

TOPIC	RESEARCH QUESTION(S)	Priority	High Priority
Rabies	Very little to support intradermal post-exposure prophylaxis	II	III
	How can we add to the global understanding of effectiveness of using intradermal versus IM?	IIII	II
	Issues around utilization of rabies vaccine	III	II
Influenza	Comparative analysis between influenza vaccines that claim to be superior vs standard QIV. For actual vaccines on the market and the 3 additional non egg based technology vaccines that have pending NOCs. We understand that head to head efficacy studies are very challenging and pricey to conduct, however, we believe that there are some workarounds possible by increasing funding for surveillance networks already in place or by using some indirect comparison methods that have been developed in the field of health technology assessment.	I	### II
	Impact of the implementation of HD Influenza vaccine in Long Term Care Facilities (LTCF) and the impact on LTCF outbreaks	III	###
Meningococcus	Evaluating strategies to optimize control of IMD through vaccination	II	IIII
	Understanding use of Meningococcal B vaccine for populations other than high risk (this would be contingent on work already being led by the Meningococcal WG of NACI)	I	III
Measles	Optimal timing for the first dose: are we approaching it the best way with schedules?	###	I
	Characterization of measles transmission in public settings. PTs have been dealing with various clusters and outbreaks of measles these past years, such as planes, airports, malls and attraction parks or zoos. There is data from past outbreaks and clusters that could be further grouped and analyzed. Pulling this information together would be helpful for public health decision making.	###	I
Invasive Pneumococcal Disease	Epidemiology of invasive pneumococcal disease and effectiveness of new generation conjugate vaccines in Canada (including comparison of PCV 10 and PCV 13)	I	IIII
	Evaluation of adult immunization programs – e.g. Pneumococcal program	II	II
Health economics (modeling, uptake)	Enhanced surveillance programs and establishing common definitions appropriate for healthcare utilization understanding as well as patient outcomes (are there sets of definitions that could be established with buy in from multiple stakeholders including public health, that could then be used to input into health economic models)	II	III

	Provincial heterogeneity of immunization schedules (including high-risk programs) and potential resulting inequities in the system	II	III
	Projects to support the capacity building of the NACI plus methodology, particularly economic modeling frameworks and methods. NACI has hinted that this will be challenging and that participation from academia would be beneficial. The projects could be about creating base models that can be used with various diseases and parameters or more specific for certain diseases. It would be critical for the credibility of the work and its usability by policy makers that industry partners not be involved in such projects.	II	III
	Optimal service delivery models for vaccination of adults, in particular persons living with chronic diseases; projects about improving service delivery of vaccination programs in various populations (including routine childhood immunization)	II	III
Vaccine safety/effectiveness	Challenges with healthcare provider reporting: projects aimed at how to better understand how to influence healthcare provider reporting of AEFI or other strategies with the ultimate aim of improving AEFI reporting	IIII	I
Vaccine hesitancy	Seeking to understand why providers may be vaccine hesitant, and if there's a link between that and further understanding that may be a barrier or a challenge from a provider perspective; is our landscape changing with a new demographic of primary care providers? If there is in fact a shift, what is the impact this may have on coverage? Understanding of what supports vaccine providers need to address vaccine hesitancy	II	III
	Understanding the impact of the anti-science movement and social media and counter strategies to address them	I	III I
	Identify PH interventions that would be helpful in addressing vaccine hesitancy	I	III I
Program evaluation	Evaluation of the implementation of new vaccine programs as they arise	III I	
Indigenous/First Nations research	Identify where there are data gaps with respect to Indigenous populations and how to address those	III	III
	Understanding factors and strategies to improve immunization coverage in Indigenous populations	IIII	III
Outbreak control gaps	Gap in research and policy making processes (zoonotic infections that affect humans)	II	I

The following additional priorities were submitted after the ranking process; therefore while we know at least one group feels they are a priority, we cannot determine how many other stakeholders agree.			
Influenza	Influenza vaccine and repeat vaccination: association with clinically significant outcomes (beyond laboratory confirmed influenza infection), i.e., morbidity, mortality		
Measles	Look at measles transmission among health care workers (as a number of cases in Canada have occurred in health care workers), as well as the 'lost generation' (the cohort who would have only received one dose before the second dose came in effect) to determine if this group is contributing to measles transmission in Canada		
Vaccine Hesitancy	Behavioural research and strategies to improve vaccine uptake in targeted populations, including HCWs		
Pertussis	Since a 2 dose pertussis calendar is now authorized for use in Canada (Infanrix Hexa), and with NACI now recommending immunization of pregnant women against pertussis, PTs will need to think about a 2+1 calendar for primary vaccination in the context of maternal immunization. However, there isn't much data available with this scenario, including potential for immune interference in the infant. Therefore, projects looking into immunogenicity and/or efficacy of pertussis and pneumococcal vaccines, in the scenario of maternal Tdap administration, followed by a 2+1 calendar in infants would be useful for decision making		
Pandemic Influenza vaccine (PIV): Evaluation	Evaluation of prototype pandemic vaccine in advance of a pandemic to better understand dosing requirements for protective responses		
	Studies that define the immunologic correlates of protection (humoral and cell-mediated immunity) after immunization, to guide vaccine development and evaluation.		
PIV: Assessment of uptake, effectiveness, safety	Development and testing of suitable population-based methods for rapid assessment of pandemic vaccine uptake, effectiveness and safety following vaccine release for general use		
	Examine barriers to pandemic influenza vaccination (including social determinants of health (SDOH)) and behavioural research and strategies to improve vaccine uptake in targeted populations, including HCWs and Indigenous populations		
	Predictors of pandemic vaccine coverage rates in the general population? In Indigenous populations?		

	Effective and culturally safe behaviour change communication messages, materials, and techniques for vaccine acceptance and public health prevention measures in a) all populations b) Indigenous communities		I
PIV: Deployment strategies	Use of mathematical modelling to identify the most effective strategies for deploying pandemic vaccine as it becomes available, considering a range of populations and situations		I
	Studies to improve the efficiency of large, rapid pandemic influenza vaccination campaigns.	I	
Pandemic Influenza: Indigenous	Model 2009 pandemic influenza rates if vaccination rates were higher in Indigenous populations	I	
	Beneficial and harmful traditional practices for influenza prevention/ transmission among Indigenous communities	I	
	Predictors of influenza mortality in Indigenous populations and comparison to non-Indigenous population		I
	Model pandemic influenza transmission dynamics in remote/ isolated/ Northern communities with high rates of overcrowded housing, trucked water, and/ or boil water advisories (or other SDOH impacting transmission)	I	

ADDITIONAL TOPICS	RESEARCH QUESTION(S)	Priority
Hepatitis A	Consider a universal schedule, including a 1-dose option	Medium
Human Papillomavirus (HPV)	Identify high risk adult groups for HPV infection and progression to disease that would benefit from vaccination	Medium
	Consider 1-dose HPV vaccination schedule, and consider 2-dose/3-dose schedules among persons 15+	High
Measles, Mumps, Rubella (MMR)	What number of doses provides optimal individual protection to adults born after 1970?	Medium

Pertussis	Optimal timing of adult and adolescent Tdap boosters, including Td intervals	High
Rotavirus	Interchangeability of products, and maximum age at first dose.	Medium
Seasonal Influenza	Review of safety and effectiveness of influenza vaccine in pregnancy	High
	Analysis of product choices for 65+	High
	Analysis of product choices for immunocompromised groups	Medium
	Optimal timing of seasonal influenza programs (including intra-season waning)	Medium
	Safety of influenza vaccines for patients receiving checkpoint inhibitors	Medium