AHS Chronic Disease Prevention Action Plan 2015–2018

ADULT POPULATION (18+ YEARS)

JUNE 2016

Chronic Disease Prevention
Healthy Living
Population, Public and Aboriginal Health

Alberta Health Services

Acknowledgement

The development of the Action Plan was led by the AHS provincial Chronic Disease Prevention team (members of the team who contributed to the Action Plan are listed on page 14). The Action Plan was developed in partnership with AHS Addiction and Mental Health (AMH) and AHS Nutrition Services (NS). The provincial chronic disease prevention team thanks AMH and NS for this ongoing partnership to strengthen chronic disease prevention provincially. We also thank all individuals and teams who participated in consultations and feedback sessions. The time given, expertise provided and passion brought to addressing chronic disease prevention were invaluable in the development of the *AHS Chronic Disease Prevention Action Plan 2015–2018: Adult Population (18+ Years)*.

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Executive Summary

Chronic diseases are the leading cause of death and disability worldwide.[1] Serious implications, such as reduced quality of life, premature death and severe economic consequences, result from chronic diseases. Currently, chronic diseases account for 53% of total health care costs in Canada, which constitutes the largest proportion of health care spending.[2] Health care expenditure per capita in Alberta is the highest in the country, with the majority of spending allocated to treating and managing chronic diseases that are largely preventable.[3] The chronic disease risk landscape is influenced by a range of factors, which is why a multi-factorial, multi-stakeholder, province-wide effort is needed to make substantial changes to the chronic disease trajectory.

In October 2013, the provincial chronic disease prevention team within Healthy Living, Population, Public and Indigenous Health (hereon referred to as the "provincial CDP team") committed to developing this three-year AHS Chronic Disease Prevention Action Plan* (hereon referred to as the "Action Plan") targeting the adult (18+) population. The Action Plan identifies gaps and priorities in chronic disease prevention, key actions to address the gaps and priorities, and strategies to improve the coordination and integration of chronic disease prevention across the province. The Action Plan focuses on the five key behavioural risk factors (nutrition, physical activity, alcohol, tobacco and stress), which are associated with major chronic diseases like cancer, cardiovascular disease, diabetes, respiratory diseases and obesity.[4] Sedentary behaviour, which is increasingly identified as an emerging modifiable risk factor, is also included in the Action Plan. It is important to note that these key behavioural risk factors for chronic disease and the overall wellbeing of the population is affected in both positive and negative ways by the social determinants of health, which include living and working conditions, unequal distributions of income and wealth, health and social services, the ability to access food, housing and quality education.[5,6]

The development of the Action Plan was supported by a review of the *Burden of Chronic Disease in Alberta and Associated Risk Factors*;[4] considerations of alignment with key strategies, frameworks and reports; and consultations with internal and external stakeholders to identify current programs and resources, as well as gaps and universal and targeted priorities for chronic disease prevention. The consultation process revealed that while there are pockets of excellence across Alberta at the individual risk factor level among specific population groups, there is no comprehensive approach to chronic disease prevention across the adult population and little coordination of activities. Although there is variation across the zones, the limited resources that are available for chronic disease prevention in the health system are focused more on child and youth populations, with responsibility for chronic disease prevention among the adult population falling to Primary Care Networks (PCNs) and stakeholders external to AHS. While chronic disease prevention efforts focused on children are key in providing the best start for preventing chronic

* This Action Plan was developed to be an iterative, living document. Adaptations to this Action Plan are expected to reflect changing priorities, actions and resource capacity, as well as new opportunities for coordinating, developing and implementing initiatives. As the Action Plan evolves, the desired end state will be a comprehensive, care and age continuum–spanning plan for chronic disease prevention.

disease, it is equally important to equip adults to maintain their own health and support, which creates the underpinnings for healthy lifestyles for children. There is also a lack of overarching or enabling supports for chronic disease prevention (such as a risk factor surveillance system), which are critical foundations for managing chronic disease prevention.

Actions spanning three years were identified by the provincial CDP team, Addiction and Mental Health (AMH), and Nutrition Services (NS). These actions and the Action Plan are intended to be iterative as new opportunities emerge for coordinating existing activities, developing new work and implementing initiatives across the province. These actions support specific AHS provincial CDP team, AMH and NS priorities and directly align with *Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life*, which sets forth a vision, guiding principles and an approach intended to guide future actions to ensure that all Albertans have the same opportunity to experience good health.[7] *Alberta's Strategic Approach to Wellness* identifies five strategies and the actions in this Action Plan, in addition to building infrastructure to support chronic disease prevention activities, support these strategies, which are as follows (see Tables 1 and 6):

- Improving the health knowledge, skills and behaviours of individuals and families
- Building communities that create wellness
- Improving social and economic supports for wellness
- Strengthening primary prevention with primary health care
- Building healthy public policy

Table 1: Selected 2015–2018 Provincial CDP team, Addiction and Mental Health, and Nutrition Services Actions

Alberta strategic approach to wellness strategy
Infrastructure-supporting actions
• Establish structure, in partnership with zones and other provincial teams, to support chronic disease prevention for populations vulnerable to poor health outcomes (e.g., Aboriginal populations), including health equity approaches. (Overarching) • Implement a governance structure for an integrated AHS chronic disease prevention committee. (Overarching) • Complete inventory of services, resources, programs, standards and guidelines (including current state by risk factor and chronic disease) for chronic disease prevention in Alberta. (Overarching) • Develop, in consultation with zones, an AHS model or framework for chronic disease prevention outlining approach guidelines, standards and best practices to identify essential services required across zones. (Overarching) • Establish a support structure with and for the zones for delivery and evaluation of chronic disease prevention services. (Overarching) • Enhance provincial surveillance for chronic disease prevention with partners. (Overarching) • Develop an evaluation framework for the Alberta Alcohol Strategy (ASS). (Alcohol)
Improving the health knowledge, skills and behaviours of individuals and families
• Disseminate healthy drinks, vegetable and fruit, and sodium messages on HealthyEatingStartsHere.ca. (Nutrition) • Develop and disseminate *Collective Kitchens* toolkit to community groups across Alberta. (Nutrition) • Provide physical activity/sedentary behaviour expertise to support adults and older adults.

Alberta strategic approach to wellness strategy
(Physical Activity/Sedentary Behaviour) • Develop and implement sedentary behaviour key messages for adults and older adults for knowledge translation products (e.g., two-pagers, AHS website, FAQs). (Sedentary Behaviour) • Provide teachers and parents with access to targeted, up-to-date information on the risks associated with tobacco, tobacco-like products and smokeless tobacco use. (Tobacco) • Develop, evaluate and pilot, with the zones, the *Find Your Stride* program. (Physical Activity/Tobacco) • Distribute *Stress and Your Health* resources. (Stress)
Building communities that create wellness
• Develop and disseminate vending toolkit and *Community Gardens Handbook*. (Nutrition) • Support the zones and partners to implement *WalkABle Alberta*, targeting improving social and physical (built) environments. (Physical Activity)
Improving social and economic supports for wellness
• Develop and pilot workplace sedentary behaviour toolkit. (Sedentary Behaviour) • Provide physical activity/sedentary behaviour/nutrition expertise to support Alberta Cancer Prevention Legacy Fund (ACPLF) Workplace Health Improvement Project (WHIP) 2 pilot project. (Physical Activity/Sedentary Behaviour/Nutrition) • Provide funding to support communities to promote best practices and reduce the harms associated with alcohol and other substance misuse. (Alcohol) • Continue implementing the *Ways to Wellness* initiative across AHS. (Stress)
Strengthening primary prevention with primary health care
• Pilot one approach/initiative to support chronic disease prevention within a primary care setting. (Overarching) • Develop one education resource/tool to support health care/community providers. (Overarching) • Develop nutrition guidelines for primary care. (Nutrition) • Implement *Find Your Stride* in PCNs. (Physical Activity/Tobacco) • Support the implementation of brief tobacco intervention and cessation support as a standard of care in health care settings by expanding *Tobacco Free Futures.* (Tobacco) • Increase access to training opportunities to educate stakeholders and encourage participation in tobacco reduction initiatives. (Tobacco) • Offer *HeartMath* workshops on *MyLearningLink.* (Stress)
Building healthy public policy
• Develop policy toolkit for chronic disease prevention. (Overarching) • Develop and disseminate *Cost of Eating in Alberta* and *Affordability of a Healthy Diet in Alberta* reports. (Nutrition) • Continue supporting AHS sites in the implementation of the *Tobacco and Smoke Free Environments* policy. (Tobacco) • Provide knowledge exchange opportunities for AHS staff and community partners to encourage and inform municipal alcohol policy. (Alcohol)

The actions identified in this Action Plan are founded on evidence and best practices, they reflect both new and existing actions, and they address gaps, as well as universal and targeted priorities,

identified through the consultative process. The Action Plan* provides an opening to begin enabling a province-wide coordinated effort that addresses chronic disease prevention in Alberta. This includes strong and continual engagement with communities, supporting community action, working in partnership with the zones, AHS provincial teams, Strategic Clinical Networks (SCNs) and external partners, and increasing emphasis on targeted approaches to support resolving health inequities.

* This Action Plan was developed to be an iterative, living document. Adaptations to this Action Plan are expected to reflect changing priorities, actions and resource capacity, as well as new opportunities for coordinating, developing and implementing initiatives. As the Action Plan evolves, the desired end state will be a comprehensive, care and age continuum–spanning plan for chronic disease prevention.

Purpose of Report

In October 2013, the provincial chronic disease prevention team within Healthy Living, Population, Public and Indigenous Health (hereon referred to as the "provincial CDP team") committed to developing this three-year AHS Chronic Disease Prevention Action Plan* (hereon referred to as the "Action Plan") targeting the adult (18+) population. The purpose of this Action Plan is to identify gaps and priorities in chronic disease prevention, key actions to address the gaps and priorities, and strategies to improve the coordination and integration of chronic disease prevention at a population level across the province. This Action Plan is intended to serve as a springboard for enhancing the coordination of chronic disease prevention across the province. This includes strong and continual engagement with communities, supporting community action, working in partnership with the zones, AHS provincial teams, Strategic Clinical Networks (SCNs) and external partners, and increasing emphasis on targeted approaches to support resolving health inequities.

Methodology

The focus of this Action Plan includes

- primary prevention strategies† focused on key behavioural risk factors for chronic disease (e.g., nutrition, physical activity, alcohol, tobacco, stress and sedentary behaviour) including interventions addressing health inequities
- supporting secondary and tertiary prevention strategies‡ focused on key behavioural risk factors for chronic disease
- stakeholder engagement to understand gaps and opportunities (a comprehensive inventory of all activities across AHS, Primary Care Networks (PCNs) and external stakeholders targeting preventing chronic disease is out of scope for this document)

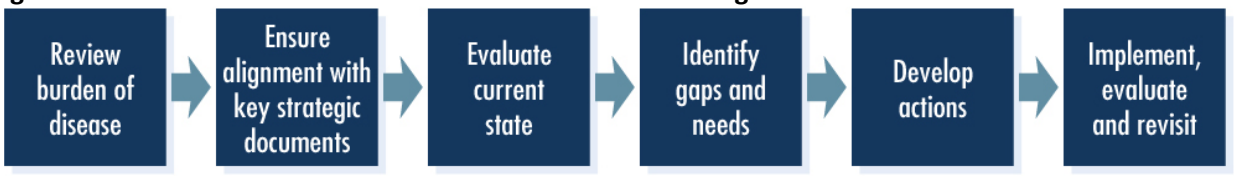
- a primary focus on the adult population (18+ years)
- alignment with
    - established health promotion models (e.g., the *Ottawa Charter for Health Promotion,*[8] the *Population Health Promotion Model*)[9]
    - *Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life*[7]
    - key Alberta Health (AH) and AHS strategic plans and documents

To develop this Action Plan, the provincial CDP team engaged in a systematic planning process (see Figure 1). This process was designed to support the provision of an integrated and comprehensive chronic disease prevention plan targeting the adult population that is developed

† Primary prevention refers to preventing the onset of disease (e.g., a healthy eating program).
‡ Secondary prevention refers to the detection of disease in early stages and intervening to slow/stop its progression. Tertiary prevention aims to reduce complications or disability from established diseases, such as through a diabetes management program.

with consultation and content provided by AHS zones, Addiction and Mental Health (AMH) and Nutrition Services (NS) provincial programs, and other internal and external partners.[§]

Figure 1: AHS Chronic Disease Prevention Action Plan Planning Process



First, the provincial CDP team reviewed the evidence relating to the burden of chronic disease in Alberta. They identified and analyzed quantitative data on rates of chronic disease incidence and prevalence, as well as on modifiable risk factors, using the most current data sources available. Appendix A1 contains the complete report.

Next, the provincial CDP team reviewed key strategic and health plan documents to ensure alignment, including the provincial government's *Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life*[7] and *Becoming the Best: Alberta's 5-Year Health Action Plan 2010-2015*[10] and the AHS *Health Plan and Business Plan 2013–2016*[11] *(and 2014–2017)*.[12] They also conducted a rapid review of additional strategic plans, frameworks and reports by AHS and others that were available nationally and internationally. Appendix A2 contains the full report of documents that were reviewed.

Finally, the provincial CDP team completed an assessment of the current state of chronic disease prevention in Alberta through a brief situational analysis with internal and external partners and stakeholders. These stakeholders were also consulted to identify gaps, needs and perceived priorities for chronic disease prevention. Internal consultations were conducted using the World Café method[**] and included 102 AHS zone and provincial and PCN participants.[††] Appendix A provides a list of all stakeholders consulted and Appendix A3 contains the full report. External stakeholder consultations were completed as key informant interviews, with 18 provincial stakeholders representing, primarily, academia and community organizations. Appendix A provides a list of all stakeholders consulted and Appendix A4 contains the full report. Additional consultations were held throughout the planning process with leaders of provincial teams across AHS, including Aboriginal Health, the Alberta Cancer Prevention Legacy Fund (APCLF), Seniors' Health (SH), Primary Health Care (PHC) and other key contributors to this Action Plan, AMH and NS. Although a brief current state analysis was conducted as part of the consultation process, a comprehensive inventory of chronic disease prevention activities across AHS, PCNs, and additional partners was out of scope; however the completion of a comprehensive current state is a needed activity as the Action Plan evolves.

[§] It is important to note that while this Action Plan was developed in consultation with our partners in the zones, AMH and NS, further coordination is required following completion of this Action Plan to develop and implement programs, services and resources for chronic disease prevention in a more comprehensive and coordinated manner.

[**] The World Café methodology fosters active participant contribution through a specialized large-discussion format. One facilitated group was conducted in each of the five zones.

†† Consultation members included primarily program staff, managers, directors, executive directors, medical leads and officers of health.

The provincial CDP team, AMH and NS then identified actions spanning three years that support chronic disease prevention directly, or through a focused lens on modifiable risk factors for chronic disease and align with the five strategies outlined in *Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life*.[7] Actions identified in this Action Plan reflect those actions developed to meet identified gaps and universal and targeted priorities through the consultative process, but also reflect actions that are already planned by teams across AHS. These actions support the identified gaps and priorities and propose solutions for chronic disease prevention outcomes that are aligned with evidence, best practices and needs not identified in the consultative process. Each team is accountable for its identified actions, which are subject to change based on resource capacity, emerging priorities and new opportunities to coordinate programming. Hence, this document is intended to be a living document.

Background

Chronic diseases are the leading cause of death and disability worldwide.[1] Their treatment accounts for the majority of health care costs.[2] As Alberta's population grows and ages, the increasing loss of life and cost of treatment for chronic disease will result in serious consequences to the health care system as well as communities throughout the province. Given that a majority of chronic disease is preventable, these losses and costs can be avoided with effective prevention. AHS has a number of chronic disease prevention strategies, interventions and approaches; however, a more coordinated approach is required to reduce the burden of these diseases and allow for a more efficient use of limited health system resources.

The major chronic diseases—cancer, cardiovascular disease (ischaemic heart disease [IHD], stroke and hypertension), diabetes, respiratory diseases (chronic obstructive pulmonary disease [COPD]) and asthma—are influenced strongly by five key modifiable risk factors: nutrition, physical activity, tobacco, alcohol and chronic stress.[4] These risk factors are, therefore, the main target of prevention strategies and this Action Plan. Sedentary behaviour is also included in this Action Plan because of increasing evidence supporting its role as a risk factor, independent of physical activity.[‡‡]

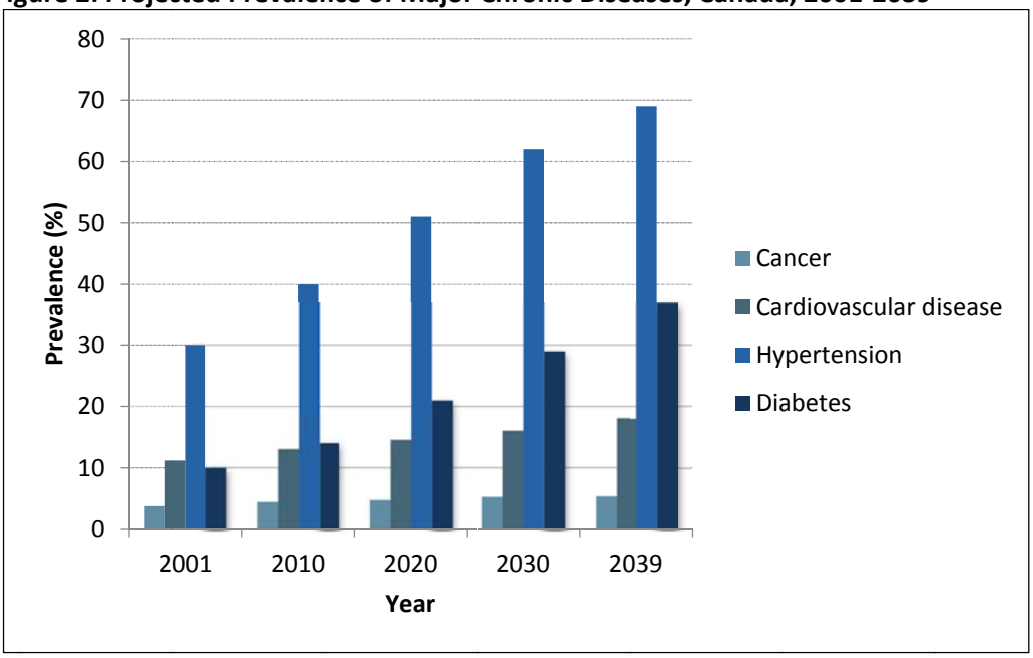
Burden of Chronic Disease

Between 2009 and 2011, 58.1% of deaths in Alberta were attributed to cancer, IHD, stroke, COPD, type II diabetes and hypertensive disease.[13] Currently one in three Canadians aged 65 to 79 have three or more chronic diseases.[14] However, chronic disease rates are increasing faster among Canadians aged 35 to 64 years than among those aged 65 years and over, and children currently experience chronic diseases that were previously only seen in adults.[15]

[‡‡] Consultation with AHS AMH provided insight for future consideration of depression and anxiety as potential emerging modifiable risk factors.

In addition to the rates of chronic disease increasing, the Alberta population is aging, growing in size and living longer,[16,17] which has serious implications for the forecasted impact of chronic disease on the health care system. These population changes, along with the projected increases in chronic disease, are expected to result in a 14% increase in chronic disease in Canada (see Figure 2).

Figure 2: Projected Prevalence of Major Chronic Diseases, Canada, 2001-2039



Adapted from Elmslie, E., *Against the Growing Burden of Disease* (2013).[15]

Currently, chronic diseases account for 53% of the total health care costs in Canada, which constitutes the largest proportion of total health care spending in the country.[2] Health care expenditure per capita in Alberta is the highest in the country, with the majority of spending being allocated to treating and managing chronic diseases that are largely preventable.[3] In 2012–2013, 735,000 Albertans had one or more of hypertension, diabetes, COPD and coronary artery disease, accounting for more than $4.5 billion in publicly funded health care services.[18] In addition, health disparities affect health care spending. When health disparities are reduced, major economic benefits are achieved in both reduced health care costs and lost productivity. If the health status of the lowest income groups equalled that of persons in the middle-income groups, the health care savings would be significant.[19] Despite evidence that prevention is a sound financial investment—a every $1 investment results in $4 to $5 in savings to the health care system[20]—the Government of Alberta only spends 3% of its total health budget on preventing disease and promoting health.[20]

Modifiable Risk Factors for Chronic Disease

Common, preventable risk factors underlie most chronic diseases (see Table 1). In 2014 the World Health Organization (WHO) reported that most noncommunicable diseases are strongly associated and causally linked with four behaviours: tobacco use, physical inactivity, unhealthy diet and the harmful use of alcohol.[21] Chronic stress and sedentary behaviour are increasingly recognized as risk factors for chronic disease. Modifiable risk factors are key contributors to a person's likelihood of developing intermediate conditions such as high blood pressure, elevated lipids, overweight, obesity and pre-diabetes, which are precursors to chronic disease (see Table 2 and Figure 3).

Table 2: Risk Factors Associated with Chronic Diseases

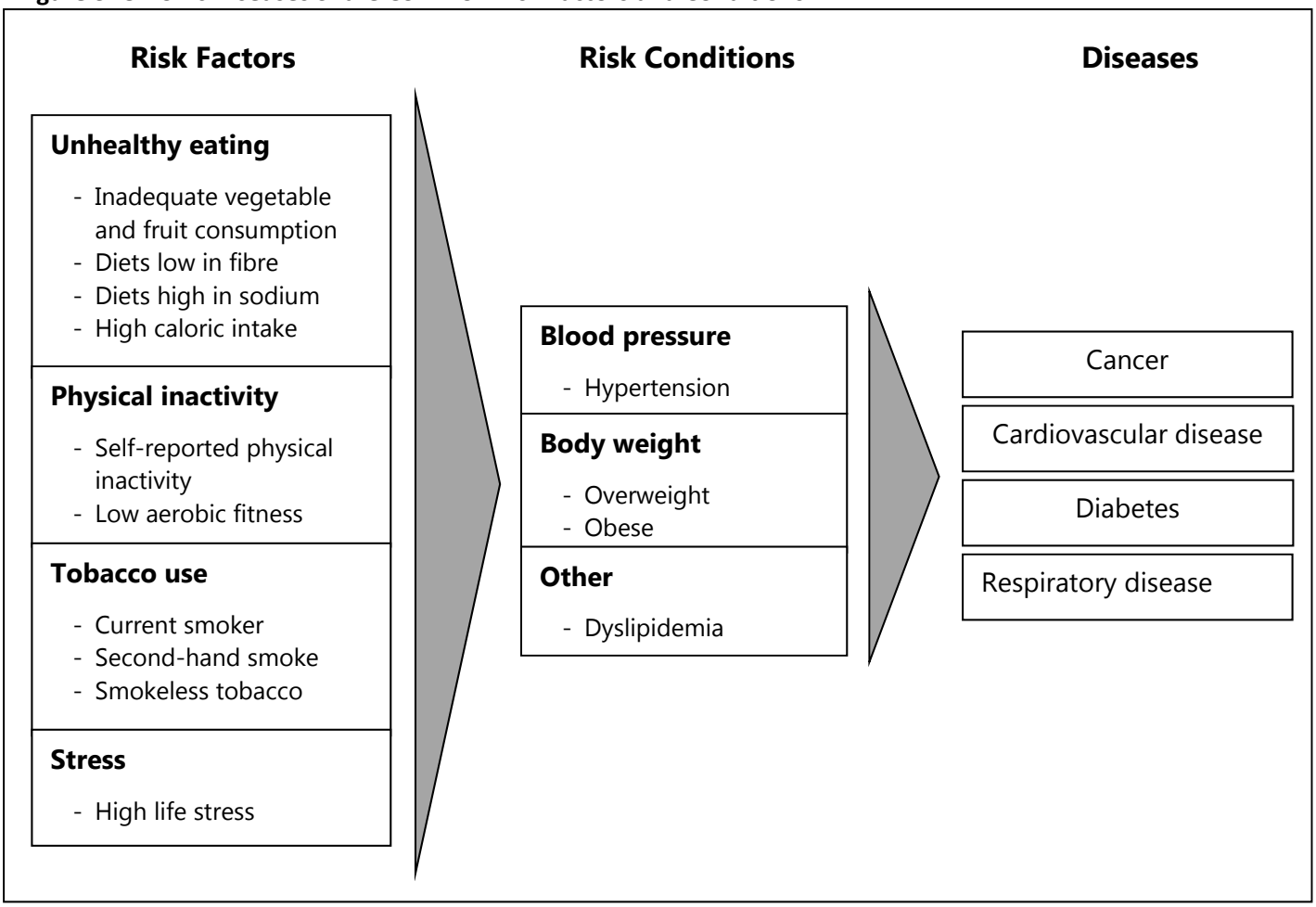
Chronic disease	Tobacco	Nutrition	Physical activity	Alcohol	Stress
Cancer	x	x	x	x	x
Cardiovascular disease	x	x	x	x	x
IHD	x	x	x	x	x
Stroke	x	x	x	x	x
Hypertension*	x	x	x	x	x
Diabetes	x	x	x	x	x
COPD	x				
Asthma	x				x

*Risk factors and risk conditions

Adapted from Alberta Health Services, *Burden of Chronic Disease and Associated Risk Factors* (2015).[4]

This Action Plan primarily focuses on modifiable (or behavioural) risk factors for chronic disease. However, it is important to note that that these factors, as well as the overall wellbeing of the population, is affected in positive and negative ways by the social determinants of health. These include living and working conditions, unequal distributions of income and wealth, health and social services, the ability to access food, housing and quality education (see Figures 3 and 4). Figure 4 demonstrates the relationship between individuals, social and community networks, living and working conditions, and overall socio-economic, cultural and environmental conditions. Approaches to modifiable risk factors for chronic disease, in order to effectively improve health in the population, must also address inequities that are experienced by individuals in lower socio-economic groups.[23]

Figure 3: Chronic Diseases Share Common Risk Factors and Conditions



Adapted from Public Health Agency of Canada, *Chronic Disease Risk Factors* (2015).[22]

Nutrition

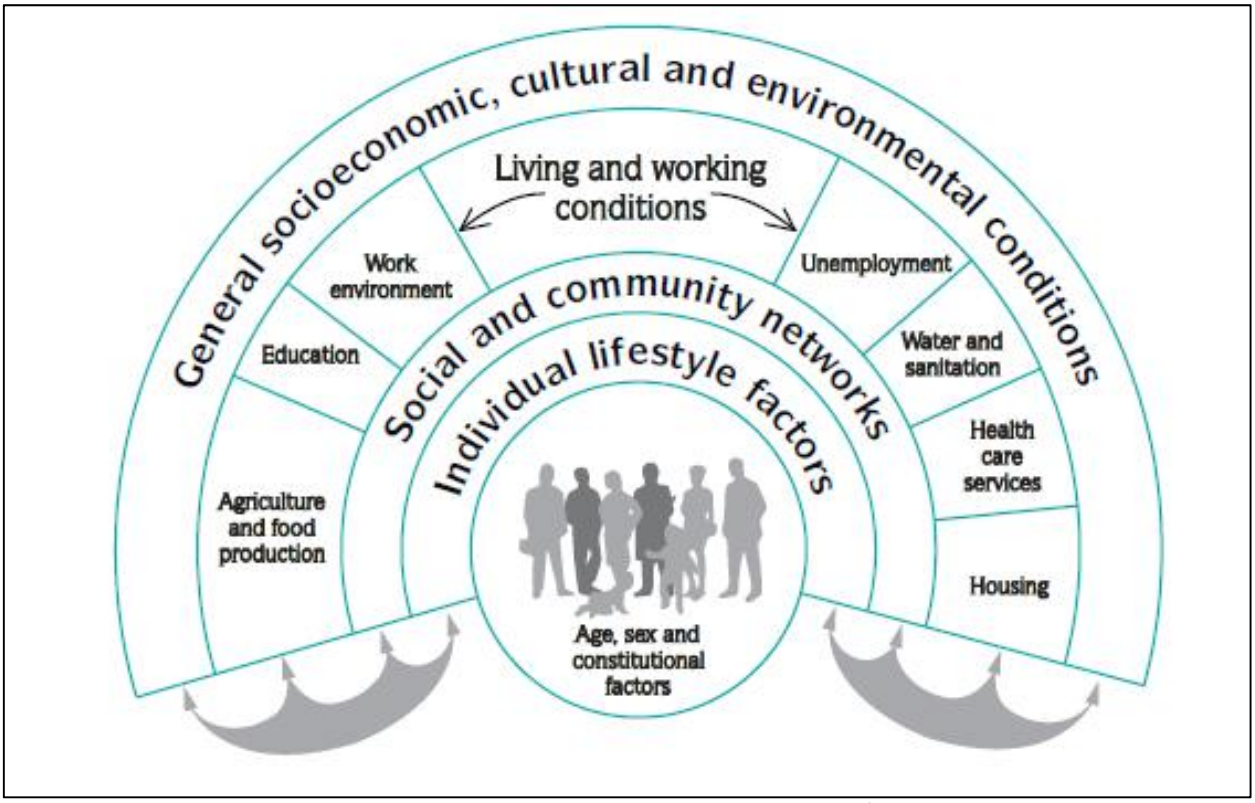
Healthy eating means emphasizing healthy food choices (e.g., variety of foods, correct portion sizes) that are consistent with *Health Canada's Eating Well with Canada's Food Guide* (CFG).[25] On average, Canadians are not meeting these healthy eating recommendations, particularly when it comes to their dietary intake of vegetables and fruits, fats, sodium and dietary fibre.[26]

Individuals who consume an unhealthy diet are at increased risk of cancer, cardiovascular disease, hypertension and overweight and obesity, and type II diabetes. Healthy eating is recognized for its preventive properties against chronic disease, including

- a 14% reduction in coronary risk with high fibre intake[27,28]
- a 16% reduction in cardiovascular disease risk with modification of type and amount of dietary fat[28,29]
- a 12–22% reduction in coronary heart disease incidence with reduction of trans fats intake[27,28]

- a 30% reduction in incidence of hypertension, and prevention of 23,500 cases of cardiovascular events each year, with reduction of average sodium intake to 1,500 mg per day[30]
- the promotion of healthy weights as a result of limiting the intake of energy-dense foods and sugary drinks, which can reduce the incidence of type II diabetes associated with overweight and obesity[31]
- a reduced risk of colorectal and colon cancer by 10–11% as a result of a diet high in fibre[32]
- a reduced risk of colorectal, colon and rectal cancer as a result of a diet low in red and processed meats[32]
- a possible reduced risk of mouth, pharynx, larynx, esophagus and stomach cancers as a result of a diet high in vegetables and fruits[33]

Figure 4: Social Model of Health and Relationship Between Non-Modifiable Risk Factors, Behavioural Risk Factors and Cultural Conditions, Environmental Conditions and Social Determinants of Health [24]



Adapted from Warwickshire Country Council, *Health Improvement* (n.d.).[24]

Household food insecurity refers to the financial inability of households to access adequate food.[26] Research increasingly shows that household food insecurity contributes to chronic disease occurrence and has a bidirectional relationship with mental health conditions.[34] In the adult population, food insecurity is associated with poor self-rated health; poor mental, physical and dental health; and multiple chronic conditions, including hypertension, heart disease, type II diabetes, asthma and mood or anxiety disorders. In addition to the health impacts associated

with a compromised dietary intake, the stress and worry of being food insecure also contributes to poor health.[35]

Physical Activity

Regular physical activity can help reduce the risk of premature death and chronic diseases like coronary heart disease, stroke, hypertension, colon cancer, breast cancer and type II diabetes. Physically active individuals have a 30–50% lower risk of developing type II diabetes and cardiovascular disease,[36] a 30–40% reduced relative risk of colon cancer[37] and a 20–30% reduced risk of breast cancer (women only).[37] Generally, research indicates that physically active individuals have a 20–35% reduced relative risk of death, and in some reports that risk is reduced by more than 50%.[37] Only 15% of Canadians are physically active enough to see health benefits.[38] In 2009, the estimated total cost of physical inactivity on the health care system was $6.8 billion.[39]

Sedentary behaviour refers to activities characterized by requiring little movement and expending low amounts of energy (e.g., sitting, watching TV, driving).[40] It is different from physical inactivity, and is an emerging risk factor for chronic disease. High rates of sedentary behaviour are a concern because they are associated with an increased risk of type II diabetes, obesity and some cancers; poor mental health and quality of life; and lower life expectancy. In addition, meeting the minimum guidelines for physical activity (150 minutes of moderate-to-vigorous intensity aerobic physical activity per week) does not undo the negative effects of being too sedentary. Thus, sedentary behaviour is a unique health risk that warrants specific focus. Reducing physical inactivity and sedentary behaviour in 10% of the population, would likely result in a cumulative reduction of incidence of hypertension (2%), diabetes (3.4%) and heart disease (3.6%) by 2040, as well as a cumulative reduction in health care spending by $2.6 billion.[29]

Tobacco

Tobacco use affects nearly every organ in the human body, causes physiological and psychological changes and causes harm to others exposed to second-hand smoke. Tobacco use prematurely kills 50% of long-term users.[41] Every year, more than 3,000 Albertans die as a result of tobacco use, while many more suffer from tobacco-related illness.[42] The most recent estimate of Alberta's smoking prevalence is 16%, which translates to approximately 524,148 people who smoke.[43] Individuals who use tobacco products or who are exposed to second-hand smoke are at an increased risk of elevated blood pressure and atherosclerosis;[44] some types of cancer (including lung, mouth, lip, throat, esophageal, pancreas, breast, cervical, stomach, liver, kidney, bladder and leukemia);[44] cardiovascular disease;[44] emphysema, chronic bronchitis and COPD;[44] metabolic syndrome;[45] and premature death.[46] If we could prevent tobacco use and help all tobacco users quit, we could eliminate 30% of all cancer deaths, 30% of all coronary heart disease deaths, 85–90% of COPD and many other tobacco-related illnesses. A conservative estimate of health care savings per person who stops using tobacco is $8,533 per year.[47]

Alcohol

Alcohol use contributes to nearly 60 different types of diseases.[48] Individuals who misuse alcohol are at increased risk of some types of cancers (including mouth, throat, liver, breast and digestive tract), type II diabetes, cirrhosis, pancreatitis, gastrointestinal diseases and neurological disorders.[49,50] Even one drink per day increases a person's risk of certain cancers. There is no amount of alcohol use in pregnancy that has been definitely proven to be safe,[51] and any level of alcohol consumption may cause harm to the fetus, including Fetal Alcohol Spectrum Disorder (FASD) and low birth weight.[49] In 2013, 17.2% and 12.4% of Albertans who consumed alcohol in the past year exceeded guidelines established for chronic and acute drinking, respectively.[52]

Stress

Both acute and chronic stress cause physiological, psychological, emotional and behavioural responses in individuals.[53] Acute stress, also known as the fight, flight or freeze response,[54] triggers the release of neurotransmitters, hormones and a protein called neuropeptide S, which results in responses such as an elevated heart rate, increased oxygen transport, constricted peripheral blood vessels, decreased digestion, increased alertness and an emotion (often fear or anxiety) that can help individuals react quickly to an immediate threat.[55] In acute stress, this can be any situation that is perceived as a threat, regardless of whether or not the threat is real or false, conscious or subconscious. In most cases, once the acute threat has passed, the relaxation response kicks in and returns stress hormone levels to their baseline.[55] However, when stress is ongoing and becomes chronic, it can lead to damaging effects on the individual's health. It has been documented that chronic stress can result in physiological, metabolic and cognitive changes.[56] Individuals who experience chronic stress are also at increased risk of cardiovascular disease,[56,57] obesity,[56,57] type II diabetes[56,57], anxiety and depression,[58] asthma[55] and fluctuations in mood and emotions (e.g., fatigue, lack of interest, lack of motivation).[48]

Alignment

Key Strategies, Frameworks and Reports

This Action Plan was developed in order for the provincial CDP team to better address chronic disease prevention in Alberta. It was therefore vital to ensure alignment with key AHS and AH strategic documents and plans. The key AHS and AH documents reviewed included:

- *Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life*[7]
- *Becoming the Best: Alberta's 5-Year Health Action Plan 2010–2015*[10]
- *AHS Health Plan and Business Plan 2013–2016*[11] *(and 2014–2017)*[59]
- *Creating Tobacco-Free Futures: Alberta's Strategy to Prevent and Reduce Tobacco Use 2012–2022*[42]
- *Alberta Alcohol Strategy (AAS)*[60]

Alberta Health

Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life sets forth a vision, guiding principles and an approach that will guide future actions to ensure that all Albertans have the same opportunity to experience good health. This document sets an overarching framework in Alberta by providing a vision and guiding principles, along with strategic approaches and outcomes.[7] It identifies five strategies:

- Improving the health knowledge, skills and behaviours of individuals and families
- Building communities that create wellness
- Improving social and economic supports for wellness
- Strengthening primary prevention with primary health care
- Building healthy public policy

This Action Plan directly aligns with each of the strategies outlined by AH (see Table 3).

Table 3: Action Plan Alignment with Alberta's Strategic Approach to Wellness

***Alberta's Strategic Approach to Wellness* strategies**	**Action Plan alignment**
Improving the health knowledge, skills and behaviours of individuals and families	Actions identified in this Action Plan will • build relationships with Albertans to help improve knowledge of and personal skills to reduce the impact of poor nutrition/unhealthy eating, physical inactivity, tobacco and alcohol misuse, and chronic stress
Building communities that create wellness	Actions identified in this Action Plan will • help enable and empower communities focused on wellness and healthy behaviours
Improving social and economic supports for wellness	Actions identified in this Action Plan will • help identify priorities, including those for social and economic supports, for chronic disease prevention
Strengthen primary prevention with primary health care	Actions identified in this Action Plan will • support a paradigm shift in which chronic disease prevention is increasingly embedded within primary health care services
Building healthy public policy	Actions identified in this Action Plan will • help provide knowledge and resources to improve supportive policy and environments

This Action Plan also directly aligns with *Becoming the Best: Alberta's 5-Year Health Action Plan 2010–2015*, a joint AH and AHS plan that sets priority actions for the province.[10] This document also identifies five strategies:

- Improve access and reduce wait times
- Provide more options for continuing care
- Strengthen primary health care

- Be healthy, stay healthy
- Build one health system

This Action Plan directly aligns with four of these strategies (see Table 3).

Table 4: Action Plan Alignment with Becoming the Best: Alberta's 5-Year Health Action Plan 2010–2015

***Becoming the Best* strategies**	**Action Plan alignment**
Improve access and reduce wait times	Actions identified in this Action Plan will • support primary and secondary prevention of chronic disease, which will indirectly affect access and wait times by reducing chronic disease–related encounters with primary and acute care services
Strengthen primary health care	Actions identified in this Action Plan will • support a paradigm shift in which chronic disease prevention is increasingly embedded within primary health care services
Be healthy, stay healthy	Actions identified in this Action Plan will • use a lifespan approach targeting Albertans 18 years and older, across multiple risk factors, and using multiple approaches to create healthier social and physical environments and prevent chronic disease
Build one health system	Actions identified in this Action Plan will • build partnerships for coordinated, consistent, effective chronic disease prevention (activities, resources, services and information) embedded across the health system and available across all zones

Alberta Health Services

The *AHS Health Plan and Business Plan 2013–2016 (and 2014–2017)* provides strategic direction for AHS.[11,12] It is a roadmap to the delivery of health care in Alberta and lays out goals and actions to improve the health care that Albertans receive. The document identifies three strategic directions:

- Bringing appropriate care to the community
- Partnering for better health outcomes
- Achieving health system sustainability

This Action Plan directly aligns with the strategic directions prioritized by AHS, which are also outlined specifically in the 2014/2017 Performance Agreement Schedule between the Minister of Health and AHS, for which Population, Public and Indigenous Health is accountable (see Table 5).

Table 5: Action Plan Alignment with AHS Health Plan and Business Plan 2013–2016 (and 2014–2017)

AHS Health Plan and Business Plan **strategic directions and goals**	**Action Plan alignment**
Bringing appropriate care to the community • Build a strong integrated community and primary health care foundation to deliver appropriate, accessible and seamless care.	Actions identified in this Action Plan will • support a paradigm shift in which chronic disease prevention is increasingly embedded within primary health care services • contribute to building communities that support wellness and health
Partnering for better health outcomes • Actively engage Albertans as partners and provide them with the support they need to enhance control over the factors that affect their health and the health of their families. • Advance the adoption of evidence-informed practices in the delivery of quality services across the continuum through partnerships with providers, academic institutions, physicians and others.	Actions identified in this Action Plan will • build relationships with Albertans to help improve their knowledge of and personal skills for preventing chronic disease • improve the quality of our services and the promotion of best possible care by applying best practices and standards for chronic disease prevention and supporting zones and community partners • enable leadership for and coordination of chronic disease prevention activities across the province with internal and external stakeholders
Achieving health system sustainability • Continue building a sustainable, quality health system that is patient-centred, driven by outcomes and informed by evidence.	Actions identified in this Action Plan will • support strengthening our provincial health system by developing and applying best practices, standards and guidelines to support chronic disease prevention activities • provide enabling supports for chronic disease prevention activities, including acquiring and making available risk factor data

Alcohol and tobacco are key modifiable risk factors in this Action Plan. The province has created the *AAS*, which is a population-based strategy meant to help Albertans take responsibility and reduce risk when choosing to use alcohol,[60] and *Creating Tobacco Free Futures: Alberta's Strategy to Prevent and Reduce Tobacco Use, 2012–2022*, which outlines a long-range plan to help Albertans avoid and quit using tobacco products.[42] Both of these documents identify priorities focused on reducing alcohol and tobacco-related harm, which, in turn, will help reduce the burden of chronic disease in Alberta. These two strategies are comprehensive documents that include multiple priorities and actions. Those actions focused on prevention among the adult population are included in this Action Plan.

Other Strategies, Frameworks and Reports

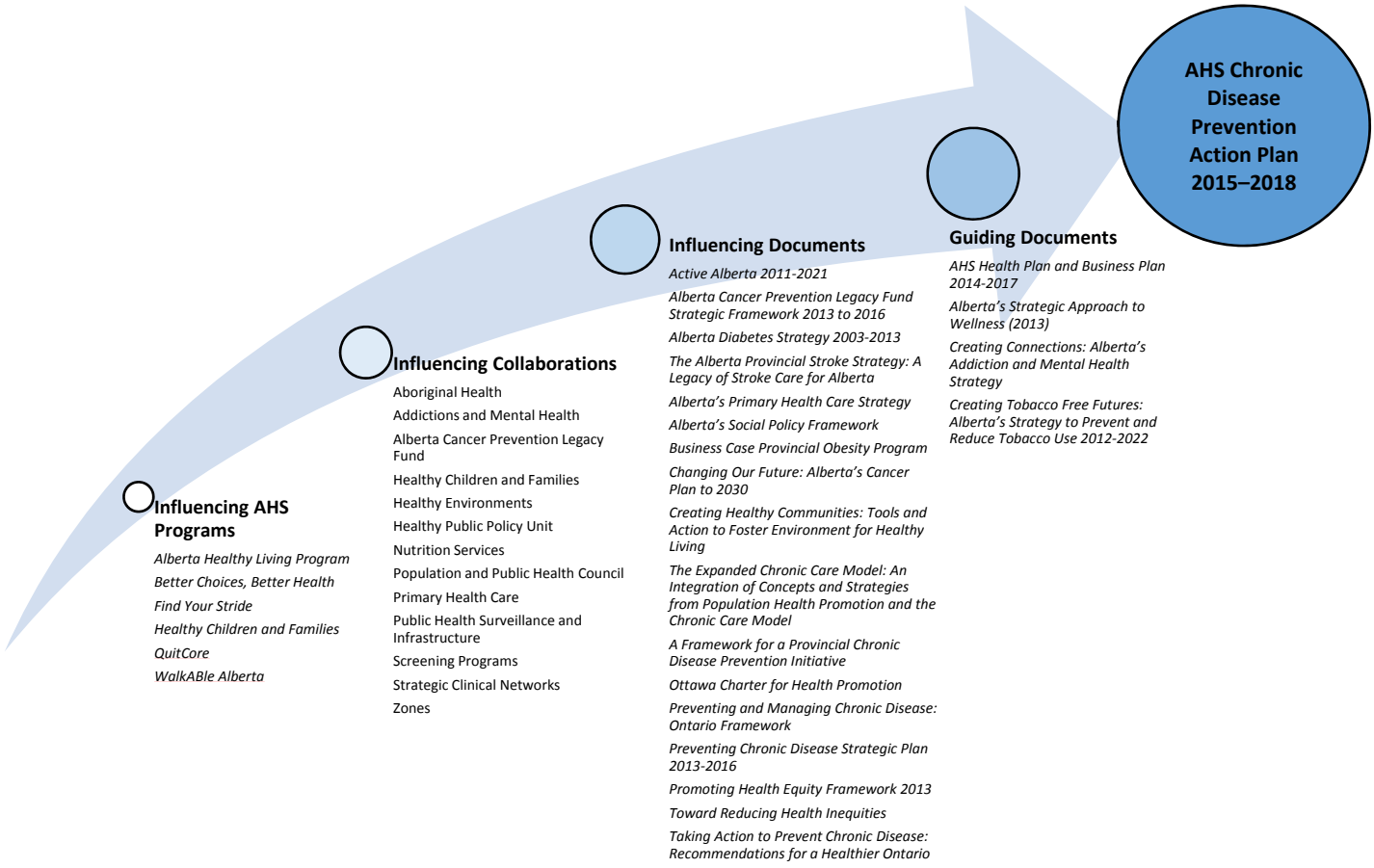
Worldwide, most government and health organizations have expressed a sense of urgency for prevention strategies, considering the rising rates of chronic diseases in their populations. In developing and implementing this Action Plan, it was important to undertake a brief provincial, national and international review of chronic disease prevention and wellness strategies to better understand how to support chronic disease prevention in the province.[§§]

In reviewing the identified documents related to chronic disease prevention (see Figure 5), some commonalities were recognized that will be important to consider when implementing this Action Plan:

- Emphasis on intersectoral collaboration, partnership and better internal integration (e.g., partnering with zones and drivers of community-level approaches in the conceptualization and planning stages)
- Focus on supportive environments and healthy policies
- Address disparities and health equities by focusing on social determinants (e.g., poverty)
- Ensure evidence-based priorities and actions
- Focus on the community level (e.g., engaging and building capacity with communities)
- Establish stronger connections and enhance links with primary care
- Recognize and address the relationship between lifestyle choices and social conditions
- Consider adopting the *Population Health Promotion Model*[9] and/or the knowledge-to-action approach[61]
- Take an integrated approach that looks at multiple risk factors and reaches different segments of the population (through lifespan, or settings and populations)
- Address social, physical and political environments

[§§] A more detailed, comprehensive and systematic review of resources, services, strategies, frameworks and reports, in addition to the rapid review conducted, will be necessary to support the development and implementation of chronic disease prevention actions.

Figure 5: Strategies, Frameworks, Reports and Programs Reviewed to Support Implementation of Action Plan



Internal and External Stakeholder Consultation Findings

An assessment of the current state of chronic disease prevention in Alberta was completed through a brief situational analysis with internal and external partners and stakeholders. These stakeholders were also consulted for the identification of gaps, needs and perceived priorities for chronic disease prevention. Internal consultations included 102 AHS zone and provincial and PCN participants.*** External stakeholder consultations were completed as key informant interviews with 18 provincial stakeholders representing, primarily, academia and community organizations.

The consultative process revealed that while there are pockets of excellence across Alberta at the individual risk factor level among specific population groups, there is no comprehensive approach to chronic disease prevention across the adult population and little coordination of

*** Consultation members included primarily program staff, managers, directors, executive directors, medical leads and officers of health.

activities. Internal and external stakeholders highlighted that there was much variability across the province in terms of chronic disease prevention initiatives. This variability exists across resources and techniques being employed (e.g., focus, target population, setting, approach), as well as in terms of consistency and availability of initiatives throughout the province.

Furthermore, the limited resources that are available for chronic disease prevention in the health system tend to be focused more on child and youth populations, with the responsibility for chronic disease prevention among the adult population increasingly falling to PCNs, or are focused narrowly on one or two risk factors for chronic disease, without much provincial coordination or sharing of resources. More focus on the modifiable risk factors for chronic disease is required across multiple settings and targeting populations who are at high risk for chronic disease.

There is also a lack of overarching or enabling supports for chronic disease prevention (such as a risk factor surveillance system), which are critical foundations for managing chronic disease prevention efforts. In addition to more resources, a more systematic approach is needed within internal stakeholders and between internal and external stakeholders to ensure that programs and services are distributed in an equitable, more universal manner. This would allow for alignment, collaboration, coordination and standardization throughout the province. In turn, this would stimulate more efficient and effective use of limited health care resources. A complete and detailed analysis of the internal and external consultations is available in Appendix A.

Provincial Chronic Disease Prevention: 2015–2018 Planned Actions

Alberta's Strategic Approach to Wellness: Health for All…Wellness for Life was developed as a guiding document for the province, including a vision, principles and an approach for future actions to ensure that all Albertans can experience good health.[7] This Action Plan directly aligns with this strategic provincial document and the actions identified for 2015–2018 to help prevent chronic disease directly support the five strategies identified in the document. Actions identified also reflect actions that provide infrastructure to support chronic disease prevention efforts, are overarching in nature across chronic disease prevention or that are specific to one or more risk factor for chronic disease (see Table 6). While the actions listed here are broad in nature, many necessitate strong and continual engagement with communities, supporting community action and working in partnership with the zones, AHS provincial teams, SCNs and external partners.

Table 6: 2015–2018 Planned Actions for Chronic Disease Prevention

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Infrastructure-supporting actions								
Identify a governance structure for an integrated AHS chronic disease prevention committee.	Draft governance structure, terms of reference and membership list completed.	N/A	N/A	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Enhance coordination of chronic disease prevention activity across Alberta	AMH, NS, zones, multiple AHS provincial teams, SCNs	✓	
Implement the governance structure for an integrated AHS chronic disease prevention committee.	Governance structure, terms of reference and membership list completed. A number of integrated committee meetings held in 2015/2016.	Expand membership of integrated chronic disease prevention committee to external partners and stakeholders.	Updated membership list completed and terms of reference reviewed. A number of integrated committee meetings held in 2016–2017 and 2017–2018.	Integration and Innovation, CDPOH, Healthy Living		AMH, NS, zones, multiple AHS provincial teams, SCNs, AH, external partners	✓	

††† Universal approaches that apply to an entire population (e.g., the AHS health care system is available to all Albertans, regardless of age, income or employment status; tobacco prevention program targeting all Albertans)[62]

‡‡‡ T = Targeted approaches that apply to a priority sub-group within the broader, defined population (e.g., food subsidy programs, healthy food boxes, community gardens in low-income neighbourhoods)[62]

**** Denotes additional resources will be required to complete the action

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
N/A	N/A	Identify and implement task/working groups to address unmet needs and potential new joint initiatives across multiple risk factors.	Governance structure, terms of reference and membership list completed. A number of working group meetings held in 2016–2017 and 2017–2018.	Integration and Innovation, CDPOH, Healthy Living		AMH, NS, zones, multiple AHS provincial teams, SCNs, AH, external partners	✓	
N/A	N/A	Continue working group to develop, revise, update and/or implement components within the Action Plan.	Status report on first two years of Action Plan. Refreshed yearly actions across risk factors.	Integration and Innovation, CDPOH, Healthy Living		AMH, NS, zones, multiple AHS provincial teams, SCNs, AH, external partners	✓	
Explore opportunities to integrate chronic disease prevention activities for the under-18 population (including identifying key best and promising practices for	Comprehensive report on key best and best promising practices, as well as current opportunities for chronic disease prevention in the under-18 population completed.	N/A	N/A	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skills to prevent chronic disease	HCF, zones	✓	✓

Key actions and measures of success				Accountability	Risk factor -------- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
chronic disease prevention) (part 1a—targeting the under-18 population).								
N/A	N/A	Identify key best and promising practices for chronic disease prevention (part 2—across all risk factors).	Comprehensive report on key and best promising practices for chronic disease prevention focused across risk factors completed.	Integration and Innovation, CDPOH, Healthy Living	Overarching ------- Improve provider capacity and Albertans' skill to prevent chronic disease	AMH, NS	✓	
Identify key best and promising practices for chronic disease prevention (part 1b—in primary care settings).	Report on best and promising practices for chronic disease prevention in primary care settings completed.	Identify key best and promising practices for chronic disease prevention (part 3—in additional health care settings).	Report on key best and promising practices for chronic disease prevention in one or more health care settings.	Integration and Innovation, CDPOH, Healthy Living, PHC	Overarching ------- Re-orient health care services for chronic disease prevention	PHC	✓	
N/A	N/A	Establish, in partnership with the zones, a support structure for local delivery and evaluation of chronic disease prevention services.****	Support structure/ key functions completed and approved by zones. A number of services supported in each zone.	Integration and Innovation, CDPOH, Healthy Living	Overarching ------- Improve provider capacity and Albertans' skills to prevent chronic disease	Zones	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Identify data sources relevant to chronic disease prevention and modifiable risk factors.	Data sources for chronic disease prevention and modifiable risk factors confirmed and accessed.	Develop report on current state of chronic disease prevention (including chronic disease prevention data).	Report on current state of chronic disease prevention completed and disseminated to partners.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skills to prevent chronic disease	AMH, NS, zones, AH, PPIH	✓	
Confirm elements/ questions required for risk factor surveillance across risk factors and chronic diseases.	List of comprehensive questions needed across risk factors confirmed and made available to partners working towards provincial (risk factor) surveillance.	Enhance, with partners, provincial risk factor surveillance for chronic disease prevention.	Mechanism for risk factor surveillance established. Year one of surveillance completed. Year one of surveillance made available to internal and external partners.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve surveillance to support chronic disease prevention	R&I, AH, AMH, AH, DIMR, ACPLF	✓	
Identify existing and potential opportunities for surveillance.	Potential opportunities for nutrition surveillance identified.	Pending results from year one, develop priority nutrition indicators and potential survey questions. Ensure surveillance allows for stratification of data by socioeconomic	Priority nutrition indicators and data collection methods identified.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Surveillance of nutrition indicators in Alberta: Explore population-level surveillance options for nutrition indicators (e.g., vegetables and fruits, sodium, sugar-sweetened	AH, R&I	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U[†††]	T[‡‡‡]
		status and geographic areas.			beverages)			
Investigate opportunities to develop a structure, in partnership with zones and other provincial teams, that supports chronic disease prevention for populations vulnerable to poor health outcomes, including health equity approaches.	Partners to begin establishing a structure to support chronic disease prevention for populations vulnerable to poor health outcomes engaged.	Establish a structure, in partnership with zones and other provincial teams, that supports chronic disease prevention for populations vulnerable to poor health outcomes, including health equity approaches.	Structure to support chronic disease prevention for populations vulnerable to poor health outcomes developed and approved.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skill to prevent chronic disease	PPIH, zones, AMH, NS		✓
N/A	N/A	Develop, in consultation with zones, an AHS model or framework for chronic disease prevention outlining approach guidelines, standards and best practices to	Guidelines completed. Model or framework completed and approved.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skills to prevent chronic disease	AH, AMH, NS, HCF, PPIH, PHC, SH, zones	✓	

Key actions and measures of success				Accountability	Risk factor -------- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
		identify essential services recommended across zones.****						
Engage partners in collaborating and coordinating efforts that promote walking.	Partnerships established and engaged. Roles and responsibilities identified. Number of partnerships. Number of events supported.	Collaborate and coordinate efforts that promote walking.	Number of partnerships increased. Number of events supported increased.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity ------- Increase physical activity: Enhance coordination among key stakeholders, including physicians, PCNs and AHS to allow for better leveraging of opportunities	Zones, ARPA, ACAL, SHAPE, PCNs	✓	
Explore the feasibility of engaging stakeholders to identify priority areas for action at provincial level.	Engagement plan explored and created.	Engage stakeholders. Identify priorities. Adapt programs/ services/ messages to identified priorities.	Stakeholders engaged. The priority report created. Tailored programs/ services/messages.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity/ sedentary behaviour ------- Increase physical activity and decrease sedentary behaviour: Enhance coordination among key stakeholders, including physicians, PCNs	Zones, PCNs, ACAL, researchers, funding	✓	

Key actions and measures of success				Accountability	Risk factor -------- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
					and AHS to allow for better leveraging of opportunities			
Development of an evaluation framework for the AAS.	Evaluation framework and plan complete.	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH and AH and the Alberta Gaming and Liquor Commission through the AAS	Alcohol ------- Promote health perceptions, attitudes and behaviours towards alcohol use		✓	
Build relationships with key stakeholders of the AAS.	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH	Alcohol ------- Support enforcement efforts to reduce alcohol-related crime		✓	
Improving the health knowledge, skills and behaviours of individuals and families								
N/A	N/A	If appropriate, identify and integrate one approach for chronic disease prevention for the under-18 population.****	If appropriate, one approach for chronic disease prevention for the under-18 population integrated.	Integration and Innovation, CDPOH, Healthy Living	Overarching ------- Improve provider capacity and Albertans' skills to prevent chronic disease	HCF, zones	✓	✓

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Create a framework to support the development of a sustainable inventory of provincial services, resources, programs, standards and guidelines for chronic disease prevention in consultation with the zones.	Framework for inventory completed.	Complete inventory of services, resources, programs, standards and guidelines for chronic disease prevention in Alberta.	Initial inventory completed.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skills to prevent chronic disease	PHC, AMH, NS, zones	✓	
Disseminate healthy drinks, vegetable and fruit, and sodium messages on healthyeating startshere.ca.	Healthy drinks, vegetable and fruit, and sodium messages appear on healthyeating startshere.ca and other websites, where appropriate. Healthyeating startshere.ca is referenced or linked by all AHS areas, where appropriate.	Identify key nutrition topic areas for chronic disease prevention and develop messages as capacity permits.	Key chronic disease prevention nutrition topic areas determined for NS PPH.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Develop Albertans' knowledge and skills for healthy eating: Albertans are aware of key chronic disease prevention nutrition messages	Healthy Living, zones	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
N/A	N/A	Provide nutrition expertise to support ACPLF *Alberta Prevents* website.	Nutrition information on *Alberta Prevents* website.	Nutrition Services, Population & Public Health Strategy		Healthy Living, zones		
Develop and disseminate *Collective Kitchens* toolkit to community groups across Alberta.	*Collective Kitchens* toolkit has been disseminated and is available online.	Evaluate the *Collective Kitchen* toolkit; make changes as needed.	*Collective Kitchens* toolkit has been evaluated.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Develop Albertans' knowledge and skills for healthy eating: Albertans have access to resources to help improve food skills	Zones	✓	
Develop and implement a process for pedometer distribution and lending kits for AHS staff.	Pedometer lending kits and distribution process created and implemented.	Evaluate effectiveness of pedometer lending kits.	Evaluation criteria created and effectiveness of program evaluated.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity --- Increase physical activity: Promotion of walking	Zones	✓	
Provide physical activity/ sedentary behaviour expertise to support adults and older adults (e.g., ACPLF *Alberta Prevents*	Physical activity and sedentary behaviour information collected for *Alberta Prevents* website.	Provide physical activity/sedentary behaviour content on websites to support adults and older adults.	Content on physical activity and sedentary behaviour on the *Alberta Prevents* and *MyHealth.Alberta* websites.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity/ sedentary behaviour --- Increase physical activity: Develop consistent messaging to disseminate the	ACPLF, Healthy Living, zones	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
website).					benefits of increased physical activity Decrease sedentary behaviour: Develop consistent messaging to disseminate the benefits of decreased sedentary behaviour			
Develop key physical activity messages for adults and older adults for Healthy Living and AHS zones.	Key messages on the health benefits of increasing physical activity developed.	Create physical activity communication plan to dissemin-ate key physical activity messages to zones and other groups/ organizations.	Physical activity communication plan created and messages disseminated.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity --- Increase physical activity: Develop consistent messaging to disseminate the benefits of increased physical activity	Zones, AHS Comm., communities	✓	✓
Develop sedentary behaviour messages for adults and older adults for Healthy Living and AHS zones.	Development of the sedentary behaviour key messages initiated.	Create sedentary behaviour communication plan to dissemin-ate key messages on sedentary behaviour to the zones/other	Sedentary behaviour communication plan created and messages disseminated.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Sedentary behaviour --- Decrease sedentary behaviour: Develop knowledge trans-lation products for sedentary	Zones, PCNs, ACAL, researchers, communities	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
		groups/ organizations.			behaviour to increase awareness			
Provide teachers and parents with access to targeted, up-to-date information on the risks associated with tobacco, tobacco-like products and smokeless tobacco use.	A number of resources developed and distributed.	Provide teachers and parents with access to targeted, up-to-date information on the risks associated with tobacco, tobacco-like products and smokeless tobacco use.	A number of resources developed and distributed.	Tobacco Reduction, CDPOH, Healthy Living	Tobacco --- Prevention: Prevent youth, young adults, pregnant woman and at-risk populations from using tobacco, tobacco-like products, smokeless tobacco and other related products	University of Lethbridge, Alberta Education, AHS Creative Services, DATA group, zone tobacco specialists, Aboriginal services	✓	✓
Increasing awareness through social marketing and media (paid and earned) to address the harms associated with tobacco, tobacco-like products, smokeless tobacco and other products that lead to tobacco use.	A number of awareness campaigns held/completed.	Increasing awareness through social marketing and media (paid and earned) to address the harms associated with tobacco, tobacco-like products, smokeless tobacco and other products that lead to tobacco use.	A number of awareness campaigns held/completed.	Tobacco Reduction, CDPOH, Healthy Living		DDB, AHS Comm., AH, CPSM, NGOs		

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Increase awareness and use of tobacco cessation supports/ services.	A number of people accessing *AlbertaQuits*.	Increase awareness and use of tobacco cessation supports/services.	A number of people accessing *AlbertaQuits*.	Tobacco Reduction, CDPOH, Healthy Living	Tobacco --- Cessation: Expand comprehensive cessation initiatives	Health Link, Context, AHS Comm., AHS Creative Services, CPSM, zones, professional associations	✓	✓
Develop, pilot and evaluate, with the zones, the *Find Your Stride* program.	Draft program materials and resources developed. Pilot completed. Evaluation report completed.	Finalize program materials for implementation of *Find Your Stride*. Operationalize across Alberta the *Find Your Stride* program	Program materials finalized. Program operationalized.	Physical Activity and Sedentary Behaviour, Tobacco Reduction, CDPOH, Healthy Living	Physical activity/ tobacco --- Increase physical activity oppor-tunities through best practices or through targeting programs: *Find Your Stride*	Zones, PCNs, recreational facilities		✓
Develop educational resources to improve the health and safety of high-risk groups.	Ten resources developed and disseminated to AHS staff and allied health professionals.	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH	Alcohol --- Promote health perceptions, attitudes and behaviours toward alcohol use		✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	**Measures of success (2015–2016)**	**Year 2–3 (2016–2018)**	**Measures of success (2016–2018)**				**U†††**	**T‡‡‡**
Distribute Stress and *Your Health* resources.	A number of resources requested across all zones. A more integrated approach to health becomes a paradigm for AHS.	Continue distribution of *Stress and Your Health* resources.	A number of resources requested across all zones. A more integrated approach to health becomes paradigm for AHS.	Mental Health Screening/Early Identification, AMH, Promotion and Prevention, Community Initiatives	Stress --- Strategic priorities currently in revision phase		✓	
Building communities that create wellness								
Develop vending toolkit, which can be used in multiple settings.	Vending toolkit disseminated and available online.	Disseminate and evaluate the vending toolkit and determine next steps for the product.	Vending toolkit has been evaluated.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Improve physical and social food environments in the community, using a settings approach: Sectors and settings in the community have increased capacity to improve their environments	Zones	✓	
Complete *WalkABle Alberta* process plan working with the zones and community partners.****	*WalkABle Alberta* plan developed.	In partnership with the zones and community partners, develop and operation-alize strategy for *WalkABle Alberta.***	Operationalization strategy developed and implemented for *WalkABle Alberta.*	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity --- Increase physical activity: *WalkABle Alberta*	Zones, AH, community champions	✓	✓

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Improving social and economic supports for wellness								
N/A	N/A	Partner with one stakeholder to reduce one or more risk factors for chronic disease, focusing on one or more social determinant of health.	Stakeholder partner identified. One risk factor reduction approach targeting one or more social determinant of health established and piloted.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and Albertans' skills to prevent chronic disease	TBD		✓
Develop and disseminate the 2014 Cost of Eating in Alberta and Affordability of a Healthy Diet in Alberta report.	The Cost of Eating in Alberta and Affordability of a Healthy Diet report disseminated.	Identify best and promising practices for improving the health and nutritional health of households at risk for food insecurity.	Best and promising practices for improving the health and nutritional health of households at risk for food insecurity identified.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Improve physical and social food environments in the community, using a settings approach: AHS role model healthy eating environments	HPPU, MOHs, zones, external organizations who work with or advocate for persons living on low income	✓	✓
Work with stakeholders to develop and disseminate products to support healthy eating	Resources for workplace and recreation centre disseminated and available online.	Evaluate NS workplace healthy eating products. Consider next steps for support to workplaces.	NS PPH workplace products evaluated.	Nutrition Services, Population & Public Health Strategy	Nutrition --- Improve physical and social food environments in the community, using a settings approach:	ACPLF WHIP, ABC Workplace Health Network, PPIH Workplace Health Integration WG, ARPA, members of ARPA-led	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	**Measures of success (2015–2016)**	**Year 2–3 (2016–2018)**	**Measures of success (2016–2018)**				**U†††**	**T‡‡‡**
environments (e.g., healthy eating challenge, healthy eating resources for workplaces, posters). Provide nutrition expertise to support ACPLF WHIP 2 pilot project. NS PPH participation on ARPA-led Recreation Centre Working Group.		Provide nutrition expertise to support ACPLF WHIP 2 pilot project.	Continued support for food environment partnership work, including WHIP 2 and ARPA Recreation Centres.	Nutrition Services, Population & Public Health Strategy	Sectors and settings in the community have increased capacity to improve their food environments	Healthy Eating in Recreation Centres Group	✓	
		NS PPH participation on ARPA-led Recreation Centre Working Group.		Nutrition Services, Population & Public Health Strategy			✓	
		Develop additional resources for settings based on identified need and capacity.		Nutrition Services, Population & Public Health Strategy		TBD	✓	
Provide physical activity/ sedentary behaviour expertise to support ACPLF WHIP 2 pilot project.	Consultations occurred and modules reviewed.	Provide physical activity/sedentary behaviour expertise to support ACPLF WHIP 2 pilot project.	Tools are launched by ACPLF.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Physical activity/ sedentary behaviour --- Decrease sedentary behaviour: Identify a targeted approach for the reduction of sedentary behaviours in the workplace	ACPLF	✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
Develop and disseminate Community Gardens Handbook.	Community Gardens Handbook disseminated.	N/A	N/A	Nutrition Services, Population & Public Health Strategy	Nutrition --- Promote healthy eating in the community	Zones, communities		
Develop tools and resources for physical activity and sedentary behaviour in the workplace.****	Partnership with ACAL formed to develop tools for the workplace.	Pilot workplace physical activity and sedentary behaviour tools/ resource kit in workplaces and AHS.	Pilots completed.	Physical Activity and Sedentary Behaviour, CDPOH, Healthy Living	Sedentary behaviour --- Decrease sedentary behaviour: Creation of resource for workplaces	Zones, PCNs, ACAL, researchers, workplaces, AHS HR and Workplace Wellness		✓
Train AHS staff to use the *It's Our Business* manual to work with business and industry to address addiction and mental health in the workplace.	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH	Alcohol --- Foster the development of context-specific policies			✓
Provide funding to support communities to mobilize local efforts on the promotion of best practices in reducing the	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH			✓	

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
harms associated with alcohol and other substance misuse.								
Implement a toolkit to address alcohol-related harm in post-secondary settings.	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH	Alcohol --- Expand harm-reduction programs for alcohol			✓
Continue implementing the *Ways to Wellness* initiative across AHS.	A degree of uptake of the initiative across the organization.	Continue to expand *Ways to Wellness* initiative.	A degree of uptake of the initiative across the organization.	Provincial AMH Communications	Stress --- Strategic priorities currently in revision phase		✓	
Strengthen primary prevention with primary health care								
N/A	N/A	Identify and pilot one approach/ initiative to support chronic disease prevention within a primary care setting.****	One approach/ initiative in primary care setting implemented. One approach/ initiative evaluation framework for primary care setting developed and implemented.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Re-orient health care services for chronic disease prevention	PHC, zones	✓	
N/A	N/A	Develop one education resource/tool to support health	One education resource/tool completed, approved and made	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Improve provider capacity and	PHC, zones	TBD	TBD

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
		care/community providers.****	available to health care/community providers.		Albertans' skills to prevent chronic disease			
Pilot *Find Your Stride* program in primary care settings.	At least one PCN has piloted *Find Your Stride*.	To support implementation, develop *Find your Stride* tool kit for primary care settings.	Tool kit completed and accessible to PCNs and primary care providers. A number of PCNs offering *Find Your Stride* program	Physical Activity and Sedentary Behaviour, Tobacco Reduction, CDPOH, Healthy Living	Physical activity/ tobacco --- Increase physical-activity opportunities through best practices or through targeting programs: *Find Your Stride*	Zones, PCNs		✓
Support the implementation of brief tobacco intervention and cessation support as a standard of care in health care settings by expanding *Tobacco Free Futures*.	A number of sites who have implemented a brief tobacco intervention in their client contact processes.	Support the implementation of brief tobacco intervention and cessation support as a standard of care in health care settings by expanding *Tobacco Free Futures*.	A number of sites who have implemented a brief tobacco intervention in their client contact processes.	Tobacco Reduction, CDPOH, Healthy Living	Tobacco --- Cessation: Expand comprehensive cessation initiatives	Zones, pharmacy services, learning services		
Enhance training opportunities.	Baseline for the number of certified tobacco educators in Alberta established.	Increase access to training opportunities to educate stakeholders and	A number of successful certifications in the certified tobacco educators' exam	Tobacco Reduction, CDPOH, Healthy Living	Tobacco --- Knowledge translation and capacity building:	Learning services, CNRC, zones, professional associations	✓	✓

Key actions and measures of success				Accountability	Risk factor --- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
		encourage participation in tobacco reduction initiatives.	attributable to TRP training programs. A number of trainers using accredited materials and a number of materials accredited for training.		Support links between prevention, protection and cessation outcomes			
Promote screening and brief intervention for alcohol.	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives Provincial AMH	Alcohol --- Enhance the province-wide continuum of alcohol treatment services			✓
Offer *HeartMath* workshops on *MyLearningLink*.	A number of *HeartMath* workshops held across the province.	Offer *HeartMath* workshops on *MyLearningLink*.	Resources secured to expand *HeartMath* across the province. A number of *HeartMath* workshops held across the province.	Mental Health Screening/Early Identification, AMH, Promotion and Prevention, Community Initiatives	Stress --- Strategic priorities currently in revision phase		✓	
Building healthy public policy								
N/A	N/A	Develop policy toolkit for chronic disease prevention.****	Policy toolkit completed and available to stakeholders.	Integration and Innovation, CDPOH, Healthy Living	Overarching --- Support building healthy public policy and creating supportive	HPPU, AMH, AH, NS	✓	

Key actions and measures of success				Accountability	Risk factor -------- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
					environments			
Support the *AHS Healthy Eating Environment* policy revision consultation.	Results from policy revision communicated through existing AHS channels.	Identify promising strategies to promote awareness and uptake of the *AHS Healthy Eating Environment* initiative at a local level, based on literature and results from the year 1 survey/ consultation.	Recommendations to promote awareness and uptake of the initiative at the local level developed, based on evidence and stakeholder feedback.	Nutrition Services and Food Services	Nutrition ------- Improve physical and social food environments in the community, using a settings approach: AHS role model healthy eating environments	Potentially all areas within AHS	✓	
N/A	N/A	Develop and pilot a standardized tool for calculating cost of a healthy diet for living wage planning at the community level.	A standardized tool for calculating the cost of a healthy diet as part of living wage activities developed and made available.	Nutrition Services, Population & Public Health Strategy	Nutrition ------- Community groups and organizations use standardized, evidence-based information on the cost of a healthy diet to advocate for policy changes to address household food insecurity: Monitor and report on the cost of a healthy diet in Alberta and its	HPPU, MOHs, zones, external organizations who work with or advocate for persons living on low income	✓	✓

Key actions and measures of success				Accountability	Risk factor -------- AHS CDP, AMH, or NS priority	Key dependencies	Approaches	
Year 1 (2015–2016)	Measures of success (2015–2016)	Year 2–3 (2016–2018)	Measures of success (2016–2018)				U†††	T‡‡‡
					affordability for vulnerable households; work with external stakeholders to promote the use of the information			
Continue supporting AHS sites in the implementation of the *Tobacco and Smoke Free Environments* policy.	Audit to provide baseline measures by AHS zones and type of facilities**** on the implementation status of AHS *Tobacco and Smoke Free Environments* policy conducted.	Continue supporting AHS sites in the implementation of the *Tobacco and Smoke Free Environments* policy.	Audit to compare to baseline by AHS zone and type of facilities**** on the implementation status of AHS *Tobacco and Smoke Free Environments* policy conducted.	Tobacco Reduction, CDPOH, Healthy Living	Tobacco ------- Protection: Protect Albertans from the harms of tobacco, tobacco-like products, smokeless tobacco and second-hand smoke	AH, policy, enforcement, seniors and transition care, AHS Comm., zones, NGOs	✓	
Provide knowledge-exchange opportunities for AHS staff and community partners to encourage and inform municipal alcohol policy.	TBD	TBD	TBD	Promotion and Prevention, Community Initiatives, Provincial AMH	Alcohol ------- Ensure social responsibility in the production, distribution, regulation and service of alcohol		✓	

Abbreviations:

AAS – Alberta Alcohol Strategy
ABC – Alberta Blue Cross
ACAL – Alberta Centre for Active Living
ACPLF – Alberta Cancer Prevention Legacy Fund
AH – Alberta Health
AHS – Alberta Health Services
ARPA – Alberta Recreation and Parks Association
AMH – Addiction and Mental Health
CDPOH – Chronic Disease Prevention and Oral Health
CNRC – Canadian Network for Respiratory Care
Comm. – Communications
CPSM – Contracting, Procurement and Supply Management
DDB – DDB Canada
DIMR – Data Integration, Measurement and Reporting
FAQ – Frequently Asked Questions
HCF – Healthy Children and Families
HPPU – Healthy Public Policy Unit
HR – Human Resources
MOH – Minister of Health
N/A – Not applicable
NGO – Non-government organization
NS – Nutrition Services
PCN – Primary Care Networks
PPH – Population and Public Health Strategy
PHC – Primary Health Care
PPIH – Population, Public and Indigenous Health
R&I – Research and Innovation
SCN – Strategic Clinical Network
SH – Seniors' Health
SHAPE – Safe, Healthy Active People Everywhere
TBD – To be determined
TRP – Tobacco Reduction Program
WG – Working group
WHIP – Workplace Health Improvement Project

Summary and Next Steps

Chronic disease is an important public health issue, with rates increasing worldwide and affecting every region and socioeconomic class.[1] Serious implications, such as reduced quality of life, premature death and severe economic consequences, result from chronic diseases. Albertans navigate a chronic disease risk landscape determined by policy and influenced by a wide range of socio-economic variables.

A single organization cannot provide all the services and resources that are required for chronic disease prevention; hence the need for a province-wide effort. This Action Plan provides an opening to begin enabling a province-wide coordinated effort addressing chronic disease prevention in Alberta.

To address chronic disease prevention in a more coordinated, effective and efficient manner, focus must include initiatives, activities and resources, which, through a modifiable risk factor approach, support healthy public policy, increase knowledge and awareness, improve personal skills and enhance the capacity of community and health care providers. This must be done using multiple approaches in multiple settings and targeting populations that are at higher risk of chronic disease. The *Population Health Promotion Model*[9] may be a useful framework to consider, as well as knowledge translation approaches (including evaluation and quality improvement).[61] Evidence-based decision making is also required to establish priorities and carry out work.

First and foremost, however, is the need to improve leadership for chronic disease prevention and collaboration (including communication) between provincial and zone teams and external partners in order to establish a solid foundation for chronic disease prevention activities. The provincial CDP team, alongside our partners in AMH, NS and the zones, are positioned to establish leadership and provide expertise, resources and services to become more efficient and effective in the prevention of chronic disease. The implementation of this Action Plan is a start to this process and an impetus to allow for a more systematic, evidence-driven approach to chronic disease prevention, as well as increased coordination, improved information flow, more opportunities for shared resources and sound reasoning for additional resources. As we improve our efforts in modifying risk factors for chronic disease, this Action Plan will progress to support a high-functioning provincial chronic disease prevention system in Alberta.

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Appendix A: Detailed Summary of Internal and External Consultation Findings and Stakeholder List

Current State of Chronic Disease in Alberta Identified by Internal and External Stakeholders

Internal and external stakeholders highlighted that there was much variability across the province in terms of chronic disease prevention initiatives. Different stakeholders reported various initiatives that focused on primary prevention and secondary prevention, as well as chronic disease management. Furthermore, variability existed in terms of resources, techniques being employed (e.g., focus, target population, setting, approach) and consistency and availability of initiatives throughout the province.

A number of internal and external stakeholders reported taking a chronic disease focus, while others reported a risk factor approach. Those who reported a chronic disease focus tended not to focus on one specific chronic disease and instead on chronic diseases in general. However, there were still certain stakeholders that focused on a specific chronic disease (e.g., cancer, cardiovascular disease, diabetes, Chronic Obstructive Pulmonary Disorder [COPD], obesity, mental health). Those who reported taking a risk factor approach tended to take a multiple risk factor approach. However, there were still certain stakeholders that focused on one specific risk factor (e.g., nutrition, physical activity, tobacco, alcohol, stress). Furthermore, one external stakeholder took a broader risk factor approach focusing on the social determinants of health.

Among internal and external stakeholders, the focus on target populations and use of settings differed. There was more variability reported in terms of target populations compared to target settings. Stakeholder groups reported addressing adults, decision-makers, Aboriginal populations, the general public, health practitioners, individuals with low socioeconomic status, mental health inpatients, mothers, older adults and women. The various settings identified for chronic disease prevention work included urban and rural communities, healthcare reserves and workplaces.

Stakeholders used various approaches to address the spectrum of chronic disease, including advocacy and policy development, community action, education, increasing awareness, management, program and service delivery, research, referrals, resource development, risk reduction and screening. The majority of program and service delivery was performed by internal stakeholders and external non-government organizations. All research was reported to be conducted by external academic institutes; however, two external non-government organizations reported providing funding for research as an approach. All other approaches seemed to be more evenly distributed across the various sectors.

Both internal and external stakeholders confirmed that there are many initiatives currently taking place throughout the province to address chronic disease and common chronic disease risk factors.

Some programs seemed to be very comprehensive and well established, while others appeared to have a smaller scope and were less well established. There are several initiatives that took place across the province or in multiple zones; however, there is also much variability across the province and it was unclear how initiatives are being distributed. Though some internal stakeholders aimed to establish initiatives that had overarching provincial direction with local support, this was not the norm. While external-stakeholder initiatives seemed to be distributed based on mandate and priorities, the rationale for their direction and distribution was not specifically discussed.

In addition to more resources available for chronic disease prevention, it appears that a more systematic approach is needed within internal stakeholders and between internal and external stakeholders to ensure programs and services are distributed in an equitable and more universal manner. This would allow for alignment, collaboration, coordination and standardization throughout the province. In turn, this would stimulate more efficient and effective use of limited health care resources. A summary of current programs and services reported in the internal and external consultative processes are available in Appendix A3 and Appendix A4, respectively.

Gaps and Priorities for Chronic Disease Prevention in Alberta Identified by Internal and External Stakeholders

There is positive and promising work across Alberta focused on preventing chronic disease and modifying risk factors. However, through the internal and external consultative process, several gaps and priorities were identified that need to be addressed to effectively reduce the burden of chronic disease across Alberta. These gaps and priorities were either overarching in nature, reflecting process and/or enabling factors for chronic disease prevention, or were more specific to modifiable risk factors.

Overarching Gaps and Priorities Reflecting Process and/or Enabling Factors

The overarching gaps and priorities identified across the consultative process in this category fell under two main themes: Taking a comprehensive integrated approach and becoming more efficient and effective. These key findings are detailed below and summarized in Table 3.

1. Take a Comprehensive and Integrated Approach

1.1 Understand Alberta's Realities

Health disparities, stigma, "boom" culture[§§§]: Inequalities and inequities across income, determinants of health and availability of health-promoting activities are the reality in Alberta. The reasons include challenges providing services across vast geographic areas, cost accessibility and availability of services, and the cultural appropriateness of services. Other considerations include the differences in the social determinants of health and the fact that Alberta has been uniquely affected by two major disaster events in the past five years.

[§§§] Also referred to as a "boom and bust" cycle; Alberta is currently in a bust, as opposed to a boom.

There is a vast and diverse geographical distribution, notably in rural, remote and isolated areas, that influences Albertans' health behaviours and poses challenges in delivering programs and services. There are barriers to accessing and engaging in health-promoting activities such as physical activity and healthy eating, including cost, transportation, availability and cultural appropriateness of services. Specific populations, which may include new Canadians and Aboriginal people, experience chronic disease risk factors at a rate higher than the general population. Food insecurity is an additional concern, as are health equity considerations across age and gender groups.

In addition to these disparities, stigma is often experienced by certain populations, including Aboriginal people, those who need to access services such as food banks and people living with mental illness. Alberta's strong economic growth[****] compared to the rest of Canada brings with it a culture of prosperity; however, this also contributes to income disparity. This prosperity is not distributed geographically throughout the province and in certain areas, such as the North Zone, can foster a transient population that, in turn, can lead to increased alcohol and drug misuse and stress levels, and decreased health-promoting behaviours (e.g., physical activity, healthy eating). Inequalities and inequities are most prominent when people are not connected to strong resource centres.

Upstream prevention: Long-term health care costs are a reality in Alberta and prevention activities are one proactive approach to reducing them. In Alberta, however, there are insufficient primary and secondary prevention activities taking place in the province due to insufficient funding and resources.

1.2 Create Targeted and Tailored Approaches

Targeted and tailored approaches: To modify risk factors for chronic disease, it is necessary to target and tailor approaches, taking into account unique needs across different settings (e.g., zones, communities, workplaces, homes, stores, recreation centres) and for various populations, particularly those vulnerable to poor health outcomes. These populations include specific ethnic or cultural groups, geographically identifiable groups, specific age or gender groups, occupational groups, and groups identifiable by certain social determinants of health, health equity statuses, health statuses and levels of knowledge. The need for targeted and tailored approaches also applies to the availability and development of resources and messaging for chronic disease prevention.

Improving personal skills: To prevent chronic disease across all risk factors, it is key to improve personal skills and change behaviour, primarily through education. Examples of educational areas of focus include meal planning, shopping, cooking, time management for physical activity, coping and problem-solving, self-awareness, self-management and peer education. Improving personal skills may be appropriate for broad-reaching programs, services and resources, but approaches should be tailored, as required.

[****] The impact of the current downturn in the economy, due to the drop in oil prices, will still contribute to income disparity.

1.3 Establish/Advocate for Supportive Policy and Environments

Supportive policy: Consistent across the consultations was the suggestion to establish policy (e.g., offer free nicotine replacement therapy [NRT] across AHS, change billing practices of primary care providers) and/or support advocacy efforts for policy change, including improving collaboration provincially to ensure consistency in policies and advocacy efforts.

Supportive environments: Physical and social environments must be improved in order to effectively support modifiable risk factors for prevention. Improvements may include making stairs more user-friendly (a physical environment change) and supporting health-promoting behaviours in the workplace (a social environment change). Another suggestion to improve social environments was taking a settings approach (e.g., targeting the family setting).

1.4 Work Across Multiple Settings

Strong, vibrant communities that foster health have a unique set of attributes, skills and resources that may be leveraged to generate health, but are underused for chronic disease prevention efforts. Workplaces were also highlighted as an underused but valuable setting to influence modifiable risk factors for chronic disease, such as sedentary behaviour. Additional settings mentioned included families, schools, grocery stores, recreational centres and physician offices.

1.5 Engage in Knowledge Translation (the Knowledge-to-Action Process)[61]

Education: Tools, resources and (consistent) messaging can serve as valuable mediums for education to help Albertans make healthier decisions and to help AHS staff become better practitioners as it pertains to preventing chronic disease and health promotion. Approaches for education may support targeted and tailored approaches (e.g., improving cultural competency), but may also be targeted and tailored in itself across settings and populations.

Advocacy: As previously described, advocacy, specifically public health advocacy at the local and provincial level, was identified as a critical chronic disease prevention priority. Elements of public health advocacy included an emphasis on collective action to bring about systemic change; a focus on changing "upstream factors" like laws, regulations, policies, institutional practices, prices and product standards; and an explicit recognition of the importance of engaging in political processes to bring about policy changes.

Culture shift: A key output of knowledge translation for chronic disease prevention should be a new way of thinking and doing that supports denormalizing unhealthy behaviours and normalizing healthy ones.

Evidence-based decision making and evaluation: Evidence-based actions and decisions need to be the foundation of chronic disease prevention work, particularly given the limited public health prevention dollars. Acquiring evidence may include environmental scans, literature reviews, surveillance activities and return-on-investment analyses. Evaluation is also key to monitor programs and services to identify and address gaps and as a gateway to quality improvement, both during an activity and at its endpoint.

2. Become Efficient and Effective

2.1 Be Strategic and Take a Systems-Focused Approach

Long-term strategy development and planning: It is imperative for chronic disease prevention planning to have a long-term strategic focus, aligning and standardizing with partner organizations/stakeholders across planning cycles, programs, services and messaging to increase overall reach.

Work together (and with others): Stakeholders across Alberta need to work in multiple sectors to leverage their collective strengths with partners at different levels and sectors to engage in chronic disease prevention and reach larger goals through communication, cooperation, coordination, engagement, collaboration, partnership, relationship building and integration. This work needs to take place within and external to AHS. Particular elements highlighted for working together were stakeholder engagement and relationship building, integration and collaboration.

2.2 Take Ownership and Be Accountable

Clarifying roles and responsibilities: A lack of clarity exists related to roles and responsibilities of teams within AHS, with evident confusion between provincial and zone programs and roles, creating confusion and duplicity of work. This is especially evident in the role of zones versus provincial teams in the development and implementation of initiatives, programs and services. Roles and responsibilities across different sectors, governments, the health care system, non-governmental organizations, municipalities and communities are also not well-defined or articulated.

Leadership: There is a clear lack of provincial leadership for chronic disease prevention activities. It was suggested that AHS, and more specifically the provincial chronic disease prevention team, would be valued as a leader to provide direction and support to the zones by way of expertise provision and implementation support, to enable advocacy at a higher systems level and to provide overall leadership and coordination support across Alberta.

2.3 Make Data Available

There is a noted gap in the availability and access of chronic disease and risk factor data. Enhanced monitoring and surveillance is required, as well as data at a more minute level (e.g., such as at the community level).

Table 3: Key Gaps and Priorities for Chronic Disease Prevention Identified by Internal and External Stakeholders

Main theme	Sub-theme	Key findings
Take a comprehensive and integrated approach	1.1 Understand Alberta's realities	1.1.1 Health disparities by income and geography, across specific populations, spanning various determinants of health, due to the "boom" culture in Alberta are an issue of concern. 1.1.2 Stigma is perceived by specific populations, which may contribute to exacerbating health disparities. 1.1.3 Insufficient primary and secondary prevention activities are available across Alberta.
	1.2 Create targeted and tailored approaches	1.2.1 Targeted and tailored approaches across settings, populations, resources and messages. 1.2.2 Improving personal skills of Albertans to reduce risk for chronic disease is needed. Approaches may be broad-reaching or targeted and tailored.
	1.3 Establish/ advocate for supportive policy and environments	1.3.1 Increasing and improving supportive policies and environments are needed through direct development/ implementation or through advocacy support. This includes identifying policies communities need to have in place to prevent disease and promote health.
	1.4 Work across multiple settings	1.4.1 Chronic disease prevention efforts are required across multiple settings.
	1.5 Engage in knowledge translation (the knowledge-to-action approach)[61]	1.5.1 Tools, resources and messaging may serve as mediums for education targeting Albertans and health care/community providers. 1.5.2 Advocacy, specifically public health advocacy, at the local and provincial level is a critical chronic disease prevention priority. 1.5.3 Knowledge translation activities need to support a culture shift to normalize healthy behaviours. 1.5.4 Evidence-based decisions and actions and evaluating programs and services need to be the foundation for chronic disease prevention work, as does the integration of evaluation outcome assessment and ongoing quality improvement. This includes identification of best and promising practices for chronic disease prevention initiatives, as well as the development of standards and guidelines to identify the strength of current chronic disease prevention initiatives.

Main theme	Sub-theme	Key findings
2. Be effective and efficient	2.1 Be strategic and take a systems-focused approach	2.1.1 It is imperative for chronic disease prevention planning to have a long-term strategic focus, aligning and standardizing with partner organizations/stakeholders across planning cycles, programs, services and messaging to increase overall reach. 2.1.2 Stakeholders across Alberta need to work in multiple sectors to leverage collective strengths with partners at different levels and sectors to engage in chronic disease prevention work and reach larger goals.
	2.2 Take ownership and be accountable	2.2.1 A lack of clarity (e.g., role/responsibility definition and articulation) exists related to roles and responsibilities of teams within AHS and across different sectors. 2.2.2 There is a clear lack of provincial leadership and coordination for chronic disease prevention activities.
	2.3 Make data available	2.3.1 There is a gap in the availability and accessibility of chronic disease and risk factor data, necessitating enhanced monitoring and surveillance.

Modifiable Risk Factors for Chronic Disease

Although a significant proportion of the consultations focused on gaps and priorities for chronic disease prevention in Alberta, which were overarching and more process/enabling in nature, gaps, priorities and opportunities across the five main modifiable risk factors and the emerging modifiable risk factor of sedentary behaviour were also identified. Table 4 summarizes this information by risk factor and reflects findings that may have universal or more targeted application. Throughout the consultation process, specific findings pertaining to Aboriginal populations were also identified. These findings are presented here, but, in development of actions that support chronic disease prevention, should be embedded within the following overarching and universal and targeted risk factor actions:

- Working together on relationship building and partnerships, developing strategies with and focused on communities (understanding that each community is unique).
- Creating a map of existing resources, as well as ensuring culturally appropriate services, resources and adequate nutrition are available and accessible.
- Considering using Aboriginal wellness facilitators as an asset in chronic disease prevention activities.

Table 4: Key Findings for Modifiable Risk Factors for Chronic Disease Identified by Internal and External Stakeholders

Modifiable risk factor	Key findings
1.0 Nutrition	Universal findings 1.1. There is a need for consistent messaging and the use of health marketing approaches to promote nutrition. 1.2. Nutrition programs need to be delivered through a settings approach, including communities, municipalities, schools, recreation centres and workplaces. 1.3. Advocacy efforts for policy changes to address food insecurity, accessibility and affordability of healthy foods, food taxation, food labelling, food manufacturing and marketing practices need to be enhanced and carried out in a collaborative manner. Need to clarify jurisdiction, roles and responsibilities for each policy area. 1.4. Sweetened beverages, sodium levels and food insecurity are important areas to be addressed. 1.5. Many Albertans may not have the skills to apply healthy eating practices (e.g., food preparation, meal planning, label reading, parent role modelling). 1.6. AHS needs to role model healthy eating and healthy eating environments.
2.0 Physical activity and sedentary behaviour	Universal findings 2.1. The built environment needs to be addressed by working with municipalities, community coalitions, stakeholders, zones and champions through a community development approach. Areas of focus include walkability and access to food within walking distance. 2.2. Programs need to be delivered through a settings approach, including communities, municipalities, schools, daycares and workplaces. 2.3. Communication strategies to promote consistent messaging regarding the health benefits of increased physical activity and decreased sedentary behaviours need to be developed. This includes supporting practitioners to provide consistent messaging with appropriate tools. 2.4. Enhanced coordination among key stakeholders, including physicians, Primary Care Networks (PCNs) and AHS will allow for better leveraging of opportunities. 2.5. Increased awareness is needed on the benefits of physical activity and decreasing sedentary behaviours, including economic benefits. Targeted findings 2.6. Tools and approaches to support joint-use agreements for after-hours use of schools should be explored. 2.7. Targeted approaches are needed for pre-schools, daycares, early school-age children and workplaces.

Modifiable risk factor	Key findings
3.0 Tobacco	Universal findings 3.1. Universal access to Nicotine Replacement Therapy (NRT) is needed to support cessation efforts. 3.2. Programs need to be delivered through a settings approach, including communities, municipalities, schools and workplaces. 3.3. Enhanced links are required with a wide range of health care providers, including physicians, pharmacies, homecare, Addictions and Mental Health (AMH) and PCNs, to better coordinate and maximize opportunities. Support is needed for these groups, including for zone communities of practice, training and toolkits. 3.4. Opportunities need to be explored further for policy and enforcement strategies (e.g., smoking in vehicles, *Tobacco Free Futures* enforcement, provincial legislation, alternative tobacco-related products). 3.5. Provincial staff should be integrated with and accessible by zone operational teams. 3.6. *Tobacco Free Futures* needs to be prioritized more strongly. 3.7. More effective recruitment strategies for cessation programs (e.g., *QuitCore*) are a priority, including availability of 1:1 in-person counselling. 3.8. Enhanced support is needed at the zone level to operationalize *Tobacco Free Futures*. 3.9. AHS needs to role model tobacco reduction in workplaces. Targeted findings 3.10. High-risk populations, including pregnant smokers, teens, Aboriginal populations and people dealing with mental health or addictive conditions, need to be addressed. 3.11. Targeted approaches are needed for children and youth, pregnant women and women of child-bearing age, trades workers, older adults and populations vulnerable to poor health outcomes.
4.0 Alcohol	Universal findings 4.1. Alignment of messaging (across provincial programs, zones, and Alberta Health [AH]) and broad-based marketing and communication strategies are required, including a focus on more than binge drinking (e.g., long-term use). 4.2. Programs need to be delivered through a settings approach, including schools, communities, municipalities and workplaces. Approaches for reducing alcohol-related harm can be delivered through community settings and building upon existing community coalitions. 4.3. Root causes and coping skills related to alcohol misuse need to be addressed. 4.4. The built environment to reduce access to liquor stores should be examined, as should local policies. Targeted findings 4.5. High-risk populations need to be identified, including pregnant women, youth, young adults and transient populations. Appropriate strategies (e.g., resources, toolkits) need to be developed and tailored for these populations vulnerable to poor health outcomes.

Modifiable risk factor	Key findings
5.0 Stress	Universal findings 5.1. Engagement is required across a broad base of stakeholders to develop primary prevention (upstream) approaches to address stress, including resiliency, coping skills and the social determinants of health. 5.2. Programs need to be delivered through a settings approach, including schools and workplaces. 5.3. The geographic distribution of higher stress rates needs to be understood. 5.4. Awareness of stress and the health effects should be increased. 5.5. Work with PCNs and other primary care providers to develop appropriate tools, resources and messaging for use in the primary care environment. 5.6. Partner to broaden the reach of the *HeartMath* program. 5.7. AHS needs to role model healthy behaviours in the workplace.

Consultation Stakeholder List††††

Table 5: Internal (AHS) Consultations Stakeholders (Including Representation from Primary Care Networks)

Name	Title/area
South Zone	
Rita Aman	Health Promotion Facilitator, Medicine Hat
Cheryl Andres	Planner, Primary Care and Chronic Disease Management
Janice Blair	Director, Public Health
Shantel Farncombe	Manager, Chronic Disease Management
Sandra Gugins	Manager, Nutrition Services
Megan Heroux	Health Promotion Facilitator, Lethbridge
Trevor Inaba	Director, Addiction and Mental Health
Andrea Klassen	Health Promotion Facilitator, Lethbridge
Laura Lukye	Health Promotion Facilitator, Brooks
Heather Mathur	Dietitian II, Nutrition Services
Ann Pudwell	Health Promotion Facilitator, Medicine Hat
Ronda Reach	Data Coordinator, Fort Macleod
Adel Royer	Director, Clinical Services, Chinook Primary Care Office
Dr. Vivien Suttorp	Medical Officer of Health
Cathy Woolfrey	Manager, Population Health Promotion Program
Colin Zieber	Executive Director, Seniors' Health
Calgary Zone	
Jana Ambrogiano	Director, Integrated Home Care
Jane Bankes	Manager, Integration and Advance Practice
Donald Barker	Dietitian, Population and Public Health
Jo Ann Beckie	Director, Primary Care and Chronic Disease Management
Laurie Blahitka	Executive Director, Community, Rural and Mental Health

†††† Note that titles of stakeholders were validated during the feedback phase of development of this Action Plan.

Name	Title/area
Connie Burkart	Manager, Chronic Disease Management, SAC, Primary Care
Lorna Driedger	Director, Nutrition Services
Coleene Ireland	Area Manager, Integrated Home Care Program
Julie Kerr	Vice President, Community, Rural and Mental Health
Jim Marteniuk	Operations Manager, Addiction and Mental Health
Micheline Nimmock	Executive Director, Highland Primary Care Network
Shelly Philley	Director, Public Health
Cheryl Ryan	Manager, Nutrition Services, Population and Public Health, Home Care
Central Zone	
Dr. Ifeoma Achebe	Medical Officer of Health
Chris Barnsdale	Family Physician, Peaks to Prairies Primary Care Network Board Member
Harrison Blizzard	Dietitian, Population and Public Health, Nutrition Services
Lee Fredeen-Kohlert	Director, Public Health and Children's Rehabilitation Services
Katherine Gagnon	Health Promotion Facilitator
Theresa Huber	Area Manager, Public Health
Dwight Hunks	Executive Director, Addiction and Mental Health
Maureen Mailer	Manager, Primary Care and Chronic Disease Management
Lorna Muise	School Health Coordinator, Public Health
Jackie Norman	Coordinator, Aboriginal Health Program
Heidi Olstad	Manager, Nutrition Services
Stacey Strilchuk	Executive Director, Camrose Primary Care Network
Jennifer Sundberg	Dietitian, Population and Public Health, Nutrition Services
Andrea Thain Liptak	Director, Primary Care and Chronic Disease Management
Michelle Volkart	Health Promotion Facilitator
Jeanette Walker	Manager, Public Health
Edmonton Zone	
June Clark	Director, Adult and Senior Services North
Teresa Curtis	Coordinator, Tobacco Reduction
Sunita Dhar	Manager, Nutrition Services
Stephanie Donaldson-Kelly	Director, Primary Care and Chronic Disease Management
Mike Ernscliff	Care Manager, Allied Health
Dawn Estey	Manager, Primary Care and Chronic Disease Management
Len Frank	Executive Director, Leduc Beaumont Devon Primary Care Network
Leslie Gwozdz	Program Manager, Primary Care and Chronic Disease Management
Wayne LaBonte	Coordinator, Aboriginal Health Program
Sarah Lartey	Care Manager Program Delivery, Chronic Disease Management
Leslie Maze	Manager, Nutrition Services
Leanne McGeachy	General Manager, Edmonton North Primary Care Network
Roslyn O'Neil	Patient Care Manager, Edmonton North Primary Care Network
Kristine Osbaldeston	Clinical Program Manager, Alberta Heartland Primary Care Network
Annie Paterson	Manager, Edmonton West Primary Care Network
Delmarie Sadoway	Executive Director, Primary Care, Chronic Disease Management and Public Health, Edmonton Zone
Violet Shepard	Coordinator, Aboriginal Health Program

Name	Title/area
Charlotte Thompson	Assistant Manager, Edmonton Oliver Primary Care Network
Mei Tom	Director, Nutrition Services
Christina Vesty	Coordinator, Chronic Disease Management, Leduc Beaumont Devon Primary Care Network
North Zone	
Albert de Villiers	Zone Lead Medical Officer of Health
Susan Given	Manager, Public Health
Tara Harpe	Executive Administrative Coordinator
Donna Koch	Executive Director, Population and Public Health, Addictions and Mental Health
Kathryn Koliaska	Medical Officer of Health
Donna Matier	Manager, Public Health
Trisha McCloskey	Director, Public Health
Bea McLeod	Aboriginal Health Liaison Worker, Aboriginal Health Program
Bev Moylan	Manager, Aboriginal Public Health, French Health and Diversity
Doug Norton	Director, Addictions and Mental Health
Garett Richardson	Public Health Promotion Facilitator
Danielle Wohlgemuth	Dietitian, Public Health
Provincial Programs*	
Tasha Allen	Team Lead, Tobacco Reduction Program, Chronic Disease Prevention and Oral Health
Monique Assi	Manager, Physical Activity and Sedentary Behaviour, Chronic Disease Prevention and Oral Health
Ron Beach	Team Lead, Addiction Prevention Unit
Chrysta Bell	Program Consultant, Tobacco Reduction Program, Chronic Disease Prevention and Oral Health
Susan Canning	Manager, Tobacco Reduction Program, Chronic Disease Prevention and Oral Health
Kally Cheung	Public Health Nutrition Lead, Nutrition Services
Maureen Devolin	Director, Healthy Children and Families
Dr. Sandra Delon	Director, Chronic Disease Prevention and Oral Health
Jazmine Drost	Health Promotion Facilitator I, Implementation and Optimization, Chronic Disease Prevention and Oral Health
Christina Gerius	Health Promotion Facilitator II, Reproductive Health
Sara Jordan	Executive Director, Healthy Living
Marty Landrie	Senior Manager, Aboriginal Health Program, Central and Edmonton Zone
Graham Matsalla	Health Promotion Facilitator I, Physical Activity and Sedentary Behaviour, Chronic Disease Prevention and Oral Health
Andrew McCloskey	Health Promotion Facilitator II, Physical Activity and Sedentary Behaviour, Chronic Disease Prevention and Oral Health
Diane McNeil	Director, Community Initiatives and Supports, Addictions and Mental Health
Anna Murphy	Health Promotion Facilitator II, Tobacco Reduction Program, Chronic Disease Prevention and Oral Health
Monica Schwann	Manager, Implementation and Optimization, Chronic Disease Prevention and Oral Health
Angela Torry	Health Promotion Facilitator II, Physical Activity and Sedentary Behaviour,

Name	Title/area
	Chronic Disease Prevention and Oral Health
Sheila Tyminski	Director, Nutrition Services, Population and Public Health
Dr. Huiming Yang	Provincial Medical Officer of Health, Healthy Living and Medical Director, Screening

* Multiple provincial program members acted as facilitators

Table 6: External Consultation Stakeholders

Organization	Name	Title
Academic		
Canadian Institute of Health Research and University of Calgary, Community Health Sciences and Cumming School of Medicine	Dr. Gavin McCormack	New Investigator Assistant Professor
University of Alberta, School of Public Health	Dr. Kim Raine	Director, Research Promoting Healthy Weight
University of Alberta, Physical Education and Recreation	Dr. Kerry Mummery	Dean
University of Calgary, Medicine and Community Health Sciences and O'Brien Institute of Public Health	Dr. William Ghali	Professor Scientific Director
University of Alberta, Physical Education and Recreation	Dr. JC Spence	Associate Dean, Research
University of Calgary, Libin Cardiovascular Institute of Alberta	Dr. Norm Campbell	Professor Canada Research Chair
Government		
First Nations and Inuit Health Branch	Coreen Everington	Director
	Dr. Parminder Thiara	Physician
Non-government organizations		
Action on Smoking and Health	Les Hagen	Executive Director
Alberta Centre for Active Living	Christina Loitz	Knowledge Translation Specialist
	Nora Johnston	Director
Alberta Recreation and Parks Association	Lisa McLaughlin	Program Manager
	Janet Naclia	Program Manager
Be Fit for Life Network	Lindsay Wright	Coordinator
Canadian Cancer Society	Dan Holinda	Executive Director, Alberta and Northwest Territories Division
Canadian Diabetes Association	Debra Jakubec	Regional Director
Canadian Network for Respiratory Care	Cheryl Connors	Executive Director
Heart and Stroke Foundation of Canada	Kate Chidester	Vice President, Health and Research Director, Adult Prevention Stroke
Prescription to Get Active*	Dawn Estey	Manager, Primary Care and Chronic Disease Management, Edmonton Zone
Safe Healthy Active People Everywhere	Lesley McEwan	Executive Director

* Internal stakeholder

Appendix A1: The Burden of Chronic Disease and Associated Risk Factors

Available as companion document to this Action Plan

Appendix A2: Key Areas of Alignment for the AHS Chronic Disease Prevention Action Plan 2015–2018: Adult Population (18+ Years)

Available as companion document to this Action Plan

Appendix A3: Summary of Internal Consultations for the AHS Chronic Disease Prevention Action Plan 2015–2018: Adult Population (18+ Years)

Available as companion document to this Action Plan

Appendix A4: Summary of External Consultations for the AHS Chronic Disease Prevention Action Plan 2015–2018: Adult Population (18+ Years)

Available as companion document to this Action Plan

The Action Plan was produced through collaborative efforts of the AHS Provincial Chronic Disease Prevention team:

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