## IMPROVING VACCINE UPTAKE: IMMUNIZATION GOVERNANCE IN ATLANTIC CANADA

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### INTRODUCTION

- Immunization is often considered one of public health's greatest achievements.<sup>1</sup>
- Despite well-known benefits of immunization, there are established patterns of inadequate vaccine uptake rates across the world.<sup>2</sup>
- Studies demonstrated decreased routine vaccine uptake after the COVID-19 Pandemic.<sup>3</sup>

### OBJECTIVES

- I. Examine Atlantic Canada's immunization governance landscape.
- 2. Examine healthcare professional (HCP) roles in vaccine administration.
- 3. Identify and assess immunization guidance and legal supports for HCPs.

### METHODS

I) Online environmental scan of provincial legislation and associated instruments in NS, PEI, NB and NFL<sup>4</sup>

• Nine-point schema: scope of action, procedural guidance, initial and continuing education, recording actions, safety procedures, adverse events, liability and supports.

2) Online environmental scan of Health Authority documents, guidelines, standards used by NS, PEI, NB and NL HCP governing bodies. Health authorities and the HCPs' governing bodies contacted via email or phone to supplement data.<sup>5</sup>

### METHODS

3) 34 semi-structured interviews with public health experts across Canada

- 7 from Atlantic provinces.
- 18 public health officials, 8 frontline healthcare workers, 5 health researchers & 3 healthcare union leaders.
  - Transcripts coded and analyzed in NVivo.

### FINDINGS: VARIABILITY IN VACCINE SCHEDULE

	Birth	2-Months	4-Months	6-Months	Grade 4	Grade 6	Grade 7	Grade 9	
HPV									
Нер В									
Tdap									
Men- Quad									
Key: Nova Scotia; New Brunswick; Prince Edward Island; Newfoundland & Labrador. HPV: Human Papillomavirus; Hep B: Hepatitis B; Tdap: tetanus, diphtheria and pertussis; Men-Quad: meningococcal quadrivalent vaccine.									

### FINDINGS: UNCLEAR SCOPE OF PRACTICE

	Physicians	Nurses	Pharmacists	Paramedics	Midwives	Respiratory Therapists				
NS										
NB										
PEI										
NL										
<b>Key:</b> Green indicates those empowered by statute to immunize, whereas <b>Red</b> indicates those who are nonetheless enabled to immunize. Orange indicated those with regulations regarding injecting drugs; however, not immunization specific.										

"Here in New Brunswick, I was stumped when I heard that respiratory therapists are allowed to immunize. So, we had to include them in our medical directives for COVID. And that was new to me."

> **NB** Interview Participant

# FINDINGS: LACK OF STANDARDIZATION OF EDUCATION IN IMMUNIZATION ADMINISTRATION

- Neither legislation nor professional governance instruments address education or continuing education in a complementary way.
- i.e., different requirements for education/training for different HCPs within and between provinces.

"One of our problems is [that] immunization teaching in medical schools and nursing schools in Canada, occupies a teensy weensy piece of the curriculum, and is almost an afterthought."

NS Interview Participant

### PEI Interview Participant

"I think pharmacies are doing a lot more modules and training around immunization. And public health nurses are comfortable with their training and understanding immunization. Ironically, our physicians, because they don't do it, but are huge influencers aren't as well informed about the different vaccines."

### CONCLUSIONS: BARRIERS TO IMMUNIZATION

- Disjointed routine immunization schedules with no rationale or evidence to support the differences;
- Lack of clarity and supporting legislation for HCPs able to immunize;
- Insufficient standardization of initial and continuing education and/or competency training for HCPs in immunization administration.
- Combined, these barriers can undermine effectiveness of, and public trust in, immunization programs.
- Could ultimately lead to reduced vaccine uptake and resurgence of vaccine preventable diseases.

### RECOMMENDATIONS

- Adoption of a standardized routine vaccine schedule;
- Adoption of a harmonized *Immunization Act* with common actors and nomenclature, with improved transparency of HCPs' scope of practice regarding immunization;
- Adoption and harmonization of steps to increase the amount and improve the quality of initial immunization education across healthcare professions;
- Adoption of immunization competency as a professional competency.

### REFERENCES

<sup>1</sup> CDC (2011). Ten Great Public Health Achievements - Worldwide, 2001-2010. *Morbidity & Mortality Weekly Rep,* 60(24), 814-818;

<sup>2</sup> Strategic Advisory Group of Experts on Immunization (2019).

<sup>3</sup> Cunniff, L., et al. The impact of the COVID-19 pandemic on vaccination uptake in the United States and strategies to recover and improve vaccination rates: A review. Hum Vaccin Immother. DOI: 10.1080/21645515.2023.2246502 (2023).

<sup>4</sup> CanLii Database. http://www.canlii.org/en/ (2023).

<sup>5</sup> Chief Medical Officer of Health of New Brunswick (2021). Routine Immunization Schedule. https://www2.gnb.ca/content/dam/gnb/Departments/h-s/pdf/en/CDC/Immunization/RoutineImmunizationSchedule.pdf.

Newfoundland and Labrador Health and Community Services (2018). Immunization Schedule. http://www.gov.nl.ca/hcs/files/publichealth-cdc-immunization-schedule.pdf.

Nova Scotia Public Health (2019). Routine Immunization Schedules for Children, Youth and Adults. http://novascotia.ca/dhw/cdpc/documents/Routine-Immunization-Schedules-for-Children-Youth-Adults.pdf.

PEI Government - Health and Wellness (2023). Childhood Immunizations. https://www.princeedwardisland.ca/en/information/health-and-wellness/childhood-immunizations.

### **QUESTIONS?**

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