Core Public Health Programs:
Air Quality, Food Safety,
Health Emergency Management and Food Security

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Provincial Health Services Authority
Core Public Health Programs:
Air Quality, Food Safety, Health Emergency Management and Food Security
2007/08 Improvement Plan

Consistent with the province's ongoing initiative to renew core public health programs, PHSA presents this summary document to communicate its role and its 2007-08 plans for core public health programs to the Ministry of Health and our regional health authority partners.

Many details of PHSA's involvement in core public health programs remain to be determined due to:
- Early focus of the core public health renewal was on functions performed by regional health authorities (RHAs).
- Provincial-level and province-wide functions require further consultation between the Ministry of Health (MoH), RHAs and PHSA. The ministry has advised that their current target for defining these roles is September 2008.
- Defining PHSA's role with provincial-level and province-wide functions will be subject to significant consultation processes between PHSA and the RHAs and MoH.
- Adequate resources are needed for PHSA to fulfill their provincial level role and in order for PHSA to develop and implement improvement plans for each of the core programs.

We look forward to working with our regional health authority partners and the Ministry of Health on further defining the provincial-level and PHSA's roles in the year ahead.

PHSA has a unique structure and mandate. For example, the newly created Public and Population Health Community of Practice's role is promoting collaboration and coordination between PHSA Agencies on issues pertaining to prevention, promotion, protection. Over the following year, this committee will further enhance it's role in public and population health.

Upon reviewing the core programs, strengths and roles were identified that were common to each of the four approved core programs (air quality, food safety, health emergency management and food security). Specifics of individual programs are described in the Appendix. Common strengths and roles identified include the following:
- PHSA provides expertise to the health authorities (HAs), other provincial agencies and the MoH
- PHSA plays a key role in educating and training regional health authority staff to foster capacity building within the RHAs
- PHSA has the capability to provide leadership and coordinating roles to address common issues, processes and challenges provincially, and
- PHSA recognizes the importance of preventive strategies and the population health approach.

The planning context has been examined and PHSA has identified areas for improvement within PHSA's for all of the approved core programs. Within PHSA, there exists opportunities to coordinate activities at the agency-level into PHSA-wide benefits.

Air Quality
Although PHSA does not have an established air quality program, BC Centre of Disease Control (BCCDC) is participating in air quality activities and the strengths that currently exist include:
- Existing local, national and international networks of contacts in air pollution and health research
- Established linkages between BCCDC and air quality experts, policy makers, and field staff
- Potential capacity and interest within BCCDC to provide leadership in air quality

The following priority improvements were identified:
- Development of a PHSA Air Quality Program plan, including a plan for an information system
- Recruitment and training of new staff, and
- Development and implementation of an information system plan for air quality surveillance.

Food Safety

BCCDC provides leadership in developing strategies and programs which contribute to ensuring the safety of British Columbia's food supply. The BCCDC performs a number of different functions in achieving their objectives.

The strengths identified for the food safety program include:
- Well established direct inspection programs for the areas of dairy and meat processing
- Risk based inspection program developed in cooperation with HAs
- Well established communication links and agreements with key stakeholders for areas of responsibility and interrelationships
- Established successes in developing provincial guidelines and best practices to enhance provincial implementation and consistency
- Established provincial agreement for emergency food recalls and seizures, and
- Substantial success in developing internationally recognized food handler education programs.

The following food safety priority improvements identified are:
- Enhanced surveillance and data analyses resources plan
- Clarification of BCCDC role in directed research in food safety and adequate resources to fulfill that role, and
- Development of a Food Toxicology plan, including a business case on resource needs, for evaluation of hazardous chemical and toxic conditions in the food supply and for stakeholder consultation.

Health Emergency Management

The PHSA's Emergency Management Program is currently being developed. PHSA and its agencies are generally well prepared for emergencies but agencies and corporate plans are in various positions of development. The strengths for this area include:
- Executive support for the Emergency Management Program at PHSA
- Existing provincial body for coordination and planning
- Strong interest and support for emergency management across the health sector
- Strong culture of emergency management in some agencies with effective emergency plans in place, and experience responding to and recovering from emergencies
- Program is prepared for considerable growth and development, and successful accreditation of all agencies.

The Health Emergency Management Program identified the following priority improvements:
- Develop a plan to integrate PHSA Health Emergency Management planning with provincial level initiatives. The plan should include a business case to secure additional resources.
- Develop a 5 year strategic plan, building on the strategic plan of the MoH Emergency Management Branch
- Develop and implement a Hazard, Risk, and Vulnerability (HRV) Assessment process to be consistently applied by all agencies and corporate services, and
- Develop or revise All-Hazard Emergency Plans and Business Continuity Plans across all agencies and corporate services, and train staff on these plans.

Response Plans for influenza pandemic will be developed separately.

Food Security

PHSA is supporting the Food Security program by coordinating the province's Community Food Action Initiative (CFAI), a multi-health authority initiative and developing food and beverage sale guidelines for PHSA facilities. The strengths for this area include:

- Established CFAI infrastructure for collaboration with the MoH and HAs to address implementation
- Established inter-sectoral CFAI advisory committee for strategic guidance on provincial issues
- CFAI evaluation in progress, and
- Alignment of PHSA Food Sales Guidelines with MoH development of vending machine sales guidelines.

The food security priority improvements identified are:

- Define provincial level functions and PHSA's role in Food Security Core Program
- Identify and implement mechanisms for consultation and collaboration to develop plan for PHSA's role. The plan should include a business case for adequate resources, and
- Complete PHSA Food Sales Guidelines, submit for approval and develop implementation plan.

The priority improvements identified for each of the four approved core programs are analyzed in PHSA's core public health programs improvement plan.

In recognition of PHSA's unique role and structure, there will be internal performance reporting through the individual agencies to PHSA.

For further information on core public health programs and PHSA's plans for improvement, please contact Lydia Drasic at 604-675-7425.

Core Public Health Programs
Improvement Plan 2007/08

	Common Element Analysis	Outcomes/Objectives	Performance Targets (Indicators)	Timeline	PHSA Lead
COMMON ELEMENTS					
Elements identified are common to the following 4 approved core programs.	Consultation mechanisms currently not in place to identify PHSA's role with provincial level and province-wide functions for the four approved programs.	Identify and implement mechanisms for consultation with MoH and HAs to define PHSA's role with provincial level and province wide functions.	PHSA's role in relation to provincial level and province-wide functions defined.	March 2008	Lydia Drasic, Director, Provincial Primary Health Care & Population Health Strategic Planning and PHSA Program Leads

Program and Components	Program Component Analysis	Outcomes/Objectives	Performance Targets (Indicators)	Timeline	PHSA Lead
AIR QUALITY					
Air Quality Program for Indoor/Outdoor Air	Development of an Air Quality plan and program is required for PHSA/BCCDC.	Consult with MoH and RHAs to develop a PHSA Air Quality Program Plan based on the model program paper. Plan approved and implemented.	Air Quality Program plan developed, approved and implemented.	October 2008	Director, Environmental Health, BCCDC (once recruited)
Air Quality Program Infrastructure	Current capacity is insufficient to recruit and train expert staff.	Expert staff recruited and trained.	Staff recruited and trained.	March 2008	
	Information system to store and track data on air pollution levels in BC to be developed and integrated into Air Quality program.	Information system for air pollution surveillance plan developed, approved and integrated into program.	Information system plan developed and integrated into air quality program.	October 2008	
Surveillance, Assessment and Intervention: Outdoor Air	Pending definition of PHSA's role with provincial level and province-wide functions. PHSA's role will be defined in consultation with MoH and RHAs.				
Surveillance, Assessment and Intervention: Indoor Air					
Education and Public Awareness: Outdoor/Indoor Air					
FOOD SAFETY					
Food Premises Inspection Programs	Computer-based data system recently updated.	Achieved	Achieved	Achieved	Larry Copeland, Director, Food Protection Services, BC CDC
Development of Provincial Guidelines and Best Practices	Pending definition of PHSA's role with provincial level and province-wide functions. PHSA's role will be defined in consultation with MoH and RHAs.				
Food Seizures and Recalls	Provincial Recall Manual recently revised with HAs and MoH.	Achieved	Achieved	Achieved	
Surveillance and Evaluation of Food Safety and Food Borne Illness (FBI)	Existing surveillance and data analysis require updating and greater provincial integration to ensure comprehensive assessment of FBI outbreaks and associated impacts.	Food safety and FBI data systems plan developed and integrated into BC's Public Health and Information Project (PHIP): ▪ Participate in BC's PHIP to ensure integration of systems.	Food safety and FBI data systems plan developed and integrated into PHIP	March 2008	
Directed Food Safety Research	PHSA/BCCDC role in directed food safety research currently not clarified.	Role of PHSA/BCCDC in directed food safety research clarified in consultation with MoH.	PHSA's role clarified.	July 2007	
	Inadequate resources for new and additional qualifications, training and expertise to pursue food safety research.	Food Safety Research plan for resources developed and approved.	Food Safety Research plan developed and approved.	March 2008	
		Increased staff qualifications through training and	# of staff with increased qualifications.	March 2010	

Program and Components	Program Component Analysis	Outcomes/Objectives	Performance Targets (Indicators)	Timeline	PHSA Lead
		education.			
Expanded expert resource into food toxicology	Increased expert analysis and strategy development is required to mitigate chemical and toxic hazards in the food supply.	Food toxicology plan developed and approved in consultation with newly created Division of Environmental Health to secure staffing resources.	Food toxicology plan developed and approved.	March 2008	
HEALTH EMERGENCY MANAGEMENT (EM)					
Provincial coordinating role for Health Emergency planning	PHSA's plan for provincial coordination of health emergency planning is pending definition of PHSA's role with provincial level and province-wide functions. PHSA's role will be defined in consultation with MoH and RHAs.				Corporate Director of Emergency Management. PHSA
Comprehensive Emergency Management (EM) Plan, including: o Preparedness: Communication and Education Measures o Preparedness: Resource Management o Preparedness: Training and Exercising o Recovery Planning	All agencies and corporate services require completed comprehensive EM Plans.	Comprehensive EM Plan, including communication and education measures, resource management, training and exercising, and recovery planning, developed, approved and implemented	Comprehensive EM Plan developed, approved and implemented consistently across PHSA.	March 2008	
Hazard, Risk and Vulnerability (HRV) Analysis	HRV Assessment plans are required to ensure consistent approaches to HRV analysis within PHSA.	HRV assessment process plan developed, approved and implemented across PHSA Corporate Services and Agencies.	HRV assessment program plan developed, approved and implemented.	March 2008	
Mitigation Measures	Emergency Management programs updated to comprise of strategies to ensure consistent application of hazard risk reduction and mitigation planning.	PHSA mitigation strategies based on HRV assessment findings developed and implemented.	Mitigation strategies developed and implemented.	September 2008	
Preparedness: Emergency Response Plan	Agencies' All-Hazard Emergency Response Plans are needed for: • Operational plan for BCCDC • Provincial plan for BC Renal Agency • Completion of plan for BCCA • Plans for BC Transplant Society, and PHSA Corporate Services	New or updated Emergency Response Plans in place for all PHSA Agencies and Corporate Services.	Emergency Response Plans developed, approved and implemented.	March 2008	
	Business Continuity Plans for all PHSA Agencies and Corporate Services are to be developed in consultation with Emergency Response Plans.	Business Continuity Plans for all PHSA Agencies and Corporate Services developed and approved.	Business Continuity Plans developed and approved.	March 2009	
FOOD SECURITY					
PHSA's role in Food Security Core Program	Mechanisms for consultation and collaboration need to be identified in order to define PHSA's role in Food Security.	In consultation with MoH and RHAs: • Mechanism for consultation and collaboration identified, and • PHSA's role in the Food Security Core Program defined.	Mechanism identified and PHSA's provincial role defined.	October 2008	Lydia Drasic, Director, Provincial Primary Health Care & Population Health Strategic Planning
Food Policy Framework	Food Policies and Guidelines, including vending machines and kiosks, are to be developed for PHSA Agencies and Corporate Services.	PHSA Food Sales Guidelines and implementation plan developed and approved.	PHSA Food Sales Guidelines and implementation plan developed.	March 2009	
Food Security Programs and Services	Pending definition of PHSA's role with provincial level and province-wide functions. PHSA's role will be defined in consultation with MoH and RHAs.				
Food Security Promotion and Public Awareness					
Surveillance, Monitoring and Evaluation of Food Security	Community Food Action Initiative (CFAI) evaluation framework to assess the impact and effectiveness of CFAI programs and services in progress.	CFAI Evaluation completed.	CFAI evaluation framework and plan developed and implemented.	March 2008	

Appendix

Air Quality Core Program

Air quality issues encompass a wide range of air pollutants, created from many different sources. These can have a significant health impact depending upon their characteristics and levels of concentration, the local conditions, and the health status of individuals.

Activity surveys show that the typical Canadian spends over 90% of their time indoors, breathing indoor air. Despite this, relatively little attention is directed to reducing risks to health in the indoor environment. The Public Health core program in Air deals largely with identification and reduction of harmful exposures from air pollutants in the *indoor* environment and response to complaints. Control of outdoor air pollutants is largely addressed through environment ministries and departments.

The model core program paper for air quality identified the following program components:
- Contributing to the surveillance and monitoring of air quality, including trend analysis and assessment of public health reports
- Identifying key air pollutants and sources (including new products), and assessing/prioritizing their public health impact
- Identifying and implementing, with partners and stakeholders, effective interventions, and
- Educational and awareness initiatives.

PHSA/BCCDC Air Quality Program Description
Currently, no program is in place for air quality within PHSA, or at the provincial level.

Food Safety Core Program

Food safety is an essential Core Public Health Program encompassing the key areas of regulation and inspection, illness investigation, food seizure and recalls, education, research and surveillance. Food borne illness can affect large numbers of people with significant costs to society. However, foodborne illnesses and outbreaks are largely preventable with appropriate education and sound public policies and programs.

The model core program paper for food safety identified the following program components:
- A Food Premises Inspection Program
- Food borne Illness Investigations, Food Seizures and Recalls
- Food Safety Education, and
- Surveillance and Evaluation of Food Safety.

PHSA/BCCDC Food Safety Program Description
BCCDC provides leadership in developing strategies and programs which contribute to ensuring the safety of British Columbia's food supply. The BCCDC performs a number of different functions in achieving their objectives.

For example:
- BCCDC provides direct prevention and inspection services to the provincially licensed dairy and meat processing industries, and

- For all other food sectors PHSA acts in a consultative and resource capacity to key stakeholders, including MoH, regional health authorities, other government departments, academia, the public and the food industry.

In these capacities BCCDC can directly control some factors affecting food safety, influence outcomes in others and in some cases only respond to issues.

Health Emergency Management Core Program

The term "emergency management" or "disaster management" is associated with the needs that are created from harmful events that have wide-scale impact on a community. Emergency management involves ongoing efforts by an organization to prevent, mitigate, prepare for, respond to, and recover from any kind of emergency. Health emergency management encompasses both emergencies and disasters which impact the health of the population or the health sector.

The model core program paper for health emergency management identified the following program components:
- Surveillance of health risks and vulnerability
- Conduct hazard, risk and vulnerability analysis
- Minimize potential health emergencies through risk reduction and mitigation measures
- Prepare for emergencies and disasters through coordinated emergency response plans and business continuity plans, and
- Respond to, and recovery from, health emergencies and disasters.

PHSA's Health Emergency Management Program Description

The PHSA's Emergency Management (EM) Program is currently being developed. The primary focus of PHSA's EM program is to provide maximum safety and protection for patients, visitors, staff, students, contract workers and volunteers during and immediately following times of major emergency and disaster through the application of emergency management best practices.

PHSA Agencies and PHSA Corporate Services' EM programs are all at various stages, with some having established programs, while others are earlier in the development process. An EM Policy is being developed that will provide overall guidance to the PHSA EM Program and will clarify roles and responsibilities of PHSA Corporate Services and Agencies.

The agencies at PHSA have been accredited by the Canadian Council on Health Services Accreditation (CCHSA), which requires Emergency Management Programs that are consistent with the model core program. In addition to CCHSA, there are a number of drivers for the PHSA Emergency Management Program beyond the Model Core Programs process. These include the National Framework for Health Emergency Management, the National Fire Protection Association (NFPA) 1600, the Canadian Standards Association (CSA) Standard on Emergency Management and Business Continuity Programs.

There is an emerging expectation from the MoH, that beyond meeting our own corporate EM Management needs, PHSA EM should provide support to all regions for planning around health emergencies at a provincial level.

Food Security Core Program

Although food security is a concern for many sectors, the focus of this core program is on those elements that are within the mandate, and within the influence, of the Ministry of Health and the health authorities. The working definition used is, "Community food security exists when all citizens obtain a safe, personally acceptable,

nutritious diet through a sustainable food system that maximizes healthy choices, community self-reliance and equal access for everyone"[1].

The model core program paper for food security identified the following program components:
- A comprehensive food policy framework that supports strategic planning, based on identifying population needs, and the existing resources and services in communities
- An appropriate array of food security programs and services
- Promotion and public awareness initiatives, targeted to both staff and the public, and
- Surveillance, monitoring and evaluation of food security programs.

PHSA Food Security Program Description
PHSA's role is not clearly defined for this core program. However, PHSA currently has the following two initiatives that support the food security program components:
- Community Food Action Initiative (CFAI) and has the goals of increasing awareness about food security, access to local healthy food, food knowledge and skills, community capacity to address local food security and the development and use of policy that support community food security. PHSA's role includes supporting the health authorities in their implementation, coordinating CFAI at the provincial level and evaluating CFAI in collaboration with the health authorities.
- PHSA Food Sales Guidelines currently being drafted and having a goal of making healthy choices easier through food sales in vending machines and kiosks.

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[1] Bellows, A. and Hamm, M. (2003). *Critical Public Health*, Vol.13, No.2, 107-123.