerin
CAs	Contribution Agreements
CAAN	Canadian Aboriginal AIDS network
CATIE	Canadian AIDS Treatment Information Exchange
CBRT	Community Based Reporting Template
CDC	Communicable Disease Control
CEO	Chief Executive Officer
CHR	Community Health Representative
CPNP	Certified Pediatric Nurse Practitioner
CTBRS	Canadian Tuberculosis Reporting System
DOT	Directly Observed Therapy
FAA	Financial Administration Act
FNQLHSSC	First Nations and Quebec and Labrador Health and Social Services Commission
FN	First Nations
FN/I	First Nations and Inuit
FNIH	First Nations and Inuit Health
FNHIB	First Nations and Inuit Health Branch
FTE	Full Time Equivalent
FWCO	Ference, Weicker and Company
GoC	Government of Canada
HIS	Health Information System
HQ	National Headquarters
HPV	Human Papillomavirus
ISPPD	International Symposium on Pneumococci and Pneumococcal Diseases
ITK	Inuit Tapiriit Kanatami
IUALDTB	International Union Against Lung Disease and TB
LTBI	Latent Tuberculosis Infection
MCCS	Management of Contributions and Contracts System
MIMS	Manitoba Immunization Monitoring System
MHHL	Manitoba Health and Healthy Living
NITHA	Northern Inter-Tribal Health Authority
NPNU	Non Prescription Needle Use
PHAC	Public Health Agency of Canada
RAPB	Regions and Programs Branch
RMAF	Results-Based Management and Accountability Framework
SAKA	Saskatchewan Advisory Committee on AIDS and Blood Borne Pathogens
STI	Sexually Transmitted Infections
SWOT	Strengths, Weaknesses, Opportunities, and Threats
TB	Tuberculosis
TBS	Treasury Board Secretariat
TIS	Targeted Immunization Strategy
TST	Tuberculin Skin Test
UNBI	Union of New Brunswick Indians
UNSI	Union of Nova Scotia Indians
VPD	Vaccine-preventable Diseases
WHO	World Health Organization

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EXECUTIVE SUMMARY

THE COMMUNICABLE DISEASE CONTROL (CDC) CLUSTER

The Communicable Disease Control Cluster was established in 2005, bringing together three existing program areas including:

- Immunization (Vaccine Preventable Diseases and Immunization);
- Tuberculosis (Airborne and Respiratory Diseases); and
- HIV/AIDS (Blood-borne Diseases and Sexually Transmitted Infections).

The Cluster focuses its efforts on enhancing collaboration and networking; enhancing surveillance activities; contributing to improved prevention, control, and treatment of communicable diseases in First Nations/Inuit (FN/I) communities; and increasing community ownership and capacity to detect, report and combat communicable diseases. The key target groups for the CDC Cluster are First Nations populations living on reserve and Inuit communities south of 60°.

PURPOSE AND METHODOLOGY

The purpose of this evaluation is to examine the relevance and performance of the Communicable Disease Control Cluster within the First Nations and Inuit Health Branch for the time period 2005/06 to 2007/08; however data for 2008/09 was included where available. The results will provide guidance for program renewal and future policy/program options and directions.

The evaluation was undertaken in two phases. During the first phase, an extensive document review was undertaken and in-person and telephone interviews were conducted with a broad cross-section of 26 representatives involved in the CDC Cluster as well as others from Health Canada. The major steps undertaken in the second phase of the evaluation included a review of existing literature; interviews and surveys with nearly 350 representatives associated with the Cluster (including 15 senior headquarters and regional representatives, 8 current and former national program coordinators and associated staff, 21 regional coordinators and CDC managers, 247 community health nurses and health directors, 27 service delivery partners, and 24 other stakeholders), and an extensive review of regional work plans, annual performance reports, and other documentation related to the CDC Cluster.

MAJOR CONCLUSIONS

Relevance

- **The objectives of the CDC Cluster are consistent with Health Canada priorities and the strategic outcomes as well as priorities of the Federal Government.** A review of the literature demonstrates that Cluster objectives are aligned with Health Canada's departmental priorities and the Speech from the Throne in 2004, which emphasized existing health discrepancies between Aboriginal people and other Canadians and highlighted the Federal Government's commitment in supporting health services for the Aboriginal communities.
- **The activities of the CDC Cluster are consistent with the mandate of the Federal Government to provide disease prevention and health promotion services.** Collaborative partners and other stakeholders (e.g., representatives of other programs) believe that development and funding of the CDC Cluster programs is an appropriate role for the Government of Canada.
- **There is a strong need for the programming,** which can be attributed to the significant health issues facing First Nations on reserve and Inuit, the importance of government support to combating communicable diseases in First Nations communities, the importance of effective surveillance in fighting disease, low awareness amongst First Nations regarding communicable diseases, the need for greater collaboration regarding health issues, and the perceived performance of the programming.

Performance

- **The CDC Cluster been successful in increasing and improving collaboration and networking.** Most national and regional CDC Cluster representatives regularly network and collaborate with a wide variety of organizations and programs that share similar objectives with the Cluster. Enhanced collaboration and networking has benefited the CDC Cluster by further clarifying the roles of the respective parties; ensuring that First Nations issues and needs are reflected in the design of strategies and delivery of services; increasing coordination in program activities and minimizing the level of duplication; facilitating the sharing of information and lessons learned; facilitating joint responses to key developments (e.g., pandemic planning); increasing access to differing viewpoints and specialized expertise; and providing for more seamless delivery of programs and services across organizations. One result is that Cluster activities are viewed as complementing rather than duplicating programming provided by others.

- **Access to timely and accurate surveillance data remains a major challenge facing the CDC Cluster.** This is attributed to a lack of information sharing agreements with the provincial governments and difficulties in identifying target group members within existing systems. Other issues include the use of multiple database systems across and even within regions, continued reliance on paper-based systems, and staff turnover at the community, regional and national levels. Surveillance data is needed for program planning, policy and strategy development as well as to monitor and evaluate program delivery.
- **Significant progress has been made in implementing newly recommended vaccines. It has been a challenge, however, to demonstrate improved coverage rates of routine immunizations.** Community health directors reported that significant progress has been made in improving routine immunization rates although the regional performance data does not confirm this. Strategies such as raising the profile of immunization, implementing reminder programs, providing incentives, and increased networking are believed to have been effective in increasing coverage across regions, although on time coverage rates remain significantly below the ultimate target of 95%.
- **Less progress has been achieved in reducing the incidence of blood-borne diseases and sexually transmitted infections.** Keeping in mind the limitations associated with the data (ethnic status is reported for about 30% of all positive HIV test reports), the number of positive HIV test reports amongst Aboriginal people has not improved in recent years. It may be unrealistic to expect that significant changes would have occurred in the 2005-2008 period. Key informants attributed whatever progress has occurred to education activities in the community (e.g., education about safer sex practices), and strategies such as the distribution of condoms, culturally appropriate promotional materials and advertising. Considerable progress has also been made in working with other organizations towards a coordinated and integrated response to blood-borne diseases and sexually transmitted infections at the national and international levels.
- **Using data from the Canadian Tuberculosis Reporting System (CTBRS), TB incidence rates remain high and the disproportionate burden of disease among Aboriginal peoples continues. Some progress was reported in improving awareness and understanding of Tuberculosis.** Approximately 13% of respondents (National and Regional Program Coordinators) reported significant progress, 35% reported some progress and 53% reported no progress in encouraging members of the target groups to participate in education and awareness activities related to Tuberculosis.
- **The CDC Cluster has had a significant impact on community capacity through increased access to training and other resources for Community Health Nurses and others in the communities.** Over 200 skill development sessions were staged between 2005-06 and 2007-08, involving nearly 10,000 participants. Seventy-six percent of the Community Health Nurses and Health Directors reported that they have received some form of training or professional development through the Cluster. Most found the training they received to be very useful.

- **Health Directors, Community Health Nurses and Regional Coordinators expressed varying opinions regarding the extent to which the communities are taking ownership of communicable disease health issues and the related programs.** For the majority of the respondents (Health Directors, Community Health Nurses, and Regional Coordinators), 51% somewhat agreed or strongly agreed and 33% of the respondents somewhat disagreed or strongly disagreed that the community has taken ownership of these issues and types of programs. Factors that may influence the level of community ownership include the skills of the local health care staff (including interpersonal skills), emphasis placed on community involvement, level of staff turnover, extent to which community leadership is supportive of the programs, and the community's previous experience with government and with communicable disease.
- **The Cluster is taking small steps towards improving longer-term health outcomes.** Activities such as education and awareness programs are viewed as positively influencing immunization rates for both new and routine vaccines, improving understanding of communicable diseases, easing stigmatization, reducing risky behaviours and better educating the youth and adult population as to how to protect themselves against STIs and HIV, and increasing screening, testing and support. While these outcomes have yet to be reflected in the available data on infection rates, it is anticipated that the programs are setting the stage for improved rates going forward. Long-term health outcomes are a function of multiple factors, many of which are beyond the scope of the Cluster.

Efficiency and Economy

- **Staff commitment, strong relationships with other groups, program flexibility and clearly defined objectives, target groups and activities have contributed to the efficiency of the CDC Cluster.** Representatives also highlighted strong cooperation and collaboration with other groups, the commitment of staff to delivering and improving the programs at all levels, and an increasing emphasis on outcomes and accountability as contributing to efficiency.
- **High rates of staff turnover at all three levels of the Cluster increase training costs and reduce the efficiency of operations.** Turnover can have a significant negative impact on the efficiency by disrupting program delivery, resulting in the loss of both institutional and corporate knowledge, and increasing the need for training and orientation.
- **Implementation of the Cluster approach is still in a relatively early stage of development and, in most respects, has not yet had a significant impact on the delivery of the programming at the regional and community levels.** The three program and service areas within the Communicable Disease Control (CDC) Cluster are integrated at the FN/I community level with the intention to facilitate: 1) a comprehensive approach to program delivery; 2) simplified delivery and administration of programs; and 3) increased transparency. There remain significant opportunities to take a more holistic approach, facilitate greater collaboration and integration of activities, share information and expertise, streamline reporting and administration, and increase the visibility of the programming.

RECOMMENDATIONS

The major recommendations arising from the evaluation are as follows:

- **Place a high priority on moving towards a more strategic and coordinated approach in the design and implementation of cluster activities.** To take fuller advantage of the potential benefits of the cluster approach, FNIHB should develop a strategic plan which clearly defines the national vision for the Cluster, the structure of the programming, the strategic priorities going forward, the inter-relationship between the three programs and associated activities, and the relationship with other resources.
- **Work with Provincial Governments, PHAC, and regional and community staff to strengthen the surveillance system.** To improve surveillance, Health Canada needs to work with the provincial governments and PHAC to improve information sharing agreements, processes and protocols. FNIHB also needs to provide on-going training to support implementation of surveillance systems and the Performance Measurement Strategy. Options should be considered to tie funding more directly to the success in meeting reporting requirements and expected outcomes.
- **Facilitate greater sharing of information, resources, research and best practices within and across the programs, regions and communities.** A Cluster-wide strategy should be developed to build on existing efforts through strategies such as conducting best practice and promising practices reviews; developing a Cluster website through which information, resources, research and best practices can be shared; and featuring best practices and promising practices at training sessions and conferences.
- **Develop and support implementation of a formal training strategy for the Cluster.** A formal training strategy will assist in defining the objectives and priorities, identifying opportunities, developing and sharing common training tools and resources, supporting the development of multiple delivery options (e.g., national and regional sessions, local training sessions, mentoring, job shadowing, online workshops, video conferences, teleconferences, publications, updates, and webinars), and better enable the Cluster to take advantage of other existing training and educational resources.
- **Work with others within Health Canada to develop and then implement strategies to reduce the level and impact of staff turnover at the national, regional and community levels.**
- **Place a high priority on increasing community ownership of Cluster activities.** Strong community leadership and ownership increases the profile of the programs and issues, lends greater credibility and importance to the messages, helps to increase participation in the programs, and facilitates promotion and delivery of program activities including the awareness and education programs.

I INTRODUCTION

Objective of the Evaluation

The objective of this evaluation is to examine and provide recommendations on the relevance and performance (effectiveness, efficiency and economy in accordance with the Treasury Board of Canada Secretariat’s Policy on Evaluation, 2009) of the Communicable Disease Control (CDC) Cluster within the First Nations and Inuit Health Branch as per requirements of the Financial Administration Act (FAA). The FAA requires all departments to conduct an evaluation of its ongoing Grants and Contribution programs every five years.

The Communicable Disease Control Division of the First Nations and Inuit Health Branch (FNIHB) at Health Canada is engaged in a variety of Grants and Contribution programming at the regional and community level which are related to communicable disease such as, immunization, reporting of notifiable disease, education and awareness projects, and surveillance epidemiology. The CDC cluster is a major element of the Division’s activities and consists of three program delivery areas that focus on detection, prevention, and control of communicable diseases in First Nations and Inuit communities:

- Immunization (Vaccine Preventable Diseases and Immunization);
- Tuberculosis (Airborne and Respiratory Diseases); and
- HIV/AIDS (Blood-Borne and Sexually Transmitted Infections).

Table 1 - List of Related Evaluation Issues and Questions

Evaluation Issues	Evaluation Questions
Relevance	<ul style="list-style-type: none"> - In what way are the CDC Cluster activities and outcomes consistent with federal government priorities? - How are the CDC Cluster programs consistent with current federal government roles and responsibilities? - In what way does the CDC Cluster clearly address identified health needs for FN/I?
Performance	<ul style="list-style-type: none"> - In what manner and to what extent has the CDC Cluster been successful in increasing and improving collaboration and networking? - In what manner and to what extent are the surveillance systems associated with the CDC cluster producing timely and relevant information? - In what manner and to what extent has the CDC Cluster contributed to improved prevention, control, and treatment of communicable diseases in FN/I communities? - In what manner and to what extent has the CDC Cluster increased community ownership and capacity to detect, report and combat communicable diseases?

Evaluation Issues	Evaluation Questions
	<ul style="list-style-type: none"> - In what manner and to what extent has the CDC Cluster contributed to the achievement of the longer-term outcome of improved health status of FN/I individuals? - Are there unintended consequences (positive and negative) and broader results occurring as a result of carrying out CDC cluster programs?
Efficiency and Economy	<ul style="list-style-type: none"> - What factors are contributing to or constraining the efficiency of the CDC Cluster? - In what manner and to what extent has the type of transfer payment impacted expected results? - What are the benefits of the cluster approach and the opportunities for improvement?

The evaluation will provide guidance for program renewal and future policy/program options and directions. The evaluation will provide information that will be used to inform Health Canada regarding the extent to which the CDC Cluster effectively achieved outcomes relevant to First Nations and Inuit populations and to Government of Canada priorities and in supporting accountability to Parliament and Canadians.

Scope and Timing

The mandate of the CDC Cluster is to serve First Nations populations living on-reserve and Inuit communities south of the 60th parallel and, as such, only those communities (on-reserve, below 60th parallel) fall under the scope of this evaluation. The evaluation focuses on the CDC Cluster activities implemented between 2005/06 to 2007/08, as well as 2008/09 where data was available, through the three program areas: Immunization, Tuberculosis and HIV/AIDS.

The evaluation was conducted between April 2009 and April 2010. The initial RFP indicated the evaluation period was from 2005/06 to 2007/08 and given that the evaluation was conducted between April 2009 and April 2010, where possible, data for 2008-2009 was included.

Outline of the Report

The first three sections of this report provide the background and methodology for the evaluation study. Sections IV to VI of this report provide the findings on the evaluation regarding the relevance and performance of the Cluster. Section VII summarizes the major conclusions of the evaluation and the recommendations are presented in Section VIII.

II BACKGROUND

This section provides an overview of the First Nations and Inuit Health Branch (FNIHB) cluster approach, the program logic model, and a description of the target groups and then summarizes the activities of the three program areas within the CDC Cluster, the delivery structure, and funding.

FNIHB and the Cluster Approach

On March 16, 1988, the Federal Government Cabinet approved the health transfer policy framework for transferring resources to Indian control for Indian health programs delivered by the federal government south of the 60th parallel. The primary objective was to support increased First Nations and Inuit management of health programs and services. The following year, Treasury Board approved the financial authorities and resources to support pre-transfer planning and community health management structures, opening the door for funding recipients to consider taking on new approaches to managing their health programs.

The same year, the Transfer Program was introduced across the country. It focused on planning as a mechanism to coordinate funded programs and it provided additional funds for management structure. The Transfer Program was conceived as a developmental approach to capacity building, centred on the concept of self-determination in health. The Transfer process involves gradually moving control of resources and responsibility for community health services and programs into the hands of First Nations and Inuit communities. The process includes the transfer of knowledge, capacity, and funding so that communities can manage and administer their health resources based on their own community needs and priorities.

Each community that entered into a Transfer Contribution Agreement chose to do so and took responsibility for health programs at its own pace, determined by its own circumstances and capacities. At the same time, those communities choosing not to enter into a Transfer Agreement could continue with FNIHB direct service delivery and/or enter into other types of contribution agreements to deliver selected programs.

The FNIHB approach to contribution funding has evolved over time to facilitate self-determination for recipients. Historically, funding was allocated to programs and services with specific program-based objectives. The emphasis was on the terms and conditions under which FNIHB would supply funding and the relationship between FNIHB and a recipient emphasized monitoring and compliance.¹

¹ FNIHB Contribution Funding Framework: Overview. Health Canada, FNIHB, Business Planning and Management Division, Health Funding Arrangements. April 2007.

Over time, greater emphasis has been placed on community determined priorities and objectives for their health programs. The new Contribution Funding Framework is based on a developmental health planning approach whereby FNIHB and individual communities or recipients reach agreement on a range of services that meet the unique needs of the community and on a funding arrangement that is in line with the community's capacity in financial and program management.

In order to ensure better integration within and across federal departments, FNIHB has established a more strategic 'cluster' approach to the management of its program authorities. Under this cluster approach, FNIHB groups together existing programs, services and/or activities that share common target groups, objectives and expected outcomes. An overall goal of the cluster approach is to contribute to sustainable health services and programs for FN/I communities and to improve their access to and control over their health system. A major objective of the cluster approach is to realize greater opportunities for collaboration, coordination, and integration across the program areas.

Another goal was to enhance the planning, monitoring, reporting and evaluation functions, requirements and practices in order to focus more on results. This entailed streamlining the demands and improving the credibility, value and utilization of the performance information generated. Such changes also supported integrated community planning, reporting and information management practices.

The flexibility built through the new terms and conditions and the new program cluster groupings ensures that programs and services are more targeted on the actual needs of recipients. Recipients can also plan and organize their programs and services based on the outcomes that they want to achieve within each program cluster. Another benefit is that the contribution funding flexibility is based on the recipients' capacity to plan and manage programs. The frequency of providing information for the Reporting Template has also been reduced to annual.

The three program and service areas within the Communicable Disease Control (CDC) Cluster are integrated at the FN/I community level. This integration is intended to facilitate: 1) a comprehensive approach to program delivery; 2) a simplified delivery and administration of programs; and 3) increased transparency.

Cluster Logic Model

The logic model developed for the CDC Cluster outlines activities, outputs and program outcomes for program design/management and program delivery. One component of the CDC Cluster evaluation is to assess the effectiveness with which the CDC Cluster activities have resulted in the intended outcomes as stipulated in the CDC Cluster logic model.²

The CDC Cluster logic model is based on:

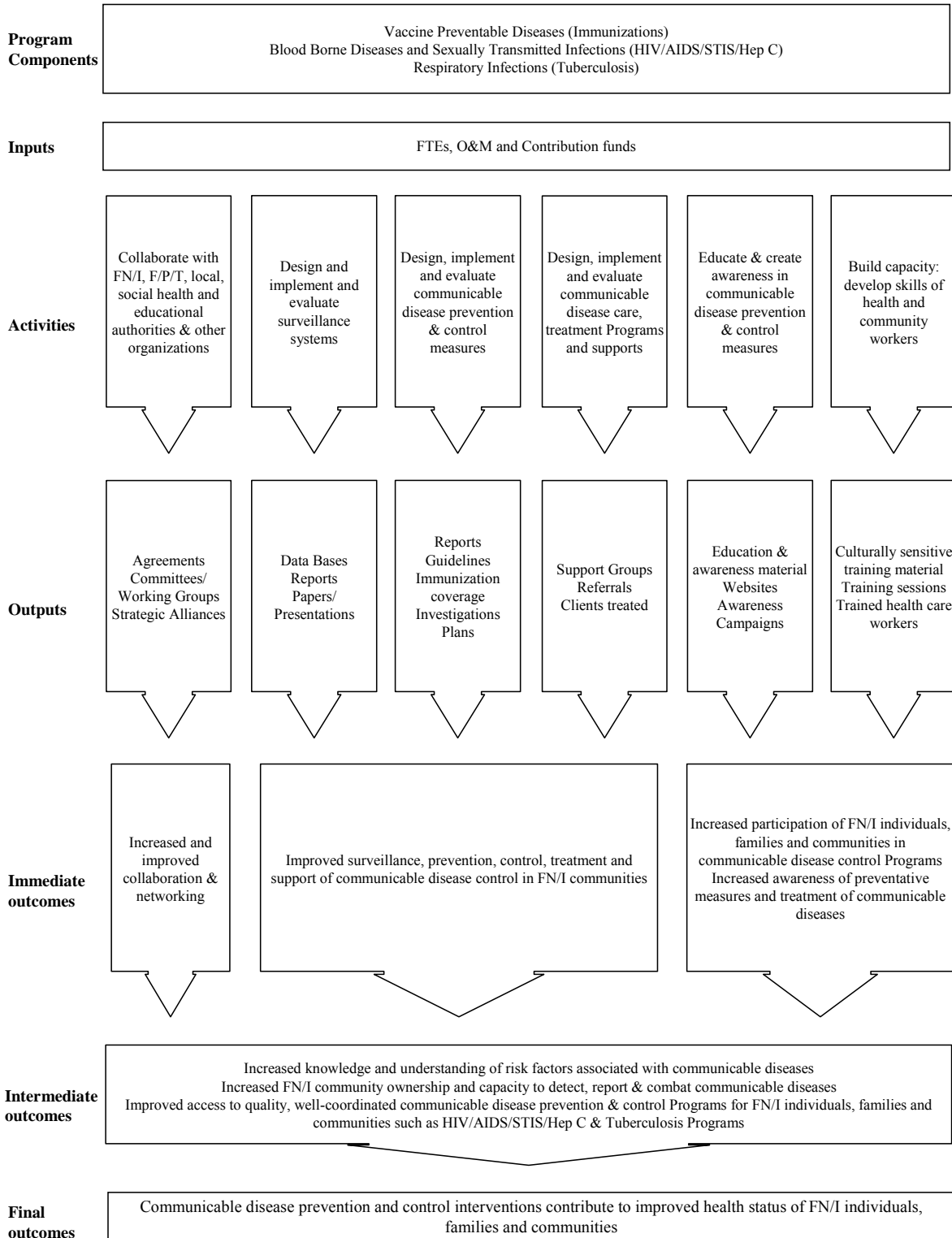
² Communicable Disease Control (Health Protection) Cluster Results-based Management and Accountability Framework (RMAF), Health Canada. 2007, pp 6-12

- There is a strong need for **collaboration** between national, provincial and regional governmental and non-governmental health professionals;
- Ongoing, routine and timely **surveillance** at the community, regional, and national levels is vital for effective disease control and prevention, through early identification of potential outbreaks and emerging trends;
- Design and implementation of **prevention and control** measures consistent with communicable disease control requirements of provincial health legislation will benefit FN/I clients and communities through improved surveillance, prevention, control, treatment and support of communicable disease control;
- **Treatment programs and supports** are also necessary short term precursors to improved surveillance, prevention, control, treatment and support of communicable disease control in FN/I communities;
- Provision of holistic and appropriate culturally sensitive **education and awareness** resources will lead to increased participation of FN/I individuals, families and communities in communicable disease control programs and increased awareness of preventative measures and treatment of communicable diseases; and
- It is necessary to **build the capacity of FN/I community health care workers** through the provision of culturally sensitive training materials and sessions which in turn will lead to increased participation of FN/I individuals, families and communities in communicable disease control programs and increased awareness of preventative measures and treatment of communicable diseases.

The outputs for each activity area are based on:

- Collaboration: agreements, committees/working groups and strategic alliances;
- Surveillance: databases, reports and papers/presentations;
- Prevention and control measures: reports, guidelines, immunization coverage data, investigations and plans;
- Treatment programs and supports: support groups, referrals, and clients treated;
- Education and awareness: materials, websites, and awareness campaigns; and
- Capacity building: culturally sensitive training material; training sessions, and trained health care workers.

Figure 1 - Communicable Disease Control Cluster Logic Model



In the immediate term, it is expected that the key activities will create three sets of outcomes: (i) improved collaboration and networking among CDC stakeholders; (ii) improved surveillance, prevention, control, treatment and support of communicable disease control in FN/I communities, and (iii) increased participation of FN/I individuals, families and communities in CDC Programs as well as increased awareness of preventative measures and treatment of communicable diseases.

In the intermediate term, FN/I communities should experience: (i) increased knowledge and understanding of risk factors associated with communicable diseases, (ii) increased FN/I community ownership and capacity to detect, report and combat communicable diseases; and (iii) improved access to quality, well coordinated communicable disease prevention and control programs for FN/I individuals, families and communities (e.g., HIV/AIDS and Tuberculosis programs).

The final outcome is expected to be that communicable disease prevention and control interventions contribute to improved health status of FN/I individuals, families and communities. This planned long-term result includes the acknowledgement that health status is influenced by additional socio-economic factors beyond the control of Communicable Disease Control.³

Overview of the CDC Programs and Activities

Despite improvements, the health status of First Nations remains poor compared to other Canadians. While life expectancy for Canadians overall (in 2005) was 78.0 for males and 82.7 for females, it was lower by up to 7.6 years for Registered Indians (70.4 for males and 75.5 for females)⁴ and by more than 12 years for Inuit (64.4 for males and 69.8 for females)⁵. The infant mortality rate among First Nations has been declining but it also remains higher than the Canadian rate. Overall, within the First Nations and Inuit population, there are:

- Elevated rates of vaccine preventable diseases and lower immunization rates;
- Higher incidences of tuberculosis (sporadic outbreaks); and
- Higher rates of HIV/AIDS cases.

³ Communicable Disease Control (Health Protection) Cluster Results-based Management and Accountability Framework (RMAF). Health Canada, 2007, page 13.

⁴ <http://www4.hrsdc.gc.ca/3ndic.1t.4r@-eng.jsp?iid=3>

⁵ Life expectancy in the Inuit-inhabited areas of Canada, 1989 to 2003 (<http://www.statcan.gc.ca/pub/82-003-x/2008001/article/10463/t/4060758-eng.htm>)

The Communicable Disease Control (CDC) Cluster was established in 2005 to help address these health status gaps and to facilitate better integration within and across federal departments and support building commonality and complementary FNIHB programs. The CDC Cluster includes an approach to FN/I health based on a holistic perspective incorporating the spiritual, cultural, physical and social needs of individuals, families and communities in the provision of health care.⁶ In addition to the rationale that a holistic approach is necessary, the CDC Cluster is also based on the premise that partnerships with FN/I organizations and FN/I communities and with provincial and territorial health organizations will lever existing capacity and help to ensure the effectiveness of health funding arrangements. Without the CDC Cluster, there would not necessarily be such an emphasis on partnerships or on an integrated and holistic approach.

The mandate of the CDC Cluster is to assist eligible FN/I recipients in delivering communicable disease control Programs and services at the national, regional and community levels. The CDC Cluster consists of three major delivery areas:

- Vaccine Preventable Diseases and Immunization (Targeted Immunization Strategy);
- Blood-borne and Sexually Transmitted Infections (HIV/AIDS/STIS/Hep C Strategy);
and
- Airborne and Respiratory Diseases (Tuberculosis Strategy).

The characteristics and rationale of each of the three Programs are summarized below.

Vaccine Preventable Diseases and Immunization Program

The mandate of the Vaccine Preventable Diseases and Immunization Program is to increase immunization coverage rates and ensure access to newly recommended vaccines. Historically, the FN on-reserve population has had 20% lower estimated immunization rates than the general population and higher rates of vaccine-preventable diseases, in some cases leading to more hospitalization than in the general population (e.g., Aboriginal children under one year of age are hospitalized 80 times more frequently with chickenpox than non-Aboriginal children).⁷

The Vaccine Preventable Diseases and Immunization Program utilized the Targeted Immunization Strategy (TIS), developed by FNIHB, as a guideline to support national and regional activities on immunization for FN children on reserve. The objectives and core activities of the Target Immunization Strategy are summarized in Table 2.

⁶ Communicable Disease Control (Health Protection) Cluster Results-based Management and Accountability Framework (RMAF). Health Canada, 2007, page 5.

⁷ Health Canada website: <http://www.hc-sc.gc.ca/ahc-asc/activit/strateg/fnih-spni-eng.php#immuni>

Table 2 - Targeted Immunization Strategy – Objectives and Activities

Objectives	Activities
Targeted Immunization Strategy	
<ol style="list-style-type: none"> 1. Improve the coverage rates of routine immunizations in the targeted population, towards the international and Canadian target of 95%. 2. Implement newly recommended vaccines programs (varicella, conjugate pneumococcal, conjugate meningococcal C) for the targeted population. 3. Improve data and understanding of immunization coverage rates, the incidence of vaccine preventable diseases, barriers to immunization and best practices in implementation. 	<ol style="list-style-type: none"> 1. Collaboration <ul style="list-style-type: none"> • Collaboration, partnerships, networks and agreements with federal, provincial, territorial as well as First Nations and Inuit stakeholders in the development and implementation of the strategy and to provide high quality immunization services. 2. Promote Improved Surveillance Data Collection and Ongoing Evaluation <ul style="list-style-type: none"> • Activities that enhance and support development of the technical strategies required to implement a surveillance system 3. Public Health Education <ul style="list-style-type: none"> • Activities that inform, educate, and create awareness on vaccine-preventable diseases, immunization (VPDI) and best practices and strategy development. 4. Capacity <ul style="list-style-type: none"> • Activities that enhance and support development of health care workers' knowledge and skills and immunization competencies.

The TIS was intended to increase immunization coverage rates for publicly funded vaccines and to introduce new vaccines (e.g., pneumococcal, meningococcal, and varicella). It should be noted that provincial governments determine, based on National Advisory Committee on Immunization recommendations, the schedule of publicly funded immunizations for their particular province. As a result, there are differences in schedules between the provinces, and thus FNIHB Regions. Throughout the course of the Targeted Immunization Strategy, considerable national work has been undertaken towards increasing collaboration between jurisdictions in the realm of immunization⁸. FNIHB has been an active partner in this work, participating as a member of the Canadian Immunization Committee, National Advisory Committee on Immunization, and various subcommittees and task groups.

Airborne and Respiratory Diseases Program

The mandate of the Airborne and Respiratory Diseases Program is to reduce the incidence of the TB disease in First Nations and Inuit communities (in keeping with the National goal of 3.6 cases per 100,000 by 2015). The Tuberculosis Program is delivered through primary health care services at the community level. Primary detection activities involve the identification of active TB cases, in addition to contact tracing and TB screening for individuals who have had documented contact with active TB patients. Surveillance activities include collection, analysis and dissemination of information about TB. TB control and prevention activities are also funded through community-based research projects. Community health education is based on the recognition of the relationship between TB incidence, nutrition, and housing conditions. Within

⁸ National Immunization Strategy, Final Report. Available from http://www.phac-aspc.gc.ca/publicat/nis-sni-03/pdf/nat_imm_strat_e.pdf

this program, there is an emphasis upon building community health resources amongst health professionals, individuals diagnosed with TB, and other community members. The objectives and core activities of the TB Program are summarized in Table 3.

Table 3 - FNIHB National TB Program - Objectives and Activities

Objectives	Activities
FNIHB National TB Program	
<ol style="list-style-type: none"> 1. Reduce incidence of TB disease in First Nations and Inuit communities, to 3.6 cases per 100,000 by 2015. 2. Detect and diagnose TB disease among those exposed to infectious cases and prevent the spread of the disease to other people in the community. 3. Provide treatment to those with active and latent disease, prevent the emergence of drug resistance and achieve life-time control of the individuals' TB disease. 4. Support health care workers and communities in the prevention and control of TB disease at the community level, by supporting awareness activities, and promoting understanding of TB. 	<ol style="list-style-type: none"> 1. Collaboration <ul style="list-style-type: none"> • Partnerships with federal partners, other FNIHB service programs, provincial government health authorities, as well as First Nations and Inuit health authorities • Increase access to support and treatment for TB to First Nations and Inuit communities 2. Enhanced TB Surveillance and Research <ul style="list-style-type: none"> • Community-based research projects • To enhance surveillance, research, prevention, treatment and support of TB control in First Nations and Inuit communities 3. Design, Develop, Implement, Coordinate and Evaluate TB Program <ul style="list-style-type: none"> • Education and training of individuals such as health professionals, patients, and community members • To help control and prevent TB by facilitating the development of and implementation of operational policies regarding TB and activities that promote program evaluation 4. Community Education and Awareness <ul style="list-style-type: none"> • Development of education and awareness material along with community education campaigns • To increase awareness of TB as well as the participation of First Nations and Inuit communities in related activities (also involves improving capacity to deliver services) 5. Build Capacity <ul style="list-style-type: none"> • TB awareness activities and provision of relevant training opportunities • To develop capacity within First Nations and Inuit communities and increase participation of health professionals, community leaders and community members in prevention education programs

Blood-Borne and Sexually Transmitted Infections Program

The mandate of the Blood-Borne and Sexually Transmitted Infections Program (HIV/AIDS/STIS/Hep C Strategy) is to provide education, prevention and related health services to First Nations on reserve and some Inuit communities. The overall goal is to work in partnership with First Nations and Inuit communities south of the 60th degree parallel to prevent HIV/AIDS transmission and support the care of those impacted by HIV and AIDS. This involves the development and delivery of community-based HIV/AIDS/STIS/Hep C prevention, education and awareness interventions in on-reserve First Nation communities. The objectives and core activities of the HIV/AIDS Program are summarized in Table 4.

Table 4 - HIV/AIDS/STIS/HEP C Strategy – Objectives and Activities

Objectives	Activities
HIV/AIDS/STIS/Hep C Strategy	
<ol style="list-style-type: none"> 1. Increase knowledge of the epidemic within First Nations on-reserve through improved community-based knowledge development, improved analysis of surveillance data, and improved translation of knowledge into practice. 2. Increase the availability of evidence-based HIV/AIDS/STIS/Hep C interventions based on analysis of regional project results, trends in epidemiological data, and research findings generated through other Aboriginal-specific funding streams under the Federal Initiative (FI) to address HIV/AIDS/STIS/Hep C in Canada. 3. Increase awareness and reduce the stigma within communities to promote testing, access to prevention, education and support, and supportive social environments for those vulnerable to and living with HIV. 4. Strengthen partnerships within FNIHB and provincial governments in order to increase access to care and support for First Nations living with HIV/AIDS. 5. Increase effective collaboration of current and new partners towards the achievement of a coordinated and integrated response to HIV/AIDS at a regional, national and international level. 	<ol style="list-style-type: none"> 1. Collaboration <ul style="list-style-type: none"> • Partnerships with federal partners, other FNIHB service programs, provincial government health authorities, as well as First Nations and Inuit health authorities. • To increase access to care and support for First Nations and Inuit living with HIV/AIDS 2. Knowledge Development and Dissemination <ul style="list-style-type: none"> • Activities that lead to programming based on best practices and evidence-based analysis • Knowledge resources developed and disseminated • Leading to improved HIV/AIDS surveillance data analysis 3. Program Design and Implementation <ul style="list-style-type: none"> • Activities that facilitate the development and implementation of operational policies regarding HIV/AIDS • Activities that promote program evaluation 4. Prevention Education <ul style="list-style-type: none"> • Activities that facilitate the development of primary and secondary prevention activities for First Nations and Inuit vulnerable to and/or living with HIV/AIDS 5. Capacity Building <ul style="list-style-type: none"> • HIV/AIDS awareness activities and provision of relevant training opportunities • To develop capacity within First Nations and some Inuit communities • To increase participation of health professionals, community leaders and community members in prevention education programs

Target Groups

The key target groups for the CDC Cluster are First Nations people living on reserve and Inuit communities south of 60°. The demographic profile of the FN/I population in Canada includes the following characteristics:

- 623,780 Registered Indian population (299,970 on reserve and 323,810 off reserve, 2006 census)⁹;
- 50,480 Inuit population¹⁰;
- 615 First Nations communities¹¹;
- 53 Inuit communities¹²;

⁹ Statistics Canada. 2006 Census Data Products Aboriginal Peoples

¹⁰ Statistics Canada, The Daily, January 25, 2008. "Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census". <http://www.statcan.gc.ca/daily-quotidien/080115/dq080115a-eng.htm>.

¹¹ Indian and Northern Affairs Canada. <http://www.ainc-inac.gc.ca/ap/fn/index-eng.asp>

- 50% of First Nations are under age 24¹¹;
- 56% of Inuit are under age 24¹¹;
- An estimated 40% of First Nations people live on reserve¹³.
- 90% of First Nations communities have a population less than 1,000¹⁴;

The Aboriginal population has grown faster than the non-Aboriginal population, increasing nearly six times faster than the non-Aboriginal growth rate between 1996 and 2006, with the fastest gain in population among those who identified themselves as Métis.¹⁵

Relatively low educational attainment, low income and high unemployment rates are characteristics of the target groups and are also recognized as determinants of poor health. Compared with the overall Canadian population, First Nations had elevated rates of pertussis (2.2 times higher), rubella (7 times higher) and shigellosis (2.1 times higher) for the year 2000.¹⁶ In 2004, the tuberculosis incidence rate among Registered Indians (27.5 per 100,000 population) was 5.5 times greater than the Canadian rate (5.0 per 100,000 population) and 30.6 times greater than the rate of Canadian-born non-Aboriginals (0.9 per 100,000 population)¹⁷. Aboriginal people are also over-represented in the HIV epidemic in Canada. Whereas Aboriginal people make up only about 3% of Canada's population, they represent 5% to 8% of all prevalent HIV infections. The proportion of new HIV infections in 2005 attributed to injection drug users was 53% for Aboriginal Canadians, which is much higher than among all Canadians (14%).¹⁸

Delivery Structure

All three program areas within the CDC Cluster function across three main levels: national, regional and community. The national level (HQ) focuses on coordination and working in collaboration with national First Nations organizations and regions, and also leads the strategic policy development and program planning for the prevention, promotion, and treatment programs. More specifically, HQ is responsible for:

- The program framework design;
- The national program funding allocation;

¹² Power Point presentation by Eric Costen, Director, Mental Health and Addictions, Community Programs Directorate, Health Canada, titled "First Nations and Inuit Health Branch," January 2009, slide #14.

¹³ Statistics Canada. 2008. The Daily. <http://www.statcan.gc.ca/daily-quotidien/080115/dq080115a-eng.htm>

¹⁴ Health Canada, Statistical Profile on the Health of First Nations in Canada, March 2003.

¹⁵ Statistics Canada, The Daily, January 25, 2008. "Aboriginal Peoples in Canada in 2006: Inuit, Métis and First Nations, 2006 Census". <http://www.statcan.gc.ca/daily-quotidien/080115/dq080115a-eng.htm>.

¹³ Health Canada, Statistical Profile on the Health of First Nations in Canada, March 2003.

¹⁷ Public Health Agency of Canada. Tuberculosis in Canada, 2004: Special report of the Canadian Tuberculosis Committee - Tuberculosis among the Aboriginal Peoples of Canada, 2000 to 2004. Tuberculosis Prevention and Control, Centre for Infectious Disease Prevention and Control; 2007.

¹⁸ HIV/AIDS Epi Update. Public Health Agency of Canada. 2007, page 47. http://www.phac-aspc.gc.ca/aids-sida/publication/epi/pdf/epi2007_e.pdf.

- The creation and continuation of national programming coordination and communication;
- National program monitoring, data analysis, reporting and evaluation;
- The provision of advice and/or guidance on program delivery; and
- Working in partnership with FN/I at the national level to ensure the effective delivery of communicable disease control programming.¹⁹

The regional level facilitates delivery in the communities through managing and monitoring Contribution Agreements (CAs), whereby recipients receive funding as a transfer payment in order to implement and deliver programs and services in the communities. Regional Offices also provide an advisory role for program policy activities.

Recipients of CAs include FN/I communities and associations; Canadian non-governmental and voluntary associations, educational institutions and hospitals; local, municipal, provincial and territorial governments, agencies and health authorities.

Resources

This section gives an overview of the total resources allocated from the CDC cluster based on data from Performance Reports for 2005-2006 to 2008-2009.

Table 5 – Total Financial Resources – Communicable Disease Control Cluster

Financial Resources – Communicable Disease Control Cluster (final reporting), in Millions of dollars				
	2005-2006	2006-2007	2007-2008	2008-2009
Targeted Immunization Strategy	5.7	8.2	8.2	8.2
HIV/AIDS Strategy	4.4	5.1	5.6	6.4
FNIHB National TB Program	3.7	5.0	5.6	8.7
Cluster Total	\$13.8	\$18.3	\$19.4	\$23.3

Funding By Community

This section provides an overview of funding by community, including the total number of CAs, the number of communities receiving funding and multiple CAs, and the number of CAs by funding model.

¹⁹ Health Canada, Communicable Disease Control (Health Protection) Cluster Results-based Management and Accountability Framework (RMAF) 2007, page 9.

As shown in Table 6, most of the CAs have been for the HIV/AIDS program area. Overall, the number of CAs has grown from 359 in 2005-06 to 429 in 2008-09. It should be noted that there is no formal definition of a community. The figures do not necessarily represent distinct Bands, Tribal Councils or residential communities. Some agreements will provide services to multiple communities.

Table 6 - Total Number of Contribution Agreements²⁰

Program Area	2005-2006	2006-2007	2007-2008	2008-2009
Vaccine Preventable Diseases (VPD) – Immunization	45	69	83	70
Air Borne Diseases – Tuberculosis	21	24	30	35
Blood Borne Diseases and Sexually Transmitted Infections – HIV/AIDS	293	313	319	324
CDC CLUSTER TOTAL	359	406	432	429

Contribution agreements have been signed between 2005-06 and 2008-09 with a wide variety of different types of organizations including communities (e.g., Bands), associations, educational institutions and provincial organizations.

Funding Models

FNIHB provides CDC support and services to the communities through contribution agreements. Services are not provided directly by FNIHB but rather FNIHB is a funder of services and support. The following categories of recipients are eligible for funding under the Contribution Funding Framework:

- First Nation Bands, Districts, Tribal Councils and Associations
- Inuit Associations and Hamlet Councils
- First Nation and Inuit organizations, including non-profit corporations
- Non-governmental and voluntary associations and organizations, including non-profit and business corporations (for-profit organizations on a case-by-case basis)
- Educational institutions and hospitals
- Local, municipal, provincial and territorial governments and agencies
- Individuals (proposed to be limited to research purposes).

²⁰ Contribution Agreement Database Provided by Health Canada

Before the new funding models were introduced in 2005, FNIHB had three types of Consolidated Contribution Agreements – General, Integrated, and Transfer Contribution Agreements – each with its own program authority. With these agreements, a recipient must choose only one and that choice determines the financial arrangements a recipient must follow across all of the programs and services it delivers under that agreement.

With Treasury Board approval of new FNIHB program authorities in 2005, FNIHB introduced four new funding models²¹ – Set, Transitional, Flexible and Flexible Transfer. One or more of these funding models can be accommodated in a single funding agreement with each recipient. This feature allows funding arrangements structured to accommodate the financial and reporting requirements of different program clusters and gives built-in flexibility to address the unique levels of managerial capacity of a recipient, as well as changes in that capacity during the period of an agreement. The funding model used to support the delivery of a specific program is assessed separately for each recipient. The model used for a program in a recipient's Agreement is based on its past performance regarding that program, as well as the capacity demonstrated during the health planning process.

The four funding models vary in:

- the type of plan required,
- the extent of involvement of FNIHB in program management and administration,
- flexibility to move funding within and among Program Authorities,
- the ability to use a surplus and/or to carry forward unspent funds from one fiscal year to the next,
- duration of agreement, and
- financial and activity reporting requirements.

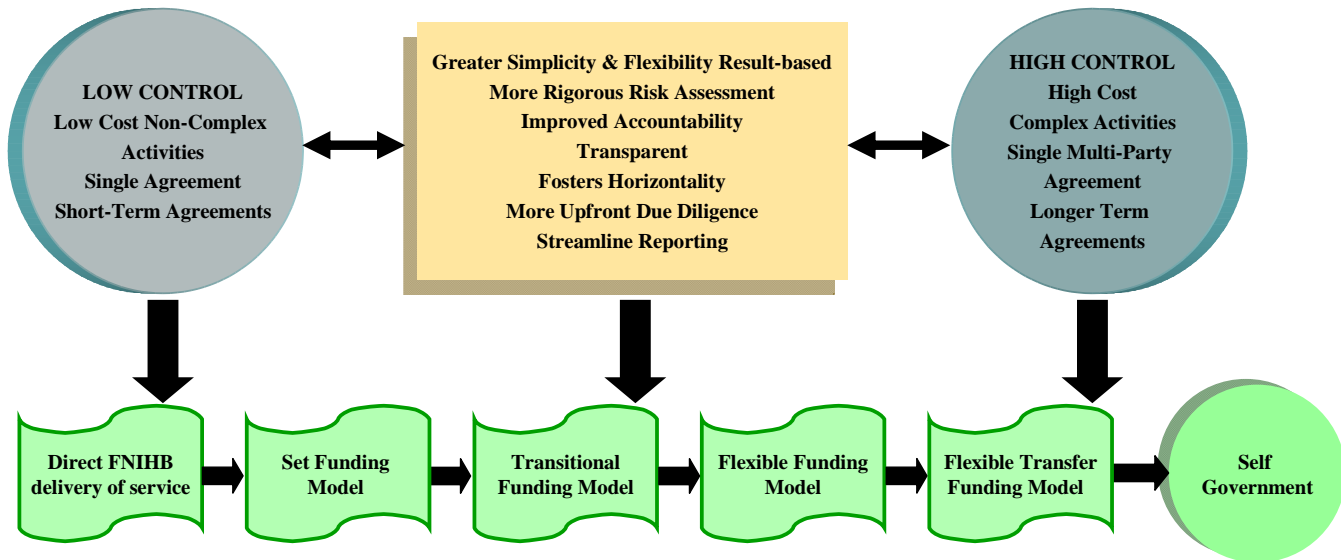
Based on the new funding models, the CDC Cluster has taken a fairly flexible approach in delivering the program activities. Regional offices have flexibility around decisions to adapt the program delivery to the regional and local conditions. Therefore, the levels of control, flexibility, reporting requirements, and accountability vary among regions. Discussions and consultations between FNIHB and the eligible FN/I community/organization are fundamental in deciding the best program delivery approach that fits the community needs.

The funding models are meant to be phased in over time through a capacity building approach based on community readiness to take on increasing levels of responsibility. Figure 2 illustrates the continuum of control available to a recipient through the various levels and mechanisms of funding.²²

²¹ Communicable Disease Control (Health Protection) Cluster Results-based Management and Accountability Framework (RMAF). Health Canada. 2007.

²² FNIHB Contribution Funding Framework: Overview. Health Canada, FNIHB, Business Planning and Management Division, Health Funding Arrangements. April 2007. Page 5.

Figure 2 - Recipients' Continuum of Control



Source: FNIHB Contribution Funding Framework: Overview, 2007. (Page 7)

In the Set funding model, the recipient must use the funding as it is described in the contribution agreement. There is limited flexibility over re-directing funds. The Transitional model allows re-allocation of funding between authorities and also the transfer of unused amounts to the next fiscal year with permission from the Ministry. The Flexible funding model allows recipients to re-design new programs and redirect funding to the other programs with the condition that the mandatory program components set by the contribution agreement have been delivered. The Flexible Transfer model gives complete flexibility to the recipient over program delivery decisions.²³

The recipient is responsible for ensuring that the programs are delivered in accordance with the Terms and Conditions of the Contribution Agreement.²⁴ FNIHB Headquarters and Regional offices, however, share the responsibility with the FN/I communities to design, monitor, and report on CDC cluster programs.

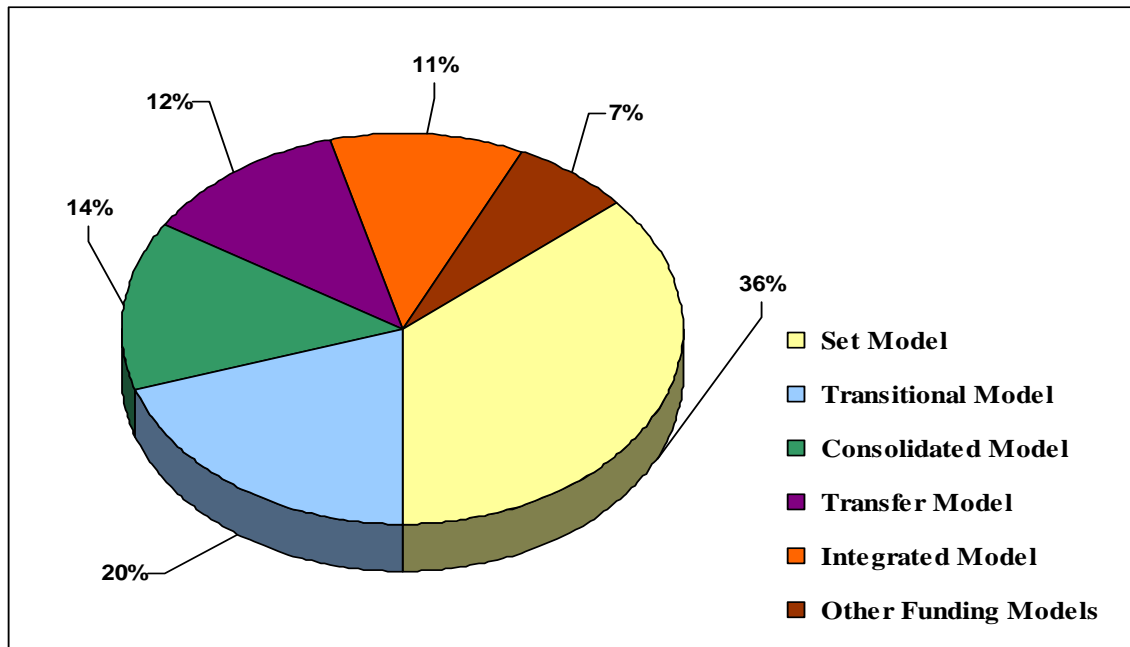
The Set funding model has been FNIHB's major approach for allocating resources in the communities. In comparison to all other regions, the FNIHB offices in Quebec and Manitoba utilized the Set funding model more frequently, whereas offices in Saskatchewan and the Pacific Regions tended to use Transitional, Flexible and Flexible Transfer models more frequently than the Set model.

²³ Communicable Disease Control Cluster Evaluation Framework. Health Canada. 2008

²⁴ CDC Cluster RMAF. Health Canada. 2007. Page 48.

For 2009, figure 3 indicates that the highest number of CAs were for the “set” funding model (154 out of 429), followed by the “integrated” model, the “consolidated” model, the flexible “transfer” model, and the “transitional” model. In figure 3, the Consolidated Model of a Contribution Agreement (referring to those CAs signed before 2005), as earlier noted, is subdivided into General, Integrated and Transfer types and, as Contribution Agreements are sometimes arranged over a number of years, a combination of older and newer CA models are listed in this figure (3).

Figure 3 - Percentage of Funding Allocated by Type of Contribution Agreement – 2009



The funding arrangements for the Contribution Agreements are determined recipient by recipient and vary based on criteria related to demonstrated capacity in program planning, management and delivery, financial management, and administration. Funding provided for implementation of the Health Plan includes both program funding and management funding. For the program funding, a funding arrangement may utilize more than one funding model depending on the health programs included and the Recipient’s past performance in managing each one. For example, the Flexible funding model could be applied to most of the programs but the Set model might be used for a specific program in which the recipient has experienced challenges in meeting program requirements or the program terms and conditions do not allow flexibility. If the Recipient has not demonstrated a major improvement in managing that program during the health planning process, then the Set model would apply for a certain period, giving the Recipient time to build their capacity to manage the program successfully.

As a result, the Recipient would have limited flexibility in the allocation of funds provided for that program. The Transitional, Flexible and Flexible Transfer funding models give greater flexibility to allocate funds. This flexibility comes with increased responsibility for the management and delivery of programs and services. Through carrying out the planning process,

the Recipient should have an idea of what will be required to manage programs and services effectively, and how much additional responsibility it is capable of taking on. The Regional Office discusses the funding models with the Recipient and recommends the most appropriate funding arrangement. Regardless of the level of flexibility and control provided in the Agreement, the Recipient must meet various requirements for program activities and reporting to remain accountable to its members and to funders. All Recipients are required to complete, as part of their reporting requirements, the Community-based Reporting Template (CBRT) which form part of their Agreement, and to prepare financial reports. Recipients are expected to examine and report on how successful they are in managing health services and to determine any changes in health status.

To this end, all recipients working with Flexible and Flexible Transfer funding models are required to carry out evaluations every five years. Health planning continues into the Implementation and Evaluation Phase. The Recipient of funding under a Health Funding Consolidated Contribution Agreement regularly reviews and updates its health plan in discussion with its members and the Region. Updates are based on findings of the Recipient's annual reviews and 5-year evaluations and reflect changes in priority health issues, program activities, budget, and management and administration. Also, recipients with a Health Plan keep other aspects of their plan current including the Training and Evaluation Plans, as well as certain plans and policies that must be kept current with changes in federal or provincial legislation and recipient circumstances. Recipients with Multi-Year Program Plans or Multi-Year Work Plans also update their plans at a minimum annually in conjunction with their annual review.

Linked to the CA funding models is the necessity of reporting program results and this is accomplished by the use of the CBRT and the regional progress reports. Prior to the introduction of the CBRT in 2008-2009, the CDC Cluster used regional progress reports to report on the performance of its programs.

The regional progress report is a management reporting tool that is sent out to regional CDC coordinators annually and is used to measure, monitor, evaluate and report on programs for decision-making purposes. Every three years the data collected through a regional progress report is rolled up into a Performance Report and submitted to TBS to meet CDC's ongoing commitment of reporting on performance.

Introduced for the reporting period of 2008-2009, the CBRT is a mandatory annual reporting requirement for contribution agreement recipients. The purpose of the reporting template is to consolidate reporting requirements and to reduce the burden of reporting that is currently placed on recipients, by eliminating individual program reports and reducing the frequency of reporting. The CBRT structures report by program clusters and not by individual programs.

The CBRT enables recipients to easily identify all of the information needed for collection based on the programs they deliver. This will stabilize reporting over time and limit the number of ad hoc requests from Health Canada. The template could also eventually be adapted for recipients to report electronically. The reporting template consists of all the required indicators for reporting on performance, as opposed to several individual program reports with different program indicators. The recipient is responsible for reporting and accountable in accordance

with the terms and conditions of the contribution agreement. The recipient may complete the CBRT for a single community or for multiple communities.

As of May 2010, the CDC Cluster is conducting a renewal of its authorities. As part of this process, the CDC Cluster is revising the CBRT and the regional progress reports to reduce reporting burden on communities as well as streamline both documents to eliminate duplicate questions and ensure that reporting is effective and timely.

III EVALUATION METHODOLOGY

This section describes the evaluation design and methodology.

Methodology, Design and Data Sources

Methods and Procedures

A multi-method approach incorporating qualitative and quantitative methodology was utilized to address the objectives of the evaluation. Information was collected through an online survey, interviews with key stakeholders, administrative file and data reviews, review of financial data and a review of other program-specific data (e.g., annual and quarterly reports, training packages, protocol documents, minutes of conference calls, etc.).

Key Informant Surveys and Interviews

The evaluation data collection was conducted in two phases:

- The first phase consisted of information gathering semi-structured interviews to inform the evaluation design and evaluation issues. Interview participants were identified by HQ and selected based on program and/or cluster expertise. The information gathered was used to refine the evaluation framework.
- The second phase of key informant interviews and surveys gathered CDC Cluster and program specific data, related to the relevance and performance of the CDC Cluster. Key Informants were selected based on roles and responsibilities in CDC and external stakeholders such as First Nations and Inuit organizations. Participation in interviews and/or survey was voluntary. Table 7 demonstrates the breakdown of key informants.

Table 7 - Evaluation Interview Groups and Sampling Methods

Key Informant Group	Key Informants # of samples	Method
Senior Headquarters and Regional Staff	15	The representatives interviewed included directors, advisors, consultants, and regional medical officers (N=15). Participants received questionnaires prior to interviews allowing them adequate time for preparation. 7 interviews were conducted in person and 8 were telephone interviews.
National Program Coordinators and Associated Staff	8	Key Informants included all National Program Coordinators who agreed to participate (N=8). Cluster Interviews were conducted with representatives from the Immunization Program and representatives from the HIV/AIDS/STIS/Hep C and TB Programs. All interviews were conducted via telephone and the representatives received questionnaires prior to interviews allowing them adequate time for preparation.
Regional Coordinators and CDC Regional Managers	21	All Regional Coordinators and Managers were invited to participate (N=27). All interviews were conducted via telephone and participants received questionnaires prior to interviews allowing them adequate time for preparation.
Community Health Staff	247	<p>All community health staff in the First Nations and Inuit communities receiving funding from FNIHB was invited to participate in the survey/interview.</p> <p>Population Description</p> <ul style="list-style-type: none"> • FNIHB Funded First Nations and Inuit Communities: N=595 • Health Directors/Managers: N=311 (Full Time: 268; Part Time: 43) • Community Health Nurses: N=215.5 (Full Time: 156; Part Time: 59.5) • Registered Nurses: 364 and Licensed Practical Nurses: 103.5 • Community Health Representatives: 345.5 (Full Time: 299; Part Time: 46.5) <p>Interview/Survey Respondents</p> <p>FNIHB Funded First Nations and Inuit Communities: n=180</p> <ul style="list-style-type: none"> • Health Directors/Managers: n=32 • Community Health Nurses: n=178 • Community Health Representatives: n=37 • Telephone: 45% Online: 55% <p>The participants received questionnaires prior to interviews allowing them adequate time for preparation.</p>
Other Stakeholders	24	Stakeholders (N=26) were identified by CDC key informants or the CDC Cluster RMAF. 4 in person and 20 by telephone. Of these interviews 4 were done in person and 20 which were done over the telephone. The group consisted of: ministries of health/regional health authorities, associations, coalitions and Aboriginal organizations with various roles such as CEO's, directors, and managers to coordinators, counsellors and educators. All Stakeholders received questionnaires prior to interviews allowing them adequate time for preparation.
Project and Service Delivery Partners	27	The group consisted of organizations contracted by FNIHB to deliver a range of services including program delivery, awareness building activities, specialized projects (e.g., developmental work, workshops, conferences, training), and policy interpretation. The organizations were identified from a list of contribution agreements (N=31). Participants were across all regions and represented organizations such as health associations, tribal councils, community health centres and authorities, as well as national organizations. All interviews were conducted via telephone and participants received questionnaires prior to interviews allowing them adequate time for preparation.

Literature and Document Review

Document Review

The document review included: work plans, progress reports, proposals, Speeches from the Throne, briefing notes, budget announcements, health policy, program frameworks, FN/I health status reports, program related data, contribution agreements, financial information, terms of references, surveillance reports, etc. Information from the document review was synthesized by evaluation issues and evaluation questions.

Literature Review

The literature review included: government statistics, research and surveillance reports related to communicable diseases and this allowed us to identify recent changes in health status among FN/I, prevalence of communicable diseases in FN/I communities, and similar programs undertaken by other government authorities. Information from the literature review was synthesized by evaluation issues and evaluation questions.

Data Analysis and Reporting

Program specific data from the file and document review was analysed and rolled up at the Cluster level. Document and literature review was analyzed by evaluation issue and question. The results were synthesized and included under the appropriate evaluation question.

Contribution Agreement and financial data was extracted from MCCA and SAP. The data was analyzed by region, agreement type, fiscal year, activity and program.

Of note: No weighting was applied in analyzing data. The financial information was not adjusted for inflation.

The data from each of the evaluation methodologies was summarized to address each of the relevant evaluation issues/questions. All the lines of evidence were triangulated to substantiate the conclusions and findings.

Data in many of the tables and figures were derived from an open-ended question and the answers to the question overlapped, resulting in more than 100% responses being recorded in some cases. In addition, for many sets of data (primarily displayed in tables), the most frequent responses were listed but there were many other less frequent responses as the initial question posed to the responders was open-ended and this resulted in responses covering a large number of different activities. All data expressed as percentages have been rounded using significant figures.

Protection Issues and Protocol

All information gathered under this evaluation was subject to both the Access to Information Act and the Privacy Act. Requirements and conditions stipulated in both legislations were followed strictly and respondents and other stakeholders were informed about confidentiality of our communication. An informed consent form statement was included describing the confidentiality and volunteer nature of the participation in the introduction to all questionnaires, letters and/or any other type of communication with all stakeholders contacted within the framework of this evaluation.

Limitations

FNIHB provides CDC support and services to the communities through contribution agreements. Services are not provided directly by FNIHB but rather FNIHB is a funder of services and support.

The four funding models set out in 2005 for the contribution agreements were: Set; Transitional; Flexible; and Flexible Transfer. The Set model gives a recipient the least flexibility and the Flexible Transfer model gives the greatest flexibility. A funding arrangement with a recipient can include one or more of these models, depending on the programs funded and the Recipient's demonstrated capacity to manage them.

The funding models used in an Agreement depend on the programs in the Agreement and the demonstrated capacity of the Recipient to manage each of those programs. The Health Plan is the most comprehensive plan and is the planning requirement for the Flexible and Flexible Transfer funding models. The newest funding models were implemented in FY2008-2009, meaning that any new contribution agreement signed during or after FY2008-2009 would be in accordance with the new Contribution Funding Framework (September 2007).

Except for mandatory programs, most FNIHB reporting requirements are now based on groups of related programs and activities (program clusters) rather than on individual programs. A number of related programs and activities make up each program cluster. Many recipients already organize their programs based on these clusters to simplify their reporting. For most programs, FNIHB reporting requirements are based on indicators that have been developed for these clusters rather than for individual programs. The minimum reporting requirement involves the collection of data and report by using a standardized reporting template. The CBRT is being phased-in starting in 2008-2009 and is mandatory for new contribution agreements.

The CBRT data from 2008-2009 has been collected but the results have not been released at the time when the evaluation was being conducted, therefore the data available for the evaluation is limited. Further, it is premature to assess the impact of the newest funding models and cluster approach as the newest funding models and the data are limited to one year. Not all communities have adopted the newest funding models as some contribution agreements are multi-year agreements, and thus signed when the old funding models were active. The new funding models will be implemented when a new agreement is signed. The CBRT also streamlines reporting and, as a result, may not report the program level details.

Health Canada restructuring has also impacted data collection. FNIHB HQ allocates funding to the regions. The regions are responsible for the contribution agreements and report through the Regions and Programs Branch (RAPB) and not FNIHB HQ. The potential impact can be data inconsistencies, timeliness, data quality, or not reporting what is needed by FNIHB HQ. The intent of the CBRT is to have consistent data, however the nature of the CBRT (mainly output focused and open ended) does not necessarily provide the breadth and depth of data required to report on outcomes. Further, the upcoming Renewals of Authorities performance reporting are currently being developed and the CBRT will be changed to accommodate the new structure.

First Nations and Inuit are striving to improve the level of health in their communities by managing their own prevention, health promotion and treatment programs. The FNIHB approach to First Nations and Inuit health is distinguishable by its strong emphasis on a holistic perspective, including not only broad social and economic determinants of health, but also cultural distinctions that play an important role in maintaining health at the level of the individual, the family and the community. Integral to such an approach is enabling First Nations and Inuit to have an effective role in the planning and delivery of their health services²⁵. Programs, unless mandatory, are based on community needs. Communities differ not only in terms of needs, but culture, language, customs, remoteness, capacity, degree and extent of needs, etc. Given the uniqueness of FNIHB programming and service delivery, target population and lack of a true comparison group, it is difficult to assess alternatives or compare the programming mix. As a result, most of the information related to outcomes around change in awareness and behaviour is perception-based and determinations around the most effective programming mix cannot be assessed.

IV RELEVANCE

The Treasury Board Secretariat (TBS) recently developed a revised GoC evaluation policy²⁶, effective in 2009, in which it defined “relevance” as “the extent to which a program addresses a demonstrable need, is appropriate to the federal government, and is responsive to the needs of Canadians”.

Need for the CDC Cluster Programming

The major findings regarding the need for the Cluster are as follows:

²⁵ FNIHB Contribution Funding Framework

²⁶ <http://www.tbs-sct.gc.ca/pol/doc-eng.aspx?id=12309>

1. Existing literature clearly demonstrates the need for programming focused on preventing communicable diseases and improving the overall health status within FN/I communities.

The literature review on FN/I health concluded that:

- **There are significant differences in health status and health outcomes between FN/I people and the non-Aboriginal population of Canada.** Despite improvements, the health status of Aboriginal peoples remains poor relative to that of other Canadians. “The picture is one of a population experiencing a disproportionate measure of illness, mortality, injury, addictions and family violence. Simply put, Aboriginal Peoples rate significantly lower on virtually every measure of health and well-being when compared to the general Canadian population.”²⁷ While life expectancy for Canadians (in 2005) overall was 78.0 for males and 82.7 for females, it was lower by up to 7.6 years for Registered Indians (70.4 for males and 75.5 for females)⁴ and by more than 12 years for Inuit (64.4 for males, and 69.8 for females)⁵. As highlighted in a report by Statistics Canada “...from 1991 to 2001, while life expectancy for Canada overall rose by about two years, it did not increase in the Inuit-inhabited areas (and may have fallen by about a year), further widening the gap.”²⁸ Infant mortality rate among First Nations has been declining; however, it still remains higher than the Canadian rate. In Canada suicide rates among Aboriginal youth are 5 to 7 times higher than those of among Canadian youth overall: 126 suicides per 100 thousand FN male youth ages 15-24 compared to 24 per 100 thousand for Canadian male youth as a whole, and 35 per 100 thousand for FN female youth, compared to 5 per 100 thousand for Canadian female youth. The rates of suicide among Inuit are eleven times higher than the national average²⁹.
- **The incidence of communicable diseases among the FN/I population of Canada is much higher than that of the Canadian population overall.** As demonstrated in literature overall, within the First Nation and Inuit population, there are elevated rates of vaccine preventable diseases, higher incidences of tuberculosis (sporadic outbreaks), and higher rates of HIV/AIDS cases.³⁰

²⁷ Lemchik-Favel, L. and Jock, R. Aboriginal Health Systems in Canada: Nine Case Studies, Journal of Aboriginal Health. January 2004. Pages 28-51. Page 31.

²⁸ Life expectancy in the Inuit-inhabited areas of Canada, 1989 to 2003 (in Summary and Conclusion) (<http://www.statcan.gc.ca/pub/82-003-x/2008001/article/10463/4149059-eng.htm>)

²⁹ United Nations, 2010. State of the World's Indigenous Peoples, pg. 170 (http://indigenouseoplesissues.com/attachments/3561_StateWorldsIndigenousPeoples2010.pdf)

³⁰ Health Canada – Statistical Profile on the Health of First Nations in Canada http://www.hc-sc.gc.ca/fniiah-spnia/pubs/aborig-autoch/stats_profil-eng.php

- **Immunization.** First Nations and Inuit populations in Canada have higher rates of communicable diseases as well as lower coverage rates for routine immunizations than the general population. According to a Health Canada parental recall survey in 2005, the coverage rates for routine immunizations of 2-year-old were lower among First Nations children for all antigens. Compared with the overall Canadian population, First Nations had elevated rates of pertussis (2.2 times higher), rubella (7 times higher) and shigellosis (2.1 times higher) for the year 2000.³¹
- **Tuberculosis.** Compared with the overall Canadian population, in 2008, the incidence of tuberculosis (TB) is 5.9 times higher for Canadian-born Aboriginal cases (rate of 28.2 per 100,000)³². Sporadic TB outbreaks are still common in First Nations communities, especially in remote locations with inadequate health care personnel resources. Recent media articles have highlighted the rates of TB for First Nations and Inuit. Their findings suggest:

*“The rate of TB for Inuit is 185 times higher when compared with non-aboriginals born in Canada and the First Nations rate of tuberculosis is 31 times higher. This may reflect not only medical and social characteristics of poor individuals but also characteristics of housing and neighbourhoods which foster airborne spread of tuberculosis disease, such as overcrowding and poor ventilation”.*³³
- **HIV/AIDS.** Aboriginal people are over-represented in the HIV epidemic in Canada. Whereas Aboriginal people make up only about 3.8% of Canada’s population, they represent 8% of all prevalent HIV infections. The proportion of new HIV infections in 2008 attributed to injection drug users was 66% for Aboriginal Canadians, which is much higher than among all Canadians (17%).³⁴ In addition, compared to HIV and AIDS cases in the non-Aboriginal population, females make up a comparatively larger part of the Aboriginal HIV epidemic. Females represent nearly half (48.1%) of all positive HIV test reports among Aboriginal peoples, compared with 20.7% of reports among non-Aboriginal peoples.³⁵

There are a number of factors that contribute to higher levels of communicable diseases among the FN/I communities. Literature review demonstrates that there are several underlining factors that contribute to higher CD rates among the FN/I communities. The findings are summarized as follows:

³¹ Health Canada – Statistical Profile on the Health of First Nations in Canada http://www.hc-sc.gc.ca/fniah-spnia/pubs/aborig-autoch/stats_profil-eng.php

³² Public Health Agency of Canada -Tuberculosis in Canada 2008 Pre-Release. <http://www.phac-aspc.gc.ca/tbpc-latb/pubs/tbcan08pre/index-eng.php>

³³ Assembly of First Nations, Health and Social Secretariat. Housing as a Social Determinant of Health Increases Risks for Tuberculosis Infection in First Nations and Inuit Peoples Fact Sheet 2010.

³⁴ Summary: Estimates of HIV Prevalence and Incidence in Canada. Public Health Agency of Canada. 2008. <http://www.phac-aspc.gc.ca/aids-sida/publication/survreport/pdf/estimat08-eng.pdf>

³⁵ Public Health Agency of Canada - HIV/AIDS/STIS/Hep C Among Aboriginal Peoples in Canada: A Continuing Concern http://www.phac-aspc.gc.ca/aids-sida/publication/epi/pdf/epi2007_e.pdf

- **Immunization.** A study carried out in 2005 concerning two year old First Nations children on-reserve and their immunization coverage found that there is some, but not universal, understanding of immunizations and the diseases they prevent. Among FN/I communities, there are proportionately fewer caregivers who are in possession of their child's immunization record (compared to the general population).³⁶ Another Canadian study conducted in 2003 investigated First Nations parental beliefs about childhood immunization. The findings revealed that although most participants were motivated to seek immunizations for their children, some proportion of mothers questioned the effectiveness of vaccines in preventing disease. For this group, deterrents to immunization included: traumatic immunization experiences, vaccine side-effects and sequelae, negative interactions with health professionals, and barriers such as time constraints and childhood illnesses.³⁷ The perceptions of First Nations mothers about childhood immunizations were also investigated in an Ontario-based study. Four key factors were found to negatively influence immunization uptake: knowledge barriers, the influence of others, vaccine barriers (i.e. complications and side effects related to vaccination), and missed opportunities.³⁸

Factors that increase CD risk, such as such as crowded housing and inadequate sanitation and smoking and alcohol use, are found at significantly higher rates among Aboriginal communities³⁹.

- **Tuberculosis.** Challenges in controlling TB are amplified by crowded housing, substance abuse and movements on and off the reserve and to and from communities and urban areas. "Delayed diagnosis of infectious TB cases, overcrowded living conditions and other risk factors for progression from infection to disease, such as substance abuse and HIV, are factors that are adding to the ongoing cycle of the disease."⁴⁰

One study found a significant association between housing density, isolation, income levels, and TB. Overcrowded housing has the potential to increase exposure of susceptible individuals to infectious TB cases, and isolation and lack of access to services from health providers may increase the likelihood of a delay in the diagnosis of TB.⁴¹

³⁶ Immunization Coverage Survey of Two-Year-Old First Nation Children On-reserve. Prepared for: First Nations and Inuit Health Branch, Health Canada. Environics Research Group. March 2005.

³⁷ Tarrant, Marie. (2003). Exploring childhood immunization uptake with First Nations mothers in north-western Ontario, Canada. *Journal of Advanced Nursing*, Volume 41, Issue 1, pp 63-72.

³⁸ Tarrant M, Gregory D. Mothers' perceptions of childhood immunizations in First Nations communities of the Sioux Lookout Zone. *Canadian Journal of Public Health*. 2001 Jan-Feb; 92(1):42-5.

³⁹ Health Canada. Regional Immunization Progress Report 2006-2007. Communicable Disease Control Division, 2008. (Page 27).

⁴⁰ Legal, Y. 2004-2005 National Progress Report on Activities: Tuberculosis Control and Prevention in Canada's First Nations and Inuit Communities. Prepared for CDC, FNIHB. 2006. (page 34)

⁴¹ Clark, M., Riben, P. and Nowgesic, E. The association of housing density, isolation and tuberculosis in Canadian First Nations communities. *International Journal of Epidemiology*, 2002, 31: 940-945.

Other challenges in addressing TB are related to diagnosis and assessment data:

- TB in children is difficult to diagnose as sputum acquisition may be difficult or impossible;
 - Some FN children are immunized with Bacille Calmette Guerin (BCG) which yields a positive TST due to vaccination rather than diagnosis of TB infection (relevant in Northern Saskatchewan, Northern Ontario, Manitoba and Alberta); and
 - Difficulties in determining the correct population size. Standard census counts of the FN population typically undercount on-reserve children.⁴²
- **HIV/AIDS.** Aboriginal people are at an increased risk for HIV infections for several reasons. Poverty, substance use (including injection drug use), sexually transmitted diseases, and limited access to health services, are all factors which increase vulnerability.⁴³ Other researchers have also pointed to the historical effects of colonization and the residential school system in Canada as contributing factors.⁴⁴

The following unique characteristics need to be taken into account for this sub-group⁴⁵:

- Aboriginal people are disproportionately represented among high-risk groups such as inner city injection drug users and prison inmates;
- The prevalence of having three or more different partners over a twelve month period is higher among sexually active First Nations adults (13%) than among sexually active adults in the general Canadian population (5.6%);⁴⁶
- Aboriginal people tend to be infected at a younger age than non-Aboriginal people;
- Injection drug use is the most common method of transmission; and
- The high degree of movement of Aboriginals between inner cities and rural areas/reserves may bring the disease to even the most remote community.

An attitudinal survey conducted in 2006 found that the Aboriginal participants were fairly knowledgeable about HIV/AIDS and are able to correctly identify how HIV/AIDS is transmitted, the gravity of the disease and lack of a cure. However, there were some gaps in awareness and knowledge including the belief by about half the survey participants that HIV/AIDS can be diagnosed through a physical examination and the assumption by one in five individuals that self-diagnosis is possible.⁴⁷

⁴² Tuberculosis in First Nations Peoples – Epidemiology & Projections. Prepared for FNIHB, Health Canada. 2003.

⁴³ Health Canada – First Nations, Inuit and Aboriginal Health, HIV and AIDS <http://www.hc-sc.gc.ca/fniiah-spnia/diseases-maladies/aids-sida/index-eng.php>

⁴⁴ Hill, Donna. HIV/AIDS/STIS/Hep C Among Canada's First Nations People: A Look at Disproportionate Risk Factors as Compared to the Rest of Canada. The Canadian Journal of Native Studies, XXIII, 2(2003): 349-359.

⁴⁵ Goss Gilroy Inc. Formative Evaluation of the First Nations and Inuit Health Branch HIV/AIDS/STIS/Hep C Program- Final Report. Health Canada. 2004. Page 12.

⁴⁶ Health Canada. A Statistical Profile on the Health of First Nations in Canada: Determinants of Health, 1999 to 2003. 2009. (page. 24).

⁴⁷ EKOS Research Associates Inc. (2006). Aboriginal HIV/AIDS/STIS/Hep C Attitudinal Survey 2006 Final Report. Public Health Agency of Canada. Page 177.

- **Preventative, educational programs that incorporate Aboriginal culture and socio-economic conditions are the most effective in combating communicable diseases among the FN/I communities.** The review of the literature demonstrate that the complex preventative initiatives that take into account Aboriginal culture and conditions can be the most successful to address the issue. A recent study which qualified the goal of eliminating TB among Aboriginal peoples in Canada highlighted: “The goal of eliminating TB among Aboriginal peoples in Canada is a feasible one, but will only be achieved with continued investment in programs designed to control and prevent transmission. Reactivation disease cases may occur for a number of years to come, making rapid elimination a difficult goal.⁴⁸ Another study emphasized that TB treatment plans need to consider the socioeconomic conditions and cultural characteristics of the Aboriginal people, especially healing models and language. Prevention must also account for community conditions, such as rates of suicide, which have exceeded the rate of TB.⁴⁹ The importance of a holistic and integrated approach to HIV prevention activities within Aboriginal communities was emphasized in a national strategy document:

Within Aboriginal communities, HIV prevention initiatives must target women and two-spirit men as well as the underlying issues of poverty, lack of employment, stigma within the Aboriginal community, substance use and low self-esteem. Effective approaches will be led by Aboriginal people and grounded in Aboriginal culture, healing and the intertwining of body, mind and spirit. They will also be integrated with other urgent Aboriginal health issues, such as diabetes and the use of tobacco and alcohol, and encourage people to value and take care of themselves. Leadership, innovation and a long-term commitment will be vital.⁵⁰

2. Key Informant groups perceive a strong need for the programming.

Results of the interviews with Key Informants concluded that:

- **All Key Informants report high levels of need for the CDC Cluster programming in FN/I communities.** However, the Health Directors and Community Health Nurses were somewhat less likely to indicate that there is a major need for the types of support provided under the Cluster.
- **According to Key Informants⁵¹, high incidence of communicable diseases, lower immunizations rates, lack of resources and integrated surveillance systems to monitor incidence, low levels of awareness of communicable diseases are among**

⁴⁸ Clark, Michael and Cameron, D.W. (2009). Tuberculosis Elimination in the Canadian First Nations Population: Assessment by a State-Transfer, Compartmental Epidemic Model. *International Journal of Infectious Diseases*. Volume 13, Issue 2, pages 220-226.

⁴⁹ Hoepfner VH, Marciniuk DD. Tuberculosis in aboriginal Canadians. *Canadian Respiratory Journal*. 2000 Mar-Apr: 7(2):141.

⁵⁰ Strengthening Ties – Strengthening Communities, An Aboriginal Strategy on HIV/AIDS/STIS/Hep C in Canada for First Nations, Inuit and Métis People. Public Health Agency of Canada. 2003. Page 33.

⁵¹ Excluding the Health Directors and Community Nurses (see Table 8).

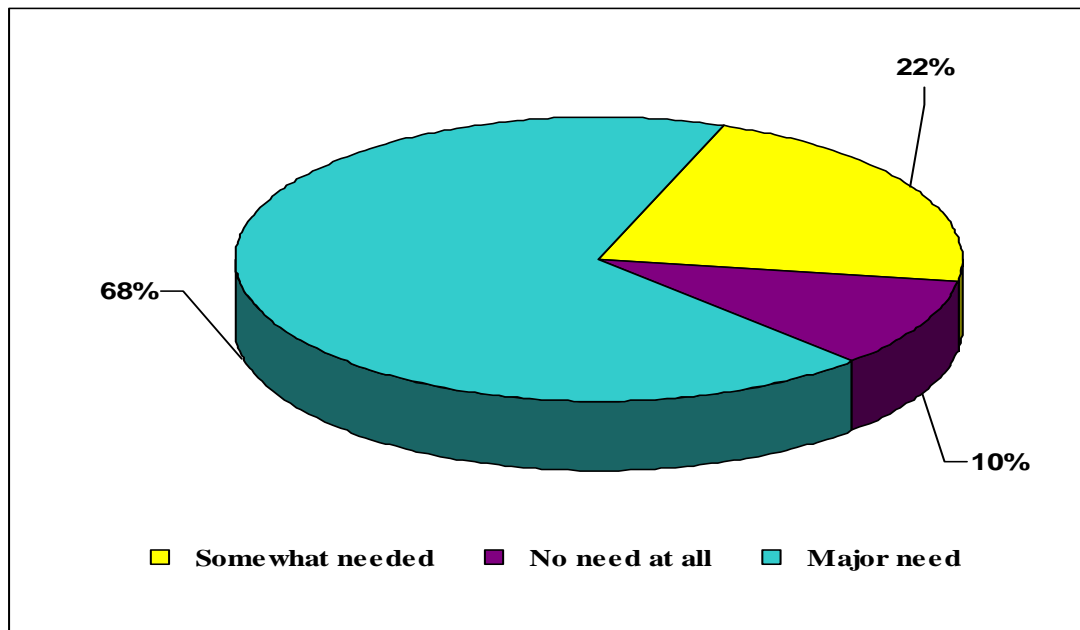
the factors contributing to the need for the CDC programming. Key informants noted the strong need for the programming in FN/I communities to a variety of factors, including⁵².

- The significant health issues facing Aboriginal people on reserve. In particular, Key Informants noted the high incidence of disease and infection and low immunization rates.
- The status of First Nation Communities vis-à-vis the social determinants of health. Factors such as the isolation of the communities, low literacy rates, crowding, and a highly mobile population require a targeted program to address issues related to communicable disease.
- The importance of government support to combating communicable diseases in First Nations and Inuit communities. Key informants noted that the government is able to provide resources, funding, staffing and coordination, as well as knowledgeable workers who can interface and adapt to different communities in culturally appropriate ways. First Nations and Inuit benefit from the clear direction and support provided by a federal coordinating body, especially within a layered health care system like Canada. Without this support, many would not have access to the same level of care and service, education would not be provided, and many more children and elders would not be immunized.
- The importance of effective surveillance in fighting disease. Having early detection systems in place helps reduce the high communicable disease burden and vulnerability to disease that First Nations and Inuit communities may face.
- Lower levels of awareness amongst First Nations and Inuit regarding communicable diseases. The creation of effective awareness campaigns that are culturally appropriate can impact the knowledge around the issues which occur on reserves.
- The importance of collaboration. Increased collaboration contributes to the maintenance of a healthy population and is increased through a collective cluster of programs. There is a need for First Nations and Inuit communities to coordinate, monitor and report on the programming.
- The demonstrated effectiveness of the programming. Key informants reported that progress has been made in some communities towards decreasing prevalence rates since the programming started. Some communities have reported significant decreases in disease levels as well as vaccination rates in children of up to 98%. Other key informants saw the program as generally effective in helping to better define and address CDC health issues as well as build trust with the communities.

- **The perceived need for Immunization and HIV/AIDS programming is stronger than the need for Tuberculosis programming** as indicated by Health Directors and Community Nurses.

⁵² Interviewees could provide more than one response.

Figure 4 - Need for CDC Cluster Immunization Program



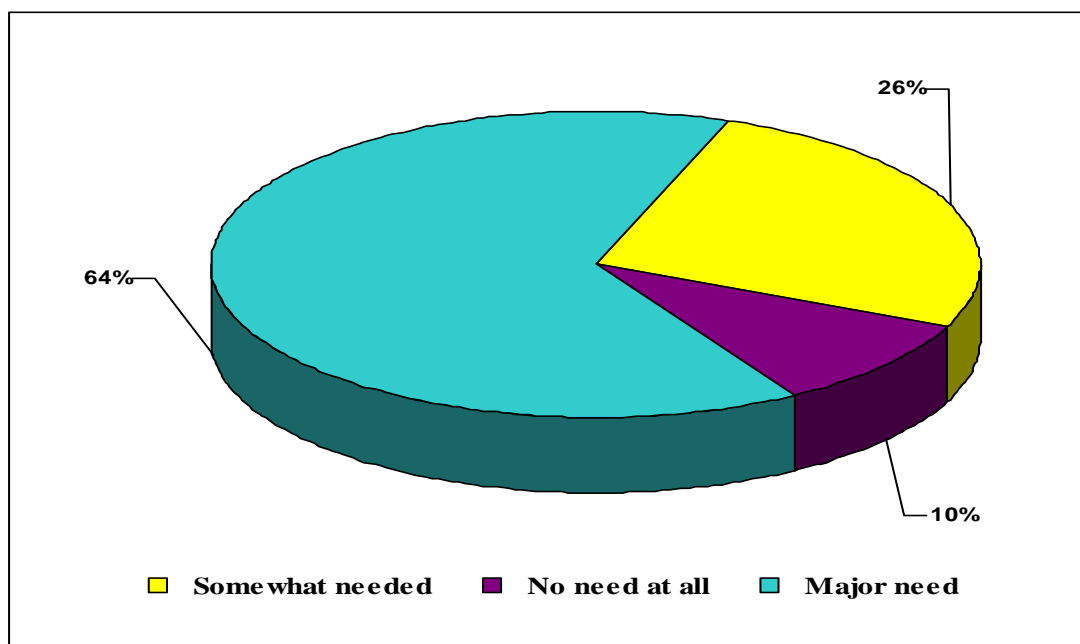
In Figure 4, the majority of the respondents (Health Directors and Community Nurses) 90% reported that there was a major need or somewhat of a need for the CDCD immunization program.

- **The strong need for the Immunization Program may be attributed to a range of factors such as low vaccination rates and socio-economic characteristics of FN/I communities, need for effective surveillance systems, and requirements for ongoing staff training and capacity building.** The Health Directors, Community Health Nurses and Regional Coordinators noted range of factors, amongst other things, that determine need for the Immunization programming in FN/I communities, including:
 - The importance of vaccinations, which are an essential tool for preventing disease and are recommended by government⁵³;
 - Particular characteristics of First Nations and Inuit communities which make them more vulnerable to disease. Representatives believe there is a significant need for the support provided by the CDC Immunization Program because these communities have high birth rates, are isolated, live in close quarters, and have more limited access to medical services;
 - The importance of strengthening surveillance. In particular, it was noted that the electronic surveillance database system is an important resource. Representatives said there needs to be expanded access to provincial electronic data systems, a more integrated system that allows users to access data in other provinces, and a more user friendly system;

⁵³ It is important to note that some provinces (Ontario and New Brunswick) have school entry requirements for immunization. Parents, however, may conscientiously object to immunization, in which case, their children are exempt from the requirement.

- The high level of staff turnover contributes to the need for training on a continuous basis. Support under the CDC Cluster is needed to quickly train new staff in immunization protocols in the community;
- The importance of having access to current, relevant and appropriate information. On an on-going basis, healthcare personnel need access to information regarding changes in immunization protocols and new vaccines as well as immunization training. A few community representatives particularly noted the importance of both training on how to communicate to Aboriginal communities as well as having access to culturally appropriate resources; and
- Support provided under the Cluster complements other resources and enables community representatives to better carry out their responsibilities in reporting, administration, awareness and immunization. However, a few respondents indicated that health centres require incentives to attract families into the centre, transportation for patients to access services and greater staff support to provide confidential services.

Figure 5 - Need for CDC Cluster HIV/AIDS Program



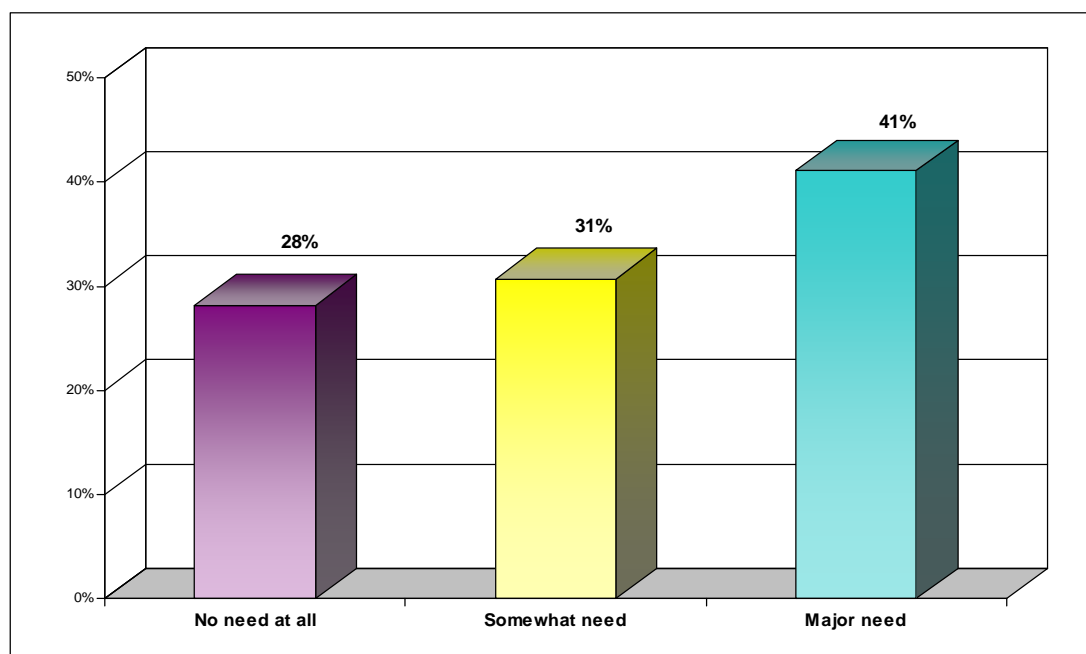
In Figure 5, the majority of the respondents (Health Directors and Community Nurses) 90% reported that there was a major need or somewhat of a need for the CDCD HIV AIDS program.

- **Lack of HIV/AIDS awareness and education in FN/I communities, elevated risk factors such as drug use and STI rates, and resource limitations are factors contributing to strong need for the HIV/AIDS programming.** Some Health Directors, Community Health Nurses and Regional Coordinators attribute the need for the HIV/AIDS Program (Interviewees were able to suggest more than one response) support to:

- The importance of creating greater awareness regarding HIV/AIDS within the communities. A few representatives reported a significant need for education in the community regarding how HIV/AIDS is transmitted and what individuals can do to protect themselves;
- A few representatives mentioned an elevated risk of infection and transmission due to drug use, high STI rates, and community isolation;
- Another factor raised is the need of nurses to access to current, relevant and appropriate information. There is need among nurses for information regarding new HIV/AIDS treatments/diagnosis methods and training on delivering awareness campaigns;
- A few respondents mentioned that the funding and support provided through the CDC cluster allows for HIV/AIDS programming that is more extensive and targeted than it could be otherwise however community health nurses do not always have the time to raise awareness and educate. The CDC program is needed to assist in raising awareness and educating on the issue of HIV/AIDS.

There were varying opinions regarding the level of support provided directly to communities under the program. Ten percent of respondents (mainly from Saskatchewan, Ontario, Manitoba and Alberta) noted that the current level of HIV/AIDS support provided is sufficient and should be maintained.

Figure 6 - Need for CDC Cluster TB Program



In Figure 6, the majority of the respondents (Health Directors and Community Nurses) 72% reported that there was a major need or somewhat of a need for the TB program.

- **On average, the need for Tuberculosis Program is viewed as less significant due to low incidence rates in some communities and involvement of provincial organizations in the delivery of TB related services.** In general, the Health Directors, Community Health Nurses and Regional Coordinators saw less of need for tuberculosis support because of the low incidence rate in the community or because other provincial organizations fulfill this role. The CDC Division acknowledges that some communities, mainly in Manitoba and Saskatchewan, have a raised incidence of TB and need support to face this important challenge. A few respondents mentioned a range of factors to support the need for the TB Program:
 - There is a need to remind the population about how to identify tuberculosis symptoms and ways to protect against infection.
 - Resource issues were identified by 5% of respondents regarding people carrying out their regular duties in addition to raising awareness and educating groups concerning TB.
 - Although the incidence has been low, risks still exist which require continued vigilance. More specifically, a few representatives reported that there is still the need for education in the community, because many residents have forgotten about the disease as it is no longer prevalent in the communities.
 - Nurses require access to current, relevant and appropriate information about TB on an on-going basis.
 - The resources, manuals, videos, and pamphlets produced by the CDC Cluster are a useful tool for educating the population on tuberculosis issues.

- **The Community Health Nurses and Directors expressed mixed viewpoints as to whether the need for the programs has changed over the past few years;** the need is largely reflective of local conditions. Those respondents who consider that the need continues to exist indicated:
 - Demand for services is increasing as First Nation communities become more aware of the issues surrounding communicable disease;
 - The need for HIV/AIDS programming has increased as incidence rates have increased. However, the increased rate of incidence could have resulted from increased awareness and testing for HIV/AIDS;
 - Nursing staff noted an increase in workload and responsibilities and an increased need for support such as immunization due to the introduction of new vaccines.
 - Issues such as increases in drug use, birth rates, and the overall population have been identified as possible drivers for increased needs for the types of support provided under the Cluster; and
 - The need for consistent surveillance data is increasing particularly with respect to tracking mobile residents and developing electronic supports.

Some Community Health Nurses and Directors also suggested that the nature of the need has changed with a greater emphasis placed on making the CDC Cluster (and health programs in general) more culturally sensitive. For example, greater emphasis is now being placed on the development and distribution of culturally sensitive materials, resources and information.

3. According to Key Informants, the Cluster is already making some progress in meeting the needs identified in the interviews and the literature review.

Although the success of Immunization program is quite noticeable in terms of increased rates of immunization, rates of HIV/AIDS and TB are still significant in some communities, key informants indicated HIV/AIDS stigma still exists, and levels of HIV/AIDS and TB awareness and education is low.

Interviewees (n = 95) indicated the Cluster as particularly successful in terms of⁵⁴:

- Increasing awareness of the Cluster Programs and the issues surrounding communicable diseases;
- Strengthening prevention efforts which are evidenced in increased immunization coverage rates, lower incidences of disease outbreaks and increased HIV/AIDS education;
- Improving communication, collaboration and information sharing among a range of organizations such as FNIHB, CDC Cluster, and other stakeholders in Health Canada. Representatives noted that partnerships have been increasing and the support provided through the Cluster (e.g., liaison, advocacy, support) have been instrumental in increasing information sharing;
- Increasing availability of culturally appropriate educational resources;
- Improving support provided to First Nations communities and ensuring that First Nations issues are now on the agenda of regions; and
- Improving reporting and surveillance systems.

However, some respondents indicated the Cluster as somewhat less successful in meeting the needs of the target population and related this to⁵⁵:

- Not having sufficiently clear objectives and a clear focus. Representatives suggested that future efforts regarding HIV/AIDS/STIS/Hep C should focus further on prevention, harm and stigma reduction, and additional testing to ensure that infection rates do not continue to increase;
- Representatives noted that funding amounts severely limit what they can do in terms of both staffing their programs and providing training to health staff. Moreover, existing funding should be allocated better to ensure that it goes to communities where it is needed and funding amounts are sufficient to cover more than outbreaks;
- Not taking a holistic approach towards communicable disease. Representatives noted that the current approach focuses on specific program areas and does not take into account other diseases (e.g., water-borne diseases, STI's) and the social determinants of health which need to be addressed particularly with respect to TB.

⁵⁴ Interviewees were allowed to provide more than one response. Therefore, a number of responses can be greater than the total number of Key Informants interviewed.

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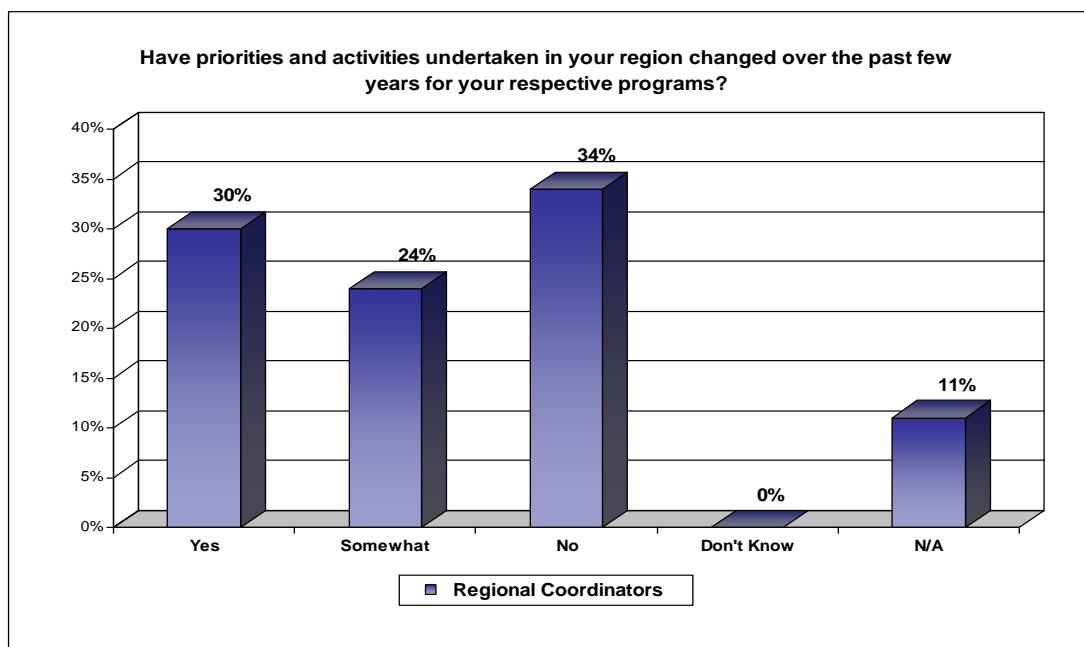
Representatives also noted that more collaboration could be done to address the social determinants of health. The Cluster has only just been operationalized in the past two years so the degree of integration may not have reached an optimal level;

- Representatives noted there is a lack of consistent and quality surveillance data and more progress is needed to ensure the data collected is analyzed and used to respond to disease in communities;
- The Cluster has been affected by high rates of staff turnover, which can challenge the delivery of healthcare on reserve and limits the effectiveness of the programs. A few representatives noted that more nursing support is needed; and
- There are various levels of administration, in delivering the Cluster programs and these can be aggravated by a lack of communication and clarity regarding the roles of the different governments.

4. Regional changes to program priorities and activities contribute to the continued relevance of the Cluster.

Fifty-four percent of Regional Coordinators indicated that the regional priorities and activities undertaken for their respective program have changed over the past few years (see Figure 7). The regions have identified increased flexibility since the operationalization of the Cluster Group in the past few years.

Figure 7. Perceived Changes in Priorities and Activities for Programming



More specifically, the National and Regional Coordinators indicated that:

- The Cluster priorities and activities in the regions constantly evolve to meet the regional circumstances and needs of the population;

- The scope of the programs has tended to expand over time. For example, BBP/STI information has been incorporated with existing healthy lifestyle programming; and
- Placing a greater emphasis on collaboration with regional and national partners (e.g., AFN, ITK) and taking steps to improve the accuracy of surveillance data were reported.
- Coordinators indicated that changes at the national and regional levels tend to be evidence-based, reflecting surveillance and other health data, the results of research, and input provided by the regions and communities.

The Regional Coordinators most commonly identified the current regional priorities of their program to be developing and training staff as well as educating the community about communicable diseases. Some of the priorities identified were:

- To develop and train healthcare staff, administrators, and Aboriginal leaders as a means to improve treatment, support and education services in the community and ensure that staff have the resources and support they need;
- To increase community awareness and provide education about communicable disease aimed at reducing the stigma of particular diseases and promoting healthy lifestyle behaviours;
- To increase program uptake among the target population (e.g., vaccination coverage, HIV testing) and implement new programming;
- To build partnerships and collaborate with related organizations;
- To collect effective surveillance data which can be used in the development of program strategies and improve other procedures such as contact investigation or cold chain maintenance; and
- To prevent and control the incidence of disease and advocate for more resources for communities.

Consistency with Federal Government Priorities and Role

The major findings of the evaluation regarding the alignment of the Cluster with the priorities and role of Health Canada and the Federal Government are as follows:

1. The objectives of the CDC Cluster are consistent with Health Canada priorities as well as the strategic outcomes and priorities of the Federal Government.

More specifically, the literature review demonstrates that objectives of the Cluster are aligned with:

- Two of Health Canada’s stated departmental priorities: “contributing to the improvement of the health of Canadians” and “reducing the risks to the health of the people of Canada”. Health Canada’s Report on Plans and Priorities 2008-2009 (also 2007-08 and 2006-07) highlighted these two areas among four departmental priorities. In addition, the final outcome of the CDC Cluster, “contributing to improved health status of FN/I individuals, families and communities,” aligns with these two departmental priorities.
- Health Canada’s strategic outcome: “Better Health Outcomes and Reduction of Health Inequalities between First Nations and Inuit and Other Canadians.” Health Canada’s Report on Plans and Priorities 2008-2009 (as well as previous versions 05/06, 06/07, and 07/08 of the report) highlighted this area as one of the four departmental strategic outcomes for the fiscal year of 2008 and 2009. The report indicates the government’s commitment to achieve improved health outcomes for FN/I and reduce health inequalities between FN/I and other Canadians. Health Canada has allocated approximately \$2.1 billion in 2008/2009 and 2.2 billion in 2010/2011 fiscal years, to implement programs and policies to achieve this strategic outcome.
- The 2004 Speech from the Throne, emphasized existing health discrepancies between Aboriginal people and other Canadians:

“We have made progress, but it is overshadowed by the rates of fetal alcohol syndrome and teen suicide in Aboriginal communities. These are the intolerable consequences of the yawning gaps that separate so many Aboriginal people from other Canadians—unacceptable gaps in education attainment, in employment, in basics like housing and clean water, and in the incidence of chronic diseases such as diabetes”

This particular speech highlighted the federal government’s commitment in supporting health services for the Aboriginal communities by stating “*The Government and Aboriginal leaders agreed to measurable goals to reduce these [health] gaps and their consequences.*”⁵⁶ In addition, the Federal government emphasized the need for demonstrated commitment to “*better adapt existing health care services to Aboriginal needs.*” The objectives and final outcomes of the CDC Cluster are aligned with these statements.

2. The primary mandate of the Federal Government is to provide access to health services and build partnership with FN/I communities as well as address Aboriginal health status gaps, which are aligned with the objectives of the CDC Cluster.

Health services for Aboriginals were transferred from Indian Affairs to Health Canada in 1945. Almost 20 years later (1962), Health Canada started to provide direct health services to First Nations on reserve and to Inuit communities in the North. In 1979 the Government of Canada adopted the Indian Health Policy which highlighted Federal Governments mandate in providing

⁵⁶ Speech from The Throne. The First Session Thirty-Eighth Parliament of Canada. House of Commons Journals: 2004.10.05, vol. 140, p. 15.

health services for FN/I. The stated goal of the Indian Health Policy adopted by the Federal Government on September 19, 1979, is *"to achieve an increasing level of health in Indian communities, generated and maintained by the Indian communities themselves."* Several years after that (mid 1980s), First Nations and Inuit communities began to control more health services, and capacity for governance has continued to increase since then. Almost 80% of First Nations and Inuit communities are involved in the transfer process.⁵⁷

The primary mandate of FNIHB is to⁵⁸:

- ensure the availability of, or access to, health services for First Nations and Inuit communities;
- assist First Nations and Inuit communities address health barriers, disease threats, and attain health levels comparable to other Canadians living in similar locations; and
- build strong partnerships with First Nations and Inuit to improve the health system.

FNIHB also manages a range of programs related to community health (e.g., chronic and communicable diseases, environmental health, communicable disease health emergencies), and also undertakes health surveillance, data analysis, research and evaluation to support the development of policies, priorities and evidence-based decision-making around health related investment. FNIHB provides for, or supports, the delivery of community-based health programs on-reserve and in Inuit communities.⁵⁹ As well, FNIHB is also involved in the provision of drug, dental and ancillary health services to First Nations and Inuit regardless of residence. Primary care services are also provided on-reserve in remote areas where there are no readily available provincial services.⁵⁸

3. According to Key Informants, development and funding of these types of programs is an appropriate role for the Government of Canada.

Collaborative partners and Other Stakeholders (e.g., representatives of other programs) agreed that development and funding of these types of programs is an appropriate role for the Government of Canada. Illustrated in Table 8, 59% of Collaborative partners and Other Stakeholders mentioned that it is a responsibility of the Canadian government to provide health care services for all citizens including the FN/I and 29% thought that, in addition, government should play a significant role in building capacity of FN/I communities to provide own health care services.

⁵⁷ Indian and Northern Affairs Canada – Fact Sheet: First Nations and Inuit Health in [Canada](http://www.ainc-inac.gc.ca/ai/mr/is/fnihb-eng.asp) <http://www.ainc-inac.gc.ca/ai/mr/is/fnihb-eng.asp>

⁵⁸ <http://www.hc-sc.gc.ca/ahc-asc/branch-dirgen/fnihb-dgspni/mandat-eng.php>

⁵⁹ Fact Sheet: First Nations and Inuit health in Canada. <http://www.ainc-inac.gc.ca/ai/mr/is/fnihb-eng.asp>

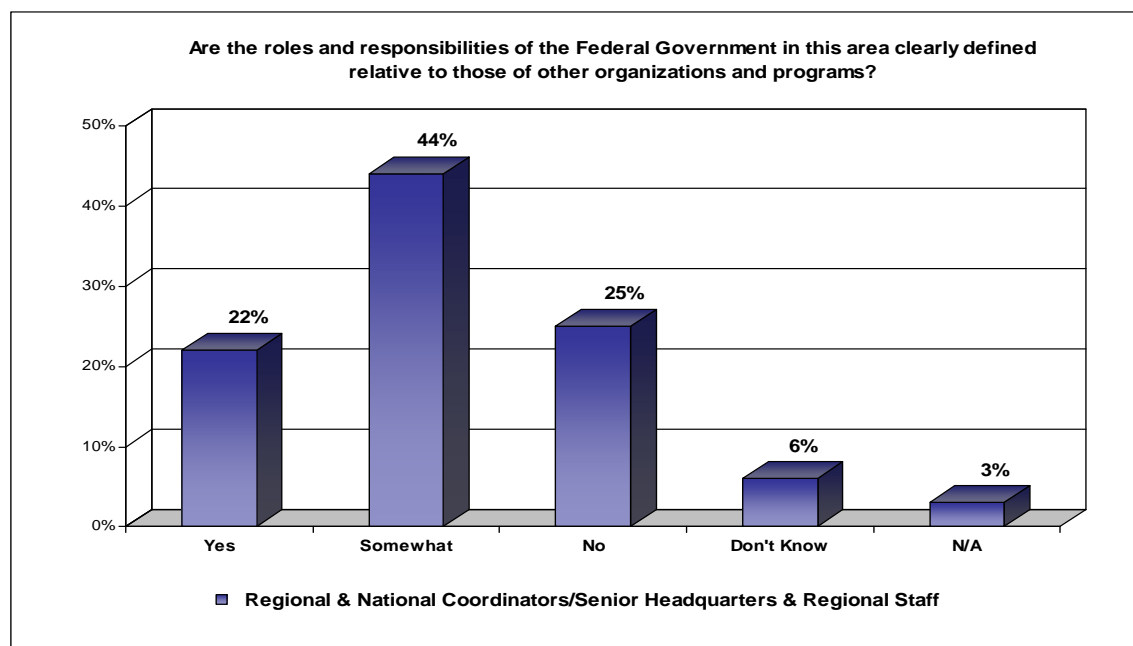
Table 8 - Appropriateness of Government of Canada Role in CDC Type Programming

Responses	%
It is government's obligation and responsibility to support health status for all Canadians including FN/I	59%
Government's role should include funding the health care services and building the capacity of FN/I communities to design and develop own programming	29%
Do not know/no answer	12%
Total (n = 51)	100%

4. Most FNIHB representatives at least somewhat agree that the roles and responsibilities of the Federal Government are clearly defined relative to other programs and organizations.

About two-thirds of the National and Regional Coordinators, Senior Headquarters staff and Regional Staff indicated that the roles and responsibilities of the Federal Government are clearly defined in relation to those of other programs and organizations and one-quarter of these respondents indicated that they are not clearly defined (see Figure 8).

Figure 8 - Perceived Clarity of Federal Government's Role with Respect to the CDC



The FNIHB representatives indicated the role of the federal government with respect to the CDC Cluster areas as being:

- To provide leadership (e.g., providing guidelines and policies, outlining roles and responsibilities) and coordination (e.g., integration of activities at the community, regional, and national level);

- To work with partners to coordinate the activities of various levels of government and ensure that the responsibilities of the federal government to people on reserve are met;
- To provide for the health care needs (including direct care) of the communities, taking into consideration their level of need. This is of particular importance during outbreaks where the government has a responsibility to manage and monitor the outbreak;
- To provide funding as well as evaluate the success and/or impact of that funding;
- To share information. The federal government should summarize and share information (e.g., best practices) and ensure that the information is passed to First Nations and Inuit communities; and
- To contribute to disease prevention efforts on reserve.

Those respondents who disagreed that the roles are clearly defined commented primarily on the potential for overlap between the various groups providing services. However, respondents did indicate there is potential to overlap between various service and support providers.

V PERFORMANCE

This section summarizes the progress made by the CDC Cluster in terms of:

- Collaborating and networking with other organizations;
- Improving surveillance, prevention, control, treatment and support of communicable disease control in FN/I communities;
- Increasing participation of FN/I individuals, families and communities in communicable disease control programs;
- Increasing awareness of preventative measures and treatment of communicable diseases;
- Increasing knowledge and understanding of risk factors associated with communicable diseases;
- Increasing community ownership and capacity to detect, report and combat communicable diseases;
- Improving access to quality, well-coordinated communicable disease prevention and control programs for FN/I individuals, families and communities;
- Contributing to the achievement of the longer-term outcome of improved health status of FN/I individuals; and
- Unintended consequences (positive or negative).

Networking and Collaboration

The major findings regarding the networking and collaboration activities of the Cluster vis-à-vis other organizations and programs are as follows:

- 1. According to the Annual Performance Reports and Work Plans, each program and region reports has developed partnerships and alliances with other federal government divisions, provincial and regional organizations, communities, associations, and others.**

According to the Annual Performance Reports, participation of Cluster staff in various committees and working groups increased over the three year period, from 58 in 2005-06 to 69 in 2006-07 and 79 in 2007-08. Over 600 total collaborative networking arrangements were recorded in the progress reports over the three year period⁶⁰.

The organizations reported by each program and each region (including the national level and the 6 regional offices) were categorized by type of organization for 2007-08. The number of regions reporting at least one organization within each type is provided in Table 9. As indicated, the regions were most likely to report relationships with national and regional working groups/committees.

Table 9 - Types of Organization with which the Cluster Collaborates

Type of Organization	Number of Regions Reporting for 2007-08		
	Immunization	TB	HIV/AIDs
Federal Government Departments/Agencies	5	2	5
Provincial Government Organizations	6	5	5
Non-Profit Organizations	0	1	3
National and Regional Working Groups	7	5	8
Educational Institutions	0	4	1
First Nations Associations/Groups	4	4	5
International Organizations	0	2	0
Other (i.e., unions; regional government departments)	1	0	1

Source: Analysis of Annual Performance Reports Submitted by Each Region

Common examples of the organizations with which the programs collaborate include national and regional working groups and committees such as the HPV working group, TB education sub-committee and Canadian Aids Information Exchange; provincial government organizations most frequently provincial health authorities; federal government departments and agencies such as the Public Health Agency of Canada and First Nations and Inuit Health Program; First

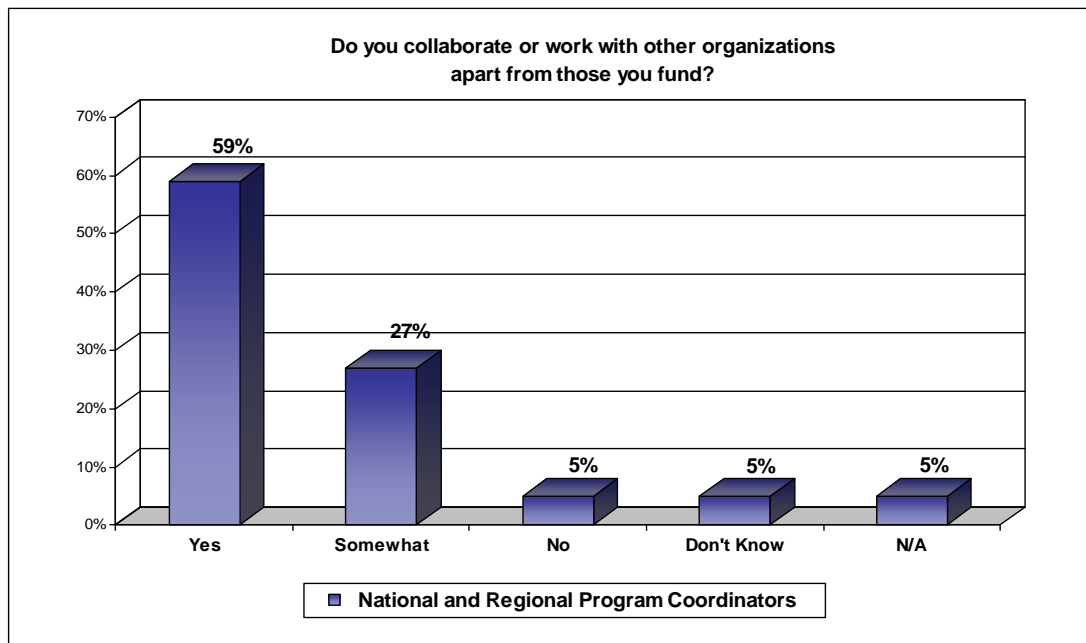
⁶⁰ Communicable Disease Control Cluster, FNIHB, Health Canada, Performance Report, 2005-06 to 2007-08, December 7, 2009, Page 22.

Nations Associations/Groups such as First Nations Tribal Councils and First Nations Health Authorities; educational institutions namely universities; non-profit organizations such as the Canadian Lung Association, Canadian Liver Foundation, and local organizations such as the Sexuality Education Resource Centre or Labrador Friendship Center. International organizations included the International Union against Tuberculosis and Lung Diseases, and other unclassified collaborators included unions and regional governments. The collaboration efforts have focused on a range of issues such as patient care, treatment and support, as well as education and prevention.

2. Interviews with national and regional coordinators as well as representatives of other programs confirm that the CDC Cluster regularly networks and collaborates with other organizations and that the level has further increased or at least stayed the same over the past few years.

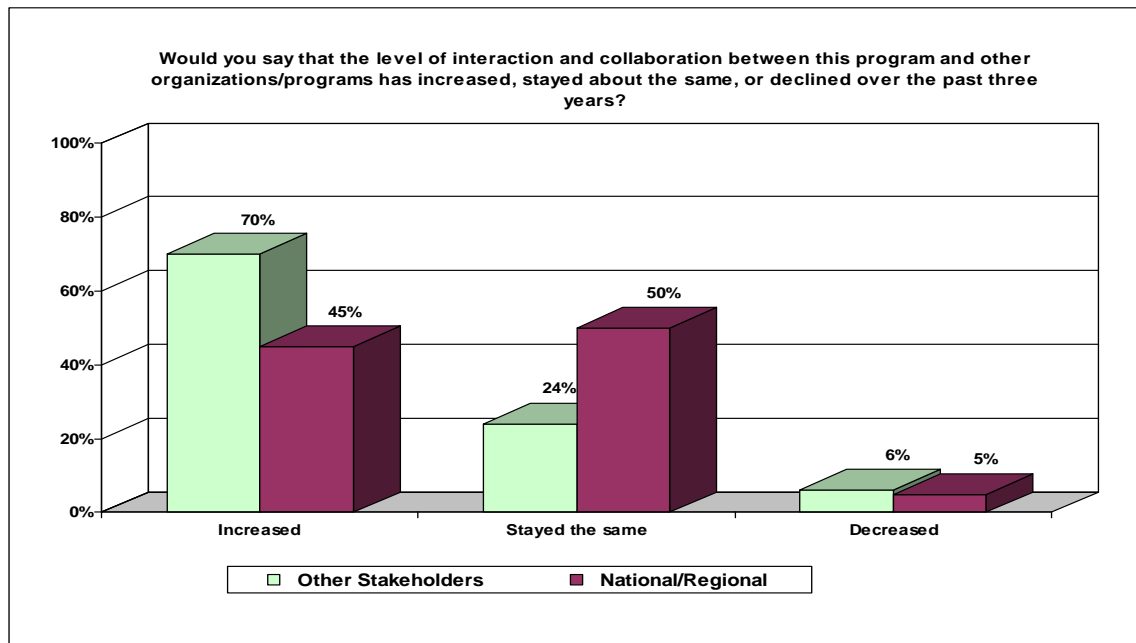
Of the Regional and National Program Coordinators who were interviewed, 86% indicated that they collaborate or work with other organizations apart from those whom they fund while 5% indicated they did not (see Figure 9, all percentages have been rounded using significant figures).

Figure 9 - Program Coordinators' Reports of Collaboration with Other Organizations



In Figure 10, 70% of Other Stakeholders and 45% of the National and Regional Coordinators indicated that the level of interaction and collaboration had increased, or increased significantly while 50% of National and Regional Coordinators and 24% of the Other Stakeholders indicated that the level of interaction and collaboration had stayed the same over the past 3 years (2005-06 to 2007-08).

Figure 10 - Perceived Changes in Interaction and Collaboration Reported by Other Stakeholders and National Coordinators



Some of the key factors that have contributed to greater collaboration include increasing recognition of the opportunities for and importance of collaboration by all parties, increasing attention placed on the health issues facing First Nations and Inuit, the adoption of more client-centred approaches, the ability to build on existing relationships (both personal and organizational), structural changes (e.g., consolidation of regional health authorities), and improvements in communication technologies (e.g., greater use of the internet). Some of the factors that can serve to constrain the level of interaction and collaboration include staff turnover (relationships need to be re-established), understaffing at the national or regional levels (e.g., vacant positions), and competing priorities (e.g., not having the time to meet with other parties).

3. Collaboration and networking is beneficial to both the CDC Cluster and to other organizations.

Communicable disease control is a complex issue in which a wide range of organizations are involved. A review of the networking and collaborating activities, combined with the input provided by the Cluster program coordinators and Other Stakeholders, highlights benefits of this activity for the Cluster including:

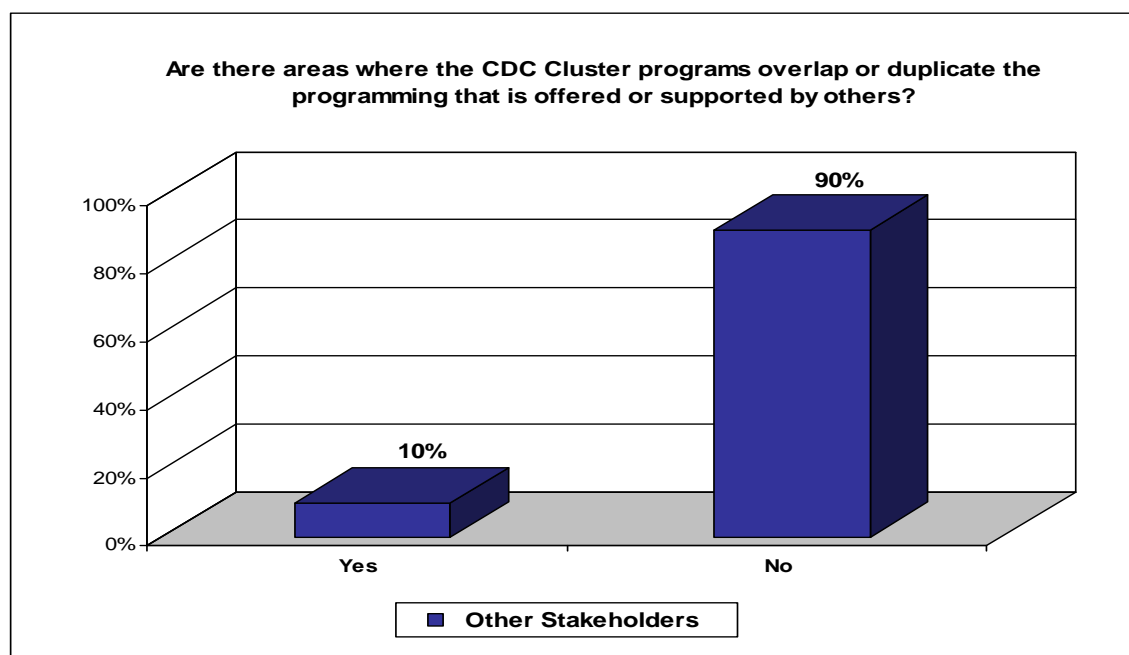
- Further clarifying the roles of the respective parties. The relative roles or nature of the operating environment can vary significantly from province to province.
- Ensuring that First Nations and Inuit issues and needs are reflected in the design of strategies and delivery of services.

- Encourage a greater focus on the social determinants of health.
- Increasing coordination in program activities and minimizing the level of duplication.
- Facilitating the sharing of information and lessons learned.
- Facilitating joint responses to key developments (e.g., pandemic planning).
- Increasing access to differing viewpoints and specialized expertise.
- Providing for more seamless delivery of programs and services across organizations.

4. The activities supported under the Cluster tend to complement rather than duplicate the programming provided by other organizations.

The Cluster complements other programming by working to increase target group awareness of issues relevant to communicable diseases, through the support of prevention, treatment and control activities, the promotion of collaboration, by strengthening community capacity (through activities such as training), and by increasing access to surveillance information. Ten percent of Other Stakeholders identified at least some areas where there is some overlap or duplication in the programming that is offered and supported (see Figure 11).

Figure 11 - Perceived Areas of Duplication Among CDC Cluster Programs and Other Programming Reported by Other Stakeholders



However, these areas of overlap or duplication which were identified were generally not significant (e.g., provision of similar education materials or information from time to time; some overlap in reporting such as communities having to report similar information to both the Federal and Provincial Governments). It was also noted that overlap is useful to the extent that it

increases access to services or information (e.g., increases the likelihood of reaching hard-to-reach populations).

It was suggested that further increasing communication and collaboration between the various parties would help to further reduce the potential for overlap or duplication. Towards this end, Other Stakeholders suggested staging periodic workshops, conferences and/or meetings in order to strengthen relationships and improve coordination across the various organizations and programs operating in the region.

Surveillance

The major findings of the evaluation regarding surveillance are as follows:

1. Surveillance data is used by representatives at all levels of the Cluster including headquarters, regions, and communities to assess needs, review performance and develop strategies, policies, and programming.

A review of existing surveillance reports combined with interviews with representatives at all levels of the Cluster indicates that:

- Representatives at the national level use surveillance data for policy and strategy development, to guide the development and implementation of programs and training, and to monitor and evaluate program delivery.
- Representatives at the regional level use surveillance data to identify priorities and develop strategies, monitor levels of protection and/or incidence of disease, and to evaluate program effectiveness.
- Representatives at the community level use surveillance data to review trends and assess community needs, to provide feedback to staff, nurses and communities, and for planning and program direction.

2. Minor progress has been made in improving the collection and reporting of surveillance data over the past three years.

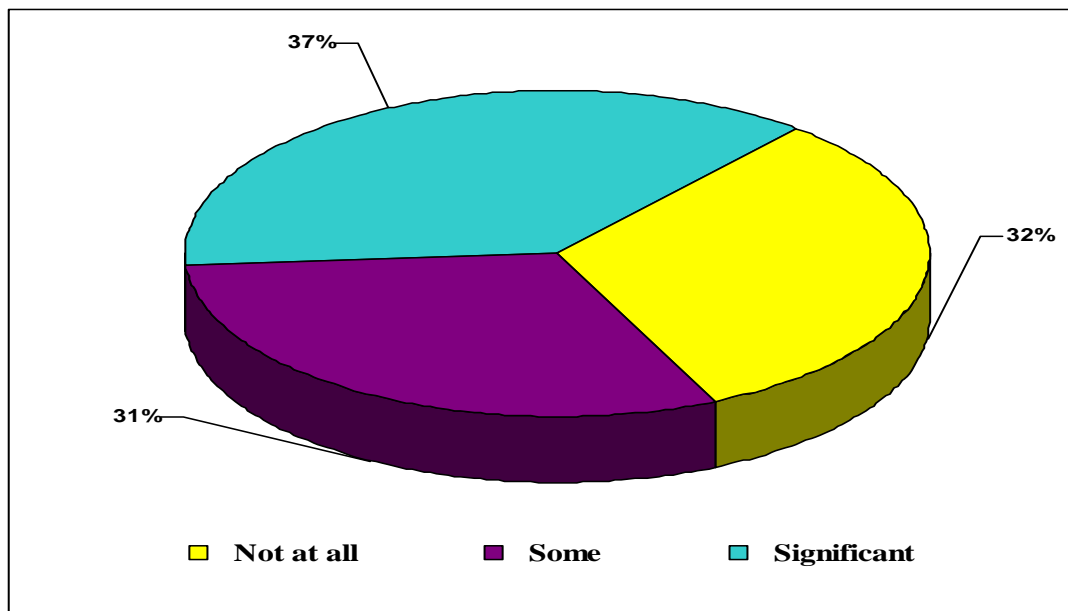
An analysis of Annual Performance Reports and Work Plans indicates that the types of activities undertaken related to surveillance have varied across the programs as well as across regions. A summary of commonly reported activities is provided in Table 10.

Table 10 - Reported Activities Related to Surveillance

Program	Activities
Immunization	<ul style="list-style-type: none"> • Support in the development and implementation of a variety of community electronic registries and data management systems including research and staff training • Surveillance of cold chain breakage and wastage (e.g., research on the current type and age of vaccine refrigerators and the presence/absence of a backup power supply to reporting on the cold chain including cold chain breaks and vaccine wastage) to maintain and support best practices, including assurance of appropriate equipment, power supplies, and thermometers. Some regions also provided support for improvements to the cold chain (from “Do Not Unplug” stickers or signs to support for the purchase of cold chain equipment such as refrigerators, back-up power supplies, and thermometers) • Development of surveillance strategies and support for community reporting on immunization. Communities may submit monthly and/or annual reports to the region, which in turn submits annual progress reports to the national office. • Research and dissemination of information on best practices (for example, a best practices report on cold chain management)
TB	<ul style="list-style-type: none"> • Enhanced surveillance of particular communities (e.g., communities with 1 or more cases of infectious TB since 1999) and/or groups (e.g., community members with high risk medical conditions, pre-school children, Grades 1 to 6, and health centre, band school, preschool & daycare employees). • Funding for activities related to databases (e.g., funding for data sharing with the province or participation in the development of Panorama). • Establishment of TB Advisory Groups and formal collaboration with provincial disease bodies to investigate and facilitate outbreak management. • Research activities. For example, the TB Program has supported: the development of screening guidelines which focus on clients at increased risk for LTBI and TB disease based on recommendations by expert TB groups; the use of social network analysis methods to better understand active case transmission in First Nations communities; and the use of data to create an accurate picture of TB among First Nations on reserve and work to develop programs and policies that accurately reflect the needs of these groups.
HIV/AIDs	<ul style="list-style-type: none"> • The primary focus has been on utilizing evidence-based analysis and best practices to improve surveillance. Examples of the types of activities include: • Conducting research on a number of topics relevant to surveillance (e.g., facilitating testing in First Nations and Inuit communities, researching population preferences in terms of treatment, a survey on sexual behaviour and precautions, research on rates of HIV transmission, environmental scans, SWOT analyses, and developing profiles of youth and adult testing behaviour, etc.); • Gathering of regional surveillance and epidemiology data at the community and regional level as well as the dissemination of surveillance data findings at a variety of levels (community, regional, and national); and • Development of surveillance strategies.

As a result of these activities, the general perception amongst Community Health Nurses, Health Directors and Regional Coordinators is that some progress had been made over the past three years with respect to improving the collection and reporting of surveillance data for the three program areas (see Figure 12).

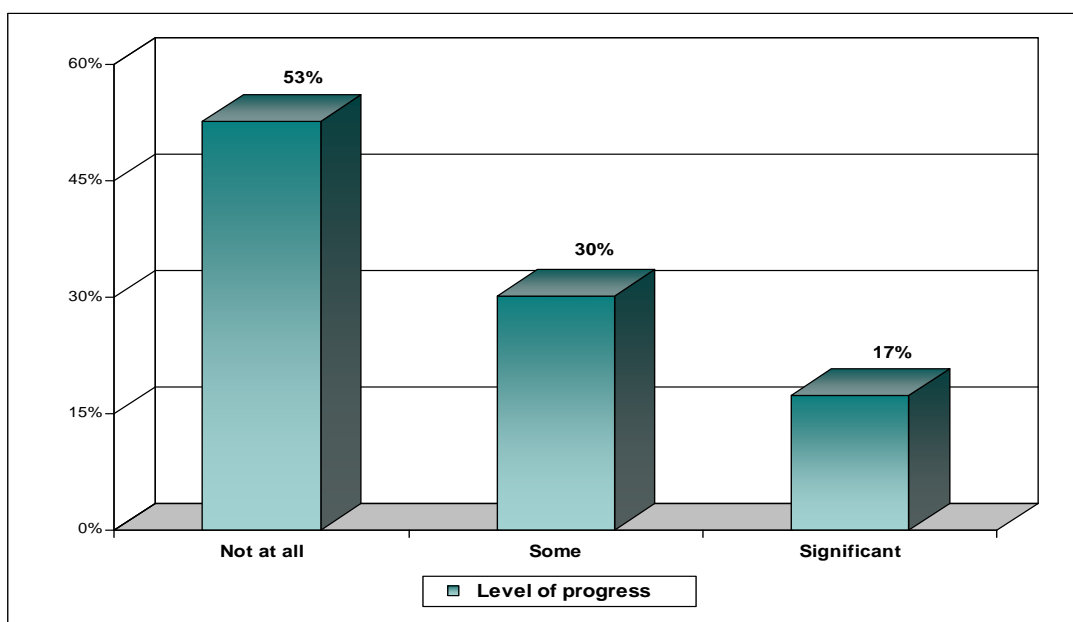
Figure 12 - Progress to Improve Data Collection and Reporting of Immunization Surveillance Data - 2005-2006 to 2007-2008



In Figure 12, respondents (Community Health Nurses, Health Directors and Regional Coordinators) reported a level of significant progress made on-reserve in the past three years in terms of improving data collection and reporting surveillance data related to immunization as 37% while the level of some progress made was reported as 31% and the level of no progress was reported as 32%.

Collection and reporting of HIV/AIDS surveillance data was not available for this evaluation.

Figure 13 - Progress in Improving Data Collection and Reporting of TB Surveillance Data 2005-2006 to 2007-2008



In Figure 13, respondents (Community Health Nurses, Health Directors and Regional Coordinators) reported a level of no progress made on-reserve in the past three years in improving the collection and reporting of surveillance data related to TB as 53% while the level of some progress made was reported as 30% and the level of significant progress was reported as 17%.

Improvements in surveillance data were credited to the wider use of electronic databases, better data collection tools, increased staffing, stronger relationships between health representatives and First Nations communities, and overall improvements to the level of communication and collaboration between regional agencies, Health Canada, the provincial government and communities.

More specifically, Community Health Nurses, Health Directors and Regional Coordinators highlighted:

- The introduction of new data collection tools, surveillance plans and reports have enabled better tracking and maintenance of patient records. Examples of new data collection tools include new database software, data collection forms from Health Canada, reporting documents, surveys, tracking forms, statistical documents and annual immunization reports.
- The use of central electronic databases has increased, which has helped to reduce the time required to collect and enter data. However, most communities still do not input data directly into the electronic databases; and
- There have been increases in the numbers of nurses and/or administrative staff in communities and regions (some regions reported the addition of dedicated physician for FNIHB, an epidemiology clerk, and a regional epidemiologist), which has enable them to better maintain records, produce daily/monthly reports, increase the numbers of patient screenings and follow-ups for TB, and improve relationships with the communities.
- Stronger community relations have resulted in more communities reporting immunization surveillance data.
- Some improvements have occurred in the level of communication and collaboration between regional agencies, Health Canada, the provincial government and communities.

3. However, access to timely and accurate surveillance data remains a major challenge facing the CDC Cluster.

For example, as will be discussed in the next sections, there are major issues with respect to the data available to assess the outcomes of the Cluster. Intervening factors affecting the data collection process include:

- Lack of information sharing agreements with the provincial governments. The extent to which provincial governments are willing to and able to share information varies across

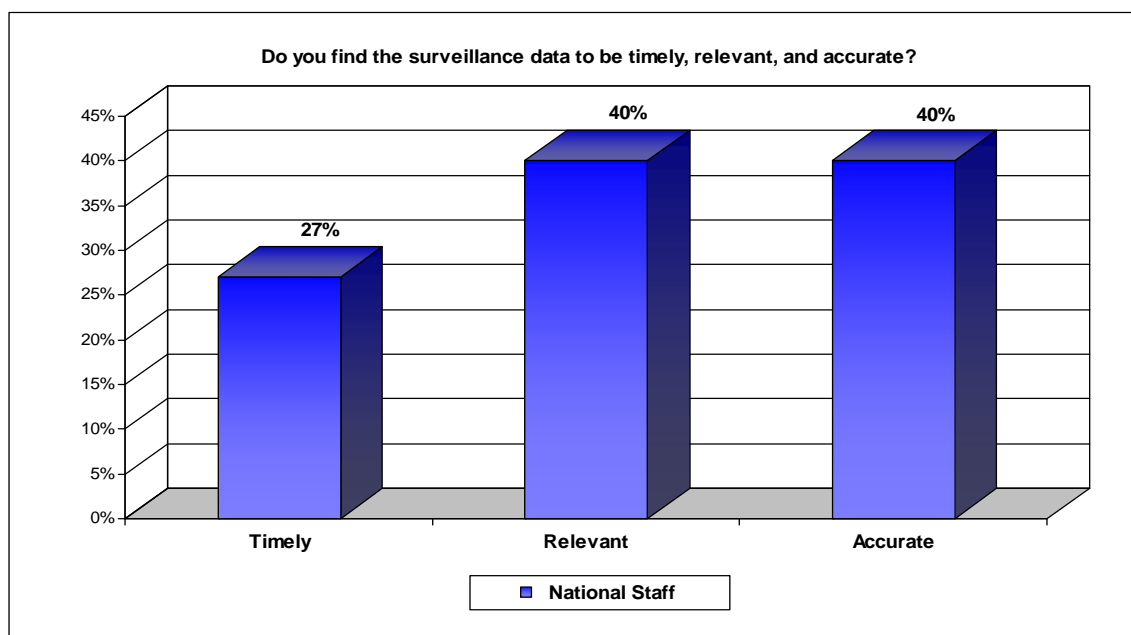
the regions. The majority of CDC data lies with the provinces and is not accessible by FNIHB or FN communities. Some provinces do not have identifiers of Aboriginal status and cannot specifically identify clients who reside on reserve. An electronic database which was linked to other provincial systems could decrease reliance on inefficient manual reporting processes such as faxes and paper reports. In the absence of sharing agreements and progresses, communities may be required to provide similar data to both the province and FNIHB.

- The use of multiple database systems within and across regions and the continued reliance upon paper-based database systems. The processes and reporting systems in place are not considered user-friendly, nor are they consistent across either programs or regions. The extent to which communities use electronic systems for immunization records varies significantly across regions with some of the communities in the Pacific, Alberta, Saskatchewan, Manitoba and the Atlantic Region still using paper-based systems (data is forwarded by fax or mail to the regional office, which then enters the data into a database). The Atlantic Region created its own paper tracking tool and report because the national tool did not reflect the four provincial immunization schedules in place there. There are also issues with the ability of Regions to manage the amount of faxed information sent into their offices.
- The levels of mobility among First Nations and Inuit people. People move on and off-reserve and may utilize health services off reserve. One implication of this is that it can be difficult to keep track of vaccination status as children move between communities. In addition, when individuals access health services in the provincial systems, the resultant “record scattering” makes it difficult to conduct accurate surveillance.
- Staff shortages and turnover at the community and regional levels. Communities highlighted the need for more clerical staff to complete reporting duties, which would enable nurses to focus on health issues. It was also noted at the regional and community levels that, due to high staff turnover, there are many representatives who have not been trained on particular database systems.
- The willingness of communities to share information. For example, some FN community leaders feel apprehension around use of people’s health information.
- The willingness of clients may not comply with TB or HIV testing and treatment for fear of being ostracized by the community.

Progress is expected on a few of these issues. FNIH and First Nations have been contributing to the development of new electronic surveillance tools and reporting forms, working to strengthen communication and links with the provincial governments, and working to resolve some of the issues relating to human resources.

In Figure 14, 27% of respondents (National Staff) reported data to be timely; 40% of respondents indicated that surveillance data is accurate and 40% of respondents report that data is relevant, respectively.

Figure 14 - Perceived Timeliness, Relevance and Accuracy of Surveillance Data Reported by National Staff



Regional Coordinators were asked their perception of timeliness, relevance and accuracy of surveillance data. As presented in Table 11, 25% of Regional Coordinators indicated surveillance data is timely, 38% indicated surveillance data is relevant and accurate (respectively), 25% of respondents indicated that surveillance data was not timely, relevant or accurate.

Table 11 - Perceived Timeliness, Relevance and Accuracy of Surveillance Data Reported by Regional Coordinators

Characteristic	Indicated %
Timely	25%
Relevant	38%
Accurate	38%
None of the above	25%

The results of the literature review highlight some of the major challenges that are associated with health-assessment data.

Aboriginal populations in Canada are diverse and multijurisdictional. About half of Aboriginal people in Canada now live in urban areas. Not only does the setup of health systems vary greatly according to Aboriginal ethnicity (First Nations people with or without registered treaty status, Inuit and Métis) and geography (remote, rural, on-reserve, urban), so does provider jurisdiction (federal, provincial /territorial, Aboriginal governing authority or a combination thereof). As well as thwarting access to comprehensive health care, these multiple jurisdictions foil the

collection of comprehensive and reliable health-assessment data.... Although the health care system in Canada is touted by many as one of the best in the world, considerable changes are required for Indigenous peoples to realize their inherent right to good health. Accurate and culturally meaningful health assessment is one step toward this goal.⁶¹

Prevention, Control and Treatment

Objectives related to prevention, control and treatment have been established for each of the three Program areas including immunization, TB and HIV/AIDS. This section explores the progress that has been made against these objectives over the past few years.

1. Considerable progress has been made against the Immunization Program objectives, particularly in terms of implementing newly recommended vaccines and promoting immunization through education and awareness activities.

Performance data and interviews with National Program Coordinators and Regional Coordinators of the Immunization Program as well as with Community Health Nurses and Health Directors were used to rate how much progress has been made over the past three years in terms of:

- Improving coverage rates of routine immunizations in the targeted population; through activities;
- Implementing newly recommended vaccines (e.g., varicella, conjugate pneumococcal, and conjugate meningococcal);
- Promoting immunization through education and awareness activities; and
- Improving understanding of immunization coverage rates, incidence of vaccine preventable diseases and barriers to immunization and best practices in implementation

A discussion of the progress made drawn from the literature review, document review and interviews is provided here.

Implementing newly recommended vaccines. Approximately 70% of respondents (National Program Coordinators and Regional Coordinators of the Immunization Program as well as with Community Health Nurses and Health Directors) reported significant progress in implementing newly recommended vaccines. According to the regional data shown in Table 12, varicella vaccination coverage rates have increased between 2004 and 2007, along with similar rates of

⁶¹ Smylie, J. and Anderson, M. Understanding the Health of Indigenous peoples in Canada: Key Methodological and Conceptual Challenges. Canadian Medical Association Journal, September 12, 2006. Pages 602 – 605.

increase in coverage for the pneumococcal vaccination. The coverage rates for other vaccines have not seen significant changes.

Table 12 - Coverage Rates for Varicella and Pneumococcal Vaccination 2004 and 2007

Age at Vaccination	Varicella Vaccination Coverage		Pneumococcal Vaccination Coverage	
	2004	2007	2004	2007
<1 year			49%	70%
1-2 years	51%	81%	38%	71%
2-6 years	29%	52%		

It was noted that factors such as parental fears of vaccines and the narrow program scope with the 0 to 6 years old age group can slow the implementation of new vaccines.

Promoting immunization through education and awareness activities. National and Regional Coordinators reported some progress in the promotion of immunization through education and awareness. They identified local radio campaigns, continuing education for nurses, and print materials as the most effective mechanisms in promoting immunization. It was noted that campaigns are most effective when they are culturally appropriate, use information from people in the community, and involves distributing information in health centres and during community events (Table 13).

Table 13 - Effective Strategies in the Promotion of Immunization

Effective promotional strategies	Community Health Staff (n=247)
Advertisements in media such as print, radio and TV	25%
Workshops and classroom sessions	13%
Mass mail-out of letters or frequent newsletters	12%
One-on-one services for parents and community personnel	11%
Providing reminders for appointment bookings	7%
Community meetings	7%
Events that promote health awareness	7%
Creating long-term relationships with parents, community leaders and health practitioners	4%
Ensuring that adequate staffing is in place (10 respondents)	4%

Other examples which were identified include booklets, pamphlets, and presentations at schools. The use of incentives to encourage parents to bring their children for immunizations was also noted to be helpful. Examples of incentives include travel mugs, t-shirts, water bottles, magnets, bibs, sippy cups, bouncy balls and colourful band-aids or stickers.

Over time, a key to the success of the Immunization Program will be its ability to reach hard-to-reach groups. The coordinators highlighted that certain groups can be hard to reach (e.g., students, adults, and young mothers) because they live in remote and isolated communities, the complexity of the immunization schedules, sporadic school attendance and misconceptions about vaccines. When asked to identify target groups that are hard-to-reach, Health Directors and

Community Health Nurses most commonly identified teens and those aged 20-40 years as hard to reach (Table 14).

Table 14 - Hard to Reach Target Groups

Hard to reach groups	Community Health Staff (n=247)
Individuals between the ages of 20 and 40 years	13%
Teenagers	13%
Higher risk families	10%
Newborns and new parents	9%
Inaccessible by phone	6%
School-aged children	5%

Some of the factors that may make them hard-to-reach are that they are busy, lack interest, have rebellious tendencies, have transportation issues, or are transient. Some other target groups that were identified less often as being hard-to-reach were substance abusers, homeless people, isolated people, uneducated, children of single parents and those suffering from HIV/Hepatitis C.

Improving understanding of immunization coverage rates, the incidence of vaccine, preventable diseases and barriers to immunization and best practices in implementation.

According to National Program Coordinators and Regional Coordinators some progress has been made in improving understanding of vaccine preventable diseases, coverage rates and immunization barriers. Regions have worked to improve the collection, standardization and access to data. Some surveys and research have been undertaken.

Approximately 32% of respondents (National Program Coordinators and Regional Coordinators) reported significant change in this area. The targets of information sharing are shown in Table 15.

Table 15 - Information Sharing Targets

To improve understanding of vaccine preventable diseases, coverage rate and immunization barriers information is commonly shared with...	Community Health Staff (n=247)
Other health care workers	10%
Community leadership and staff	10%
Broader community	4%
Public health centres	3%
School staff, parents, and/or children	2%

The information is shared through various communication vehicles such as posters/pamphlets, staff meetings, and other means such as via conferences, teleconferences, emails, workshops and clinics. Some communities use their data to develop appropriate strategies and workshops to address issues in the community. Progress may also be shared with the community leadership and, at times, with the larger community through websites, reports, and immunization clinics. However, despite progress, concerns regarding limited and often inaccurate data remain.

2. Stakeholders indicated progress has been made in terms of working with other national and international organizations towards a coordinated and integrated response, encouraging participation in education and awareness activities, reducing risky behaviours, and increasing knowledge of blood-borne diseases and sexually transmitted infections.

National Coordinators, regional coordinators, community health nurses, and health directors were asked the extent of progress created to HIV/AIDS programming based on the following factors:

- Increasing knowledge of blood-borne diseases and sexually transmitted infections and reducing the associated stigma within the community or communities;
- Increasing testing, education and support for those vulnerable to and living with HIV;
- Bringing about changes in risky behaviours associated with blood-borne diseases and sexually transmitted infections (e.g., unprotected sex, needle sharing, etc.);
- Reducing the incidence of blood-borne diseases and sexually transmitted infections;
- Encouraging members of the target groups to participate in education and awareness activities related to blood-borne diseases and sexually transmitted infections;
- Working with other organizations towards a coordinated and integrated response to blood-borne diseases and sexually transmitted infections at the national and international levels;
- Increasing the availability of evidence-based interventions related to blood borne diseases and sexually transmitted infections; and
- Improving the collection and reporting of surveillance data related to HIV/AIDS.

Working with other organizations towards a coordinated and integrated response to blood-borne diseases and sexually transmitted infections at the national and international levels. According to National Program Coordinators and Regional Coordinators, there has been considerable progress made in terms of working with other federal government departments (e.g., PHAC, Correctional Services Canada, Indian and Northern Affairs Canada, and the National Native Alcohol and Drug Abuse Program), national associations (e.g., AFN, Canadian Aboriginal AIDS Network, Pauktuutit, National Aboriginal Council on HIV/AIDS etc.), and international groups (e.g., through the Spirited People ILA for International Indigenous Peoples Satellite and the International AIDS Conference).

Encouraging members of the target groups to participate in education and awareness activities related to blood-borne diseases and sexually transmitted infections. According to National Program Coordinators and Regional Coordinators, some progress has been made in encouraging the participation of target groups. The strategies that tend to be the most effective are those which are culturally appropriate. Having Aboriginal leaders, prominent community

members and role models who openly speak about HIV/AIDS has proven to be an effective approach to use in a campaign. Several different approaches were highlighted including providing education through community media outlets such as Aboriginal TV channels, radio shows and posters/displays as well as incorporating messages into other activities (e.g., classes, dances, camps and sporting activities). For example, for campaigns that are directed at adult males, it may be useful to integrate promotions with wellness events or golfing tournaments; for young women, one option is to build on pre-natal/post-natal classes.

Approximately, 13% of respondents (National Program Coordinators and Regional Coordinators) reported significant progress in this area (39% reported some progress and 48% reported no progress). These activities have been targeted at a wide variety of groups, including Aboriginal leaders, community healthcare staff, young men and women, young pregnant women and individuals living with or directly affected by HIV/AIDS. Examples of education and awareness activities include print materials such as culturally sensitive teaching booklets and posters as well as events such as AIDS Awareness Week or a play to facilitate discussion of HIV/AIDS. The most effective educational awareness activities were workshops on HIV/AIDS and classroom presentations in schools (see Table 16).

Table 16 - Most Effective HIV/AIDS Education and Awareness Activities

Most effective educational and awareness activities related to activities related to blood-borne diseases and sexually transmitted infections	Community Health Staff (n=247)
Workshops on HIV/AIDS issues	24%
Classroom presentations in elementary and secondary schools	20%
Culturally appropriate promotional materials	11%
General health conferences and fairs	9%
One-on-one education and counselling support	8%
Community-based events such as luncheons, parties, gatherings, awareness weeks and HIV/AIDS walks	6%
Outreach clinics which offer access to confidential testing, information and resources	4%
Informal communications such as word-of-mouth, support groups and forums	2%
Distribution of condoms, needles, sharp/needle kits and straws	2%

Key factors that constrain the progress made in terms of communication with hard-to-reach-groups are most commonly related to a lack of interest in BBP/STI issues (see Table 17).

Table 17 - Community Health Staff Perceptions of HIV/AIDS Communication Constraints

Key factors that constrain the progress made in terms of communication with hard-to-reach-groups	Community Health Staff (n=247)
Lack of interest in BBP/STI issues	24%
Inaccessibility of the services and ineffective relationships (conflicting priorities, lack of funding, standard hours of operation, staff turnover)	14%
Stigma associated with accessing resources and fear of positive test results	14%
Lack of culturally sensitive promotional and educational activities	10%
Difficulties getting services to remote communities	9%

Key factors that constrain the progress made in terms of communication with hard-to-reach-groups	Community Health Staff (n=247)
Other compounding issues (e.g., drugs, alcohol abuse, gangs, teen pregnancy, mental illness)	8%
Misconceptions about the seriousness and transmission of HIV/AIDS and BBP/STIs	8%
Lack of alternative communication strategies with isolated communities (no internet access, no phone)	5%
Language barriers	5%
Poverty, high mobility	2%
Lack of incentives to increase attendance at workshops	2%
Limited opportunities for testing on reserves	2%

The target groups that were considered hardest to reach as identified by the National and Regional Coordinators were young adult males between the ages of 17 and 35 years who tend not to access health care and may believe they are invulnerable. Highly mobile youth and adults who move between reserves and cities are particularly hard to reach because they are difficult to track and often don't seek or follow through with treatment. Other groups identified as hard to reach are adults between the ages of 35 and 60 years old, Aboriginal leaders and IV drug users. Some of the factors that constrain the progress made include staff shortages, funding shortages, and competing demands for the time of Community Health Nurses. To create relationships with the target groups, it was suggested that incentives, information and routine testing be offered.

Bringing about changes in risky behaviours associated with blood-borne diseases and sexually transmitted infections (e.g., unprotected sex, needle sharing, etc.). National Program Coordinators and Regional Coordinators reported some progress (in creating greater community awareness of harm reduction methods among youth and particularly among young aboriginal women). Increased awareness has been viewed as a result of education on healthy lifestyles and risky behaviours as well as involving youth in the design and implementation of programs.

Approximately 11% of respondents (National Program Coordinators and Regional Coordinators) reported significant progress. To the extent there was an impact, the activities that have had the greatest influence in affecting risky behaviours are those that involve distributing and making condoms more available or education and promotional activities in the communities (see Table 18).

Table 18 - Effective Activities Impacting HIV/AIDS Behaviour Changes

Effective activities impacting changes in risky behaviours	Community Health Staff (n=247)
Distributing and ensuring availability of condoms in various sites (bathrooms, partitioned rooms)	16%
Education and promotional activities in the communities	14%
Awareness about HIV/AIDS and drug use (e.g., providing needles and straws for safe drug use)	8%
Presentations in elementary and secondary schools	4%
Effective, culturally appropriate advertising	3%
Workshops, conferences and health fairs	3%
Increasing access to and availability of testing services	2%
One-to-one counselling and support for clients affected by HIV/AIDS	2%

Increasing the availability of evidence-based interventions related to blood-borne diseases and sexually transmitted infections (e.g., based on analysis of regional project results, trends in epidemiological data and research findings generated through other Aboriginal-specific funding streams to address in Canada). Six percent of respondents (National and Regional Coordinators) reported significant progress in sharing information between national offices, regional partners and policy-makers as well as working closely with PHAC has contributed to a more evidence-based approach. Representatives particularly identified the Aboriginal AIDS status report produced by PHAC as helping to provide a better understanding of conditions on reserve.

Community Health Nurses and Health Directors noted that information obtained through training, workshops and conferences as well as from other resources such as the Canadian AIDS Treatment Information Exchange (CATIE) website has been useful in designing and delivering evidence-based services.

Increasing testing, education and support for those vulnerable to and living with HIV.

National Coordinators and Regional Coordinators noted that, in the past three years, there has been a slight increase in STI testing and support provided to patients (e.g., help with medication, transportation to services, counselling) and an increase in education for health staff. Progress has also been made in terms of increased awareness, funding and collaboration with other health branches. These improvements can be attributed to an increased availability and access to STI information, educating nursing staff to provide better testing and support, and enhanced communication channels between regional health authorities and FNIHB. Some of the factors which have limited the overall progress made include staffing issues, resistance of some communities to discussing issues related to HIV/AIDS, social stigma, and limited resources available locally for persons with the illness.

Approximately 16% of respondents (National and Regional Coordinators) reported significant progress in this area. The most significant issue constraining the progress made is the existing stigma in communities around BBPs/STIs. As a result, the key factor in assisting this population may be the availability of outreach clinics with confidential testing and counselling.

Table 19 – Effective HIV/AIDS Activities to Increase Testing, Education and Support

Activities increasing testing, education and support for those vulnerable to and living with HIV	Community Health Staff (n=247)
Availability of outreach clinics with trained staff able to deliver confidential testing and counselling	18%
Use of workshops, conferences and health fairs	6%
Use of culturally appropriate promotional materials	6%
Distribution of condoms and sharp cases/needle kits	1%
Support activities implemented locally	Community Health Staff (n=247)
Workshops	4%
Guest speakers	4%
One on one support fro healthcare staff	4%
Sharing/education circles	2%
Open forums	2%

Increasing knowledge of blood-borne diseases and sexually transmitted infections and reducing the associated stigma within the community or communities. Some progress in increasing knowledge and reducing the associated stigma was reported by National and Regional Coordinators. Approximately 18% of communities reported significant progress. Some representatives noted that HIV/AIDS awareness projects, conferences, workshops, culturally appropriate materials and other health strategies in the community have facilitated more open discussion regarding HIV/AIDS related issues among community members. Although data is not available on participation rates, some communities reported increases in the number of community members attending programs aimed at teaching healthy lifestyles and encouraging youth to have a better understanding of HIV/AIDS transmission methods.

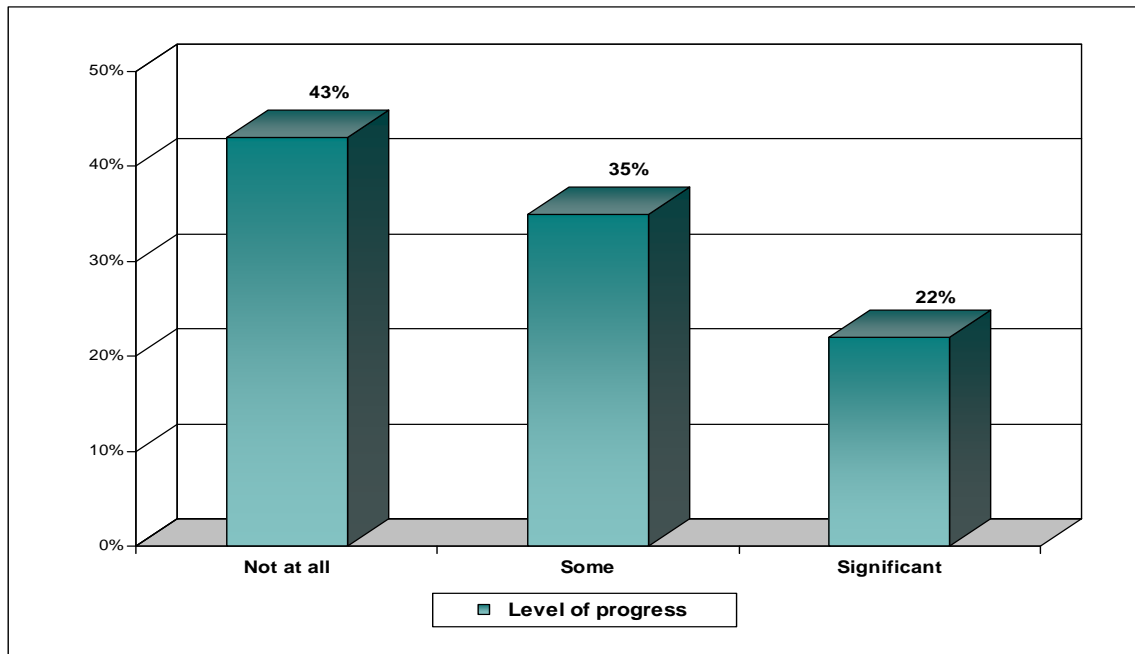
Reducing the incidence of blood-borne diseases and sexually transmitted infections. National and Regional Coordinators did not report significant progress in terms of reducing the incidence of blood-borne diseases and sexually transmitted infections. Approximately 10% of communities reported significant progress. Keeping in mind the limitations associated with the data (ethnic status is reported for about 30% of all positive HIV test reports), the number of positive HIV test reports amongst Aboriginals has not improved in recent years (reports increased from 161 in 2003 to 174 in 2004, 176 in 2005, 198 in 2006, 183 in 2007, and 201 in 2008). Amongst those cases where ethnic status was reported, Aboriginal Canadians accounted for 25% of the reported number of positive HIV test reports. Where it has occurred, the progress was attributed to education activities in the community (e.g., education about safer sex practices), distribution of condoms, culturally appropriate promotional materials and advertising. The lack of progress was attributed to the types of factors which were previously identified and, in some cases, to the perception that infection rates were already low.

3. While some progress has been made in improving understanding of Tuberculosis, incidence rates remain very high relative to the general population.

The National Coordinators and Regional Coordinators of the Tuberculosis Program, as well as, the Community Health Nurses and Health Directors were asked to rate how much progress has been made over the past three years in terms of:

- Increasing awareness and promoting better understanding of Tuberculosis disease;
- Reducing the incidence of Tuberculosis infections;
- Detect and diagnose latent Tuberculosis infections among those exposed to active TB disease cases and preventing the spread of the disease to other people in the community;
- Improving the treatment of those with active and latent Tuberculosis; and
- Encouraging members of the target groups to participate in education and awareness activities related to Tuberculosis.

Figure 15 - Progress in Increasing Tuberculosis Awareness

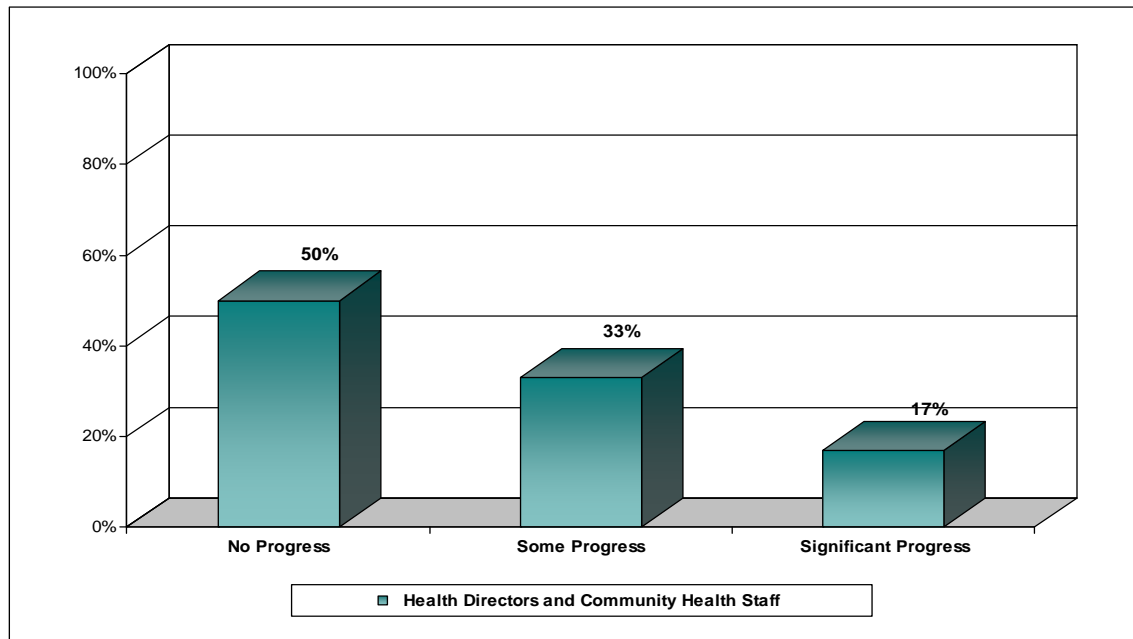


Increasing awareness and promoting better understanding of Tuberculosis. In Figure 15, respondents (Health Directors and Community Health Nurses, and National and Regional Program Coordinators) reported a level of no progress made on-reserve in the past three years in increasing awareness and promoting better understanding of TB as 43% while the level of some progress made was reported as 35% and the level of significant progress was reported as 22%. Progress has been made in the reduction of the stigma associated with tuberculosis as well as screening, and the activities leading to this progress were most likely the use of educational workshops (see Table 20).

Table 20 - Increasing Tuberculosis Awareness and Understanding

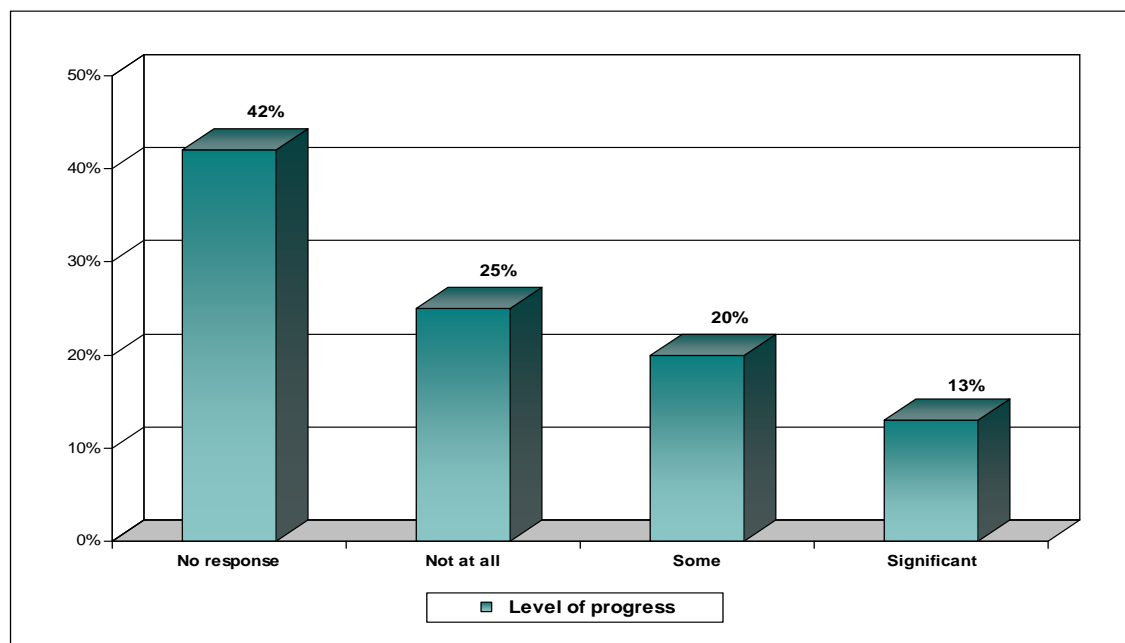
Areas of progress in increasing awareness and promoting understanding of Tuberculosis.	Community Health Staff (n=247)
Reduction in the stigma associated with tuberculosis and a greater emphasis the importance of screening.	17%
Increased involvement of community members who have begun to actively seek information, testing, and treatment.	10%
Activities effective in increasing awareness and promoting understanding of Tuberculosis	Community Health Staff (n=247)
Use of educational workshops in schools, health fairs, activities in the community and informative videos	17%
Increases in availability of screening	8%
Culturally sensitive program promotions such as newsletters, articles, posters and pamphlets	7%
Improved training and education for nurses and an increase in staffing have also impacted progress	6%

Figure 16 - Progress in Participating in Tuberculosis Education and Awareness Activities



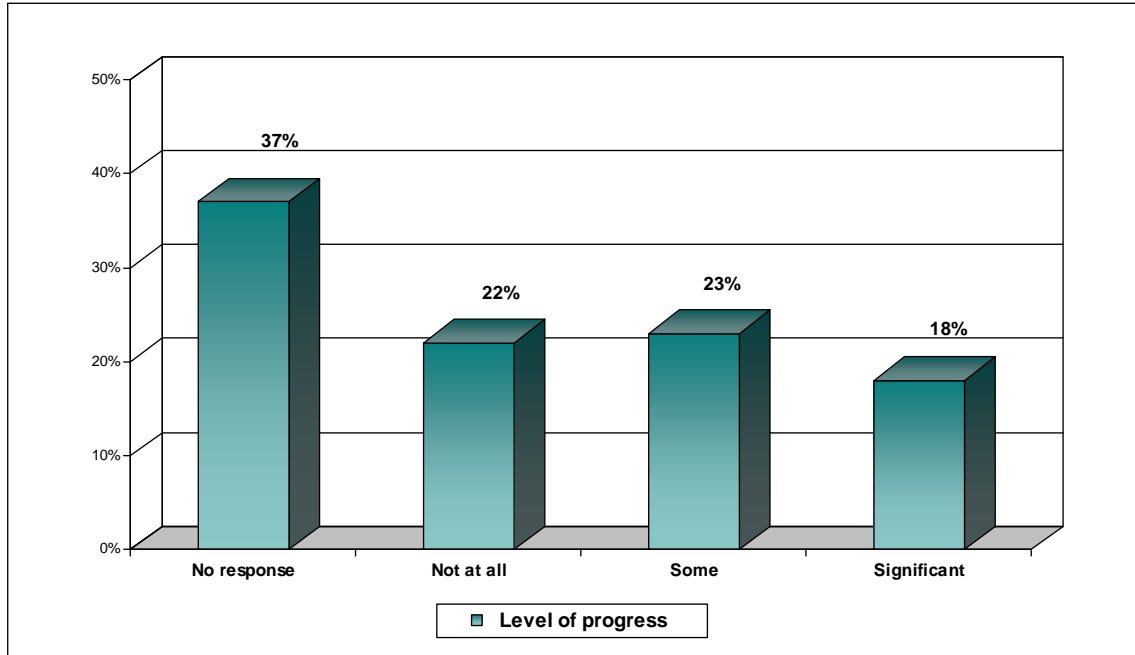
In Figure 16, respondents (Health Directors and Community Health Nurses, and National and Regional Program Coordinators) reported a level of no progress made on-reserve in the past three years in encouraging members of the community in participating in education and awareness activities related to TB as 50% while the level of some progress made was reported as 33% and the level of significant progress was reported as 17%.

Figure 17 - Progress in Improving the Treatment of Active and Latent Tuberculosis



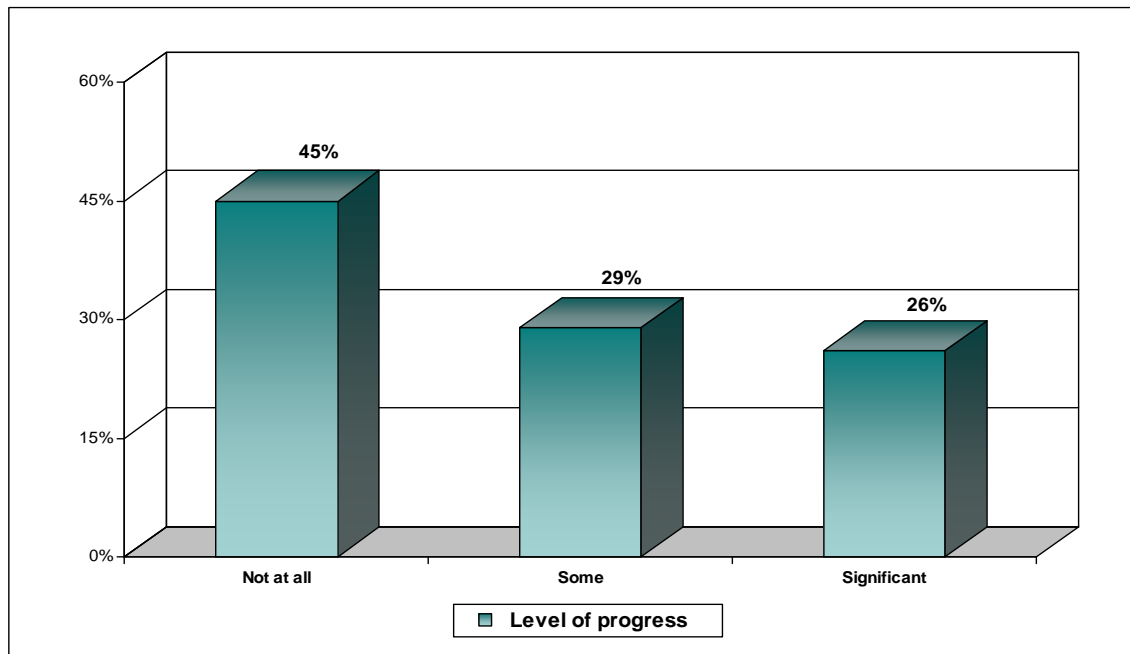
In Figure 17, respondents (Health Directors and Community Health Nurses, and National and Regional Program Coordinators) reported a level of no progress made on-reserve in the past three years in terms of improving the treatment of those with active and latent TB as 25% while the level of some progress made was reported as 20% and the level of significant progress was reported as 13%. The level of no response from respondents was 42%.

Figure 18 - Progress in Detecting and Diagnosing Tuberculosis Infections



In Figure 18, respondents (Health Directors, Community Health Nurses, and National and Regional Program Coordinators) reported a level of significant progress made on-reserve in the past three years in terms of detecting and diagnosing TB infections as 18% while the level of some progress made was reported as 23% and the level of no progress was reported as 22%. The level of no response from respondents was 37%.

Figure 19 - Progress in Reducing the Incidence of Tuberculosis Infections



In Figure 19, respondents (Health Directors, Community Health Nurses, and National and Regional Program Coordinators) reported a level of no progress made on-reserve in the past three years in reducing the incidence of TB as 45% while the level of some progress made was reported as 29% and the level of significant progress was reported as 26%.

Encouraging members of the target groups to participate in education and awareness activities related to Tuberculosis. National and Regional Program Coordinators reported some progress in this area. They reported that the types of campaigns that tend to be the most effective are ones that address other issues, are culturally appropriate, and are designed with community input. An example would be an annual conference. The people that are targeted in these campaigns are First Nations on reserve and Inuit (youth, elders, leaders and parents), front-line staff, off-reserve health practitioners, mobile Aboriginals and those with Paediatric Tuberculosis or co-morbidities. It is believed that approximately 20% of the target population has been reached with information. Target groups that tend to be the hardest to reach are those that are transient (e.g., homeless, populations that are mobile between communities and cities), adolescents, off-reserve health practitioners and substance abusers.

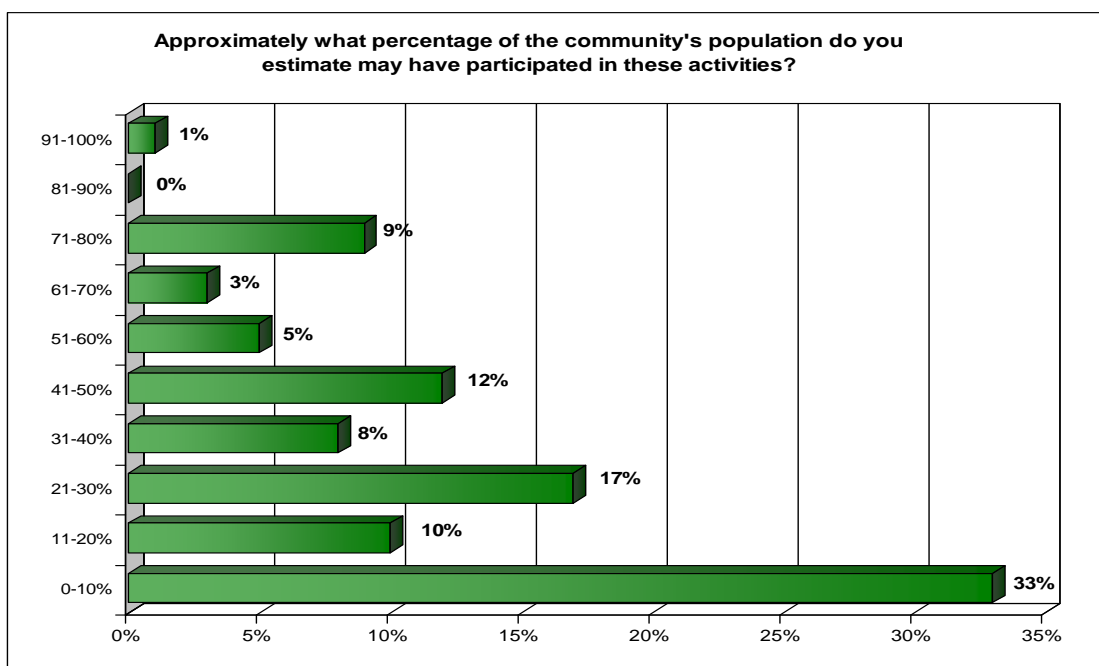
Approximately 13% of respondents (National and Regional Program Coordinators) reported significant progress, 35% reported some progress and 53% reported no progress in encouraging members of the target groups to participate in education and awareness activities related to Tuberculosis. The most commonly identified factor affecting progress in this area is the workshops and education sessions held throughout the communities (see Table 21).

Table 21 - Most Effective Tuberculosis Activities Promoting Community Participation

Activities affecting progress in encouraging members of target groups to participate in education and awareness sessions related to tuberculosis	Community Health Staff (n=247)
Workshops and education sessions	21%
Awareness campaigns (e.g., pamphlets, newsletter articles, radio broadcasts, and information packages)	15%
Availability of information at community events (e.g., health fair)	14%
Staff with up to date information and training	2%

Health Directors and Community Health Nurses were asked to estimate the percentage of the community's population that has participated in education and awareness activities. The majority of respondents (33%) perceived only 10% of community members participated in TB Education and Awareness Activities. Figure 20 provides additional details (all percentages have been rounded using significant figures).

Figure 20 – Community Health Staff Perceptions of Communities Participation in Tuberculosis Education and Awareness Activities



The most common factor constraining the program's success is the lack of interest in the issue and competing issues (see Table 22).

Table 22 – Barriers to Participation in Tuberculosis Education and Awareness Activities

Factors constraining participation of target groups in education and awareness activities	Community Health Staff (n=247)
Lack of interest/ Competing issues	18%
Denial in the population due to lack of understanding	10%
Travel distance to health centres	9%
Lack of culturally competent materials	4%

Improving the treatment of those with active and latent Tuberculosis. Regional support to communities and professional support from the TB coordinator to staff has slightly increased over the last three years according to National Program Coordinators and Regional Coordinators. Those communities that have a food incentive program and good relationships can encourage people to adhere to their medication regimens whereas those with a high turnover of staff and rotating doctors are unable to do the same. The FNIHB Tuberculosis Program also allows for better follow-up and treatment. Directly Observed Therapy Treatment for all clients, SCRAP TB and public education through radio, TB and community booths are examples of treatments and support activities that are implemented locally.

Approximately 13% of respondents (National Program Coordinators and Regional Coordinators) reported significant progress, 20% some progress, 25% no progress and 42% gave no response regarding improving the treatment of those with active and latent Tuberculosis. The presence of TB control nurses and community TB workers is the most commonly identified factor in the progress made and the most common factor limiting progress in treatment is client characteristics which are counter to receiving treatment (see Table 23).

Table 23 – Tuberculosis Treatment Activities

Activities affecting progress in the treatment of TB	Community Health Staff (n=247)
Presence of TB Control nurses community TB workers	9%
Presence of close monitoring and follow-up of cases	5%
Education on the importance of treatment	3%
High levels of regional support (e.g., protocols, DOT workers, data collection)	1%
Providing incentives for treatment compliance	1%
Factors constraining progress in the treatment of TB	Community Health Staff (n=247)
Client characteristics (e.g., resistance to treatment because of length, fear of stigmatization, drug addiction, other disease, mobility)	14%
Communities lacking capability to properly treat tuberculosis	8%
Insufficient surveillance systems	3%

Detecting and diagnosing latent Tuberculosis infections among those exposed to active TB disease cases and preventing the spread of the disease to other people in the community. Slight progress has been made in this area according to National and Regional Coordinators as a result of the regional support in treating aggressive cases and conducting contact investigation under the Cluster. Improvements in cooperation and collaboration among government agencies have also had a positive impact in the communities' ability to detect and diagnose tuberculosis. Although progress has been made in some communities, factors such as competing community priorities, staff shortages and turnover and the level of mobility of First Nations have limited communities' ability to detect, diagnose and prevent the spread of TB.

Approximately 18% of the respondents (National and Regional Coordinators) reported significant progress, 23% some progress, 22% no progress (with 37% no response) in the detection and diagnosing latent Tuberculosis infections on-reserve in the past three years. The most commonly identified activities impact detection and diagnosis were efforts made to educate community members (see Table 24).

Table 24 –Progress Activities in Detecting and Diagnosing Tuberculosis

Activities impacting progress made in detecting and diagnosing Tuberculosis	Community Health Staff (n=247)
Efforts made to educate community members	8%
Community-wide testing in schools and by appointment	5%
Follow-ups where adherence to treatment is encouraged	4%
Efforts to increase the number of specialized workers	4%
Efforts to improve communication with TB Control, hospitals and the public health agency	2%

Reducing the incidence of latent Tuberculosis infections. The National and Regional Program Coordinators perceive very little progress has been made to date in reducing actual incidence rates either because the community has not experienced outbreaks in recent years (i.e. no improvement was possible) or because outbreaks have begun or continued. The progress that has been made is attributable to good contact tracing and the awareness of Community Health Staff. However, progress is limited by capacity issues at the provincial level (e.g., no physicians, unstable staffing), lack of 'off reserve' system awareness of TB, competing priorities, surveillance problems such as a lack of reliable data and insufficient funding to TB Programs. Among community members there are issues of poverty, stigma associated with the disease, and substance abuse. Representatives noted that in some regions, rates of tuberculosis are actually increasing.

Approximately 26% of respondents (National and Regional Program Coordinators) reported significant progress, 29% some progress and 45% no progress in reducing the incidence of latent TB infections on-reserve over the past three years. As noted earlier, compared with the overall Canadian population, the incidence of tuberculosis (TB) is much higher amongst First Nations and Inuit people and sporadic TB outbreaks are still common in First Nations communities, especially in remote locations. According to preliminary data which was recently released, 1,600 new active and re-treatment tuberculosis (TB) cases (a rate of 4.8 per 100,000 population)

were reported to the Canadian Tuberculosis Reporting System (CTBRS) in 2008. Of these cases in 2008, 341 were Canadian-born Aboriginal people, and since 2004 the number of cases amongst this group has increased (see Table 25).

Table 25 - New Tuberculosis Active and Re-treatment Cases

Reported Cases of new active and re-treatment tuberculosis cases					
Year	2004	2005	2006	2007	2008
Canadian Born Aboriginal Individuals	213	265	264	257	341

Incidence rates reveal the disproportionate burden of disease among Aboriginal peoples which appears to have worsened over the past few years. For the Canadian population overall, the TB case rate in 2008 remained unchanged at 4.8 per 100,000 from that reported in 2007 but had declined somewhat from the rate of 5.0 which existed in 2004. In 2004, the total Aboriginal rate was 4.8 times higher than the Canadian rate and 26.4 times higher than the rate of Canadian-born non-Aboriginals. In 2008, the total Aboriginal rate was 5.9 times higher than the Canadian rate and 31 times higher than the rate of Canadian-born non-Aboriginals. Although the amount of progress made was not large (11%), the most commonly identified activities impacting the progress made in reducing the incidence of Tuberculosis are the prevention efforts (see Table 26).

Table 26 – Effective Activities at Reducing Incidence of Tuberculosis

Activities impacting progress made in reducing the incidence of Tuberculosis	Community Health Staff (n=247)
Prevention efforts (e.g., pamphlets, information sessions, community events, school visits)	11%
Increased regularity of testing (particularly in schools) with increased emphasis on early detection and follow-up	10%
Improvements to surveillance systems	2%

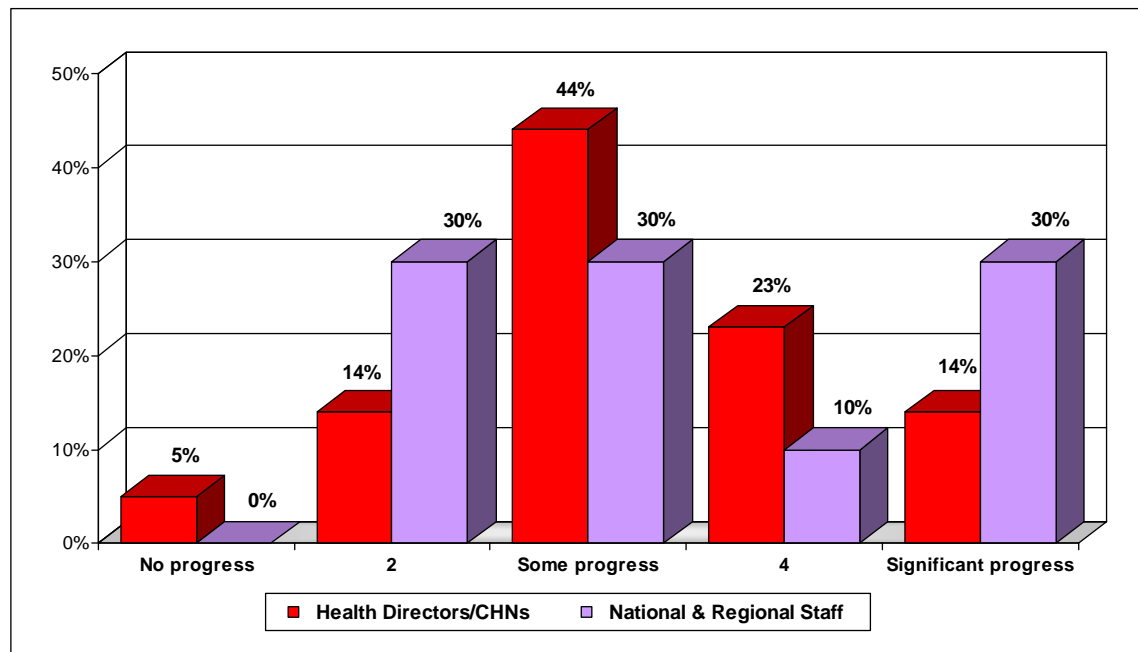
4. Overall, the Cluster is viewed as having made some progress in improving longer-term health outcomes.

As indicated in Figure 21:

- Health Directors and Community Health Nurses reported a level of significant progress made on-reserve in the past three years **towards improving longer-term health outcomes among residents in the Community of First Nations and Inuit** as 14% while the level of some progress made was reported as 44% and the level of no progress was reported as 5%.

- National and Regional Staff reported a level of significant progress made on-reserve in the past three years **towards improving longer-term health outcomes among residents in the Community of First Nations and Inuit** as 30% while the level of some progress made was reported as 30% and the level of no progress was reported as 0%.

Figure 21 - Perceived Progress Towards Improving Longer-term Health Outcomes



Activities such as education and awareness programs are viewed as positively influencing immunization rates for both new and routine vaccines, improving understanding of communicable diseases, easing stigmatization, reducing risky behaviours and better educating the youth and adult population as to how to protect themselves against STIs and HIV, and increasing screening, testing and support. The development of aggregate reports concerning First Nations has meant that performance over time can be tracked and measured. While these outcomes may yet to be reflected in the available data on infection rates, it is anticipated that the program is setting the stage for reduced rates going forward.

Those who provided lower ratings noted that the progress that can be made by the Cluster is constrained by the limited influence it can have over social determinants of health such as poverty and housing as well as by funding and staffing constraints. Some also noted specific issues associated with the Cluster such as not having enough community involvement, the relative emphasis put on certain programs (e.g., not enough focus given to the HIV/AIDS program versus other CDC Control Cluster Programs), and ineffectiveness of some of the program activities.

5. Of the three programs, the Immunization Program is viewed by the Community Health Representatives as having the most significant impact on the health of the community.

The Community Health Representatives noted that the programs have encouraged more people in their community to become immunized, made residents more knowledgeable about communicable disease, enabled them to make safe choices, and will result in lower incidences of disease.

Community Ownership and Capacity

The CDC Cluster can contribute to building community capacity by encouraging the communities to take greater ownership of their health issues and by facilitating development of skills relevant to communicable diseases through providing training and information to Community Health Nurses and others. The major findings of the evaluation regarding the critical role played by the Community Health Nurses in program delivery, the effectiveness of the training provided to them, and the extent to which communities take ownership of the issues are as follows:

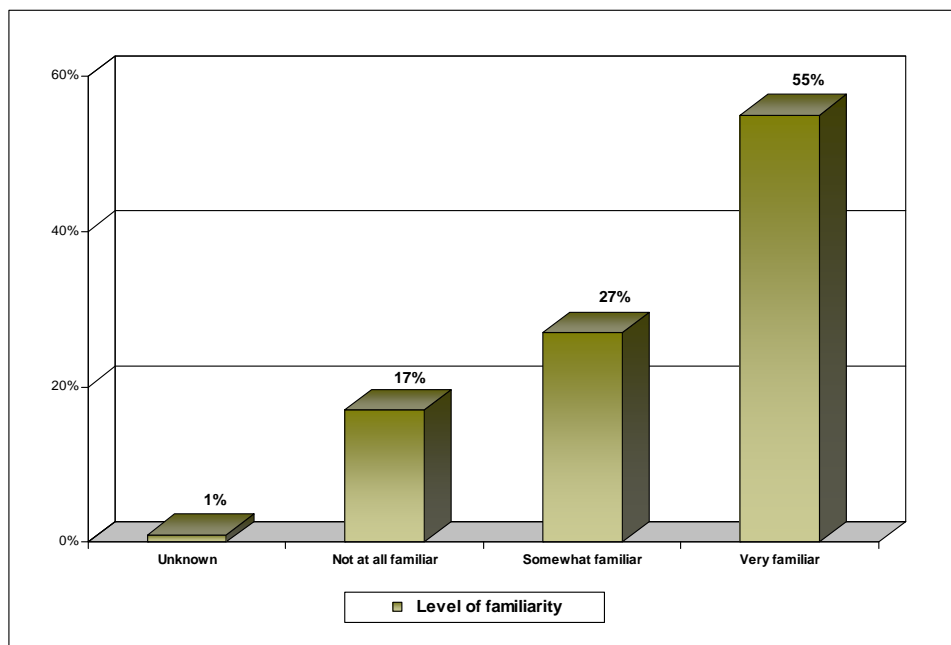
1. The Community Health Nurses play a key role in the delivery of all three programs.

The results of our survey of Community Health Nurses and Health Directors as well as Community Health Representatives indicate that:

The Community Health Nurses, Health Directors and Community Health Representatives are familiar with each of the three types of programs, even when the community does not receive direct funding for program delivery. Nurses, Directors and Community Health Representatives were asked to rate their familiarity with the three CDC Program areas.

In Figure 22, the majority of respondents were either very familiar (55%) or somewhat familiar (27%) while a smaller amount (17%) were not familiar with the HIV/AIDS program.

Figure 22 - Familiarity of HIV/AIDS Activities



The Health Directors and Community Health Nurses tend to be active in all three areas, spending proportionately more time on the Immunization Program than on the HIV/AIDS and Tuberculosis Programs. The CDC is a mandatory program with Immunization, HIV/AIDS and TB components of the Cluster. On average, the Health Directors and Community Health Nurses indicated they spend 35% of their time on immunization as compared to 13% on HIV/AIDS activities and 11% on tuberculosis activities (see Table 27).

Table 27 - Percentage of Time Spent on Immunization, Tuberculosis and HIV/AIDS Programs (n=247)

Program Area	Mean % of Time Spent	Percentage of Respondents					
		0%-10%	11%-25%	26%-50%	51%-75%	76%-100%	100%
Immunization	35%	25%	16%	22%	12%	9%	0%
HIV/AIDS	13%	58%	19%	4%	1%	4%	1%
Tuberculosis	11%	61%	15%	6%	1%	0%	0%

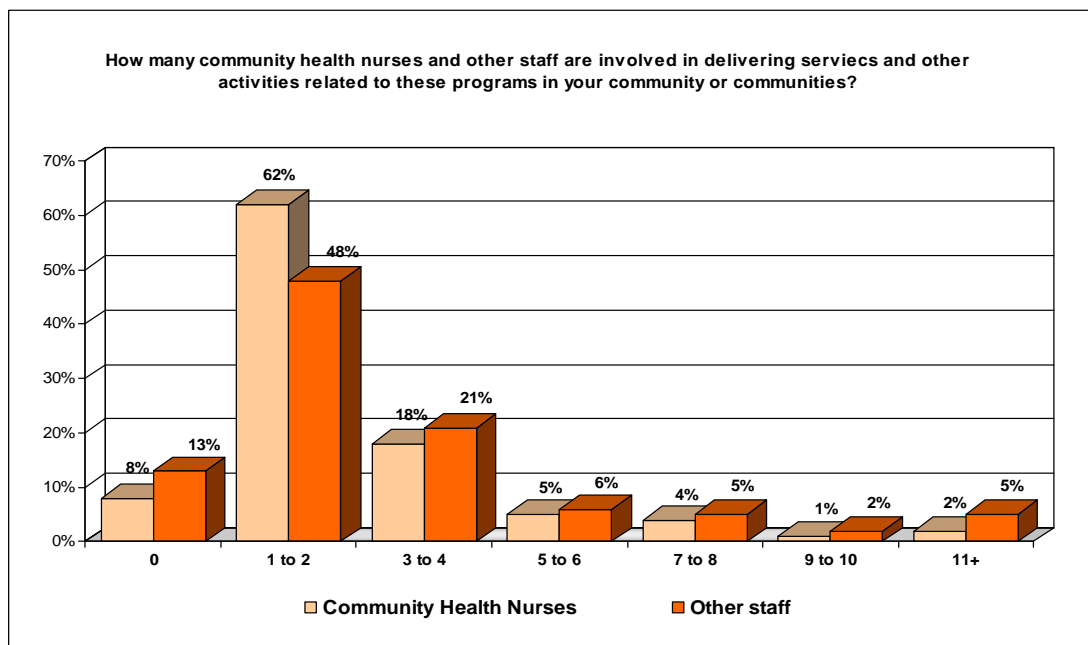
The allocation of time varied somewhat depending upon whether the nurse was employed by FNIHB, worked for a community directly funded under a Program or did not work in a community directly funded. Nurses employed by FNIHB reported working a higher percentage of their time on immunization (47% versus 32%). Similarly, those working in communities directly funded under the Immunization Program reported working a higher percent of their time on Immunization (47% versus 31%). Significant differences in terms of the time allocation were not noted depending upon whether the communities received funding under the HIV/AIDS or Tuberculosis Programs, but may be related to how immunization services are delivered in particular communities.

The Community Health Nurses play a key role in educating their communities about communicable diseases. When the Regional Coordinators were asked to identify the key activities undertaken by the Community Health Nurses in their regions, they identified the following activities:

- Providing educational workshops and outreach programs to the public, promoting harm reduction practices, putting on child health clinics, and planning and delivering programs to schools and adults;
- Administering health procedures and services, providing basic treatment and referrals, conducting routine testing, monitoring treatment progress, and managing specific aspects of the programs (e.g., vaccine management, contact tracing, preschool and school screening, contact investigation);
- Maintaining records, staying informed about new practices and information, preparing reports and reporting information as required, and conducting follow-up with particular cases and regional authorities;
- Providing counselling services and informing individuals about healthy lifestyle behaviours as well as case management; and
- Contact investigation.

As indicated in Figure 23, most communities represented in the survey reported having 2 or few staff members involved in Cluster activities. However, some offices (e.g., regional Health Canada offices or larger tribal council offices) serve as a larger base from which Community Health Nurses and other staff may also serve a larger range of communities.

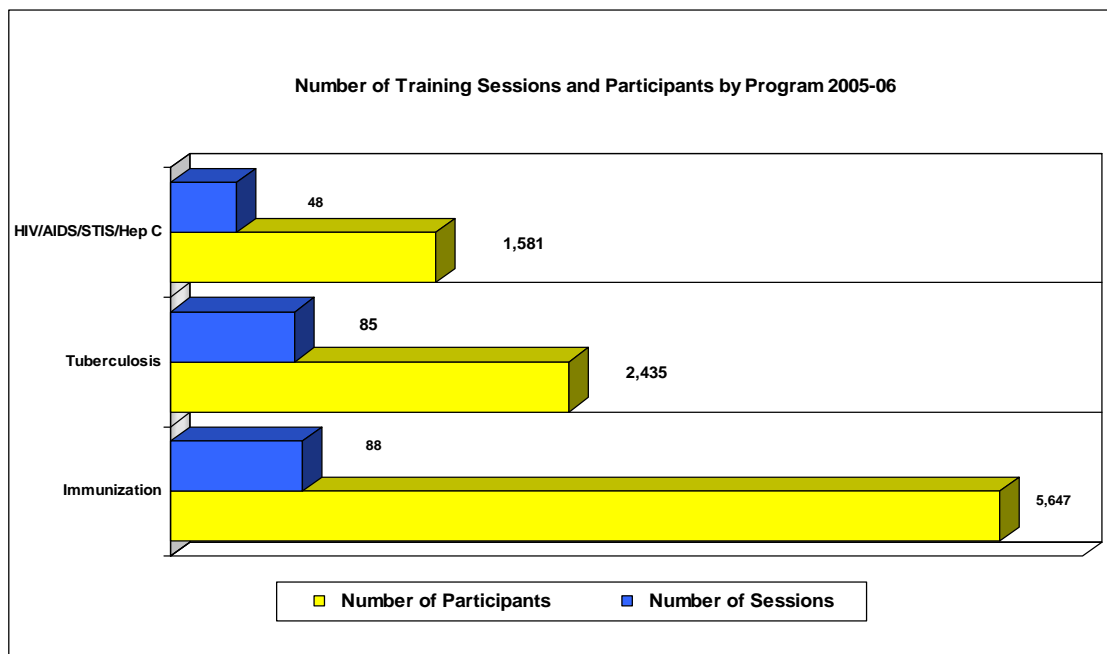
Figure 23 - Number of Community Health Nurses and Other Staff Involved in Delivering Services



2. Most Community Health Nurses and Health Directors reported that they have received some form of training or professional development through the Cluster and the majority of those participants indicated that they were very satisfied with the training received.

Seventy-six percent of Community Health Nurses and Directors reported receiving training. The data obtained from the performance reports indicates that over 200 skill development sessions were staged between 2005-06 and 2007-08, involving nearly 10,000 participants. The number of sessions held and number of participants by program area over the three years period is summarized in Figure 24. Each individual may have participated in more than one session. It should be noted that the figures are incomplete in terms of the number of participants.

Figure 24 - Number of Training Sessions and Participants by Program 2005-06 and 2007-08



Health Directors and Community Nurses are provided with a range of training, most notably in the form of certification, orientation and training programs. Examples of the types of training and other support related to capacity reported by the regions over this period are summarized in Table 28.

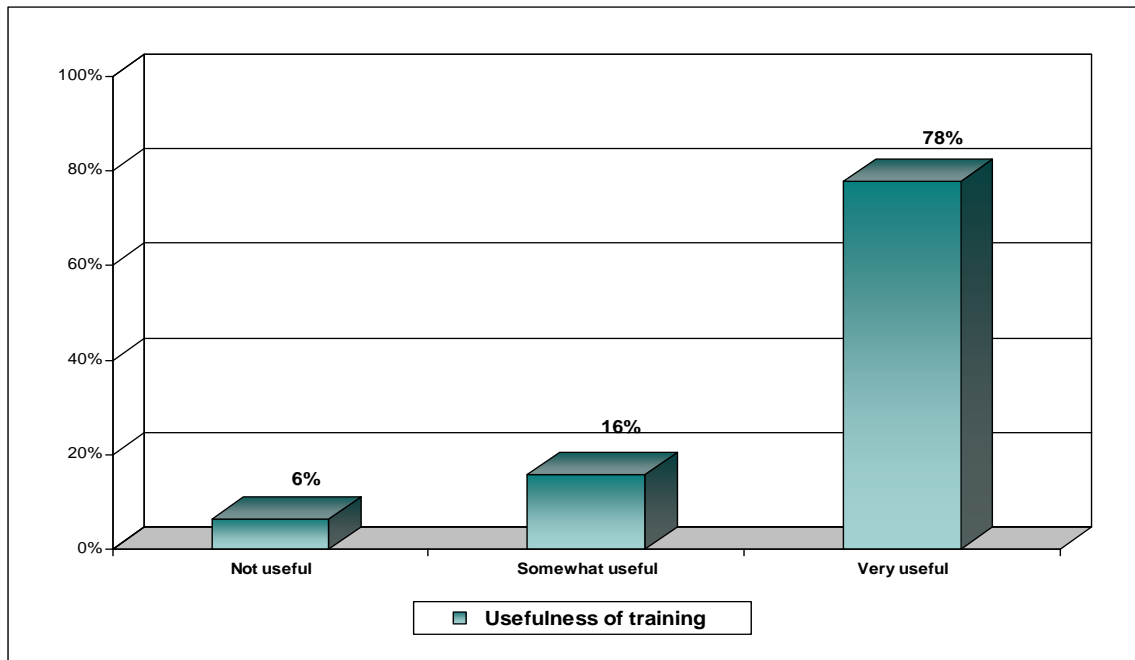
Table 28 - Capacity Development Types of Training and Other Support

Types	Activities
Immunization Program Area	
Conferences/Teleconferences	<ul style="list-style-type: none"> • CDC/FNIHB • Immunization Conferences and Forums • The International Symposium on Pneumococci and Pneumococcal Diseases (ISPPD)
Certification, Orientation, and Training Programs	<ul style="list-style-type: none"> • Certification Programs including exams/processes • Orientation and skill building sessions • Software training (Vaxin software - computerized vaccination data collection system) • DVD training programs (Well Child Training DVD) • Provincial programs (Alberta's "Do Bugs Need Drugs" Program) • Paraprofessional training (CPNP, Head start, BFI/BHC, CHR's, etc.) • Education, training and support on cold chain management • New equipment demonstrations • Vaccine Storage and Handling protocols • Other ongoing staff education
Workshops	<ul style="list-style-type: none"> • Basic immunization (myths, successes, vaccine safety, and impact in communities.) • Social Networking • Privacy Impact • Cold chain standards; vaccine wastage and ways to improve cold chain management.
Manuals/Information Kits/ Training Tools	<ul style="list-style-type: none"> • Posters • Regional Immunization Manuals (covering basic Immunology, vaccine information, general recommendations, Cold Chain Management, etc.) • Immunization Protocols • Professional resources (e.g., "The Pink Book" - CDC Epidemiology and Prevention of Vaccine Preventable Diseases) • Information Kits/Newsletters • Immunization tracking tools • Training Tools and Resources
HIV/AIDS Program Area	
Conferences/ Teleconferences	<ul style="list-style-type: none"> • Nursing Conferences • HIV/AIDS/STIS/Hep C Aboriginal Conference • Hepatitis C Conference • Conferences on Sexual Health • Nursing Leadership forums
Certification, Orientation, and Training Programs	<ul style="list-style-type: none"> • Pre- and post- HIV test counselling skills • Nursing orientation (overview of HIV, testing, and prevention.) • HIV education • Evidence-based practices and surveillance enhancement • In-service training sessions • Staff learning plans and professional development • Culturally appropriate training • Training opportunities, materials and mentoring to community people

Types	Activities
Immunization Program Area	
Workshops	<ul style="list-style-type: none"> • Work plan implementation workshops • Workshops dealing with new information on STI's, HIV/AIDS and Harm Reduction
Manuals/Information Kits/Training Tools	<ul style="list-style-type: none"> • Nursing Reference tools • Standards and protocols for quality nursing services • Policy and Procedure Manuals • HIV Antibody Testing Options • Guidelines for pre/post test counselling. • Guides on treatment, interpretation of results, medical and psychological referrals/follow-ups. • Manuals on prevention techniques • Harm reduction strategies and contraception
Tuberculosis Program Area	
Orientation/ Training	<ul style="list-style-type: none"> • Orientation sessions for new nursing staff • Dedicated staff training in hot spot communities • Develop CDC training plans based on survey results • Familiarization with provincial tuberculosis policies and procedures • Local CDC/TB educational opportunities • Ensuring updates with scientific information (TB prevention, control, treatment and compliance) • Training and education for TB core competencies C • Continuing education for professional and allied health staff
Conferences	<ul style="list-style-type: none"> • Tuberculosis Educators • Tuberculosis prevention and control • Community Health Nurse • International Union Against Lung Disease and TB (North America Region (IUALDTB-NAR) Conference)
Workshops	<ul style="list-style-type: none"> • CDC work planning • Social networking
Manuals/Materials/Exams	<ul style="list-style-type: none"> • CDC Knowledge Assessments • CDC resources and literature

The most common methods reported by the Community Health Nurses through which they received training were via teleconference or videoconference, or in person through conferences, workshops, meetings, fairs and presentations. Some regions reported that some training was also delivered onsite by FNIHB through regionally hired consultants. Other methods included via email or online training websites.

Figure 25 - Usefulness of Orientation/Training Reported by Community Health Staff



In Figure 25, the majority of the respondents (Health Directors, Community Nurses and Regional Coordinators), 94%, reported that the orientation/training was very or somewhat useful to program participants.

Regional Coordinators noted that the training and orientation received positive feedback from participants and that training topics reflected specific needs identified by nurses (e.g., HIV/AIDS; community outreach methods; contact tracing). In addition, orientation sessions were viewed as particularly valuable for new staff as it provides them with information about the program and their roles and responsibilities. The Community Health Nurses and Health Directors identified various means to improve training and orientation including:

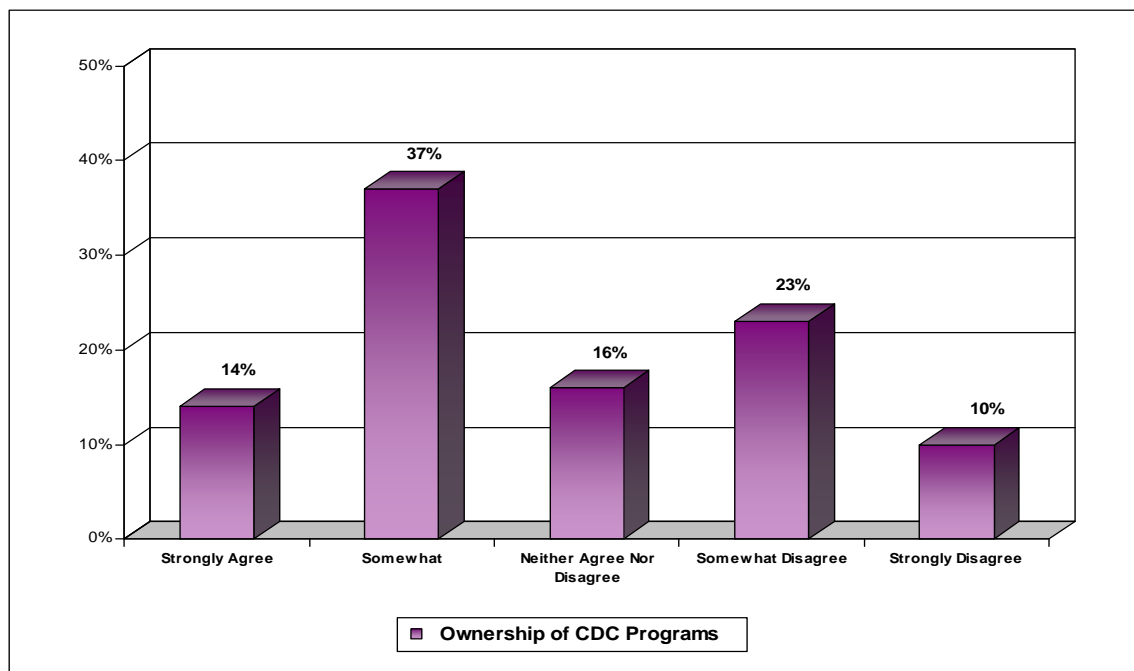
- Ensuring that training offered is also convenient for nurses by offering online workshops, video conferences, teleconferences, webinars or local training sessions;
- Providing more frequent and mandatory training opportunities and increasing training sessions with smaller review sessions and updates which would reinforce the skills they are learning;
- Providing a greater selection of educational programs and ensuring that the training provided is relevant and practical;
- More support in-person through job shadowing, mentoring, and in-person training;
- Providing health staff with the resources needed to attend workshops such as funding for travel and additional staff to provide support during training sessions; and
- Increase the availability of program specific training (HIV/AIDS and TB).

When Health Directors and Community Health Nurses were asked if they had adequate time to put their training into practice, 70% agreed that there had been adequate time to apply what they had learned. Approximately 19% had not had adequate time to put their training into practice and some nurses and directors noted that a lack of staff, competing priorities at their respective health centres and a lack of demand have limited their ability to put the training into practice.

3. Health Directors and Nurses and Regional Coordinators expressed mixed opinions regarding the extent to which the communities are taking ownership of communicable disease health issues and the related programs.

Health Directors, Community Health Nurses, and Regional Coordinators were asked the degree to which they agree with the statement, “The community has taken ownership of these issues and types of programs”.

Figure 26 - Extent that Communities Have Taken Ownership of Issues and Programming



In Figure 26, the majority of the respondents (Health Directors, Community Health Nurses, and Regional Coordinators) 51% somewhat agreed or strongly agreed and 33% of the respondents somewhat disagreed or strongly disagreed that the community has taken ownership of these issues and types of programs.

Indicators of increased ownership in some communities include increasing participation levels in awareness programs, rising immunization rates, and the greater involvement of Band staff, Chief and Council in the promoting, participating and otherwise supporting awareness and education progress. Apart from the effectiveness of the programs themselves, some of the factors that affect the level of community ownership include the skills of the local health care staff (including the interpersonal skills of the nurses and health director), the emphasis placed on community involvement, the level of staff turnover, the number and prevalence of other issues in the community, the transfer payment model under which the community is funded, the extent to which community leadership is supportive of the programs, and the community's previous experience with government and with communicable disease.

The steps recommended by headquarters and regional staff to promote increased community ownership included increasing the involvement of the community in the planning and delivery of activities; further expanding the education and awareness programs; providing more timely and accurate feedback to individual communities on the progress made in immunization rates, infection rates, and awareness; and better coordinate and integrate program activities with community activities as well as with the activities of the regional health authorities and provincial government, and more directly link funding with outputs and outcomes.

Unintended Impacts and Effects

Very few unintended impacts and effects were identified through the research. One significant impact which was noted is that the activities of the Cluster helped to prepare the regions and communities to deal with significant impacts. The successful mass immunization campaign during the H1N1 outbreak demonstrated that FNIHB has improved coordination efforts and enhanced the capabilities of communities to respond in the case of a pandemic. The high level of coordination contributed to a lower incidence of disease and to less vaccine wastage.

VI EFFICIENCY AND ECONOMY

This section summarizes the findings regarding efficiency and economy of the CDC Cluster and the opportunities for improvement. Setting the context of the efficiency and economy aspects of this evaluation in relation to the Government of Canada (GoC) Evaluation Policy (April 2009) is important. The CDC Cluster evaluation strategy and the request for proposals were designed prior to the recent GoC Evaluation Policy (April 2009). Thus, specific requirements for defining and operationalizing efficiency and economy analysis were not set out for the Cluster work. Further, the Cluster RMAF (2007) was implemented prior to the GoC Evaluation Policy and it did not define efficiency and economy performance measures, definitions or indicators.

GoC Evaluation Policy defines the demonstration of efficiency and economy as an assessment of resource utilization in relation to the production of outputs and progress toward expected outcomes. Within the realm of Cluster activities and FNIHB activities in general, there are considerable difficulties in measuring economy and efficiency in terms of true comparisons, alternatives and attribution as well as quantifying many of the outcomes.

Factors Affecting Efficiency and Economy

Table 29 depicts the percentage of contribution agreements by funding model type from FY 2005-2006 to FY 2008-2009. This includes only First Nations and Inuit communities and only CDC related agreements. As indicated by the data, FY 2008-2009 is the first year that the new funding agreements were implemented. As a result, the impact and benefits of the Cluster approach or the funding models cannot be determined at this time. Until the Cluster approach is fully operationalized, it may be difficult to report on the extent to which outcomes have been attained or to determine the impact on FN/I communities.

Table 29 - CDC Contribution Agreements by Funding Model

Funding Model	Fiscal Year 2005-2006	Fiscal Year 2006-2007	Fiscal Year 2007-2008	Fiscal Year 2008-2009
Canada First Nations Funding Arrangements	2.51%	2.46%	2.78%	1.15%
Consolidated Contribution Agreement	49.30%	49.51%	49.77%	14.75%
Integrated	27.30%	30.54%	31.48%	19.35%
NGO - Consolidated Contribution Agreement	3.90%	3.45%	3.70%	1.61%
Third Party Management Agreement	0.28%			
Transfer	16.71%	13.79%	11.57%	11.75%
Health Plan Flexible (HPF)		0.25%	0.23%	
Transitional			0.46%	11.52%
Corporate - Community Based - Set				0.46%
Corporate - Community Based - Transitional				0.23%
Corporate - Projects - Set				2.07%
Flexible Transfer				0.46%
Health Plan Flexible (HPF)				0.46%
Set				36.18%

Literature supports the theory that local control, ownership and decentralizing of health services improves health outcomes significantly. Moreover, research has established the correlation between increased local control and influence over health services. Research shows the impact on health outcomes is not only significantly improved but, as well, the impact is long term.

The flexibility offered to recipients by the new funding arrangements is supported by the new FNIHB Program Authority structure. Within a program authority, programs and initiatives are organized by components or program clusters, giving rise to streamlined planning and reporting by clusters rather than by individual programs. Moreover, the terms and conditions of the program authorities allow for options in the level of flexibility given to recipients to use surplus funds and to reallocate funding within and among programs, clusters and authorities. The level of flexibility is based on a recipient's demonstrated capacity in program and financial management. The new funding models (Set, Transitional, Flexible and Flexible Transfer) are phased in over time through a capacity building approach. The continuum of control is from direct FNIHB delivery to self-government.

Accordingly, economy and efficiency in the FNIHB context can be defined as the progression of FNI communities to the flexible transfer agreements. Whereas the greater the locus of community control the more efficient and economical the CDC Cluster and programs are in terms of attainment of outcomes. Further, flexibility in fund utilization as a function of needs demonstrates value for money, as money is not wasted on programs that are not needed or potentially could be counter productive. However, at this time, due to lack of longitudinal data this cannot be assessed. Consequently, FY 2008-2009 can serve as the baseline for future years.

In terms of measuring economy and efficiency of CDC programs, the World Health Organization (WHO) suggested examining technical and allocative efficiency.

Technical efficiency is typically defined as achieving the maximum output from a given physical quantity of the input or, alternatively, to use the minimum level of inputs required to achieve a given level of output⁶².

Allocative efficiency is typically defined as to the correct *mix and distribution of* programs or services. It is the balance between the correct different forms of health promotion, and is the balance between the correct health care and health promotion, or could one get better outcomes by doing more of one thing and less of something else⁶³. As mentioned in the limitations section of the economy and efficiency analysis, there is difficulty in attribution of FNIHB programming as there are many other funders and service deliverers to FN/I living on reserve addressing same or other determinants of health. Individuals are unlikely to be able to directly control many of the determinants of health. Health Canada has identified 12 determinants of health: 1) income and social status; 2) employment; 3) education; 4) social environments; 5) physical environments; 6) healthy child development; 7) personal health practices and coping skills; 8) health services; 9) social support networks; 10) biology and genetic endowment; 11) gender and 12) culture.

Further, the nature of service delivery of FNIHB programs does not allow for the determination of mix of prevention and promotion programs and ability to assess causal linkage of program mix to specific outcomes at the community level. The underlying theory of all FNIHB programs is that the program mix is based on the needs of the community and determined by the

⁶² *Guide to Economic Evaluation in Health Promotion, WHO*

⁶³ *Guide to Economic Evaluation in Health Promotion, WHO*

community. Needs depending on the perspective can be that which is felt or perceived by an individual; that which is expressed by individual through actions seeking to alleviate the need, such as going to a doctor; that which is a departure from a norm or standard; for example, low birth weight is defined as less than 1,500 grams; or that which compares unfavourably with conditions prevailing in the larger society; for example, higher rates of TB infections and higher rates of diabetes compared to the rest of Canada. No one perspective of need is more critical. Since these perspectives can lead to markedly different impressions about needs in any community, more than one perspective should be assessed to create a composite picture of community need.⁶⁴ However, given the data limitations over the period of the program evaluation (2005-2006 to 2007-2008) , this level of analysis was not entirely feasible.

During the document review, literature review and preliminary interviews, a series of factors were identified as potentially impacting the efficiency and economy of the Cluster including:

- The processes in place to allocate funding;
- Staff turnover;
- The support provided by the regional offices to the communities;
- The support provided by the national office to the regional offices;
- How well defined the cluster programs are in terms of their objectives, target groups, activities and responsibilities;
- The flexibility of the programs;
- The level of coordination with other programs;
- The level of vaccine wastage;
- The funding models which are in place;
- The staffing and other resources available; and
- The progress made to date in implementing the Cluster approach.

The findings of the document review and field research regarding these factors are as follows:

1. Varying strategies are used across the three programs to allocate funding to the regions and opinions are mixed with respect to the effectiveness of those processes.

The FNIHB regional offices prepare annual work plans which are submitted to the national office for funding. Regional coordinators, working with managers and others, usually prepare the work plan. The national office allocates the funding based on submitted work plans and availability of resources, with the exception of the HIV/AIDS and TB Programs where funding is allocated to the regions by applying a formula that takes into account historical funding,

⁶⁴ Planning a Health Needs Assessment: The basic choices

population size, burden of illness, vulnerability of the population, and remoteness of the communities. Once the workplan is approved by the national office, the regional offices begin to implement those activities articulated in the plan. The regional office(s) will retain some of the funding to cover their own activities and deliver some direct services. They also enter into contribution agreements with communities and other delivery partners. Some of the funding is retained by the national office which funds national program activities and its own contribution agreements.

When Regional Coordinators from both the Immunization and HIV/AIDS programs were asked if they agreed that the existing process for allocating funding across the communities is effective, 22% of representatives indicated they disagreed while 29% indicated some level of agreement with the statement. Thirteen percent indicated that they neither agreed nor disagreed and 40 % indicated that they did not know (all figures have been rounded using significant figures).

Concerns expressed about the existing system focused on the amount of time that is spent preparing and reviewing proposals, allocating funding, and administering agreements as well as concerns about the fairness of the existing system (e.g., the population numbers used in allocation of HIV/AIDS funding are often not accurate, and funding does not sufficiently take into consideration unique situations such as the size or remoteness of the communities which impacts on resource requirements).

FNIHB does not directly provide the health services at the community level. Through the regional organizations, FNIHB allocates funding to the community and other organizations by way of Contribution Agreements. As a result, the level of reporting is limited to the activity such as immunization, tuberculosis and HIV/AIDS prevention. However, no further details are provided and, in some cases, depending on the funding model, the funding can be reallocated as the community sees fit. Furthermore, the target population is unique and no true comparison group exists to measure impact or true alternatives for a comparative analysis.

CDC is just one of the Clusters that funds programming in the communities and there are other departments such as INAC and non-governmental organizations that provide additional funding. Thus attribution is difficult to measure given the number of other complementary programs and other sources of funding.

2. High rates of staff turnover increase training costs and reduce the efficiency of operations at all three levels of the Cluster.

Staff turnover has occurred at all three levels, with rates being particularly high at the national levels. The people who participated in the evaluation tended to be those who are more experienced (e.g., people who were recently hired are more likely to decline to participate because they feel that they are not yet in a position to provide input). Nevertheless, the percentage of those who have been involved for two years or less ranged from 80% of those interviewed at the national level to 25% among Community Health Nurses and medical directors, 40% at the regional level, and 44% among community health representatives.

As a result, over two-thirds of the National and Regional Coordinators disagreed (including 54% who strongly disagreed) with the statement that the turnover rate related to health staff at the national, regional, and community level is relatively low. Fifteen percent strongly agree or somewhat agree with the prior statement and 11% neither agree nor disagree.

Turnover can have a significant negative impact on the efficiency and effectiveness of the Cluster as a result of:

- Disruption in programming and patient care (it often results in programs not being carried out at all until the position is filled and training is provided or having to use more expensive options such as contractors or casual workers to fill the gaps until a permanent replacement is found);
- Loss of both institutional and corporate knowledge;
- Increased costs associated with training and orientation; and
- Loss of relationships between regional and national partners and within the community.

Various strategies can be used to address issues associated with vacancies. When asked to identify some of the factors that contribute to higher than desired turnover rates, the national and regional staff identified:

- Compensation (e.g., salaries for community nurses are not competitive and are lower than those earned by nurses employed by the provincial governments);
- Lack of staff support and appreciation (a sense that staff are not valued);
- Organization, management or leadership issues including failure to acknowledge or act on the issues;
- The challenging work conditions including factors such as the remoteness of the community, shortages in nursing staff, and the health and social issues in the community;
- Burdensome workloads, leading to long hours for nursing staff and causing burnout;
- High stress levels; and
- Poor recruitment practices.

3. The information, assistance, support and guidance provided by the National Coordinators and the Regional Coordinators contribute to the efficient operation of the Cluster.

According to the document review and interviews, the types of information, assistance, guidance and support provided by headquarters consist primarily of:

- Access to information and resources (ranging from research reports and specialized program/epidemiological expertise to information on standards and guidelines); and

- Advice, direction and assistance related to budgets, work plans, reporting, policy development, and evaluations.

When asked to rate their satisfaction with the information, assistance support and guidance provided by the national office, 29% of the Regional Coordinators were very satisfied, 55% were somewhat satisfied, and 16% were not at all satisfied.

It was noted that the National Coordinators are generally a helpful and useful resource although some concerns were expressed regarding the high level of turnover at the national level, a perceived lack of understanding about region specific issues, and a lack of clarity about the role of headquarters. Opportunities identified by Regional Coordinators to improve the support provided by headquarters included increasing the number of face-to-face meetings with regional representatives, more clearly defining and communicating roles and responsibilities, and reducing the reporting requirements.

In turn, the Health Directors and Community Health Nurses were generally satisfied with the support provided to them by the regional offices of FHNIB in that 48 % stated they were very satisfied, 34% were somewhat satisfied and 18% were not satisfied at all.

Suggestions from the Community Health Nurses and Regional Directors to improve the support provided by FNIHB regional offices are summarized as follows:

- Increase communication and information sharing with Aboriginal Communities
- Create more consistent training and alternative educational sessions for nurses and community leaders
- Increase funding to hire additional staff, improve technology and expand training
- Reduce staff turnover at community and regional level
- Streamline reporting requirements

In particular, community staff highlighted the importance of fostering strong relationships between the communities and the government.

4. The efficiency of the CDC Cluster programs benefits from flexibility and from being well-defined in terms of their objectives, target groups, activities and responsibilities.

The programs are well-structured to the extent that they are:

- Well-defined in terms of their objectives, target groups, activities and responsibilities; and
- Within this broadly defined program structure, sufficiently flexible to enable the activities of the program to be tailored to reflect local needs and conditions.

As indicated in Table 30, most Directors, Nurses and Regional Coordinators perceive the programs as being flexible (allowing them to be tailored to meet the needs of the community or communities) and well-defined particularly in terms of objectives, target groups, and types of activities. It is important to note that the Cluster was created in 2005 but not operationalized until 2008 and this will have a bearing on the extent of perceived program flexibility and clarity.

Table 30 - Perceptions of Program Flexibility and Clarity of Objectives and Roles and Responsibilities

Please specify whether you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree with the following statements:	Directors & Nurses (n=247)		Regional Coordinators (n=21)	
	Somewhat Agree	Strongly Agree	Somewhat Agree	Strongly Agree
The programs are flexible and can be tailored to meet the needs of your community or communities.	39%	33%	44%	34%
The programs are clearly defined in terms of their objectives.	38%	28%	13%	48%
The programs are clearly defined in terms of their target groups.	36%	34%	38%	27%
The programs are clearly defined in terms of their activities.	41%	23%	43%	18%
The programs are clearly defined in terms of their responsibilities.	37%	23%	35%	13%

Table 31 – Community Health Staff Perceptions of CDC Cluster Programs

Please specify whether you strongly disagree, somewhat disagree, neither agree nor disagree, somewhat agree, or strongly agree with the following statements:	Directors & Nurses (n=247)		Regional Coordinators (n=21)	
	Somewhat Agree	Strongly Agree	Somewhat Agree	Strongly Agree
The level of vaccine wastage is low.	29%	40%	N/A	N/A
The three programs funded under the CDC Cluster are coordinated with and complement other programs related to Immunization, HIV/AIDs or Tuberculosis.	38%	14%	32%	24%
The materials, activities, outputs and services supported under the programs are culturally sensitive.	40%	18%	25%	35%
We have access to useful tools and information which support and improve service delivery.	45%	22%	42%	35%
Members of the target groups are able to access the services they need.	43%	23%	N/A	N/A

There has been progress with respect to reducing the level of vaccine wastage (see Table 31). For example, the regional offices have conducted research (e.g., research on the current type and age of vaccine refrigerators and the presence/absence of a backup power supply; best practices report on cold chain management) and made selected capital investments. The primary cause of cold chain breaks is power outages. Nearly 70% of the community representatives agreed that the level of vaccine wastage is low.

The resources and flexibility inherent in the system have facilitated cooperation, collaboration and the development of good relationships with communities, staff, regional health authorities and provincial governments. Other factors that were identified as contributing to the efficiency of the Cluster included:

- The commitment of staff to delivering and improving the programs at all levels (e.g., focusing on key success factors, lessons learned, sharing information, and developing work plan and delivery capabilities); and
- An increasing emphasis on outcomes and accountability.

Factors identified as constraining the efficiency of the Cluster included staff shortages and capacity issues (e.g., some communities only have travel nurses with limited access, nurses are too busy); lack of coordination and competing priorities between regions); organizational issues (e.g., restrictions in job descriptions, lack of connection with public health system, lack of vision or leadership); reporting issues; and the magnitude of the issues to be addressed (i.e. the social determinants of health and the level stigmatization) and the resistance to change.

5. Analysis of results across communities cannot confirm or reject that certain funding models are inherently more efficient or effective than others.

Health Canada employs a variety of funding models for its contribution agreements with communities. The models, which vary in terms of their flexibility, focus on outcomes and accountability, and transparency, become increasingly flexible as increased community capacity is demonstrated. For example, under the Set funding model, communities must use the funding specifically as defined in the contribution agreement while the Flexible Transfer model gives complete flexibility to the recipient over program delivery decisions.

Literature has supported the theory that local control, ownership and decentralization of health services does improve health outcomes significantly. Research has established the correlation between increased local control and influence over health services and the impact on health outcomes is not only significantly improved but the impact is long term as well.

It must be first noted that, as the Cluster had not been fully implemented in the communities due to timing (e.g., some Contribution Agreements extend over three years), the full effect of the Cluster work has not been realized as yet.

Representatives associated with the Cluster expressed varied opinions about the potential influence of the transfer payment model on results. The headquarters and regional staff indicated that the Cluster has helped to build community capacity (e.g., through skill development and awareness building), which may assist communities in moving along the continuum towards more complex funding models over time. However, there were disagreements as to whether the funding model itself has an impact on the relative efficiency or effectiveness of a program in a given community.

- Some suggested that a more advanced funding agreement is more efficient because it reduces the costs associated with reporting, enables activities to be better tailored to local needs and conditions, and better coordinates activities with other elements of the community health plans.

- However, some representatives felt that Cluster activities supported through more advanced funding agreements may not be more efficient or effective to the extent that they may reduce the level of involvement and interaction with the regional offices, reduce coordination with others including the provincial government, result in less information sharing, and may be impacted by conflicting priorities and financial, governance or leadership issues.

The interview and surveys results were cross-tabulated by different types of funding models: Set, Transfer, Integrated, Transitional and Consolidated. The results are shown in Table 32 on the following page. Where some differences in results can be noted across communities with different types of models, these differences are likely more attributable to other factors (e.g., differences in the characteristics of the communities such as location, remoteness, infrastructure, range of services available or differences in Cluster activities across regions) than to the type of model itself.

Table 32 - Constraints: Interview and Survey Responses by Representatives' Type of Transfer Payment

Key Issue	Type of Transfer Payment				
	Set	Transfer	Integrated	Transitional	Consolidated
Factors Contributing To and Constraining Efficiency and Effectiveness (% Who Somewhat or Strongly Agree With Statement)					
The Programs are clearly defined in terms of their objectives.	79%	62%	67%	57%	80%
The Programs are clearly defined in terms of their target groups.	84%	65%	63%	61%	71%
The Programs are clearly defined in terms of their activities.	74%	58%	67%	44%	80%
The Programs are clearly defined in terms of their responsibilities.	63%	50%	46%	48%	80%
The level of vaccine wastage is low.	91%	58%	46%	78%	55%
The Programs are flexible and can be tailored to meet the needs of your community or communities.	86%	73%	71%	61%	35%
The materials, activities, outputs and services supported under the Programs are culturally sensitive.	67%	54%	54%	52%	55%
We have access to useful tools and information which support and improve service delivery.	81%	58%	63%	61%	55%
Members of the target groups are able to access the services they need.	81%	54%	63%	61%	65%
The community has taken ownership of these issues and types of Program.	54%	42%	50%	39%	45%
We have the staff and resources needed at the community level to deliver the services	65%	62%	67%	74%	45%
We have the staff and resources needed at the community level to deliver the services and Programs in HIV/AIDS	51%	42%	42%	44%	45%
We have the staff and resources needed at the community level to deliver the services and Programs in TB	56%	58%	58%	61%	60%
The rate of turnover in related health staff is relatively low.	51%	54%	38%	52%	50%
The three Programs are coordinated with and complement other Programs related to Immunization, HIV/AIDS or Tuberculosis.	67%	58%	54%	35%	40%

6. Implementation of the Cluster approach is still in a relatively early stage of development and, in most respects, has not yet had a significant impact on the delivery of the programming at the regional and community levels.

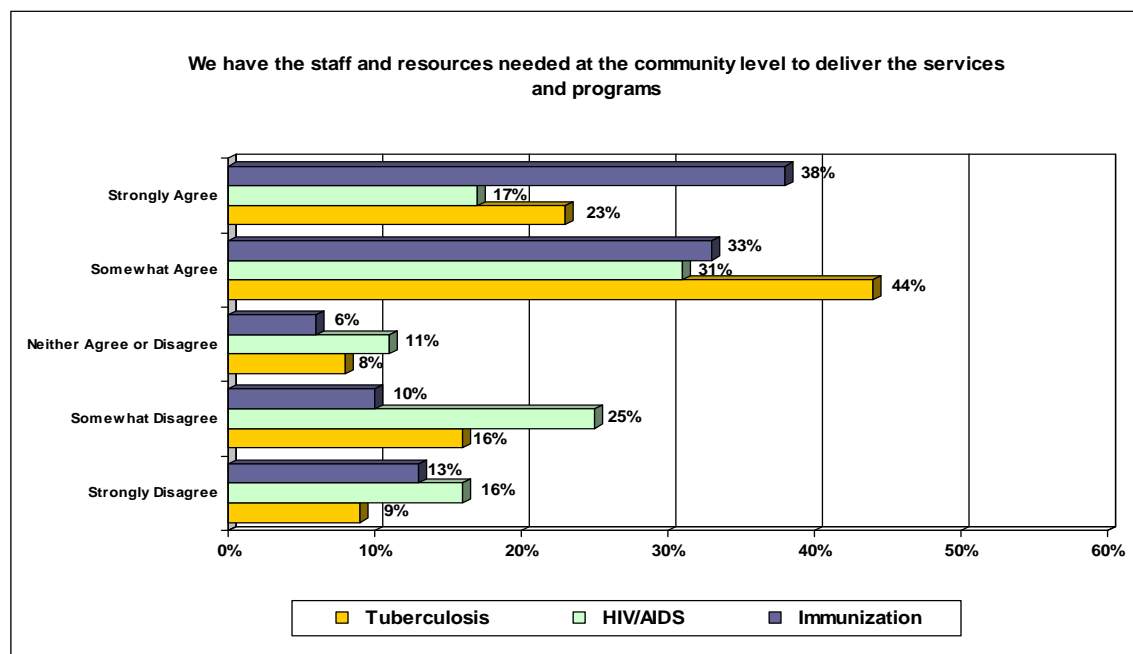
In 2005, FNIHB established the CDC Cluster which brought the three programs: Vaccination, Tuberculosis, and HIV/AIDS together under one umbrella. It is important to note that the Cluster was not operationalized until 2008 and this will have a bearing on the extent of the program outcomes. As noted earlier, the Cluster had not been fully implemented in the communities due to timing (e.g., some Contribution Agreements extend over three years), so the full effect of the Cluster work has not been realized as yet. According to the National and Regional Coordinators as well as Senior Headquarters staff, a Cluster approach can facilitate:

- A more holistic approach (and less of a silo approach) to the design of strategies and comprehensive programming which focuses more directly on the needs of the clients and the communities;
- Greater collaboration and further integration of activities (e.g., in awareness programs or training activities);
- Increased sharing of information, expertise and lessons learned;
- Increased complementarity across the FNIHB programs as well as with other programming which serves the target groups;
- More streamlined administration of the programs, particularly in the areas of program planning, program approvals, budgeting, reporting, and evaluation;
- Reductions in the level of duplication;
- Increased flexibility for communities to tailor their programming and budgets to their priorities and current developments; and
- Increased visibility of the programming, both in the target communities and with partner organizations.

However, the results of the interviews with National and Regional Coordinators as well as with Health Directors and Community Health Nurses indicate that the movement towards a more coordinated, Cluster approach is still in a relatively early stage of development. While some awareness of the Cluster has been developed, most representatives still view TB, Immunization and HIV/AIDS as distinct programs which are implemented independently. Apart from the reporting process and with somewhat of an increased focus on co-infections, most representatives indicated that they have not noticed significant differences in how the programs are implemented since the Cluster approach was adopted. It was noted that the programs still operated largely in independent silos. Familiarity with the Cluster approach is lower at the regional level and much lower at the community level than amongst staff at the national level. It will be a number of years before the Cluster approach is fully realized.

Health Directors and Community Nurses perceived resource levels to be appropriate (strongly or somewhat agreed) in terms of TB (67%) and Immunization (71%) program service delivery. However, 48% of respondents indicated for HIV/AIDS resource levels were appropriate for service delivery. Refer to Figure 27 for detailed breakdown of responses.

Figure 27 - Perceptions of CDC Cluster Resource Levels



Opportunities for Improvement

The community, regional and national representatives identified a wide variety of areas where improvements to the Cluster and accompanying programming could be made or alternative approaches could be considered. The most common recommendations were to:

- Improve surveillance and reporting systems (increase access to needed data and examine ways to streamline the process).
- Improve collaboration and communication across the programs and across the levels of the cluster.
- Strengthen relationships with other key players, particularly with the Provincial Government and regional health authorities.
- Further strengthen the delivery of education and training to community health representatives (e.g., greater use of various technologies).
- Increase community involvement in the design and delivery of Cluster activities.
- Reduce the level of staff turnover and increase staffing at the community level.

- Increase access to culturally relevant materials.
- Provide more flexibility with respect to the program funding.

The formal recommendations arising from the evaluation are presented in section VIII.

VII CONCLUSIONS

The major findings and conclusions related to each of the evaluation issues are summarized under relevance, performance, and efficiency and economy.

Relevance

Evaluation Question #1:

In what way are the CDC Cluster objectives linked to government priorities and departmental strategic objectives?

The objectives of the CDC Cluster are consistent with Health Canada priorities and its strategic outcomes as well as priorities of the Federal Government. More specifically, a literature review demonstrates that the objectives of the Cluster are aligned with:

- Two of Health Canada's stated departmental priorities: "contributing to the improvement of the health of Canadians" and "reducing the risks to the health of the people of Canada." Health Canada's Report on Plans and Priorities 2008-2009 (also 2007-08 and 2006-07) highlighted these two areas among four departmental priorities. In addition, the final outcome of the CDC Cluster, "contributing to improved health status of FN/I individuals, families and communities," aligns with these two departmental priorities.
- Health Canada's strategic outcome: "Better Health Outcomes and Reduction of Health Inequalities between First Nations and Inuit and Other Canadians." Health Canada's Report on Plans and Priorities 2008-2009 (as well as previous versions 2005/06, 2006/07, and 2007/08 of the report) highlighted this area as one of the four departmental strategic outcomes for the fiscal year of 2008 and 2009.
- The 2004 Speech from the Throne emphasized existing health discrepancies between Aboriginal people and other Canadians and highlighted the Federal Government's commitment in supporting health services for the Aboriginal communities. It was noted that "The Government and Aboriginal leaders agreed to measurable goals to reduce these

[health] gaps and their consequences.”⁶⁵ Moreover, the Government of Canada emphasized its commitment to “better adapt existing health care services to Aboriginal needs.” The objectives and final outcomes of the CDC Cluster are aligned with these statements.

Evaluation Question #2:

How are the CDC Cluster programs consistent with current Federal Government roles and responsibilities?

- **The activities of the CDC Cluster are consistent with the mandate of the Federal Government to provide preventative and health promotion services.** The primary mandate of FNIHB is to provide disease prevention and health promotion services. This mandate is partially borne from the Indian Health Policy adopted by the Government of Canada, in 1979, in order to "achieve an increasing level of health in Indian communities, generated and maintained by the Indian communities themselves." FNIHB manages a range of programs related to community health (e.g., chronic and communicable diseases, environmental health, emergency preparedness), and also undertakes health surveillance, data analysis, research and evaluation to support the development of policies, priorities and evidence-based decision-making around health related investment.
- **Collaborative partners and other stakeholders (e.g., representatives of other programs) believe that development and funding of the CDC Cluster programs is an appropriate role for the Government of Canada.** In the interviews, partners and other stakeholders stressed that such programming is important for the health of First Nations people (as well as the Canadian population overall).
- **Most FNIHB representatives although not all agree that the roles and responsibilities of the Federal Government are clearly defined.**

Evaluation Question #3:

In what way does the CDC Cluster address clearly identified health needs for FN/I?

- **The existing literature clearly demonstrates that there are significant differences in health status and health outcomes between FN/I people and the non Aboriginal population of Canada.** Despite improvements, the health status of First Nations remains poor relative to that of other Canadians. “The picture is one of a population experiencing a disproportionate measure of illness, mortality, injury, addictions and family violence. Simply put, Aboriginal Peoples rate significantly lower on virtually every measure of health and well-being when compared to the general Canadian

⁶⁵ Speech from The Throne. The First Session Thirty-Eighth Parliament of Canada. House of Commons Journals: 2004.10.05, vol. 140, p. 15.

population.”⁶⁶ The incidence of communicable diseases among the FN/I population of Canada is much higher than that of the Canadian population overall. There are elevated rates of vaccine preventable diseases, higher incidences of tuberculosis (sporadic outbreaks), and higher rates of HIV/AIDS cases.

- **The CDC Cluster is designed to address issues which impact communicable disease rates.** More specifically, the programs are expected to reduce the incidence and impact of communicable diseases by improving understanding of communicable diseases, increasing immunization rates, reducing risky behaviours, improving access to control measures and treatment, and broadening access to timely and relevant information. The Cluster is not designed to directly address some of the social determinants of health such as crowded housing, poor water quality, income and social status, education and literacy, or the social environment.
- **Key Informants believe that there is a strong need for the programming.** The strong need for the programming was attributed to the significant health issues facing Aboriginal people on reserve, the importance of government support in combating communicable diseases in First Nations communities, the importance of effective surveillance in fighting disease, low awareness amongst First Nations regarding communicable diseases, the need for greater collaboration regarding health issues, and the perceived effectiveness of the programming.

Performance

Evaluation Question #4:

In what manner and to what extent has the CDC Cluster been successful in increasing and improving collaboration and networking?

- **Most national and regional representatives involved in the CDC Cluster regularly network and collaborate with a wide variety of organizations and programs that share similar objectives with CDC Cluster.** Based on interviews as well as a review of regional work plans and annual progress reports, it is clear that the Cluster is effective in building partnerships and alliances with other Federal Government divisions, provincial and regional organizations, communities, associations, and others. The collaboration efforts focus on a range of issues such as patient care, treatment and support, as well as education and prevention.
- **Networking and collaboration activities have further increased and improved over the past few years.** Four percent of the National and Regional Coordinators and 5% of Other Stakeholders (consisting primarily of representatives of other organizations and programs) indicated that the level of interaction and collaboration had decreased over the past three years. According to the annual performance reports, participation of Cluster

⁶⁶ Lemchik-Favel, L. and Jock, R. Aboriginal Health Systems in Canada: Nine Case Studies, Journal of Aboriginal Health. January 2004. Pages 28-51. Page 31.

staff in various committees increased over the three year period from 58 collaborations in 2005-06 to 79 in 2007-08 suggesting greater effectiveness in this area. Over 600 total collaborative networking arrangements were recorded over the three year period. There has been increasing recognition of the importance of collaboration, by all relevant parties. In doing so, the adoption of more client-centred approaches, the ability to build on existing relationships, structural changes (consolidation of regional health authorities), and improvements in communication technologies have contributed to strengthening the CDC policy network, and therein more opportunities for collaboration.

- **Enhanced collaboration and networking has benefited the CDC Cluster, by:**
 - Further clarifying the roles of the respective parties;
 - Ensuring that First Nations issues and needs are reflected in the design of strategies and delivery of services encouraging a greater focus on the social determinants of health;
 - Increasing coordination in program activities thereby reducing work duplication;
 - Facilitating the sharing of information and lessons learned;
 - Facilitating joint responses to key developments (e.g., pandemic planning);
 - Increasing access to a broad range of viewpoints and specialized expertise; and
 - Providing for more seamless delivery of Programs and services across organizations.

- **One result is that Cluster activities are generally viewed as complementing rather than duplicating the programming that is provided by others.** The Cluster complements other programming by working to increase target group awareness of issues relevant to communicable diseases, supporting prevention, treatment and control activities, promoting collaboration, strengthening community capacity (through activities such as training), and increasing access to surveillance information.

Evaluation Question #5:

In what manner and to what extent are the surveillance systems associated with the CDC cluster producing timely and relevant information?

- **Effective surveillance data is a key element in combating communicable disease.** Early detection systems help reduce the high communicable disease burden and vulnerability to disease that many First Nations communities face due to limited medical resources and poor living conditions. Surveillance data is used by representatives at all levels of the Cluster including headquarters, regions, provinces, and communities to assess needs, review performance and develop strategies, policies, and programming. There are however, challenges associated with surveillance that constrain the use of the data associated with it.

- **While some progress has been made, access to timely and accurate surveillance data remains a major challenge facing the CDC Cluster.** Most respondents indicated that, for the most part, the current surveillance data that is collected for the Cluster is not

timely, accurate or relevant. This is attributed to a lack of information sharing agreements with the provincial governments and difficulties in identifying target group members within existing systems because of interprovincial variations in reporting ethnicity. Other issues include the use of multiple database systems across and even within regions, continued reliance on paper-based systems, and staff turnover at the community and regional levels. Surveillance data is needed for program planning, policy and strategy development as well as to monitor and evaluate program delivery.

Evaluation Question #6:

In what manner and to what extent has the CDC Cluster contributed to improved prevention, control, and treatment of communicable diseases in FN/I communities?

A major challenge facing the evaluation of the CDC Cluster is the limited availability of reliable secondary data that can be used to objectively assess progress in terms of contribution to improved prevention, control, and treatment of communicable diseases in FN/I communities. In the absence of other quantifiable measures, those closest to the programs (National & Regional Program Coordinators and Community Health Nurses & Health Directors) were asked to rate and comment on the progress made by the CDC Cluster against a series of related objectives. The major conclusions are summarized below:

Immunization

- **Significant progress has been made in implementing newly recommended vaccines.** According to the regional performance data, varicella vaccination coverage rates have increased in children from all age groups.
- **Coverage rates of routine immunizations in the targeted population have improved.** The Community Health Nurses and Health Directors reported that significant progress has been made in improving routine immunization rates; however, the regional performance data does not confirm this (there are significant issues related to the accuracy of the available data regarding immunization rates). Strategies such as raising the profile of immunization, implementing reminder programs, providing incentives, and increased networking are believed to have been effective in increasing coverage across regions although rates remain significantly below the ultimate target of 95%.
- **Efforts to promote immunization through education and awareness activities have been effective,** particularly advertisements in media such as print, radio and TV, workshops, reminder programs, and creating long-term relationships with parents, community leaders and health practitioners.
- **Understanding of immunization coverage rates, the incidence of vaccine preventable diseases, barriers to immunization and best practices in implementation has improved.** However, despite progress, concerns regarding limited and often inaccurate data remain.

Blood Borne Diseases and Sexually Transmitted Infections

- **Considerable progress has been made in working with other organizations to develop a coordinated and integrated response to blood-borne diseases and sexually transmitted infections** at the national and international levels. Progress was reported in terms of working with other Federal Government departments, national associations, and international groups.
- **Reported changes in high-risk behaviours were linked with community member participation in education and awareness activities.** Overall, some progress was reported in terms of encouraging target group members to participate in education and awareness activities related to blood-borne diseases and sexually transmitted infections and correspondingly to reduce risky behaviours. The strategies and mechanisms that have proven most effective include community workshops, classroom presentations in elementary and secondary schools, and use of culturally appropriate promotional materials. Factors constraining the progress made include a general lack of interest amongst the target groups, time and resource constraints, the sensitive nature of the topic, and limited access to culturally sensitive materials.
- **Some communities reported improvements related to serving those vulnerable and to living with HIV.** Increases in testing, education and support for those vulnerable to and living with HIV is often associated with increased knowledge of blood-borne diseases and sexually transmitted infections and reductions in the associated stigma within the community or communities. A major factor which is limiting testing rates and utilization of available supports is the associated stigma.
- **Coordinators reported an increase in the availability of evidence-based interventions related to blood borne diseases and sexually transmitted infections.** The coordinators viewed the program as benefiting from increased sharing of information and a greater emphasis on evidence-based approaches.
- **However, less progress was reported in terms of reducing the incidence of blood-borne diseases and sexually transmitted infections.** Keeping in mind the limitations associated with the data (ethnic status is reported for about 30% of all positive HIV test reports), the number of positive HIV test reports amongst Aboriginals has not improved in recent years. Key informants attributed whatever progress has occurred to education activities in the community (e.g., education about safer sex practices), strategies such as the distribution of condoms, culturally appropriate promotional materials and advertising.

Tuberculosis

- **Increasing awareness and better understanding of Tuberculosis was, in part, attributed to encouraging target group members to participate in education and awareness activities.** It is estimated that about 27% of the target groups in the communities have participated in education and awareness activities such as workshops, education sessions including screening sessions, presentations, school workshops, school clinics, lunch & learns and awareness campaigns such as pamphlets, newsletter articles, radio broadcasts and information packages for new mothers.

- **Limited progress has occurred with respect to detecting, diagnosing and treating.** According to data from the Canadian Tuberculosis Reporting System (CTBRS), incidence rates remain high and the disproportionate burden of disease among Aboriginal peoples continues. Progress made in reducing the incidence of latent Tuberculosis infections was rated much lower by Regional Coordinators than by Community Health Nurses and Health Directors.

Evaluation Question #7:

In what manner and to what extent has the CDC Cluster increased community ownership and capacity to detect, report and combat communicable diseases?

- **The CDC Cluster has had a significant impact on community capacity through increasing access to training and other resources for Community Health Nurses and others in the communities.** Based on the field research and other information provided by the regions, it is estimated that there are 1,600 people (700 nurses and 900 others) involved in the Cluster at the community level across all regions. The data obtained from the performance reports indicates that over 200 skill development sessions were staged between 2005-06 and 2007-08, involving nearly 10,000 participants. Twenty-four percent of the Community Health Nurses and Health Directors reported that they have not received some form of training or professional development through the Cluster. Most found the training they received to be very useful to them in detecting, reporting and combating communicable diseases.
- **Health Directors, Community Health Nurses and Regional Coordinators expressed mixed opinions regarding the extent to which the communities are taking ownership of communicable disease health issues and the related programs.** Indicators of increased ownership in some communities include increasing participation levels in awareness programs, rising immunization rates, and the greater involvement of Band staff, Chief and Council in promoting, participating and otherwise supporting awareness and education progress. Apart from the effectiveness of the programs themselves, some of the factors that may influence the level of community ownership include the skills of the local health care staff (including interpersonal skills), emphasis placed on community involvement, level of staff turnover, number and prevalence of other issues in the community, transfer payment model under which the community is funded, extent to which community leadership is supportive of the programs, and the community's previous experience with government and with communicable disease.

Evaluation Question #8:

In what manner and to what extent has the CDC Cluster contributed to the achievement of the longer-term outcome of improved health status of FN/I individuals?

- **The Cluster is making some progress towards improving longer-term health outcomes.** Activities such as education and awareness programs are viewed as positively influencing immunization rates for both new and routine vaccines. These activities include: improving understanding of communicable diseases; easing stigmatization; reducing high-risk behaviours and better educating the youth and adult population as to how to protect themselves against STIs and HIV; and, increasing screening, testing and support. While these outcomes have yet to be reflected in the available data on infection rates, it is anticipated that the programs are setting the stage for reduced rates going forward. However, it should be remembered that long-term health outcomes are a function of multiple factors many of which are beyond the scope of the Cluster.

Evaluation Question #9:

Are there unintended consequences (positive and negative) and broader results occurring as a result of carrying out CDC cluster programs?

- **Very few unintended impacts and effects were identified through the research.** One significant impact which was noted is that the activities of the Cluster helped prepare the regions and communities to deal with significant outbreaks. The successful mass immunization campaign during the H1N1 outbreak demonstrated FNIHB has improved coordination efforts and enhanced the capabilities of communities to respond to a pandemic. The high level of coordination contributed to less vaccine waste and a lower incidence of disease.

Efficiency and Economy

Evaluation Question #10:

What factors are contributing to or constraining the efficiency and effectiveness of the CDC Cluster?

The major conclusions related to this evaluation question are summarized below:

- **Staff commitment, strong relationships with other groups, program flexibility and clearly defined objectives, target groups and activities have contributed to the efficiency of the CDC Cluster.** Representatives highlighted the ability to tailor activities to reflect regional and local needs and environment; strong cooperation and collaboration with other groups; the commitment of staff to delivering and improving the programs at all levels; and an increasing emphasis on outcomes and accountability.

- **Staff turnover, staffing shortages are constraining the efficiency of the CDC Cluster.** Turnover continues to constrain the success of the Program. For example, two-thirds of the National and Regional Coordinators disagreed (including 54% who strongly disagreed) with the statement that the turnover rate related to health staff at the national, regional, and community level is relatively low. Turnover can have a significant negative impact on the effectiveness of the Cluster by disrupting program delivery, resulting in the loss of both institutional and corporate knowledge, and increasing the need for training and orientation. Other factors which are seen as constraining the effectiveness of the Cluster include competing priorities between regions, organizational issues (e.g., restrictions in job descriptions, lack of connection with the public health system, and lack of vision or leadership), reporting issues, and the magnitude of the issues to be addressed.

Evaluation Question #11:

In what manner and to what extent has the type of transfer payment impacted expected results?

- **Evidence from this evaluation is unable to demonstrate that certain types of transfer payment models are inherently more effective than others in producing positive outcomes. It may be too early to demonstrate real impact due to the length (3 years) of some Contribution Agreements and the fact that the Cluster model was operationalized only two years ago (2008).** FNIHB uses a number of different funding models in its approach to community-based program delivery. Funding models are meant to be phased-in over time through a capacity building approach which is based on community readiness to take on increasing levels of responsibility. Representatives associated with the Cluster expressed varied opinions about the potential influence of the transfer payment model on results. This evaluation report summarizes results via type of funding model. Where some differences in results can be noted across communities with different types of models, these differences are likely more attributable to other factors (e.g., differences in the characteristics of the communities such as location, remoteness, infrastructure, or range of services available or differences in Cluster activities across regions) than to the type of model itself.

Evaluation Question #12:

What are the benefits of the cluster approach and the opportunities for improvement?

The major conclusions related to this evaluation question are summarized below:

- **There is support at the national, regional and community levels for the Cluster approach.** The Cluster approach creates significant opportunities to take a more holistic approach, facilitate greater collaboration and integration of activities, share information and expertise, streamline reporting and administration, and increase the visibility of the programming both in target communities and with partner organizations.

- **Implementation of the Cluster approach is still in a relatively early stage of development.** Apart from some reporting activities and early coordination, implementation of the cluster approach has not yet had a significant impact on the delivery of the programming at the regional and community levels. It will be a number of years before the Cluster approach is fully realized.

VIII RECOMMENDATIONS

The major recommendations arising from the evaluation are as follows:

- 1. Place a high priority on moving towards a more strategic and coordinated approach in the design and implementation of cluster activities.** To take fuller advantage of the potential benefits of the cluster approach, FNIHB should develop a strategic plan which clearly defines the national vision for the Cluster, the structure of the programming, the strategic priorities going forward, the inter-relationship between the three programs and associated activities, and the relationship with other resources.
- 2. Work with Provincial Governments, PHAC, and regional and community staff to strengthen the surveillance system.** To improve surveillance, Health Canada needs to work with the provincial governments and PHAC to improve information sharing agreements, processes and protocols. FNIHB also needs to provide on-going training to support implementation of surveillance systems and the Performance Measurement Strategy. Options should be considered to tie funding more directly to the success in meeting reporting requirements and expected outcomes.
- 3. Facilitate greater sharing of information, resources, research and best practices within and across the programs, regions and communities.** A Cluster-wide strategy should be developed to build on existing efforts through strategies such as conducting best practice and promising practices reviews; developing a Cluster website through which information, resources, research and best practices can be shared; and featuring best practices and promising practices at training sessions and conferences.
- 4. Develop and support implementation of a formal training strategy for the Cluster.** A formal training strategy will assist in defining the objectives and priorities, identifying opportunities, developing and sharing common training tools and resources, supporting the development of multiple delivery options (e.g., national and regional sessions, local training sessions, mentoring, job shadowing, online workshops, video conferences, teleconferences, publications, updates, and webinars), and better enable the Cluster to take advantage of other existing training and educational resources.

- 5. Work with others within Health Canada to develop and then implement strategies to reduce the level and impact of staff turnover at the national, regional and community levels.**

- 6. Place a high priority on increasing community ownership of Cluster activities.**
Strong community leadership and ownership increases the profile of the programs and issues, lends greater credibility and importance to the messages, helps to increase participation in the programs, and facilitates promotion and delivery of program activities including the awareness and education programs.