## Intelligence MEMOS



From: Aaron Jacobs and Ramya Muthukumaran

To: Provincial and Federal Ministries of Health and Public Health Agencies

Date: May 2, 2017

Re: FIVE WAYS TO INCREASE IMMUNIZATION AMONG CANADIAN CHILDREN

any communities in Canada <u>are well short</u> of childhood immunization targets, and children there remain at risk of contracting infectious diseases like measles, mumps, and whooping cough, among others. The <u>main source of this problem</u> is not parents who reject vaccines entirely, but children who are underimmunized - that is, they get some but not all their vaccines, or some but not all doses. Many children get immunized months - or years - too late.

This is something of a mystery, since immunization is clearly in parents' self-interest. Children are susceptible to an infectious disease and there are economic costs to take care of them if they fall ill – such as time off work – so the benefits of immunization would seem to outweigh the inconvenience of getting kids vaccinated.

The reasons behind poor immunization uptake are many, but they often reflect psychological biases. Parents may well need a 'nudge' to make a vaccination decision. Principles from the psychology-informed field of <u>behavioural economics</u> have improved the way we approach <u>retirement savings</u>, <u>organ donation</u>, <u>and insurance plans in Canada</u>. What could we observe about childhood vaccination?

Building off recommendations in <u>our recent report</u>, we suggest five ways policy makers could nudge parents towards fully immunizing their children:

- 1. Avoid abstraction: Parents are more affected by personal, relatable examples than by abstract risks. Every year in Canada a handful of infants become seriously ill due to vaccine-preventable diseases: anecdotes about these individuals will be more compelling than citing the precise numbers.
- 2. Communicate cost over benefit: How messages are presented can affect outcomes. Humans often react more strongly to losses than gains so immunization information emphasising costs over benefits might work better at capturing parents' attention. In many provinces, there is room for more involvement of public health nurses in crafting and communicating these messages.
- 3. Emphasize social norms: We are hyper attentive to prevailing norms when making decisions. Emphasising to new parents that more than 90 percent of Canadian children get immunized may be persuasive in its own right.
- 4. Choose 'opt-out' over 'opt-in': People usually stick with the default option, so the default option wherever possible should prompt immunization. Programs should aim to be 'opt-out' whenever possible this means making enrollment, appointments and follow-ups all as systematic and automatic as possible. In Ontario, parents must fill out a form if their child needs to be exempt from school immunization requirements which has a significant impact on uptake.
- 5. Experiment: Interprovincial and international comparisons have consistently shown that there is no silver bullet solution to improving childhood immunization. To address the spectrum of reasons for low vaccine uptake will require carefully staging, measuring, and analysing interventions. The federal government likely has a role to play in funding research towards these efforts.

With these targeted recommendations, Canadian provinces will be able to better ensure that children are protected from future outbreaks.

Aaron Jacobs and Ramya Muthukumaran are Researchers at the C.D. Howe Institute. They are co-authors of the report, "In Need of a Booster: How to Improve Childhood Vaccination Coverage in Canada."