



REPORT FOR ACTION

Addressing Vaccine Hesitancy

Date: March 28, 2019

To: Board of Health

From: Medical Officer of Health

Wards: All

SUMMARY

Vaccine hesitancy is the reluctance or refusal to vaccinate despite the availability of vaccines. It is a growing concern internationally and has been identified as a top ten threat to global health by the World Health Organization. In Canada, an estimated 20% of parents are vaccine hesitant and are unsure about the safety and effectiveness of vaccines.

Social media and the internet play a significant role in spreading misinformation about vaccines and have contributed greatly to vaccine hesitancy. Technology companies such as Pinterest, Facebook, Instagram and Google have acknowledged the detrimental role these platforms have played in spreading misinformation about vaccines, and have taken some action to address this issue.

Clear and truthful messages supporting vaccines and the importance of immunization in protecting health is critical to combatting vaccine hesitancy. This report provides a number of recommended actions to help address this growing concern and the role the federal government as well as international, national and provincial organizations can play to support these efforts.

RECOMMENDATIONS

The Medical Officer of Health recommends that:

1. The Board of Health requests that Health Canada explore avenues to reduce the spread and dissemination of misinformation and false claims about vaccines.
2. The Board of Health request that the World Health Organization consider global recommendations, similar to the WHO Framework Convention on Tobacco Control, regulating direct and indirect advertising, promotion and sponsorship by anti-vaccine groups and anti-vaccine messages in print, audio, video and online advertisements.

3. The Board of Health request the following health professional organizations educate their members on how to address vaccine hesitancy in their practice and promote vaccines: Ontario Medical Association, Canadian Medical Association, Ontario Nurses Association, Registered Nurses' Association of Ontario, Canadian Nurses Association, Ontario Pharmacists Association, Association of Ontario Midwives, Ontario Chiropractic Association, and Ontario Association of Naturopathic Doctors.

4. The Board of Health forward this report to Health Canada, Industry Canada, the Public Health Agency of Canada, The Ontario Ministry of Health and Long-term Care, Public Health Ontario, Advertising Standards Canada, the Canadian Association of Broadcasters, the Canadian Marketing Association and the Association of Canadian Advertisers, Public Health Ontario, the Ontario Public Health Association, the Association of Local Public Health Agencies, and the Council of Medical Officers of Health of Ontario, Ontario Medical Association, Canadian Medical Association , Ontario Nurses Association, Registered Nurses' Association of Ontario, Canadian Nurses Association, Ontario Pharmacists Association , Association of Ontario Midwives, Ontario Chiropractic Association and Ontario Association Of Naturopathic Doctors.

FINANCIAL IMPACT

There is no financial impact resulting from the adoption of the recommendations in this report.

DECISION HISTORY

The Board of Health has received a number of reports on immunization and vaccine hesitancy. The most recent report titled, Measles Outbreak 2015 and Ontario's Immunization System, was adopted at the June 11, 2015 Board of Health meeting <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2015.HL5.3>

COMMENTS

Vaccine hesitancy as a growing public health concern

In January 2019, the [World Health Organization \(WHO\) declared vaccine hesitancy to be one of their top ten major health threats for 2019](#)¹. WHO defines vaccine hesitancy as the reluctance or refusal to vaccinate despite the availability of vaccines. It includes parents who delay or chose not to provide all vaccinations for their children². The reasons why people choose not to vaccinate or incompletely vaccinate their children are complex and multi-faceted and include complacency, inconvenience in accessing vaccines, lack of confidence about their safety and/or effectiveness and misinformation that is available on social media and the internet including false concerns about side effects and ingredients in vaccines³.

In Canada, about 20% of the population is vaccine hesitant, meaning they have some concerns about vaccination but are not firm vaccine refusers⁴. They are distinct from vaccine refusers who make up less than 5% of the population. On March 12, 2019,

Canada's Chief Public Health Officer raised concerns about the impact of vaccine hesitancy in Canada and urged both healthcare providers and parents to ask questions and seek out trusted and reliable sources of information⁵.

Addressing anti-vaccine messages leading to vaccine hesitancy

The sources and ways of countering the underlying beliefs that lead to vaccine hesitancy are multi-factorial. No single intervention has been shown to be effective. Instead, the use of multiple interventions has shown effectiveness in increasing vaccine uptake and acceptance⁶. Research has also shown that vaccine hesitant parents are primarily concerned about the safety and efficacy of vaccines and perceived their health care providers to be a key source of information, as they often have difficulty identifying credible information sources⁷. Parents want to have information on the risks and benefits of vaccines that is relevant to their situation and is presented to them clearly and in advance of their child being vaccinated⁸. As well, a respectful dialogue between parents and their child's health care provider was found to be an important part of decision making around childhood vaccinations⁹.

Aside from addressing misinformation, it is also important to understand how health-related misinformation is spread. One study found a high level of social connectedness and use of social media to both diffuse health misinformation and engage individuals around it. The findings emphasized the importance of understanding how social networks and media can be influential in disseminating misinformation¹⁰. Other research has also emphasized the importance of social marketing when promoting vaccines to parents, individuals and communities. This includes identifying key community influencers, carefully choosing who provides the vaccine information and understanding the background and perspectives of the target population¹¹.

Addressing anti-vaccine messages on social media and the internet

Since February 2019, technology companies such as Pinterest, Facebook, Instagram and Google have addressed anti-vaccine content on their sites and have acknowledged the detrimental role they have played in spreading misinformation about vaccines. These companies have reduced access to misleading information including removing ads that promote vaccine misinformation, and not displaying or recommending content with anti-vaccine information^{12, 13}. In March 2019, the CEO of the American Medical Association, wrote to CEO's of leading technology companies, including the ones identified above, urging them to stop the spread of vaccine misinformation and to provide credible, scientific information instead¹⁴.

Advertising Regulation and Codes

Advertising health products and services is different from other goods and services because of the potential harms of misleading and false information and the expertise needed to properly understand often complex scientific findings¹⁵. Health claims for products such as vaccines are based on rigorous and reproducible scientific data evaluating their safety and effectiveness. Health Canada has the authority to regulate advertising of medications/health products (e.g. prescription and non-prescription medications, biologics (including vaccines), etc.) under Canada's Food and Drugs Act (FDA)¹⁶. Advertisements must not be false, misleading, deceptive, or likely to create an erroneous impression regarding character, value, quantity, composition, merit or safety¹⁷.

As an example, Health Canada has recently issued a public safety alert about false claims in the marketing of homeopathic remedies, known as nosodes. Reports indicated that homeopathic and naturopathic practitioners were promoting nosodes for “homeoprophylaxis,” suggesting they can protect children from illness similar to vaccines. The alert reinforced the message that no homeopathic products should be promoted as an alternative to vaccines because there are no substitutes for vaccines¹⁸.

The Advertising Standards of Canada maintains the *Canadian Code of Advertising Standards (Code)*. The *Code* is the Canadian advertising industry's principal instrument of self-regulation. It sets the standards for acceptable advertising in Canada and forms the basis for the review and evaluation of complaints about advertising. It applies to advertising of products and services in any medium (i.e., radio, TV, newspapers, magazines, billboard, Internet, flyers, etc.) and applies to a wide range of messages. There is no specific section of the *Code* that explicitly and definitively restricts messages about vaccines that contain misinformation or false statements¹⁹.

Internationally, the World Health Organization (WHO) Framework Convention on Tobacco Control is a universal standard for tobacco control so member countries can protect the public from the devastating health, social, environmental and economic consequences of tobacco. The treaty includes rules regarding the production, sale, distribution, advertisement, and taxation of tobacco. Article 13 of the agreement prohibits all forms of advertising, promotion and sponsorship that promote a tobacco product by any means that are false, misleading or deceptive or likely to create an erroneous impression about its characteristics, health effects, hazards or emissions²⁰. The WHO does not have a comprehensive multi-national framework to address the misinformation about vaccines that is spreading globally and causing significant harmful health consequences. If the WHO were to create a similar standard regarding direct and indirect advertising, promotion and sponsorship by anti-vaccine groups and anti-vaccine messages it could be adopted globally and have far reaching effects.

Anti-vaccine messages are meant to negatively influence the use of vaccines and include misinformation that can be difficult to interpret and differentiate from the truth. Ensuring advertisements about vaccines are truthful and clear without false, misleading or deceptive messages will mean that parents have access to clear information to make informed decisions about vaccinating their children. Therefore, the Medical Officer of Health (MOH) recommends that the Board of Health (BOH) request Health Canada to explore avenues to reduce the spread and dissemination of misinformation and false claims about vaccines. Furthermore, the MOH recommends that the BOH request the WHO to consider global recommendations, similar to their Framework Convention on Tobacco Control, regulating direct and indirect advertising, promotion and sponsorship by anti-vaccine groups and anti-vaccine messages in print, audio, video and online advertisements.

Role of TPH to promote vaccination and reduce vaccine hesitancy

Toronto Public Health (TPH) has a major role in educating the public to make informed choices based on evidence, to correct misinformation and to ultimately protect the health of the community by maintaining high vaccination rates. The threat posed by anti-vaccine messages and its influence on vaccine hesitancy requires an ongoing effort to

ensure the public and health care providers maintain confidence in vaccines. Toronto Public Health does this by working with health care professionals, schools and community organizations, by providing vaccinations, and by enforcing Ontario's legislation that supports vaccinations in schools and child care centres.

To continue to counter the effects of vaccine misinformation, increase vaccine confidence and maintain high vaccination rates, TPH will examine the evidence to inform a comprehensive multipronged strategy to reduce vaccine hesitancy and investigate various avenues to implement locally, including measures to mitigate the negative impact of false advertising, public and health care provider education and training, in partnership with other community organizations.

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SIGNATURE

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