A Tobacco Endgame for Canada:

Creating a future free of commercial tobacco use

IN THIS POLICY STATEMENT

Heart &Stroke™

Facts

Prevalence

- In 2017, 15.1% of Canadians aged 15 years and older were current (daily or occasional) smokers, including 16.7% of males and 13.5% of females.[1]
- Smoking rates were the greatest among male young adults aged 20-24 (20.4%) and overall declined with age.[1] Across all age groups, smoking rates were lowest among youth aged 15-19 (7.9%), followed by adults over 45 years of age.[1]
- A 2016-17 survey found that tobacco use among youth had declined but that 3.2% of youth in grades 7-12 in Canada identified as current smokers.[2] Among students in Canada, 18.4% reported ever having tried a cigarette and 23.1% reported ever having tried any tobacco product (cigarette, chew tobacco, cigars, cigarillos, hookah).[2]
- The 2016-17 Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) results indicate that 14.6% of students in grades 10-12 used a vaping product in the past 30 days, up from 9% in 2014-15. This represents a 64% increase.[2]
- More recent Canadian research indicates that cigarette smoking in teenagers has increased substantially for the first time in decades. Speaking publicly about the data the researcher also noted "teenage vaping rates have increased substantially."[3]
- There is evidence that e-cigarette use increases the risk of ever using combustible tobacco cigarettes among youth and young Canadians. [4]
- Smoking rates among Indigenous people are higher than the general population, and are in part linked to health and social inequities.[5] In 2012, 37% of Indigenous people living off-reserve reported being current daily or occasional smokers.[5] Among First Nations, current smoking rates were 37%, 35% for Métis and 58% for Inuit.[5]
- In 2016, 53% of First Nations adults living on-reserve and in northern communities reported being current smokers with 40% smoking reporting daily smoking.[6]
- Smoking rates among Indigenous youth (15-19 years of age) in Canada are at least three times higher as compared to non-Indigenous youth.[7]

Social factors

- Psychological, physical and social factors are predictive of tobacco use.[8] Tobacco marketing continues to be a significant factor influencing use.[8] Marketing takes the form of attractive and appealing flavours, as well as package and product promotion that uses eye-catching colours, branding and finishes.[8]
- Tobacco companies target youth by preying upon their desires for popularity, attractiveness and risk seeking behaviours.[9,10] They also target women with gender-specific marketing, appealing to ideals of slimness and glamour.[10–13]
- Traditional tobacco use in some Indigenous communities is a cultural and spiritual practice.
- Clinicians and public health experts assert that smoking rates of commercial tobacco in Indigenous communities are high as a result of systemic inequities and generational trauma.[7,14] This is believed to further exacerbate adverse health effects faced by Indigenous people.[14]

Products

- Cigarette smoke contains more than 7,000 chemicals and compounds.[15]
- Tobacco in cigarette form remains the most frequently used product, but other forms of tobacco (hookah, chew, heated) are also used and e-cigarettes are becoming increasingly popular in Canada.[16]
- Smokeless tobacco, also called spit tobacco, is a mixture of tobacco, nicotine, sweeteners, abrasives, salts and chemicals. It is sold in two basic forms, chew or plug tobacco and snuff.[17]
- Waterpipe tobacco - also known as hookah or shisha - is usually flavoured and can be appealing to youth and new users. Hookah was the most popular alternative tobacco product among youth, with a higher use than cigarillos, cigars, and heated tobacco. [2]
- In 2012-13, 50% of high school students in Canada who used tobacco products, used flavoured tobacco products.[18] More recently, in 2016-17, one-third of grade 7-12 students in Canada who had used a tobacco product, reported tobacco initiation using a flavoured product.[2]

Health and social impacts

- Smoking is a risk factor for heart disease, stroke, cancer, and respiratory disease.[15]
- Hundreds of ingredients in tobacco are toxic and more than 70 cause, initiate or promote cancer.[15] The number of toxins stored in the body increases with each puff of the cigarette.[15]
- Nicotine is a highly addictive drug found in tobacco products that increases blood pressure and makes hearts work harder.[15]
- Adolescents' bodies are sensitive to nicotine and adolescents may be more vulnerable to addiction.[15] Nicotine negatively affects brain development.[19]

- Experts assert that there is no safe level of exposure to tobacco smoke.[15] Any exposure to tobacco smoke – even an occasional cigarette or exposure to second-hand smoke – is harmful.[15]
- 63.6% of Canadians reported exposure to second-hand smoke in the past month.[16] 13.3% of Canadians reported being exposed to second-hand smoke either every day or almost every day.[16] Second-hand smoke exposure was more prevalent among males, youth and young adults, and current smokers.[16]
- Tobacco use kills up to half of people who use it [10,20] and significantly reduces life expectancy.[21] In a study of women, half or more of long-term regular smokers died as a result of tobacco use.[22]
- While rates of tobacco use overall have declined in Canada over the past few decades, tobacco use remains a leading public health threat, killing over 45,000 people in one year and costing the economy $16.2 billion.[23] According to recent Canadian research, teenage smoking rates have increased for the first time in many years.[3]
- Women who smoke during pregnancy have a higher risk of miscarriage and complications during birth, and of having an infant with low birth weight.[15] Babies from mothers who smoke are more prone to illness (for example asthma or sudden infant death syndrome) and have a higher chance of death at birth or shortly after.[15]
- Compared to non-smokers, women who smoke have a 25% greater relative risk of heart disease than males who smoke.[24]
- Smokeless tobacco has over 3,000 chemicals including 28 known carcinogens.[25] It is not a safe substitute for cigarettes and increases the risk of having a fatal heart attack, fatal stroke and certain cancers.[26–29]
- Menthol is a deceptive flavor used to mask the harshness of tobacco. Smokers who smoke cigarettes with menthol may be less likely to quit smoking.[30] When these smokers attempt to quit, they are more likely to relapse.[30]
- Becoming tobacco-free at any age and at any time is beneficial and can extend your life.[15] Becoming tobacco-free gives your body a chance to heal the damage caused by tobacco use.[15]
- As soon as you become smoke-free, your risk of heart disease and stroke begins to decrease.[31]

Tobacco control

- Tobacco control includes prevention, cessation, protection and industry de-normalization to reduce the burden of tobacco.[10,32]
- The tobacco industry preys upon young people, knowing that as more tobacco consumers quit or die prematurely there is a need to entice and hook new users.[10,33] Strategies to limit initiation are becoming increasingly popular around the world.[32,34]
- Raising taxes is the most effective measure to reduce tobacco use.[35] Pricing strategies are powerful tobacco control measures with potential to prevent uptake and increase quit rates.[35]
- The use of nicotine therapies (e.g., patch, gum, inhaler, lozenge) as an aid to quitting smoking is considered one of the most effective cessation interventions and is much less harmful than smoking a cigarette.[36]
- In the past year, more than half of smokers had tried to quit and one-third had tried to quit multiple times.[16] It can take some people many attempts to become smoke-free.[16] According to survey data from Health Canada and Statistics Canada, the percentage of people who remained smoke-free after one year of quitting was 12.3% in 2017.[16]
- Great strides have been made in creating smoke-free indoor and outdoor public spaces, but more efforts are still needed to ensure all people in Canada are protected from second-hand smoke.[16]
- The Tobacco Endgame is a comprehensive strategy to create a future free of commercial tobacco use in Canada. The vision of the Endgame to reduce smoking prevalence rates to less than 5% tobacco use by 2035 was formally adopted by the Government of Canada on March 1st, 2017. Many other countries have formally adopted Endgame strategies, and some other countries have proposed bold and innovative policy measures to drive down tobacco use.[37] Only Ontario has set its own provincial Endgame aims, although has not gone as far as the Federal Government, it did commit to less than 10% tobacco use by 2023.[38]
- Innovative and aggressive measures are necessary to further drive tobacco rates down with promising measures including warnings on cigarettes, industry cost-recovery fees, Tobacco-Free Generation social movement, retail reform and better access to quit aids.[37] Strict measures are also required to reduce the appeal of e-cigarettes to youth and non-users of tobacco.

Background

Tobacco control

A comprehensive approach to tobacco control includes the following components:[10,39]

1. Prevention – ensuring that people in Canada, particularly youth and young adults do not start to use tobacco products.
2. Cessation – helping tobacco users successfully quit their use of tobacco products.
3. Protection – protecting all Canadians from the harmful effects of second-hand smoke.
4. De-normalization – educating Canadians about the marketing strategies and tactics of the tobacco industry and the effects the industry's products have on health. Confronting the tobacco industry and taking steps to decrease retail availability, curtail production and supply, introduce substantial tax increases and mandate price controls while making the industry pay for the burden it creates.

A comprehensive approach requires the use of a variety of strategies at multiple levels including health education and public information, legislation, regulation, price policy and taxation.[10] Heart & Stroke and other tobacco control organizations' strategies' of raising awareness and calling out the tactics of the tobacco industry within Canada and globally are also key elements of tobacco control.

Tobacco use in Canada

Tobacco use remains the leading risk for premature death in Canada, killing over 45,000 people each year.[23] Nearly one in five deaths in Canada are attributed to tobacco use.[23] Everyday approximately 125 Canadians die from tobacco use – more than those who die from car crashes, violent assault, accidents and suicide combined.[23]

In 2012, tobacco use cost the economy over $16 billion with $6.5 billion attributable to direct healthcare costs ($3.8 billion in hospital care expenditures, $1.7 billion in prescription drugs expenditure and $1 billion in physician care).[23] The remainder of the economic burden is due to indirect costs such as lost productivity.[23]

The Canadian Community Health Survey (CCHS) found current smoking (daily or occasional) rates at 15.1% in 2017.[1] Smoking rates are higher among males than females, a trend which has remained fairly consistent over the past decade.[1] Age is also related to smoking status, with young adults aged 20-24 reporting the highest rates of smoking.[1] The largest proportion of smokers (20.4%) was males aged 20-24.[1] Rates among young adults have declined slightly over time while there have been faster declines with other age groups.[1] Overall, rates of smoking generally decline from early adulthood to later in life.[1]

Prevalence is lowest among youth aged 15-19 (7.9%), peaks among 25-44 year-olds at 17.9% and declines for adults over the age of 45 (14.1%).[1]

More recent Canadian research indicates that cigarette smoking in teenagers aged 15-19 has increased substantially for the first time in decades from 10.7% to 15.5%. This represents a 45% increase from 2017 to 2018.[3]

Smoking rates differ across the country. Prince Edward Island reports the lowest rate at 11.8% and Newfoundland and Labrador has the highest prevalence among the provinces at 20%.[1] The territories have substantially higher rates of smoking and Nunavut reports the highest rates where almost two-thirds report smoking daily.[1]

Overall consumption has decreased: Canadians purchased over 27 billion cigarettes in 2017, down from over 42 billion in 2001.[16] This is attributed to fewer smokers as well as reduced consumption since daily smokers in Canada smoked fewer cigarettes: an average of 13.7 cigarettes per day in 2017 compared to 17 cigarettes per day in 1999.[16] Male daily smokers are heavier smokers, consuming over three cigarettes more per day than females.[16]

Indigenous communities

It is important that any tobacco strategy acknowledge the sacred and ceremonial role that traditional tobacco plays in certain Indigenous communities as well as the health burden of commercial tobacco in these communities. Tobacco is one of the four sacred medicines in many Indigenous cultures. Traditional ceremonial tobacco in its original form has honour and purpose.[40] Commercial tobacco does not have the same purpose in Indigenous ceremonies and culture.[40] It is important to address the impact of the low price of commercial tobacco, in addition to its associated retail marketing, placement, ease of access and use in public spaces in Indigenous communities.

Indigenous health is a priority for Heart & Stroke. Our Indigenous Health Strategy, built in partnership with Indigenous organizations, focuses on health reconciliation and aims for collaboration with Indigenous communities in Canada to address inequities in heart disease and stroke. The Heart & Stroke is committed to working with Indigenous people – First Nation, Métis, and Inuit (FNMI) – to decrease morbidity and mortality from heart disease and stroke.

Among Indigenous people the risk factors for heart disease and stroke need to be addressed using an equity and social determinants lens. This approach recognizes that the differences in health outcomes between Indigenous people and other people in Canada are a result of the historical, social, economic and policy injustices that shape the living situations of Indigenous people. The social and economic determinants

that impact health and well-being and the inequities that exist must be addressed as the root cause of poor Indigenous health outcomes. This upstream approach should be used in addition to interventions that address specific behavioural risk factors.

Colonization, dispossession and cultural genocide have generated a legacy of trauma and despair among Indigenous people, which in turn generate high rates of addictive behaviour and mental health challenges.[41] This includes the commercial use of tobacco. Approximately 37% of First Nations living off reserve, 35% of Métis people and 58% of Inuit people (not including those in Nunavut) are current smokers compared to 15% in the non-Indigenous population.[42] Other surveys indicate that 48.7% of Inuit report daily smoking.[5] In 2012, 53% of First Nations adults living on reserve and in northern communities reported being current smokers with 40% reporting daily smoking.[6]

Social inequity

The prevalence of smoking among individuals who have low socioeconomic status (SES) is much higher than among those with higher SES.[1] There is a disproportionate rate of low SES among Indigenous communities compared to other people in Canada.[43]

The proportion of smokers in Canada decreased as household income increased.[1] In 2017, among Canadian households within the lowest income quintile, about one in five Canadians were smokers (21.7%).[1] In comparison, for households in the highest income quintile, just over one in 10 were smokers (11.9%).[1]

The use of commercial tobacco reinforces other types of inequality.[44] People in vulnerable populations bear a disproportionate share of the burden of death, illness and disease caused by tobacco.[44,45] This contributes to widening health and financial inequities within low SES communities.[44] In addition, children in families with low SES are more likely to be exposed to second-hand smoke and have a higher likelihood of becoming smokers themselves.[36,46,47] Children of both current and former smokers are at elevated risk of becoming smokers themselves.[48] This increased risk may perpetuate the cycle of tobacco use into the next generation creating further burden.[44]

A health equity lens should be used to take into account the root cause of tobacco use among these populations.[44,49] Targeted initiatives and programs focused on alleviating stress or trauma among people with low SES should also address the socio-economic barriers which make people more likely to use tobacco.[49]

Mental health

Mental health is linked to cardiovascular health, with depression and other severe mental illness associated with increased risk for cardiovascular disease.[50] People with mental health disorders are disproportionately represented among low SES groups.[45,51] While declines in smoking among those with mental illness have been less than those without mental illness, those who received mental health treatment were more likely to quit.[51] Smoking may be the leading cause of death among this population.[52–54] Quit rates for individuals diagnosed with a mental illness are lower than those without mental illness.[55] Canadian analysis linked smoking with multiple mental health conditions (anxiety, mood disorders, depression).[56] Mental health indicators were significantly lower among current smokers (56%) compared to former smokers (69%) or never smokers (77%).[16] This, in combination with the poor long-term quit rates among adults with mental health conditions demonstrates the need to better support people in this situation with cessation resources and other supports.[57] Lastly, smoking cessation promotes better mental health outcomes.[58]

LGBTQ+

Smoking prevalence is higher among lesbian, gay, bisexual, transgender and queer (LGBTQ+) persons than the Canadian average.[59] Estimates suggest tobacco use among LGBTQ+ communities in Canada ranges between 24% and 45% across different groups.[59] A variety of social and psychological factors have been linked to the higher tobacco use including additional personal stress and mental health issues, as well as stigmatization, abuse, victimization, and discrimination.[60–64] LGBTQ+ people experience barriers in accessing healthcare services.[65] Health groups are concerned that these difficulties in getting appropriate medical care may undermine access to cessation support.[66] Aggressive and targeted tobacco marketing in areas and places frequented by LGBTQ+ people may have increased exposure and susceptibility to smoking initiation.[60] There are large research gaps in assessing prevention and cessation interventions for LGBTQ+ young adults demonstrating a need to better support this population.[59]

Blue collar workers

Blue collar occupations (construction, trades, transport, equipment operator, processing, manufacturing) have the highest smoking prevalence compared to other occupations related to social sciences, education, government and health.[66] In 2011, about one-third of construction workers, workers in mining and oil and gas extraction and those in transportation and warehousing in Canada smoked.[67] These are jobs where smoking restrictions or bans have been less utilized compared to white-collar occupational settings and cultures where smoking may be more acceptable to workplace cultures.[67,68] Given their high tobacco use, occupational and social context, blue collar workers merit tailored interventions to support cessation.[69]

New and emerging tobacco products

Tobacco control strategies need to be vigilant of the shifting landscape, crafting both proactive and reactive ways to address emerging issues and concerns. The industry innovates to diversify product lines, retain market share, attract new users and portray an image of reduced harm from tobacco among current users.[70,71] New technology and products such as e-cigarettes, and heated tobacco as well as changes to filters should be monitored and acted upon.[70] In particular the increase in youth vaping rates (and potential implications including re-normalizing smoking and an increase in using combustible tobacco need to be carefully monitored and addressed.[4]

Other tobacco products

As tobacco control measures have successfully reduced incidence rates of smoking, new products have come onto the market to attract users. These products include: cigars, cigarillos, pipe, chewing tobacco/snuff, and hookah/shisha/waterpipe. Although combustible cigarettes are the most commonly used tobacco product, tobacco control efforts should not be limited to this segment alone. Recent figures from 2017 reveal that 18% of people in Canada (15 years and older) have used at least one tobacco product in the past 30 days representing an increase from 15.5% in 2015.[72] These other tobacco products are associated with adverse health effects and their use is problematic.[20,73] Cigars and cigarillos were the most popular tobacco products after cigarettes, with 1.2-1.8% of Canadians reporting use in the past 30 days.[72] Use of other tobacco products is more common among males, and among young adults.[72]

Hookah/shisha/waterpipe tobacco has particularly grown in popularity in recent years. Data from the Canadian Student Tobacco, Alcohol and Drugs Survey administered to 50,103 Canadian youth from grades 7 to 12 showed increasing popularity of hookahs among youth compared with other tobacco products.[2] In 2016/2017, 5.3% of grade 10 to 12 students reported using hookahs in the past 30 days, making hookah the most popular tobacco alternative in comparison to cigarillos, cigars and smokeless tobacco.[2] Additionally, hookah use grew in popularity as youth grew older.[2] Grade 10 to 12 students had higher rates of ever using hookahs (13.9% compared to grade 7 to 9 students 3.2%).[2] Most alarming is that 37.6% of students from grade 9 to 12 considered hookah use to be less harmful than cigarette smoking, a belief that is inaccurate and dangerous.[74] This is troubling as hookah use is linked to many of the same adverse health effects such as cancers, lung and cardiovascular disease.[73]

E-cigarettes and vaping

E-cigarettes, sometimes called vapes, are battery-operated devices that heat and vaporize a liquid that users inhale or "vape" to imitate the smoking experience. This liquid is usually propylene glycol or vegetable glycerin-based and can be combined with other ingredients and flavours. E-cigarettes can be available with or without nicotine. In 2018, Health Canada legalized the sale of vaping products with nicotine so that e-cigarettes could be accessible as an option for smokers as a smoking cessation tool. In 2019 the Federal Government proposed amendments to the Tobacco and Vaping Products Act to address and reverse the increase in youth vaping rapes, including measures to address advertising, flavours, nicotine concentration and product design.[75]

E-cigarettes are appealing to Canadian youth. Approximately 23% of grade 7-12 students in Canada report having ever tried an e-cigarette.[2] Current use of e-cigarettes among young people in Canada increased to 10% in 2016-17 – a 61% increase from 6.2% in 2014-15.[2] Research also shows that more teens are using e-cigarettes, with 71.9% having tried them because they viewed them as "cool" or "fun".[76]

It is essential that young Canadians are protected from marketing exposure. A Canadian study concluded that e-cigarette use among youth (past 30-day use) was linked with future tobacco cigarette smoking (increased odds of experimentation and daily smoking).[77] The evidence assessing the gateway effect is mixed[78–82] and continued research in Canada is necessary as e-cigarettes with nicotine have been legalized and are widely accessible in retail settings.

The Heart & Stroke position on e-cigarettes has evolved over time with advances in research and will continue to evolve. While the evidence base on e-cigarettes continues to grow, much remains unknown regarding the public health harms and the potential of e-cigarettes as a cessation aid. Although e-cigarettes are likely less harmful than regular cigarettes, they are not without harm and the increase in youth vaping is alarming. Immediate and strong action is required to protect youth and non-users.

Experts agree that complete tobacco cessation over the long term, rather than reducing the number of cigarettes smoked per day, is the most effective way to reduce risk for disease and premature death.[20] Heart & Stroke encourages people to strive for cessation as the best means of reducing the burden of tobacco-related illness. We recommend people in Canada use cessation tools such as nicotine replacement therapy (NRT), quit medications, and counselling. More research is needed to conclusively elucidate the role that e-cigarettes play in smoking cessation, if any. E-cigarettes are not recognized or medically approved cessation devices, nor have they proven to be successful on their own in larger population studies. Importantly, people should refrain from using both, cigarettes and vaping products simultaneously. Research shows that it would be healthier to quit smoking completely, rather than use both e-cig¬arettes and tobacco (known as dual use).[83]

The dual use of e-cigarettes – where an individual both vapes and smokes combustible tobacco – is common in Canada.[84] Dual use may facilitate nicotine addiction and continued tobacco use over complete smoking cessation.[85,86] E-cigarette use is associated with an increased risk of heart attack.[83] The use of both conventional cigarettes and e-cigarettes is associated with a compounded risk of heart attack.[83]

Heart & Stroke believes the best approach would be to stop smoking altogether, with behavioural support and/or cessation aids increasing the chance of success. Research is divided on whether e-cigarettes can be considered a useful smoking cessation device. This lack of consensus is partly due to rapidly evolving e-cigarette technology and a lack of standardization in the e-cigarette products studied, which makes it challenging to compare results across studies. Some research shows e-cigarettes to be useful in quit attempts, while other research shows that smokers are unsatisfied with the new devices and return to smoking tobacco cigarettes or maintain dual use of e-cigarettes and conventional cigarettes.[87] A recent review demonstrated that e-cigarettes with nicotine (vs. those without nicotine) increased quitting.[88] However, the evidence quality was deemed low, supporting the need for more research with both larger samples and modern products.[88]

E-cigarettes should not be used by youth, by non-smokers, or by ex-smokers who have quit altogether. It is imperative that we track trends and understand usage of e-cigarettes among youth and non-smokers and pursue strategies to counter the worrisome trends of growing use in these groups. Monitoring must also include those who engage in dual use (combustible tobacco and e-cigarettes) or have moved from cigarettes to e-cigarettes. Heart & Stroke believes that any tobacco control strategy needs to consider how e-cigarettes fit into a long-term strategy with the objective of eliminating commercial tobacco use in Canada.

Heated products

Heated products (marketed by industry as "heat not burn") are battery-powered devices that deliver nicotine in a vapour form by heating tobacco at a lower temperature than traditional combustible tobacco, sometimes below the point of combustion.[89] In essence, experts speculate that heated products occupy a position in the nicotine spectrum between regular combustible cigarettes and e-cigarettes: their tobacco base resembles that of regular cigarettes, while their mechanism of delivering nicotine primarily through vapour resembles that of e-cigarettes.[89] Heated products are manufactured by transnational tobacco companies and marketed as less harmful alternatives to combustible cigarettes, given the claim that they 'heat, not burn' tobacco, and therefore produce fewer harmful chemicals.[90,91]

To date, there is very limited independent or peer-reviewed research on these products and their health effects and as such, they are not recommended as a means to reduce risk. Critical evidence gaps remain regarding the public health impact these products may have at the population level. Heated products are a tobacco product and their use is discouraged by Health Canada and Heart & Stroke.

Endgame strategies and policies

Endgame strategies with goals to reduce tobacco use to under 5% have been a priority for a growing number of countries. Canada has committed to less than 5% tobacco use by 2035[92] but no provincial governments have followed.[93] Sweden, Finland, Scotland, Ireland and New Zealand have formally adopted Endgame targets with comprehensive plans and many other countries are in similar discussions.[37] Modelling studies have demonstrated that countries aiming to meet the 5% prevalence target by 2035 need to accelerate and expand tobacco control measures.[94,95] Research has found that current tobacco control measures will not be sufficient to achieve these goals by 2050, let alone 2035.[20] Instead, experts are calling for bold policy innovations and for the inclusion of Indigenous communities in the development of solutions.[37] With respect to Indigenous use of commercial tobacco, 'Nothing about us without us' is an important principle to guide the Endgame vision.[37] Since tobacco use is more prevalent in certain population groups, each of which has different resources, needs and priorities, tobacco control practitioners must work with people from these groups.[37]

Protecting Canadians

Reducing access for youth and young adults

Youth tobacco use

In 2017, 3.2% of Canadians in grades 7-12 reported current smoking according to the Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS).[2] This figure however, does not take into account Indigenous people living on reserve. Surveys of students found that tobacco use among youth has remained stable from 2014 to 2017.[2] Among grade 7-12 students in Canada, 18.4% report ever having tried a cigarette and 23.1% report ever having tried a tobacco product.[2] Student experimentation with tobacco products has remained fairly stable – 8.6% have tried waterpipes, 5% have tried smokeless tobacco, 4.7% roll-your-own cigarettes and 9% cigars – but there has been a recent increase of 11.5% in those ever trying cigarillos or little cigars.[2]

Smoking rates and consumption increase as youth get older.[2,16] In 2016-17, the prevalence of ever smokers increases from 8.6% among the grade 7-9 students to 28.1% for students in grades 10-12.[2,16] Among daily smokers in grades 7-9, consumption averaged 7.5 cigarettes per day, and eight cigarettes per day among those in grades 10-12.[2] The majority of student smokers, (80%) reported accessing cigarettes by social sources rather than through a retail store.[2,16]

The average age of smoking initiation among Indigenous people is 12 years, which is seven years earlier than non-Indigenous people in Canada.[7] Research shows that a younger age of smoking initiation is linked to a higher risk for nicotine addiction.[20] In Canada, smoking rates among Indigenous youth are at least three times higher than for non-Indigenous youth.[7] In 2012, daily smoking rates were 30.8% among Métis youth, 30.6% among First Nations youth and 56.6% among Inuit youth compared to 11% for non-Indigenous youth.[5-7] While overall smoking rates among Canadian youth had been decreasing, recent evidence shows an increase for the first time in 30 years.[3] Over the past three decades, a similar reduction has not been achieved among Indigenous youth.[7] This trend is especially pronounced in girls, indicating a widening gap in health equity between Indigenous and non-Indigenous young women.[7] Fortunately, quit attempts among Indigenous youth are increasing[7] and smoking rates among some Indigenous youth have decreased, however they have not declined at the same rate as the general population, creating a widening gap.[96]

Cessation among Indigenous youth is more difficult when their parents or siblings smoke.[97] In addition, mental health conditions such as depression increase the likelihood for addictions and tobacco use among youth.[98] Among Indigenous youth, low self-esteem, high levels of stress, boredom and low academic achievement all influence the initiation of tobacco use.[97,98] A study exploring First Nations youth in Saskatoon found that unhappiness with a person's home life and thoughts of suicide were both independent risk factors for smoking.[99] In Nunavut, where suicide rates are up to 11 times higher than the Canadian average, these findings are particularly relevant and underscore the need for integration of tobacco control into strategies focused on the determinants of health.[7]

Tobacco 21

Heart & Stroke is pleased to see momentum internationally to increase the minimum age of purchase for tobacco products to 21 years of age. Numerous jurisdictions have adopted this policy measure including several U.S. states (including California, Oregon, Hawaii, New Jersey, Maine, Virginia) and more than 400 U.S. municipalities (including New York City, Boston, Chicago, Cleveland, Kansas City, San Antonio and St. Louis), along with several countries (including Honduras, Kuwait, Mongolia, Palau, Samoa, Singapore, Sri Lanka and Uganda).[100,101] From 2016-2017, the Government of Canada led a three- step consultation titled *the Future of Tobacco Control in Canada: What We Heard*. Respondents to the online consultation component included non-governmental organizations, industry representatives, academics, other governmental bodies and members of the Canadian public.[102] When asked, 73% of respondents supported increasing the age of tobacco access to 21.[102] However, no province or territory has increased the age to 21 as of yet.[102]

Research found that laws increasing the minimum age of purchase for tobacco sales to 21 led to a greater decline in youth smoking rates.[103] A modelling study suggested that raising the minimum age of legal purchase for tobacco to 21 could result in significant declines of future tobacco use as it reduces the ability of youth to buy tobacco products and also prevents or delays tobacco use initiation.[104,105] It was also found that a minimum national age of 21 in the U.S. would lead to a decrease in smoking prevalence of 25% among 15-17 year olds and 15% among 18-19 year olds.[104] Young adults have been the least responsive to declines in prevalence and it is believed that further restricting access by age could be advantageous.[1,105] To limit any adverse implications with 18 year-olds who may be current smokers and already addicted to tobacco products, Heart & Stroke recommends that the increase be phased in gradually.

Tobacco-free environments

There is a good opportunity to restrict tobacco sales using retail reform to make tobacco less accessible by reducing the number of retail outlets. There is evidence showing that ubiquitous availability is associated with smoking-related behaviours, initiation and unsuccessful quit attempts.[106–110] Tobacco retailers should not be permitted to be located within close-proximity of schools nor should tobacco be sold in unsupervised areas (i.e., vending machines and online) as both contribute to increased access among youth.[107,110,111]

In 2017, the mean age at which ever smokers had tried their first cigarette was 16.5.[16] Given that the rates of tobacco use among young Canadians remains high and difficult to reduce, it is warranted to consider policy options that would restrict use in places where young Canadians spend a significant amount of time such as college and university campuses. Tobacco-free environments help ensure clean air through reduced second-hand smoke exposure and help to further de-normalize tobacco use among young Canadians. As of 2018, 65 colleges and universities in Canada had demonstrated leadership by creating smoke-free campuses but there is more left to be accomplished in this area.[112]

Commercial tobacco-free generation

The commercial tobacco-free generation is an innovative measure that would cut the industry off from any new young customers and offer strong protection for young Canadians. This measure entails using regulation to eliminate future sales of tobacco to the current generation of young people.[113] For example, a government could legislate that any person born after a given year would be prohibited from purchasing tobacco. This measure is practical and effective because the mechanism to limit sales to minors is already in place and works relatively well. It should be implemented in a gradual manner to ensure it does not entrap or criminalize those already addicted to tobacco products including those below the current legal age of purchase

for tobacco products. For instance, 12- or 13-year olds who are current smokers may be addicted to nicotine. As such, any new legislation should balance protection for these adolescents while allowing access for those already addicted to tobacco products. Heart & Stroke recommends that tobacco-free generation legislation should apply to commercial tobacco only, and not apply to traditional and cultural uses of tobacco.

Community programs

Youth-focused community programs which address the needs and context of various targeted groups can work in synergy with population-based measures. Indigenous participatory approaches – techniques with the objective of handing power from the researcher to research participants – that combine prevention and cessation strategies with a focus on understanding the community context needs are proving to be the most effective.[114,115] For example, a smoking prevention program in Alberta was culturally adapted for Indigenous children by incorporating the medicine wheel (symbolizing the spiritual, mental, emotional and physical aspects of health or wellness).[116] The program was found to significantly reduce future smoking intentions among Indigenous children and youth as compared to standard approaches.[116]

Taxation and price controls

Taxation is the most cost-effective tobacco control strategy.[35,117] It is well established that rates of tobacco use decline as price increases.[117] Youth have been found to be especially sensitive to price increases on cigarettes and as such, price is an important determinant of youth smoking behavior.[117,118] An effective pricing strategy must include frequent tax increases, adjusted to inflation, and eliminate sources of cheap tobacco.[35] Price controls through regulation are also necessary to prevent the industry from escaping the effects of tax increases.[35]

Illegal sales

Tobacco sales to minors are a key problem in both the illegal market and in the legal retail setting. Surveillance data from 2017 showed that 43.5% of youth smokers under the minimum age (15 to 18) who purchase tobacco reported obtaining their cigarettes from a regular retail outlet as their usual source.[16] Youth are more likely than adults to illegally purchase from a retailer rather than get them from a social source such as a friend or family member.[16] These trends have remained unchanged over recent years.[16] Higher penalties for those who sell to minors[119] and the threat of losing a tobacco retail license can act as a deterrent to those who might sell to minors. At present fines for Canadian retailers can be as little as a few hundred dollars. Health organizations fear this may not be sufficient to deter illegal retail sales.

Contraband

Contraband tobacco continues to be a concern, although it represents a small and decreasing source of tobacco consumption.[120] Contraband rates are often exaggerated by the tobacco industry as a tactic to stall public policy.[121] The issue of contraband is likely greater in provinces where there is more accessibility to an illegal market.[120] Contraband can be addressed with increased resourcing and collaboration among justice and law enforcement officials. It is important that the government increase penalties for smuggling tobacco or tobacco products (monetary fines and imprisonment) and ensure these penalties are well-advertised. Further research around youth use of contraband tobacco is also essential.

Smoke-free spaces

It is important to recognize that while significant strides have been made towards smoke-free spaces, there is still much work left to ensure all people in Canada have access to clean and safe air. Research from 2017 shows that 63.6% of Canadians reported being exposed to second-hand smoke in the past month and 13.3% of Canadians reported being exposed to second-hand smoke either every day or almost every day.[16] Second-hand smoke exposure was more prevalent among males, youth and young adults, and current smokers.[16]

There are a number of environments, such as multi-unit housing, where much more needs to be done to protect people from second-hand smoke. Reports indicate that only half of the designated smoke-free government subsidized multi-unit housing for seniors are smoke free.[122] This is due to smokers living in the building prior to the designation of these residences as smoke free by the Department of Family and Human Services.[122] Future vacancies are being filled by only by non-smokers to resolve this issue.[122] However the number of smoke-free building vacancies is limited and some people are unable to find smoke-free housing for their families.[123]

Outdoor public places

While cigarette smoking has been mostly banned nation-wide in indoor places (e.g., bars, restaurants, government and office buildings), there is still protection lacking in outdoor public spaces such as patios, parks, beaches, sports grounds, construction sites and university/college campuses. Halifax NS, Kentville, NS and Hampstead, QC are among the first municipalities in Canada to ban smoking on roads and sidewalks owned by the city.[124,125]

Other forms of tobacco such as herbal waterpipe, have grown in use but are often exempt from smoke-free public space regulation depending on the province. Several provinces and municipalities in Canada and countries including those in the Middle East have extended smoke-free regulations to include all water pipe use in restaurants, cafes and bars.[126]

Workplaces

All workplaces should be smoke-free but frequently that is not the case in Canada. As smoking is permitted in most outdoor workplaces, many non-smokers who work outdoors continue to be exposed to second-hand smoke. Workers at casinos and other establishments located in First Nations communities are sometimes not protected by smoke-free regulation. Quit rates are higher among workers who are not allowed to smoke at work compared to those working where smoking is not restricted.[127] The likelihood of smoking increases with the ability to smoke at work in all occupational categories.[128,129] Blue collar occupations (construction, trades, transport, equipment operator, processing, manufacturing) have the highest smoking prevalence rates.[67]

Indigenous communities

Indigenous communities face additional challenges related to smoke-free spaces. Some of these communities are not protected under provincial/regional smoke-free protection legislation, such that smoking is permitted in indoor public buildings. Indigenous people have indicated that the majority of tobacco use occurs inside the home, and as such, initiatives should be geared towards encouraging and creating smoke-free environments in the home.[130] Smoke-free homes in Indigenous communities are promising measures and are associated with reduced secondhand smoke exposure, quit attempts and reduced smoking initiation among children and youth.[130]

While there is limited Indigenous tobacco control specific research, some programs that help Indigenous families and people create a smoke-free home environment have been successful.[130,131] Experts indicate that supporting families in their ability to create smoke-free homes may decrease smoking behaviors in the long-term.[130]

Marketing and promotion

While much of tobacco marketing and promotion has been banned, some forms still exist in branded tobacco accessories and non-tobacco products such as lighters and matches. Tobacco use continues to be depicted in media and entertainment.[132,133] There is also exposure to tobacco and smoking over digital and social media.[134] Celebrities and online personalities are often portrayed using these products creating images of glamour and coolness.[135,136]

Gender-specific marketing

The tobacco industry recognizes that the product and its package are valuable marketing spaces. It uses them as tools to advertise imageries of glamour, sexiness, masculinity, fun and appeal.[11,34] Slim and super slim cigarettes are also a marketing tactic used to convey imageries of glamour that play on stereotypes around women's body image.[11,32,137,138] Research shows that smokers of slims and super slims falsely believe that these cigarettes are not as harmful as regular cigarettes.[137]

Plain and standardized packaging

The quick implementation of plain and standardized tobacco packaging of all tobacco products in Canada is critical. This includes one format of cigarette pack (slide-and-shell); strict controls over brand and variant names; and enhanced, continually refreshed package health warnings. Plain and standardized packaging has been endorsed by the World Health Organization and adopted in Australia, Ireland, France, United Kingdom, Hungary, New Zealand, Norway and Slovenia to name a few.[139]

Plain and standardized tobacco packaging has a variety of benefits including accelerated declines in tobacco use.[139–145] The policy is also associated with curbing deceptive marketing messages, increasing the visibility and effectiveness of health warnings, reducing tobacco use appeal among youth and promoting smoking cessation.[144,145] After the policy's implementation in Australia, positive image association ratings fell for all tobacco brands, and the greatest decline was reported in adolescent smokers.[143] This policy has been associated with greater rates of intentions to quit, concerns around smoking and quit attempts.[146] In Australia, more smokers disliked their packs and perceived the pack to be less appealing.[147,148] In addition, fewer smokers reported that brands differed in prestige after the policy's introduction.[149]

The product itself should be unappealing: banning slim cigarettes, using dissuasive colours and mandating quit messages or health warnings such as "tobacco kills" on the product itself. Recent research found that the use of unappealing colours and health warnings on cigarettes were associated with a reduced likelihood of use and less favourable product perceptions.[150] Such messages on each cigarette itself could be highly effective in dissuading use and increasing quit attempts.[150]

On-screen smoking

Research has shown that children and teens are impressionable, and that on-screen smoking can increase the likelihood that they will try smoking. One study reported that 37% of smokers may have started smoking after being exposed to smoking in movies.[8] In Canada children are exposed to a significant amount of smoking in youth-rated (G, PG, 14A) films. Ontario specific research found that from 2002-2018, 87% of movies with on-screen smoking were child/youth-rated.[151] Furthermore, more than half of top-grossing popular films in that same time period featured tobacco imagery.[151] In assessing the impact of on-screen smoking, modelling studies suggest that at least 185,000 Ontario children and teens will be recruited to tobacco use by exposure to on-screen smoking and about 59,000 of these newly recruited smokers will die prematurely from smoking-related disease.[151]

Some countries have chosen to mandate warnings or health messages in film or television programs depicting tobacco use.[152] However, it is not clear whether mandated warnings are effective at reducing the harms associated with exposure to onscreen tobacco. A better alternative suggested by the U.S. Surgeon General, is to give films that depict smoking an adult rating.[8] This could reduce the youth smoking rate by 18%.[8] It is estimated that assigning an 18A (adult accompaniment) rating to movies with smoking in Ontario could avert more than 30,000 tobacco-related deaths and save more than half a billion dollars in future healthcare costs.[151]

Retail promotion

Most smokers in Canada (85%) purchase their cigarettes from a retail source.[16] The retail setting remains a key area for marketing and retailers continue engaging in promotional activities even though visible retail displays are banned.[153,154]

Recent Canadian reports indicate that the tobacco industry has given retailers incentives for achieving sales targets.[153] In particular, bonus payments are rewarded for reaching targets and retailers have been entered into draws for a chance to win a vacation.[153] In Quebec, this type of promotion between manufacturers and retailers was traditionally permitted in tobacco control legislation but has recently been banned due to the presence of various retail marketing schemes which were deemed to be a gap in regulation.[153] Tobacco companies in Quebec were found to have developed retail programs promoting and pushing certain brands, promoted larger purchases (duo-packs), and discounted prices to create competition.[153] Overall, there is a strong need to prohibit incentive payments to retailers for tobacco sales and/or promotion as retailers are currently driving sales of certain products.

Flavours

Flavours and additives are an appealing form of marketing often used to entice children and youth. Menthol is an additive which masks the harshness experienced at smoking initiation and going forward.[155] Menthol was previously exempted in federal tobacco regulations on flavors and as such, some provinces enacted bans on menthol cigarettes in the intervening years. A national ban on menthol in cigarettes, most cigars and blunt wraps came into force in October 2017 and extended to all tobacco products in November 2018.

Despite progress on menthol cigarettes, flavours still exist in a range of tobacco and tobacco-related products. In a recent study, users of non-cigarette tobacco products were asked if any of the products they had used in the last 30 days were flavoured.[18] Overall, 60.4% of those who had used any non-cigarette tobacco products in the last 30 days had used a flavoured product.[18]

As such, an area of great opportunity is a Canada-wide comprehensive ban on all flavours in all tobacco products, including herbal shisha. Herbal shisha is commonly perceived as harmless and appealing with attractive flavours and packaging though it often contains tobacco or other harmful ingredients.[156] Quebec has banned flavoured herbal shisha.

Cessation

Helping tobacco users reduce and quit is another key component of tobacco control. It is never too late to quit smoking. There are health-related and non-health-related benefits to becoming tobacco-free at any age including for those who have developed smoking-related illnesses such as heart disease and stroke.[20]

Tobacco is an addiction. Treating tobacco use is similar to treating a chronic condition that requires ongoing support.[20] Most people try to become tobacco-free without help but, without additional support, they may face greater challenges than those who do so with assistance. Family, friends, employers and health professionals are integral in creating supportive environments that help people become or remain tobacco-free. Research indicates that smokers may benefit from specially designed self-help materials or brief individual and group counselling (through telephone quit lines and health professionals).[157] These help build insight about smoking, self-confidence to quit, and motivation to take action.[157] Health professionals are best suited to recommend effective treatments that will increase the likelihood of becoming and remaining tobacco-free.

Cessation strategies

A comprehensive, coordinated, population level cessation program is necessary as part of a tobacco control strategy.[37] Although prevention strategies are central to achieving tobacco prevalence rates of less than 5% by 2035, they alone are insufficient.[158] To reach this goal, the absolute number of smokers in Canada will need to fall from approximately 5.2 million today to less than 2 million, an annual decrease of some 200,000 smokers.[159] People who are addicted to tobacco industry products must receive evidence-based cessation help when and where they want it and without barriers.[10] New approaches are needed to specifically target populations with the highest smoking rates.[160] Governments should substantially increase cessation initiatives and work with healthcare institutions and designated health professionals to provide cessation advice and services as part of a strengthened and integrated cessation system.[160,161] It is important to leverage best practices in cessation and also remain flexible to support hard to reach groups which may require tailored approaches. Clinical frameworks for smoking cessation such as the Ottawa Heart Model for Smoking Cessation have been successful in increasing quit rates and improving health outcomes over the long term.[162]

Access and affordability

Proven cessation tools should be free of charge to all people in Canada without limits on quit attempts. There are promising examples of this type of policy around the world including coverage and supply of nicotine replacement therapy (NRT) products and subsidization of specific smoking cessation prescription drugs.[161,163] In British Columbia, the Smoking Cessation Program supports those trying to quit smoking or tobacco products by covering 100% of the cost of NRT products, or contributing to the cost of specific smoking cessation prescription drugs[164] In Ontario, under the coverage of new OHIP+ program, youth aged 18-24 years (who have OHIP coverage and are not covered by a private plan) are eligible for up to a year of free counseling from a pharmacist or health care provider and two types of cessation medication (Champix or Zyban).[165] In addition, those leaving hospitals in higher risk communities are provided with free nicotine replacement therapies through quit cards[166] Such policies and programs can reduce barriers to access, which minimize difficulty for smokers to join a quit program and access support. If a national pharmacare program is established, NRT and other prescription-based quit aids should be included to ensure they are universally available.

Cessation messages

Currently there are eight cessation messages appearing on a rotated basis inside cigarette packages, either on the slide of slide and shell packages or on an insert. As inserts in tobacco products are easy to discard,[167] cessation and health messages should be a permanent fixture on the interior of tobacco packages and products as implemented in other countries rather than an insert. Cessation messages on cigarette packages should encourage quit attempts using best practices such as NRT, counselling and pharmacological support.[168] Health and quit messages can also be printed on cigarettes themselves to encourage quit attempts and dissuade use.[150]

Targeted approaches

Integrating smoking cessation support in social and community organizations that are already working with disadvantaged groups is an effective way to reduce smoking rates.[169] There is a need to develop and fund community cessation programs that are accessible, non-judgmental, holistic and empowering in combination with social support.[169,170]This approach to cessation programming has been deemed effective with vulnerable populations.[170] Research shows high acceptance of monetary and non-monetary rewards as a smoking cessation strategy among disadvantaged groups[171] and that financial incentives rewarding participation increase recruitment rates (which may in turn be expected to deliver higher numbers of successful quitters).[172]

It is also important to target approaches for women, as research has shown that women have more difficulty quitting than men and higher relapse rates.[24,173] Women's experiences with smoking and quitting are influenced by complex factors such as biological, physiological and psychosocial factors.[173] Women start smoking for different reasons than men – some use it as a coping mechanism to deal with negative feelings and gender-based stresses, such as unpaid work and weight control.[174] This requires cessation efforts to understand and tailor efforts to suit women's needs.[174]

Targeted smoking cessation interventions to young adults working in "blue-collar" occupations may be the most promising way to reach a large number of young adult smokers.[69] Rates of commercial tobacco use are traditionally higher among people living in rural, remote and northern communities.[1] People living in such areas are often additionally burdened by limited access to healthcare services. As such, smoking cessation counselling provided by telehealth videoconferencing has been demonstrated to be effective in rural and remote regions of Alberta and the Northwest Territories.[175]

First Nations smokers, even when highly motivated to quit, are less likely to use NRT than other Canadian smokers.[7] Physician groups attribute this to First Nations smokers actively deciding not to pursue physician services and general reluctance towards utilizing drug therapy[7], and as such it is recommended that the need for a physician prescription for subsidized products be eliminated for Indigenous Peoples.[7,98] Easier access to quit aids can improve uptake.[171] Quit lines have been deemed more effective for Indigenous smokers compared to non-Indigenous smokers.[7] Quit lines are cost-effective[157,176] and should be available in all provinces and territories, as is currently the case.

Among Indigenous communities, a holistic approach that addresses psychosocial and socioeconomic factors (e.g., unemployment, housing, domestic violence, addictions, mental health problems and past trauma) increases the likelihood of successful cessation.[7,97,177,178] Reviews of Indigenous cessation programs found that components to success were: "culturally relevant; involved local orientation and facilitation; were flexible, responsive and holistic; included facilitator training; highlighted traditional activities, knowledge and values; recognized contemporary lifestyles; cooperated with existing systems and resources; showed a high degree of respect and trust in the individuals and groups involved; and created partnerships."[7]

Another effective Indigenous approach to smoking cessation is mentorship by Elders or the inclusion of healing, spiritual or cultural practices.[98] Elders in Indigenous communities represent a culturally relevant but often underused resource and communities have shown leadership by drawing upon their wisdom to influence and help decrease tobacco use.[7,98]

There is an opportunity to increase the collaboration between mental health services and referrals to cessation programs

such as quit lines. Creating tobacco-free mental health facilities will help eliminate triggers for those within the hospital (patients/staff) who are trying to remain tobacco-free. There is a need for more Canadian-specific research on this issue, as well as research on how to tailor cessation programs to smokers with co-morbidities.[56]

Pharmaceutical aids

There are currently two types of medical gold standard and proven cessation pharmaceutical therapies to help smokers become smoke-free; those that contain nicotine referred to as nicotine replacement therapy (NRT) and those that do not (i.e., pills containing bupropion hydrochloride or varenicline tartrate).[157]

Nicotine replacement therapy

There are five types of nicotine replacement therapy (NRT) currently available in Canada. These include nicotine gum, which is sold over the counter in 2 mg and 4 mg strengths, the nicotine patch, which is sold over the counter in 16 and 24-hour varieties, a nicotine inhaler which is sold over the counter and is available in a 10 mg cartridge, nicotine lozenges which are available over the counter in 2 mg and 4 mg strengths, and nasal sprays which are available over the counter. Those trying to quit may need to use higher dosages of nicotine replacement therapy and/or use them over months or years instead of weeks. Health professional should be consulted when considering using a combination of nicotine replacement therapies.

Pharmaceutical aids that do not contain nicotine

Bupropion hydrochloride (e.g., Zyban®, Wellbutrin®) and varenicline tartrate (i.e., Champix®) are pharmaceutical therapies that do not contain nicotine and help to prevent nicotine cravings. These are available by prescription only.

Building capacity in tobacco control

Working with partners

As a result of funding cuts to health organizations and other challenges, many tobacco control organizations have been forced to reduce staff or close their doors and this has reduced tobacco control activity across the country. Sustained funding is essential to rebuild and maintain traction over the short term, but also ensure a long-term plan as these organizations often act as watchdogs over the tobacco industry and provide innovative policy ideas, programming and research.

Working with Indigenous communities and leaders is essential to address the high rates of commercial tobacco use. Solutions are best developed by partnering and working alongside Indigenous groups. Indigenous organizations have requested sustained and long-term funding from governments to develop strategies. From 2012 to 2017, the Federal Tobacco Control Strategy allocated $22 million for tobacco control in Indigenous communities across seven provinces and one territory.[179] Although this is a small step towards recognizing the need for cessation and control strategies to manage high smoking rates in First Nations and Inuit communities, it is not nearly enough. Further funding for prevention and cessation programs is needed if the government intends to see significant reductions in smoking rates and true improvements in community health.

The World Health Organization Framework Convention for Tobacco Control (FCTC) is an international treaty negotiated under the auspices of the World Health Organization which sets a vision and specific policy measures to reduce the global and domestic burden of tobacco use.[180] Tobacco is a global epidemic requiring a coordinated worldwide plan. In addition to implementing FCTC recommendations, Canada can play a leadership role by offering financial and human resources to the FCTC Secretariat to support the development of global mechanisms to monitor the tobacco industry, conduct research, and transfer knowledge.

Research

Heart & Stroke advocates for increased tobacco control research and welcomes submissions on these topics to its research programs. Specific streams of funding for tobacco control research are available through either the Canadian Institutes of Health Research (CIHR) or other research agencies. It is also important to develop funding opportunities for students, early- and mid-career researchers utilizing both quantitative and qualitative research methods. Qualitative research can address policy questions and allow tobacco control organizations to build evidence on how to better reach disadvantaged and other sub-populations through our tobacco control efforts. Furthermore, research focusing on Indigenous tobacco control should be carried out by or in collaboration with Indigenous researchers.

Financing

The total cost of Canada's tobacco control strategy should be funded by the industry through annual and sustained recovery fees. At present, Canada does not fund our tobacco control strategy at a rate comparable to the U.S. nor align with Centre for Disease Control (CDC) recommended best practices for population-based tobacco control.[181] The regulatory and fiscal policy measures governing tobacco companies in Canada are not proportionate to the level of harm and burden inflicted by the tobacco industry. Cigarettes kill at least half of long-term regular users[15,22] when used exactly as intended, cause immeasurable loss of quality of life, burden the healthcare system, and cause a host of other social and environmental harms.[23] Economic levers in tobacco control should concentrate on reversing this situation by fundamentally transforming all of the ways in which tobacco companies are permitted to operate in Canada.

Experts recommend a comprehensive pricing strategy that combines substantial excise tax increases and other mechanisms to ensure that high prices serve to deter tobacco use initiation and promote quitting.[35] An innovative fiscal policy measure recommended by Heart & Stroke is a cost-recovery fee charged to tobacco companies operating or selling in Canada. The fee, proportional to a company's market share, could be used to fully recover the costs of the Federal Tobacco Control Strategy. Fines for selling contraband tobacco could also be re-invested in the tobacco control strategy.

Transparency

The tobacco industry has a vested interest in growing sales, in conflict with public health goals and policy. According to the World Health Organization, the tobacco industry works to derail or weaken strong tobacco control policies, a concept known as tobacco industry interference.[182] Interference takes many forms such as:

- Manoeuvering to undermine the political and legislative process
- Exaggerating the economic importance of the industry
- Manipulating public opinion to gain the appearance of respectability
- Fabricating support through front groups
- Discrediting proven science
- Intimidating governments with litigation or the threat of litigation[182]

Prevention of industry interference in policy (per Article 5.3 from the Guidelines to the Framework Convention on Tobacco Control) aims to ensure that the interest of public health is not compromised.[180] To fully implement Article 5.3 in Canada, all sectors of the government must develop mechanisms which make the tobacco industry accountable and increase transparency.[152] Public education about both the harmful nature of industry products and industry strategies to undermine public health policy will facilitate better transparency. It would also be beneficial to require public disclosure of industry information that has been provided to government.

Article 5.3 also calls for all government bodies not to have financial interest in the tobacco industry given that investing in such companies creates a conflict of interest for government.[180] Governments are caught between the aim to drive down tobacco use, protect public health, and maximize their return on investments.[180] In Canada, the Canada Pension Plan, Quebec Pension Plan and B.C. Investment Management Corp are among those that have tobacco industry investments. The government of Alberta formally divested all tobacco stock and pressure for tobacco-free portfolios is gaining traction.[183] Similar approaches are being adopted by national governments in Australia and the Netherlands.[183]

While no country has become a world leader and fully implemented measures that protect against interference, many countries (Australia, Brazil, Ecuador, Mongolia, New Zealand, Norway, Philippines and the U.K.) have introduced guidelines for public servants and elected officials regarding interaction with and accepting funding from representatives of tobacco firms.[184] This also extends to tobacco industry front groups (organizations claiming to represent one agenda while in actuality serving other parties with hidden interests) and any organization to which they provide funding that may have a stake in impeding tobacco control.

Policy Options

While the majority of smokers reported smoking daily and the burden of tobacco use is highest among daily and heavy smokers, there is a need to reduce tobacco use among occasional smokers as well.[16] Tobacco control strategies also need to reduce this figure and consider measures which could move occasional smokers to become former smokers.

Heart & Stroke is among a group of leading organizations working to guide Canada to become a tobacco-free country. To accomplish this, we are developing our own Endgame strategy to achieve a bold but realistic target of less than 5% tobacco use in Canada by 2035. Heart & Stroke has articulated a nimble, long-term strategy, with sustained intensity that affirms a whole-of government approach. Along with our partners, we call for a fundamental shift in focus: a shift to focus on the disease vector itself – the tobacco industry. We also aim to offer greater assistance to those most afflicted by industry tactics and products and greater protection to those affected by second-hand smoke.

To achieve our Endgame goal, Heart & Stroke recommends that the following policy options be pursued across Canada:

People in Canada

1. Be tobacco-free: Ensure that those who are currently tobacco-free – particularly children and youth – remain tobacco-free, and those who currently smoke cigarettes or use commercial tobacco, become tobacco-free as soon as possible. Visit http://www.heartandstroke.ca/heart/risk-and-prevention/lifestyle-risk-factors/smoking-and-tobacco to learn more.
2. Understand the harms of tobacco use and secondhand smoke, the benefits of becoming tobacco- and smoke-free, and cessation aids that are available to assist them to become tobacco-free.
3. Create, maintain and support smoke-free spaces to protect family and friends from the effects of second-hand smoke. Make your car and home smoke-free and avoid public places that are not smoke-free.

4. Learn about and call attention to the marketing strategies and tactics of the tobacco industry that target young Canadians and new smokers by making tobacco and e-cigarette use seem “cool”, “fun”, “appealing” or “liberating.”
5. Raise your voice: Work with organizations such as Heart & Stroke to influence all levels of government to take action on tobacco control. Find out how to get involved at https://www.heartandstroke.ca/get-involved.
6. Promote and encourage adoption of tobacco control policies to create healthier environments in the places we live, work and gather.
7. Seek investments that are free of tobacco industry stock as a means to create more demand for such financial products.

Governments

Legend F: Federal P/T: Provincial/Territorial M: Municipal

1. The Federal Government has endorsed the Endgame goal of less than 5% tobacco use by 2035. However, pan-Canadian support is required. Provinces and territories need to endorse the Endgame goal, and along with municipalities should take stronger action steps with specific targets and goals for different segments of tobacco users. Specific targets for quit rates, quit attempts, and per day consumption are necessary and targets for high risk or hard-to-reach groups should be developed in collaboration with those communities. (F, P/T, M)
2. Modernize and strengthen tobacco control to include innovative and bold strategies, for example, a licence fee on all tobacco companies operating or selling in Canada. (F, P/T, M)
3. Adopt an Endgame strategy that incorporates a whole-of government approach. This requires considering tobacco as more than simply a health issue, but one that requires commitment from a broad range of federal departments. A whole-of government approach includes a: (F, P/T, M)
    - Shift in focus to the disease vector itself – the tobacco industry.
    - Divestment of tobacco industry stock by all governmental and quasi-governmental bodies.
    - Commitment from finance departments/ministries in all levels of government on economic levers to reduce tobacco burden.
    - Implementation of article 5.3 of the Framework Convention for Tobacco Control which prohibits tobacco industry interference in the public policy process. Implement guidelines for public servants and elected officials prescribing how they should interact with representatives of tobacco firms and organizations which receive funding from the tobacco industry.
    - Development of mechanisms that make the tobacco industry accountable and increase transparency.
    - Commitment of trade and agricultural departments among others to use a “health in all policies” lens when assessing tobacco control solutions for Canada.
    - Commitment of justice departments to strict enforcement of penalties for trafficking and sales of tobacco contraband.
4. Facilitate greater cooperation and coordination between federal and regional governments including Indigenous communities. Provinces, territories and municipalities should be encouraged and supported to collaborate and align their tobacco control objectives and plans with those of the new federal strategy, where feasible. (F, P/T, M)
5. Reduce youth accessibility to tobacco by:
    - Increasing the minimum age to be sold tobacco products to 21 years of age. (F, P/T)
    - Legislating/regulating a tobacco-free generation. For example, under this legislation people born after a given year would be prohibited from purchasing and using tobacco products. This would apply to commercial tobacco only, and not traditional and cultural uses of tobacco. (F, P/T)
    - Restricting tobacco sales in the medium-term to a limited and reduced number of government-controlled outlets, and not within close proximity to schools. (P/T, M)
    - Prohibit all tobacco use on elementary and secondary school grounds.(P/T)
    - Mandate tobacco-free university/college campus policies to both ensure clean air and to further de-normalize tobacco use among young Canadian adults. (P/T, M)
    - Incorporate comprehensive and sustained tobacco prevention education in schools. (P/T)
    - Mandate an annual licence fee on retailers who sell tobacco. Issue a limited and decreasing number of permitted tobacco retailer licenses each year. Raise the cost of licence fees to make the sale of tobacco less attractive to retailers, and to recover enforcement and other costs. (P/T, M)
6. Create supportive environments that make quitting tobacco use easier and offer protection from second-hand smoke:
    - Adopt effective measures to protect residents from second-hand smoke in multi-unit dwellings. (P/T, M)
    - Work with and encourage smoke-free public spaces in Indigenous communities for commercial tobacco. (F, P/T, M)

- Establish regulations for tobacco use in the workplace including trades and workers who are primarily outdoors. (P/T, M)
- Enhance smoke-free protection in areas under government jurisdiction, for example, by requiring specified outdoor areas to be smoke-free and by ensuring that herbal shisha is covered under tobacco laws and that places free of tobacco smoke remain free of cannabis smoke. (F, P/T, M)
- Ban smoking in outdoor public spaces including patios, playgrounds, doorways, beaches, parks, outdoor sports facilities, recreation facilities, bus stops, spectator stands and university/college campuses. (F, P/T, M)
- Prohibit smoking or carrying lighted tobacco in a motor vehicle while a person who is under the age of 19 is present in the vehicle. (P/T)
- Mandate that all healthcare and mental health facilities become commercial tobacco-free (in-patients, out-patients, volunteers, staff, physicians and visitors should not be allowed to smoke or use tobacco on the property and the hospital should not sell tobacco products). (P/T)

7. Give consideration to how e-cigarettes fit into a long-term strategy with the objective of eliminating commercial tobacco use in Canada. Protect Canadians from e-cigarettes by:
   - Adopting comprehensive restrictions on advertising and promotion, including strict restrictions by regulation under the federal Tobacco and Vaping Products Act. (F)
   - Including a ban on retail displays (with an exception for specialty vape shops where the age of entry is 18 years and over). (F,P/T)
   - Prohibiting use of e-cigarettes wherever smoking is banned. (F,P/T,M)
   - Banning sales to minors, and increasing the minimum age for both tobacco and e-cigarettes to 21. (F,P/T)
   - Prohibiting the sale of e-cigarettes wherever the sale of tobacco is banned. (F,P/T,M)
   - Requiring that the sale of e-cigarettes only take place in specialty vape shops where the age of entry is 18 years and over. (F, P/T)
   - Banning all flavours in e-cigarettes given their proven appeal to youth. (F)
   - Imposing a limit on nicotine concentration with an exception for higher limiters in vaping products that support tobacco cessation. (F)
   - Mandating standardized vape designs including standardization of colours, shapes, and other features that can be used to make the devices attractive to youth. (F)
8. Develop a policy framework that is nimble and able to respond to future concerns as they emerge, including: (F, P/T)
   - Monitor and conduct research and implement policies in response to marketplace developments.
   - Require detailed company reports regarding sales volumes, prices, marketing expenditures, additives/ingredients in the product, research activities, and other information.
   - Require that all reported information be publicly disclosed.
   - Recognize and monitor for loopholes in existing and upcoming tobacco regulation (flavours, plain and standardized packaging, heated, e-cigarettes).
9. Ensure the quick implementation of outstanding plain and standardized tobacco packaging of all tobacco products including rotating mandatory health warnings directly on cigarettes themselves. (F)
10. Implement a total ban on tobacco marketing and promotion: (F, P/T)
    - Including a ban on tobacco branded tobacco accessories and non-tobacco products.
    - Introduce mandatory hard-hitting anti-tobacco ads to accompany all entertainment that depicts tobacco use, including movies, television, music videos, and video games.
    - Monitor exposure to tobacco and smoking over traditional entertainment including television and film as well as new forms such as digital and social media and assess its impacts.
    - Consider ways in which policies can control marketing produced elsewhere but seen in Canada, and work with international partners to address the issue.
    - Prohibit tobacco manufacturer/distributor incentive, promotional or other payments to retailers.
11. Reduce tobacco marketing aimed at youth by: (F, P/T)
    - Ensuring that movie ratings make tobacco imagery a criterion for 18A (adult accompaniment) classification, with the exception of depictions of historical figures and unambiguous descriptions of the negative health consequences of tobacco use.
    - Making youth-related films with tobacco-related imagery ineligible for provincial film subsidies.
    - Introducing mandatory hard-hitting anti-tobacco ads accompanying all entertainment including movies, television, music videos and video games that depict tobacco use.

12. Strengthen existing regulation or introduce new legislation to implement a Canada-wide comprehensive ban on all flavours in all tobacco products, (including cigarette papers) as well as in all herbal shisha. (F, P/T)
13. Implement substantial tobacco tax increases for all tobacco products, and index tobacco tax rates to inflation. Ensure that high prices serve to deter tobacco use initiation and promote quitting while funding the tobacco control strategy and making it more difficult for the tobacco industry to remain profitable. Establish other tobacco tax-related measures that include: banning duty-free tobacco sales; establishing a maximum duty-free import limit of 25 cigarettes or equivalent for other products; establishing a tax on herbal shisha at the same rate as on loose tobacco. (F, P/T)
14. Monitor, fund and implement measures to curb contraband tobacco. (F, P/T) Become a Party to the international contraband treaty, the *Protocol to Eliminate Illicit Trade in Tobacco Products.*
15. Aggressively pursue medicare cost recovery lawsuits against the tobacco industry to bring the cases to trial and ensure that public health is the priority in these lawsuits. (F, P/T)
16. Raise awareness on the harms of tobacco and tobacco industry tactics by implementing: (F, P/T)
    - Culturally appropriate and sensitive media and awareness campaigns targeted at those more likely to use tobacco, (e.g., youth, Indigenous people, racialized groups, low-income communities, people with mental health conditions, and blue collar workers).
    - Public awareness and education campaigns to inform Canadians of the strategies and tactics used by the tobacco industry.
17. Support and strengthen cessation through: (F, P/T)
    - Improved access to best practice cessation services.
    - Subsidized programs and aids that help people become tobacco-free (e.g., nicotine replacement therapy products and other pharmaceutical products).
    - Universal access to services and therapeutics. These should be covered under public health care plans without restrictions.
    - Targeted services for high-risk populations (Indigenous people, blue collar workers, those with mental health conditions and low-income peoples) and those having difficulty with quit rates.
    - Mandating that interior messages become a permanent fixture on tobacco packages, such as on the slide of mandatory slide and shell packages.
    - Require that messages be printed directly on cigarettes to promote quit attempts and dissuade use.
    - Address the connection between mental health and tobacco use through collaboration with departments and organizations that work in mental health such as the Centre for Addiction and Mental Health (CAMH), and the mental health community.
18. Work in collaboration with Indigenous leaders, organizations and communities, to develop and support strategies to reduce commercial tobacco use including: (F, P/T)
    - Set commercial tobacco prevalence reduction targets.
    - Eliminate the sale of discount tobacco sales on and off reserve to reduce affordability – especially to youth.
    - Develop and implement strategies to increase the cost of manufacturing and distributing tobacco products to impact sale of tobacco.
    - Mandate smoke-free dwellings, workplaces and public places, including outdoor spaces.
    - Bans on tobacco advertising.
    - Improve access to cessation support including counselling, and programs, as well as financial support for nicotine replacement therapy and pharmaceuticals which increase success.
    - Work with Indigenous communities to ban illegal tobacco production, manufacturing and distribution of tobacco.
19. Recognize tobacco control as a worldwide issue and support global advancement. (F)
    - Continue to work closely with the Framework Convention for Tobacco Control (FCTC) secretariat and Framework Convention Alliance (FCA) to demonstrate a leadership role in the implementation and advancement of tobacco control at the global level.
    - Offer financial resources to the FCTC Secretariat and/or FCA to support the development of global mechanisms which will monitor the tobacco industry, conduct research and transfer knowledge.
20. Build capacity in tobacco control. (F, P/T)
    - Continue to support research at various academic institutions that are hubs for excellence in tobacco control research.
    - Offer specific streams of funding for tobacco control research either through CIHR or other research agencies.
    - Consider and build funding opportunities for students, early and mid-career researchers.

Employers, corporations and institutions

1. Offer protection from second-hand smoke:
    - Establish policies for tobacco use in the workplace including trades and workers who work primarily outdoors.

- Ban smoking in outdoor public spaces, particularly within a specified distance from workplace buildings.
- Prohibit e-cigarette use in places where smoking is banned.
- Mandate that all healthcare and mental health facilities become tobacco-free (in-patients, out-patients, volunteers, staff, physicians and visitors should not be allowed to smoke on the property and the hospital should not sell tobacco products).

2. Include cessation support including access to counselling, pharmacological aids and nicotine replacement therapy in benefits programs.
3. Strive to ensure investment and pension plans are free of tobacco industry funds.

Research funding agencies/organizations

1. Increase funding for clinical, behavioural and public policy research to learn more about effective ways to help people, particularly vulnerable populations to become tobacco-free.
2. Increase funding for research to understand the social and cultural factors that lead individuals, including Indigenous, those with mental health conditions, and youth, to begin and continue smoking.
3. Research on tobacco use among sub-populations should be both qualitative and quantitative to address the factors that contribute to tobacco initiation and barriers for quitting.
4. Fund Indigenous and women researchers in the area of tobacco control.
5. Investigate the relationships between smoking prevalence and certain occupations.
6. Gender and equity lenses should be a requirement for research, policies and programs in tobacco control.
7. Maintain a policy of refusing to accept funding from the tobacco industry or associated entities.

Healthcare leaders and providers

1. Adopt the Ottawa Model for Smoking Cessation in primary care and hospital settings:
   - Train health professionals in effective ways to help Canadians become tobacco-free.
   - Become familiar with the principles and practice of smoking cessation, including assessment, counseling, pharmacotherapy, ongoing support, and relapse prevention strategies.
   - Provide individualized treatment strategies for patients who smoke.
   - Identify, monitor and follow up on treatment for patients who use tobacco.
   - Implement tobacco-free policies for facilities.
2. Implement and adhere to the Canadian Cardiovascular Society's smoking cessation strategy recommendations for Cardiovascular Specialists.[17]

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