




Our future health built with care

A photograph of a man and a woman walking away from the camera down a dirt path in a wooded area. The sun is shining through the trees on the left, creating a lens flare and casting long shadows of the couple onto the path. The path is flanked by tall grasses and shrubs.

CHRONIC DISEASE PREVENTION AT CCO

2015 – 2018

about CCO

An agency of the Ministry of Health and Long-Term Care, CCO is the Ontario government's principal advisor on cancer and chronic kidney disease care, as well as access to care for key health services.

It is guided by a mission that together we will improve the performance of our health systems in Ontario by driving quality, accountability, innovation and value.

CCO houses both Cancer Care Ontario and the Ontario Renal Network, which leverage CCO's infrastructure, assets and models to improve the province's health systems for cancer and chronic kidney disease. It also directs and oversees healthcare funds for hospitals and other cancer and chronic kidney disease care providers, enabling them to deliver high-quality, timely services and improved access to care.

CCO guiding principles

- The people of Ontario are at the core of everything we do and every decision we make.
- We are transparent in sharing performance-related information, and we foster a culture of open communication with colleagues, partners and the public.
- We ensure fairness across regions in Ontario in the development of strong provincial health systems.
- We make decisions and provide advice based on the best available evidence.
- We consult widely, share openly, and collaborate actively to achieve our goals.



This report provides an overview of chronic disease prevention initiatives at CCO from April 1, 2015, to March 31, 2018.



In 2015, CCO developed its *Chronic Disease Prevention Strategy* in consultation with key chronic disease prevention stakeholders. The purpose of the strategy is to provide a comprehensive plan to guide our prevention initiatives and to ensure coordination with other prevention partners. The strategy builds on our programs, resources and expertise by incorporating current and planned

prevention initiatives, research capacity, data holdings, risk factor surveillance, policy analysis, and program design and implementation. The goals of the strategy focus on promoting the development of coordinated policies and programs that support the health of the population as a whole, and improving the health of disadvantaged groups by helping to foster healthy environments, healthy lifestyles and cancer screening. The strategy also aims to improve the long-term outcomes of cancer survivors and people living with cancer or other chronic diseases. The *CCO Chronic Disease Prevention Strategy 2015-2020* is available at ccohealth.ca/en/chronic-disease-strategy.

The strategy is an objective of the fourth [Ontario Cancer Plan](#), which is the roadmap for the way Cancer Care Ontario will develop and deliver cancer services until 2019. The strategy also reflects and supports the Ontario Renal Network's second [Ontario Renal Plan](#), CCO's *Corporate Strategy 2012 to 2018* and the *CCO Research Strategy 2017-2020*. In addition, the strategy supports the recommendations jointly put forward by Cancer Care Ontario and Public Health Ontario in the [Taking Action to Prevent Chronic Disease: Recommendations for a Healthier Ontario](#) report.

CCO is uniquely situated to make a significant impact on chronic disease prevention through Cancer Care Ontario and the Ontario Renal Network, and our role as the government's principal advisor on cancer and chronic kidney disease care. To reduce disease occurrence, we make provincial-level recommendations on healthy public policies that reduce risk factors. We also work with a range of partners to promote chronic disease prevention policies and programs. Cancer Care Ontario supports cancer prevention and early detection through managing the province's three organized

Chronic diseases are the leading cause of death and disability in Ontario, and account for the majority of healthcare costs in the province.

cancer screening programs: the Ontario Breast Screening Program, the Ontario Cervical Screening Program and ColonCancerCheck. In addition, CCO plays a significant role in improving disease outcomes and preventing recurrence by promoting healthy behaviours among people with cancer and chronic kidney disease.

Now two-thirds of the way through the term of the *Chronic Disease Prevention Strategy*, we can reflect on the steady progress being made towards the strategy's goals. These achievements include:

- The launch of the [Prevention System Quality Index](#) reports, which promote improvements in chronic disease prevention by monitoring system-level policies and programs that can reduce cancer risk factors and exposures in the Ontario population.
- The release of [Path to Prevention—Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis](#). This report provides evidence-based policy recommendations to reduce the four key risk factors for chronic diseases in First Nations, Inuit and Métis communities: commercial tobacco use, alcohol consumption, physical inactivity and unhealthy eating. Along with risk factors, the recommendations also address themes of equity and collaboration.
- The development of the [Ontario Food and Nutrition Strategy](#), co-led by Cancer Care Ontario and in partnership with 26 organizations that have a role in food systems and health. The *Ontario Food and Nutrition Strategy* is a plan for healthy food and food systems in Ontario that uses a cross-government, cross-sectoral, coordinated approach to developing food policy.
- The integration of [smoking cessation programs](#) into Regional Cancer Centres, which has resulted in more people with cancer being screened for tobacco use. Access to these smoking cessation programs has also resulted in more people with cancer accepting a referral for counselling to stop smoking, which has provided them with a better opportunity to become smoke free and get the best results from their cancer treatments.
- The launch of [My CancerIQ](#), an evidence-based online cancer risk assessment tool that allows Ontarians to complete risk assessment questionnaires for melanoma, female breast, cervical, colorectal, kidney and lung cancers.
- The launch of the [Lung Cancer Screening Pilot for People at High Risk](#) to help determine how to best implement organized lung cancer screening for people at high risk across Ontario.

I appreciate this opportunity to share CCO's work in prevention. We are fortunate to be able to work closely with a wide range of prevention partners to help reduce the burden of chronic diseases in Ontario. I look forward to the next two years of the *CCO Chronic Disease Prevention Strategy* and the positive contributions that we will make with our partners to improve the health of Ontarians.



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The 2015-2020 CCO Chronic Disease Prevention Strategy at a glance

CCO VISION: Working together to create the best health systems in the world

CCO MISSION: Together, we will improve the performance of our health system by driving quality, accountability, innovation and value.

CCO CORPORATE STRATEGY FOCUS: Prevention of chronic disease—develop evidence-based recommendations and initiatives with our partners that promote and support action on chronic-disease prevention.

CCO VALUES: Accountability, Integrity, Partnerships, United Purpose.

CCO CHRONIC DISEASE PREVENTION STRATEGY

GOAL 1:

CCO works with its partners to champion chronic disease prevention in Ontario.

GOAL 2:

CCO promotes chronic disease prevention policies and programs.

GOAL 3:

CCO undertakes primary, secondary and tertiary prevention.

GOAL 4:

CCO informs chronic disease prevention through research, and population health assessment and surveillance.

STRATEGIC PRIORITIES

1.1 Establish complementary priorities and roles with Ontario's chronic disease prevention leadership.

1.2 Work with partners to strengthen Ontario's chronic disease prevention system.

1.3 Engage multiple sectors and levels of government to promote a health in all policies approach to chronic disease prevention.

2.1 Provide advice to government and prevention partners on chronic disease prevention.

2.2 Promote policies and programs that increase health equity.

2.3 Monitor the impact of provincial-level policies and programs on chronic disease risk factors.

2.4 Support the development and implementation of provincial-level prevention strategies.

3.1 Ensure prevention is integrated into relevant CCO programs.

3.2 Expand screening and early detection programs.

3.3 Increase access to screening and early detection programs.

3.4 Provide the public with information and tools to reduce their risk of cancer.

4.1 Conduct and support etiologic, prevention and screening research.

4.2 Optimize CCO's data holdings and data infrastructure to support research and surveillance.

4.3 Provide risk factor, screening and disease surveillance information, including information on health inequities.

4.4 Produce and disseminate high quality knowledge products that inform chronic disease prevention.



GOAL 1

CCO works with its partners to champion chronic disease prevention in Ontario

CCO works closely with government and its partners in chronic disease prevention to encourage coordinated, cross-sectoral action that can reduce exposure to chronic disease risk factors in Ontario.

2015 to 2018 Highlights

Establish complementary priorities and roles with Ontario's chronic disease prevention leadership

The CCO Prevention Advisory Committee was formed in 2016 to provide strategic advice on the implementation of CCO's *Chronic Disease Prevention Strategy*, and to identify opportunities for aligning with chronic disease partners and initiatives in Ontario. The committee consists of chronic disease prevention leaders, representing Public Health Ontario, the Council of Ontario Medical Officers of Health, the Canadian Cancer Society, the Canadian Partnership Against Cancer, the Ontario Public Health Association, primary care, and the research community, as well as senior staff from CCO. The committee discusses current and anticipated successes and challenges in chronic disease prevention in Ontario and how to best work together to identify opportunities for action.

Work with partners to strengthen Ontario's chronic disease prevention system

Cancer Care Ontario – CCO's division that focuses on cancer – collaborates with chronic disease partners on priorities and initiatives of mutual interest. From 2015 to 2018, Cancer Care Ontario worked with several groups and associations, including the Ontario Chronic Disease Prevention Alliance, the Ontario Collaborative Group on Healthy Eating and Physical Activity, the

Ontario is fortunate to have many organizations working in chronic disease prevention. This diversity enables the development and implementation of many initiatives directed at different diseases and risk factors. Coordination and common priorities can make all of the work across these organizations more effective.

Ontario Sun Safety Working Group, the Toronto Cancer Prevention Coalition, the Canadian Partnership Against Cancer Population Health Advisory Group and the National Steering Committee for Consensus on Content for Sun Safety Messages.

Cancer Care Ontario also contributed to committees that advised the Ontario government, such as the Tobacco Control System Committee, which advised the Ministry of Health and Long-Term Care. The [Occupational Cancer Research Centre](#) played a key role in developing and supporting the provincial *Occupational Disease Action Plan* Implementation Team's working groups, including a group that identifies and develops data to support the prevention efforts of the occupational health and safety system and its partners.

The Aboriginal Cancer Control Unit, which is part of Cancer Care Ontario, has spent many years building strong relationships with First Nations, Inuit and Métis organizations and communities to co-develop culturally relevant strategies, policies and programs to prevent chronic disease in these communities. Cancer Care Ontario's third [Aboriginal Cancer Strategy](#) guides this work and promotes a wholistic approach to cancer education, prevention, screening and research in First Nations, Inuit and Métis populations.

Engage multiple sectors and levels of government to promote a health in all policies approach to chronic disease prevention

Cancer Care Ontario promotes a multi-sectoral, health in all policies approach to chronic disease prevention by identifying policy and program opportunities that are relevant not only to the Ontario Ministry of Health and Long-Term Care, but also to a range of ministries, as well as Local Health Integration Networks, municipal governments and public health units. This multiple sector approach is guided by advisory committees and expert panels comprised of individuals representing a wide range of sectors and areas of expertise, including health policy specialists, research scientists, healthcare providers, epidemiologists, health system administrators and public health professionals.

SPOTLIGHT

Ontario Food and Nutrition Strategy

Cancer Care Ontario co-led the development of the [Ontario Food and Nutrition Strategy](#), which is a plan for healthy food and food systems in Ontario that uses a cross-government, cross-sectoral, coordinated approach to developing food policy. Published in 2017, it was developed by 26 organizations that have a role in food systems and health. Although the strategy has not been endorsed by the provincial government, organizations are working to collectively advance the goals of the strategy.

The *Ontario Food and Nutrition Strategy* report provides the rationale and recommendations, based on evidence, to advance a healthy food environment and support the wholistic health and well-being of the people of Ontario. As an example, one of these recommendations is to include food literacy education and food skills development as a mandatory part of the public school curriculum at all grade levels. This policy recommendation is supported by partner organizations, including the Ontario Home Economics Association, Sustain Ontario, the Ontario Federation of Agriculture and Public Health Ontario.



GOAL 2

CCO promotes chronic disease prevention policies and programs

CCO uses research, indicators, evidence from the literature, and expert and community input to advise the government and other prevention stakeholders on policies and programs for reducing chronic disease risk factors in the population. CCO also shares evidence on ways to change the social and environmental conditions that cause risk factors to develop. For example, adequate income to cover essential living costs could directly help Ontarians to be food secure and potentially, improve their vegetable and fruit consumption. Finally, CCO plays a central role in supporting provincial-level tobacco control and occupational disease strategies.

2015 to 2018 Highlights

Provide advice to government and prevention partners on chronic disease prevention

Cancer Care Ontario – CCO's division that focuses on cancer – provides evidence-informed advice to government and partners by highlighting policy and program opportunities for reducing chronic disease risk factors. These chronic disease prevention opportunities are outlined in Cancer Care Ontario's reports, which are described in more detail throughout this document. Cancer Care Ontario also provides the government with advice on chronic disease prevention issues through briefing notes and consultation submissions on topics such as alcohol availability, radon protection and plain packaging for tobacco.

Promote policies and programs that increase health equity

Populations facing health inequities often have an increased prevalence of risk factors for cancer and other chronic diseases. The fourth [Ontario Cancer Plan](#) directs Cancer Care Ontario to ensure health equity for all Ontarians across the cancer system. The Aboriginal Cancer Control Unit focuses on increasing health equity by promoting policies and programs to meet the unique needs of First Nations, Inuit and Métis populations. First Nations, Inuit and Métis peoples face health inequities rooted in colonialism, racism and social exclusion, and have a higher prevalence of several cancer risk factors, higher mortality rates, rising rates of cancer incidence and worse cancer survival than other Ontarians.



The [Prevention System Quality Index: Health Equity](#) report, which was published in 2018, uses a health equity perspective to examine system-level policies and programs that can reduce risk factors for cancer and other chronic diseases in the population. The report provides evidence and data to support governments, non-governmental organizations and local public health agencies in reducing health inequities, so that the overall health of the population and the sustainability of the healthcare system can be improved. First Nations, Inuit and Métis populations are a major focus of this report. Included in this report are evidence-informed policy opportunities, such as protecting vulnerable populations in social housing from second-hand smoke and continuing to implement poverty reduction policies.

The Program Training and Consultation Centre (PTCC), housed at Cancer Care Ontario from 2007 to 2018, developed training workshops in 2016 for healthcare providers on using an equity-informed approach to tobacco treatment. Integrated into these workshops were modules to help providers work more effectively with priority populations who are disproportionately affected by commercial tobacco, such as people with mental illness and addictions, young adults, and lesbian, gay, bisexual and transgender people. From 2016 to 2018, 574 professionals received training.

Cancer Care Ontario is working to address racism in the healthcare system that is often experienced by First Nations, Inuit and Métis people. For example, in 2015, the Aboriginal Cancer Control Unit launched [Aboriginal Relationship and Cultural Competency courses](#) for healthcare professionals to improve person-centred care and outcomes for First Nations, Inuit and Métis people. These courses are free of charge, open to anyone and are accredited by the College of Family Physicians of Canada.

SPOTLIGHT

Recommendations for reducing chronic disease in First Nations, Inuit and Métis

In 2016, Cancer Care Ontario and partners published [Path to Prevention—Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis](#), which provides the Ontario government with 22 evidence-based policy recommendations to reduce the prevalence of four key chronic disease risk factors in First Nations, Inuit and Métis communities: commercial tobacco use, alcohol consumption, physical inactivity and unhealthy eating. The recommendations also address themes of equity and collaboration. In 2017, the inaugural *Path to Prevention* Partnership Table met with over 30 partner organizations working in the field of chronic disease prevention. The aim of the Partnership Table is to work towards implementing the *Path to Prevention* recommendations by aligning and supporting the work of these partners in chronic disease prevention.

Monitor the impact of provincial-level policies and programs on chronic disease risk factors

Cancer Care Ontario monitors progress on the 22 evidence-informed recommendations it made with Public Health Ontario in the 2012 report, [Taking Action to Prevent Chronic Disease: Recommendations for a Healthier Ontario](#) (*Taking Action*). Since then, progress has been made in reducing exposure to chronic disease risk factors with the 2015 amendment to the Smoke-Free Ontario Act that banned smoking in some outdoor public places, including bar and restaurant patios. In addition, the Making Healthier Choices Act, which was implemented in 2017, requires large chain restaurants and other food service premises that sell ready-to-eat and prepared food to post calories on menus.

To address the *Taking Action* report recommendations on improving measurement and monitoring of the prevention system in Ontario, the [Prevention System Quality Index](#) reports were published in 2015, 2016 and 2018. The *Prevention System Quality Index* monitors system-level policies and programs that can reduce the prevalence of cancer risk factors and exposures in the Ontario population. Using indicators and evidence from the literature, the *Prevention System Quality Index* identifies achievements and gaps in the prevention system, and highlights opportunities for improvement. It aims to inform the work of public health experts, policy-makers, policy-influencers and program planners in governments, non-governmental organizations and local public health agencies across all sectors.

Cancer Care Ontario's Occupational Cancer Research Centre monitors the effects of Ontario's Toxics Reduction Act on workplace exposure to chemical carcinogens. The Toxics Reduction Act aims to reduce the use and creation of toxic substances by requiring facilities to quantify the use, creation, transformation, release and disposal of toxic substances, and to prepare voluntary plans to reduce the use or creation of these substances. The Occupational Cancer Research Centre uses data from reports submitted by industrial facilities to monitor trends and identify opportunities for exposure reduction.

As a member of the Ontario Sun Safety Working Group, Cancer Care Ontario assessed the impact of the Skin Cancer Prevention Act (Tanning Beds), 2013, on the use of tanning beds and lamps by Ontario adolescents one year after the act's implementation. The act restricts tanning bed use to people over age 18. A [report and a webcast](#) were produced to disseminate the findings, which showed no reduction in the proportion of adolescents reporting

the use of tanning beds or lamps one year after the act came into effect. The Ontario Sun Safety Working Group is continuing to work with stakeholders to learn more about compliance with and enforcement of the act.

Support the development and implementation of provincial-level prevention strategies

Cancer Care Ontario has supported Ontario's tobacco control strategy, *Smoke-Free Ontario*, through the work of the Program Training and Consultation Centre (PTCC). From 2015 to 2018, PTCC provided over 1,200 consultations, delivered 153 training events and supported three provincial communities of practice. During this time, PTCC also planned and hosted a provincial knowledge exchange forum on how to use media and communication to increase attempts to quit smoking, and worked with the Ministry of Health and Long-Term Care to deliver an annual training program for public health inspectors who enforce the Smoke-Free Ontario Act. In 2016, PTCC launched a new Media Capacity Building and Documentation of Practice project that supported six public health units and one Tobacco Control Area Network in developing community-based media campaigns featuring personal testimonials from former smokers about the negative health effects of smoking.

Cancer Care Ontario's Occupational Cancer Research Centre (OCRC) supports the provincial *Occupational Disease Action Plan*. The OCRC collects occupational exposure and cancer surveillance data, and conducts epidemiologic and prevention research on occupational cancer. This information is used to identify prevention priorities and evaluate measures that protect workers from exposure to carcinogens. For example, the OCRC's research on the burden of cancer caused by diesel engine exhaust informed the Ministry of Labour's decision to propose an occupational carcinogen exposure limit. The OCRC's calculation of the annual number of lung cancers and mesotheliomas caused by asbestos was also used by the Canadian Cancer Society, Canadian Labour Congress and other organizations to successfully lobby the Government of Canada to ban asbestos.

GOAL 3

CCO undertakes primary, secondary and tertiary prevention

Primary prevention aims to prevent disease by reducing the exposure to risk factors, and secondary prevention aims to find disease early through screening and early detection programs to improve health outcomes. Tertiary prevention focusses on reducing the effects of disease, slowing disease progression, improving treatment outcomes and reducing the risk of recurrence. CCO is committed to integrating primary, secondary and tertiary prevention into its relevant cancer and renal programs, and expanding screening and early detection programs.

2015 to 2018 Highlights

Ensure prevention is integrated into relevant CCO programs

The [Provincial Primary Care and Cancer Network](#) is run by Cancer Care Ontario – CCO's division that focuses on cancer – and engages primary care providers across Ontario in all aspects of the cancer system, including prevention and screening. Through the network, primary care providers are encouraged to incorporate chronic disease risk factor reduction interventions into their patient encounters, use cancer screening guidelines and improve their cancer screening rates. To support this work, primary care providers are given education and training tools, such as the Screening Activity Report, and physician-linked correspondence.

Cancer Care Ontario has been working to integrate prevention into the cancer care system through clinical tools such as [cancer pathway maps](#) and [guidelines](#), which provide healthcare providers with an overview of the care someone should receive for a specific cancer. Several cancer pathway maps direct the healthcare provider to screen for tobacco use and refer to a smoking cessation program.



SPOTLIGHT

Smoking cessation program for people newly diagnosed with cancer

In Ontario, approximately one in five people with cancer uses tobacco. There is overwhelming evidence that continued tobacco use after a cancer diagnosis can lead to adverse outcomes, including reduced treatment efficacy and safety. Quitting smoking improves the prognosis of people with cancer and evidence suggests that someone's risk of dying could be lowered by 30 to 40 percent by quitting smoking as soon as they are diagnosed.

Cancer Care Ontario began implementing a [smoking cessation program](#) in all 14 Regional Cancer Programs in 2013. People who are newly diagnosed with cancer are screened for tobacco use, advised on the benefits of quitting smoking and referred to cessation services for support. As one of the first jurisdictions in Canada to implement a smoking cessation program in its cancer system, Ontario's initiative has attracted broad interest. In 2015, the Canadian Partnership Against Cancer provided funding to further refine the program's implementation model and to help promote smoking cessation as an integral component of quality cancer care.

From 2015 to 2017, the proportion of people newly diagnosed with cancer systematically screened for tobacco use in the Regional Cancer Centres increased from 42 percent to 68 percent. This smoking cessation program has driven a number of ongoing research projects, including an economic evaluation.

Lung Cancer Screening Pilot for People at High Risk

Cancer Care Ontario is piloting an organized screening program for people at high risk of lung cancer that uses low-dose computed tomography. In 2017, three pilot sites began implementing the [Lung Cancer Screening Pilot for People at High Risk](#), which will inform the design and implementation of a provincial program. The pilot is evaluating key components of the screening pathway, including recruitment, retention and follow-up and treatment. The evaluation will also assess the impact of screening on cancer detection and smoking cessation, and the outcomes of embedding smoking cessation services into the screening pathway.

The Breast Cancer Prevention Pathway Map outlines the preventive care process, which includes high risk screening and genetic testing for women who are at a high risk for breast cancer. Including prevention in clinical tools such as these has the potential to improve outcomes for patients.

Providing effective smoking cessation interventions is important for increasing the overall benefit of lung cancer screening; therefore, smoking cessation is an integral part of the screening pathway for the [Lung Cancer Screening Pilot for People at High Risk](#). Based on early data from pilot sites, 64 percent of people eligible for lung cancer screening were current smokers, and of those, 88 percent accepted in-hospital smoking cessation services. Cancer Care Ontario has also implemented a smoking cessation program for people newly diagnosed with cancer in the Regional Cancer Programs.

Cancer Care Ontario's guideline for providing follow-up care to people with colorectal cancer directs healthcare providers to provide counselling regarding smoking cessation, maintaining a healthy body weight, leading an active lifestyle and having a healthy diet. The [Exercise Guide for People with Cancer](#) and the [Exercise for People with Cancer Guideline](#) provide guidance to people with cancer and health professionals.

The Ontario Renal Network's [KidneyWise Clinical Toolkit](#) helps primary care providers identify and manage people with chronic kidney disease. From 2015 to 2017, the toolkit was disseminated to primary care providers across the province and promoted at provincial and local primary care conferences. Since May 2015, there have been more than 3,000 downloads of the KidneyWise Toolkit App in Canada. The Ontario Renal Network is also working to develop quality improvement initiatives to make access and outcomes better for people at risk of chronic kidney disease progression.

Expand screening and early detection programs

Cancer Care Ontario plans, implements and evaluates the province's three organized cancer screening programs: the Ontario Breast Screening Program, the Ontario Cervical Screening Program and ColonCancerCheck. Screening is when people without symptoms are tested for early signs of disease. Cancer Care Ontario is committed to adopting innovative evidence-based approaches to screening and early detection for cancer, and has been planning several new initiatives since 2015, including:

- The transition from the guaiac fecal occult blood test (gFOBT) to the fecal immunochemical test (FIT) as the screening test for colorectal cancer. FIT will be fully implemented across the province in 2018/2019. FIT offers significant advantages over the

gFOBT, such as increased sensitivity, better detection of colorectal cancer and advanced adenomas, and anticipated higher screening participation rates.

- The transition from the Papanicolaou (Pap) test to the human papillomavirus (HPV) test as the cervical screening test for women ages 30 to 69. Implementing HPV testing will reduce the number of unnecessary diagnostic tests and physician visits women need for cervical screening, and eliminate unnecessary treatment for women who are not at risk of cervical cancer.

Increase access to screening and early detection programs

The benefits of an organized cancer screening program are fully realized when participation by target populations is high. Cancer Care Ontario works to increase cancer screening participation rates by sending personalized letters inviting eligible Ontarians to get screened, telling them when it is time to get screened again and informing them of their screening test results. In 2015, the ColonCancerCheck program began including physicians' names in their rostered patients' cancer screening letters because research shows a strong positive relationship between physician recommendation for screening and participation in screening.

Some Ontarians experience barriers to getting screened. Through its Screen for Life Mobile Coaches, Cancer Care Ontario works to increase access to screening for Ontarians without a primary care provider and for people facing transportation barriers. These mobile coaches are buses that travel to remote areas to offer breast, cervical and colorectal cancer screening services. Cancer Care Ontario has also been increasing access to the Ontario Breast Screening Program by transitioning all sites performing screening mammography into the organized program.

Provide the public with information and tools to reduce their risk of cancer

In 2015, Cancer Care Ontario, in partnership with the Ministry of Health and Long-term Care, launched [My CancerIQ](#), an evidence-based online cancer risk assessment tool. My CancerIQ allows Ontarians to complete risk assessment questionnaires for melanoma, female breast, cervical, colorectal, kidney and lung cancers. The tool also provides people who complete questionnaires with personalized action plans containing information about cancer prevention and credible behaviour change resources. Cancer Care Ontario encourages primary care providers to incorporate My CancerIQ into their discussions about cancer risk and prevention with their patients. My CancerIQ is actively promoted to primary

care providers and the public through a wide range of marketing strategies. As of March 2018, there were over 1.1 million visits to the website and over 430,000 cancer risk assessments were completed.

Cancer Care Ontario's [Aboriginal Tobacco Program](#) works with First Nations, Inuit and Métis communities and public health partners to develop culturally appropriate strategies for addressing commercial tobacco prevention, protection and cessation. Since 2015, the Aboriginal Tobacco Program has run 260 cessation workshops and 187 prevention workshops, reaching approximately 15,500 people.

In an effort to promote health and well-being among CCO employees, in 2014, CCO launched Health Works, a comprehensive workplace health promotion program. Health Works was developed in response to a recommendation made in the [Taking Action](#) report to implement chronic disease prevention and health promotion initiatives in provincially-funded workplaces. The program focused on incorporating physical activity, healthy eating and mental health into the workplace. Participation in the program was high: almost two-thirds (63 percent) of CCO employees participated in at least one Health Works activity during 2017. One year after the physical activity program was implemented, participants reported sitting less and walking more during work hours and to or from work.

SPOTLIGHT

Chronic kidney disease screening and First Nations, Inuit and Métis

The Ontario Renal Network works with First Nations, Inuit and Métis partners to promote chronic kidney disease screening in people who are at high risk. A pilot project promoting chronic kidney disease screening was completed in Wiikwemkoong Unceded Territory in 2016/2017. This initiative is being expanded across northeastern Ontario in partnership with Mushkegowuk Tribal Council and North Shore Tribal Council. The Ontario Renal Network intends to promote chronic kidney disease screening to other First Nations, Inuit, Métis and urban Indigenous communities in Ontario that are interested in participating.



GOAL 4

CCO informs chronic disease prevention through research, and population health assessment and surveillance.

CCO generates new knowledge through research on the causes of disease (etiology), the prevalence of risk factors, the outcomes of policy and program implementation, and the impact of screening and early detection programs. CCO shares research results, population health assessments and risk factor surveillance with chronic disease prevention stakeholders through high-quality resources and reports.

2015 to 2018 Highlights

Conduct and support etiologic, prevention and screening research

Scientists and staff from Cancer Care Ontario – CCO's division that focuses on cancer – continue to conduct and support population-based research to inform improvements and innovations in disease prevention and screening. Since 2015, Cancer Care Ontario researchers have been awarded high-profile grants to support their work, including two Canadian Cancer Society Prevention Innovation Grants, a Canadian Institutes of Health Research Catalyst Grant and several other operating grants. During this time, Cancer Care Ontario scientists and staff have published more than 200 articles and delivered more than 300 presentations, workshops and posters on chronic disease etiology, prevention and screening.

Examples of etiologic, prevention and screening research achievements include:

- Building a database of polybrominated biphenyl (PBDE) concentrations in foods and supplements. PBDEs are a class of brominated flame retardants that can contaminate common consumer products and some may be carcinogenic to humans. The database supports the assessment of dietary PBDE in multiple jurisdictions, and identifies important sources to include in dietary risk analyses.
- Estimating the number of cancers and cancer deaths occurring in Canada resulting from occupational exposure to carcinogens. This study will help raise awareness of occupational exposure as a key cause of cancer and will highlight priorities for prevention activities.



- Conducting an intervention trial to evaluate the possible beneficial effects of flaxseed intake on circulating estrogens thought to be involved in breast cancer development, with the ultimate goal being the prevention of breast cancer.
- Working with Aamjiwnaang First Nation to consolidate over 20 years of research about the health impacts of environmental exposures. The project also highlights the importance of partnership to create practical recommendations and resources for First Nations communities.

Optimize CCO's data holdings and data infrastructure to support research and surveillance

CCO collects and maintains some of the most comprehensive disease registries and healthcare databases in Canada, which support prevention, population health assessment and surveillance research, and surveillance initiatives by CCO and external organizations.

The [Ontario Cancer Registry](#) captures data on all Ontario residents diagnosed with cancer or who died from cancer, and allows for the surveillance and ongoing study of trends in cancer incidence, prevalence, mortality and survival. Since 2015, Cancer Care Ontario has continued its focus on improving the quality and completeness of cancer stage data in the registry, and on expanding database linkages to understand cancer burden and risk in specific populations. For example, the Aboriginal Cancer Control Unit completed a data linkage between the Indian Registration System and the Ontario Cancer Registry to better understand the burden of

cancer in status First Nations people. The data linkage was used to conduct analyses for [Cancer in First Nations People in Ontario: Incidence, Mortality, Survival and Prevalence](#), published in partnership with the Chiefs of Ontario and the Institute for Clinical Evaluative Sciences.

In addition, Cancer Care Ontario's Occupational Cancer Research Centre led the development of the Occupational Disease Surveillance System (ODSS), which identifies industries and occupations at high risk of cancer and other occupational diseases by linking data from the Workplace Safety and Insurance Board to the Ontario Cancer Registry and other provincial health data held at CCO. The ODSS was launched in 2017 and captures information for more than 2 million Ontario workers. ODSS is currently being used to generate data on occupational risks for cancer and other health outcomes.

Data from the smoking cessation program in the Regional Cancer Programs are collected in CCO's Data Book - Activity Level Reporting. Data are submitted monthly by the regions and includes record-level data to allow for quarterly analysis and reporting of the proportion of people newly diagnosed with cancer that are screened for tobacco use, and the proportion of people with cancer that smoke who accepted a referral for cessation support, among other performance metrics. This data holding will allow for ongoing health system improvements and future research.



Provide risk factor, screening and disease surveillance information, including information on health inequities

Cancer Care Ontario devotes considerable resources to developing reports that present risk factor, screening and disease surveillance information, all of which can be used to inform cancer control efforts, including chronic disease prevention.

The [*Cancer Risk Factors Atlas of Ontario*](#), released in 2017, supplements the provincial-level data found in some of the earlier Cancer Risk Factors in Ontario reports by providing the public health community with valuable information about the distribution and estimated prevalence of risk factors at the local level.

To address the information gap on cancer risk factors and screening in First Nations, Inuit and Métis populations, Cancer Care Ontario's Aboriginal Cancer Control Unit and its partners have produced three new reports on this topic:

- The [*Cancer in First Nations in Ontario: Risk Factors and Screening*](#) report, which was developed in partnership with the Chiefs of Ontario, shows that First Nations, especially those living on-reserve, have a much higher prevalence of cancer risk factors than non-Aboriginal Ontarians.
- The [*Cancer Risk Factors and Screening Among Inuit in Ontario and Other Canadian Regions*](#) report, which was developed jointly with Tungasuvvingat Inuit, shows that cancer risk factors are significantly more common among Inuit in Ontario and elsewhere in Canada than among non-Aboriginal Ontarians.
- The [*Cancer in the Métis People of Ontario: Risk Factors and Screening Behaviours*](#) report, which was developed in partnership with the Métis Nation of Ontario, shows that cancer risk factors in Ontario's Métis population are significantly higher than in the non-Aboriginal Ontario population.

Since 2015, Cancer Care Ontario has developed several other information products on risk factors, and screening and disease surveillance, including the following:

- [*Ontario Cancer Profiles*](#), released in 2017, is an online, self-serve mapping tool that provides provincial and regional data on select modifiable risk factors and social determinants of health, cancer incidence and mortality, and cancer screening participation gaps for Ontario's three cancer screening programs.
- [*The Ontario Cancer Screening Performance Report 2016*](#) presents data from the Ontario Breast Screening Program, the Ontario Cervical Screening Program and ColonCancerCheck, with a special focus on screening participation and retention, as well as a feature on Ontarians overdue for screening.

- [Ontario Cancer Facts](#) are concise monthly fact sheets on cancer, screening and cancer risk modifiers based on population health assessment and surveillance work.
- The [Cancer System Quality Index](#) (CSQI), first published in 2005 and updated annually, is a quality improvement index that identifies gaps in the cancer system and drives improvement through regional, provincial, national and international benchmarking. In addition to indicators of cancer incidence and survival, the CSQI includes risk factor indicators, such as smoking, alcohol and obesity, and indicators of all three cancer screening programs. Data are available for the province and by region.
- The [Ontario Cancer Statistics](#) report uses data from the Ontario Cancer Registry and other data sources to provide a clear picture of the changing burden of cancer in Ontario, focusing on the incidence, mortality, relative survival and prevalence of the disease. *Ontario Cancer Statistics* reports were published in 2016 and 2018.

Produce and disseminate high-quality knowledge products that inform chronic disease prevention

As described in the previous sections, since 2015, Cancer Care Ontario has produced many knowledge products and resources to inform chronic disease prevention in the province. Most of these resources have been produced in collaboration with partners and with advice from advisory and expert committees to strengthen their quality and utility.

Knowledge products are disseminated to colleagues at the Ontario Ministry of Health and Long-Term Care and other provincial ministries, non-governmental organizations, local public health agencies and other partners working in chronic disease prevention. Additionally, media is used to engage healthcare providers and the public and to amplify the message through headlines such as, “Good policies can help prevent half of Ontario’s cancer cases,” “Ontario’s cancer agency warns about possible risks as grocery stores begin stocking wine” and “Workplace carcinogens lead to thousands of cancer cases in Ontario each year.” For example, the 2016 *Prevention System Quality Index* report received coverage in 49 news stories, with over 16.5 million impressions (the number of people who had the opportunity to see the stories).

Cancer Care Ontario regularly presents its chronic disease prevention work at provincial, national and international academic and professional conferences, as well as at Public Health Ontario Grand Rounds. In addition, since 2015, the Occupational Cancer Research Centre has organized 36 occupational and environmental health seminars, in partnership with Public Health Ontario, the Dalla Lana School of Public Health and the Centre for Research Expertise in Occupational Disease.

SPOTLIGHT

Cancer Risk Factors in Ontario series

The Cancer Risk Factors in Ontario report series, which began in 2013 with an evidence summary of cancer risk factors relevant to the Ontario context, now includes six risk factor-specific reports. Each report describes the distribution of selected cancer risk factors in the Ontario population and quantifies their associated Ontario cancer burden. In addition, opportunities are identified for prevention policies and programs that can reduce risk factors and their associated cancer burden. Three Cancer Risk Factors in Ontario reports have been published since April 2015.

- The [Environmental Burden of Cancer in Ontario](#) report, jointly produced with experts in environmental health from Public Health Ontario, found that between 3,540 and 6,510 new cancer cases in Ontario each year are estimated to result from 23 environmental carcinogens. Over 90 percent of those cancer cases were from exposure to ultraviolet radiation from the sun, radon gas from the ground and outdoor air pollution.
- The [Burden of Occupational Cancer in Ontario: Major Workplace Carcinogens and Prevention of Exposure](#) report focuses on the most common carcinogens found in Ontario workplaces and their contribution to occupational cancer. The report found that solar radiation, asbestos, diesel engine exhaust and crystalline silica had the largest estimated impact on cancer burden.
- The [Burden of Cancer Caused by Infections in Ontario](#) report estimated that between 2,400 and 3,600 new cancer cases diagnosed in Ontario in 2013 (or roughly four percent of all new cancers) were from seven infectious agents: human papillomavirus, *Helicobacter pylori*, hepatitis C virus, Epstein-Barr virus, hepatitis B virus, human herpesvirus 8 and human T-cell lymphotropic virus, type 1.

looking forward

This report provides an overview of chronic disease prevention initiatives at CCO from April 1, 2015 to March 31, 2018. These initiatives align with the goals and strategic priorities of CCO's *Chronic Disease Prevention Strategy: 2015 to 2020*.

Looking forward, CCO will continue to work closely with partners to prevent chronic disease and improve the long-term outcomes of people living with cancer or other chronic diseases, and cancer survivors.

CCO will continue to promote chronic disease prevention policies and programs through advice to government and partners, and by monitoring the impact of policies and programs.

Future initiatives include:

- Continuing to monitor progress made on the recommendations in *Taking Action to Prevent Chronic Disease: Recommendations for a Healthier Ontario*;
- Monitoring progress made on the recommendations in *Path to Prevention—Recommendations for Reducing Chronic Disease in First Nations, Inuit and Métis*;
- Collaborating with partners to develop a plan to reduce premature mortality in Ontario. This work will be based on the 2018 report, *Ontario Atlas of Adult Mortality, 1992-2015: Trends in Local Health Integration Networks* by Buajitti and colleagues;
- Continuing to monitor and describe system-level policies and programs that can reduce cancer risk factors and exposure in the *Prevention System Quality Index* reports; and
- Monitoring and reporting on the impact of the Indigenous Tobacco Program through the Indigenous Tobacco Program Tracker.

CCO will continue to identify opportunities to integrate primary, secondary and tertiary prevention into relevant programs, and to improve health outcomes through screening and early detection programs.

Future initiatives include:

- Continuing to integrate smoking cessation counselling into cancer care for people who are newly diagnosed with cancer at Regional Cancer Centres, and considering an expansion of the program to new target audiences, such as people undergoing a potential cancer diagnosis;
- Evaluating the Lung Cancer Screening Pilot for People at High Risk;
- Implementing the fecal immunochemical test fully across the province to screen for colorectal cancer;
- Transitioning to the human papillomavirus test for women ages 30 to 69 as the screening test for cervical cancer; and
- Continuing to provide direct, culturally relevant support to First Nations, Inuit, Métis and urban Indigenous community healthcare providers and community members to address commercial tobacco prevention, cessation and protection through the Indigenous Tobacco Program.

CCO will continue to identify and address gaps in etiologic, prevention and screening research, and conduct disease and risk factor surveillance.

Future initiatives include:

- Launching a new Occupational Disease Surveillance Program, which will include the Occupational Disease Surveillance System and the development of other systems to monitor patterns and trends in occupational disease in Ontario;
- Collaborating with the Ontario Lung Association and the Radiation Safety Institute of Canada to investigate workplace exposure to radon;
- Conducting research projects that investigate the increasing rates of colorectal cancer in Ontarians ages 18 to 49 and in First Nations people;
- Measuring human exposures to emerging environmental contaminants and assessing their associated cancer risks;
- Continuing to develop novel data and methods to support health equity analyses;
- Researching the effectiveness of personalized breast cancer risk assessment by combining data on genomic profiling and other breast cancer risk factors. This research project will provide evidence to inform tailored prevention and screening recommendations based on individual risk; and
- Assessing cancer prevention behaviours and actual cancer risk in Ontario using data linkages from the Canadian Community Health Survey and Ontario Cancer Registry.

CCO recognizes that chronic disease prevention is key to the sustainability of the healthcare system and is working together with partners to create a healthier future for everyone in Ontario. CCO welcomes the opportunity to work in partnership with others on chronic disease prevention. Feel free to contact CCO at: populationhealth@cancercare.on.ca.

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This document is available at
ccohealth.ca/preventionreport

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