



CORE

Public Health Functions for BC

Model Core Program Paper: Food Security

**Population and Public Health
BC Ministry of Health**

March 2014 (update from June 2006)

This is a review of evidence and best practice that should be seen as a guide to understanding the scientific and community-based research, rather than as a formula for achieving success. This review does not necessarily represent ministry policy, and may include practices that are not currently implemented throughout the public health system in BC. This is to be expected as the purpose of the Core Public Health Functions process—consistent with the quality improvement approach widely adopted in private and public sector organizations across Canada—is to put in place a performance improvement process to move the public health system in BC towards evidence-based best practice.

This Evidence Review should be read in conjunction with the accompanying Model Core Program Paper.

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EXECUTIVE SUMMARY

In March 2005, the Ministry of Health released *A Framework for Core Functions in Public Health* (Core Functions Framework), which clearly defined the core functions of the public health system and identified a comprehensive set of core public health programs intended to improve health and well-being, and/or reduce disease, disability and injury. This policy work formed the foundation of *Promote, Protect, Prevent: Our Health Begins Here. BC's Guiding Framework for Public Health* (Guiding Framework)—the 10-year directional document for the public health system released in March 2013. The Guiding Framework reinforces Core Functions as the framework for public health program and service delivery in the province, provides a strong foundation for all current public health efforts, and builds on the critical elements necessary to consider when identifying future priorities.

Food security is a core public health program, which is aligned with the Healthy Living and Healthy Communities goal in the Guiding Framework. Each core public health program is supported by an evidence review and model core program paper, quality improvement tools that help the Ministry of Health and health authorities ensure that public health policies, programs and services are based on evidence and best practice.

Many core public health programs are linked and because of the nature of health improvement, it is difficult to divide initiatives entirely into different categories. With respect to food security, it is important to consider linkages to, and to coordinate planning and delivery mechanisms with, several other core public health programs.^a For example, although food safety is touched on briefly in this paper, it is generally assumed that discussion of healthy food implies safe food; specific initiatives to ensure food safety are described more fully in the core public health program on food safety.

This model core program paper is an update the food security model core program paper completed in 2006. It builds on the previous work using a number of resources, including information from an updated *Food Security Evidence Review*¹ prepared by the Ministry of Health in 2013, the growing expertise among BC health authorities who have initiated many innovative projects since the core public health program was established in 2006, and emerging interest and action related to food security in a number of other jurisdictions.

Food security has been recognized as a key public health issue in BC and Canada. In a 2007 document, the United Nations' Food and Agricultural Organization stated that "food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."² The public health role recognizes that health is determined by complex interactions among social and economic factors, the physical environment and individual

^a See the BC Ministry of Health's list of Core Public Health Programs at <http://www.health.gov.bc.ca/public-health/core-programs/>.

behaviour. The Public Health Agency of Canada³ noted that this requires a focus on partnerships and cross-sectoral cooperation, finding flexible and multidimensional solutions for complex problems, and public involvement and community participation.

Roles and Responsibilities of the Ministry of Health, the Provincial Health Services Authority and the Regional Health Authorities

The purpose of a model core program is to assist the Ministry of Health, the Provincial Health Services Authority (PHSA) and the regional health authorities with determining what they are able to do to address the public health issue of interest within their respective mandates.

With respect to food security, the Ministry of Health plays a role in

- Informing and advising the Minister of Health on food security policies and programs.
- Coordinating and providing leadership on food security policies, provincial programs/initiatives and partnerships with other ministries or sectors.
- Working towards achieving provincial food security goals by sharing knowledge and best practices and encouraging collaboration with other provinces/territories and/or the federal government to enhance and support food security initiatives.

The PHSA is responsible for

- Leading, monitoring, evaluating and facilitating cross-sectoral collaboration and informing policies related to advancing food security in BC.
- Coordinating activities regarding food security across the province to support the Ministry of Health, regional health authorities and others.
- Coordinating and collaborating with various ministries and the regional health authorities to identify common issues and needs and promote evidence-based best/promising practices to support effective implementation and evaluation of food security initiatives at the regional and local levels.
- Developing key partnerships with stakeholders across all sectors to influence strategic direction and ensure best practices and sustainability for food security initiatives.

The regional health authorities are responsible for

- Advocating for the development, implementation and ongoing review of food security policies, programs and services within their geographic area.
- Providing leadership, support and encouragement for strengthening food policies in the communities they serve.
- Supporting knowledge transfer.
- Supporting food security strategies and programs that facilitate community engagement and community-driven awareness, planning and delivery of local initiatives.
- Supporting the monitoring and evaluation of food security programs within the region.
- Supporting province-wide collaboration and coordinated initiatives.

Key Structural Elements for the Food Security Core Public Health Program

The overall goals of the food security core public health program are to increase food security and decrease food insecurity for the population of British Columbia.

The objectives of the core program are to

- Advocate for, and inform the development of, policies that support food security initiatives at the provincial, regional and community levels.
- Partner with other sectors to increase food security and decrease food insecurity for all citizens in the province.
- Develop resources, collate evidence and share information to enhance understanding of food security.
- Facilitate community capacity and support collaboration among stakeholders who are striving to increase food security and/or decrease food insecurity.
- Facilitate and collaborate in research and evaluation to build evidence regarding both food security and food insecurity.

Food security programs are complex and it may be difficult to link interventions with direct health outcomes, particularly as initiatives involve multiple factors, sectors and stakeholders, which all play a role in determining outcomes. Thus, a variety of indicators (not just outcome measures) should be used to understand the overall functioning of a food security program. In 2010, the PHSA undertook a project to develop a core set of indicators for the food security core program using an iterative, collaborative process. The resulting set of six indicators (presented in the table below) represents a broad cross-section of food security issues. They can be used to inform policy and programming at both the regional health authority and provincial levels.

Indicators Selected to Date to Monitor Food Security Programs

Category	Indicator
Organizational Commitment to Food Security	A1: Presence of food policy that supports food security within health authorities
Community Capacity	A2: Proportion of communities that have ongoing food actions supported through the Community Food Action Initiative
Individual and Household Food Security	A3: Annual cost of a nutritious food basket in BC as a proportion of family income
	A4: Prevalence of nutrition-related health conditions
	A5: Proportion of the BC population that eats fruits and vegetables five or more times per day
	A6: Proportion of the BC population that always had enough of the foods they wanted to eat in the last 12 months

Main Components and Possible Activities/Strategies for a Food Security Core Program

Using the BC Ministry of Health’s 2013 *Food Security Evidence Review*¹ and their own knowledge and experiences as a base, representatives of the PHSA and the regional health authorities have discussed what a food security core public health program for BC could look like, given current needs, existing resources, other provincial and regional initiatives, etc. The following table identifies the main components¹ and possible activities/strategies that could be conducted by both the PHSA and the regional health authorities (RHAs).

Main Components and Possible Activities/Strategies for a Food Security Core Public Health Program in BC

Main Component	Possible Activities/Strategies	
	PHSA	RHAs
Leadership and Advocacy to Advance Food Security	<ul style="list-style-type: none"> • Establish an internal food security framework and/or strategy • Provide information, resources and technical advice regarding food security at the provincial level to inform policy • Partner with cross-sector stakeholders to ensure food security is integrated into broad strategies • Develop mechanisms to foster cross-sector collaboration and coordination regarding food security • Identify and facilitate opportunities to ensure alignment of food security initiatives with provincial priorities and best/promising practices • Coordinate and lead activities that enhance food security across BC 	<ul style="list-style-type: none"> • Establish a food security framework/strategy • Provide information, resources and technical advice within the health authority and to cross-sector community partners • Implement mechanisms to ensure internal cross-program collaboration and consistency regarding food security policies and strategies • Develop and maintain cross-sector partnerships, networks and strategies externally to share information and best/promising practices • Support local and First Nations communities to enhance food security in their communities
Food Security Knowledge Transfer, Promotion and Awareness Initiatives	<ul style="list-style-type: none"> • Develop resources and collate evidence and information to enhance understanding of food security and inform program and policy development • Create opportunities for stakeholder engagement, dialogue, training and knowledge transfer to support food security 	<ul style="list-style-type: none"> • Support the collection and sharing of current food security evidence, information and resources with the regional health authority and community partners • Identify educational resources, training materials, workshops and protocols to promote and support food security • Support community partners to develop targeted educational resources, communication materials, workshops and special events for community members • Develop public awareness resources, materials and initiatives to increase public understanding of food security at the community level • Inform PHSA and the Ministry of Health of province-wide frameworks and resources that support food security

¹ The main components reflect the objectives of the model core program noted above.

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Main Component	Possible Activities/Strategies	
	PHSA	RHAs
Support for Community Capacity to Deliver Food Security Programs and Services	<ul style="list-style-type: none"> Identify and facilitate mechanisms to build capacity and support collaboration at the provincial level 	<ul style="list-style-type: none"> Develop mechanisms to build and strengthen relationships among community stakeholders Create opportunities for community stakeholders to develop skills related to the development, implementation, maintenance and evaluation of food security programs and services^b Provide support for a range of community food security initiatives (including programs that contribute to short- and long-term food security, increase access to healthy foods and ensure access to culturally appropriate foods)
Surveillance, Monitoring and Evaluation	<ul style="list-style-type: none"> Monitor trends, population health and indicators related to food security and health Analyze, and interpret and present data focused on six indicators Facilitate evaluation of food security programs and policies Collaborate with researchers to identify gaps and support research to build evidence Facilitate and collaborate in research and evaluation to build evidence 	<ul style="list-style-type: none"> Establish a food security evaluation framework Identify sources of and/or suggest mechanisms to develop and gather baseline data Analyze and interpret data within local and regional contexts Provide evaluation/research related training manuals, workshops and other support to community stakeholders Collaborate with researchers in various organizations to enhance surveillance, monitoring and evaluation processes Share evaluation reports within the health authority and with others

Conclusion

Food security, as a public health issue, is continuing to evolve. As a result, the food security core public health program is a work in progress. In part, this is due to the lack of evidence and best practices in the literature. The experiences of those working in the field are critical for moving the program forward. It is clear that the representatives of the PHSA and the regional health authorities are committed to ensuring that there is increased community food security and decreased household/individual food insecurity for all British Columbians.

^b Skills could include, but are not limited to organizational development; community development; program planning; project management; facilitation; negotiation; conflict resolution; outreach to vulnerable populations; cultural competency; sustainability planning; and grant writing.

1.0 OVERVIEW/ SETTING THE CONTEXT

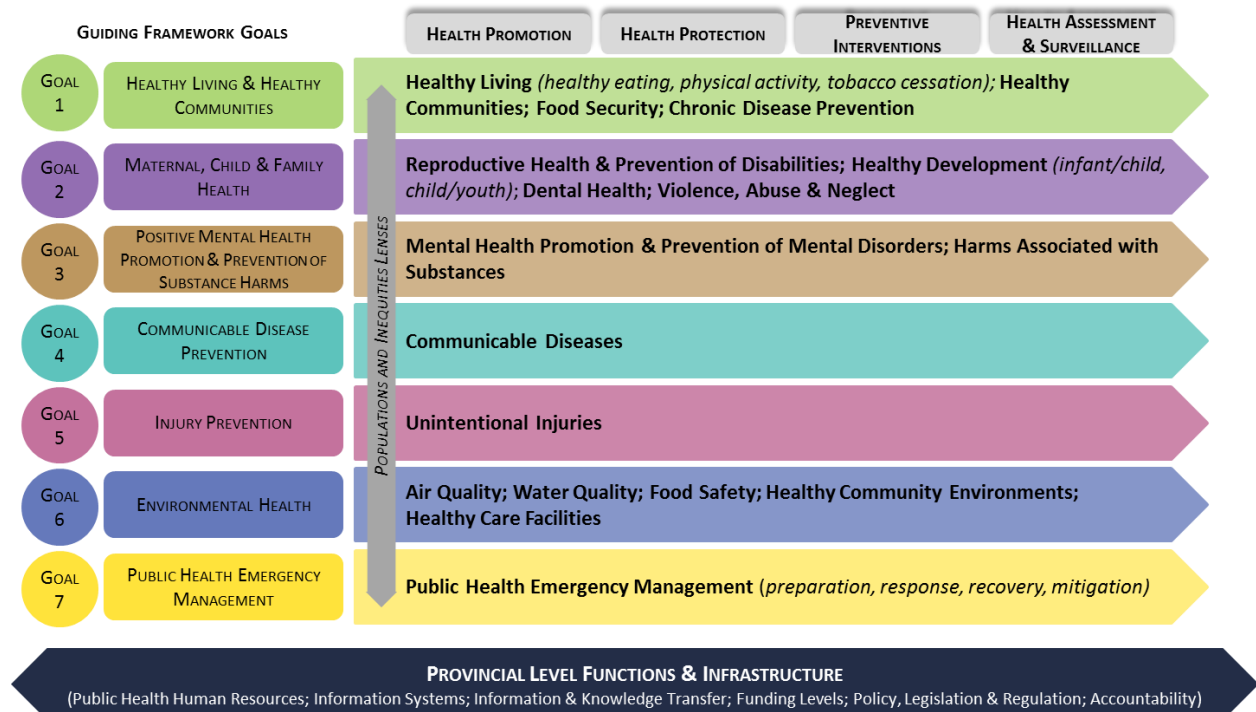
1.1 The Core Functions Framework

In March 2005, the Ministry of Health released *A Framework for Core Functions in Public Health* (Core Functions Framework) that clearly defined the core functions of the public health system and identified a comprehensive set of public health services, based on the best available evidence and best practices. This policy work formed the foundation of *Promote, Protect, Prevent: Our Health Begins Here. BC’s Guiding Framework for Public Health* (Guiding Framework)—the 10-year directional document for the public health system released in March 2013.⁴ The Guiding Framework reinforces Core Functions as the framework for public health program and service delivery in the province, provides a strong foundation for all current public health efforts, and builds on the critical elements necessary to consider when identifying future priorities (See Figure 1).

The original Core Functions Framework has been revised to reflect the alignment with the Guiding Framework. It outlines the 20 core public health programs within the seven goal areas that health authorities provide as they seek to improve the overall health of their populations. Four strategies (health promotion; health protection; preventive interventions; and health assessment and disease surveillance) are used to guide implementation.

Food Security is a core public health program, and it is aligned with the Healthy Living and Healthy Communities goal (Goal 1) within the Guiding Framework.

Figure 1: Core Functions Framework



Each core public health program is supported by quality improvement tools that help the Ministry of Health and health authorities ensure that public health policies, programs and services are based on evidence and best practice.

- An *evidence review*, which identifies and ranks the evidence of effective public health interventions related to the core public health program.
- A *model core program paper*, which identifies the core elements of a comprehensive program, including goals and objectives, principles, key components, best practices, and indicators and potential performance measures. The information in the evidence review provides the foundation for the main components and best practices outlined in the model core program paper.

Health authorities are expected to use these quality improvement tools to inform planning, policy development and delivery, and support ongoing quality improvement. Specifically to

- Ensure programs and services are evidence-based and address health inequities.
- Develop and implement new public health priorities, as identified by the Guiding Framework and other public health directional documents.
- Educate and inform internal and external stakeholders of the evidence and support them in implementing evidence-based practices.

1.2 Introduction to the Core Public Health Program of Food Security

This document is an update of the model core program paper on food security, completed in 2006. It builds on the previous work using a number of resources, including information from an updated *Food Security Evidence Review*¹ prepared by the Ministry of Health in 2013, the growing expertise among BC health authorities who have initiated many innovative projects since the core program was established in 2006, and emerging interest and action related to food security in a number of other jurisdictions.

1.2.1 Linkages with Other Core Public Health Programs

Many core public health programs are linked and because of the nature of health improvement, it is difficult to divide initiatives entirely into different categories. With respect to food security, it is important to consider linkages to, and to coordinate planning and delivery mechanisms with, several other core public health programs.^c It is thus suggested that model core program papers for other core public health programs be referenced for additional information on related topics. For example:

- The core public health programs for healthy living, reproductive health and prevention of disabilities, healthy development and healthy communities highlight the importance of healthy food.

^c See the BC Ministry of Health's list of Core Public Health Programs at <http://www.health.gov.bc.ca/public-health/core-programs/>.

- The core public health programs for food safety, water quality, healthy community environments and public health emergency management have a link to food security
- The core public health programs for chronic disease prevention and dental health include a number of factors associated with food insecurity.

1.3 Food Security within a Public Health Perspective

1.3.1 Healthy Eating and Food Security

Healthy eating promotes and supports social, physical and mental well-being and contributes to the overall health of individuals, families and communities.⁵ It is important for achieving a healthy lifestyle and reducing the risk of many chronic diseases (such as diabetes, cardiovascular disease and cancer).⁶ Access and education are keys to healthy eating.⁷ Healthy foods need to be readily available and reasonably priced and families need the skills and knowledge to make sound snack and meal choices.⁷

Food security, which is the foundation for healthy eating, requires a stable and sustainable food supply from production to disposal.⁶ This includes having an economically and environmentally sustainable food system that ensures enough nutritious food and water is available, accessible, affordable, acceptable and safe for everyone at all times.

1.3.2 Influences on Food Security

Food security has been recognized as a key public health issue in BC and Canada. The United Nations' (UN) Food and Agricultural Organization stated that "food security exists when all people, at all times, have physical, social and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."²

The public health role requires consideration of factors both inside and outside the health care system, as it recognizes that health is determined by complex interactions among social and economic factors, the physical environment, and individual behaviour. This requires a focus on partnerships and cross-sectoral cooperation, finding flexible and multidimensional solutions for complex problems, and public involvement and community participation.³

There are multiple factors that can affect food security, and it may not be possible to identify all of the direct and indirect influences. Figure 2, which was developed by representatives of the Provincial Health Services Authority (PHSA) and the regional health authorities in BC, is informed by the work of Story et al.⁸, Kumanyika et al.⁹ and the Office of the Provincial Health Officer.¹⁰ The figure is a work in progress and is not meant to be exhaustive. Rather, it provides examples of multiple influences on food security.

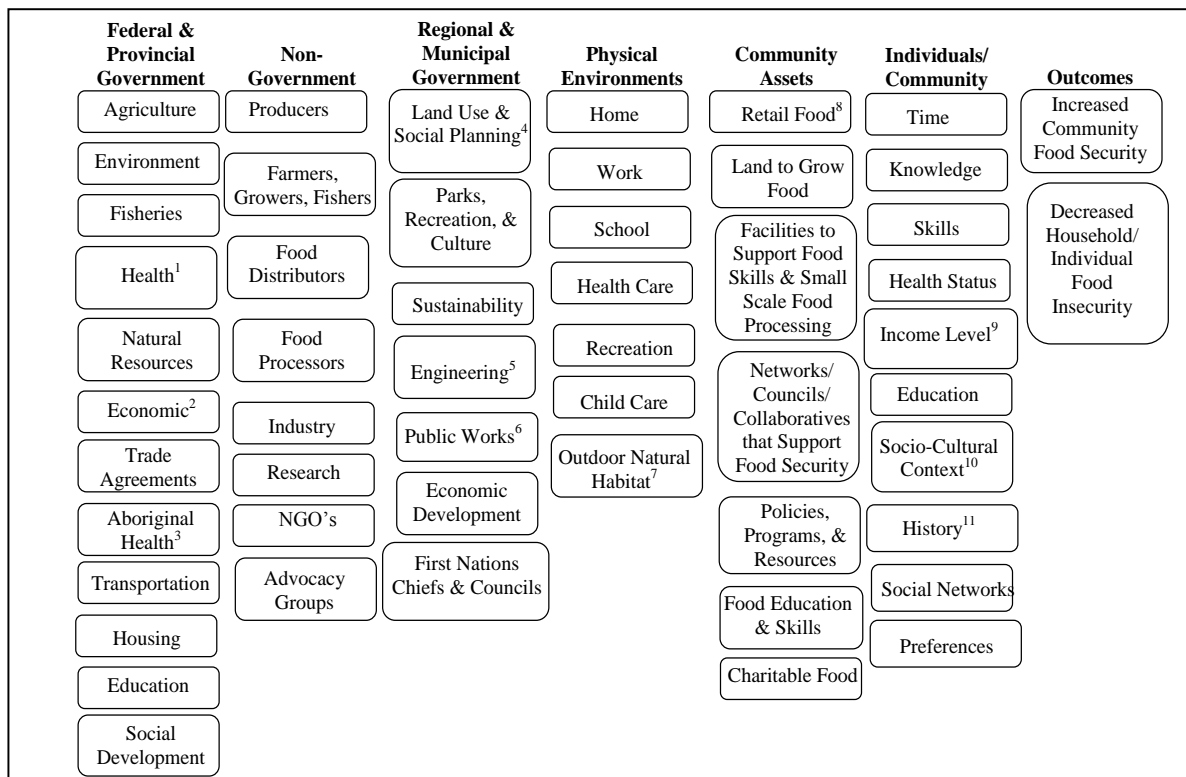
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According to the UN’s Food and Agricultural Organization,¹¹ the following four dimensions must be fulfilled simultaneously in order to achieve food security:

- Physical availability of food (sufficient supply).
- Economic and physical access to food.
- Food utilization (quality of food, food practices, etc.).
- Stability (which is influenced by global and individual factors).

All of the boxes in Figure 2 affect one or more of these dimensions.

Figure 2: Influences on Food Security in BC



Notes: ¹Especially food and nutrition, and food safety; ² Includes income assistance rates, minimum/living wage; ³ Includes Aboriginal Health leads with the regional health authorities, Regional Directors at the First Nations Health Authority (FNHA) and staff with expertise in Aboriginal food security at the FNHA; ⁴Includes housing; ⁵ Includes transportation; ⁶ Includes waste; ⁷ Includes environmental contaminants and safety of traditional food sources; ⁸ Includes supermarkets, restaurants, farmers markets; ⁹ Includes low income and poverty; ¹⁰ Includes First Nations cultures & traditions; ¹¹ Includes colonization.

1.3.3 Community Food Security and Household/Individual Food Insecurity

Community food security and household/individual food insecurity are two important dimensions within the broad construct of food security. Community food security is defined as “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.”¹² The major focus of this paper is on community food security.

A lack of household/individual food security is measured by Health Canada as household/individual food **insecurity**. Household/individual food insecurity is defined as “the inability to acquire or consume an adequate diet quality or a sufficient quantity of food in socially acceptable ways, or the uncertainty that one will be able to do so.”¹³

It is recognized that there are vulnerable^d populations who still experience food insecurity despite the work being done at the community level. Low income has consistently been found to be the best predictor of food insecurity (e.g., Cook¹⁴; Health Canada¹⁵). Individuals may also be unable to obtain sufficient, nutritious food for a variety of other reasons such as the presence of a physical or mental health condition, an inability to access culturally appropriate food, or an inability to access food in a socially acceptable manner.

There is an inherent reciprocal relationship between community and household/individual food security. Community food security is not achieved until all households are food secure. Conversely, household/individual food security depends upon a resilient, food-secure community. Consideration of this relationship is critical for the development of food security initiatives at both the household/individual and community levels.

1.4 Factors Affecting Food Security

Food security is a complex issue, which recognizes the importance of economic, social and cultural, and environmental factors (as illustrated in Figure 2). The following sections highlight findings from the 2013 *Food Security Evidence Review*¹ related to each of these key areas.

1.4.1 Economic Factors

As noted, poverty is one of the key contributing factors to food insecurity. McIntyre¹⁶ has argued that food insecurity is “primarily a matter of insufficient income.”

The 2007/2008 Canadian Community Health Survey (CCHS) found that people in the lowest income decile had quadruple the rate of food insecurity compared to the national average; 56% of those receiving social assistance and 25% of those receiving workers’ compensation/employment insurance were food insecure.¹⁷ The situation appears to be getting worse. In a recent report, Tarasuk et al.¹⁸ noted that in the majority (62.2%) of food-insecure households, there is at least one working individual (who may be receiving a low wage, working part-time, or working at an insecure job). They also noted that 70% of households that were reliant on social assistance and 38.4% of those reliant on workers’ compensation/employment insurance were food insecure in 2012.

In 2012, the rate of food insecurity was higher in BC than the national average. The total provincial rate of food-insecure households was 8.4% (compared to 8.1% nationally).^{13,19} Of

^d The term “vulnerable” is used in this document to refer to people who are susceptible to food insecurity because of socio-demographic characteristics (such as income, family status, cultural background, and living situation).

these, 5.2% experienced moderate food insecurity (slightly less than the national average of 5.6%) and 3.2% experienced severe food insecurity (which was higher than the national average of 2.5%).^e

1.4.2 Social and Cultural Factors

The groups who are most vulnerable for food insecurity are families headed by single females; black and Aboriginal peoples; marginally housed and homeless people; and new immigrants.^{17,18,20}

The 2007/2008 CCHS¹⁷ found that

- Some 25% of households led by female lone parents were food insecure, which was twice the rate of households led by male lone parents (11.2%) and four times the rate of households led by couples (6.3%).
- More households with children reported food insecurity compared to the average household (9.7% versus 7.7%).^f
- Approximately 21% of Aboriginal people living off-reserve experienced food insecurity.
- Some 13% of recent immigrants experienced food insecurity.

The CCHS does not include people of Aboriginal ancestry living on-reserve or people who are homeless. However, both groups have been identified as particularly vulnerable to food insecurity. A 2008/2009 survey of 1,103 Aboriginal adults living on-reserve in 21 BC communities found food insecurity affected 41% of First Nations households (34% experienced moderate food insecurity and 7% experienced severe food insecurity). Rates varied from 13% to 47% across eco-zone/culture areas and affected 25% of households with children.²¹

More recently, Tarasuk et al.¹⁸ noted that food insecurity was experienced by

- 34.3% of households led by female lone parents.
- 15.6% of households with children under the age of 18.
- 27.8% of black individuals and 28.2% of Aboriginal individuals.
- 26.1% of individuals who rented rather than owned their own home.

^e Households experiencing moderate food insecurity report multiple indications of problems with food access among adults and/or children, but typically few, or no, indications of reduced food intake. Their experiences may include inadequacy in household food supplies or adjustments to the quality of food consumed. Households experiencing severe food insecurity report disrupted eating patterns and reduced food intake among adults and/or children in addition to conditions reported by moderate food-insecure households.

^f For households with children, 7.0% reported moderate food insecurity and 2.7% reported severe food insecurity. The comparable figures for households without children were 5.1% and 2.6%, respectively.

1.4.3 Environmental Factors

Access to healthy, safe and sufficient food is essential for good health. The natural environment influences, and is influenced by, the production, harvesting and distribution of food. It is, therefore, an important consideration for food security.

1.4.3.1 BC's Agricultural Land Reserve

BC's Agricultural Land Reserve was created in 1974 to protect prime agricultural land for farming and future food production in the province. However, the special land use zone is continually threatened by population growth, urban sprawl, competing land uses, land speculation and changing weather patterns.^{8,7,22}

1.4.3.2 Climate Change

BC's agricultural sector faces both positive and negative impacts from climate change.²³ Changes in precipitation and water supply, more frequent and sustained droughts, and increased demand for water will strain the adaptive capacity of most forms of agriculture. Growing conditions may improve in some regions for some crops, although the ability to expand agricultural regions will be constrained by soil suitability and water availability.²³ Sustainable modes of production may also help to mitigate climate change, hopefully minimizing its negative effects on food production over the long term.

1.4.3.3 Environmental Degradation

Environmental degradation affects both the availability and safety of cultivated and wild foods. For example, the loss of protected agricultural land may have a negative impact on community food security initiatives. For First Nations communities, fishermen and others who depend on wild food both from the land and water, a decrease in the availability of traditional foods because of environment degradation may have a substantial negative impact on food security.

1.4.4 Transportation

The absence of reliable transportation options for individuals in both rural areas and lower income urban neighbourhoods underserved by public transport can reduce access to affordable and nutritious food.²⁴ The problem is more acute in rural and remote areas and among Aboriginal peoples living on reserves.^{25,26}

2.0 SCOPE AND AUTHORITY FOR THE FOOD SECURITY CORE PROGRAM

The purpose of a model core program is to assist the Ministry of Health, the Provincial Health Services Authority (PHSA) and the regional health authorities in determining what they are able to do to address the public health issue of interest (in this case, food security) within their

⁸ The BC Healthy Living Alliance recommends that all lands with the highest capability of agricultural production should be captured within the Agricultural Land Reserve and used only for their intended purpose.

respective mandates, while also recognizing that their resources may be constrained due to other initiatives.

This chapter focuses on general legislation and policy direction for food security in BC and the roles and responsibilities of the Ministry of Health, PHSA and the regional health authorities. An overview of key initiatives in BC as well as at the national and international levels is also presented.

2.1 Legislation and Policy Direction

In BC, the legislative and policy direction for food security is based on the following:

- The *Public Health Act*, the *Food Safety Act*, the Food Premises Regulation and the Public Health Impediments Regulation (BC trans fat regulation).
- *A Framework for Core Functions in Public Health*.²⁷
- *Promote, Protect, Prevent: Our Health Begins Here. BC's Guiding Framework for Public Health*.⁴
- The Community Food Action Initiative (see Section 2.5.1).
- Government policy and guidelines regarding food such as the *Healthier Choices in Vending Machines in BC Public Buildings Policy*²⁸ and the *Guidelines for Food and Beverage Sales in BC Schools*.²⁹
- *The Food Donor Encouragement Act*.^h

2.2 Provincial Roles and Responsibilities

2.2.1 Ministry of Health

The Ministry of Health has three main roles and responsibilities:

- Providing overall stewardship of the health system in BC, including conducting strategic interventions with health authorities to ensure continuing delivery of efficient, appropriate, equitable and effective health services to British Columbians.
- Working with health authorities to provide accountability to government, the general public and recipients of health services.
- Providing resources to health authorities to allow them to deliver health-related services to British Columbians.

^h Bill 10, the *Food Donor Encouragement Act*, protects donors from liability when they act in good faith to donate or distribute surplus perishable food if consumption of that food accidentally results in injury or death. The *Act* also ensures recipients' rights are protected.

With respect to food security, the Ministry of Health plays a role in

- Informing and advising the Minister of Health on food security policies and programs.
- Coordinating and providing leadership on food security policies, provincial programs/initiatives and partnerships with other ministries or sectors.
- Working towards achieving provincial food security goals by sharing knowledge and best practices and encouraging collaboration with other provinces/territories and/or the federal government to enhance and support food security initiatives.

2.2.2 Other Provincial Ministries and Agencies

In addition to the Ministry of Health, several other provincial ministries have roles and responsibilities that contribute to food security in British Columbia. They are potential partners for enhancing the sustainability of both community and household/individual food security. For example:

- The Ministry of Agriculture works to support an innovative, adaptive, globally competitive and social and environmentally responsible agrifoods sector. It supports healthy and safe animal and plant health, food safety, and sustainable and competitive food production. The BC Agriculture Strategy lists health as a priority area.
- The Agricultural Land Commission is an independent provincial agency that is responsible for administering the *Agricultural Land Commission Act* and managing the Agricultural Land Reserve. The purpose of the Commission is to preserve agricultural land; encourage farming in collaboration with other communities of interest; and encourage local government, First Nations and the provincial government to enable and accommodate the use of agricultural land for farming, and uses compatible with agriculture in their plans, bylaws and policies.
- The Ministry of Education is responsible for ensuring every student receives a high quality education that enables them to develop the knowledge and skills necessary for health and well-being in a changing world, to realize their full potential and to contribute to the well-being of society. The Ministry supports Community Link funding, which can be used to support meal programs for vulnerable children.
- The Ministry of Environment is responsible for encouraging and maintaining the effective protection, management and conservation of BC's water, land, air and living resources. It provides leadership to minimize the effects of climate change and ensure that British Columbians and industry are prepared to adapt to the effects of a changing climate.
- The Ministry of Finance is responsible for building a foundation that keeps costs affordable for families. The Ministry of Jobs, Tourism and Skills Training offers a range of services, resources and expertise aimed at enhancing training and employment opportunities. This may include training in food-related industries.
- The ministry responsible for housing plays a major role in ensuring that individuals are well housed. The ministry works with BC Housing to address critical gaps across the

housing continuum for vulnerable individuals. BC Housing develops, manages and administers a wide range of subsidized housing options throughout BC. The availability of affordable housing options is intended to help improve food security (among other things) for vulnerable individuals. BC Housing can also encourage and support food security projects within affordable housing complexes and communities.

- The Ministry of Social Development and Social Innovation provides a broad range of supports and services for the province’s most vulnerable individuals. It funds a mixture of income assistance and other services for unemployed and underemployed individuals. It also leads, encourages and develops new social innovation partnerships with non-profit groups, government and the private sector to address social and financial challenges.
- The Ministry of Children and Family Development provides services to support healthy, safe environments where children are connected to their family and community, with a primary focus to support vulnerable children. The Ministry is piloting community poverty reduction strategies.
- The Ministry of Transportation and Infrastructure is responsible for transportation networks, services and infrastructure to move people and goods. It works to enhance the competitiveness of transportation industries, reduce transportation-related greenhouse gas emissions and provide a safe and reliable highway system. It consults with local and regional authorities, stakeholder groups and industry, and partners with port, railway, airport, public transit, ferry services and cycling networks to fulfill economic and social needs.

2.3 Provincial Health Services Authority Roles and Responsibilities

The roles for PHSA are to

- Deliver health services, and work with health authorities to coordinate and set standards for selected province-wide specialized services.
- Lead system-wide improvements and create province-wide partnerships.
- Implement population and public health initiatives.
- Advance research and its applications to improve patient care, decision-making and planning.

With respect to food security, the PHSA is responsible for

- Leading, monitoring, evaluating and facilitating cross-sectoral collaboration and informing policies related to advancing food security in BC. It plays a key role in coordinating activities across the province to support the Ministry of Health, regional health authorities and others.
- Coordinating and collaborating with ministries and the regional health authorities to identify common issues and needs and promote evidence-based best/promising

practices to support effective implementation and evaluation of food security initiatives at the regional and local levels.

- Developing key partnerships with stakeholders across all sectors to influence strategic direction and ensure best practices and sustainability for food security initiatives.

2.4 Regional Health Authority Roles and Responsibilities

The roles of the regional health authorities are to

- Identify and assess the health needs in the region.
- Deliver health servicesⁱ to British Columbians in an efficient, appropriate, equitable and effective manner.
- Monitor and evaluate the services they provide.

With respect to food security, regional health authorities are responsible for

- Advocating for the development, implementation and ongoing review of food security policies, programs and services within their geographic area.
- Providing leadership, support and encouragement for strengthening food policies in the communities they serve.
- Supporting knowledge transfer.
- Supporting food security strategies and programs that facilitate community engagement and community-driven awareness, planning and delivery of local initiatives.
- Supporting the monitoring and evaluation of food security programs within the region (with support from PHSA, as appropriate).
- Supporting province-wide collaboration and coordinated initiatives.

2.5 Examples of Provincial and Regional Initiatives

Several provincial and regional initiatives that are designed to improve food security are described in the following sections. Note that these are examples; the list is neither comprehensive nor exhaustive.

2.5.1 Community Food Action Initiative

The Community Food Action Initiative (CFAI) is a collaborative effort of the Ministry of Health, PHSA and the regional health authorities. It is funded by the Ministry of Health and implemented by the regional health authorities in communities across the province. The objectives of the CFAI are to:

- Increase awareness about food security.
- Increase access to local healthy food.

ⁱ Except for physician and BC Pharmacare services.

- Increase food knowledge and skills.
- Increase community capacity to address local food security.
- Increase development and use of policy that supports community food security.³⁰

A number of stakeholder partners are involved in the process of developing and implementing programs at both the provincial and community levels.

2.5.2 Dietitian Services at HealthLink BC

HealthLink BC is a service within the Ministry of Health that connects British Columbians with non-emergency health information and services. Dietitian Services at HealthLink BC

- Provides free, up-to-date, evidence-based nutrition information, counseling and advice.
- Offers services through telephone, email and Internet, including translation services in more than 130 languages.
- Offers specialty nutrition services to meet provincial gaps in the areas of allergies, oncology, and pediatric and childhood healthy weights.
- Coordinates province-wide healthy eating resources.
- Provides services to professional clients, including health professionals, schools, non-government organizations and industry.

With respect to food security, Dietitian Services provides information, counseling and advice on many topics, including factors affecting food security, eating well on a limited income, food safety and food security resources/programs, such as the following:

- Meal programs and services in BC.
- The cost of eating in BC.
- *Guidelines for Food and Beverage Sales in BC Schools.*²⁹
- *Healthier Choices in Vending Machines in BC Public Buildings.*²⁸

Dietitian Services also contributes to food security work by preparing background reports and evidence reviews, supporting the planning and implementation of provincial nutrition programs and initiatives, and authoring healthy eating content on the Healthy Families BC blog.

2.5.3 PlanH

PlanH is a partnership between the BC Healthy Communities Society and Healthy Families BC. The program supports local government engagement and partnerships across sectors in order to create healthier communities. With the support of local government, communities can identify opportunities to increase access to healthy food, create healthy eating environments, build food security and support local food systems. PlanH identifies several ways these opportunities can be achieved.

2.5.4 BC Food Security Gateway

The BC Food Security Gateway is a web portal designed for food security practitioners and others in BC who wish to build food-secure communities and make “healthy eating the easy choice.” The resource provides links to projects, initiatives and organizations in BC as well as publications, tools, guides, news and events. The portal is supported by PHSA.

2.5.5 BC Food Systems Network

The BC Food Systems Network is a provincial organization that works towards “a healthy and just food system.” Formed in 1999, it links people across the province in community-level action related to food and highlights food-related issues across sectors, age groups and cultures.

2.5.6 Working Group on Indigenous Food Sovereignty

The Working Group on Indigenous Food Sovereignty^{j,31} (WGIFS) was created in 2006 to increase awareness of the underlying issues, concerns and strategies affecting food security in Indigenous communities in BC. The group consists of individuals who provide input and leadership regarding increasing awareness and mobilizing communities around the topic of Indigenous food sovereignty. The Indigenous Food Systems Network website was developed by the WGIFS to enable individuals and groups involved with Indigenous food-related action, research and policy reform to network and share relevant resources and information. The WGIFS also hosts the Indigenous Food Sovereignty email listserve that helps build capacity within communities.

2.5.7 Healthy Eating, Active Living (HEAL) Network

Started in 2001, the Healthy Eating, Active Living (HEAL) Network has been supporting grassroots community-based groups to improve the health of individuals in northern British Columbia. HEAL focuses on food security, healthy eating, active living, physical activity and chronic disease reduction.

^j Food sovereignty is a relatively new term that encompasses the right of people to healthy, culturally appropriate food and in particular, the right of people to define and control their own food and agricultural systems (Wittman & Desmarais, 2012). There is considerable overlap in the goals of food sovereignty and food security, although the language of food sovereignty is more explicit in terms of food citizenship.

2.6 Examples of National and International Initiatives

The following sections highlight examples of national and international initiatives. The list is neither comprehensive nor exhaustive.

2.6.1 National Initiatives

2.6.1.1 Federal Initiatives

The federal government has developed several initiatives to support food security planning including the following:

- A food security module was included in the 2007/2008 Canadian Community Health Survey (and selectively in 2009/2010 based on the decision of each province). It focused on characteristics of individual and household food insecurity to collect standard measures and data to support food security planning and development initiatives.
- A web-based Food Security Knowledge Initiative was established to support knowledge development, exchange and dissemination of income-based food security research. The project is currently under review as many of the research findings were based on self-reported, anecdotal information involving small samples of respondents.
- Canada's Progress Report on Food Security was developed in response to the World Food Summit Plan of Action. Both the 4th and 5th progress reports^{32,33} note that Canada is committed to creating an enabling environment for achieving food security goals; reducing poverty to improve access to safe and nutritious food; supporting sustainable agriculture; encouraging trade; and addressing emergency prevention and preparedness related to Canada's food supply. There has been strong criticism of Canada by the World Health Organization for lack of action on food security for the poor.

2.6.1.2 Food Secure Canada

Food Secure Canada is a pan-Canadian alliance of organizations and individuals who work together to advance food security and food sovereignty. The organization is committed to ensuring that everyone is able to acquire an adequate supply of culturally and personally acceptable food at all times; there is a sustainable food system in Canada; and healthy and safe foods (free of pathogens and industrial chemicals) are available. Food Secure Canada facilitates an accessible information hub to encourage debate on food policy; supports networks to facilitate research and enhance learning and collaboration on food-related projects; and advocates for food policies at the federal level that are consistent with the priorities of Canada's food movement.

2.6.2 International Initiatives

At the international level, comprehensive and cross-sectoral approaches have become an important focus with the growing recognition and concern about food security. The United Nations' (UN) Food and Agricultural Organization has held several World Food Summits on food security:

- The first Summit was held in Rome in 1996 to renew a global commitment to the fight against hunger, in response to widespread under-nutrition and growing concern about the capacity of agriculture to meet future food needs. The conference produced two key documents: the *Rome Declaration on World Food Security* and the *World Food Summit Plan of Action*. The *Rome Declaration* called for the members of the UN to decrease the number of chronically undernourished people on earth by 50% by 2015. The Plan of Action set a number of targets for governments and non-governmental organizations for achieving food security at the individual, household, national, regional and global levels.
- The second World Summit on Food Security took place in Rome in 2009. Although the initial international focus had prioritized food security in developing countries, it expanded to include developed countries, taking into account the global nature of food production and transportation, agricultural trends, and environmental and climate considerations.

In addition, a high-level task force on the global food security crisis was formed in 2008 by the UN to promote a comprehensive and unified response to the challenge of achieving global food security. The UN's³⁴ *Comprehensive Framework for Action* pursues a twin-track approach to address immediate needs, as well as longer term structural needs through the participation of governments, civil society, businesses and researchers at both the international and regional levels.

3.0 KEY STRUCTURAL ELEMENTS FOR THE FOOD SECURITY CORE PROGRAM

Each health authority has a unique structure and approach to food security. In addition, the roles of the health authorities are flexible so they can respond to the needs of diverse and changing organizations. Nevertheless, there are several key structural elements of a food security core public health program that apply throughout the province. These include goals and objectives, guiding principles, using evidence to support practice, and indicators and benchmarks.

3.1 Overall Goals and Objectives

The overall goals of the food security core public health program are to increase food security and decrease food insecurity for the population of British Columbia.

The objectives of the core public health program are to

- Advocate for, and inform the development of, policies that support increased food security and decreased food insecurity at the provincial, regional and community levels.
- Partner with other sectors to increase food security and decrease food insecurity for all citizens in the province.
- Develop resources, collate evidence and share information to enhance understanding of food security and insecurity.
- Facilitate community capacity and support collaboration among stakeholders who are striving to increase food security and/or decrease food insecurity.
- Facilitate and collaborate in research and evaluation to build evidence regarding both food security and food insecurity.

3.2 Guiding Principles

There are a number of principles that can be used to guide the development of a food security program. These principles include the following:

- Universal access, with a targeted focus on vulnerable groups.
- Respect for individual autonomy, dignity and diversity.
- A comprehensive collaborative approach with cooperation among, and commitment from, multiple sectors and levels of government.
- A proactive, advocacy approach to support community-based cooperation, collaboration, education, planning and decision-making.
- Flexibility, innovation and responsiveness to local needs.
- Recognition of the impact of environmental health (food and water systems) on human health.

- Evidence based.
- Fairness and openness in communication and decision-making.
- Accountability through appropriate monitoring, evaluation and reporting on outcomes.

Some of these principles are discussed in more detail below as they are integral to the food security core public health program in BC.

3.2.1 Universal and Targeted Initiatives

A public health program on food security could include a combination of universal and targeted initiatives. Universal initiatives focus on all demographics of the population. They recognize that many people are affected by a lack of access to, and availability of, healthy food, as a result of limited food skills and knowledge, physical limitations (e.g., in seniors and children) and environmental factors that are generally outside of the population's control (e.g., transportation issues, isolation, existence of food deserts and food swamps,^k impacts of climate change, etc.).

It is important to target some initiatives towards vulnerable groups and households/individuals with low socio-economic status as these populations are most at risk for food insecurity. A diversity/equity lens can be used to identify vulnerable populations who may be at risk for food insecurity because of a range of biological, social, cultural and other factors.

Proportionate universality can be used to create and maintain universal services that also respond to populations with the highest need. Proportionate universality has been defined as “programs, services and policies that are universal but with a scale and intensity that is proportionate to the level of disadvantage.”³⁵ Food security programs can recognize a continuum of needs while also acknowledging the importance of universality in structuring policies and plans.

3.2.2 Comprehensive, Collaborative Approach

As noted previously, one of the responsibilities regional health authorities have with respect to food security is to support strategies and programs that facilitate community engagement in planning and delivering local initiatives. Community partnerships and networks are important for the development, enhancement, and expansion of food security initiatives that are responsive to the unique needs of the community, supported by community leaders and effective and sustainable.

^k A food desert is a socially distressed neighbourhood with relatively low average household incomes, a lack of transportation and poor access to healthy foods. A food swamp is an area that has an overabundance of high-energy, low nutrient food provided mainly by fast food outlets.

Partnerships and networks with groups and organizations such as the following are important for the successful delivery of a food security public health program:

- Community groups such as government food councils, agricultural and farming groups, media outlets, education groups, social services, child care agencies, Aboriginal Friendship Centres, cultural/ethnic groups, charitable organizations, food retail outlets, workplaces, recreation centres, religious/faith organizations, community funders (e.g., Vancouver Foundation) and other community groups.
- Health care providers such as public health professionals, primary care practitioners, acute care practitioners, nurses, etc.
- Other professional groups such as environmental health officers, agrologists, city planners, transportation planners, etc.

Partnerships also need to be established with other core public health programs in BC such as those addressing healthy communities, food safety, water quality, health emergency management, chronic disease prevention, dental health, reproductive health, healthy infant and early childhood development, healthy child and youth development, and healthy community care and assisted living.

3.2.3 Proactive Advocacy Approach

Advocacy is a central feature in seminal health promotion frameworks such as the *Ottawa Charter for Health Promotion*.³⁶ The Public Health Agency of Canada³⁷ identifies advocacy as a core competency of public health and notes that it is important “to advocate for healthy public policies and services that promote the health and well-being of individuals and communities.”

A proactive, advocacy approach is required to support multi-sectoral/multi-disciplinary collaboration, planning, and decision-making. The health authorities need to advocate for policies, practices and programs that address both community food security and household/individual food insecurity issues.

3.3 Using Evidence to Support Practice

For any public health program, it is important to keep the following caveats in mind:

- Compared to the evidence base in clinical medicine, the evidence base in public health is generally weaker and more fragmented due to several factors, including the inadequacy of a clinically-based evidence model for reviewing public health interventions and the relative scarcity of funding for both practice and research in public health.
- Information is usually only one factor in policy development. Policies often take into account a combination of factors including expert judgment, values, opinions and budgetary realities.
- Evidence of effectiveness is not always possible to obtain in the early stages of policy and program development.

The term “best practice” is used to describe the best evidence available to guide decision-making. As a relatively new field, there are few food security practices that can be considered “best.” However, there are a number of “promising” practices based on the literature as well as the consistent views of professionals working in the field.¹ In general, the promising practices include the following:

- Creating supportive environments at the individual, social and structural levels.
- Building community capacity in order to develop and support cross-sectoral approaches.
- Engaging partners (for example, in different levels of government, agricultural and environmental sectors, the food industry, the educational system, and social agencies) to support community development processes for planning and implementing food security programs.
- Conducting strategic planning with diverse partners (based on needs assessments and current capacity) to establish policies that incorporate a continuum of food security programs and services.
- Working with regional and municipal governments to incorporate food security initiatives into a variety of community strategies, development plans/permits, land use policies and community development processes, as well as a variety of incentives (or restrictions) that encourage access to, and the availability of, healthy food.

3.4 Indicators, Benchmarks and Performance Targets

3.4.1 Introduction

This section identifies ways to monitor and assess the food security core program in BC on an ongoing basis using indicators, benchmarks and performance targets.

The terms “indicators,” “benchmarks,” and “performance targets” are not always used consistently. Thus, the following definitions are provided:

- Indicators – are summary measures (usually numerical) that denote or reflect, directly or indirectly, variations and trends. They are more than outcome measures. They are an important reflection of some aspect of a given program or service and can be used to drive decisions and actions. Indicators need to be standardized so they can be compared across different organizational entities such as health regions.
- Benchmarks – are established by reviewing the literature, reviewing the best practice experience in other jurisdictions and/or determining the consensus opinion of leading experts and practitioners in the field. Benchmarks represent program goals that health authorities can strive to achieve. In BC, some benchmarks may apply across the province while others may need to be modified to address geographic size and/or the population density of the health authority.

¹ Promising practices are based on providers’ experiences. There may be little to no research evidence available on their effectiveness.

- Performance targets – are locally determined targets that represent a realistic and achievable improvement in performance.

3.4.2 Indicators for Monitoring Food Security in BC

Food security programs are complex and it may be difficult to link interventions with direct health outcomes, particularly as initiatives involve multiple factors, sectors and stakeholders, which all play a role in determining outcomes. A variety of indicators (not just outcome measures) should be used to understand the overall functioning of a food security program.

The Provincial Health Services Authority³⁸ undertook a project to develop a core set of indicators for the food security core program using an iterative, collaborative process. The goal was to identify five to 10 common indicators that all health authorities could endorse and for which data were readily available or could be easily collected at the health authority level. The process involved a review of indicators identified by the regional health authorities and the Ministry of Health; focus groups with the project resource group; key informant interviews with a range of key stakeholders; and a ranking exercise to ensure consensus around the final list of indicators. The indicators were further refined to ensure they were relevant to the goals of the health authorities and the food security core program.

The resulting set of six indicators (see Table 1) represents a broad cross-section of food security issues that can be used to inform policy and programming at both the regional health authority and provincial levels.

Table 1: Indicators Selected to Date to Monitor Food Security Programs

Category	Indicator
Organizational Commitment to Food Security	A1: Presence of food policy that supports food security within health authorities
Community Capacity	A2: Proportion of communities that have ongoing food actions supported through the Community Food Action Initiative
Individual and Household Food Security	A3: Annual cost of a nutritious food basket in BC as a proportion of family income
	A4: Prevalence of nutrition-related health conditions
	A5: Proportion of the BC population that eats fruits and vegetables five or more times per day
	A6: Proportion of the BC population that always had enough of the foods they wanted to eat in the last 12 months

4.0 MAIN COMPONENTS, POSSIBLE ACTIVITIES/STRATEGIES AND SUPPORTING EVIDENCE FOR A FOOD SECURITY CORE PROGRAM

Using the 2013 *Food Security Evidence Review*¹ and their own knowledge and experiences as a base, representatives of the Provincial Health Services Authority (PHSA) and the regional health authorities have discussed what a food security core public health program for BC could look like, given current needs, existing resources, other provincial and regional initiatives, etc. As with Figure 2, the food security core public health program for BC is a work in progress.

This chapter presents a summary of the main components of the food security core public health program, possible activities/strategies that the PHSA and regional health authorities could conduct to address the main components, and supporting evidence (from the 2013 *Food Security Evidence Review*¹) that addresses the main component and/or the potential activities/strategies.

A summary of the food security core program (which includes activities/strategies, outputs and short/intermediate and long-term outcomes) is presented in Appendix A.

4.1 Main Components of the Core Public Health Program

The main components of the food security core public health program, which reflect the objectives of the model core program noted in Section 3.1, are as follows:

- Leadership and advocacy to advance food security.^m
- Food security knowledge transfer, promotion and awareness initiatives.
- Support for community capacity to deliver food security programs and services.
- Surveillance, monitoring and evaluation.

As noted in Chapter 2, in general, the PHSA is responsible for leading system-wide improvements; delivering specific health services; implementing population and public health initiatives; creating province-wide partnerships; and advancing research and its applications. In general, the regional health authorities are responsible for identifying and assessing the health needs in their region; delivering health services in an efficient, appropriate, equitable and effective manner; and monitoring and evaluating the services they provide.

The following sections identify activities/strategies PHSA and the regional health authorities could provide with respect to each of the main components.

^m In the roles and responsibilities sections discussed in Chapter 2, leadership and advocacy were considered separately. However, representatives of PHSA and the regional health authorities felt they should be combined for the core program.

4.2 Leadership and Advocacy to Advance Food Security

Leadership and advocacy are important for ensuring that policies, practices and programs at the provincial, regional and community levels address both community and household/individual food security issues.

4.2.1 Provincial Health Services Authority

PHSA could provide provincial leadership and advocacy by

- Establishing an internal food security framework and/or strategy.
- Providing information, resources and technical advice to ensure a food security lens is applied to provincial programs, resources and policies.
- Partnering with cross-sector stakeholders to raise the profile of food security and to ensure the integration of food security into broader strategies such as those addressing health, social well-being, agriculture, the environment and finance.
- Developing mechanisms that foster cross-sector collaboration and coordination of food security activities across BC.
- Identifying and facilitating opportunities to inform food security policies, programs, research and resources to align with provincial priorities and best/promising practices.
- Coordinating and leading external activities and internal (PHSA) activities that enhance food security and the food system across BC.

4.2.2 Regional Health Authorities

The regional health authorities could provide leadership and advocate for policies and programs both internally and externally at the health authority level.

Internally, they could do this by

- Establishing a regional health authority food security framework and/or food security strategy to identify internal food security policies as well as ways the health authority could support policy development amongst other partners.
- Providing information, resources and technical advice to ensure a food security lens is applied to health authority programs, resources and policies.
- Implementing mechanisms to ensure cross-program collaboration and consistency regarding food security policies and strategies within the health authority.

Externally, the health authorities could provide leadership and advocacy to promote food security by

- Providing information, data, best/promising practices, technical advice and other assistance to cross-sector community partners for needs assessments, planning and development of action plans.

- Developing and maintaining cross-sector partnerships, networks and strategies to share information and best/promising practices, align programs and priorities, and build a broader understanding of, and support for, food security initiatives.
- Supporting local and First Nations communities to take action to enhance food security in their communities through
 - The establishment of local food councils/coalitions or other consultation processes to identify needs, priorities and actions.
 - The use of community assessment and mapping toolkits to measure and assess various indicators of community food security in order to identify food related resources, gaps, opportunities and assets.
 - The adoption of evidence based regulations/mechanisms to increase the accessibility and availability of healthy, safe, and culturally acceptable food to communities through retail outlets, group purchasing initiatives, charitable food programs and urban agricultural initiatives.
 - The protection and preservation of natural habitats and agricultural land for food harvesting/production.
 - The engagement of stakeholders and groups representing vulnerable individuals in community planning activities.

4.2.3 Summary of Supporting Evidence

The *Ottawa Charter for Health Promotion* states that the focus for health promotion should include creating physical and social environments supportive of health; strengthening communities' capacity to address health issues of importance to them; and enabling communities to support their members in improving their health.³⁶

Research presented at the 2007 Bangkok Conference (which resulted in the *Bangkok Charter on Health Promotion in a Globalized World*) examined evidence regarding the effectiveness of the *Ottawa Charter* health promotion strategies.³⁹ Jackson et al.³⁹ noted that investment in building healthy public policy is a key strategy; supportive environments need to be created at the individual, social and structural levels; interventions employing multiple strategies and actions at multiple levels are most effective; and certain actions are central to effectiveness, including cross-sectoral action and inter-organizational partnerships at all levels, community engagement and participation in planning and decision making, the creation of healthy settings (particularly focusing on schools, communities, workplaces and municipalities), political commitment, funding and infrastructure, and awareness of the socio-environmental context.

Engaging a wide range of stakeholders in the food system is critical for building and sustaining food security. Stakeholders bring unique perspectives and experiences that help to conceptualize food issues and generate strategies and solutions while increasing the likelihood communities will accept and extend new interventions.⁴⁰ The literature generally recommends that food security policies be integrated with the agriculture, economic development,

education, food, health, labour and social welfare sectors in order to establish a comprehensive approach involving aspects of production, distribution and consumption of food.⁴¹

Food policy councils or coalitions have been established in some Canadian communities and in many other countries.ⁿ They are viewed as providing a consistent and persistent voice for advocacy and as a resource for supporting action, helping to ensure that food security remains a regional and community priority.^{42,43} In jurisdictions with food policy councils, substantial and significant outcomes have often been achieved.⁴³ For example, food policy councils have been able to engage stakeholders; strengthen food policy and practice; develop a number of resources (including food charters and food policy reports), and embed food security and food policy into government activities and decision making. The health sector can support the work of local food coalitions or councils by sharing information and best practices; helping to align programs and priorities; and building a broader understanding of food system issues.

4.3 Food Security Knowledge Transfer, Promotion and Awareness Initiatives

Health authorities can take a proactive role in promoting and facilitating public awareness and systemic support for sustainable community food security by focusing on a number of major pillars in the *Ottawa Charter for Health Promotion*.³⁶

4.3.1 Provincial Health Services Authority

For PHSA, knowledge transfer, promotion and awareness initiatives could include the following:

- Developing resources and collating evidence and information to enhance understanding of food security and inform program and policy development.
- Creating opportunities for stakeholder engagement, dialogue, training and knowledge transfer to support food security.

4.3.2 Regional Health Authorities

The regional health authorities could contribute to knowledge transfer, promotion, and awareness initiatives internally by

- Supporting the collection and sharing of current food security evidence, information and resources to enhance understanding of food security within the health authority.
- Identifying educational resources, training materials, workshops and protocols for health professionals and others to encourage and assist them in promoting and supporting food security.

ⁿ Food policy councils/coalitions are inter-sectoral working groups that aim to improve a community food supply and to enhance food security. They generally have a diverse, broadly representative membership and a strong focus on developing and implementing policies. Their roles may also include leadership, advocacy, coordination and networking, education and research.

The regional health authorities could also contribute to external initiatives by

- Supporting the collection and sharing of current food security evidence, information and resources to enhance community partners' understanding of food security as well as their ability to promote and support food security.
- Supporting community partners in developing targeted educational resources, communication materials, workshops and special events for community members to improve their knowledge regarding community food security.
- Developing public awareness resources, materials and initiatives to increase public understanding of key factors and opportunities to enhance food security at the community level.
- Informing PHSA and the Ministry of Health of province-wide frameworks and resources that support food security.

4.3.3 Summary of Supporting Evidence

As noted above, this component of the model core program involves the development of resources, educational materials, workshops, and public awareness materials regarding food security.

Mendes et al.⁴⁴ examined the development of municipal land use inventories in Portland, Oregon and in Vancouver, BC. A number of helpful processes that resulted in positive outcomes were identified. These included ensuring public involvement by creating participatory mechanisms in the design and implementation of the inventory; drawing on the expertise of institutional partners (including universities); increasing institutional awareness and political support for urban agriculture; and aligning urban agriculture with related sustainability goals.

Nutrition knowledge and food skills are key elements for healthy eating and a common focus of community-based food initiatives such as collective or community kitchens and cooking classes. Studies on food knowledge and skills programs indicate they are effective when they involve a number of strategies in addition to personal skills development.³⁹ Strengthening food related knowledge, skills and behaviours is generally recognized as one element in improving healthy eating for individuals with limited resources.^{45,46}

Farm-to-school programs connect schools to local farms with the objective of serving healthy meals in schools, improving student nutrition, providing education on agriculture, health and nutrition, and supporting local and regional farmers.⁴⁷ An evaluation of farm-to-school programs in the US found that the programs influenced teacher knowledge and attitudes; contributed positively to students' knowledge, attitudes and behaviours toward local, healthy food; promoted healthier dietary choices; and increased consumption of fruits and vegetables.⁴⁷

BC's *Food Skills for Families* program, which focuses on promoting wellness and preventing chronic diseases through healthy eating and cooking, has been profiled as a promising practice.⁴⁸ A 2012 evaluation showed that it had a positive impact as participants reported: having a significantly higher knowledge about healthy foods; having a significantly higher level of confidence in cooking and preparing healthy foods; and understanding nutrition facts on food labels.⁴⁹

Carr and Fodor⁵⁰ studied Vancouver's neighbourhood food network movement and suggested it could be sustained by building and bridging social and food systems capital (e.g., by connecting people, organizations and infrastructures through city-wide coordinated networking forums, gatherings, celebrations, events, etc.); and communicating about the food network movement (e.g., by developing and coordinating city-wide communications, encouraging engagement through workshops, etc.).

4.4 Support for Community Capacity to Deliver Food Security Programs and Services

It is critical that health authorities work with community, regional and provincial organizations to ensure that food security programs are developed and implemented. Building community capacity is especially important to ensure that access to sufficient nutritious and culturally appropriate foods can be addressed effectively.

4.4.1 Provincial Health Services Authority

PHSA could support community capacity by

- Identifying and facilitating mechanisms to build capacity and support collaboration at the provincial level.

4.4.2 Regional Health Authorities

Regional health authorities could support community capacity by

- Developing mechanisms to build and strengthen collaborative relationships among community stakeholders by connecting people, organizations and infrastructures within the health authority.
- Creating opportunities for community stakeholders to develop skills related to the development, implementation, maintenance and evaluation of food security programs and services to enhance their ability to participate as effective partners.^o

^o Skills could include, but are not limited to organizational development; community development; program planning; project management; facilitation; negotiation; conflict resolution; outreach to vulnerable populations; cultural competency; sustainability planning; and grant writing.

- Providing support for a range of community food security initiatives (including programs that contribute to short and long term food security,^P increase access to healthy foods, and ensure access to culturally appropriate foods) through strategic guidance and advice, direct staff support, and/or financial support.

4.4.3 Summary of Supporting Evidence

A research paper prepared for the Bangkok Conference examined the effectiveness of community capacity building.⁵¹ Based on a global review of the literature and case studies, it found that while academic research on the impact of community capacity building on health is lacking, multiple case studies documented in the grey literature suggest community capacity building is highly effective in improving health as does research in related areas, such as community empowerment. It concluded that health promotion in a globalized world requires a balance between macro actions (e.g., policy development) and human and local scale actions (e.g., community capacity building). Further, it concluded that action centred on empowered and capable communities, in synergistic collaboration with other key players, may be the most powerful instrument available for the future of health promotion in a globalized world. This work would suggest that both community capacity building and community empowerment are critical for improving food security.

A 2011 case study found that creating a community-engaged food security coalition required time, much of which involved consciousness-raising about the concept of food insecurity.⁵² Freedman et al.⁵² realized that people power is paramount in coalition work as is building networks that are as diverse as possible. They highlighted the role of participatory planning, collaboration among coalition actors and the importance of financial and political support (which was enhanced by local media connections and through university evaluations that helped to legitimize their work).

PHSA⁵³ noted that, if long-term sustainability is an objective, food security programs that build social capital and support community capacity building are preferable to ones that do not contribute to that objective.

4.5 Surveillance, Monitoring and Evaluation

All of the health authorities are responsible for monitoring and evaluating public health programs to measure improvements in population health and decreases in health inequities.

^P Short-term food security initiatives include community-based charitable food programs; food recovery programs; and nutritional support programs for low-income pregnant women, vulnerable school children, etc. Long-term food security initiatives include food knowledge and skills programs provided through community kitchens, cooking classes, etc.; promoting urban agriculture, such as community gardens, edible landscaping and rooftop gardens; and supporting farm-to-cafeteria programs and the distribution of good food boxes.

4.5.1 Provincial Health Services Authority

PHSA could support surveillance, monitoring and evaluation activities by

- Monitoring trends, population health and indicators as they relate to food security and health.
- Analyzing, interpreting and presenting data with a focus on six food security indicators (see Section 3.4.2).
- Facilitating evaluation of food security programs and policies both internal and external to PHSA.
- Collaborating with researchers to identify gaps and support research that builds evidence to advance food security programs and policies within the BC context.
- Facilitating and collaborating in research and evaluation that builds evidence to support food security policies and programs within the BC context.

4.5.2 Regional Health Authorities

Regional health authorities could support surveillance, monitoring, and evaluation activities by

- Establishing a food security evaluation framework as one component of community based food security programs.
- Identifying sources of and/or suggesting mechanisms to develop and gather baseline data to measure the level of food security in different geographic areas of the region and among different age and cultural groups.
- Analyzing and interpreting data to clarify local and regional trends, major issues, key risk factors and vulnerable groups in order to support effective planning and decision-making.
- Providing evaluation/research related training manuals, workshops and other forms of support to non-profit agencies and community groups to assist them in evaluating their programs.
- Collaborating with researchers in universities, professional organizations, federal/provincial governments, and communities to enhance surveillance, monitoring, and evaluation processes.
- Sharing evaluation reports among appropriate officials within the health authority and with other health authorities to build a knowledge base of effective (or unsuccessful) approaches.

4.5.3 Summary of Supporting Evidence

As food security is a relatively new public health field characterized by innovative, community based multi-pronged strategies, many activities and interventions have not been evaluated in a scientific manner and are seldom assessed in terms of their population level impact. The

complexity involved in assessing whether an intervention has a population level impact is often beyond the scope of community based projects.

PHSA⁵³ has noted that the merits of individual activities and approaches may have as much to do with the community context and associated infrastructures as with the individual merits of the specific activity itself. Individual community-based food security strategies should be planned and supported within the context of the needs and priorities of the communities; the mix of programs that are already in place; and the existing capacity within the community.

While the evidence may be limited, it is important that health authorities ensure relevant evidence is used in program planning. Similarly, evaluating program outcomes and impacts ensures a knowledge base is developed and continuous quality improvement is supported.

It is recognized that although public health programs are difficult to measure, it is nonetheless likely that “we will be able to manage and improve core function in public health if we can measure performance.”²⁷

5.0 STRATEGIES FOR SUCCESS

This chapter summarizes various strategies and resources that can be used to ensure that a food security core program is successful. While some of these may exist already, others may need to be developed as both the PHSA and the regional health authorities continue to address food security within their respective roles.

5.1 Key Strategies and Resources

Successful implementation of a high quality food security program will depend on having key strategies and resources in place. These include the following:

- Effective, timely and relevant provincial policies and legislation related to building food security.
- Strong support from the Ministry of Health and PHSA, the board and senior management of the health authorities, and other key players in the region (such as school boards and local governments), regarding the importance of food security and the role it plays in public health.
- Sufficient allocation of resources by the health authorities to meet the priority needs identified in their overall health improvement plan, their food security framework/strategic plan, and their evaluation framework for the food security core program.
- Strategies for the ongoing integration of best and promising food security practices.
- Well trained and competent staff with the necessary policies and tools to carry out their work efficiently.
- An information system that provides management with the information it needs to drive good policy and decisions, staff with appropriate support, and the public with relevant information about food security.
- High quality and competent management of the food security program, including monitoring of performance measures.
- Strategies and support for contributing to an evidence base regarding promising and best practices.
- Clarification of food security research and surveillance responsibilities at each level of the health sector, including the Ministry of Health, PHSA and health authorities.
- Clear mechanisms for reporting and being accountable to the health authority and external organizations.

5.2 Cross-Sectoral Collaboration and Coordination

A food security program can be strengthened when it works collaboratively with other key stakeholders involved in food security. Cross-sectoral collaboration and coordination at multiple levels is necessary.

At the provincial level, the key linkages are with the Ministry of Health and the PHSA. Other important linkages are with provincial ministries such as Social Development and Social Innovation; Children and Family Development; Finance; Education; Jobs, Tourism and Skills Training; Agriculture; Environment; Transportation and Infrastructure; and the ministry responsible for housing. Additional important provincial level linkages include those with BC Housing and the Agricultural Land Commission. At the regional and local levels, key linkages include local governments; schools; social service agencies; agricultural groups/farms; and other relevant community organizations (see Figure 2).

It is also important to integrate food security principles and policies into other programs provided by the health authority. For example, food security principles need to be integrated into the food safety, healthy living/healthy eating and communicable disease control programs.

5.3 Monitoring/Evaluating Success

Health authorities will need to monitor/evaluate their food security program to ensure that it is meeting the needs of their communities and is integrated with other public health programs. This may involve reviewing existing information and monitoring systems to ensure the health authority has the capacity and resources to measure and monitor performance indicators.

5.4 Conclusion

Food security, as a public health issue, is continuing to evolve. As a result, the food security core program is a work in progress. In part, this is due to the lack of evidence and best practices in the literature. The experiences of those working in the field are critical for moving the program forward. It is clear that the representatives of the PHSA and the regional health authorities are committed to ensuring that there is increased community food security and decreased household/individual food insecurity for all British Columbians.

APPENDIX A: PROGRAM SCHEMATIC FOR A FOOD SECURITY CORE PROGRAM IN BC

Overall Goal: To increase food security and decrease food insecurity for the population of British Columbia

Main Component	Possible Activities/Strategies ^q		Outputs	Short /Intermediate Outcomes	Long-term Outcomes
	PHSA	RHAs			
Leadership and Advocacy to Advance Food Security	<ul style="list-style-type: none"> Establish an internal food security framework and/or strategy Provide information, resources and technical advice regarding food security at the provincial level to inform policy Partner with cross-sector stakeholders to ensure food security is integrated into broad strategies Develop mechanisms to foster cross-sector collaboration and coordination regarding food security Identify and facilitate opportunities to ensure alignment of food security initiatives with provincial priorities and best/promising practices Coordinate and lead activities that enhance food security across BC 	<ul style="list-style-type: none"> Establish a food security framework/strategy Provide information, resources and technical advice within the health authority and to cross-sector community partners Implement mechanisms to ensure internal cross-program collaboration and consistency regarding food security policies and strategies Develop and maintain cross-sector partnerships, networks and strategies externally to share information and best/promising practices Support local and First Nations communities to enhance food security in their communities 	<ul style="list-style-type: none"> Provincial and region specific food security frameworks/strategies Policies that support food security initiatives on all levels 	<ul style="list-style-type: none"> Cross-sectoral partnerships are established to address barriers to food security Supportive environments are created that increase accessibility to and availability of safe, nutritious food Policies, services and resources that increase accessibility, availability and affordability of safe, nutritious, culturally appropriate foods are available Community capacity and collaboration are increased 	<ul style="list-style-type: none"> Increased community food security Decreased household/individual food insecurity Improved population health Decreased health inequities

^q For more detailed information on the activities/strategies, see Chapter 4. PHSA = Provincial Health Services Authority; RHAs = Regional Health Authorities.

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Main Component	Possible Activities/Strategies ^q		Outputs	Short /Intermediate Outcomes	Long-term Outcomes
	PHSA	RHAs			
Food Security Knowledge Transfer, Promotion and Awareness Initiatives	<ul style="list-style-type: none"> Develop resources and collate evidence and information to enhance understanding of food security and inform program and policy development Create opportunities for stakeholder engagement, dialogue, training and knowledge transfer to support food security 	<ul style="list-style-type: none"> Support the collection and sharing of current food security evidence, information and resources with the regional health authority and community partners Identify educational resources, training materials, workshops and protocols to promote and support food security Support community partners to develop targeted educational resources, communication materials, workshops and special events for community members Develop public awareness resources, materials and initiatives to increase public understanding of food security at the community level Inform PHSA and the Ministry of Health of province-wide frameworks and resources that support food security 	<ul style="list-style-type: none"> Resources (e.g., written, electronic) regarding importance of and strategies for addressing food security issues at provincial, regional and community levels Documents/ resources that summarize current evidence regarding food security Resources to support and inform public policy and programs Community partners develop well informed, accurate education resources, communication materials, etc. 	<ul style="list-style-type: none"> Increased knowledge and awareness of food security issues and solutions Community capacity and collaboration are increased 	<ul style="list-style-type: none"> Increased community food security Decreased household/individual food insecurity Improved population health Decreased health inequities

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Main Component	Possible Activities/Strategies ^q		Outputs	Short /Intermediate Outcomes	Long-term Outcomes
	PHSA	RHAs			
Support for Community Capacity to Deliver Food Security Programs and Services	<ul style="list-style-type: none"> Identify and facilitate mechanisms to build capacity and support collaboration at the provincial level 	<ul style="list-style-type: none"> Develop mechanisms to build and strengthen relationships among community stakeholders Create opportunities for community stakeholders to develop skills related to the development, implementation, maintenance and evaluation of food security programs and services^r Provide support for a range of community food security initiatives (including programs that contribute to short and long term food security, increase access to healthy foods, and ensure access to culturally appropriate foods) 	<ul style="list-style-type: none"> Tools and mechanisms for building community capacity Educational materials/ workshops focusing on skills related to the development, implementation, maintenance and evaluation of food security programs and services. 	<ul style="list-style-type: none"> Community stakeholders have the necessary competencies/ capacity to effectively advance food security within their communities Community capacity and collaboration are increased 	<ul style="list-style-type: none"> Increased community food security Decreased household/individual food insecurity Improved population health Decreased health inequities

^r Skills could include, but are not limited to organizational development; community development; program planning; project management; facilitation; negotiation; conflict resolution; outreach to vulnerable populations; cultural competency; sustainability planning; and grant writing.

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Main Component	Possible Activities/Strategies ^q		Outputs	Short /Intermediate Outcomes	Long-term Outcomes
	PHSA	RHAs			
Surveillance, Monitoring and Evaluation	<ul style="list-style-type: none"> • Monitor trends, population health and indicators related to food security and health • Analyze, and interpret and present data focused on six indicators • Facilitate evaluation of food security programs and policies • Collaborate with researchers to identify gaps and support research to build evidence • Facilitate and collaborate in research and evaluation to build evidence 	<ul style="list-style-type: none"> • Establish a food security evaluation framework • Identify sources of and/or suggest mechanisms to develop and gather baseline data • Analyze and interpret data within local and regional contexts • Provide evaluation/ research related training manuals, workshops and other support to community stakeholders • Collaborate with researchers in various organizations to enhance surveillance, monitoring and evaluation processes • Share evaluation reports within the health authority and with others 	<ul style="list-style-type: none"> • Evaluation framework(s) • Limited number of indicators related to food security (which are revised as necessary) • Collaborations with researchers in various settings • Funding, data collection tools and other resources for gathering information • Evaluation/ research related training manuals, workshops and other supports for community stakeholders • Documents and other resources related to evaluation/ research findings 	<ul style="list-style-type: none"> • Evaluation and research results are available to PHSA, RHAs, community stakeholders and others • Evaluation and research informs policies, programs and services that affect food security • Expanded evidence base regarding promising and best practices 	<ul style="list-style-type: none"> • Increased community food security • Decreased household/individual food insecurity • Improved population health • Decreased health inequities

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