COVID-19 Immunization Strategy for Canada

"Make No Little Plans. they have no power to stir [the] blood and probably themselves will not be realised ..." Daniel Burnham, Chicago Architect (1816-1912)

Building on Canada's National Immunization Strategy, the Canada's COVID-19 immunization strategy should contain the following, interconnected components, and plan to leave a legacy of a strengthened national immunization strategy for Canada. It is based on experience delivering the pandemic H1N1 (2009) vaccine, seasonal influenza vaccines and large-scale immunization programs that have been implemented in response to communicable disease exposures and outbreaks. It must build on existing structures and processes, where possible, as it is challenging – some may say impossible - to create something completely new during an emergency. Project management support is essential to sequence and develop timelines for the activities required for successful execution. Finally, thought must be given to how and whether the COVID-19 Immunization Strategy will align with Canada's COVID-19 emergency response structure.

- Vaccine development, acquisition and production strategy a process is currently underway to acquire vaccine under the Vaccine Task Force. The outcome of this process will result in advance purchase agreement(s) for enough vaccine to immunize all Canadians with up to two doses of vaccine. The Chair of this group, or a member, should be engaging with the Chair of the COVID-19 immunization strategy group.
- 2) Vaccine clinical trials the Canadian Immunization Research Network (CIRN) is currently planning clinical trials of candidate COVID-19 vaccines in Canada. The team lead should be engaged with the COVID-19 implementation strategy group.
- 3) Immunization recommendations the National Advisory Committee on Immunization should make recommendations on vaccine use in Canada. The NACI should be providing advice to the CIRN on the target populations on whom new vaccine candidates should be tested for safety and immunogenicity.
- 4) Vaccine procurement process this should be led by CIRID, in collaboration with Public Services and Procurement Canada on behalf the Vaccine Supply Working Group. The VSWG also should be planning and making recommendations on the auxiliary supply (eg, needles, syringes, etc), vaccine shipment and vaccine storage requirements.
- 5) Immunization registries all Canadians receiving vaccine should be pre-registered in their provincial or territorial as potential recipients of a COVID-19. This will enable planning for procurement of the appropriate volume of vaccine for Canada. The administration of all vaccines should be recorded electronically, through a bar-coded product that is linked to the DIN supplied by Health Canada. This will be especially important given that many if not most Canadians will require two doses of vaccine and new COVID-19 vaccines will not be interchangeable.
- 6) Immunization program planning and implementation who, where, when, why, how and so what ...

Planning should be anticipated for the delivery of more than one product/type of COVID-19 vaccine. All vaccine delivery should be conducted by vaccine delivery agents who are able to comply with the minimum standards for the storage and administration of COVID-19 vaccine, including the appropriate infection prevention and control measures, in light of the risks of COVID-19 transmission associated with the provision of health care services during the

pandemic. Priority groups for the receipt of vaccine **must** be standardized across Canada, as well as the timing of the implementation of priority group immunization. Planning should be anticipated for the delivery of more than one product/type of COVID-19 vaccine. Planning also should consider how, when and where each age group (preschool children, school-aged children, working age adults and seniors) and special populations (Canada's aboriginal peoples, migrants, refugees, persons in residential care, those who are incarcerated) will be reached.

- 7) Professional and public education and communication related to COVID-19 immunization professional and public communication strategies should be developed and implemented as soon as possible to prepare for the eventual administration of a COVID-19 vaccine. Messaging and FAQs should include what we know, what we don't know and what we are doing about what we don't know as it pertains to the COVID-19 immunization program and should be aligned with global and regional messaging and need to be updated constantly. Following the procurement announcements, this should start with the announcement that a national COVID-19 immunization strategy is under development, along with the components of that strategy.
- 8) Surveillance for COVID-19 and vaccine-associated adverse events building on the current national surveillance strategy for COVID-19, influenza and other respiratory virus surveillance platforms and adverse event following immunization (AEFI) surveillance systems, both passive and active, the goals and objectives of surveillance should be developed and appropriate systems implemented.
- 9) Management of AEFIs building on existing national processes, signal identification and management and field investigation should be anticipated and strengthened. As immunization will be strongly encouraged, and perhaps required in certain settings, consideration should be given to the development of a national vaccine injury compensation scheme.
- 10) Evaluation and applied immunization research in collaboration with the Canadian Institutes of Health Research, the COVID-19 immunization program should be monitored and evaluated, and a plan developed for this.