



# **CIC** 2016

**Canadian Immunization Conference**

**December 6 - 8, 2016 | Shaw Centre  
Ottawa, Ontario, Canada**

**Final Program**



## COLLABORATORS



### CANADIAN ASSOCIATION FOR IMMUNIZATION RESEARCH AND EVALUATION (CAIRE)

[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 (CPS)

The [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 3,000 paediatricians, paediatric subspecialists, paediatric residents, and other people who work with and care for children and youth.



### CANADIAN PUBLIC HEALTH ASSOCIATION (CPHA)

Founded in 1910, [CPHA](#) is the independent voice for public health in Canada with links to the international community. As the only Canadian non-governmental organization focused exclusively on public health, CPHA is uniquely positioned to advise decision-makers about public health system reform and to guide initiatives to help safeguard the personal and community health of Canadians and people around the world. CPHA's mission is to enhance the health of people in Canada and to contribute to a healthier and more equitable world.



### PUBLIC HEALTH AGENCY OF CANADA (PHAC)

[The Agency](#) is responsible for promoting and protecting the health of Canadians through leadership, partnership, innovation and action in public health. Through our research, programs and services, our goals are to bring about healthier Canadians, reduced health disparities, and a stronger capacity to deliver on and support public health activities.

## ABOUT CIC

Immunization protects individuals and communities by preventing the spread of disease. As more people are immunized, the disease risk for everyone is reduced. Immunization has probably saved more lives in Canada in the last 50 years than any other health intervention. Immunization is the single most cost-effective health investment, making it a cornerstone in the effort to promote health.

The ongoing occurrence of vaccine-preventable disease outbreaks makes CIC 2016 an important venue to discuss the recurrence and emergence of infectious diseases that are posing challenges for public health at all levels. Critical to our degree of preparedness are an ability to continue to develop and improve vaccines, strengthen public health surveillance systems, and support timely and practice-relevant immunization program research, as well as an encouraging of evidence-based and ethical policy and practice measures to help us better control infectious diseases and improve public confidence in vaccines.

From December 6-8, 2016, over 900 delegates will connect, collaborate, share and learn. The innovative scientific program will engage and inspire future research, policies and practices. To facilitate knowledge exchange and engagement, the Organizing Committee engages with experts and thought-provoking speakers who will inspire and challenge delegates.

## CONFERENCE OBJECTIVES

CIC 2016 will provide a:

- Dynamic setting to profile new research, successful strategies and best practices, to inspire innovation and to encourage further collaborations;
- Venue for new and returning vaccination stakeholders to collaborate, innovate and help shape the future of Canada's vaccination research, policies and programs; and,
- The opportunity to improve knowledge translation across disciplines to identify, discuss and troubleshoot current vaccine- and immunization-related issues across a range of disciplines and sectors.

## LEARNING OBJECTIVES

Having attended CIC 2016, delegates will be 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; and,
- Identify vaccination-related challenges and solutions, trends, emerging issues and evidence gaps.

## LEARNING STREAMS

### IMMUNIZATIONS IN SPECIFIC POPULATIONS

Different populations, such as the immunocompromised, newcomers, and some Indigenous Peoples may require unique approaches to ensure that optimal immunization coverage and efficacy are obtained. Sessions in this stream will explore the unique needs of specific populations, how services are accessed across the country, and innovative approaches that are being developed and implemented to promote uptake and efficacy of vaccines. Factors such as changes to the vaccine, changes to the adjuvant, and the number of doses will be considered to ensure a healthy and protected population.

### MAKING AND IMPLEMENTING POLICY

Policy-makers need to be able to communicate effectively in the planning and implementation of vaccine programs. Sessions in this stream will explore the various facets of vaccine-related policy development and implementation from cost-benefit analyses and program modelling to decision-making processes and evaluation. What are the key factors driving policy decisions and systematic approaches for considering the evidence that promote health and health equity? How are various types of evidence used to decide what should be publicly funded and for whom? Sessions will look to international examples for promising approaches.

### NEW DEVELOPMENTS IN VACCINES AND THEIR USE

The field of vaccine research and development is constantly evolving and the complex process involves a combination of public and private involvement. Sessions in this stream will explore new vaccines, adjuvants, advances in technology and other enhancements that are in development. The topic will be covered from a variety of angles such as new vaccines that are coming to market, new uses for existing vaccines, new vaccine schedules, new trends in vaccines and uptake, and emerging pathogens.

### OPTIMAL PRACTICE

Evidence-based vaccine administration standards, effective communication, and optimal storage and handling practices are key components of an effective immunization program. Recommended administration practices are based on clinical trials that determine the dose, route, schedule and storage requirements for each vaccine. The [PHAC Immunization Competencies for Health Professionals](#) set professional standards, guide practice, and provide a framework for immunization program development. Sessions in this stream will explore the importance of education and training for providers who administer vaccines to the public. The significance of programs to monitor the quality of immunization services and the competence of providers will be examined.

### VACCINE UPTAKE AND ACCEPTANCE

Vaccine hesitancy and sub-optimal immunization rates remain significant challenges in protecting Canadians against vaccine-preventable diseases. Sessions in this stream will explore challenges and innovative ways to improve vaccine acceptance and uptake for specific and general populations in Canada. Are low immunization rates simply a factor of complacency or is it directly related to pervasive myths and misconceptions that hinder vaccine uptake? Strategies to improve the situation will hinge on an understanding of the full scope of the issue, which includes a focus on the individuals' interaction with health professionals as well as their knowledge, beliefs and other practices.



## WORKSHOPS

New for CIC 2016 are Workshop Sessions that aim to enhance the skills of conference participants through a practical learning experience.



Education Program  
for Immunization  
Competencies | Programme de formation  
sur les compétences en  
matière d'immunisation

## EDUCATION PROGRAM FOR IMMUNIZATION COMPETENCIES (EPIC)

EPIC is a 1-day course that provides an overview of competencies—developed by a national consensus—for front-line immunization providers. The program is based on the document [Immunization Competencies for Health Professionals](#), developed with the Public Health Agency of Canada, a landmark national consensus guideline on education and training for immunization providers. It's open to residents, physicians, nurses and pharmacists.

### COURSE OBJECTIVES

After participating in this program, you will be able to:

- Integrate key principles of the guideline into any practice setting.
- Counsel patients on important immunization issues.
- Build public confidence in vaccine efficacy and safety.
- Ensure safe and competent immunization practices.
- Work collaboratively with other professionals to promote cooperation on important public health issues such as immunization.

### PROGRAM

Download the [full program](#)

### MAINTENANCE OF CERTIFICATION (MOC)

This event has been approved by the Canadian Paediatric Society for a **maximum** of 8.0 **credit hours** under Accredited Group Learning Activity (Section 1), as defined by the Maintenance of Certification program of the Royal College of Physicians and Surgeons of Canada.

### REGISTRATION

- Registration if also attending CIC 2016: \$250
- [Registration for EPIC Course only](#): \$350

# GENERAL INFORMATION



## ACCREDITATION

This event has been approved by the Canadian Paediatric Society for a maximum of **16.5 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.

If you are a member of the College of Family Physicians of Canada please contact [mainprocredits@cfpc.ca](mailto:mainprocredits@cfpc.ca) or 1-800-387-6197, ext. 243 or 204 for information on claiming credits for this event.

## CO-DEVELOPED ACCREDITED LEARNING ACTIVITIES PROGRAM

The Conference program will include Co-developed Accredited Learning Activities. Each of these sessions will be accredited by the Canadian Paediatric Society (CPS) or the Association of Medical Microbiology and Infectious Disease Canada (AMMI) and must comply with the accreditation guidelines and procedures of these organizations.

## SIMULTANEOUS INTERPRETATION

Simultaneous interpretation will be offered for all sessions. Headsets will be available to delegates at the **registration desk**. Identification will be required to pick up your headset. Please return the headset to the registration desk at the end of each day.

## SPEAKER READY ROOM (ROOM 204)

The Speaker Ready Room, located in **Room 204** and we encourage you to preview your presentation and ensure graphics, text and media files display as needed. The Speaker Ready Room will be open:

- Monday, December 5            12:00-16:00
- Tuesday, December 6        08:00-16:00
- Wednesday, December 7    08:00-16:00
- Thursday, December 8       08:00-10:00

## DISCLOSURE OF CONFLICT OF INTEREST

To ensure balance, independence, objectivity and scientific rigour, all presenters have been asked to inform audience members of any possible affiliations or financial interests that may have a direct bearing on the subject matter of the presentation.

Such conflicts could include, but are not limited to: employment, ownership of stock, involvement with industry advisory boards, or participation in industry-sponsored clinical research. Other potential areas of real or perceived conflict of interest could include receiving honoraria or expenses from a commercial organization in relation to the presentation.

## GREEN INITIATIVES

The Shaw Centre is a strong advocate for environmental respect, conservation, and sustainable living and is a LEED Gold certified building. LEED (Leadership in Energy and Environmental Design) is a green building rating system administered by the non-profit Canada Green Building Council. The Shaw Centre has utilized cutting-edge environmentally sound technology in six categories: Sustainable Sites, Water Efficiency, Energy & Atmosphere, Materials & Resources, Indoor Environment, and Innovation & Design.

**WIRELESS NETWORK: CIC2016    PASSWORD: IMMUNIZE**





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# PROGRAM-AT-GLANCE

TIME	TUESDAY 6 DECEMBER	WEDNESDAY 7 DECEMBER	THURSDAY 8 DECEMBER
7:00		CO-DEVELOPED LEARNING OPPORTUNITY	
7:30			
8:00			
8:30			
9:00	WELCOME REMARKS	WELCOME REMARKS	PLENARY III
9:30	PLENARY I	PLENARY II	
10:00			
10:30	BREAK IN EXHIBIT HALL	BREAK IN EXHIBIT HALL	BREAK
11:00	CONCURRENT SESSIONS	CONCURRENT SESSIONS	CONCURRENT SESSIONS
11:30			
12:00			
12:30	LUNCH IN EXHIBIT HALL + CO-DEVELOPED LEARNING OPPORTUNITY	LUNCH IN EXHIBIT HALL + CO-DEVELOPED LEARNING OPPORTUNITIES	LUNCH
13:00			PLENARY IV + CLOSING
13:30			
14:00			
14:30	CONCURRENT SESSIONS	CONCURRENT SESSIONS	
15:00			
15:30			
16:00	WELCOME RECEPTION IN EXHIBIT HALL	NETWORKING EVENT WITH POSTER PRESENTERS	
16:30			
17:00			



## PROGRAM OVERVIEW

09:00-10:30	WELCOME REMARKS Canada Hall 1				
	PLENARY I: WHAT HAVE WE ACCOMPLISHED IN CANADA'S IMMUNIZATION PROGRAMS IN THE PAST 25 YEARS? Monika Naus				
10:30-11:00	NUTRITION BREAK Canada Hall 2 & 3				
11:00-12:30	CONCURRENT SESSIONS				
	HPV vaccination: New vs old!  Room 207	Oral Abstracts: Immunizations in specific populations  Session 1 - Room 201 Session 2 - Room 202		Introduction of new vaccines and programs – Is it all just about value for money?  Room 206	
	Inventory management  Room 208	Steve Jobs vs. the measles: Using digital tools to enhance immunization  Room 210		Vaccine hesitancy: Tools to address problems at the population, public and individual levels  Room 205	
12:30-14:30	LUNCH Canada Hall 2 & 3				
12:45-14:15	CO-DEVELOPED LEARNING OPPORTUNITY What's new in pneumococcal disease? Where have we been and where are we going? Room 215				
14:30-16:00	CONCURRENT SESSIONS				
	Brief training workshop on motivational interviewing adapted to immunization  Room 207		Electronic Registries  Room 213		It Takes a Village: Implementation of best practices in pain mitigation at the time of vaccination  Room 205
	Oral Abstracts: Making and implementing policy  Session 1 - Room 201 Session 2 - Room 202	New vaccines on the horizon  Room 208	Optimizing immunization in Indigenous populations  Room 206	What's new with NACI?  Room 210	
16:00-17:30	WELCOME RECEPTION Canada Hall 2 & 3				
16:00-17:30	VACCINOLOGY STUDENT RESEARCH PROGRAM Parliament Foyer				

**WIRELESS NETWORK: CIC2016    PASSWORD: IMMUNIZE**

## WELCOME REMARKS

### MODERATOR

- Ian Culbert, Executive Director, Canadian Public Health Association

### COLLABORATOR GREETINGS:

- Rhonda Kropp, Director General, Public Health Agency of Canada
- Brian Ward, Interim Chair, Canadian Association for Immunization Research and Evaluation
- Joan Robinson, Chair, Infectious Diseases and Immunization Committee, Canadian Paediatric Society; Editor-in-Chief, Journal of Paediatrics & Child Health

### ADDRESS BY THE MINISTER OF HEALTH

- The Honourable Dr. Jane Philpott, PC, MP

## PLENARY I - DR. JOHN WATERS MEMORIAL LECTURE



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.

### PRESENTED BY:

**Bryce Larke**, Dr. John Waters Memorial Committee

## WHAT HAVE WE ACCOMPLISHED IN CANADA'S IMMUNIZATION PROGRAMS IN THE PAST 25 YEARS?

### MONIKA NAUS, 2016 DR. JOHN WATERS MEMORIAL AWARD RECIPIENT

**Medical Director, Immunization Programs & Vaccine Preventable Diseases Service, BC Centre for Disease Control; Associate Professor, School of Population and Public Health, University of British Columbia**

In the past quarter century, vaccine programs have expanded to include protection against twice as many diseases. This session will explore what approaches and tools are available to us now that were not then, and which do we still need to strengthen our programs?

### LEARNING OBJECTIVES:

- Describe the changes to the Canadian landscape in immunization programs over the past 25 years.
- Plan an approach to strengthen support for and evaluation of public health immunization programs.

### MODERATOR:

- Ian Gemmill, Medical Officer of Health, Kingston, Frontenac and Lennox & Addington Public Health





## NEW DEVELOPMENTS IN VACCINES AND THEIR USE

### ROOM 207 HPV VACCINATION: NEW VS OLD!

This session will discuss recent scientific knowledge regarding the new vaccine HPV-9, in comparison with the HPV-2 and HPV-4 vaccines, and address the dosing regimen. Panelists will explore the options for HPV-9 use in current programs and for patients that have already received 1 or 2 doses of HPV-2 or HPV-4. The session will provide an overview of the use of HPV-9 vaccine in Canada and elsewhere in the world and the efficacy to protect against the 9 strains and its impact on the incidence of HPV infection, genital warts, cervical cancer and other related cancers. Evidence on the immunization of boys/men will also be presented.

#### LEARNING OBJECTIVES:

- Review the public health impact of HPV vaccines to date.
- Outline the clinical information for the HPV-9 vaccine.
- Describe the implications of vaccine programs for boys and girls, and various dosing approaches.
- Outline the future of cervical cancer screening in the era of HPV vaccination.

#### SPEAKERS:

- Simon Dobson, Clinical Associate Professor & Head, Division of Infectious Diseases, Department of Pediatrics, University of British Columbia; Clinical Investigator, Vaccine Evaluation Centre, Child and Family Research Institute at BC Children's Hospital
- Gina Ogilvie, Senior Public Health Scientist, BC Centre for Disease Control; Professor, Faculty of Medicine, University of British Columbia; Canada Research Chair, Global control of HPV-related cancer
- Chantal Sauvageau, Médecin-conseil, Institut national de santé publique du Québec; Professeure agrégée, Faculté de médecine, Université Laval; Chercheure, Centre de recherche du CHU de Québec-Université Laval

#### MODERATOR:

- Brian Ward, Professor of Medicine & Microbiology, Research Institute of the McGill University Health Centre Vaccine Study Centre; Interim Chair, CAIRE

Image courtesy of Shaw Centre



# TUESDAY 6 DECEMBER

11:00-12:30

## CONCURRENT SESSIONS

### IMMUNIZATIONS IN SPECIFIC POPULATIONS

#### ROOM 201 ORAL ABSTRACT SESSION 1

- CANVAS: Active surveillance for adverse events following immunization with seasonal influenza vaccines, 2015 and 2016. A Canadian Immunization Research Network study – [Julie Bettinger](#)
- End-of-season estimates of 2015-16 influenza vaccine effectiveness, Canada – [Danuta Skowronski](#)
- Influenza vaccine effectiveness in the prevention of influenza-related hospitalization in Canadian adults over the 2011/12 through 2013/14 season: A pooled analysis from the Serious Outcomes Surveillance Network of the Canadian Influenza Research Network – [Shelly McNeil](#)
- Impact of prior season vaccination on seasonal influenza vaccine effectiveness: A preliminary analysis over 4 seasons from the Serious Outcomes Surveillance Network of the Canadian Immunization Research Network – [Michaela Nichols-Evans](#)
- Burden of vaccine-preventable pneumococcal disease in hospitalized adults: A Serious Outcomes Surveillance Network study of the Canadian Immunization Research Network – [Jason Leblanc](#)

#### MODERATOR:

- Lisa Paddle, Public Health Agency of Canada
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### IMMUNIZATIONS IN SPECIFIC POPULATIONS

#### ROOM 202 ORAL ABSTRACT SESSION 2

- Safety and immunogenicity of tetanus-diphtheria-acellular pertussis vaccine (Tdap) during pregnancy – [Scott Halperin](#)
- Fecal shedding of rotavirus vaccine in premature babies in the neonatal unit – [Manish Sadarangani](#)
- Rotavirus hospitalizations: A decade (2005-2015) of surveillance documenting vaccine success – [Nicole Le Saux](#)
- Understanding rotavirus coverage in Ontario: No easy task! – [Sarah Wilson](#)
- Vaccine effectiveness against laboratory-confirmed influenza hospitalizations among young children during the 2010-11 to 2013-14 influenza seasons in Ontario, Canada – [Sarah Buchan](#)

#### MODERATOR:

- Lindsay Colas, Public Health Agency of Canada



## MAKING AND IMPLEMENTING POLICY

### ROOM 206 INTRODUCTION OF NEW VACCINES AND PROGRAMS – IS IT ALL JUST ABOUT VALUE FOR MONEY?

This session will enable participants to understand cost-effectiveness analyses as they pertain to new vaccines and programs implementation. As National Advisory Committees are moving toward a framework for implementation that includes cost-effectiveness parameters, policy makers need to understand the advantages and limit of such analyses.

#### LEARNING OBJECTIVES:

- Discuss the basic principles and understand the terminology of cost-effectiveness analysis (CEA).
- Discuss how CEA can be used in the decision to introduce new vaccines or new vaccine programs.
- Discuss the limits of CEA and other criteria that can oppose CEA in decision making.

#### SPEAKERS:

- Amanda Cohn, Senior Advisor for Vaccines, National Center for Immunization and Respiratory Diseases, Centers for Disease Control and Prevention
- Shelley Deeks, Medical Director, Immunization and Vaccine Preventable Diseases, Public Health Ontario; Associate Professor, Dalla Lana School of Public Health, University of Toronto
- Nisha Thampi, Medical Director, Infection Prevention and Control Program; Assistant Professor, Department of Pediatrics, Division of Infectious Diseases, Children's Hospital of Eastern Ontario

#### MODERATOR:

- Caroline Quach, Paediatric Infectious Disease Consultant & Medical Microbiologist, McGill University Health Centre; Associate Professor, Departments of Paediatrics & Epidemiology, Biostatistics & Occupational Health, McGill University

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**OPTIMAL PRACTICE****ROOM 208    INVENTORY MANAGEMENT**

The growing number of domestic and international vaccine shortages have underscored the need to strengthen the prevention and mitigation of vaccine supply issues in Canada. With the introduction of newer and more expensive vaccines in the publicly funded programs, both the cost and the volume of vaccines are growing rapidly, making the need for effective vaccine tracking and inventory management critical for reducing vaccine waste, cost containment, and sustainability.

This session will discuss measures for establishing efficiencies in supply management. Recommendations from the Task Group on Vaccine Supply Risk Management and measures to strengthen the security of vaccine supply in Canada will be discussed. As vaccine management includes two integral features — cold chain and inventory management — the Alberta Vaccine Cold Chain policy and the Alberta Vaccine Inventory System will be outlined as best practice for vaccine management. The integral role of national vaccine procurement in Canada to ensure that vaccine supply is optimized will be explored.

**LEARNING OBJECTIVES:**

- Identify recommendations from the Task Group on Vaccine Supply Risk Management and measures to strengthen the security of vaccine supply in Canada.
- Describe the vaccine management system in Alberta that includes the Alberta Vaccine Cold Chain Policy and the Alberta Vaccine Inventory System.
- Explore the role of national vaccine procurement coordination and the process of planning for and mitigating vaccine shortages.

**SPEAKERS:**

- Martin Lavoie, Deputy Chief Medical Officer of Health, Alberta
- Kari Bergstrom, Manager, Immunization Business, Alberta Health
- Susan Smith, Nurse Consultant, Immunization, Alberta Health
- Kurt Young, Manager, Acquisitions Branch (Drugs, Vaccines and Biologics Division), Public Services and Procurement Canada

**MODERATOR:**

- Joanne Rey-Reiter, Nurse Consultant, Immunization Policy and Programs, Population and Public Health Division, Ministry of Health and Long-Term Care

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**VACCINE UPTAKE AND ACCEPTANCE****ROOM 210    STEVE JOBS VS. THE MEASLES: USING DIGITAL TOOLS TO ENHANCE IMMUNIZATION**

Individuals are increasingly using the internet to access health information, yet the digital world is rife with misinformation and fear mongering - and vaccines have long been a target. This session will explore how health organizations can engage in the online discourse and dilute the effects of anti-vax initiatives through effective use of mobile and social platforms. Participants will learn about a variety of tactics and tools they can use to find, verify, and cognize immunization content to help empower Canadians in making informed choices about immunization.



## 11:00-12:30 CONCURRENT SESSIONS

### LEARNING OBJECTIVES:

- Assist public health organizations to understand how immunization is being framed in the digital landscape and the tremendous influence that social media has on immunization beliefs and behaviours.
- Provide examples of effective digital tools and strategies to help improve vaccine coverage.
- Discuss free, accessible digital tools to monitor the immunization narrative and help shift the discourse away from anti-vax sentiment.

### SPEAKERS:

- Katherine Atkinson, Director, Research and Business Development, The Ottawa Hospital mHealth Research Team
- Mike Kujawski, Managing Partner and Senior Consultant, Centre of Excellence for Public Sector Marketing
- Kumanan Wilson, Senior Scientist, Ottawa Hospital Research Institute; Professor of Medicine, University of Ottawa

### MODERATOR:

- Patricia Salsbury, Manager, Immunization Promotion and Education Unit, Public Health Agency of Canada

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## VACCINE UPTAKE AND ACCEPTANCE

### ROOM 205 VACCINE HESITANCY: TOOLS TO ADDRESS PROBLEMS AT THE POPULATION, PUBLIC AND INDIVIDUAL LEVELS

Vaccine hesitancy is a complex and perplexing problem for many health care providers and immunization program managers in Canada. In spite of the huge positive impact of immunization on fighting infectious diseases and improving health outcomes, acceptance of vaccines cannot be taken for granted. Sadly, vaccine hesitancy, refusal and denial persist.

Vocal vaccine deniers contribute to vaccine hesitancy and the potential damage they can cause through mass media as an amplifier of myths and misinformation is significant. The first part of this session will address lessons learned in the WHO European Region on how to target and address vaccine hesitancy in different populations and settings. The second part will present an evidence-guided strategy for how to deal with vocal vaccine deniers in public. The third part will be on use of motivational interviewing to help move individual parents and patients to a yes for acceptance of a vaccine.

### LEARNING OBJECTIVES:

- Summarize the key elements of vaccine hesitancy.
- Identify lessons learned for addressing vaccine hesitancy in different populations and settings.
- Review an evidence-based strategy to engage with vocal vaccine deniers in public.
- Describe the motivational interviewing tool and implementation approaches.

### SPEAKERS:

- Eve Dubé, Researcher, Institut national de santé publique du Québec, Laval University
- Michael McNeil, Medical Officer, Immunization Safety Office, CDC, Atlanta, Georgia
- Noni MacDonald, Professor, Department of Pediatrics, IWK Health Centre, Dalhousie University

### MODERATOR:

- Marie Adèle Davis, Executive Director, Canadian Paediatric Society

# TUESDAY 6 DECEMBER

12:30-14:30

LUNCH

CANADA HALL 2 & 3

12:45 - 14:15

CO-DEVELOPED LEARNING OPPORTUNITY

## ROOM 215 WHAT'S NEW IN PNEUMOCOCCAL DISEASE? WHERE HAVE WE BEEN AND WHERE ARE WE GOING?

Pneumococcal disease causes severe infections such as meningitis, bacteraemia and pneumonia, with children and the elderly being at greatest risk for infection. The success of pneumococcal vaccination programs across Canada can be seen with PCV13 serotypes having declined in all ages, with an overall decline from 45.6% in 2010 to 26.0% in 2014. PCV13 has a significant added benefit over PCV7 in reducing carriage of antibiotic-nonsusceptible *Streptococcus pneumoniae* (ANSP). Because carriage determines transmission, these results suggest that PCV13 will provide protection against ANSP disease that exceeds protection provided by PCV7.

Unfortunately, adults are still not effectively protected. The rate of pneumococcal pneumonia in adults 50 to 64 years and  $\geq 65$  years is higher among persons with comorbidities vs. healthy counterparts, and a patient's comorbidities increase their risk of mortality associated with pneumococcal disease. NACI recently published recommendations for pneumococcal vaccinations that will hopefully contribute to the prevention of vaccine-type community-acquired pneumonia and IPD in the adult population.

### LEARNING OBJECTIVES:

- Review the burden of pneumococcal disease and the introduction and impact of pneumococcal vaccinations in Canada.
- Describe the importance of reducing nasopharyngeal carriage of *S. pneumoniae*.
- Examine the unmet need of pneumococcal disease protection in the adult population.
- Discuss the importance of adult pneumococcal vaccination and review the implementation of NACI recommendations.

### FACULTY:

- James Kellner, MD, Professor and Head, Department of Pediatrics, University of Calgary
- Ron Grossman, MD, Professor of Medicine, University of Toronto, Chief of Medicine, Credit Valley Hospital

### MODERATOR:

- Joan Robinson, Co-Chair, Conference Organizing Committee; University of Alberta

*The program was co-developed with CPS and Pfizer Canada Inc and was planned to achieve scientific integrity, objectivity and balance.*







## PROTECTING NOW FOR A HEALTHIER TOMORROW

One hundred years ago, infectious diseases were the leading cause of death worldwide. Thanks to the discovery of vaccines and the introduction of immunization programs across the country, they now account for less than five percent of all deaths in Canada. With such success, it can be easy to forget the value of immunization. When you choose vaccination, not only do you protect yourself, you also help reduce the spread of disease – particularly to those too young to be vaccinated. Together, we help protect one another.

For more than a century, Sanofi Pasteur has been committed to creating vaccines to fight infectious diseases. Today, our commitment to protect the health of people around the globe is stronger than ever.

Vaccination does not provide 100% protection. Side effects and allergic reactions can occur. To learn more about vaccines and immunization, consult your family doctor or visit: [www.immunize.ca](http://www.immunize.ca).



## SE PROTÉGER MAINTENANT POUR DES LENDEMAINS PLUS EN SANTÉ

Il y a maintenant un siècle, les maladies infectieuses étaient la principale cause de décès à travers le monde. Grâce aux vaccins et aux programmes d'immunisation mis en œuvre à travers le pays, elles représentent dorénavant moins de 5 % des décès recensés au Canada. Un tel succès fait en sorte qu'il peut être facile d'oublier l'utilité de la vaccination. Lorsque vous choisissez de vous faire vacciner, en plus de vous protéger vous-même, vous aidez aussi à réduire la propagation des maladies – en particulier chez ceux qui sont trop jeunes pour être vaccinés. Ensemble, nous pouvons nous protéger les uns les autres.

Depuis plus de cent ans, Sanofi Pasteur s'est engagée à créer des vaccins contre des maladies infectieuses. Aujourd'hui, notre engagement pour protéger la santé publique à travers le monde est plus fort que jamais.

La vaccination ne procure pas une protection à 100 %. Des effets secondaires et des réactions allergiques peuvent survenir. Pour en apprendre davantage sur les vaccins et l'immunisation, consultez votre médecin de famille ou visitez le site : [www.immunize.ca/fr/default.aspx](http://www.immunize.ca/fr/default.aspx).



### VACCINE UPTAKE AND ACCEPTANCE



#### ROOM 207

#### BRIEF TRAINING WORKSHOP ON MOTIVATIONAL INTERVIEWING ADAPTED TO IMMUNIZATION

*This workshop will be presented mainly in French with simultaneous interpretation to English available. We encourage English-speaking delegates to attend and participate and working group exercises will be adapted accordingly.*

Given the reluctance of a number of parents and individuals to immunize, it is sometimes difficult to provide suitable counselling. Health care professionals, trained according to a traditional model of knowledge sharing, sometimes feel powerless and “short of arguments.” Motivational interviewing is a helpful and promising way of dealing with this, because it uses various techniques to foster open and encouraging dialogue. In the end, those who are hesitant may not all necessarily or immediately accept immunization, but the health care professional’s openness could pave the way for future compliance. The workshop will introduce participants to the principles and techniques of motivational interviewing and enable them to practice some of these techniques through role-playing and situation simulations and discussions with other participants so they can apply them in their professional practices.

#### LEARNING OBJECTIVES

- Describe the principles of motivational interviewing.
- Recognize the steps of motivational interviewing.
- Apply certain motivational interviewing techniques (e.g., open-ended questions, exploring ambivalence during immunization counselling).

#### WORKSHOP FACILITATORS:

- Maryse Guay, Consulting Physician, Direction de santé publique de la Montérégie & Institut national de santé publique du Québec; Professor, Faculté de médecine et des sciences de la santé, Université de Sherbrooke
- Judith Archambault, Resident Physician 5, Public Health and Preventive Medicine, Faculté de médecine et des sciences de la santé, Université de Sherbrooke
- Stéphanie Lanthier-Labonté, Resident Physician 1, Public Health and Preventive Medicine, Faculté de médecine et des sciences de la santé, Université de Sherbrooke
- Nina Nguyen, Resident Physician 1, Family Medicine Program, Bruyère Family Medicine Centre, University of Ottawa
- Eve Dubé, Researcher, Institut national de santé publique du Québec, Université Laval



### VACCINE UPTAKE AND ACCEPTANCE

#### ROOM 213 ELECTRONIC REGISTRIES

- An end-to-end model for electronic registration, recording and reporting in mass immunization clinics – The University of Alberta experience – [Beth Woytas](#)
- Transformation by tool: Working together to build immunization registries and the impact on immunization coverage in Canada – [Rosalie Tuchscherer](#)
- Tracking migrant immunizations using an mHealth app – [Michelle Paradis](#)
- Using mobile apps to facilitate reporting of vaccination status. Results of a pilot study with ImmunizeCA and Ottawa Public Health – [Katherine Atkinson](#)
- Moving to Panorama: Immunization coverage assessment in British Columbia – [Samara David](#)

#### MODERATOR:

- Christina Jensen, Public Health Agency of Canada
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### OPTIMAL PRACTICE



#### ROOM 205 IT TAKES A VILLAGE: IMPLEMENTATION OF BEST PRACTICES IN PAIN MITIGATION AT THE TIME OF VACCINATION

Successful implementation of evidence-based pain mitigation practices at the time of vaccination requires consideration and input of the different stakeholders involved. The HELPinKIDS&Adults team and project will be used as a model for discussion. The team published an updated clinical practice guideline on vaccination pain management in the Canadian Medical Association Journal in August 2015 and this guideline formed the basis for global recommendations on vaccination pain management announced by the World Health Organization later in 2015. We will share how we have approached and successfully engaged a range of stakeholders, including policy makers, immunizers and consumers in this work, our guideline recommendations, and some of our successes, challenges, and future directions. The results of guideline implementation studies will also be presented.

#### LEARNING OBJECTIVES

- Understand the importance of targeting different groups of stakeholders involved in vaccination in pain management practice change.
- Identify potential opportunities and challenges in incorporating pain management interventions in the vaccination process in different clinical settings.
- Describe the impact of implementation efforts directed to different stakeholder groups.

#### WORKSHOP FACILITATORS:

- Noni MacDonald, Professor, Department of Pediatrics, IWK Health Centre, Dalhousie University
- Christine Halpert, Senior Practice Leader, Immunization Programs and Vaccine Preventable Diseases Service, BC Centre for Disease Control
- Anna Taddio, Professor, Leslie Dan Faculty of Pharmacy, University of Toronto



14:30-16:00 CONCURRENT SESSIONS

## MAKING AND IMPLEMENTING POLICY

### ROOM 201 ORAL ABSTRACT SESSION 1

- Physician immunization decision-making support tools – [Sarah Loseth](#)
- Adult immunization by pharmacists - A national scan of current policy and practice – [Cathy Mcdermott](#)
- Evaluating the impact of a universal policy with or without pharmacists as immunizers on influenza vaccine coverage in Nova Scotia – [Jennifer Isenor](#)
- Public opinion of pharmacist administered flu vaccines in Canada: A media analysis – [Michelle Simeoni](#)
- Economic analysis of community pharmacists providing influenza vaccination in Ontario – [Sherilyn Houle](#)

#### MODERATOR:

- Phil Emberley, Canadian Pharmacists Association

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## MAKING AND IMPLEMENTING POLICY

### ROOM 202 ORAL ABSTRACT SESSION 2

- Resource utilization and cost of influenza requiring hospitalization in Canadian adults: A study from the Serious Outcomes Surveillance Network of the Canadian Immunization Research Network – [Shelly McNeil](#)
- Obstacles and opportunities for including males in Canadian human papillomavirus vaccination programs – [Gilla Shapiro](#)
- Mapping the gap between immunization program evaluation/research and decision-making in Canada: The case of the human papillomavirus vaccine program – [Maria Eugenia Espinoza](#)
- Effect of human papillomavirus vaccination on cervical cancer screening in Alberta – [Jong Kim](#)
- Evaluation of new vaccines that have therapeutic indications and lack traditional public health prevention indications: An emerging gap in the vaccine evaluation framework – [Robert Van Exan](#)

#### MODERATOR:

- Lyne Cantin, Public Health Agency of Canada

Image courtesy of Ottawa Tourism



### NEW DEVELOPMENTS IN VACCINES AND THEIR USE

#### ROOM 208 NEW VACCINES ON THE HORIZON

This forward-looking session will focus on recent scientific advances contributing to the development of new herpes family (CMV, EBV and VZV) and RSV vaccines and present the need for a new acellular pertussis vaccine.

#### LEARNING OBJECTIVES:

- Review the impact of herpes family viral infections and the progress of vaccines to prevent them.
- Summarize the impact of RSV disease in Canada, the progress on RSV vaccine development and the outcomes of Canadian clinical trials.
- Describe the changing epidemiology of pertussis, the shortcomings of the current acellular pertussis vaccine and what is needed to provide an improved vaccine.

#### SPEAKERS:

- Soren Gantt, Associate Professor, Department of Infectious and Immunological Diseases (Pediatrics), Faculty of Medicine, University of British Columbia; Investigator, BC Children's Hospital
- Scott Halperin, Professor of Pediatrics and Microbiology & Immunology; Director, Canadian Center for Vaccinology, IWK Health Centre, Dalhousie University
- Joanne Langley, Scientific Co-Chair, Conference Organizing Committee; Professor, Departments of Pediatrics and Community Health and Epidemiology; CIHR-GSK Chair in Pediatric Vaccinology, Dalhousie University

#### MODERATOR:

- Manish Sadarangani, Director, Vaccine Evaluation Center, Research Institute, BC Children's Hospital; Assistant Professor, Division of Infectious Diseases, Department of Pediatrics, University of British Columbia

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### IMMUNIZATIONS IN SPECIFIC POPULATIONS

#### ROOM 206 OPTIMIZING IMMUNIZATION IN INDIGENOUS POPULATIONS

The incidence and burden of certain vaccine-preventable diseases (VPDs) is disproportionately higher in some Indigenous populations compared to the overall Canadian population. This symposium will review the epidemiology of VPDs in Indigenous populations, and explore whether the current vaccine schedule for Invasive Pneumococcal Disease in one jurisdiction is addressing the epidemiology of disease in First Nations. The session will also describe successes and challenges in producing national level immunization coverage data for on-reserve populations, review successful interventions used to support front-line immunization providers and strategies to increase immunization uptake in First Nations communities.

#### LEARNING OBJECTIVES:

- Review the epidemiology of vaccine-preventable diseases with a specific focus on invasive bacterial diseases in Indigenous populations compared to the overall Canadian population. Discuss how the burden of Invasive Pneumococcal Disease (IPD) has impacted immunization programming for First Nations communities in one region.
- Discuss the successes, challenges and strategies to improve the assessment of overall reported immunization coverage for First Nations living on-reserve.
- Discuss successful initiatives for supporting immunization programming and optimizing vaccine uptake in First Nations communities.

### SPEAKERS:

- Kathleen Lydon-Hassen, Senior Policy Analyst, First Nations and Inuit Health Branch, Health Canada
- Ruth Richardson, Regional CDC Nurse Manager, First Nations and Inuit Health Branch, Health Canada
- Shalini Desai, Medical Specialist, Vaccine Preventable Diseases, Public Health Agency of Canada
- Jill Williams, Practice Consultant – Public Health, First Nations and Inuit Health Branch, Health Canada
- Cheryl Chisholm, Communicable Disease Co-ordinator, First Nations and Inuit Health Branch, Atlantic Region
- Catharine Langlois, Public Health Nurse, Communicable Disease Prevention and Control, Nova Scotia Health Authority-Northern Zone

### MODERATOR:

- Erin Henry, Director, Communicable Disease Control Division, First Nations and Inuit Health Branch, Health Canada
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## MAKING AND IMPLEMENTING POLICY

### ROOM 210 WHAT'S NEW WITH NACI?

This session will have three focussed sections, beginning with a review of the new NACI publications and recommendations that have been released since the 2014 Canadian Immunization Conference. To navigate these items, release dates and the online location of publications will be highlighted for participants. The next portion of the session will review the various types of publications from NACI, including Advisory Committee statements and chapters of the Canadian Immunization Guide, and others, such as the literature reviews that provide the evidence base for recommendations.

Participants will gain insight into the intended audience for these products and how to use them effectively. The session will end with details on the future direction of NACI, including a description of its expanded mandate and the additional analyses that will be required to provide more comprehensive guidance on vaccine use in Canada.

### LEARNING OBJECTIVES:

- Describe new products and recommendations since the 2014 Canadian Immunization Conference.
- Explore the various guidance products and how to use them effectively.
- Identify the future direction of NACI.

### SPEAKERS:

- Caroline Quach, Paediatric Infectious Disease Consultant & Medical Microbiologist, McGill University Health Centre; Associate Professor, Departments of Paediatrics & Epidemiology, Biostatistics & Occupational Health, McGill University; Vice-Chair, National Advisory Committee on Immunization
- Matthew Tunis, Scientific Project Coordinator, National Advisory Committee on Immunization Secretariat, Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada
- Ian Gemmill, Medical Officer of Health, Kingston, Frontenac and Lennox & Addington Public Health; Chair, National Advisory Committee on Immunization

### MODERATOR:

- Robert Lerch, Executive Secretary, National Advisory Committee on Immunization Secretariat, Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada



# TUESDAY 6 DECEMBER

**16:00-17:30**

**WELCOME RECEPTION**

**CANADA HALL 2 & 3**

End the first day of sessions with a casual networking reception with exhibitors. Meet fellow attendees from across the country and sample food and beverage selections as you mingle, network and make lasting connections.

**16:00-17:30**

**VACCINOLOGY STUDENT  
RESEARCH PROGRAM**

**PARLIAMENT FOYER**

Led by the Canadian Association for Immunization Research and Evaluation (CAIRE) with co-funding from the Canadian Institutes of Health Research (CIHR) and Meningitis Research Foundation of Canada (MRFC), seventeen students submitted applications to the Vaccinology Student Research Program (VSRP). Projects were evaluated based on pertinence to immunization programs in Canada, the methods used, and originality, timeliness and effort involved. Eleven students were awarded a travel bursary to attend CIC 2016.

During this dedicated poster viewing time, students will have the opportunity to present their data in an oral poster session and discuss their research with experienced Canadian vaccinology researchers. One student will be selected as the recipient of an educational bursary from the Dr. Bernard Duval Foundation. The winning student will be announced on Thursday, December 8. We encourage you to come and listen to the presentations as well browse the posters and engage with presenters.

Session Chair: Dr. Shelley Deeks, Medical Director, Public Health Ontario & Chair, Vaccinology Student Research Program

## TRAVEL BURSARY WINNERS:

1. Adverse effects of vaccination with live attenuated intranasal influenza vaccine in a pediatric cohort with cystic fibrosis – [Constantina Boikos](#)
2. BCG-induced granulopoiesis protects newborns from septic death – [Byron Brook](#)
3. Vaccine effectiveness against laboratory-confirmed influenza hospitalizations among young children during the 2010-11 to 2013-14 influenza seasons in Ontario, Canada – [Sarah Buchan](#)
4. Comparison of two pneumococcal urine antigen detection tests for detection of community-acquired pneumonia (CAP) in hospitalized adults – [May Elsherif](#)
5. B-cell responses to 13-valent pneumococcal conjugate vaccine in patients with severe chronic kidney disease – [Gabrielle Gaultier](#)
6. Two-year efficacy of the quadrivalent human papillomavirus vaccine in a cohort of HIV-positive females – [Elisabeth McClymont](#)
7. The health and economic burden of pertussis in Canada: A microsimulation study – [Ashleigh McGirr](#)
8. Impact of conjugate vaccines on Haemophilus influenzae type b (Hib) and Streptococcus pneumoniae in children with cancer: A report from the Canadian Immunization Monitoring Program Active (IMPACT) – [Joanne McNair](#)
9. Review of encephalitis and encephalopathy cases following immunization reported to the Canadian Immunization Monitoring Program ACTive (IMPACT) from 1992-2012 – [Jennifer Tam](#)
10. Vaccine hesitancy in the Web 2.0 era – [Maryline Vivion](#)
11. Risk of recurrence of adverse events following immunization: Results of 18 years of monitoring in Quebec, Canada – [Joseline Zafack](#)



16:00-17:30

VACINOLOGY STUDENT  
RESEARCH PROGRAM

PARLIAMENT FOYER

## STUDENT PARTICIPANTS:

12. Using mobile apps to facilitate reporting of vaccination status. Results of a pilot study with ImmunizeCA and Ottawa Public Health – [Katherine Atkinson](#)
13. Equity-based childhood immunization policy-making in urban centres across the Canadian prairies: A comparative analysis – [Thilina Bandara](#)
14. Haemophilus influenzae type A invasive infections at the Montreal Children Hospital and infection rates in Quebec – [Andrée-Anne Boisvert](#)
15. Interventions to increase routine childhood immunizations in low socioeconomic populations: A systematic review – [Sarah Edwards](#)
17. Understanding non-vaccination against influenza in Canadian adults: Findings from the 2015-2016 influenza coverage survey – [Noushon Farmanara](#)
18. Investigation of an excess of injection site reactions following immunization with measles, mumps, rubella, and varicella (MMRV) vaccine in Quebec – [Marilou Kiely](#)
19. Effect of human papillomavirus vaccination on cervical cancer screening in Alberta – [Jong Kim](#)
20. Evaluation of a brief training on motivational interviewing adapted to vaccination – [Stéphanie Lanthier-Labonté](#)
21. A review of cost-utility analyses of vaccines – [Jason Lee](#)
22. Pertussis outbreak in a large health region in Saskatchewan – [Olanrewaju Medu](#)
23. Quality improvement in clinical services delivered by public health – [Mohammed Mosli](#)
24. Maternal perceptions of childhood vaccination: Reasons for and against – [Melissa Mueller](#)
26. Evaluating the cost-effectiveness of targeted vaccination campaigns for the containment of pandemic influenza in Canadian metropolitan areas – [Patrick Saunders-Hastings](#)
27. Vaccine conspiracy beliefs across Canada – [Gilla Shapiro](#)
28. Reductions in antibody production to the 2014/15 seasonal influenza vaccine in highly active young men aged 18-35 – [Andrew Stewart](#)
29. A randomized controlled trial of the effect of two injection speeds on infant distress during vaccination – [Horace Wong](#)





**NEW TO YOU.**

**NOT NEW  
TO THE FLU.**

**SERIOUS ABOUT  
INFLUENZA.**

**Ever heard of Seqirus? We're the second largest influenza vaccine company in the world** – thanks to our parent company, CSL, joining forces with the Novartis influenza vaccines team. And we are proud to announce that by next year, Seqirus will represent FLUAD®, FLUAD® Pediatric, and AGRIFLU® in Canada.

The Novartis team has already transitioned to the Seqirus team here in Canada. Which means you can expect the same great service and attention you have become accustomed to with these products – in fact, you can expect the same team!

**Please come visit us at booth 16 this week and join us in a conversation about a new Canadian partnership dedicated to high-quality influenza vaccines.**

**VOUS DÉCOUVREZ  
NOTRE EXISTENCE ?**

**LA GRIPPE C'EST  
NOTRE ÉXPÉRIENCE.**

**POUR NOUS, LA GRIPPE  
C'EST SÉRIEUX.**

**Vous connaissez Seqirus? Nous sommes la deuxième plus importante entreprise du monde spécialisée dans les vaccins contre la grippe** – grâce à notre société mère, CSL, nous unissons nos forces à celles de l'équipe de vaccins antigrippaux de Novartis. Et nous sommes fiers d'annoncer que, d'ici à l'an prochain, Seqirus représentera FLUAD<sup>MD</sup>, FLUAD<sup>MD</sup> Pédiatrique et AGRIFLU<sup>MD</sup> au Canada.

L'équipe de Novartis a déjà complété sa transition vers celle de Seqirus ici même, au Canada. Vous pouvez donc vous attendre à obtenir le service remarquable et les mêmes attentions auxquels vous vous êtes habitués à l'endroit de ces produits – en fait, vous pouvez vous attendre à fréquenter la même équipe!

**Venez nous rendre visite cette semaine au kiosque 16 et vous joindre à la conversation à propos d'un nouveau partenariat canadien consacré à des vaccins de grande qualité.**



## PROGRAM OVERVIEW

07:00-08:45	<b>CO-DEVELOPED LEARNING OPPORTUNITY</b> HPV immunization: 10 years of experience in Canada! Room 215		
09:00-10:30	<b>WELCOME REMARKS</b> Gregory Taylor, Chief Public Health Officer, Public Health Agency of Canada Canada Hall 1		
	<b>PLENARY II: POPULAR CULTURE, VACCINATION AND OUR BUNK-FILLED WORLD</b> Timothy Caulfield		
10:30-11:00	<b>NUTRITION BREAK</b> Canada Hall 2 & 3		
11:00-12:30	<b>CONCURRENT SESSIONS</b>		
	A Case Study: Assessing mumps vaccine effectiveness during an outbreak investigation  Room 205	Diseases 101: Do you know what you are preventing?  Room 208	Evaluating new vaccine programs in Canada: How do we decide which vaccines should be publicly funded?  Room 207
	Influenza vaccines and program dilemmas  Room 206	Oral Abstracts: New developments in vaccines & their use  Session 1 - Room 201 Session 2 - Room 202	Vaccine uptake and communication strategies  Room 210
12:30-14:30	<b>LUNCH</b> Canada Hall 2 & 3		
12:45-14:15	<b>CO-DEVELOPED LEARNING OPPORTUNITIES</b>		
	Vaccine-preventable disability: what you need to know about influenza prevention in older adults  Room 213	Examining vaccination against serogroup B meningococcal disease  Room 215	
14:30-16:00	<b>CONCURRENT SESSIONS</b>		
	Emerging infectious diseases Ebola, Zika, H. influenzae type A: Vaccine development on the front-lines  Room 207	Immunocompromised patients: Keeping their unique immunization needs in mind (or straight)  Room 206	Oral Abstracts: Optimal practice  Session 1 - Room 201 Session 2 Room 202
	Pre-event vaccination for biological threats  Room 210	Reviewing Ontario’s Universal Influenza immunization Program – The application of research to practice, programs and policy  Room 205	Vaccine hesitancy and the health care professional  Room 208
16:00-17:30	<b>NETWORKING EVENT WITH POSTER PRESENTERS</b> Parliament Foyer		

**WIRELESS NETWORK: CIC2016    PASSWORD: IMMUNIZE**



# WEDNESDAY 7 DECEMBER

07:00-08:45

CO-DEVELOPED LEARNING OPPORTUNITY

## ROOM 215 HPV IMMUNIZATION: 10 YEARS OF EXPERIENCE IN CANADA!

The symposium will focus on the impact of HPV immunization in Canada and the impact upon the Canadian healthcare system. HPV prevention through immunization will be discussed by reviewing current HPV vaccination programs across Canada, exploring the impact of HPV immunization programs on HPV infection and related diseases, reviewing latest international and Canadian statements around the safety of HPV vaccines and discussing the latest data on the nonavalent HPV vaccine in terms of 2-dose regimen, immunization of males and cost-effectiveness of vaccination.

### LEARNING OBJECTIVES:

- Summarize the real-world effectiveness and safety of HPV immunization in Canada.
- Describe the status and uptake of current Canadian HPV immunization programs.
- Discuss the latest clinical data on the nonavalent HPV vaccine.
- Discuss the challenges facing the program in the next 10 years.

### FACULTY:

- Marina Salvadori, MD, Pediatric Infectious Diseases, Schulich School of Medicine, University of Western Ontario
- Marc Steben, MD, Medical Advisor, STI unit, Institut national de santé publique du Québec

### MODERATOR:

- Marc Brisson, PhD, Scientific Co-Chair, Conference Organizing Committee; Associate professor, Laval University; Canada Research Chair in Mathematical Modeling and Health Economics of Infectious Diseases

*The program was co-developed with CPS and Merck Canada Inc. and planned to achieve scientific integrity, objectivity and balance.*

Image courtesy of Ottawa Tourism



## WELCOME REMARKS

**Gregory Taylor, Chief Public Health Officer,  
Public Health Agency of Canada**



## PLENARY II

### POPULAR CULTURE, VACCINATION AND OUR BUNK-FILLED WORLD

**Timothy Caulfield, Professor, Faculty of Law and School of Public Health & Research Director, Health Law Institute, University of Alberta; Canada Research Chair in Health Law and Policy**

There is a ridiculous amount of science-free health and wellness advice floating around in popular culture. And much of this information is conflicting, misleading or just plain crazy. Indeed, these are strange times. Vaccination myths won't die. Bizarre celebrity health recommendations remain ridiculously popular. There is a growing market for unproven therapies. In this presentation Professor Caulfield will explore why and how health information gets so twisted – especially in the context of vaccinations. This will include a consideration of the role of celebrity culture, social media, the erosion of public trust, our cognitive biases and the embrace of pseudoscience by some research institutions. He will conclude by reviewing what the best available evidence says about how to counter this trend.



#### LEARNING OBJECTIVES:

- Describe the social forces that create and dissemination misinformation about health and vaccines.
- Explore what evidence says about how best to counter health myths.

#### MODERATOR:

- Rhonda Kropp, Director General, Public Health Agency of Canada

### IMMUNIZATIONS IN SPECIFIC POPULATIONS



#### ROOM 205    **A CASE STUDY: ASSESSING MUMPS VACCINE EFFECTIVENESS DURING AN OUTBREAK INVESTIGATION**

After a brief overview on AVALON and VE assessments, participants will work their way through a case study and will calculate mumps VE by dose and birth cohort using data from a 2009-2010 mumps outbreak. Participants will determine the appropriate methodology after assessing the available data, identify limitations of the analysis and also determine whether conducting a sensitivity analysis is appropriate. Finally participants will identify why conducting VE assessments are important despite their limitations. The workshop is appropriate for conference participants with basic epidemiologic knowledge (e.g. an understanding of incidence, prevalence and the difference between vaccine efficacy and vaccine effectiveness) and an ability to calculate incidence and prevalence rates. **A calculator or lap top (with Excel) is required.**

#### LEARNING OBJECTIVES:

- Describe why determination of VE is important.
- Explore data requirements and limitations of different approaches to assessing VE.
- Identify and apply formulas used to calculate VE.

#### WORKSHOP FACILITATORS:

- Shelley Deeks, Medical Director, Immunization and Vaccine Preventable Diseases, Public Health Ontario
- Natasha Crowcroft, Chief, Applied Immunization Research, Public Health Ontario
- Sarah Wilson, Medical Epidemiologist, Immunization and Vaccine Preventable Diseases, Public Health Ontario
- Shelly Bolotin, Scientist, Applied Immunization Research, Public Health Ontario

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### OPTIMAL PRACTICE

#### ROOM 208    **DISEASES 101: DO YOU KNOW WHAT YOU ARE PREVENTING?**

In the pre-vaccine era, life-threatening diseases struck thousands of people in Canada each year, most of them children. Today, these diseases are all but forgotten because of the success of immunization programs in the 20th century. Many of today's parents and health practitioners have never seen these diseases, although recent outbreaks of vaccine-preventable diseases such as measles and mumps have demonstrated what can happen when a disease is introduced into an under vaccinated population. As these diseases become increasingly uncommon, it is challenging for health practitioners to be able to recognize the clinical features when they do occur or to communicate the value of vaccination with parents who have not seen first-hand the tragic consequences of these diseases.

This session will present descriptions and photos of vaccine-preventable diseases affecting children, adolescents and adults and show how the risk of contracting these diseases still exists.

#### LEARNING OBJECTIVES:

- Provide information that will help health practitioners to recognize vaccine-preventable diseases.
- Discuss the risks associated with vaccine-preventable diseases and provide information that will assist with counselling patients and parents.
- Describe recent outbreaks of vaccine-preventable diseases.

### SPEAKERS:

- Simon Dobson, Clinical Associate Professor & Head, Division of Infectious Diseases, Department of Pediatrics, University of British Columbia; Clinical Investigator, Vaccine Evaluation Centre, Child and Family Research Institute at BC Children's Hospital
- Noni MacDonald, Professor, Department of Pediatrics, IWK Health Centre, Dalhousie University
- Allison McGeer, MD, Microbiologist & Infectious Disease Consultant, Medical Director, Infection Control, Mount Sinai Hospital; Professor, Laboratory Medicine and Pathobiology and Public Health Science, University of Toronto

### MODERATOR:

- Ian Gemmill, Medical Officer of Health, Kingston, Frontenac and Lennox & Addington Public Health
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### NEW DEVELOPMENTS IN VACCINES AND THEIR USE



#### ROOM 207

#### EVALUATING NEW VACCINE PROGRAMS IN CANADA: HOW DO WE DECIDE WHICH VACCINES SHOULD BE PUBLICLY FUNDED?

As new vaccines become available, decision-making authorities are in greater need for tools and processes to understand the public health value of new vaccine programs. It's been recognized that Canada needs and integrated, transparent and consistent processes to review and assess the findings of not only the clinical benefits of new vaccines but also the economic value of these new products. Other health technology assessment (HTA) processes have also adopted the patient perspective to inform funding and implementation recommendations. This workshop seeks to understand the current decision-making processes in Canada and the needs related to improving the process to ensure Canadians have timely access to new vaccines.

### LEARNING OBJECTIVES:

- Review the current status of decision-making for new vaccine programs in Canada.
- Describe the need for a health technology assessment process to evaluate the clinical, economic and patient impact of new vaccine programs in Canada in order to prioritize and allocate public health resources.
- Examine the HTA processes in Canada and other jurisdictions to identify best practices that might be amenable to evaluating new vaccine programs in Canada.

### WORKSHOP FACILITATORS:

- Alexandra Chambers, Director, pCODR, CADTH
- Christine White, President & Executive Director, National Gaucher Foundation of Canada

### MODERATOR:

- Joanne Langley, Scientific Co-Chair, Conference Organizing Committee; Professor, Departments of Pediatrics and Community Health and Epidemiology; CIHR-GSK Chair in Pediatric Vaccinology, Dalhousie University



## MAKING AND IMPLEMENTING POLICY

### ROOM 206 INFLUENZA VACCINES AND PROGRAM DILEMMAS

Current influenza vaccination programs are complex. This session will address various issues including vaccine products by age and other special populations, the effects of repeat annual vaccination and enforced health care worker vaccination influenza policies will be explored.

#### LEARNING OBJECTIVES:

- Discuss the different influenza vaccines available and explain why specific vaccines might be recommended for various populations.
- Summarize the evidence that influenza vaccine given in previous years may alter the response to vaccine.
- Explore scientific evidence underpinning policies of enforced health care worker influenza vaccination.

#### SPEAKERS:

- Bryna Warshawsky, Public Health Physician, Public Health Ontario
- Danuta Skowronski, Epidemiology Lead, Influenza & Emerging Respiratory Pathogens, BC Centre for Disease Control
- Gaston De Serres, Medical Epidemiologist, Institut national de santé publique du Québec; Professor of Epidemiology, Faculty of Medicine, Laval University

#### MODERATOR:

- Joan Robinson, Co-Chair, Conference Organizing Committee; University of Alberta
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## NEW DEVELOPMENTS IN VACCINES AND THEIR USE

### ROOM 201 ORAL ABSTRACT SESSION 1

- Impact of frailty on influenza vaccine effectiveness and clinical outcomes: Experience from the Serious Outcomes Surveillance Network 2011/12 Season of the Canadian Immunization Research Network – [Melissa Andrew](#)
- Comparison of the epidemiology of vaccine preventable and non-vaccine preventable invasive Haemophilus influenzae disease in Canada, 2011-2015 – [Jenny Rotondo](#)
- Variable effects of repeat vaccination against Influenza A (H3N2) illness by season: 2010/11 to 2014/15 – [Catharine Chambers](#)
- Non-influenza Respiratory Virus (NIRV) detections in a Sentinel Surveillance Platform, Canada, 2010/11 to 2014/15 – [Catharine Chambers](#)
- Adjuvants: Understanding their role in vaccines – [Leonard Friedland](#)

#### MODERATOR:

- Jennifer Pennock, Public Health Agency of Canada

### NEW DEVELOPMENTS IN VACCINES AND THEIR USE

#### ROOM 202 ORAL ABSTRACT SESSION 2

- Timeliness and completeness of routine childhood immunizations in Alberta – [Sarah Edwards](#)
- What is the impact of combination vaccines on uptake? Immunization coverage before and after introduction of the MMRV vaccine – [Shannon MacDonald](#)
- Evaluation of meningococcal C conjugate vaccine programs in Canadian children: Duration of protection – [Julie Bettinger](#)
- Impact of an immunization campaign to control an increased incidence of serogroup B meningococcal disease in one region of Quebec, Canada – [Genevieve Deceuninck](#)
- Anaphylaxie post-vaccination et retrait national d'un lot de vaccin contre le méningocoque C : L'évaluation risque/bénéfice au quotidien, sommes-nous prêts? – [Eveline Toth](#)

#### MODERATOR:

- Greg Penney, Director, National Programs, Canadian Public Health Association

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### VACCINE UPTAKE AND ACCEPTANCE

#### ROOM 210 VACCINE UPTAKE AND COMMUNICATION STRATEGIES

When faced with vaccine hesitancy, public health authorities are looking for effective strategies to address it. Research on vaccine acceptance has shown that individual decision-making regarding vaccination is complex and may involve emotional, cultural, social, spiritual or political factors as much as individual factors. In this session, strategies and innovative approaches to address vaccine hesitancy and, more broadly, to enhance vaccine acceptance will be presented.

#### LEARNING OBJECTIVES:

- Explore promising strategies to address vaccine hesitancy at the policy and population level.
- Identify promising strategies to communicate with vaccine-hesitant parents.
- Describe adoptable interventions that can improve immunization acceptance and uptake in infants, children, adults and health care providers.

#### SPEAKERS:

- Dianne Alexander, Manager, Immunization Policy and Programs, Population and Public Health Division, Ministry of Health and Long-Term Care
- Olivier Bernard, Pharmacist, author of [lepharmachien.com](#) and [thepharmacist.com](#)
- Elspeth Kirkman, Head, North America, The Behavioural Insights Team
- Andrea McLellan, Program Manager, Vaccine Preventable Diseases and Clinical Information, North Bay Parry Sound District Health Unit

#### MODERATOR:

- Martine Dubuc, Senior Nurse Advisor, Immunization Promotion and Education Unit, Public Health Agency of Canada

# WEDNESDAY 7 DECEMBER

12:45-14:15

CO-DEVELOPED LEARNING OPPORTUNITY

## ROOM 213 **VACCINE-PREVENTABLE DISABILITY: WHAT YOU NEED TO KNOW ABOUT INFLUENZA PREVENTION IN OLDER ADULTS**

As Canada's population ages, there will be increasing pressures on an already strained health care system to cope with and treat older adults. One particular stress on the health care system is the number of seniors experiencing influenza-related complications or hospitalization.

### LEARNING OBJECTIVES:

- Explain the burden and impact of influenza on older adults and on the healthcare system.
- Explore the importance of frailty for influenza vaccine effectiveness and outcomes, including the impact that prevention could have on improving health and functional outcomes for older adults.
- Describe the evidence supporting the use of the high-dose influenza vaccine as a new option for Canadian seniors and understand NACI's position on the choice of influenza vaccines for adults over 65 years of age.

### FACULTY:

- Melissa Andrew, MD, Associate Professor, Medicine (Geriatrics) and Community Health & Epidemiology, Dalhousie University
- Allison McGeer, MD, Microbiologist & Infectious Disease Consultant, Medical Director, Infection Control, Mount Sinai Hospital; Professor, Laboratory Medicine and Pathobiology and Public Health Science, University of Toronto
- Janet McElhaney, MD, Senior Scientist, Advanced Medical Research Institute of Canada; Professor, Medical Sciences Division, Northern Ontario School of Medicine
- Shelly McNeil, MD, Clinician Scientist, Canadian Center for Vaccinology; Professor, Department of Medicine (Infectious Diseases), Dalhousie University

### MODERATOR:

- Brian Ward, Professor of Medicine & Microbiology, Research Institute of the McGill University Health Centre Vaccine Study Centre; Interim Chair, CAIRE

*The program was co-developed with AMMI Canada and Sanofi Pasteur and was planned to achieve scientific integrity, objectivity and balance.*

Image courtesy of Ottawa Tourism



## ROOM 215 EXAMINING VACCINATION AGAINST SEROGROUP B MENINGOCOCCAL DISEASE

At present, there are no publicly funded programs in Canada for MenB vaccination. There are only two documented programs where MenB vaccination with the 4CMenB vaccine has been provided publicly. In 2014, MenB vaccination was provided by the Ministry of Health and Social Services of Quebec through a targeted program in the Saguenay-Lac-Saint-Jean region based on the high incidence of IMD caused by serogroup B. In February of 2015, a vaccination program was publicly funded at Acadia University in Nova Scotia in response to an institutional outbreak. Despite the promise of MenB vaccination, there remain several knowledge gaps, specifically the efficacy and effectiveness of the vaccine. Effective protection from MenB depends upon the match between circulating strains and the strain in the vaccine. Furthermore, there is still debate among researchers on whether the MenB vaccine provides community-level protection (herd immunity) and the duration of protection. This symposium will present the most recent research evidence on the immunogenicity and safety of MenB vaccination and the potential impact of vaccination on IMD-associated outcomes, and public acceptance.

### LEARNING OBJECTIVES:

- Describe the burden of MenB disease in Canada.
- Identify where knowledge gaps exist with regards to the efficacy and effectiveness of vaccination for MenB.
- Discuss the potential impact of MenB vaccination on IMD-associated outcomes.
- Discuss public acceptance of MenB vaccination.

### FACULTY:

- Julie Bettinger, MD, Associate Professor, Department of Pediatrics, University of British Columbia
- Joanne Langley, MD, Professor, Department of Pediatrics, Dalhousie University
- Eve Dubé, MD, Associate Professor, Social and Preventive Medicine, Université Laval

### MODERATOR:

- Manish Sadarangani, Director, Vaccine Evaluation Center, Research Institute, BC Children's Hospital; Assistant Professor, Division of Infectious Diseases, Department of Pediatrics, University of British Columbia

*The program was co-developed with CPS and CPHA, supported via an Independent Medical Education Grant from GSK, and planned to achieve scientific integrity, objectivity and balance.*

## NEW DEVELOPMENTS IN VACCINES AND THEIR USE

### ROOM 207 EMERGING INFECTIOUS DISEASES EBOLA, ZIKA, *H. INFLUENZAE* TYPE A: VACCINE DEVELOPMENT ON THE FRONT-LINES

This session will discuss recent progress in the development of vaccines against recent emerging pathogens (Ebola, Zika, *Haemophilus influenzae* type A). The effect of the 2014-2015 Ebola epidemic will be explored as panelists describe the potential impact of the new subunit varicella zoster vaccine and discuss what the impact on Canadian health would be when these vaccines are licensed and implemented into programs. The epidemiology and clinical impact of Zika infection will be described and is vaccine prevention feasible? The session will discuss the importance of if *H. influenzae* type A infection can be a vaccine-preventable disease.



### LEARNING OBJECTIVES:

- Review the clinical impact of Ebola, Zika, *H. influenzae* type A.
- Summarize progress in the development of the vaccines against these infections.
- Review the changing epidemiology of non-type b *H. influenzae* infection in Canada.
- Describe research advances towards development of a vaccine to prevent invasive *H. influenzae* type A infection.

### SPEAKERS:

- Marina Ulanova, Professor, Division of Medical Sciences, Northern Ontario School of Medicine
- Michael Drebot, Director, Zoonotic Diseases and Special Pathogens, Public Health Agency of Canada; Associate Professor, Department of Medical Microbiology and Infectious Diseases, University of Manitoba
- Xiangguo Qiu, Head, Vaccine Development & Antiviral Therapy, Special Pathogens Program, National Microbiology Laboratory; Adjunct Professor, Department of Medical Microbiology, University of Manitoba

### MODERATOR:

- Joanne Langley, Scientific Co-Chair, Conference Organizing Committee; Professor, Departments of Pediatrics and Community Health and Epidemiology; CIHR-GSK Chair in Pediatric Vaccinology, Dalhousie University

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## IMMUNIZATIONS IN SPECIFIC POPULATIONS

### ROOM 206 IMMUNOCOMPROMISED PATIENTS: KEEPING THEIR UNIQUE IMMUNIZATION NEEDS IN MIND (OR STRAIGHT)

A growing proportion of the Canadian population has a weakened immune system, either due to aging (immunosenescence) or secondary to medication used to treat various conditions (chemotherapy, biological agents, or steroids). How should we keep those most at risk for vaccine-preventable diseases protected? This session will aim to review immunology concepts that impact vaccine response, but also tools that exist to help practitioners know what to do to optimize vaccine protection.

### LEARNING OBJECTIVES:

- Highlight how biologics and aging impact the immune response to vaccines.
- Discuss the best approaches to overcome immunosenescence and decreased response to vaccines in the immunocompromised.
- Discuss tools that exist for practitioners working with immunosuppressed populations to ensure optimal immunization.

### SPEAKERS:

- Christine McCusker, Associate Professor of Pediatrics, Division Director, Allergy and Immunology, Faculty of Medicine, McGill University
- Karina Top, Assistant Professor of Pediatrics, Division of Pediatric Infectious Diseases, IWK Health Centre, Dalhousie University
- Donald Vinh, Clinician-Scientist; Director, Infectious Disease Susceptibility Program; Assistant Professor, Department of Medicine, Division of Infectious Diseases, Faculty of Medicine, McGill University

### MODERATOR:

- Matthew Tunis, Scientific Project Coordinator, National Advisory Committee on Immunization Secretariat, Centre for Immunization and Respiratory Infectious Diseases, Public Health Agency of Canada

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### OPTIMAL PRACTICE

#### ROOM 201 ORAL ABSTRACT SESSION 1

- The risk of seizure after immunization in children with epilepsy – [Karina Top](#)
- A longitudinal randomized trial of the relative effectiveness of additive pain mitigation interventions during vaccination in infants – [Anna Taddio](#)
- Improving pediatric experience of pain during vaccinations at the North Bay nurse practitioner-led clinic – [Terri MacDougall](#)
- 10 practical tips to increase early childhood immunization coverage rates – [Karen Dickenson-Smith](#)
- Socioeconomic status differences in parental vaccination attitudes and child vaccinations: Findings from the 2013 Childhood National Immunization Coverage Survey – [Richard Carpiano](#)

### MODERATOR:

- Christine Halpert, Senior Practice Leader, Immunization Programs and Vaccine Preventable Diseases Service, BC Centre for Disease Control

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### OPTIMAL PRACTICE

#### ROOM 202 ORAL ABSTRACT SESSION 2

- Forecasting the potential public health impact of introducing a new herpes zoster vaccine to the Canadian population – [Ruben Tavares](#)
- The effectiveness of the shingles vaccine in Alberta – [Bruce McDonald](#)
- Epidemiology of invasive pneumococcal disease (IPD) among adults 65 years and older in New Brunswick 2012-2015: An enhanced surveillance lens – [Rita Gad](#)
- Clinical validation of PCR-based detection and serotype deduction of *Streptococcus pneumoniae* from nasopharyngeal swabs collected for viral studies – [Hayley Gillis](#)
- Increasing the diagnostic yield of pneumococcal community-acquired pneumonia Surveillance in hospitalized adults using combinative laboratory testing – [Jason Leblanc](#)

### MODERATOR:

- Lyne Cantin, Public Health Agency of Canada

### NEW DEVELOPMENTS IN VACCINES AND THEIR USE

#### ROOM 210 PRE-EVENT VACCINATION FOR BIOLOGICAL THREATS

Few people in Canada are aware of the potential biological threats and what work is currently being undertaken to address these threats. The World Health Organization (WHO) identified ten emerging pathogens as risks to global public security, several of which do not currently have approved vaccines. Exponential increases in global mobility and reduced detection times of so-called eradicated or controlled diseases have called into question the effectiveness of Ring Containment without pre-event vaccination.

In February 2016, the WHO solicited ideas for platform technology solutions to develop and manufacture candidate products for clinical trials in a timely manner (months rather than years) for a variety of infectious disease threats. This session will present the complex infectious disease threats that could cause public health emergencies and understand how nations including Canada are dealing with the potential risks.

#### LEARNING OBJECTIVES:

- Describe the six bioterrorism/biological threats the Department of National Defence in Canada is pursuing.
- Review the Public Health Agency of Canada activities in this area, specifically through the National Emergency Stockpile System.
- Summarize where paramedics and other first responders/critical infrastructure personnel fit in this global picture, i.e. training and equipment.

#### PANELISTS:

- Tim Dear, Senior Associate, Centre-Arch Inc.
- James Anderson, Biological Warfare Threat Medical Counter Measures Project Manager, Department of National Defence
- Jean-Francois Duperre, Acting Executive Director, Center for Emergency Preparedness and Response, Public Health Agency of Canada
- Robert Davidson, Commander, Special Operations Division, Ottawa Paramedic Service
- Jesper Elsgaard, Senior Director, Global Government Affairs, Bavarian Nordic

#### MODERATOR:

- Tim Dear, Senior Associate, Centre-Arch Inc.

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### MAKING AND IMPLEMENTING POLICY



#### ROOM 205 REVIEWING ONTARIO'S UNIVERSAL INFLUENZA IMMUNIZATION PROGRAM – THE APPLICATION OF RESEARCH TO PRACTICE, PROGRAMS AND POLICY

The Universal Influenza Immunization Program (UIIP) has been in place in Ontario since 2000. A review of specific questions related to the UIIP was recently completed. The following three questions were addressed:

1. Is influenza vaccine being given at the optimal time?
2. What is the impact of repeated influenza vaccinations on vaccine effectiveness?
3. What are the indirect/herd effects of influenza vaccination?

The clinical practice, program delivery and policy development implications of these questions will be explored during this session. Participants will be provided with an overview of the research questions and findings and then asked to consider how these findings can be applied within their provincial or territorial influenza immunization programs. Implications of the findings on the timing of delivery of influenza vaccine by providers, vaccination recommendations, and professional and public promotional and educational materials will be examined.

### LEARNING OBJECTIVES:

- Identify and discuss the research questions addressed as part of the UIIP review.
- Explore the implications of these findings from clinical practice, program delivery, and policy development perspectives.
- Identify practice, program, and policy approaches to improve influenza immunization programs, with a focus on the three research questions.

### WORKSHOP FACILITATORS:

- Sarah Buchan, PhD candidate, Dalla Lana School of Public Health, University of Toronto
- Jeff Kwong, Scientist, Public Health Ontario; Senior Scientist, Institute for Clinical Evaluative Science
- Lauren Ramsay, Research Coordinator, Public Health Ontario
- Christina Renda, Health Analyst, Public Health Ontario
- Bryna Warshawsky, Public Health Physician, Public Health Ontario
- Anne Winter, Epidemiologist Specialist, Public Health Ontario

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## VACCINE UPTAKE AND ACCEPTANCE

### ROOM 208 VACCINE HESITANCY AND THE HEALTH CARE PROFESSIONAL

Health care professionals (HCP) have a critical role to play in immunization. Those who are fully immunized and up-to-date, model good practices. Their attitude is very influential in the decision to immunize; their advice and information can counter anti-vaccine information received from friends, family, and websites. Alternatively, health care providers who are themselves vaccine hesitant may reinforce the opinions of those who are unsure of immunizations' effectiveness and safety, resulting in refusal of some or all vaccines. This session will look at the impact of the use of effective counselling techniques by HCP on vaccine hesitancy; explore the opinions and attitudes of alternative health care providers on immunization decisions; and discuss how to address vaccine hesitancy among HCP.

### LEARNING OBJECTIVES:

- Explain basic principles of motivational interviewing techniques as an approach to address vaccine hesitancy.
- Recognize how alternate health providers can influence immunization decisions.
- Describe effective approaches to address vaccine hesitancy among health care professionals.

### SPEAKERS:

- Arnaud Gagneur, Investigator, Centre de recherche du CHUS; Associate Professor, Department of Pediatrics, Faculty of Medicine and Health Sciences, Université de Sherbrooke
- Kumanan Wilson, Senior Scientist, Ottawa Hospital Research Institute; Professor of Medicine, University of Ottawa
- Eve Dubé, Researcher, Institut national de santé publique du Québec, Laval University

### MODERATOR:

- Jill Skinner, Associate Director, Policy Development and Analysis, Canadian Medical Association



# WEDNESDAY 7 DECEMBER

16:00-17:30

POSTER PRESENTATIONS

PARLIAMENT FOYER

The dedicated poster session and networking event will enable presenters to engage with delegates and present research, program, best practices or policy innovation in a more dynamic setting. The goal of the poster presentation session is to allow delegates to network, and exchange innovative ideas, while facilitating productive discussion and feedback.

1. BCG-induced granulopoiesis protects newborns from septic death – [Byron Brook](#)
2. Reporting and identification of adverse events following immunization in pregnancy, Canada, January 2000 to December 2015 – [Ania Kemp](#)
3. Adverse effects of vaccination with live attenuated intranasal influenza vaccine in a pediatric cohort with cystic fibrosis – [Constantina Boikos](#)
4. A randomized controlled trial of the effect of two injection speeds on infant distress during vaccination – [Horace Wong](#)
5. Improving pediatric experience of pain during vaccinations at the North Bay Nurse Practitioner-led Clinic – [Shawna Meloche](#)
6. Waning of measles maternal antibody in infants - A systematic literature review focusing on elimination settings – [Shelly Bolotin](#)
7. Vaccinating children against influenza in Hutterite colonies: Follow up of a randomized trial – [Biao Wang](#)
8. Protection against vaccine-preventable diseases after chemotherapy for acute lymphoblastic leukemia – [Léna Coïc](#)
9. Hepatitis B immunization in pediatric solid organ transplant recipients – [Léna Coïc](#)
10. Understanding factors influencing infant rotavirus vaccination in British Columbia: A survey of parents – [Alexandra Nunn](#)
11. An outbreak of mumps in a population of young adults left susceptible by Canada's evolving vaccination schedules – [Alexandra Nunn](#)
12. Implementation of British Columbia's Influenza Prevention Policy, 2015/16 influenza season – [Alexandra Nunn](#)
13. Haemophilus influenzae type A invasive infections at the Montreal Children's Hospital and infection rates in Quebec – [Andrée-Anne Boisvert](#)
14. The effect of latent cytomegalovirus and Epstein-Barr virus infections on responses to MenC and Hib conjugate vaccines in children – [Manish Sadarangani](#)
15. Reductions in antibody production to the 2014/15 seasonal influenza vaccine in highly active young men aged 18-35 – [Andrew Stewart](#)
16. Preparedness for and response to meningococcal outbreaks: Preliminary safety results of a Canadian Immunization Research Network (CIRN) randomized controlled trial of two schedules of 4CMenB vaccination in adolescents and young adults – [Joanne Langley](#)
17. Invasive meningococcal disease in Canada, 2012-2014 – [Jenny Rotondo](#)
18. fHbp variant diversity and level of surface expression among invasive Neisseria meningitidis serogroup B isolates from Canada (2006-2012) – [Julie Bettinger](#)
19. Vaccine effectiveness against laboratory-confirmed influenza hospitalizations among community-dwelling older adults during the 2010/11 to 2013/14 influenza seasons in Ontario, Canada – [Jeffrey Kwong](#)
20. Antibody responses against antigenically drifted strains of Fluad, a seasonal MF59 adjuvanted trivalent influenza vaccine in older adults – [James Mansi](#)
21. Development of a glycoconjugate vaccine to combat disease caused by Haemophilus influenzae type A – [Andrew Cox](#)
22. Current epidemiology of invasive Haemophilus influenzae disease in Northwestern Ontario – [Marina Ulanova](#)
23. Characterisation of Haemophilus influenzae serotype A: An emerging pathogen in the post-Hib vaccine era – [Raymond Tsang](#)
24. Bordetella pertussis strains in Canada not expressing acellular pertussis vaccine antigens – [Raymond Tsang](#)

- 26.** Vaccine effectiveness of non-adjuvanted and adjuvanted trivalent inactivated influenza vaccines (TIV) in the prevention of influenza-related hospitalization in Canadian seniors over the 2011/12 through 2013/14 season: A pooled analysis from the Serious Outcomes Surveillance Network of the Canadian Immunization Research Network – [Shelly McNeil](#)
- 27.** Influenza burden, risk factors for severe disease and influenza vaccine effectiveness among patients with chronic obstructive pulmonary disease admitted to hospital with lab-confirmed influenza: A study from the Serious Outcomes Surveillance Network of the Canadian Immunization Research Network – [Sunita Mulpuru](#)
- 28.** A phase 1 randomized, placebo-controlled clinical trial assessing the safety and immunogenicity of a recombinant vesicular stomatitis virus Ebola vaccine in healthy adults – [May ElSherif](#)
- 29.** Comparison of two pneumococcal urine antigen detection tests for detection of community-acquired pneumonia (CAP) in hospitalized adults – [May ElSherif](#)
- 30.** Determining the impact of a medical directive on the uptake of pneumococcal polysaccharide vaccine to eligible at-risk patients – [Laura Bourns](#)
- 31.** Predicting the efficacy of the adjuvanted trivalent influenza vaccine based on haemagglutination-inhibiting antibody titers and clinical protection in adults 65 years of age and older – [Van Hung Nguyen](#)
- 32.** Cost-effectiveness of alternative strategies for use of 13-valent pneumococcal conjugate vaccine (PCV13) in Canadian adults aged ≥65 years – [Marie-Claude Breton](#)
- 33.** Clinical and economic impact of switching from the 13-valent to 10-valent pneumococcal conjugate vaccine in Canada – [Marie-Claude Breton](#)
- 34.** The immune response of adult patients with severe chronic kidney disease to 13-valent pneumococcal conjugate vaccine – [Angèle Desbiens-Forget](#)
- 35.** B-cell responses to 13-valent pneumococcal conjugate vaccine in patients with severe chronic kidney disease – [Gabrielle Gaultier](#)
- 36.** Shifts in distribution of invasive pneumococcal PCV13 serotypes and antimicrobial susceptibilities in Canada: 2011-2014 – [Averil Griffith](#)
- 37.** Pneumococcal conjugate vaccines' (PCVs) effect against invasive pneumococcal disease (IPD) related to serotype 19A: Evidence from national surveillance programs – [Heather Sings](#)
- 38.** Post-hoc analysis of the 13-valent polysaccharide conjugate vaccine efficacy against vaccine-serotype pneumococcal community acquired pneumonia in at-risk older adults – [Jose Suaya](#)
- 39.** Invasive pneumococcal disease (IPD) by serotypes 3/6A/19A in children after 13-valent (PCV13) and 10-valent (PCV10) pneumococcal conjugate vaccination in the United States and Finland – [Jose Suaya](#)
- 40.** Impact of conjugate vaccines on Haemophilus influenzae type b (Hib) and Streptococcus pneumoniae in children with cancer: A report from the Canadian Immunization Monitoring Program Active (IMPACT) – [Joanne McNair](#)
- 41.** Hospitalized pneumonia in the Nunavik region of Quebec from 1997-2013 – [Jean-Baptiste Le Meur](#)
- 42.** Incidence of adult invasive pneumococcal disease post pneumococcal conjugate vaccines in Toronto/Peel, Canada, 2001-2015 – [Allison McGeer](#)
- 43.** Paediatric invasive pneumococcal disease (IPD) post pneumococcal conjugate vaccines in Toronto/Peel Region, Canada, 2001-2015 – [Allison McGeer](#)
- 44.** Comparing the estimated potential health impact of two herpes zoster vaccines in Ontario, Canada – [Kelly Johnson](#)
- 45.** Effectiveness of live zoster vaccine in preventing postherpetic neuralgia (PHN) – [Morgan Marks](#)
- 46.** Tetanus hospital admissions in Canada, 1995-2010 – [Tiffany Smith](#)
- 47.** Two-year efficacy of the quadrivalent human papillomavirus vaccine in a cohort of HIV-positive females – [Elisabeth McClymont](#)
- 48.** Modèle de services de vaccination aux enfants de 0-5 ans au Québec : Évaluation du processus d'élaboration et d'accompagnement – [Maryse Guay](#)

# WEDNESDAY 7 DECEMBER

16:00-17:30

POSTER PRESENTATIONS

PARLIAMENT FOYER

49. Promoting vaccination in a healthy lifestyle program for dyads of seniors and their companions: A randomized controlled trial – [Maryse Guay](#)
50. Utilisation du programme de fidélisation d'une entreprise privée afin d'accélérer l'administration de la vaccination post exposition dans une éclosion d'hépatite A – [Danielle Auger](#)
51. Is there evidence in the scientific literature to support the indirect effect of influenza immunization? – [Anne Winter](#)
52. A literature review of strategies to increase uptake of the influenza vaccine among health care workers in hospitals – [Anne Winter](#)
53. Sample-size analysis: Can an observational study successfully assess the historical association between influenza vaccination rates of health care workers on the probability of influenza outbreaks in long-term care facilities in BC? – [Chelsea Treloar](#)
54. British Columbia's Influenza Prevention Policy: Healthcare workers' knowledge, attitudes and practices study, 2015/16 influenza season – [Chelsea Treloar](#)
55. Reactogenicity of high- versus standard-dose trivalent inactivated influenza vaccine for use in healthcare workers – [Cheryl Volling](#)
56. Canadian healthcare providers' perceptions of vaccine product monograph safety language and impact on use of vaccines in pregnancy – [Catherine Arkell](#)
57. Exploring the potential use of mobile health (mhealth) digital technologies for healthcare worker communicable disease prevention in England: A survey focussed on influenza immunization among healthcare workers – [Robyn Harrison](#)
58. Using mobile apps to facilitate reporting of vaccination status. Results of a pilot study with ImmunizeCA and Ottawa Public Health – [Katherine Atkinson](#)
59. Impacts de l'utilisation de Panorama sur les pertes de vaccins du Programme québécois d'immunisation (PQI) – [Sylvie Bastien](#)
60. Vaccination Under the Midnight Sun, an audit of the Northwest Territories Immunization Registry – [Marc Arsneau](#)
61. Community health aides: Augmenting the scope of nursing practice in northern Inuit communities – [Tina Buckle](#)
62. Partnering to improve influenza uptake in Labrador Inuit communities of Nunatsiavut – [Sylvia Doody](#)
63. Exploring knowledge and attitudes in a low-immunization Saskatchewan First Nation community – [Carrie Gardipy](#)
64. Addressing the immunization needs of Syrian refugees in Saskatoon: An innovative community approach – [Simon Kapaj](#)
65. Knowledge, attitudes, beliefs and behaviours of college students and staff during a meningococcal B outbreak vaccination program: A Canadian Immunization Research Network study – [Donna MacDougall](#)
66. Reducing the numbers of adolescent students who were not in compliance with immunization legislation using a combined strategy of school-based and community evening vaccination clinics – [Andrea Main](#)
67. Seroprevalence of measles, mumps, rubella, varicella-zoster and hepatitis A-C in Emirati medical students – [Mohamud Sheek-Hussein](#)
68. Investigation of an excess of injection site reactions following immunization with measles, mumps, rubella and varicella (MMRV) vaccine in Quebec – [Marilou Kiely](#)
69. Vaccine effectiveness against laboratory-confirmed influenza hospitalizations among young children during the 2010/11 to 2013/14 influenza seasons in Ontario, Canada – [Sarah Buchan](#)
70. The impact of repeated vaccination on influenza vaccine effectiveness: A systematic review – [Sarah Buchan](#)
71. The Special Immunization Clinics Network: Immunizing patients with adverse events following immunization (2013-2016) – [Karina Top](#)
72. Adverse event following immunization active paediatric surveillance: From case identification to reporting. Recent experience in an IMPACT hospital – [Sophie Bouchard](#)
73. Life after ACCA: Causality assessment for serious adverse events following immunization in British Columbia and Manitoba – [Monika Naus](#)

- 74.** "Crater Like Defect" following adjuvanted influenza vaccine – [Barbara Gordon](#)
- 75.** Risk of recurrence of adverse events following immunization: Results of 18 years of monitoring in Quebec, Canada – [Joseline Zafack](#)
- 76.** Risk of recurrence of adverse events following immunization: A systematic review – [Joseline Zafack](#)
- 77.** Review of encephalitis and encephalopathy cases following immunization reported to the Canadian Immunization Monitoring Program ACTive (IMPACT) from 1992-2012 – [Jennifer Tam](#)
- 78.** Assessing the relationship between age, medical risk factors and influenza complications: The challenges of answering policy questions with routinely collected public health data – [Christina Renda](#)
- 79.** Evaluating the cost-effectiveness of targeted vaccination campaigns for the containment of pandemic influenza in Canadian metropolitan areas – [Patrick Saunders-hastings](#)
- 80.** Developing new standards for building trust with pharmaceutical companies: A reflection on GlaxoSmithKline's (GSK's) journey in Canada – [Leonard Friedland](#)
- 81.** Reverse vaccinology – The catalyst for a new Renaissance period in vaccine development – [David Willer](#)
- 82.** Burden of influenza B in Canada: Analysis of FluWatch national surveillance data 2004-2016 – [Heather VanSeggelen](#)
- 83.** Economic analysis of pneumococcal vaccination for elderly adults in Canada – [Zhou Zhou](#)
- 84.** The annual disease and economic burden of seasonal influenza in Canada – [Jason Lee](#)
- 85.** A review of cost-utility analyses of vaccines – [Jason Lee](#)
- 86.** Interventions to increase routine childhood immunizations in low socioeconomic populations: A systematic review – [Sarah Edwards](#)
- 87.** The health and economic burden of pertussis in Canada: A microsimulation study – [Ashleigh McGirr](#)
- 88.** Cost-effectiveness comparison of monovalent C versus quadrivalent ACWY meningococcal conjugate vaccination in Canada – [Philippe De Wals](#)
- 89.** Equity-based childhood immunization policy-making in urban centres across the Canadian Prairies: A comparative analysis – [Thilina Bandara](#)
- 91.** Impact and effectiveness of the quadrivalent human papillomavirus vaccine: A review of 10 years of real-world experience in Canada – [Caroline Rodier](#)
- 92.** Identified barriers to the uptake of the human papillomavirus vaccine program in Ontario – [Anierhe Joan Abohweyere](#)
- 93.** Perceptions of human papillomavirus related disease among adolescents and parents in Ontario – [Anierhe Joan Abohweyere](#)
- 94.** Effect of human papillomavirus vaccination on cervical cancer screening in Alberta – [Jong Kim](#)
- 95.** Variable effects of repeat vaccination against influenza B illness by season: 2010/11 to 2014/15 – [Catharine Chambers](#)
- 96.** Comparing the cost-effectiveness of universal hepatitis B immunization programs: A literature review – [Lauren Ramsay](#)
- 97.** Show us the data! Improving data quality in Ontario – [Jill Fediurek](#)
- 98.** Strength in numbers: Vaccine safety in Ontario in 2015 – [Tara Harris](#)
- 99.** Mind the gender gap: Assessing sex-specific differences in adverse event following immunization reporting in Ontario, 2012-2015 – [Tara Harris](#)
- 100.** Evaluation of Public Health Ontario's Annual Report on Vaccine Safety – [Lauren Ramsay](#)
- 101.** Changing the landscape of immunization coverage assessment in Ontario: Methods and knowledge exchange – [Sarah Wilson](#)
- 102.** Monitoring of lack of effectiveness/vaccination failure – [Jhona Rose](#)
- 103.** Monitoring medication errors following vaccination – [Jhona Rose](#)
- 104.** New vaccine storage and handling resources for British Columbia (BC) health professionals – [Shaila Jiwa](#)
- 105.** I Boost Immunity – [Ian Roe](#)
- 107.** Quality improvement in clinical services delivered by public health – [Mohammed Mosli](#)



# WEDNESDAY 7 DECEMBER

16:00-17:30

POSTER PRESENTATIONS

PARLIAMENT FOYER

- 108.** Integration of public health unit practice and immunization research within Fraser Health  
– [Alison Orth](#)
- 109.** Informed consent by mature minors in BC  
– [Stephanie Meier](#)
- 110.** Illness absenteeism rates in primary and secondary schools in 2013-2014 in England: Was there any impact of vaccinating all children of primary school age against influenza? An ecological study  
– [Nicholas Brousseau](#)
- 111.** Excluding pupils in a pertussis outbreak to increase immunization coverage  
– [Bill Sherlock](#)
- 112.** Pertussis outbreak in a large health region in Saskatchewan – [Olanrewaju Medu](#)
- 113.** Pertussis in Ontario: Age-specific trends with suggestion of waning immunity among tweens – [Chi Yon Seo](#)
- 114.** Comparative analysis of pertussis epidemic cycles in immunizing and under-immunizing public health units in Ontario, 1991-2015  
– [Amanda Shane](#)
- 115.** Understanding non-vaccination against influenza in Canadian adults: Findings from the 2015-2016 Influenza Coverage Survey  
– [Noushon Farmanara](#)
- 116.** Validating a 'Vaccine Hesitancy' instrument in a cohort of Alberta parents: A Canadian Immunization Research Network (CIRN) study  
– [Shannon MacDonald](#)
- 117.** Maternal perceptions of childhood vaccination: Reasons for and against  
– [Melissa Mueller](#)
- 118.** Determinants of influenza vaccination among a large population in Quebec  
– [Arnaud Gagneur](#)
- 119.** Determinants of vaccine hesitancy in the Eastern Townships (Quebec): A large population-based survey – [Arnaud Gagneur](#)
- 120.** Evaluation of a brief training on motivational interviewing adapted to vaccination  
– [Stéphanie Lanthier-Labonté](#)
- 121.** Vaccine hesitancy in Canada: Results of an online survey – [Eve Dubé](#)
- 122.** How do we measure vaccine hesitancy? A comparison of qualitative and quantitative measures in a Victoria-based sample of mothers – [Clara Rubincam](#)
- 123.** Vaccine conspiracy beliefs across Canada  
– [Gilla Shapiro](#)
- 124.** Vaccine hesitancy: View from front-line vaccine providers – [Maryline Vivion](#)
- 125.** Vaccine hesitancy in the Web 2.0 era  
– [Maryline Vivion](#)



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# THURSDAY 8 DECEMBER



## PROGRAM OVERVIEW

09:15-10:30	PLENARY III Laurie Garrett Canada Hall 1			
10:30-11:00	NUTRITION BREAK Canada Hall 2 & 3			
11:00-12:30	CONCURRENT SESSIONS			
	Facilitating interoperable immunization records in Canada  Room 207	Increasing access to immunization services: An integrated, interprofessional approach  Room 210	Indigenous peoples' health  Room 213	Making and implementing policy: Working together!  Room 208
	Maternal immunization against pertussis in Canada – Considerations for implementation and evaluation  Room 205	Optimizing immunization in immigrants and refugees  Room 206	Oral Abstracts: Vaccine uptake and acceptance  Session 1 - Room 201 Session 2 - Room 202	
12:30-14:30	LUNCH & PLENARY IV: PREVENTING CANCER BY VACCINATION: THE HPV STORY John Schiller Canada Hall 1			

**WIRELESS NETWORK: CIC2016    PASSWORD: IMMUNIZE**

**9:15 – 10:30**

**CANADA HALL 1**

### 2016 NATIONAL GRADE 6 IMMUNIZATION POSTER CONTEST AWARD

The Public Health Agency of Canada and Immunize Canada are pleased to present the 2016 National Grade 6 Immunization Poster Contest. Students from across Canada were invited to create posters expressing their ideas about immunization and healthy children. One national grand prize winner and one national runner-up were chosen, and one winner was chosen from each participating province and territory.

All winning posters will be displayed at CIC 2016 and on the [Immunize Canada website](#). The calendar of winning posters is available at the registration desk or the Immunize Canada booth (#4).

#### PRESENTED BY:

- Shelly McNeil, Chair, Immunize Canada; Clinician Scientist, Canadian Center for Vaccinology; Professor, Department of Medicine (Infectious Diseases), Dalhousie University
- Nicole Le Saux, Vice-Chair, Immunize Canada; Physician, Division of Infectious Disease, Children's Hospital of Eastern Ontario; Associate Professor, Department of Pediatrics, Faculty of Medicine, University of Ottawa



## DR. BERNARD DUVAL FOUNDATION VACCINOLOGY STUDENT RESEARCH PROGRAM BURSARY

Dr. Duval was a founding member of CAIRE and recognized for significant contributions to immunization in Canada.

### PRESENTED BY:

- Gaston De Serres, Medical Epidemiologist, Institut national de santé publique du Québec

## PLENARY III

### GLOBAL HEALTH TRENDS IN VACCINATION PROGRAM FAILURES WORLDWIDE

#### Laurie Garrett, Senior Fellow for Global Health, Council on Foreign Relations

Based on data amassed from multiple sources around the world since 2007, Laurie Garrett will explore three worldwide trends that negatively impact vaccination programs.

While improvements in global efforts to better coordinate vaccine logistics have been realized by organizations such as GAVI, UNICEF and the WHO, there continue to be planning, supply and production problems in poor or conflict-besieged countries as revealed by yellow fever and cholera vaccine outages.

Vaccine refusal has become a worldwide problem, particularly in wealthy, well-educated populations where false beliefs and claims that “too many vaccines” are required can prevail. Programs aimed at countering denial, such as changes in school entry laws and mass education, will be explored.

Finally, Ms. Garrett will discuss terrorist attacks and fatwahs against vaccinators, the origins of violent anti-vaccine campaigns in Nigeria, Pakistan and Afghanistan and describe efforts made to confront such groups as Boko Haram, the Taliban and al-Qaeda.

Laurie Garrett is one of America’s leading commentators on global health issues and infectious diseases, including Zika and Ebola. She is the only person to win the three P’s of journalism: The Pulitzer Prize, the Peabody Award, and the Polk Award.



### LEARNING OBJECTIVES:

- Describe worldwide trends that have led to failures of some vaccination programs.
- Discuss what steps are being taken to counter vaccine supply trends.
- Summarize program interventions that can counter vaccine refusal.
- Explore the impact of global anti-vaccine campaigns.

### MODERATOR:

- Brian Ward, Professor of Medicine & Microbiology, Research Institute of the McGill University Health Centre Vaccine Study Centre; Interim Chair, CAIRE

### VACCINE UPTAKE AND ACCEPTANCE



#### ROOM 207 FACILITATING INTEROPERABLE IMMUNIZATION RECORDS IN CANADA

The workshop will provide participants with an update on how the model of interoperable records has replaced the concept of a national immunization registry as a means to provide access to accurate, complete and timely immunization records. This will set the stage for the hands-on portion of the workshop, which will include an opportunity to access to tools to support interoperability (e.g., mobile technologies, including the ImmunizeCA consumer app, bar code scanning, and immunization record sharing between systems).

The goal of interoperable immunization records is to improve health outcomes by making standardized, comprehensive immunization health information accessible in real time. This supports healthcare providers during clinical practice and engages members of the public as active partners in the management of their own health. This will improve timeliness and accuracy in immunization coverage and adverse event following immunization (AEFI) surveillance, at both the jurisdictional and national level, which in turn supports the advancement of immunization research.

Participants will be able to evaluate the benefits of the pan-Canadian immunization terminology and messaging standards and how to access them; they will be in a better position to make informed choices regarding the use of tools and solutions that can be used in their jurisdiction and/or clinical practice. Participants will be provided with resources to facilitate alignment with standardized record keeping to support interoperable systems.

#### LEARNING OBJECTIVES:

- Learn how to access and utilize pan-Canadian terminology and messaging standards.
- Analyze the tools available to advance immunization interoperability in Canada and assess relevance for use in their setting.
- Formulate priorities for advancing interoperability in their setting and provide input to priority setting for national initiatives.

#### SPEAKERS:

- Karen Hay, Manager, Solution Support and Integration, Ministry of Health and Long-Term Care
- Katherine Atkinson, Director, Research and Business Development, The Ottawa Hospital mHealth Research Team
- Cameron Bell, Director of Design and Development, The Ottawa Hospital mHealth Research Team
- Lyne Cantin, Manager, Immunization Coverage and Information Systems, Public Health Agency of Canada

#### WORKSHOP FACILITATOR:

- Tara Mawhinney, Consultant, The Ottawa Hospital Research Institute

# THURSDAY 8 DECEMBER

11:00-12:30 CONCURRENT SESSIONS

## OPTIMAL PRACTICE

### ROOM 210 INCREASING ACCESS TO IMMUNIZATION SERVICES: AN INTEGRATED, INTERPROFESSIONAL APPROACH

All health care providers play an important role in providing a safe and effective immunization program. PHAC's Immunization Competencies for Health Professionals present a comprehensive framework that supports health care professionals in developing the required knowledge, skills and abilities to be able to deliver high-quality immunization services. This session will review the national immunization competencies, discuss how they have supported the development of an integrated and Interprofessional team of immunizers in Canada and provided a framework for education and training. Participants will also hear from jurisdictions that have integrated new groups of immunizers into their programs and will have an opportunity to discuss successes, challenges and next steps.

#### LEARNING OBJECTIVES:

- Describe PHAC Immunization Competencies for Health Professionals, explain how they can improve the quality of immunization practice from a systems level and apply them to their practice.
- Describe how access to immunization services can be improved through an interdisciplinary approach, particularly through the involvement of a variety of health care professionals as immunizers, and evaluate the potential impact on immunization rates.
- Develop a framework for Interprofessional collaboration and development of integrated immunization services in order to increase access and ensure patient safety.
- Describe provincial immunization resources that aim to meet the needs of a wide variety of health care providers.

#### SPEAKERS:

- Ian Gemmill, Medical Officer of Health, Kingston, Frontenac and Lennox & Addington Public Health
- John Papastergiou, Pharmacist/Owner; Collaborator, Pharmacists as immunizers project, Ontario Pharmacy Research Collaboration; Assistant Professor, Leslie Dan Faculty of Pharmacy, University of Toronto; School of Pharmacy, University of Waterloo
- Shaila Jiwa, Vaccine Educator, Immunization Programs and Vaccine Preventable Diseases Service, BC Centre for Disease Control

#### MODERATOR:

- Christine Halpert, Senior Practice Leader, Immunization Programs and Vaccine Preventable Diseases Service, BC Centre for Disease Control

Image courtesy of Shaw Centre



### IMMUNIZATIONS IN SPECIFIC POPULATIONS

#### ROOM 213 INDIGENOUS PEOPLES' HEALTH

- Community health aides: Augmenting the scope of nursing practice in northern Inuit communities – [Tina Buckle](#)
- Partnering to improve influenza uptake in Labrador Inuit communities of Nunatsiavut – [Sylvia Doody](#)
- Up-to-date immunization coverage rates among 2-year-olds in the Saskatchewan First Nations communities – [Michelle Allard-Johnson](#)
- The epidemiology of invasive diseases caused by Haemophilus influenzae type A: A report from the Canadian Immunization Monitoring Program ACTive (IMPACT) – [Ben Tan](#)
- Haemophilus influenzae type A invasive infections at the Montreal Children Hospital and infection rates in Quebec – [Andrée-Anne Boisvert](#)

#### MODERATOR:

- Teresa Gillespie, First Nations Inuit Health Branch, Health Canada
- 

### MAKING AND IMPLEMENTING POLICY

#### ROOM 208 MAKING AND IMPLEMENTING POLICY: WORKING TOGETHER!

When implementing policy, various stakeholders have different views. This session will discuss systematic approaches that have been used, but also how opportunities exist to work together in innovative ways. What factors influence decisions?

#### LEARNING OBJECTIVES:

- Analyze the Immunization 2020 strategy developed by Ontario and identify elements that may be useful in other jurisdictions.
- Consider the range of evidence needed to inform provincial and territorial decision-making related to immunization programs.
- Discuss possible ways of interacting with industry in the policy-making process, yet limiting bias: the pros and cons.

#### SPEAKERS:

- Dianne Alexander, Manager, Immunization Policy and Programs, Population and Public Health Division, Ministry of Health and Long-Term Care
- Caroline Quach, Paediatric Infectious Disease Consultant & Medical Microbiologist, McGill University Health Centre; Associate Professor, Departments of Paediatrics & Epidemiology, Biostatistics & Occupational Health, McGill University
- Terry Gunter, General Manager, Vaccines Business Unit, Pfizer Canada; Chair, Vaccine Industry Committee

#### MODERATOR:

- Nina Arron, Director of Public Health Policy and Programs Branch, Population and Public Health Division, Ministry of Health and Long-Term Care

### NEW DEVELOPMENTS IN VACCINES AND THEIR USE



#### ROOM 205 MATERNAL IMMUNIZATION AGAINST PERTUSSIS IN CANADA – CONSIDERATIONS FOR IMPLEMENTATION AND EVALUATION

In this workshop, public health researchers, immunization policy makers, front-line providers and clinical researchers will come together to learn about and discuss potential maternal pertussis immunization programs in Canada, including objectives, recent evidence, program feasibility and challenges. Maternal immunization is a rapidly expanding area of immunization but faces many challenges. Maternal immunization has been very effective in controlling infant pertussis recently in a number of countries. Given the cyclical nature of recurring pertussis peaks, the immunization community in Canada must consider how maternal pertussis immunization programs will be implemented and evaluated.

Workshop delegates will specifically have the opportunity to review and discuss evidence pertinent to the risk-benefit and cost-effectiveness analyses relating to maternal pertussis immunization. Experience from other countries, both practical and scientific, and how Canada might appropriately consider such programs during an outbreak or for routine use, will be covered.

#### LEARNING OBJECTIVES

- Review the considerations, conditions and thresholds for maternal pertussis immunization, including experience elsewhere and applicability within Canada.
- Explore challenges in Canada and how these can be mitigated.
- Discuss infrastructure and evaluation needed to monitor the program in relation to objectives and with respect to acceptance, risk-benefit and cost-effectiveness analyses.

#### WORKSHOP FACILITATORS:

- Manish Sadarangani, Director, Vaccine Evaluation Center, Research Institute, BC Children's Hospital; Assistant Professor, Division of Infectious Diseases, Department of Pediatrics, University of British Columbia
- Jason Brophy, Clinician-investigator, Children's Hospital of Eastern Ontario
- Scott Halperin, Professor of Pediatrics and Microbiology & Immunology; Director, Canadian Center for Vaccinology, IWK Health Centre, Dalhousie University
- David Scheifele, Emeritus Professor, Vaccine Evaluation Center, University of British Columbia
- Danuta Skowronski, Epidemiology Lead, Influenza & Emerging Respiratory Pathogens, BC Centre for Disease Control
- Joanne Langley, Scientific Co-Chair, Conference Organizing Committee; Professor, Departments of Pediatrics and Community Health and Epidemiology; CIHR-GSK Chair in Pediatric Vaccinology, Dalhousie University
- Eliana Castillo, Clinical Associate Professor of Medicine and Obstetrics and Gynaecology, University of Calgary



#CIC16





### IMMUNIZATIONS IN SPECIFIC POPULATIONS

#### ROOM 206 OPTIMIZING IMMUNIZATION IN IMMIGRANTS AND REFUGEES

Many newly arrived immigrants and refugees are at increased risk for several vaccine-preventable diseases because they may not be part of the routine vaccination programs in their countries of origin or due to several barriers of accessing these vaccines after arrival in Canada. Vaccines are not updated during the immigration screening exam and there are no routine targeted vaccination programs for immigrants after arrival. This symposium will review the vaccination status, coverage and barriers to uptake of vaccines for routine childhood vaccines in adults and children, hepatitis B and HPV vaccines in immigrants and refugees.

#### LEARNING OBJECTIVES:

- Identify barriers to vaccine uptake in children and adults new to Canada.
- Discuss ways to optimize vaccine programs for children and adults new to Canada.
- Discuss the role of HPV vaccine in addressing this health disparity.

#### SPEAKERS:

- Christina Greenaway, Associate Professor, Jewish General Hospital, McGill University
- Charles Hui, Associate Professor of Paediatrics, Faculty of Medicine, University of Ottawa; Chief of Infectious Diseases, Children's Hospital of Eastern Ontario
- Marc Steben, Medical Advisor, STI Unit, Institut national de santé publique du Québec

#### MODERATOR:

- Marie Adèle Davis, Executive Director, Canadian Paediatric Society
- 

### VACCINE UPTAKE AND ACCEPTANCE

#### ROOM 201 ORAL ABSTRACT SESSION 1

- What causes changes in mothers' vaccine hesitancy over time? – [Devon Greyson](#)
- Maternal perceptions of childhood vaccination: Reasons for and against – [Melissa Mueller](#)
- Is the pre-natal period an underutilized opportunity for initiating communication with parents about pediatric vaccinations? – [Clara Rubincam](#)
- Who and what do vaccine rejecting parents' trust when making vaccination decisions? A qualitative study in WA and SA, Australia – [Samantha Meyer](#)
- A geography-based equity approach to increasing childhood immunizations in the Winnipeg Health Region – [Bunmi Fatoye](#)

#### MODERATOR:

- Victor Ng, College of Family Physicians of Canada



### VACCINE UPTAKE AND ACCEPTANCE

#### ROOM 202 ORAL ABSTRACT SESSION 2

- Mapping vaccine history—Establishing a positive web presence for the Canadian context – [Heather MacDougall](#)
- Vaccine Hesitancy in the Web 2.0 Era – [Maryline Vivion](#)
- HPV Vaccination Uptake in Canada: A Systematic Review and Meta-Analysis – [Olatunji Obidiya](#)
- A Canadian approach to the community health worker: Improving equity in immunization coverage rates in Saskatoon – [Simon Kapaj](#)
- Influenza immunization in Canadian healthcare personnel – [Sarah Buchan](#)

#### MODERATOR:

- Cora Constantinescu, University of Calgary



**We are committed to helping protect people from serious diseases through vaccination.**

In 2013, we distributed more than 860 million doses of vaccines to some 170 countries – over 80% of these going to the developing world. In Canada, we have a portfolio of 23 vaccines and we are committed to investing in research.<sup>1</sup>

We work with global partners to deliver vaccines to help address healthcare challenges around the world.<sup>1</sup>

**We are GSK.**

#### Vaccine Safety Profile<sup>2,3</sup>

- The most common side effects involve inflammation at the site of vaccination, such as redness, swelling, or pain, as well as a fever. These vary by vaccine, but are common, affecting no more than 10% of those who are vaccinated.
- Uncommon reactions may occur (0.1 to less than 1% of individuals vaccinated).
- True anaphylaxis reactions are rare and occur 1 in 100,000 to 1 in a million doses and are reversible with proper treatment.
- For further information on vaccine safety, please refer to the Product Monograph for the specific vaccine.
- Reactions usually occur shortly after vaccination. Following immunization, watch for signs of an allergic reaction such as breathing problems, severe swelling or blotchy skin on the body or around the mouth.

- Immunization may not protect all individuals and may not provide 100% protection.

**Adverse events should be reported. If you need to report an adverse event for any GSK product, please call: 1-800-387-7374.**

**References:** 1. GlaxoSmithKline. GSK and the decade of vaccines. Available at: <http://www.gsk.com/media/281058/gsk-and-the-decade-of-vaccines-report.pdf>. Accessed June 2016. 2. Public Health Agency of Canada. Vaccine safety: frequently asked questions. Available at: <http://www.phac-aspc.gc.ca/im/vs-vs-faq-18-eng.php>. Accessed June 2016. 3. Public Health Agency of Canada. A parent's Guide to Vaccination. <http://healthycanadians.gc.ca/publications/healthy-living-vie-saine/parent-guide-vaccination/index-eng.php>. Accessed June 2016.

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 **80%** of our vaccines go to the developing world<sup>1</sup>

Access

 **100+** partnerships in R&D alone<sup>1</sup>

Collaboration



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## PREVENTING CANCER BY VACCINATION: THE HPV STORY

**John Schiller, NIH Distinguished Investigator, Center for Cancer Research, National Cancer Institute**

In the 1980s and 90s, laboratory and epidemiological studies determined that a select group of human papilloma virus (HPV) types are responsible for the development of most cervical cancers. As the link between HPV and cervical cancer became evident, Dr. John Schiller, with his colleague Dr. Douglas Lowy, explored the potential to develop a vaccine to prevent HPV infection. Their research led to the development of Gardasil and Cervarix which were licensed by the Food and Drug Administration for prevention of cervical cancer in 2006-2007.

The development of the HPV vaccines, which are based on virus-like particles, is one of this century's notable biomedical success stories, and widespread vaccination has the potential to reduce the incidence of cervical and other HPV-induced cancers around the world. As 2016 marks the tenth anniversary of the vaccines becoming widely available, we celebrate their remarkable success, while acknowledging the efforts that are still required for them to fully realize their potential impact.

This session will review the history of the development of HPV vaccines, their efficacy in clinical trials and emerging effectiveness in national immunization programs, the unique immunological and virological features that explain their remarkable effectiveness, and the efforts being made to increase uptake, particularly in low-resource settings where they are most needed.

### LEARNING OBJECTIVES:

- Summarize the similarities and differences in the composition and efficacy of the three commercial HPV vaccines.
- Describe the immunologic features of the vaccines and the HPV infection process that may contribute to high efficacy and effectiveness of the vaccines.
- Discuss what steps are being taken to increase vaccine uptake, particularly in low-resource settings.

### MODERATOR:

- Joanne Langley, Scientific Co-Chair, Conference Organizing Committee; Professor, Departments of Pediatrics and Community Health and Epidemiology; CIHR-GSK Chair in Pediatric Vaccinology, Dalhousie University



# COMMITTEES

## CONFERENCE ORGANIZING COMMITTEE

A conference of this magnitude is the result of hard work and commitment from the dedicated members of the conference Organizing and Scientific Committees. Our ongoing collaboration continues to create a unique knowledge exchange opportunity, grounded in a high-caliber scientific program.

**Ian Culbert** (Co-Chair)  
Canadian Public Health Association

**Marc Brisson** (Scientific Co-Chair)  
Université Laval  
*Representing the Canadian Association for Immunization Research and Evaluation*

**Dianne Alexander**  
Canadian Immunization Committee

**Brenda Bastarache**  
Canadian Nursing Coalition for Immunization

**Gordean Bjornson**  
Canadian Association for Immunization Research and Evaluation

**Andrea Coady** (up to April 2016)  
First Nations and Inuit Health Branch, Health Canada

**Marie Adèle Davis**  
Canadian Paediatric Society

**Eve Dubé**  
Immunize Canada

**Phil Emberley**  
Canadian Pharmacists Association

**Christine Halpert**  
Canadian Nurses Association

**Nathalie Labonté**  
Vaccine Industry Committee [BIOTECanada]

**Joan Robinson** (Co-Chair)  
Canadian Paediatric Society

**Joanne Langley** (Scientific Co-Chair)  
Dalhousie University  
*Representing the Canadian Association for Immunization Research and Evaluation*

**Isabelle Letourneau**  
Canadian Institutes of Health Research – Institute of Infection and Immunity

**Victor Ng**  
College of Family Physicians of Canada

**Marc Ouellette**  
Canadian Institutes of Health Research – Institute of Infection and Immunity

**Nany Grimard Ouellette** (from May 2016)  
First Nations and Inuit Health Branch, Health Canada

**Caroline Quach**  
Association of Medical Microbiology and Infectious Disease Canada & National Advisory Committee on Immunization

**Patricia Salisbury**  
Public Health Agency of Canada

**Jill Skinner**  
Canadian Medical Association

**Marie-Claude Turcotte**  
Ottawa Public Health

## SCIENTIFIC COMMITTEE

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Université Laval  
*Representing the Canadian Association for Immunization Research and Evaluation*

**Lucie Marisa Bucci**  
Immunize Canada  
*Representing the Canadian Public Health Association*

**Joanne Langley** (Scientific Co-Chair)  
Dalhousie University  
*Representing the Canadian Association for Immunization Research and Evaluation*

**Cora Constantinescu**  
University of Calgary  
*Representing the Association of Medical Microbiology and Infectious Disease Canada*

**Christina Jensen**  
*Representing the Public Health Agency of Canada*

# EXHIBIT HALL

## EXHIBITION DATES AND TIMES

## CANADA HALL 2 & 3

CIC 2016 isn't complete without a visit to the Exhibit Hall in Canada Hall 2 & 3. Come and enjoy networking events alongside exhibitors showcasing the latest immunization products and services. Make sure you schedule ample time to visit close to 20 exhibitors to learn about the latest innovations and form new partnerships.

### TUESDAY, DECEMBER 6

Health Break	10:30 – 11:00
Networking Lunch	12:30 – 14:30
Welcome Reception	16:00 – 17:30

### WEDNESDAY, DECEMBER 7

Health Break	10:30 – 11:00
Networking Lunch	12:30 – 14:30

### ORGANIZATION

### BOOTH NUMBER

AstraZeneca	7
Canadian Paediatric Society	10
Canadian Public Health Association	Networking Area
CardioMed Supplies	11
Doctors Without Borders	18
GlaxoSmithKline	5
GSK Medical Information	8
Immunize Canada	4
Merck	13
Novartis Pharmaceuticals Canada	16
Ottawa Hospital Research Institute	3
Pfizer Canada	15
Public Health Agency of Canada	1 & 2
Public Health Ontario	12
Sanofi Pasteur	14
Scientific Technologies Corporation	17
Vaccines411	9
Valneva Canada	6
VeriCor, LLC	20

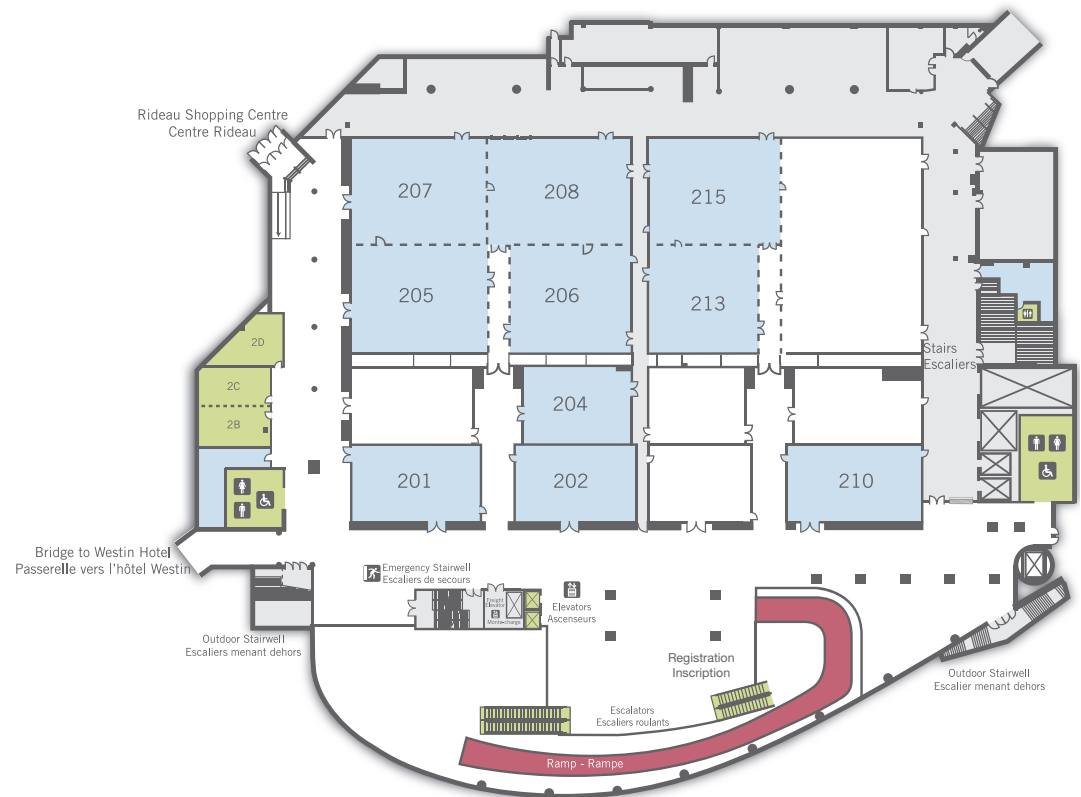




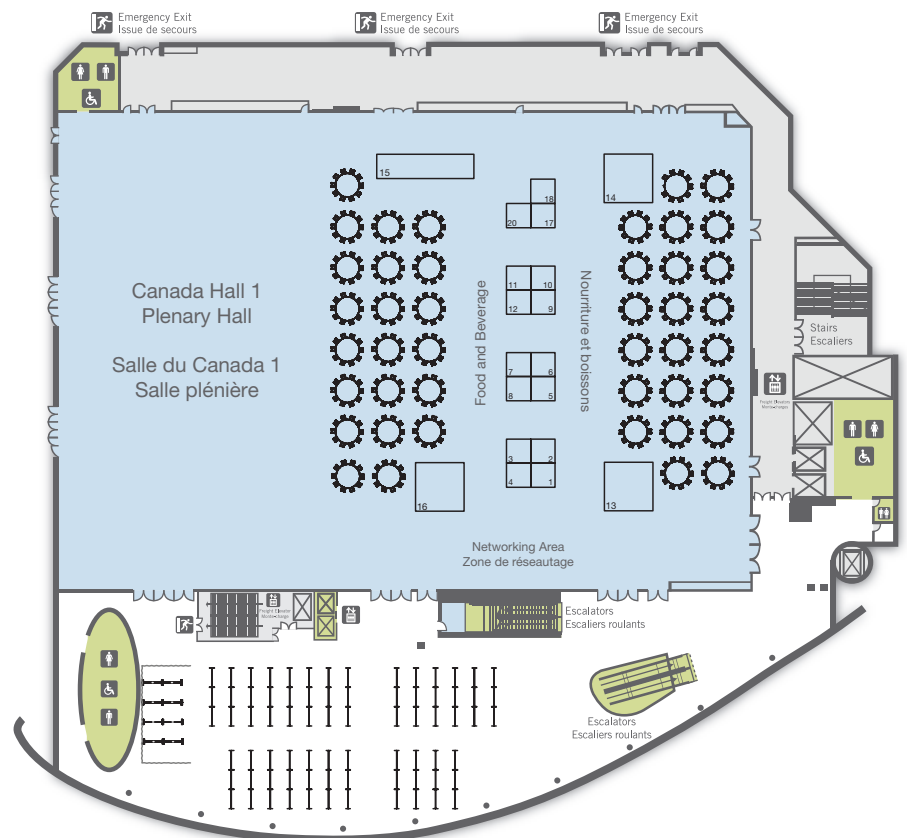
# SHAW CENTRE

## FLOORPLANS

### LEVEL 2



### LEVEL 3



# CIC 2016

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