

Caffeinated Energy Drinks: Feasibility of Restricting Sales and Marketing to Youth in Toronto

Date: February 16, 2017

To: Board of Health

From: Acting Medical Officer of Health

Wards: All

SUMMARY

Energy drinks are a relatively new class of beverages that are popular among young people. Consumption of these drinks by young people has been identified as a public health concern because of the high levels of caffeine, added sugars and herbal stimulants, and youth-oriented marketing.¹⁻⁵ Of particular concern is the use of energy drinks by children, during physical activity, or mixing them with alcohol.^{3,6-9} This report outlines the public health concerns and regulatory context for caffeinated energy drinks (CEDs) in Canada and provides information on the feasibility of various sales and marketing restrictions to youth in Toronto, as requested by the Board of Health (BOH) in November 2014.

Toronto Public Health reviewed the evidence and found no compelling reason to deviate from the current precautionary public health approach that encourages limits in CED consumption, discourages the consumption of CEDs for hydration purposes, and discourages the mixing of CEDs with alcohol, particularly among youth and young adults. Toronto Public Health also consulted Health Canada and received input from the City Manager's Office, City Solicitor, and Parks, Forestry and Recreation, and the Toronto Office of Partnerships.

Health Canada approves all CEDs that are sold or marketed in Canada and outlines requirements and conditions for their formulation, labelling, and marketing.¹⁰ Health Canada requires that: CED labels state that they are not recommended for children, that they should not be mixed with alcohol, that they shall not be marketed to children (12 years and under) or that they are not represented for the purpose of hydration and/or electrolyte replacement before, during or after physical activity.^{6,10}

Policy options feasible for municipalities and local public health agencies to limit sales, marketing and consumption of energy drinks by children and youth include measures such as healthy vending machine policies, policies related to sponsorship, and education and awareness-raising to youth and young people. The City of Toronto has already implemented a number of the feasible options.¹¹ A separate report to the BOH discusses a proposed amendment to the Toronto Municipal Alcohol Policy to increase awareness of Health Canada's precautionary advice not to mix CEDs and alcohol.

Neither age restrictions on sales nor requiring health warning signs in retail settings are currently feasible for local authorities.

The Acting Medical Officer of Health recommends that City Council send this report to City agencies for their consideration in restricting sales of CEDs to children and youth.

Toronto Public Health will continue to monitor the developments related to CEDs and provide input as appropriate into the public consultations to be held by Health Canada for its final CED regulations.

RECOMMENDATIONS

The Acting Medical Officer of Health recommends that:

1. City Council forward this report to the City's agencies and request them, where applicable, to:
 - (a) consider not selling caffeinated energy drinks to individuals under the age of majority; and
 - (b) support compliance with Health Canada's conditions regarding the marketing and distribution of caffeinated energy drinks.

FINANCIAL IMPACT

There are no financial implications arising from this report.

DECISION HISTORY

At its meeting on February 11, 2013, the Board of Health made four energy drink-related requests to Health Canada and the Province of Ontario. The requests included action to address the marketing and promotion of energy drinks to children and adolescents and a requirement for an on-package warning label related to use during exercise and hydration after exercise.¹²

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.HL19.12>

At its meeting on November 17, 2014, The Board of Health approved a motion referred by City Council requesting the Medical Officer of Health, in consultation with other appropriate staff, to report to the Board of Health on ways and means of preventing children and youth under the age of majority from buying energy drinks, and on the feasibility of:

1. banning energy drink marketing, distribution (sampling) and advertising on City properties;

2. banning the sale of energy drinks to youth and children in all Toronto affiliated agencies, boards, and commissions including the Canadian National Exhibition in compliance with the ban at City properties;
3. banning the sale of energy drinks to youth and children in Toronto retail outlets; and
4. requiring point-of-sale warning signage to be posted in retail outlets to assist in awareness to the potential dangers that these drinks pose.¹³
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.MM55.48>

COMMENTS

The term 'energy drink' is commonly used to refer to packaged beverages containing naturally occurring and/or added caffeine, added sugar and other sweeteners, herbal stimulants such as guarana and taurine, and flavouring agents.^{1,2,6-8} Energy drinks are typically marketed to youth and young adults and they are popular among this age group in Ontario.^{4,5,14,15} Although many types of beverages share these features, 'energy drinks' are regulated by Health Canada as caffeinated energy drinks (CED)¹⁰ and are distinct from other beverages such as coffee, tea, sports drinks, 'energy shots', and caffeinated soft-drinks.

This report outlines the public health concerns and regulatory context for CEDs in Canada and provides information on the feasibility of the sales and marketing restrictions identified in the City Council Motion with a focus on children and youth. Details are also described in the attached technical report, *Caffeinated Energy Drinks: Technical Report on Public Health Concerns and Regulation in Canada* (Attachment 1). A related report on the City's Municipal Alcohol Policy will be presented at the same Board of Health meeting.

Public Health Concerns

Caffeine can be a diuretic, has stimulant properties, and temporarily affects mood, performance, and behaviour in humans.^{7,16} Although caffeine is not addictive and is generally considered to be safe to consume, Health Canada provides caffeine consumption guidance to Canadians to avoid adverse effects such as insomnia, headaches, irritability and nervousness.^{16,17} Health Canada recommends a maximum of 85 mg/day of caffeine for children 10-12 years of age and no more than 2.5 mg/kg-body-weight of caffeine per day for adolescents (13 years old to adult).^{16,17} For a 50 kg adolescent, Health Canada's recommended limit is equivalent to 125 mg of caffeine per day. A small can of a CED (237 ml) in the Canadian market typically contains 80 mg of caffeine.

Due to the caffeine content, CEDs are not recommended for children (age 12 and under) and are also not suitable for hydration or use as an electrolyte replacement during sports performance, where they may mask the signs of dehydration.¹⁷ Manufacturers and distributors of CEDs have agreed to not market CEDs for these purposes as a condition for approval by Health Canada to sell and market CEDs.¹⁰

Caffeinated energy drinks are also typically sugar-sweetened, having a sugar content that is similar to that of caffeinated soft drinks.¹⁸ For this reason they present the same concerns as with other sugar-sweetened beverages, such as weight gain, obesity and dental health issues.⁸

Toronto Public Health has reviewed the available evidence on CEDs and found no compelling evidence to deviate from the existing precautionary public health measures adopted by Health Canada in its setting of the conditions for the sale and marketing of CEDs. Many reviews reaffirmed the findings that Health Canada used in its risk management approach, including, findings of reported adverse events following the consumption of CEDs such as cardiovascular events, daytime sleepiness, and behavioural issues such as irritability and nervousness (see Attachment 1).

Consumption of Caffeinated Energy Drinks by Young People

Nearly three-quarters of Canadian youth and young adults (age 12-24 years) report having consumed an energy drink at least once in their lifetime and one in six (15.6%) report consumption in the past week.¹⁴ The 2015 Ontario Student Drug Use and Health Survey (OSDUHS) found that one-in-three students in grades 7 to 12 (34.8%) had consumed an energy drink at least once in the past year, including nearly half of all students in grade 12 (45.9%).¹⁵ The OSDUHS study also found that one-in-eight students in grades 7 to 12 (11.7%) consumed an energy drink mixed with alcohol at least once in the past year.¹⁵ This rate is similar to the 12% reported in the 2014 Toronto Student Health Survey.¹⁹

Regulation of Caffeinated Energy Drinks in Canada

Since 2012, Health Canada has regulated the conditions under which CEDs may be sold and marketed using a Temporary Market Authorization (TMA) process.^{6,10,20} The related guidance document for CEDs defines what an 'energy drink' is, mandates requirements for product formulation and labelling and places conditions on marketing. Among the provisions or conditions identified by Health Canada are:¹⁰

- CEDs have a caffeine concentration between 200 and 400 mg/L;
- CED product labels must contain CED-specific messages, such as "Not recommended for children", "Do not mix with alcohol", and "Not recommended for caffeine sensitive persons";

The Health Canada conditions that are most relevant to this report are the following:

- A prohibition against marketing CEDs to children (12 years old and under);
- A prohibition against providing CED samples to children; and
- Prohibitions against representing CEDs for hydration and/or electrolyte replacement before, during or after physical activity.

The TMA is a transitional phase. Health Canada will eventually develop final regulations for the sale and marketing of CEDs using data collected during the TMA phase and input from public consultations.¹⁰ Refer to Attachment 1 for additional details.

Feasibility of CED Sales and Marketing Restrictions in Toronto

The Medical Officer of Health was asked to report on the feasibility of four approaches related to restricting the sales and marketing of CEDs to youth in Toronto. The following section provides information from TPH's assessment informed by a review of the evidence and actions in other jurisdictions discussed in Attachment 1.

1. Restrictions on CED-related marketing on City property

Health Canada places conditions that require energy drink manufacturers and distributors in Canada not to market CEDs or give them as samples to children 12 or younger.¹² Furthermore, members of the Canadian Beverage Association (CBA) have adopted a voluntary code of marketing for energy drinks²¹ that is consistent with the conditions required by Health Canada. Toronto Public Health was unable to find examples of jurisdictions that had implemented additional restrictions that specifically addressed energy drink marketing, advertising or sponsorship.

The City has existing policies for sponsorship,²² donations,²³ and naming rights.²⁴ While these do not deal with specific products such as energy drinks, they outline relevant principles for such agreements. For example, the sponsorship policy notes that "the City does not endorse the products, services, or ideas of any sponsor" and that the City reserves the right to refuse such requests where they are "incompatible with the City's goals, values or mission". The City also follows the Canadian Code of Advertising Standards (Code), which includes provisions related to advertising to children and minors, use of professional or scientific claims, and acceptable depictions and portrayals.²⁵ The Code notes for example, that advertising directed to children "must not present information or illustrations that might result in their physical, emotional or moral harm." City staff are able to use discretion to apply appropriate precautions at events or in facilities that are family friendly or for all ages.

Toronto Public Health staff consulted with City divisions on marketing and sponsorship and learned that arrangements with energy drink interests are relatively uncommon. The City can ensure that the health of children in Toronto is protected by following Health Canada's conditions on the marketing of CEDs. To ensure that City agencies are apprised of Health Canada's conditions on marketing and distribution of energy drinks, it is recommended that City Council forward this report to City agencies. City agencies can support compliance of Health Canada's conditions when selling advertising or negotiating sponsorship agreements, donations, and naming rights.

2. Ban on the sale of CEDs to youth by City Agencies and Corporations

Policies to restrict or ban sales on public (i.e. municipal or provincial) property are the most common approach in Canada to addressing the public health concerns of CEDs as discussed in Attachment 1. Toronto City Council already took this step in 2011 by prohibiting the sale of energy drinks in vending machines in Parks, Forestry and Recreation facilities.¹¹

The City delivers some services and performs certain activities through agencies (e.g. Exhibition Place, Toronto Transit Commission, Toronto Zoo, Community-Based Arena Boards) which have been delegated varying levels of authority by City Council. Each agency has a different mandate and responsibility. It is recommended that City Council

forward this report to City agencies for their consideration so that in the event they are selling CEDs, they consider the relevant Health Canada conditions and consider not selling CEDs to children and youth.

City Council has also established corporations to deliver specific services or operate certain services and activities. Corporations are established under the City of Toronto Act in compliance with the Ontario Business Corporations Act, with the City as shareholder. Corporations have independent boards, own their own assets and operate independently from the City. Furthermore, in 2013 the Canadian National Exhibition (CNE) Association, which operates the CNE, became organizationally independent from the City of Toronto and Exhibition Place. City Council has no authority to direct the CNE Association in its policies.

3. Restrictions on the sale of CEDs to youth in retail stores in the City of Toronto

While there have been proposals to ban or restrict sales of CEDs to children and youth, few jurisdictions (none in Canada) have enacted such laws and those that exist are quite recent.²⁶⁻²⁸ An age restriction on the sale of CEDs at retail stores (e.g. convenience and grocery stores) is therefore a relatively rare approach to addressing the concerns of children's access to and consumption of CEDs (refer to Attachment 1 for more details).

A municipal ban restricting sales of CEDs to children and youth in retail stores is not feasible. Such an approach would have to be enacted by the provincial or federal government as municipal governments do not have the authority to impose such a ban.

Voluntary approaches by the retail sector could be considered an incremental approach to limiting access to CEDs by children and youth.²⁹ Focus groups with Toronto youth suggest that some convenience stores have a policy of not selling to children,²⁸ however given the marked economic interests retail stores have in continuing to sell energy drinks, it is unlikely that such an approach would be broadly adopted.³⁰

4. Requiring health warning signage where CEDs are sold in Toronto retail stores

There are very few precedents globally and none in Canada, of jurisdictions that require health warning signage where energy drinks are sold. Municipal action to require signage related to CEDs to be posted in retail stores may also conflict with the authority of the provincial government, the appropriate authority for such a requirement. Requiring retail stores to post warning signs about the potential health risks to children and youth from consuming energy drinks is not a feasible policy approach for the City of Toronto.

Current Municipal Actions to Reduce CED-related Risks

A number of prevention and awareness-raising initiatives are already underway in the City to educate parents, youth and young adults to reduce potential risks from consuming CEDs:

- Promotional content on TPH's "Food and Drinks to Avoid During Pregnancy" website recommends limiting caffeine intake to 300 mg/day and identifies energy drinks as a source of caffeine.³¹
- As a part of TPH's Into Kids' Health project (a comprehensive school and community based childhood obesity prevention initiative), parents and students in elementary school are advised to avoid energy drinks.³²
- Toronto Children's Services' School-Age Quality Standards Inventory tool advises that after-school programs prohibit the serving of energy drinks along with other types of sugar-sweetened beverages.³³ This approach complements the Ontario government's School Food and Beverage Policy which places energy drinks in the "Not Permitted for Sale" category.³⁴
- Promotional content on TPH's "Risks with Drinking" website advises "Don't mix alcohol with other drugs or energy drinks."³⁵
- Taking a harm reduction approach, TPH youth leadership initiatives advise students in secondary school, college or university not to mix alcohol with energy drinks.^{36,37}

Conclusions

Toronto Public Health's review of the available evidence provides no compelling reason to deviate from the current precautionary public health approach that encourages limits in CED consumption, discourages the consumption of CEDs for hydration purposes, and discourages the mixing of CEDs with alcohol, particularly among youth and young adults. This view also aligns with Health Canada's current risk management approach to energy drinks.

Feasible policy options for municipalities and local public health agencies to ensure protection of children and youth include measures such as healthy vending machine policies and education and awareness-raising to targeted population groups. The City of Toronto has already implemented a number of the feasible options available.

It is recommended that this report be circulated to City agencies for them to consider, where applicable to their context, not selling CEDs to children and youth. Neither age restrictions on sales nor requiring health warning signs in retail settings are currently feasible for local governments.

Toronto Public Health will continue to monitor this issue, including consumption patterns by youth and young adults and emerging health evidence. Toronto Public Health will provide input as appropriate into the public consultations for the final CED regulations by Health Canada. Toronto Public Health will also work to increase awareness of Health Canada's advice to consumers about CEDs. Specifically, TPH will continue to advise residents not to mix CEDs with alcohol, to discourage their consumption by children and to educate youth to avoid consuming CEDs for hydration or electrolyte replacement.

CONTACT

Monica Campbell
Director, Healthy Public Policy
Toronto Public Health
Tel: 416-338-0661
Email: Monica.Campbell@toronto.ca

Loren Vanderlinden
Manager, Healthy Public Policy
Toronto Public Health
Tel: 416-338-8094
Email: Loren.Vanderlinden@toronto.ca

SIGNATURE

Dr. Barbara Yaffe
Acting Medical Officer of Health

ATTACHMENTS

Attachment 1: Caffeinated Energy Drinks: Technical Report on Public Health Concerns and Regulation in Canada

References

1. Food and Drug Administration. *The Buzz on Energy Drinks*. Accessed 30/11/2016. URL: <https://www.cdc.gov/healthyschools/nutrition/energy.htm>.
2. Dietitians of Canada. *Energy drinks*. Accessed 02/12/2016. URL: <http://www.dietitians.ca/Your-Health/Nutrition-A-Z/Energy-drinks.aspx>.
3. Centers for Disease Control and Prevention. *Fact Sheets – Caffeine and Alcohol*. Accessed 12/12/2016. URL: <http://www.cdc.gov/alcohol/fact-sheets/caffeine-and-alcohol.htm>.
4. Emond JA, Sargent JD, Gilbert-Diamond D. 2014. *Patterns of energy drink advertising over US television networks*. *J Nutr Educ Behav*, Mar-Apr; 47(2): 120–126.e1. URL: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4356017/>.
5. Kumar G, Onufrak S, Zytneck D, Kingsley B. 2015. *Self-reported advertising exposure to sugar-sweetened beverages among US youth*. *Public Health Nutr*, 18(7) 1173-1179. URL: <https://www.cambridge.org/core/services/aop-cambridge-core/content/view/DD8F808E14006935B52DD487B11B737D/S1368980014001785a.pdf/self-reported-advertising-exposure-to-sugar-sweetened-beverages-among-us-youth.pdf>.
6. Health Canada. *Caffeinated energy drinks*. Accessed 02/12/2016. URL: <http://www.hc-sc.gc.ca/fn-an/prodnatur/caf-drink-boissons-eng.php>.
7. Health Canada. *Information for Parents on Caffeine in Energy Drinks*. Accessed 25/11/2016. URL: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/faq-eng.php>.
8. EatRightOntario (Dietitians of Canada). *Facts on Energy Drinks*. Accessed 05/12/2016. URL: <http://www.eatrightontario.ca/en/Articles/Caffeine/Facts-on-Energy-Drinks.aspx>.
9. Health Canada. *Summary of Comments on Health Canada's Proposed Approach to Managing Caffeinated Energy Drinks*. Accessed 02/12/2016. URL: <http://www.hc-sc.gc.ca/fn-an/legislation/pol/sum-som-comment-caf-drink-boiss-eng.php>.
10. Health Canada. *Category Specific Guidance for Temporary Marketing Authorization - Caffeinated Energy Drinks*. Accessed 27/09/2016. URL: <http://www.hc-sc.gc.ca/fn-an/legislation/guide-ld/guidance-caf-drink-boiss-tma-amt-eng.php#s3.1.2>.
11. City of Toronto (Government Management Committee). *GM2.16 Healthy Vending Criteria - Cold Drink Vending Request for Proposal (Ward: All)*. Accessed 27/09/2016. URL: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.GM2.16>.
12. City of Toronto (Board of Health). *HL19.12 Caffeinated Energy Drinks*. Accessed 27/09/2016. URL: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2013.HL19.12>.
13. City of Toronto (Board of Health). *HL34.14 Request for Report on Ways and Means of Preventing Children and Youth Under the Age of Majority from Buying Energy Drinks*. Accessed 27/09/2016. URL: <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2014.HL34.14>.
14. Reid JL, McCory C, White CM, Martineau C, Vanderkooy P, Fenton N, Hammond D. (2016.) *Consumption of Caffeinated Energy Drinks Among Youth and Young Adults in Canada*. *Preventive Medicine Reports*, (05)65-70. URL: <http://www.sciencedirect.com/science/article/pii/S2211335516301450>.
15. Boak A, Hamilton HA, Adlaf EM, Mann RE. (2015). *Drug use among Ontario students, 1977-2015: Detailed OSDUHS findings (CAMH Research Document Series No. 41)*. Toronto, ON: Centre for Addiction and Mental Health. Available from: http://www.camh.ca/en/research/news_and_publications/ontario-student-drug-use-and-health-survey/Documents/2015%20OSDUHS%20Documents/2015OSDUHS_Detailed_DrugUseReport.pdf.
16. Health Canada. *Caffeine in Food*. Accessed 28/09/2016. URL: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/food-caf-aliments-eng.php>.
17. Health Canada. *Frequently Asked Questions. Information for Parents on Caffeine in Energy Drinks*. Accessed 16/12/2016. URL: <http://www.hc-sc.gc.ca/fn-an/securit/addit/caf/faq-eng.php>.
18. Rotstein J, Barber J, Stowbridge C, Hayward S, Huang R, Godefroy SB, et al. (2013). *Energy Drinks: An Assessment of the Potential Health Risks in the Canadian Context*. *International Food Risk Analysis Journal*, 3(5): 1-29. Available from: http://cdn.intechopen.com/pdfs/45380/InTech-Energy_drinks_as_assessment_of_the_potential_health_risks_in_the_canadian_context.pdf.

19. Toronto Public Health. *Healthy Futures: 2014 Toronto Public Health Student Survey*. March, 2015. Available from: <https://www1.toronto.ca/City%20Of%20Toronto/Toronto%20Public%20Health/Performance%20&%20Standards/Healthy%20School/Files/pdf/StudentHealthSurveyWeb%20FINAL-AODA.pdf>.
20. Health Canada. *Lists of foods that have received Temporary Marketing Authorization Letters*. Accessed 27/09/2016. URL: http://www.hc-sc.gc.ca/fn-an/legislation/acts-lois/list-tmal-rpsn-eng.php#un_6.
21. Canadian Beverage Association. *Energy Drinks Marketing Code*. Available from: <http://www.canadianbeverage.ca/wp-content/uploads/2013/12/Energy-drinks-Code-CBA-2012-FINAL-T.pdf>.
22. City of Toronto. *City of Toronto Sponsorship Policy*. Accessed 27/09/2016. URL: http://www1.toronto.ca/city_of_toronto/toronto_office_of_partnerships/files/pdf/sponsorship-policy.pdf.
23. City of Toronto. *Donations to the City of Toronto For Community Benefits Policy*. Accessed 27/09/2016. URL: http://www1.toronto.ca/city_of_toronto/toronto_office_of_partnerships/files/pdf/donation_policy.pdf.
24. City of Toronto. *City of Toronto Individual and Corporate Naming Rights Policy*. Accessed 27/09/2016. URL: http://www1.toronto.ca/city_of_toronto/toronto_office_of_partnerships/files/pdf/naming-policy.pdf.
25. Advertising Standards of Canada. *The Canadian Code of Advertising Standards*. Accessed 21/12/2016. URL: <http://www.adstandards.com/en/standards/cancodeofadstandards.aspx>.
26. Breda JJ, Whiting SH, Encarnação R, Norberg S, Jones R, Reinap M, Jewell J. (2014). *Energy drink consumption in Europe: a review of the risks, adverse health effects, and policy options to respond*. *Front Public Health*. 2: 1-5. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC4197301/>.
27. Pomeranz J, Munsell C, Harris J. (2013). *Energy Drinks: An Emerging Public Health Hazard for Youth*. *J Public Health Pol* 34: 254. Available from: <http://link.springer.com/article/10.1057%2Fjph.2013.6>.
28. McCrory C, White CM, Bowman C, Fenton N, Reid JL, Hammond D. *Perceptions and knowledge of caffeinated energy drinks: results of focus groups with Canadian youth*. *Journal of Nutrition Education & Behavior*; In Press.
29. Wolfe K. *Energy Drink Ban. "What can c-store owners do?" Cstore Life*. August/September 2009. Available from: http://www.kymwolfe.com/index_htm_files/Energy%20Drink%20Ban%20.pdf.
30. Ontario Convenience Store Association. *City of Toronto Potential Energy Drink Ban*. December 7, 2016. URL: <http://ontariocstores.ca/city-toronto-potential-energy-drink-ban/>
31. Toronto Public Health. *Foods and Drinks to Avoid During Pregnancy*. Accessed 25/11/2016. URL: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=b459ce7e2b322410VgnVCM10000071d60f89RCRD>.
32. Toronto Public Health. *Overview of Toronto Public Health School Health Services*. Accessed 06/01/2017. URL: <http://www.toronto.ca/legdocs/mmis/2015/hl/bgrd/backgroundfile-76823.pdf>.
33. City of Toronto - Children Services Division. *Toronto School-Age Quality Standards Inventory*. Accessed 25/11/2016. URL: <http://www1.toronto.ca/City%20Of%20Toronto/Children's%20Services/Files/pdf/S/school-age-quality-standards-inventory.pdf>.
34. Ministry of Education, Government of Ontario. *Policy/Program Memorandum No. 150: School Food and Beverage Policy. 2010*. Available from: <http://www.edu.gov.on.ca/extra/eng/ppm/ppm150.pdf>.
35. Toronto Public Health. *Risks with Drinking*. Accessed 25/11/2016. URL: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=ff9eb3fb99842410VgnVCM10000071d60f89RCRD>.
36. Toronto Public Health. *Youth Health: Party in the Right Spirit*. Accessed 25/11/2016. URL: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=6790f46358922410VgnVCM10000071d60f89RCRD>.

37. Toronto Public Health. *Youth Leadership Initiatives*. Accessed 05/12/2016. URL: <http://www1.toronto.ca/wps/portal/contentonly?vgnextoid=936cab376c432410VgnVCM10000071d60f89R> CRD.