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3 **TITLE: Missed opportunities to promote tobacco control, physical activity and**
4 **healthy eating? A systematic assessment of Canadian laws**
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6 **SHORT TITLE: Health behaviour laws in Canada**
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9 **AUTHORS:** Katerina Maximova, PhD^a; Kim D. Raine, PhD^a; Christine Czoli, PhD^b; Jennifer
10 O'Loughlin, PhD^c; John Minkley, JD^d; Tania Bubela, PhD, JD^e
11

12 **INSTITUTIONAL AFFILIATIONS:**

- 13 a School of Public Health, University of Alberta, Edmonton, AB
14 b School of Epidemiology and Public Health, University of Ottawa, Ottawa, ON
15 c School of Public Health, University of Montreal, Montreal, QC
16 d Faculty of Law, University of Alberta, Edmonton, AB
17 e Faculty of Health Sciences, Simon Fraser University, Vancouver, BC
18
19

20 **CORRESPONDING AUTHOR:** Katerina Maximova, PhD
21 School of Public Health, University of Alberta,
22 3-268 Edmonton Clinic Health Academy
23 Edmonton, AB, T6G 2T4, CANADA
24 Tel: 1-780-248-2076; Fax: 1-780-492-8934
25 email: katerina.maximova@ualberta.ca
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ABSTRACT

Background: Legal interventions are important mechanisms for chronic disease prevention (CDP). Unlike tobacco control legislation, Canadian laws to promote physical activity and healthy eating have not been systematically assessed.

Methods: Using the CPAC Prevention Policies Directory, we identified 786 federal and provincial laws targeting tobacco use, physical activity and healthy eating. We systematically characterized the legislation with regard to its purpose, tools to accomplish the purpose, responsible authorities, target location, level of coerciveness, and provisions for enforcement.

Results: Two-thirds of tobacco control legislation had a primary CDP purpose (6% explicit; 63% implicit) and 29% had a secondary CDP purpose. One-third of physical activity legislation had a primary CDP purpose (8% explicit; 22% implicit) and 50% had a secondary CDP purpose. In contrast, 62% of healthy eating legislation had no CDP purpose. Tobacco control legislation was most coercive (restrict/eliminate choice), while physical activity and healthy eating legislation was least coercive (provide information/enable choice). Most (84%) tobacco control legislation included provisions for enforcement, while 43% and 21% of physical activity and healthy eating laws, respectively, included such provisions. Patterns in responsible authorities, target populations, settings, and tools to accomplish its purpose (e.g., taxation, subsidies, advertising limits, prohibitions) also differed between legislation targeting tobacco control vs. physical activity and healthy eating.

Interpretation: Compared with tobacco control, stronger legislative approaches to promote physical activity and healthy eating lag behind. Results serve as a baseline for building consensus on the use of legislation to support CDP approaches to reduce the chronic disease burden among Canadians.

INTRODUCTION

Legislative and regulatory approaches have emerged as important mechanisms for chronic disease prevention (CDP), whereby governments use law as a tool to create health-supporting environments that enable behaviour change.¹⁻³ Growing evidence demonstrates public health impact of legal interventions such as taxation and subsidies; appropriate packaging, labelling and composition standards; and marketing restrictions as key cost-effective components within a comprehensive CDP strategy.⁴⁻⁷ At the United Nations High-level Meeting on noncommunicable diseases in September 2018, Canada along with other governments reaffirmed its commitment to urgent implementation of robust legislative and regulatory measures targeting key lifestyle behaviours,⁸ to support action on reducing the escalating burden of chronic disease.⁹

The enactment of appropriate legislation has been central to tobacco control in Canada and has led to considerable progress in curbing the prevalence of tobacco use.¹⁰ The use of law is enshrined in the WHO Framework Convention on Tobacco Control (WHO FCTC), a legally binding treaty.¹¹ Building on lessons from tobacco control can help accelerate progress in the development of public regulations designed to promote physical activity and healthy eating.¹²⁻¹³ In Canada, as in other jurisdictions, tobacco control policies have been extensively identified, described, and evaluated.¹⁴⁻¹⁸ Legal interventions targeting physical activity and healthy eating are increasing,¹⁹⁻²³ with recent Canadian studies examining the effects of provincial food/beverage advertising ban on the quality and quantity of advertised products,²⁴⁻²⁶ and the impact of provincial bans of junk food in schools on overweight and obesity in children.²⁷ The objective of this study was to systematically assess the characteristics of Canadian federal and provincial legislation targeting tobacco use, physical activity and healthy eating with regard to its purpose, tools to accomplish

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3 the purpose, responsible authorities, target location, level of coerciveness, and provisions for
4 enforcement.
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10 **METHODS**

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12 Developed and curated by the Canadian Partnership Against Cancer (CPAC), the Prevention
13 Policies Directory (PPD) is a freely accessible, online, up-to-date inventory of policies and legal
14 instruments related to modifiable risk factors for chronic disease, including tobacco use, built
15 environment, physical activity, and nutrition.²⁸ Each document published online contains basic
16 descriptive information (i.e., document type, title, geographic location, targeted risk factor, year)
17 and provides a web link to the document on a government website or the Canadian Legal
18 Information Institute (CanLII) (<http://canlii.org/>). We extracted federal and provincial legislation
19 targeting tobacco use, physical activity or the built environment, and healthy eating that had been
20 captured in the CPAC PPD database up to September 2017. We included statutes, regulations,
21 codes, bills and action plans. While action plans and bills may never become law, they signify
22 organizational and legislative intent, respectively, of federal and provincial governments. We
23 combined legislation targeting the built environment (e.g., roads, buildings, infrastructure, and
24 parks; human-made landscape; preservation of the natural environment for the purpose of
25 recreation) and physical activity (e.g., physical education standards, child fitness tax credits)
26 because improving the built environment also improves opportunities for physical activity.²⁹ A
27 ‘general’ category comprised broad CDP and health promotion legislation, which made no specific
28 reference to the three risk factors.²⁸ Two coders with backgrounds in law and public health,
29 respectively, independently extracted the characteristics from the text of each legislative
30 document, using a set of coding rules developed by the legal coder (JM) in consultation with the
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3 senior authors (KM, TB). We calculated percentage agreement and κ coefficients for each coding
4 category (agreement > 90%; $\kappa > 0.90$). Coding disagreements generally arose from texts with vague
5 terminology or inconsistent use of terms. Where there was disagreement, we used the results of
6 the legal coder (JM).
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14 ***Legislative Characteristics***

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16 We distinguished whether the primary or secondary purpose of the legislation was related to CDP
17 or health promotion. For example, Prince Edward Island's *Smoke-free Places Act*ⁱ has a primary
18 CDP purpose; its main purpose is to reduce tobacco use and exposure. Further distinction was
19 made to categorize the intent of the legislation as explicit vs. implicit based on whether the primary
20 purpose was stated or implied. Alberta's *Child Care Licensing Act*ⁱⁱ has CDP as a secondary
21 purpose; its primary purpose is the licensing and regulation of day care centres with provisions
22 that may stipulate the serving of healthy foods and/or the prohibition of smoking on daycare
23 premises. We coded legislation that did not mention CDP or health promotion as having no CDP
24 purpose. For example, the purpose of the Canada's *National Dairy Code*ⁱⁱⁱ is to regulate the safe
25 production and processing of dairy products with no reduction targets for trans-fat or sodium
26 relevant to CDP.
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44 We developed a coding scheme for the assessment of tools or means through which the legislation
45 accomplished its purpose based on Gostin's criteria that comprise: (1) tax and spend (impose taxes,
46 provide tax credits or exemptions); (2) direct regulation (directly impose restrictions on individuals
47 and business, such as prohibitions and licensing); (3) indirect regulation through the tort system;
48 (4) de-regulation (repeal of legislative provisions that dis-incentivise desired public health
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3 behaviors); (5) delegation of regulation to a public administrative body (e.g., school boards); (6)
4 alter informational environment (product labeling, instructions for safe use, disclosure of
5 ingredients or health warnings, limits on harmful or misleading advertising); (7) alter the built
6 environment (grant ability to alter or regulate the built environment or what individuals can do
7 with the built environment); and (8) alter socio-economic environment (improve health by
8 targeting social or economic resources to the benefit of disadvantaged populations).³⁰
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19 We determined the responsible ministry from the legislation or from public government websites.
20 The responsibility for the legislation, including amendments and enactment of regulations, may be
21 the same as, or distinct from, administrative responsibility, which may be delegated to public
22 bodies (captured under the coding of tools). We assigned a categorical name to each ministry
23 according to the most common name in use across Canadian jurisdictions (e.g., Ministry of
24 Health). We assessed the target location for the application of the legislation from the text, or
25 inferred it from the content and purpose of the legislation.^{cf.iv}
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38 We assigned a level of coerciveness based on the Nuffield Council's public health policy
39 intervention ladder, which comprises eight levels from least to most coercive or restrictive of
40 individual rights: (1) do nothing or simply monitor the situation; (2) provide information (inform
41 and educate people); (3) enable choice (support behavior change); (4) guide choices by changing
42 the default option (make "healthier" choices the default); (5) guide choice through incentives
43 (financial and other incentives to guide people to pursue healthy activities); (6) guide choice
44 through disincentives (financial and other disincentives to guide people not to pursue unhealthy
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3 activities); (7) restrict choice (regulate to restrict the options available); and (8) eliminate choice
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5 (regulate to eliminate the choice entirely).³¹
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10 We assessed whether the legislation included enforcement provisions (e.g., appointment and duties
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12 of officers and inspectors, or powers of audit, search, seizure or inspection) and specified
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14 conditions for an offence or penalty: in the legislation itself; in the enacting legislation of
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16 regulations; or under another piece of legislation.^{cf.v}
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20 21 **RESULTS**

22
23 We identified 786 pieces of legislation that met our inclusion criteria (Table 1). Most tobacco
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25 control legislation had a primary CDP purpose, about one-third had a secondary CDP purpose, and
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27 only 2% had no CDP purpose (Table 2). Half of legislation targeting physical activity or the built
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29 environment had a secondary CDP purpose, one-third had a primary CDP purpose, and the
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31 remainder had no CDP purpose. In contrast, about two-thirds of legislation targeting healthy eating
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33 had no CDP purpose, one-fifth had a secondary CDP purpose, and less than one-fifth had a primary
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35 CDP purpose.
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42 The majority of tobacco control legislation used ‘direct regulation’ to accomplish its purpose,
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44 followed by ‘tax & spend’ and ‘alter informational environment’, ‘indirect regulation’, and
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46 ‘regulation through a public body’ (Table 2). In contrast, ‘altering built environment’ was the most
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48 common tool used in legislation targeting physical activity or the built environment, followed by
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50 ‘regulation through a public body’, ‘tax & spend’, and ‘direct regulation’. The legislation targeting
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3 healthy eating used ‘direct regulation’, ‘regulation through a public body’, and ‘alter informational
4 environment’.
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10 Most often, the ministry of health held legislative responsibility for tobacco control legislation,
11 followed by finance and justice (Table 3). For physical activity legislation, the ministry of
12 environment most commonly held legislative responsibility, followed by municipalities, culture,
13 and education. The ministries of education and health were most often responsible for legislation
14 targeting healthy eating. In terms of settings where the legislation applied, workplaces, public
15 transit, enclosed public spaces, and schools were most often protected by tobacco control
16 legislation. Municipalities were most often covered by physical activity legislation, followed by
17 outdoor non-urban spaces and schools. Finally, healthy eating legislation targeted schools, child
18 care facilities and food establishments.
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33 Tobacco control legislation was most restrictive of individual rights, compared to legislation
34 targeting other risk factors across all time periods (Figure 1). It most commonly eliminated or
35 restricted choice, and its coerciveness increased gradually between 1980 and 2017, with one-third
36 and two-thirds of legislation either eliminating choice or restricting choice, respectively.
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42 Conversely, most legislation targeting physical activity or the built environment enabled choice or
43 guided choice through changing the default policy. Legislation targeting healthy eating was least
44 coercive.
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51 Finally, the majority of tobacco control legislation included provisions for enforcement and
52 specified conditions for an offence or penalty using the three mechanisms to do so (i.e., in
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3 legislation, via delegated authority, in other legislation). In contrast, about two-fifths of physical
4 activity and one-fifth of healthy eating legislation included such provisions (Table 4). In addition,
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6 most laws targeting tobacco control and physical activity specified an offence and/or penalty either
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8 in the legislation itself or in the enabling legislation of regulations; only one-fifth of healthy eating
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10 legislation did so.
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17 **DISCUSSION**

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19 Three key findings emerge from our systematic characterization of 786 Canadian federal and
20 provincial laws that target CDP and health promotion: tobacco use, physical activity and healthy
21 eating. First, these laws are diverse in terms of their purpose, tools to accomplish their purpose,
22 responsible authority, target location, level of coerciveness, and enforcement. Second, while the
23 majority of tobacco control legislation passed in Canada since the 1980s had a primary goal of
24 improving behaviours (i.e., reducing tobacco use) and CDP, only a minority of legislation targeting
25 physical activity and healthy eating had similar primary goals. Third, the restrictiveness of tobacco
26 control legislation has increased gradually since 1980. Although the level of coerciveness in
27 legislation that targets physical activity and healthy eating appears to have increased since 2010,
28 legislative approaches in these areas lag behind tobacco control. Rather than coercion, these laws
29 promote exchange of best practices and adoption of self-regulatory standards by industry.
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47 The central role of public regulatory approaches within national and international CDP strategies
48 recognizes governments as key stakeholders in the development of policy frameworks to create
49 health-supporting environments.⁶⁻⁸ The WHO FCTC has been a catalyst and a powerful legal
50 instrument to promote implementation of strong regulatory approaches aimed at reducing the
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3 prevalence of tobacco use and exposure to tobacco smoke. Recent assessments of global tobacco
4 control policies report a significant increase in highest-level implementation of all key demand-
5 reduction measures of the WHO FCTC and provide convincing evidence that these approaches led
6 to considerable reductions in tobacco use and other tobacco-related outcomes.¹⁷⁻¹⁸ Implementation
7 of a comprehensive package, consisting of a combination of interventions and policies, particularly
8 higher taxes and smoke-free environment legislation, is critical for accelerating action.¹²⁻¹³
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19 Corroborating emerging international evidence, our study demonstrates that softer approaches for
20 improving diet and activity levels are preferred in Canadian legislation. A systematic assessment
21 of US state-level childhood obesity prevention legislation adopted in 2003-2005 found that the
22 likelihood of bill enactment for bills using softer tools (e.g., school nutrition standards,
23 walking/biking trails, safe routes to school) was higher compared to bills with stronger tools (e.g.,
24 snack and soda taxes, menu and product labelling).²² A systematic review of legislation targeting
25 dietary risk factors enacted in the US and the European Union since 2004 similarly highlighted the
26 limited scope of the legislation, with provision of information to consumers preferred over taxation
27 and marketing restrictions.²³ Research in support of stronger legislative and regulatory approaches
28 for improving diet and activity levels is burgeoning. US studies suggest that a ban on television
29 advertising of unhealthy foods high in sugar, fat and/or salt is associated with an estimated 20.5%
30 decline in overweight/obesity in children.³²⁻³³ In Canada, the body mass index (BMI) of school
31 children declined by 0.05 kg/m² each year after introducing a ban on junk food sales on school
32 property in six provinces, translating into a decline of almost 1 kg after five or more years.²⁷ The
33 nutritional profile of food/beverage advertised to children on television was found to be healthier
34 in Quebec, which bans advertising to children under age 13,^{vi} compared to Ontario where
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3 advertising is self-regulated by industry.²⁴ Yet, the Quebec advertising ban does little to limit the
4 amount of food/beverage advertising during children's prime television viewing time, highlighting
5 the need for monitoring and enforcement.²⁵⁻²⁶ Our results also demonstrate that only a minority of
6 healthy eating and physical activity laws in Canada include provisions for monitoring and
7 enforcement.
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17 Although the CPAC PPD is comprehensive, some laws may not have been captured. We excluded
18 municipal by-laws, government policy documents and policy evaluations because our intent was
19 to identify issues and responses significant enough to be enshrined in federal or provincial laws,
20 considered by the legislative bodies of Parliament and Legislatures, respectively. However,
21 addition of 325 by-laws from across Canada to our analysis did not change the findings (data not
22 shown). Capturing administrative responsibility was challenging since this information was
23 extracted from the legislation text and publicly accessible government websites. Nonetheless, the
24 analysis showed that responsibility lies across several ministries. Lastly, we studied characteristics
25 of the legislation as it exists "on the books" and not in practice.
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40 This is the first systematic assessment of Canadian legislation targeting behavioural risk factors
41 for chronic disease, providing a baseline for building consensus on using law to reduce disease
42 burden. Overall, there is a substantial lag in utilizing stronger legislative approaches to promote
43 physical activity and healthy eating, underscoring missed opportunities to impact health behaviour
44 through regulatory interventions.³⁴ Collectively, our findings underscore the need for improving
45 capacity in the public health system³⁵ to develop and implement a diverse and comprehensive set
46 of CDP laws that are evidence-based, well-designed and appropriately targeted. Despite national
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and international commitments to accelerate action on CDP, Canadian public health efforts to enact new laws or to inject CDP-relevant information into existing laws, continue to face substantial challenges that thwart the creation of optimally health-supportive environments.

Confidential

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Table 1. Legislation type by targeted risk factor

	Tobacco Control (n=195)	Physical Activity (n=237)	Healthy Eating (n=117)	Multiple factors (n=120)	Total (n=786)
	%	%	%	%	%
Statute	12.9	49.0	35.9	15.8	42.6
Regulation	43.1	33.8	40.2	61.7	38.6
Code	0.0	0.4	0.0	1.7	0.4
Bill	16.9	12.2	17.1	5.0	12.9
Action Plan	1.5	4.6	6.8	15.8	5.6

Notes: Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).

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Table 2. Legislation purpose and tools to accomplish its purpose by targeted risk factor

	Tobacco Control (n=195)	Physical Activity (n=237)	Healthy Eating (n=117)	Multiple factors (n=120)	Total (n=786)
	%	%	%	%	%
<i>Purpose</i>					
Primary - explicit	5.6	8.4	2.6	6.7	5.5
Primary - implicit	62.6	21.5	15.4	9.2	26.1
Secondary	29.2	49.8	20.5	71.7	41.4
No purpose	2.1	19.4	61.5	10.0	26.3
<i>Tools to accomplish purpose*</i>					
Tax & spend	16.9	19.0	5.1	15.0	13.5
Direct regulation	76.4	12.7	16.2	60.8	35.2
Indirect regulation	8.7	0.0	0.0	0.0	2.2
De-regulation	0.0	0.0	0.0	0.0	0.0
Regulation through a public body	8.7	27.9	12.0	8.3	17.9
Alter informational environment	16.4	1.3	6.8	5.0	6.5
Alter built environment	1.5	54.0	0.0	42.5	25.6
Alter socio-economic environment	0.5	2.1	2.6	5.0	1.9

Notes: Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).

* Tax and spend (imposing taxes, providing tax credits or exemptions); direct regulation (directly imposing restrictions on individuals and business, such as prohibitions and licensing); indirect regulation through tort (granting causes of action in tort to the government or others); de-regulation (repealing other pieces of legislation to dismantle legal barriers to desired public health behaviors); regulation through a public body (empowering a public or administrative body (e.g., school boards) to act and setting its duties); alter informational environment (product labelling, instructions for safe use, disclosing ingredients or health warnings, limiting harmful or misleading advertising); alter built environment (granting ability to alter or regulate the built environment or what individuals can do with the built environment); and alter socio-economic environment (improving health by targeting disadvantaged social or economic resources).³⁰

Table 3. Ministry responsible for legislation and target location by targeted risk factor

	Tobacco Control (n=195) %	Physical Activity (n=237) %	Healthy Eating (n=117) %	Multiple factors (n=120) %	Total (n=786) %
Ministry responsible					
Health	44.1	0.4	9.4	25.0	17.4
Finance	27.7	5.5	3.4	5.8	9.9
Municipal	0.0	17.7	0.0	5.8	8.3
Environment	0.0	23.2	0.0	5.8	7.9
Education	1.5	6.8	10.3	4.2	5.2
Social services	0.0	2.1	5.6	15.0	4.3
Justice	12.3	0.4	0.9	0.8	3.6
Culture	0.0	8.0	0.0	7.5	3.6
Transportation	5.1	3.4	0.0	2.5	2.8
Agriculture	1.0	0.4	2.6	11.7	2.5
Development	0.5	5.5	0.0	0.8	1.9
Employment/labour	5.1	0.0	0.0	1.7	1.5
Target location					
Municipalities	4.1	26.6	0.0	15.0	13.5
Schools	16.9	6.3	11.1	5.8	9.2
Public transit	20.5	5.9	0.9	8.3	8.5
Outdoor non-urban spaces	0.5	20.7	0.0	7.5	7.5
Food establishments	12.8	0.0	4.3	20.8	7.0
Child care facilities	7.7	0.8	5.1	20.0	6.4
Workplaces	21.5	0.4	0.9	2.5	6.0
Long term care facilities	11.8	0.0	4.3	12.5	5.7
Recreation & sport facilities	11.8	3.8	0.0	5.8	5.1
Enclosed public spaces	18.0	0.0	0.0	0.0	4.6
Hospitals	14.4	0.0	0.0	0.8	3.8
Universities	9.2	2.5	1.7	0.8	3.4
Pharmacies	7.2	0.0	0.0	0.0	2.0

Notes: Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).

Table 4. Legislation enforcement by targeted risk factor

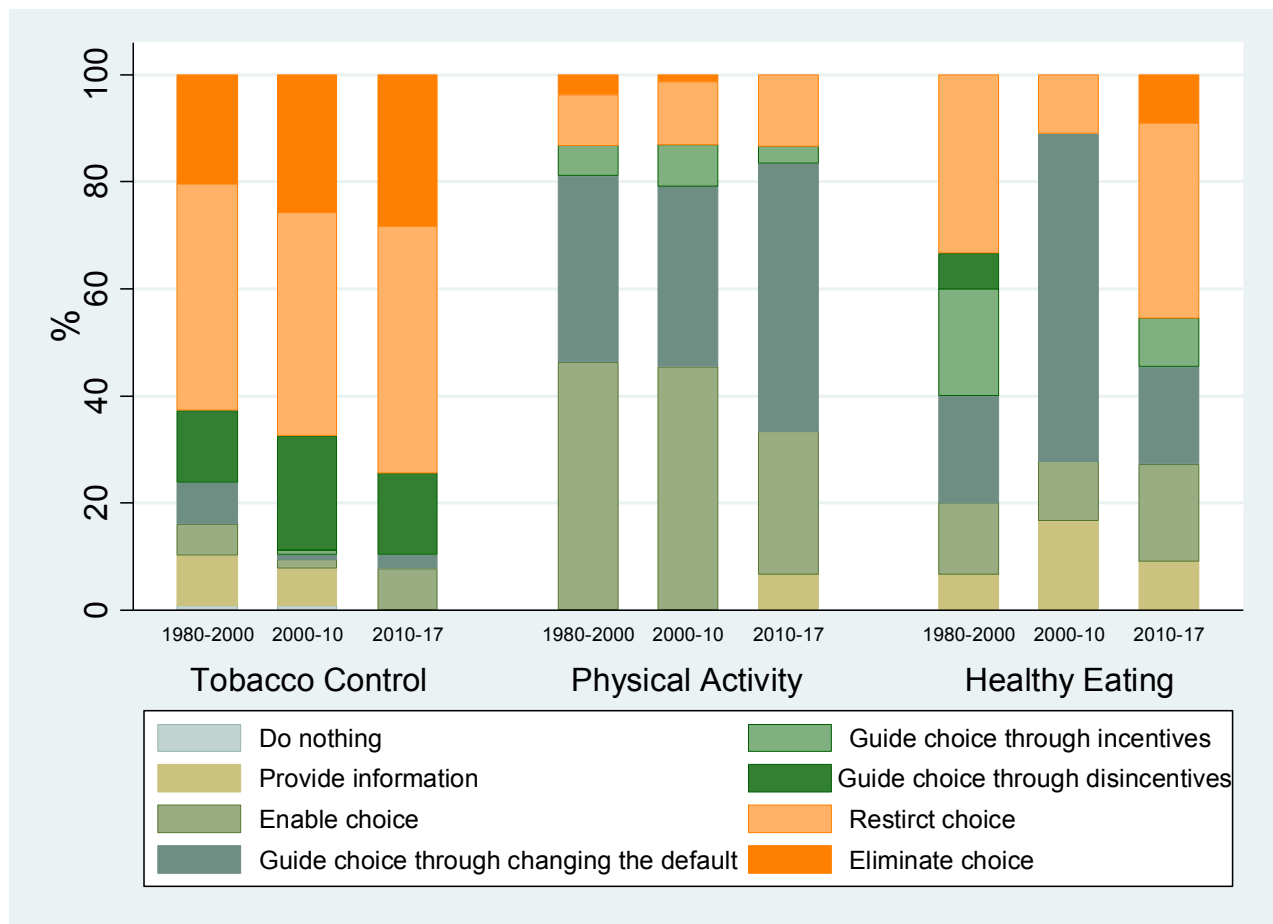
	Tobacco Control (n=195) %	Physical Activity (n=237) %	Healthy Eating (n=117) %	Multiple factors (n=120) %	Total (n=786) %
<i>Provision specified</i>					
In legislation itself	33.9	28.3	10.3	17.5	24.1
In enacting or other legislation	49.7	14.8	11.1	38.3	24.8
<i>Offence or penalty specified</i>					
In legislation itself	37.4	30.0	12.0	5.8	23.5
In enacting or other legislation	47.2	44.7	10.3	50.0	25.8

Notes: Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).

Figure 1. Legislation coerciveness between 1980 and 2017 by targeted risk factor

Figure legend:

Based on the Nuffield Council's public health policy intervention ladder,³¹ which consists of eight levels: do nothing or simply monitor the situation; provide information (inform and educate people (e.g., health warnings, nutrition labels)); enable choice (enable people to change their behaviours); guide choices through changing the default (make "healthier" choices the default option); guide choice through incentives (financial and other incentives to guide people to pursue certain activities); guide choice through disincentives (financial and other disincentives to guide people to influence people to not pursue certain activities); restrict choice (regulate to restrict the options available to people); and eliminate choice (regulate to eliminate choice entirely).



ANNEX

Annex Table 1: Distribution of legislation by province and risk factors

	Tobacco Control (n=195)	Physical Activity (n=237)	Healthy Eating (n=117)	Multiple factors (n=120)	Total (n=786)
	n (%)	n (%)	n (%)	n (%)	n (%)
Newfoundland & Labrador	18 (9.2)	11 (4.6)	2 (1.7)	5 (4.2)	41 (5.2)
Prince Edward Island	11 (5.6)	10 (4.2)	2 (1.7)	6 (5.0)	34 (4.3)
Nova Scotia	17 (8.7)	20 (8.4)	8 (6.8)	11 (9.2)	67 (8.5)
New Brunswick	11 (5.6)	13 (5.5)	5 (4.3)	6 (5.0)	45 (5.7)
Quebec	11 (5.6)	16 (6.8)	8 (6.8)	12 (10.0)	57 (7.3)
Ontario	24 (12.3)	59 (24.9)	29 (24.8)	18 (15.0)	139 (17.7)
Manitoba	21 (10.8)	20 (8.4)	13 (11.0)	11 (9.2)	79 (10.0)
Saskatchewan	9 (4.6)	22 (9.3)	9 (7.7)	10 (8.3)	62 (8.0)
Alberta	17 (8.7)	18 (7.6)	10 (8.5)	9 (7.5)	63 (8.0)
British Columbia	13 (6.7)	27 (11.4)	13 (11.0)	9 (7.5)	71 (9.0)
Northwest Territories	13 (6.7)	6 (2.5)	2 (1.7)	4 (3.3)	35 (4.5)
Nunavut	6 (3.0)	5 (2.1)	1 (0.8)	3 (2.5)	20 (2.5)
Yukon	7 (3.6)	4 (1.7)	3 (2.6)	6 (5.0)	25 (3.2)
Canada	17 (8.7)	6 (2.5)	12 (10.3)	10 (8.3)	48 (6.0)

Notes: Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).

Annex Table 2: Condensed primary purposes of the legislation by risk factors

	Tobacco Control (n=195)	Physical Activity (n=237)	Healthy Eating (n=117)	Multiple factors (n=120)	Total (n=786)
	n (%)	n (%)	n (%)	n (%)	n (%)
First Nation & Metis Agreement enactment & enforcement	-	-	1 (0.9)	-	5 (0.6)
Criminal Justice	4 (2.1)	1 (0.4)	-	1 (0.8)	6 (0.8)
General Government Regulation	3 (1.5)	5 (2.1)	1 (0.9)	-	16 (2.0)
Long Term Care facilities operation regulation	-	-	4 (3.4)	15 (12.5)	20 (2.5)
Education system oversight	2 (1.0)	14 (5.9)	3 (2.6)	-	25 (3.2)
Promoting healthy eating	-	-	20 (17.1)	6 (5.0)	27 (3.4)
Child care operation regulation	-	2 (0.8)	6 (5.1)	21 (17.5)	33 (4.2)
Transportation System Regulation	11 (5.6)	14 (5.9)	-	9 (7.5)	34 (4.3)
General Health & Safety	8 (4.1)	18 (7.6)	3 (2.6)	7 (5.8)	37 (4.7)
Municipal Empowerment and regulation	-	18 (7.6)	1 (0.9)	-	41 (5.2)
Creating, modify & regulating built environment for PA	-	32 (13.5)	-	9 (7.5)	41 (5.2)
Food and Drug Safety	3 (1.5)	-	15 (12.8)	22 (18.3)	46 (5.9)
Promoting physical activity	-	31 (13.1)	1 (0.9)	13 (10.8)	49 (6.2)
Planning, Development & Land Use	3 (1.5)	37 (15.6)	-	9 (7.5)	50 (6.4)
Financial Regulation	26 (13.3)	16 (6.8)	4 (3.4)	5 (4.2)	51 (6.5)
Environmental, Natural Resource & Parks Regulation	-	48 (20.3)	-	9 (7.5)	58 (7.4)
General Public Health regulation	1 (0.5)	-	2 (1.7)	1 (0.8)	70 (8.9)
Food Industry Regulation	-	-	62 (53.0)	13 (10.8)	75 (9.5)
Tobacco Control	133 (68.2)	-	-	2 (1.7)	136 (17.3)

Notes: Proportions larger than 5% are in bold. Multiple factors refers to legislation targeting more than one risk factor (i.e., tobacco control, physical activity, healthy eating). Total includes 'general' legislation (e.g., provincial Public Health Acts).