

CIC 2018

Canadian Immunization Conference

December 4 - 6, 2018 | Shaw Centre
Ottawa, Ontario, Canada

Summary Report



COLLABORATORS



CANADIAN ASSOCIATION FOR IMMUNIZATION RESEARCH, EVALUATION AND EDUCATION

CAIRE is a unique professional organization of more than 140 Canadian researchers dedicated to building the scientific foundation for optimal immunization programs. Members are involved in vaccine and program development, program evaluation, social science of vaccine use and training of the next generation of vaccinologists. CAIRE's mission is to encourage and enhance vaccinology research so Canadians have timely access to new and improved vaccines and optimal programs. CAIRE promotes collaboration and networking amongst the vaccinology disciplines to ensure that suitable expertise exists to maintain Canada as a world leader in high-quality vaccinology research.



CANADIAN PAEDIATRIC SOCIETY

The Canadian Paediatric Society (CPS) is the national association of paediatricians, committed to working together to advance the health of children and youth by nurturing excellence in health care, advocacy, education, research and support of its membership. As a voluntary professional association, the CPS represents more than 3,300 paediatricians, paediatric subspecialists, paediatric residents, and other people who work with and care for children and youth.



CANADIAN PUBLIC HEALTH ASSOCIATION

The Canadian Public Health Association (CPHA) is the independent national voice and trusted advocate for public health, speaking up for people and populations to all levels of government. We champion health equity, social justice and evidence-informed decision-making. We leverage knowledge, identify and address emerging public health issues, and connect diverse communities of practice. We promote the public health perspective and evidence to government leaders and policy-makers. We are a catalyst for change that improves health and well-being for all.



PUBLIC HEALTH AGENCY OF CANADA

The Public Health Agency of Canada (PHAC) empowers Canadians to improve their health. In partnership with others, its activities focus on preventing disease and injuries, promoting good physical and mental health, and providing information to support informed decision-making. It values scientific excellence and provides national leadership in response to public health threats.

CANADIAN IMMUNIZATION CONFERENCE 2018

The Canadian Immunization Conference (CIC) is the biennial gathering of the wide range of individuals working in immunization from across Canada and internationally. Delegates include scientists and academics, front-line health service providers, public health professionals, policy makers, industry representatives, and students. Representatives from the Public Health Agency of Canada (PHAC), Canadian Association for Immunization Research, Evaluation and Education (CAIRE), Canadian Paediatric Society (CPS), and Canadian Public Health Association (CPHA) comprised the Executive Committee, which oversaw the work of the Organizing Committee, Scientific Committee, Communications Group, and CIC Conference Secretariat.

From December 4-6, 2018 over 850 conference delegates discussed current trends in immunization, learned about the latest developments in the field, and established new and renewed existing professional relationships. This report summarizes the conference objectives, registration process, and several other conference components. It relies on delegate feedback to describe the conference experience, what worked well, suggestions for improvement, and recommendations. Appendices list the conference committees, media report, and sponsors and exhibitors.

CONFERENCE OBJECTIVES

CIC 2018 provided participants the opportunity to:

- Profile new research, successful strategies and best practices to encourage future innovation and collaboration.
- Connect stakeholders to shape the future of Canada's vaccination research, policies and programs.
- Examine current vaccine- and immunization-related issues from various disciplines and sectors and discuss relevant knowledge translation approaches.
- Explore strategies to address emerging issues and potential impacts on decision-making, research, policy and practice.

LEARNING OBJECTIVES

Having attended CIC 2018, delegates are better prepared to:

- Utilize effective evidence-based programs and best clinical practices as well as policy approaches.
- Describe vaccine-related research and identify colleagues and partners to develop initiatives.
- Identify vaccination-related challenges and solutions, trends, emerging issues and evidence gaps.

LEARNING STREAMS

CIC 2018 was organized in a stream-based format, and multiple sessions were offered for each of the learning streams. Conference attendees had the opportunity to attend all sessions in one stream, or to select sessions of professional interest across several of the following streams:

- Informing and implementing policy
- New developments in vaccines and their use
- Optimal practice
- Vaccination in specific populations
- Vaccine acceptance and uptake

REGISTRATION

A total of 881 delegates attended CIC2018, representing a variety of registration categories including invited speakers, award recipients, students, exhibitors, sponsors, committee members, staff, volunteers, media, full-, single-, and two-day delegates.

Of the registered delegates who indicated their profession, about one-third (32%) were Public Health Nurses (157) and Nurses (128). Public Health Physicians (44) and Physicians (43) represented 10% of registered delegates. Students (59) composed 7% of registered delegates. Several other professionals from the biotechnology/vaccine industry, academia, pharmacy, and policy also registered.

The majority of registered Conference delegates came from Canada (n=826, 94%). Just over half the delegates from Canada were from Ontario (n=421, 51%), and there was representation from all 13 provinces and territories in Canada.

There were 55 registered delegates (6%) from outside Canada, including Australia, Belgium, Benin Bhutan, Botswana, Chile, China, the Democratic Republic of the Congo, Denmark, Haiti, Indonesia, Jamaica, Kazakhstan, Montenegro, Mozambique, Nepal, Netherlands, Norway, Saudi Arabia, Senegal, South Sudan, Switzerland, Uganda, United Kingdom, and United States. There was considerable international representation in 2018 due to

CONFERENCE EXPERIENCE

EVALUATION SURVEY METHODOLOGY

Following the Conference, delegates were invited to complete an online evaluation to share their feedback on their overall Conference experience and assess specific sessions. The online evaluation opened on December 6 and closed on December 20, 2018. A total of 457 delegates responded to the survey (response=52%), of whom 378 (completion=62%) completed the survey. This represents an increase of 44% in responses from 2016. Using a scale from 1 [strongly disagree] to 5 [strongly agree], delegates were asked to evaluate the quality of the sessions and whether they met the respondents' expectations, the speakers' demonstrated knowledge and expertise, if there was appropriate interaction with the audience, whether the sessions met the stated learning objectives, and if the sessions were free from industry bias. Evaluation respondents also had the opportunity to provide open-ended comments. The quantitative results are summarized separately in an evaluation report. This report is based on the qualitative responses, unless otherwise stated.

OVERALL CONFERENCE EXPERIENCE

Delegates were asked to rate their overall Conference experience, as well as various factors relating to the program structure, registration, location/duration, and accessibility, using a scale from 1 [very dissatisfied] to 5 [very satisfied]. The majority of respondents were either satisfied or very satisfied with the overall Conference experience (93%) and related factors.

Conference experience	1	2	3	4	5
Overall Conference experience	—	—	7%	49%	44%
The Conference as an opportunity to share information, network and engage with colleagues	—	1%	4%	42%	53%
The Conference was well organized	—	1%	4%	30%	65%
Conference registration process and communications	—	1%	3%	32%	64%
Conference location in Ottawa	0.5%	0.5%	3%	22%	74%

The majority of conference delegates, 78%-95%, were aware that CIC 2018 was held in collaboration with the Canadian Association for Immunization Research, Evaluation and Education (80%), Canadian Paediatric Society (78%), Canadian Public Health Association (88%), and Public Health Agency of Canada (95%). The vast majority of evaluation respondents, 93% or greater, agreed or strongly agreed that the Conference met all three of its learning objectives and 98% felt their personal learning needs were met.

With respect to the Conference program, delegates were asked to rate the quantity of the various sessions. The majority of respondents felt the right number of sessions was offered. Some types of sessions had higher percentages of respondents not attending such as the oral presentations (16%), poster presentations (18%), and exhibits (14%).

CONFERENCE COMPONENTS

The Honourable Ginette Petitpas Taylor, Minister of Health, opened the conference with highlights of the Government of Canada's commitment to immunization as a measure to protect and improve public health. She encouraged collaboration between government, industry and health professionals to ensure that the health benefits of successful programs are accessible to all Canadians.

Canada's Chief Public Health Officer, Dr. Theresa Tam, welcomed delegates on the second day of the conference and suggested collaboration and concerted effort is needed to build trust and confidence in vaccines and improve immunization coverage rates.



PLENARY SESSIONS

There were four plenary sessions held over the course of CIC 2018.

Plenary 1: Pandemic influenza: Past and future vaccine and preparedness challenges

- Nancy Cox, (Retired) Director, Influenza Branch, CDC; (Retired) Director, WHO Collaborating Centre for Surveillance, Epidemiology and Control of Influenza

Dr. Cox overviewed the basic microbiology of the influenza virus with an emphasis on how it can evolve into pandemic influenza. The presenter provided historical, social, and political information on past influenza pandemics starting with the Spanish Flu in 1918. She overviewed influenza vaccine development, its effectiveness, and challenges with its adoption. The content was put into a global perspective and challenged delegates to consider a global influenza surveillance system. The presenter concluded with a provocative question about readiness for the next severe influenza pandemic, which sparked the interest of a range of health professionals. Some survey respondents lamented the presentation was mostly background information and did not contain novel insights. Others were interested in hearing a Canadian perspective around preparedness for a future influenza pandemic. Roughly 80% of evaluation respondents agreed or strongly agreed that this plenary met their expectations.



Plenary 2: A global perspective on mandatory infant and childhood immunization: Rationales, issues and knowledge gaps

- Noni MacDonald, Professor, Department of Pediatrics, IWK Health Centre, Dalhousie University

Panelists:

- Amanda Cohn, Senior Advisor for Vaccines, Centers for Disease Control and Prevention
- Natasha Crowcroft, Chief, Applied Immunization Research and Evaluation, Public Health Ontario
- Shawn Harmon, Honorary Fellow, University of Edinburgh; Adjunct Professor, Department of Pediatrics, Dalhousie University
- Hope Peisley, Director, Immunisation Policy Section, Immunisation Branch, Office of Health Protection, Australian Government Department of Health

Dr. MacDonald presented background information on mandatory infant and child immunization, which was followed by a panel discussion with global perspectives. If the ultimate goal is to increase global vaccine uptake, which hinges on supply and demand (including hesitancy) factors, then mandatory immunization of infants and children is a potential strategy for consideration. The presenter described the complexity of mandatory immunization, factors for consideration when contemplating mandatory immunization, situations that call for mandatory immunization, outcomes of mandatory immunization in different countries, and a case study from Ontario. She overviewed challenges to making vaccines mandatory, the ethical/legal issues and unintended consequences. Words matter and it was suggested that we move away from the term "mandatory" and consider alternative terms such as requirements for entry into various settings including schools or the workforce. While many delegates felt the international perspectives added



value to the discussion, some wanted more focus on the Canadian context. Many felt there was inadequate time for audience discussion. Some wanted to hear an opposing point of view, i.e. pros of non-mandatory immunization and cons of mandatory immunization, rather than a focused discussion around strategies to implement mandatory immunization. Close to 95% of evaluation respondents agreed or strongly agreed that this plenary met their expectations.

Plenary 3: Public health in the age of anxiety

- Paul Bramadat, Professor and Director, Centre for Studies in Religion and Society, University of Victoria

Dr. Bramadat's plenary session was very highly rated and delegates enjoyed the opportunity to hear from such an engaging speaker. Following an overview of the history of religion and science, the presenter explained that we're in a crisis of trust and a crisis of truth. The root causes of vaccine hesitancy are about more than the vaccines themselves, which has significant implications for a health provider's ability to influence vaccine uptake. Several delegates remarked they have a new-found understanding of and appreciation for the complexity of vaccine hesitancy that can be applied in practice. Close to 95% of evaluation respondents agreed or strongly agreed that this plenary met their expectations.



Plenary 4: Looking ahead: The future of vaccine design and delivery

- Gregory Poland, Director, Vaccine Research Group, Mayo Clinic

Dr. Poland concluded the conference with a provocative presentation on future directions for the field of vaccinology. He introduced the concept of vaccinomics, which takes a personalized approach to vaccine development. The presenter situated his discussion in the global demographic trend of population ageing. He urged delegates to avoid premature cognitive narrowing, which includes staying up-to-date with personal vaccination schedules. As a society, Dr. Poland stressed that new paradigms are needed for the ways vaccines are developed and rolled out. Delegates enjoyed hearing cutting-edge ideas at the end of the conference. Close to 95% of evaluation respondents agreed or strongly agreed that this plenary met their expectations.



SYMPOSIUMS AND WORKSHOPS

There were a total of 26 symposiums and workshops at CIC 2018 with a relatively even distribution across the five learning streams. Each session included a session chair and between two and five invited panelists, resulting in 55 invited speakers being included in the program. Most of these sessions were planned by members of the Organizing Committee (see Appendix A), although some were submitted by delegates.

These sessions were very highly rated by evaluation respondents and well-attended. There was insufficient seating capacity at certain sessions. Delegates are keen to obtain cutting-edge, novel information and are grateful for the opportunity to learn about immunization policies and practices in place in different jurisdictions across the country. In the same vein, a respondent noted that it is a code violation to promote a vaccine before it has been formally approved, indicating that guidelines are needed around what can be discussed.

Several evaluation respondents commented that they gained useful information that can be applied in different settings. It was noted that information needs to be accessible and cannot be overly technical. There was a heated question and response period in the session on Shifting sands underpinning Influenza policy which highlighted the importance of having skilled moderators in these sessions.

People were very enthusiastic about some of the resources that were shared in the Practical communications tools for immunizers session.

Delegates thoroughly enjoyed hearing from a formerly vaccine hesitant mother in the session on Tell me more about the "vaccine hesitant." They learned the importance of truly listening to concerns of the vaccine hesitant and techniques from motivational interviews.

“ I learned about the nuanced and myriad reasons why some people are vaccine hesitant, and gained a greater appreciation of the difference between vaccine hesitancy and refusal to vaccinate. The personal story and presentation by Tara Hills was very moving and brought home the human aspects of the issue, and how we can do better in communicating with vaccine hesitant parents. One of the best sessions I attended at the conference.”

There was also a very positive response to the session on Using social media as a tool for outbreak response and to improve vaccine uptake.

The session on Legal issues in immunization was very well received and evaluation respondents would like to see this topic covered in more depth at future conferences.

ORAL ABSTRACTS AND POSTER PRESENTATIONS

A call for oral and poster submissions launched on 14 May 2018 with a closing date of 27 June 2018. One hundred and fifty-five (155) oral abstract submissions and 103 poster submissions were received and evaluated using pre-defined criteria established by the Scientific Review Committee (see Appendix A). Sixty-five oral abstracts and 152 poster presentations were accepted for presentation. Many of the high-scoring abstracts not selected for an oral presentation were offered the opportunity to present in a poster format.

The oral abstracts were organized into 13 sessions with five presenters each in an effort to combine interrelated and complementary presentations across the five learning streams. There is room for improvement around use of slides, i.e. presenters should only display legible figures. Many respondents noted that they gained useful information that can be applied in different settings. There was a suggestion to provide some of the presenters with speaking opportunities at a future conference.

Close to 60% of respondents evaluated the poster presentations. Feedback on the poster session was positive and respondents enjoyed the opportunity for dedicated time to discuss with the presenters. Respondents appreciated that the posters were clustered by theme. Some noted that there was insufficient time to meet with all poster presenters; in other cases too many people were congregated around presenters to allow for interaction. Others noted that attendance was poor among non-poster presenters and that two separate poster viewing times could be beneficial. Respondents would like posters visible throughout the conference and suggested that industry posters should be clearly labelled as such.

“ The session exceeded my expectations. The use of social media is fascinating. Afterwards, my colleagues and I discussed how our health promotion funding could be better used with a social media campaign rather than printing out hundreds of pamphlets that just sit in clinics.”

Copies of the oral and poster abstracts are available on the CIC 2018 website: <https://cic-cci.ca/program/>.

1918 SPANISH FLU EXHIBIT AND DOCUMENTARY

CIC 2018 fell on the 100th anniversary of the 1918 Influenza Pandemic and it was a fitting venue to commemorate one of the worst global public health disasters on record. Unmasking Influenza attempted to capture the social and political impact on Canada during the 1918 flu pandemic and to shed light on whether or not we are prepared for the next great pandemic. This exhibit commemorated the global story of disease, death and tragedy which was ultimately responsible for the loss of more than 50,000 Canadians.

The 1-hour documentary Unmasking Influenza examined the lasting impact on Canada of the world's most deadly flu pandemic and reveals whether or not we are prepared for the next. This commemorative project was presented by Sound Venture Productions, the Royal Canadian Geographical Society and the Government of Canada.



DEFINING MOMENTS CANADA

Defining Moments Canada presented Struggle Without Rest, a travelling exhibit about the impact on diverse Canadian communities of the Spanish Flu. The Spanish Flu Pandemic of 1918-1919 swept through Canada, causing unprecedented mortality and leading to massive social upheaval and change. With stories from one coast to the other, this exhibit shined a light on the diverse, untold stories of the flu pandemic that would, in many ways, shape Canada's future.

NATIONAL IMMUNIZATION POSTER CONTEST

Immunize Canada, in collaboration with the Canadian Public Health Association, organized the National Immunization Poster Contest for Grade 6 students in conjunction with CIC 2018. This contest provided students across Canada with an opportunity to submit works of art reflecting their ideas on immunization for good health. The objectives of the contest were to provide educational resources on immunization to teachers, and to initiate a dialogue between teachers, students and parents about the benefits of immunization. Prizes for the 2018 contest were donated by BIOTECCanada's Vaccine Industry Committee and the Canadian Paediatric Society. The National Winner received an iPad, books, and art materials. The National Winner's school library received a donation of science- and biotechnology-themed books. The National Runner-up received an Instax Mini 9 camera and film, a science kit, books, and art materials. The National Runner-up's school library received a donation of science- and biotechnology-themed books. Each provincial/territorial winner received a science kit, books, and art materials. This year's national winner was Katrina Torre from Holy Ghost School in Winnipeg, Manitoba and the national runner-up was Frédérique Boeck from La Prélude in Ottawa, Ontario. There were an additional nine poster winners. They can be viewed online <https://immunize.ca/national-immunization-poster-contest>.

EXHIBIT HALL

Conference sponsors and exhibitors had the opportunity to display an exhibit booth at CIC 2018. The 32 conference sponsors and exhibitors (see Appendix C) were invited to complete a hand-written survey to rate various components of the exhibiting experience using a scale from 1 [poor] to 5 [excellent] and to share their feedback in open-ended comments. They had one day to complete and return the survey. A total of eleven completed surveys were received (response rate=34%) with a 100% completion rate.

The evaluation responses were overwhelmingly positive with every component of the survey rated highly or extremely highly, on average. Respondents rated the registration process, information package, conference show services, set-up experience, exhibit space, exhibit hours, refreshment breaks, support staff, delegate traffic, networking opportunities and the overall exhibitor experience. Some respondents noted that they loved the new exhibit space and that there was good attendance during the exhibit hours.

Delegates also had the opportunity to comment on the exhibitor hall in the regular conference evaluation. Close to three-quarters (74%) of evaluation respondents noted there was the right number of exhibits, 9% noted there were too few, 3% noted there were too many, and 14% did not attend.

AWARDS

AWARD OF EXCELLENCE IN IMMUNIZATION

Based on a suggestion stemming from CIC 2016, the Award of Excellence in Immunization was established to recognize the efforts of a group or individual who has made an outstanding contribution to the community level to front-line immunization programs, policy or advocacy. The inaugural Award of Excellence was presented to The Centre for Family Medicine's International Travel and Immunization Clinic. The Immunization Clinic is an interprofessional team within a family health team located in Kitchener-Waterloo, Ontario that has promoted, innovated, and provided training in vaccination programs and initiatives since its inception in 2007. This team provides leadership in the vaccination of the family health team's 27,000 patients, including high-risk immunocompromised patients and the vulnerable population of government-assisted refugees.

DR. JOHN WATERS MEMORIAL AWARD

The Dr. John Waters Memorial Award was initiated in 2002 in recognition of his outstanding leadership in support of immunization programs and policy. The purpose of the Award is to recognize other outstanding contributors to public health and immunization programs. The 2018 Award was presented to Dr. Gaston De Serres. Dr. De Serres is an epidemiologist and physician at the Institut national de santé publique du Québec. His career of over 25 years in the field of immunization has been devoted to improving immunization programs: applying a critical lens, insisting on a population perspective, and quantifying benefits, costs and risks to inform recommendations. Dr. De Serres has been involved at all levels of decision-making, including the Quebec Immunization Committee, the National Advisory Committee on Immunization, and as a consultant to the World Health Organization. His astute



analyses of immunization programs, based on strong epidemiological principles, ensure recommendations are evidence-based and use resources wisely to protect the greatest number of people at the greatest risk.

BURSARY PROGRAMS

VACINOLOGY STUDENT RESEARCH PROGRAM

Established in 2008 by the Canadian Association for Immunization Research, Evaluation and Education (CAIRE), the Vaccinology Student Research Program encourages students to consider careers in vaccinology by exposing them to a wide cross-section of vaccinology-related research.

CAIRE, with support from the Meningitis Research Foundation of Canada, led the student travel bursary program to provide financial support to individuals who would not otherwise be able to attend CIC. In 2018, 49 students applied for the Vaccinology Student Research Program. All applicants were eligible to participate in the student poster session and the meet the expert networking sessions.

The applications were reviewed and evaluated by the Travel Bursary Committee based on pre-defined criteria. Following the review, funding up to a maximum of \$1,200 plus conference registration was provided to 6 individuals to cover participation costs (travel, meals and accommodation).


The following 12 students participated in the program:

- Bahaa Abu-raya: The effect of timing of tetanus-diphtheria-acellular pertussis vaccine administration in pregnancy on the avidity of pertussis antibodies
- May Ahmed: Investigating the effect of seasonal influenza vaccination on the development of anesthesia/paresthesia, headaches, and seizures, Canadian Immunization Research Network, 2012-2016
- Alex Aregbesola: Safety of H1N1 pandemic vaccines during the 2009 outbreak in Manitoba
- Jessica Bartoszko: Does consecutive influenza vaccination reduce protection against influenza: A systematic review and meta-analysis
- Antonia Di Castri: Knowledge, attitudes, beliefs and behaviours of the general public about the role of pharmacists as immunizers
- Heidi Fernandes: Content development and validity testing of a framework for the assessment of health-related risks, including vaccination needs, among travellers by pharmacists in Ontario & Development and testing of a framework for the assessment of health-related risks, including vaccination needs, among travellers by pharmacists in Ontario
- Gabrielle Gaultier: B cell responses to 13-valent pneumococcal conjugate vaccine in adult patients with severe chronic kidney disease
- Jennifer Gillis: Prevention of human papillomavirus-associated anal cancer among men living with HIV: Examining knowledge, attitudes, and beliefs regarding HPV-associated disease and prevention
- Ramandip Grewal: Human papillomavirus HPV vaccine uptake in gay, bisexual, and other men who have sex with men Montreal, Toronto, and Vancouver: A CIRN-funded study & Experiences and attitudes towards HPV and HPV vaccination among GB2M in Ontario, Canada: Results from the #iCruise study
- Terra Manca: Developing product monograph language that supports evidence-informed use of vaccines in pregnancy
- Sarai Racey: Rates of cervical intraepithelial neoplasia in women in British Columbia: A data linkage evaluation of the school-based HPV immunization program
- Nirma Vadlamudi: Immunogenicity and safety of the 13-valent pneumococcal conjugate vaccine compared to 23-valent pneumococcal polysaccharide in immunocompetent adults: A systematic review and meta-analysis

BERNARD DUVAL FOUNDATION EDUCATION BURSARY

Dr. Bernard Duval was one of Canada's leading vaccinologists and made significant contributions to the immunization field in Canada. Dr. Duval was passionate about training future immunization researchers. His Foundation has been able to provide an educational bursary to a deserving participant in the Student Vaccinology Research Program. A Committee of reviewers rated the students' posters and three-minute oral presentations to select a recipient of this award, which was announced on December 6. Jennifer Gillis was honoured for her presentation





entitled Prevention of human papillomavirus-associated anal cancer among men living with HIV: examining knowledge, attitudes and beliefs regarding HPV-associated disease and prevention.

CO-DEVELOPED ACCREDITED LEARNING ACTIVITIES

There were five co-developed accredited learning activities at CIC 2018 on the topics of novel delivery systems and immunization schedules; meningococcal B in adolescence and HPV in males; flu in older adults; pneumococcal disease; and HPV-related diseases and cancers. These sessions required pre-registration and were accredited by the Canadian Paediatric Society or the Association of Medical Microbiology and Infectious Disease Canada and complied with the accreditation guidelines and procedures of these organizations. While the industry sponsor of each of these sessions nominated the topic of the session, all planning (including faculty invitations and review of curriculum) was the responsibility of the accrediting body.

Between 50-100 participants evaluated each of these sessions and rated them very highly overall. There were mixed views on the novel delivery systems session with some delegates indicating they gained knowledge that could be applied in practice and others noting the content did not align with the session description. The session on meningococcal B in adolescence and HPV in males provided participants with techniques for speaking to patients but not necessarily new knowledge. The session about flu in older adults was well-received and explored how to help seniors choose an appropriate flu vaccine. The session on pneumococcal disease received a positive response and participants noted they appreciated the call to action around the need for better advocacy around adult vaccination. The session on HPV-related diseases and cancers was very well-received and enhanced the confidence of the participants to recommend HPV vaccines for relevant populations.

ACCREDITATION

CIC 2018 was approved by the Canadian Paediatric Society for a maximum of 17.25 credit hours as an Accredited Group Learning Activity (Section 1) as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada (RCPSC) (<http://www.royalcollege.ca/rcsite/cpd/maintenance-of-certification-program-e>). The 17.25 credits included up to 5.75 credit hours per day. Participants could also claim an additional 0.5 credits per poster for poster viewing under RCPSC Section 2. By late February 2019, 100 physicians requested Certificates of Accreditation and 162 delegates requested Certificates of Participation.

COMMUNICATIONS

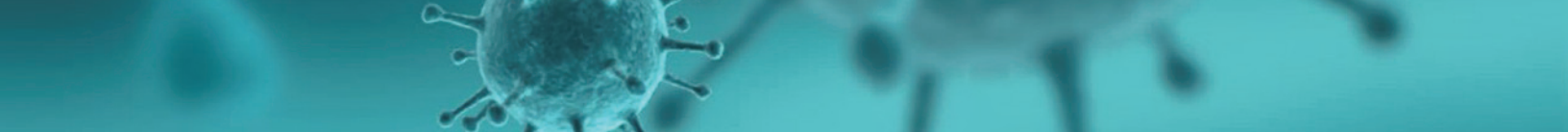
The Canadian Public Health Association (CPHA) coordinated a communications group composed of representatives from all conference collaborating organizations (see Appendix A). The group was responsible for developing and implementing a communications plan that included both communications and media relations activities.

CPHA managed social media for the Conference, including a Twitter profile and Facebook page. Activity on the Facebook page was minimal and did not include any interaction. The Twitter account received considerable traffic during the conference and has over 300 followers. There was significant use of the bilingual hashtag #cic2018cci by many Conference delegates.

The communications group issued two news releases in conjunction with the conference. One featured 10 newsworthy oral abstracts that the communications group thought would resonate with journalists. The presenting authors gave their approval to be featured in the release and were available to conduct interviews. The other news release provided an overview of Conference highlights and included quotes from the Minister of Health, the Chief Public Health Officer of Canada and all conference collaborators.

Five media representatives attended some portion of the Conference. Several other media representatives made contact with CPHA's Communications Manager to request an interview with a Conference speaker and/or delegate, but did not attend the Conference. Coverage included a combination of print/online articles and radio interviews at the local and national levels. See Appendix B for a full media report.

A mobile Conference app was available that enabled delegates to browse and search the Conference program, build their own schedule, access detailed Conference session information and share their experiences via social



media. Over 30% of respondents used the app and 85% of the users rated it as being useful or very useful. The availability of the app and its tools need to be clearly communicated to delegates to promote uptake. Ideally the app should enable delegates to go paperless if that is their desire.

MARKETING AND PROMOTION

CPHA managed a Conference website, which served as a repository for Conference information, including the collaborators, committees and sponsors; Conference programs; registration and travel information; and, an online media kit. Following the Conference, the website was updated to include the speaker presentations.

Leading up to the Conference, seven (7) electronic notices were sent out to a distribution list of registered CIC 2018 Conference delegates and individuals who had attended past conferences to solicit conference ideas, announce the call for submissions, promote registration and provide them with relevant Conference information as it became available. Social media was also used in advance of and during the Conference to generate interest and raise visibility of CIC 2018.

CONFERENCE FACILITY

CIC 2018 took place at the Shaw Centre in Ottawa, Ontario. Some delegates commented the venue was excellent, accessible, well-laid out and easy to navigate while others disagreed and would have liked more signage. Some delegates commented the session rooms were too small to accommodate the audience. Several respondents noted the food was excellent. Some evaluation respondents suggest we consider holding the conference at another time of year and in a different city.

ON-SITE SERVICES

The Conference Secretariat provided a number of services at CIC 2018 to promote accessibility. Simultaneous interpretation (English and French) was available for all sessions with the exception of workshops. Free wireless internet access was available. A media room was available for media representatives to conduct interviews.

RECOMMENDATIONS

The following recommendations stem primarily from suggestions made by evaluation respondents and can inform the planning of future Conferences.

- To encourage greater transparency, disclosure statements should refer to all disclosures including those related to industry, government and other relationships.
- To help address the historic and contemporary injustices and health inequities faced by Indigenous communities, the Conference Organizing Committee should work with Indigenous organizations to incorporate Indigenous worldviews into conference sessions as appropriate.
- To promote improved evaluation data, the Conference Organizing Committee should explore the feasibility of daily evaluation surveys.
- To foster peer-to-peer networking opportunities, the conference app should enable direct communication between delegates.
- To foster audience engagement, the Conference Organizing Committee should designate more sessions for workshops and consider alternative presentation methods (e.g., PechaKucha, world café, and improvisation/role play).
- To promote a variety of perspectives and to avoid repetition, diversity in speaker selection should be encouraged while seeking Canadian presenters (opposed to international speakers) in order to highlight the Canadian context.



APPENDIX A

CONFERENCE COMMITTEES

EXECUTIVE COMMITTEE

- Ian Culbert, Canadian Public Health Association
- Gordean Bjornson, Canadian Association for Immunization Research, Evaluation and Education
- Marie Adèle Davis, Canadian Paediatric Society
- Gina Charos, Public Health Agency of Canada

CONFERENCE ORGANIZING COMMITTEE

- Ian Culbert, Co-Chair, Canadian Public Health Association
- Patricia Salsbury, Co-chair, Public Health Agency of Canada
- Brenda Coleman, Scientific Co-Chair, University of Toronto
- Fawziah Lalji, Scientific Co-Chair, University of British Columbia
- Disha Alam, Canadian Association of Midwives
- Gordean Bjornson, Canadian Association for Immunization Research, Evaluation and Education
- Susan Bowles, Canadian Pharmacists Association
- Eliana Castillo, Society of Obstetricians and Gynaecologists of Canada
- Marie Adèle Davis, Canadian Paediatric Society
- Eve Dubé, Immunize Canada
- Nany Grimard Ouellette, First Nations and Inuit Health Branch, Indigenous Services Canada
- Christine Halpert, Canadian Nursing Coalition for Immunization
- Nathalie Labonté, Vaccine Industry Committee [BIOTECCanada]
- Janet McElhaney, Canadian Geriatrics Society
- Shelly McNeil, Association of Medical Microbiology and Infectious Disease Canada & National Advisory Committee on Immunization
- Monika Naus, Canadian Immunization Committee
- Lisa Paddle, Public Health Agency of Canada
- Elisabeth Pagé, Canadian Institutes of Health Research – Institute of Infection and Immunity
- Caroline Quach, National Advisory Committee on Immunization
- Jennifer Ralph, Canadian Institutes of Health Research – Institute of Infection and Immunity

SCIENTIFIC COMMITTEE

- Brenda Coleman, Scientific Co-Chair, Canadian Association for Immunization Research, Evaluation and Education
- Fawziah Lalji, Scientific Co-Chair, Canadian Association for Immunization Research, Evaluation and Education
- Christina Bancej, Public Health Agency of Canada
- Lucie Marisa Bucci, Canadian Public Health Association
- Dorothy Moore, Canadian Paediatric Society
- Otto G. Vanderkooi, Association of Medical Microbiology and Infectious Disease Canada

COMMUNICATIONS GROUP

- Emma Mallach (Chair), Canadian Public Health Association
- Karen Simmons, Canadian Association for Immunization Research, Evaluation and Education
- Jessica Sherman, Canadian Paediatric Society
- Leslie Waghorn, Public Health Agency of Canada

CIC CONFERENCE SECRETARIAT

- Sarah Pettenuzzo, Conference Manager, Canadian Public Health Association
- Alexie Arseneault, Conference Officer, Canadian Public Health Association
- Lison Pelletier, Business Development Coordinator, Canadian Public Health Association



ABSTRACT REVIEWERS

- Naser Alkhatib
- Karen Beckermann
- Jason Brophy
- Sarah Buchan
- Eliana Castillo
- Brenda Coleman
- Shelley Deeks
- Deshayne Fell
- Devon Greyson
- Maryse Guay
- Julie Guertin
- Donna Halperin
- Kazi Hassan
- Sherilyn Houle
- Lili Jiang
- Olayemi (Yemi) Kadri
- Fawziah Lalji
- Joanne Langley
- Catherine Mah
- Athena McConnell
- Shelly A. McNeil
- Dorothy Moore
- Monika Naus
- Margaret Russell
- Manish Sadarangani
- Bruce Seet
- Mayank Singal
- Shakti Singh
- Xiaochen (Chloe) Tai
- Karina Top
- Wendy Vaudry
- Bryna Warshawsky



APPENDIX B MEDIA REPORT

OUTPUT: TWO NEWS RELEASES

- Canadian Immunization Conference features latest immunization research (10 newsworthy oral presentations)
- Canadian Immunization Conference

COVERAGE

- CBC's All in a Day interview with Sarah Wilson
<https://www.cbc.ca/listen/shows/all-in-a-day/segment/15644265>
- The National Observer interview with Anne Budgell
<https://www.nationalobserver.com/2018/12/03/news/they-all-expected-die>
- Les matins d'ici ICI Radio-Canada.ca interview with Gaston de Serres
<https://ici.radio-canada.ca/premiere/emissions/Les-matins-d-ici/segments/entrevue/97528/grippe-vaccin-ottawa-conference>
- Ottawa Citizen interviews with Tara Hills and Noni MacDonald
<https://ottawacitizen.com/news/local-news/tone-down-the-rhetoric-advises-former-anti-vax-mother>
- Ottawa Citizen interview with Nancy Cox and Bonnie Henry
<https://ottawacitizen.com/news/local-news/are-we-ready-canada-and-the-world-have-work-to-do-before-next-pandemic-say-experts>
- Le Droit interviews with Tara Hills and Gaston de Serres
<https://www.pressreader.com/canada/le-droit/20181205/281500752325245>
- CBC's As it Happens interview with Tara Hills
<https://www.cbc.ca/radio/asithappens/as-it-happens-thursday-edition-1.4935124/this-formerly-vaccine-hesitant-mom-has-a-message-for-canadian-doctors-1.4935126>
- Global News interview with Tara Hills
<https://globalnews.ca/news/4741087/vaccine-hesitant-mom-canada/>

CANCELLED/DECLINED:

- CBC Atlantic radio interview request with Noni MacDonald: Declined
- 1310 NEWS radio interview request with Tara Hills: Declined



APPENDIX C SPONSORS AND EXHIBITORS

SPONSORS

PLATINUM

- Pfizer Canada
- Sanofi Pasteur

GOLD

- GSK
- Merck

SILVER

- Seqirus

BRONZE

- Medicago
- Vaccines411®

CONTRIBUTOR

- Innovative Medicines Canada
- Public Health Ontario
- Valneva – Advancing Vaccines for Better Lives

EXHIBITORS

- AccuVax by TruMed Systems
- Canadian Vaccination Evidence Resource and Exchange Centre
- CANImmunize
- CardioMed Supplies Inc
- Doctors Without Borders
- GlaxoSmithKline
- Immunize Canada
- LogTag Recorders
- Montréal en Santé
- Public Health Ontario
- Public Health Physicians of Canada
- TempArmour Refrigeration

CONFERENCE FINANCING

This conference had three main revenue streams, including support from: the Public Health Agency of Canada (29%); corporate sponsors and exhibitors (28%); and, delegate registration fees (43%).

Corporate sponsors and exhibitors provide financial support that offsets core expenses (such as food and beverage, graphic design and printing) in order to reduce the financial burden on conference delegates to the greatest possible extent. These financial contributions do not entitle corporate sponsors to any involvement in the development of the scientific program.

CIC 2018

Canadian Immunization Conference