HIGHLIGHTS

AHS Chronic Disease Prevention Action Plan 2015—2018

ADULT POPULATION (18+ YEARS)



JUNE 2016

Chronic Disease Prevention

Healthy Living

Population, Public and Indigenous Health





A Message from the Provincial Chronic Disease Prevention Team

Although chronic diseases are the leading cause of death and disability in Alberta and worldwide,^{1,2} the good news is that they are largely preventable.¹ Research shows that almost half of cancers and 80% of heart disease, type II diabetes and respiratory disease are preventable by eliminating four common risk factors: poor nutrition, lack of physical activity, smoking and harmful use of alcohol.^{3,4}

The Action Plan consists of six separate documents:

- 1. Highlights-AHS Chronic Disease Prevention Action Plan 2015-2018: Adult Population (18+ Years)
- 2. AHS Chronic Disease Prevention Action Plan 2015-2018: Adult Population (18+ Years)
- 3. Appendix A1: The Burden of Chronic Disease and Associated Risk Factors
- 4. Appendix A2: Key Areas of Alignment
- 5. Appendix A3: Summary of Internal Consultations
- 6. Appendix A4: Summary of External Consultations

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The Action Plan reflects the vision of a broad range of stakeholders who share common and complementary goals, and who recognize that aligning their efforts is essential to achieving the maximum preventive impact.

This Action Plan is not, however, complete.

Consultations to engage and solicit the views of all members of the prevention community in Alberta still need to be undertaken, and the document will be revised to reflect their input. Specifying the roles and responsibilities of all the various players in chronic disease prevention and together setting common goals, targets and performance metrics is a vital next step to maximize our prevention efforts.

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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 thank 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).

OVERVIEW OF CHRONIC DISEASE

Chronic diseases are an epidemic, as well as the leading cause of death and disability around the world. Major chronic diseases include cardiovascular disease, cancer, obesity, chronic obstructive pulmonary disease (COPD) and type II diabetes. People with chronic diseases face a range of negative consequences, including lower quality of life, lower incomes and premature death; from 2009 to 2011, 58% of all deaths in Alberta were the result of chronic disease. Alberta were the result of chronic disease.

The national rate of chronic disease is increasing by 14% each year.⁸ As the population of Alberta grows larger and individuals live longer, the impact of chronic disease on the health care system is only going to grow larger.

Treating chronic disease already accounts for the majority of our health care costs. Alberta spends more money on health care, per person, than anywhere else in Canada, and most of that money is spent treating and managing chronic diseases that are, for the most part, preventable.⁹

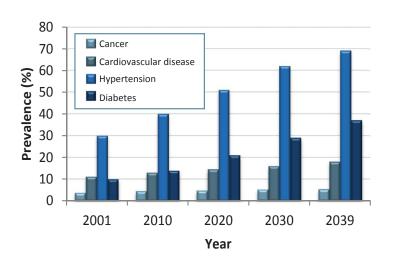
In 2012–2013, 735,000 Albertans had a chronic disease, costing \$4.5 billion in health care services.¹⁰

3 out of 5 Canadians aged 20 and older currently have a chronic disease.8

67% of Canada's direct health care costs can be attributed to chronic diseases.8

FIGURE 1

Projected Prevalence of Major Chronic Diseases, Canada, 2001–2039¹¹







FIVE COMMON RISK FACTORS

UNHEALTHY DIET

PHYSICAL INACTIVITY

TOBACCO USE

HARMFUL USE OF ALCOHOL

CHRONIC STRESS

Chronic diseases are influenced by many different factors, many of which are common and preventable. Modifiable risk factors are also key contributors to developing a chronic disease or an intermediate condition to chronic disease (e.g., high blood pressure, elevated lipids, overweight).¹²

Modifiable risk factors for chronic disease are greatly affected by the social determinants of health, which include living and working conditions, unequal distributions of income and wealth, health and social services, and the ability to access food, housing, quality education. 13,14

Nutrition

On average, Canadians are not meeting nutrition recommendations when it comes to servings of vegetables and fruits, as well as their intake of fats, milk and alternatives, sodium and dietary fibre.¹⁵

Healthy eating means making healthy choices about food, including a variety of different foods and portion sizes, that are consistent with *Canada's Food Guide*. ¹⁶ People who eat an unhealthy diet are at increased risk of cancer, cardiovascular disease, hypertension, overweight and obesity, and type II diabetes. ¹⁷

Healthy eating can help prevent chronic disease.¹⁷

Household food insecurity, which refers to households not being able to afford or access adequate food, also contributes to chronic disease. ¹⁸ For adults, food insecurity is associated with poor mental, physical and dental health, as well as multiple chronic conditions. ¹⁹ The stress and worry of being food insecure also contributes to poor health. ¹⁹





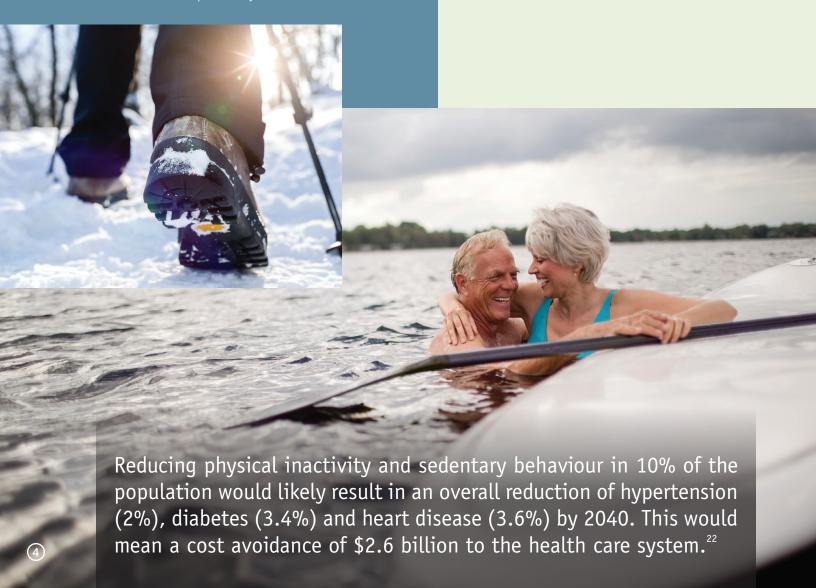
Physical Activity

Regular physical activity can help reduce the risk of premature death and many chronic diseases. Research indicates that physically active individuals generally see their relative risk of premature death lowered by 20–35%.²⁰ In 2009, the estimated total cost of physical inactivity on the health care system in Canada was \$6.8 billion.²¹

Sedentary behaviour, or activities that require little movement and use low amounts of energy (e.g., sitting, watching TV, driving), is also an emerging risk factor for chronic disease. High rates of sedentary behaviour are associated with an increased risk of type II diabetes, obesity, some cancers, poor mental health, poor quality of life and lower life expectancy.¹⁷



Only 15% of Canadians are physically active enough to see health benefits.²²





Tobacco

Tobacco use affects nearly every organ in the human body. It causes physiological and psychological changes, and harms others exposed to second-hand smoke.

Tobacco use prematurely kills 50% of long-term users.²³

Every year, more than 3,000 Albertans die as a result of tobacco use.²⁴

Approximately 16% of Albertans (or 514,000 people) smoke.²⁵ Individuals who use tobacco products or who are exposed to second-hand smoke are at an increased risk of many chronic diseases.

If we could prevent tobacco use and help all current 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. Each person who quits using tobacco means a cost avoidance of \$8,533 to the health care system.²⁶

Alcohol

Alcohol use contributes to nearly 60 different types of diseases.²⁷ Individuals who misuse alcohol are at increased risk of some types of cancers, type II diabetes, gastrointestinal diseases and neurological disorders.^{28,29} Even one drink per day increases a person's risk of certain cancers and there is no amount of alcohol use in pregnancy that is definitely safe.²⁸

In 2013, of Albertans who consumed alcohol in the past year, 17% exceeded the guidelines for chronic drinking and 12% exceeded the guidelines for acute drinking.³⁰



Stress

Stress causes physiological, psychological, emotional and behavioural responses.³¹ Acute stress (also known as the fight, flight or freeze response) refers to any situation that can be perceived as a threat, regardless of whether the threat is real or not. However, when stress is ongoing and becomes chronic, it can lead to damaging physiological, metabolic and cognitive effects on a person's health.³²

Individuals who experience chronic stress are at increased risk of cardiovascular disease, ^{32,33} obesity, ^{32,33} type II diabetes, ^{32,33} anxiety and depression, ³⁴ asthma, ³⁵ and fluctuations in mood and emotions, including fatigue, lack of interest and lack of motivation. ²⁷



THE ACTION PLAN

To reduce the burden of chronic disease on Albertans and the health system, AHS created the *Chronic Disease Prevention Action Plan* 2015–2018: Adult Population (18+ Years).¹⁷

The Action Plan is designed to find ways of fixing gaps in the system, as well as looking at the ways chronic disease prevention activities currently underway can be better coordinated and put into practice across the province.



FIGURE 2

Consultations undertaken in the development of the Action Plan



Internal Consultations:

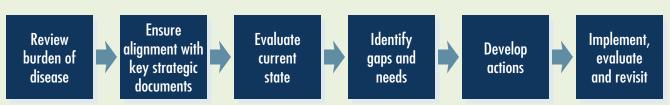
5 zone consultations (100+ participants) and ~20 AHS provincial consultation meetings.

External Consultations:

18 key informant interviews

FIGURE 3

Planning process followed in the development of the Action Plan



THE ACTION PLAN INCLUDES

- a review of the burden and costs of chronic disease and associated risk factors in Alberta
- alignment with key strategies, frameworks and reports
- results of consultations with internal and external stakeholders
- identified gaps and priorities for chronic disease prevention
- AHS chronic disease prevention actions spanning three years, framed around the five strategies in Alberta's Strategic Approach to Wellness: Health for All...Wellness for Life³⁶ and identified by AHS Chronic Disease Prevention (focused on physical activity, sedentary behaviour, tobacco and overarching infrastructure for chronic disease prevention), Addictions and Mental Health (focused on alcohol and stress), and Nutrition Services.

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Alberta's Strategic Approach to Wellness: Health for All...Wellness for Life sets out a vision, guiding principles and an approach intended to guide future actions that ensure all Albertans have the same opportunity to experience good health by³⁶

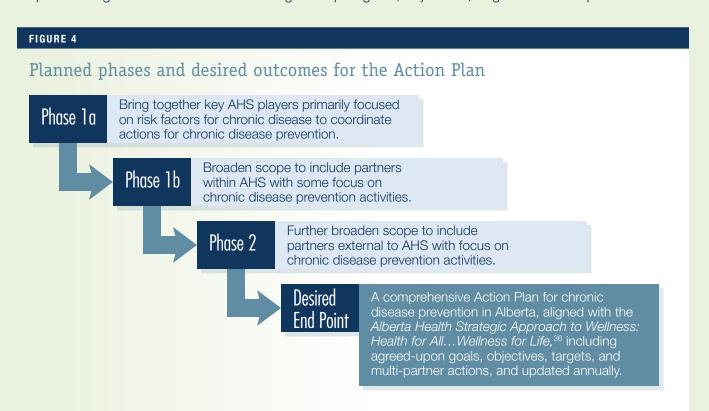
- 1. improving the health knowledge, skills, and behaviours of individuals and families
- 2. building communities that create wellness
- 3. improving social and economic supports for wellness
- 4. strengthening primary prevention with primary health care
- 5. building healthy public policy



FOCUS AND VISION

ACTION PLAN FOCUS	EXPLANATION
KEY BEHAVIOURAL RISK FACTORS (nutrition, physical activity, sedentary behaviour, tobacco, alcohol, stress)	 Associated with major chronic diseases. Reducing these risks is key to maintaining health and preventing chronic disease.
ADULT POPULATION (18+ YEARS)	 Efforts to prevent chronic disease in children and youth are important. However, it is equally important to give adults ways of maintaining their own health and wellness. This will, in turn, support creating a foundation for healthy lifestyles for all. Limited resources within AHS are currently directed towards chronic disease prevention in the population.
SOCIAL DETERMINANTS OF HEALTH	 When addressing modifiable risk factors for chronic disease, approaches must also address inequities experienced by individuals to improve the health of the overall population.
GAPS AND PRIORITIES IN CHRONIC DISEASE PREVENTION	 The consultation process identified a series of gaps and priorities identified by AHS teams, Primary Care Networks and key external stakeholders.

The long-term vision for the Action Plan is to be a comprehensive provincial plan that is updated yearly, spans the age continuum and includes agreed-upon goals, objectives, targets and multi-partner actions.



KEY STRATEGIES AND ACTIONS, 2015-2018

THE CONSULTATIONS IDENTIFIED KEY GUIDING PRINCIPLES AND AREAS OF FOCUS FOR THE PLAN:

- Understand the realities of Alberta's social, geographical and economic landscape
- Work across multiple settings
- Create targeted and tailored approaches
- Engage in knowledge translation and clear information and messaging

- Make data more readily available
- Increase funding and resources
- Improve coordination of chronic disease prevention across the province
- Identify opportunities to focus on social determinants of health

EXAMPLES OF PLANNED 2015-2018 ACTIONS:

Improving the health knowledge, skills and behaviours of individuals and families.

- Develop and distribute a Collective Kitchen Manual to community groups across Alberta
- Provide teachers and parents with information about the risks of newly emerging tobacco-like products
- Provide messaging about healthy eating

Building communities that create wellness.

- Develop tools and resources for workplaces and communities to help in making positive changes to their food environments
- Work with community partners to implement the WalkABle Alberta program

Improving social and economic supports for wellness.

- Partner with stakeholders to address the social determinants of health
- Develop and disseminate a report on the affordability of healthy eating in Alberta
- Identify tools to improve physical activity and sedentary behaviour in workplaces and other settings

• Strengthen primary prevention with primary health care.

- Develop an integrated approach to chronic disease prevention and management
- Identify key best and promising practices to reduce risk for chronic disease in primary care settings
- Expand implementation of successful programs like Find Your Stride and Tobacco Free Futures

Building healthy public policy.

- Develop tools to inform and diffuse chronic disease prevention policies
- Identify best practices for improving the health of those at risk of food insecurity
- Support AHS in promoting healthy physical and social environments

Overarching infrastructure support.

- Form a provincial chronic disease prevention committee to coordinate activities across the province
- Create task groups to identify unmet needs and potential new initiatives
- Improve access to and availability of chronic disease and risk factor data
- Create an inventory of provincial chronic disease prevention programs and services





WHAT'S NEXT?

The actions identified in this Action Plan are based on evidence and best practice. They reflect both new and existing actions, and they address gaps, as well as universal and specific priorities identified through the consulting process. Most of all, the Action Plan provides a way to begin a coordinated, province-wide effort to address chronic disease prevention in Alberta. This includes strong and constant engagement with communities, working in partnership with the zones, AHS provincial teams and external partners, and a stronger emphasis on targeted approaches to reduce health inequities.

The Action Plan is a living document. This means that it will be modified and expanded as more stakeholders are engaged. As the Action Plan evolves, the desired result is a comprehensive plan for chronic disease prevention in Alberta which spans both the age and care continuum.



REFERENCES

- 1. World Health Organization. Integrated chronic disease prevention and control [Internet]. 2015 [cited 2015 May 4]. Available from: http://www.who.int/chp/about/integrated_cd/en/
- 2. World Health Organization. Facing the facts: The impact of chronic disease in Canada [Internet]. Available from: http://www.who.int/chp/chronic disease report/media/CANADA.pdf
- 3. Alberta Health Services, Alberta Cancer Prevention Legacy Fund. Almost half of cancers in Alberta are preventable [Internet]. Available from: http://www.albertahealthservices.ca/assets/news/rls/ne-rls-2016-02-04-cancer-bkg.pdf
- 4. World Health Organization. 2008-2013 Action plan for the global strategy for the prevention and control of noncommunicable diseases [Internet]. 2008. Available from: http://www.who.int/nmh/publications/ncd_action_plan_en.pdf
- 5. Patra J, Popova S, Rehm J, Bondy S, Flint R, Giesbrecht N. Economic cost of chronic disease in Canada 1995-2003 [Internet]. 2007. Available from: http://www.ocdpa.on.ca/sites/default/files/publications/OCDPA_EconomicCosts.pdf
- 6. Predy GN, Lightfoot P, Edwards J, Sevcik M, Fraser-Lee N, Zhang J, et al. Alberta health status update 2011 [Internet]. 2012. Available from: http://www.albertahealthservices.ca/poph/hi-poph-surv-hsa-update-2011-alberta.pdf
- 7. Government of Alberta. Population growth in Alberta and Canada between census years [Internet]. 2013 [cited 2015 May 5]. Available from: https://osi.alberta.ca/osi-content/Pages/OfficialStatistic.aspx?ipid=840
- 8. Elmslie K. Against the growing burden of disease [Internet]. Available from: http://www.ccgh-csih.ca/assets/ Elmslie.pdf
- 9. Alberta Policy Coalition for Chronic Disease Prevention. A wellness foundation for Alberta: It's about health. It's about time. [Internet]. Available from: http://socialpolicyframework.alberta.ca/files/documents/2012-11-06_alberta_policy_coalition_for_chronic_disease_prevention_apccp_submission_3_0.pdf
- 10. Office of the Auditor General of Alberta. Report of the auditor general of Alberta: Health chronic disease management [Internet]. 2014. Available from: http://www.oag.ab.ca/webfiles/reports/OAGSept2014Report.pdf
- 11. Statistics Canada, Public Health Agency of Canada, Ottawa Hospital Research Institute, Children's Hospital of Eastern Ontario. Population health model Physical activity dynamic model [Internet]. 2011. Available from: http://www.scb.se/Grupp/Produkter_Tjanster/Kurser/_Dokument/IMA/Flanagan_POHEM_PhysicalActivityModel_IMApaper_2011.pdf
- 12. Public Health Agency of Canada. Chronic disease risk factors [Internet]. 2015 [cited 2015 May 4]. Available from: http://www.phac-aspc.gc.ca/cd-mc/risk_factors-facteurs_risque-eng.php
- 13. Mikkonen J, Raphael D. Social determinants of health: The Canadian facts [Internet]. Toronto; 2010. Available from: http://www.thecanadianfacts.org/the_canadian_facts.pdf
- 14. Canadian Public Health Association. Frontline health: Beyond health care [Internet]. [cited 2016 Feb 1]. Available from: http://www.cpha.ca/en/programs/social-determinants/frontlinehealth/sdh.aspx
- 15. Health Canada. Canadian community health survey, cycle 2.2, nutrition (2004) Nutrient intakes from food: Provinicial, regional and national summary data tables. 2007.
- 16. Health Canada. Eating well with Canada's food guide [Internet]. 2011 [cited 2015 May 28]. Available from: http://hc-sc.gc.ca/fn-an/food-guide-aliment/index-eng.php
- 17. Alberta Health Services. AHS chronic disease prevention action plan 2015-2018: Adult population (18+ years). 2016.

- 18. Tarasuk V, Mitchell A, Dachner N. Household food insecurity in Canada 2012 [Internet]. 2012. Available from: http://nutritionalsciences.lamp.utoronto.ca/wp-content/uploads/2014/05/Household_Food_Insecurity_in_Canada-2012_ENG.pdf
- 19. Laraia BA. Food insecurity and chronic disease. Am Soc Nutr Adv Nutr. 2013;4:203-12.
- 20. Warburton DER, Nicol CW, Bredin SSD. Health benefits of physical activity: the evidence. CMAJ. 2006;147(6).
- 21. Janssen I. Health care costs of physical inactivity in Canadian adults. Appl Physiol Nutr Metab. 2012;37:803–6.
- 22. Bounajm F, Dinh T, Theriault L. Moving ahead: The economic impact of reducing physical inactivity and sedentary behaviour. 2014.
- 23. World Health Organization. The global tobacco crisis [Internet]. 2008. Available from: http://www.who.int/tobacco/mpower/mpower_report_tobacco_crisis_2008.pdf
- 24. Government of Alberta. Creating tobacco-free futures: Alberta's strategy to prevent and reduce tobacco use 2012-2022 [Internet]. 2012. Available from: http://www.health.alberta.ca/documents/Tobacco-Reduction-Strategy-2012.pdf
- 25. Reid JL, Hammond D, Rynard VL, Burkhalter R. Tobacco use in Canada: Patterns and trends, 2015 edition [Internet]. 2015. Available from: http://tobaccoreport.ca/2015/TobaccoUseinCanada_2015.pdf
- 26. Cambridge MA. Economic evaluation of Health Canada's proposal to amend the tobacco product information regulations. 2009.
- 27. American Psychological Association. Americans engage in unhealthy behavior to manage stress [Internet]. 2015 [cited 2015 May 5]. Available from: http://www.apa.org/news/press/releases/2006/01/stress-management.aspx
- 28. Canadian Centre on Substance Abuse. Canadian drug summary: Alcohol [Internet]. 2014 [cited 2015 May 4]. Available from: http://www.ccsa.ca/Resource Library/CCSA-Canadian-Drug-Summary-Alcohol-2014-en.pdf
- 29. Public Health Agency of Canada. Risk factor atlas [Internet]. 2013 [cited 2015 May 4]. Available from: http://www.phac-aspc.gc.ca/cd-mc/atlas/
- 30. Government of Canada. Canadian tobacco, alcohol and drugs survey Table 12. Alcohol indicators by sex and age group, 2013 [Internet]. 2013. Available from: http://healthycanadians.gc.ca/science-research-sciences-recherches/data-donnees/ctads-ectad/tables-tableaux-2013-eng.php#t12
- 31. Stress Less. Stress related information [Internet]. 2015 [cited 2015 May 5]. Available from: http://www.stressless.com/stressinfo2.cfm
- 32. Marcovecchio ML, Chiarelli F. The effects of acute and chronic stress on diabetes control. Sci Signal. 2012;23(5):247.
- 33. Ippoliti F, Canitano N, Businaro R. Stress and obesity as risk factors in cardiovascular diseases: A neuroimmune perspective. J Neuroimmune Pharmacol [Internet]. 2013;8:212–26. Available from: http://www.ncbi.nlm.nih.gov/pubmed/23329173
- 34. Reagan LP, Grillo CA, Piroli GG. The As and Ds of stress: Metabolic, morphological and behavioral consequences. Eur J Pharmacol [Internet]. 2008;585(1):64–75. Available from: http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2423189/pdf/nihms50588.pdf
- 35. University of Maryland Medical Centre. Stress [Internet]. 2013 [cited 2015 Jun 1]. Available from: http://umm.edu/health/medical/reports/articles/stress
- 36. Government of Alberta. Alberta's strategic approach to wellness: Health for all...wellness for life [Internet]. 2014. Available from: http://www.health.alberta.ca/documents/Strategic-Approach-Wellness-2013.pdf

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