Canadian Guidance on Addressing Vaccine Hesitancy to Help Foster Vaccine Demand and Acceptance

Section 2. Vaccine Hesitancy Globally and in Canada

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Building Resilient Pro-Vaccine Communities

Building the capacity to improve vaccine acceptance and uptake

The Canadian Vaccination Evidence Resource and Exchange Centre (CANVax) is an online database of curated resources to support immunization program planning and promotional activities to improve vaccine acceptance and uptake in Canada. As an online resource centre, CANVax aims to increase access to evidence-based products, resources, and tools to inform public health professionals in immunization program planning and promotion.

CANVax has been developed by the Canadian Public Health Association. Production of CANVax has been made possible through funding from the Public Health Agency of Canada. The views expressed herein do not necessarily represent the view of the Public Health Agency of Canada.

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PREFACE

This document was adapted from the **Western Pacific Regional Guidance on Addressing Vaccine Hesitancy to Help Foster Vaccine Demand** document, drafted in 2017 in response to the recommendation at the meeting of the Technical Advisory Group (TAG) on Immunization and Vaccine-Preventable Diseases in the Western Pacific Region (WPR), in July 2016.

Purpose and Specific Objectives of the Guidance as per WPR

The main purpose of the regional guideline on vaccine hesitancy is to help Member States to:

1. Identify the extent of vaccine hesitancy in the country.
2. Identify vaccine-hesitant population subgroups.
3. Diagnose the demand- and supply-side immunization barriers and enablers.
4. Design evidence-informed strategies to address hesitancy appropriate for the subgroup setting, context and vaccine.
5. Receive and provide support for regional coordination to successfully address vaccine hesitancy in the country.

The initial WPR draft, including the two Aide Memoires, was written by Noni E MacDonald, Dalhousie University, Halifax Canada, with input from Eve Dubé, Institut national de santé publique du Québec, Québec, Canada, Lisa Menning and Melanie Marti, Immunization, Vaccines and Biologicals, World Health Organization (WHO), Geneva, Switzerland and Sarah Long, Dalhousie University.

Canadian Guidance

The WPR document was then re-crafted by Noni E MacDonald and Eve Dubé to address the Canadian context, and sections were updated.

Each section has been written to integrate with the other sections but also to be able to stand alone. The main emphasis is on the diagnosis of hesitancy and focuses on interventions that can increase vaccine uptake at the program and individual levels.

For the full report of the Canadian Guidance on Addressing Vaccine Hesitancy to Help Foster Vaccine Demand and Acceptance, please visit https://canvax.ca/canadian-guidance-addressing-vaccine-hesitancy-help-foster-vaccine-demand-and-acceptance-full.

Global Perspective on Vaccine Hesitancy: Data from WHO UNICEF Joint Reporting Form

In 2013, the Strategic Advisory Group of Experts (SAGE) on Immunization's Working Group on Vaccine Hesitancy developed two indicators that were incorporated into the WHO UNICEF Joint Reporting Form (JRF) for the first time in 2014[1] with the first reported data available in 2015.[2]

The two indicators were:

Indicator 1: Reasons for vaccine hesitancy.

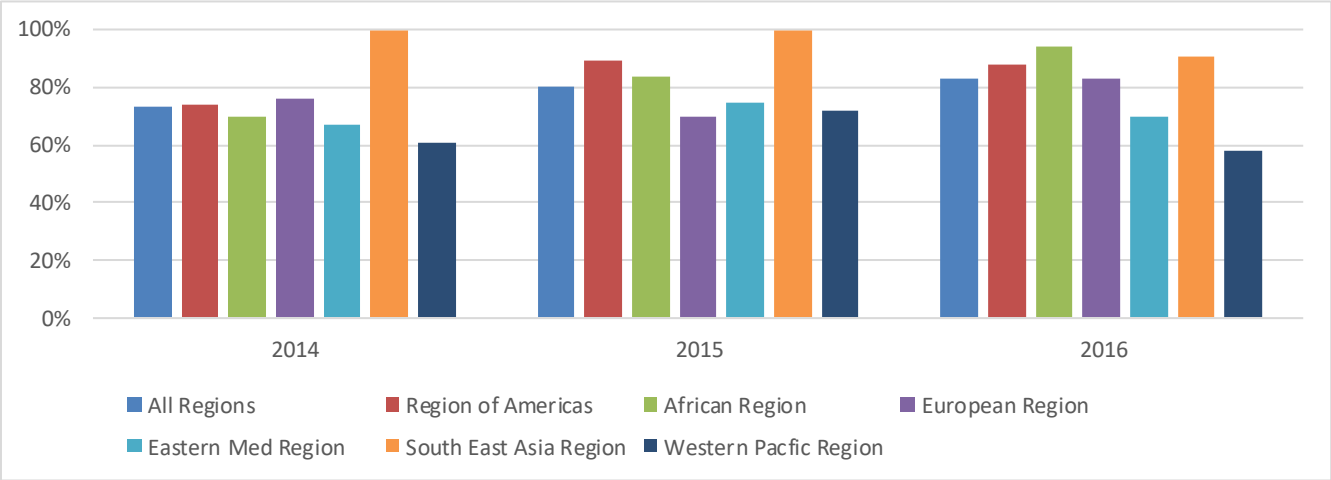
- Question 1: What are the top three reasons for not accepting vaccines according to the national schedule?
- Question 2: Is this response based on or supported by some type of assessment, or is it an opinion based on your knowledge and expertise?

Indicator 2: Percentage of countries that have assessed the level of hesitancy in vaccination at the national or subnational level.

- Question 1: Has there been some assessment (or measurement) of the level of confidence in vaccination at the national or subnational level in the past (<5 years)?
- Question 2: If yes, please specify the type and year, and provide assessment title(s) and reference(s) to any publication/report.

The response rate to these JRF indicators increased over the years, from 2014 to 2016 (see Figure 2.1). With respect to the Region of the Americas (Pan American Health Organization), there was an increase from 70% of countries responding in 2014 (i.e. reported in 2015 JRF) to nearly 90% in 2015. Canada did not respond to this indicator in 2015, but did in 2016 and 2017.

Figure 2.1 JRF Vaccine Hesitancy Response Rate



In 2017, a review of the three years of responses to these indicators in the annual JRF (i.e. for the years 2014, 2015, 2016 reports – available in 2015, 2016, 2017) revealed that hesitancy was common, and was reported in >90% of countries.[3,4]

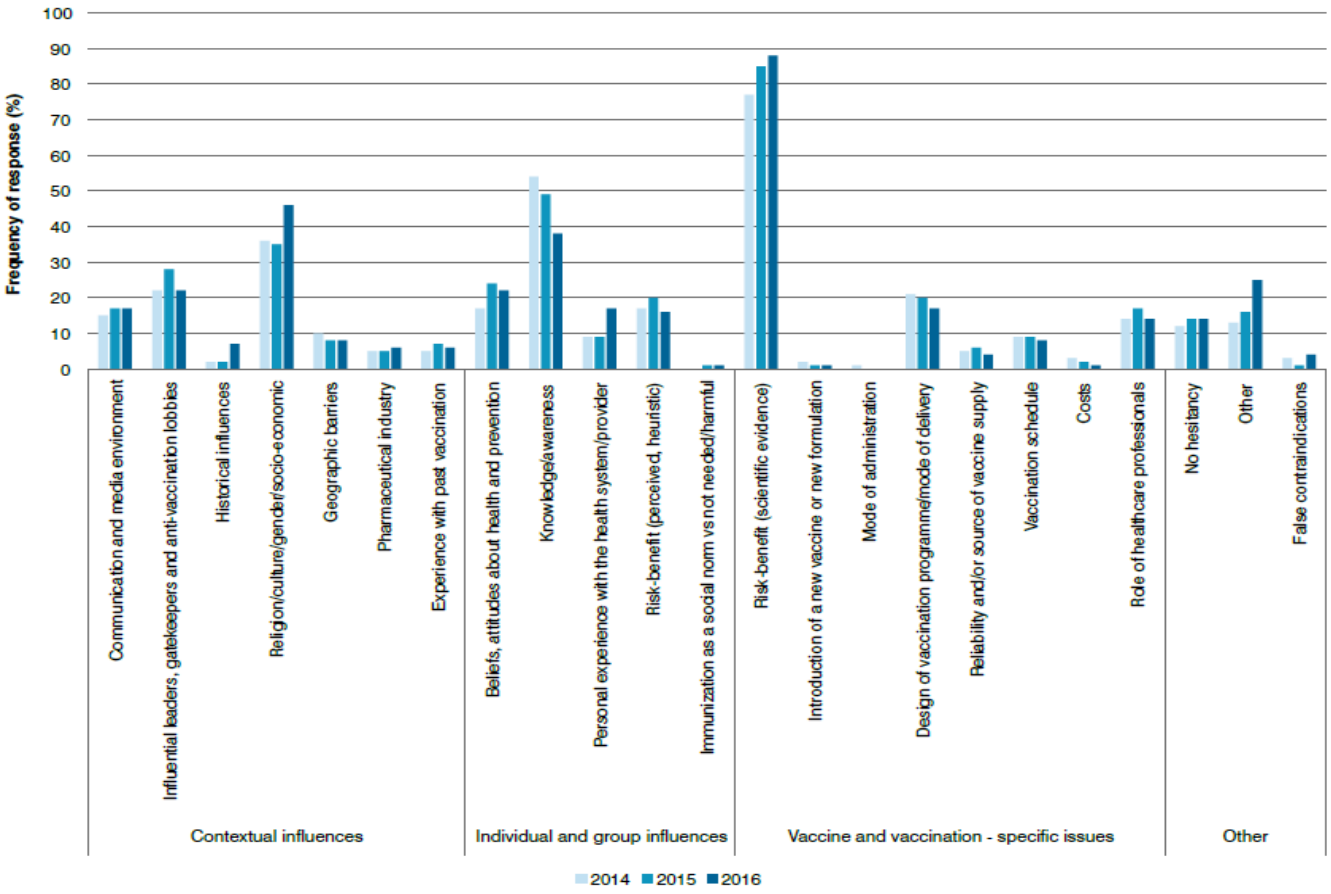
Using the WHO SAGE Working Group on Vaccine Hesitancy Matrix of Determinants (see Section 1 – Vaccine Hesitancy and Vaccine Demand: Table 1.1) to categorize the reasons for vaccine hesitancy reported by the countries, the top three most frequently cited determinants globally were consistent across the three years, although their ranking and frequency changed.[3,4]

These three determinants were:

a. *Risk–benefit (scientific evidence perception);*
b. *Lack of knowledge and awareness of vaccination and its importance*;
c. *Religion, culture, gender and socioeconomic issues, in particular religious reasons*.

Overall, the reasons cited for hesitancy across the three years covered 20 of 23 WHO Determinants Matrix categories.[4] However, even the most frequently cited category, *risk-benefit (scientific evidence, e.g. vaccine safety concerns),* accounted for less than one quarter of all reasons cited.[4] The reasons varied by country income level, by WHO region over time, and within a country. Of note: in high-income countries, e.g., like Canada, risk–benefit (scientific evidence) remained the most commonly cited reason over the three years, with relative consistency of 28%, 31% and 29% in 2014, 2015 and 2016 respectively[4] – see Figure 2.2.

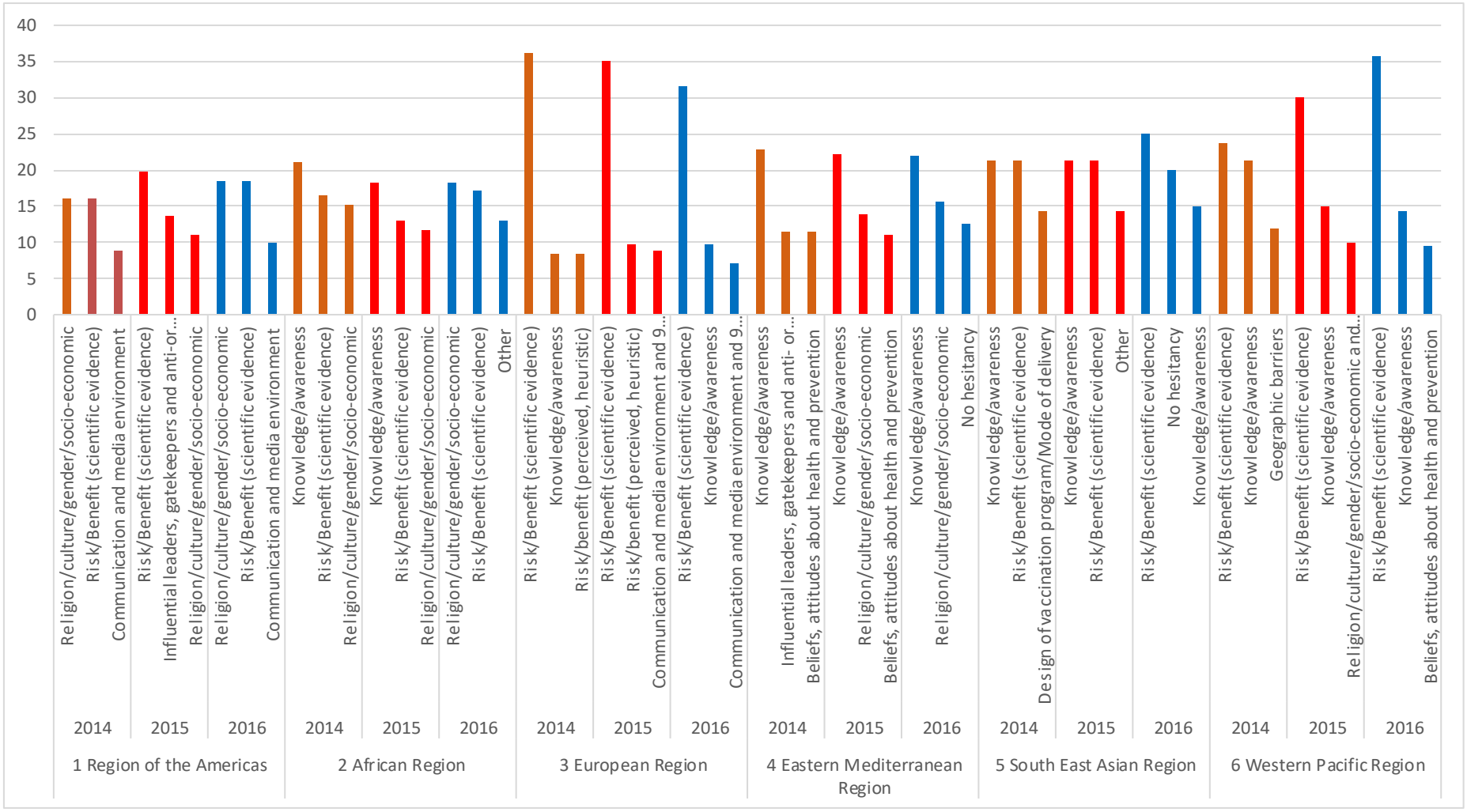
Figure 2.2 Top 3 Reasons Reported Across the Globe for Hesitancy in 2014, 2015, and 2016[3]



Pan American Health Organization Perspective

The top three reasons reported in the Americas differed somewhat from the other five WHO regions (see Figure 2.3). In all regions there was a shift in reasons over the three years, but this was the most pronounced in the AFRO region.

Figure 2.3 Top 3 Reasons Reported by WHO Regions for 2014, 2015, and 2016[3]



Canadian Perspective

Data from WHO UNICEF Joint Reporting Form

Canada reported on vaccine hesitancy in the 2016 and 2017 JRF reports, but did not report in 2014. The top three reasons cited by Canada for 2015 and 2016 are shown in Table 2.1. The 2016 reasons cited were reported based upon an assessment of the Canadian National Immunization Coverage Survey 2013 data.

Table 2.1 Top 3 Reasons Cited for Vaccine Hesitancy by Canada for the Years 2015 and 2016 in the JRF Reports

1. Fears about safety and effectiveness	1. Vaccine safety concerns
2. Complacency and questions related to relevance of vaccination	2. Philosophical or religious reasons
3. Fear of needles/ pain	3. Perceptions of too many vaccines

Fear of needles is both interesting and not surprising, given that Canada is a leader in recognizing that pain during immunization is a significant concern for parents and for children.[5] Taddio found that needle fear is common, reported by 24% of parents and 63% of children, and that needle fear was a major reason for immunization non-compliance for 7% of parents and 8% of children. In the JRF reports, needle fear was rarely reported in the top three reasons (only in three other countries), but this may reflect low detection and poor recognition.

Hesitancy studies in Canada

Surveys of parents have shown that hesitancy is an issue in Canada. For at least the past decade, 10 to 15% of parents have been reluctant to have their children receive vaccines; a far cry from the 1950s, when parents anxious about polio often waited in line for hours to ensure their children were immunized. Hesitancy is not just an issue for parents with young children. Parents may also be hesitant about HPV vaccine for their adolescent children and some adolescents themselves are hesitant. Hesitancy is also a problem for adult and senior vaccine acceptance. For example, for health care workers in Canada, while they accept screening for immunization and/or immunity as a condition of service for work in a hospital or health care facility, requirements for annual influenza immunization have proven to be much more contentious.[6] Many are hesitant about annual influenza immunization.

Recent surveys of parents of young children in Canada suggest that, while vaccine acceptance is high – well over 80% – even amongst parents willing to have their children immunized, there are some who are hesitant and have concerns. One third of Canadian parents were sceptically cautious about vaccine safety, were not convinced by the science of herd immunity and considered themselves to be vaccine-hesitant.[7-11] Common concerns included confidence issues such as fear of adverse events and harms, lack of trust, difficulty in accessing vaccines, and the belief that mandatory vaccines may be being pushed by the pharmaceutical industry. Pain concerns were often not been probed for, and were therefore not cited.

KEY POINTS

Globally

- Vaccine hesitancy has been reported in almost all countries globally.
- The most common reported reasons were risk-benefit (epidemiological and scientific evidence), lack of knowledge/awareness, and beliefs and attitudes.
- These reasons varied by income level, WHO region, by country and over time.

In Canada

- Vaccine hesitancy is well recognized across the country.
- The most common reasons fall into the confidence determinant category, but access, complacency and concerns about pain are also important.

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