



Canadian Immunization Monitoring Program, ACTive
Programme canadien de surveillance active de l'immunisation

Publications and Presentations List

“By Topics” List

Jan 2019

NEW*

IMPACT PUBLICATIONS and PRESENTATIONS

(By topic, with hyperlinks added where applicable)

- A. Surveillance** - General
- B. Vaccine Safety** - (Hypotonic- Hypo responsive episodes; Thrombocytopenia; Encephalopathy; Baccille Calmette-Guérin; Seizures; Infantile spasms; Injection site reactions)
- C. Vaccine Preventable Diseases** - (*Haemophilus influenzae*; *Neisseria meningitides*; Pertussis; *Streptococcus pneumoniae*; Varicella; Zoster; Influenza; Rotavirus; Polio-Acute Flaccid Paralysis surveillance)
- D. Other Knowledge Translation Activities** - (*new section added September 2012*)

A. Surveillance – General

Publications:

1. Morris R, Halperin SA, Déry P, Mills E, Lebel M, MacDonald N, Gold R, Law B, Jadavji T, Scheifele DW, Marchessault V, Duclos P. IMPACT monitoring network: a better mousetrap. *Can J Infect Dis* 1993; 4:194-5
2. Scheifele DW, Halperin SA, Samson H, King A, Gold R, and members of the Canadian Paediatric Society/Health Canada Immunization Monitoring Program Active (IMPACT). Assuring Vaccine Safety: A celebration of 10 years of progress with the IMPACT project. *Paediatrics & Child Health*. Vol 7, November 2002, 9:645-8
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=5&atlKy=3758&isuKy=419&isArt=t&fromfold=>
3. Scheifele DW, Halperin SA, and members of the Health Canada/CPS Immunization Monitoring Program, Active (IMPACT). A Model of Active Surveillance of Vaccine Safety. *Seminars in Pediatric Infectious Diseases*, Vol 14, No 3 July 2003: pp 213-219
[http://www.journals.elsevierhealth.com/periodicals/yspid/article/S1045-1870\(03\)00036-0/abstract](http://www.journals.elsevierhealth.com/periodicals/yspid/article/S1045-1870(03)00036-0/abstract)
4. Scheifele DW. *Paediatric Infectious Disease Notes*. IMPACT after 17 years: Lessons learned about successful networking. *Paediatrics & Child Health* 2009; 14(1):40-3
<http://www.cps.ca/english/statements/ID/impact17yr.htm>
5. (IMPACT Highlights) Parents who reject immunizations: losing life's lottery. *Paediatrics & Child Health* 1999; 4:117
6. (IMPACT Highlights) Invasive *Haemophilus influenzae* type b cases - 2004
Autistic children get serious infections, too. *Paediatrics & Child Health* 2005; 10-6; 314
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=5&atlKy=6407&isuKy=446&isArt=t&fromfold=>

7. (Upshots) Vaccination site reaction or bacterial cellulitis? Paediatric Child Health 2009; 14-4, 245
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=5&atlKy=8737&isuKy=848&isArt=t&fromfold>
8. Bettinger JA, Halperin SA, Vaudry W, Law BJ, Scheifele DW. The Canadian Immunization Program ACTIVE (IMPACT): Active surveillance for vaccine adverse events and vaccine preventable diseases. Canada Communicable Disease Report CCDR: Volume 40 S-3, December 4, 2014 <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/14vol40/dr-rm40s-3/comment-d-eng.php>

Presentations:

1. Duclos P, Marchessault V, Gold R, Scheifele DW, Déry P, Halperin SA, Law B. Sentinel paediatric hospital network - IMPACT immunization monitoring program. Childhood Immunization in Canada. CPHA Second National Conference on Immunization, Toronto, Canada, May 4-6, 1992 (Poster)
2. Scheifele DW, Gold R, Duclos P, and members of the Canadian Pediatric Society's Immunization Monitoring Program, Active (IMPACT). An innovative hospital-based national network for active surveillance of vaccine-associated adverse events, vaccine failures and selected infections in children. Proceedings of the 33rd ICAAC, New Orleans, 1993 (Abstract # 1649)
3. Scheifele DW and Members of the CPS/LCDC IMPACT Surveillance Network. IMPACT-a pediatric hospital-based active surveillance system for vaccine-associated adverse events. Proceedings of the National Immunization Conference "Immunization in the 90s: Challenges and Solutions", Quebec City, October 7, 1994
4. Ahmadipour N, Walop W, Law B, and members of the Public Health Agency of Canada (PHAC)/Canadian Paediatric Society (CPS) Immunization Monitoring Program Active (IMPACT) Network. A Comparison Of Childhood Adverse Events Following Immunization (AEFI) As Detected Through Active Versus Passive Surveillance in Canada From 1997 to 2004. Poster 100, Proceedings of the 82nd Annual Conference of the Canadian Pediatric Society. Vancouver, BC June 21-25, 2005
5. S Bouchard, D Cote, M Lebel, J Embree, J. Bettinger for members of the Canadian Immunization Monitoring Program ACTIVE (IMPACT) . Identifying reportable cases of adverse events following immunization (AEFI) in the paediatric population admitted to Canadian tertiary care hospitals by IMPACT monitors (Immunization Monitoring Program ACTIVE): A Challenging Endeavor. Poster presentation at the 11th Canadian Immunization Conference December 2-4, 2014 in Ottawa, Ontario.

6. Sophie Bouchard. Adverse event following immunization active paediatric surveillance: From case identification to reporting. Recent experience in an IMPACT hospital –Poster presentation # 72 at the 12th Canadian Immunization Conference Ottawa, Ontario Wednesday Dec 7, 2016

B. Vaccine Safety

Bacille Calmette-Guérin

Publications:

1. Scheifele DW, Law B, Jadavji T and Members of IMPACT. Disseminated Bacille Calmette-Guérin infection: three recent Canadian cases. *Can Commun Dis Rep (CCDR)* 1998; 24:69-72
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98vol24/dr2409ea.html>
2. Deeks SL, Clark M, Scheifele DW, Law BJ, Dawar M, Ahmadipour N, Walop W, Ellis EC, King A. Serious adverse events associated with Bacille Calmette-Guerin vaccine in Canada. *Pediatr Infect Dis J* 2005; 24:538-541
http://journals.lww.com/pidj/Abstract/2005/06000/Serious_Adverse_Events_Associated_with_Bacille.12.aspx

Presentations:

1. Hutmacher M., Scheifele D., Law B., Halperin S., and Members of the CPS/ Health Canada Immunization Monitoring Program, Active (IMPACT). Hospital Admissions for BCG Vaccine Complications: IMPACT Hospitals, 1993-2001. Presented, 5th Canadian National Immunization Conference, Victoria, BC. December 2002. Abstract P20
2. Deeks SL, Clark M, Scheifele DW, Law BJ, Dawar M., Ahmadipour N, Walop W, King A. A Review of Adverse Events Associated with BCG Vaccine in Canada. Poster presentation at the 6th Canadian National Immunization Conference, December 5-8, 2004, Montreal P2

Encephalopathy

Publications:

1. Moore DL, Le Saux N, Scheifele D, Halperin SA, and members of the Health Canada/CPS Immunization Monitoring Program, Active (IMPACT). Lack of evidence of Encephalopathy Related to Pertussis Vaccine: Active Surveillance by IMPACT, Canada, 1993-2002. *Pediatr Infect Dis J* 2004;23; 568-570
http://journals.lww.com/pidj/Abstract/2004/06000/Lack_of_Evidence_of_Encephalopathy_Related_to.18.aspx

Presentations:

1. Mills E, Silver K and Members of IMPACT. Acute encephalitis/encephalopathy in children: a multicenter study. Proceedings of the Annual Meeting of the Canadian Paediatric Society. Hamilton, Ontario, June 24-28, 1998 (Abstract # 45)
2. Moore D.L., Le Saux N., Scheifele D., Halperin S., and Members of the CPS/ Health Canada Immunization Monitoring Program, Active (IMPACT). Lack of Evidence of Encephalopathy Related to Pertussis Vaccine: Active Surveillance, Canada, 1993-2001. Presented at the 5th Canadian National Immunization Conference, Victoria, BC December 2002. (Abstract P31)
3. Le Saux N., Scheifele D., Halperin SA., Mozel M., Tam T. Reports of Encephalopathy/Encephalitis 5 to 30 Days Following Measles, Mumps, Rubella vaccine 1993-2004. Oral presentation at the 6th Canadian National Immunization Conference, Breakout session # 8, Tuesday December 7th, 2004, Montreal
4. Jennifer Tam. Review of encephalitis and encephalopathy cases following immunization reported to the Canadian Immunization Monitoring Program ACTIVE (IMPACT) from 1992-2012 –Poster presentation # 77 at the 12th Canadian Immunization Conference Ottawa, Ontario Wednesday Dec 7, 2016

Guillain Barré Syndrome

Publications

1. Karina A. Top, Shalini Desai, Dorothy Moore, Barbara J. Law, Wendy Vaudry, Scott A. Halperin, Julie A. Bettinger, for members of the Canadian Immunization Monitoring Program ACTIVE (IMPACT). Guillain-Barré Syndrome after Immunization in Canadian Children (1996-2012). The Pediatric Infectious Disease Journal 2015; 34 (12) 1411-1413 http://journals.lww.com/pidj/Abstract/2015/12000/Guillain_Barr_Syndrome_After_Immunization_in.31.aspx

Presentations

- Karina A. Top, Shalini Desai, Dorothy Moore, Barbara J. Law, Wendy Vaudry, Scott A. Halperin, Julie A. Bettinger, for members of the Canadian Immunization Monitoring Program ACTIVE (IMPACT). Guillain-Barré Syndrome after Immunization in Canadian Children (1996-2012). Poster presentations:
- a) 8th International Vaccine and ISV Congress October 26-28, 2014 in Philadelphia, USA
 - b) 11th Canadian Immunization Conference December 2-4, 2014 in Ottawa, Ontario

Hypotonic-Hypo responsive episodes

Publications:

1. Gold R, Scheifele DW, Halperin SA, Déry P, Law B, Lebel M, MacDonald N, Mills E, Morris R, Jadavji T, Marchessault V, Duclos P. Hypotonic-hypo responsive episodes in children hospitalized at 10 Canadian pediatric tertiary-care centers, 1991-1994. *Can. Comm. Dis Rep (CCDR)* 1997; 23:73-76
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/97vol23/dr2310ea.html>
2. Le Saux N, Barrowman NJ, Moore D, Whiting S, Scheifele D, Halperin S, for members of the Health Canada/CPS Immunization Monitoring Program Active (IMPACT). Decrease in Hospital Admissions for Febrile Seizures and Reports of Hypotonic Hypo responsive Episodes Presenting to Hospital Emergency Departments since Switching to Acellular Pertussis Vaccine in Canada: A Report from IMPACT. *Pediatrics* Vol. 112 No.5, November 2003, pp.348-353
<http://pediatrics.aappublications.org/cgi/content/full/112/5/e348>

Presentations:

1. Scheifele DW, Halperin SA, Pless R, Delage G, Jadavji T, Vaudry, W, Law B, MacDonald N, Wang E, Lebel M, Mills E, Dery, P. Marked reduction in febrile seizures and hypotonic-hypo responsive episodes with acellular pertussis-based vaccines: results of Canada-wide surveillance, 1995-1998. 37th Annual meeting of the Infectious Diseases Society of America, Philadelphia, November 18-21, 1999 (Abstract # 31)
2. Scheifele D, Halperin SA, Waters J, McDermot C and Members of CPS/LCDC Immunization Monitoring Program Active (IMPACT), Ottawa, Ontario and Alberta Health, Edmonton, Alberta, Canada. Marked reduction in febrile seizures and hypotonic-hypo responsive episodes with acellular pertussis-based vaccines: results of Canada-wide surveillance, 1995-1998. Presented at "Acellular Pertussis vaccine Conference" by invitation November 12-14, 2000, Bethesda, MD

Infantile Spasms

Presentations:

1. Silver K, Mills E and Members of IMPACT. Infantile spasms: an active surveillance multicenter study. American Association of Neurology Annual Meeting, 1998 (Abstract # P01.018)

Injection Site Reactions

Presentations:

1. Scheifele DW, Halperin SA, for Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). A perspective on severe immunization site reactions in children. Proceedings of the Annual Meeting of the Canadian Pediatric Society. Hamilton, Ontario, June 24-28, 1998 (Abstract # 53)

2. Binder F, Scheifele DW, Halperin SA, for Members of IMPACT. Perspective on severe immunization site reactions in children. 3rd National Immunization Conference, Calgary, 1998. (Abstract P37)

Intussusception

Presentations

1. L. Sauve, J. Bettinger, D. Scheifele, J. Kalil, W. Vaudry, S. Halperin, N. Le Saux, B. Law, for the members of the Immunization Monitoring Program Active (IMPACT) Immunization Monitoring Program Active Surveillance For Intussusception in Canada Poster presentation at the 7th World Congress for Pediatric Infectious Diseases, November 16-19th, 2011 Melbourne, Australia

Seizures

Publications

1. Karina A. Top, Cora M. Constantinescu, Julie Laflèche, Julie A. Bettinger David W. Scheifele, Wendy Vaudry, Scott A. Halperin, Barbara J. Law Applicability of the Brighton Collaboration Case Definition for seizure after immunization in active and passive surveillance in Canada Vaccine. 2013; 31 (48) 5700-5705 Available online -5 October 2013 <http://www.sciencedirect.com/science/article/pii/S0264410X13013029>

Presentations:

1. Halperin SA, Scheifele DW. for Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). A perspective on seizures following childhood immunization. Proceedings of the Annual Meeting of the Canadian Pediatric Society. Hamilton, Ontario, June 24-28, 1998 (Abstract # 46)
2. Halperin SA, Scheifele DW, for Members of IMPACT. A perspective on seizures following childhood immunizations. 3rd National Immunization Conference, Calgary, 1998. (Abstract P36)
3. Hutmacher M, Scheifele DW, Halperin SA, for Members of IMPACT. Marked decline in febrile seizures associated with the use of acellular pertussis-containing vaccines. Annual meeting of the Canadian Paediatric Society, Winnipeg, June, 1999. (Abstract P62)
4. K.A. Top, J. Laflèche, C.M. Constantinescu, J.A. Bettinger, B.J. Law, W. Vaudry, S.A. Halperin for members of the Canadian Immunization Monitoring Program Active Seizures after Pneumococcal Conjugate and Meningococcal Serogroup C Conjugate Vaccines in Canadian Children. Poster presentation at the 90th Canadian Paediatric Conference June 19-22, 2013 in Edmonton, Alberta.
5. K.A. Top, J. Laflèche, C.M. Constantinescu, J.A. Bettinger, B.J. Law, W. Vaudry, S.A. Halperin for members of the Canadian Immunization Monitoring Program Active.

Applicability of the Brighton Collaboration Case Definition for seizure in active and enhanced passive post-licensure surveillance in Canada. *Poster presentation at the 29th International Conference on Pharmacoepidemiology & Therapeutic Risk Management*, August 25-28, 2013 in Montréal, Québec

Thrombocytopenia

Publications:

1. Jadavji T, Scheifele DW, Halperin SA and members of the Canadian Paediatric Society/ Health Canada Immunization Monitoring Program Active (IMPACT). Thrombocytopenia after immunization of Canadian children, 1992 to 2001. *Pediatr Infect Dis J* 2003; 22:119-122
http://journals.lww.com/pidj/Abstract/2003/02000/Thrombocytopenia_after_immunization_of_Canadian.6.aspx
2. Sauvé, Laura J. MD, MPH; Bettinger, Julie PhD; Scheifele, David MD; Halperin, Scott MD; Vaudry, Wendy MD; Law, Barbara MD; the members of the Canadian Immunization Monitoring Program, and Active (IMPACT). Post Vaccination Thrombocytopenia in Canada. *The Pediatric Infectious Disease Journal*; Brief Reports June 2010; Volume 29: Issue 6, pp 559-561
http://journals.lww.com/pidj/Abstract/2010/06000/Postvaccination_Thrombocytopenia_in_Canada.19.aspx

Presentations:

1. Scheifele DW, Halperin SA, for Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Thrombocytopenia following immunization: 30 cases in Canadian children, 1992-1997. *Proceedings of the Annual Meeting of the Canadian Pediatric Society*. Hamilton, Ontario, June 24-28, 1998 (Abstract # 54)
2. Binder F, Scheifele DW, Halperin SA, for Members of IMPACT. Thrombocytopenia following immunization: 30 cases in Canadian children. 3rd National Immunization Conference, Calgary, 1998. (Abstract P38)
3. Jadavji, T, Scheifele, DW, Halperin SA, for members of the CPS/LCDC Immunization Monitoring Program Active (IMPACT). Thrombocytopenia following immunization: 37 cases in Canadian children, 1992-1999. *Pediatr Child Hlth* 2000; 5 (Suppl A), Abstract 28, p15A
4. Sauvé L, Bettinger J, Scheifele D, Halperin S, Bortolussi R, Law B, Canadian Immunization Monitoring Program, Active (IMPACT). Post-Immunization Thrombocytopenia in Canadian Children, 1992-2007. Poster presentation (abstract 130) June 24-28, 2008, 85th Annual Conference of the Canadian Paediatric Society, Victoria, BC

Adverse Event Other:

Presentations:

1. S Balakrishnan, LJ Sauve, W Vaudry, D Scheifele, S Halperin, B Law. Could HSP Be An Adverse Event Following Immunization? A Report From The Canadian Pediatric Society Immunization Monitoring Program, Active (IMPACT). Abstract 84 Poster presentation at the 87th Annual Conference of the Canadian Paediatric Society, Ottawa, June 25, 2010 Paediatr Child Health Vol 15 Suppl A May/June 2010 page35A
<http://www.pulsus.com/journals/JnlSupToc.jsp?sCurrPg=journal&jnlKy=5&supKy=475>
2. L.J. Sauvé, J. Bettinger, W. Vaudry, D. Moore, D. Scheifele, S. Halperin, and B. Law for Members of the Canadian Immunization Monitoring Program, Active (IMPACT). Reported Adverse Events Following Adjuvanted Pandemic Influenza Vaccine. Poster (1362) presented at the 48th Annual Meeting of the Infectious Diseases Society of America, October 21-24, 2010 Vancouver, BC
3. LJ Sauve, J Bettinger, W Vaudry, D Moore, D Scheifele, S Halperin, B Law, and the Canadian Immunization Monitoring Program, Active (IMPACT). IMPACT Network Active Surveillance For Adverse Events Following Adjuvanted Pandemic Influenza Vaccine In Canadian Children. Oral presentation (O14) at the 9th Canadian Immunization Conference, December 5-8th, 2010 Québec City. Abstract published in Can J Infect Dis Med Microbiol Vol 21 No 4 page 180 Winter 2010

C. Vaccine Preventable Diseases

Publications:

Haemophilus influenzae

1. Scheifele DW, Gold R, Law B, Déry P, Halperin SA, Marchessault V, Duclos P. Decline in *Haemophilus influenzae* type b invasive infections at five Canadian pediatric centers. Can. Comm. Dis Report (CCDR) 1993; 19: 88-91
2. D. Scheifele, L. Mitchell, J. Ochnio J. Hailey. Haemophilus b conjugate vaccine failure. Can Commun Dis Rep (CCDR) 1994; 20:37-39
3. Scheifele DW, Gold R, Marchessault V, Duclos P and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Missed opportunities to prevent infections caused by *Haemophilus influenzae* type b. Can J Pediatr 1995; 2:318-20
4. Scheifele DW. Recent trends in pediatric *Haemophilus influenzae* type b infections in Canada. Immunization Monitoring Program, Active (IMPACT) of the Canadian Paediatric Society and the Laboratory Centre for Disease Control. Can Med Assoc J 1996; 154 (7):1041-1047
<http://www.pubmedcentral.nih.gov/picrender.fcgi?artid=1487572&blobtype=pdf>

5. Scheifele DW, Gold R, Marchessault V, Duclos P and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Failures after immunization with *Haemophilus influenzae* type b vaccines, 1991-195. Can Commun Dis Rep (CCDR) 1996; 22:17-23 <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/96vol22/dr2203ea-eng.php>
6. Grewal S, Scheifele DW and Members of the CPS/LCDC IMPACT Surveillance Network. *Haemophilus influenzae* type b disease at eleven pediatric centers: 1996-1997. Can Commun Dis Rep 1998; 24:105-108
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/98vol24/dr2413ea.html>
7. Scheifele DW and Members of the CPS/LCDC Immunization Monitoring Program Active (IMPACT). *Haemophilus Influenzae* type b disease control using Pentacel[®], Canada 1998-99. Canadian Comm. Dis. Report (CCDR) 2000; 26:93-96
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00vol26/dr2611ea.html>
8. Scheifele DW, Bell A, Jadavji T, Vaudry W, Waters, J, Naus M, Sciberras J. Population-based surveillance of Hib invasive infections in children in British Columbia, Alberta and Ontario- 1995-1997. Can J Infect Dis 2000; 11-3:135-140
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=3&atlKy=5916&isuKy=676&isArt=t&fromfold=>
9. Scheifele D, Halperin S, Vaudry W, Jadavji T, Tan B, Law B, Le Saux N, Ford-Jones L, Lebel M, Moore D, Dery P, Morris R, Waters J, Embree J, Walop W. Historic Low *Haemophilus Influenzae* Type b case tally- Canada 2000. Can Comm. Dis Report (CCDR) 2001; 27:149-150
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/01vol27/dr2718ea.html>
10. Scheifele DW, Halperin SA, Law B, King A, for the Canadian Paediatric Society/Health Canada Immunization Monitoring Program, Active (IMPACT). Invasive *Haemophilus influenzae* type b infections in vaccinated and unvaccinated children in Canada, 2001-2003 Can Med Assoc J 2005;172(1):53-6 <http://www.cmaj.ca/cgi/content/full/172/1/53>
11. McConnell A, Tan B, Scheifele D, Halperin S, Vaudry W, Law B, Embree J of the Canadian Immunization Monitoring Program Active (IMPACT). Invasive Infections Caused by *Haemophilus influenzae* Serotypes in Twelve Canadian IMPACT Centers, 1996-2001. The Pediatric Infectious Disease Journal; November 2007; 26 (11): 1025-31
http://journals.lww.com/pidj/Abstract/2007/11000/Invasive_Infections_Caused_by_Haemophilus.11.aspx

12. Scheifele DW, Bettinger JA, Halperin SA, Law B, Bortolussi R for Members of the Canadian Immunization Monitoring Program, Active (IMPACT). Ongoing control of *Haemophilus influenzae* Type B Infections in Canadian Children: 2004-2007. The Pediatric Infectious Disease Journal; August 2008; 27(8): 755-757
http://journals.lww.com/pidj/Abstract/2008/08000/Ongoing_Control_of_Haemophilus_influenzae_Type_B.16.aspx
13. (IMPACT Highlights) Invasive *Haemophilus influenzae* type b cases-2004. Paediatrics & Child Health 2005; 10-6; 314
14. (IMPACT Highlights) *Haemophilus Influenzae* type b disease control using Pentacel®. Paediatrics & Child Health. 2000; 5-3; 155
15. (IMPACT Highlights) Historic low *Haemophilus influenzae* type b case total in 2000. Paediatrics & Child Health. 2001; 6-6; 318
16. Joanne McNair, BSc Pharm ; Alyssa Smith, MD ; Julie A. Bettinger, PhD, MPH ; Wendy Vaudry, MD; Ben Tan, MD ; Shalini Desai, MD, MSc, Scott A. Halperin, MD; Karina A. Top, MD, MS for the Canadian Immunization Monitoring Program Active (IMPACT) Investigators. Invasive *Haemophilus influenzae* type b (Hib) infections in children with cancer in the era of infant Hib immunization programs (1991–2014): A report from the Canadian Immunization Monitoring Program Active. The Pediatric Infectious Disease Journal Published: Volume 37, number 7, July 2018

Presentations:

1. D. Scheifele, R. Gold, V. Marchessault, P. Duclos and Members of CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Control of *Haemophilus influenzae* type b infections across Canada: results of active surveillance at ten pediatric centers. Poster presented at "Immunization in the 90s: Challenges and Solutions", Quebec City, October 7, 1994
2. Scheifele DW, Gold R, Marchessault V, Duclos P and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Evidence for the control of *Haemophilus influenzae* type b (Hib) infections in Canadian children (1985-1994). Child Health 2000, Vancouver, May 30 - June 3, 1995
3. Scheifele DW, Jadavji T, Vaudry W, Naus M, Bell A, Waters J. Population-based surveillance of invasive *Haemophilus influenzae* type b invasive infections. 3rd National Immunization Conference, Calgary, 1998. (Abstract A1)
4. McConnell A, Tan B, Scheifele D, Halperin SA and members of the CPS/Health Canada Immunization Monitoring Program, Active (IMPACT). Invasive Disease caused by

- Haemophilus influenzae* species in 12 IMPACT centers, 1996-2001. Oral presentation #118 at the 81st Annual Meeting of the Canadian Pediatric Society, June 18, 2004
5. Greenberg DP, Doemland ML, Lavigne P, Galanis E, Kandola K and Bettinger JA, Halperin SA, Scheifele DW on behalf of the Immunization Monitoring Program Active (IMPACT). Impact of Pentacel™ (DtaP-IPV/PRP-T) on the Epidemiology of Invasive Hib Disease and Pertussis in Canada. Poster presentation at the Fifth Pediatric Infectious Disease Society Conference, October 10-11, 2005, Napa, California. Abstract # 10
 6. Scheifele D, Marty K, Halperin S, Tam T. Invasive *Haemophilus Influenza* Type B (HIB) Infections in the Post-vaccine era: Data From the Canadian IMPACT Surveillance Network, 2001-2005. Platform presentation # 20 at the 83rd Annual Conference of the Canadian Paediatric Society, June 14, 2006, St. John's, NL
 7. Scheifele DW, Bettinger JA, Halperin SA, Law B, Bortolussi R for Members of the Canadian Immunization Monitoring Program, Active (IMPACT). Ongoing control of *Haemophilus influenzae* b infections in Canadian children: 2004-2007. Presented at the AMMI Canada – CACMID 2008 Annual Conference, Vancouver, February 27 – March 2, 2008 (abstract P45). *Can J Infect Dis Med Microbiol* 2008; 19:129
 8. Shuel M, Tan B, Scheifele D, Law D, Vaudry W, Halperin S, Tsang R for members of the Canadian Immunization Monitoring Program Active (IMPACT). Laboratory characterization of invasive *Haemophilus influenzae* isolates collected from IMPACT centres from January 2007 to January 2008. Poster presentation (P88) at the 8th Canadian Immunization Conference, December 1-3, 2008, Toronto, Ontario. Abstract published in *Can J Infect Dis Med Microbiol* 2008 (19) 5:361
 9. M Shuel, B Tan, D Scheifele, B Law, W Vaudry, S Halperin, K Grimsrud, B Bortolussi, R Pless, R Tsang. Update on IMPACT Surveillance of *Haemophilus Influenzae* Isolates in Canada. Poster (P056) presented at 9th Canadian Immunization Conference, December 5-8th, 2010 Québec City. Abstract published in *Can J Infect Dis Med Microbiol* Vol 21 No 4 page 199, Winter 2010
 10. The epidemiology of invasive diseases caused by *Haemophilus influenzae* type a (Hia): A report from the Canadian Immunization Monitoring Program ACTIVE (IMPACT) – Ben Tan Co-authors: Athena McConnell, Julie Bettinger, David Scheifele, Joanne Embree, Laura Sauve, Natalie Bridger, Wendy Vaudry, Scott Halperin, Shalini Desai, Raymond Tsang. Oral presentation at the 12th Canadian Immunization Conference Ottawa, Ontario -Thursday December 8, 2016

Influenza

Publications:

1. Wootton S, Scheifele D, Mozel M, Moore D, Vaudry W, Halperin S, Tam T, for the Canadian Immunization Monitoring Program Active (IMPACT). The Epidemiology of Influenza in Children Hospitalized in Canada, 2004-2005, in Immunization Monitoring Program Active (IMPACT) Centres. *Can Comm Dis Rep (CCDR)* April 1, 2006; Volume 32, Number 7, pp 77-86
<http://www.phac-aspc.gc.ca/publicat/ccdrrmtc/06vol32/dr3207a-eng.php>
2. Moore DL, Vaudry W, Scheifele DW, Halperin SA, Dery P, Ford-Jones L, Arishi H, Law B, Lebel M, Le Saux N, Grimsrud K, Tam T. Surveillance for Influenza Admissions among Children Hospitalized in Canadian Immunization Monitoring Program Active Centers, 2003-2004. *Pediatrics* Volume 118, Number 3, September 2006, pp 610-619.
<http://pediatrics.aappublications.org/cgi/content/full/118/3/e610>
3. C. Burton MD, W. Vaudry MD, D. Moore MD, D. Scheifele MD, J. Bettinger PhD, S. Halperin MD, T. Tam MD, B. Law MD, for the Canadian Immunization Monitoring Program, Active (IMPACT). Children hospitalized with influenza during the 2006-2007 season: A report from the Canadian Immunization Monitoring Program, Active (IMPACT). *Can Comm Dis Rep (CCDR)* December 2008; Volume 34, Number 12, pp 17-32. <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/08vol34/dr-rm3412b-eng.php>
4. Bettinger JA, Sauv e LJ, Scheifele DW, Moore D, Vaudry W, Tran D, Halperin SA, Pelletier L. Pandemic influenza in Canadian children: A summary of hospitalized pediatric cases *Vaccine* 2010; 28(18):3180–3184
<http://www.sciencedirect.com/science/article/B6TD4-4YGHCB-3/2/343554a0bec2575e4d744367f0d0699e>
5. Dat Tran, Wendy Vaudry, Dorothy L. Moore, Julie A. Bettinger, Scott A. Halperin, David W. Scheifele and Samina Aziz for the IMPACT Investigators. Comparison of Children Hospitalized With Seasonal Versus Pandemic Influenza A, 2004-2009. *Pediatrics* 2012; 130; 397-406
<http://pediatrics.aappublications.org/content/130/3/397.full.html>
6. Catherine Burton, MD, Wendy Vaudry, MD, Dorothy Moore, MD, Julie A. Bettinger, PhD, MPH, Dat Tran MD, MSc, Scott A. Halperin, MD, and David W. Scheifele, MD, for the IMPACT investigators. Burden of Seasonal Influenza in Children With Neurodevelopmental Conditions. *The Pediatric Infectious Disease Journal* Volume 33, Number 7, July 2014, 710-714
http://journals.lww.com/pidj/Abstract/2014/07000/Burden_of_Seasonal_Influenza_in_Children_With.7.aspx

7. Dat Tran, Wendy Vaudry, Dorothy Moore, Julie A. Bettinger, Scott A. Halperin, David W. Scheifele, Taj Jadvji, Liza Lee, Teresa Mersereau, for the members of the Canadian Immunization Monitoring Program Active. Hospitalization for Influenza A Versus B
Pediatrics Sep 2016, 138 (3) e20154643; DOI: 10.1542/peds.2015-4643
<https://pediatrics.aappublications.org/content/pediatrics/138/3/e20154643.full.pdf>

Presentations:

1. Moore D., Vaudry W., Scheifele D., Halperin SA., Dery P., Ford-Jones E., Law B., Lebel M., Le Saux N., Tam T. Canadian Children Hospitalized for Influenza at Immunization Monitoring Program Active (IMPACT) Centers, 2003-04. Oral presentation at the 6th Canadian National Immunization Conference, Breakout session # 8, Tuesday December 7th, 2004, Montreal. Awarded CAIRE Best Presentation Award
2. Wootton S, Mozel M, Vaudry W, Moore D, Scheifele D, Halperin S, Tam T. The Epidemiology Of Children Hospitalized With Influenza In Canada, 2004-2005, In Immunization Monitoring Program - Active (IMPACT) Centers. Platform presentation # 21 at the 83rd Annual Conference of the Canadian Paediatric Society, June 14, 2006, St. John's, NL
3. Wootton S, Mozel M, Marty K, Vaudry W, Moore D, Scheifele DW, Halperin SA, Tam T. The Epidemiology of Children Hospitalized With Influenza, 2005-6, In Immunization Monitoring Program, Active (IMPACT) Centers. Poster presentation (P90) at the 7th Canadian Immunization Conference, Winnipeg, MB, December 3-6, 2006
4. De Serres G, Halperin SA, Skowronski D, Dery P, Vaudry W, Moore D, McGeer A, Duval B, Bettinger J, Tam, T, Scheifele DW. Effectiveness of Influenza Vaccine in Preventing Hospitalization of Children 6-23 Months of Age. Poster presentation (P96) at the 7th Canadian Immunization Conference, Winnipeg, MB, December 3-6, 2006
5. Wootton S, Vaudry W, Moore D, Scheifele D, Halperin S, Tam T, for IMPACT Investigators. Monitoring Influenza Infections in Children Using a Hospital-Based Surveillance System, Canadian Immunization Monitoring Program Active, and (IMPACT) Poster presentation at the Options for the Control of Influenza VI Conference; 2007; June 17-23; Toronto, ON Abstract P134
6. De Serres G, and the Canadian Immunization Monitoring Program Active. Effectiveness of Trivalent Inactivated Influenza Vaccine to Prevent Hospitalization in Children 6-23 months of Age during Two Influenza Seasons in Canada. Poster presentation at the Options for the Control of Influenza VI Conference; 2007; June 17-23; Toronto, ON. Abstract P723

7. Burton C, Vaudry W, Moore D, Scheifele D, Halperin S, Bettinger J, Law B, Tam T and the IMPACT Investigators Canadian Immunization Monitoring Program Active (IMPACT). Children Hospitalized with Influenza during the 2006-7 season: A Report from the Canadian Immunization Monitoring Program Active (IMPACT). Platform presentation (abstract 72), June 26, 2008, 85th Annual Conference of the Canadian Paediatric Society, Victoria, BC
8. De Serres G, Moore D, Vaudry W, Scheifele D, Halperin S, Dery P, McGeer A, Embree J, Lebel M, Le Saux N, Tan B, Ford Jones L, Law B, Li Y, Skowronski D. Trivalent influenza vaccine effectiveness against toddler hospitalization during three winters: A report from the Canadian Immunization Monitoring Program – Active (IMPACT). Poster presentation (P01) at the 8th Canadian Immunization Conference, November 30-December 1, 2008, Toronto, Ontario Abstract published in Can J Infect Dis Med Microbiol 2008 (19) 5:336
9. Domingo FR, Aziz S, Winchester B, Li Y, Vaudry W, Bettinger J, Pelletier L, Spika J. Influenza Surveillance in Canada: 2007-2008 Season. Poster presentation (P73) at the 8th Canadian Immunization Conference, November 30-December 3, 2008, Toronto, Ontario Abstract published in Can J Infect Dis Med Microbiol 2008 (19) 5:357
10. Sauv , Laura J, Bettinger J, Vaudry W, Moore D, Halperin S, Bortolussi B, Law B. Bacterial Co-Infections in Canadian Children Hospitalized with Influenza, 2004-2008. Poster presentation (P50) at the Conference on Vaccine Research, National Foundation for Infectious Diseases, Baltimore. April 27-29, 2009
11. C. Burton, W. Vaudry, D. Moore, J. Bettinger, D. Scheifele, S. Halperin, B. Law, R. Bortolussi. Children Hospitalized with Influenza during the 2007-8 season: A Report from the Canadian Immunization Monitoring Program, Active (IMPACT) Oral Presentation (Abstract 116) at the 86th Annual Conference of the Canadian Pediatric Society, Ottawa (June 25, 2009)
12. C Burton, W Vaudry, D Moore, J Bettinger, D Scheifele, S Halperin, B Law, R Bortolussi. Burden of Influenza in Children with Neurologic and Developmental Disorders over Four Years of Surveillance: A Report from the Canadian Immunization Monitoring Program, Active (IMPACT) Oral Presentation (Abstract 123) at the 86th Annual Conference of the Canadian Paediatric Society, Ottawa (June 26, 2009)
13. L. Pich , S Bouchard. Life of IMPACT (Canadian Immunization Monitoring Program, Active) Nurse Monitors During the Pandemic Influenza A H1N1. Poster (P113) presented at 9th Canadian Immunization Conference, December 5-8th, 2010 Qu bec City. Abstract published in Can J Infect Dis Med Microbiol Vol 21 No 4 page 217, Winter 2010

Neisseria Meningitidis

Publications:

1. R. Gold, P. Déry, S. Halperin, B. Law, N. MacDonald, D. Scheifele, V. Marchessault, P. Duclos. Meningococcal disease in children hospitalized at six Canadian pediatric tertiary care centers. *Can Commun Dis Rep* 1994; 20:9-11
2. Bettinger, J.A, Scheifele, D.W, Le Saux, N, Halperin, S.A, Vaudry, W, Tsang, R and the members of the Canadian Immunization Monitoring Program, Active (IMPACT). The Impact of Childhood Meningococcal Serogroup C Conjugate Vaccine Programs in Canada. *The Pediatric Infectious Disease Journal*; March 2009; 28(3): 220-224
https://journals.lww.com/pidj/Abstract/2009/03000/The_Impact_of_Childhood_Meningococcal_Serogroup_C.11.aspx
3. Nicole Le Saux MD, Julie A. Bettinger PhD, MPH, Susan Wootton, MD, Scott A Halperin MD, Wendy Vaudry MD, David W Scheifele MD, Raymond Tsang PhD for the members of the Canadian Immunization Monitoring Program, Active (IMPACT). Profile of serogroup Y meningococcal infections in Canada: Implications for vaccine selection. *The Canadian Journal of Infectious Diseases and Medical Microbiology*, 2009; 20(4): e130-e-134
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=3&atlKy=9226&isuKy=891&isArt=t&fromfold>
4. Julie A. Bettinger, PhD, David W. Scheifele, MD, Nicole Le Saux, MD, Scott A. Halperin, MD, Wendy Vaudry, MD and Raymond Tsang, PhD, for the Members of the Canadian Immunization Monitoring Program, Active (IMPACT) *The Pediatric Infectious Disease Journal* Volume 32, Number 1, January 2013, e20–e25. The Disease Burden of Invasive Meningococcal Serogroup B Disease in Canada
http://journals.lww.com/pidj/Abstract/2013/01000/The_Disease_Burden_of_Invasive_Meningococcal.11.aspx
5. Julie A. Bettinger, PhD, David W. Scheifele, Scott A. Halperin, Wendy Vaudry, Jamie Findlow, Ray Borrow, Duccio Mendini, Raymond Tsang, for the members of the Canadian Immunization Monitoring Program, Active (IMPACT) Diversity of Canadian meningococcal serogroup B isolates and estimated coverage by an investigational meningococcal serogroup B vaccine (4CMenB). *Vaccine* 32 (2014) 124-130
<http://dx.doi.org/10.1016/j.vaccine.2013.03.063>
6. Manish Sadarangani, David W. Scheifele, Scott A. Halperin, Wendy Vaudry, Nicole Le Saux, Raymond Tsang, and Julie A. Bettinger, for the investigators of the Canadian Immunization Monitoring Program, ACTIVE (IMPACT). The Impact of Meningococcal Serogroup C Conjugate Vaccine in Canada Between 2002 and 2012, *Clinical Infectious*

Diseases (2014) 59 (9): 1208-1215

<http://cid.oxfordjournals.org/content/59/9/1208.abstract?sid=224916cd-b847-4b31-913e-5feb1849e4b9>

7. Manish Sadarangani; David W. Scheifele; Scott A. Halperin; Wendy Vaudry; Nicole Le Saux; Raymond Tsang; Julie A. Bettinger Outcomes of invasive meningococcal disease in adults and children in Canada between 2002 and 2011: a prospective cohort study *Clinical Infectious Diseases* (2015) 60 (15 April) e27-35
<http://cid.oxfordjournals.org/content/early/2015/01/19/cid.civ028.abstract?keytype=ref&ijkey=JXtuHJbZsXH95Me>

Presentations:

1. Bettinger JA, Scheifele DW, Le Saux N, Halperin S for the Immunization Monitoring Program, ACTive (IMPACT). Age Distribution and Serogroups of Meningococcal Invasive Infections across Canada, 2002-2004. Platform presentation # 16 at the 83rd Annual Conference of the Canadian Paediatric Society, June 14, 2006, St. John's, NL
2. Bettinger J, Scheifele D, Le Saux N, Halperin S, Tsang R, for Members of the Canadian Immunization Monitoring Program, Active (IMPACT). Variability in meningococcal serogroups causing invasive infection in children in Canada, 2002-2005. Presented at the 15th International Pathogenic Neisseria Conference, Cairns, Australia, September 10-15, 2006, abstract P4.3.04
3. Bettinger J, Le Saux N, Scheifele DW, Halperin SA, Marty K, Tsang R. Meningococcal Infections in Adults across Canada, 2002-2005. Poster presentation (P1) at the 7th Canadian Immunization Conference, Winnipeg, MB, December 3-6, 2006
4. Le Saux N, Bettinger J, Halperin SA, Scheifele DW, Marty K, Tsang R. Morbidity and Mortality of Invasive Meningococcal Disease in Canada, 2002-2005. Poster presentation (P4) at the 7th Canadian Immunization Conference, Winnipeg, MB, December 3-6, 2006
5. Bettinger JA, Le Saux N, Scheifele D, Halperin S, Marty K, Tsang R on behalf of all members of the Canadian Immunization Monitoring Program Active. Adult meningococcal infections, Canada 2002-2005. Presented at the 10th Annual Conference on Vaccine Research, Baltimore MD, April 30- May 2, 2007 Poster P31
6. Bettinger J, Le Saux N, Scheifele DW, Halperin SA, Vaudry W, Tsang R. Vaccinated children among hospitalized meningococcal cases across Canada, IMPACT 2002-2006. 11th Annual Conference on Vaccine Research, Baltimore, MD, May 5-7, 2008 (abstract S34)
7. Bettinger JA, Le Saux N, Scheifele DW, Halperin SA, Tsang R, and the IMPACT Investigators, Canadian Immunization Monitoring Program Active (IMPACT). The Changing Incidence of Meningococcal Invasive Infections across Canada, 2002-2006. Platform presentation (abstract 78), June 27, 2008, 85th Annual Conference of the

Canadian Paediatric Society, Victoria, BC

8. Bettinger J, Le Saux N, Scheifele D, Halperin S, Vaudry W, Bortolussi B, Tsang R, and the IMPACT Investigators. The Changing Incidence of Meningococcal Invasive Infections across Canada, Immunization Monitoring Program, Active (IMPACT) 2002-2007. Poster presentation (P136) at the 16th International Pathogenic Neisseria Conference, September 7-12, 2008, Beurs-WTC, Rotterdam, The Netherlands
9. Bettinger J, Le Saux N, Scheifele DW, Halperin S, Vaudry W, Tsang R, for members of the Canadian Immunization Monitoring Program Active (IMPACT). Vaccinated Children Among Hospitalized Meningococcal Cases Across Canada, IMPACT 2002-2006. Poster presentation (P08) at the 8th Canadian Immunization Conference, November 30-December 1, 2008, Toronto, Ontario. Abstract published in *Can J Infect Dis Med Microbiol* 2008 (19) 5:339
10. Tsang R, Bettinger J, Wootton S, Scheifele Dm Le Saux N, Halperin S, Vaudry W, Zhou J, Cameron M, Law D, IMPACT Investigators. Genetic analysis of invasive meningitidis strains in Canada monitored by the IMPACT program from 2002-2006. Poster presentation (P89) at the 8th Canadian Immunization Conference, December 1-3, 2008, Toronto, Ontario. Abstract published in *Can J Infect Dis Med Microbiol* 2008 (19) 5:361
11. Bettinger J, Halperin S. Meningococcal infections across Canada. The burden of invasive Meningococcal disease in Canada. An oral presentation (breakfast symposium), Tuesday December 2, 2008 at the 8th Canadian Immunization Conference, Toronto, Ontario.
12. Julie Bettinger, David Scheifele, Nicole Le Saux, Scott Halperin, Wendy Vaudry, Robert Bortolussi, Raymond Tsang. Update on the Incidence of Meningococcal Invasive Infections in Canada, IMPACT 2002-2009, Poster P036, Presented at the 17th International Pathogenic *Neisseria* Conference September 11-16th, 2010 Banff, Alberta
13. JA Bettinger, N Le Saux, DW Scheifele, W Vaudry, SA Halperin, R Bortolussi, R Tsang, The Epidemiology of Serogroup B Meningococcal Invasive Infections in Canada, IMPACT 2002-2009. Oral presentation (O10) at the 9th Canadian Immunization Conference, December 5-8th, 2010 Québec City. Abstract published in *Can J Infect Dis Med Microbiol* Vol 21 No 4 page 179, Winter 2010
14. Julie A. Bettinger, David W. Scheifele, Scott A. Halperin, Nicole Le Saux, Wendy Vaudry, Jamie Findlow, Ray Borrow, Duccio Medini, Raymond Tsang. Estimated coverage of Canadian Meningococcal B isolates by a meningococcal sergroup B vaccine. Poster presentation at the 5th Vaccine and ISV Annual Global Congress, October 2-4th, 2011 Seattle, WA USA

15. Sadarangani, Manish; Halperin, Scott A.; Vaudry, Wendy; Le Saux, Nicole; Tsang, Raymond; Scheifele, David W; Bettinger, Julie A. Outcomes of Invasive Meningococcal Disease in Canadian Children and Adults between 2002 and 2010 E-Poster P008, Presented at the 10th Canadian Immunization Conference, Monday December 3, 2012 Vancouver BC.
16. Bettinger, Julie A.; Scheifele, David W.; Halperin, Scott A.; Le Saux, Nicole; Vaudry, Wendy; Findlow, Jamie; Borrow, Ray; Medini, Duccio; Tsang, Raymond. Estimated Coverage of Canadian Meningococcal Serogroup B Isolates by an Investigational Meningococcal Serogroup B Vaccine (4CMenB). E-Poster P009, Presented at the 10th Canadian Immunization Conference, December 3, 2012 Vancouver BC.
17. Sadarangani, Manish; Halperin, Scott A; Vaudry, Wendy; Le Saux, Nicole; Tsang, Raymond; Scheifele, David W.; Bettinger, Julie A. A Decade of Serogroup C Neisseria Meningitidis Surveillance in Canada Poster P156, Presented at the 10th Canadian Immunization Conference, December 3-5, 2012 Vancouver BC.
18. Bettinger JA, Scheifele DW, Halperin SA, Vaudry W, Liberator P, Hao L, Jansen KU, Anderson A and Tsang R for the members of IMPACT. Comparative Analysis of Canadian *Neisseria meningitidis* Serogroup B Isolates. Poster presentation at the X1Xth International Pathogenic Neisseria Conference in Asheville, North Carolina on October 12-17, 2014.
19. Bettinger JA, Tsang R, Scheifele DW, Halperin SA, Vaudry W, Lambert N, Liberator P, Hao L, Jansen KU, Anderson A and for the members of IMPACT. fHBP Variant Diversity and Level of Surface Expression among Invasive *Neisseria meningitidis* Serogroup B Isolates from Canada.
Presented at:
 - a) XX International Pathogenic Neisseria Conference, Manchester, England, September 5-9, 2016.
 - b) Poster presentation # 18 at the 12th Canadian Immunization Conference Ottawa, Ontario Wednesday Dec 7, 2016
20. Julie A. Bettinger, Manish Sadarangani, Shaun K. Morris, Nicole Le Saux, Karina A. Top, Wendy Vaudry, Scott A. Halperin and Raymond Tsang on behalf of the members of the Canadian Immunization Monitoring Program, Active (IMPACT). The effect of quadrivalent vaccination program in Canada. Poster at the International Pathogenic Neisseria Conference (IPNC) Asilomar, USA September 23-28, 2018.
21. Manish Sadarangani, Morris Shaun K. Morris, Nicole Le Saux, Karina A. Top, Wendy Vaudry, Scott A. Halperin, Julie A. Bettinger, Raymond Tsang; for members of the Canadian Immunization Monitoring Program Active (IMPACT). Molecular epidemiology

of *Neisseria meningitidis* in children and adults with invasive meningococcal disease in Canada between 2002 and 2017. Poster at the International Pathogenic *Neisseria* Conference (IPNC) Asilomar, USA September 23-28, 2018.

22. **NEW*** Nicole Le Saux, Julie A. Bettinger, Manish Sadarangani, Shaun K. Morris, Karina A. Top, Wendy Vaudry, Scott A. Halperin and Raymond Tsang on behalf of the members of the Canadian Immunization Monitoring Program, Active (IMPACT). The Epidemiology of Invasive Meningococcal Disease (IMD) over 16 years after start of Meningococcal Vaccine Programs in Canada. **Oral abstract presentation at the Canadian Immunization Conference, Ottawa, Ontario, December 4, 2018**

Pertussis

Publications:

1. R. Gold, Déry P, S. Halperin, B. Law, N. MacDonald, D. Scheifele, V. Marchessault, P. Duclos. Pertussis in children hospitalized at five Canadian pediatric tertiary care centers. *Can Commun Dis Rep* 1994; 20:31-34
2. Halperin SA, Wang EL, Law B, Mills E, Morris R, Déry P, Lebel M, MacDonald N, Jadavji T, Vaudry W, Scheifele DW, Delage G, Duclos P. Epidemiological features of pertussis in hospitalized patients in Canada, 1991-1997: Report of the Immunization Monitoring Program - Active (IMPACT). *Clin Infect Dis* 1999;28:1238-43
<http://www.journals.uchicago.edu/doi/pdf/10.1086/514792>
3. Mikelova LK, Halperin SA, Scheifele DW, Smith B, Ford-Jones E, Vaudry W, Jadavji T, Law B, Moore D, and members of the Immunization Monitoring Program Active, (IMPACT). Predictors of Death in Infants Hospitalized With Pertussis: A Case-Control Study of 16 Deaths in Canada. *J Pediatr* 2003;143:576-81
[http://www.jpeds.com/article/S0022-3476\(03\)00365-2/abstract](http://www.jpeds.com/article/S0022-3476(03)00365-2/abstract)
4. Galanis E, King AS, Varughese P, Halperin SA (on behalf of the IMPACT Investigators). Analysis: Changing epidemiology and emerging risk groups for pertussis. *CMAJ* February 14, 2006; 174 (4): pp 451-452
<http://www.cmaj.ca/content/174/4/451.full.pdf+html>
5. Bettinger JA, Halperin SA, De Serres G, Scheifele DW, Tam T. The Effect of Changing From Whole-Cell to Acellular Pertussis Vaccine on the Epidemiology of Hospitalized Children with Pertussis in Canada. *The Pediatric Infectious Disease Journal* Volume 26, Number 1, January 2007, pp 31-35
http://journals.lww.com/pidj/Abstract/2007/01000/The_Effect_of_Changing_From_Whole_Cell_to.7.aspx

6. (IMPACT Highlights) Safety Advantages of new pertussis vaccine are clearly evident across Canada. *Paediatrics & Child Health* 1999; 4:383.
7. Greenberg, David P. MD; Doemland, Martha PhD; Bettinger, Julie A. PhD, MPH; Scheifele, David W. MD; Halperin, Scott A. MD; Waters, Valerie MD; Kandola, Kami MD, MPH; for the IMPACT Investigators. *Epidemiology of Pertussis and Haemophilus influenzae type b Disease in Canada with Exclusive Use of Diphtheria-Tetanus-Acellular Pertussis-Inactivated Poliovirus-Haemophilus influenzae type b Pediatric Combination Vaccine and an Adolescent-Adult Tetanus-Diphtheria-Acellular Pertussis Vaccine: Implications for Disease prevention in the United States. The Pediatric Infectious Disease Journal*; June 2009; 28(6): 521-528
http://journals.lww.com/pidj/Abstract/2009/06000/Epidemiology_of_Pertussis_and_Haemophilus.13.aspx
8. **NEW*** Bahaa Abu-Raya, Julie A Bettinger, Otto G Vanderkooi, Wendy Vaudry, Scott A Halperin, Manish Sadarangani, Members of the Canadian Immunization Monitoring Program, Active (IMPACT). Burden of Children Hospitalized with Pertussis in Canada in the Acellular Pertussis Vaccine Era, 1999-2015. *Journal of the Pediatric Infectious Diseases Society*; <https://doi.org/10.1093/jpids/piy128/5236699#126652949>, December 2018

Presentations:

1. Halperin SA, Mills E, Lebel M and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Hospital-based surveillance of pertussis in children < 2 years old. 35th ICAAC, San Francisco, September, 1995 (Abstract # K167)
2. Mikelova LK, Halperin SA, Scheifele DW, for members for the CPS/LCDC Immunization Monitoring Program Active (IMPACT). Clinical and epidemiological evaluation of ten fatal cases of pertussis in Canada: a case control study. *Pediatr Child Hlth* 2000; 5 (Suppl A), Abstract 40, p18A
3. Ambrose A, Samson H, Mikelova LK, Halperin SA, Scheifele DW, for Members for the CPS/LCDC Immunization Monitoring Program Active (IMPACT). Clinical and epidemiological evaluation of ten fatal cases of pertussis in Canada: a case control study. 4th Annual CNIC, December 3-6, 2000 Halifax, NS. (Abstract P2)
4. Bettinger JA., Halperin SA., DeSerres G., Scheifele D., Tam T. Epidemiology of Hospitalized Pertussis after Change from Whole Cell to Acellular Pertussis Vaccine. Oral presentation at the 6th Canadian National Immunization Conference, Breakout session # 4, Monday December 6th, 2004, Montreal

5. Bettinger JA, Halperin SA, De Serres G, Scheifele DW, Tam T for the Immunization Monitoring Program, Active. Appropriately Vaccinated Children among Hospitalized Pertussis Cases. Poster presentation at the Ninth Annual Conference on Vaccine Research; 2006 May 8-10; Baltimore, MD. Abstract Poster P73
6. Bettinger J, Halperin SA, De Serres G, Scheifele DW, Tam T. Appropriately Vaccinate Children Among Hospitalized Pertussis Cases. Poster presentation (P2) at the 7th Canadian Immunization Conference, Winnipeg, MB, December 3-6, 2006

Polio – Acute Flaccid Paralysis Surveillance

Presentations:

1. Mills E, Silver K, and Members of IMPACT. Acute flaccid paralysis in children: active surveillance for poliomyelitis. Annual Meeting of the American Pediatric Society and the Society for Pediatric Research, 1998 (Abstract # 701078h)
3. Mills E, Silver K and Members of IMPACT. Acute flaccid paralysis: an active surveillance multicenter study. American Association of Neurology Annual Meeting, 1998 (Abstract # P01.015)

Rotavirus

Publications:

1. Le Saux, Nicole MD; Bettinger, Julie A. PhD; Halperin, Scott A. MD; Vaudry, Wendy MD; Scheifele, David W. MD; for Members of the Canadian Immunization Monitoring Program, Active (IMPACT) Substantial Morbidity for Hospitalized Children With Community Acquired Rotavirus Infections: 2005-2007 Impact Surveillance in Canadian Hospitals. The Pediatric Infectious Disease Journal; 29(9):879-882, September 2010. http://journals.lww.com/pidj/Abstract/publishahead/Substantial_Morbidity_for_Hospitalized_Children.99295.aspx
2. JA Bettinger, K Wills, N Le Saux, DW Scheifele, SA Halperin, W Vaudry for members of the Canadian Immunization Monitoring Program Active (IMPACT). Heterogeneity of rotavirus testing and admitting practices for gastroenteritis among 12 tertiary care pediatric hospitals: Implications for surveillance. The Canadian Journal of Infectious Diseases and Medical Microbiology, 2011; 22(1):15-18 <http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=3&atlKy=10006&isuKy=969&isArt=t&fromfold>
3. Nicole Le Saux, Julie Bettinger, Scott Halperin, Wendy Vaudry and David Scheifele for the members of the Canadian Immunization Monitoring Program, Active (IMPACT). Hospital acquired rotavirus infections: burden in Canadian paediatric hospitals. Journal of Infection Prevention. Volume 12 Issue 4 July 2011 pp.159-162 (<http://bjj.sagepub.com/content/early/2011/03/30/1757177411402409.abstract>)

4. Le Saux, Nicole MD; Bettinger, Julie PhD; Déry, Pierre MD; Embree, Joanne MD; Vaudry, Wendy MD; Halperin, Scott A. MD; McDermid, Andrew BSc; Booth, Timothy F. PhD; Coyle, Doug PhD The Hidden Costs and Characteristics of Childhood Emergency Visits in Canada. *The Pediatric Infectious Disease Journal*, Volume 31
Issue 2 February 2012 pp 159-163
http://journals.lww.com/pidj/Abstract/publishahead/The_Hidden_Costs_and_Characteristics_of_Childhood.98895.aspx
5. Doug Coyle MA MSc PhD, Kathryn Coyle BSc Pharm MSc, Julie A Bettinger MPH PhD, Scott A Halperin MC FRCPC, Wendy Vaudry MD FRCPC, David W Scheifele MD FRCPC, Nicole Le Saux MD FRCPC. Cost Effectiveness of infant vaccination for rotavirus in Canada. *Canadian Journal of Infectious Diseases and Medical Microbiology* 2012; 23(2):71-77
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=journal&jnlKy=3&atlKy=10634&isuKy=1027&spage=1&isArt=t>
6. Andrew McDermid, Nicole Le Saux, Elsie Grudeski, Julie A Bettinger, Kathy Manguiat, Scott A Halperin, Lily MacDonald, Pierre Déry, Joanne Embree, Wendy Vaudry and Timothy F Booth for Members of the Canadian Immunization Monitoring Program, Active (IMPACT) Molecular characterization of rotavirus isolates from select Canadian pediatric hospitals *BMC Infectious Diseases* 2012, 12:306
<http://www.biomedcentral.com/1471-2334/12/306>

Presentations:

1. Cook N, MacDonald NE, Sockett P for Members of IMPACT, Canadian Paediatric Society, Laboratory Centre for Disease Control. Ottawa, Ontario, Canada. Prospective study of rotavirus (RV) hospitalizations in infants < 24mo in 11 pediatric hospitals in Canada. Poster, 36th Infectious Diseases Society of America, Nov 1998
2. Cook N, MacDonald N, Sockett P, for Members of IMPACT. Prospective study of rotavirus hospitalizations in infants less than 24 months in 11 pediatric hospitals in Canada. 3rd National Immunization Conference, Calgary, 1998. (Abstract P56)
3. N. LeSaux, J. Bettinger, S. Halperin, W. Vaudry, D. Scheifele. Rotavirus gastroenteritis hospitalizations in Canada, IMPACT 2005-2007. Oral Presentation (Abstract 011) at the 26th International Congress of Chemotherapy and Infection. Toronto, June 18-21, 2009. Abstract published in *International Journal of Antimicrobial Agents*, Volume 34, Supplement 2, July 2009, Page S4
<http://www.sciencedirect.com/science/article/B6T7H-4WM1TNM/D/2/a44d387c93bb9d263a227325168d5a1c>
4. N. Le Saux, J. Bettinger, S. Halperin, W. Vaudry and D. Scheifele

Hospital acquired rotavirus infections: Substantial disease burden in Canadian Pediatric hospitals. Oral presentation (Abstract OP08) at the Excellence in Paediatrics conference, 3-6 December 2009, Florence, Italy. Abstract published in *Child: care, health and development*, 36 (Suppl. 1), page 45

<http://www3.interscience.wiley.com/cgi-bin/fulltext/123197982/PDFSTART>

5. Julie A. Bettinger. PhD, MPH, Kathryn Wills, Nicole Le Saux, MD, David W. Scheifele, MD, Scott A. Halperin, MD, Wendy Vaudry, MD for Members of the Canadian Immunization Monitoring Program, Active (IMPACT) Rotavirus Testing and Admitting Practices in 12 Pediatric Hospitals: Implications For Surveillance Abstract published in *Am J Epidemiol* 2010;171Suppl 11:S137. Abstract 548. Presented at the 43rd Annual Society for Epidemiologic Research Seattle, Washington, June 23 - 26, 2010
6. AK McDermid, NM Le Saux, J Bettinger, P Dery, J Embree, W Vaudry, S Halperin, T Booth. Rotavirus Serotypes: Results from an IMPACT Emergency Department Study. Poster (P055) presented at 9th Canadian Immunization Conference, December 5-8th, 2010 Québec City. Abstract published in *Can J Infect Dis Med Microbiol* Vol 21 No 4 page 198, Winter 2010
7. Le Saux, N., Bettinger, J., Dery P, Embree J, Vaudry W, Halperin S., McDermid A, Booth T, Coyle D, Scheifele D. The Hidden Costs and Characteristics of Childhood Rotavirus Emergency Visits in Canada. Poster presentation at the Canadian Paediatric Conference June 15-18th, 2011 Québec City, Quebec.
8. N. Le Saux, S Halperin, D. Scheifele, W. Vaudry, JA Bettinger on behalf of Immunization Monitoring Program Active IMPACT Investigators Surveillance for Decreases in hospitalizations: Effects of Rotavirus vaccine programs. Oral Presentation at the 11th Canadian Immunization Conference December 2-4, 2014 in Ottawa, Ontario
9. N Le Saux, S Halperin, W Vaudry, D Scheifele, J Bettinger for members of the Canadian Immunization Monitoring Program Active (IMPACT). Decreases in Rotavirus hospitalizations: IMPACT Data Pre and 3 years Post-First publicly funded programs. Oral presentation (3 minutes-3 slides): 93rd Canadian Paediatric Society Annual Conference June 22-25, 2016 Charlottetown, PEI.
10. Rotavirus Hospitalizations: A decade (2005 to 2015) of Surveillance Documenting Vaccine Success – Nicole Le Saux Co-authors: Scott Halperin, Wendy Vaudry, David Scheifele, Julie Bettinger Oral presentation at the 12th Canadian Immunization Conference Ottawa, Ontario - Tuesday December 6, 2016

Streptococcus Pneumoniae

Publications:

1. Scheifele DW, Gold R, Marchessault V, Talbot J and Members of the LCDC/CPS IMPACT Group. Penicillin resistance among invasive pneumococcal isolates at ten children's hospitals, 1991-4. Can Commun Dis Rep (CCDR) 1996; 22:157-162
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/96vol22/dr2219ea-eng.php>
2. Scheifele DW, Halperin SA, Pelletier L, Talbot J and Members of the CPS/LCDC Immunization Monitoring Program Active (IMPACT). Invasive pneumococcal infections in Canadian children, 1991-1998: Implications for new vaccination strategies. Clin Infect Dis: 2000;31:58-64
<http://www.journals.uchicago.edu/doi/full/10.1086/313923>
3. Bjornson G, Scheifele D, Binder F, Talling D. Population-based incidence rate of invasive pneumococcal infection in children: Vancouver, 1994-1998 Can Comm. Dis Report (CCDR) 2000:26-18
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00vol26/dr2618ea.html>
4. Scheifele D, Halperin S, Pelletier L, Talbot J, Lovgren M, Vaudry W, Jadavji T, Law B, MacDonald N, Gold R, Wang E, Mills E, Lebel M, Dery P, Morris R. Reduced susceptibility to penicillin among pneumococci causing invasive infection in children - Canada, 1991-1998. Can J Infect Dis 2001;12:241-6
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=3&atlKy=4876&isuKy=683&isArt=t&fromfold=>
5. Greenberg D, Speert D.P, Mahenthiralingham, D. A Henry, Campbell, M.E, Scheifele D W, and the CPS/LCDC IMPACT Monitoring network. Emergence of Penicillin - Non-susceptible *Streptococcus pneumoniae* Invasive clones in Canada. J Clin Microbiol 2002; 40:68-74 <http://jcm.asm.org/cgi/content/full/40/1/68>
6. Kellner J, Scheifele D, Halperin S, Lebel M , Moore D, Le Saux N, Ford-Jones L, Law B Vaudry W, and members of the Canadian Pediatric Society/ Centre for Infectious Disease Prevention and Control Immunization Monitoring Program Active (IMPACT). Outcome of penicillin-nonsusceptible *Streptococcus pneumoniae* meningitis: a nested case-control study. Pediatr Infect Dis J, 2002; 21:903-9 Note: This was highlighted in Journal Watch (Infectious Diseases) Vol 5, Dec 2002, p 92-3 and in Pediatric Notes Vol 26, Dec 2002, p 207
http://journals.lww.com/pidj/Abstract/2002/10000/Outcome_of_penicillin_nonsusceptible_Streptococcus.4.aspx
7. Bjornson GL, Scheifele DW, Halperin SA, and members of the Canadian Pediatric Society/Health Canada Immunization Monitoring Program, Active (IMPACT). Population-based epidemiology of invasive pneumococcal infection in children in nine urban centers in Canada, 1994 through 1998. Pediatr Infect Dis J 2002; 21:947-950 Note: This was highlighted in Pediatric Notes Vol 26, Dec 2002, p 205

http://journals.lww.com/pidj/Abstract/2002/10000/Population_based_epidemiology_of_invasive.12.aspx

8. Scheifele D, Law B, Vaudry W, Halperin S, Kellner J, King A, Dawar M, and members of the Canadian Paediatric Society/Health Canada Immunization Monitoring Program Active (IMPACT). Invasive Pneumococcal Infections among Canadian Aboriginal Children. Can Comm. Dis Report (CCDR) 2003; 29:37-42
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/03vol29/dr2905ea.html>
9. Bettinger JA, Scheifele DW, Halperin SA, Kellner JD, Tyrrell, G and members of the Canadian Immunization Monitoring Program Active (IMPACT). Invasive Pneumococcal Infections in Canadian Children, 1998-2003. Implications for New Vaccination Programs. Canadian Journal of Public Health; March-April 2007; 98, 2; pp 111-115
<http://journal.cpha.ca/index.php/cjph/article/view/828/828>
10. Julie A. Bettinger, David W. Scheifele, James D. Kellner, Scott A. Halperin, Wendy Vaudry, Barbara Law, Gregory Tyrrell and for Members of the Canadian Immunization Monitoring Program Active (IMPACT). The effect of routine vaccination on invasive pneumococcal infections in Canadian children, Immunization Monitoring Program, Active 2000–2007 *Vaccine*. 2010; 28 (9):2130-2136
<http://www.sciencedirect.com/science/article/B6TD4-4Y1VXG4-2/2/389e2db874e001bc95b35cb5209b3746>

Presentations:

1. Scheifele DW, Gold R, Talbot J and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). A national survey of invasive pneumococcal infections in children, 1991-1994. Infectious Diseases Society of America Annual Meeting, San Francisco, September, 1995. Clin Infect Dis 1995; 21:788 (Abstract # 410)
2. Scheifele DW, Halperin SA, Talbot J, Kertesz D, for Members of IMPACT. Invasive pneumococcal infections in Canadian children, 1991-8: Implications for new vaccination strategies. Second Conference on Vaccine Research, National Foundation for Infectious Diseases, Bethesda, MD. March 1999 (Abstract P11)
3. Greenberg D, Speert D, Mahenthiralingham E, Henry DA, Campbell ME, Scheifele DW, and Members of the CPS/ LCDC IMPACT Monitoring Network. Emergence of penicillin-nonsusceptible *Streptococcus pneumoniae* invasive clones in Canada. 39th Interscience Conference on antimicrobial agents and Chemotherapy, San Francisco, September 1999 (Abstract #1030)
4. Kellner JD, Scheifele, DW, Halperin SA, for Members of CPS/LCDC Immunization Monitoring Program Active (IMPACT). Outcome of Penicillin-nonsusceptible *Streptococcus Pneumoniae* (PNSP) meningitis: a nested case-control study. Pediatric

- Research 2000; 47 (4, part 2): 266. A poster presentation at the Pediatric Academic Societies and American Academy of Pediatrics Combined Annual Meeting, Boston, May 2000.
5. Scheifele, DW, Halperin SA, Pelletier L, Talbot J, Vaudry, W, Jadavji T, Law B, MacDonald N, Wang E, Mills E, Level MH, Déry P, Morris R, Delage G. Update on penicillin resistance rates among pneumococci causing invasive infection in children - Canada 1998. *Pediatr Child Health* 2000; 5 (Suppl A), Abstract 102, p37A
 6. Greenberg D, Mahenthiralingham E, Speert D, Scheifele D. Spread of an International multi-drug resistant invasive *Streptococcus pneumoniae* 23F/14 Clone in Canadian children. Proceedings of the Interscience Conference on Antimicrobial Agents and Chemotherapy, Sept 17-20, 2000, Toronto, Ontario, # 1811
 7. Bjornson G, Scheifele D, Binder F, Talling D. Population-based incidence Rate of invasive pneumococcal infection in children: Vancouver, 1994-1998. 4th Annual CNIC, December 3-6, 2000 Halifax, NS. (Abstract P8)
 8. Bjornson G, Scheifele D, Halperin S for Members for the CPS/LCDC Immunization Monitoring Program Active (IMPACT). Population - Based Incidence Rates of Invasive Pneumococcal Infection in Children in 7 centers across Canada, 1994-1998. 4th Annual Conference on Vaccine research April 23-25, 2001 Arlington, VA (Abstract P1)
 9. Bjornson G, Scheifele D, Talling D, Halperin S, Dery P. Population - Based Incidence Rates of Invasive Pneumococcal Infection in Children: Vancouver, Halifax, Quebec City, 1994-1998. Vaccine Evaluation Center, BC's Children's Hospital, Vancouver, BC, IWK Health Centre, Halifax, NS, Centre Hospitalier de l'Université Laval, Quebec City, QC. Presented at the Canadian Paediatric Society Annual Meeting June 13-17th, 2001 Vancouver, BC
 10. Kellner JD, McGeer AJ, Greenberg D, Willey B, Koscianski A, Low DE, Scheifele DW. Molecular epidemiology of invasive *Streptococcus pneumoniae* (SP) in Canadian children from 1991-1999. Poster presentation at 3rd International Pediatric Infectious Diseases Conference, Monterey, California, October 2001
 11. Bjornson G., Scheifele D., Halperin S., and Members of the CPS/ Health Canada Immunization Monitoring Program, Active (IMPACT). Population-Based Epidemiology of Invasive Pneumococcal Infection in Children in Nine Urban Centres Across Canada, 1994-1998. Presented at the 5th Canadian National Immunization Conference, Victoria, BC. December 2002. Abstract P2
 12. Scheifele D., Law B., Halperin S., King A., Dawar M., and Members of the CPS/ Health Canada Immunization Monitoring Program, Active (IMPACT). Invasive Pneumococcal Infections among Aboriginal Children in Canada, 1991-2001. Presented 5th Canadian

National Immunization Conference, Victoria, BC. December 2002. Abstract P28

13. Bettinger JA., Scheifele D., Bjornson G., Halperin SA. Invasive Pneumococcal Infections in Canadian children, 1998-2004. Poster presentation at the 6th Canadian National Immunization Conference, December 5-8, 2004, Montreal P14
14. Bettinger J for the IMPACT Investigators. The Effect of Routine Vaccination on Invasive Pneumococcal Infection in Canadian Children: 2000-2007, A Report from the IMPACT Network. Oral presentation, November 30, 2008 at the 8th Canadian Immunization Conference, Toronto, Ontario Abstract published in *Can J Infect Dis Med Microbiol* 2008 (19) 5:331
15. D Rajakumar, B Tan, A McConnell, B Andreychuk, IMPACT University of Saskatchewan, Saskatoon. Effects of Heptavalent Pneumococcal Conjugate Vaccine (PCV7) on Invasive Pneumococcal Disease (IPD) in Central and Northern Saskatchewan, 2000-2008 Abstract 88 Poster presentation at the 87th Annual Conference of the Canadian Paediatric Society, Ottawa, June 25, 2010 Abstract published in *Paediatr Child Health* Vol 15 Suppl A May/June 2010 page 37A
<http://www.pulsus.com/journals/JnlSupToc.jsp?sCurrPg=journal&jnlKy=5&supKy=475>
16. Julie A. Bettinger, PhD, MPH, David W. Scheifele, MD, James D. Kellner, Scott A. Halperin, Wendy Vaudry, MD, Robert Pless, and Gregory Tyrrell for Members of the Canadian Immunization Monitoring Program, Active. Emergence of pneumococcal serotype 19A in Canadian Children: 2000-2009. Poster (1374) presented at the 48th Annual Meeting of the Infectious Diseases Society of America, October 21-24, 2010, Vancouver, BC
17. JA Bettinger, DW Scheifele, JD Kellner, W Vaudry, SA Halperin, B Law, G Tyrrell, and The Canadian Immunization Monitoring Program Active. Emergence of Pneumococcal Serotype 19A in Canadian Children: IMPACT 2000-2009 Tsang. The Epidemiology of Serogroup B Meningococcal Invasive Infections in Canada 2002-2009. Oral presentation (O07) at the 9th Canadian Immunization Conference, December 5-8th, 2010 Québec City. Abstract published in *Can J Infect Dis Med Microbiol* Vol 21 No 4 page 178 Winter 2010
18. JA Bettinger, DW Scheifele, J Kellner, SA Halperin, W Vaudry, H Deehan, G Tyrell for the Canadian Immunization Monitoring Program Active. Pneumococcal Vaccine Failures and Missed Opportunities IMPACT 2002-2010 Oral presentation at the Canadian Paediatric Conference June 15-18th, 2011 Québec City, Quebec. Abstract published in *Paediatrics & Child Health* June/July 2011 Volume 16 Supplement A, page 13A
19. J Bettinger, D Scheifele, N le Saux, J Kellner, N Le Saux, J Embree, O Vanderkooi, I Martin, G Tyrell, W Vaudry, S Halperin for members of the Canadian Immunization Monitoring Program Active (IMPACT). Invasive Pneumococcal Disease in Canadian

- Children, 2000-2014. Oral presentation (3 minutes-3 slides): 93rd Canadian Paediatric Society Annual Conference June 22-25, 2016 Charlottetown, PEI.
20. Joanne McNair. 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) Poster presentation # 40 at the 12th Canadian Immunization Conference Ottawa, Ontario Wednesday Dec 7, 2016
 21. Julie Bettinger, Manish Sadarangani, Shaun K. Morris, James D. Kellner, Nicole Le Saux, Joanne Embree, Otto G. Vanderkooi, Irene Martin, Walter Demczuk, Gregory J. Tyrrell, Wendy Vaudry and Scott Halperin on behalf of the members of the Canadian Immunization Monitoring Program, Active. Twenty-Six years of Invasive Pneumococcal Disease in Canadian Children, 1991-2016, the Canadian Immunization Monitoring Program, Active. Oral presentation at the 11th International Symposium on Pneumococci and Pneumococcal Diseases, Melbourne, Australia, April 1-19, 2018. Poster at the Canadian Immunization Conference, Ottawa, Ontario, December 5, 2018
 22. Manish Sadarangani, Shaun K. Morris, James D. Kellner, Nicole Le Saux, Joanne Embree, Otto G. Vanderkooi, Irene Martin, Walter Demczuk, Gregory J. Tyrrell, Wendy Vaudry, Scott Halperin and Julie Bettinger, on behalf of the members of the Canadian Immunization Monitoring Program, Active. Clinical features and Outcomes of Invasive Pneumococcal Disease in Canada Between 1991 and 2015. Poster presentation at the 11th International Symposium on Pneumococci and Pneumococcal Diseases, Melbourne, Australia, April 1-19, 2018. Poster at the Canadian Immunization Conference, Ottawa, Ontario, December 5, 2018
 23. Alyssa Smith, Joanne McNair, Julie Bettinger, Wendy Vaudry, Otto G. Vanderkooi, Shalini Desai, Scott Halperin, Karina Top, for the members of IMPACT. Impact of pneumococcal conjugate vaccination programs on *Streptococcus pneumoniae* disease in children with cancer: A report from the Canadian Immunization Monitoring Program Active. Oral abstract presentation at the Pediatric Academic Societies (PAS) 2018 Meeting, May 5-8, in Toronto, Canada.

Varicella

Publications:

1. Law B, Fitzsimon C, Ford-Jones L, MacDonald N, Dery P, Vaudry W, Mills E, Halperin S, Michalszyn A and Riviere M. Cost of chickenpox in Canada: Part 1. Cost of Uncomplicated Cases. *Pediatrics* 1999; 104:1-6
<http://pediatrics.aappublications.org/cgi/content/abstract/104/1/1>
2. Law B, Fitzsimon C, Ford-Jones L, McCormick J, Riviere M and Members of the

- Immunization Monitoring Program, Active (IMPACT). Cost of chickenpox in Canada: Part 11. Cost of Complicated Cases and Total Economic Impact. *Pediatrics* 1999; 104:1-7
<http://pediatrics.aappublications.org/cgi/content/abstract/104/1/7>
3. Law, B and Members of the CPS/LCDC Immunization Monitoring program Active (IMPACT). Prospective Surveillance of Varicella Zoster Infections among hospitalized Canadian Children: 1991-1996. *Can. Comm. Dis. Report (CCDR)* 2000; 26-15
<http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/00vol26/dr2615ea.html>
 4. Law B, MacDonald N, Halperin S, Scheifele D, Dery P, Jadavji T, Lebel M, Mills E, Morris R, Vaudry W, Gold, R, Marchessault V, and Duclos P. The Immunization Monitoring Program Active (IMPACT) prospective five-year study of Canadian children Hospitalized for chickenpox or as an associated complication. *PIDJ*, 2000; 19:1053-9
http://journals.lww.com/pidj/Abstract/2000/11000/The_Immunization_Monitoring_Program_Active.5.aspx
 5. Scheifele DW, Law B, Halperin SA, Tam T, for members of the Immunization Monitoring Program, Active (IMPACT). Seven fatal varicella infections in children were potentially avoidable: A report from IMPACT centres from 2000 to 2005. *Paediatrics & Child Health*; 11(7) September 2006, pp 413-415
<http://www.pulsus.com/journals/abstract.jsp?sCurrPg=abstract&jnlKy=5&atlKy=7082&isuKy=457&isArt=t&fromfold=>
 6. Tan, Ben MD, Bettinger, Julie PhD, McConnell, Athena MD, MSc, Scheifele, David MD, Halperin, Scott MD, Vaudry, Wendy MD, Law, Barbara MD, for Members of the Canadian Immunization Monitoring Program, Active (IMPACT). The Effect of Funded Varicella Immunization Programs on Varicella-related Hospitalizations in IMPACT Centers, Canada, 2000–2008. *Pediatric Infectious Disease Journal*: September 2012 - Volume 31 - Issue 9 - p 956–963
http://journals.lww.com/pidj/Abstract/2012/09000/The_Effect_of_Funded_Varicella_Immunization.23.aspx

Presentations:

1. Law BJ, Scheifele DW and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Prospective hospital-based surveillance of varicella zoster virus infections in Canada: January 1991 - October 1994. Society for Pediatric Research Annual Meeting, San Diego, May, 1995. *Pediatric Research* 1995; 37:110A (Abstract # 644)
2. Law BJ, Scheifele DW and Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). Impact of varicella zoster immune globulin on hospital course of chickenpox among immunocompromised children. 35th ICAAC, San Francisco,

September, 1995 (Abstract # H141)

3. Law B, Fitzsimon C, Michaliszyn A, McCormick J, Ford-Jones E, Members of the CPS/LCDC Immunization Monitoring Program, Active (IMPACT). The cost of care of chickenpox in Canada. 1998 Interscience Conference on Antimicrobial Agents and Chemotherapy, San Diego CA
4. Law B, Fitzsimon C, McCormick J, Michaliszn A, Ford-Jones E and Members of IMPACT. The cost of care of chickenpox in Canada. 3rd National Immunization Conference, Calgary, 1998. (Abstract P19)
5. Law B and Members of IMPACT. Pediatric hospital-based surveillance for chickenpox in Canada, 1991-1996. 3rd National Immunization Conference, Calgary, 1998. (Abstract P21)
6. Law B, Scheifele D, Halperin SA for Members of the CPS/Health Canada Immunization Monitoring Program, Active (IMPACT), Ottawa, ON, Canada. Missed Opportunities for Varicella Prevention 2000-2002. Oral Presentation # 120 at the 81st Annual Meeting of the Canadian Pediatric Society, June 18, 2004
7. B Tan, J Bettinger, D Scheifele, S Halperin, W Vaudry, S Fan, B Law, R Bortolussi, other IMPACT members. The Effect of Provincially-Funded Varicella Immunization Programs on Varicella – Related Hospitalizations in IMPACT Centers, 1999-2007 Oral Presentation (Abstract 121) at the 86th Annual Conference of the Canadian Paediatric Society, Ottawa, June 26, 2009
8. Ben Tan, Julie Bettinger, Athena McConnell, Roseline Thibeault, Taj Jadavij, Francesca Reyes Domingo, Heather Samson, Alberto Severini, Wendy Vaudry, Scott Halperin, for the members of IMPACT, Surveillance and Epidemiology Division, National Microbiology Laboratory, Varicella hospitalizations in IMPACT (Immunization Monitoring Program, Active) centers after introduction of 1- and 2-dose varicella vaccination programs between 2000 and 2015. Poster presentation at the 95th Canadian Paediatric Society Annual Conference, May 30-June 2, 2018, Quebec City, Quebec. Oral abstract presentation at the Canadian Immunization Conference, Ottawa, Ontario, December 4, 2018

Zoster

Publications:

1. Wootton SH, Law B, Tan B, Mozel M, Scheifele D, Halperin S. The epidemiology of children hospitalized with herpes zoster in Canada: Immunization Monitoring Program, Active (IMPACT) 1991-2005. *The Pediatric Infectious Disease Journal*; February 2008; 27 (2): 112-16

http://journals.lww.com/pidj/Abstract/2008/02000/The_Epidemiology_of_Children_Hospitalized_With.4.aspx

Presentations:

1. Wootton S, Law B, Tan B, Scheifele D. The Epidemiology of herpes Zoster Among Children Hospitalized In Canadian Immunization Monitoring Program Active (IMPACT) Centers. Poster presentation # 112 at the 83rd Annual Conference of the Canadian Paediatric Society, June 15, 2006, St. John's, NL. (Judged best Fellows' poster

D. Other Knowledge Translation activities

This new section, added in September 2012, will include activities that are notable contributions to the greater good. There have been many KT activities in the past but only 2012 onwards will be added.

- **Lecturing and Coaching:**
June 2012: A plenary lecture was given by Dr. David Scheifele at the 13th National Immunization Conference in Darwin, Australia. "*Canada's Immunization Monitoring Program, Active (IMPACT): Looking back, looking forward*". This lecture invitation then enabled "coaching" with the faculty of the PAEDS surveillance network (Australia's IMPACT equivalent).
- **Federal/Provincial/Territorial Information sharing:**
Quebec Provincial Advisory committee - provided a summary of the Quebec IMPACT influenza surveillance from 2009-2012 including fatalities.
- **International Information sharing:**
FDA requested some copies of already presented abstracts and posters with respect to surveillance of meningococcal invasive infections.
- **Liaison with other networks:**
A new liaison member of ISARIC - *International Severe Acute Respiratory Infection Consortium*. ISARIC is a multi-regional collaboration of research networks with a focus on Investigator-led clinical studies in adults and children. ISARIC's mission is both to conduct world-class clinical research in the inter-pandemic influenza period and to provide a collaborative platform through which clinical studies could be undertaken rapidly in response to the emergence of a novel respiratory pathogen or other new infectious disease outbreak. <http://isaric.tghn.org/about/>
- Collaborated with the PRIDE (Post-pandemic Review of anti-Influenza Drug Effectiveness) study group which is conducting a patient-level global meta-analysis on the effectiveness of antiviral use on outcomes of public health importance during the

2009/10 (swine) influenza A/H1N1v.

<http://www.nottingham.ac.uk/research/groups/healthprotection/projects/pride.aspx>

- IMPACT collaborates with Global Research in Paediatrics Project (GRiP), funded by the European commission. The aim of GRiP is to stimulate and facilitate the development of and safe use of medicines and vaccines in children. Databases are not linked but non-nominal data common to multiple databases are extracted and merged. S. Halperin participated on behalf of IMPACT. <http://www.grip-network.org/index.php/cms/en/home>
- IMPACT collaborates with the Brighton Collaboration as part of Canada's national AEFI reporting system. <https://brightoncollaboration.org/public>
- Acknowledged by Paul Adamiak et al. *Effectiveness of the standard and an alternative set of Streptococcus pneumoniae multi locus sequence typing primers* BMC Microbiology 2014, 14:143 <http://www.biomedcentral.com/1471-2180/14/143>
- Collaboration with pertussis data for CCDR publication <http://www.phac-aspc.gc.ca/publicat/ccdr-rmtc/14vol40/dr-rm40-03/index-eng.php>
- Data requests from PHAC epidemiologists for updating sections of the Canadian Immunization Guide
- (Upshots) How best to describe the risk of meningococcal B infection? Paediatric Child Health 2013; 18-10; 543
- Acknowledged by Crawford et al. *Active surveillance for adverse events following immunization* Expert Review of Vaccines 2014 13(2) 265-276 describing active surveillance and mentioning IMPACT. <http://informahealthcare.com/doi/abs/10.1586/14760584.2014.866895>
- Acknowledged by Thoon et al. *Active surveillance of adverse events following childhood immunization in Singapore* **Vaccine 32 (2014) 5000-5005** (Page 5001: "The hospital-based active surveillance program was loosely adapted from the Canadian Immunization Monitoring Programme, Active (IMPACT).") www.sciencedirect.com/science/article/pii/S0264410X14009463
- Hospital Pediatric Resident Research day presentations on various IMPACT data: Sick kids – Toronto 2014; Stollery- Edmonton 2014 : Wendy Vaudry on previously published data -PIDJ Volume 33, Number 7, July 2014, 710-714; at the University of Alberta, Department of Pediatrics Research day; May 30, 2014 *Burden of Seasonal Influenza in Children With Neurodevelopmental Conditions*

- Influenza Surveillance Expert Working Group (SEWG) December 9, 2015 – Julie Bettinger
- CIRN/CCfV Research Education Series IMPACT presentation on May 8, 2015 and January 8, 2016: Heather Samson
- Dr. Karina Top. Canadian Immunization Monitoring Program, Active (IMPACT): 25 years of surveillance presented at the 10th Anniversary Showcase of PAEDS – Paediatric Active Enhanced Disease Surveillance, Melbourne Australia July 26, 2017
- Dr. Nicole Le Saux. IMPACT: A Model of Active Surveillance presented at the Vaccine Sciences Symposium, Toronto Ontario November 15, 2017
- Dr Scott Halperin. Overview of IMPACT, Canada’s Immunization Monitoring Program ACTIVE, presented to the Canadian Immunization Registries network on September 25, 2018